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RADIO TEST REPORT

Report ID:
REP153232

Project number:
PRJ0096610

Type of assessment:
Final product testing

Applicant:
BLiNQ Networks Inc.

Product:
MCRF-400

Model:
MCRF400-36

Description:
5G Enterprise Micro Cell

FCC ID:
ROR2005

Specifications:

- FCC 47 CFR Part 96

Date of issue: April 29, 2026

Tarek Elkholy, EMC/RF Engineer
Tested by

Signature

Dhara Patel, EMC/RF Specialist
Reviewed by

Signature

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The tests included in this report are within the scope of this accreditation.
The ANAB symbol is an official symbol of the ANSI National Accreditation Board, used under licence.

ANAB File Number: AT-3195 (Ottawa); AT-3193 (Pointe-Claire); AT-3194 (Cambridge)

Lab locations

Company name	Nemko Canada Inc.
Facilities	**Ottawa site:** 303 River Road, Ottawa, ON, Canada, K1V 1H2 Tel: +1 613 737 9680 Test site registration number: CA2040 **Montréal site:** 292 Labrosse Avenue, Pointe-Claire, QC, Canada, H9R 5L8 Tel: +1 514 694 2684 Test site registration number: CA2041 **Cambridge site:** 1-130 Saltsman Drive, Cambridge, ON, Canada, N3E 0B2 Tel: +1 519 650 4811 Test site registration number: CA0101
Website	www.nemko.com

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 Canada's ISO/IEC 17025 accreditation.

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Section 1 Report summary

1.1 Test specifications

FCC 47 CFR Part 2	Frequency Allocations and Radio Treaty Maters; General Rules and Regulations
FCC 47 CFR Part 96	Citizens Broadband Radio Service

1.2 Test methods

ANSI C63.26-2015	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services
KDB 662911 D01	Multiple Transmitter Output v02r01
KDB 662911 D02	MIMO with Cross-Polarized Antennas v01
KDB 940660 D01	Certification and Test Procedures for Citizens Broadband Radio Service Devices Authorized Under Part 96
KDB 971168 D01	Measurement Guidance for Certification of Licensed Digital Transmitters
FCC 47 CFR Part 2, Subpart J	Equipment authorization procedures

1.3 Exclusions

Spectrum access system requirements are not part of this assessment.

1.4 Statement of compliance

Statement of Conformity:

The reported results have been evaluated against the specified limits of the standard(s) listed in **Section 1.1** of this report.

Conformity with the specified requirements is determined by comparing the measured results directly to the applicable limits. Measurement uncertainty is not applied to adjust or attribute to the measured value for the purpose of compliance determination.

In the configuration tested, the **Equipment Under Test (EUT)** was found to be compliant. Unless otherwise noted in **Section 1.3**, all testing was performed against the relevant requirements of the applicable test standard(s).

The results obtained indicate that the product under test complies in full with the requirements tested, and the test results relate only to the items tested.

Refer to the **Summary of Test Results** section for full details.

1.5 Test report revision history

Table 1.5-1: *Test report revision history*

Revision #	Date of issue	Details of changes made to test report
REP153232	April 29, 2026	Original report issued

Section 2 Engineering considerations

2.1 Modifications incorporated in the EUT for compliance

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

2.2 Technical judgment

None

2.3 Deviations from laboratory tests procedures

No deviations were made from laboratory procedures.

Section 3 Test conditions

3.1 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.

3.2 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 4 Information provided by the applicant

4.1 Disclaimer

This section contains information provided by the applicant and has been utilized to support the test plan. Inaccurate information provided by the applicant can affect the validity of the results contained within this test report. Nemko accepts no responsibility for the information contained within this section and the impact it may have on the test plan and resulting measurements.

4.2 Applicant/Manufacture

Applicant name	BLiNQ Networks Inc.
Applicant address	140 Renfrew Dr, Markham, ON, L3R 6B3, Canada
Manufacturer name	Same as applicant
Manufacturer address	Same as applicant

4.3 EUT information

Description	5G Enterprise Micro Cell
Product	MCRF-400
Model	MCRF400-36
Serial number	MT400-A25520009
Power supply requirements	DC: 48 V from external 100–240 V(AC) AC/DC adapter
Product description and theory of operation	MCRF-400 is a 5GNR micro cell

4.4 Technical information

Base Station Type	category B CBSD
Frequency band	5G NR n48
Frequency Min (MHz)	3550 MHz
Frequency Max (MHz)	3700 MHz
Bandwidth and carrier aggregation configuration	1CC: 10, 20, 30, 40, 60, 80, 100 MHz 2CC: 10+10, 20+20, 10+30, 20+30, 20+40, 40+40, 20+60 MHz 3CC: 10+10+10, 20+20+20, 10+20+40, 20+30+40 MHz 4CC: 20+20+20+20, 10+20+30+40 MHz
RF power Max (W), Conducted	2.8 W (34.4 dBm), full power at 2CC 20+20 MHz at 3.68 GHz
Type of modulation	QPSK, QAM, …., 256 QAM
Antenna information	4 antenna ports, 4T4R MIMO Configuration (uncorrelated signals), Maximum gain: 17 dBi

4.5 EUT setup details

4.5.1 Radio exercise details

Operating conditions	The EUT was powered using the AC/DC adapter, using a tera term serial interface the EUT was forced into continuous transmission at all available modes, bandwidths and power levels, see the table below. During the radiated spurious emissions tests all the RF ports were terminated by matching 50 Ω terminations.
Transmitter state	Continuous transmission

Radio exercise details, continued

Table 4.5-1: *Power settings*

	Aggregated Signal bandwidth, MHz	Frequency, MHz	Power settings
1CC	10	3555	31
		3625	30
		3695	30
	20	3560	34
		3625	33
		3690	33
	30	3565	36
		3625	35
		3685	36
	40	3570	36
		3625	36
		3680	36
	60	3580	36
		3625	36
		3670	36
	80	3590	36
		3625	36
		3660	36
	100	3600	36
		3625	36
		3650	36
2CC	10 + 10	3560	34
		3625	33
		3690	33
	20 + 20	3570	36
		3625	36
		3680	36
	10 + 30	3570	36
		3625	36
		3680	36
	20 + 30	3575	36
		3625	36
		3675	36
	20 + 40	3580	36
		3625	36
		3670	36
	40 + 40	3590	36
		3625	36
		3660	36
	20 + 60	3590	36
		3625	36
		3660	36

Radio exercise details, continued

	Aggregated Signal bandwidth, MHz	Frequency, MHz	Power settings
3CC	10 + 10 + 10	3565	35
		3625	35
		3685	35
	20 + 20 + 20	3580	36
		3625	36
		3670	36
	10 + 20 + 40	3585	36
		3625	36
		3665	36
	20 + 30 + 40	3595	36
		3625	36
		3655	36
4CC	20 + 20 + 20 + 20	3590	36
		3625	36
		3660	36
	10 + 20 + 30 + 40	3600	36
		3625	36
		3650	36

The power was measured at all chains, chain 4 was identified as the worst-case, all conducted measurements were performed at chain 4 port.

Notes: *As requested by the applicant 256 QAM was considered during the test.*

As declared by the applicant the two chains transmit different data streams and the data transmitted at the two chains are uncorrelated.

4.5.2 EUT setup configuration

Table 4.5-2: *EUT sub assemblies*

Description	Brand name	Model, Part number, Serial number, Revision level
External cavity filter 3.55 – 3.7 GHz	Communication Components Inc.	SN: CF4325DG002
External cavity filter 3.55 – 3.7 GHz	Communication Components Inc.	SN: CF4325DG003
External cavity filter 3.55 – 3.7 GHz	Communication Components Inc.	SN: CF4325DG004
External cavity filter 3.55 – 3.7 GHz	Communication Components Inc.	SN: CF4325DG005
AC/DC adapter	MeanWell	MN: HLG-240H-48, SN: A1 HB81K11374

Table 4.5-3: *EUT interface ports*

Description	Qty.
Power input	1
Ethernet port	1
Cellular RF 4.3-10 port	4
GPS RF TNC port	1

Table 4.5-4: *Support equipment*

Description	Brand name	Model, Part number, Serial number, Revision level
Laptop	Dell	MN: Latitude E6420, DPN: VVF52 A01, SN: 28MCCS1
Three 30 dB high power attenuators	None	Sample IDS: PRJ00966080002, PRJ00966080003, PRJ00966080004

Table 4.5-5: *Inter-connection cables*

Cable description	From	To	Length (m)
AC power cable	AC/DC adapter	Mains	2
Ethernet cable	Base station	Laptop	> 30

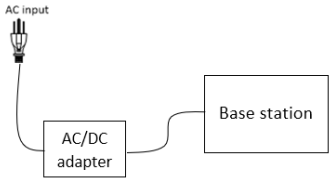

Figure 4.5-1: *Radiated testing block diagram*

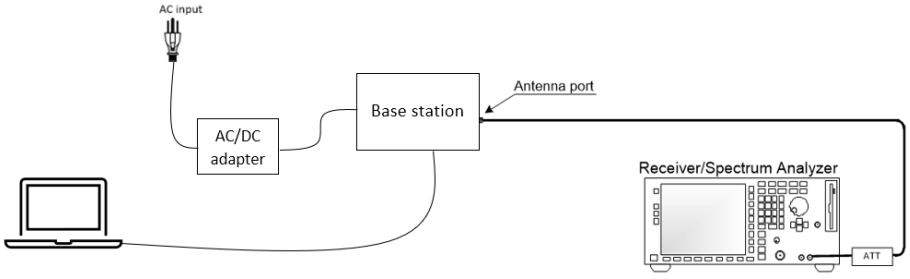

Figure 4.5-2: *Antenna port testing block diagram*

Section 5 Summary of test results

5.1 Testing location

Test location (s)	Cambridge

5.2 Testing period

Test start date	March 2, 2026	Test end date	April 2, 2026

5.3 Sample information

Receipt date	February 12, 2026	Nemko sample ID number(s)	PRJ00966080001, PRJ00966080006

5.4 FCC Part 96 test requirements results

Table 5.4-1: *FCC requirements results*

Part	Test description	Verdict
§2.1049	Occupied bandwidth	Pass
§2.1055	Frequency Stability	Pass
§96.41 (a)	Digital modulation[1]	Pass
§96.41 (b)(g)	Power, PSD and Peak to Average Power Ratio	Pass
§96.41 (e)(1)(i)	General protection levels	Pass
§96.41 (e)(2)	Additional protection levels	Pass

Notes: [1]EUT utilizes digital modulations techniques.

