RADIO TEST REPORT

REP068646

Date of issue: December 23, 2024

Applicant:

Andrew Wireless Systems Industriering 10, Buchdorf 86675 Germany

Product:

RPM-A61L1-7E

Model:	Model variant:
7847588-00	None

FCC ID:	IC Registration number:
XS5-RPML2-B121314	NA

Specifications:

- FCC 47 CFR Part 90

  Private Land Mobile Radio Services

Lab and test locations

Company name	Nemko Spa
Address	Via del Carroccio, 4
City	Biassono
Province	MB
Postal code	20853
Country	Italy
Telephone	+39 039 220 12 01
Website	+39 039 220 12 21

Tested by	O. Frau
Signature	Firmato digitalmente da Frau Oscar
Reviewed by	D. Guarnone
Review date	December 23, 2024
Signature	Firmato digitalmente da Guarnone Daniele

Limits of responsibility

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 Spa ISO/IEC 17025 accreditation.

Copyright notification

Table of contents

Section 1. Report summary

1.1 Applicant and manufacturer

Company name	Andrew Wireless Systems
Address	Industriering 10,
City	Buchdorf
Province/State	--
Postal/Zip code	86675
Country	Germany

1.2 Test specifications

FCC 47 CFR Part 90	Private Land Mobile Radio Services

1.3 Statement of compliance

In the configuration tested, the EUT was found compliant.

Testing was performed against all relevant requirements of the test standard. Results obtained indicate that the product under test complies in full with the requirements tested. The test results relate only to the items tested.

See "Summary of test results" for full details.

1.4 Exclusions

None

1.5 Test report revision history

Revision #	Details of changes made to test report
REP068646	Original report issued

Section 2. Summary of test results

2.1 FCC Part 90 test results

Part	Test description	Verdict
§2.1033(c)(4)	Modulation type	Pass
§2.1049(h)	99% Occupied bandwidth	Pass
§2.1049(h)	Frequency ranges	Pass
§90.542(a)(3)	Output power at RF antenna connector	Pass
§90.542(a)(3)	Peak to average power ratio	Pass
§90.543(e)	Conducted spurious emissions	Pass
§90.543(e)	Radiated spurious emissions	Pass
§2.1049(h)	26 dB Occupied bandwidth	Pass
§90.539	Frequency stability	Pass

Note: None.

Section 3. Equipment under test (EUT) details

3.1 Sample information

Receipt date	November 7, 2024
Nemko sample ID number	PRJ00630770006

3.2 EUT information

Product name	RPM-A61L1-7E
Model	7847588-00
Part Number	7847588-00
Serial number	SZRMBG24230045

3.3 Technical information

Frequency band	B14: 758 - 768 MHz
RF power Max (W), Conducted	max Port 1 = 22.5 dBm (0.18 W) – max Port 2 = 22.5 dBm (0.18 W); max comb. Port 1 + Port 2 = 25.5 dBm (0.36 W) @ 760.5 MHz (with 5 MHz bandwidth)
Supported bandwidths:	5, 10 MHz
Type of modulation	TM1.1, TM3p1, TM3p1a, TM3p3 (QPSK, 16QAM, 64QAM, 256QAM)
Power requirements	48 Vdc
Antenna information	The EUT uses a unique antenna coupling/ non-detachable antenna to the intentional radiator.
Antenna gain	3.7 dBi

3.4 Product description and theory of operation

The radio unit (RU) is one of the components to configure the 5G RAN mobile communication system.

3.5 EUT exercise details

A laptop computer was used to send test commands to EUT to force it to transmit the appropriate signal. Unit transmit the selected signal at full power. The unit was tested using a conducted port. The antenna installation shall be done by professionals, and they are not within the scope of the tests evaluated on this document.

3.6 EUT setup diagram

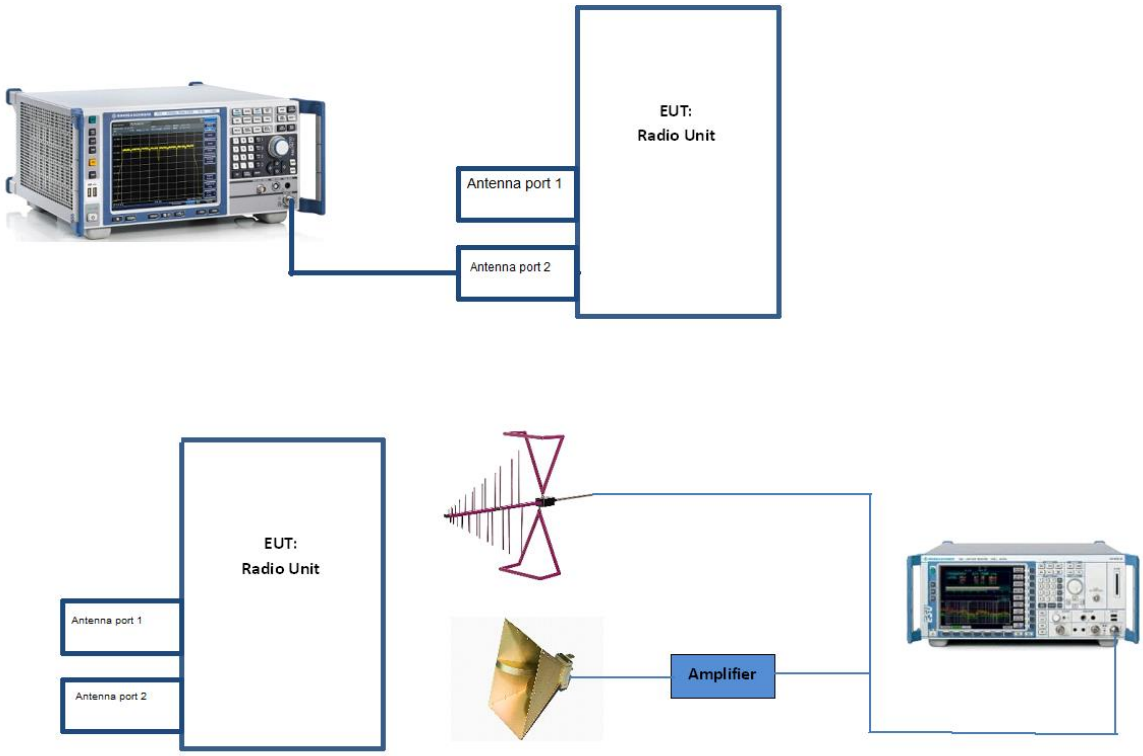


Figure 3.6-1: Setup diagram

Section 4. Engineering considerations

4.1 Modifications incorporated in the EUT

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

4.2 Technical judgment

None

4.3 Deviations from laboratory tests procedures

No deviations were made from laboratory procedures.

Section 5. Test conditions

5.1 Atmospheric conditions

Temperature	15 °C – 35 °C
Relative humidity	20 % – 75 %
Air pressure	86 kPa (860 mbar) – 106 kPa (1060 mbar)

When it is impracticable to carry out tests under these conditions, a note to this effect stating the ambient temperature and relative humidity during the tests shall be recorded and stated.

The following instruments are used to monitor the environmental conditions:

Equipment	Manufacturer	Model no.	Asset no.	Cal date	Next cal.
Thermo-hygrometer data loggers	Testo	175-H2	20012380/305	2022-12	2024-12
Thermo-hygrometer data loggers	Testo	175-H2	38203337/703	2022-12	2024-12
Barometer	Castle	GPB 3300	072015	2024-04	2025-04

5.2 Power supply range

The normal test voltage for equipment to be connected to the mains shall be the nominal mains voltage. For the purpose of the present document, the nominal voltage shall be the declared voltage, or any of the declared voltages ±5 %, for which the equipment was designed.

Section 6. Measurement uncertainty

6.1 Uncertainty of measurement

The measurement uncertainty was calculated for each test and quantity listed in this test report, according to CISPR 16-4-2, ETSI TR 100 028-1, ETSI TR 100 028-2 and other specific test standards and is documented in Nemko Spa working manuals WML1002 and WML0078.
The assessment of conformity for each test performed on the equipment is performed not taking into account the measurement uncertainty. The two following possible verdicts are stated in the report:
P (Pass) - The measured values of the equipment respect the specification limit at the points tested. The specific risk of false accept is up to 50% when the measured result is close to the limit.
F (Fail) - One or more measured values of the equipment do not respect the specification limit at the points tested. The specific risk of false reject is up to 50% when the measured result is close to the limit.
Hereafter Nemko's measurement uncertainties are reported:

EUT	Type	Test	Range	Measurement Uncertainty	Notes
Transmitter	Conducted	Frequency error	0.001 MHz ÷ 40 GHz	0.08 ppm	(1)
		Carrier power RF Output Power	0.009 MHz ÷ 30 MHz	1.1 dB	(1)
			30 MHz ÷ 18 GHz	1.5 dB	(1)
			18 MHz ÷ 40 GHz	3.0 dB	(1)
			5 MHz ÷ 140 GHz	5.0 dB	(1)
		Adjacent channel power	1 MHz ÷ 18 GHz	1.4 dB	(1)
		Conducted spurious emissions	0.009 MHz ÷ 18 GHz	3.0 dB	(1)
			18 GHz ÷ 40 GHz	4.2 dB	(1)
			40 GHz ÷ 220 GHz	6.0 dB	(1)
		Intermodulation attenuation	1 MHz ÷ 18 GHz	2.2 dB	(1)
		Attack time – frequency behaviour	1 MHz ÷ 18 GHz	2.0 ms	(1)
		Attack time – power behaviour	1 MHz ÷ 18 GHz	2.5 ms	(1)
		Release time – frequency behaviour	1 MHz ÷ 18 GHz	2.0 ms	(1)
		Release time – power behaviour	1 MHz ÷ 18 GHz	2.5 ms	(1)
		Transient behaviour of the transmitter– Transient frequency behaviour	1 MHz ÷ 18 GHz	0.2 kHz	(1)
		Transient behaviour of the transmitter – Power level slope	1 MHz ÷ 18 GHz	9%	(1)
		Frequency deviation - Maximum permissible frequency deviation	0.001 MHz ÷ 18 GHz	1.3%	(1)
		Frequency deviation - Response of the transmitter to modulation frequencies above 3 kHz	0.001 MHz ÷ 18 GHz	0.5 dB	(1)
		Dwell time	-	3%	(1)
		Hopping Frequency Separation	0.01 MHz ÷ 18 GHz	1%	(1)
		Occupied Channel Bandwidth	0.01 MHz ÷ 18 GHz	2%	(1)
		Modulation Bandwidth	0.01 MHz ÷ 18 GHz	2%	(1)
	Radiated	Radiated spurious emissions	0.009 MHz ÷ 26.5 GHz	6.0 dB	(1)
			26.5 GHz ÷ 66 GHz	8.0 dB	(1)
			66 GHz ÷ 220 GHz	10 dB	(1)
		Effective radiated power transmitter	10 kHz ÷ 26.5 GHz	6.0 dB	(1)
			26.5 GHz ÷ 66 GHz	8.0 dB	(1)
			66 GHz ÷ 220 GHz	10 dB	(1)

NOTES:
(1) The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k = 2, which for a normal distribution corresponds to a coverage probability of approximately 95 %

Section 7. Test equipment

7.1 Test equipment list

Table 7.1-1: *Equipment list*

Equipment	Manufacturer	Model no.	Asset no.	Cal cycle	Next cal.
Spectrum Analyzer	Rohde & Schwarz	FSW43	101767	2024-01	2025-01
EMI Receiver	Rohde & Schwarz	ESU8	100202	2024-09	2025-09
EMI Receiver	Rohde & Schwarz	ESW44	101620	2024-08	2025-08
RF Vector Signal Generator	Rohde & Schwarz	SMBV100A	263254	2024-05	2025-05
RF Vector Signal Generator	Rohde & Schwarz	SMBV100A	263397	2024-09	2025-09
Climatic Chamber	MSL	EC500DA	15022	2024-01	2025-01
Antenna Trilog 25MHz - 8GHz	Schwarzbeck Mess-Elektronik	VULB9162	9162-025	2024-07	2027-07
Antenna 1 - 18 GHz	Schwarzbeck Mess-Elektronik	STLP9148	STLP 9148-152	2024-09	2027-09
Double Ridge Horn Antenna	RFSpin	DRH40	061106A40	2023-04	2026-04
Broadband Amplifier	Schwarzbeck Mess-Elektronik	BBV9718C	00121	2024-01	2025-01
Broadband Bench Top Amplifier	Sage	STB-1834034030-KFKF-L1	18490-01	2024-04	2025-04
Semi-anechoic chamber	Nemko S.p.a.	10m semi-anechoic chamber	530	2023-09	2025-09
Controller	Maturo	FCU3.0	10041	NCR	NCR
Tilt antenna mast	Maturo	TAM4.0-E	10042	NCR	NCR
Turntable	Maturo	TT4.0-5T	2.527	NCR	NCR
Semi-anechoic chamber	Comtest	3m SAC	1711-150	2024-09	2026-09
Controller	Maturo	FCU3.0	10237	NCR	NCR
Tilt antenna mast	Maturo	TAM4.0-E	3466.01	NCR	NCR
Turntable	Maturo	TT4.0	-	NCR	NCR
Pyramidal Horn Antenna 40-60 GHz	Sage	SAR-2507-19VF-R2	15715-01	2024-06	2027-06
Harmonic Mixer	Radiometer Physics	FS-Z60	100988	2024-01	2027-01
Cable set	Rosenberger	ST.ALO-02	1.650	2024-10	2025-10
Cable set	Rosenberger and Huber + Suhner	RE01+RE02	1.654+1.655	2024-09	2025-09
Cable set	Rosenberger+Huber-Suhner	RE03+RE04	1.510+1.511	2024-09	2025-09

Section 8. Testing data

8.1 FCC §2.1033(c)(4) Modulation type

8.1.1 Definitions and limits

(c) Applications for equipment other than that operating under parts 15, 11 and 18 of this chapter shall be accompanied by a technical report containing the following information:
(4) Type or types of emission

8.1.2 Test summary

Test date	November 29, 2024	Temperature	22 °C
Test engineer	O. Frau	Air pressure	1001 mbar
Verdict	Pass	Relative humidity	62 %

8.1.3 Observations, settings and special notes

None

8.1.4 Test data

Band B14:

Bandwidth (MHz)	Emission type
5	TM1.1
5	TM3p1
5	TM3p1a
5	TM3p3
10	TM1.1
10	TM3p1
10	TM3p1a
10	TM3p3

***Table** Errore. Per applicare Heading 2 al testo da visualizzare in questo punto, utilizzare la scheda Home.**-1:** Types of emission*

8.2 FCC §2.1049(h) 99% Occupied Bandwidth and frequency ranges

8.2.1 Definitions and limits

§2.1049 (h) Transmitters employing digital modulation techniques—when modulated by an input signal such that its amplitude and symbol rate represent the maximum rated conditions under which the equipment will be operated. The signal shall be applied through any filter networks, pseudo-random generators or other devices required in normal service. Additionally, the occupied bandwidth shall be shown for operation with any devices used for modifying the spectrum when such devices are optional at the discretion of the use.

8.2.2 Test summary

Test start date	November 29, 2024	Temperature	22 °C
Test end date	December 13, 2024	Air pressure	1001 mbar
Test engineer	O. Frau	Relative humidity	62%
Verdict	Pass		

8.2.3 Observations, settings and special notes

Test method: ANSI C63.26 Section 5.4.4

Spectrum analyzer settings:

Resolution bandwidth	1% - 5% OBW
Video bandwidth	3*RBW
Frequency span	2*OBW
Detector mode	Peak
Trace mode	Max Hold

8.2.4 Test equipment used

Equipment	Manufacturer	Model no.	Asset no.
Spectrum Analyzer	Rohde & Schwarz	FSW43	101767

8.2.5 Test data

Band B14: Antenna port 1

Band	OBW Declared	Modulation	Channel (MHz)	99% OBW (MHz)
B14	5 MHz	TM1.1	760.5	4.49
B14	5 MHz	TM1.1	763.0	4.49
B14	5 MHz	TM1.1	765.5	4.49

Band	OBW Declared	Modulation	Channel (MHz)	99% OBW (MHz)
B14	5 MHz	TM3p1	760.5	4.51
B14	5 MHz	TM3p1	763.0	4.50
B14	5 MHz	TM3p1	765.5	4.51

Band	OBW Declared	Modulation	Channel (MHz)	99% OBW (MHz)
B14	5 MHz	TM3p1a	760.5	4.49
B14	5 MHz	TM3p1a	763.0	4.49
B14	5 MHz	TM3p1a	765.5	4.48

Band	OBW Declared	Modulation	Channel (MHz)	99% OBW (MHz)
B14	5 MHz	TM3p3	760.5	4.49
B14	5 MHz	TM3p3	763.0	4.49
B14	5 MHz	TM3p3	765.5	4.49

Band	OBW Declared	Modulation	Channel (MHz)	99% OBW (MHz)
B14	10 MHz	TM1.1	n/a	-
B14	10 MHz	TM1.1	763.0	8.96
B14	10 MHz	TM1.1	n/a	-

Band	OBW Declared	Modulation	Channel (MHz)	99% OBW (MHz)
B14	10 MHz	TM3p1	n/a	-
B14	10 MHz	TM3p1	763.0	8.96
B14	10 MHz	TM3p1	n/a	-

Band	OBW Declared	Modulation	Channel (MHz)	99% OBW (MHz)
B14	10 MHz	TM3p1a	n/a	-
B14	10 MHz	TM3p1a	763.0	8.97
B14	10 MHz	TM3p1a	n/a	-

Band	OBW Declared	Modulation	Channel (MHz)	99% OBW (MHz)
B14	10 MHz	TM3p3	n/a	-
B14	10 MHz	TM3p3	763.0	8.96
B14	10 MHz	TM3p3	n/a	-

Band B14: Antenna port 2

Band	OBW Declared	Modulation	Channel (MHz)	99% OBW (MHz)
B14	5 MHz	TM1.1	760.5	4.49
B14	5 MHz	TM1.1	763.0	4.49
B14	5 MHz	TM1.1	765.5	4.49

Band	OBW Declared	Modulation	Channel (MHz)	99% OBW (MHz)
B14	5 MHz	TM3p1	760.5	4.50
B14	5 MHz	TM3p1	763.0	4.51
B14	5 MHz	TM3p1	765.5	4.51

Band	OBW Declared	Modulation	Channel (MHz)	99% OBW (MHz)
B14	5 MHz	TM3p1a	760.5	4.48
B14	5 MHz	TM3p1a	763.0	4.49
B14	5 MHz	TM3p1a	765.5	4.48

Band	OBW Declared	Modulation	Channel (MHz)	99% OBW (MHz)
B14	5 MHz	TM3p3	760.5	4.49
B14	5 MHz	TM3p3	763.0	4.49
B14	5 MHz	TM3p3	765.5	4.49

Band	OBW Declared	Modulation	Channel (MHz)	99% OBW (MHz)
B14	10 MHz	TM1.1	n/a	-
B14	10 MHz	TM1.1	763.0	8.95
B14	10 MHz	TM1.1	n/a	-

Band	OBW Declared	Modulation	Channel (MHz)	99% OBW (MHz)
B14	10 MHz	TM3p1	n/a	-
B14	10 MHz	TM3p1	763.0	8.96
B14	10 MHz	TM3p1	n/a	-

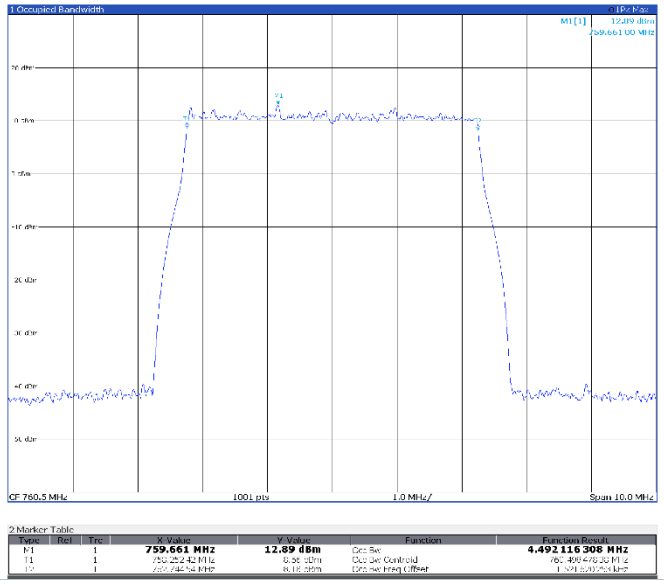
Band	OBW Declared	Modulation	Channel (MHz)	99% OBW (MHz)
B14	10 MHz	TM3p1a	n/a	-
B14	10 MHz	TM3p1a	763.0	8.95
B14	10 MHz	TM3p1a	n/a	-

Band	OBW Declared	Modulation	Channel (MHz)	99% OBW (MHz)
B14	10 MHz	TM3p3	n/a	-
B14	10 MHz	TM3p3	763.0	8.96
B14	10 MHz	TM3p3	n/a	-

