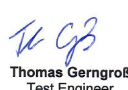
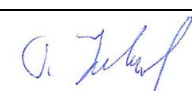




EMC Test report 2025-0163-EMC-TR-25-0149-V01

Designation:	CAP H2 34T/34T F-AC-F1 [34T]
Manufacturer:	Andrew
Serial no.:	BGH2AA2434005
ID no.:	7857017-0001 Rev.: 01
FCC ID:	XS5-H23437
ISED ID:	2237E-H23437
Test specifications:	Class 2, permissive change ANSI 63.26:2015 Partly of FCC Rules and regulations as listed in 47 CFR, Part 20 and Part 27 Partly of RSS-192 Issue 5 with RSS-GEN Issue 5 and RSS-131 Issue 4 ALL CONDUCTED MEASUREMENTS PERFORMED.
	BU
Test plan:	Test plan „BU-PC-2336-10“ from customer
Test result:	Passed

Date of issue:	27.01.2026		Signature:
Version:	01	Technical reviewer:	 Digitally signed by Thomas Gerngroß DN: cn=Thomas Gerngroß, o=Bureau Veritas CPS Germany GmbH, ou=ECL, email=thomas.gerngross@bureauveritas.com, c=DE Date: 2026.01.27 10:39:06 +01'00'
Date of receipt EUT:	14.07.2025		
Performance date:	17.07.2025 - 11.12.2025	Report reviewer:	 Digitally signed by Thomas Hufnagel Date: 2026.01.27 11:09:55 +01'00'



BNetzA-CAB-19/21-20



Deutsche
Akkreditierungsstelle
D-PL-12024-06-00

The test results relates only to the tested item. The sample has been provided by the client.
Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.

Bureau Veritas
Consumer Products Services Germany GmbH
www.bureauveritas.de/cps
Tel.: +49 (0)40 – 740 41 – 0

Schwerin
Mettenheimer Straße 12-14, 19061 Schwerin
cps-schwerin@bureauveritas.com

Tuerkheim
Businesspark A96, 86842 Tuerkheim
cps-tuerkheim@bureauveritas.com

Managing Director: Jörg-Timm Kilisch
VAT-No.: DE164793120
Reg.No.: Schwerin HRB 3564

Hamburg
Oehleckerring 40, 22419 Hamburg
cps-hamburg@bureauveritas.com

Nuremberg
Thurn-und-Taxis-Str. 18, 90411 Nuremberg
cps-nuernberg@bureauveritas.com

**Test Report No.: 25-0163-EMC-TR-25-0149-V01**

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

**BUREAU
VERITAS**

Client: Andrew Wireless System GmbH
Industriering 10
86675 Buchdorf
Germany

Test laboratory: Bureau Veritas Consumer Products Services Germany GmbH
Thurn-und-Taxis-Straße 18
D-90411 Nürnberg
Tel.: +49 40 74041 0

Test location: Bureau Veritas Consumer Products Services Germany GmbH
Thurn-und-Taxis-Straße 18
D-90411 Nürnberg

Laboratory accreditation no: DAKKS D-PL-12024-06-04
BNETZA-CAB-19/21-20

FCC designation number: DE0023
FCC test firm registration: 366481

ISED CAB identifier: DE0016
ISED company number: 3475A

Versions management:

V 01.00 Initial release

The test results relate only to the tested item. The sample has been provided by the client.
Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.



Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

BUREAU
VERITAS

Table of contents

1	APPLIED STANDARDS AND TEST SUMMARY	4
1.1	CFR APPLIED STANDARDS.....	4
1.2	FCC-ISED CORRELATION TABLE.....	6
1.3	MEASUREMENT SUMMARY/SIGNATURES	7
2	ADMINISTRATIVE DATA	10
2.1	TESTING LABORATORY	10
2.2	APPLICANT DATA	10
2.3	MANUFACTURER DATA.....	10
3	TEST OBJECT DATA	11
3.1	GENERAL EUT DESCRIPTION	11
3.2	EUT MAIN COMPONENTS	12
3.3	ANCILLARY EQUIPMENT	12
3.4	AUXILIARY EQUIPMENT	13
3.5	EUT SETUPS	13
3.6	OPERATING MODES.....	14
3.7	PRODUCT LABELLING.....	16
4	DESCRIPTION OF EMC TEST CENTRE	17
4.1	CLIMATIC CONDITIONS DURING MEASUREMENTS	17
4.2	CONFORMITY STATEMENT/DECISION RULE	17
4.3	MEASUREMENT UNCERTAINTIES.....	18
5	TEST RESULTS	19
5.1	EFFECTIVE RADIATED POWER, MEAN OUTPUT POWER AND ZONE ENHANCER GAIN.....	19
5.2	PEAK TO AVERAGE RATIO	30
5.3	OCCUPIED BANDWIDTH/INPUT-VERSUS-OUTPUT SPECTRUM.....	36
5.4	CONDUCTED SPURIOUS EMISSIONS AT ANTENNA TERMINALS.....	44
5.5	OUT-OF-BAND EMISSION LIMITS	55
5.6	OUT-OF-BAND REJECTION	67
5.7	FREQUENCY STABILITY	70
6	TEST EQUIPMENT	71
6.1	CONDUCTED	71
6.2	ANTENNA FACTORS. CABLE LOSS AND SAMPLE CALCULATION.....	71
7	PHOTO REPORT.....	72
	Annex A: Accreditation certificate (for information)	73
	Annex B: Additional information provided by client.....	74

The test results relate only to the tested item. The sample has been provided by the client.

Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.



Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

**BUREAU
VERITAS**

1 APPLIED STANDARDS AND TEST SUMMARY

1.1 CFR APPLIED STANDARDS

Type of authorization

Certification for an industrial signal booster.

Applicable FCC rules

Prepared in accordance with the requirements of FCC Rules and Regulations as listed in 47 CFR Chapter 1 Parts 2 and 20 and 27. The following subparts are applicable to the results in this test report.

Part 2, Subpart J - Equipment authorization procedures, certification

Part 20, Commercial mobiles services

§ 20.21 Signal boosters

Part 27; Miscellaneous wireless communications services

Subpart C – Technical standards

§ 27.50 – Power and duty cycle limits

§ 27.54 – Frequency stability

§ 27.53 – Emission limits

The test results relate only to the tested item. The sample has been provided by the client.
Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.

2025-0163-EMC-TR-25-0149-V01

Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

The tests were selected and performed with reference to:

- FCC Public Notice 935210 applying "Signal Boosters Basic Certification Requirements" 935210 D02, 2024-11-20.
- FCC Public Notice 935210 applying "Measurement guidance for industrial and non-consumer signal booster, repeater and amplifier devices" 935210 D05, 2020-04-03.
- FCC Public Notice 971168 applying "Measurement guidance for certification of licensed digital transmitters" 971168 D01, 2018-04-09.
- ANSI C63.26: 2015 "American National Standard for Compliance Testing of Transmitters Used in Licensec Radio Services"
- RSS-192 Issue 5 "Flexible Use Broadband Equipment Operating in the Band 3450-3900MHz"
- RSS-GEN Issue 5 "General Requirements for Compliance of Radio Apparatus"
- RSS-131 Issue 4 "Zone Enhancers"

1.2 FCC-ISED CORRELATION TABLE

Correlation of measurement requirements for Industrial signal booster from FCC and ISED Canada

Measurement	FCC reference	ISED reference
Effective radiated power, mean output power and zone enhancer gain	§ 27.50 KDB 935210 D05 v01r04: 3.5	RSS-GEN Issue 5, 6.12 RSS-131 Issue 4: 9.3 RSS-192 Issue 5, 5.5
Peak to average ratio	§ 27.50	RSS-192 Issue 5, 5.5
Occupied bandwidth Input-versus-output spectrum	§ 2.1049 KDB 935210 D05 v01r04: 3.4	RSS-GEN Issue 5, 6.7 RSS-131 Issue 4: 9.2
Out-of-band emissions limits	§ 2.1051 § 27.53 KDB 935210 D05 v01r04: 3.6	RSS-GEN Issue 5, 6.13 RSS-192 Issue 5, 5.6
Conducted spurious emission at antenna terminal(s)	§ 2.1051 § 27.53 KDB 935210 D05 v01r04: 3.6	RSS-GEN Issue 5, 6.13 RSS-192 Issue 5, 5.6
Frequency stability	§ 2.1055 § 27.54	RSS-GEN Issue 5, 6.11 RSS-131 Issue 4: 9.4 RSS-192 Issue 5, 5.4
Out-of-band rejection	KDB 935210 D05 v01r04: 3.3	RSS-131 Issue 4: 9.1
Field strength of spurious radiation	§ 2.1053 § 27.53	RSS-GEN Issue 5, 6.13 RSS-192 Issue 5, 5.5
All measurements	ANSI 63.26	ANSI 63.26

The test case frequency stability was not performed since the EUT is not equipped with signal processing capabilities. According KDB 935210 D05 in this case a measurement is not required.

The field strength of spurious radiation wasn't also tested because a class 2 permission change was performed at the DUT.

Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

1.3 MEASUREMENT SUMMARY/SIGNATURES

**47 CFR CHAPTER I FCC PART 27 Subpart C [Base § 27.50
stations/Repeater]**

Effective radiated power, mean output power and zone enhancer gain
The measurement was performed according to ANSI C63.26,
KDB 935210 D05 v01r04: 3.5

Final Result

OP-Mode

Frequency band; direction; input Power; signal type

TDD 34, RF downlink, 0.3 dB < AGC, Wideband

TDD 34, RF downlink, 3 dB > AGC, Wideband

TDD 34, RF downlink, 0.3 dB < AGC, Wideband 5G

TDD 34, RF downlink, 3 dB > AGC, Wideband 5G

FCC

ISED

Passed

Passed

Passed

Passed

Passed

Passed

Passed

Passed

**47 CFR CHAPTER I FCC PART 27 Subpart C [Base § 27.50
stations/Repeater]**

Peak to average ratio

The measurement was performed according to ANSI C63.26

Final Result

FCC

ISED

TDD 34, RF downlink, 0.3 dB < AGC, Wideband

Passed

Passed

TDD 34, RF downlink, 3 dB > AGC, Wideband

Passed

Passed

TDD 34, RF downlink, 0.3 dB < AGC, Wideband 5G

Passed

Passed

TDD 34, RF downlink, 3 dB > AGC, Wideband 5G

Passed

Passed

47 CFR CHAPTER I FCC PART 2

§ 2.1049

Occupied bandwidth/input-versus-output spectrum

The measurement was performed according to ANSI C63.26,

KDB 935210 D05 v01r04: 3.4

Final Result

OP-Mode

Frequency band; direction; input power; signal type

TDD 34, RF downlink, 0.3 dB < AGC, Wideband

TDD 34, RF downlink, 3 dB > AGC, Wideband

TDD 34, RF downlink, 0.3 dB < AGC, Wideband 5G

TDD 34, RF downlink, 3 dB > AGC, Wideband 5G

FCC

ISED

Passed

Passed

Passed

Passed

Passed

Passed

Passed

Passed

**47 CFR CHAPTER I FCC PART 27 Subpart C [Base § 2.1051, § 27.53
stations/Repeater]**

Conducted spurious emissions at antenna terminals

The measurement was performed according to ANSI C63.26,
KDB 935210 D05 v01r04: 3.6

OP-Mode

Frequency band; Direction; Input power; Signal type

TDD 34, RF downlink, Wideband

TDD 34, RF downlink, Wideband 5G

Final Result
FCC
ISED

Passed

Passed

Passed

Passed

**47 CFR CHAPTER I FCC PART 27 Subpart C [Base
stations/Repeater]**
§2.1051, § 27.53

Out-of-band emission limits

The measurement was performed according to ANSI C63.26,
KDB 935210 D05 v01r04: 3.6

OP-Mode

Band edge; frequency band; number of signals; direction; input power; signal
type

FCC
ISED

Passed

Passed

Upper, TDD 34, 1, RF downlink, 0.3 dB < AGC, Wideband

Passed

Passed

Upper, TDD 34, 1, RF downlink, 3 dB > AGC, Wideband

Passed

Passed

Upper, TDD 34, 1, RF downlink, 0.3 dB < AGC, Wideband 5G

Passed

Passed

Upper, TDD 34, 1, RF downlink, 3 dB > AGC, Wideband 5G

Passed

Passed

Lower, TDD 34, 1, RF downlink, 0.3 dB < AGC, Wideband

Passed

Passed

Lower, TDD 34, 1, RF downlink, 3 dB < AGC, Wideband

Passed

Passed

Lower, TDD 34, 1, RF downlink, 0.3 dB < AGC, Wideband 5G

Passed

Passed

Lower, TDD 34, 1, RF downlink, 3 dB < AGC, Wideband 5G

Passed

Passed

Upper, TDD 34, 2, RF downlink, 0.3 dB < AGC, Wideband

Passed

Passed

Upper, TDD 34, 2, RF downlink, 3 dB > AGC, Wideband

Passed

Passed

Lower, TDD 34, 2, RF downlink, , 0.3 dB < AGC, Wideband

Passed

Passed

Lower, TDD 34, 2, RF downlink, 0.3 dB < AGC, Wideband

Passed

Passed



Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

**BUREAU
VERITAS**

47 CFR CHAPTER I FCC PART 27 Subpart C [Base stations/Repeater] KDB 935210 D05 v01r04: 3.3

Out-of-band rejection

The measurement was performed according to ANSI C63.26;

KDB 935210 D05 v01r04: 3.3

Final Result

OP-Mode

Frequency band; direction

TDD 34, RF downlink

FCC

ISED

Passed

Passed

The test case frequency stability was not performed, since the EUT is not equipped with signal processing capabilities.

The test results relate only to the tested item. The sample has been provided by the client.

Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.

2025-0163-EMC-TR-25-0149-V01



Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

BUREAU
VERITAS

2 ADMINISTRATIVE DATA

2.1 TESTING LABORATORY

Bureau Veritas Consumer Products Services

Germany GmbH

Thurn-und-Taxis-Straße 18

D-90411 Nürnberg

Tel.: +49 40 74041 0

Fax: +49 40 74041-2755

2.2 APPLICANT DATA

Company name: Andrew Wireless Systems GmbH
Address: Industriering 10
86675 Buchdorf
Germany

Contact person: Mr. Jiri Cecka

2.3 MANUFACTURER DATA

Company name: Please see applicant data.

Address:

The test results relate only to the tested item. The sample has been provided by the client.
Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.

2025-0163-EMC-TR-25-0149-V01

3 TEST OBJECT DATA

3.1 GENERAL EUT DESCRIPTION

Kind of device; product description	Cellular repeater
Product name	Cellular repeater
Type	CAP H2 34T/34T F-AC-F1
Declared EUT data by the supplier	
General product description	The EUT is an industrial signal booster supporting the following: Band 34T: 3450 MHz - 3550 MHz Band 34T from 3700 MHz – 3980 MHz with the segments: Segment 1: 3700 MHz - 3800 MHz Segment 2: 3790 MHz - 3890 MHz Segment 3: 3880 MHz – 3980 MHz A RF operation is only supported for the downlink.
Booster type	Industrial signal booster
Voltage type	AC/50 Hz – 60 Hz
Voltage level	100 V - 240 V
Maximum output donor port (uplink)	-
Maximum output server port (downlink)	43 dBm in all bands
Maximum gain (uplink)	-
Maximum gain (downlink)	48 dB in all bands

The main components of the EUT are listed and described in chapter 3.2 EUT Main components.

Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

3.2 EUT MAIN COMPONENTS

Sample parameter	Value
Serial number	SZBEAQ2501A0056
HW version	7857017-0001 Rev.: 00
SW version	1.10.0.1219
Comment	-----

NOTE: The short description is used to simplify the identification of the EUT in this test report.

3.3 ANCILLARY EQUIPMENT

For the purposes of this test report, ancillary equipment is defined as equipment which is used in conjunction with the EUT to provide operational and control features to the EUT. It is necessary to configure the system in a typical fashion, as a customer would normally use it. But nevertheless Ancillary Equipment can influence the test results.

Device	Details (manufacturer, type model, OUT code)	Description
-	-	-

3.4 AUXILIARY EQUIPMENT

For the purposes of this test report, auxiliary equipment is defined as equipment which is used temporarily to enable operational and control features especially used for the tests of the EUT which is not used during normal operation or equipment that is used during the tests in combination with the EUT but is not subject of this test report. It is necessary to configure the system in a typical fashion, as a customer would normally use it. But nevertheless Auxiliary Equipment can influence the test results.

Device	Details (manufacturer, type, S/N)	Description
AUX1	CommScope, ION-E PSZ Shelf AC, FD34499	Power supply rack
AUX2	GE Power Electronic Inc., CAR1212FPBC-Z, EL17448	Power plug-in module
AUX3	CommScope, ION-E WCS-2, SZAEJAJ1925A0019	Module rack
AUX4	CommScope, ION-E OPT, SZBEAD2043A0127	Optical plug-in module
AUX5	Commcope, 7680813, APAP25120001628	Optical plug in probe
AUX6	Commcope, 7680813, APAP25120001628	Optical plug in probe
AUX8	CommScope, ION-E SUI, SZBEAC172A0002	Interface card plug-in module
AUX8	CommScope, RFD HB, SZBEAQ2501A0056	RF card plug-in module
AUX9	CommScope, RFD HB, SZBEAQ2512A0017	RF card plug-in module

3.5 EUT SETUPS

This chapter describes the combination of EUTs and equipment used for testing. The rationale for selecting the EUTs, ancillary and auxiliary equipment and interconnecting cables, is to test a representative configuration meeting the requirements of the referenced standards.

Setup	Combination of EUTs	Description and rationale
	,	Setup for all tests

3.6 OPERATING MODES

This chapter describes the operating modes of the EUT used for testing.

3.6.1 TEST CHANNELS

Segment of TDD 34 band	Direction	Lower frequency band edge [MHz]	Upper frequency band edge [MHz]	Center frequency [MHz]	Port
34T	Downlink	3450.0	3550.0	3500.0	Donor

3.6.2 DEFINITION OF USED FREQUENCY BANDS

Wideband: representation by an AWGN signal with 4.1 MHz

Wideband 5G: representation by an AWGN signal with 98.3 MHz

3.6.3 AUTOMATIC GAIN CONTROL LEVELS

AGC Levels							
Band	Direction	Signal Type	AGC Start Pin [dBm]	AGC Start Pin -0.3 dB [dBm]	AGC Start Pin +3 dB [dBm]	Frequency [MHz]	Frequency
34 TDD	Downlink	Wideband	-4.3	-4.6	-1.3	3500.00	Mid
34 TDD	Downlink	Wideband 5G	-4.0	-4.3	-1.0	3500.00	
34 TDD	Downlink	Wideband	-3.0	-3.3	0.0	3452.50	Low
34 TDD	Downlink	Wideband	-3.4	-3.7	-0.4	3547.50	High
34 TDD	Downlink	Wideband	-4.6	-4.9	-1.5	3546.00	Max.Power
34 TDD	Downlink	Wideband 5G	-4.0	-4.3	-1.0	3500.00	

Remark:

If the measured frequency f_0 for the max power has a too low distance to the band edges, because in the tests modulated signals must be used: The next possible frequency to the according band edge was used.

The minimum distances to the band edges are:

AWGN signal (wideband): 2.5 MHz

AWGN signal (wideband 5G): Here only measurements at the mid frequency were performed, because of the signal width.



**BUREAU
VERITAS**

Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

3.7 PRODUCT LABELLING

3.7.1 FCC ID LABEL

Please refer to the documentation of the applicant.

3.7.2 LOCATION OF THE LABEL ON THE EUT

Please refer to the documentation of the applicant.

The test results relate only to the tested item. The sample has been provided by the client.
Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.

2025-0163-EMC-TR-25-0149-V01

Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

4 DESCRIPTION OF EMC TEST CENTRE

4.1 CLIMATIC CONDITIONS DURING MEASUREMENTS

The climatic conditions were within the following ranges.

For ESD testing, the conditions during the test were denoted in the corresponding chapter.

Ambient temperature:	25 ± 10 °C
Relative humidity:	20 – 60 %
Air pressure:	860 - 1060 hPa

4.2 CONFORMITY STATEMENT/DECISION RULE

4.2.1 EMISSION

If the standard or the customer defines no decision rule, the laboratory applies a decision rule following the "Binary Statement for Simple Acceptance Rule ($w=0$)" (chapter 4.2.1) of ILAC Guidelines on Decision Rules and Statements of Conformity (ILAC-G8:09/2019). If the measured value is at the limit value, it is evaluated as PASS. The client has agreed with application of the decision rule prior testing and demanded a statement of conformity by the test laboratory.