Section 6 Test equipment

6.1 Test equipment list

Table 6.1-1: *Equipment list*

Equipment	Manufacturer	Model no.	Asset no.	Cal cycle	Next cal.
Spectrum analyzer	Rohde & Schwarz	FSW43	FA002971	1 year	November 24, 2026
Receiver/spectrum analyzer	Rohde & Schwarz	ESR26	FA002969	1 year	May 28, 2026
3 m EMI test chamber	TDK	SAC-3	FA003012	1 year	October 31, 2026
Antenna mast	SUNAR	TLT2	FA003007	—	NCR
Bilog antenna (30–2000 MHz)	SUNAR	JB3	FA002108	1 year	April 8, 2026
Horn antenna (1–18 GHz)	EMCO	3115	FA000649	1 year	April 16, 2026
Preamp (1–18 GHz)	ETS Lindgren	124334	FA002956	1 year	April 11, 2026
Horn antenna (1–18 GHz)	ETS Lindgren	3117	FA002911	1 year	June 2, 2026
Horn antenna (18–40 GHz)	EMCO	3116B	FA002948	1 year	April 4, 2027
Preamp 18-40 GHz	None	PA1840	FA003323	1 year	April 11, 2026
Vector signal generator	Rohde & Schwarz	SMW200A	FA002970	1 Year	March 26, 2026
Power splitter	Mini-Circuits	ZN2PD-63-S+	SUU05701418	–	NCR
50 Ω SMA coax cable	Huber + Suhner	None	FA003058	1 year	August 6, 2026
50 Ω SMA coax cable	Huber + Suhner	None	FA003054	1 year	August 6, 2026
50 Ω SMA coax cable	Huber + Suhner	None	FA003055	1 year	August 6, 2026
30 dB high power attenuator	Aeroflex/Weinscel	73-30-43	FA002058	1 year	April 14, 2026
10 dB power attenuator	Weinschel	WA7	FA003494	1 year	April 14, 2026
Temperature Chamber	Espec	EPX-4H	FA003033	–	NCR
Temperature meter	VAISALA	MI70/ HMP76B	FA003318	1 year	June 3, 2026

Note: NCR - no calibration required
All equipment related to the contribution of measurement has been included in this list. Such items include, but are not limited to, cables, attenuators, directional couplers, and pre-amps.

Table 6.1-2: *Automation software details*

Test description	Manufacturer of Software	Details
Radio/EMC test software	Rohde & Schwarz	EMC32, Software for EMC Measurements, Version 10.60.00

Table 6.1-3: *Measurement uncertainty calculations based on equipment list*

Measurement	Measurement uncertainty, ±dB
RF Output power measurement using Spectrum Analyzer	1.46
Conducted spurious emissions (9 kHz – 30 MHz)	0.89
Conducted spurious emissions (30 MHz – 18 GHz)	1.52
Conducted spurious emissions (18 GHz – 40 GHz)	1.64
Radiated spurious emissions (30 MHz to 1 GHz)	4.14
Radiated spurious emissions (1 GHz to 6 GHz)	4.74
Radiated spurious emissions (6 GHz to 18 GHz)	5.33
Radiated spurious emissions (18 GHz to 40 GHz)	4.82

Notes: UKAS Lab 34, TIA-603 and ETSI TR 100 028-1&2 have been used as guidance for measurement uncertainty reasonable estimations with regards to previous experience and validation of data. Nemko Canada Inc. follows these test methods in order to satisfy ISO/IEC 17025 requirements for estimation of uncertainty of measurement for wireless products. Measurement uncertainty calculations assume a coverage factor of K = 2 with 95% certainty.

Section 7 Testing data

7.1 Power, PSD and Peak to Average Power Ratio

7.1.1 References, definitions and limits

FCC §96.41

(b) ***Power limits.*** Unless otherwise specified in this section, the maximum effective isotropic radiated power (EIRP) and maximum Power Spectral Density (PSD) of any CBSD and End User Device must comply with the limits shown in the table below

(g) The peak-to-average power ratio (PAPR) of any CBSD transmitter output power must not exceed 13 dB. PAPR measurements should be made using either an instrument with complementary cumulative distribution function (CCDF) capabilities or another Commission approved procedure. The measurement must be performed using a signal corresponding to the highest PAPR expected during periods of continuous transmission.

Table 7.1-1: *Power limits*

Device	Maximum EIRP (dBm/10 MHz)	Maximum PSD (dBm/MHz)
End User Device	23	–
Category A CBSD	30	20
Category B CBSD	47	37

7.1.1 Test summary

Verdict	Pass		
Test date	March 5, 2026	Temperature	24 °C
Tested by	Tarek Elkholy	Air pressure	971 mbar
Test location	Cambridge	Relative humidity	39 %

7.1.2 Observations, settings and special notes

- Output power was measured per ANSI C63.26 Paragraph 5.2.4.4.1
- PSD was measured using method described in per ANSI C63.26 Paragraph 5.2.4.5
- The peak-to-average power ratio (PAPR) was measured using method described in per ANSI C63.26 Paragraph 5.2.6
- The antenna sub-array gain is 17 dBi with uncorrelated signals. This gain represents the minimum available configuration and therefore requires the highest transmit power. Antennas with higher gains will necessitate a corresponding reduction in transmit power in order to remain compliant with applicable EIRP limits.
- As per 662911 D02, Where conducted measurements are used for compliance with radiated limits, the EIRP or ERP (total or spectral density) of the individual transmit chains is computed separately based on measured output power or PSD and antenna gain.
- PAPR is measured utilizing CCDF function for 10 MHz wide signals and PAPR (dB) = Peak power (dBm) - Average power (dBm) method as per KDB 971168 D01 and ANSI C63.26 clause 5.2.6.for wider signals.

Spectrum analyzer settings for PSD:

Detector mode	RMS
Resolution bandwidth	1 MHz
Video bandwidth	>RBW
Measurement mode	Power over emission bandwidth
Trace mode	Averaging
Measurement time	Auto

7.1.3 Test data

Table 7.1-2: *Power and PSD test results*

Aggregated Signal bandwidth, MHz		Frequency, MHz	Conducted power, dBm/10 MHz	EIRP power, dBm/10 MHz	EIRP limit, dBm/10 MHz	Margin, dB	Conducted PSD, dBm/MHz	EIRP PSD, dBm/MHz	EIRP PSD limit, dBm/MHz	Margin, dB
1CC	10	3555	28.44	45.44	47.00	1.56	19.61	36.61	37.00	0.39
		3625	28.08	45.08	47.00	1.92	19.32	36.32	37.00	0.68
		3695	27.96	44.96	47.00	2.04	19.04	36.04	37.00	0.96
	20	3560	29.17	46.17	47.00	0.83	19.78	36.78	37.00	0.22
		3625	28.62	45.62	47.00	1.38	19.07	36.07	37.00	0.93
		3690	28.64	45.64	47.00	1.36	19.32	36.32	37.00	0.68
	30	3565	29.12	46.12	47.00	0.88	19.63	36.63	37.00	0.37
		3625	28.45	45.45	47.00	1.55	19.06	36.06	37.00	0.94
		3685	28.43	45.43	47.00	1.57	19.02	36.02	37.00	0.98
	40	3570	28.15	45.15	47.00	1.85	18.77	35.77	37.00	1.23
		3625	28.46	45.46	47.00	1.54	19.06	36.06	37.00	0.94
		3680	28.66	45.66	47.00	1.34	19.13	36.13	37.00	0.87
	60	3580	26.47	43.47	47.00	3.53	17.10	34.10	37.00	2.90
		3625	26.74	43.74	47.00	3.26	17.34	34.34	37.00	2.66
		3670	26.88	43.88	47.00	3.12	17.44	34.44	37.00	2.56
	80	3590	25.29	42.29	47.00	4.71	15.81	32.81	37.00	4.19
		3625	25.37	42.37	47.00	4.63	15.96	32.96	37.00	4.04
		3660	25.62	42.62	47.00	4.38	16.13	33.13	37.00	3.87
	100	3600	24.33	41.33	47.00	5.67	14.74	31.74	37.00	5.26
		3625	24.49	41.49	47.00	5.51	14.97	31.97	37.00	5.03
		3650	24.42	41.42	47.00	5.58	15.17	32.17	37.00	4.83
2CC	10 + 10	3560	28.66	45.66	47.00	1.34	19.82	36.82	37.00	0.18
		3625	28.16	45.16	47.00	1.84	19.33	36.33	37.00	0.67
		3690	28.12	45.12	47.00	1.88	19.34	36.34	37.00	0.66
	20 + 20	3570	28.06	45.06	47.00	1.94	19.00	36.00	37.00	1.00
		3625	28.34	45.34	47.00	1.66	19.18	36.18	37.00	0.82
		3680	28.51	45.51	47.00	1.49	19.41	36.41	37.00	0.59
	10 + 30	3570	27.85	44.85	47.00	2.15	18.43	35.43	37.00	1.57
		3625	28.13	45.13	47.00	1.87	18.75	35.75	37.00	1.25
		3680	28.35	45.35	47.00	1.65	19.04	36.04	37.00	0.96
	20 + 30	3575	26.84	43.84	47.00	3.16	17.57	34.57	37.00	2.43
		3625	27.14	44.14	47.00	2.86	17.85	34.85	37.00	2.15
		3675	27.32	44.32	47.00	2.68	18.00	35.00	37.00	2.00
	20 + 40	3580	26.15	43.15	47.00	3.85	16.82	33.82	37.00	3.18
		3625	26.43	43.43	47.00	3.57	17.16	34.16	37.00	2.84
		3670	26.81	43.81	47.00	3.19	17.42	34.42	37.00	2.58
	40 + 40	3590	25.13	42.13	47.00	4.87	15.65	32.65	37.00	4.35
		3625	25.39	42.39	47.00	4.61	15.93	32.93	37.00	4.07
		3660	25.65	42.65	47.00	4.35	16.21	33.21	37.00	3.79
	20 + 60	3590	25.16	42.16	47.00	4.84	15.92	32.92	37.00	4.08
		3625	25.44	42.44	47.00	4.56	16.09	33.09	37.00	3.91
		3660	25.67	42.67	47.00	4.33	16.34	33.34	37.00	3.66