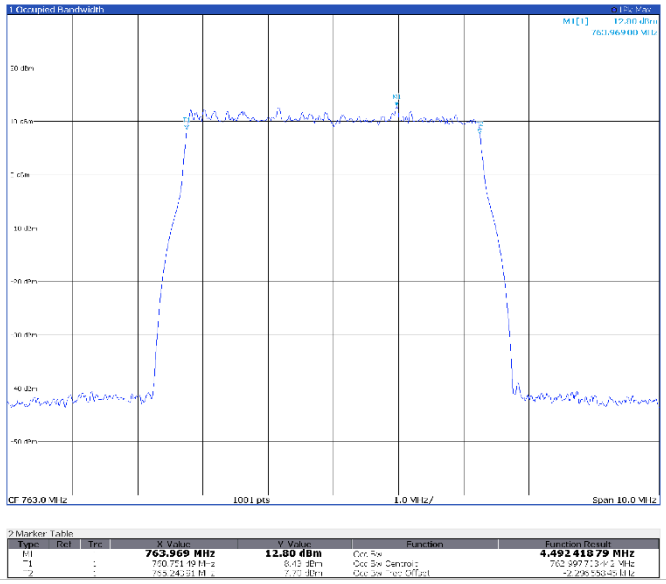
Antenna port 1

Band B14	5 MHz

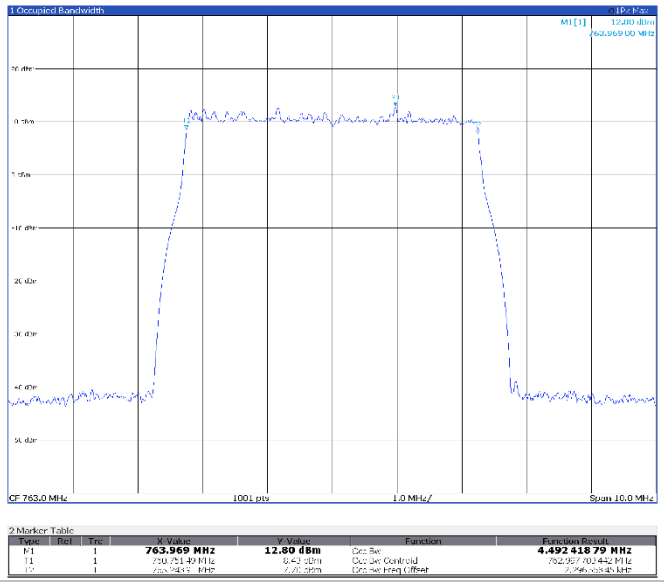
TM1.1, 5 MHz, low channel



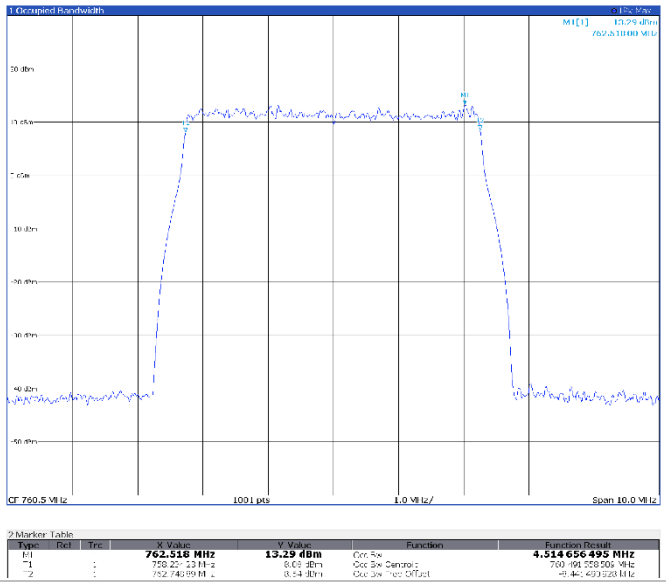
TM1.1, 5 MHz, mid channel



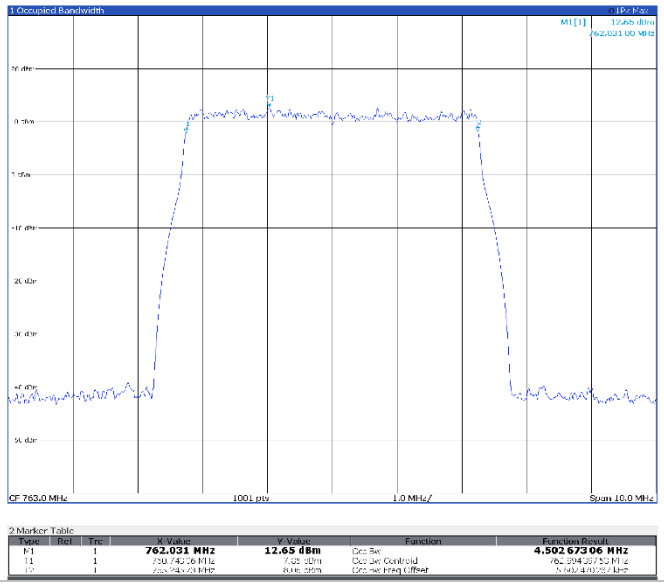
TM1.1, 5 MHz, high channel



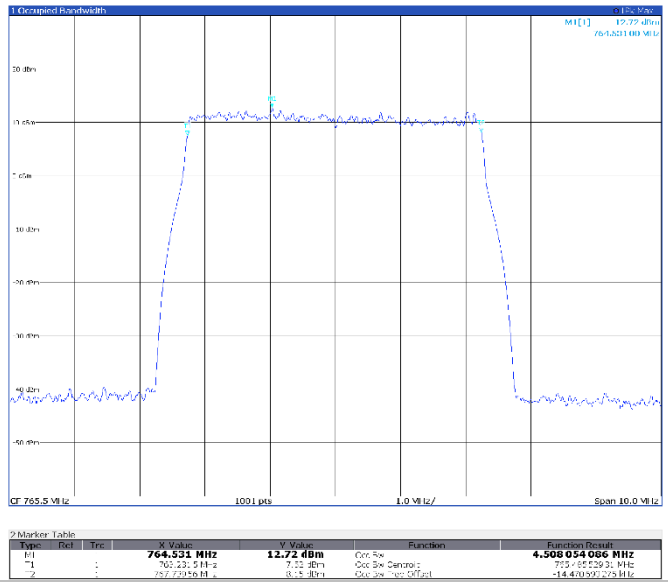
TM3p1, 5 MHz, low channel



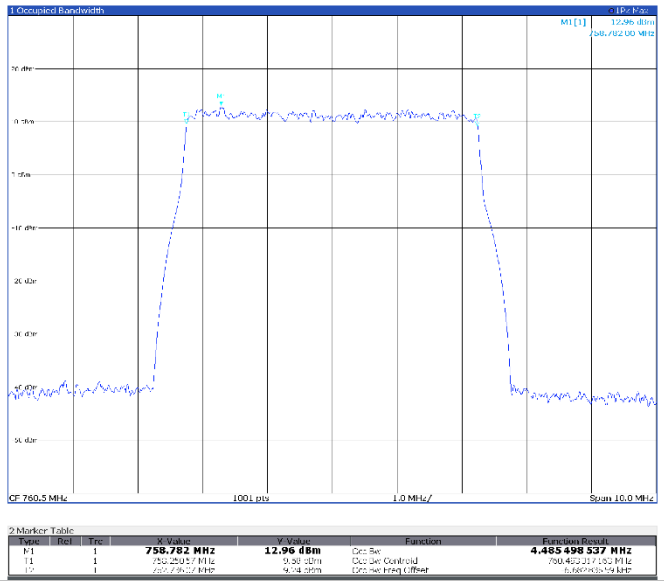
TM3p1, 5 MHz, mid channel



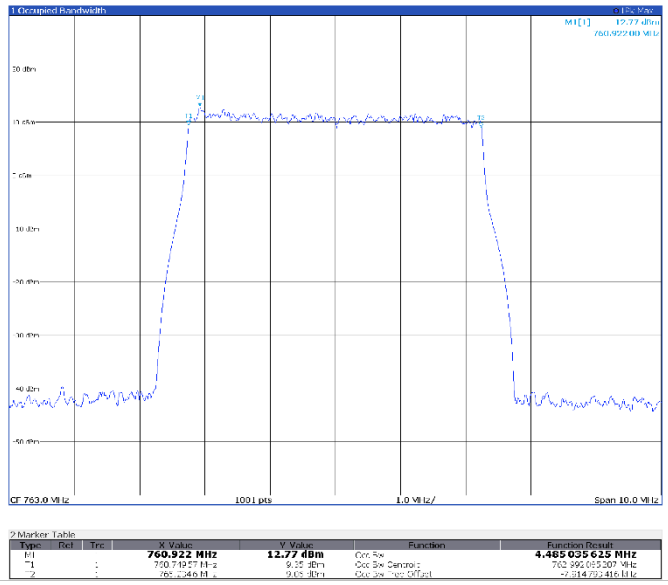
TM3p1, 5 MHz, high channel



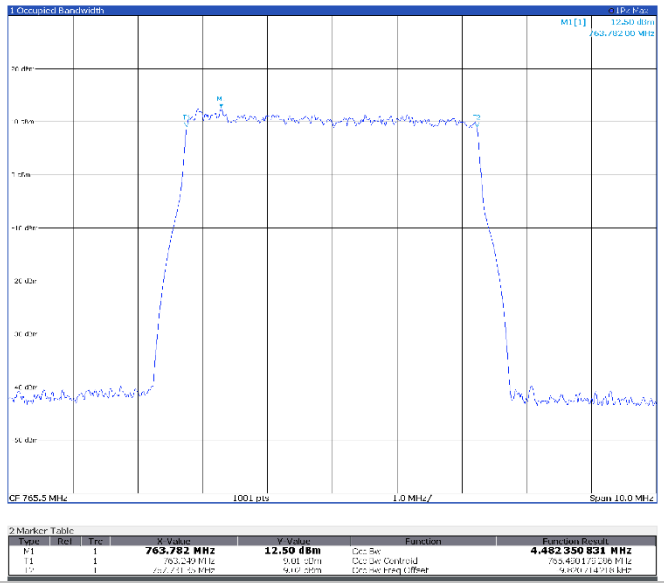
TM3p1a, 5 MHz, low channel



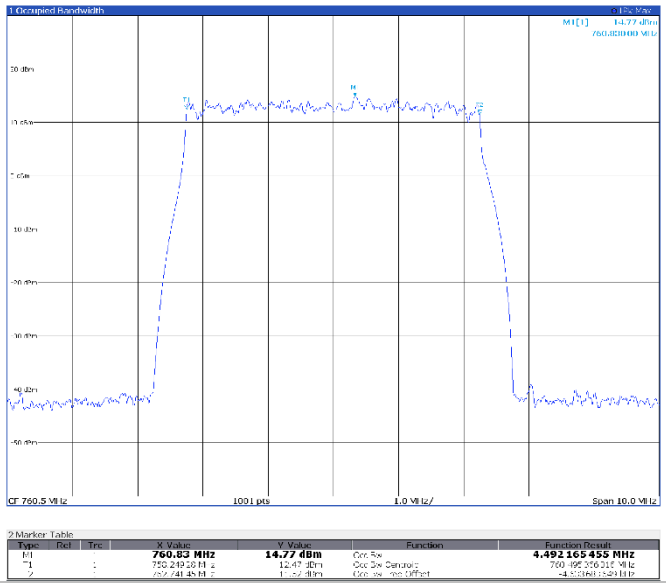
TM3p1a, 5 MHz, mid channel



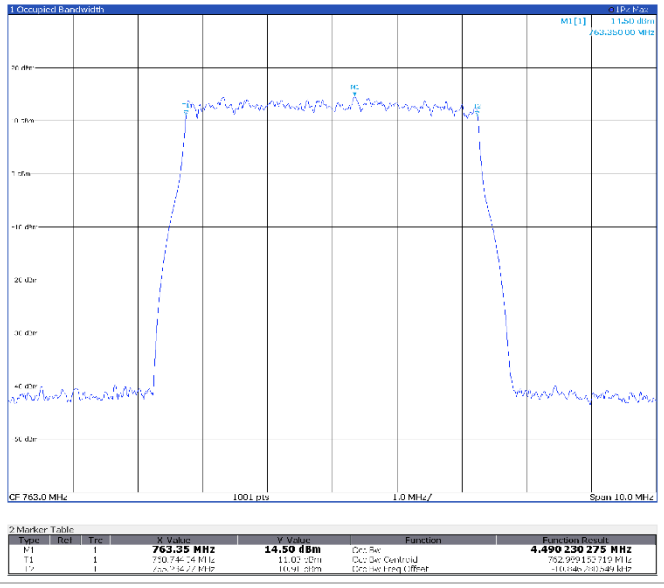
TM3p1a, 5 MHz, high channel



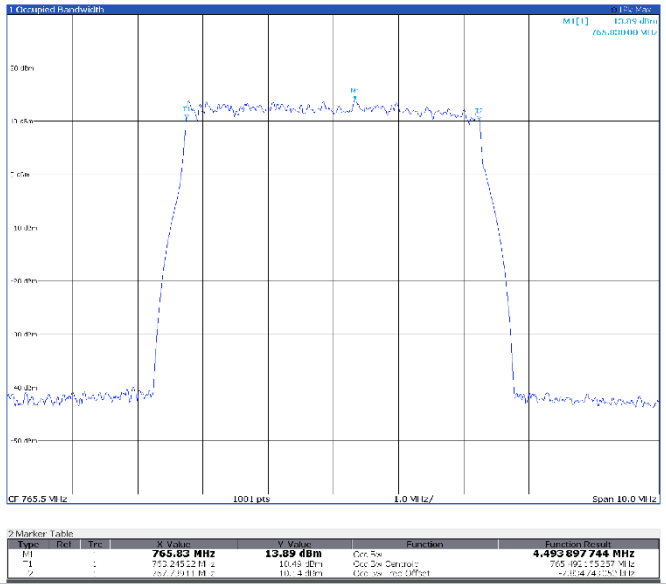
TM3p3, 5 MHz, low channel



TM3p3, 5 MHz, mid channel

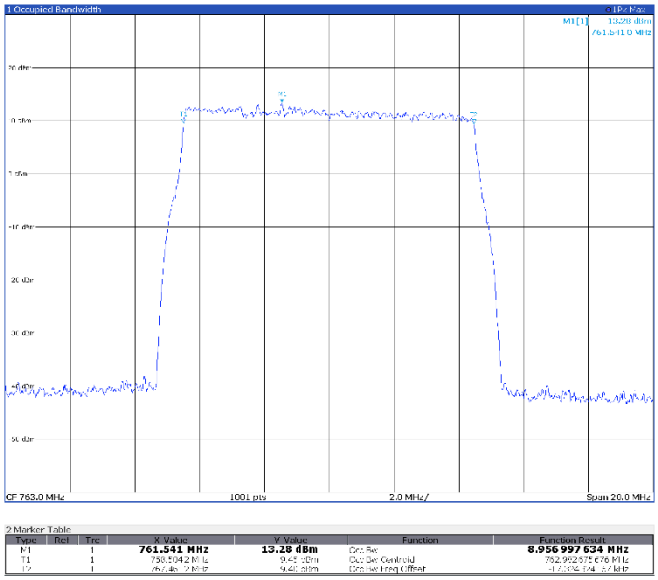


TM3p3, 5 MHz, high channel

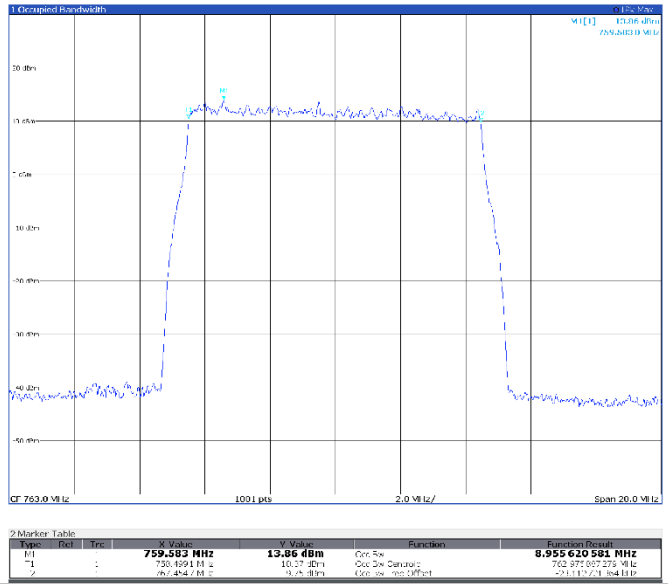


Band B14 | **10 MHz**

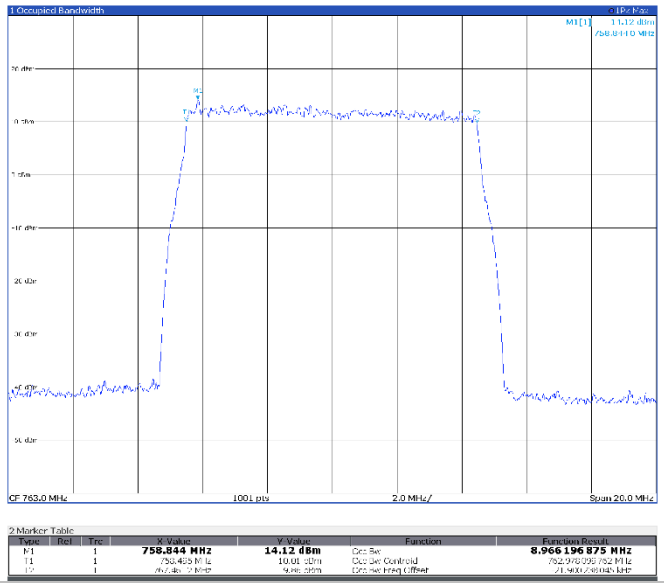
TM1.1, 10 MHz, mid channel



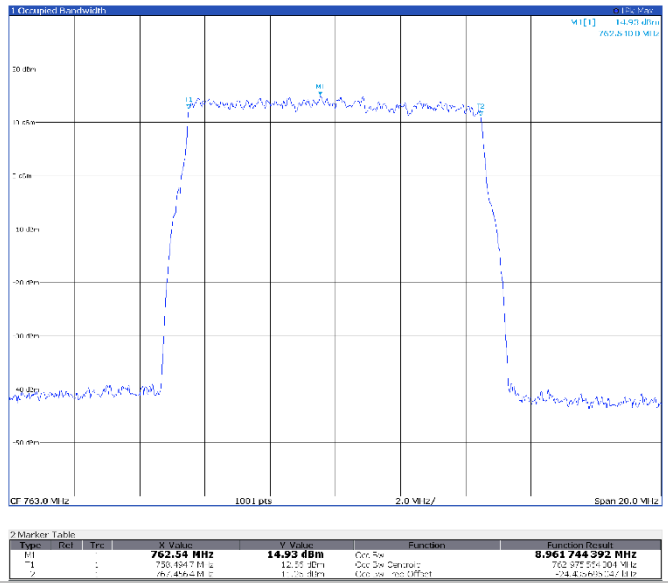
TM3p1, 10 MHz, mid channel



TM3p1a, 10 MHz, mid channel



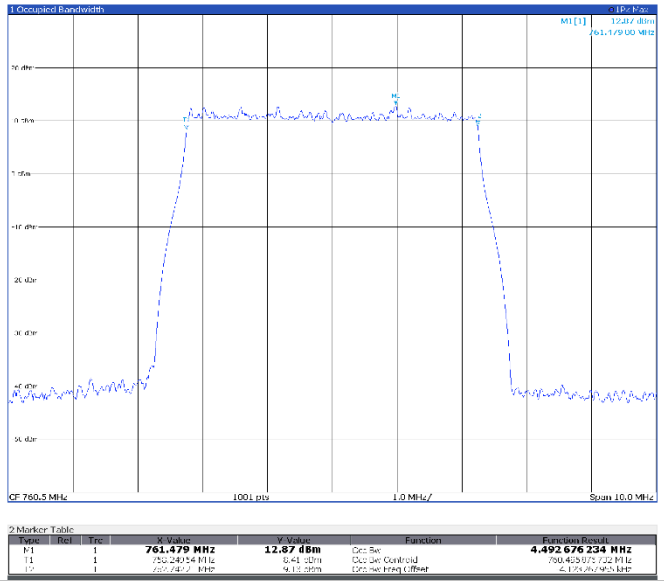
TM3p3, 10 MHz, mid channel



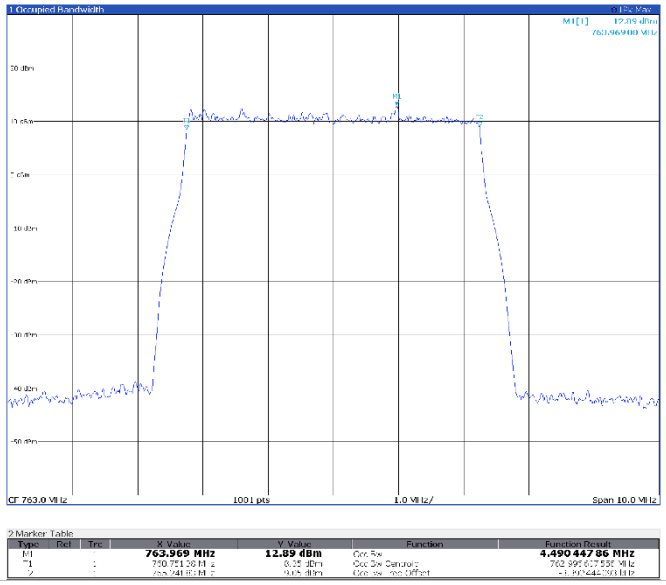
Antenna port 2

Band B14	5 MHz

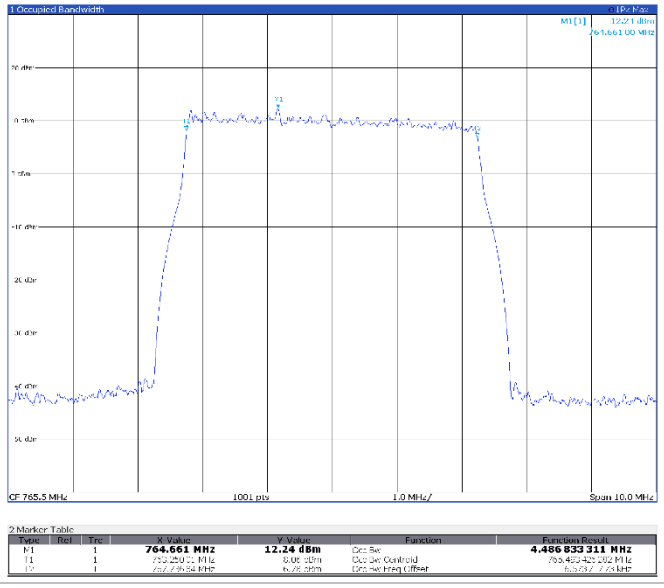
TM1.1, 5 MHz, low channel



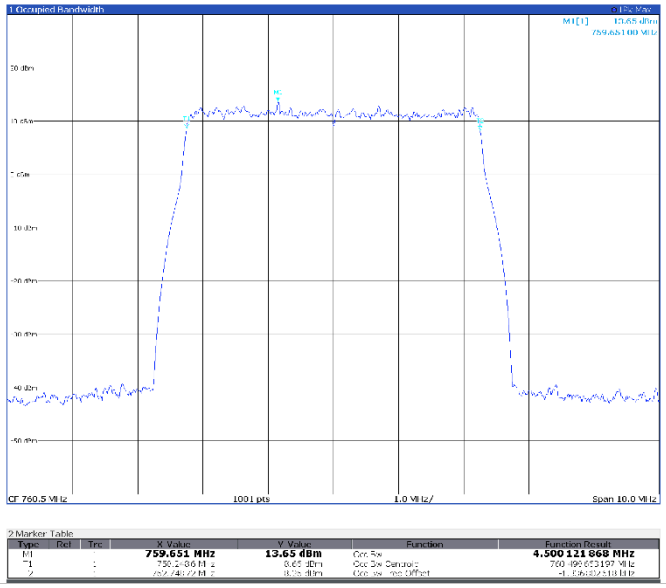
TM1.1, 5 MHz, mid channel



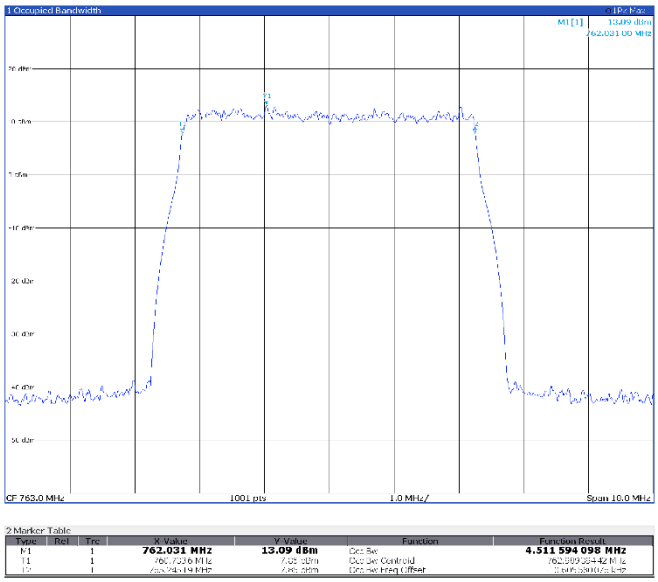
TM1.1, 5 MHz, high channel



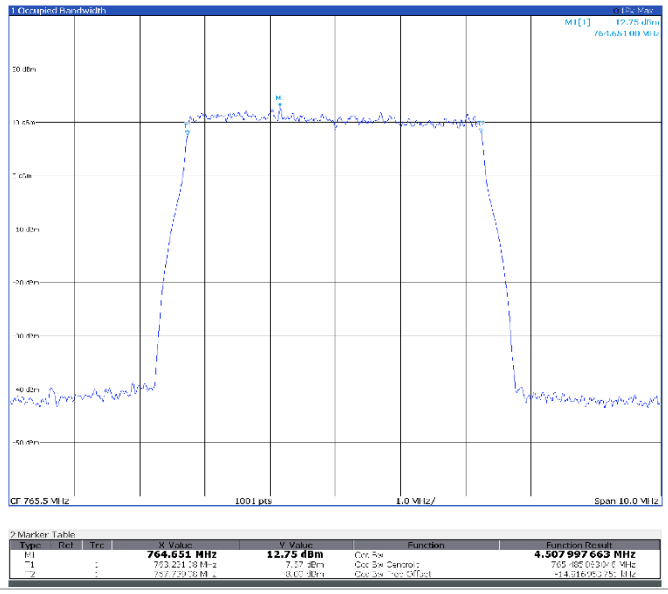
TM3p1, 5 MHz, low channel



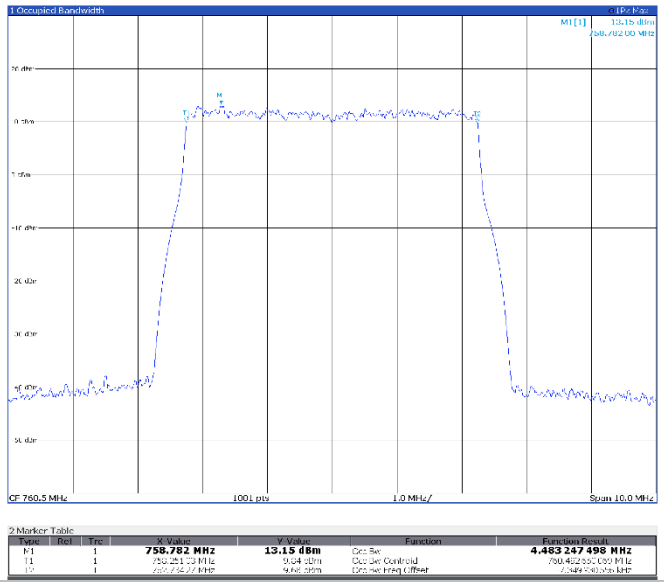
TM3p1, 5 MHz, mid channel



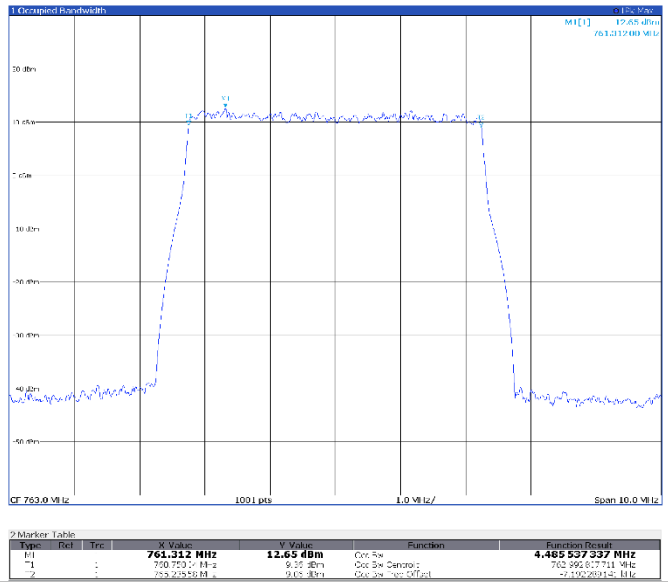
TM3p1, 5 MHz, high channel



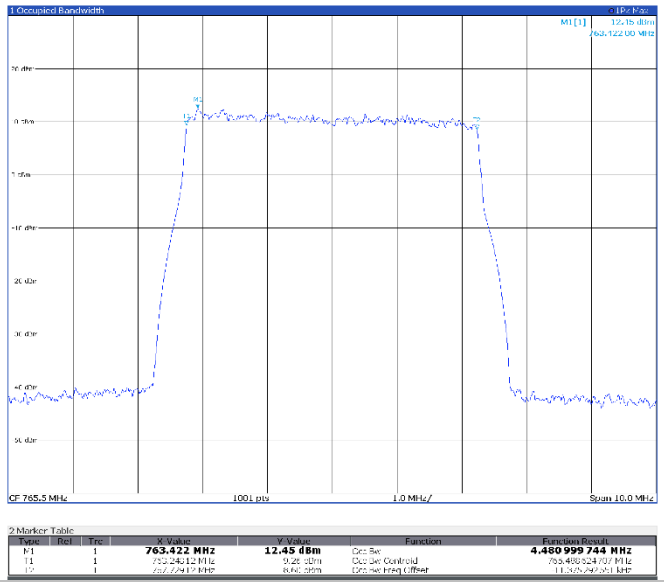
TM3p1a, 5 MHz, low channel



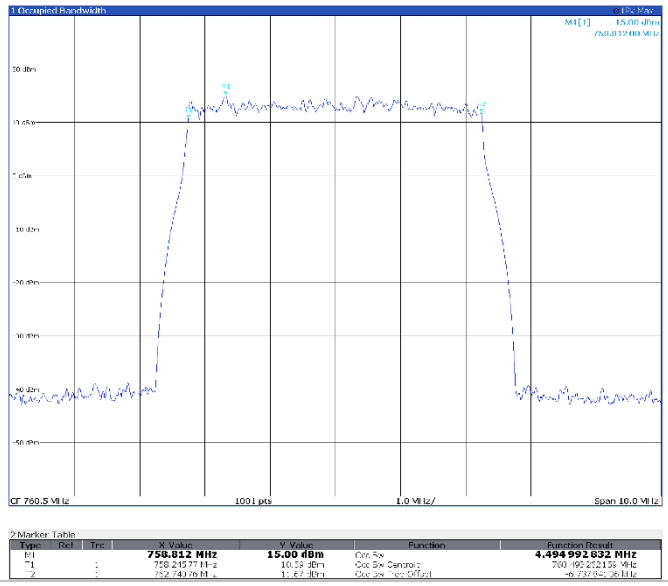
TM3p1a, 5 MHz, mid channel



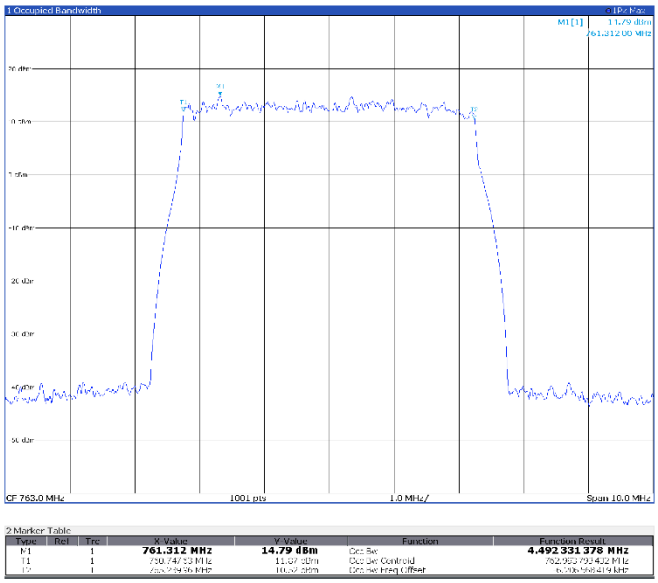
TM3p1a, 5 MHz, high channel



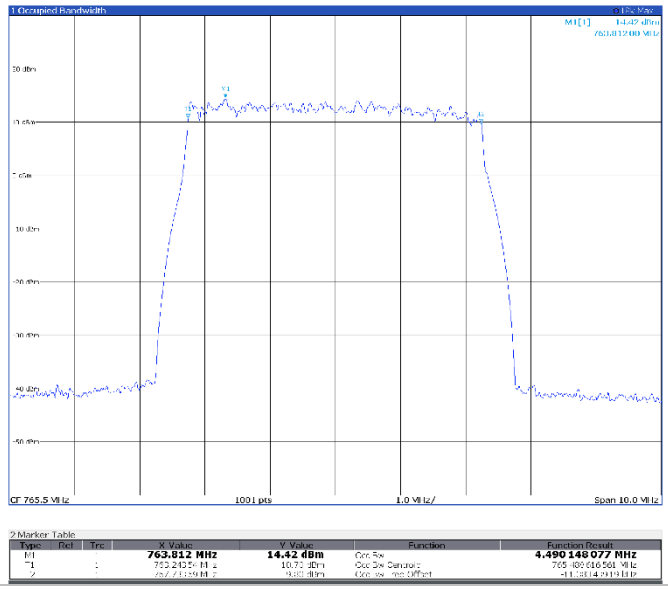
TM3p3, 5 MHz, low channel



TM3p3, 5 MHz, mid channel

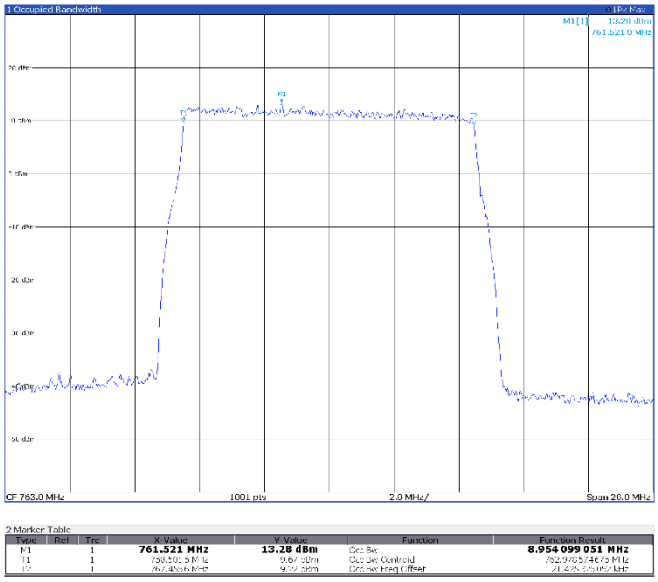


TM3p3, 5 MHz, high channel

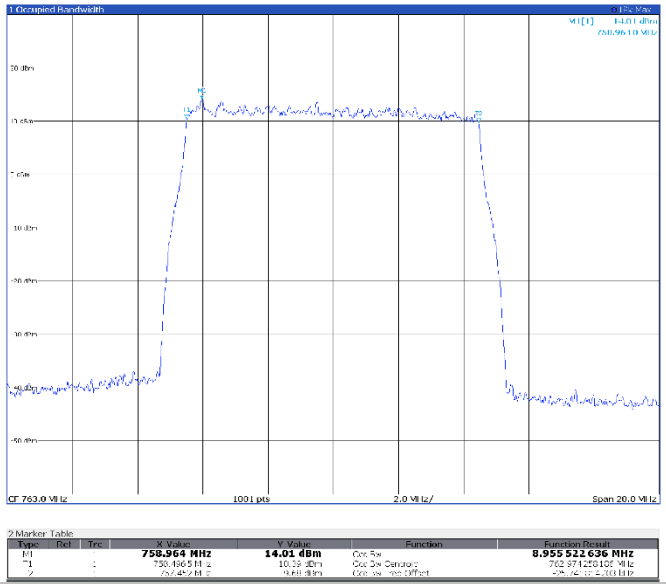


Band B14 | **10 MHz**

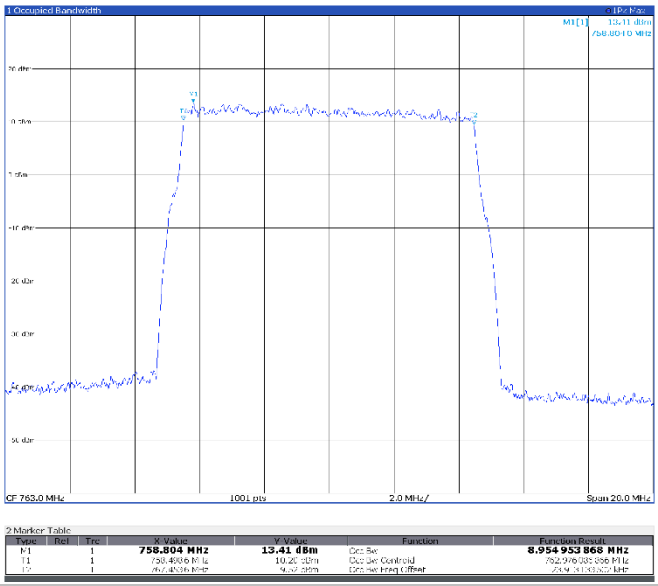
TM1.1, 10 MHz, mid channel



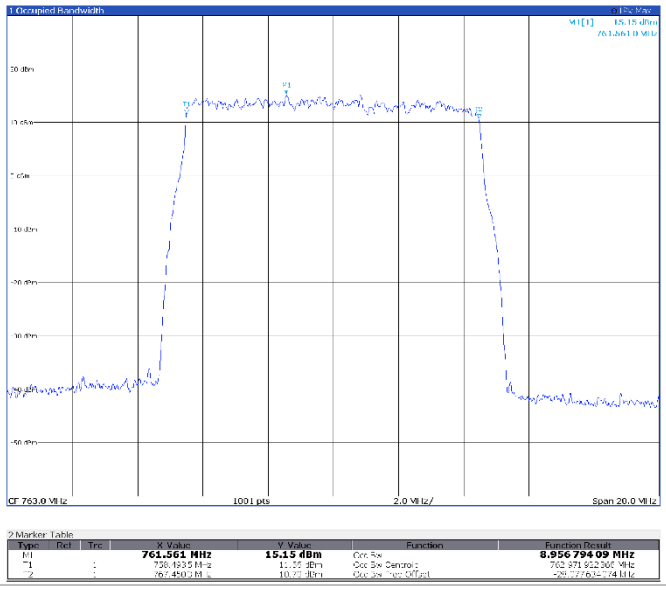
TM3p1, 10 MHz, mid channel



TM3p1a, 10 MHz, mid channel



TM3p3, 10 MHz, mid channel



8.3 FCC §2.1049(h) 26 dB Occupied Bandwidth

8.3.1 Definitions and limits

(3) Measurement procedure. (i) Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

8.3.2 Test summary

Test start date	November 29, 2024	Temperature	22 °C
Test end date	December 13, 2024	Air pressure	1001 mbar
Test engineer	O. Frau	Relative humidity	62%
Verdict	Pass		

8.3.3 Observations, settings and special notes

Test method: ANSI C63.26 Section 5.4.4

Spectrum analyzer settings:

Resolution bandwidth	1% - 5% OBW
Video bandwidth	3*RBW
Frequency span	2*OBW
Detector mode	Peak
Trace mode	Max Hold

8.3.3 Test equipment used

Equipment	Manufacturer	Model no.	Asset no.
Spectrum Analyzer	Rohde & Schwarz	FSW43	101767

8.3.4 Test data

Band B14: Antenna port 1

Band	OBW Declared	Modulation	Channel (MHz)	26 dB (MHz)
B14	5 MHz	TM1.1	760.5	5.07
B14	5 MHz	TM1.1	763.0	5.08
B14	5 MHz	TM1.1	765.5	5.08

Band	OBW Declared	Modulation	Channel (MHz)	26 dB (MHz)
B14	5 MHz	TM3p1	760.5	5.11
B14	5 MHz	TM3p1	763.0	5.09
B14	5 MHz	TM3p1	765.5	5.08

Band	OBW Declared	Modulation	Channel (MHz)	26 dB (MHz)
B14	5 MHz	TM3p1a	760.5	5.03
B14	5 MHz	TM3p1a	763.0	5.00
B14	5 MHz	TM3p1a	765.5	5.00

Band	OBW Declared	Modulation	Channel (MHz)	26 dB (MHz)
B14	5 MHz	TM3p3	760.5	5.07
B14	5 MHz	TM3p3	763.0	5.04
B14	5 MHz	TM3p3	765.5	5.08

Band	OBW Declared	Modulation	Channel (MHz)	26 dB (MHz)
B14	10 MHz	TM1.1	n/a	-
B14	10 MHz	TM1.1	763.0	10.01
B14	10 MHz	TM1.1	n/a	-

Band	OBW Declared	Modulation	Channel (MHz)	26 dB (MHz)
B14	10 MHz	TM3p1	n/a	-
B14	10 MHz	TM3p1	763.0	9.95
B14	10 MHz	TM3p1	n/a	-

Band	OBW Declared	Modulation	Channel (MHz)	26 dB (MHz)
B14	10 MHz	TM3p1a	n/a	-
B14	10 MHz	TM3p1a	763.0	9.99
B14	10 MHz	TM3p1a	n/a	-

Band	OBW Declared	Modulation	Channel (MHz)	26 dB (MHz)
B14	10 MHz	TM3p3	n/a	-
B14	10 MHz	TM3p3	763.0	9.99
B14	10 MHz	TM3p3	n/a	-

Band B14: Antenna port 2

Band	OBW Declared	Modulation	Channel (MHz)	26 dB (MHz)
B14	5 MHz	TM1.1	760.5	5.08
B14	5 MHz	TM1.1	763.0	5.08
B14	5 MHz	TM1.1	765.5	5.07

Band	OBW Declared	Modulation	Channel (MHz)	26 dB (MHz)
B14	5 MHz	TM3p1	760.5	5.08
B14	5 MHz	TM3p1	763.0	5.11
B14	5 MHz	TM3p1	765.5	5.08

Band	OBW Declared	Modulation	Channel (MHz)	26 dB (MHz)
B14	5 MHz	TM3p1a	760.5	5.03
B14	5 MHz	TM3p1a	763.0	5.01
B14	5 MHz	TM3p1a	765.5	5.00

Band	OBW Declared	Modulation	Channel (MHz)	26 dB (MHz)
B14	5 MHz	TM3p3	760.5	5.08
B14	5 MHz	TM3p3	763.0	5.08
B14	5 MHz	TM3p3	765.5	5.08

Band	OBW Declared	Modulation	Channel (MHz)	26 dB (MHz)
B14	10 MHz	TM1.1	n/a	-
B14	10 MHz	TM1.1	763.0	9.99
B14	10 MHz	TM1.1	n/a	-

Band	OBW Declared	Modulation	Channel (MHz)	26 dB (MHz)
B14	10 MHz	TM3p1	n/a	-
B14	10 MHz	TM3p1	763.0	9.95
B14	10 MHz	TM3p1	n/a	-

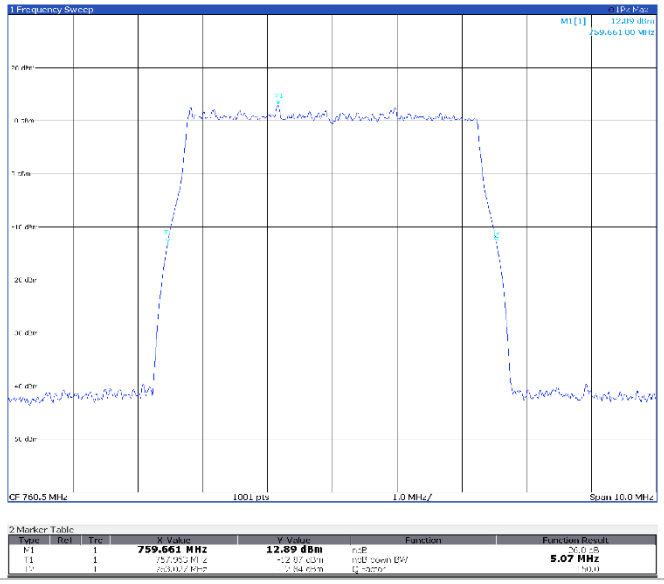
Band	OBW Declared	Modulation	Channel (MHz)	26 dB (MHz)
B14	10 MHz	TM3p1a	n/a	-
B14	10 MHz	TM3p1a	763.0	9.99
B14	10 MHz	TM3p1a	n/a	-

Band	OBW Declared	Modulation	Channel (MHz)	26 dB (MHz)
B14	10 MHz	TM3p3	n/a	-
B14	10 MHz	TM3p3	763.0	9.95
B14	10 MHz	TM3p3	n/a	-