4.3 MEASUREMENT UNCERTAINTIES

KDB 935210 D05	Test laboratory
Power measurement	0,68 dB
Measuring AGC threshold level	0,90 dB
Out of band rejection	0,90 dB
Input-versus-output signal comparison	0,91 dB
Mean power output	0,90 dB
Measuring out-of-band/out-of-block (including intermodulation) emissions and spurious emissions	0,90 dB
Out-of-band/out-of-block emissions conducted measurements	0,90 dB
Spurious emissions conducted	2,18 dB
Spurious emissions radiated measurements	5,38 dB
Total frequency uncertainty	2×10^{-7}

Reference : ECL-MU5.4.6.3-EMC-14-001-V03.00 MU Wireless.xlsx

Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

5 TEST RESULTS

5.1 EFFECTIVE RADIATED POWER, MEAN OUTPUT POWER AND ZONE ENHANCER GAIN

Standard FCC Part 27, §27.50

The test was performed according to:

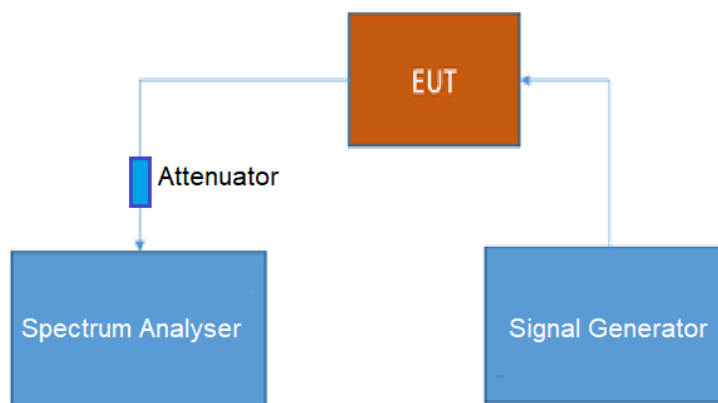
ANSI C63.26, KDB 935210 D05 v01r04: 3.5

Test date: 2025-07-23/2025-07-25**Environmental conditions:** 28.9 °C; 34 % r. H./27.7 °C ; 43 % r. H.**Test engineer:** Thomas Hufnagel

5.1.1 TEST DESCRIPTION

This test case is intended to demonstrate compliance to the signal booster power and gain limits and requirements for industrial signal boosters.

The EUT was connected to the test setup according to the following diagram:



The attenuation of the measuring and stimulus path are known for each measured frequency and are considered.

The Spectrum Analyser settings can be directly found in the measurement diagrams.

Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

5.1.2 TEST REQUIREMENTS/LIMITSAbstract from FCC Part 27:**§ 27.50**

- (k) The following power requirements apply to stations transmitting in the 3450-3550 MHz band:
- (1) The power of each fixed or base station transmitting in the 3450-3550 MHz band and located in any county with population density of 100 or fewer persons per square mile, based upon the most recently available population statistics from the Bureau of the Census, is limited to an equivalent isotropically radiated power (EIRP) of 3280 Watts/MHz. This limit applies to the aggregate power of all antenna elements in any given sector of a base station.
 - (2) The power of each fixed or base station transmitting in the 3450-3550 MHz band and situated in any geographic location other than that described in paragraph (j)(1) of this section is limited to an EIRP of 1640 Watts/MHz. This limit applies to the aggregate power of all antenna elements in any given sector of a base station.
 - (3) Mobile and portable stations are limited to 1 Watt EIRP. Mobile and portable stations operating in these bands must employ a means for limiting power to the minimum necessary for successful communications.
 - (4) Equipment employed must be authorized in accordance with the provisions of § 27.51. Power measurements for transmissions by stations authorized under this section may be made either in accordance with a Commission-approved average power technique or in compliance with paragraph (j)(5) of this section. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.
 - (5) Peak transmit power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage. The measurement results shall be properly adjusted for any instrument limitations, such as detector response times, limited resolution bandwidth capability when compared to the emission bandwidth, sensitivity, and any other relevant factors, so as to obtain a true peak measurement for the emission in question over the full bandwidth of the channel.

The test results relate only to the tested item. The sample has been provided by the client.

Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.

Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

Abstract from RSS-131:**RSS-131; 9.3 Mean output power and zone enhancer gain**

The zone enhancer gain shall not exceed the nominal gain (i.e the maximum gain at any frequency within the zone enhancer's passband) by more than 1.0 dB. Outside of the 20 dB passband bandwidth, the gain shall not exceed the gain at the 20 dB point.

Abstract from RSS-192:**RSS-192; 5.5 Transmitter output power**

The maximum output power of the equipment measured in terms of average values shall comply with the limits specified in table 1.

Table 1: Maximum power of equipment

Equipment type	Maximum power
Non-AAS: base station (outdoor), fixed P-P station, P-MP hub station	68 dBm e.i.r.p./5 MHz
AAS: base station (outdoor), P-MP hub station	47 dBm TRP/5MHz
Indoor base station	39 dBm TRP/channel bandwidth
Fixed subscriber equipment	39 dBm e.i.r.p./channel bandwidth
Subscriber equipment other than fixed subscriber equipment	30 dBm e.i.r.p./channel bandwidth

Use of ISED limit:

The ISED limit of 68 dBm/5 MHz EIRP is taken and converted into the limit of 61.0 dBm/MHz EIRP for the tables.

5.1.3 TEST PROTOCOL

FCC table

TDD 34, ANT 2; Downlink							
Signal type	Input power	Frequency [MHz]	Input power [dBm]	Maximum average output power [dBm]	Limit average output power [dBm/MHz] EIRP	Margin to limit [dB]	Gain [dB]
Wideband	0.3 dB < AGC	3546.0	-4.9	42.8	62.1	19.3	47.7
Wideband	3 dB > AGC	3546.0	-1.5	42.9	62.1	19.2	44.4
Wideband 5G	0.3 dB < AGC	3500.0	-4.3	43.0	62.1	19.1	47.3
Wideband 5G	3 dB > AGC	3500.0	-1.0	43.2	62.1	19.0	44.1

ISED table

TDD 34, ANT 2; Downlink							
Signal type	Input power	Frequency [MHz]	Input power [dBm]	Maximum average output power [dBm]	Limit average output power [dBm/MHz] EIRP	Margin to limit [dB]	Gain [dB]
Wideband	0.3 dB < AGC	3546.0	-4.9	42.8	61.0	18.2	47.7
Wideband	3 dB > AGC	3546.0	-1.5	42.9	61.0	18.1	44.4
Wideband 5G	0.3 dB < AGC	3500.0	-4.3	43.0	61.0	18.0	47.3
Wideband 5G	3 dB > AGC	3500.0	-1.0	43.2	61.0	17.9	44.1

The manufacturer's nominal gain value is 48 dB. According RSS-131 the gain may not exceed a limit of nominal gain plus 1.0 dB.

The maximum measured gain in the ISED tables above is 47.7 dB: The DUT meets this requirement: **PASS**.

Remark: Please see next sub-clause for the measurement plots.

Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

5.1.4 SAMPLE CALCULATION OF OUTPUT POWERFCC calculation:**Maximum output power (EIRP) in consideration together with the send antenna**

The highest power level in the tables above is

 $p_{\text{highest}} = 43.2 \text{ dBm}$ at the channel which has the most output power of all channels.Hereby at an antenna gain of $G_{\text{dBi}} = 13 \text{ dB}$ the highest effective radiated output power EIRP $p_{\text{EIRP 1CH}}$ of one channel is:

$$p_{\text{EIRP 1CH}} = p_{\text{highest}} + G_{\text{dBi}}$$

This results in:

$$p_{\text{EIRP 1CH}} = 43.2 \text{ dBm} + 13.0 \text{ dB} = 56.2 \text{ dBm}$$

The equivalent power P is according the given formula:

$$P_{\text{EIRP 1CH}} =$$

$$P_{\text{EIRP 1CH}} [\text{W}] = 10 \exp \left(\left(p_{\text{EIRP 1CH}} [\text{dBm}] / 10 \right) * 0.001 [\text{W}] \right)$$

This results in:

$$P_{\text{EIRP 1CH}} [\text{W}] = 10 \exp \left(\left(56.2 [\text{dBm}] / 10 \right) * 0.001 [\text{W}] \right) = 398 \text{ W}$$

Supposed all antenna ports are working together in MIMO operation the highest value of the highest output power $p_{\text{EIRP all channels}}$ is:

$$p_{\text{EIRP all channels}} = 2 * p_{\text{EIRP 1CH}}$$

This results in:

$$p_{\text{EIRP all channels}} = 2 * 398 \text{ W} = 756 \text{ W}$$

Final result of this consideration:

 $p_{\text{EIRP all channels}} = 756 \text{ W} < 1640 \text{ W/MHz}$, hereby 1640 W/MHz is the highest allowed limit in this band which equates 62.1 dBm/MHz.**The DUT doesn't exceed the limit.**

Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

ISED calculation:**Maximum output power (EIRP) in consideration together with the send antenna**

The highest power level in the tables above is

$p_{\text{highest}} = 43.2 \text{ dBm}$ at the channel which has the most output power of all channels.

Hereby at an antenna gain of $G_{\text{dBi}} = 13 \text{ dB}$ the highest effective radiated output power EIRP $p_{\text{EIRP 1CH}}$ of one channel is:

$$p_{\text{EIRP 1CH}} = p_{\text{highest}} + G_{\text{dBi}}$$

This results in:

$$p_{\text{EIRP 1CH}} = 43.2 \text{ dBm} + 13.0 \text{ dB} = 56.2 \text{ dBm}$$

Supposed all antenna ports are working together in MIMO operation the highest value of the highest output power $p_{\text{EIRP all channels}}$ is:

$$p_{\text{EIRP all channels}} = p_{\text{EIRP 1CH}} + 3 \text{ dB}$$

This results in:

$$p_{\text{EIRP all channels}} = 56.2 \text{ dBm} + 3.0 \text{ dB} = 59.2 \text{ dBm}$$

Final result of this consideration:

$p_{\text{EIRP all channels}} = 59.2 \text{ dBm} < 61.0 \text{ dBm/MHz}$, hereby the limit of 61.0 dBm/MHz equates the ISED limit of 68 dBm/5 MHz

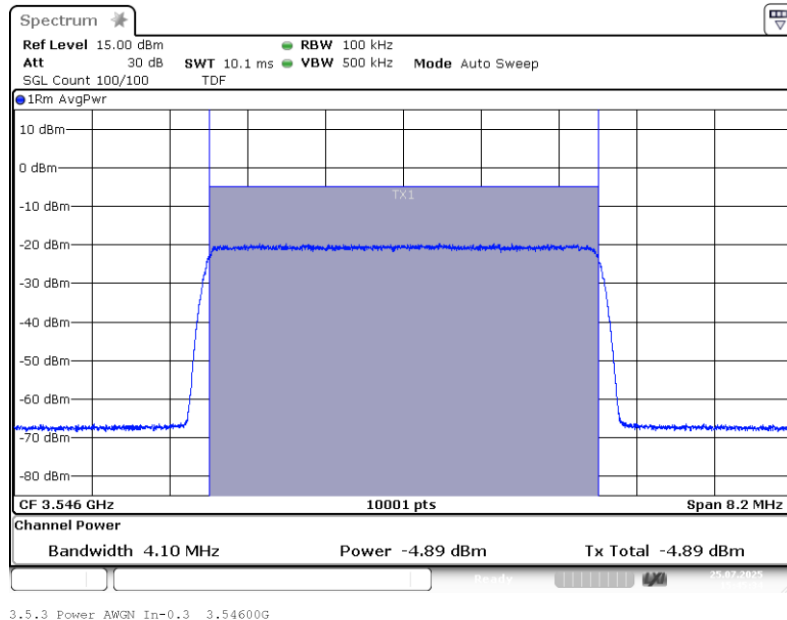
The DUT doesn't exceed the limit.