Test data, continued

Table 7.1-2: *Power and PSD test results, continued*

Aggregated Signal bandwidth, MHz		Frequency, MHz	Conducted power, dBm/10 MHz	EIRP power, dBm/10 MHz	EIRP limit, dBm/10 MHz	Margin, dB	Conducted PSD, dBm/MHz	EIRP PSD, dBm/MHz	EIRP PSD limit, dBm/MHz	Margin, dB
3CC	10 + 10 + 10	3565	28.09	45.09	47.00	1.91	19.18	36.18	37.00	0.82
		3625	28.30	45.30	47.00	1.70	19.41	36.41	37.00	0.59
		3685	28.38	45.38	47.00	1.62	19.60	36.60	37.00	0.40
	20 + 20 + 20	3580	26.27	43.27	47.00	3.73	17.11	34.11	37.00	2.89
		3625	26.33	43.33	47.00	3.67	17.24	34.24	37.00	2.76
		3670	26.74	43.74	47.00	3.26	17.61	34.61	37.00	2.39
	10 + 20 + 40	3585	25.40	42.40	47.00	4.60	16.23	33.23	37.00	3.77
		3625	25.68	42.68	47.00	4.32	16.34	33.34	37.00	3.66
		3665	25.95	42.95	47.00	4.05	16.47	33.47	37.00	3.53
	20 + 30 + 40	3595	24.43	41.43	47.00	5.57	15.09	32.09	37.00	4.91
		3625	24.71	41.71	47.00	5.29	15.22	32.22	37.00	4.78
		3655	24.75	41.75	47.00	5.25	15.30	32.30	37.00	4.70
4CC	20 + 20 + 20 + 20	3590	25.06	42.06	47.00	4.94	16.05	33.05	37.00	3.95
		3625	25.36	42.36	47.00	4.64	16.27	33.27	37.00	3.73
		3660	25.65	42.65	47.00	4.35	16.40	33.40	37.00	3.60
	10 + 20 + 30 + 40	3600	23.81	40.81	47.00	6.19	14.57	31.57	37.00	5.43
		3625	24.16	41.16	47.00	5.84	14.85	31.85	37.00	5.15
		3650	24.32	41.32	47.00	5.68	15.19	32.19	37.00	4.81

Note: *Antenna gain is 17 dBi.*

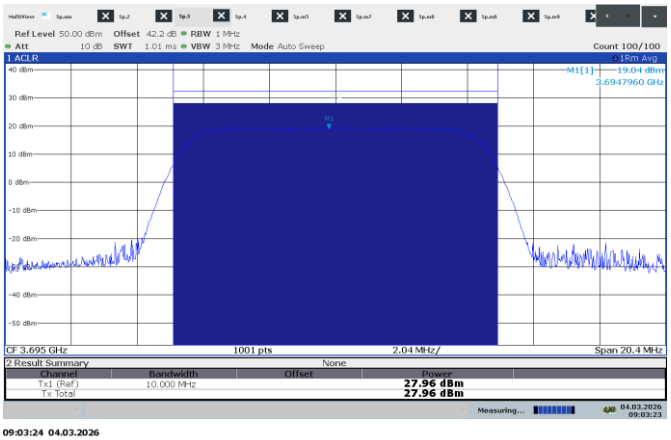

Figure 7.1-1: *Power & PSD 1CC 10 MHz, sample plot*

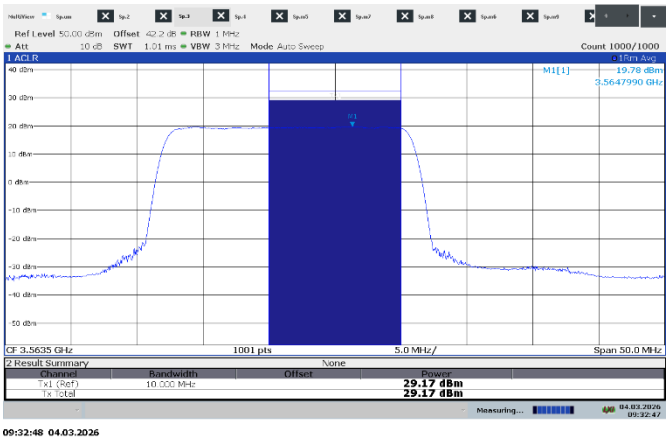

Figure 7.1-2: *Power & PSD 1CC 20 MHz, sample plot*

Note: The highest 10 MHz was selected across the 20 MHz

Test data, continued

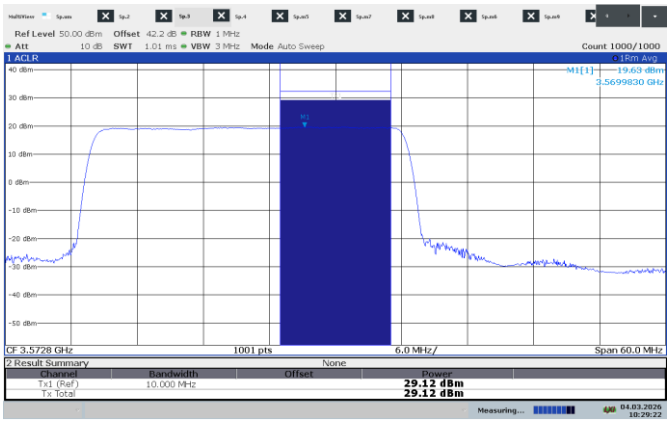

Figure 7.1-3: *Power & PSD 1CC 30 MHz, sample plot*
Note: The highest 10 MHz was selected across the 30 MHz

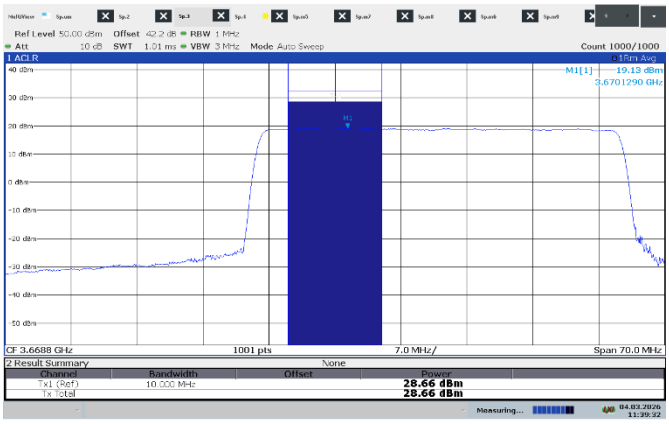

Figure 7.1-4: *Power & PSD 1CC 40 MHz, sample plot*
Note: The highest 10 MHz was selected across the 40 MHz

Figure 7.1-5: *Power & PSD 1CC 60 MHz, sample plot*
Note: The highest 10 MHz was selected across the 60 MHz

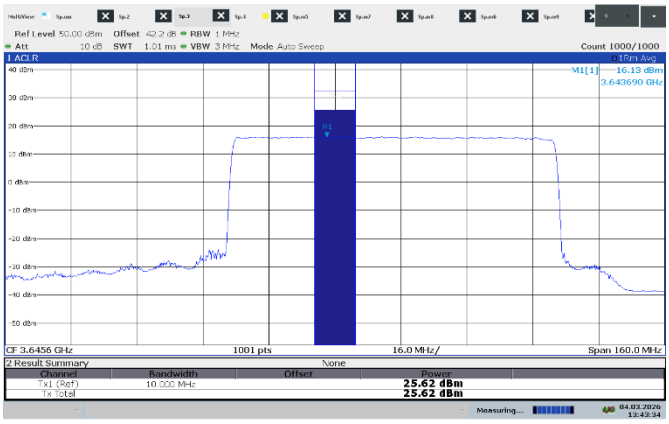

Figure 7.1-6: *Power & PSD 1CC 80 MHz, sample plot*
Note: The highest 10 MHz was selected across the 80 MHz

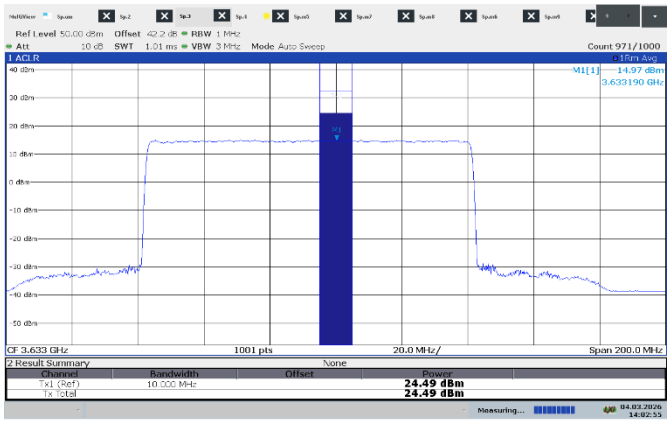

Figure 7.1-7: *Power & PSD 1CC 100 MHz, sample plot*
Note: The highest 10 MHz was selected across the 100 MHz

Test data, continued

Table 7.1-3: *PAPR test results*

Aggregated Signal bandwidth, MHz		Frequency, MHz	Measured PAPR, dB	PAPR limit, dB	Margin, dB
1CC	10	3555	8.50	13.00	4.50
		3625	8.48	13.00	4.52
		3695	8.48	13.00	4.52
	20	3560	8.12	13.00	4.88
		3625	8.12	13.00	4.88
		3690	8.12	13.00	4.88
	30	3565	8.60	13.00	4.40
		3625	8.60	13.00	4.40
		3685	8.56	13.00	4.44
	40	3570	8.28	13.00	4.72
		3625	8.30	13.00	4.70
		3680	8.28	13.00	4.72
	60	3580	9.10	13.00	3.90
		3625	9.12	13.00	3.88
		3670	9.12	13.00	3.88
	80	3590	8.68	13.00	4.32
		3625	8.68	13.00	4.32
		3660	8.68	13.00	4.32
	100	3600	7.52	13.00	5.48
		3625	7.50	13.00	5.50
		3650	6.95	13.00	6.05
2CC	10 + 10	3560	7.19	13.00	5.81
		3625	8.71	13.00	4.29
		3690	6.91	13.00	6.09
	20 + 20	3570	7.09	13.00	5.91
		3625	7.10	13.00	5.90
		3680	7.02	13.00	5.98
	10 + 30	3570	7.11	13.00	5.89
		3625	7.14	13.00	5.86
		3680	7.05	13.00	5.95
	20 + 30	3575	6.84	13.00	6.16
		3625	6.78	13.00	6.22
		3675	6.83	13.00	6.17
	20 + 40	3580	7.30	13.00	5.70
		3625	7.35	13.00	5.65
		3670	7.29	13.00	5.71
	40 + 40	3590	7.40	13.00	5.60
		3625	7.53	13.00	5.47
		3660	7.52	13.00	5.48
	20 + 60	3590	7.45	13.00	5.55
		3625	7.45	13.00	5.55
		3660	7.48	13.00	5.52