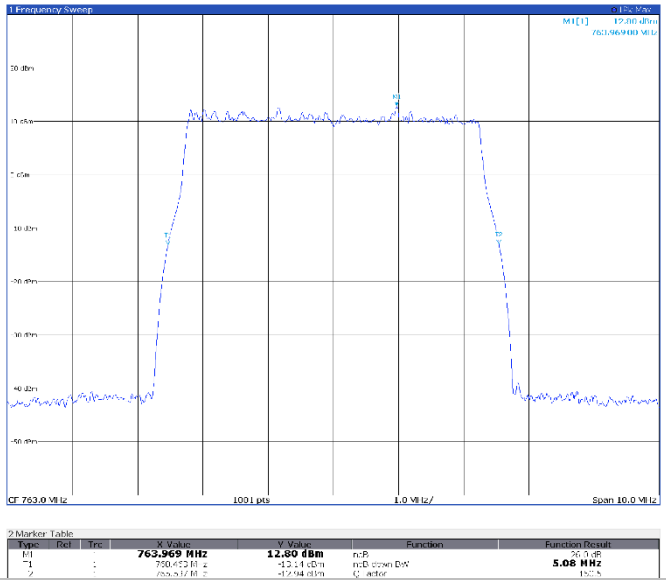
Antenna port 1

Band B14	5 MHz

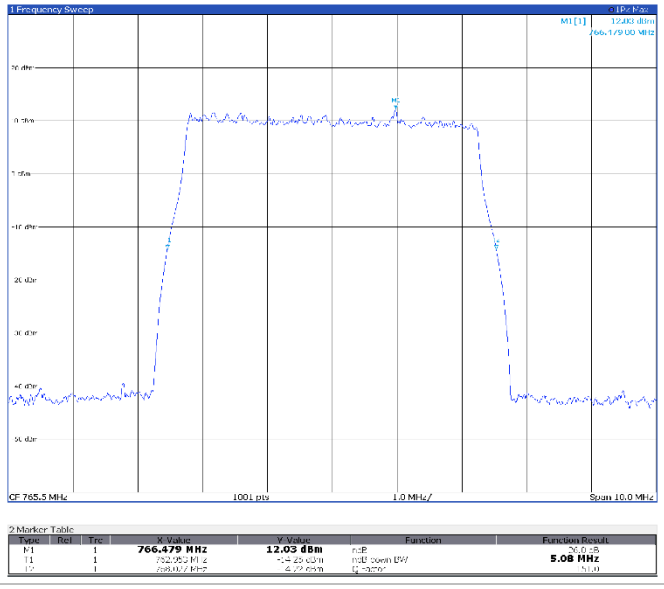
TM1.1, 5 MHz, low channel



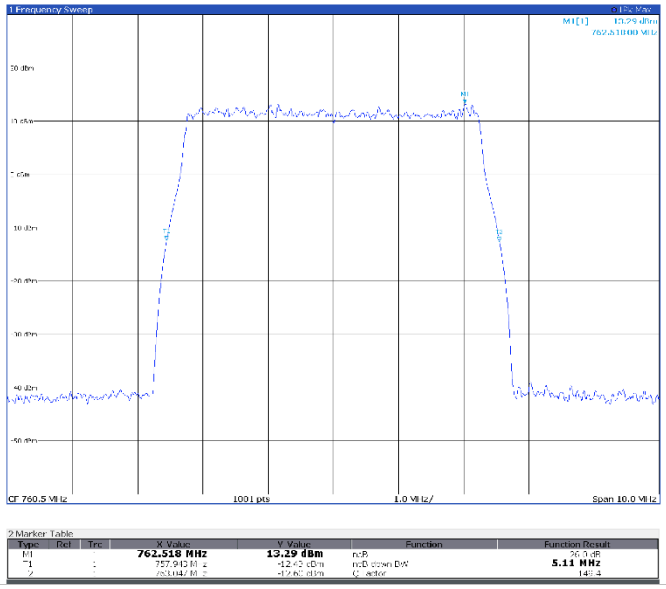
TM1.1, 5 MHz, mid channel



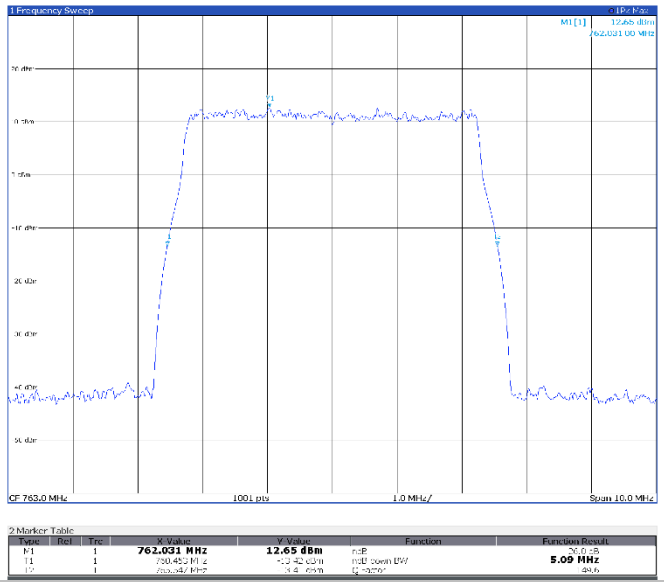
TM1.1, 5 MHz, high channel



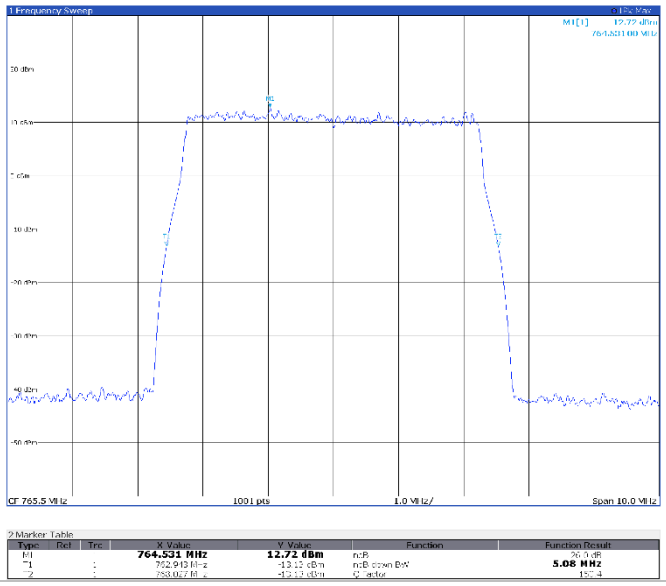
TM3p1, 5 MHz, low channel



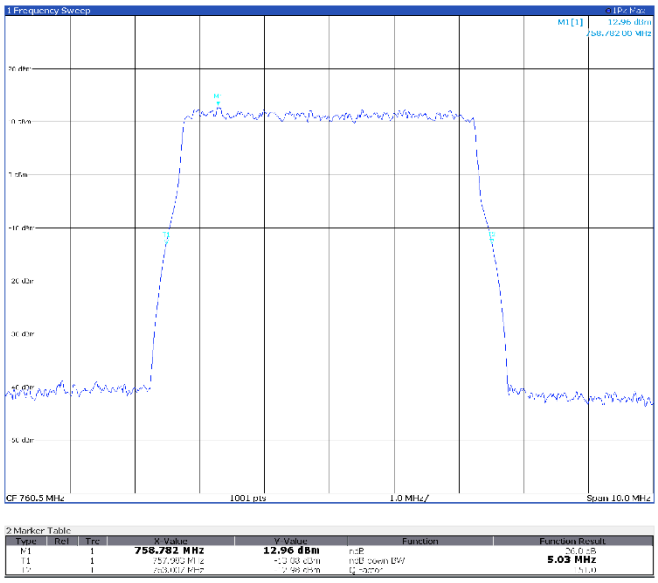
TM3p1, 5 MHz, mid channel



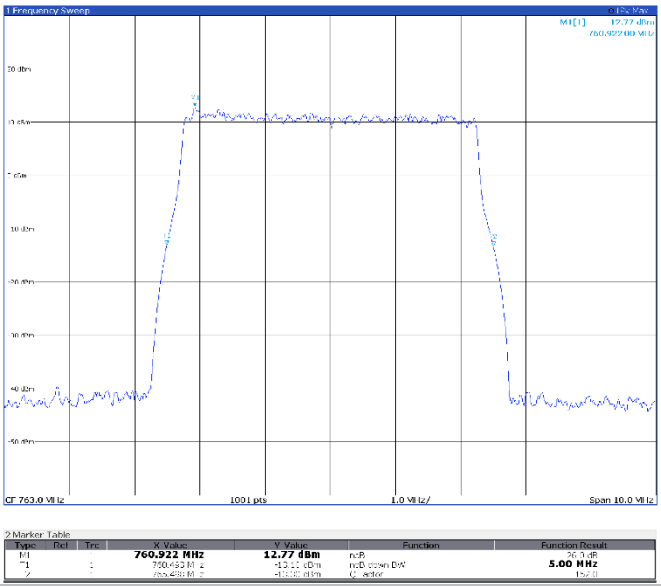
TM3p1, 5 MHz, high channel



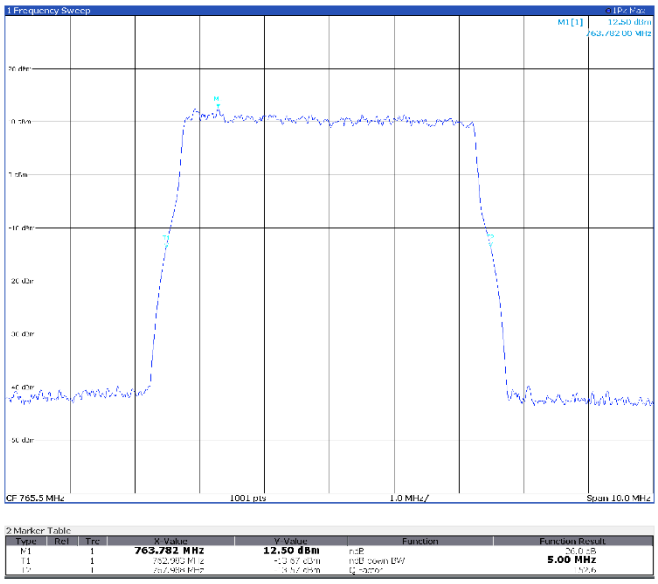
TM3p1a, 5 MHz, low channel



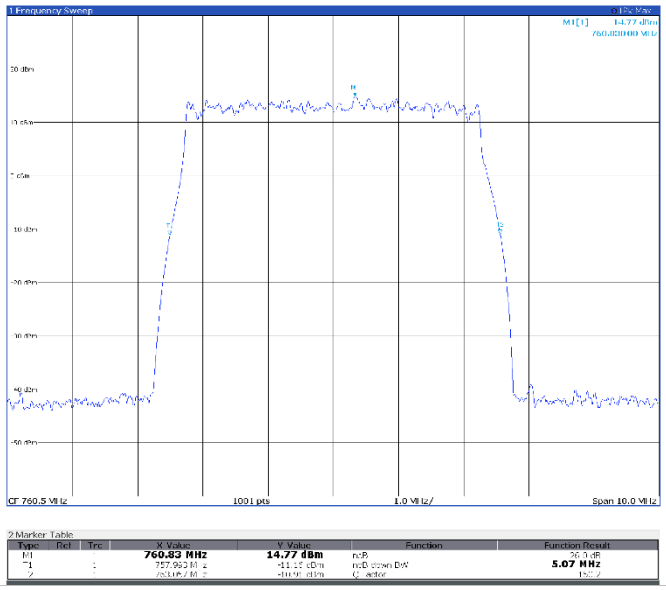
TM3p1a, 5 MHz, mid channel



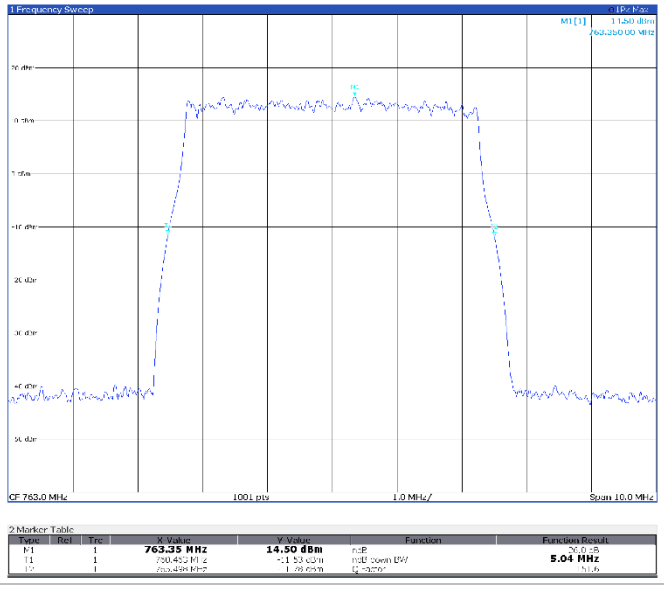
TM3p1a, 5 MHz, high channel



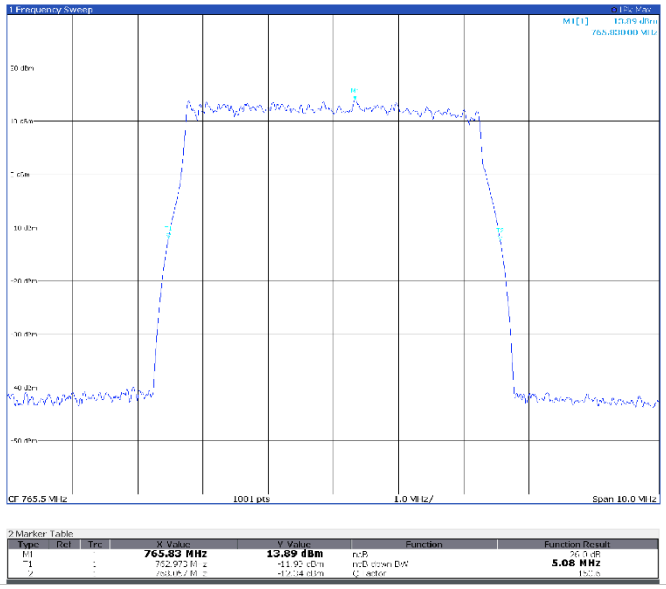
TM3p3, 5 MHz, low channel



TM3p3, 5 MHz, mid channel

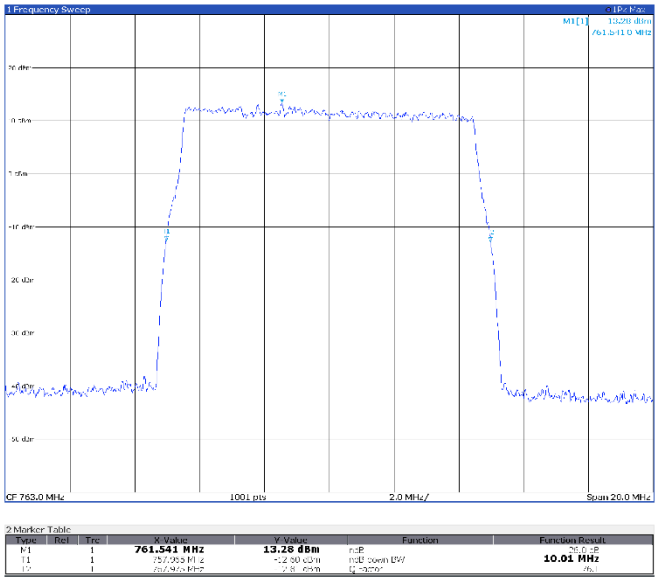


TM3p3, 5 MHz, high channel

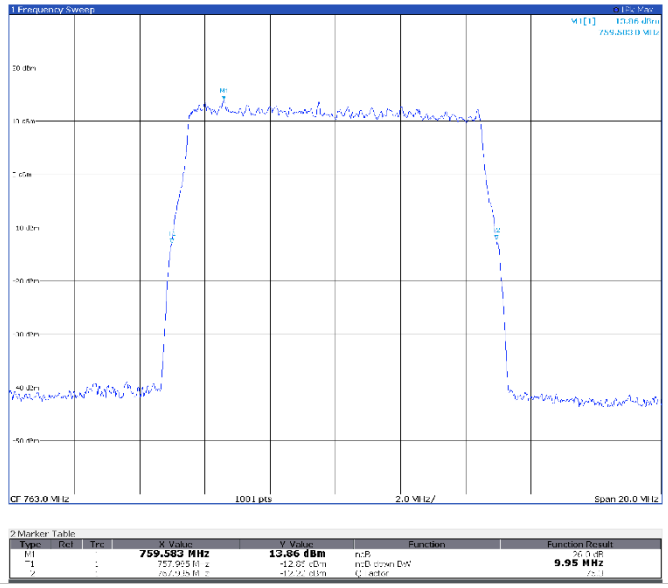


Band B14 | **10 MHz**

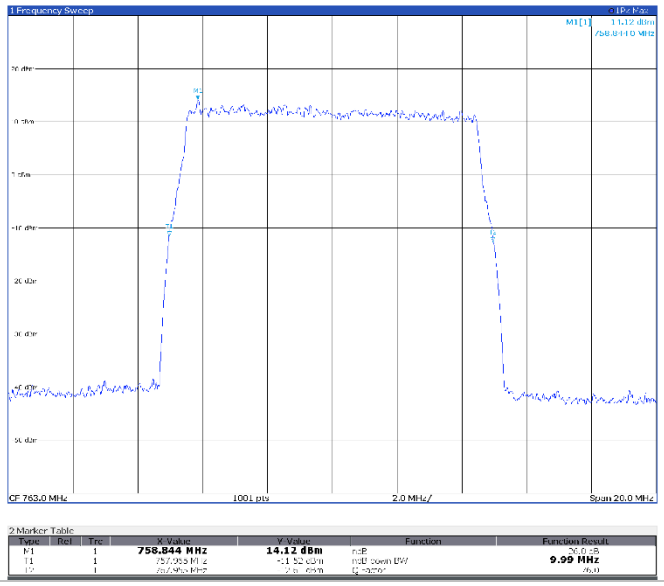
TM1.1, 10 MHz, mid channel



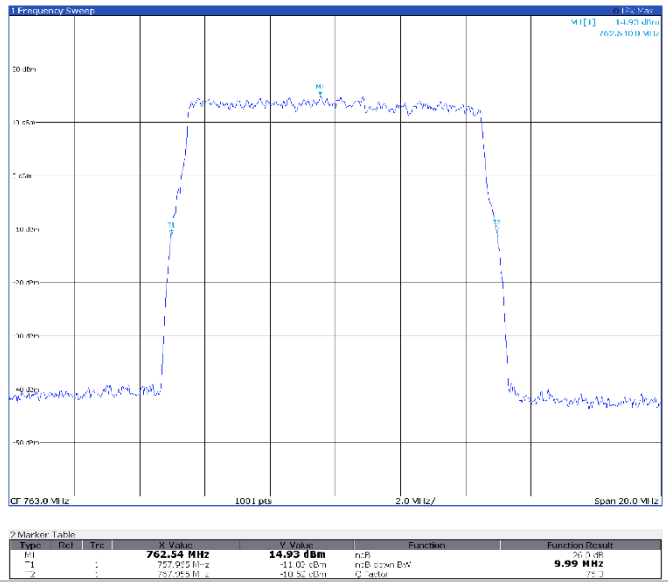
TM3p1, 10 MHz, mid channel



TM3p1a, 10 MHz, mid channel



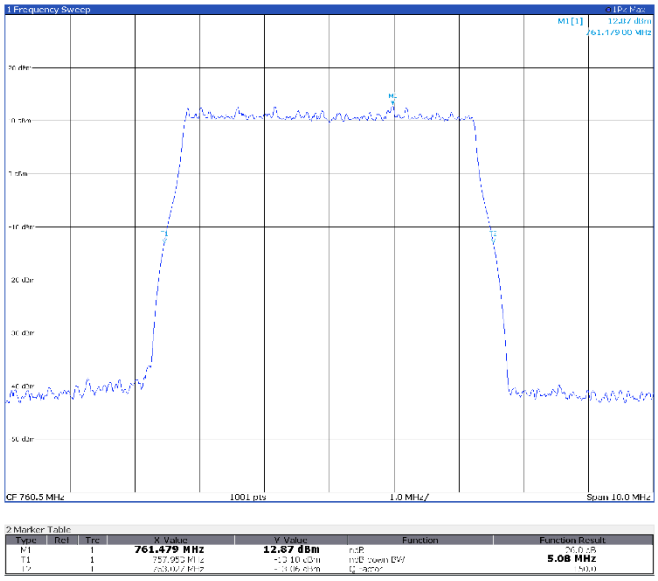
TM3p3, 10 MHz, mid channel



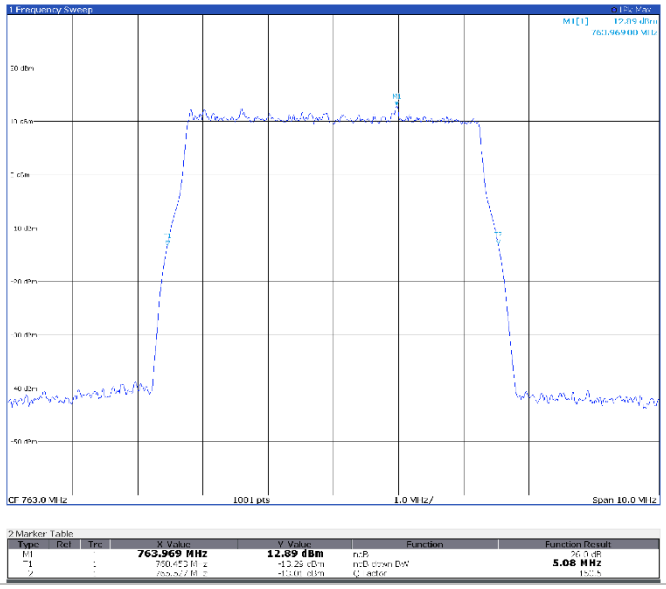
Antenna port 2

Band B14	5 MHz

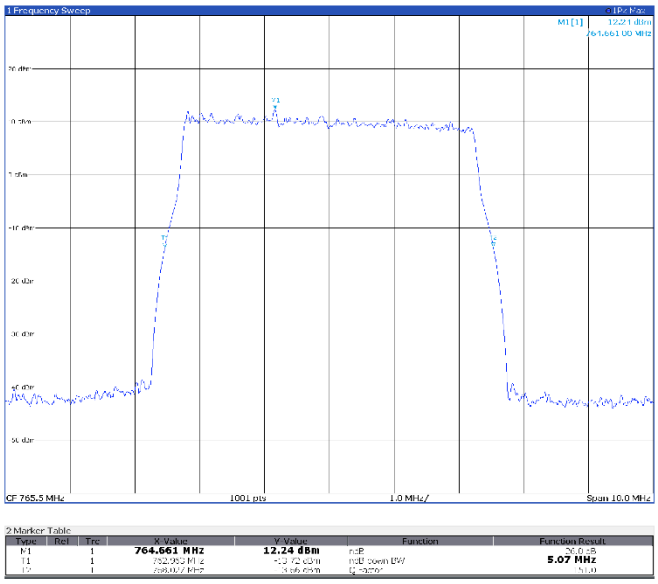
TM1.1, 5 MHz, low channel



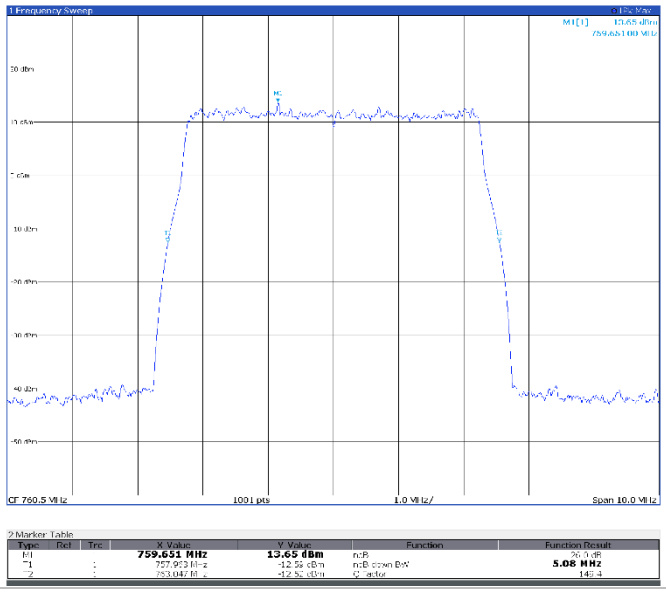
TM1.1, 5 MHz, mid channel



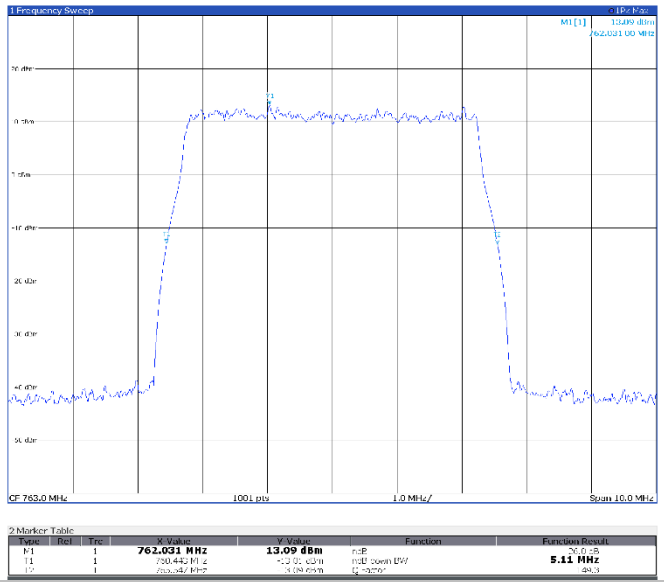
TM1.1, 5 MHz, high channel



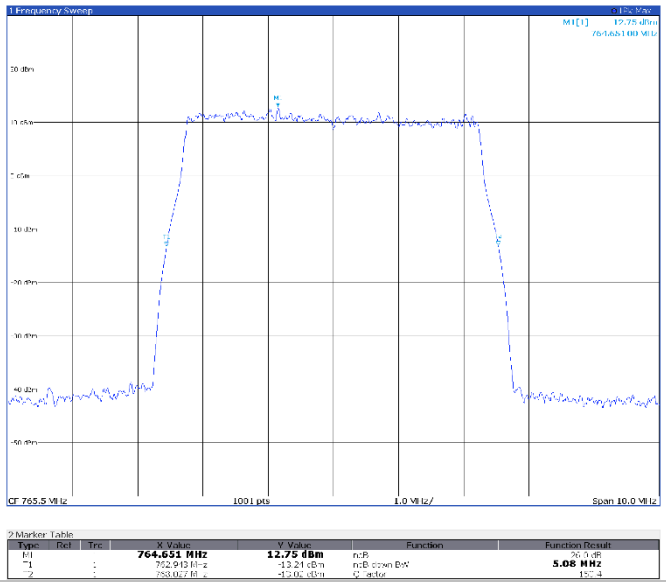
TM3p1, 5 MHz, low channel



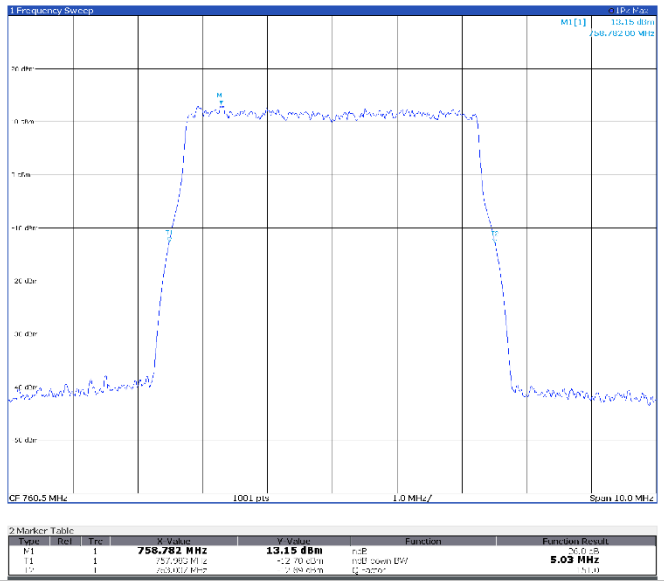
TM3p1, 5 MHz, mid channel



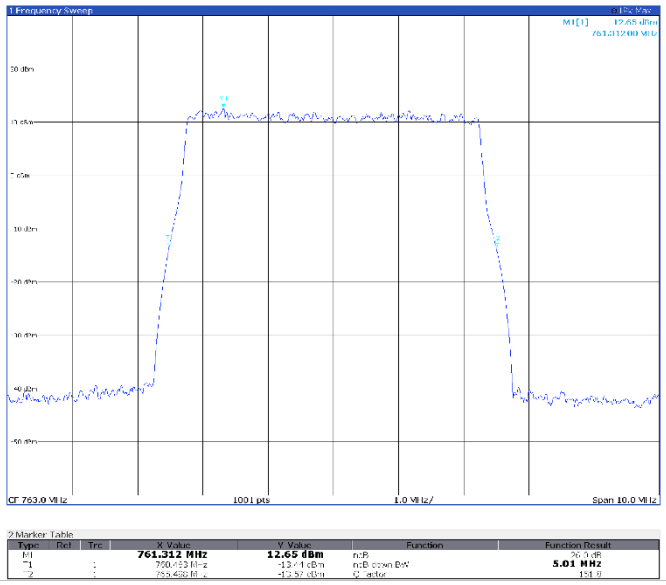
TM3p1, 5 MHz, high channel



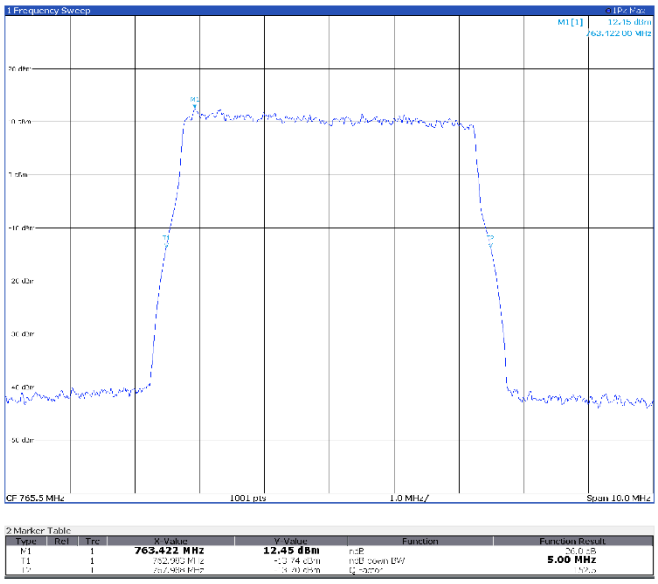
TM3p1a, 5 MHz, low channel



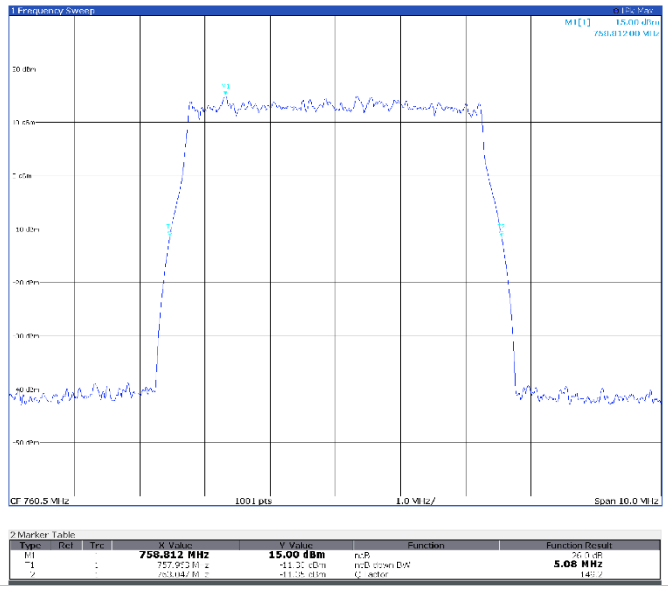
TM3p1a, 5 MHz, mid channel



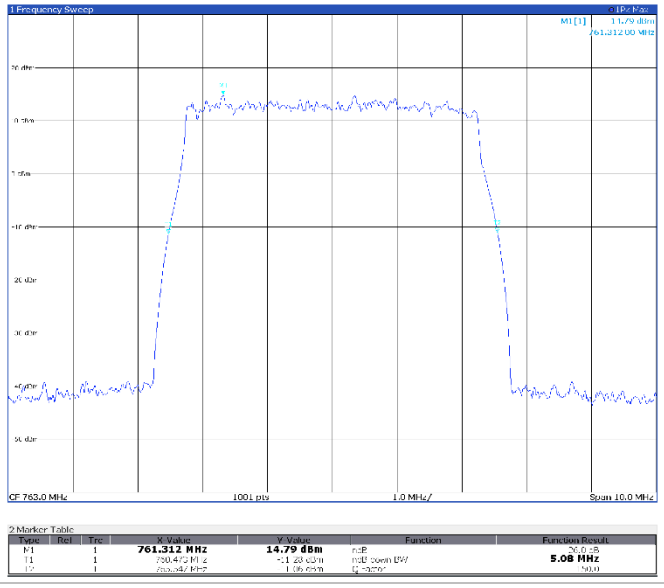
TM3p1a, 5 MHz, high channel



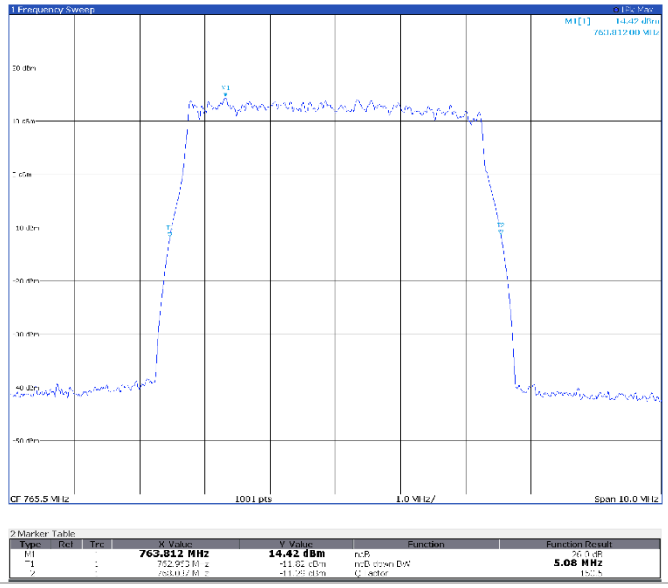
TM3p3, 5 MHz, low channel



TM3p3, 5 MHz, mid channel

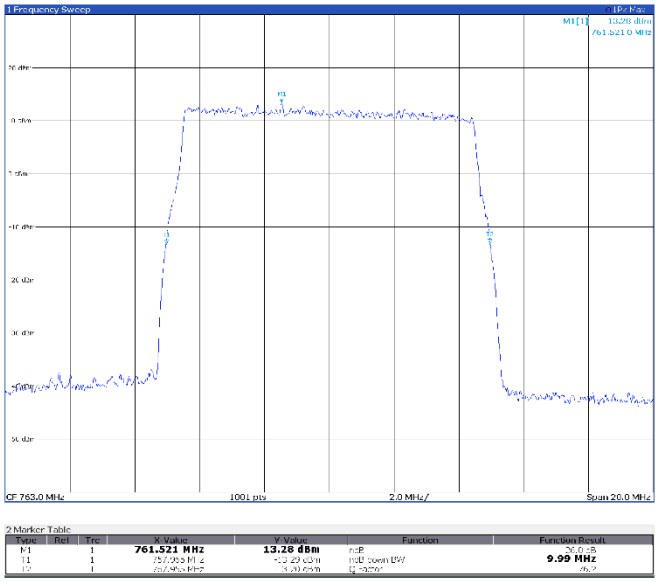


TM3p3, 5 MHz, high channel

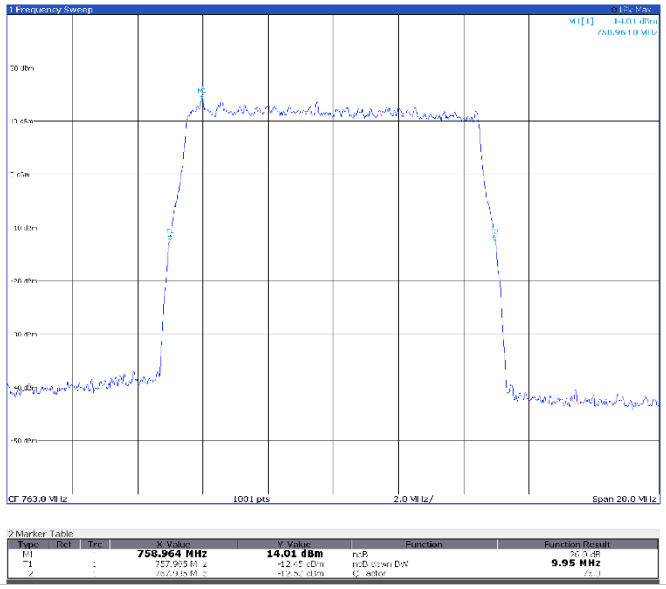


Band B14 | **10 MHz**

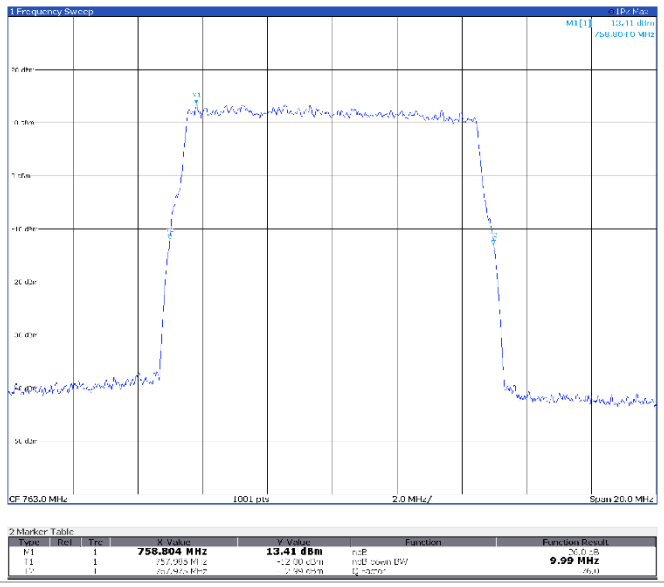
TM1.1, 10 MHz, mid channel



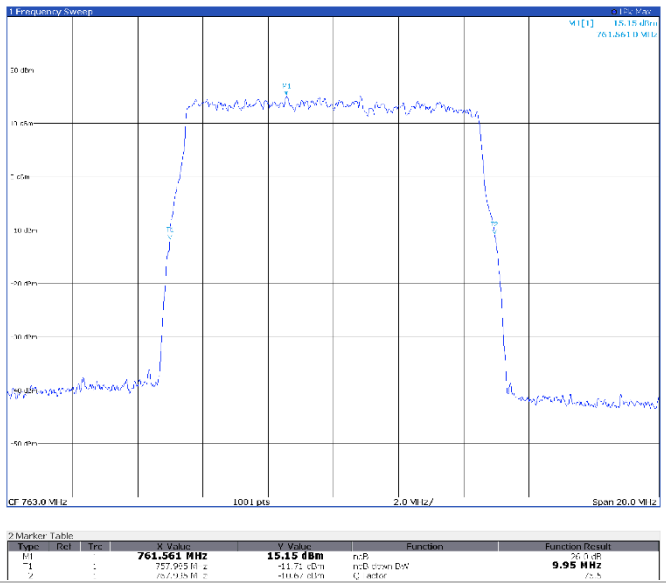
TM3p1, 10 MHz, mid channel



TM3p1a, 10 MHz, mid channel



TM3p3, 10 MHz, mid channel



8.4 FCC §90.542(a)(3) Broadband transmitting power limits.

8.4.1 Definitions and limits

(a) The following power limits apply to the **758-768**/788-798 MHz band:

(3) Fixed and base stations transmitting a signal in the 758-768 MHz band with an emission bandwidth greater than 1 MHz must not exceed an ERP **1000 watts/MHz (60 dBm/MHz)** and an antenna height of 305 m HAAT, except that antenna heights greater than 305 m HAAT are permitted if power levels are reduced below 1000 watts/MHz ERP accordance with Table 3 of this section.

(6) Control stations and mobile stations transmitting in the 758-768 MHz band and the 788-798 MHz band are limited to 30 watts ERP.

8.4.2 Test summary

Test start date	November 29, 2024	Temperature	22 °C
Test end date	December 13, 2024	Air pressure	1001 mbar
Test engineer	O. Frau	Relative humidity	62%
Verdict	Pass		

8.4.3 Observations, settings and special notes

Test method: ANSI C63.26 Section 5.2.4.5

Spectrum analyzer settings:

Resolution bandwidth	1 MHz
Video bandwidth	3 MHz
Frequency span	>= 1.5* OBW
Detector mode	Peak
Trace mode	Max Hold

This test was made across the conducted port and using a sensor power. An offset of 30 dB was added to the measurement to compensate the loss of the external 30 dB attenuator. Interconnecting cable losses were included as a transducer factor in the spectrum analyzer.

8.4.4 Test equipment used

Equipment	Manufacturer	Model no.	Asset no.
Spectrum Analyzer	Rohde & Schwarz	FSW43	101767

8.4.5 Test data

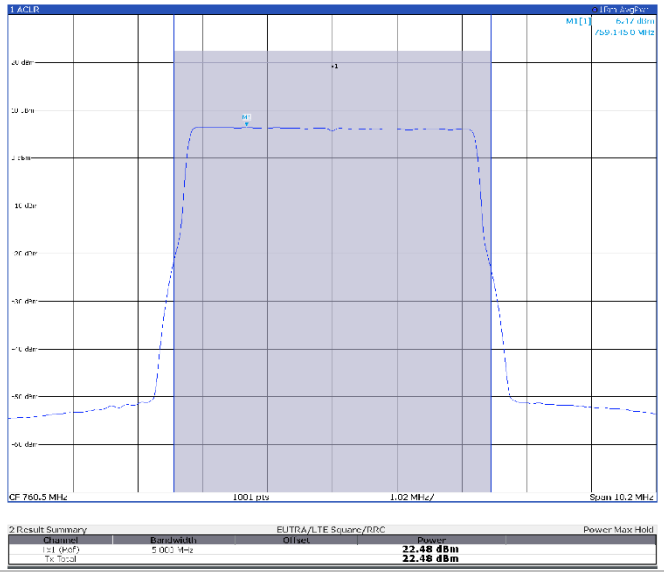
Band B14:

Modulation	OBW (MHz)	Frequency (MHz)	Measured Power Density (dBm/MHz) port 1	Measured Power Density (dBm/MHz) port 2	Antenna Gain Max (dBi)	Total EIRP Power Density (dBm/MHz)	Measured Power (dBm) port 1	Measured Power (dBm) port 2	Limits Power (dBm)	Margin (dB)
TM1.1	5	760.5	6.47	6.54	3.7	13.22	22.48	22.55	60.0	-46.78
TM3p1	5	760.5	6.53	6.57	3.7	13.26	22.50	22.49	60.0	-46.74
TM3p1a	5	760.5	6.50	6.59	3.7	13.26	22.39	22.47	60.0	-46.74
TM3p3	5	760.5	7.74	7.81	3.7	14.49	22.46	22.45	60.0	-45.51
TM1.1	5	763.0	6.30	6.28	3.7	13.00	22.26	22.28	60.0	-47.00
TM3p1	5	763.0	6.33	6.38	3.7	13.07	22.23	22.25	60.0	-46.93
TM3p1a	5	763.0	6.33	6.32	3.7	13.04	22.18	22.17	60.0	-46.96
TM3p3	5	763.0	7.45	7.56	3.7	14.22	22.20	22.25	60.0	-45.78
TM1.1	5	765.5	5.87	5.88	3.7	12.59	21.68	21.64	60.0	-47.41
TM3p1	5	765.5	6.00	6.05	3.7	12.74	21.70	21.64	60.0	-47.26
TM3p1a	5	765.5	5.96	6.01	3.7	12.70	21.66	21.59	60.0	-47.30
TM3p3	5	765.5	6.81	6.93	3.7	13.58	21.64	21.60	60.0	-46.42
TM1.1	10	n/a	-	-	-	-	-	-	-	-
TM3p1	10	n/a	-	-	-	-	-	-	-	-
TM3p1a	10	n/a	-	-	-	-	-	-	-	-
TM3p3	10	n/a	-	-	-	-	-	-	-	-
TM1.1	10	763.0	3.19	3.17	3.7	9.89	22.09	22.01	60.0	-50.11
TM3p1	10	763.0	3.21	3.32	3.7	9.98	22.07	22.09	60.0	-50.02
TM3p1a	10	763.0	3.28	3.38	3.7	10.04	22.06	22.10	60.0	-49.96
TM3p3	10	763.0	4.07	4.06	3.7	10.78	21.97	22.01	60.0	-49.22
TM1.1	10	n/a	-	-	-	-	-	-	-	-
TM3p1	10	n/a	-	-	-	-	-	-	-	-
TM3p1a	10	n/a	-	-	-	-	-	-	-	-
TM3p3	10	n/a	-	-	-	-	-	-	-	-

