

RADIO TEST REPORT

REP064941

Date of issue: November 19, 2024

Applicant:

**Andrew Wireless Systems Industriering 10, Buchdorf 86675
Germany**

Product:

RPM-A61L1-05

Model:

7847585-01

Model variant:

None

FCC ID:

XS5-RPML2-B5

IC Registration number:

NA

Specifications:

- ◆ **FCC 47 CFR Part 22H**
Public Mobile Services

Lab and test locations

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Tested by	O. Frau
Signature	
Reviewed by	D. Guarnone
Review date	November 19, 2024
Signature	

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 contained in this report are within Nemko Spa ISO/IEC 17025 accreditation.

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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 22	Public Mobile Services
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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
REP064941	Original report issued

Section 2. Summary of test results

2.1 FCC Part 22H test results

Part	Test description	Verdict
§2.1033(c)(4)	Modulation type	Pass
§2.1049(h)	99% and 26 dB occupied bandwidth	Pass
§22.355	Frequencies	Pass
§22.913	Power and antenna height limits	Pass
§22.913(d)	Peak to average power ratio	Pass
§22.917	Conducted and radiated spurious emissions	Pass
§22.917	Frequency stability	Pass

Note: None.

Section 3. Equipment under test (EUT) details

3.1 Sample information

Receipt date	September 23, 2024
Nemko sample ID number	PRJ0063077007

3.2 EUT information

Product name	RPM-A61L1-05
Model	7847585-01
Part Number	7847585-01
Serial number	SZRMBM24360035

3.3 Technical information

Frequency band	5G nr5: 869-894 MHz
RF power Max (W), Conducted	max Port 1 = 22.4 dBm (0.17 W) – max Port 2 = 22.2 dBm (0.16 W); max comb. Port 1 + Port 2 = 25.3 dBm (0.34 W) @ 874 MHz (with 10 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	4.8 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

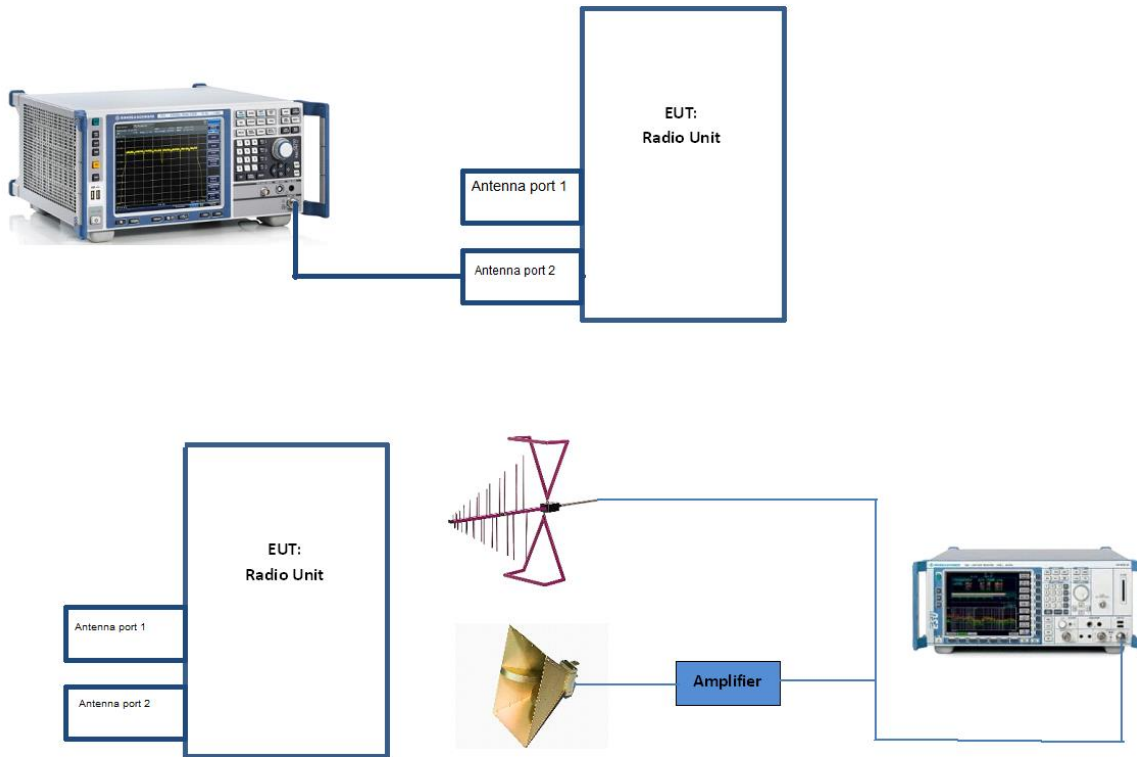


Figure 3.6-1: Setup diagram

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 $\pm 5\%$, 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)
			40 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	October 21, 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 n5:

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

Table Error. 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	October 22, 2024	Temperature	22 °C
Test end date	October 31, 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 n5: Antenna port 1

Band	OBW Declared	Modulation	Channel (MHz)	99% OBW (MHz)
n5	5 MHz	TM1.1	871.5	4.49
n5	5 MHz	TM1.1	881.5	4.48
n5	5 MHz	TM1.1	891.5	4.49
Band	OBW Declared	Modulation	Channel (MHz)	99% OBW (MHz)
n5	5 MHz	TM3p1	871.5	4.48
n5	5 MHz	TM3p1	881.5	4.49
n5	5 MHz	TM3p1	891.5	4.49
Band	OBW Declared	Modulation	Channel (MHz)	99% OBW (MHz)
n5	5 MHz	TM3p1a	871.5	4.49
n5	5 MHz	TM3p1a	881.5	4.49
n5	5 MHz	TM3p1a	891.5	4.50
Band	OBW Declared	Modulation	Channel (MHz)	99% OBW (MHz)
n5	5 MHz	TM3p3	871.5	4.52
n5	5 MHz	TM3p3	881.5	4.52
n5	5 MHz	TM3p3	891.5	4.51
Band	OBW Declared	Modulation	Channel (MHz)	99% OBW (MHz)
n5	10 MHz	TM1.1	874.0	9.31
n5	10 MHz	TM1.1	881.5	9.30
n5	10 MHz	TM1.1	889.0	9.31
Band	OBW Declared	Modulation	Channel (MHz)	99% OBW (MHz)
n5	10 MHz	TM3p1	874.0	9.29
n5	10 MHz	TM3p1	881.5	9.29
n5	10 MHz	TM3p1	889.0	9.29
Band	OBW Declared	Modulation	Channel (MHz)	99% OBW (MHz)
n5	10 MHz	TM3p1a	874.0	9.32
n5	10 MHz	TM3p1a	881.5	9.32
n5	10 MHz	TM3p1a	889.0	9.32
Band	OBW Declared	Modulation	Channel (MHz)	99% OBW (MHz)
n5	10 MHz	TM3p3	874.0	9.14
n5	10 MHz	TM3p3	881.5	9.15
n5	10 MHz	TM3p3	889.0	9.13

Band n5: Antenna port 2

Band	OBW Declared	Modulation	Channel (MHz)	99% OBW (MHz)
n5	5 MHz	TM1.1	871.5	4.47
n5	5 MHz	TM1.1	881.5	4.50
n5	5 MHz	TM1.1	891.5	4.49

Band	OBW Declared	Modulation	Channel (MHz)	99% OBW (MHz)
n5	5 MHz	TM3p1	871.5	4.48
n5	5 MHz	TM3p1	881.5	4.49
n5	5 MHz	TM3p1	891.5	4.48

Band	OBW Declared	Modulation	Channel (MHz)	99% OBW (MHz)
n5	5 MHz	TM3p1a	871.5	4.50
n5	5 MHz	TM3p1a	881.5	4.49
n5	5 MHz	TM3p1a	891.5	4.49

Band	OBW Declared	Modulation	Channel (MHz)	99% OBW (MHz)
n5	5 MHz	TM3p3	871.5	4.50
n5	5 MHz	TM3p3	881.5	4.51
n5	5 MHz	TM3p3	891.5	4.52

Band	OBW Declared	Modulation	Channel (MHz)	99% OBW (MHz)
n5	10 MHz	TM1.1	874.0	9.31
n5	10 MHz	TM1.1	881.5	9.30
n5	10 MHz	TM1.1	889.0	9.31

Band	OBW Declared	Modulation	Channel (MHz)	99% OBW (MHz)
n5	10 MHz	TM3p1	874.0	9.28
n5	10 MHz	TM3p1	881.5	9.29
n5	10 MHz	TM3p1	889.0	9.29

Band	OBW Declared	Modulation	Channel (MHz)	99% OBW (MHz)
n5	10 MHz	TM3p1a	874.0	9.32
n5	10 MHz	TM3p1a	881.5	9.32
n5	10 MHz	TM3p1a	889.0	9.32

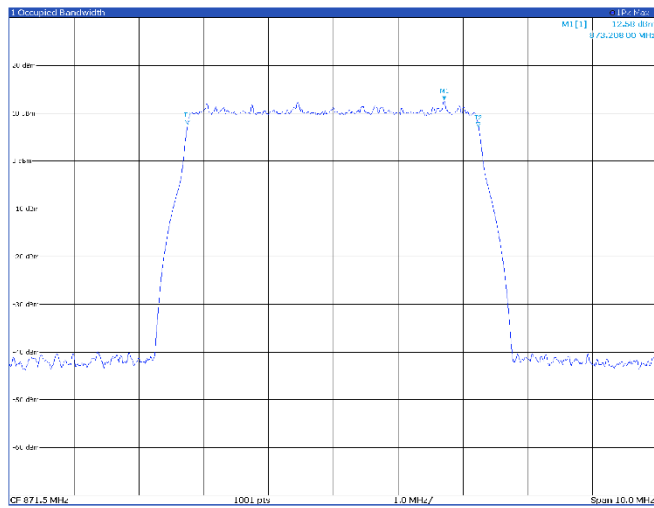
Band	OBW Declared	Modulation	Channel (MHz)	99% OBW (MHz)
n5	10 MHz	TM3p3	874.0	9.14
n5	10 MHz	TM3p3	881.5	9.13
n5	10 MHz	TM3p3	889.0	9.14

Antenna port 1

Band n5

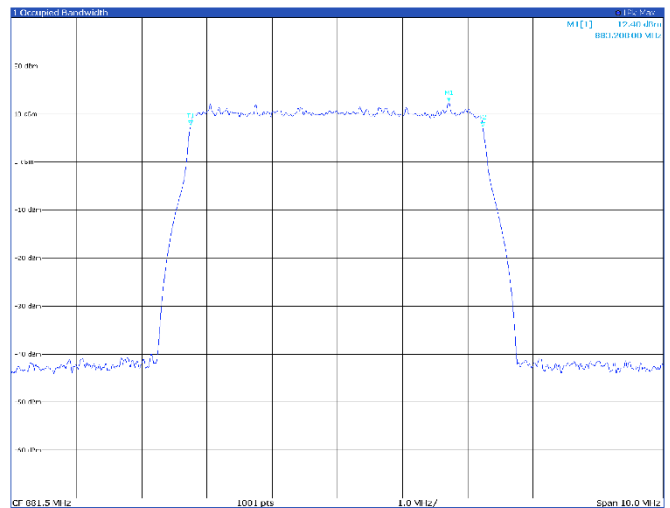
5 MHz

TM1.1, 5 MHz, low channel



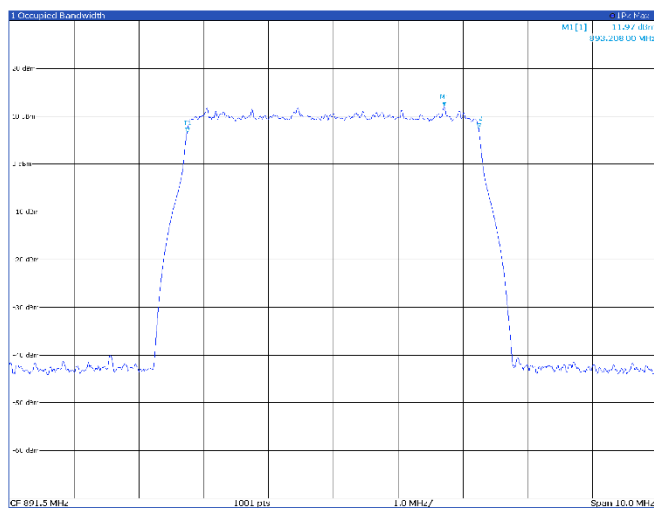
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result
M1	1		873.208 MHz	12.58 dBm	Occupied Bandwidth	4.487 288 853 MHz
T1	1		873.208 MHz	7.58 dBm	Occupied Bandwidth	871.464 702 208 MHz
T2	1		873.208 MHz	7.58 dBm	Occupied Bandwidth	873.208 853 MHz

TM1.1, 5 MHz, mid channel



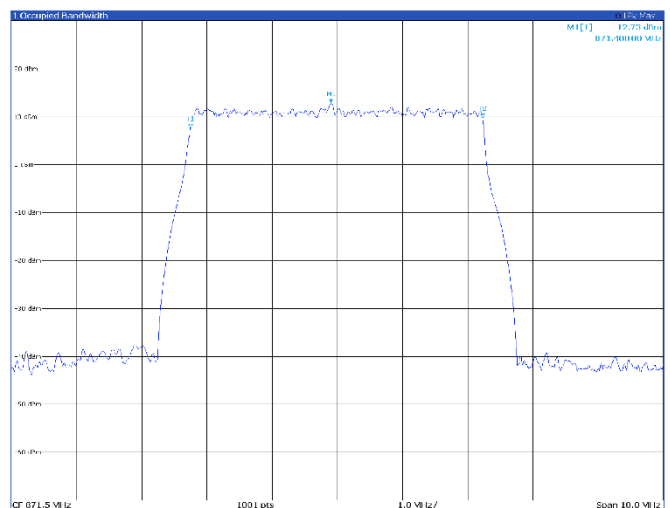
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result
M1	1		883.208 MHz	12.40 dBm	Occupied Bandwidth	4.481 810 143 MHz
T1	1		883.208 MHz	7.40 dBm	Occupied Bandwidth	881.489 812 279 MHz
T2	1		883.208 MHz	7.40 dBm	Occupied Bandwidth	883.208 143 MHz

TM1.1, 5 MHz, high channel



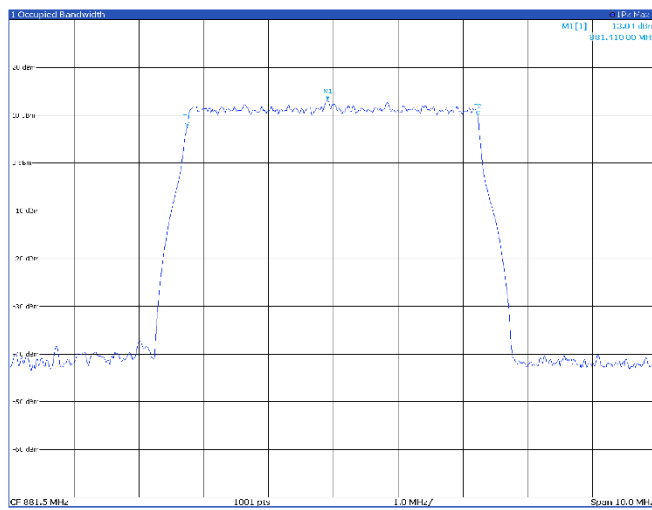
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result
M1	1		893.208 MHz	11.97 dBm	Occupied Bandwidth	4.493 001 265 MHz
T1	1		893.208 MHz	6.97 dBm	Occupied Bandwidth	891.492 251 177 MHz
T2	1		893.208 MHz	6.97 dBm	Occupied Bandwidth	893.208 265 MHz

TM3p1, 5 MHz, low channel



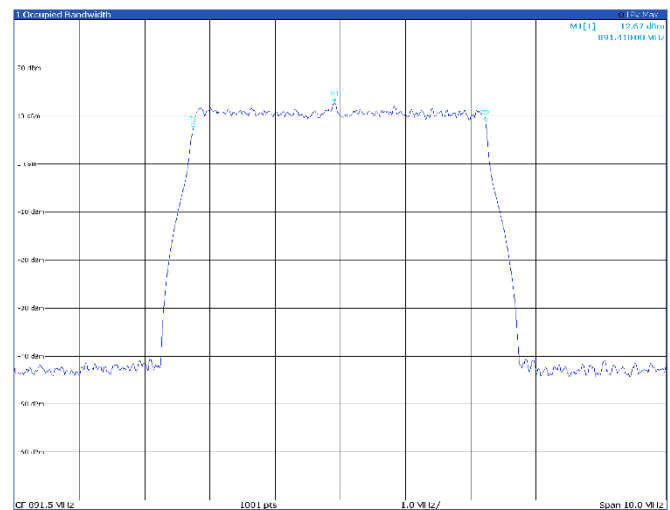
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result
M1	1		871.4 MHz	12.73 dBm	Occupied Bandwidth	4.462 720 956 MHz
T1	1		871.4 MHz	7.73 dBm	Occupied Bandwidth	871.461 805 614 MHz
T2	1		871.4 MHz	7.73 dBm	Occupied Bandwidth	871.461 956 MHz

TM3p1, 5 MHz, mid channel



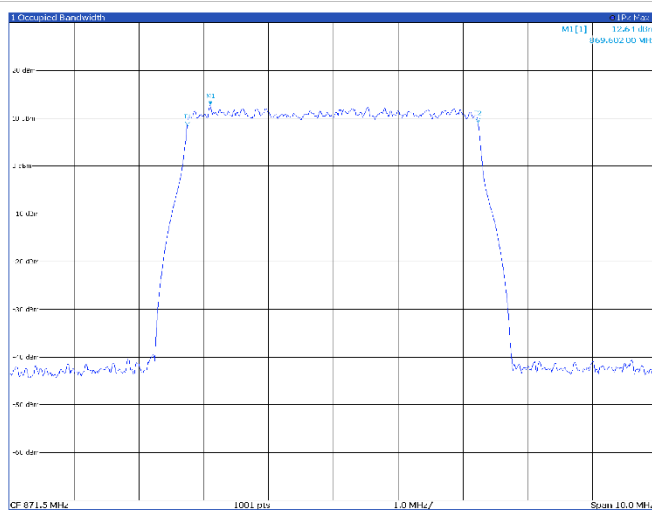
Type	Ref	Trc	X Value	Y Value	Function	Function Result
M1	1		881.41 MHz	13.04 dBm	Occ 5w	4.486 117 74 MHz
M1	1		879.242 00 MHz	7.64 dBm	Occ 5w Channel	881.486 226 000 MHz
M2	1		883.224 83 MHz	9.44 dBm	Occ 5w Channel	883.602 833 000 MHz

TM3p1, 5 MHz, high channel



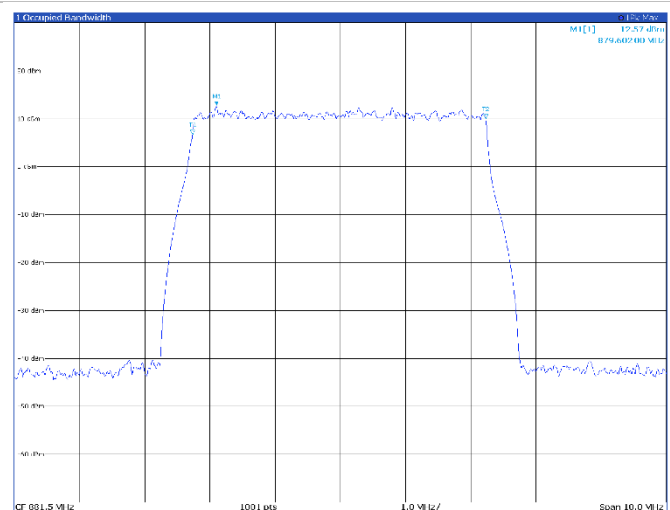
Type	Ref	Trc	X Value	Y Value	Function	Function Result
M1	1		891.41 MHz	12.67 dBm	Occ 5w	4.486 565 021 MHz
M1	1		889.229 59 MHz	7.41 dBm	Occ 5w Channel	891.480 170 702 MHz
M2	1		893.229 47 MHz	8.61 dBm	Occ 5w Channel	893.602 329 333 MHz

TM3p1a, 5 MHz, low channel



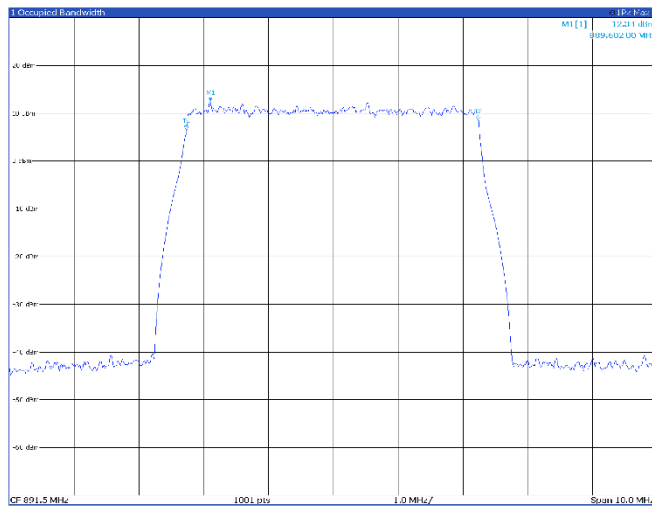
Type	Ref	Trc	X Value	Y Value	Function	Function Result
M1	1		869.602 MHz	12.64 dBm	Occ 5w	4.486 658 639 MHz
M1	1		867.246 52 MHz	8.22 dBm	Occ 5w Channel	869.489 145 130 MHz
M2	1		869.229 47 MHz	9.44 dBm	Occ 5w Channel	869.602 833 000 MHz

TM3p1a, 5 MHz, mid channel



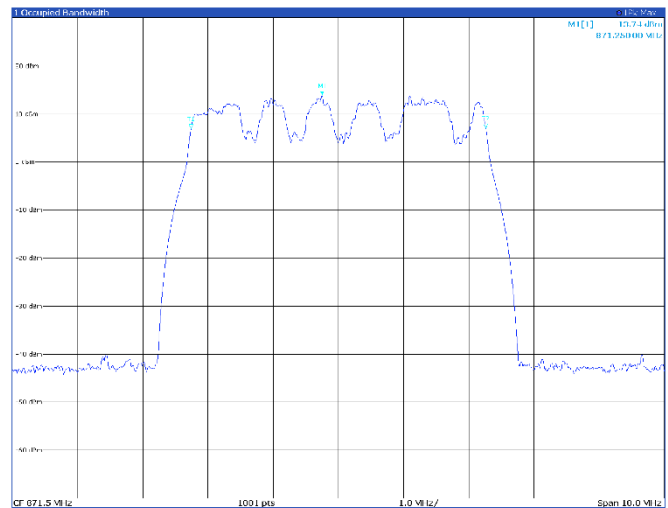
Type	Ref	Trc	X Value	Y Value	Function	Function Result
M1	1		879.602 MHz	12.57 dBm	Occ 5w	4.484 990 214 MHz
M1	1		877.229 52 MHz	6.63 dBm	Occ 5w Channel	879.480 170 702 MHz
M2	1		879.229 47 MHz	9.44 dBm	Occ 5w Channel	879.602 833 000 MHz

TM3p1a, 5 MHz, high channel



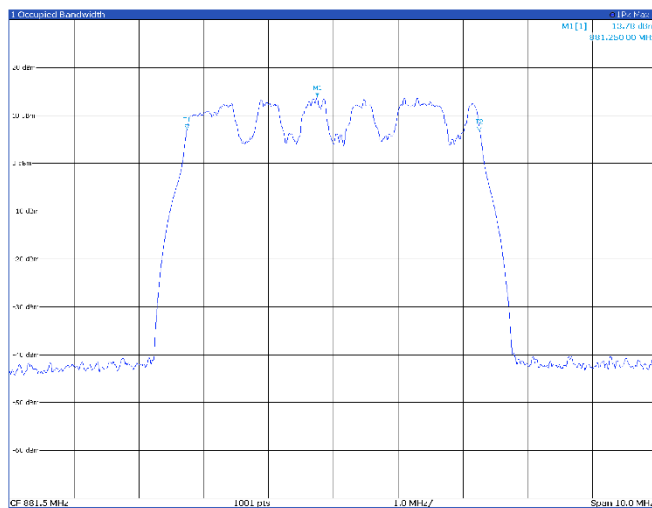
Type	Ref	Trc	X Value	Y Value	Function	Function Result
P1	1		889.602 MHz	12.34 dBm	Occ Sw	4.498 997 015 MHz
P1	1		889.602 MHz	6.22 dBm	Occ Sw Control	881.467 015 MHz
P2	1		889.602 MHz	6.22 dBm	Occ Sw Control	881.467 015 MHz

TM3p3, 5 MHz, low channel



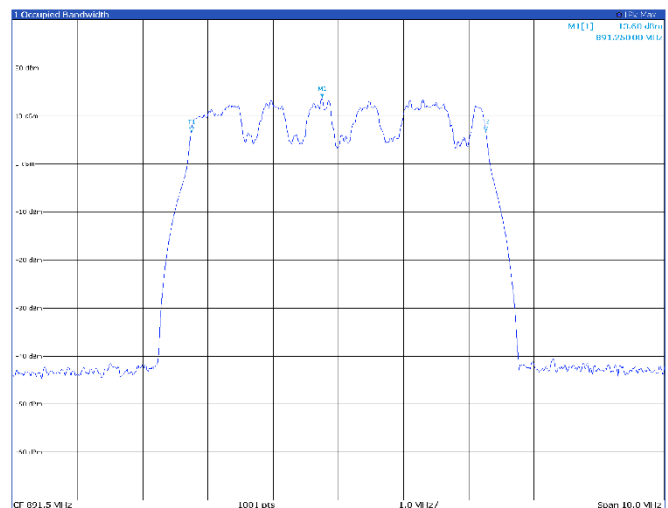
Type	Ref	Trc	X Value	Y Value	Function	Function Result
P1	1		871.25 MHz	13.74 dBm	Occ Sw	4.517 375 636 MHz
P1	1		871.25 MHz	6.91 dBm	Occ Sw Control	871.501 400 200 MHz
P2	1		871.25 MHz	6.91 dBm	Occ Sw Control	871.501 400 200 MHz

TM3p3, 5 MHz, mid channel



Type	Ref	Trc	X Value	Y Value	Function	Function Result
P1	1		881.25 MHz	13.78 dBm	Occ Sw	4.515 473 107 MHz
P1	1		881.25 MHz	7.07 dBm	Occ Sw Control	881.467 015 MHz
P2	1		881.25 MHz	7.07 dBm	Occ Sw Control	881.467 015 MHz

TM3p3, 5 MHz, high channel

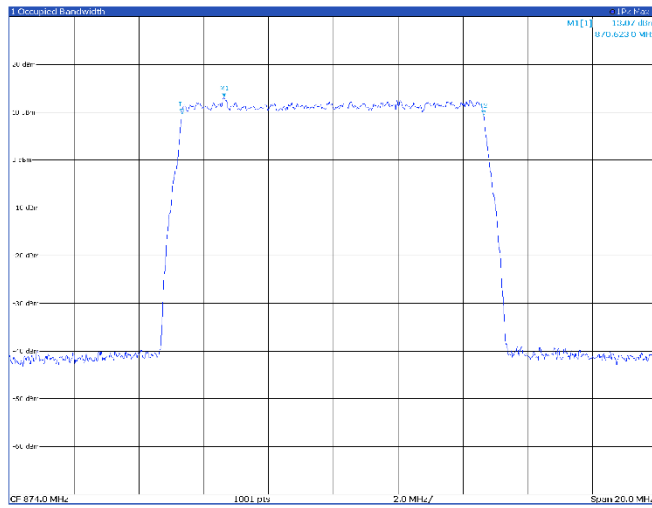


Type	Ref	Trc	X Value	Y Value	Function	Function Result
P1	1		891.25 MHz	13.60 dBm	Occ Sw	4.511 525 409 MHz
P1	1		891.25 MHz	6.91 dBm	Occ Sw Control	891.511 400 200 MHz
P2	1		891.25 MHz	6.91 dBm	Occ Sw Control	891.511 400 200 MHz

Band n5

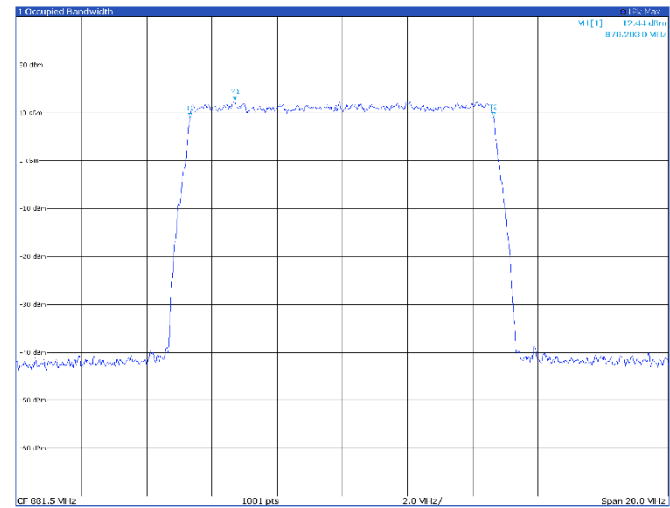
10 MHz

TM1.1, 10 MHz, low channel



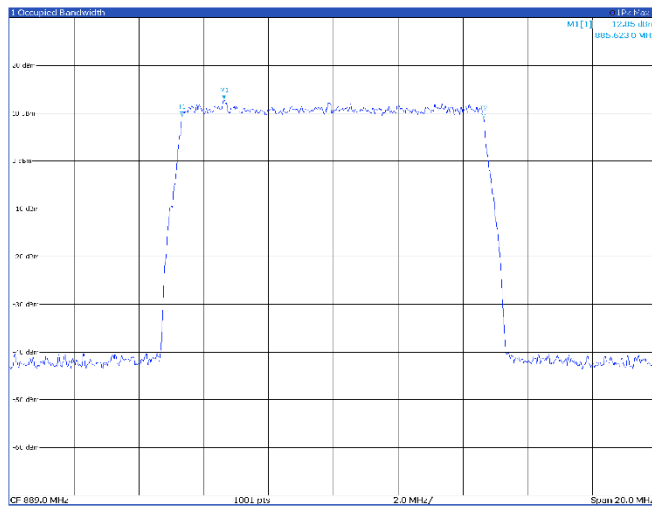
Type	Ref	Trc	X Value	Y Value	Function	Function Result
P1	1		870.623 MHz	13.07 dBm	Occ 50	9.306 989 588 MHz
T1	1		869.220 MHz	9.64 dBm	Occ 50 Control	870.962 242 47 MHz
T2	1		872.020 MHz	9.64 dBm	Occ 50 Interq Offset	869.487 747 94 MHz

TM1.1, 10 MHz, mid channel



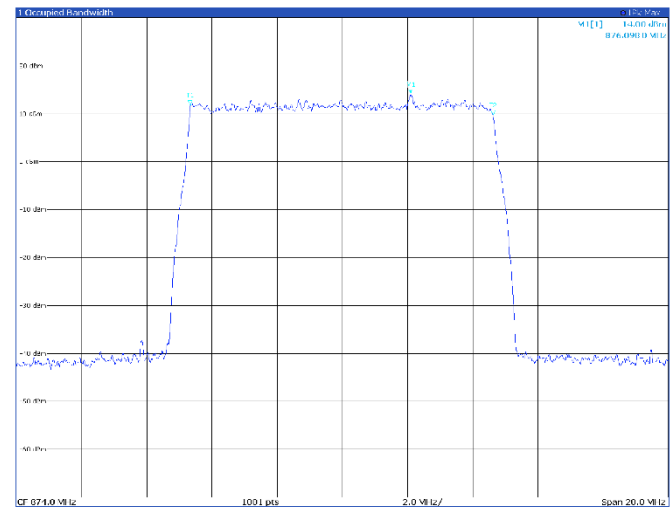
Type	Ref	Trc	X Value	Y Value	Function	Function Result
P1	1		870.203 MHz	12.44 dBm	Occ 50	9.303 804 802 MHz
T1	1		868.520 MHz	9.64 dBm	Occ 50 Control	869.489 500 111 MHz
T2	1		871.320 MHz	9.64 dBm	Occ 50 Interq Offset	870.729 693 232 MHz