Test Report No.: 25-0163-EMC-TR-25-0149-V01

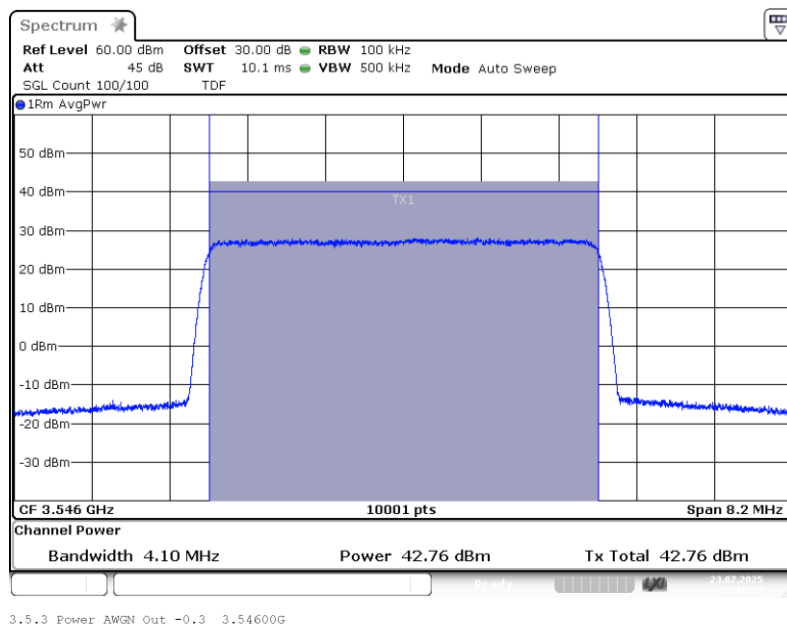
Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

5.1.5 MEASUREMENT PLOT

Band: TDD 34, ANT 2; Frequency: 3.5460 GHz; Band edge: f0;
Mod: AWGN; Input power 0.3 dB < AGC



Band: TDD 34, ANT 2; Frequency: 3.5460 GHz; Band edge: f0;
Mod: AWGN; Output power 0.3 dB < AGC

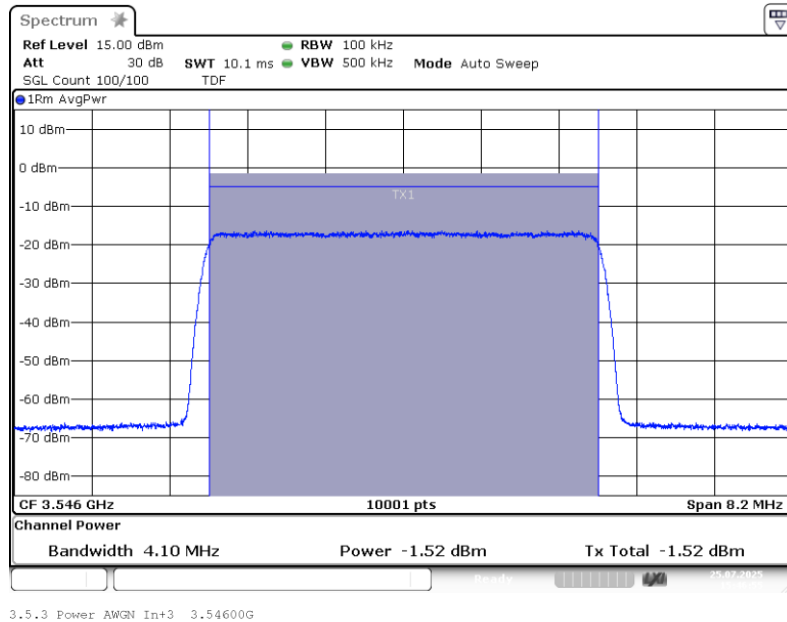


The test results relate only to the tested item. The sample has been provided by the client.
Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.

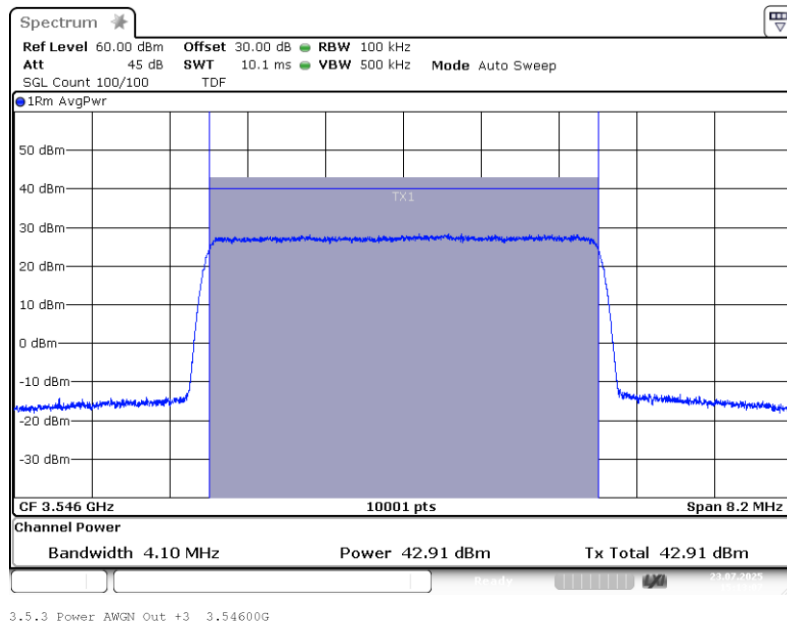
Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

Band: TDD 34, ANT 2; Frequency: 3.5460 GHz; Band edge: f0;
Mod: AWGN; Input power 3 dB > AGC



Band: TDD 34, ANT 2; Frequency: 3.5460 GHz; Band edge: f0;
Mod: AWGN; Output power 3 dB > AGC

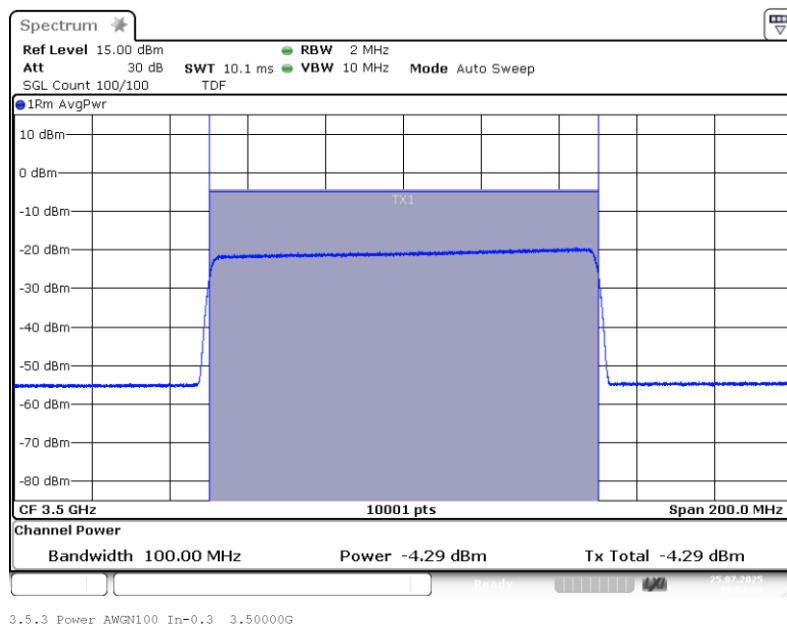


The test results relate only to the tested item. The sample has been provided by the client.
Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.

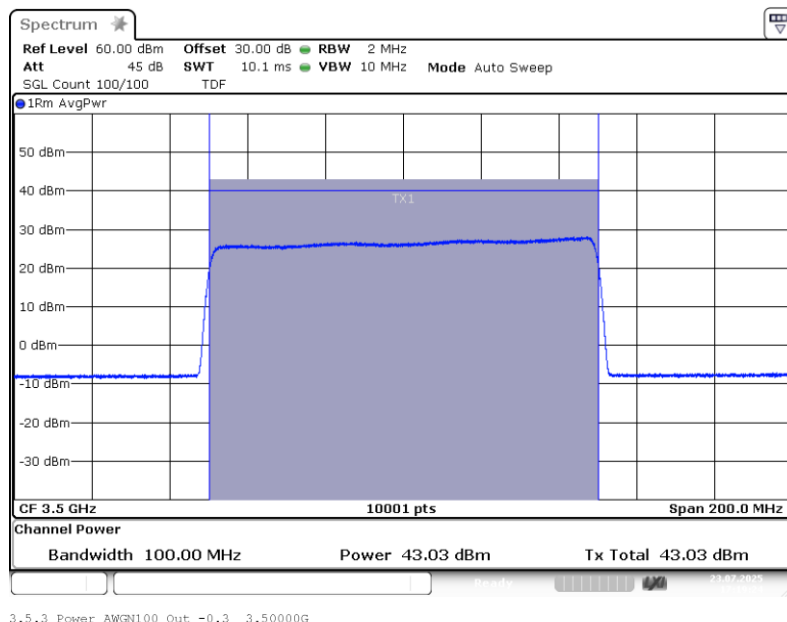
Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

Band: TDD 34, ANT 2; Frequency: 3.5000 GHz; Band edge: mid;
Mod: AWGN100; Input power 0.3 dB < AGC