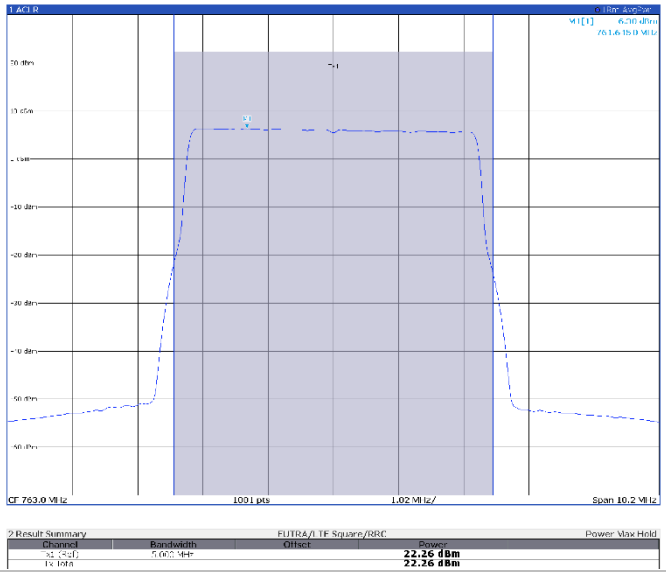
Antenna port 1

Band B14	5 MHz

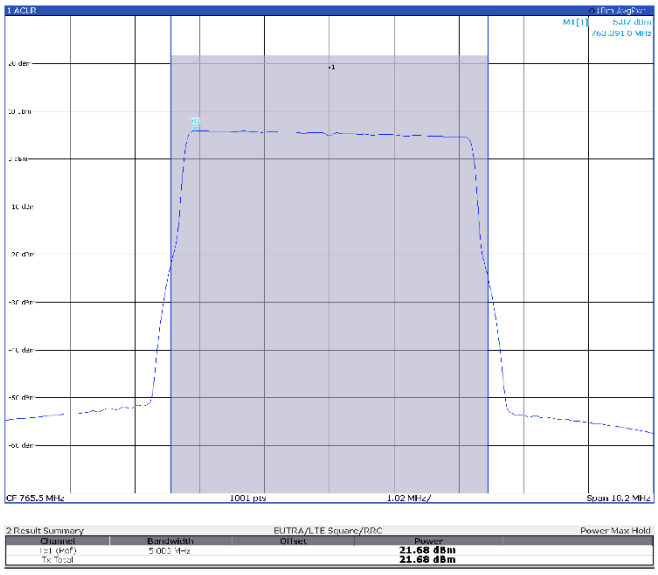
TM1.1, 5 MHz, low channel



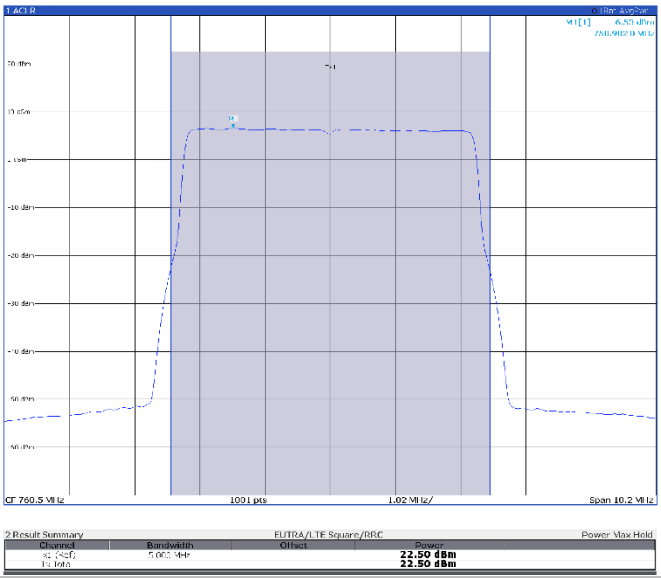
TM1.1, 5 MHz, mid channel



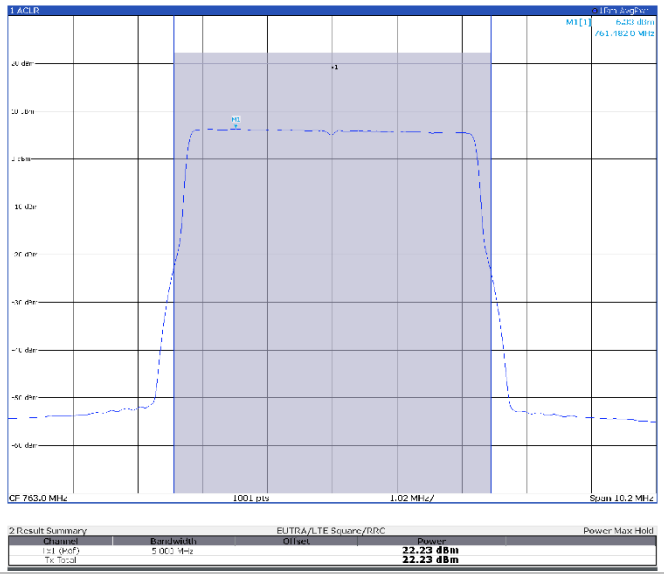
TM1.1, 5 MHz, high channel



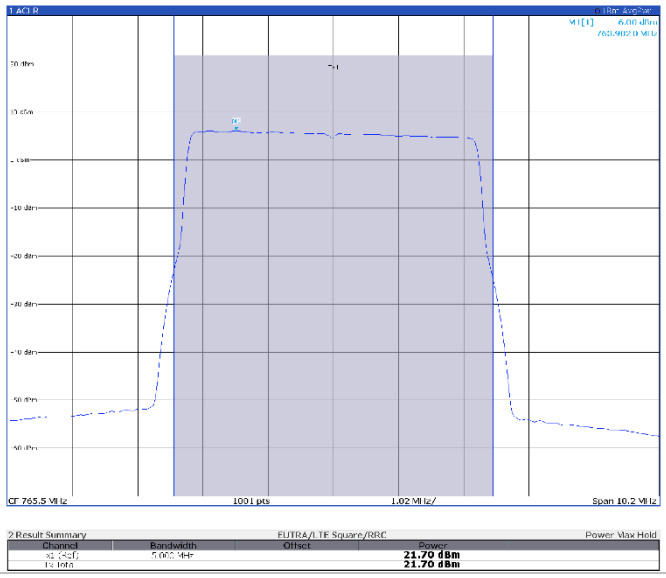
TM3p1, 5 MHz, low channel



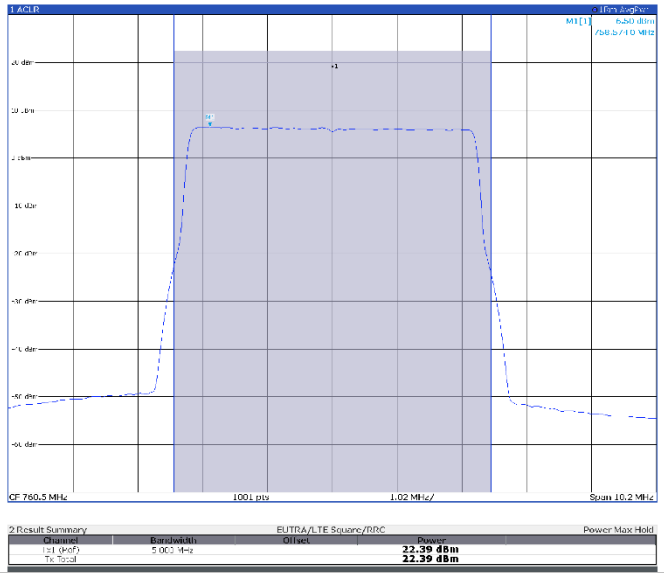
TM3p1, 5 MHz, mid channel



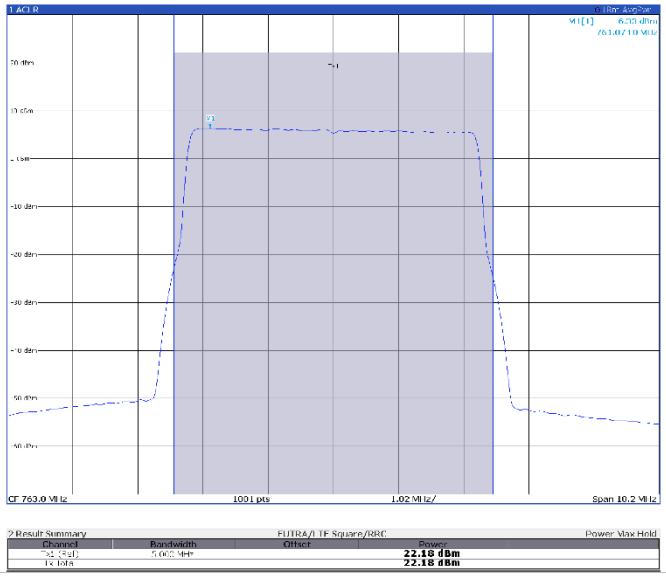
TM3p1, 5 MHz, high channel



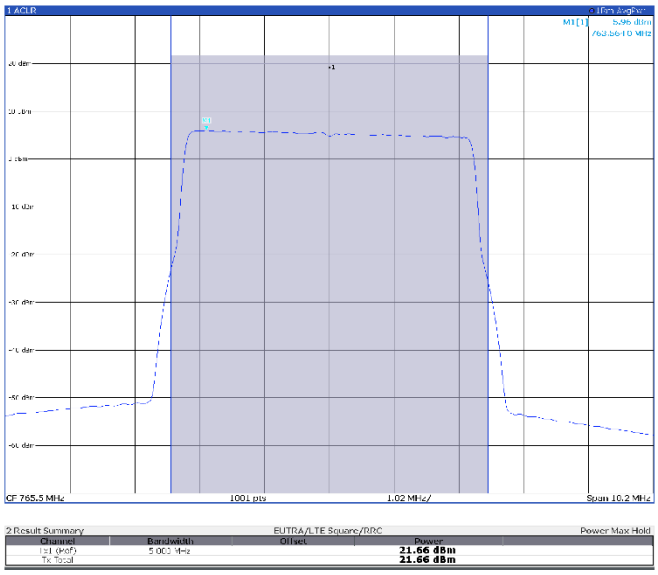
TM3p1a, 5 MHz, low channel



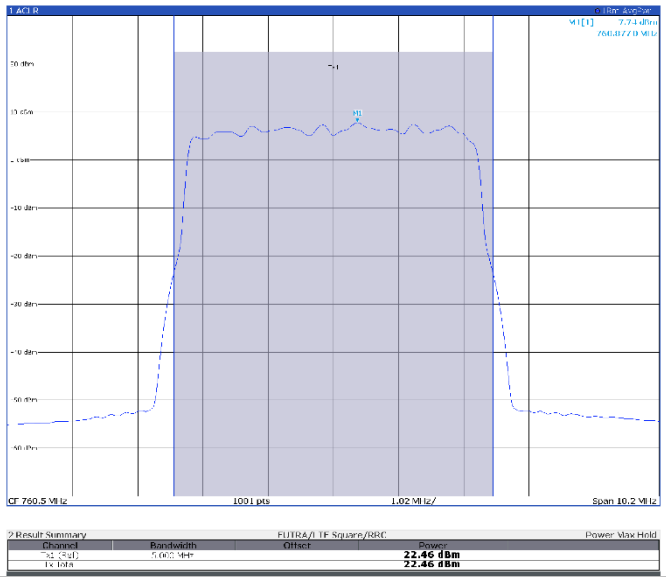
TM3p1a, 5 MHz, mid channel



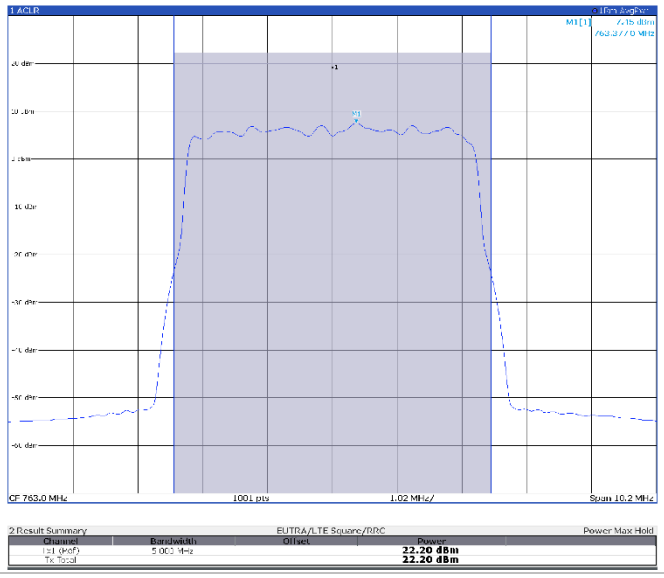
TM3p1a, 5 MHz, high channel



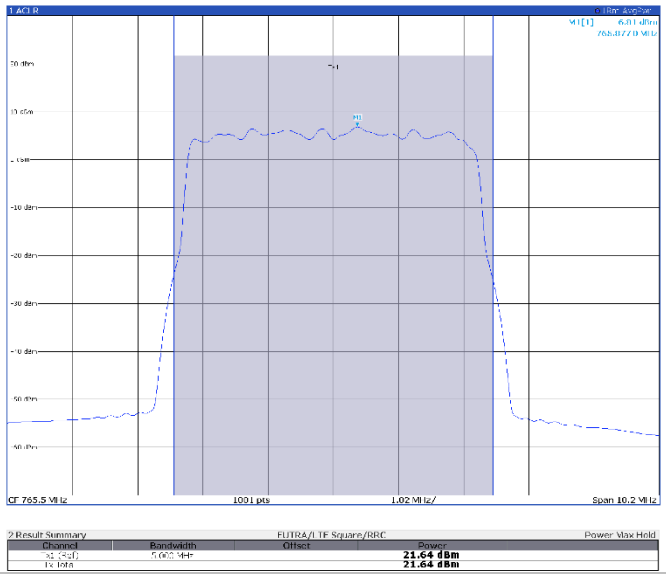
TM3p3, 5 MHz, low channel



TM3p3, 5 MHz, mid channel

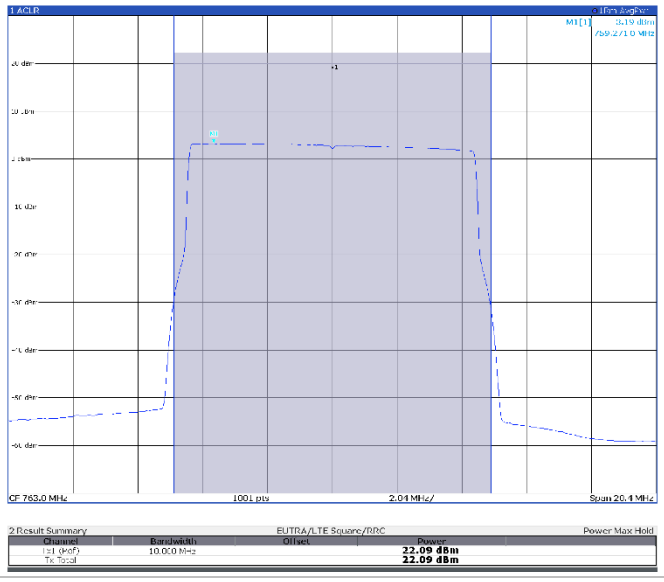


TM3p3, 5 MHz, high channel

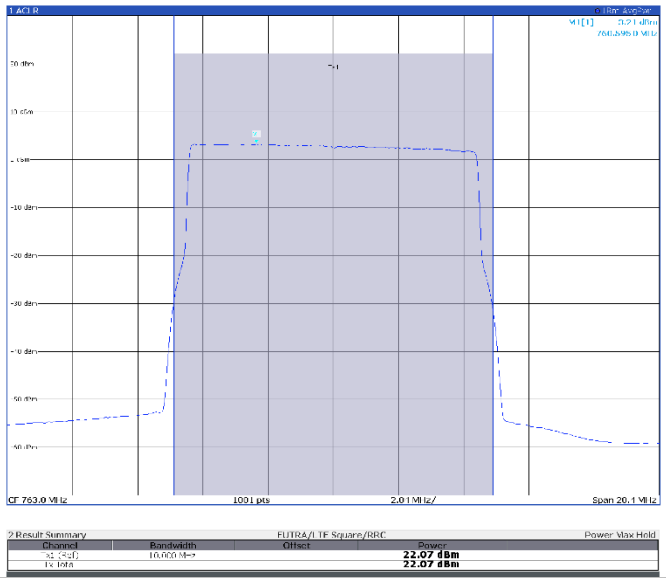


Band B14 **10 MHz**

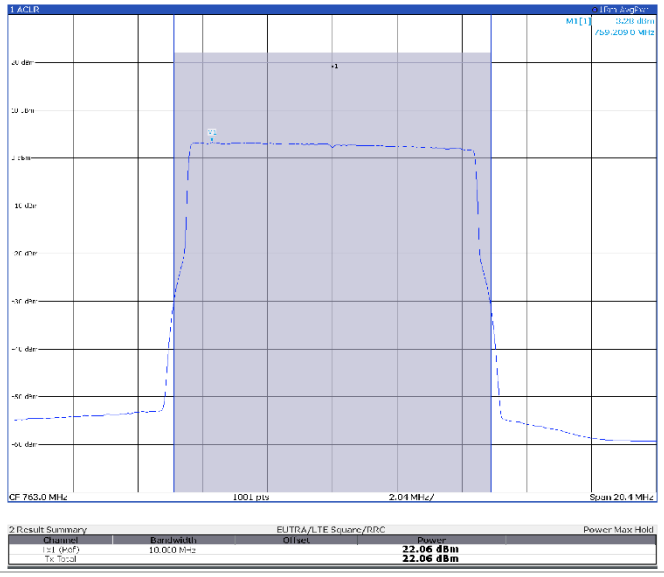
TM1.1, 10 MHz, mid channel



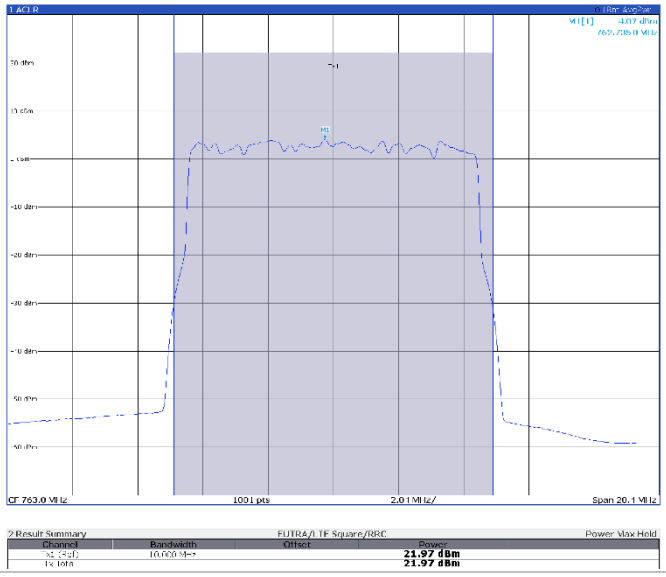
TM3p1, 10 MHz, mid channel



TM3p1a, 10 MHz, mid channel



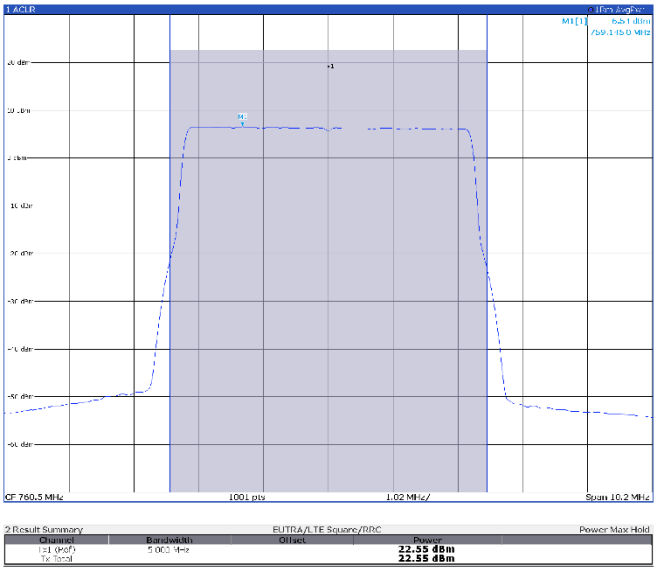
TM3p3, 10 MHz, mid channel



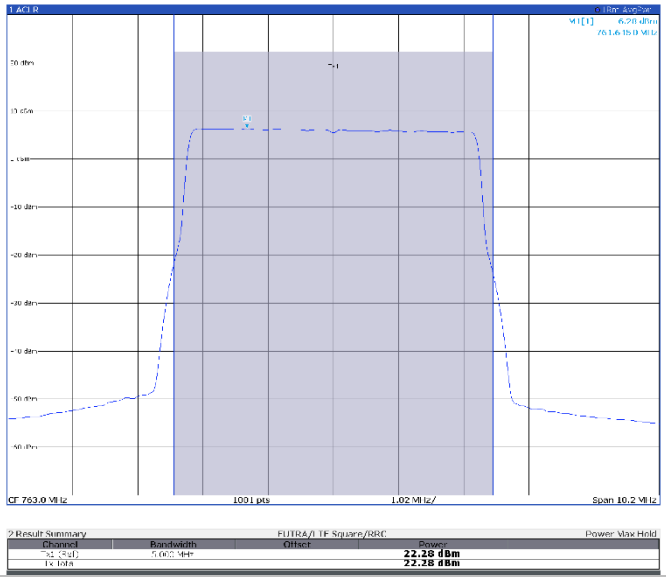
Antenna port 2

Band B14	5 MHz

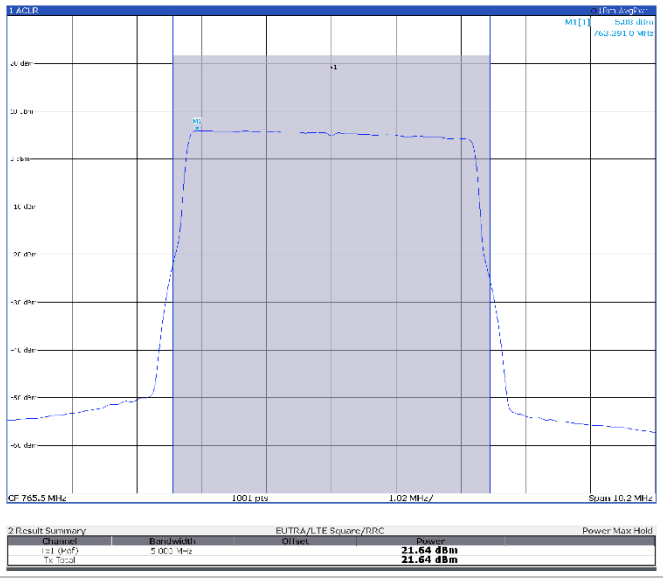
TM1.1, 5 MHz, low channel



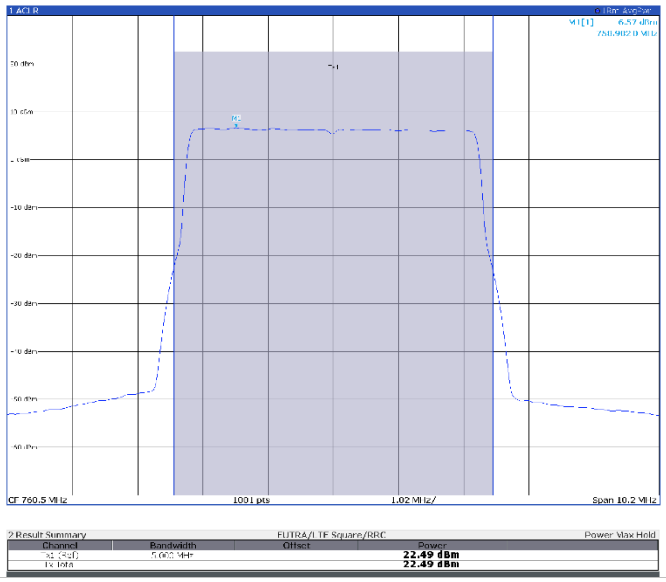
TM1.1, 5 MHz, mid channel



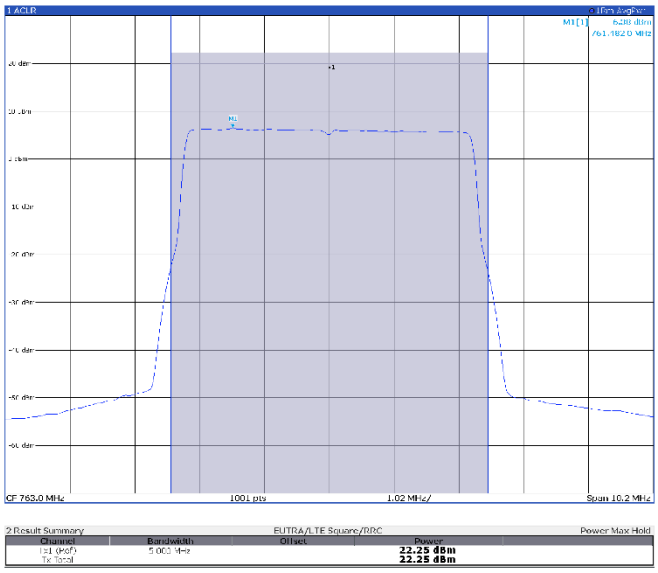
TM1.1, 5 MHz, high channel



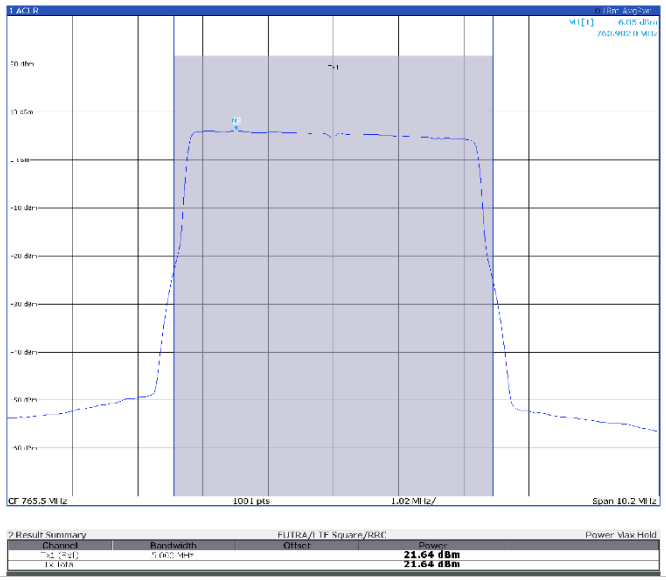
TM3p1, 5 MHz, low channel



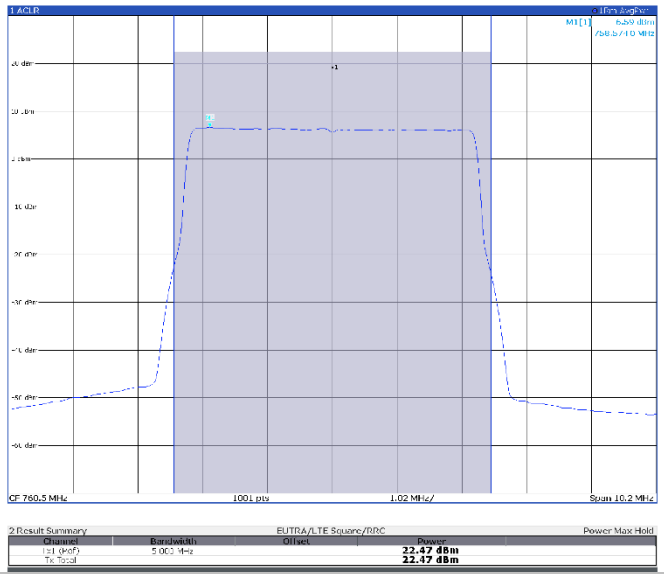
TM3p1, 5 MHz, mid channel



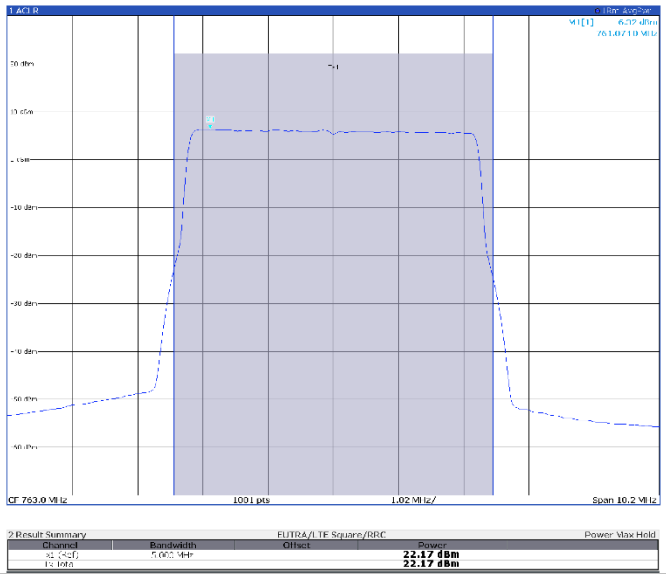
TM3p1, 5 MHz, high channel



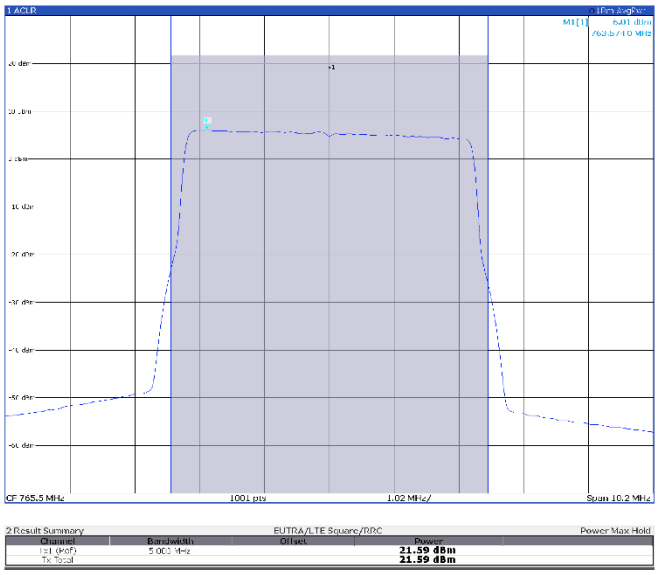
TM3p1a, 5 MHz, low channel



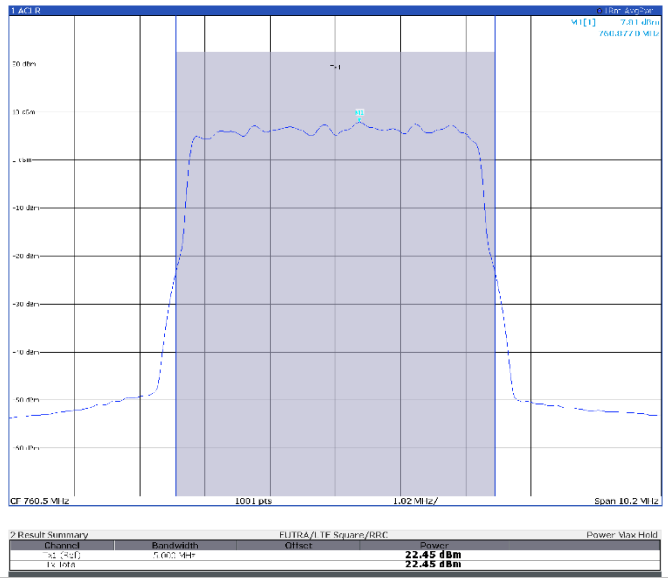
TM3p1a, 5 MHz, mid channel



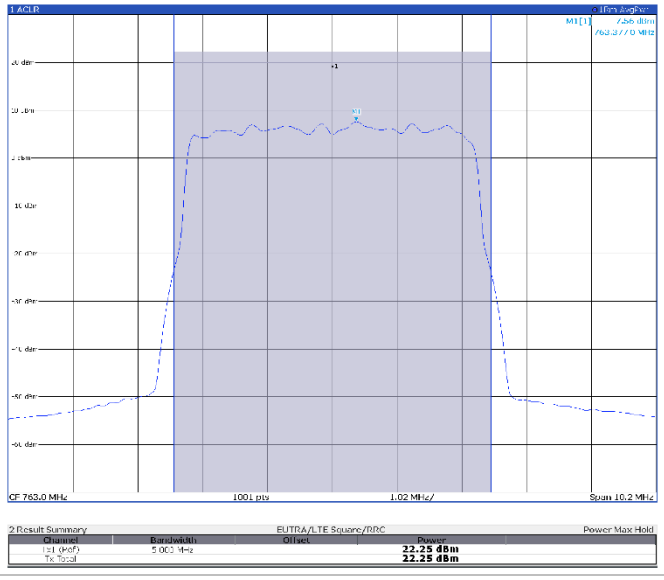
TM3p1a, 5 MHz, high channel



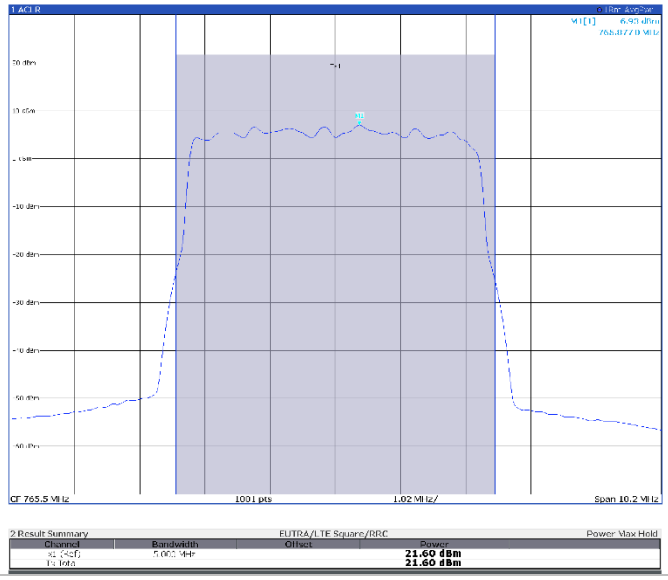
TM3p3, 5 MHz, low channel



TM3p3, 5 MHz, mid channel

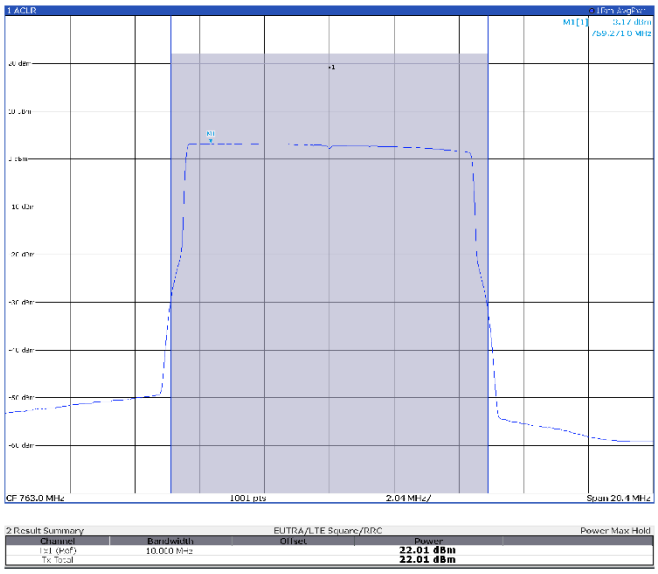


TM3p3, 5 MHz, high channel

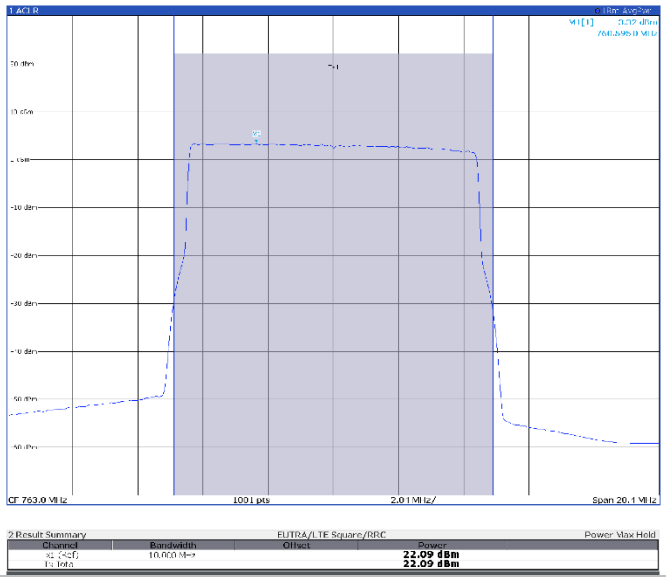


Band B14 | **10 MHz**

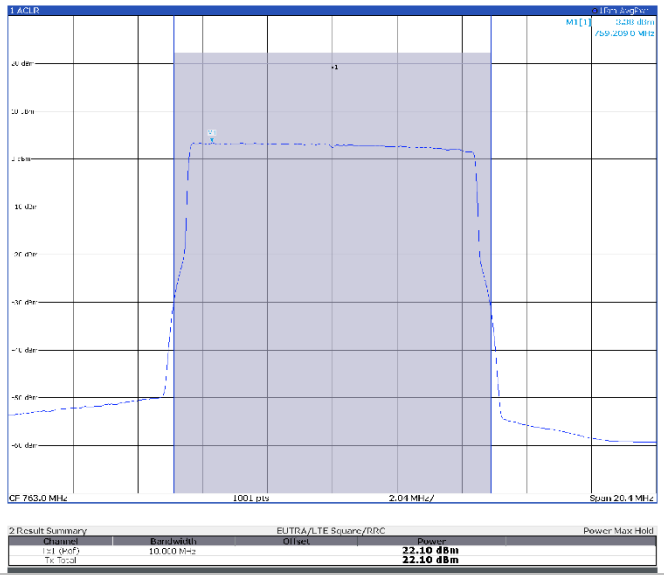
TM1.1, 10 MHz, mid channel



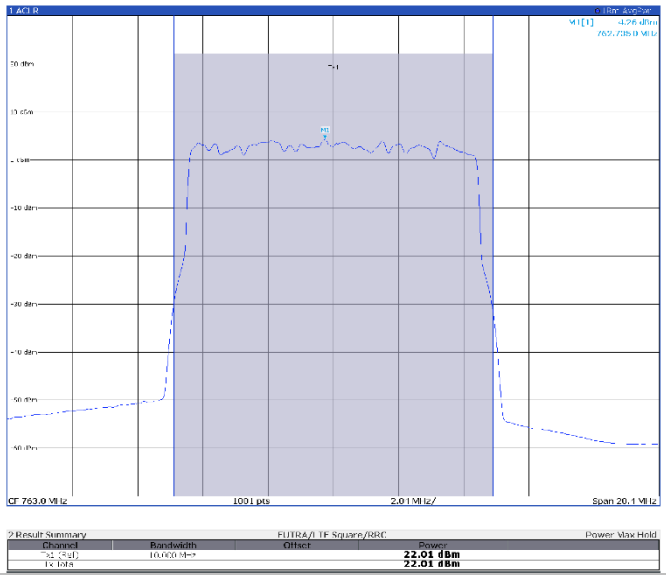
TM3p1, 10 MHz, mid channel



TM3p1a, 10 MHz, mid channel



TM3p3, 10 MHz, mid channel



8.5 FCC §90.542(a)(3) Peak to Average Power Ratio

8.5.1 Definitions and limits

d) (5) Equipment employed must be authorized in accordance with the provisions of § 24.51. Power measurements for transmissions by stations authorized under this section may be made either in accordance with a Commission-approved average power technique or in compliance with paragraph (d)(6) of this section. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

(6) Peak transmit power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage. The measurement results shall be properly adjusted for any instrument limitations, such as detector response times, limited resolution bandwidth capability when compared to the emission bandwidth, sensitivity, and any other relevant factors, so as to obtain a true peak measurement for the emission in question over the full bandwidth of the channel.

8.5.2 Test summary

Test start date	November 29, 2024	Temperature	22 °C
Test end date	December 13, 2024	Air pressure	1001 mbar
Test engineer	O. Frau	Relative humidity	62%
Verdict	Pass		

8.5.3 Observations, settings and special notes

Test method: ANSI C63.26 Section 5.2.3.4.

Spectrum analyzer settings:

Resolution bandwidth	≥ OBW
Number of counts	The necessary number up to stabilizes the measured
Trace mode	Clear/Write

8.5.4 Test equipment used

Equipment	Manufacturer	Model no.	Asset no.
Spectrum Analyzer	Rohde & Schwarz	FSW43	101767

8.5.5 Test data

Antenna 1

Band B14:

Band	OBW Declared	Port	Channel (MHz)	0.1% (dB)	0.1% Limit (dB)	Margin (dB)
B14	5 MHz	1	760.5	8.46	13	-4.54
B14	5 MHz	1	763.0	8.44	13	-4.56
B14	5 MHz	1	765.5	8.54	13	-4.46

Peak to average power ratio, TM1.1

Band	OBW Declared	Port	Channel (MHz)	0.1% (dB)	0.1% Limit (dB)	Margin (dB)
B14	5 MHz	1	760.5	8.36	13	-4.64
B14	5 MHz	1	763.0	8.42	13	-4.58
B14	5 MHz	1	765.5	8.40	13	-4.60

Peak to average power ratio, TM3p1

Band	OBW Declared	Port	Channel (MHz)	0.1% (dB)	0.1% Limit (dB)	Margin (dB)
B14	5 MHz	1	760.5	8.26	13	-4.74
B14	5 MHz	1	763.0	8.24	13	-4.76
B14	5 MHz	1	765.5	8.30	13	-4.70

Peak to average power ratio, TM3p1a

Band	OBW Declared	Port	Channel (MHz)	0.1% (dB)	0.1% Limit (dB)	Margin (dB)
B14	5 MHz	1	760.5	8.34	13	-4.66
B14	5 MHz	1	763.0	8.34	13	-4.66
B14	5 MHz	1	765.5	8.42	13	-4.58

Peak to average power ratio, TM3p3

Band	OBW Declared	Port	Channel (MHz)	0.1% (dB)	0.1% Limit (dB)	Margin (dB)
B14	10 MHz	1	n/a	-	-	-
B14	10 MHz	1	763.0	8.34	13	-4.66
B14	10 MHz	1	n/a	-	-	-

Peak to average power ratio, TM1.1

Band	OBW Declared	Port	Channel (MHz)	0.1% (dB)	0.1% Limit (dB)	Margin (dB)
B14	10 MHz	1	n/a	-	-	-
B14	10 MHz	1	763.0	8.32	13	-4.68
B14	10 MHz	1	n/a	-	-	-

Peak to average power ratio, TM3p1

Band	OBW Declared	Port	Channel (MHz)	0.1% (dB)	0.1% Limit (dB)	Margin (dB)
B14	10 MHz	1	n/a	-	-	-
B14	10 MHz	1	763.0	8.44	13	-4.56
B14	10 MHz	1	n/a	-	-	-

Peak to average power ratio, TM3p1a

Band	OBW Declared	Port	Channel (MHz)	0.1% (dB)	0.1% Limit (dB)	Margin (dB)
B14	10 MHz	1	n/a	-	-	-
B14	10 MHz	1	763.0	8.44	13	-4.56
B14	10 MHz	1	n/a	-	-	-

Peak to average power ratio, TM3p3

Antenna 2

Band B14:

Band	OBW Declared	Port	Channel (MHz)	0.1% (dB)	0.1% Limit (dB)	Margin (dB)
B14	5 MHz	2	760.5	8.54	13	-4.46
B14	5 MHz	2	763.0	8.58	13	-4.42
B14	5 MHz	2	765.5	8.46	13	-4.54

Peak to average power ratio, TM1.1

Band	OBW Declared	Port	Channel (MHz)	0.1% (dB)	0.1% Limit (dB)	Margin (dB)
B14	5 MHz	2	760.5	8.42	13	-4.58
B14	5 MHz	2	763.0	8.48	13	-4.52
B14	5 MHz	2	765.5	8.42	13	-4.58

Peak to average power ratio, TM3p1

Band	OBW Declared	Port	Channel (MHz)	0.1% (dB)	0.1% Limit (dB)	Margin (dB)
B14	5 MHz	2	760.5	8.30	13	-4.70
B14	5 MHz	2	763.0	8.24	13	-4.76
B14	5 MHz	2	765.5	8.24	13	-4.76

Peak to average power ratio, TM3p1a

Band	OBW Declared	Port	Channel (MHz)	0.1% (dB)	0.1% Limit (dB)	Margin (dB)
B14	5 MHz	2	760.5	8.36	13	-4.64
B14	5 MHz	2	763.0	8.40	13	-4.60
B14	5 MHz	2	765.5	8.40	13	-4.64

Peak to average power ratio, TM3p3

Band	OBW Declared	Port	Channel (MHz)	0.1% (dB)	0.1% Limit (dB)	Margin (dB)
B14	10 MHz	2	n/a	-	-	-
B14	10 MHz	2	763.0	8.48	13	-4.52
B14	10 MHz	2	n/a	-	-	-

Peak to average power ratio, TM1.1

Band	OBW Declared	Port	Channel (MHz)	0.1% (dB)	0.1% Limit (dB)	Margin (dB)
B14	10 MHz	2	n/a	-	-	-
B14	10 MHz	2	763.0	8.34	13	-4.66
B14	10 MHz	2	n/a	-	-	-

Peak to average power ratio, TM3p1

Band	OBW Declared	Port	Channel (MHz)	0.1% (dB)	0.1% Limit (dB)	Margin (dB)
B14	10 MHz	2	n/a	-	-	-
B14	10 MHz	2	763.0	8.40	13	-4.60
B14	10 MHz	2	n/a	-	-	-

Peak to average power ratio, TM3p1a

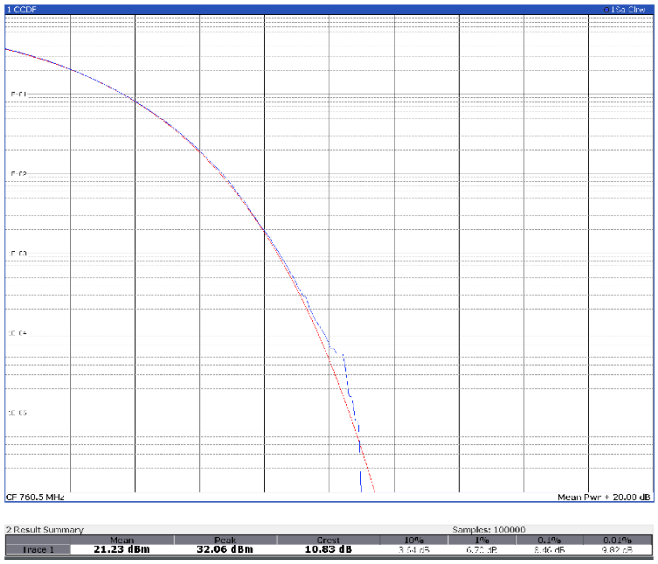
Band	OBW Declared	Port	Channel (MHz)	0.1% (dB)	0.1% Limit (dB)	Margin (dB)
B14	10 MHz	2	n/a	-	-	-
B14	10 MHz	2	763.0	8.48	13	-4.52
B14	10 MHz	2	n/a	-	-	-