TM1.1, 10 MHz, high channel



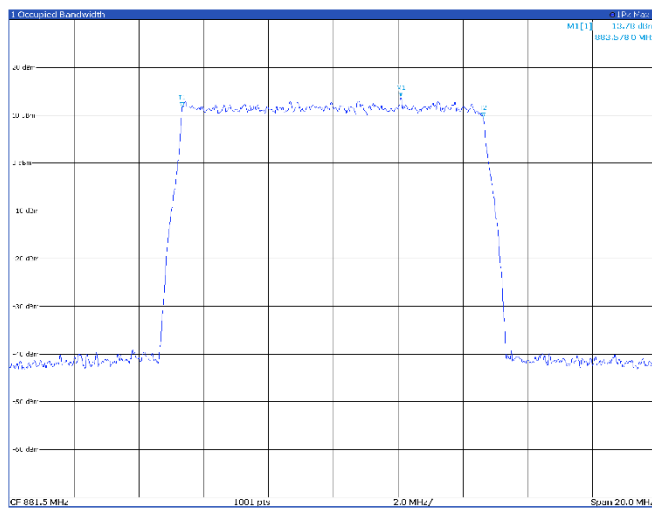
Type	Ref	Trc	X Value	Y Value	Function	Function Result
P1	1		885.623 MHz	12.85 dBm	Occ 50	9.307 966 559 MHz
T1	1		884.220 MHz	9.64 dBm	Occ 50 Control	885.977 748 076 MHz
T2	1		886.820 MHz	9.64 dBm	Occ 50 Interq Offset	885.146 547 950 MHz

TM3p1, 10 MHz, low channel



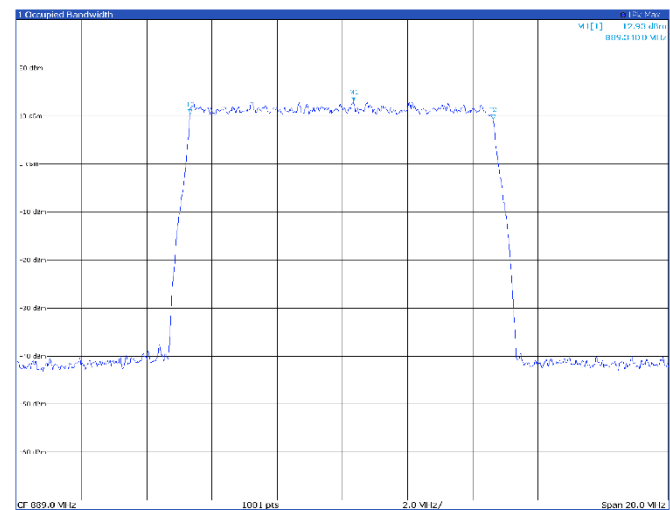
Type	Ref	Trc	X Value	Y Value	Function	Function Result
P1	1		876.098 MHz	14.00 dBm	Occ 50	9.287 291 603 MHz
T1	1		874.520 MHz	11.62 dBm	Occ 50 Control	873.979 491 016 MHz
T2	1		877.620 MHz	11.62 dBm	Occ 50 Interq Offset	876.288 007 310 MHz

TM3p1, 10 MHz, mid channel



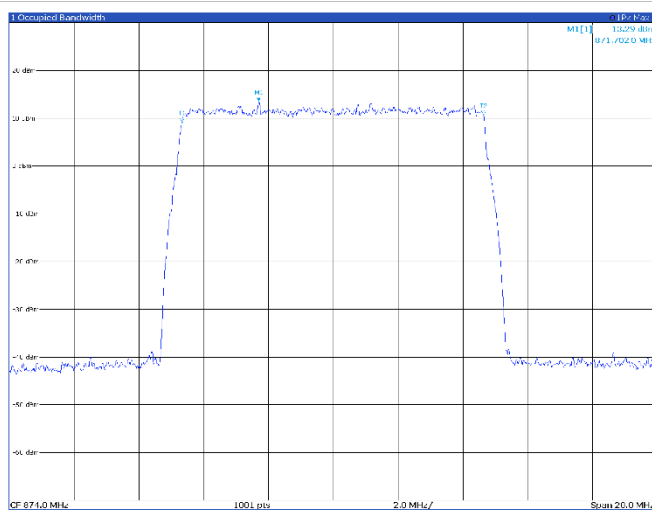
Type	Ref	Trc	X Value	Y Value	Function	Function Result
M1	1		883.578 MHz	13.78 dBm	Occ Sw	9.289 958 604 MHz
M1	1		878.5251 MHz	11.70 dBm	Occ Sw Control	881.400 229112 MHz
M2	1		886.6306 MHz	9.30 dBm	Occ Sw Control	884.561 08026 MHz

TM3p1, 10 MHz, high channel



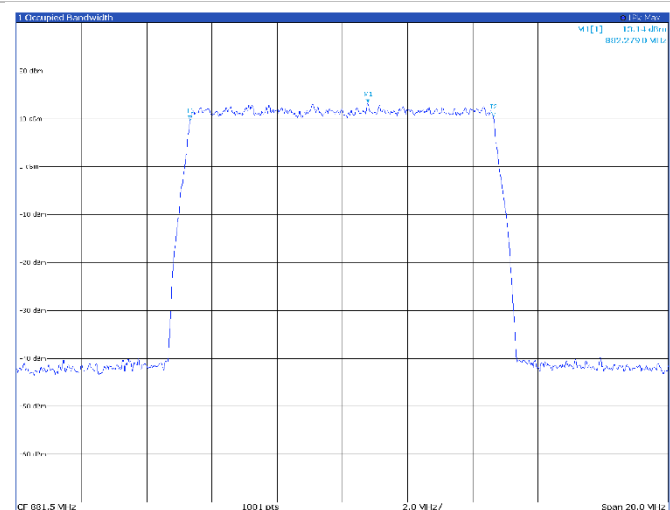
Type	Ref	Trc	X Value	Y Value	Function	Function Result
M1	1		889.34 MHz	12.93 dBm	Occ Sw	9.288 672 MHz
M1	1		884.2336 MHz	10.41 dBm	Occ Sw Control	888.977 61557 MHz
M2	1		893.5722 MHz	9.21 dBm	Occ Sw Control	891.104 2531273 MHz

TM3p1a, 10 MHz, low channel



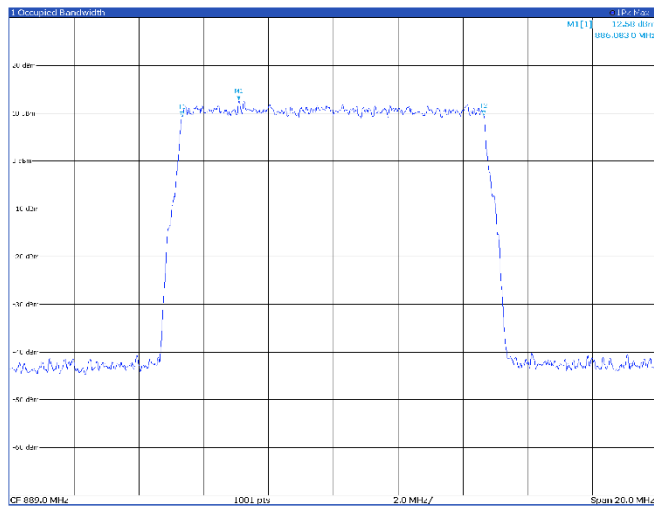
Type	Ref	Trc	X Value	Y Value	Function	Function Result
M1	1		871.702 MHz	13.29 dBm	Occ Sw	9.317 297 676 MHz
M1	1		868.2659 MHz	9.00 dBm	Occ Sw Control	870.965 021 401 MHz
M2	1		878.8076 MHz	10.36 dBm	Occ Sw Control	880.038 94882 MHz

TM3p1a, 10 MHz, mid channel



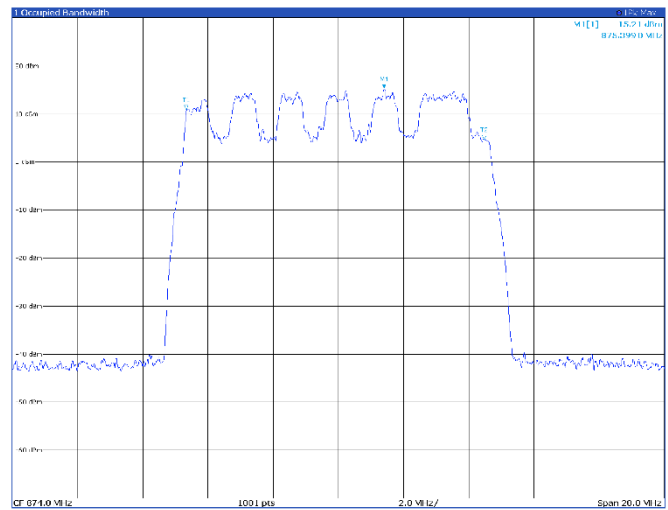
Type	Ref	Trc	X Value	Y Value	Function	Function Result
M1	1		882.279 MHz	13.14 dBm	Occ Sw	9.318 789 347 MHz
M1	1		878.621 MHz	9.63 dBm	Occ Sw Control	881.883 37115 MHz
M2	1		886.4329 MHz	10.44 dBm	Occ Sw Control	891.202 87419 MHz

TM3p1a, 10 MHz, high channel



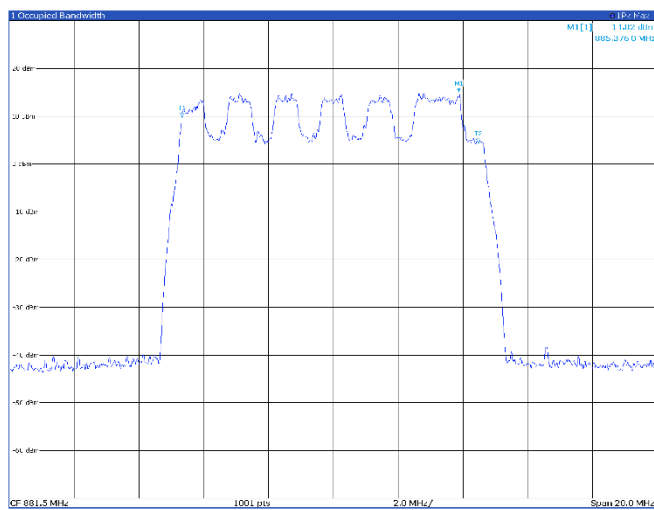
Type	Ref	Trc	X Value	Y Value	Function	Function Result
P1	1		886.083 MHz	12.58 dBm	Occ 5w	9.317426112 MHz
P1	1		886.228 MHz	9.45 dBm	Occ 5w Channel	986.228 MHz
P2	1		886.165 MHz	9.45 dBm	Occ 5w Channel	986.165 MHz

TM3p3, 10 MHz, low channel



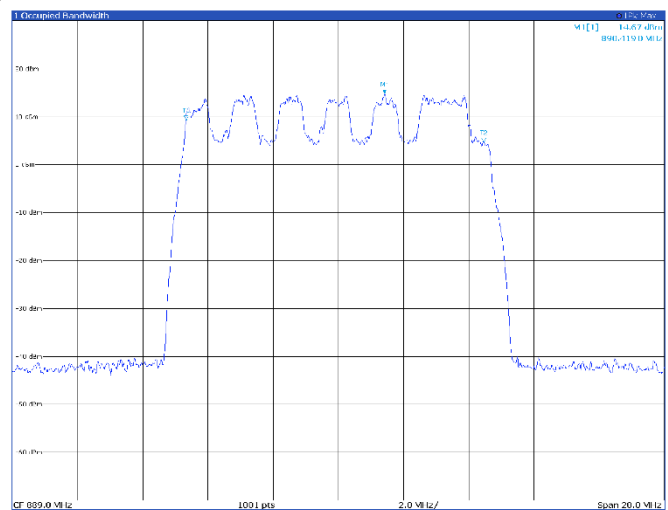
Type	Ref	Trc	X Value	Y Value	Function	Function Result
P1	1		875.399 MHz	15.21 dBm	Occ 5w	9.14173813 MHz
P1	1		875.256 MHz	10.61 dBm	Occ 5w Channel	975.256 MHz
P2	1		875.403 MHz	4.64 dBm	Occ 5w Channel	975.403 MHz

TM3p3, 10 MHz, mid channel



Type	Ref	Trc	X Value	Y Value	Function	Function Result
P1	1		885.376 MHz	14.82 dBm	Occ 5w	9.147521009 MHz
P1	1		885.202 MHz	9.73 dBm	Occ 5w Channel	985.202 MHz
P2	1		885.577 MHz	4.35 dBm	Occ 5w Channel	985.577 MHz

TM3p3, 10 MHz, high channel



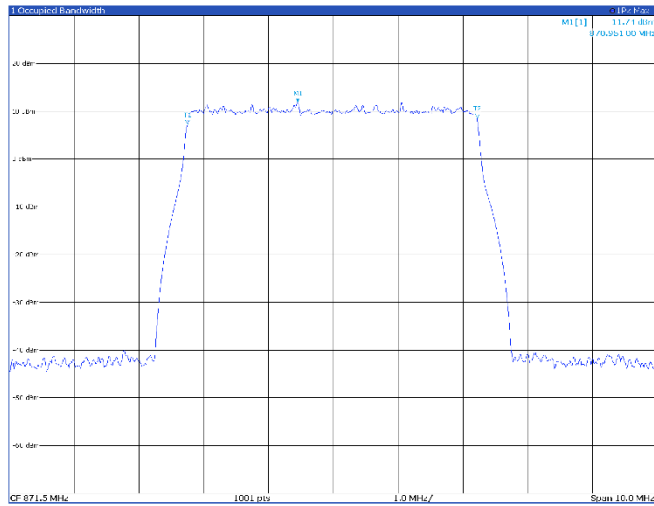
Type	Ref	Trc	X Value	Y Value	Function	Function Result
P1	1		890.419 MHz	14.67 dBm	Occ 5w	9.128179195 MHz
P1	1		890.221 MHz	9.25 dBm	Occ 5w Channel	989.221 MHz
P2	1		890.497 MHz	4.61 dBm	Occ 5w Channel	989.497 MHz

Antenna port 2

Band n5

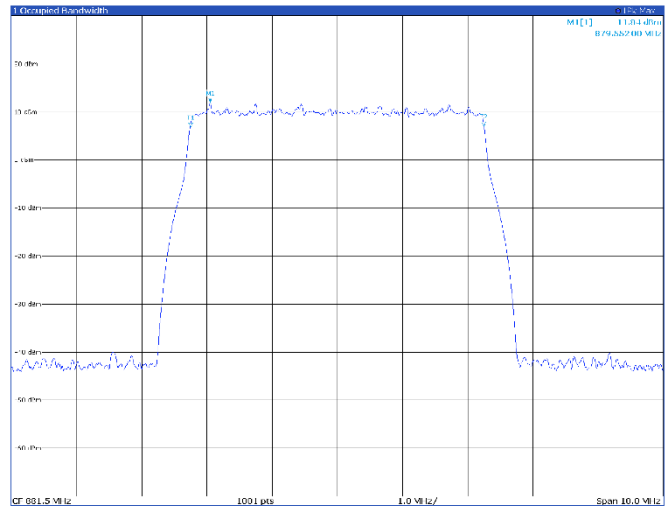
5 MHz

TM1.1, 5 MHz, low channel



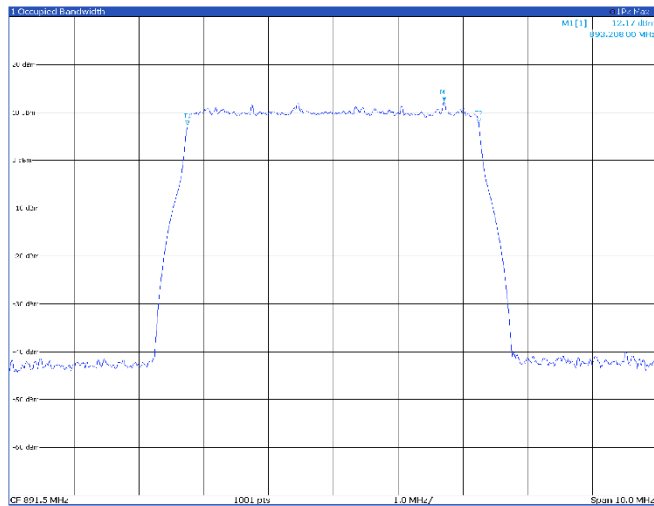
Type	Ref	Trc	X Value	Y Value	Function	Function Result
M1	1		870.951 MHz	11.74 dBm	Occ. BW	4.472 995 78 MHz
T1	1		870.951 MHz	7.17 dBm	Occ. BW Control	871.492 031 747 MHz
T2	1		870.951 MHz	6.50 dBm	Occ. BW Error	16.000 000 000 MHz

TM1.1, 5 MHz, mid channel



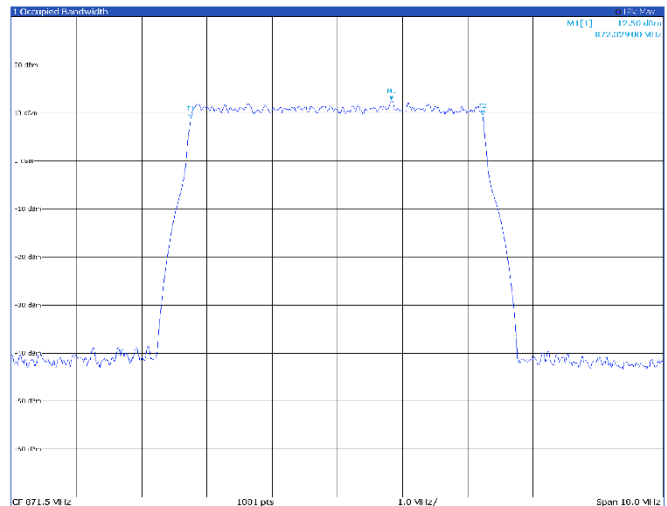
Type	Ref	Trc	X Value	Y Value	Function	Function Result
M1	1		879.552 MHz	11.84 dBm	Occ. BW	4.497 103 979 MHz
T1	1		879.552 MHz	6.62 dBm	Occ. BW Control	881.491 613 414 MHz
T2	1		879.552 MHz	6.14 dBm	Occ. BW Error	16.000 000 000 MHz

TM1.1, 5 MHz, high channel



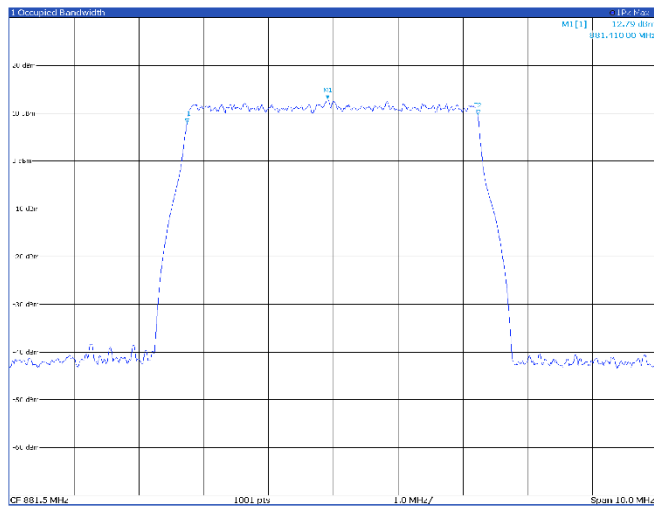
Type	Ref	Trc	X Value	Y Value	Function	Function Result
M1	1		893.208 MHz	12.17 dBm	Occ. BW	4.492 726 344 MHz
T1	1		893.208 MHz	7.20 dBm	Occ. BW Control	895.494 071 546 MHz
T2	1		893.208 MHz	7.01 dBm	Occ. BW Error	16.000 000 000 MHz

TM3p1, 5 MHz, low channel



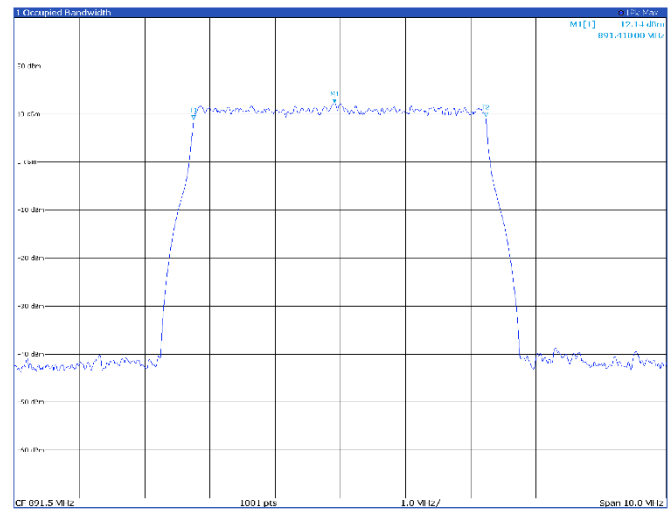
Type	Ref	Trc	X Value	Y Value	Function	Function Result
M1	1		873.329 MHz	12.50 dBm	Occ. BW	4.483 497 337 MHz
T1	1		873.329 MHz	9.65 dBm	Occ. BW Control	875.492 031 217 MHz
T2	1		873.329 MHz	9.45 dBm	Occ. BW Error	16.000 000 000 MHz

TM3p1, 5 MHz, mid channel



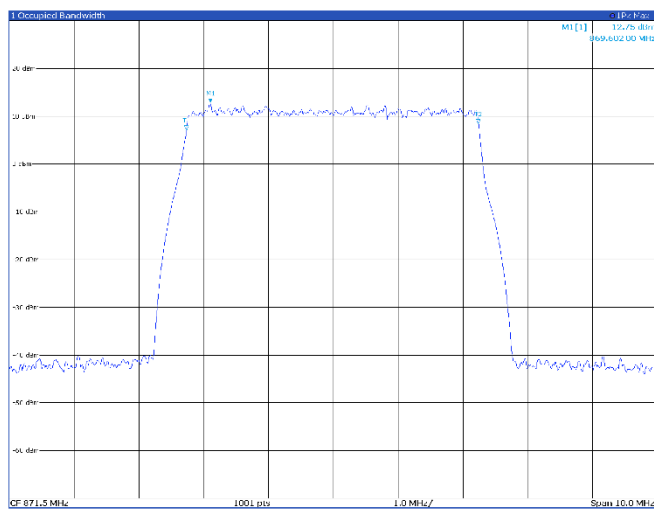
Type	Ref	Trc	X Value	Y Value	Function	Function Result
M1	1		881.41 MHz	12.79 dBm	Occ 5w	4.467062433 MHz
F1	1		879.2424 MHz	7.75 dBm	Occ 5w Channel	881.409309256 MHz
F2	1		883.7248 MHz	8.62 dBm	Occ 5w Channel	883.409309256 MHz

TM3p1, 5 MHz, high channel



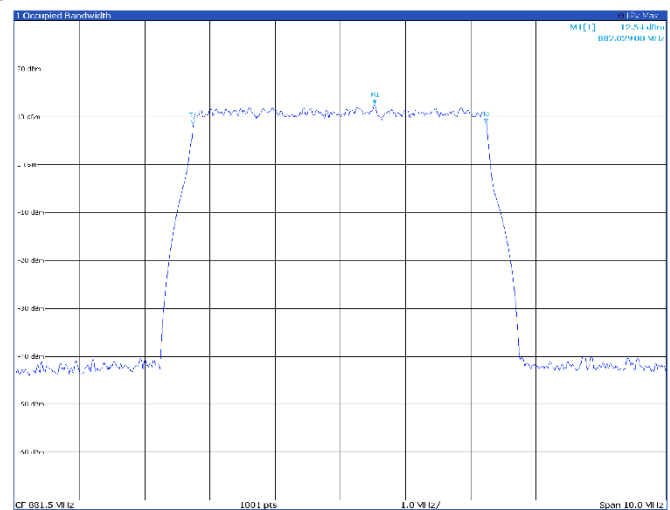
Type	Ref	Trc	X Value	Y Value	Function	Function Result
M1	1		891.41 MHz	12.14 dBm	Occ 5w	4.479223122 MHz
F1	1		889.24935 MHz	6.72 dBm	Occ 5w Channel	891.409309256 MHz
F2	1		893.72735 MHz	8.71 dBm	Occ 5w Channel	893.409309256 MHz

TM3p1a, 5 MHz, low channel



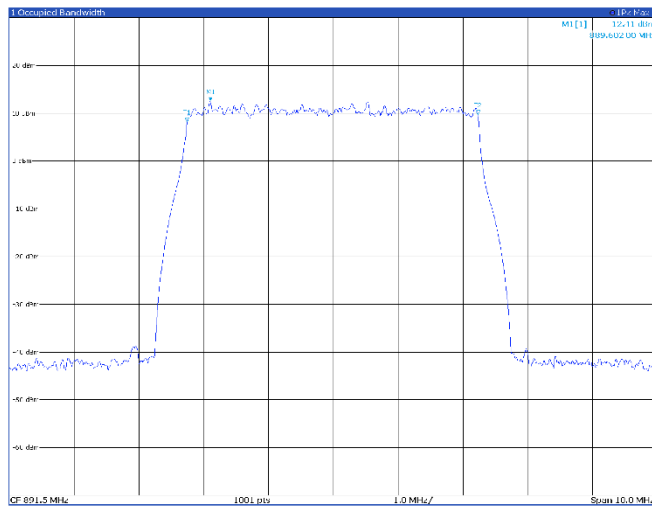
Type	Ref	Trc	X Value	Y Value	Function	Function Result
M1	1		869.602 MHz	12.75 dBm	Occ 5w	4.498884758 MHz
F1	1		867.20946 MHz	7.12 dBm	Occ 5w Channel	869.602509256 MHz
F2	1		871.73614 MHz	8.62 dBm	Occ 5w Channel	871.402509256 MHz

TM3p1a, 5 MHz, mid channel



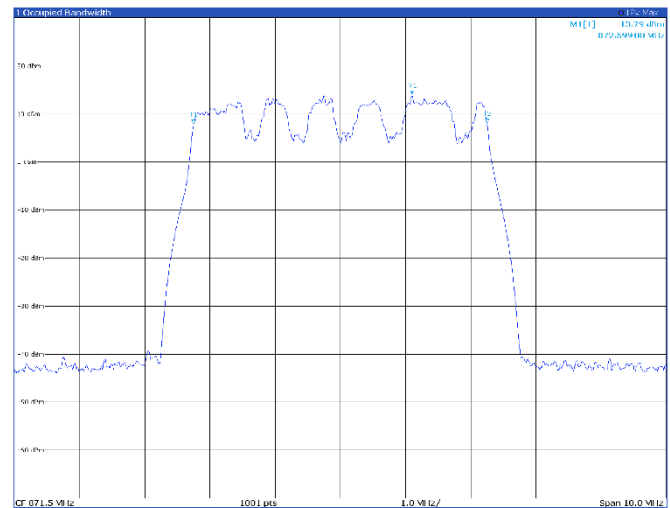
Type	Ref	Trc	X Value	Y Value	Function	Function Result
M1	1		882.029 MHz	12.54 dBm	Occ 5w	4.492494318 MHz
F1	1		880.24132 MHz	6.27 dBm	Occ 5w Channel	882.02509256 MHz
F2	1		883.73218 MHz	8.54 dBm	Occ 5w Channel	883.42509256 MHz

TM3p1a, 5 MHz, high channel



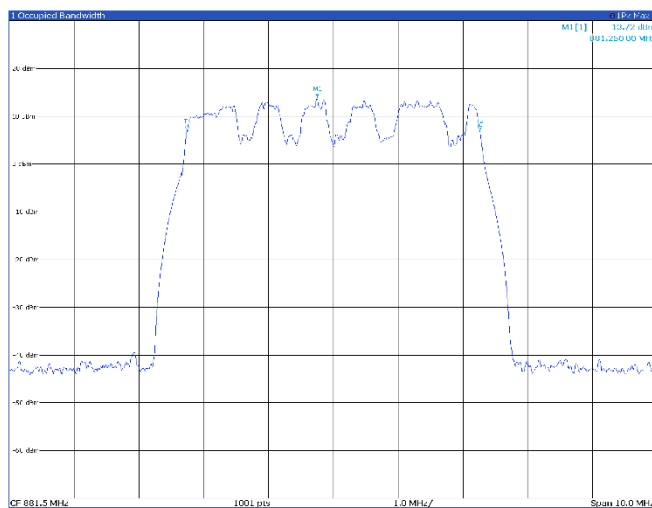
Type	Ref	Trc	X Value	Y Value	Occ Sw	Function	Function Result
M1	1		889.602 MHz	12.41 dBm	Occ Sw		4.489382277 MHz
F1	1		889.24050 MHz	6.17 dBm	Occ Sw	Occ Sw Channel	889.486265110 MHz
F2	1		889.73030 MHz	6.14 dBm	Occ Sw	Occ Sw Channel	889.486265110 MHz

TM3p3, 5 MHz, low channel



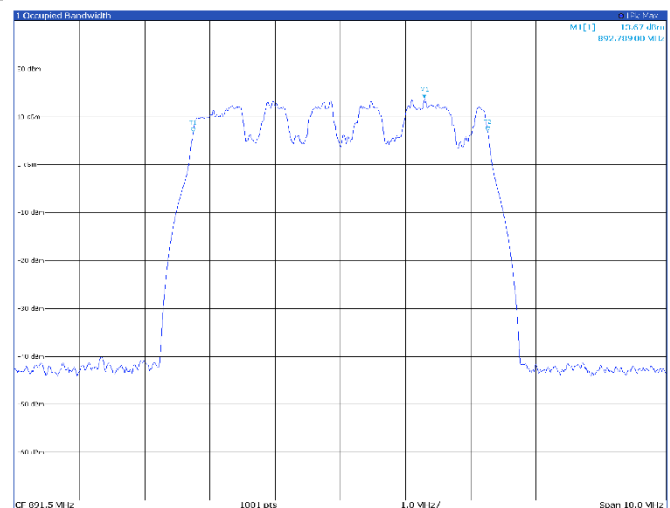
Type	Ref	Trc	X Value	Y Value	Occ Sw	Function	Function Result
M1	1		872.599 MHz	13.79 dBm	Occ Sw		4.50071525 MHz
F1	1		872.24050 MHz	7.61 dBm	Occ Sw	Occ Sw Channel	872.50071525 MHz
F2	1		872.73030 MHz	6.14 dBm	Occ Sw	Occ Sw Channel	872.50071525 MHz

TM3p3, 5 MHz, mid channel



Type	Ref	Trc	X Value	Y Value	Occ Sw	Function	Function Result
M1	1		881.25 MHz	13.72 dBm	Occ Sw		4.511776182 MHz
F1	1		880.94050 MHz	6.02 dBm	Occ Sw	Occ Sw Channel	881.251776182 MHz
F2	1		881.55030 MHz	6.14 dBm	Occ Sw	Occ Sw Channel	881.251776182 MHz

TM3p3, 5 MHz, high channel

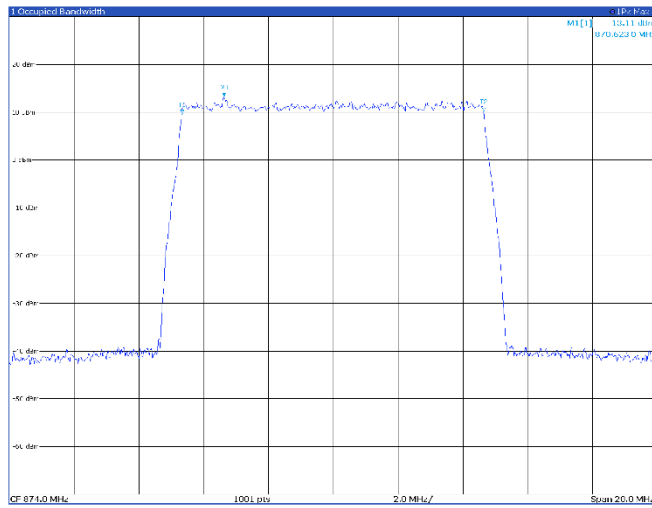


Type	Ref	Trc	X Value	Y Value	Occ Sw	Function	Function Result
M1	1		892.789 MHz	13.67 dBm	Occ Sw		4.515684667 MHz
F1	1		892.48050 MHz	6.61 dBm	Occ Sw	Occ Sw Channel	892.781568467 MHz
F2	1		893.09030 MHz	6.14 dBm	Occ Sw	Occ Sw Channel	892.781568467 MHz