Table 7.1-3: *PAPR test results, continued*

Aggregated Signal bandwidth, MHz		Frequency, MHz	Measured PAPR, dB	PAPR limit, dB	Margin, dB
3CC	10 + 10 + 10	3565	6.99	13.00	6.01
		3625	7.05	13.00	5.95
		3685	7.05	13.00	5.95
	20 + 20 + 20	3580	6.99	13.00	6.01
		3625	7.04	13.00	5.96
		3670	6.95	13.00	6.05
	10 + 20 + 40	3585	6.92	13.00	6.08
		3625	6.99	13.00	6.01
		3665	6.91	13.00	6.09
	20 + 30 + 40	3595	7.08	13.00	5.92
		3625	7.00	13.00	6.00
		3655	7.00	13.00	6.00
4CC	20 + 20 + 20 + 20	3590	6.81	13.00	6.19
		3625	6.96	13.00	6.04
		3660	6.97	13.00	6.03
	10 + 20 + 30 + 40	3600	6.98	13.00	6.02
		3625	7.14	13.00	5.86
		3650	6.97	13.00	6.03

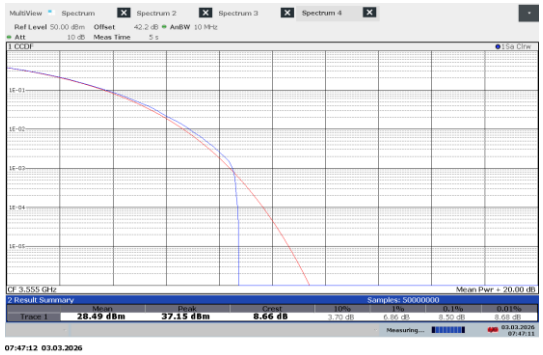

Figure 7.1-8 : *PAPR, 1CC 10 MHz, sample plot*

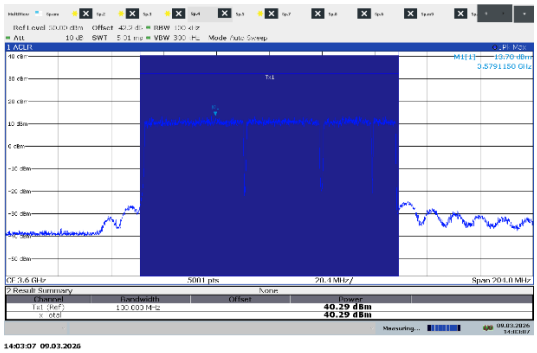

Figure 7.1-9: *PAPR, 4CC 10+20+30+40 MHz, Peak, sample plot*

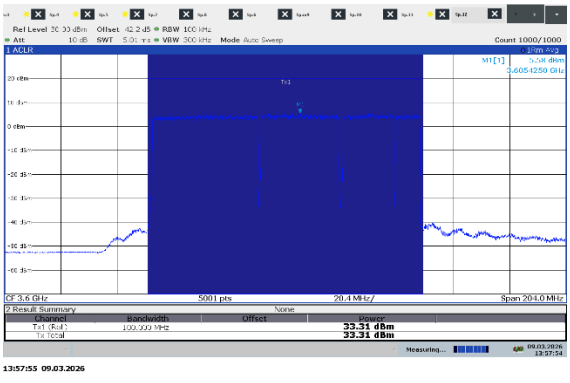

Figure 7.1-10 : *PAPR, 4CC 10+20+30+40 MHz, Average, sample plot*

Test data, continued

Table 7.1-4: *Full EIRP, provided for informative purposes only*

Aggregated Signal bandwidth, MHz		Frequency, MHz	Conducted power, dBm	EIRP power, dBm	EIRP power, Watts
1CC	10	3555	28.44	45.44	34.99
		3625	28.08	45.08	32.21
		3695	27.96	44.96	31.33
	20	3560	29.72	46.72	46.99
		3625	29.19	46.19	41.59
		3690	29.17	46.17	41.40
	30	3565	29.62	46.62	45.92
		3625	28.88	45.88	38.73
		3685	29.03	46.03	40.09
	40	3570	28.73	45.73	37.41
		3625	28.87	45.87	38.64
		3680	29.15	46.15	41.21
	60	3580	26.90	43.90	24.55
		3625	27.18	44.18	26.18
		3670	27.31	44.31	26.98
	80	3590	25.84	42.84	19.23
		3625	26.05	43.05	20.18
		3660	26.19	43.19	20.84
	100	3600	33.76	50.76	119.12
		3625	33.91	50.91	123.31
		3650	34.16	51.16	130.62
2CC	10 + 10	3560	31.48	48.48	70.47
		3625	31.03	48.03	63.53
		3690	31.04	48.04	63.68
	20 + 20	3570	33.83	50.83	121.06
		3625	34.17	51.17	130.92
		3680	34.40	51.40	138.04
	10 + 30	3570	33.41	50.41	109.90
		3625	33.67	50.67	116.68
		3680	33.79	50.79	119.95
	20 + 30	3575	33.28	50.28	106.66
		3625	33.57	50.57	114.02
		3675	33.68	50.68	116.95
	20 + 40	3580	33.51	50.51	112.46
		3625	33.78	50.78	119.67
		3670	34.06	51.06	127.64
	40 + 40	3590	33.74	50.74	118.58
		3625	33.91	50.91	123.31
		3660	34.02	51.02	126.47
	20 + 60	3590	33.80	50.80	120.23
		3625	34.04	51.04	127.06
		3660	34.11	51.11	129.12

Test data, continued

Table 7.1-4 *Full EIRP, provided for informative purposes only, continued*

Aggregated Signal bandwidth, MHz		Frequency, MHz	Conducted power, dBm	EIRP power, dBm	EIRP power, Watts
3CC	10 + 10 + 10	3565	32.71	49.71	93.54
		3625	32.85	49.85	96.61
		3685	32.98	49.98	99.54
	20 + 20 + 20	3580	33.69	50.69	117.22
		3625	33.89	50.89	122.74
		3670	34.06	51.06	127.64
	10 + 20 + 40	3585	33.34	50.34	108.14
		3625	33.57	50.57	114.02
		3665	33.68	50.68	116.95
	20 + 30 + 40	3595	33.36	50.36	108.64
		3625	33.54	50.54	113.24
		3655	33.64	50.64	115.88
4CC	20 + 20 + 20 + 20	3590	33.74	50.74	118.58
		3625	33.89	50.89	122.74
		3660	34.03	51.03	126.77
	10 + 20 + 30 + 40	3600	33.31	50.31	107.40
		3625	33.58	50.58	114.29
		3650	33.69	50.69	117.22

Note: *Antenna gain is 17 dBi.*

7.2 Occupied bandwidth

7.2.1 References, definitions and limits

FCC §2.1049

The occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission shall be measured under the following conditions as applicable:

FCC §96.41

(3)(i) The fundamental 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.

7.2.2 Test summary

Verdict	Pass		
Test date	March 5, 2026	Temperature	24 °C
Tested by	Tarek Elkholy	Air pressure	971 mbar
Test location	Cambridge	Relative humidity	39 %

7.2.3 Observations, settings and special notes

The test was performed as per ANSI C63.26, subclause 5.4.4.
Spectrum analyser settings:

Resolution bandwidth	1–5% of OBW
Video bandwidth	≥3 × RBW
Frequency span	1.5 × OBW
Detector mode	Peak
Trace mode	Max Hold

7.2.4 Test data

Table 7.2-1: *Bandwidth test results*

	Aggregated Signal bandwidth, MHz	Frequency, MHz	99% OBW, MHz	26 dB BW, MHz
1CC	10	3555	8.60	9.55
		3625	8.60	9.55
		3695	8.60	9.57
	20	3560	18.29	20.07
		3625	18.30	20.11
		3690	18.30	20.15
	30	3565	27.87	30.04
		3625	27.87	30.11
		3685	27.87	30.04
	40	3570	37.84	40.94
		3625	37.86	40.94
		3680	37.84	40.88
	60	3580	57.91	60.55
		3625	57.94	60.46
		3670	57.93	60.46
	80	3590	77.40	81.25
		3625	77.40	81.18
		3660	77.38	81.18
	100	3600	97.38	100.52
		3625	97.41	100.52
		3650	97.40	100.44
2CC	10 + 10	3560	18.43	19.71
		3625	18.43	19.71
		3690	18.42	19.69
	20 + 20	3570	38.13	41.20
		3625	38.15	41.30
		3680	38.13	41.20
	10 + 30	3570	37.70	40.02
		3625	37.72	40.02
		3680	37.71	39.98
	20 + 30	3575	47.81	50.62
		3625	47.82	50.62
		3675	47.80	50.42
	20 + 40	3580	57.62	62.57
		3625	57.65	62.52
		3670	57.63	62.66
	40 + 40	3590	77.43	81.57
		3625	77.44	81.50
		3660	77.41	81.44
	20 + 60	3590	77.25	81.76
		3625	77.23	81.76
		3660	77.21	81.69

Test data, continued

Table 7.2-2: *Bandwidth test results, continued*

	Aggregated Signal bandwidth, MHz	Frequency, MHz	99% OBW, MHz	26 dB BW, MHz
3CC	10 + 10 + 10	3565	28.26	29.66
		3625	28.26	29.63
		3685	28.26	29.59
	20 + 20 + 20	3580	57.58	62.09
		3625	57.61	62.13
		3670	57.60	62.18
	10 + 20 + 40	3585	66.92	69.69
		3625	66.94	69.69
		3665	66.94	69.75
	20 + 30 + 40	3595	86.84	90.32
		3625	86.83	90.18
		3655	86.79	90.11
4CC	20 + 20 + 20 + 20	3590	77.10	79.90
		3625	77.10	79.90
		3660	77.08	79.90
	10 + 20 + 30 + 40	3600	96.36	99.64
		3625	96.39	99.64
		3650	96.36	99.56