Band: TDD 34, ANT 2; Frequency: 3.5000 GHz; Band edge: mid;
Mod: AWGN100; Output power 0.3 dB < AGC

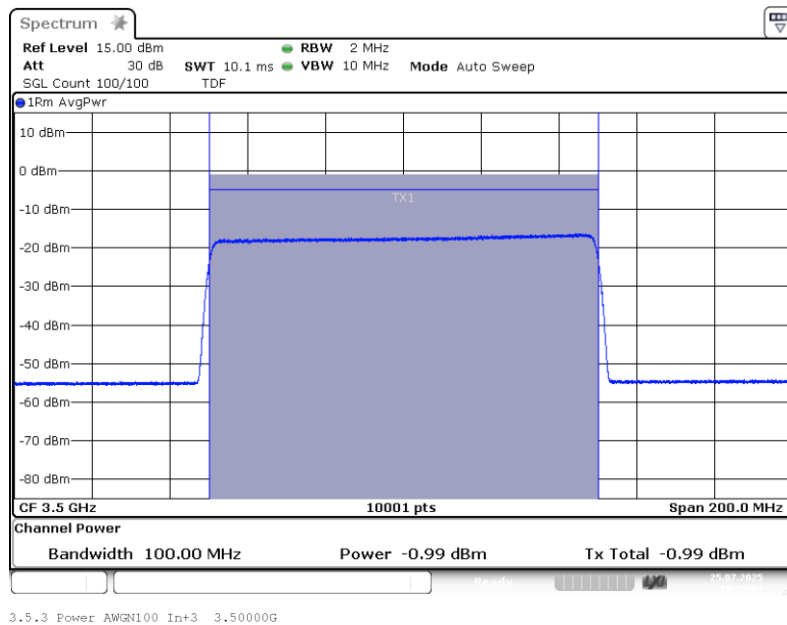


The test results relate only to the tested item. The sample has been provided by the client.
Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.

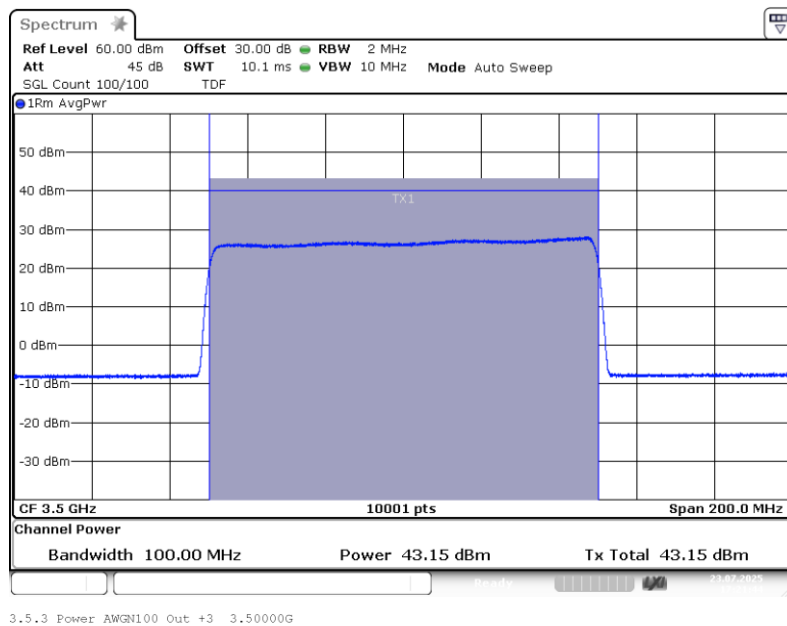
Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

Band: TDD 34, ANT 2; Frequency: 3.5000 GHz; Band edge: mid;
Mod: AWGN100; Input power 3 dB > AGC



Band: TDD 34, ANT 2; Frequency: 3.5000 GHz; Band edge: mid;
Mod: AWGN100; Output power 3 dB > AGC



The test results relate only to the tested item. The sample has been provided by the client.
Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.



Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

BUREAU
VERITAS

5.1.6 TEST EQUIPMENT USED

- Conducted

The test results relate only to the tested item. The sample has been provided by the client.
Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.

2025-0163-EMC-TR-25-0149-V01

Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

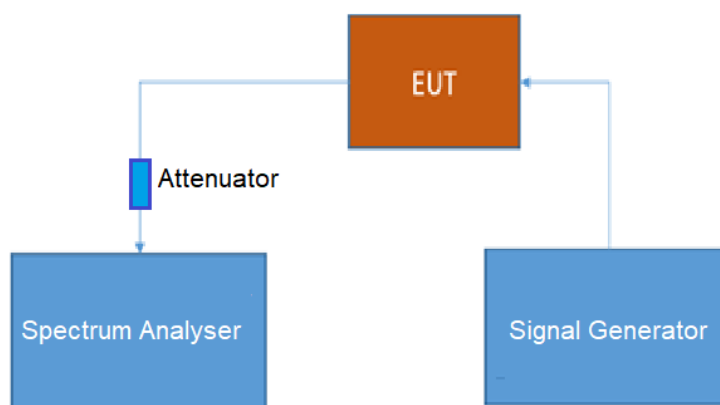
5.2 PEAK TO AVERAGE RATIO

Standard FCC Part 27, §27.50

The test was performed according to:
ANSI C63.26**Test date:** 2025-07-23/2025-07-25**Environmental conditions:** 28.9 °C; 34 % r. H./27.7 °C ; 43 % r. H.**Test engineer:** Thomas Hufnagel**5.2.1 TEST DESCRIPTION**

This test case is intended to demonstrate compliance to the signal booster power and gain limits and requirements for industrial signal boosters.

The EUT was connected to the test setup according to the following diagram:



The attenuation of the measuring and stimulus path are known for each measured frequency and are considered.

The Spectrum Analyzer settings can be directly found in the measurement diagrams.

Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

5.2.2 TEST REQUIREMENTS/LIMITSAbstract from FCC Part 27:**Subpart C – Technical standards****§ 27.50**

(k) The following power requirements apply to stations transmitting in the 3450-3550 MHz band:

- (1) Equipment employed must be authorized in accordance with the provisions of § 27.51. Power measurements for transmissions by stations authorized under this section may be made either in accordance with a Commission-approved average power technique or in compliance with paragraph (j)(5) of this section. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

Abstract from RSS-192:**RSS-192; 5.5 Transmitter output power**

In addition, the peak to average power ratio (PAPR) of the equipment shall not exceed 13 dB for more than 0.1% of the time, using a signal that corresponds to the highest PAPR during periods of continuous transmission.

Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

5.2.3 TEST PROTOCOL

TDD 34, ANT 2; Downlink						
Signal type	Input power	Frequency [MHz]	Input power [dBm]	PAPR [dB]	Limit PAPR [dB]	Margin to limit [dB]
Wideband	0.3 dB < AGC	3546.0	-4.9	8.7	13.0	4.3
Wideband	3 dB > AGC	3546.0	-1.5	8.6	13.0	4.4
Wideband 5G	0.3 dB < AGC	3500.0	-4.3	8.5	13.0	4.5
Wideband 5G	3 dB > AGC	3500.0	-1.0	8.5	13.0	4.5

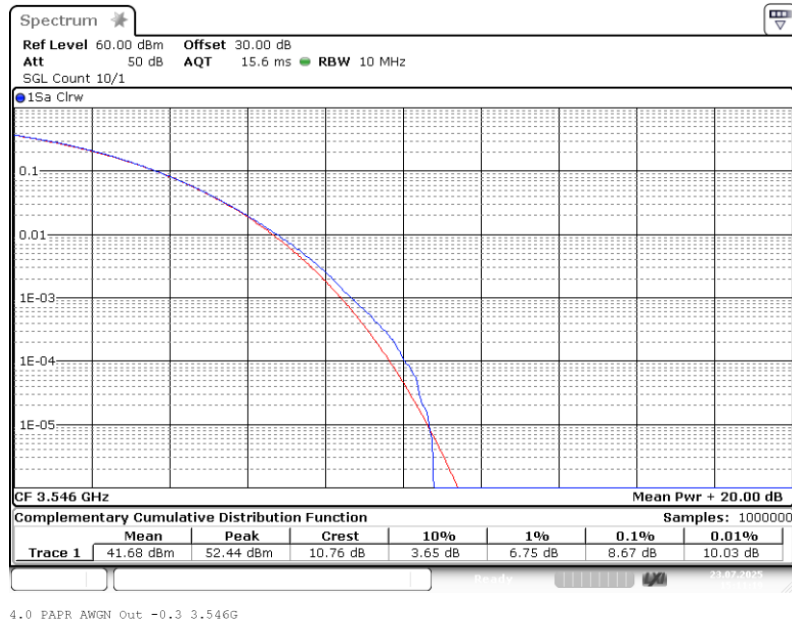
Remark: Please see next sub-clause for the measurement plot.

Test Report No.: 25-0163-EMC-TR-25-0149-V01

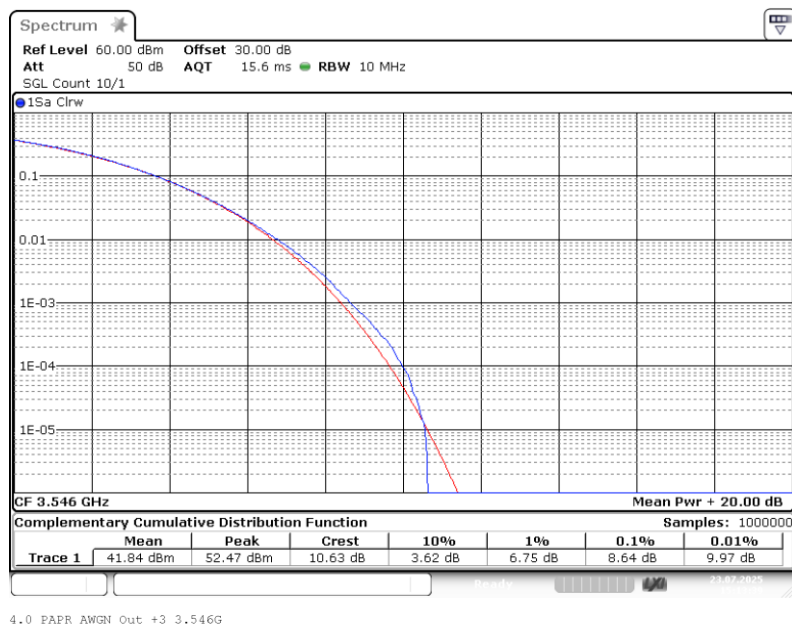
Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