Band n5

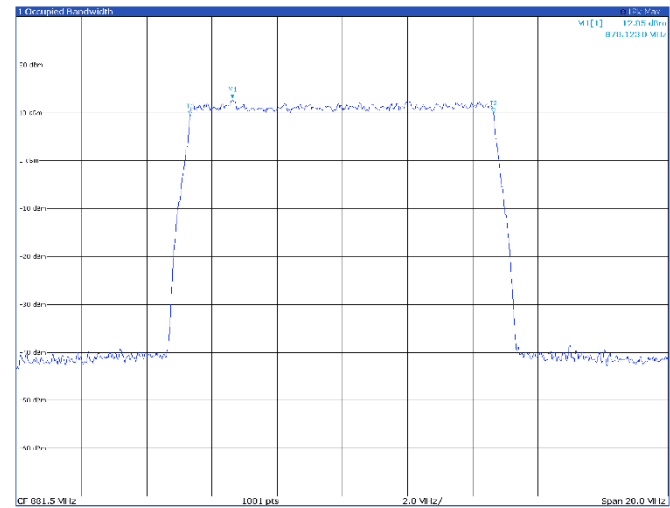
10 MHz

TM1.1, 10 MHz, low channel



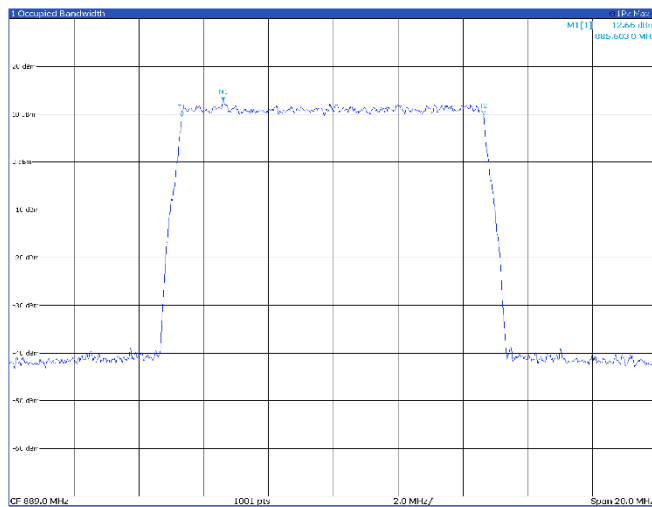
Type	Ref	Trc	X Value	Y Value	Function	Function Result
P1	1		870.623 MHz	13.11 dBm	Occupied Bandwidth	9.312 093 65 MHz
P2	1		880.228 MHz	9.50 dBm	Occupied Bandwidth	9.312 093 65 MHz
P3	1		878.594 MHz	10.12 dBm	Occupied Bandwidth	9.312 093 65 MHz

TM1.1, 10 MHz, mid channel



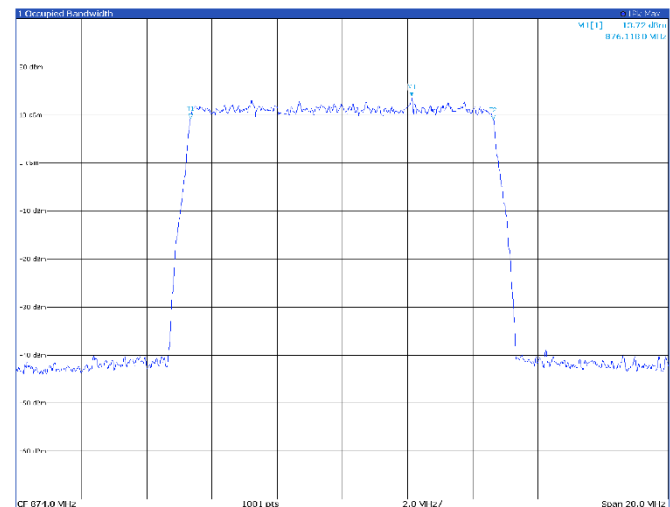
Type	Ref	Trc	X Value	Y Value	Function	Function Result
P1	1		870.623 MHz	12.85 dBm	Occupied Bandwidth	9.301 626 388 MHz
P2	1		880.228 MHz	9.50 dBm	Occupied Bandwidth	9.301 626 388 MHz
P3	1		878.594 MHz	10.12 dBm	Occupied Bandwidth	9.301 626 388 MHz

TM1.1, 10 MHz, high channel



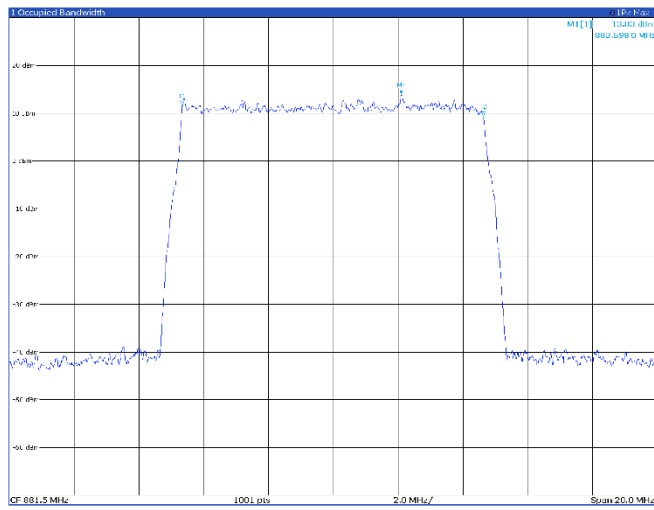
Type	Ref	Trc	X Value	Y Value	Function	Function Result
P1	1		880.603 MHz	12.66 dBm	Occupied Bandwidth	9.308 620 269 MHz
P2	1		880.228 MHz	9.50 dBm	Occupied Bandwidth	9.308 620 269 MHz
P3	1		878.594 MHz	10.12 dBm	Occupied Bandwidth	9.308 620 269 MHz

TM3p1, 10 MHz, low channel



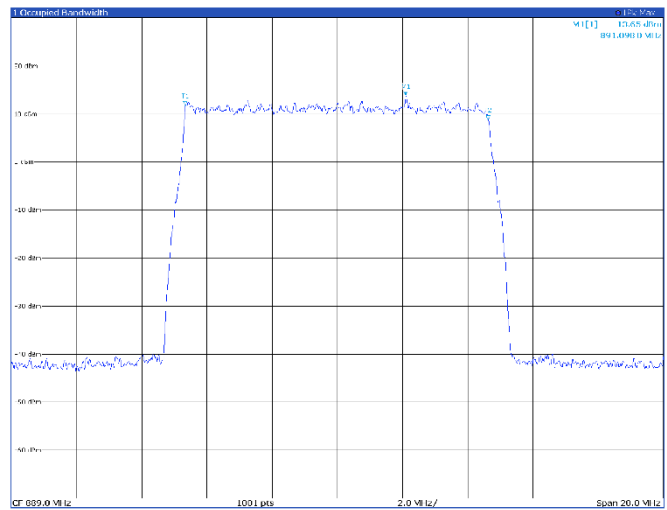
Type	Ref	Trc	X Value	Y Value	Function	Function Result
P1	1		870.623 MHz	13.72 dBm	Occupied Bandwidth	9.283 339 906 MHz
P2	1		880.228 MHz	9.50 dBm	Occupied Bandwidth	9.283 339 906 MHz
P3	1		878.594 MHz	10.12 dBm	Occupied Bandwidth	9.283 339 906 MHz

TM3p1, 10 MHz, mid channel



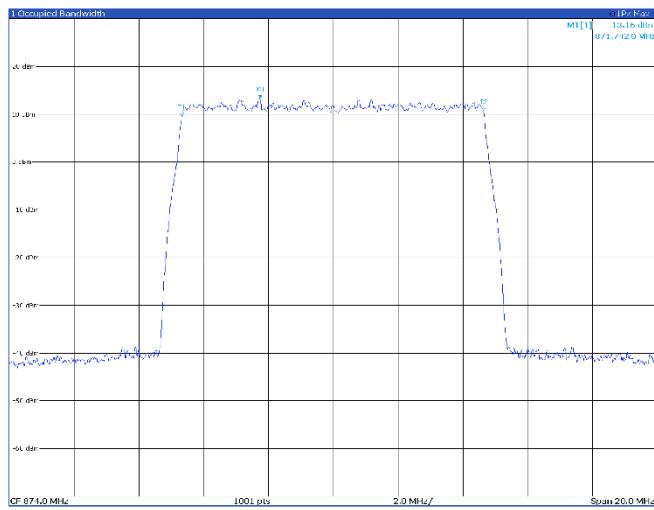
Type	Ref	Trc	X Value	Y Value	Function	Function Result
F1	1		883.598 MHz	13.63 dBm	Occ Sw	9.286 950 513 MHz
F1	1		878.5779 MHz	11.50 dBm	Occ Sw Control	980.460 724 MHz
F2	1		886.527 MHz	9.30 dBm	Occ Sw Control	9.286 950 513 MHz

TM3p1, 10 MHz, high channel



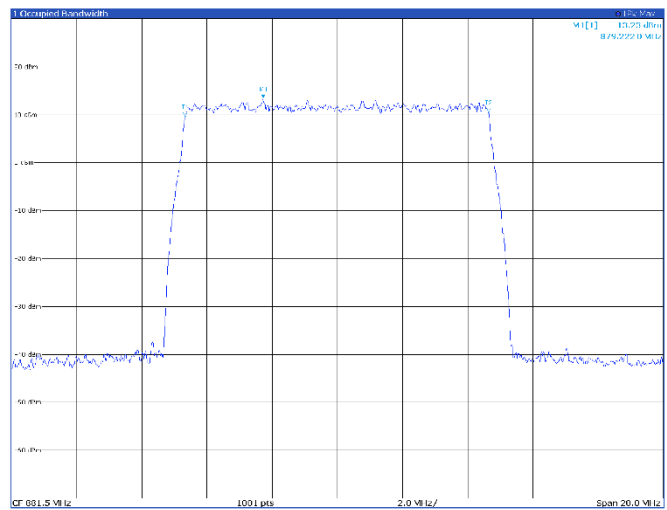
Type	Ref	Trc	X Value	Y Value	Function	Function Result
F1	1		891.098 MHz	13.65 dBm	Occ Sw	9.290 607 264 MHz
F1	1		881.0551 MHz	11.72 dBm	Occ Sw Control	889.981 276 624 MHz
F2	1		893.1377 MHz	8.75 dBm	Occ Sw Control	9.290 607 264 MHz

TM3p1a, 10 MHz, low channel



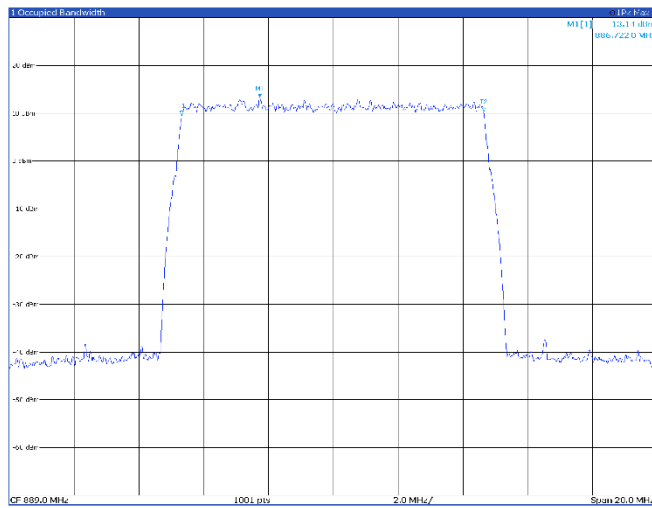
Type	Ref	Trc	X Value	Y Value	Function	Function Result
F1	1		871.742 MHz	13.15 dBm	Occ Sw	9.322 134 071 MHz
F1	1		869.2611 MHz	9.41 dBm	Occ Sw Control	9.322 134 071 MHz
F2	1		878.5037 MHz	10.36 dBm	Occ Sw Control	9.322 134 071 MHz

TM3p1a, 10 MHz, mid channel



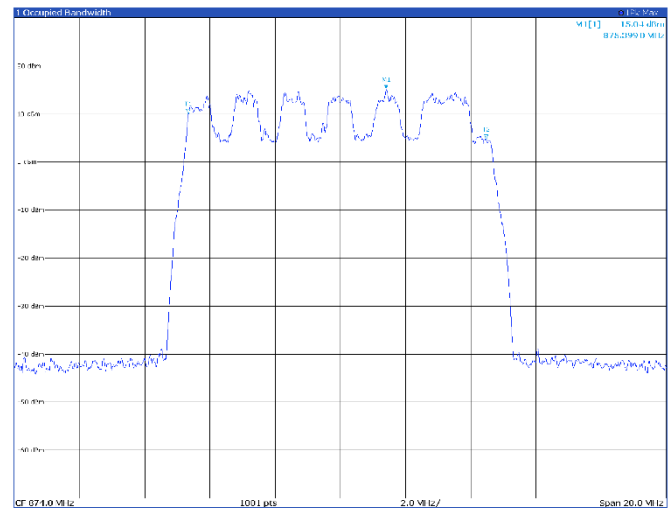
Type	Ref	Trc	X Value	Y Value	Function	Function Result
F1	1		879.222 MHz	13.23 dBm	Occ Sw	9.317 100 772 MHz
F1	1		878.5009 MHz	9.73 dBm	Occ Sw Control	9.317 100 772 MHz
F2	1		886.148 MHz	10.40 dBm	Occ Sw Control	9.317 100 772 MHz

TM3p1a, 10 MHz, high channel



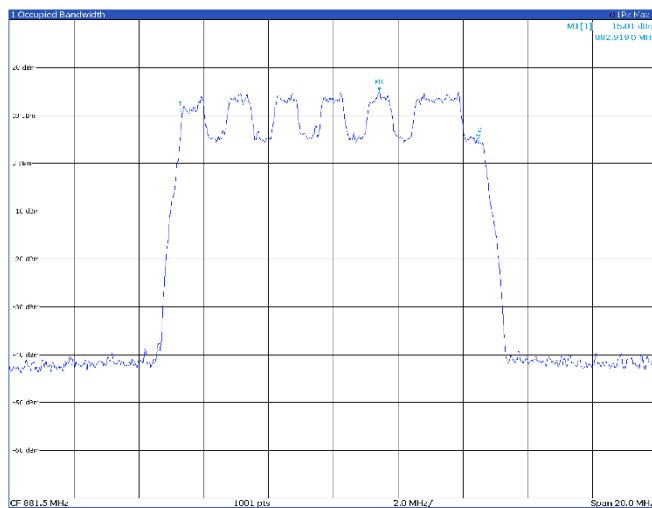
Type	Ref	Trc	X Value	Y Value	Function	Function Result
1	1	1	886.722 MHz	13.14 dBm	Occ Sw	9.323498783 MHz
1	1	1	886.722 MHz	13.14 dBm	Occ Sw Control	986.952741722 MHz
1	1	1	886.722 MHz	13.14 dBm	Occ Sw Control	17.028222201 dBm

TM3p3, 10 MHz, low channel



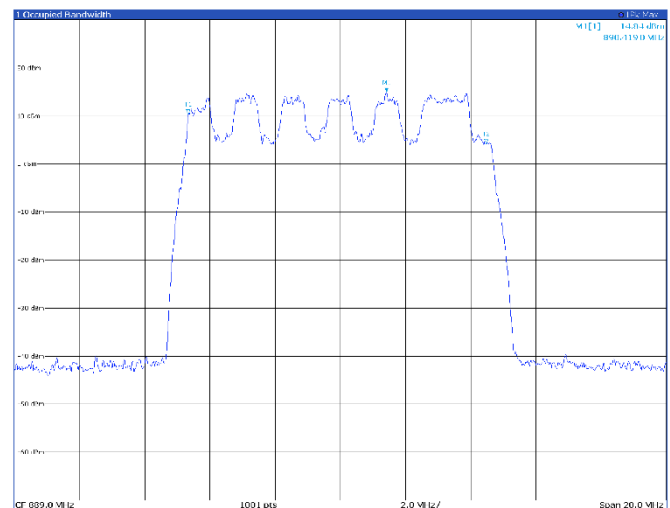
Type	Ref	Trc	X Value	Y Value	Function	Function Result
1	1	1	875.399 MHz	15.04 dBm	Occ Sw	9.142095981 MHz
1	1	1	875.399 MHz	15.04 dBm	Occ Sw Control	875.905650357 MHz
1	1	1	875.399 MHz	15.04 dBm	Occ Sw Control	-11.071482724 dBm

TM3p3, 10 MHz, mid channel



Type	Ref	Trc	X Value	Y Value	Function	Function Result
1	1	1	882.919 MHz	15.01 dBm	Occ Sw	9.12716804 MHz
1	1	1	882.919 MHz	15.01 dBm	Occ Sw Control	981.027442736 MHz
1	1	1	882.919 MHz	15.01 dBm	Occ Sw Control	111.180244184 dBm

TM3p3, 10 MHz, high channel



Type	Ref	Trc	X Value	Y Value	Function	Function Result
1	1	1	890.419 MHz	14.04 dBm	Occ Sw	9.137691484 MHz
1	1	1	890.419 MHz	14.04 dBm	Occ Sw Control	888.901655611 MHz
1	1	1	890.419 MHz	14.04 dBm	Occ Sw Control	-99.764255423 dBm

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	October 22, 2024	Temperature	22 °C
Test end date	October 31, 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 n5: Antenna port 1

Band	OBW Declared	Modulation	Channel (MHz)	26 dB (MHz)
n5	5 MHz	TM1.1	871.5	5.04
n5	5 MHz	TM1.1	881.5	5.04
n5	5 MHz	TM1.1	891.5	5.08

Band	OBW Declared	Modulation	Channel (MHz)	26 dB (MHz)
n5	5 MHz	TM3p1	871.5	5.05
n5	5 MHz	TM3p1	881.5	5.05
n5	5 MHz	TM3p1	891.5	5.04

Band	OBW Declared	Modulation	Channel (MHz)	26 dB (MHz)
n5	5 MHz	TM3p1a	871.5	5.05
n5	5 MHz	TM3p1a	881.5	5.07
n5	5 MHz	TM3p1a	891.5	5.07

Band	OBW Declared	Modulation	Channel (MHz)	26 dB (MHz)
n5	5 MHz	TM3p3	871.5	5.08
n5	5 MHz	TM3p3	881.5	5.08
n5	5 MHz	TM3p3	891.5	5.08

Band	OBW Declared	Modulation	Channel (MHz)	26 dB (MHz)
n5	10 MHz	TM1.1	874.0	10.13
n5	10 MHz	TM1.1	881.5	10.11
n5	10 MHz	TM1.1	889.0	10.09

Band	OBW Declared	Modulation	Channel (MHz)	26 dB (MHz)
n5	10 MHz	TM3p1	874.0	10.09
n5	10 MHz	TM3p1	881.5	10.07
n5	10 MHz	TM3p1	889.0	10.11

Band	OBW Declared	Modulation	Channel (MHz)	26 dB (MHz)
n5	10 MHz	TM3p1a	874.0	10.15
n5	10 MHz	TM3p1a	881.5	10.15
n5	10 MHz	TM3p1a	889.0	10.07

Band	OBW Declared	Modulation	Channel (MHz)	26 dB (MHz)
n5	10 MHz	TM3p3	874.0	9.95
n5	10 MHz	TM3p3	881.5	9.95
n5	10 MHz	TM3p3	889.0	9.95

Band n5: Antenna port 2

Band	OBW Declared	Modulation	Channel (MHz)	26 dB (MHz)
n5	5 MHz	TM1.1	871.5	5.04
n5	5 MHz	TM1.1	881.5	5.07
n5	5 MHz	TM1.1	891.5	5.05

Band	OBW Declared	Modulation	Channel (MHz)	26 dB (MHz)
n5	5 MHz	TM3p1	871.5	5.04
n5	5 MHz	TM3p1	881.5	5.07
n5	5 MHz	TM3p1	891.5	5.08

Band	OBW Declared	Modulation	Channel (MHz)	26 dB (MHz)
n5	5 MHz	TM3p1a	871.5	5.07
n5	5 MHz	TM3p1a	881.5	5.08
n5	5 MHz	TM3p1a	891.5	5.07

Band	OBW Declared	Modulation	Channel (MHz)	26 dB (MHz)
n5	5 MHz	TM3p3	871.5	5.00
n5	5 MHz	TM3p3	881.5	5.08
n5	5 MHz	TM3p3	891.5	5.08

Band	OBW Declared	Modulation	Channel (MHz)	26 dB (MHz)
n5	10 MHz	TM1.1	874.0	10.09
n5	10 MHz	TM1.1	881.5	10.15
n5	10 MHz	TM1.1	889.0	10.11

Band	OBW Declared	Modulation	Channel (MHz)	26 dB (MHz)
n5	10 MHz	TM3p1	874.0	10.07
n5	10 MHz	TM3p1	881.5	10.05
n5	10 MHz	TM3p1	889.0	10.07

Band	OBW Declared	Modulation	Channel (MHz)	26 dB (MHz)
n5	10 MHz	TM3p1a	874.0	10.15
n5	10 MHz	TM3p1a	881.5	10.11
n5	10 MHz	TM3p1a	889.0	10.13

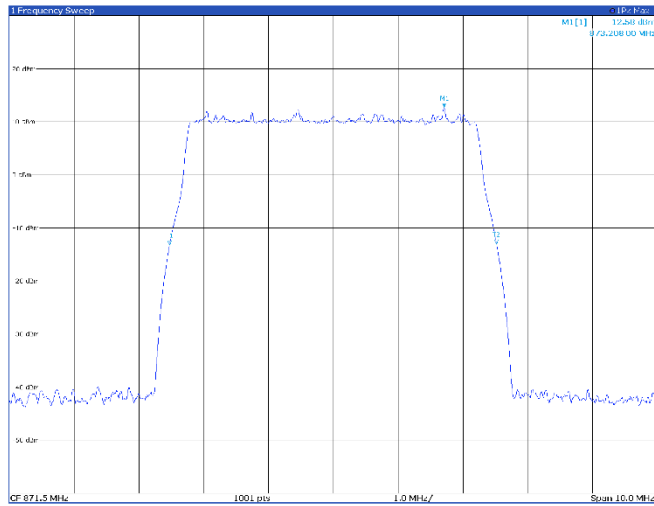
Band	OBW Declared	Modulation	Channel (MHz)	26 dB (MHz)
n5	10 MHz	TM3p3	874.0	9.93
n5	10 MHz	TM3p3	881.5	9.95
n5	10 MHz	TM3p3	889.0	9.97

Antenna port 1

Band n5

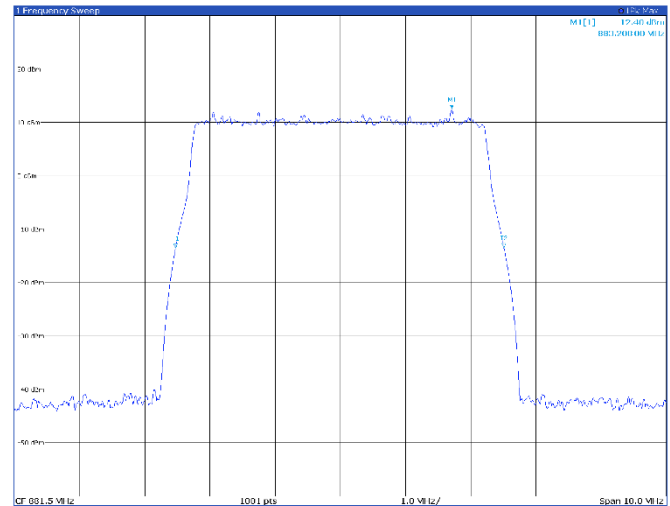
5 MHz

TM1.1, 5 MHz, low channel



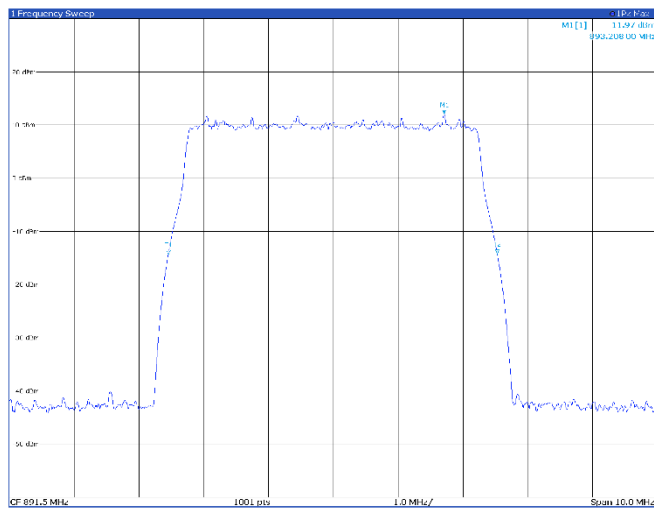
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result
M1	1		873.208 MHz	12.58 dBm	nB	5.04 MHz
M1	1		873.208 MHz	-12.47 dBm	nB down BW	5.04 MHz
M1	1		873.208 MHz	-12.47 dBm	nB down BW	5.04 MHz

TM1.1, 5 MHz, mid channel



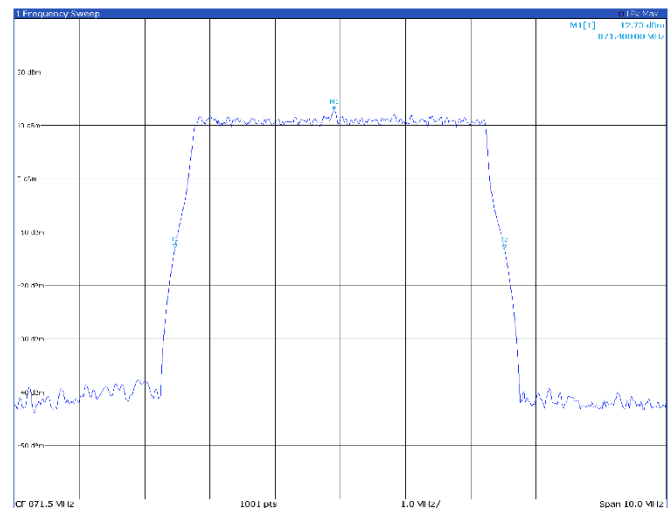
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result
M1	1		883.208 MHz	12.40 dBm	nB	5.04 MHz
M1	1		883.208 MHz	-12.52 dBm	nB down BW	5.04 MHz
M1	1		883.208 MHz	-12.52 dBm	nB down BW	5.04 MHz

TM1.1, 5 MHz, high channel

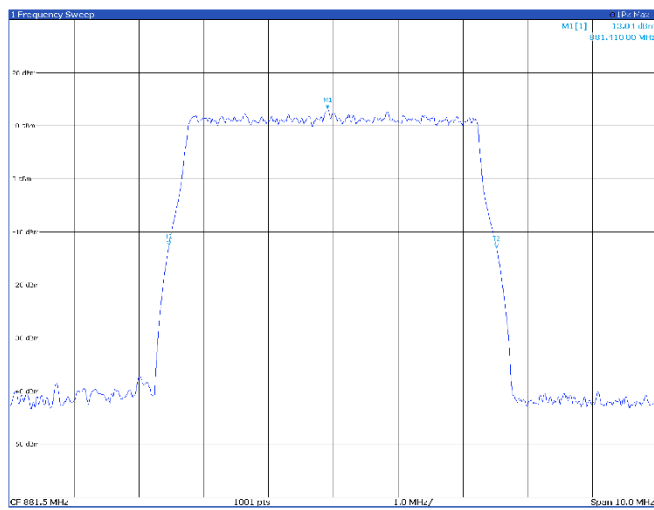


Type	Ref	Trc	X-Value	Y-Value	Function	Function Result
M1	1		893.208 MHz	11.97 dBm	nB	5.08 MHz
M1	1		893.208 MHz	-12.23 dBm	nB down BW	5.08 MHz
M1	1		893.208 MHz	-12.23 dBm	nB down BW	5.08 MHz

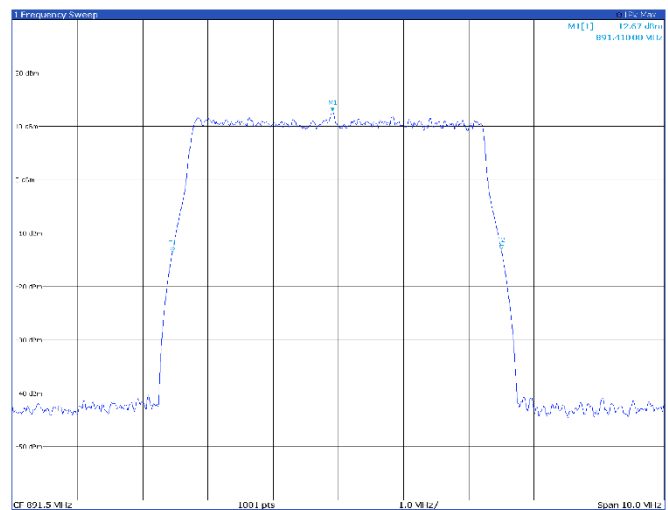
TM3p1, 5 MHz, low channel



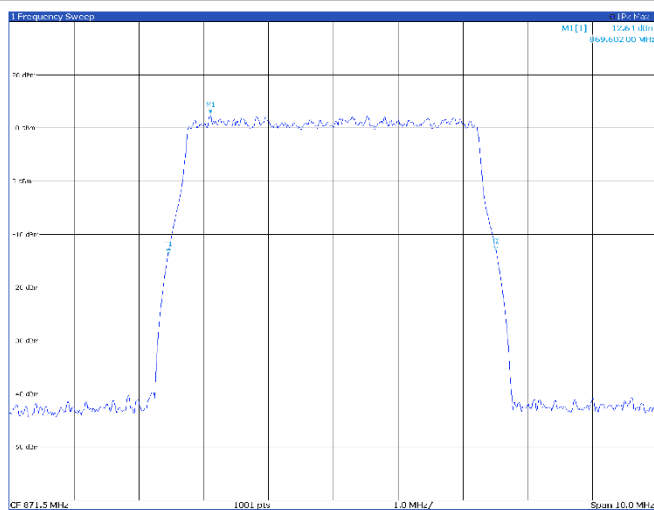
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result
M1	1		873.208 MHz	12.73 dBm	nB	5.05 MHz
M1	1		873.208 MHz	-12.02 dBm	nB down BW	5.05 MHz
M1	1		873.208 MHz	-12.02 dBm	nB down BW	5.05 MHz

TM3p1, 5 MHz, mid channel


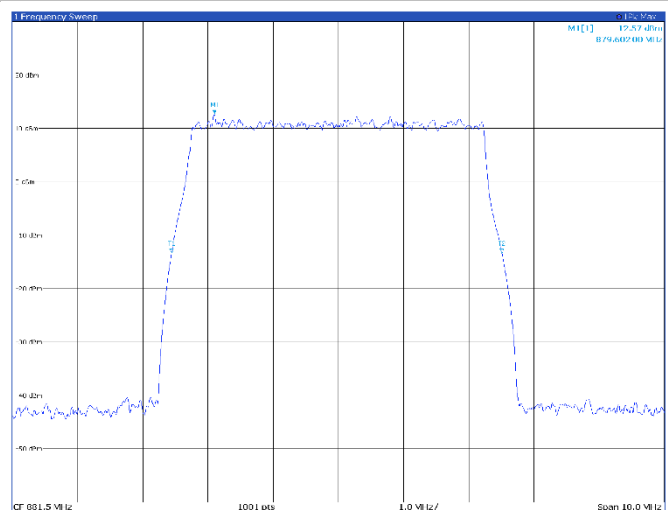
Type	Ref	Trc	X Value	Y Value	nB	Function	Function Result
M1	1		881.41 MHz	13.04 dBm	nB	20.0 dB	
T1	1		872.952 MHz	-12.52 dBm	nB	down BW	5.05 MHz
T2	1		894.007 MHz	-13.04 dBm	Q factor		1.22.0

TM3p1, 5 MHz, high channel


Type	Ref	Trc	X Value	Y Value	nB	Function	Function Result
M1	1		891.41 MHz	12.67 dBm	nB	20.0 dB	
T1	1		882.952 MHz	-12.67 dBm	nB	down BW	5.04 MHz
T2	1		904.007 MHz	-13.17 dBm	Q factor		1.22.7