Figure 7.2-1: *99 % occupied bandwidth, 1CC 10 MHz, sample plot*

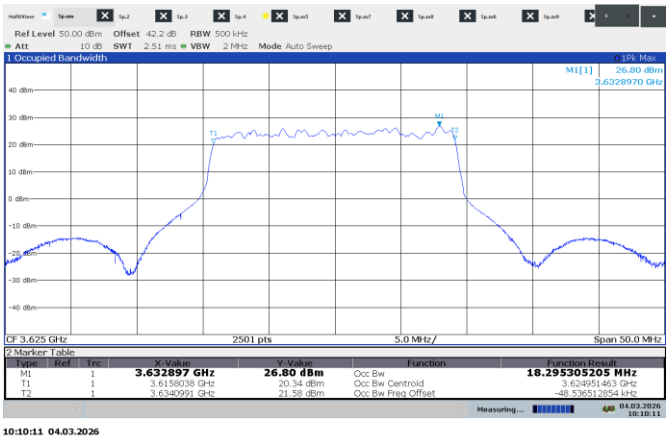

Figure 7.2-2: *99 % occupied bandwidth, 1CC 20 MHz, sample plot*

Test data, continued

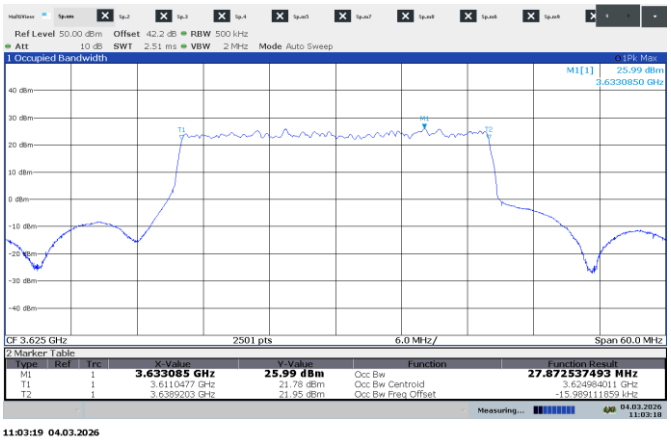

Figure 7.2-3: *99 % occupied bandwidth, 1CC 30 MHz, sample plot*

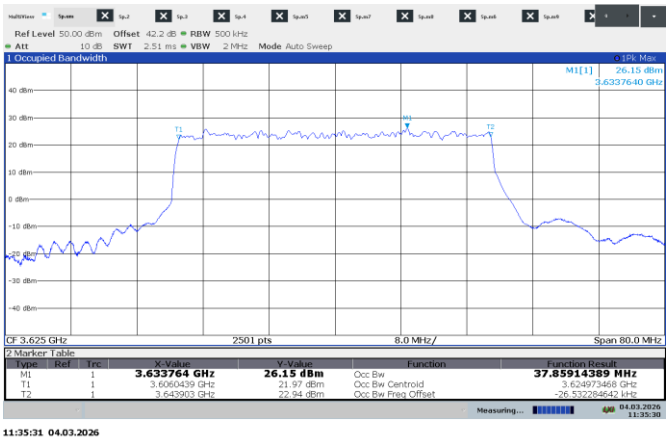

Figure 7.2-4: *99 % occupied bandwidth, 1CC 40 MHz, sample plot*

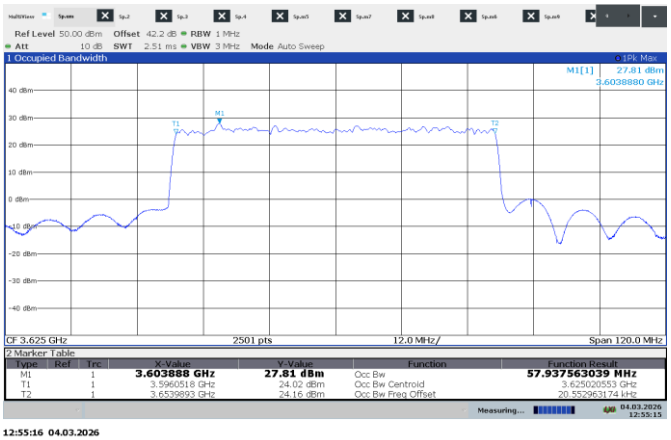

Figure 7.2-5: *99 % occupied bandwidth, 1CC 60 MHz, sample plot*

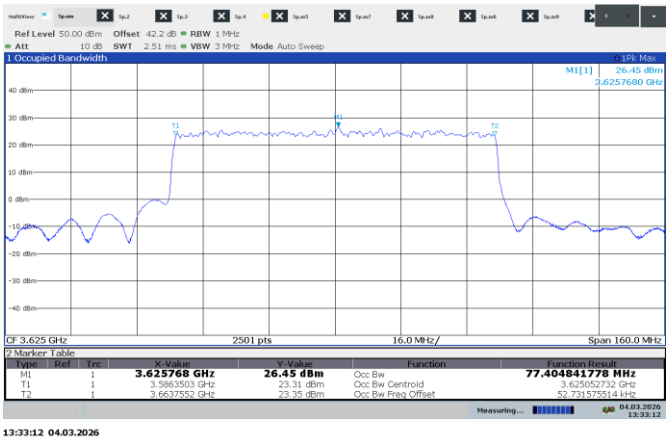

Figure 7.2-6: *99 % occupied bandwidth, 1CC 80 MHz, sample plot*

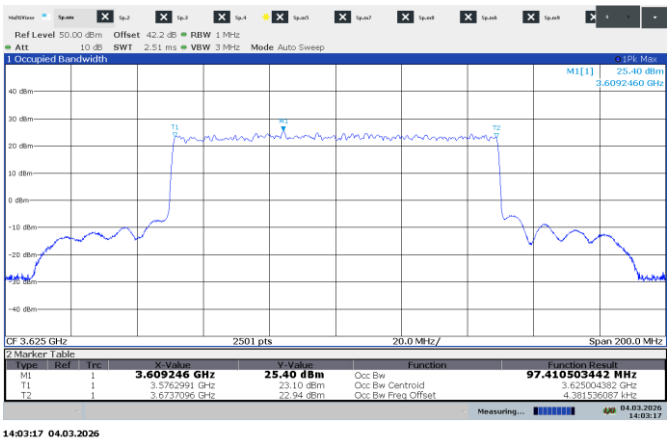

Figure 7.2-7: *99 % occupied bandwidth, 1CC 100 MHz, sample plot*

Figure 7.2-8: *26 dB bandwidth, 1CC 10 MHz, sample plot*

Test data, continued

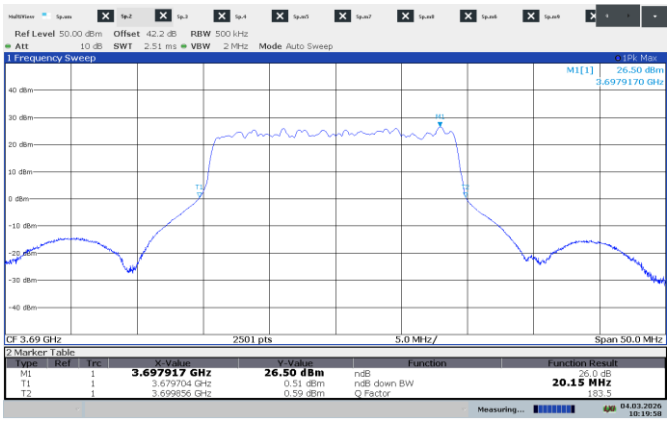

Figure 7.2-9: *26 dB bandwidth, 1CC 20 MHz, sample plot*

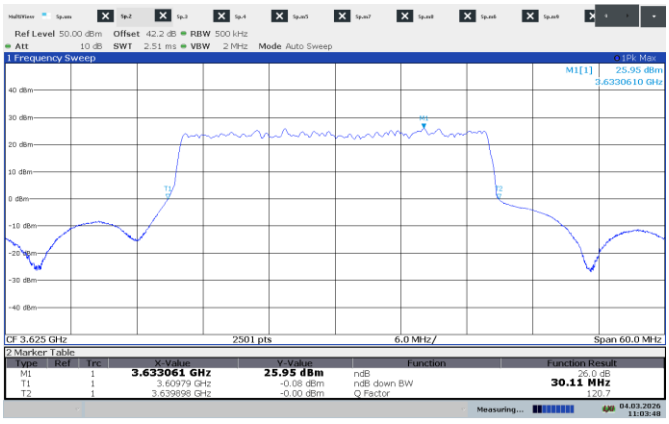

Figure 7.2-10: *26 dB bandwidth, 1CC 30 MHz, sample plot*

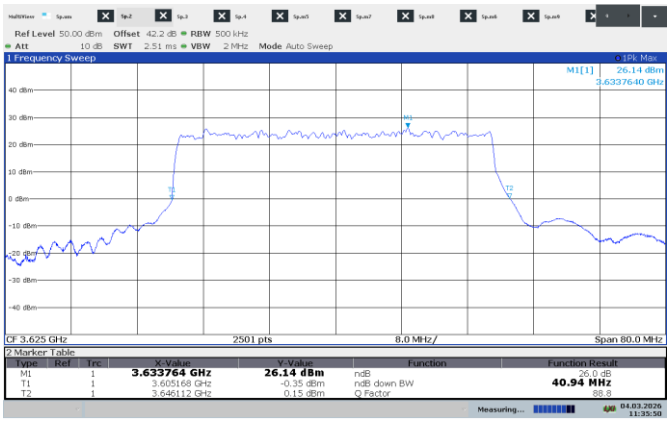

Figure 7.2-11: *26 dB bandwidth, 1CC 40 MHz, sample plot*

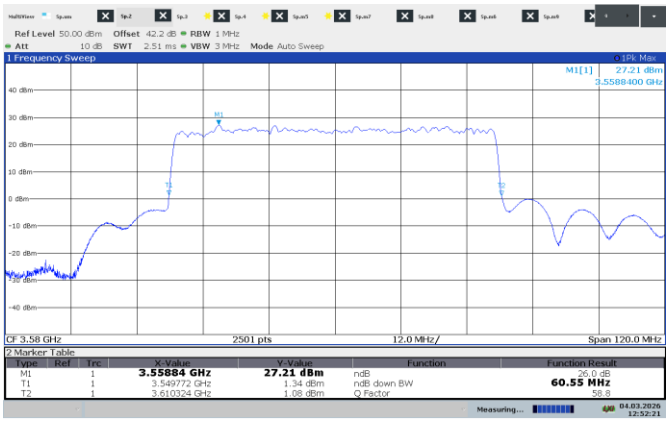

Figure 7.2-12: *26 dB bandwidth, 1CC 60 MHz, sample plot*

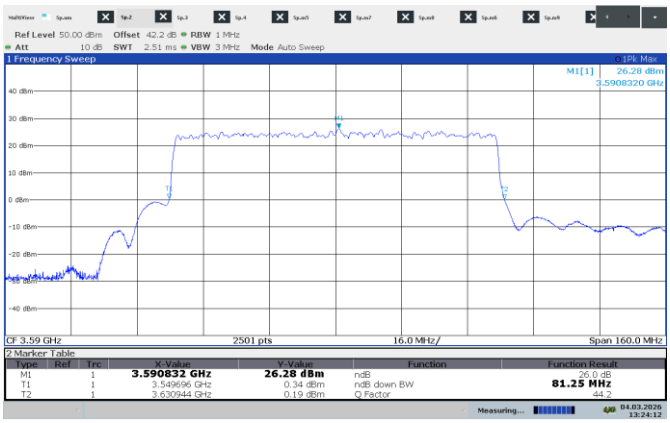

Figure 7.2-13: *26 dB bandwidth, 1CC 80 MHz, sample plot*

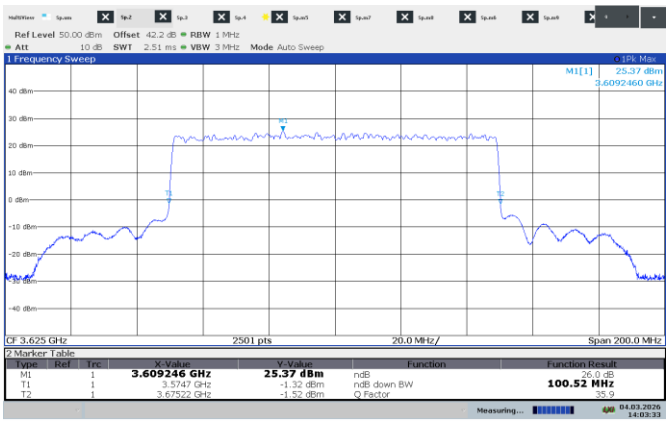

Figure 7.2-14: *26 dB bandwidth, 1CC 100 MHz, sample plot*

7.3 General protection levels

7.3.1 References, definitions and limits

FCC §96.41

(e)(1)(i) The conducted power of any CBSD emission outside the fundamental emission bandwidth shall not exceed −13 dBm/MHz within 0-10 megahertz above the upper SAS-assigned channel edge and within 0-10 megahertz below the lower SAS-assigned channel edge.
At all frequencies greater than 10 megahertz above the upper SAS assigned channel edge and less than 10 MHz below the lower SAS assigned channel edge, the conducted power of any CBSD emission shall not exceed −25 dBm/MHz.
The upper and lower SAS assigned channel edges are the upper and lower limits of any channel assigned to a CBSD by an SAS, or in the case of multiple contiguous channels, the upper and lower limits of the combined contiguous channels.

(e)(2) for CBSDs and End User Devices, the conducted power of emissions below 3540 MHz or above 3710 MHz shall not exceed −25 dBm/MHz, and the conducted power of emissions below 3530 MHz or above 3720 MHz shall not exceed −40dBm/MHz.

(e)(3)(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 authorized frequency channel, a resolution bandwidth of no less than one percent of the fundamental emission bandwidth may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full reference bandwidth (*i.e.,* 1 MHz or 1 percent of emission bandwidth, as specified). The fundamental 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.

7.3.2 Test summary

Verdict	Pass		
Test date	March 5, 2026	Temperature	24 °C
Tested by	Tarek Elkholy	Air pressure	971 mbar
Test location	Cambridge	Relative humidity	39 %

7.3.3 Observations, settings and special notes

- The spectrum was searched from 30 MHz to the 10th harmonic.
- All measurements were performed using an average (RMS) detector per ANSI C63.26 Paragraph 5.7.2 method.
- Radiated cabinet spurious emissions were performed while terminating the RF ports.
- Radiated cabinet spurious emissions were scanned at distance of 3 m, except for 1 – 6 GHz and 18 – 40 GHz which were carried out at 1 m distance to maintain low noise factor and avoid pre-amp saturation.

Spectrum analyser settings for out of band emissions:

Resolution bandwidth:	1 MHz
Video bandwidth:	> RBW
Detector mode:	RMS
Trace mode:	Averaging

Spectrum analyser settings for spurious emissions in the 1 MHz bands immediately outside and adjacent to the licensee's frequency block:

Resolution bandwidth:	At least 1% of EBW
Video bandwidth:	> RBW
Detector mode:	RMS
Trace mode:	Averaging