5.2.4 MEASUREMENT PLOT

Band: TDD 34, ANT 2; Frequency: 3.5460 GHz; Band edge: f0;
Mod: AWGN; PAPR 0.3 dB < AGC



Band: TDD 34, ANT 2; Frequency: 3.5460 GHz; Band edge: f0;
Mod: AWGN; PAPR 3 dB > AGC

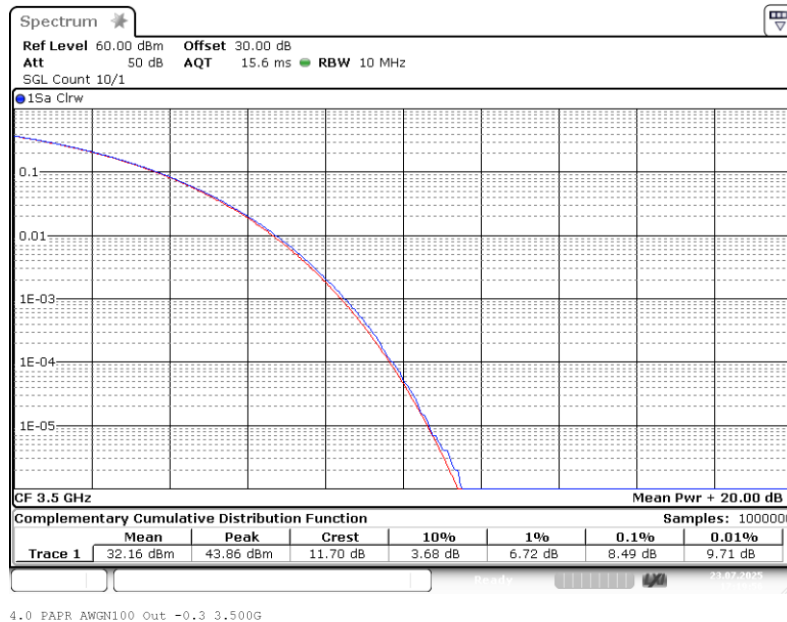


The test results relate only to the tested item. The sample has been provided by the client.
Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.

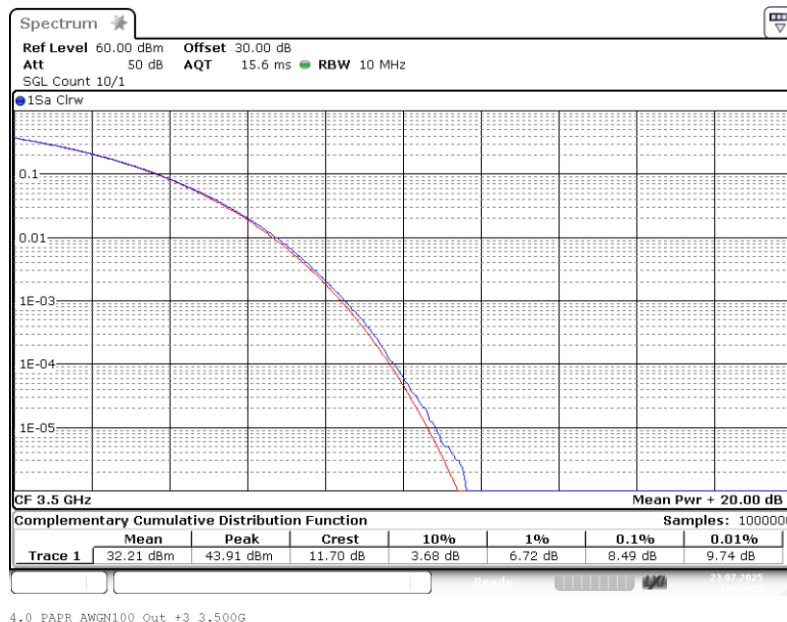
Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

Band: TDD 34, ANT 2; Frequency: 3.5000 GHz; Band edge: mid;
Mod: AWGN100; PAPR 0.3 dB < AGC



Band: TDD 34, ANT 2; Frequency: 3.5000 GHz; Band edge: mid;
Mod: AWGN100; PAPR 3 dB > AGC



The test results relate only to the tested item. The sample has been provided by the client.
Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.



Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

BUREAU
VERITAS

5.2.5 TEST EQUIPMENT USED

- Conducted

The test results relate only to the tested item. The sample has been provided by the client.
Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.

2025-0163-EMC-TR-25-0149-V01

Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

5.3 OCCUPIED BANDWIDTH/INPUT-VERSUS-OUTPUT SPECTRUM

Standard FCC Part 2.1049; Occupied bandwidth

The test was performed according to:

ANSI C63.26, KDB 935210 D05 v01r04: 3.4

Test date: 2025-07-23/2025-07-25

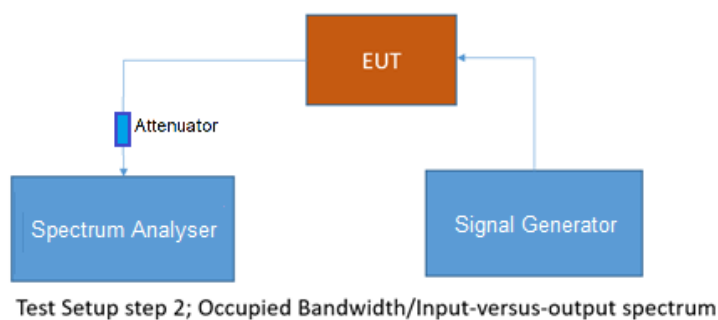
Environmental conditions: 28.9 °C; 34 % r. H./27.7 °C ; 43 % r. H.

Test engineer: Thomas Hufnagel

5.3.1 TEST DESCRIPTION

This test case is intended to demonstrate compliance to the applicable conducted spurious emission limits per FCC §2.1049, RSS-GEN 6.4 and RSS-131-5.2.2

The EUT was connected to the test setups according to the following diagram:



The attenuation of the measuring and stimulus path are known for each measured frequency and are considered.

The Spectrum Analyzer settings can be directly found in the measurement diagrams.

5.3.2 TEST REQUIREMENTS/LIMITS

Abstract from FCC Part 2:

FCC Part 2.1049; Occupied bandwidth:

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 0.3 percent of the total mean power radiated by a given emission shall be measured under the following conditions as applicable:

- (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 user.
- (i) Transmitters designed for other types of modulation—when modulated by an appropriate signal of sufficient amplitude to be representative of the type of service in which used. A description of the input signal should be supplied.

Abstract from ISED RSS-131:

RSS-131; 92 Input-versus-output spectrum

The spectral growth of the 26 dB bandwidth of the output signal shall be less than 5% of the input signal spectrum.

Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

5.3.3 TEST PROTOCOL

TDD 34, ANT 2; Downlink							
Signal type	Input power	Signal frequency [MHz]	Occupied bandwidth SG [kHz]	Occupied bandwidth booster [kHz]	Delta occupied bandwidth [kHz]	Limit delta occupied bandwidth [kHz]	Margin to limit [kHz]
Wideband	0.3 dB < AGC	3500.0	4388.4	4387.8	0.6	205.0	204.4
Wideband	3 dB > AGC	3500.0	4387.2	4389.0	1.9	205.0	203.2
Wideband 5G	0.3 dB < AGC	3500.0	103480	103210	270	4915	4645
Wideband 5G	3 dB > AGC	3500.0	103120	103360	240	4915	4675

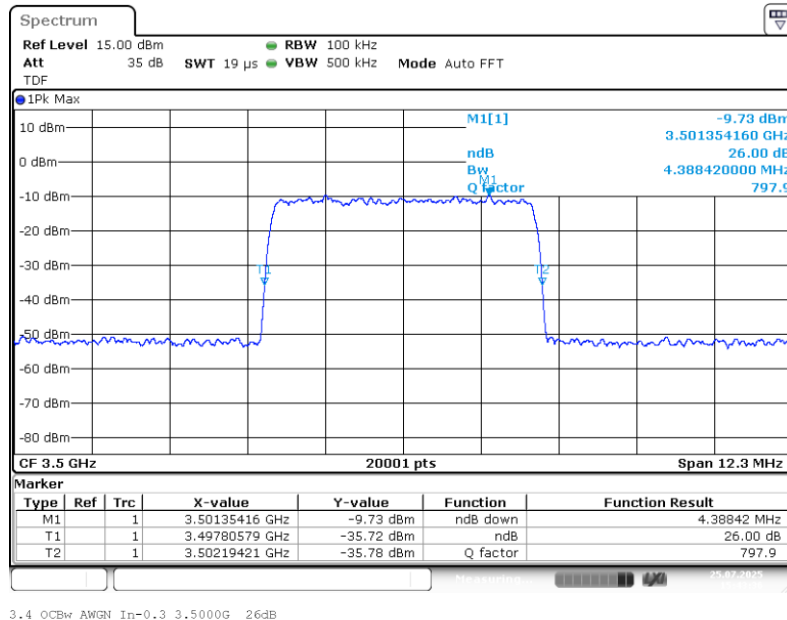
Remark: Please see next sub-clause for the measurement plot.