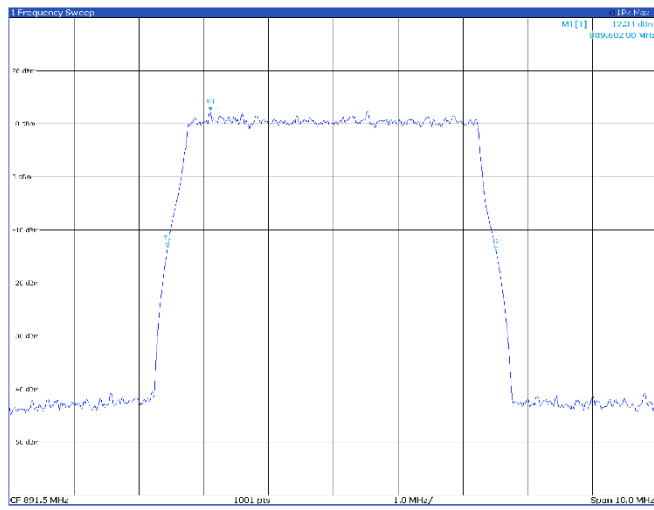
TM3p1a, 5 MHz, low channel


Type	Ref	Trc	X Value	Y Value	nB	Function	Function Result
M1	1		869.602 MHz	12.64 dBm	nB	20.0 dB	
T1	1		860.953 MHz	-13.59 dBm	nB	down BW	5.05 MHz
T2	1		874.007 MHz	-13.04 dBm	Q factor		1.22.0

TM3p1a, 5 MHz, mid channel


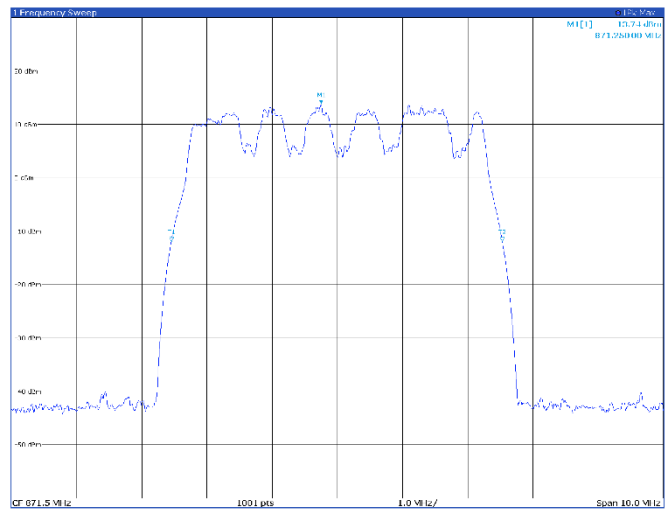
Type	Ref	Trc	X Value	Y Value	nB	Function	Function Result
M1	1		879.602 MHz	12.57 dBm	nB	20.0 dB	
T1	1		870.953 MHz	-13.27 dBm	nB	down BW	5.07 MHz
T2	1		894.007 MHz	-13.27 dBm	Q factor		1.22.7

TM3p1a, 5 MHz, high channel



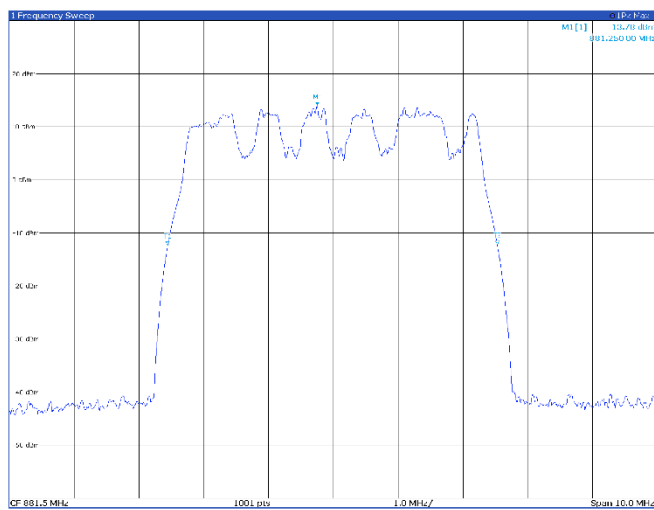
Type	Ref	Trc	X Value	Y Value	n dB	Function	Function Result
F1	1		891.502 MHz	12.34 dBm	n dB	30 dB	5.07 MHz
F1	1		891.502 MHz	12.34 dBm	n dB	30 dB	5.07 MHz
F1	1		891.502 MHz	12.34 dBm	n dB	30 dB	5.07 MHz

TM3p3, 5 MHz, low channel



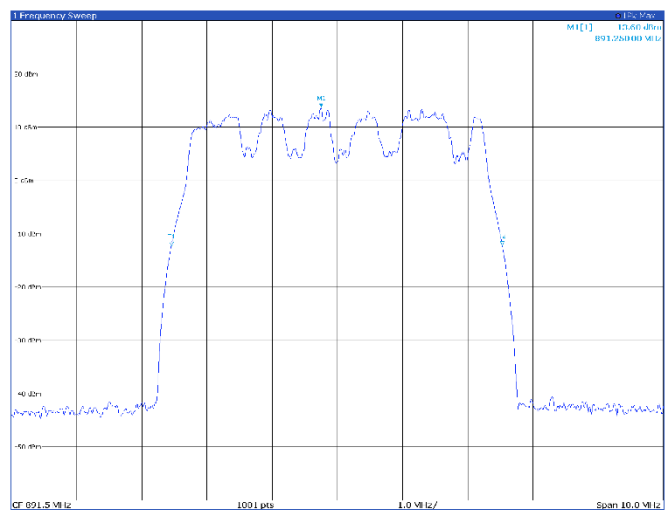
Type	Ref	Trc	X Value	Y Value	n dB	Function	Function Result
F1	1		891.502 MHz	13.74 dBm	n dB	30 dB	5.08 MHz
F1	1		891.502 MHz	13.74 dBm	n dB	30 dB	5.08 MHz
F1	1		891.502 MHz	13.74 dBm	n dB	30 dB	5.08 MHz

TM3p3, 5 MHz, mid channel



Type	Ref	Trc	X Value	Y Value	n dB	Function	Function Result
F1	1		891.502 MHz	13.78 dBm	n dB	30 dB	5.08 MHz
F1	1		891.502 MHz	13.78 dBm	n dB	30 dB	5.08 MHz
F1	1		891.502 MHz	13.78 dBm	n dB	30 dB	5.08 MHz

TM3p3, 5 MHz, high channel

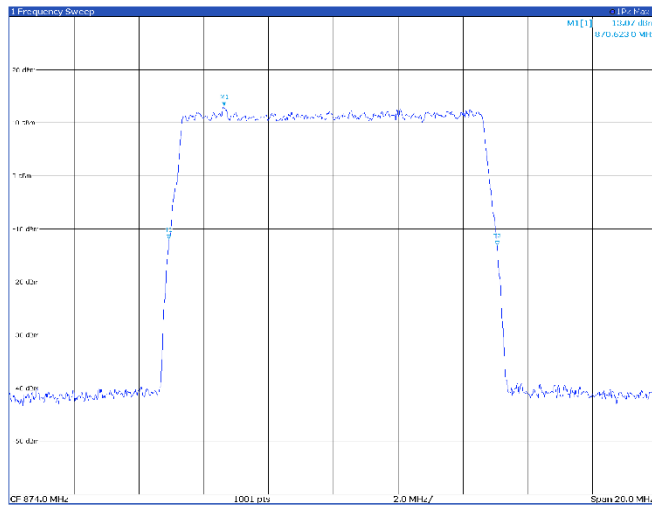


Type	Ref	Trc	X Value	Y Value	n dB	Function	Function Result
F1	1		891.502 MHz	13.60 dBm	n dB	30 dB	5.08 MHz
F1	1		891.502 MHz	13.60 dBm	n dB	30 dB	5.08 MHz
F1	1		891.502 MHz	13.60 dBm	n dB	30 dB	5.08 MHz

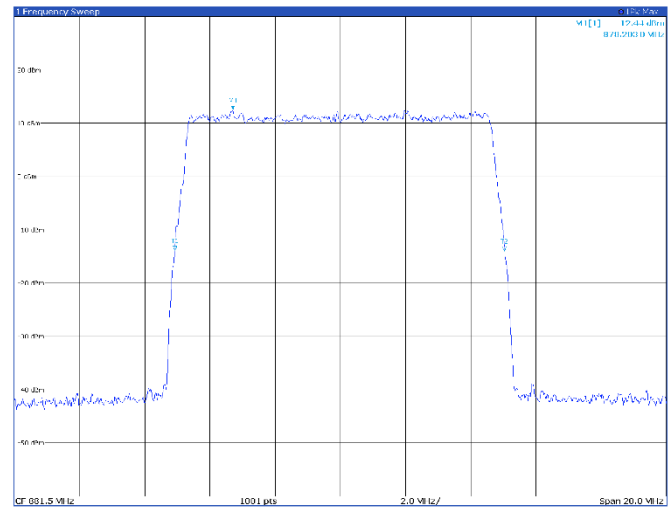
Band n5

10 MHz

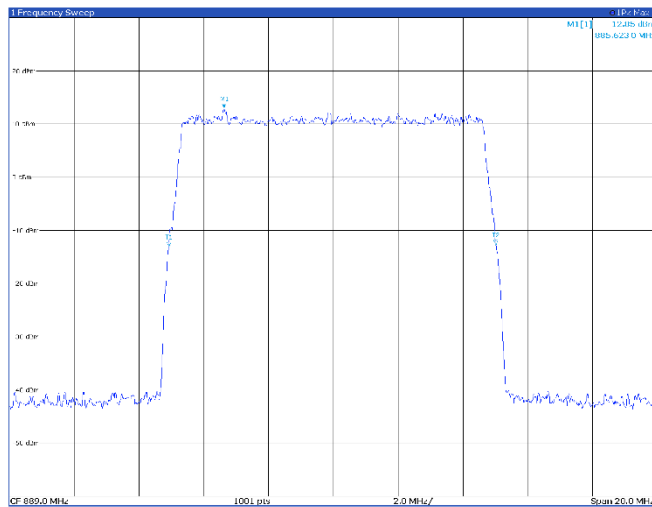
TM1.1, 10 MHz, low channel



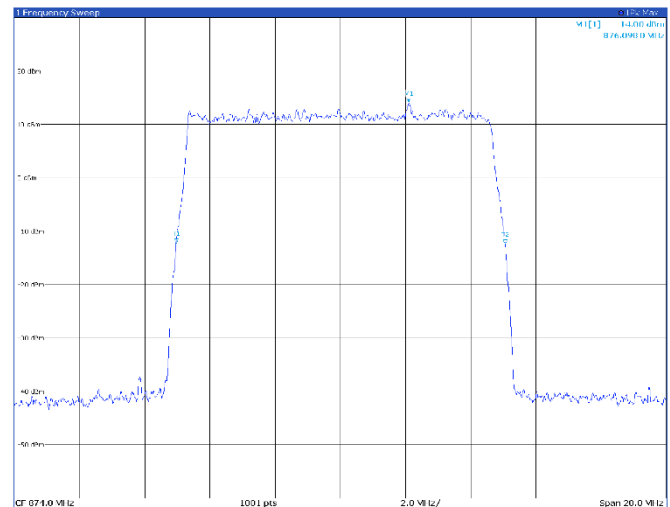
TM1.1, 10 MHz, mid channel



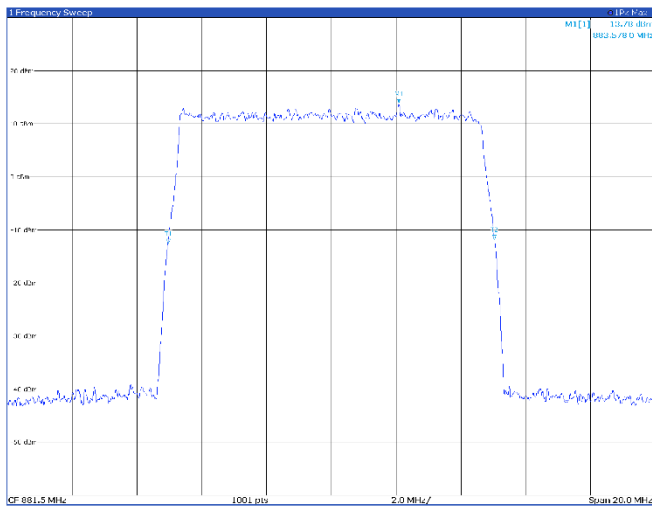
TM1.1, 10 MHz, high channel



TM3p1, 10 MHz, low channel

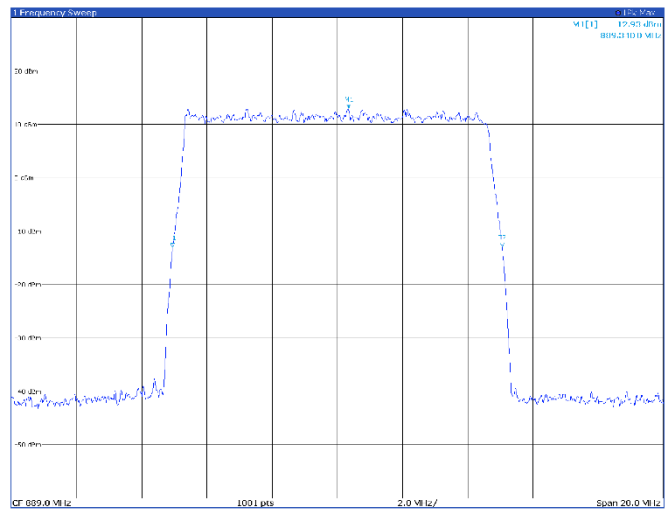


TM3p1, 10 MHz, mid channel



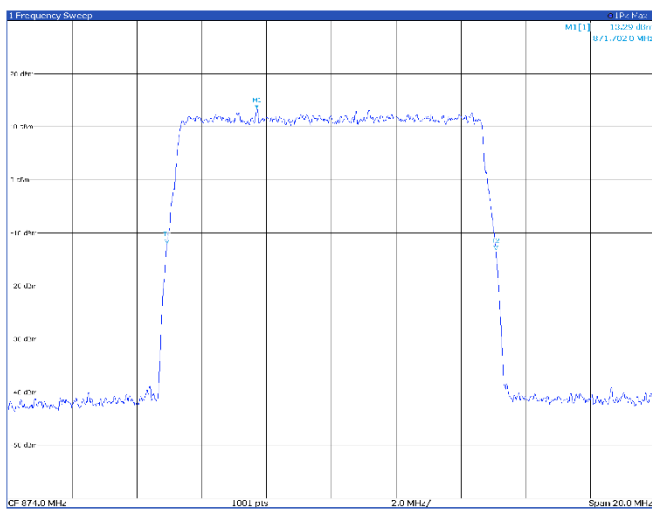
Type	Ref	Trc	X Value	Y Value	Function	Function Result
P1	1		883.578 MHz	13.78 dBm	nB	20.0 dB
P1	1		876.453 MHz	-12.52 dBm	nB down BW	10.07 MHz
P2	1		886.533 MHz	1.25 dBm	Q factor	52.2

TM3p1, 10 MHz, high channel



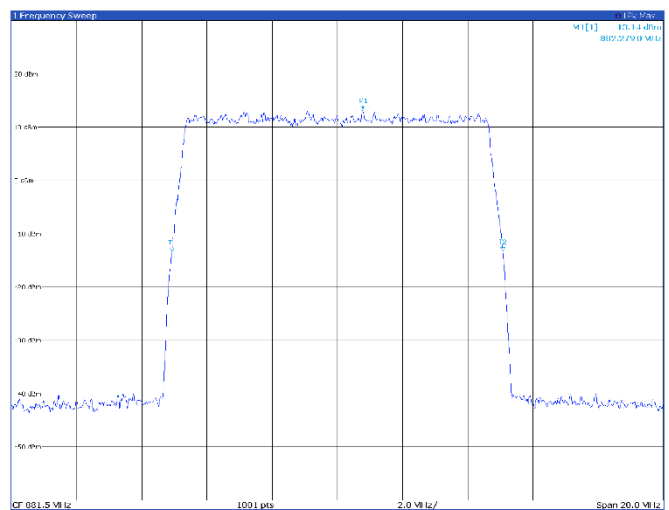
Type	Ref	Trc	X Value	Y Value	Function	Function Result
P1	1		889.34 MHz	12.93 dBm	nB	20.0 dB
P1	1		893.915 MHz	-12.00 dBm	nB down BW	10.11 MHz
P2	1		894.000 MHz	-12.00 dBm	Q factor	60.0

TM3p1a, 10 MHz, low channel

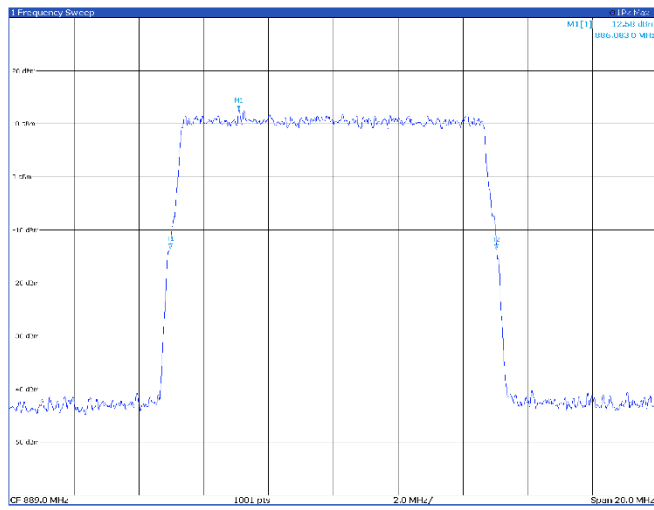


Type	Ref	Trc	X Value	Y Value	Function	Function Result
P1	1		871.702 MHz	13.29 dBm	nB	20.0 dB
P1	1		868.065 MHz	-12.58 dBm	nB down BW	10.15 MHz
P2	1		876.000 MHz	3.25 dBm	Q factor	50.6

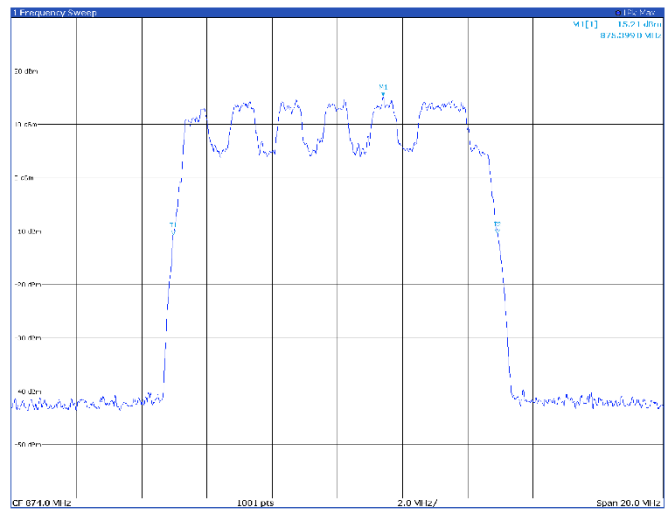
TM3p1a, 10 MHz, mid channel



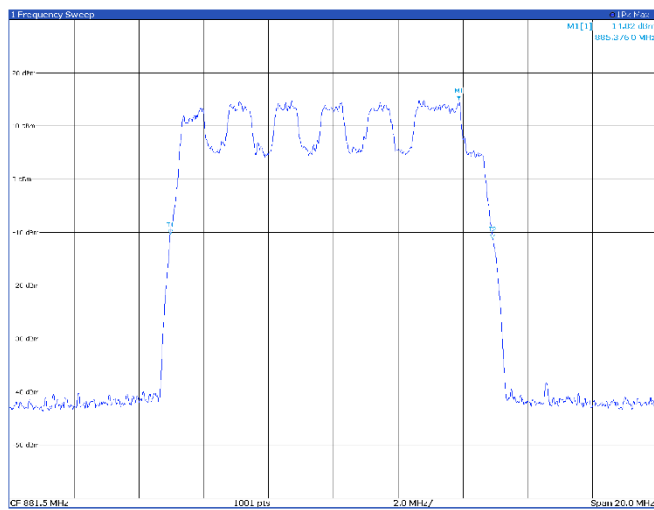
Type	Ref	Trc	X Value	Y Value	Function	Function Result
P1	1		882.279 MHz	13.14 dBm	nB	20.0 dB
P1	1		876.423 MHz	-12.02 dBm	nB down BW	10.15 MHz
P2	1		886.578 MHz	-12.02 dBm	Q factor	51.9

TM3p1a, 10 MHz, high channel


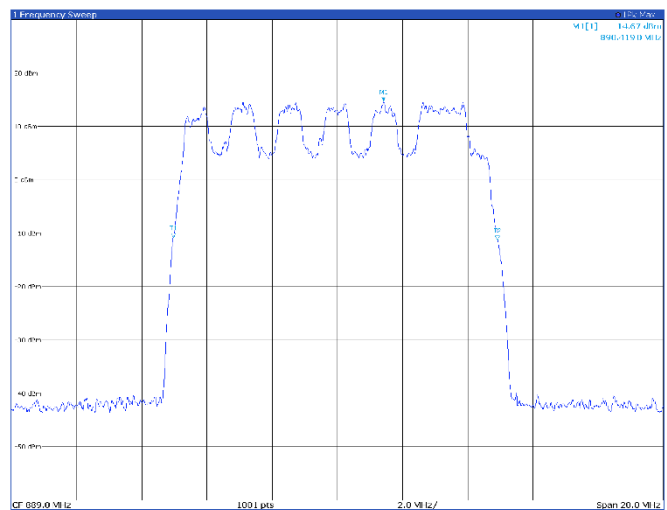
Type	Ref	Trc	X Value	Y Value	Function	Function Result
M1	1	1	886.083 MHz	12.58 dBm	nB	20.0 dB
M1	1	1	892.053 MHz	-10.43 dBm	mB down BW	10.07 MHz
M2	1	1	886.010 MHz	-1.58 dBm	Q-factor	88.0

TM3p3, 10 MHz, low channel


Type	Ref	Trc	X Value	Y Value	Function	Function Result
M1	1	1	875.399 MHz	15.21 dBm	nB	20.0 dB
M1	1	1	880.975 MHz	-10.69 dBm	mB down BW	9.95 MHz
M2	1	1	874.915 MHz	-10.54 dBm	Q-factor	88.0

TM3p3, 10 MHz, mid channel


Type	Ref	Trc	X Value	Y Value	Function	Function Result
M1	1	1	886.376 MHz	14.82 dBm	nB	20.0 dB
M1	1	1	890.420 MHz	-10.43 dBm	mB down BW	9.95 MHz
M2	1	1	886.310 MHz	-1.22 dBm	Q-factor	88.0

TM3p3, 10 MHz, high channel


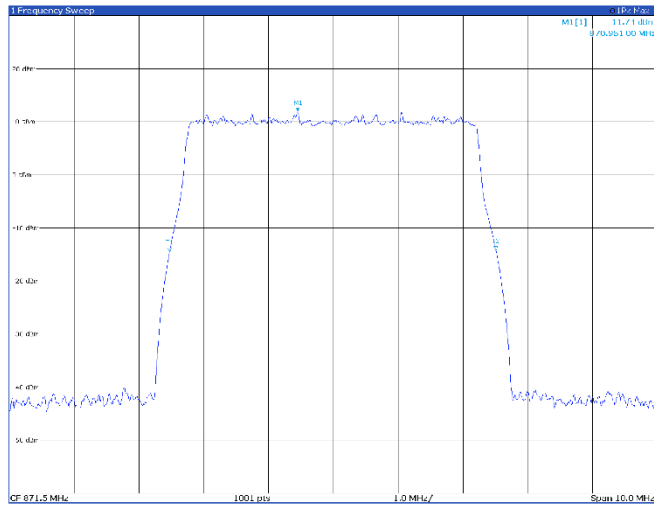
Type	Ref	Trc	X Value	Y Value	Function	Function Result
M1	1	1	890.449 MHz	14.67 dBm	nB	20.0 dB
M1	1	1	893.920 MHz	-10.69 dBm	mB down BW	9.95 MHz
M2	1	1	889.920 MHz	-11.27 dBm	Q-factor	88.0

Antenna port 2

Band n5

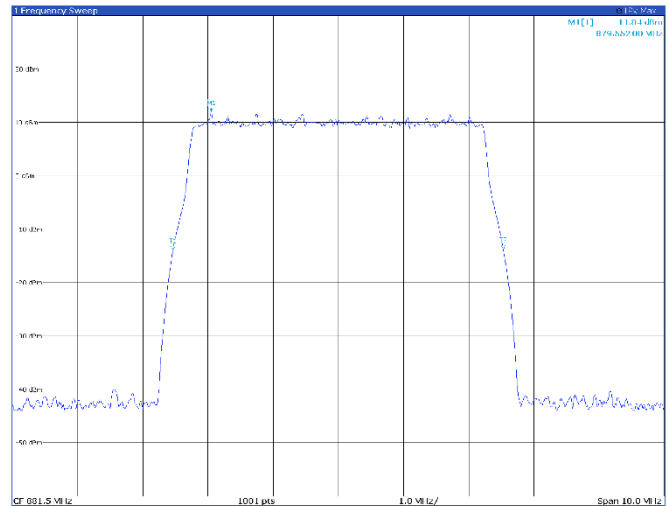
5 MHz

TM1.1, 5 MHz, low channel



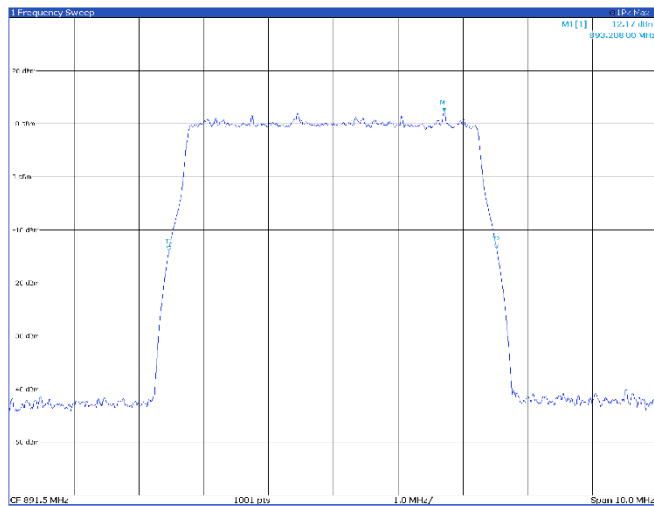
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result
F1	1		870.951 MHz	11.74 dBm	nB	20.0 dB
F1	1		870.951 MHz	-12.58 dBm	nB down BW	5.04 MHz
F2	1		870.961 MHz	-12.58 dBm	nB down	0.00

TM1.1, 5 MHz, mid channel



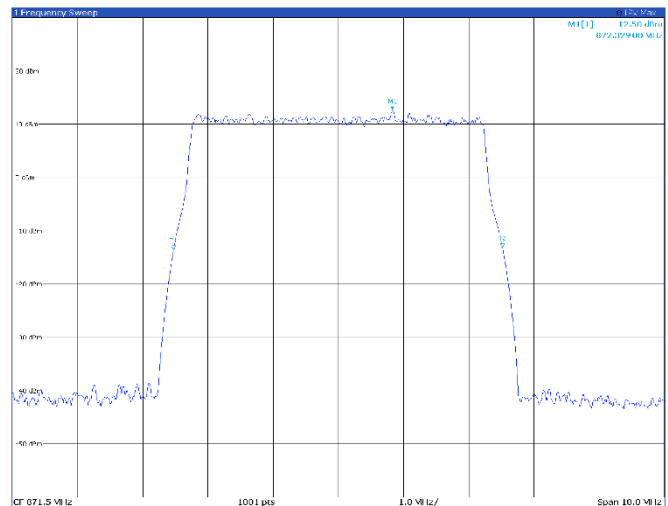
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result
F1	1		879.552 MHz	11.84 dBm	nB	20.0 dB
F1	1		879.552 MHz	-12.00 dBm	nB down BW	5.07 MHz
F2	1		879.562 MHz	-12.00 dBm	nB down	0.00

TM1.1, 5 MHz, high channel



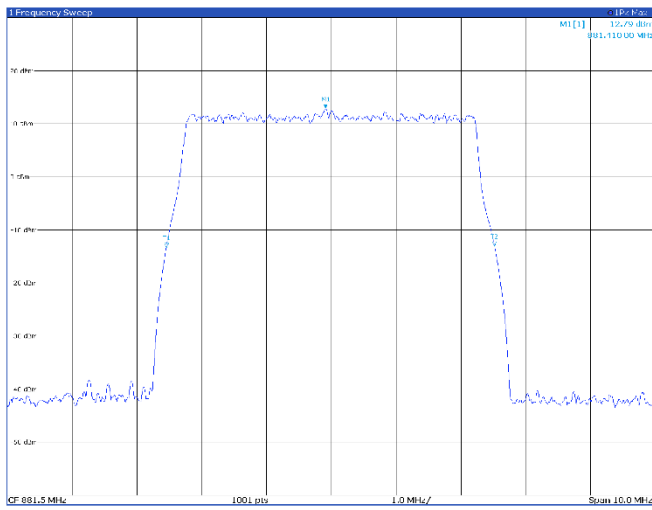
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result
F1	1		893.208 MHz	12.17 dBm	nB	20.0 dB
F1	1		893.208 MHz	-12.00 dBm	nB down BW	5.05 MHz
F2	1		893.218 MHz	-12.00 dBm	nB down	0.00

TM3p1, 5 MHz, low channel

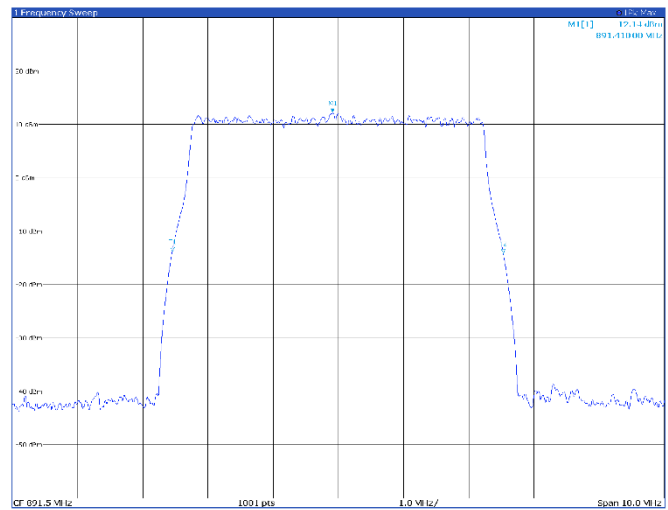


Type	Ref	Trc	X-Value	Y-Value	Function	Function Result
F1	1		872.329 MHz	12.50 dBm	nB	20.0 dB
F1	1		872.329 MHz	-12.27 dBm	nB down BW	5.04 MHz
F2	1		872.339 MHz	-12.27 dBm	nB down	0.00