7.3.4 Test data

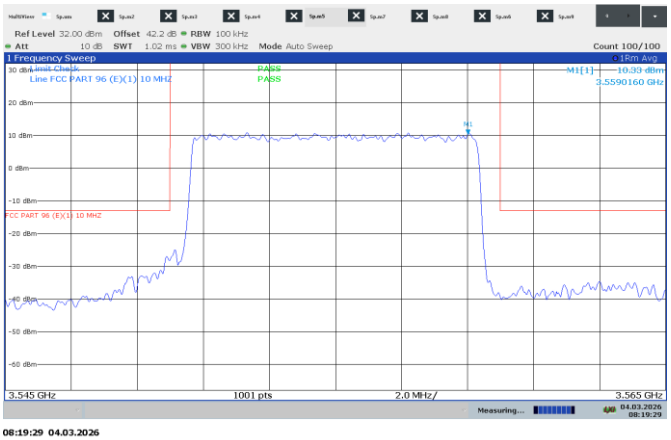

Figure 7.3-1: *Conducted band edge, RBW 1 % EBW, 1CC 10 MHz, low ch*

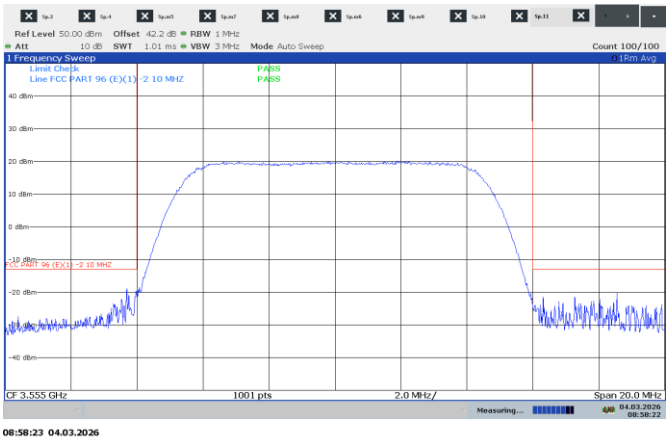

Figure 7.3-2: *Conducted band edge, 1CC 10 MHz, low ch*

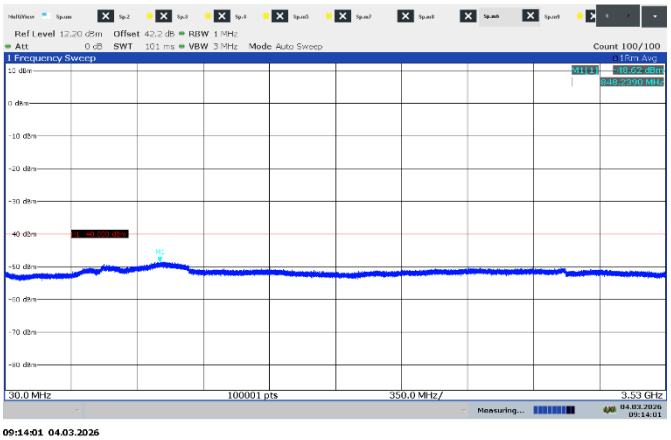

Figure 7.3-3: *Conducted sp. emissions, 30 – 3530 MHz, 1CC 10 MHz, low ch*

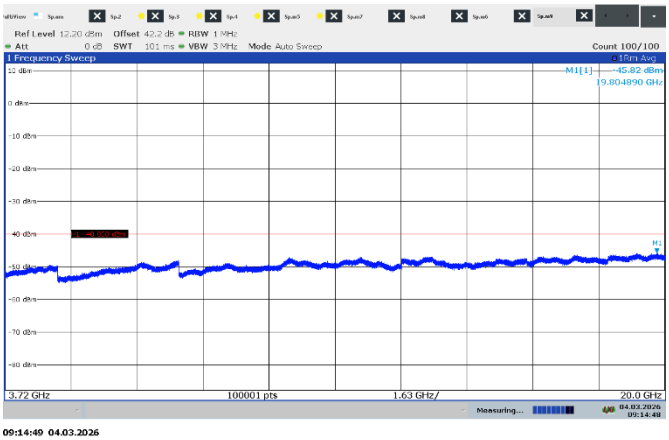

Figure 7.3-4: *Conducted sp. emissions, 3.72 – 20 GHz, 1CC 10 MHz, low ch*

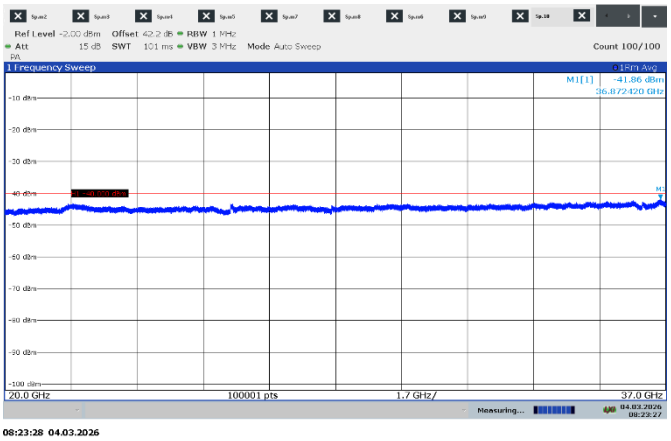

Figure 7.3-5: *Conducted sp. emissions, 20 – 37 GHz, 1CC 10 MHz, low ch*

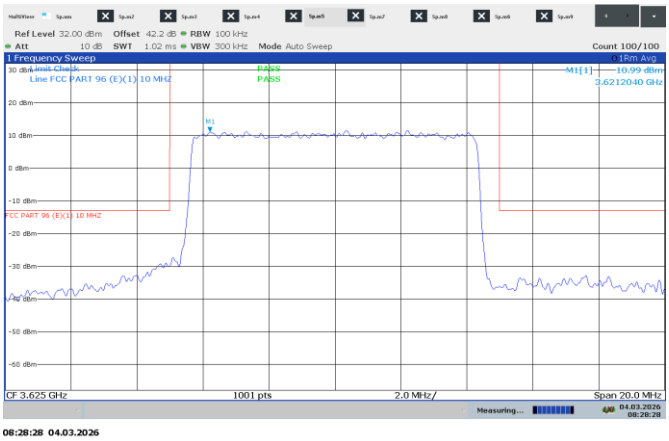

Figure 7.3-6: *Conducted band edge, RBW 1 % EBW, 1CC 10 MHz, mid ch*

Test data, continued

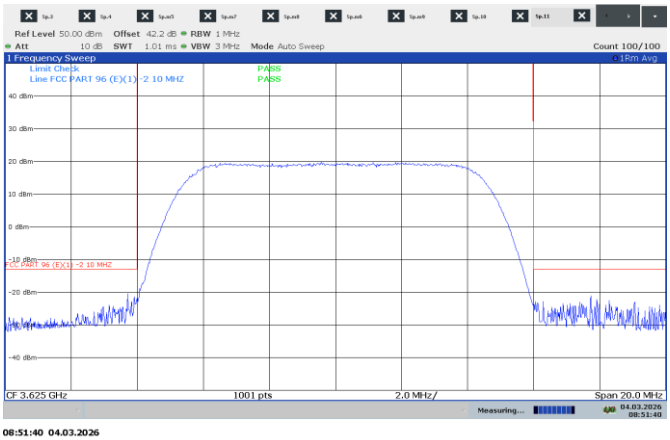

Figure 7.3-7: *Conducted band edge, 1CC 10 MHz, mid ch*

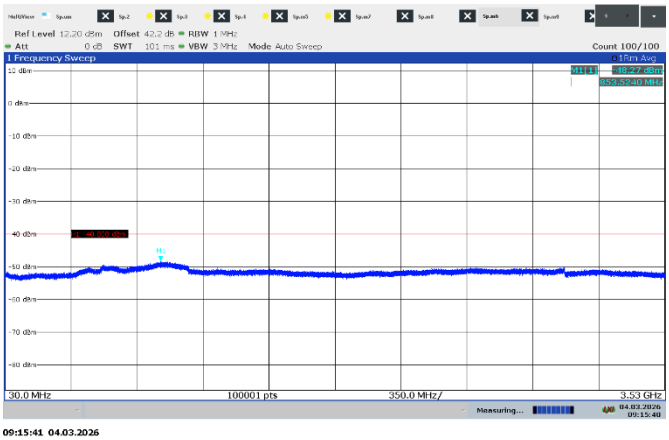

Figure 7.3-8: *Conducted sp. emissions, 30 – 3530 MHz, 1CC 10 MHz, mid ch*