Peak to average power ratio, TM3p3

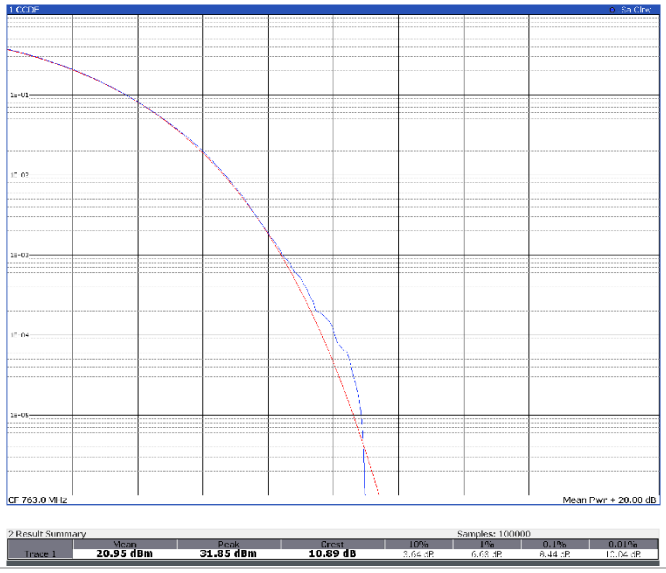
Antenna port 1

Band B14	5 MHz

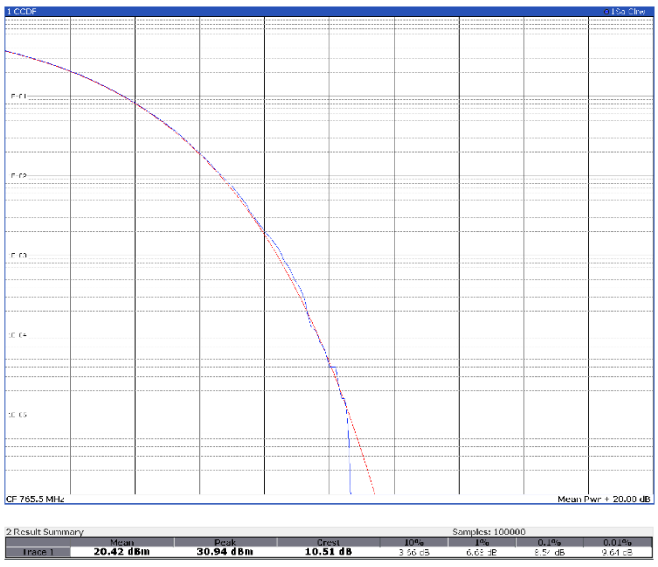
TM1.1, 5 MHz, low channel



TM1.1, 5 MHz, mid channel



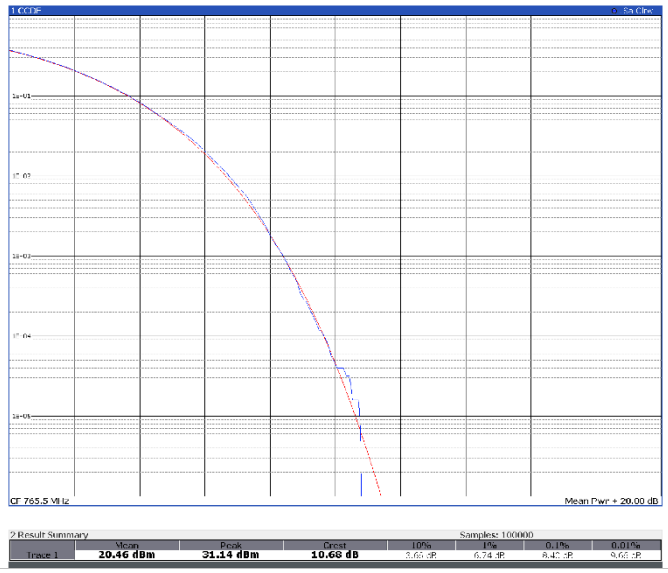
TM1.1, 5 MHz, high channel



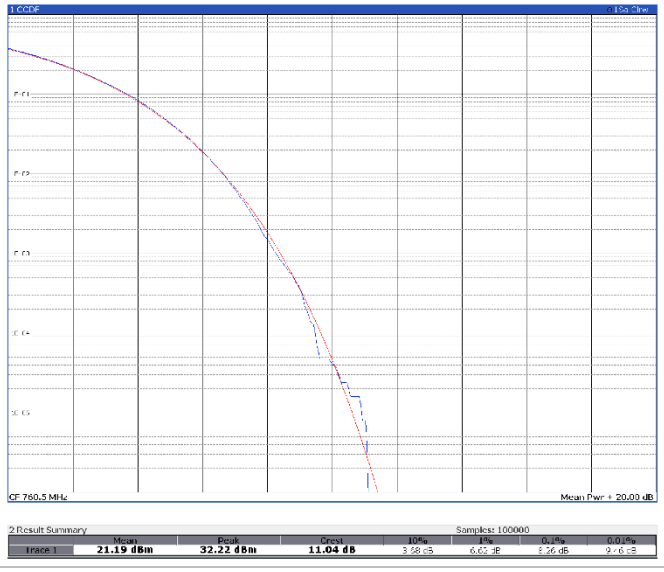
TM3p1, 5 MHz, low channel

TM3p1, 5 MHz, mid channel

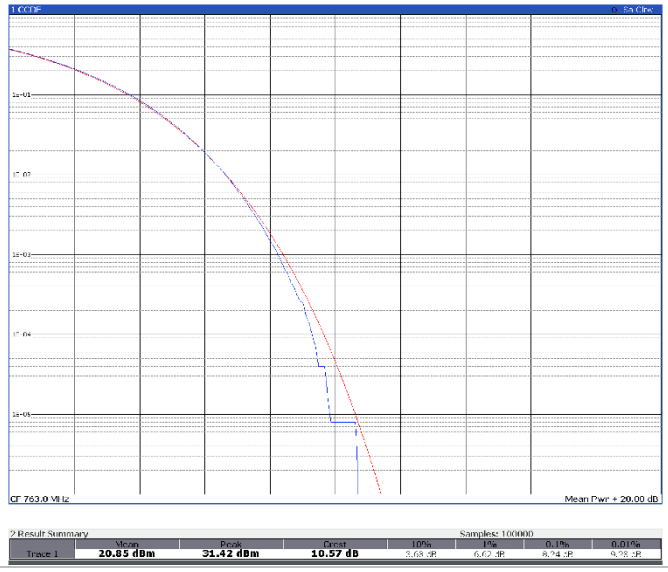
TM3p1, 5 MHz, high channel



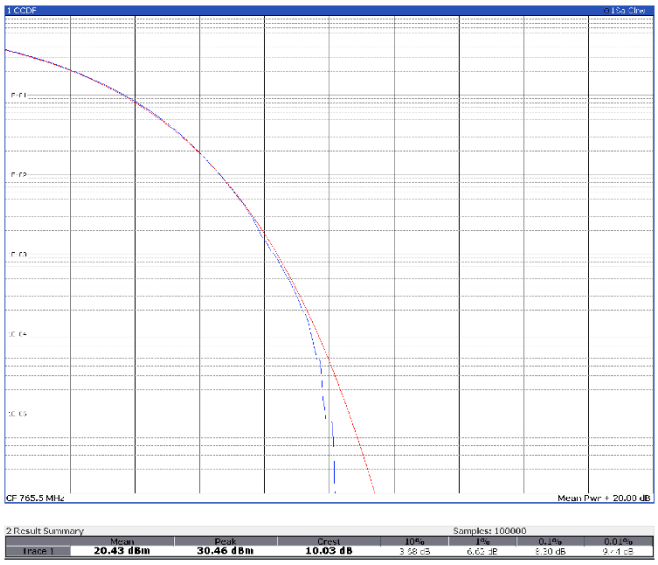
TM3p1a, 5 MHz, low channel



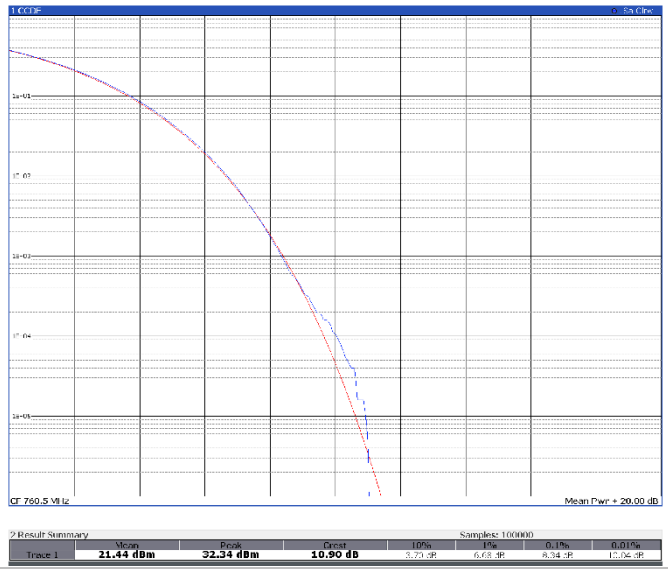
TM3p1a, 5 MHz, mid channel



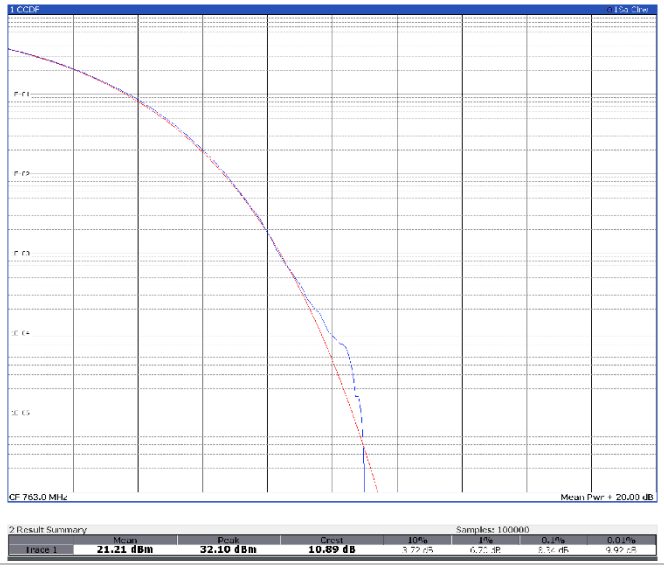
TM3p1a, 5 MHz, high channel



TM3p3, 5 MHz, low channel



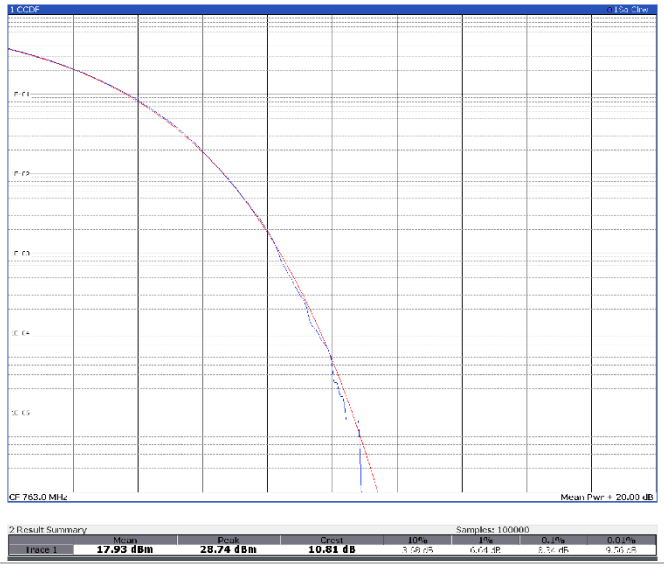
TM3p3, 5 MHz, mid channel



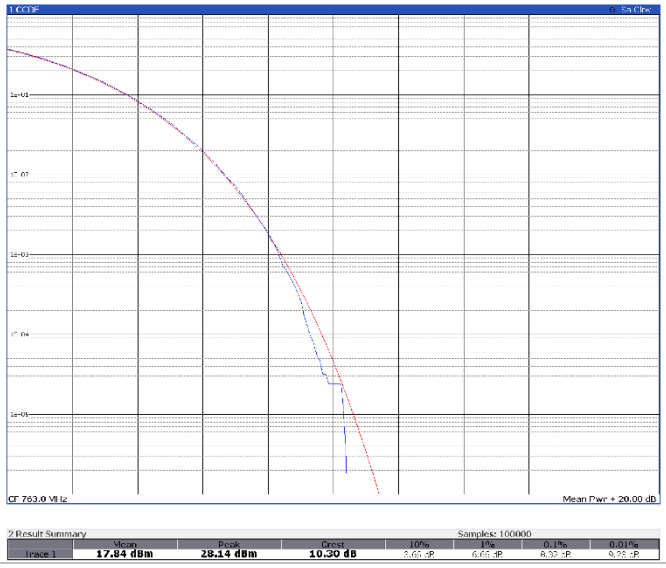
TM3p3, 5 MHz, high channel

Band B14 | **10 MHz**

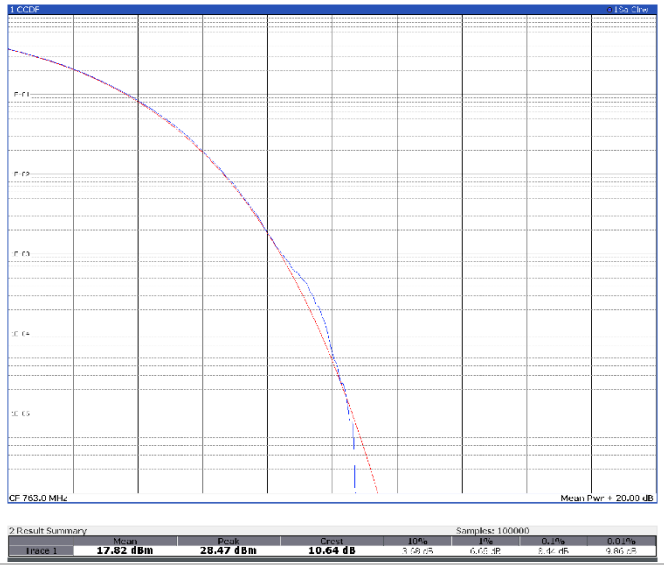
TM1.1, 10 MHz, mid channel



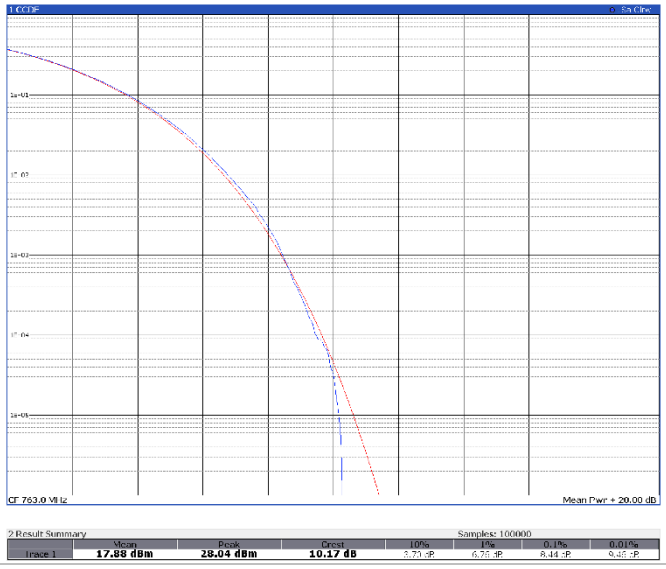
TM3p1, 10 MHz, mid channel



TM3p1a, 10 MHz, mid channel



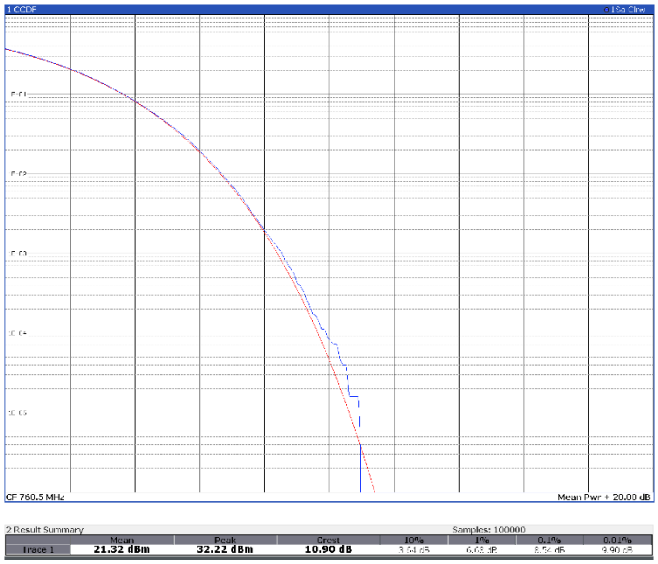
TM3p3, 10 MHz, mid channel



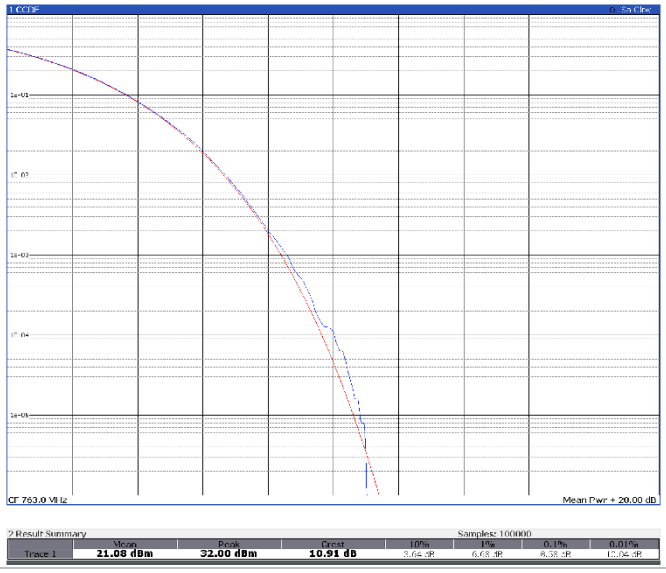
Antenna port 2

Band B14	5 MHz

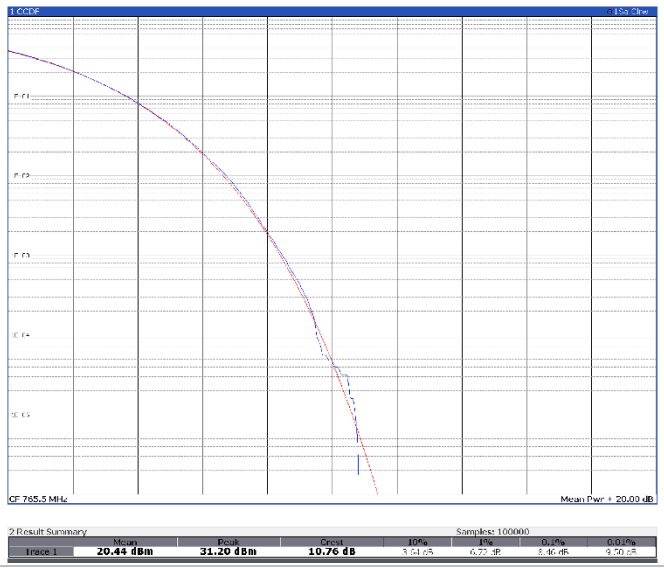
TM1.1, 5 MHz, low channel



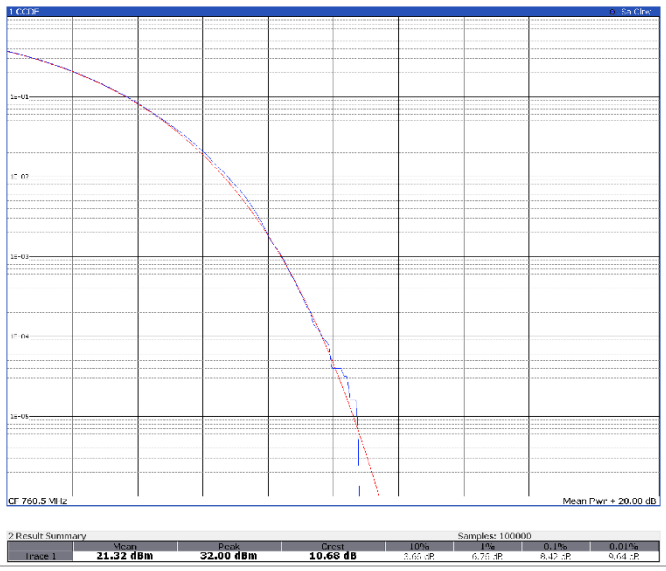
TM1.1, 5 MHz, mid channel



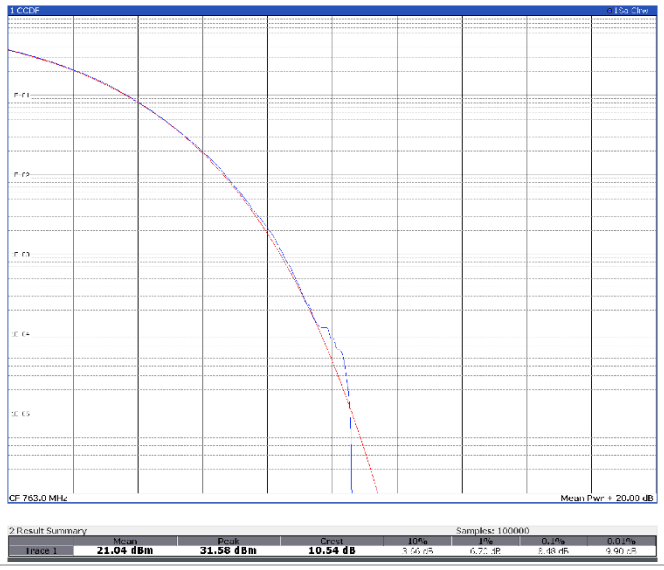
TM1.1, 5 MHz, high channel



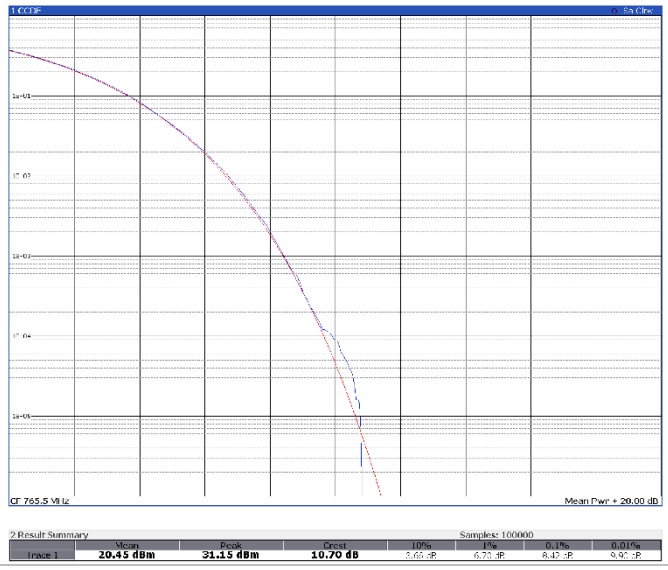
TM3p1, 5 MHz, low channel



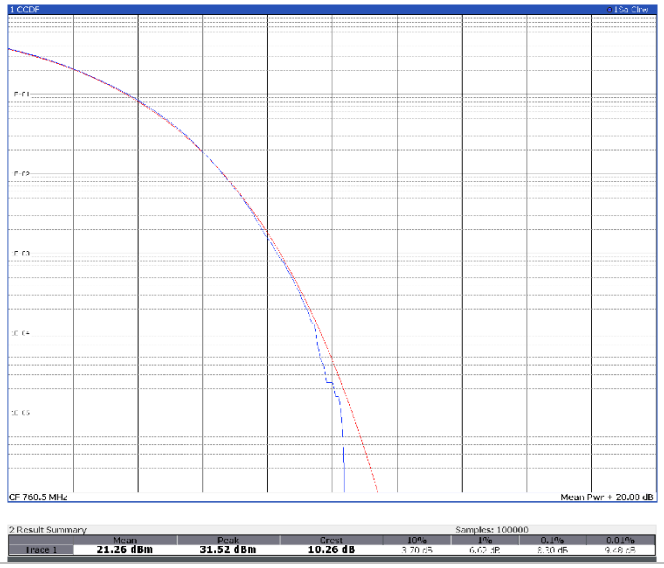
TM3p1, 5 MHz, mid channel



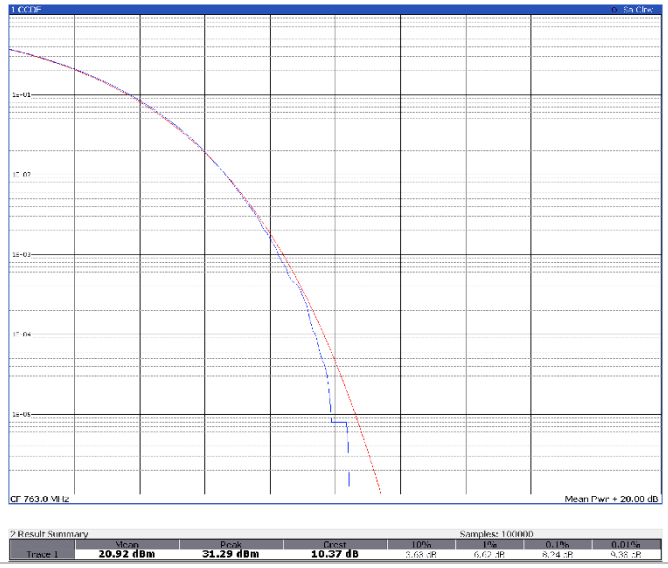
TM3p1, 5 MHz, high channel



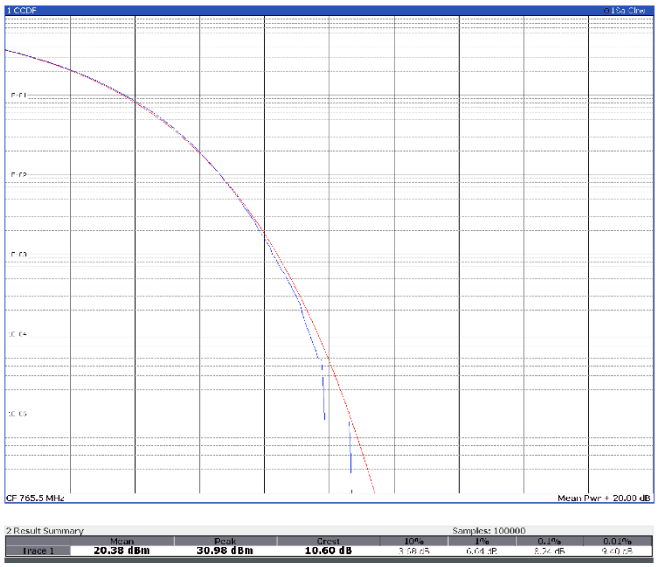
TM3p1a, 5 MHz, low channel



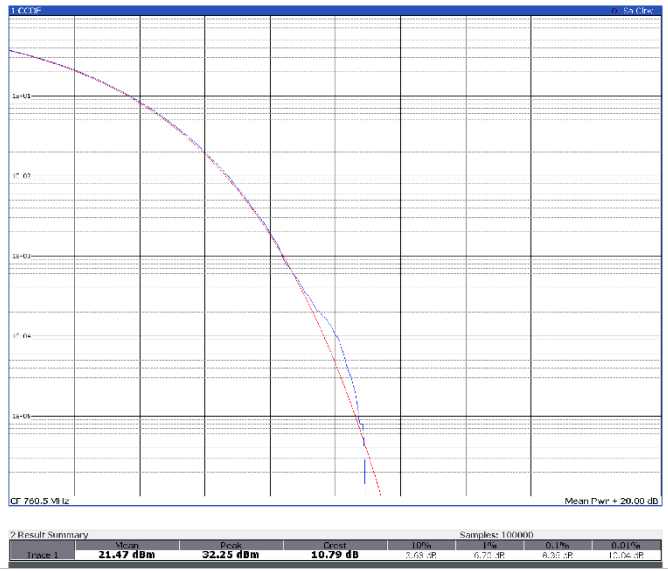
TM3p1a, 5 MHz, mid channel



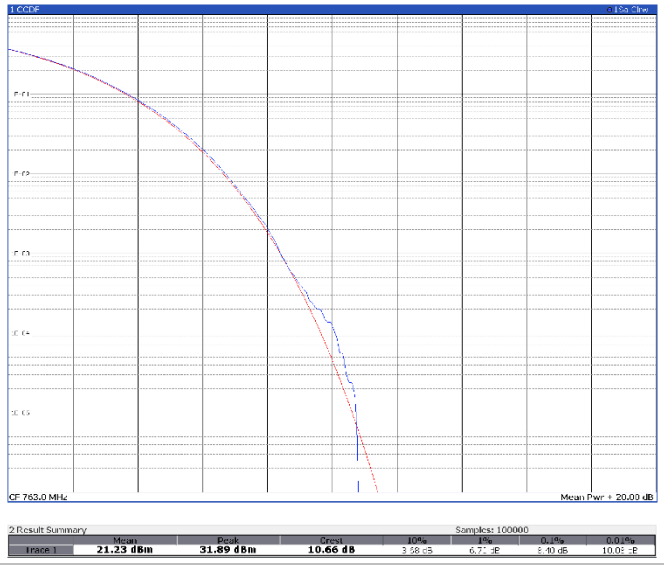
TM3p1a, 5 MHz, high channel



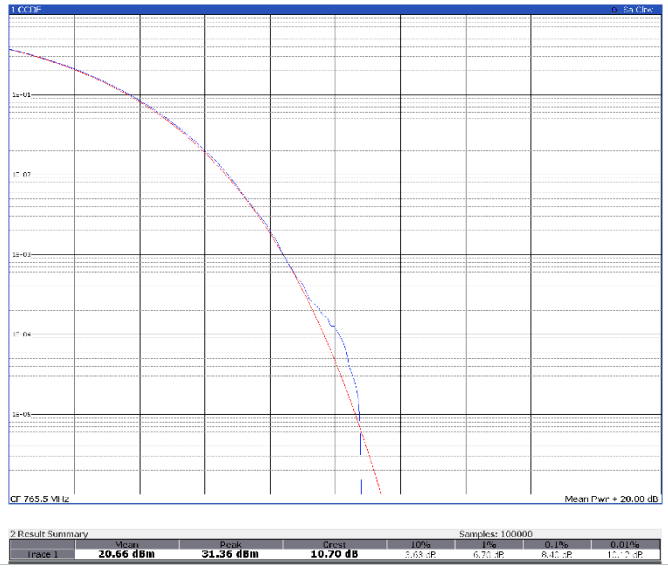
TM3p3, 5 MHz, low channel



TM3p3, 5 MHz, mid channel

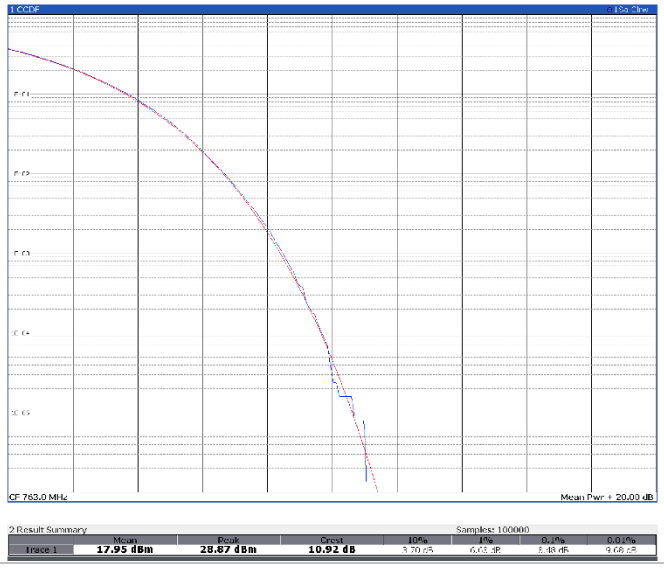


TM3p3, 5 MHz, high channel

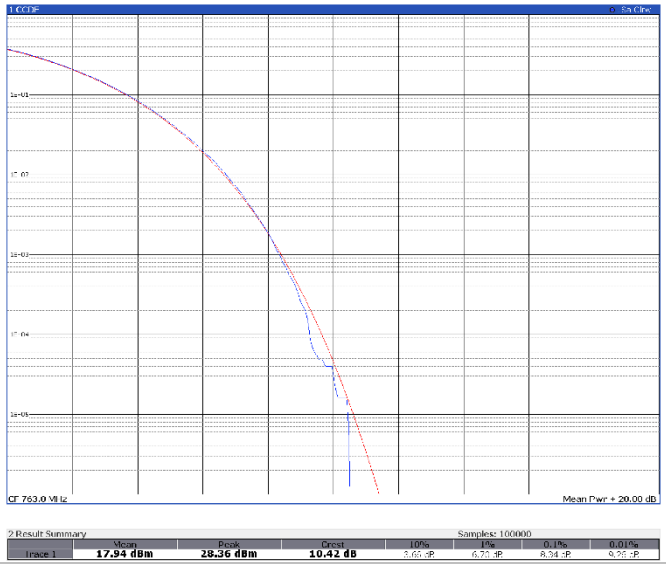


Band B14 | **10 MHz**

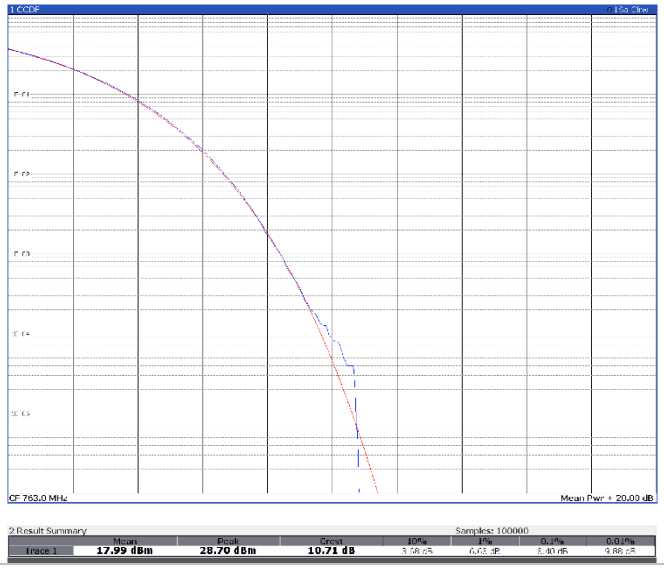
TM1.1, 10 MHz, mid channel



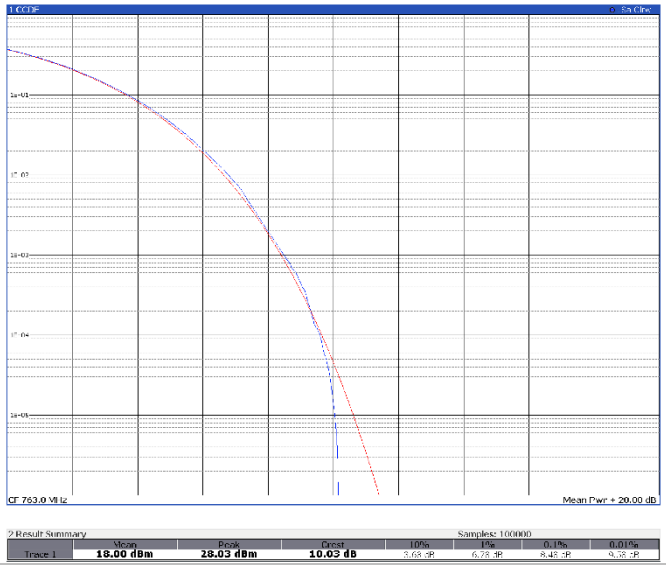
TM3p1, 10 MHz, mid channel



TM3p1a, 10 MHz, mid channel



TM3p3, 10 MHz, mid channel



8.6 FCC §90.543(e) Emission limitations.

8.6.1 Definitions and limits

Transmitters operating in 758-768 MHz and 788-798 MHz bands must meet the emission limitations in (e) of this section.

(e) For operations in the 758-768 MHz and the 788-798 MHz bands, 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, in accordance with the following:

(1) On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations.

(2) On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations.

(3) On any frequency between 775-788 MHz, above 805 MHz, and below 758 MHz, by at least 43 + 10 log (P) dB.

(4) Compliance with the provisions of paragraphs (e)(1) and (2) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

(5) Compliance with the provisions of paragraph (e)(3) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of 30 kHz may be employed

8.6.2 Test summary

Test start date	November 29, 2024	Temperature	21 °C
Test end date	December 13, 2024	Air pressure	1005 mbar
Test engineer	O. Frau	Relative humidity	64%
Verdict	Pass		

8.6.3 Observations, settings and special notes

EUT setup configuration	Table top
Test facility	3 m Semi anechoic chamber
Measuring distance	3m
Antenna height variation	1–4 m
Turn table position	0–360°
Measurement details	A preview measurement was generated with receiver in continuous scan or sweep mode while the EUT was rotated and antenna adjusted to maximize radiated emission. Emissions detected within 6 dB or above limit were re-measured with the appropriate detector against the correlating limit and recorded as the final measurement.

Receiver/spectrum analyzer settings for frequencies below 1 GHz:

Resolution bandwidth	120 kHz
Video bandwidth	300 kHz
Detector mode	– Peak (Preview measurement) – Quasi-peak (Final measurement)
Trace mode	Max Hold
Measurement time	– 100 ms (Peak preview measurement) – 5000 ms (Quasi-peak final measurement)

Receiver/spectrum analyzer settings for frequencies above 1 GHz:

Resolution bandwidth	1 MHz
Video bandwidth	3 MHz
Detector mode	Peak (Preview measurement) Peak and Caverage (Final measurement)
Trace mode	Max Hold
Measurement time	– 100 ms (Peak preview measurement) – 5000 ms (Peak and Caverage final measurement)

Spectrum analyzer settings (conducted test):

Resolution bandwidth	1 MHz
Video bandwidth	3 MHz
Frequency span	Sufficient for making an accurate measurement
Detector mode	RMS
Trace mode	Max Hold

This test was realized in two parts: one with a conducted setup and another one with a radiated setup.

The conducted test was made on one port at time, transmitting at max power and with the other one loaded with 50 Ω loads. For capturing the signal with the equipment, it was divided in two ranges, using a transducer factor to compensate the losses caused by a cable and attenuator used to protect the test equipment. The first range was measured from 30 MHz to 1 GHz where the fundamental signal is visible; the second range was selected from 1 GHz to 8 GHz. The evaluation was made using the three channels and all the modulations (TM1.1, TM3p1, TM3p1a, and TM3p3).

A 30 dB attenuator was placed between the EUT and spectrum analyzer and compensated for as a reference level offset. Additionally, to correct for MIMO consideration, an additional offset of 10Log (2) = -3.01 dB was included to compensate for 2 correlated antennas output.

For band edge tests, in the 1 MHz region immediately outside of the authorized band, a resolution bandwidth of approximately 1 – 5 % of the 26 dB bandwidth measured was used.

The radiated test was made transmitting to max power too with the two ports terminated with 50 Ω loads. The scans were made from 30 MHz to 8 GHz considering all the channels but only the bandwidth and modulation with the highest power was showed.

Based on equation 43 + 10 log10 (P) dB, the general emission limit is -13 dBm (conducted and radiated test) or the equivalent at 3m is 82.23 dBµV/m above 1 GHz and 84.38 dBµV/m below 1 GHz.