Test Report No.: 25-0163-EMC-TR-25-0149-V01

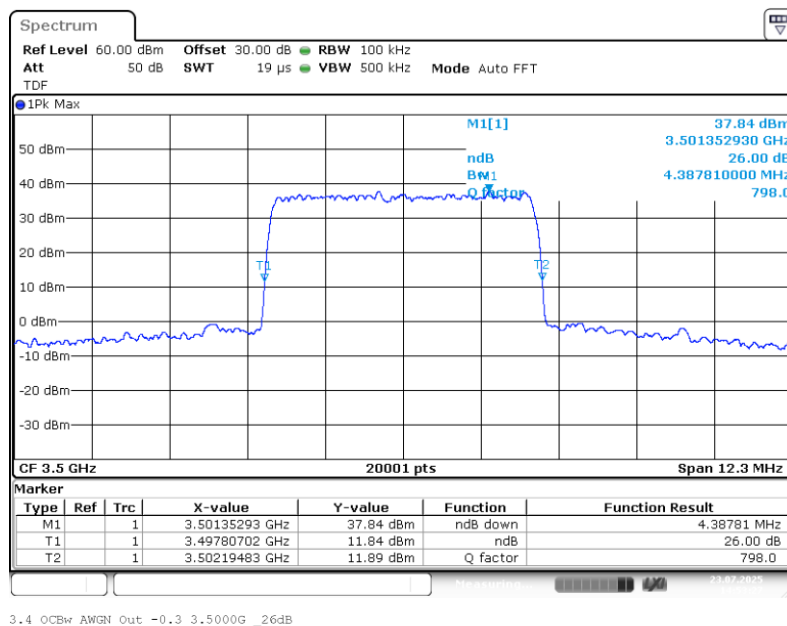
Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

5.3.4 MEASUREMENT PLOT

Band: TDD 34, ANT 2; Frequency: 3.5000 GHz; Band edge: mid;
Mod: AWGN; Input OCBw 0.3 dB < AGC



Band: TDD 34, ANT 2; Frequency: 3.5000 GHz; Band edge: mid;
Mod: AWGN; Output OCBw 0.3 dB < AGC

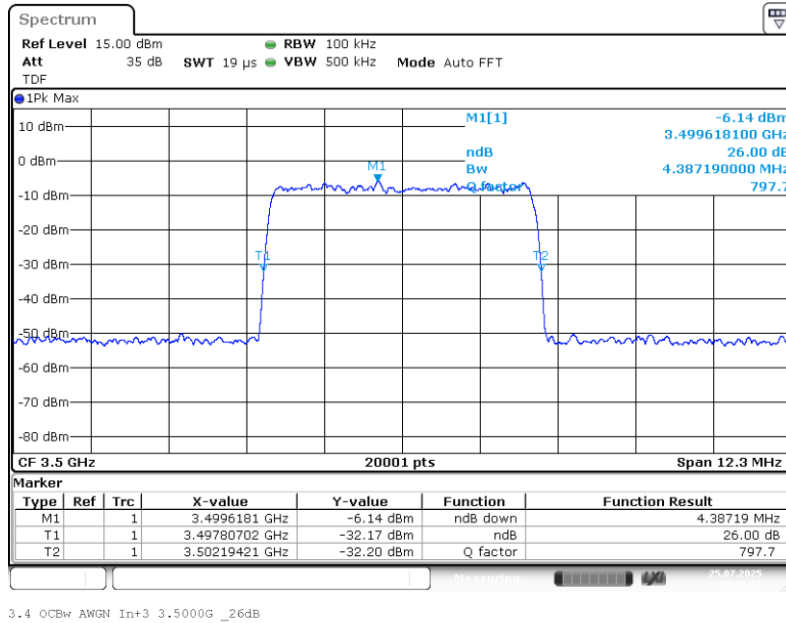


The test results relate only to the tested item. The sample has been provided by the client.
Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.

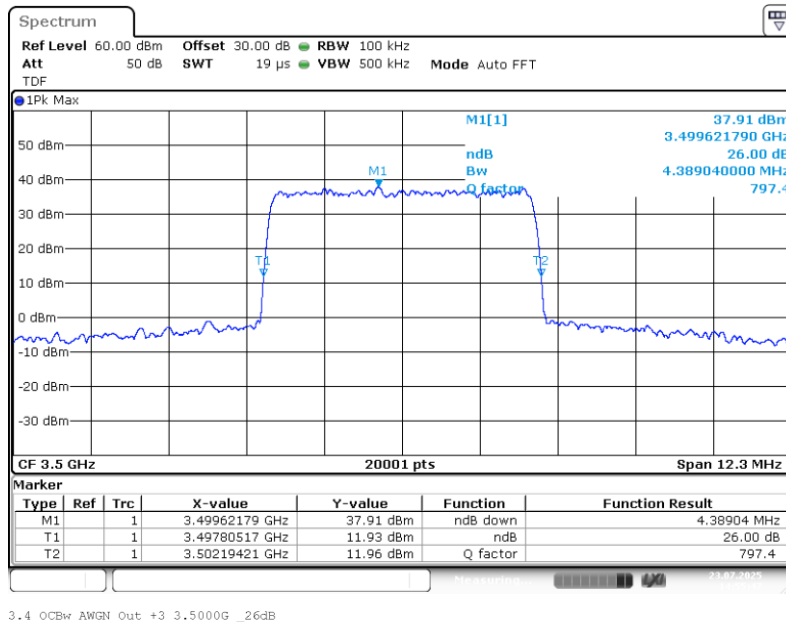
Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

Band: TDD 34, ANT 2; Frequency: 3.5000 GHz; Band edge: mid;
Mod: AWGN; Input OCBw 3 dB > AGC



Band: TDD 34, ANT 2; Frequency: 3.5000 GHz; Band edge: mid;
Mod: AWGN; Output OCBw 3 dB > AGC

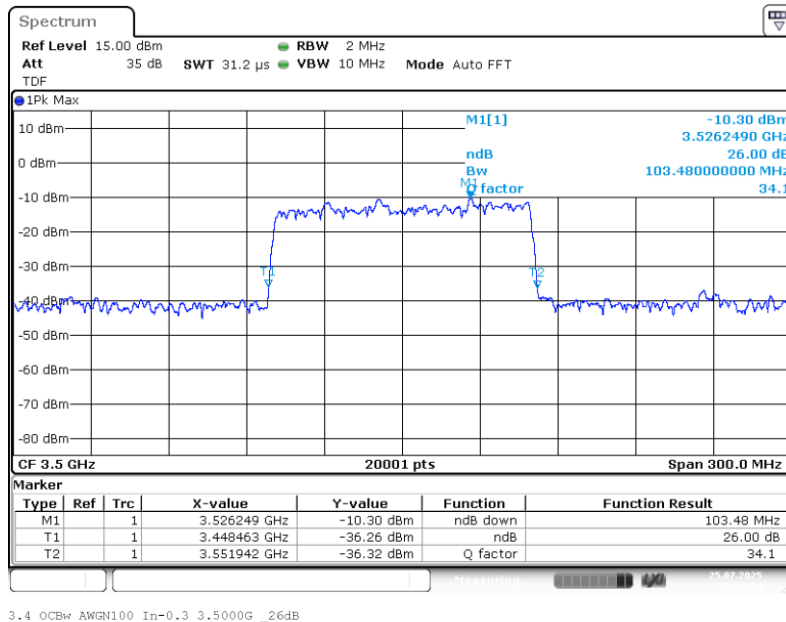


The test results relate only to the tested item. The sample has been provided by the client.
Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.

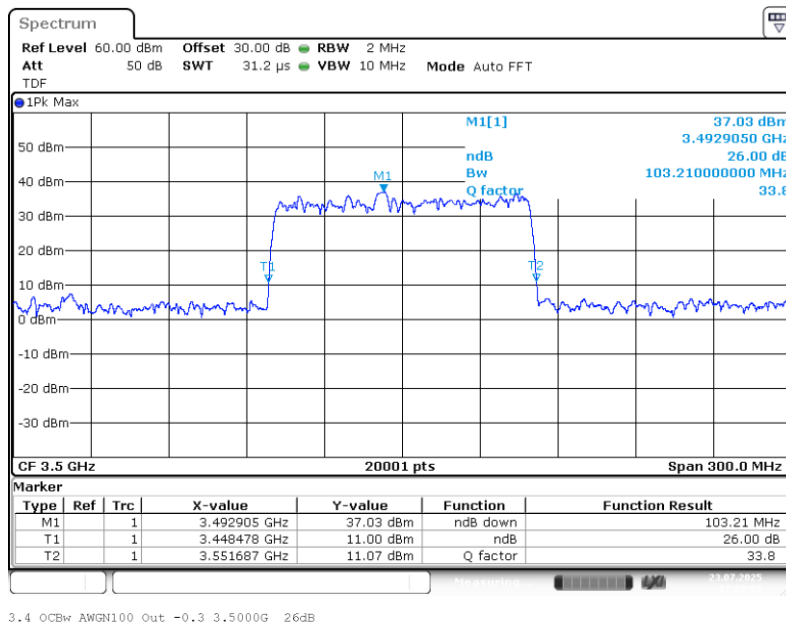
Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

Band: TDD 34, ANT 2; Frequency: 3.5000 GHz; Band edge: mid;
Mod: AWGN100; Input OCBw 0.3 dB < AGC



Band: TDD 34, ANT 2; Frequency: 3.5000 GHz; Band edge: mid;
Mod: AWGN100; Output OCBw 0.3 dB < AGC

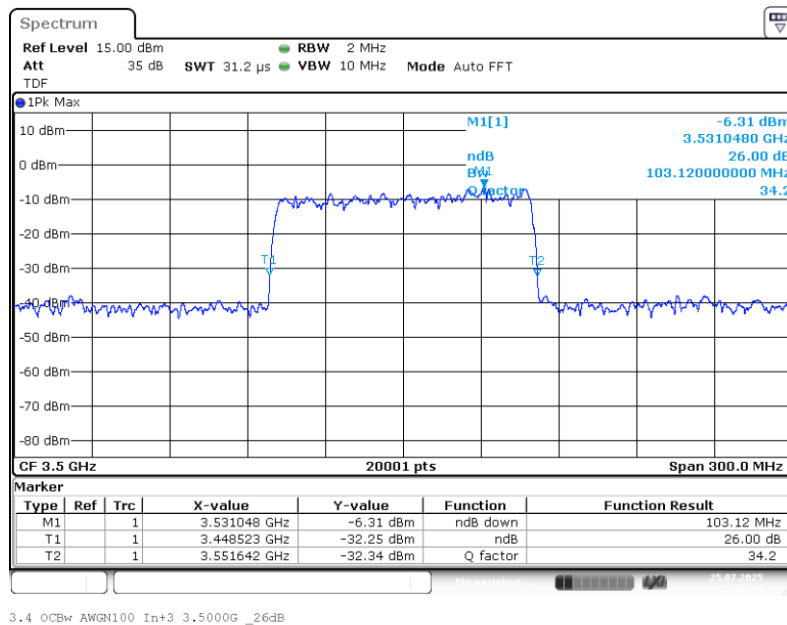


The test results relate only to the tested item. The sample has been provided by the client.
Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.