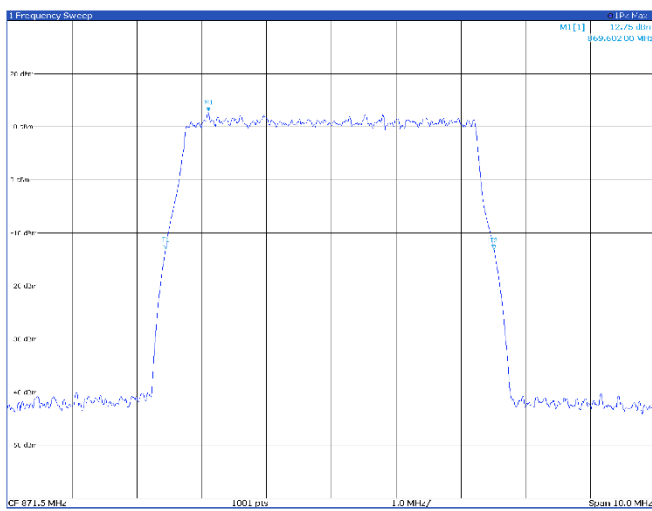
TM3p1, 5 MHz, mid channel



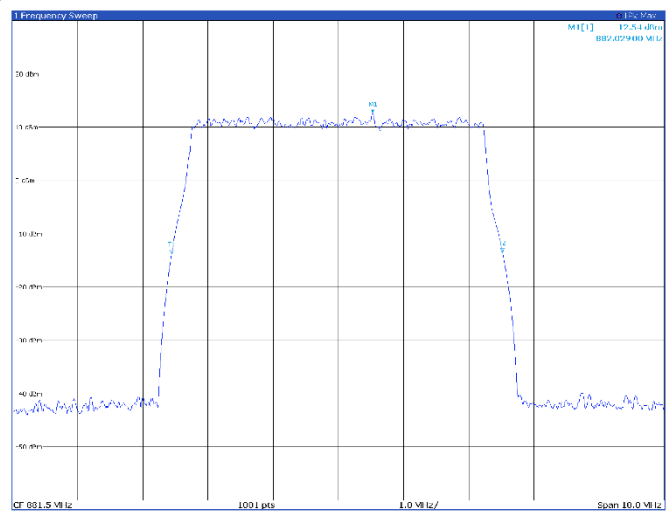
TM3p1, 5 MHz, high channel



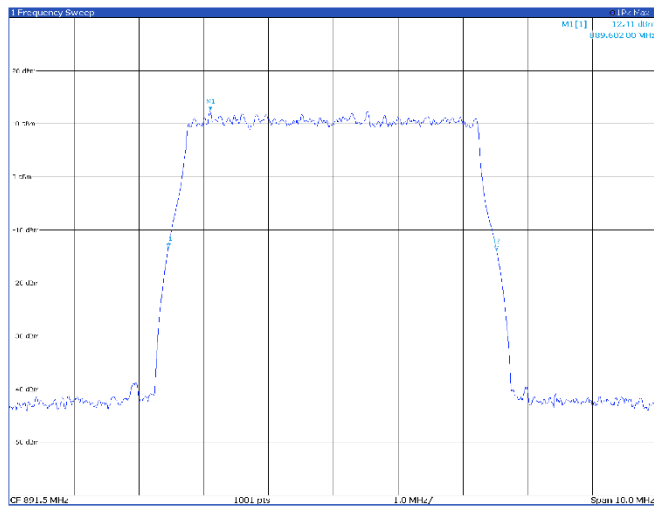
TM3p1a, 5 MHz, low channel



TM3p1a, 5 MHz, mid channel

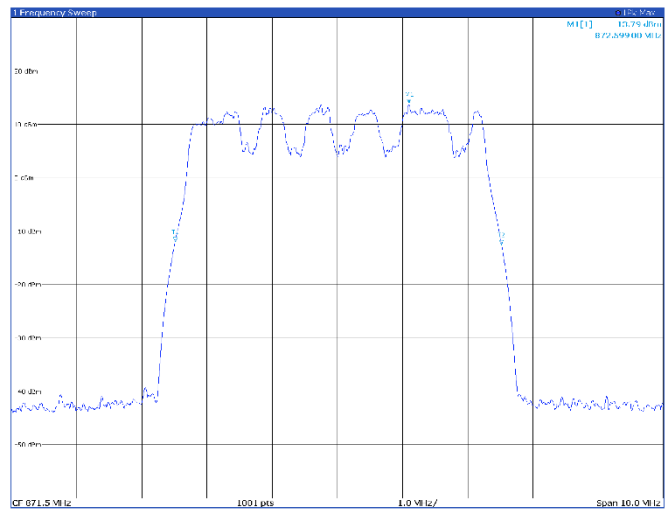


TM3p1a, 5 MHz, high channel



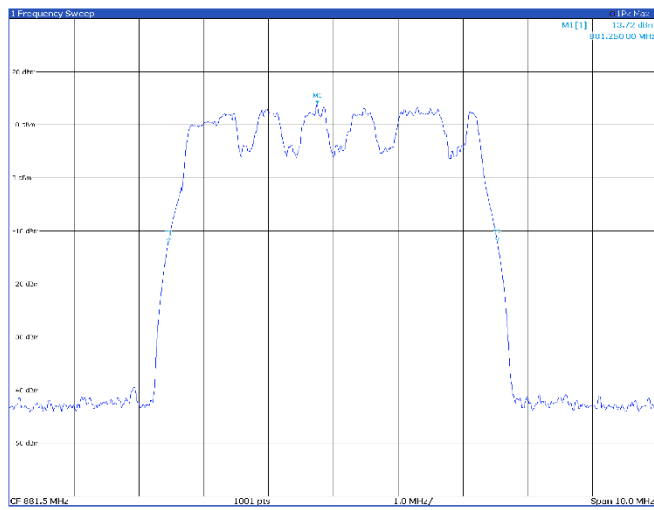
Type	Ref	Trc	X Value	Y Value	Function	Function Result
M1	1		889.602 MHz	12.41 dBm	ncB	20.0 dB
T1	1		889.593 MHz	-13.42 dBm	ncB down BW	5.07 MHz
T2	1		889.607 MHz	-13.38 dBm	Q factor	125.6

TM3p3, 5 MHz, low channel



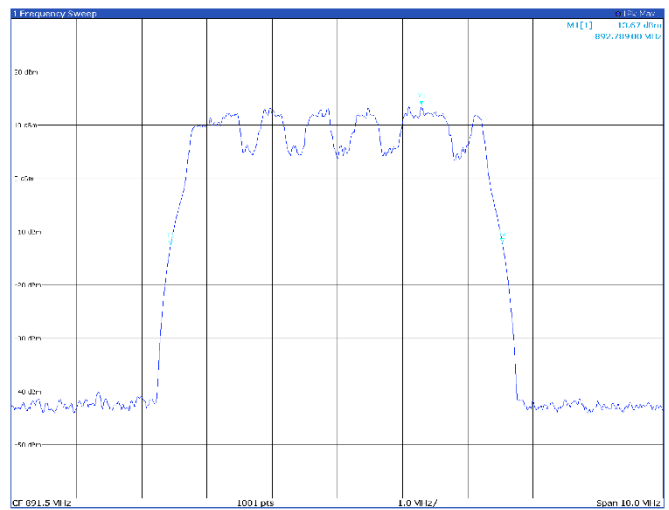
Type	Ref	Trc	X Value	Y Value	Function	Function Result
M1	1		872.599 MHz	13.79 dBm	ncB	20.0 dB
T1	1		872.593 MHz	-11.91 dBm	ncB down BW	5.00 MHz
T2	1		872.607 MHz	-12.34 dBm	Q factor	124.1

TM3p3, 5 MHz, mid channel



Type	Ref	Trc	X Value	Y Value	Function	Function Result
M1	1		881.25 MHz	13.72 dBm	ncB	20.0 dB
T1	1		881.242 MHz	-12.42 dBm	ncB down BW	5.08 MHz
T2	1		881.258 MHz	-12.09 dBm	Q factor	123.6

TM3p3, 5 MHz, high channel

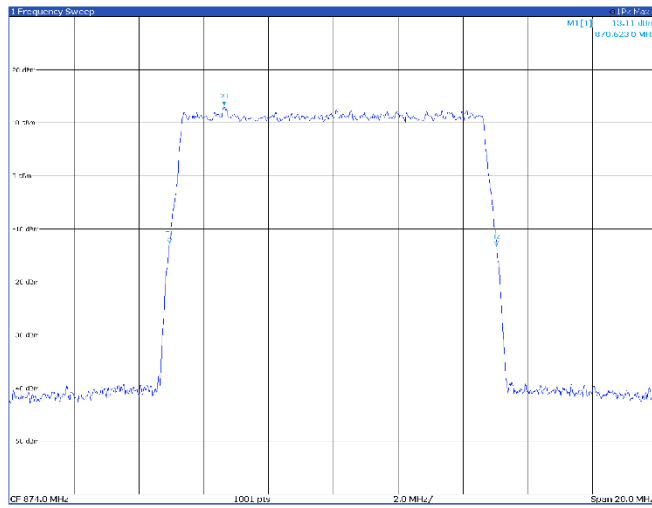


Type	Ref	Trc	X Value	Y Value	Function	Function Result
M1	1		892.789 MHz	13.67 dBm	ncB	20.0 dB
T1	1		892.783 MHz	-12.21 dBm	ncB down BW	5.05 MHz
T2	1		892.795 MHz	-12.04 dBm	Q factor	125.5

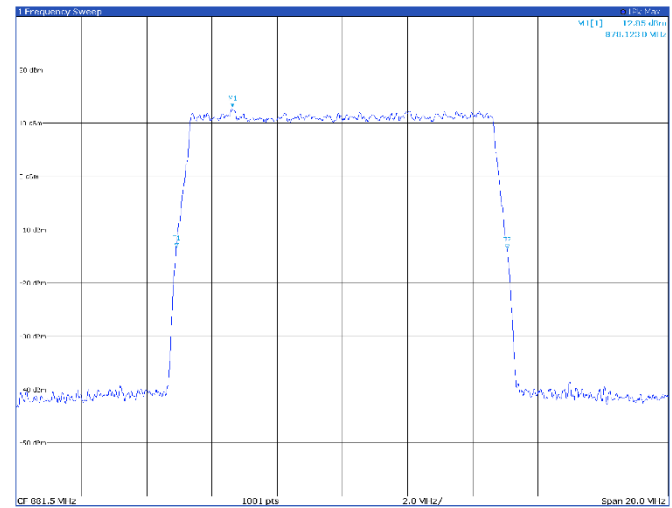
Band n5

10 MHz

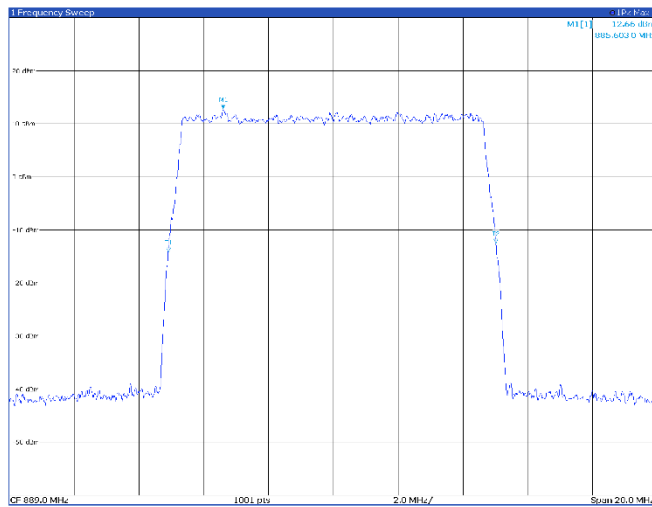
TM1.1, 10 MHz, low channel



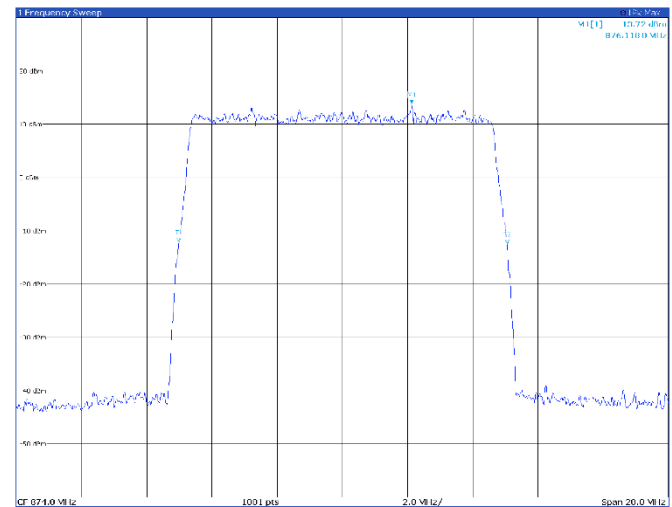
TM1.1, 10 MHz, mid channel



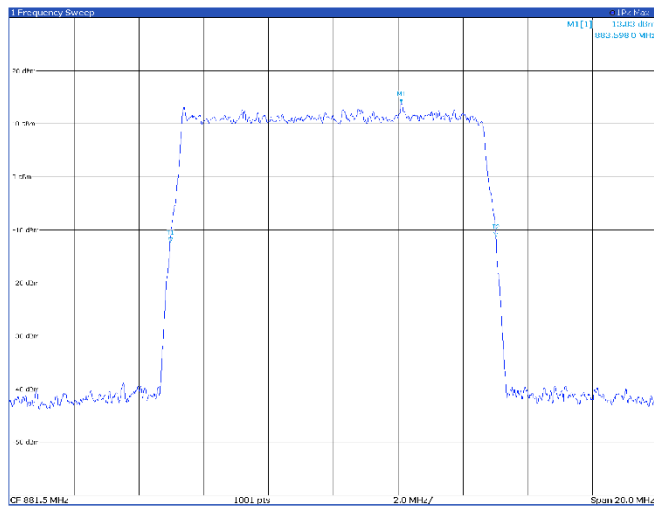
TM1.1, 10 MHz, high channel



TM3p1, 10 MHz, low channel

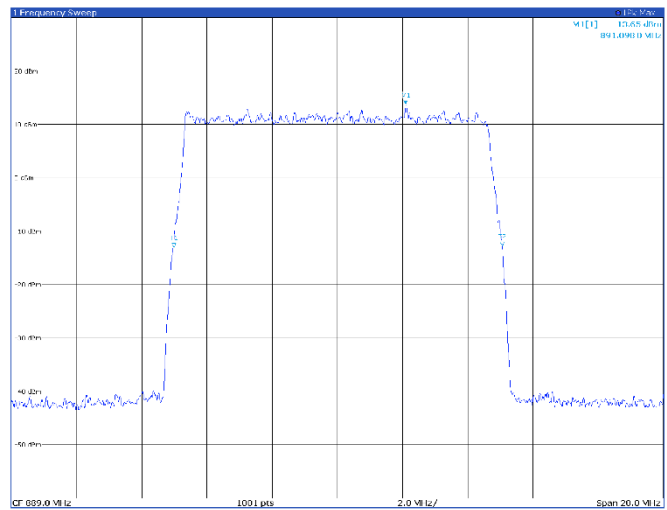


TM3p1, 10 MHz, mid channel



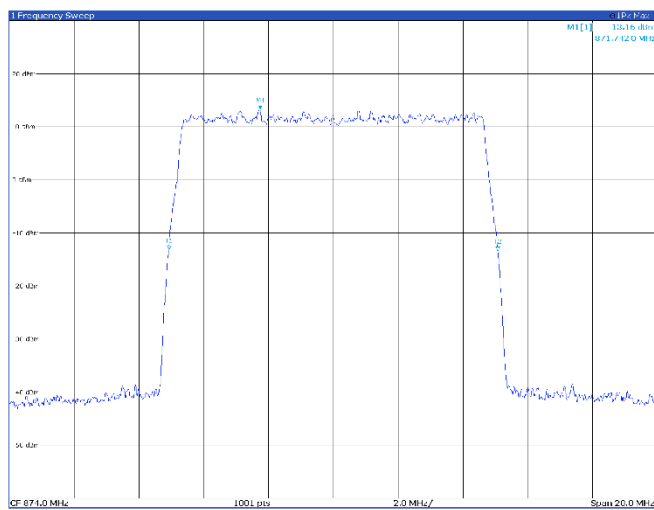
Type	Ref	Trc	X Value	Y Value	nB	Function	Function Result
M1	1		883.598 MHz	13.83 dBm	nB	20.0 dB	10.05 MHz
M1	1		876.453 MHz	-12.22 dBm	nB	down BW	10.05 MHz
M2	1		886.313 MHz	-12.22 dBm	nB	down BW	10.05 MHz

TM3p1, 10 MHz, high channel



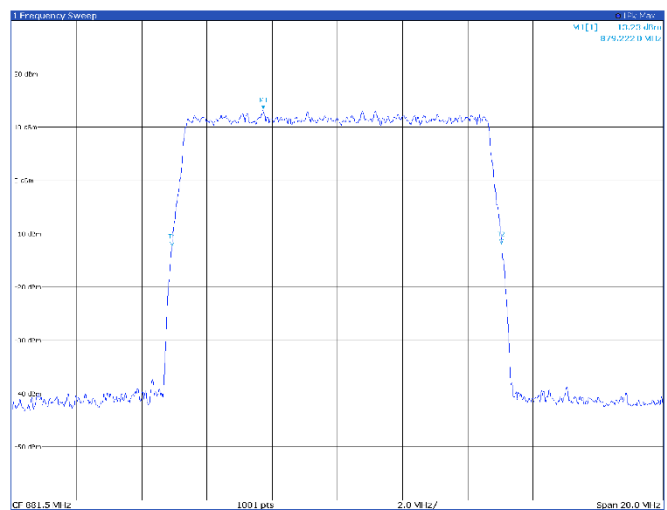
Type	Ref	Trc	X Value	Y Value	nB	Function	Function Result
M1	1		891.098 MHz	13.65 dBm	nB	20.0 dB	10.07 MHz
M1	1		893.953 MHz	-12.11 dBm	nB	down BW	10.07 MHz
M2	1		894.073 MHz	-12.11 dBm	nB	down BW	10.07 MHz

TM3p1a, 10 MHz, low channel



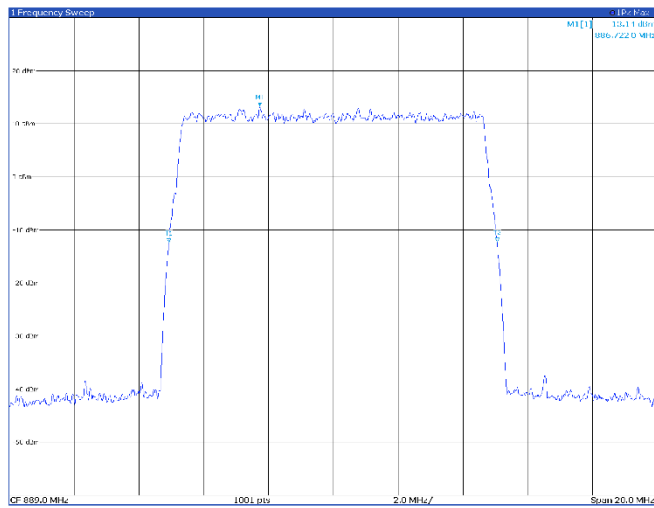
Type	Ref	Trc	X Value	Y Value	nB	Function	Function Result
M1	1		871.742 MHz	13.16 dBm	nB	20.0 dB	10.15 MHz
M1	1		873.742 MHz	-12.22 dBm	nB	down BW	10.15 MHz
M2	1		874.042 MHz	-12.22 dBm	nB	down BW	10.15 MHz

TM3p1a, 10 MHz, mid channel



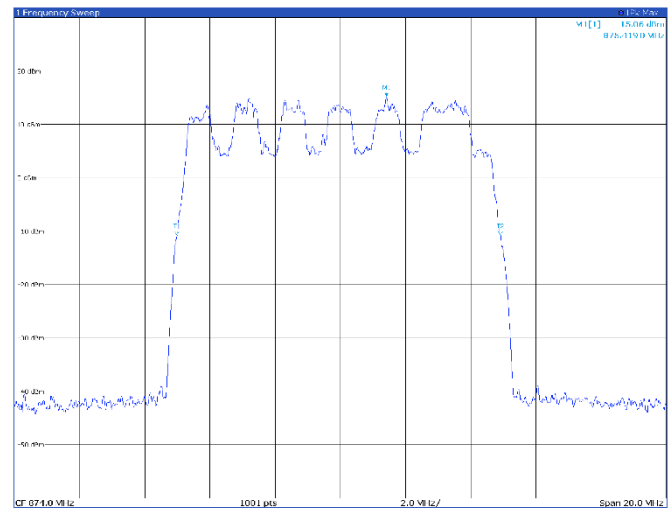
Type	Ref	Trc	X Value	Y Value	nB	Function	Function Result
M1	1		879.222 MHz	13.23 dBm	nB	20.0 dB	10.11 MHz
M1	1		876.422 MHz	-12.35 dBm	nB	down BW	10.11 MHz
M2	1		876.522 MHz	-12.35 dBm	nB	down BW	10.11 MHz

TM3p1a, 10 MHz, high channel



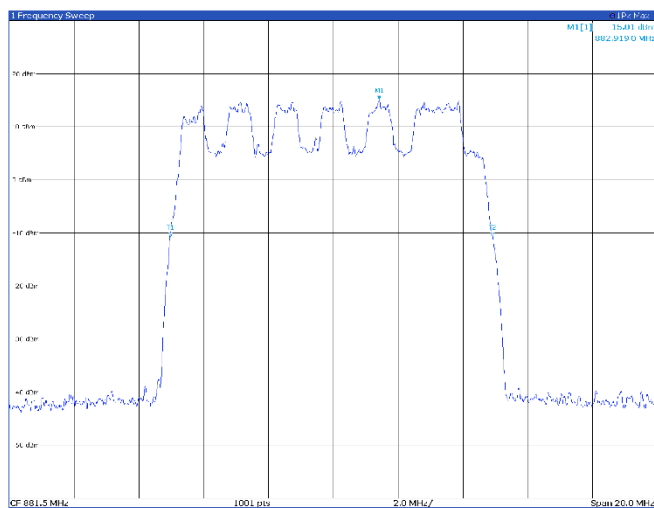
Type	Ref	Trc	X Value	Y Value	nB	Function	Function Result
F1	1		886.722 MHz	13.14 dBm	nB		20.0 dB
F1	1		892.503 MHz	-12.46 dBm	nB	down BW	10.13 MHz
F2	1		896.722 MHz	-12.46 dBm	nB	down BW	10.13 MHz

TM3p3, 10 MHz, low channel



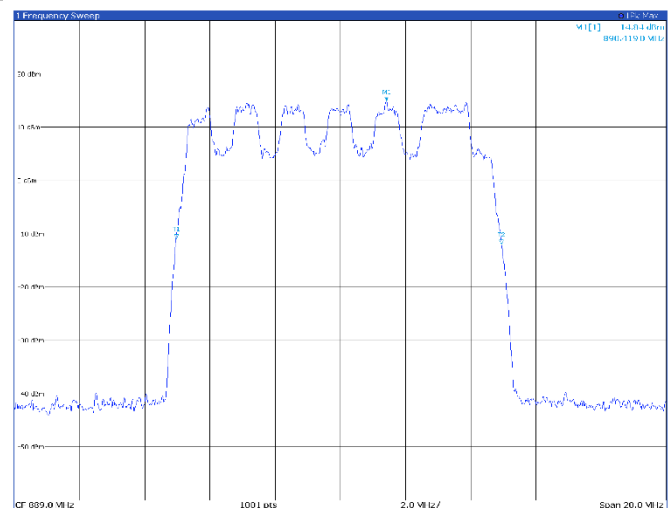
Type	Ref	Trc	X Value	Y Value	nB	Function	Function Result
F1	1		875.419 MHz	15.06 dBm	nB		20.0 dB
F1	1		880.903 MHz	-10.00 dBm	nB	down BW	9.93 MHz
F2	1		885.419 MHz	-10.00 dBm	nB	down BW	9.93 MHz

TM3p3, 10 MHz, mid channel



Type	Ref	Trc	X Value	Y Value	nB	Function	Function Result
F1	1		882.919 MHz	15.01 dBm	nB		20.0 dB
F1	1		888.403 MHz	-10.00 dBm	nB	down BW	9.95 MHz
F2	1		893.919 MHz	-10.00 dBm	nB	down BW	9.95 MHz

TM3p3, 10 MHz, high channel



Type	Ref	Trc	X Value	Y Value	nB	Function	Function Result
F1	1		890.419 MHz	14.84 dBm	nB		20.0 dB
F1	1		895.903 MHz	-10.00 dBm	nB	down BW	9.97 MHz
F2	1		900.419 MHz	-10.00 dBm	nB	down BW	9.97 MHz

8.4 FCC 22.913 Effective radiated power limits

8.4.1 Definitions and limits

Licenseses in the Cellular Radiotelephone Service are subject to the effective radiated power (ERP) limits and other requirements in this Section. See also § 22.169.

(a) Maximum ERP. The ERP of transmitters in the Cellular Radiotelephone Service must not exceed the limits in this section.

(1) Except as described in paragraphs (a)(2), (3), and (4) of this section, the ERP of base stations and repeaters must not exceed—

- (i) 500 watts per emission; or
- (ii) 400 watts/MHz (PSD) per sector.

(2) Except as described in paragraphs (a)(3) and (4) of this section, for systems operating in areas more than 72 kilometers (45 miles) from international borders that:

- (i) Are located in counties with population densities of 100 persons or fewer per square mile, based upon the most recently available population statistics from the Bureau of the Census; or
- (ii) Extend coverage into Unserved Area on a secondary basis (see § 22.949), the ERP of base transmitters and repeaters must not exceed—
 - (A) 1000 watts per emission; or
 - (B) 800 watts/MHz (PSD) per sector.

(3) Provided that they also comply with paragraphs (b) and (c) of this section, licensees are permitted to operate their base transmitters and repeaters with an ERP greater than 400 watts/MHz (PSD) per sector, up to a maximum ERP of 1000 watts/MHz (PSD) per sector unless they meet the conditions in paragraph (a)(4) of this section.

(4) Provided that they also comply with paragraphs (b) and (c) of this section, licensees of systems operating in areas more than 72 kilometers (45 miles) from international borders that:

- (i) Are located in counties with population densities of 100 persons or fewer per square mile, based upon the most recently available population statistics from the Bureau of the Census; or
- (ii) Extend coverage into Unserved Area on a secondary basis (see § 22.949), are permitted to operate base transmitters and repeaters with an ERP greater than 800 watts/MHz (PSD) per sector, up to a maximum of 2000 watts/MHz (PSD) per sector.

(5) The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

§ 24.232 Power and antenna height limits.

(a)

(1) Base stations with an emission bandwidth of 1 MHz or less are limited to 1640 watts equivalent isotropically radiated power (EIRP) with an antenna height up to 300 meters HAAT, except as described in paragraph (b) below.

(2) Base stations with an emission bandwidth greater than 1 MHz are limited to **1640 watts/MHz** equivalent isotropically radiated power (EIRP) with an antenna height up to 300 meters HAAT, except as described in paragraph (b) below.

(c) Mobile and portable stations are limited to 2 watts EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

8.4.2 Test summary

Test start date	October 22, 2024	Temperature	22 °C
Test end date	October 31, 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 n5:

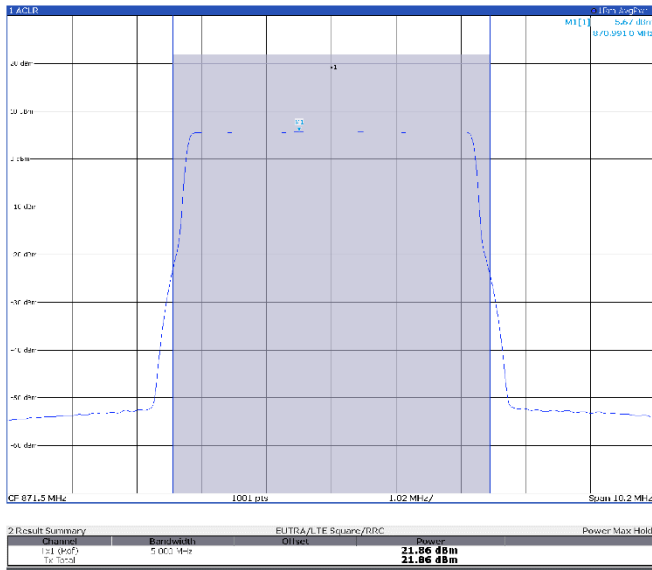
Modulation	OBW (MHz)	Frequency (MHz)	Measured Power Density (dBm/MHz) port 1	Measured Power Density (dBm/MHz) port 2	Antenna Gain Max (dBi)	Total EIRP Power Density (dBm/MHz)	Measured Power (dBm) port 1	Measured Power (dBm) port 2	Limits Power Density (dBm/MHz)	Margin (dB)
TM1.1	5	871.5	5.67	5.85	4.8	13.57	21.86	22.01	62.1	-48.53
TM3p1	5	871.5	5.34	5.79	4.8	13.38	22.14	21.99	62.1	-48.72
TM3p1a	5	871.5	5.84	5.83	4.8	13.65	21.95	22.04	62.1	-48.45
TM3p3	5	871.5	7.70	7.71	4.8	15.52	22.09	21.93	62.1	-46.58
TM1.1	5	881.5	5.66	5.58	4.8	13.43	22.06	21.82	62.1	-48.67
TM3p1	5	881.5	6.06	5.87	4.8	13.78	22.19	22.10	62.1	-48.32
TM3p1a	5	881.5	5.69	5.59	4.8	13.45	22.10	21.83	62.1	-48.65
TM3p3	5	881.5	7.76	7.65	4.8	15.52	22.12	21.88	62.1	-46.58
TM1.1	5	891.5	5.46	5.41	4.8	13.25	21.76	21.61	62.1	-48.85
TM3p1	5	891.5	5.44	5.63	4.8	13.35	21.54	21.77	62.1	-48.75
TM3p1a	5	891.5	5.41	5.47	4.8	13.25	21.74	21.62	62.1	-48.85
TM3p3	5	891.5	7.53	7.55	4.8	15.35	21.84	21.70	62.1	-46.75
TM1.1	10	874.0	2.86	2.74	4.8	10.61	22.25	22.08	62.1	-51.49
TM3p1	10	874.0	2.77	2.76	4.8	10.58	22.25	22.00	62.1	-51.52
TM3p1a	10	874.0	2.92	2.88	4.8	10.71	22.31	22.08	62.1	-51.39
TM3p3	10	874.0	5.27	5.24	4.8	13.07	22.38	22.17	62.1	-49.03
TM1.1	10	881.5	2.65	2.58	4.8	10.43	22.18	21.94	62.1	-51.67
TM3p1	10	881.5	2.70	2.71	4.8	10.52	22.21	21.90	62.1	-51.58
TM3p1a	10	881.5	2.92	2.80	4.8	10.67	22.27	21.99	62.1	-51.43
TM3p3	10	881.5	5.17	5.10	4.8	12.95	22.32	22.07	62.1	-49.15
TM1.1	10	889.0	2.37	2.49	4.8	10.24	21.75	21.81	62.1	-51.86
TM3p1	10	889.0	2.51	2.53	4.8	10.33	21.98	21.83	62.1	-51.77
TM3p1a	10	889.0	2.67	2.75	4.8	10.52	22.06	21.94	62.1	-51.58
TM3p3	10	889.0	4.85	4.90	4.8	12.69	22.07	21.92	62.1	-49.41