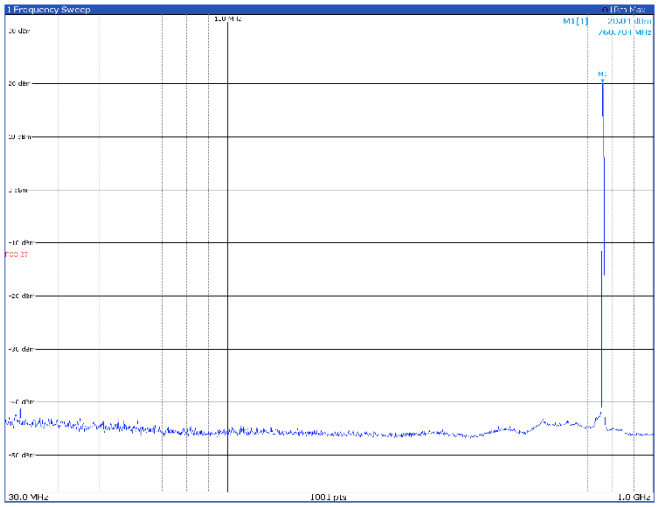
8.6.4 Test equipment used

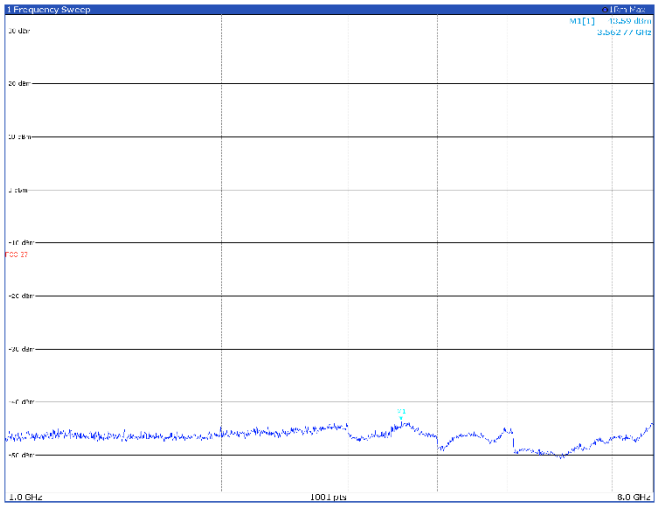
Equipment	Manufacturer	Model no.	Asset no.
Spectrum Analyzer	Rohde & Schwarz	FSW43	101767
EMI Receiver	Rohde & Schwarz	ESW44	101620
RF Vector Signal Generator	Rohde & Schwarz	SMBV100A	263254
RF Vector Signal Generator	Rohde & Schwarz	SMBV100A	263397
Antenna Trilog 25MHz – 8GHz	Schwarzbeck Mess-Elektronik	VULB9162	9162-025
Antenna 1 – 18 GHz	Schwarzbeck Mess-Elektronik	STLP9148	STLP 9148-152
Double Ridge Horn Antenna	RFSpin	DRH40	061106A40
Broadband Amplifier	Schwarzbeck Mess-Elektronik	BBV9718C	00121
Broadband Bench Top Amplifier	Sage	STB-1834034030-KFKF-L1	18490-01
Controller	Maturo	FCU3.0	10041
Tilt antenna mast	Maturo	TAM4.0-E	10042
Turntable	Maturo	TT4.0-5T	2.527