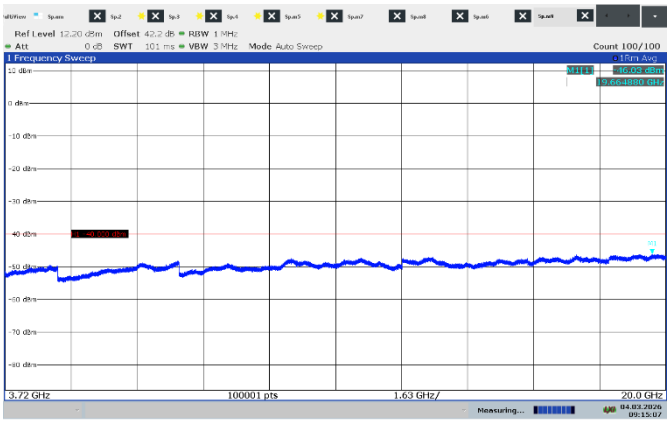

Figure 7.3-9: *Conducted sp. emissions, 3.72 – 20 GHz, 1CC 10 MHz, mid ch*

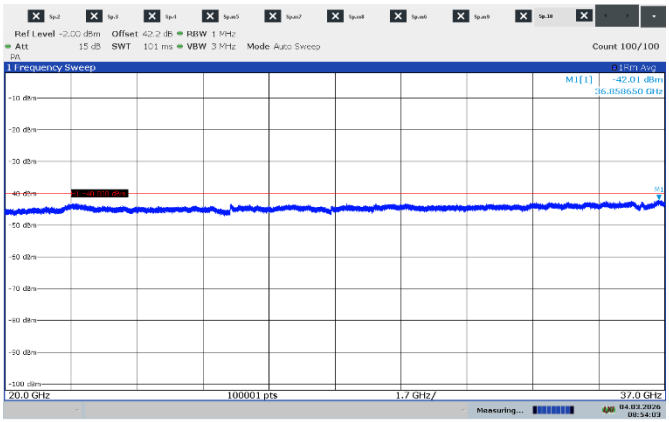

Figure 7.3-10: *Conducted sp. emissions, 20 – 37 GHz, 1CC 10 MHz, mid ch*

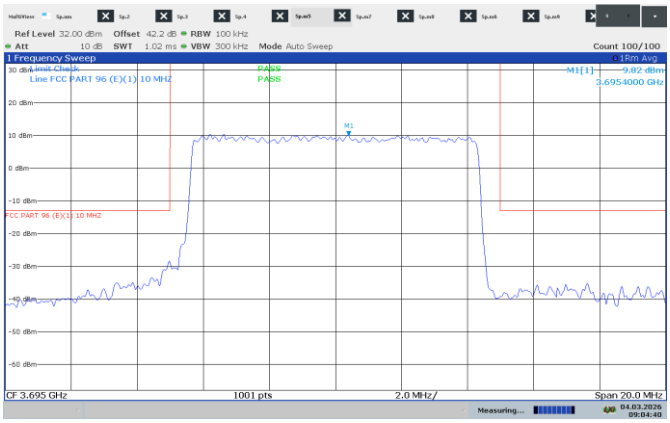

Figure 7.3-11: *Conducted band edge, RBW 1 % EBW, 1CC 10 MHz, high ch*

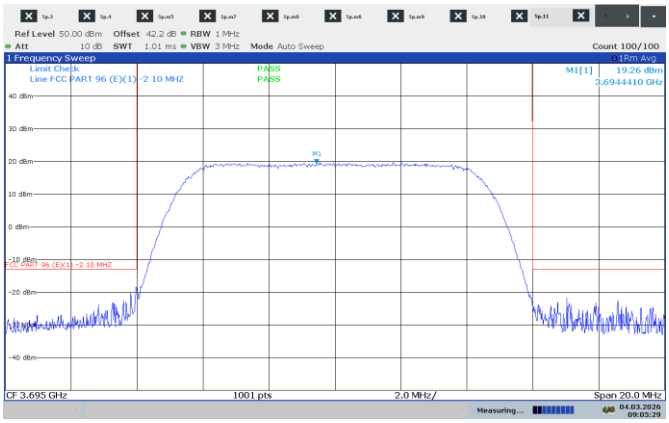

Figure 7.3-12: *Conducted band edge, 1CC 10 MHz, high ch*

Test data, continued

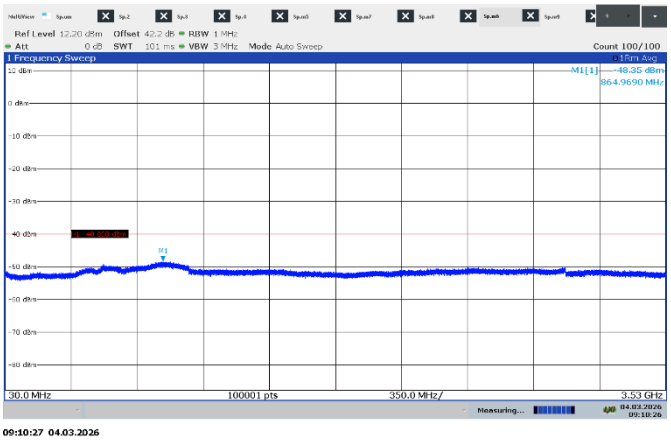

Figure 7.3-13: *Conducted sp. EMI, 30 – 3530 MHz, 1CC 10 MHz, high ch*

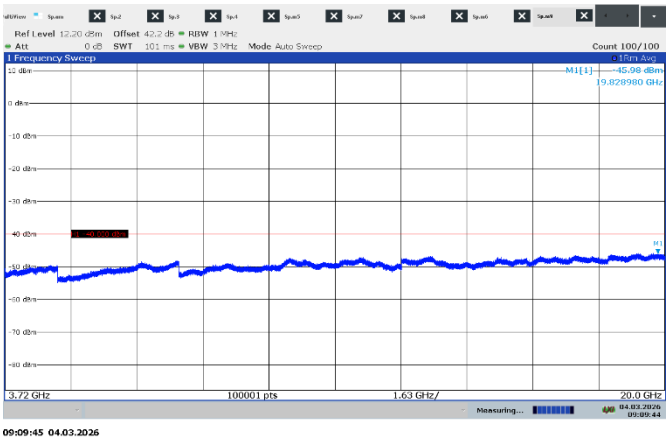

Figure 7.3-14: *Conducted sp. emissions, 3.72 – 20 GHz, 1CC 10 MHz, high ch*

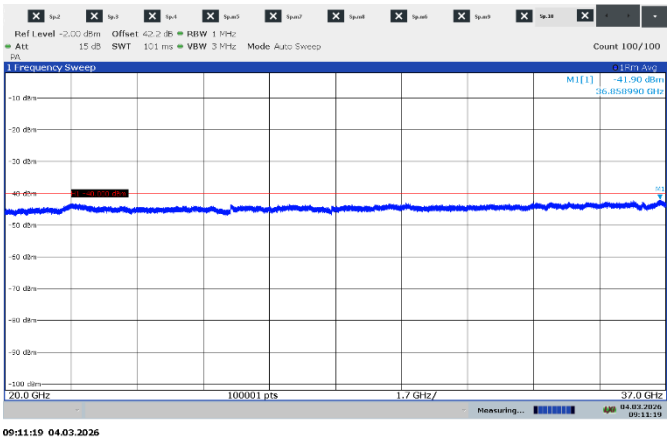

Figure 7.3-15: *Conducted sp. emissions, 20 – 37 GHz, 1CC 10 MHz, high ch*

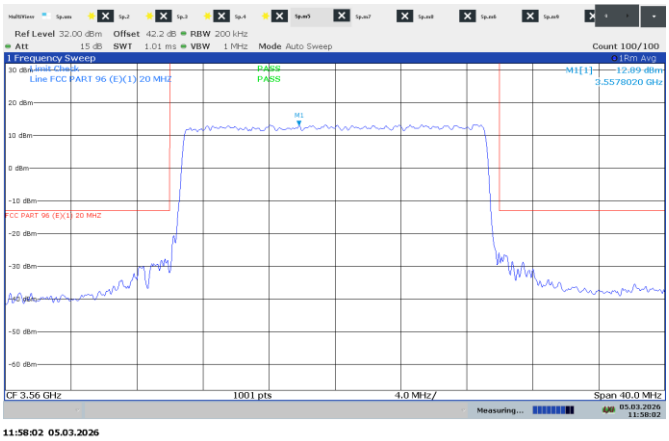

Figure 7.3-16: *Conducted band edge, RBW 1 % EBW, 1CC 20 MHz, low ch*