Antenna port 1

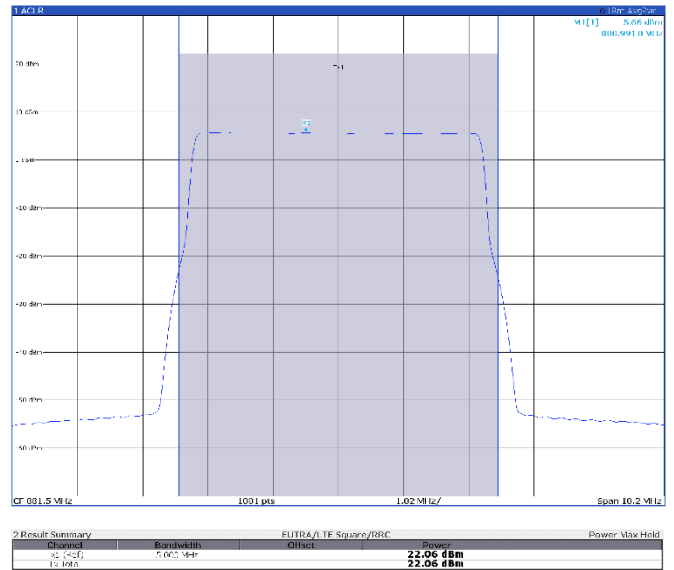
Band n5

5 MHz

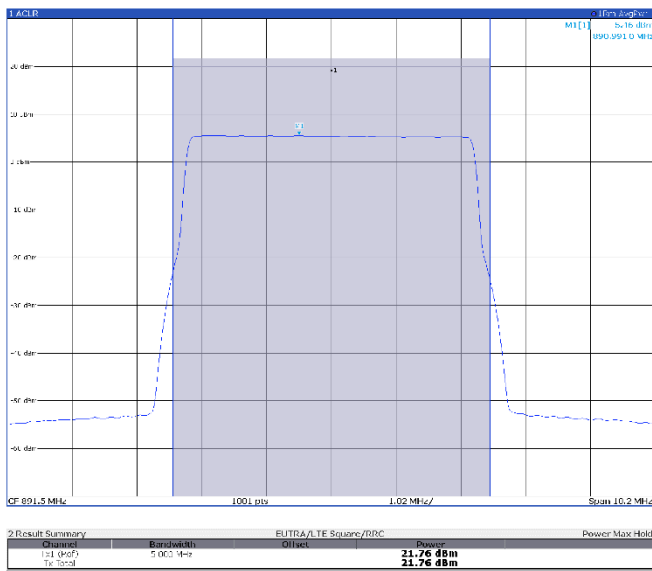
TM1.1, 5 MHz, low channel



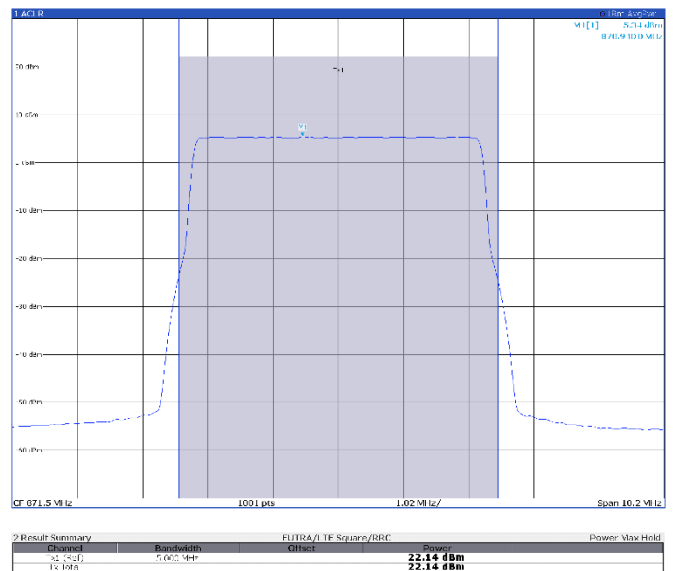
TM1.1, 5 MHz, mid channel



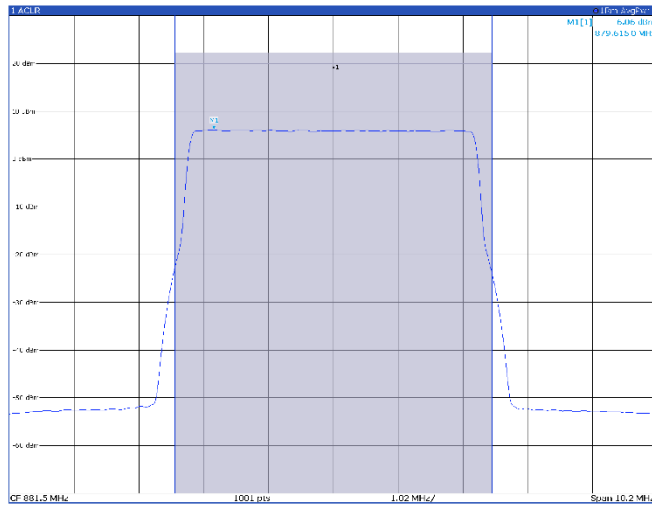
TM1.1, 5 MHz, high channel



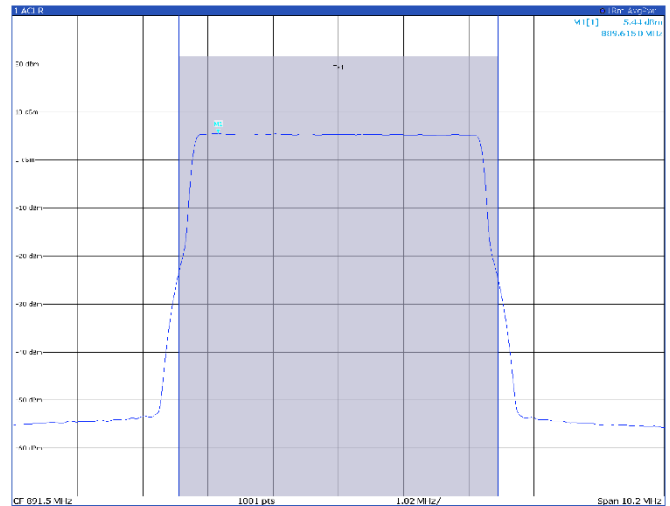
TM3p1, 5 MHz, low channel



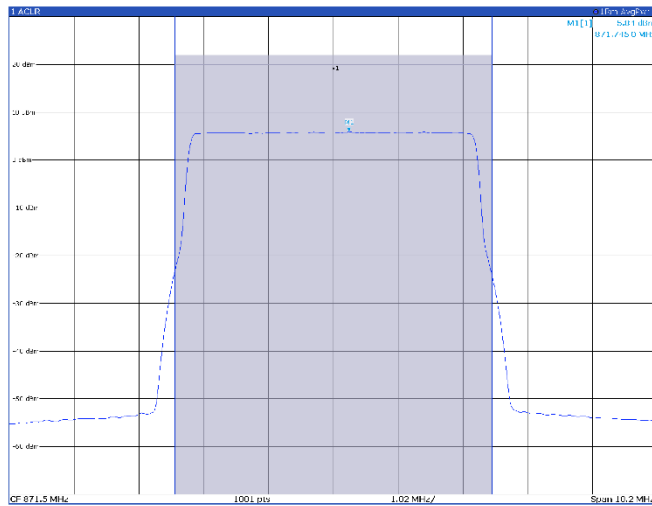
TM3p1, 5 MHz, mid channel



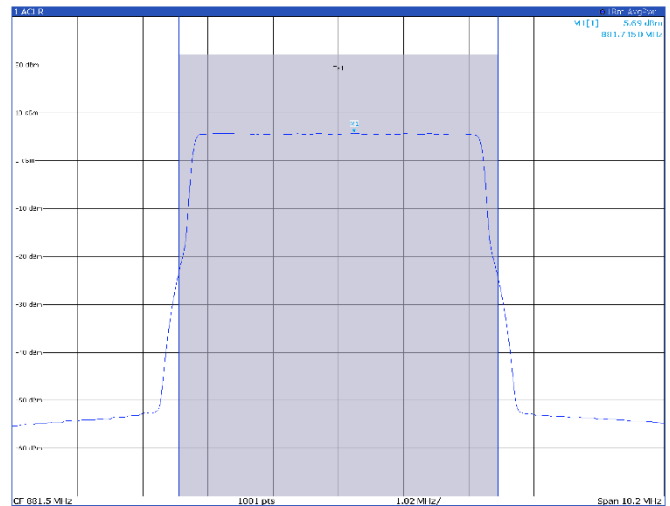
TM3p1, 5 MHz, high channel



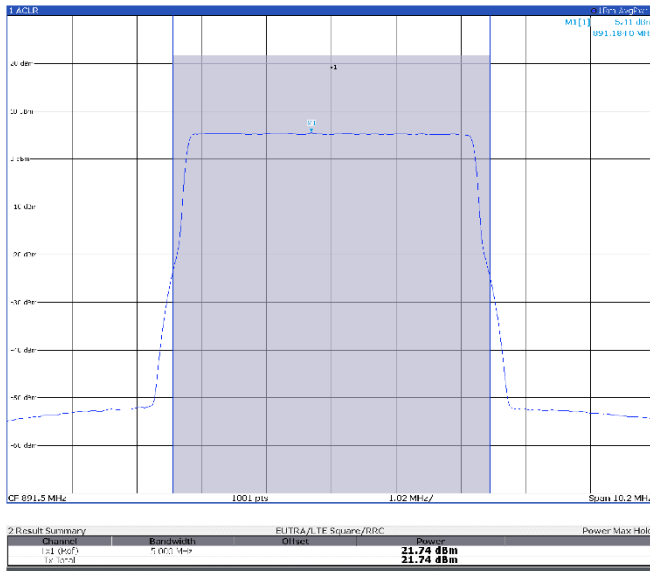
TM3p1a, 5 MHz, low channel



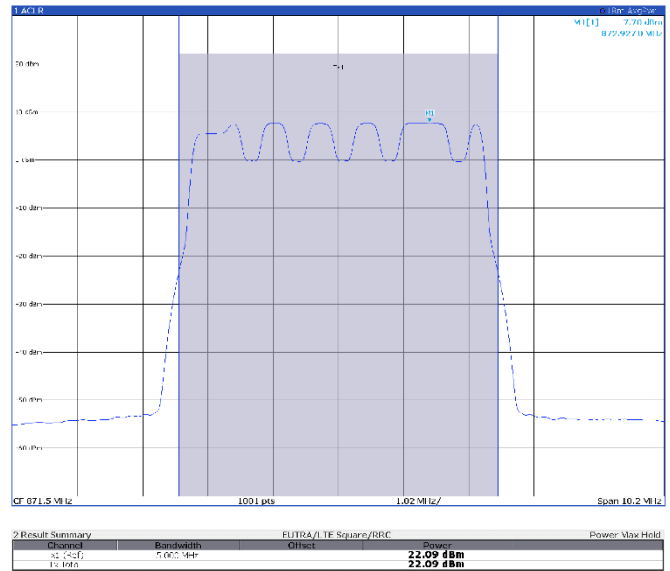
TM3p1a, 5 MHz, mid channel



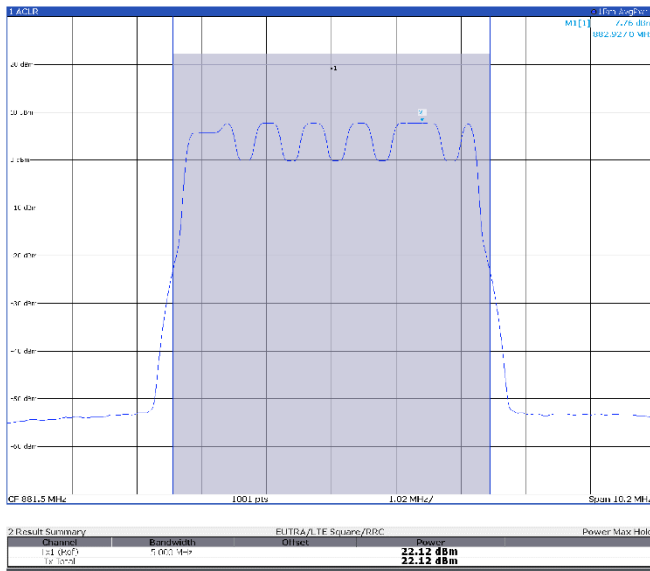
TM3p1a, 5 MHz, high channel



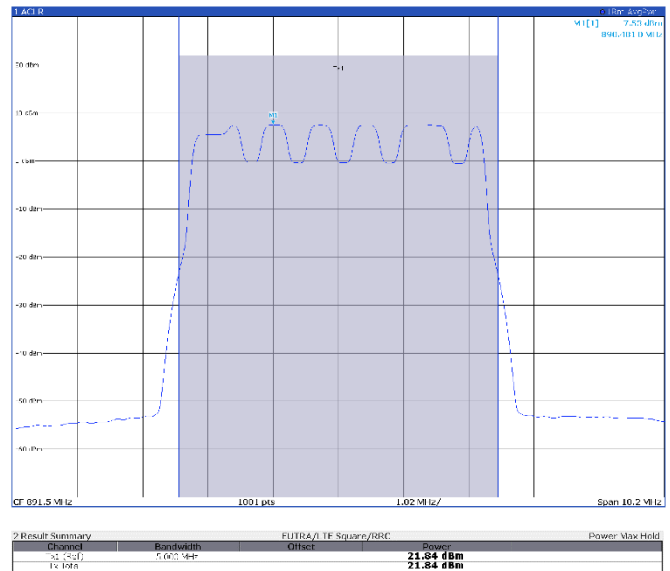
TM3p3, 5 MHz, low channel



TM3p3, 5 MHz, mid channel



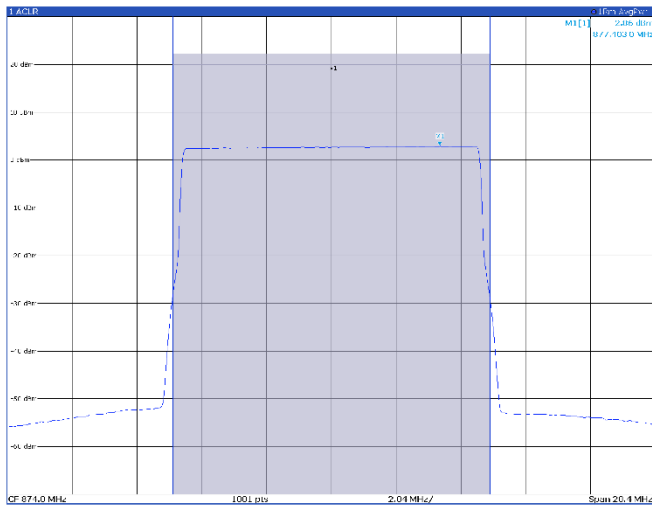
TM3p3, 5 MHz, high channel



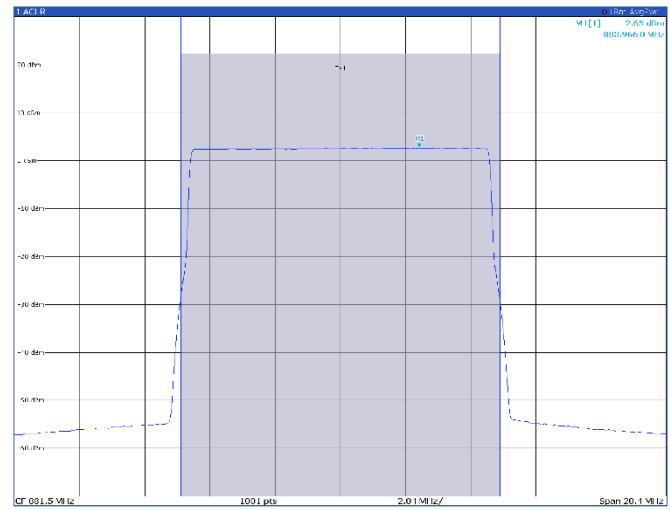
Band n5

10 MHz

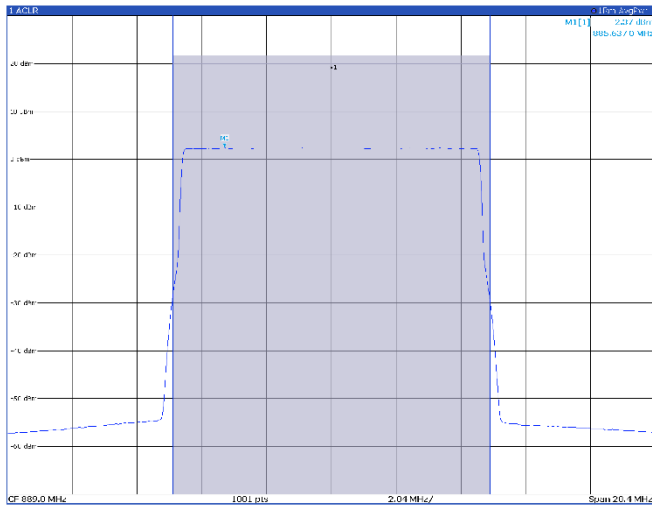
TM1.1, 10 MHz, low channel



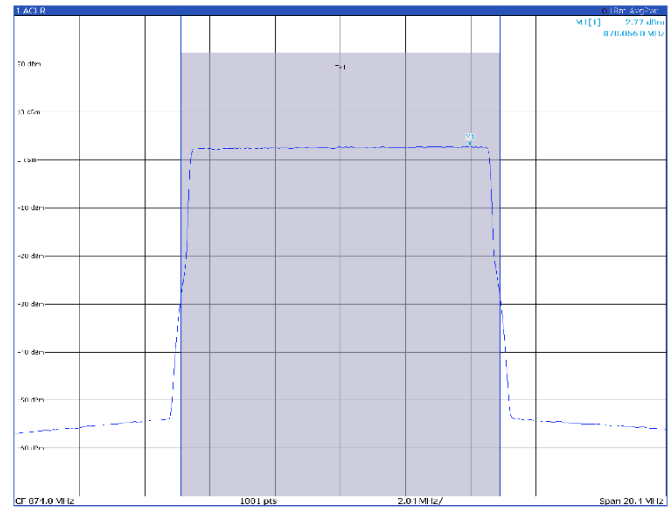
TM1.1, 10 MHz, mid channel



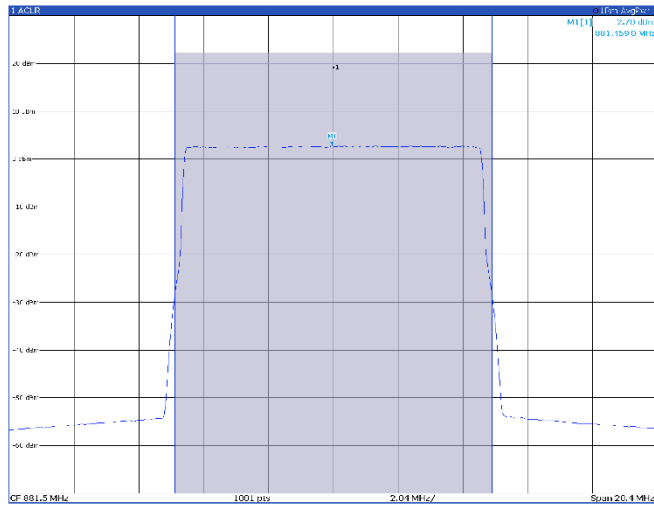
TM1.1, 10 MHz, high channel



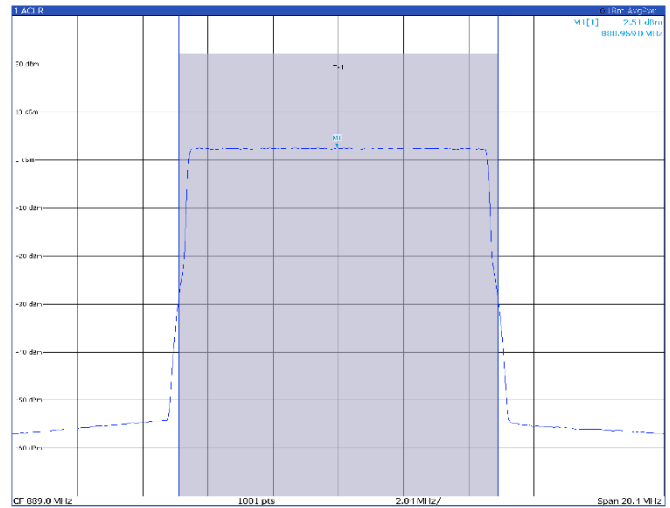
TM3p1, 10 MHz, low channel



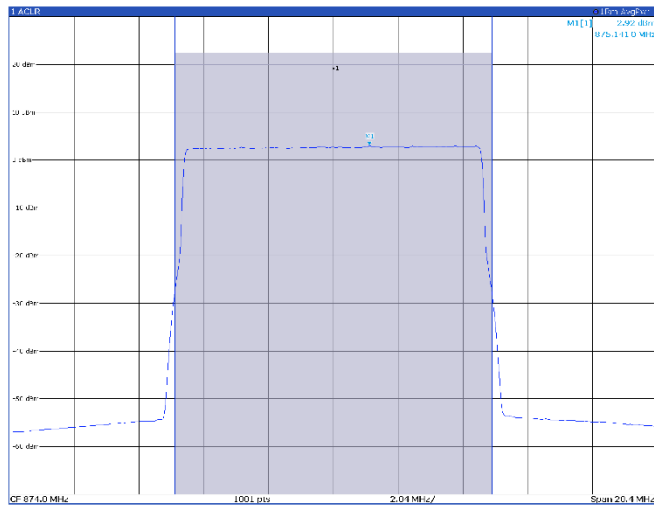
TM3p1, 10 MHz, mid channel



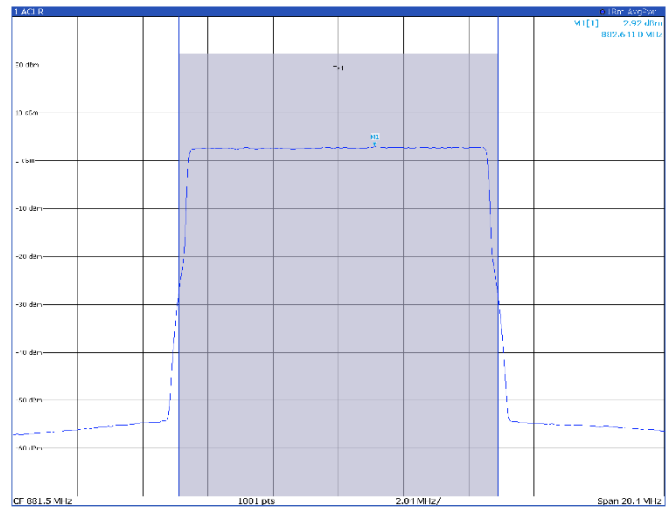
TM3p1, 10 MHz, high channel



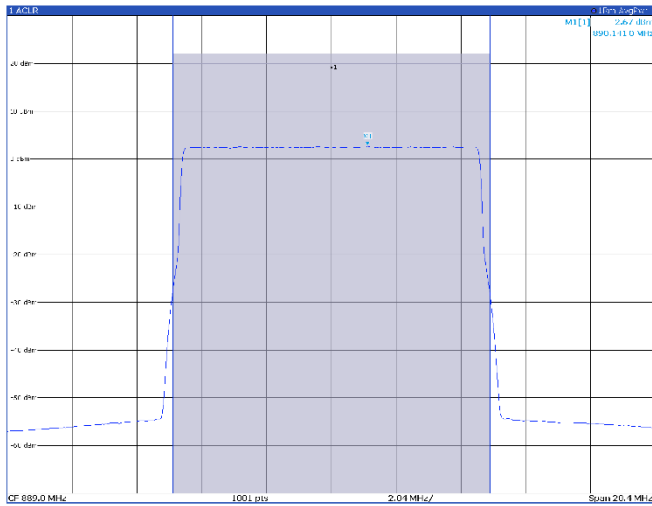
TM3p1a, 10 MHz, low channel



TM3p1a, 10 MHz, mid channel

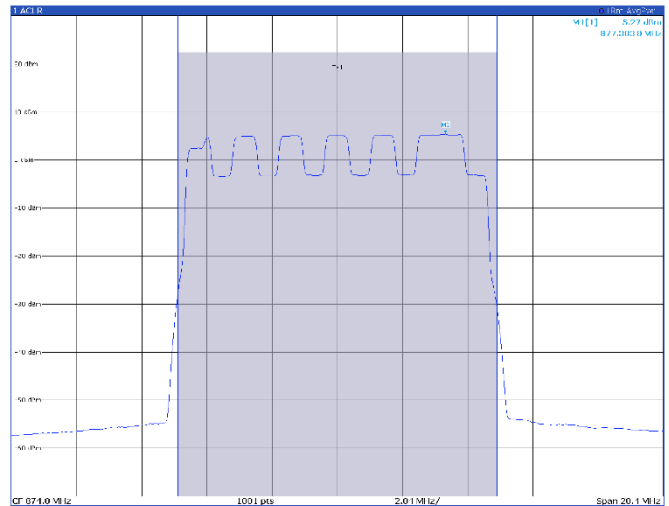


TM3p1a, 10 MHz, high channel



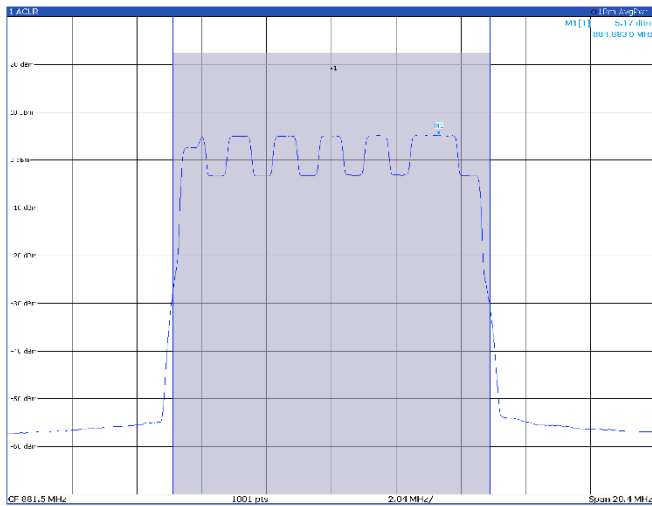
2 Result Summary			
Channel	Bandwidth	Offset	Power
1 (1) (400)	10.000 MHz		22.06 dBm
Tx Total			22.06 dBm

TM3p3, 10 MHz, low channel



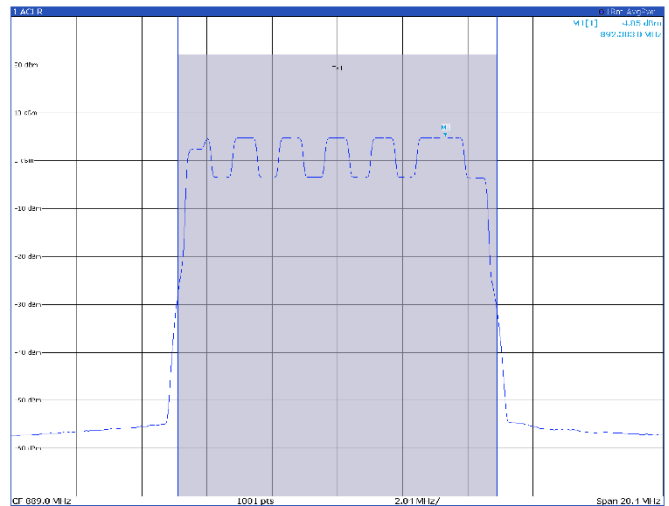
2 Result Summary			
Channel	Bandwidth	Offset	Power
1 (1) (400)	10.000 MHz		22.38 dBm
Tx Total			22.38 dBm

TM3p3, 10 MHz, mid channel



2 Result Summary			
Channel	Bandwidth	Offset	Power
1 (1) (400)	10.000 MHz		22.32 dBm
Tx Total			22.32 dBm

TM3p3, 10 MHz, high channel



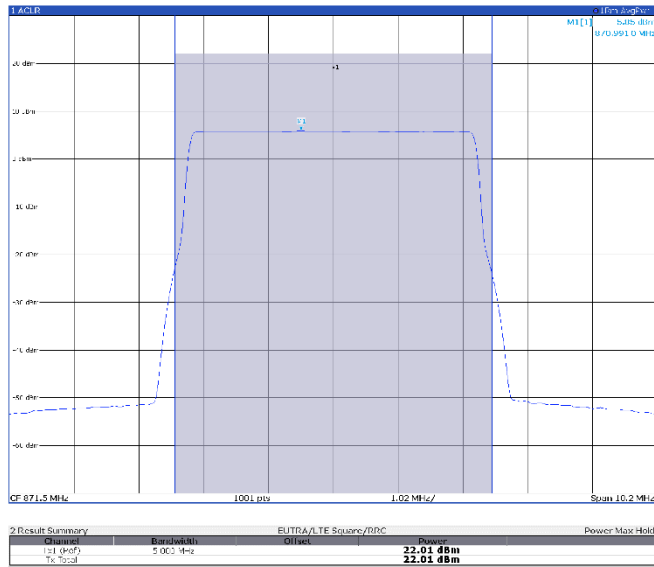
2 Result Summary			
Channel	Bandwidth	Offset	Power
1 (1) (400)	10.000 MHz		22.07 dBm
Tx Total			22.07 dBm