8.6.5 Test data

Band B14 – conducted emissions Antenna port 1	5 MHz

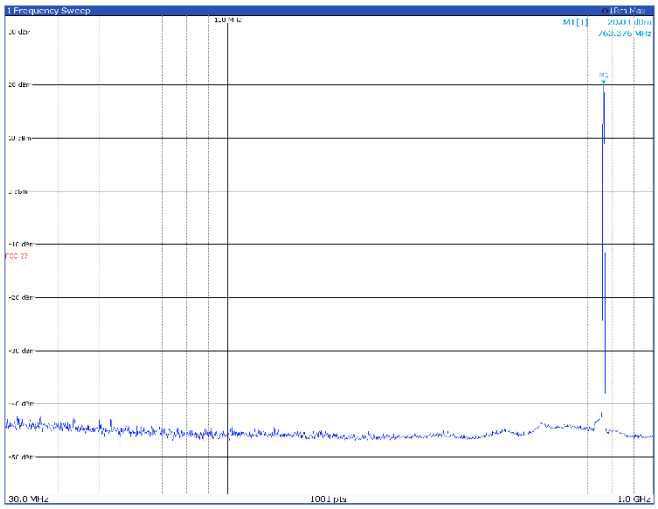
TM1.1, 5 MHz, low channel

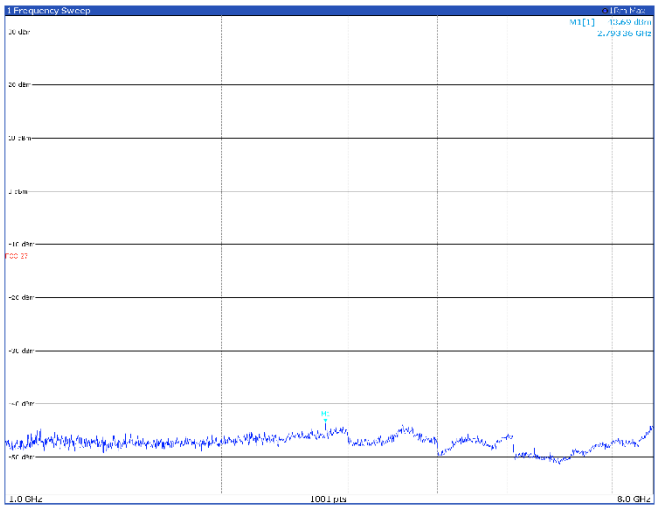




Limit exceeded by the carrier

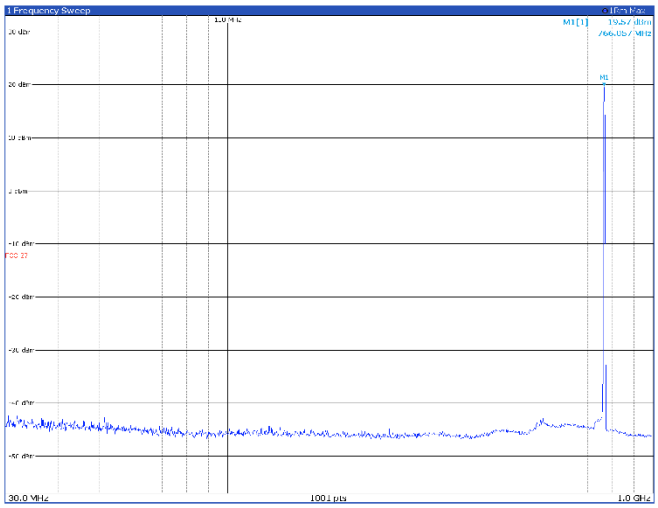
TM1.1, 5 MHz, mid channel

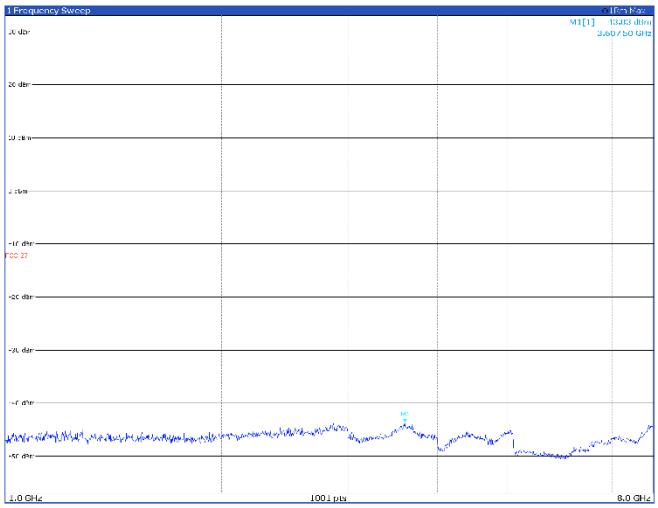




Limit exceeded by the carrier

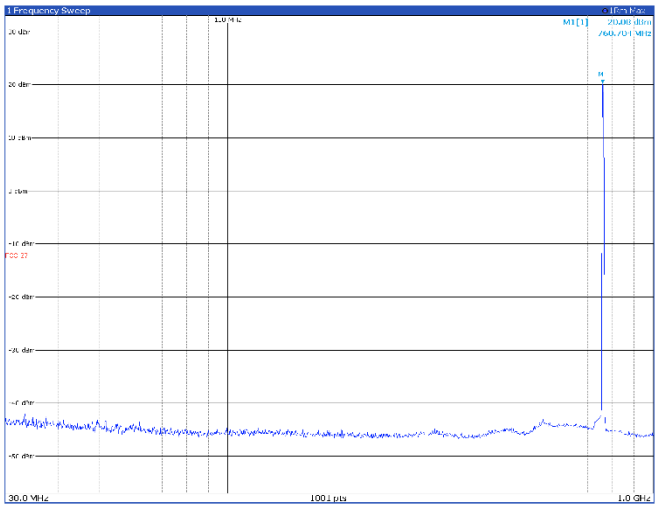
TM1.1, 5 MHz, high channel

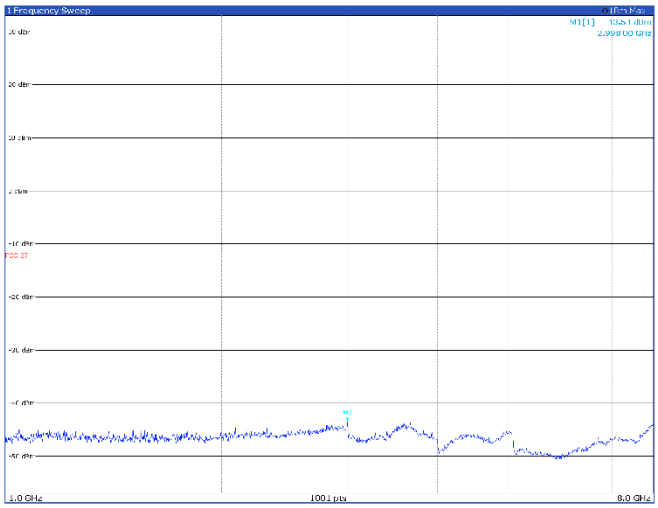




Limit exceeded by the carrier

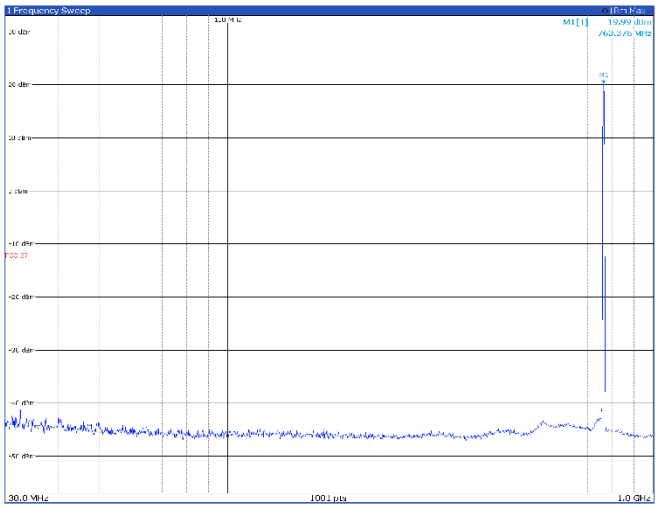
TM3p1, 5 MHz, low channel

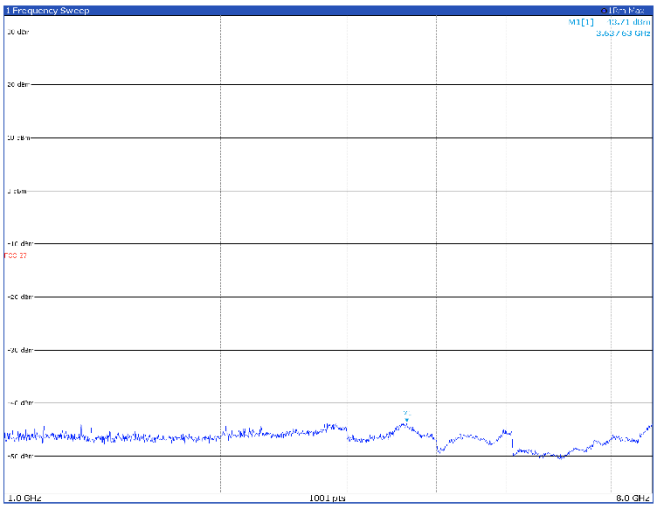




Limit exceeded by the carrier

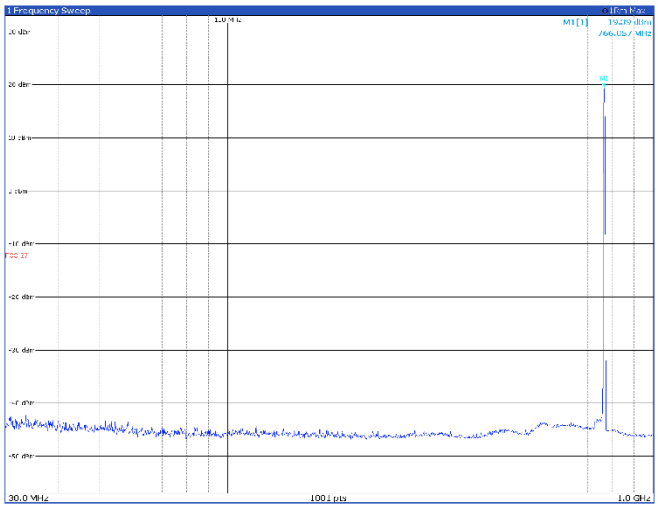
TM3p1, 5 MHz, mid channel

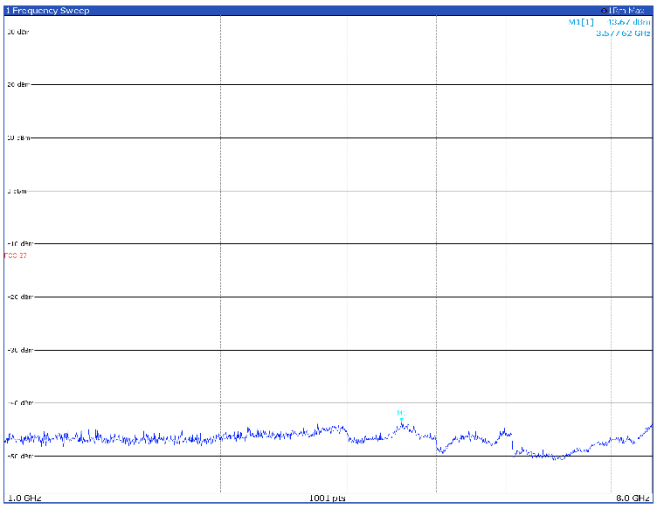




Limit exceeded by the carrier

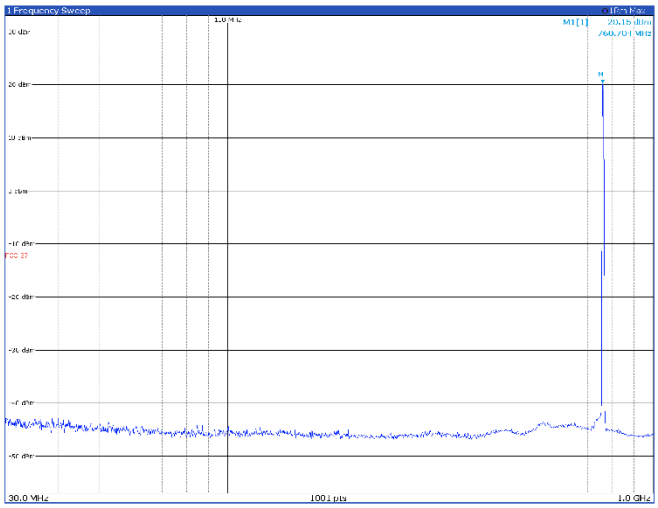
TM3p1, 5 MHz, high channel

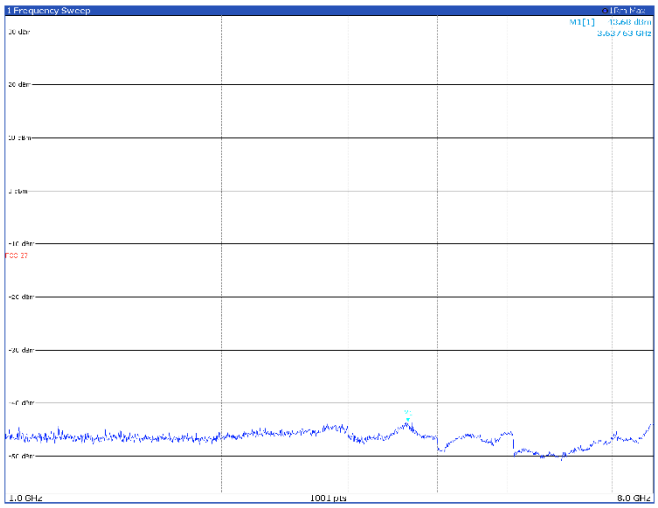




Limit exceeded by the carrier

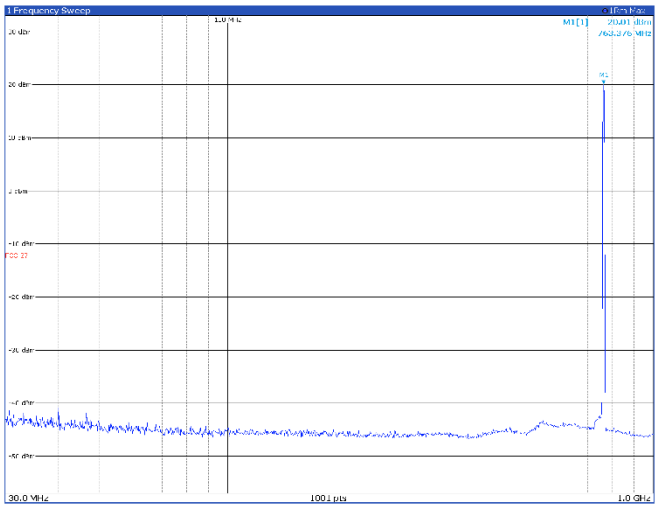
TM3p1a, 5 MHz, low channel

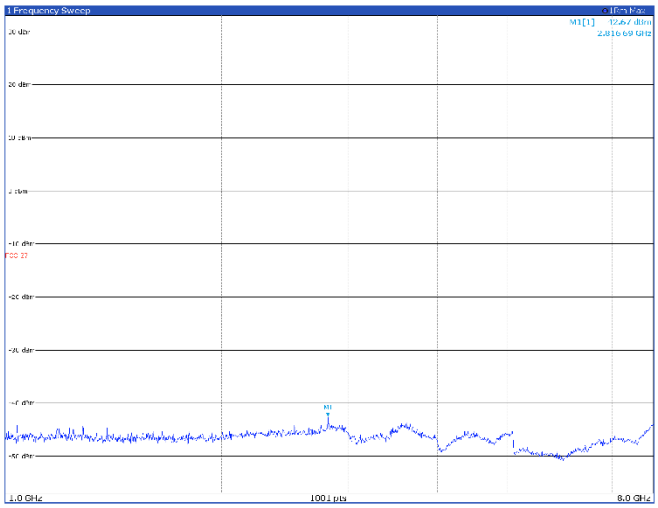




Limit exceeded by the carrier

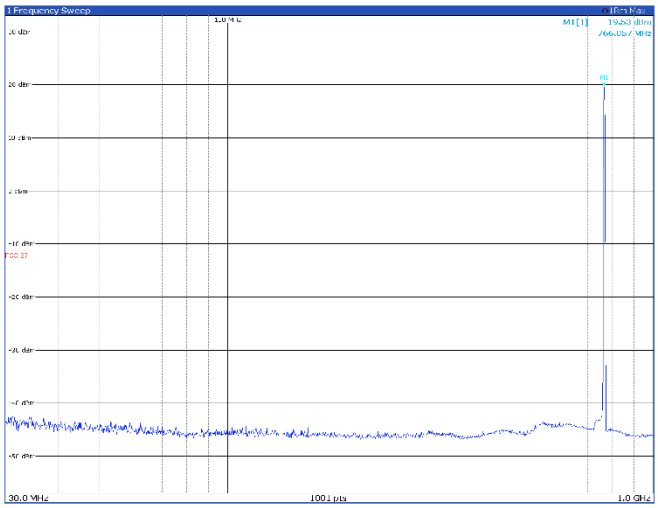
TM3p1a, 5 MHz, mid channel

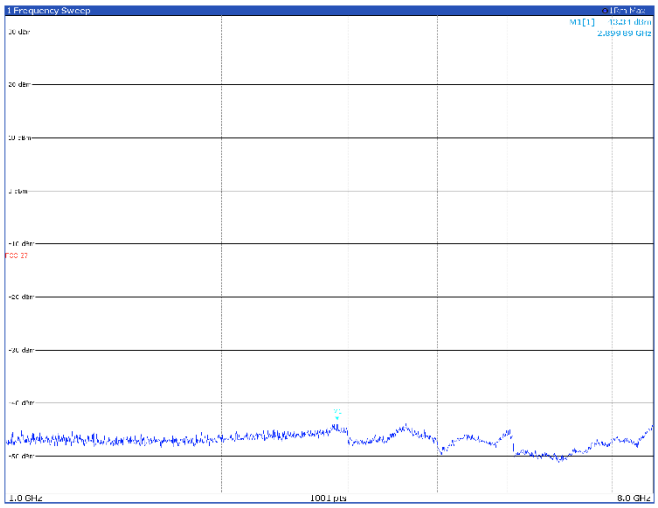




Limit exceeded by the carrier

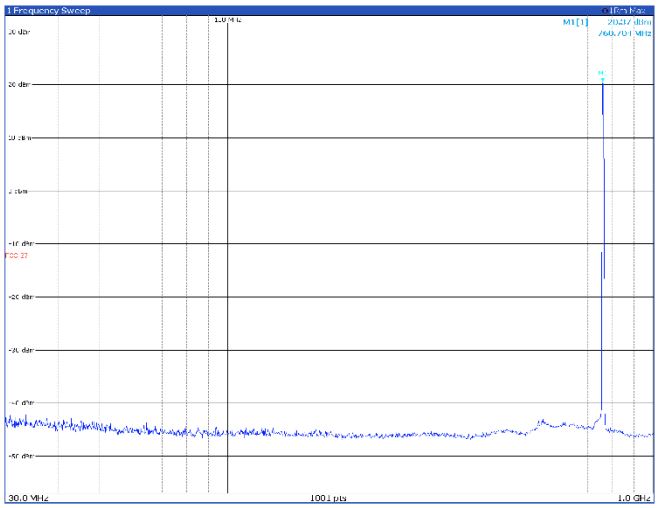
TM3p1a, 5 MHz, high channel

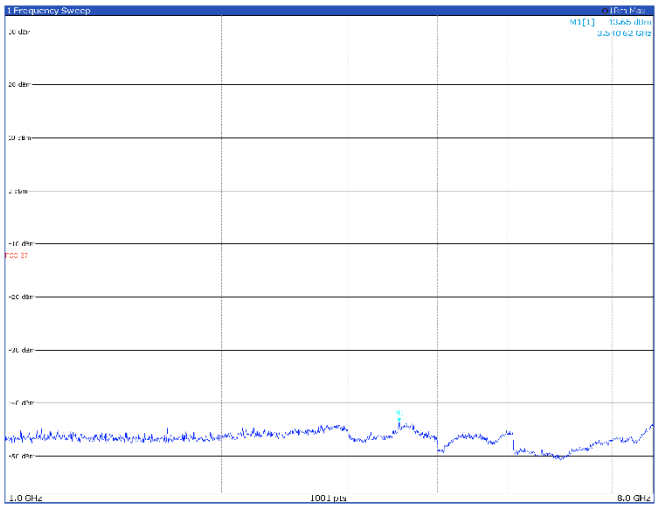




Limit exceeded by the carrier

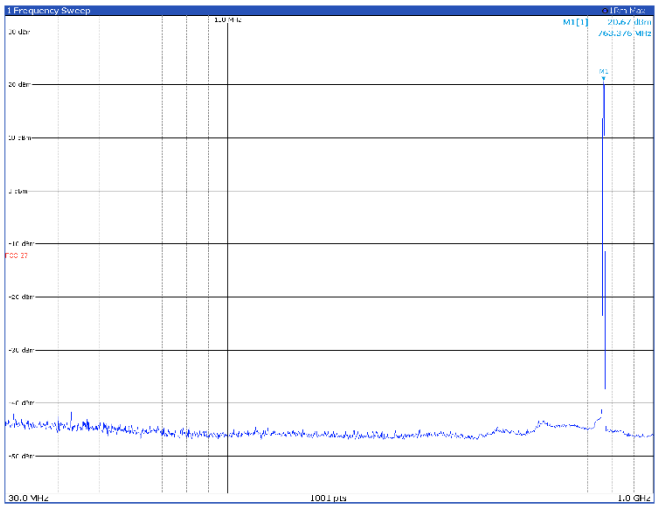
TM3p3, 5 MHz, low channel

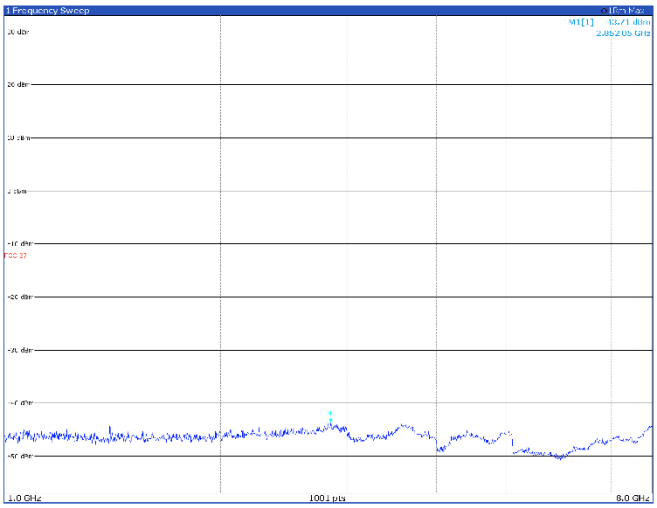




Limit exceeded by the carrier

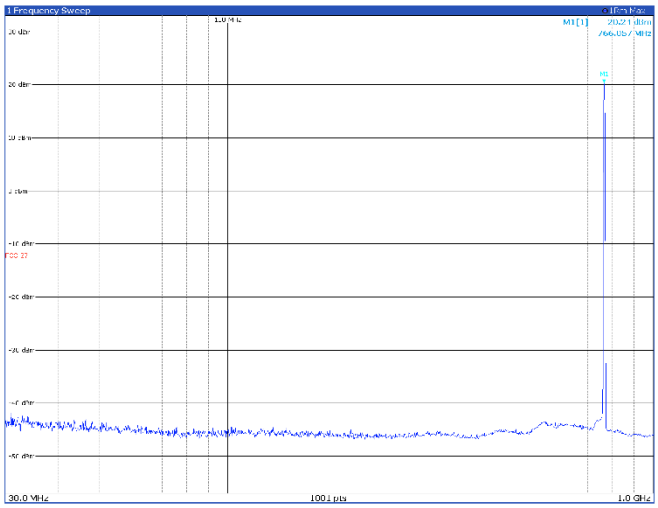
TM3p3, 5 MHz, mid channel

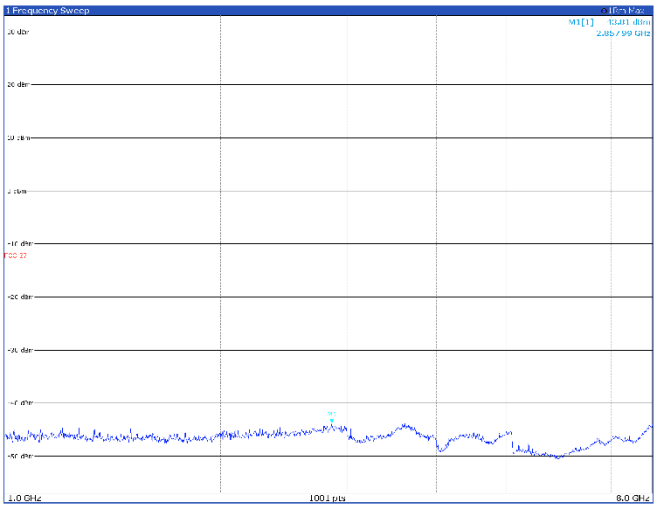




Limit exceeded by the carrier

TM3p3, 5 MHz, high channel

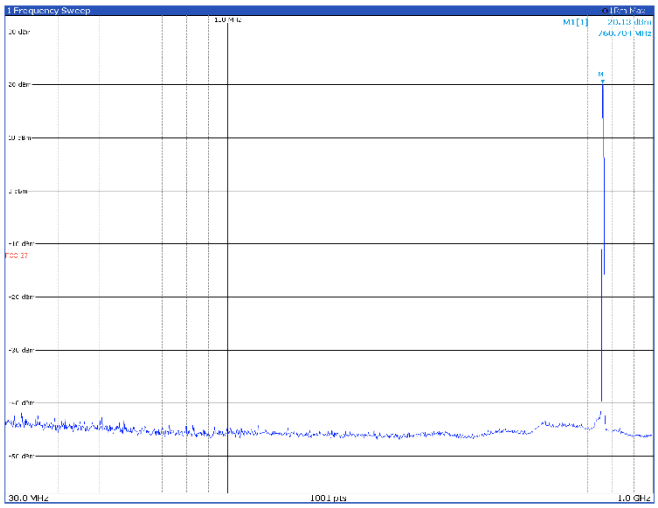


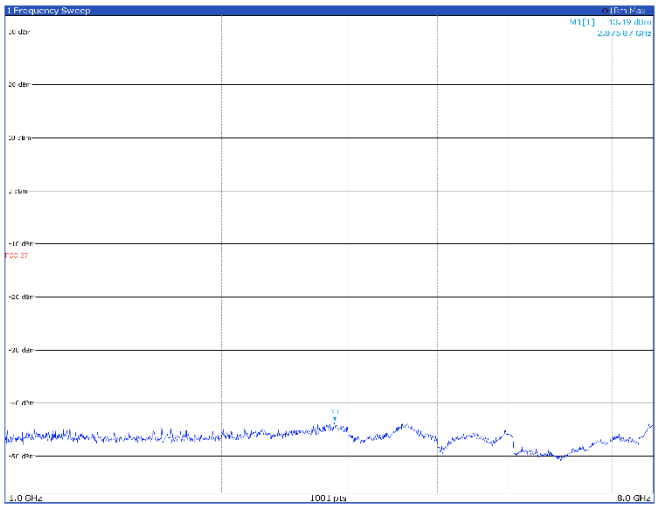


Limit exceeded by the carrier

Band B14 – conducted emissions Antenna port 2 **5 MHz**

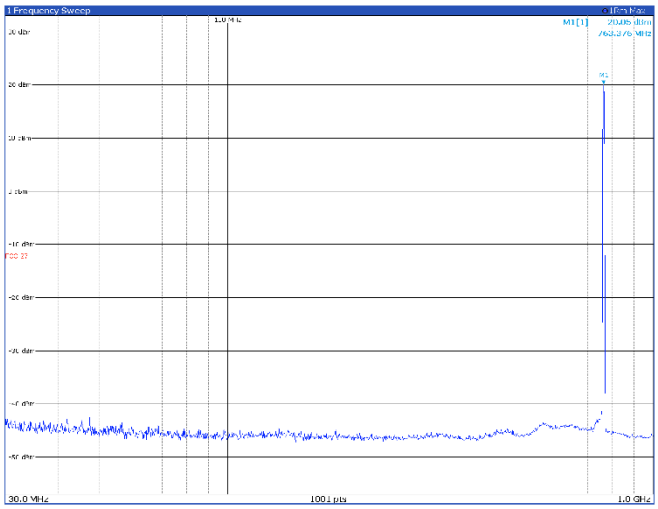
TM1.1, 5 MHz, low channel

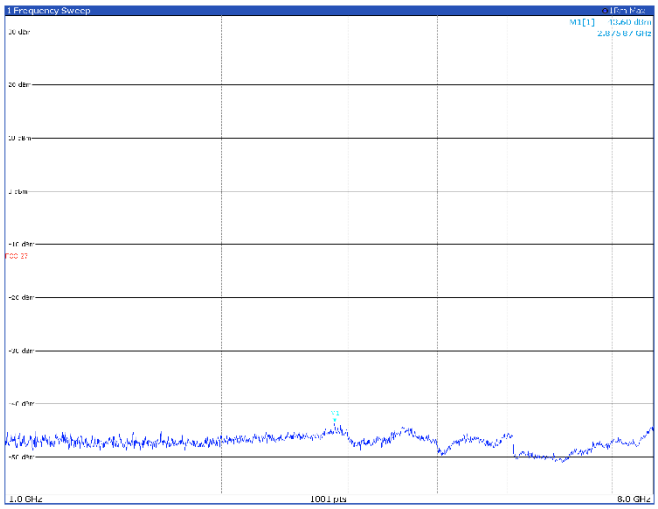




Limit exceeded by the carrier

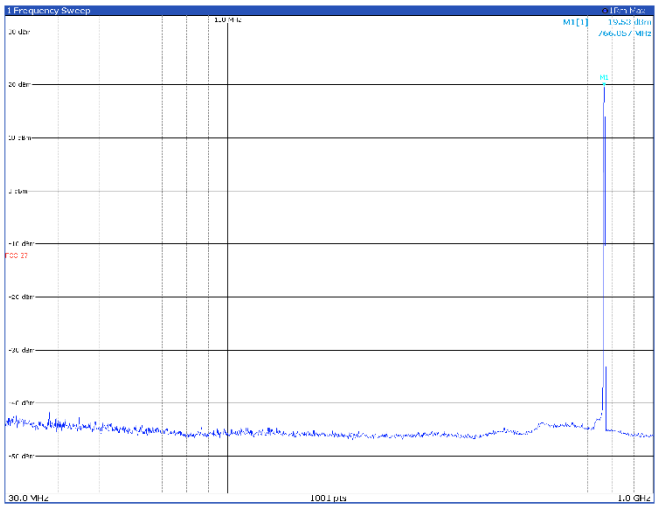
TM1.1, 5 MHz, mid channel

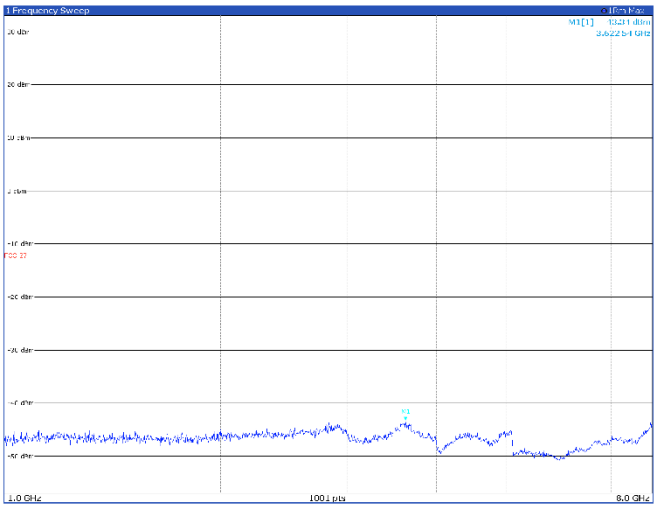




Limit exceeded by the carrier

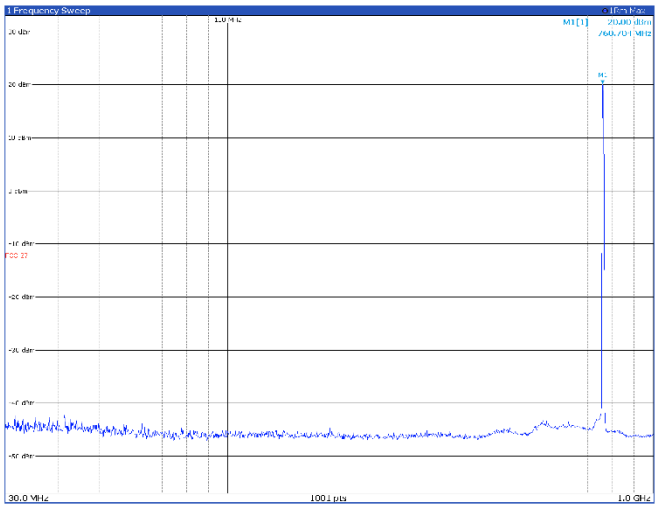