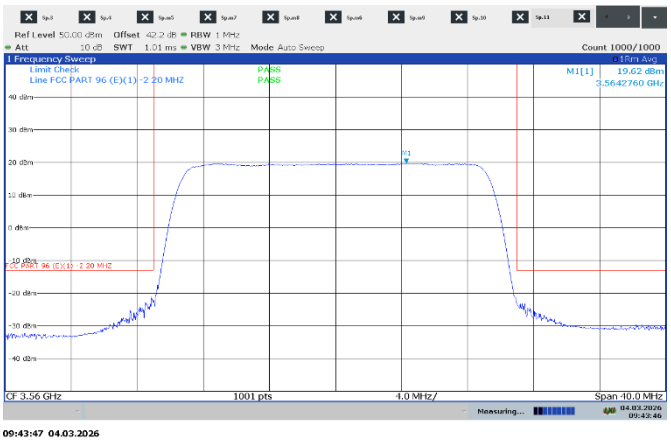

Figure 7.3-17: *Conducted band edge, 1CC 20 MHz, low ch*

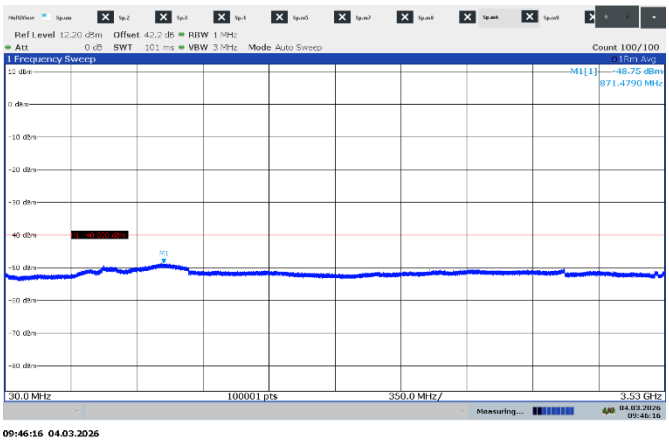

Figure 7.3-18: *Conducted sp. emissions, 30 – 3530 MHz, 1CC 20 MHz, low ch*

Test data, continued

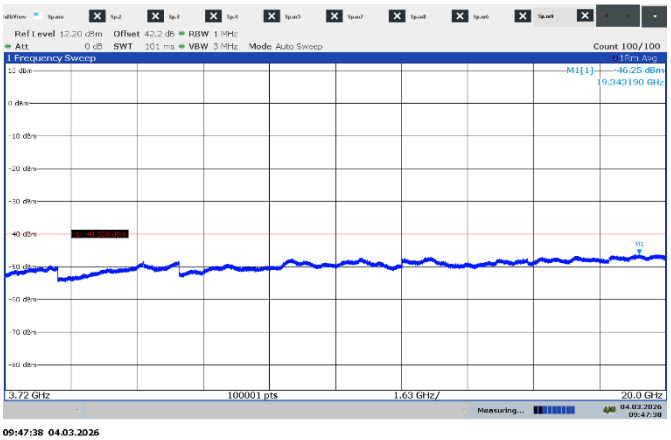

Figure 7.3-19: *Conducted sp. emissions, 3.72 – 20 GHz, 1CC 20 MHz, low ch*

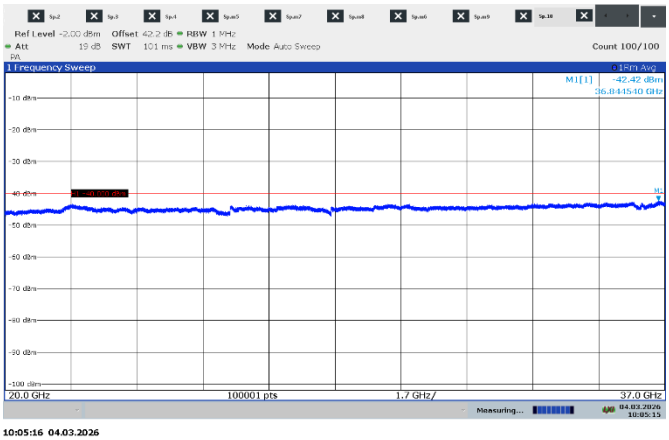

Figure 7.3-20: *Conducted sp. emissions, 20 – 37 GHz, 1CC 20 MHz, low ch*

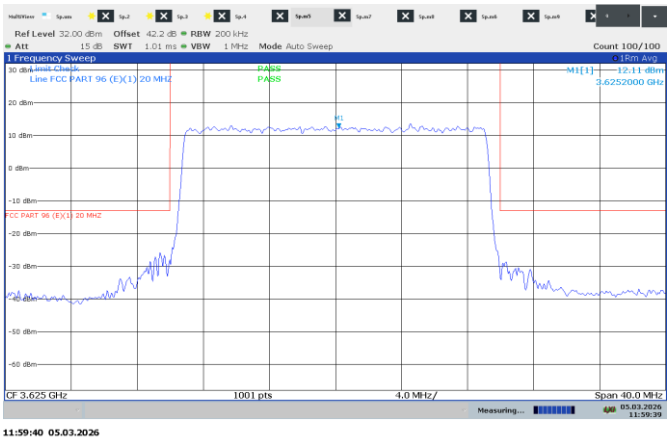

Figure 7.3-21: *Conducted band edge, RBW 1 % EBW, 1CC 20 MHz, mid ch*

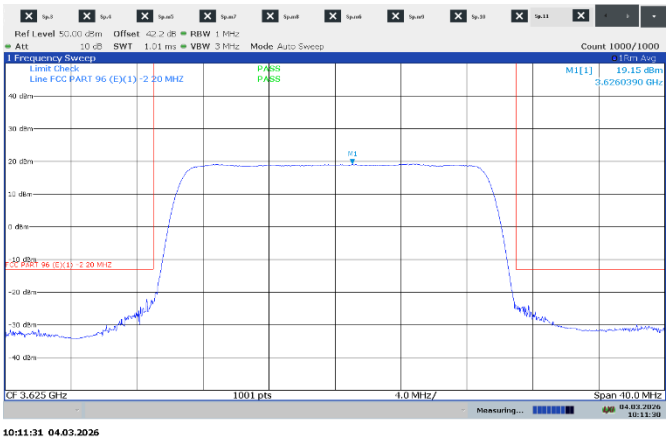

Figure 7.3-22: *Conducted band edge, 1CC 20 MHz, mid ch*

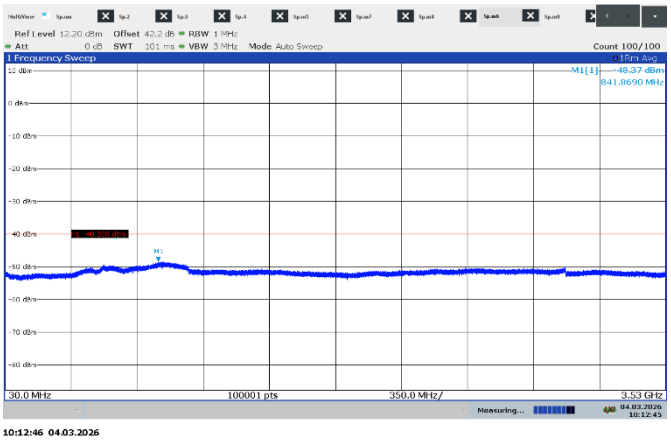

Figure 7.3-23: *Conducted sp. emissions, 30 – 3530 MHz, 1CC 20 MHz, mid ch*

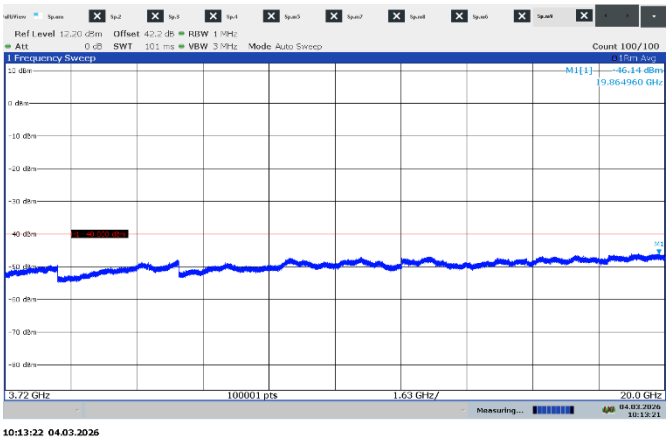

Figure 7.3-24: *Conducted sp. emissions, 3.72 – 20 GHz, 1CC 20 MHz, mid ch*