Antenna port 2

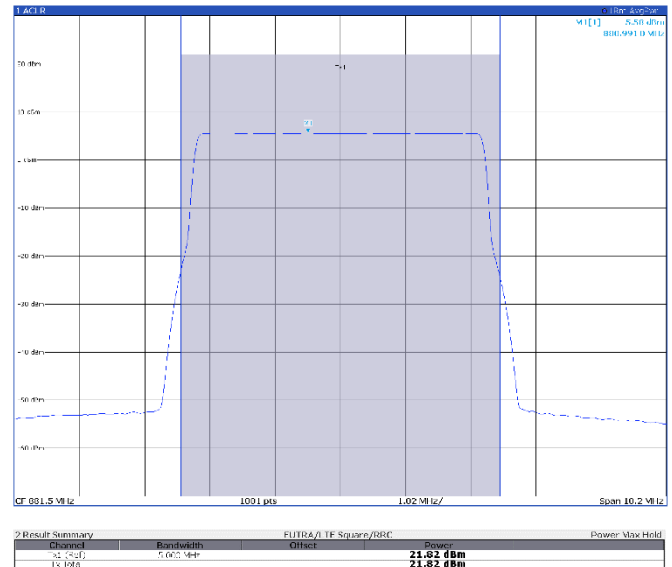
Band n5

5 MHz

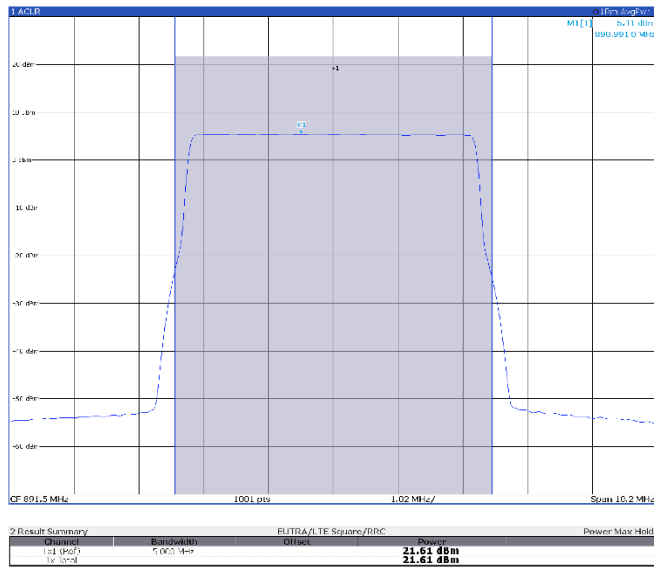
TM1.1, 5 MHz, low channel



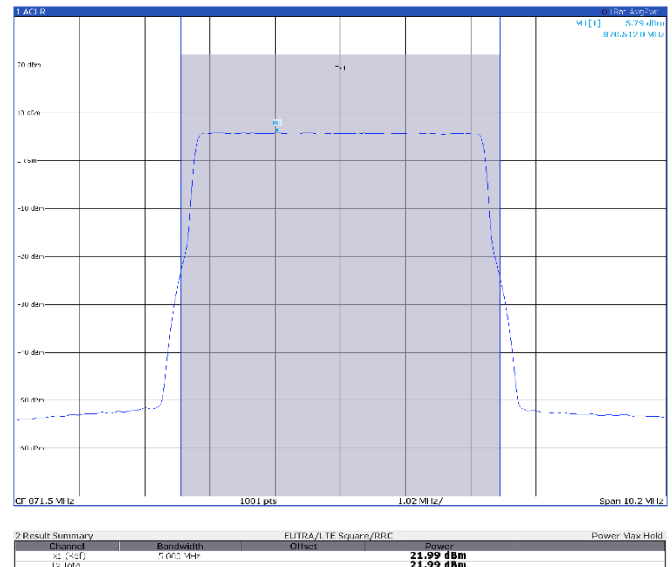
TM1.1, 5 MHz, mid channel



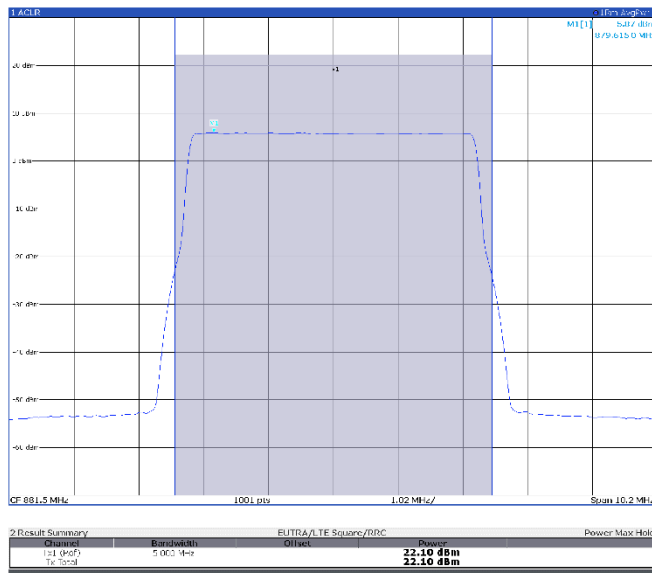
TM1.1, 5 MHz, high channel



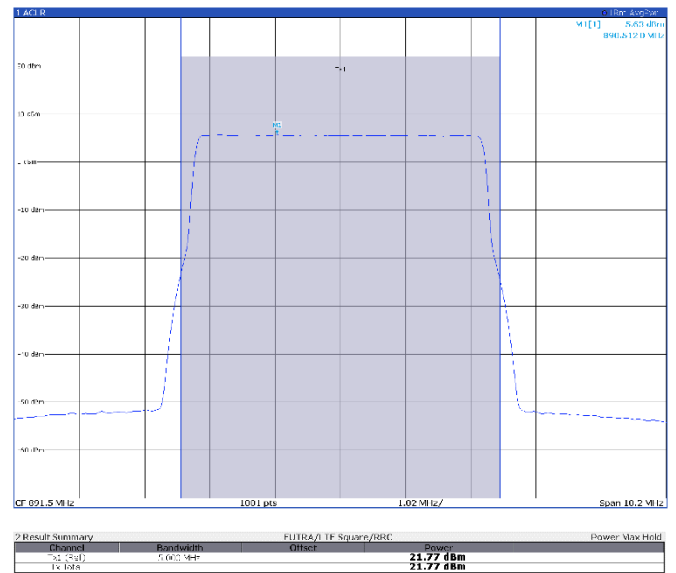
TM3p1, 5 MHz, low channel



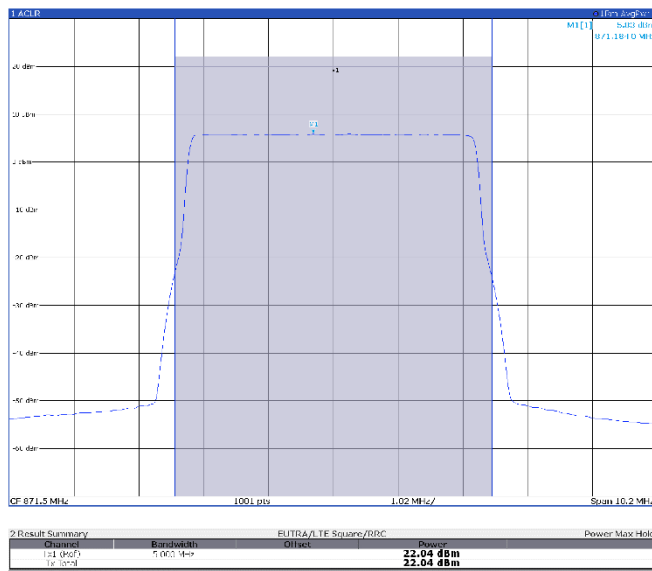
TM3p1, 5 MHz, mid channel



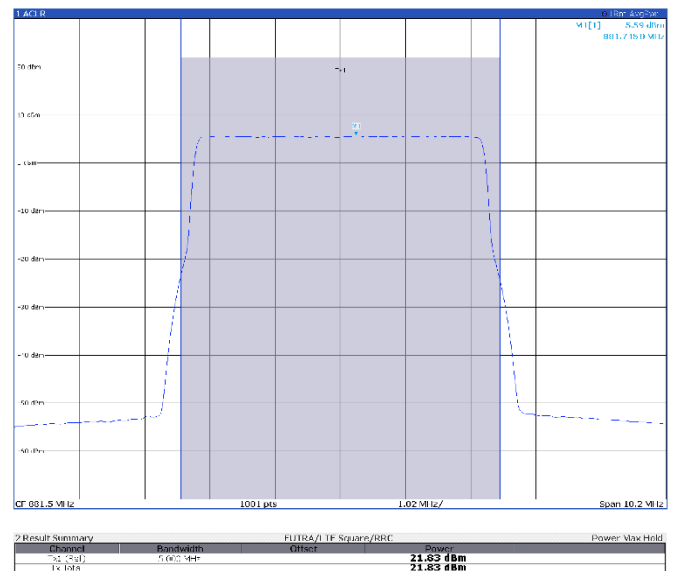
TM3p1, 5 MHz, high channel



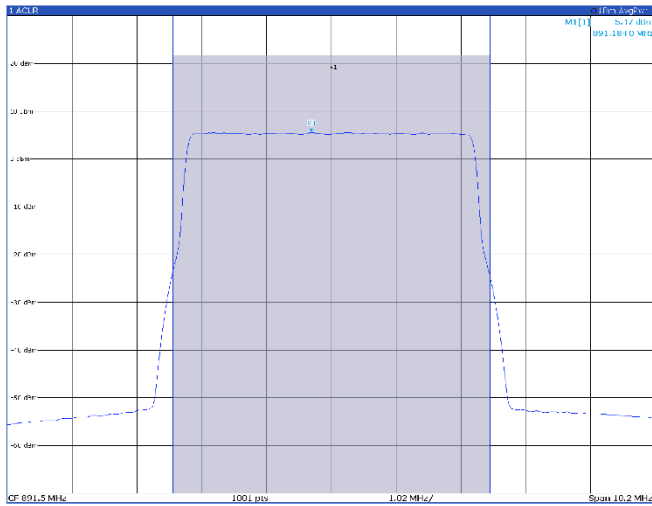
TM3p1a, 5 MHz, low channel



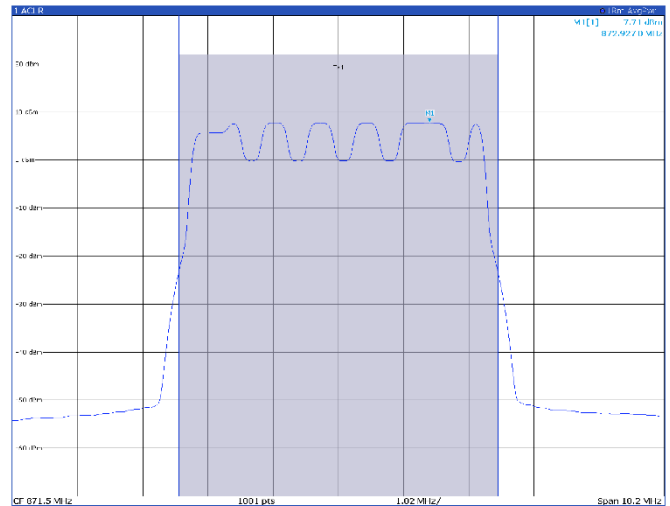
TM3p1a, 5 MHz, mid channel



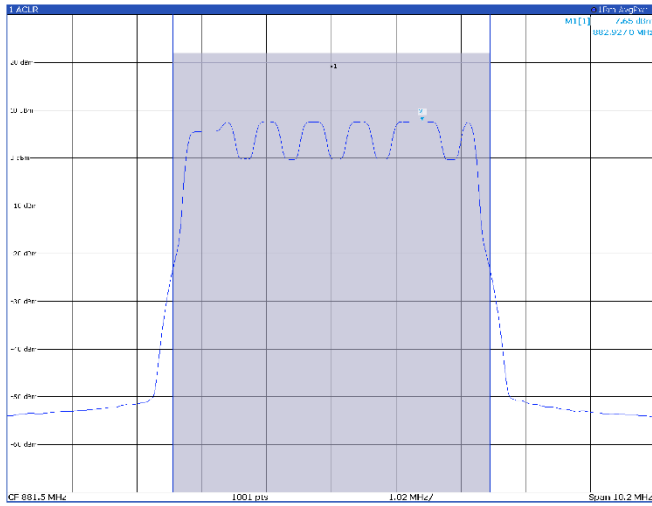
TM3p1a, 5 MHz, high channel



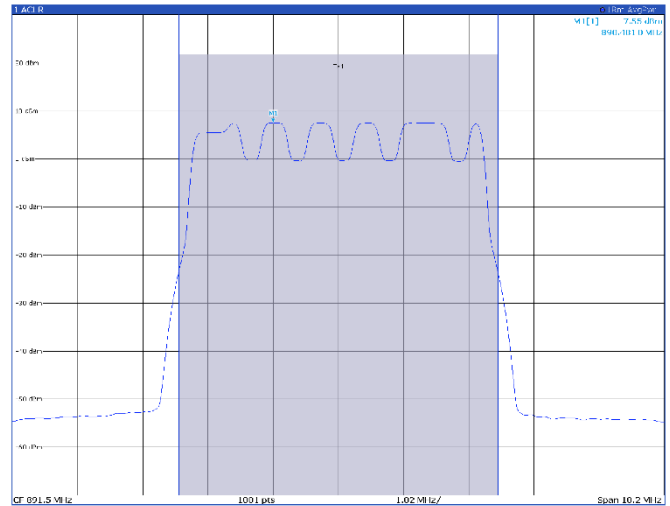
TM3p3, 5 MHz, low channel



TM3p3, 5 MHz, mid channel



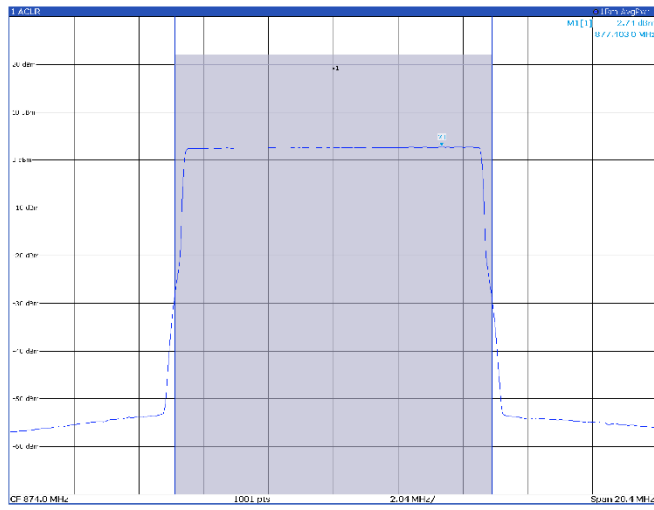
TM3p3, 5 MHz, high channel



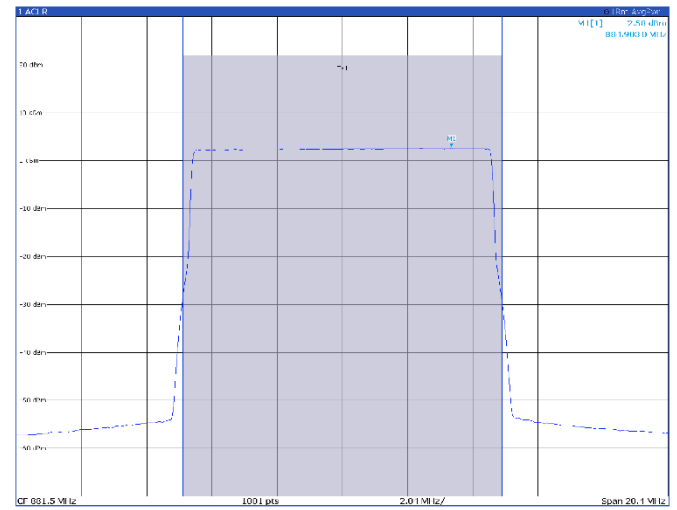
Band n5

10 MHz

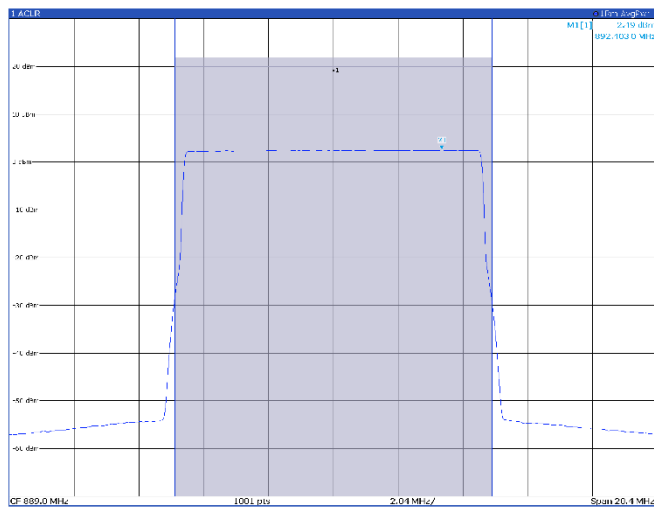
TM1.1, 10 MHz, low channel



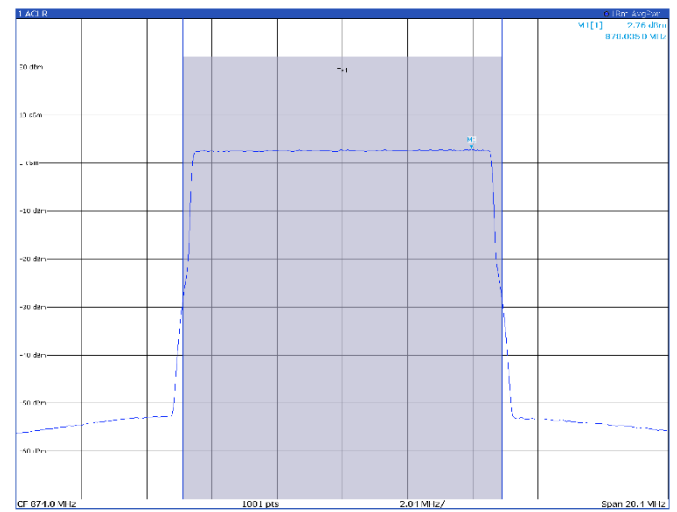
TM1.1, 10 MHz, mid channel



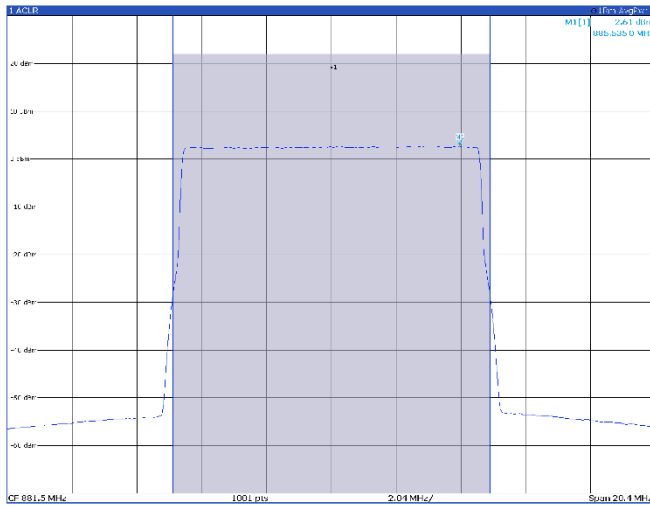
TM1.1, 10 MHz, high channel



TM3p1, 10 MHz, low channel

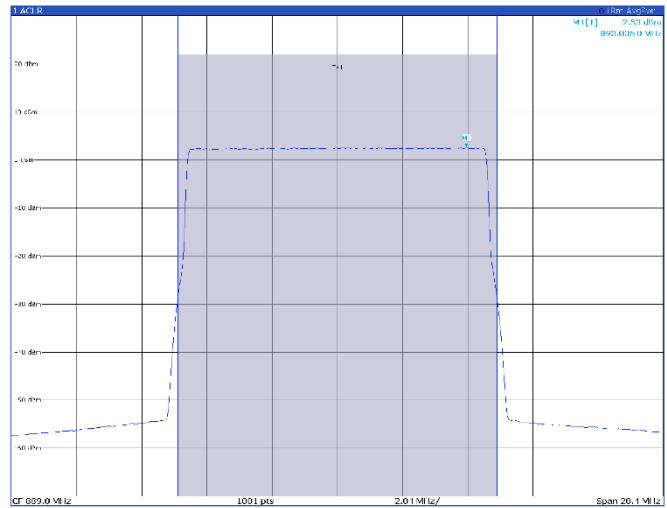


TM3p1, 10 MHz, mid channel



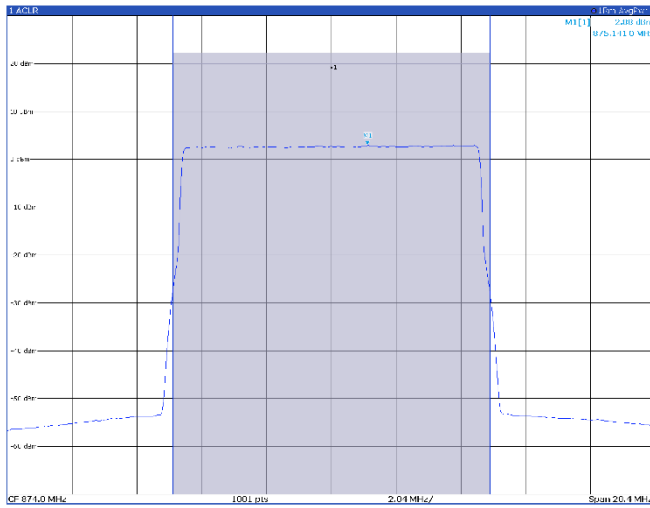
Result Summary			
Channel	Bandwidth	Offset	Power
11 (M2)	10.000 MHz		21.90 dBm
12 (M2)			21.90 dBm

TM3p1, 10 MHz, high channel



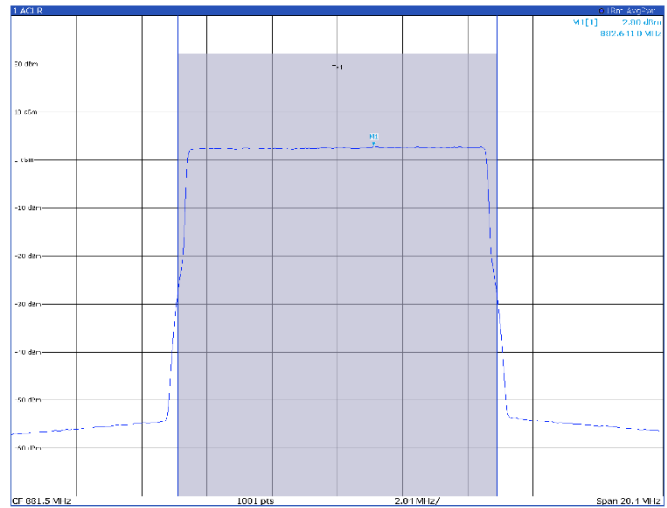
Result Summary			
Channel	Bandwidth	Offset	Power
11 (M2)	10.000 MHz		21.83 dBm
12 (M2)			21.83 dBm

TM3p1a, 10 MHz, low channel



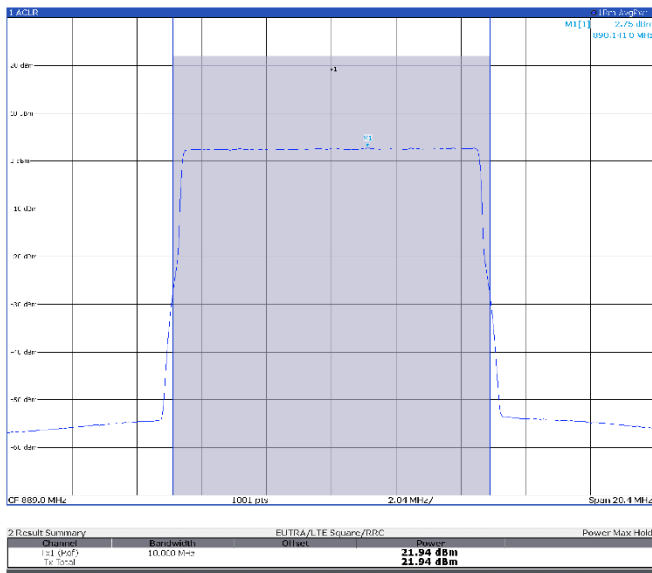
Result Summary			
Channel	Bandwidth	Offset	Power
11 (M2)	10.000 MHz		22.08 dBm
12 (M2)			22.08 dBm

TM3p1a, 10 MHz, mid channel

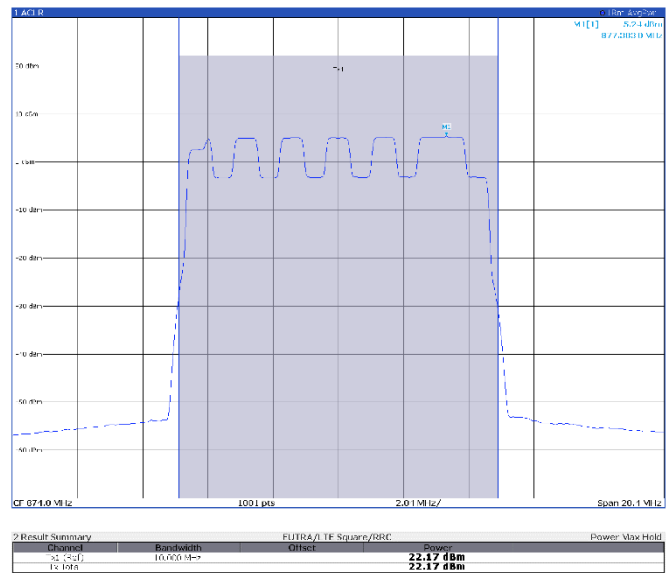


Result Summary			
Channel	Bandwidth	Offset	Power
11 (M2)	10.000 MHz		21.99 dBm
12 (M2)			21.99 dBm

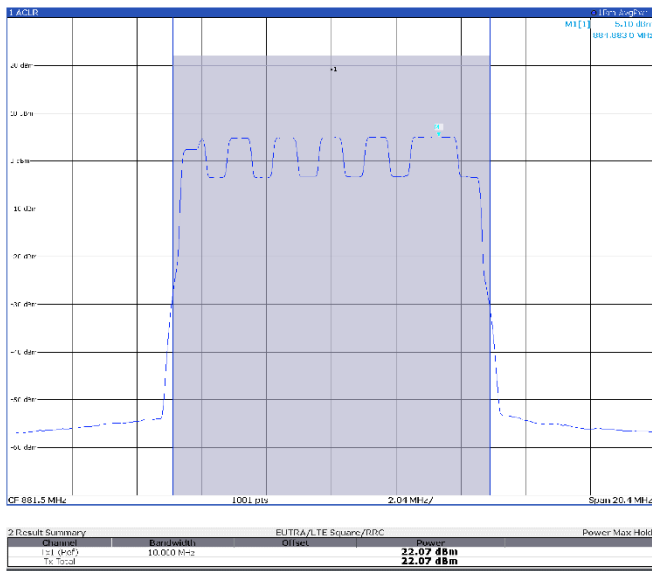
TM3p1a, 10 MHz, high channel



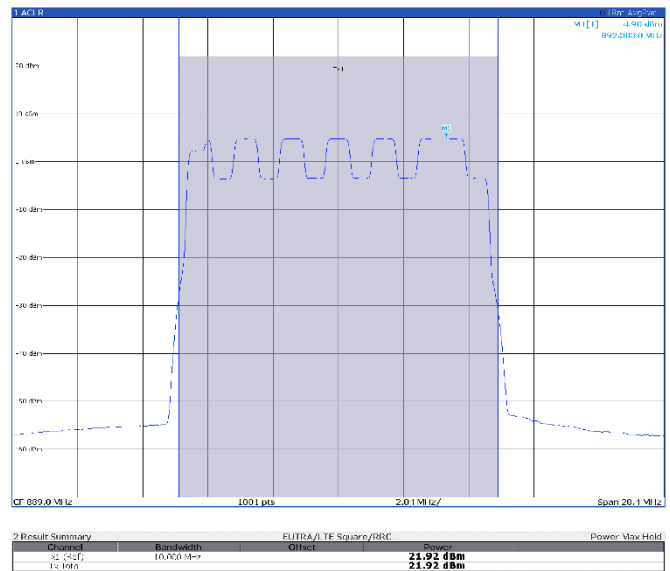
TM3p3, 10 MHz, low channel



TM3p3, 10 MHz, mid channel



TM3p3, 10 MHz, high channel



8.5 FCC 22.913(d) Effective radiated power limits - Peak to Average Power Ratio

8.5.1 Definitions and limits

(d) **Power measurements** Measurement of the ERP of Cellular base transmitters and repeaters must be made using an average power measurement technique. The peak-to-average ratio (PAR) of the transmission must not exceed 13 dB.

8.5.2 Test summary

Test start date	October 22, 2024	Temperature	22 °C
Test end date	October 31, 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 n5:

Band	OBW Declared	Port	Channel (MHz)	0.1% (dB)	0.1% Limit (dB)	Margin (dB)
n5	5 MHz	1	871.5	8.46	13	-4.54
n5	5 MHz	1	881.5	8.44	13	-4.56
n5	5 MHz	1	891.5	8.48	13	-4.52

Peak to average power ratio, TM1.1

Band	OBW Declared	Port	Channel (MHz)	0.1% (dB)	0.1% Limit (dB)	Margin (dB)
n5	5 MHz	1	871.5	8.30	13	-4.70
n5	5 MHz	1	881.5	8.36	13	-4.64
n5	5 MHz	1	891.5	8.34	13	-4.66

Peak to average power ratio, TM3p1

Band	OBW Declared	Port	Channel (MHz)	0.1% (dB)	0.1% Limit (dB)	Margin (dB)
n5	5 MHz	1	871.5	8.44	13	-4.56
n5	5 MHz	1	881.5	8.38	13	-4.62
n5	5 MHz	1	891.5	8.34	13	-4.66

Peak to average power ratio, TM3p1a

Band	OBW Declared	Port	Channel (MHz)	0.1% (dB)	0.1% Limit (dB)	Margin (dB)
n5	5 MHz	1	871.5	8.54	13	-4.46
n5	5 MHz	1	881.5	8.48	13	-4.52
n5	5 MHz	1	891.5	8.46	13	-4.54

Peak to average power ratio, TM3p3

Band	OBW Declared	Port	Channel (MHz)	0.1% (dB)	0.1% Limit (dB)	Margin (dB)
n5	10 MHz	1	874.0	8.52	13	-4.48
n5	10 MHz	1	881.5	8.52	13	-4.48
n5	10 MHz	1	889.0	8.44	13	-4.56

Peak to average power ratio, TM1.1

Band	OBW Declared	Port	Channel (MHz)	0.1% (dB)	0.1% Limit (dB)	Margin (dB)
n5	10 MHz	1	874.0	8.42	13	-4.58
n5	10 MHz	1	881.5	8.36	13	-4.64
n5	10 MHz	1	889.0	8.38	13	-4.62

Peak to average power ratio, TM3p1

Band	OBW Declared	Port	Channel (MHz)	0.1% (dB)	0.1% Limit (dB)	Margin (dB)
n5	10 MHz	1	874.0	8.36	13	-4.64
n5	10 MHz	1	881.5	8.38	13	-4.62
n5	10 MHz	1	889.0	8.36	13	-4.64

Peak to average power ratio, TM3p1a

Band	OBW Declared	Port	Channel (MHz)	0.1% (dB)	0.1% Limit (dB)	Margin (dB)
n5	10 MHz	1	874.0	8.46	13	-4.54
n5	10 MHz	1	881.5	8.54	13	-4.46
n5	10 MHz	1	889.0	8.54	13	-4.46

Peak to average power ratio, TM3p3

Antenna 2

Band n5:

Band	OBW Declared	Port	Channel (MHz)	0.1% (dB)	0.1% Limit (dB)	Margin (dB)
n5	5 MHz	2	871.5	8.44	13	-4.56
n5	5 MHz	2	881.5	8.46	13	-4.54
n5	5 MHz	2	891.5	8.50	13	-4.50

Peak to average power ratio, TM1.1

Band	OBW Declared	Port	Channel (MHz)	0.1% (dB)	0.1% Limit (dB)	Margin (dB)
n5	5 MHz	2	871.5	8.34	13	-4.66
n5	5 MHz	2	881.5	8.36	13	-4.64
n5	5 MHz	2	891.5	8.38	13	-4.62

Peak to average power ratio, TM3p1

Band	OBW Declared	Port	Channel (MHz)	0.1% (dB)	0.1% Limit (dB)	Margin (dB)
n5	5 MHz	2	871.5	8.38	13	-4.62
n5	5 MHz	2	881.5	8.42	13	-4.58
n5	5 MHz	2	891.5	8.40	13	-4.60

Peak to average power ratio, TM3p1a

Band	OBW Declared	Port	Channel (MHz)	0.1% (dB)	0.1% Limit (dB)	Margin (dB)
n5	5 MHz	2	871.5	8.50	13	-4.50
n5	5 MHz	2	881.5	8.50	13	-4.50
n5	5 MHz	2	891.5	8.52	13	-4.48

Peak to average power ratio, TM3p3

Band	OBW Declared	Port	Channel (MHz)	0.1% (dB)	0.1% Limit (dB)	Margin (dB)
n5	10 MHz	2	874.0	8.42	13	-4.58
n5	10 MHz	2	881.5	8.54	13	-4.46
n5	10 MHz	2	889.0	8.50	13	-4.50

Peak to average power ratio, TM1.1

Band	OBW Declared	Port	Channel (MHz)	0.1% (dB)	0.1% Limit (dB)	Margin (dB)
n5	10 MHz	2	874.0	8.38	13	-4.62
n5	10 MHz	2	881.5	8.42	13	-4.58
n5	10 MHz	2	889.0	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)
n5	10 MHz	2	874.0	8.40	13	-4.60
n5	10 MHz	2	881.5	8.40	13	-4.60
n5	10 MHz	2	889.0	8.42	13	-4.58

Peak to average power ratio, TM3p1a

Band	OBW Declared	Port	Channel (MHz)	0.1% (dB)	0.1% Limit (dB)	Margin (dB)
n5	10 MHz	2	874.0	8.40	13	-4.60
n5	10 MHz	2	881.5	8.48	13	-4.52
n5	10 MHz	2	889.0	8.48	13	-4.52