TM1.1, 5 MHz, high channel

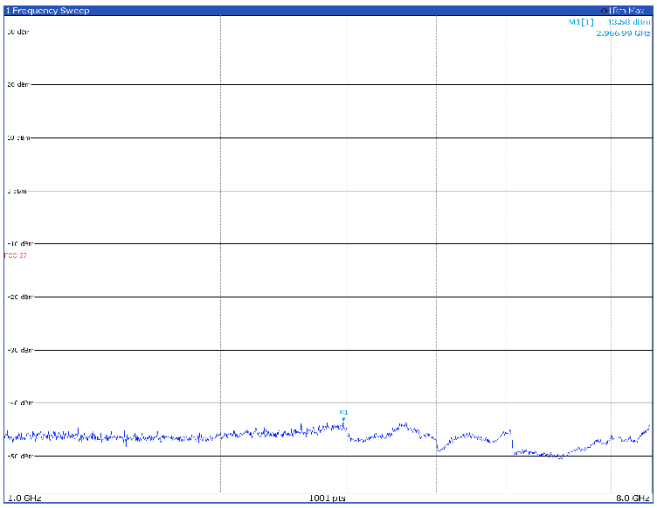




Limit exceeded by the carrier

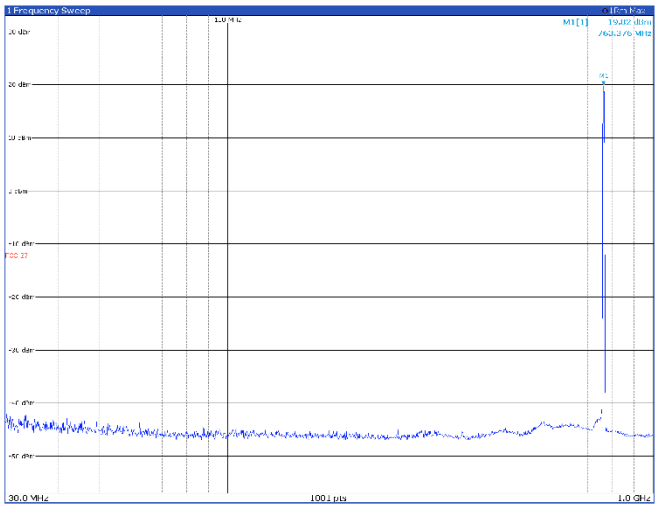
TM3p1, 5 MHz, low channel

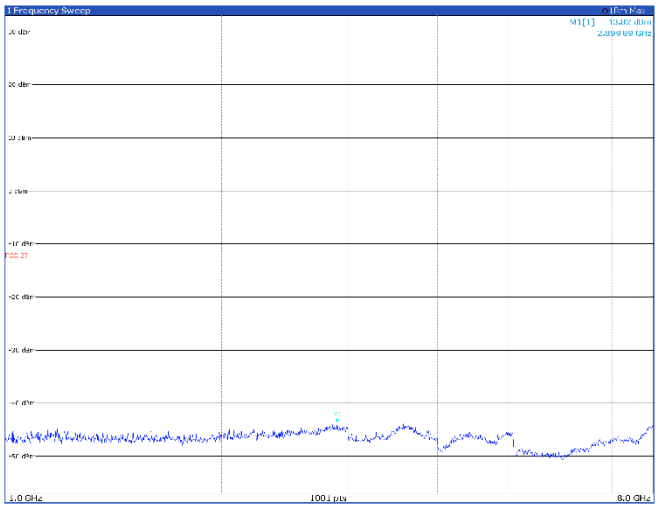




Limit exceeded by the carrier

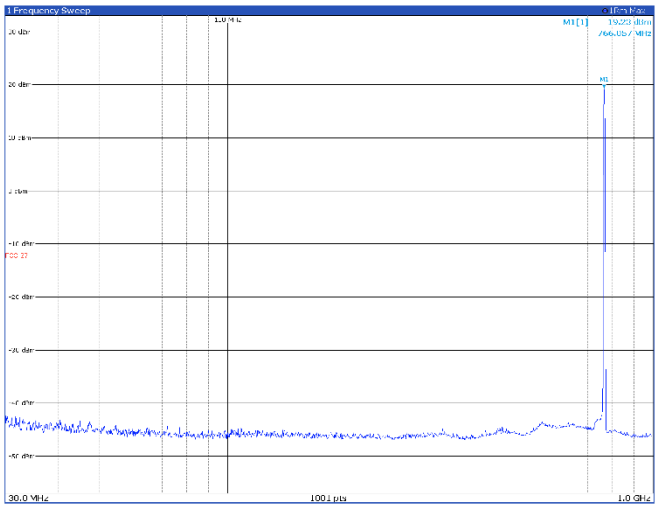
TM3p1, 5 MHz, mid channel

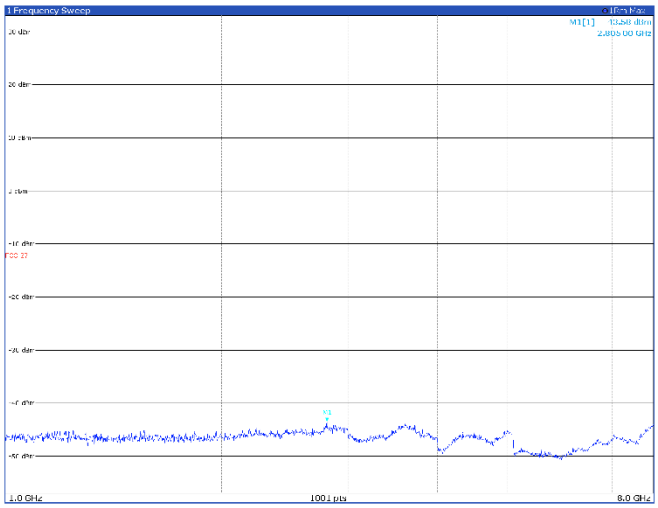




Limit exceeded by the carrier

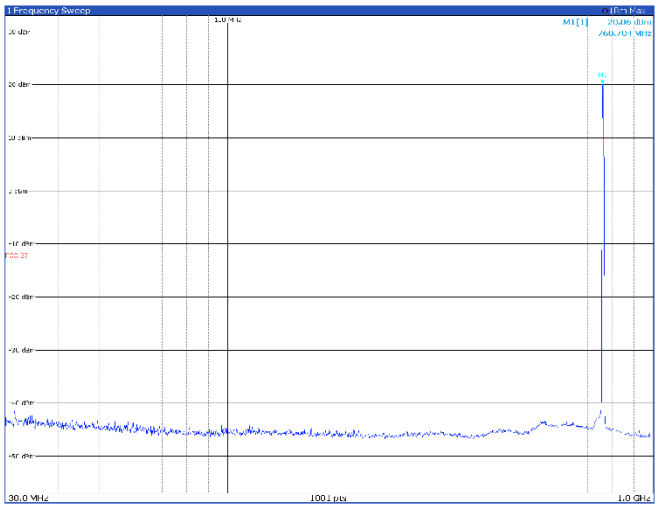
TM3p1, 5 MHz, high channel

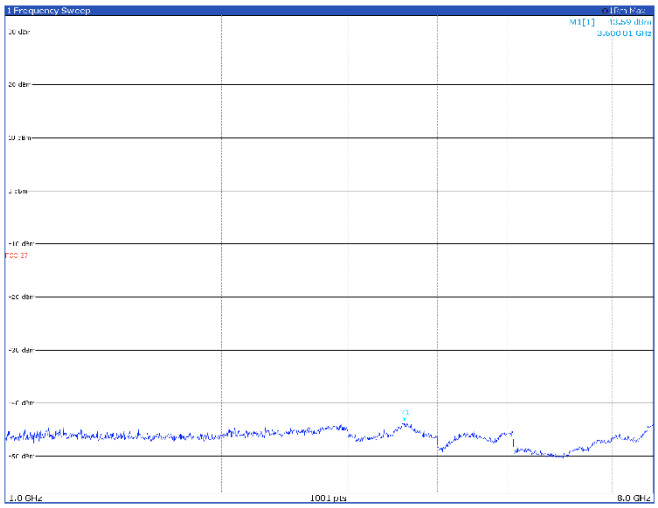




Limit exceeded by the carrier

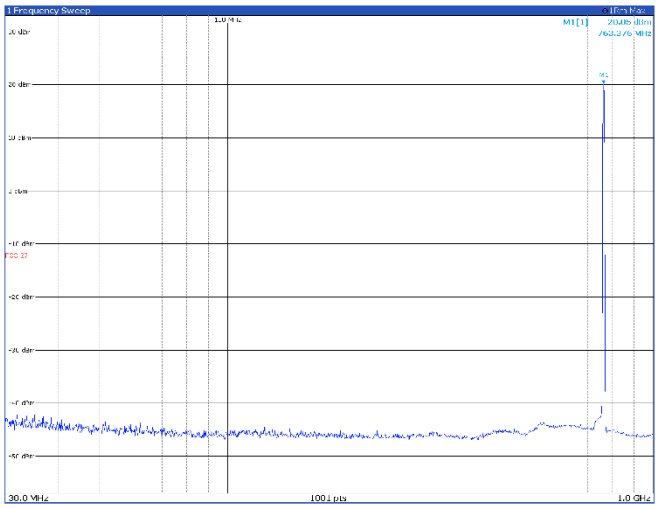
TM3p1a, 5 MHz, low channel

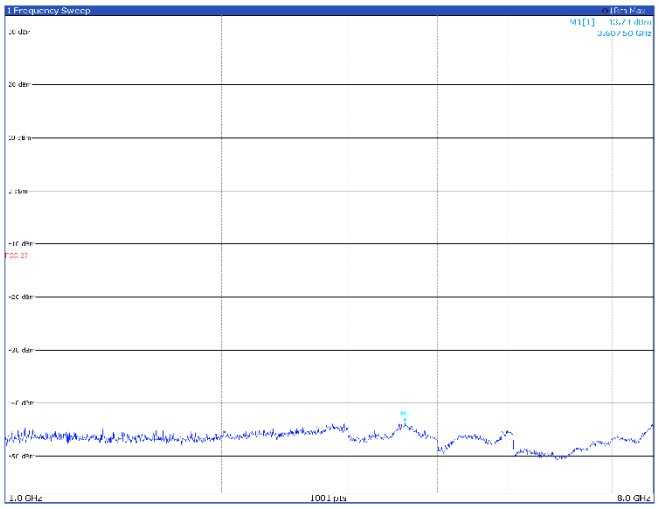




Limit exceeded by the carrier

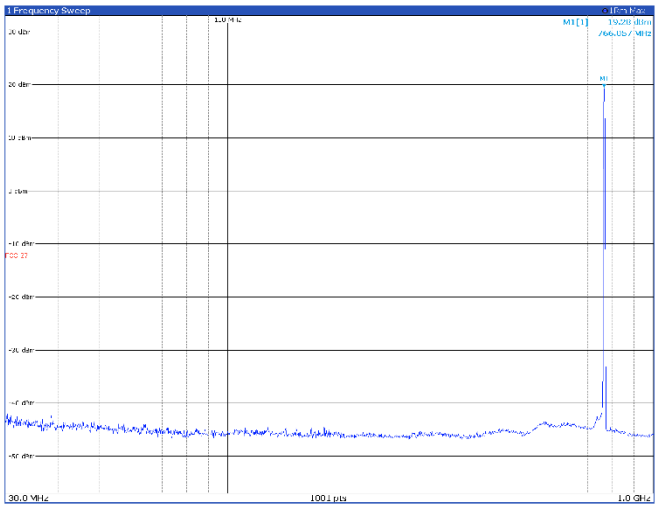
TM3p1a, 5 MHz, mid channel

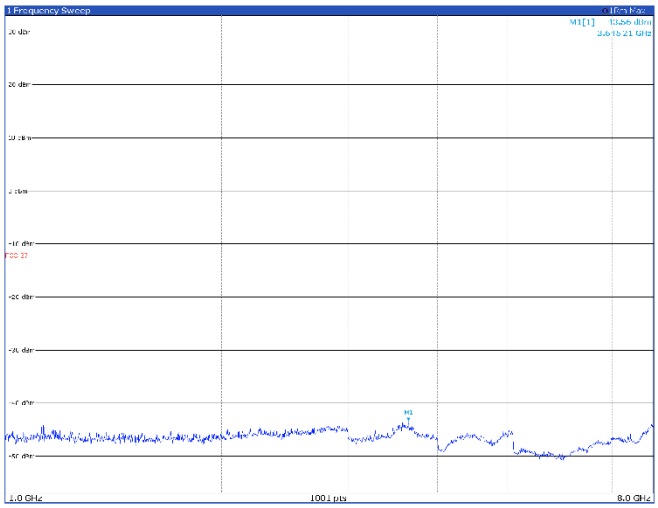




Limit exceeded by the carrier

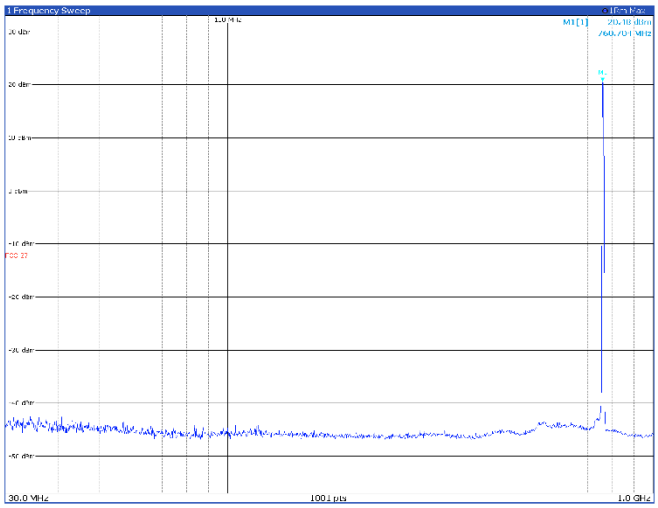
TM3p1a, 5 MHz, high channel

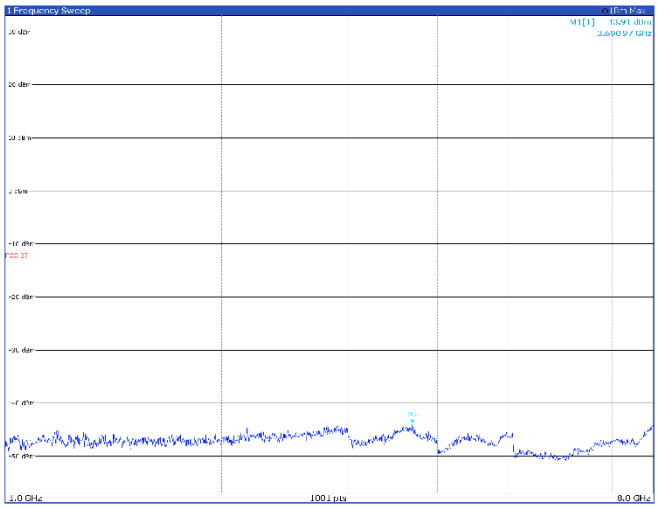




Limit exceeded by the carrier

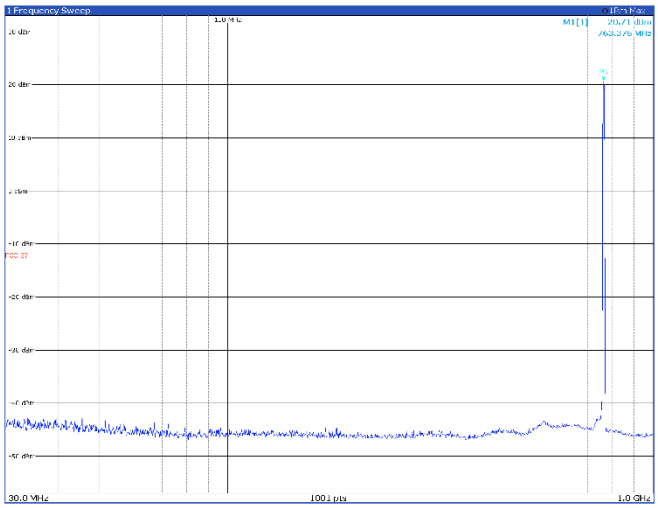
TM3p3, 5 MHz, low channel

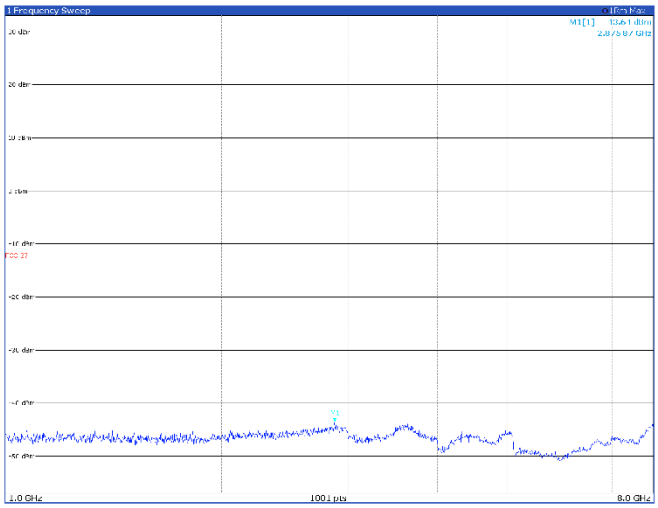




Limit exceeded by the carrier

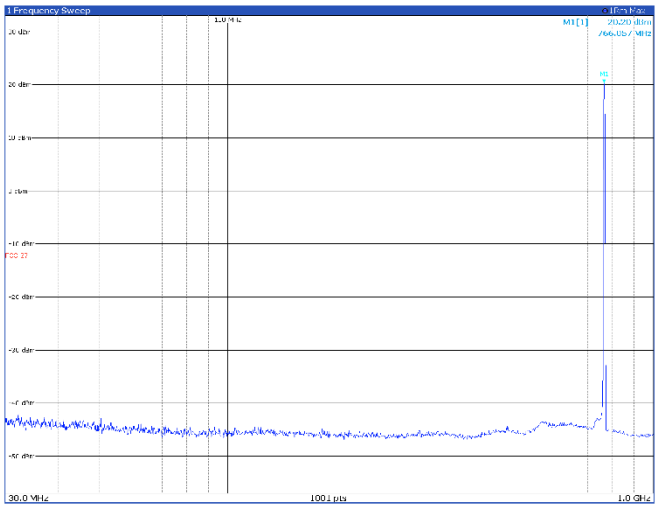
TM3p3, 5 MHz, mid channel

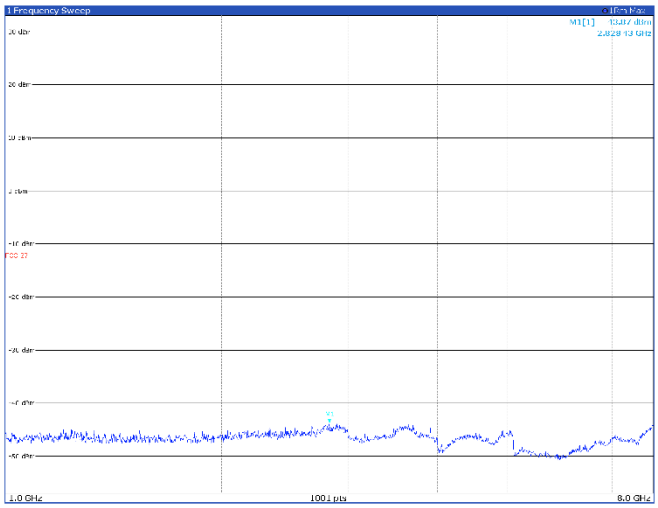




Limit exceeded by the carrier

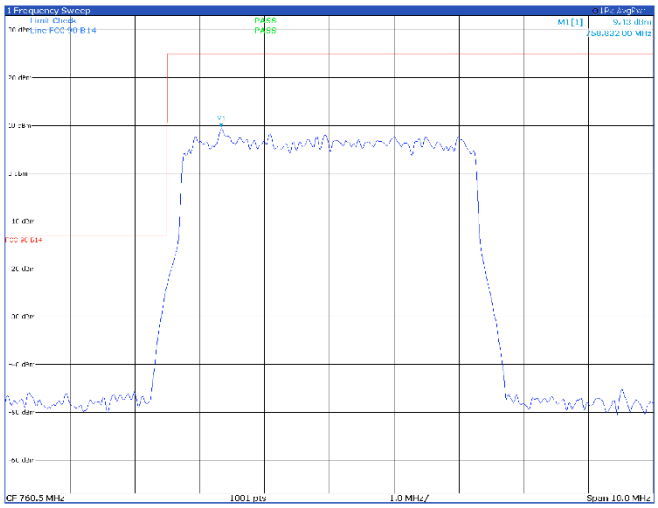
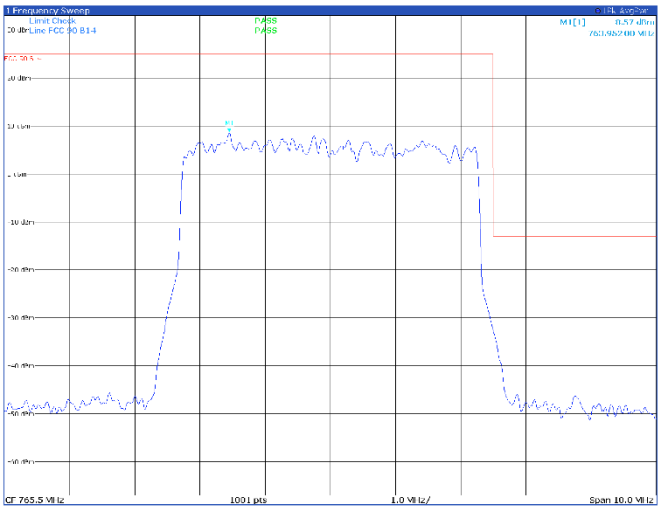
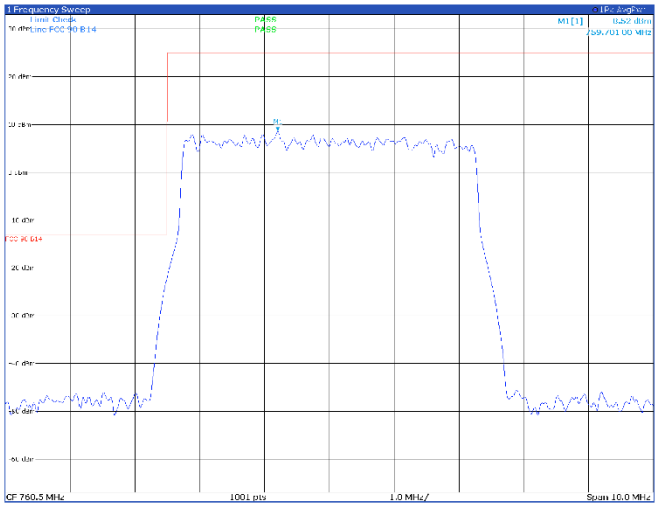
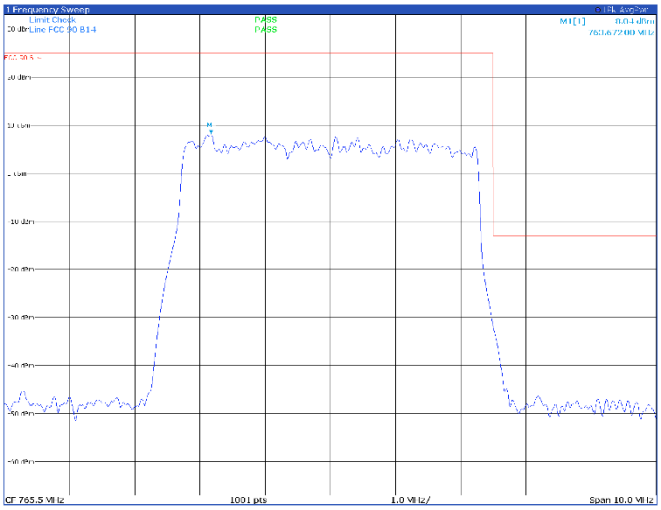
TM3p3, 5 MHz, high channel

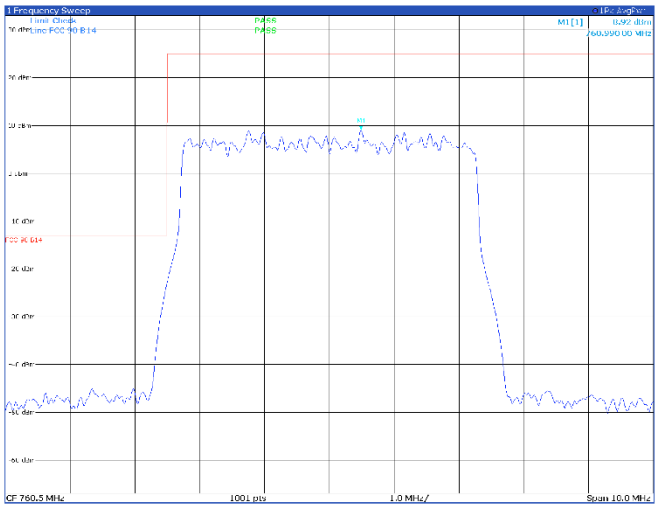
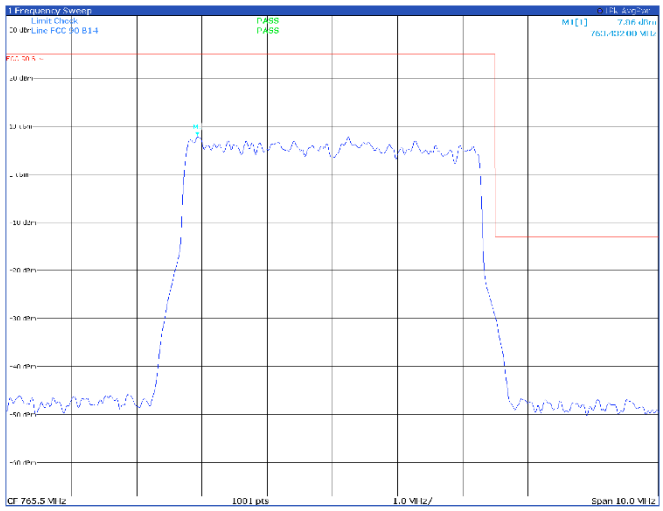
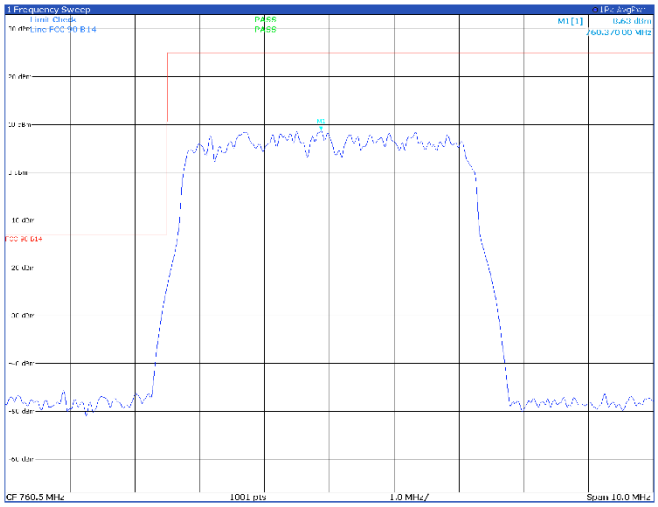
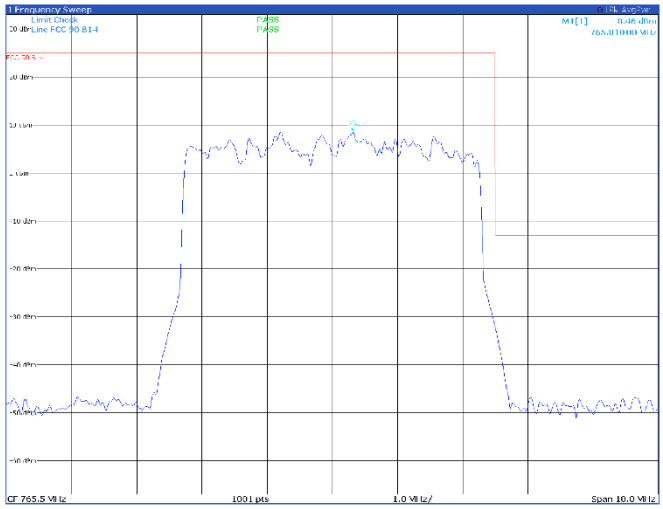




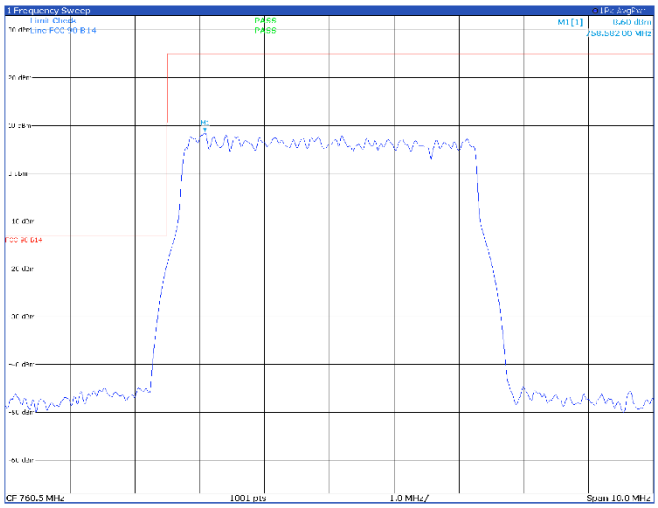
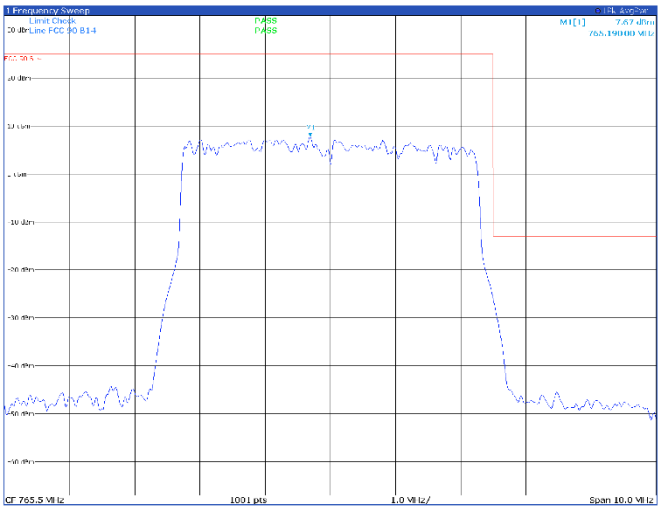
Limit exceeded by the carrier

Band B14 – band edge Antenna port 1 **5 MHz**

TM1.1, 5 MHz, low channel	TM1.1, 5 MHz, high channel
	
TM3p1, 5 MHz, low channel	**TM3p1, 5 MHz, high channel**
	

TM3p1a, 5 MHz, low channel	TM3p1a, 5 MHz, high channel
	
TM3p3, 5 MHz, low channel	**TM3p3, 5 MHz, high channel**
	

Band B14 – band edge Antenna port 2 **5 MHz**

TM1.1, 5 MHz, low channel	TM1.1, 5 MHz, high channel
	
TM3p1, 5 MHz, low channel	**TM3p1, 5 MHz, high channel**