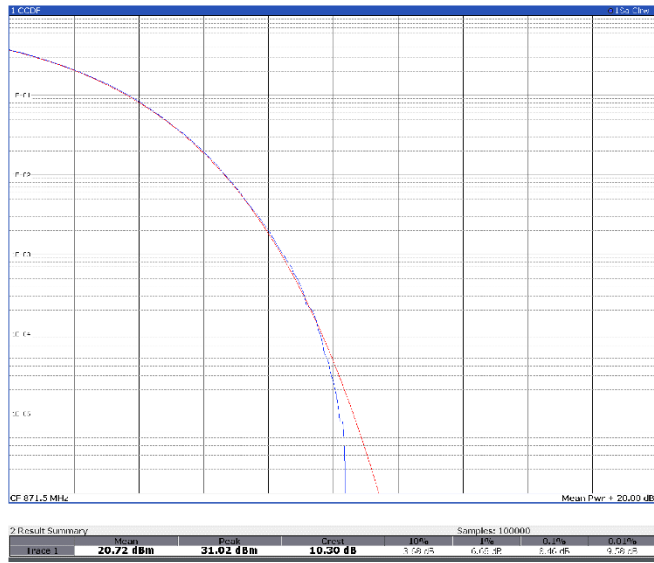
Peak to average power ratio, TM3p3

Antenna port 1

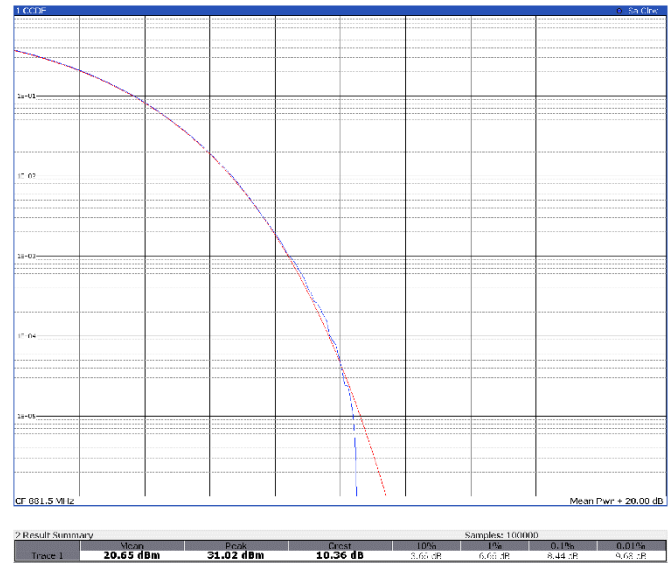
Band n5

5 MHz

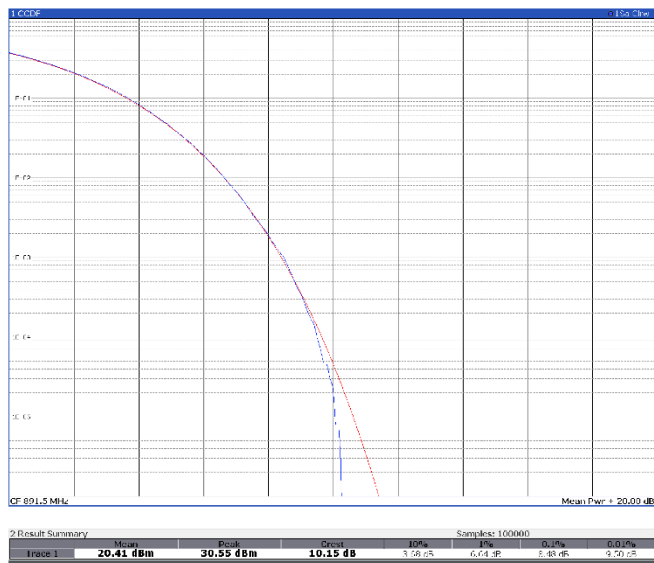
TM1.1, 5 MHz, low channel



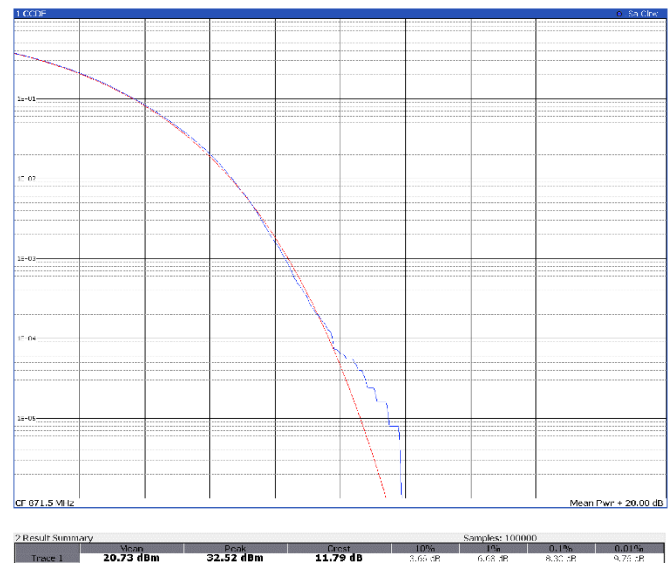
TM1.1, 5 MHz, mid channel



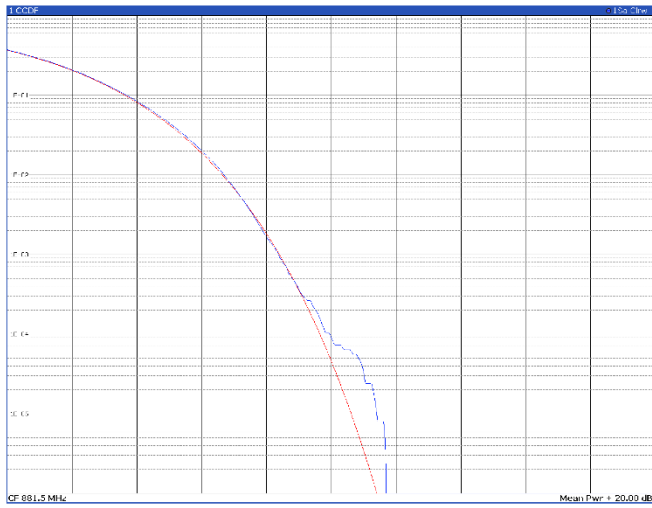
TM1.1, 5 MHz, high channel



TM3p1, 5 MHz, low channel

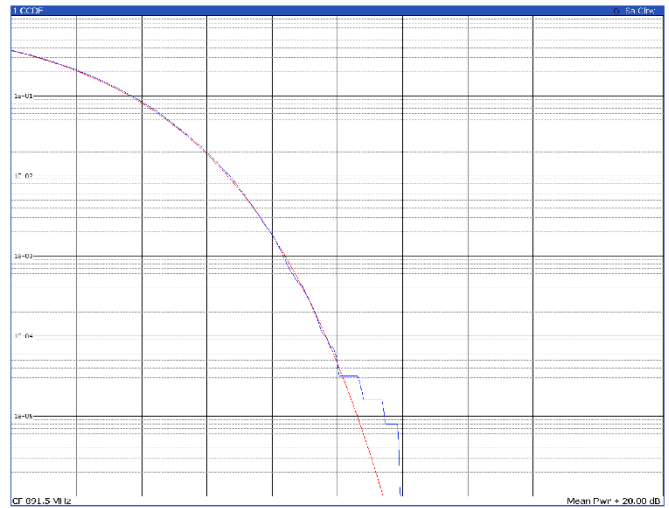


TM3p1, 5 MHz, mid channel



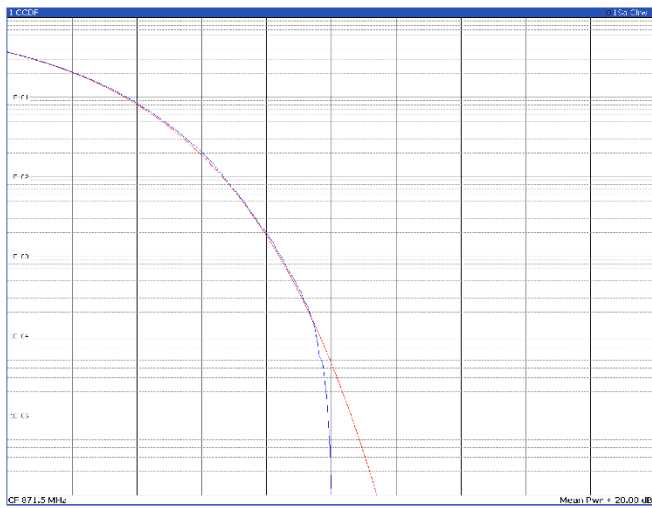
2 Result Summary		Samples: 100000	
Mean	Peak	Crest	10%
Trace 1	20.87 dBm	32.45 dBm	11.58 dB
			10%
			1%
			0.1%
			0.01%

TM3p1, 5 MHz, high channel



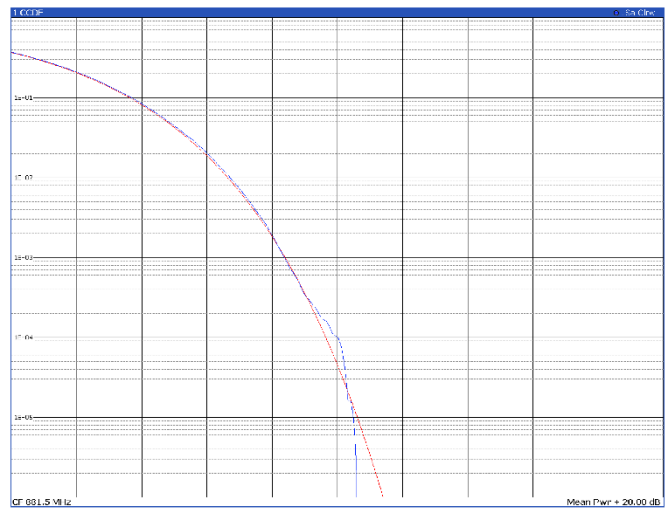
2 Result Summary		Samples: 100000	
Mean	Peak	Crest	10%
Trace 1	20.33 dBm	32.12 dBm	11.80 dB
			10%
			1%
			0.1%
			0.01%

TM3p1a, 5 MHz, low channel



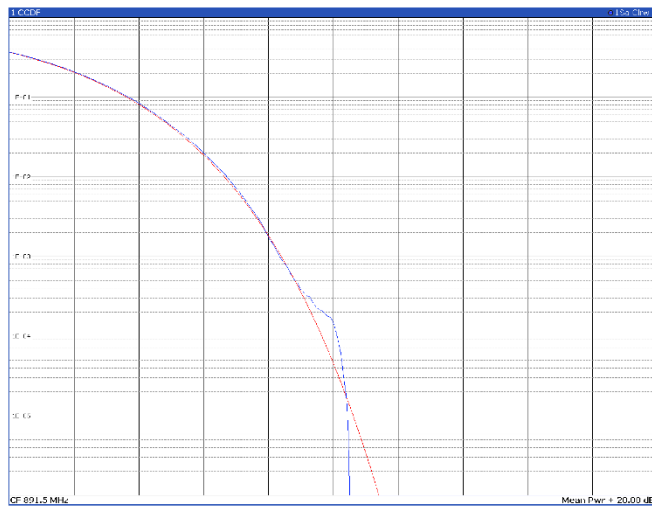
2 Result Summary		Samples: 100000	
Mean	Peak	Crest	10%
Trace 1	20.73 dBm	30.60 dBm	9.88 dB
			10%
			1%
			0.1%
			0.01%

TM3p1a, 5 MHz, mid channel



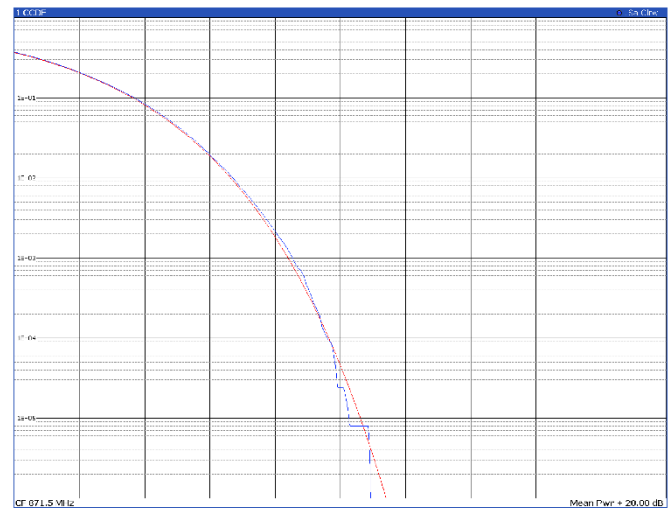
2 Result Summary		Samples: 100000	
Mean	Peak	Crest	10%
Trace 1	20.75 dBm	31.21 dBm	10.46 dB
			10%
			1%
			0.1%
			0.01%

TM3p1a, 5 MHz, high channel



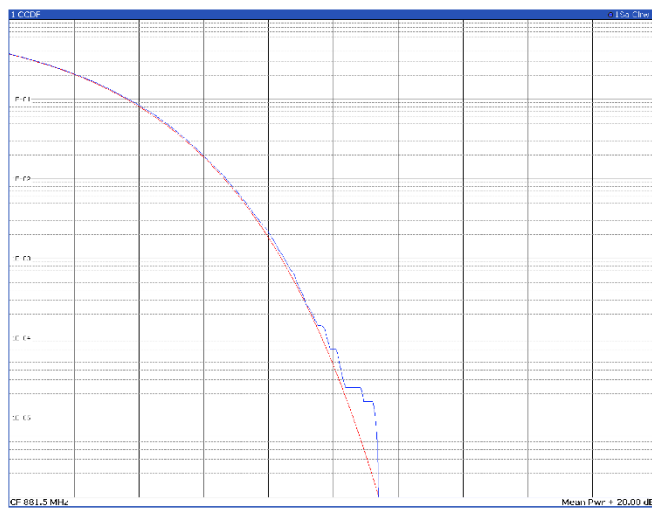
2 Result Summary						
Samples: 100000						
Trace 1	Mean	Peak	Crest	10%	1%	0.01%
	20.35 dBm	30.76 dBm	10.43 dB	3.59 dB	6.72 dB	8.52 dB

TM3p3, 5 MHz, low channel



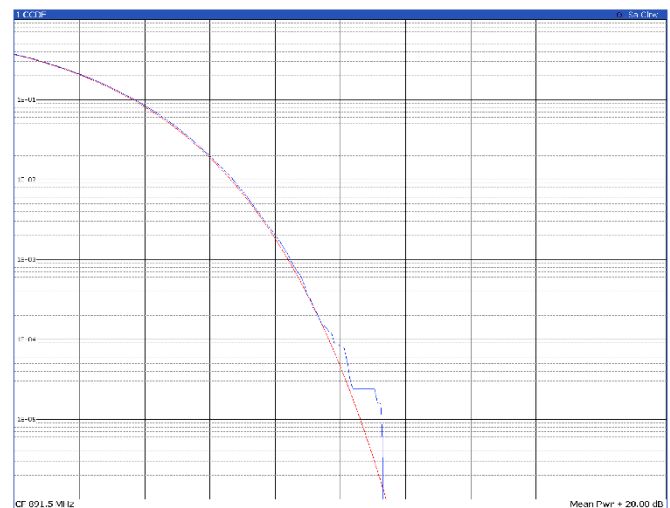
2 Result Summary						
Samples: 100000						
Trace 1	Mean	Peak	Crest	10%	1%	0.01%
	20.82 dBm	31.62 dBm	10.60 dB	3.65 dB	6.72 dB	8.52 dB

TM3p3, 5 MHz, mid channel



2 Result Summary						
Samples: 100000						
Trace 1	Mean	Peak	Crest	10%	1%	0.01%
	20.79 dBm	32.05 dBm	11.27 dB	3.68 dB	6.70 dB	8.48 dB

TM3p3, 5 MHz, high channel

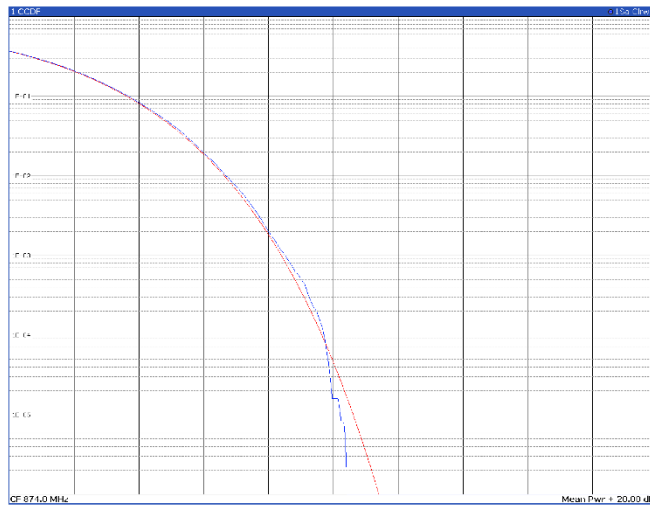


2 Result Summary						
Samples: 100000						
Trace 1	Mean	Peak	Crest	10%	1%	0.01%
	20.56 dBm	31.82 dBm	11.26 dB	3.65 dB	6.70 dB	8.47 dB

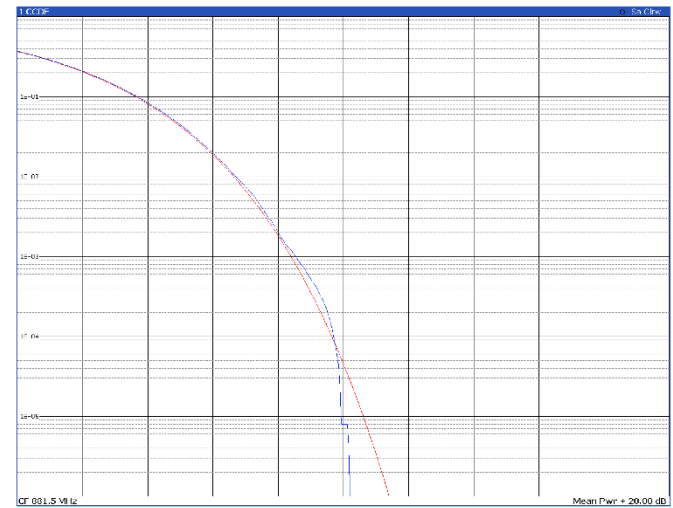
Band n5

10 MHz

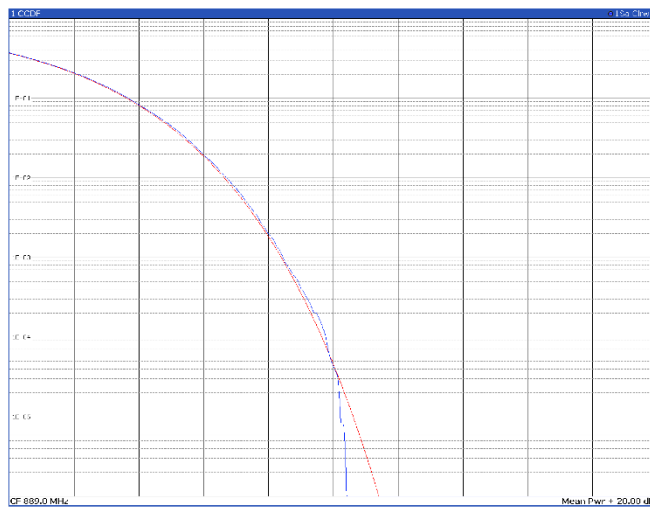
TM1.1, 10 MHz, low channel



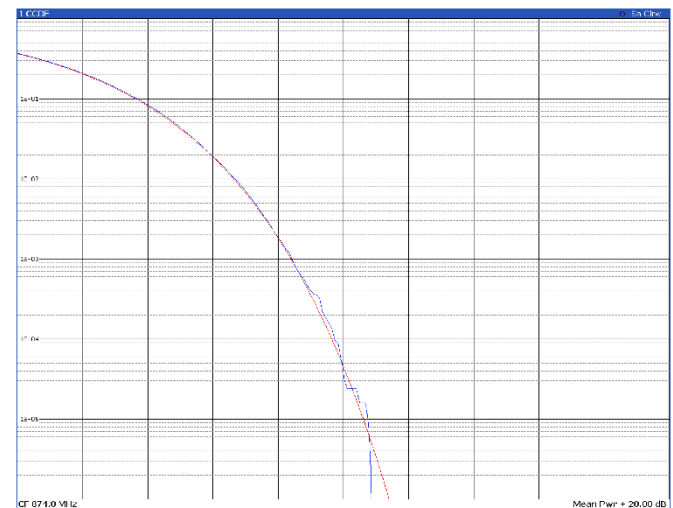
TM1.1, 10 MHz, mid channel



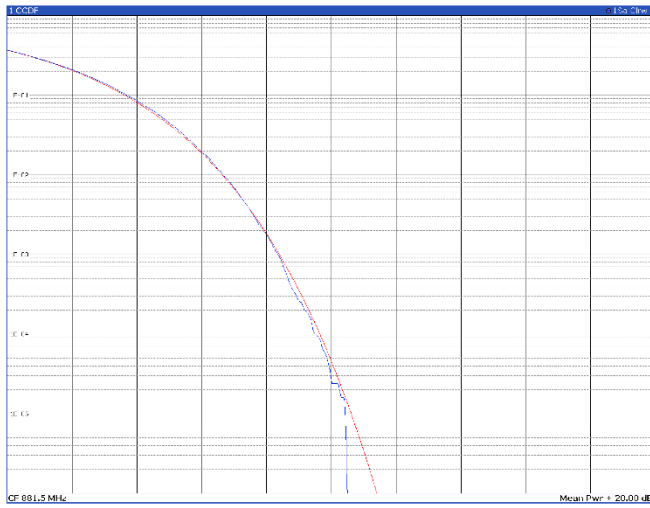
TM1.1, 10 MHz, high channel



TM3p1, 10 MHz, low channel

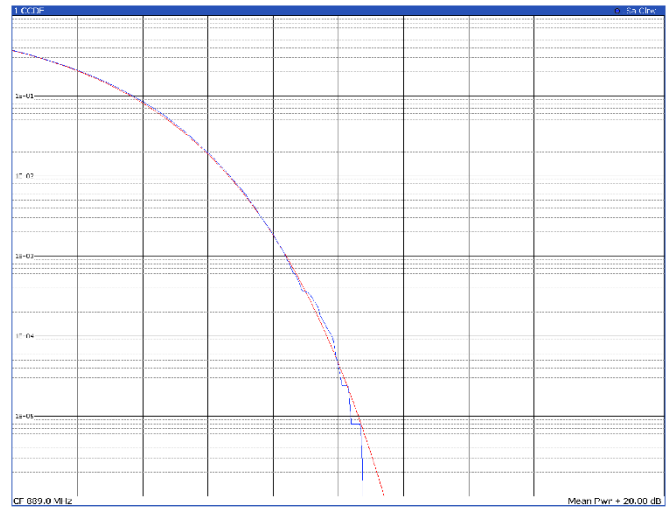


TM3p1, 10 MHz, mid channel



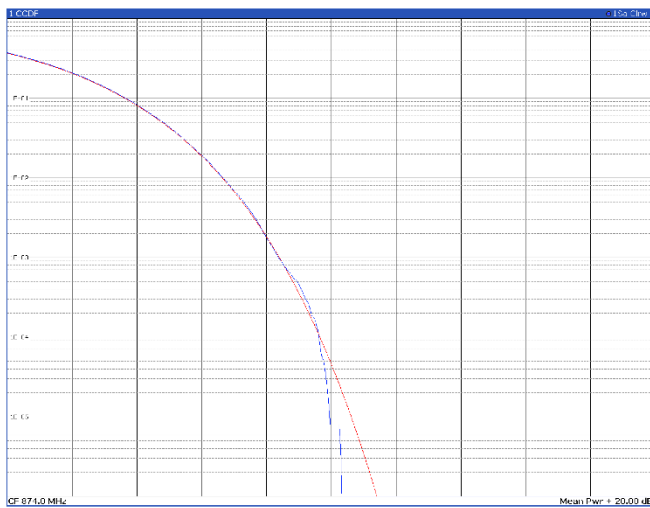
Result Summary		Mean		Peak		Crest		10%		Sample: 100000	
Trace 1		17.57 dBm		27.99 dBm		10.42 dB		9.70 dB		0.1%	0.01%
										0.1%	0.01%

TM3p1, 10 MHz, high channel



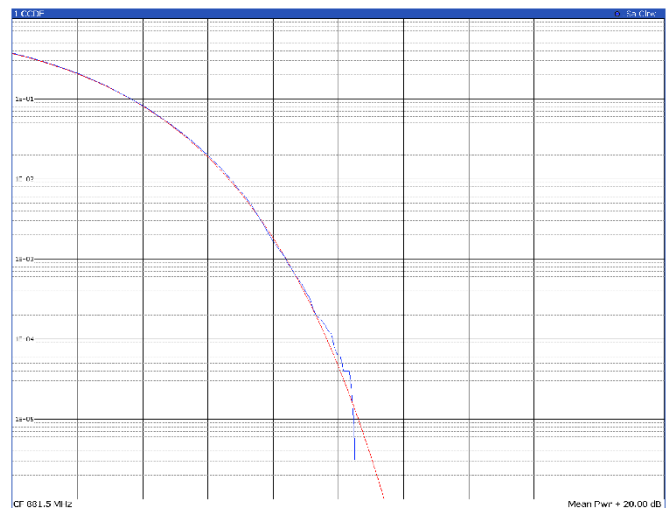
Result Summary				Sample: 100000			
Trace 1	Mean	Peak	Crest	10%	1%	0.1%	0.01%
	17.36 dBm	28.02 dBm	10.66 dB	9.65 dB	6.63 dB	4.32 dB	3.80 dB

TM3p1a, 10 MHz, low channel



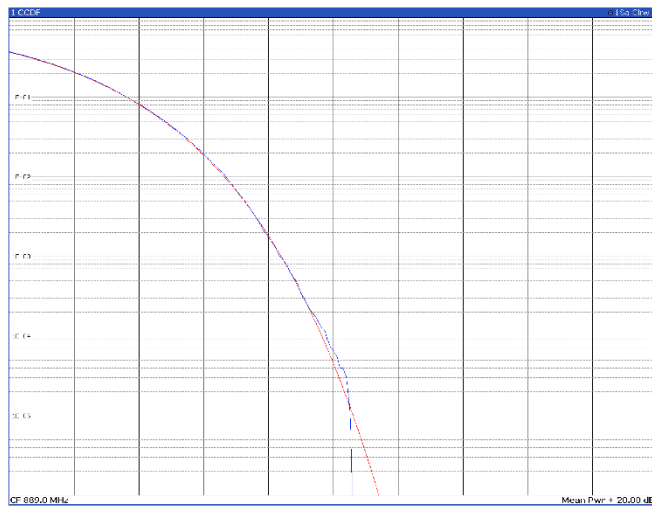
2 Result Summary				Samples: 100000			
	Mean	Peak	Crest	10%	1%	0.1%	0.01%
Trace 1	17.56 dBm	27.78 dBm	10.22 dB	3.56 dB	6.04 dB	8.36 dB	9.62 dB

TM3p1a, 10 MHz, mid channel



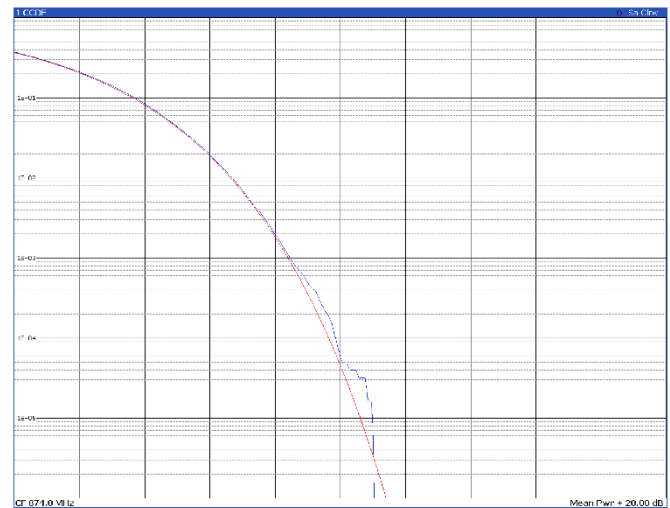
2 Result Summary				Sample: 100000			
Trace 1	Mean	Peak	Crest	10%	1%	0.1%	0.01%
	17.63 dBm	28.06 dBm	10.43 dB	9.66 dB	6.63 dB	8.35 dB	9.80 dB

TM3p1a, 10 MHz, high channel



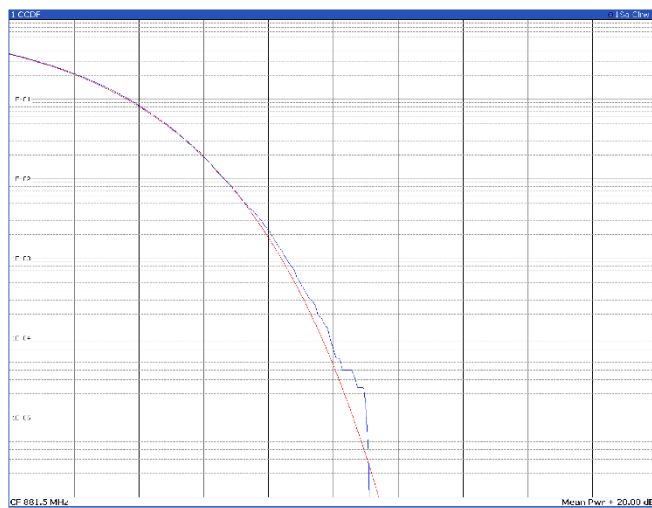
2 Result Summary		Sample: 100000	
Mean	Peak	Crest	10%
Trace 1	17.37 dBm	27.81 dBm	10.44 dB
			3.51 dB
			0.1%
			0.01%
			0.001%

TM3p3, 10 MHz, low channel



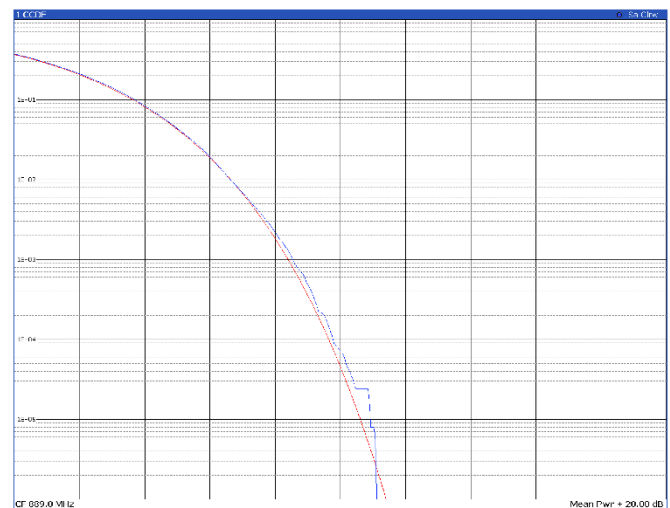
2 Result Summary		Sample: 100000	
Mean	Peak	Crest	10%
Trace 1	18.08 dBm	29.05 dBm	10.97 dB
			3.65 dB
			0.1%
			0.01%
			0.001%

TM3p3, 10 MHz, mid channel



2 Result Summary		Sample: 100000	
Mean	Peak	Crest	10%
Trace 1	18.06 dBm	29.08 dBm	11.02 dB
			3.58 dB
			0.1%
			0.01%
			0.001%

TM3p3, 10 MHz, high channel



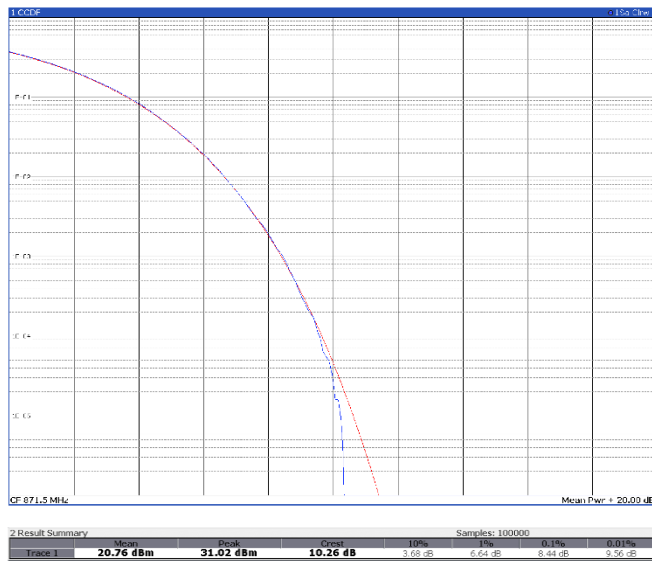
2 Result Summary		Sample: 100000	
Mean	Peak	Crest	10%
Trace 1	17.85 dBm	28.88 dBm	11.03 dB
			3.63 dB
			0.1%
			0.01%
			0.001%

Antenna port 2

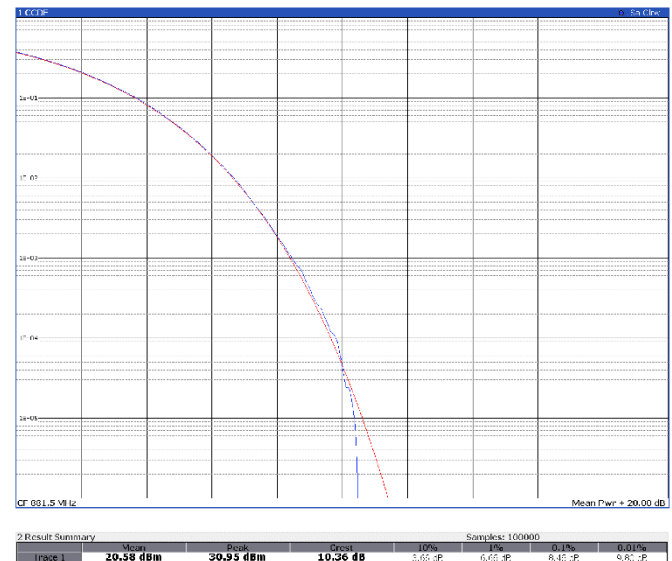
Band n5

5 MHz

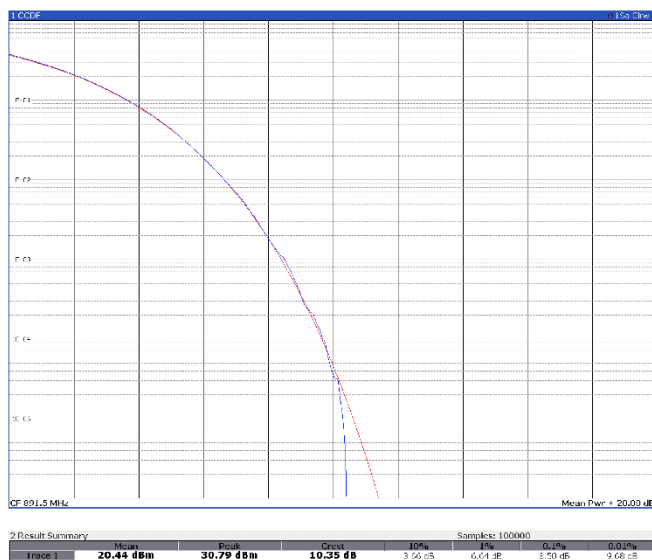
TM1.1, 5 MHz, low channel



TM1.1, 5 MHz, mid channel



TM1.1, 5 MHz, high channel



TM3p1, 5 MHz, low channel