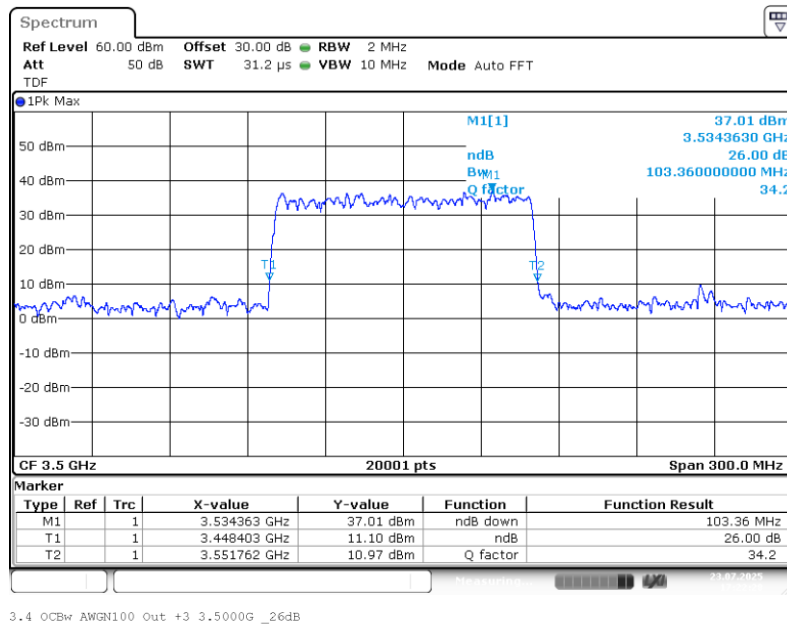
Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

Band: TDD 34, ANT 2; Frequency: 3.5000 GHz; Band edge: mid;
Mod: AWGN100; Input OCBw 3 dB > AGC



Band: TDD 34, ANT 2; Frequency: 3.5000 GHz; Band edge: mid;
Mod: AWGN100; Output OCBw 3 dB > AGC



The test results relate only to the tested item. The sample has been provided by the client.
Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.



Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

BUREAU
VERITAS

5.3.5 TEST EQUIPMENT USED

- Conducted

The test results relate only to the tested item. The sample has been provided by the client.
Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.

2025-0163-EMC-TR-25-0149-V01

Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

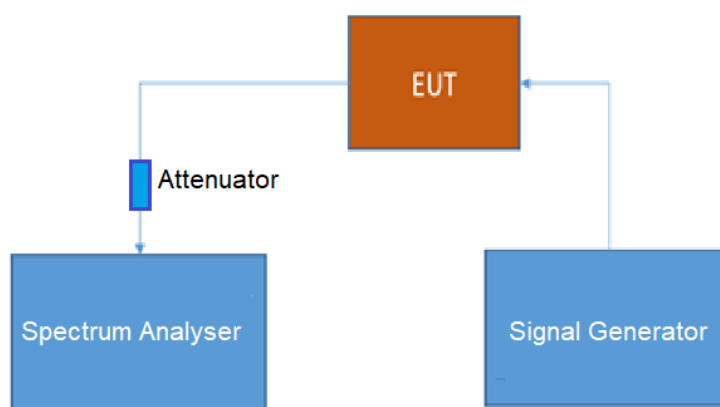
5.4 CONDUCTED SPURIOUS EMISSIONS AT ANTENNA TERMINALS

Standard FCC Part §2.1051, §27.53

The test was performed according to:
ANSI C63.26**Test date:** 2025-12-08 – 2025-12-11**Environmental conditions:** 26.5 °C; 30 % r. H. (average values from the test times)**Test engineer:** Thomas Hufnagel**5.4.1 TEST DESCRIPTION**

This test case is intended to demonstrate compliance to the occupied bandwidth in comparison between the input and output signal of a booster.

The EUT was connected to the test setup according to the following diagram:



The attenuation of the measuring and stimulus path are known for each measured frequency and are considered.

The Spectrum Analyzer settings can be directly found in the measurement diagrams.

5.4.2 TEST REQUIREMENTS/LIMITS

Abstract from FCC Part 2:

FCC Part 2.1051; Measurement required: Spurious emissions at antenna terminal:

The radio frequency voltage or powers generated within the equipment and appearing on a spurious frequency shall be checked at the equipment output terminals when properly loaded with a suitable artificial antenna. Curves or equivalent data shall show the magnitude of each harmonic and other spurious emission that can be detected when the equipment is operated under the conditions specified in §2.1049 as appropriate. The magnitude of spurious emissions which are attenuated more than 20 dB below the permissible value need not be specified.

Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

Abstract from FCC Part 27:**Part 27; Miscellaneous Wireless Communication Services****Part 27; Miscellaneous Wireless Communication Services****Subpart C – Technical standards****§27.53 – Emission limits****(n) 3.5 GHz Service**

The following emission limits apply to stations transmitting in the 3450-3550 MHz band:

- (1) For base station operations in the 3450–3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed –13 dBm/MHz. Compliance with the provisions of this paragraph (n)(1) 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, but limited to a maximum of 200 kHz. 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. Notwithstanding the channel edge requirement of –13 dBm per megahertz, for base station operations in the 3450–3550 MHz band, the conducted power of any emission below 3440 MHz or above 3560 MHz shall not exceed –25 dBm/MHz, and the conducted power of emissions below 3430 MHz or above 3570 MHz shall not exceed –40 dBm/MHz.
- (2) For mobile operations in the 3450–3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed –13 dBm/MHz. Compliance with this paragraph (n)(2) 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, but limited to a maximum of 200 kHz. In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz. 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.

The test results relate only to the tested item. The sample has been provided by the client.

Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.

Abstract from ISED RSS-192:

RSS-192; 5.6.1 Unwanted emission limits for outdoor base station, point-to-point and point-to-multipoint equipment

The unwanted emissions of base station, P-P and P-MP equipment shall comply with the following:

- the limits in table 2 for all frequencies between 3450-3900 MHz
- the limits in table 3 for all frequencies between 3400-3450 MHz
- a limit of -13 dBm TRP /MHz or conducted power (sum of conducted power across all antenna connectors), where applicable, for all frequencies below 3400 MHz
- the limits in table 4 for all frequencies above 3900 MHz
- a limit of -30 dBm TRP /MHz or conducted power (sum of conducted power across all antenna connector), where applicable, for all frequencies between 4200-4400 MHz

Table 2: Unwanted emission limits for outdoor base station, P-P, and P-MP equipment in the band 3450-3900 MHz

Offset frequency from the edge of the frequency block group (MHz)	Non-AAS e.i.r.p. (dBm/5 MHz) per antenna	AAS TRP (dBm/5 MHz)
0-5	Min {(e.i.r.p. _{max} - 40), 21}	Min {(TRP _{max} - 40), 16}
5-10	Min {(e.i.r.p. _{max} - 43), 15}	Min {(TRP _{max} - 43), 12}
>10	Min {(e.i.r.p. _{max} - 43), 13}	Min {(TRP _{max} - 43), 1}

Note: e.i.r.p._{max} and TRP_{max} are expressed in dBm

Table 3: Unwanted emission limits for outdoor base station, P-P, and P-MP equipment in the band 3400-3450 MHz

Frequency range (MHz)	Non-AAS e.i.r.p. (dBm/5 MHz) per antenna	AAS TRP (dBm/5 MHz)
3450-3445	Min {(e.i.r.p. _{max} - 40), 21}	Min {(TRP _{max} - 40), 16}
3445-3440	Min {(e.i.r.p. _{max} - 43), 15}	Min {(TRP _{max} - 43), 12}
3440-3400	Min {(e.i.r.p. _{max} - 43), 13}	Min {(TRP _{max} - 43), 1}

Note: e.i.r.p._{max} and TRP_{max} are expressed in dBm

Table 4: Unwanted emission limits for outdoor base station, P-P and P-MP equipment above 3900 MHz

Offset from 3900 MHz band edge	TRP or conducted power (sum of conducted power across all antenna connectors), where applicable
≤1 MHz	-13 dBm/1% of OB*
>1 MHz	-13 dBm/MHz

*OB is the occupied bandwidth

Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

5.4.3 TEST PROTOCOL

General considerations concerning the spurious levels:

The measuring bandwidth of 1 MHz was chosen according the test requirements except at the Band edges: At the Band edges reducing of measurement bandwidth was necessary to prevent overlaying the RF-signal over the spurious emissions.

Also outside the downlink frequency band at lower frequencies the measurement bandwidths were reduced to have the possibility to record the spurious emissions at these lower frequencies.

At frequencies where measuring bandwidths were reduced the measured levels were extrapolated to values, which would have been measured with a bandwidth of 1 MHz.

$$p_{extrapolated} [dBm] = 10 * \log \left(1000 \text{ kHz} / RBW_{reduced} [kHz] \right) + p_{RBW_{reduced}} [dBm]$$

The expression " $10 * \log \left(1000 \text{ kHz} / RBW_{reduced} [kHz] \right)$ " is the correction factor which is shown in the column "Corr. factor [dB]".

Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

TDD 34, ANT 2; Downlink

Test freq.	Signal type	Spurious freq. [MHz]	Spurious level [dBm]	Detector	RBW [kHz]	Limit [dBm]	Margin to limit [dB]	Corr. factor [dB]
low	Wideband	0.03495	-46.9	RMS	1	-40	6.9	30.0
low	Wideband	0.05750	-50.6	RMS	10	-40	10.6	20.0
low	Wideband	951.6	-53.9	RMS	100	-40	13.9	10.0
low	Wideband	1820.8	-47.4	RMS	1000	-40	7.4	0.0
low	Wideband	2864.1	-32.9	RMS	100	-25	7.9	10.0
low	Wideband	3438.7	-42.5	RMS	100	-13	29.5	10.0
low	Wideband	3448.7	-14.5	RMS	100	-13	1.5	10.0
low	Wideband	3553.6	-30.7	RMS	100	-13	17.7	10.0
low	Wideband	3563.7	-51.3	RMS	1000	-40	11.3	0.0
low	Wideband	3617.5	-43.4	RMS	1000	-40	3.4	0.0
low	Wideband	6817.0	-50.5	RMS	1000	-40	10.5	0.0
low	Wideband	10357.2	-42.2	RMS	1000	-40	2.2	0.0
low	Wideband	19548.7	-49.9	RMS	1000	-40	9.9	0.0
low	Wideband	30319.5	-53.5	RMS	1000	-40	13.5	0.0
low	Wideband	39918.8	-49.1	RMS	1000	-40	9.1	0.0
mid	Wideband	0.03167	-51.0	RMS	1	-40	11.0	30.0
mid	Wideband	3.0	-51.7	RMS	10	-40	11.7	20.0
mid	Wideband	948.9	-53.5	RMS	100	-40	13.5	10.0
mid	Wideband	1628.4	-47.2	RMS	1000	-40	7.2	0.0
mid	Wideband	3428.5	-35.3	RMS	100	-25	10.3	10.0
mid	Wideband	3438.9	-43.2	RMS	100	-13	30.2	10.0
mid	Wideband	3447.1	-20.9	RMS	100	-13	17.9	10.0
mid	Wideband	3552.4	-31.4	RMS	100	-13	18.4	10.0
mid	Wideband	3569.8	-50.8	RMS	1000	-40	10.8	0.0
mid	Wideband	3622.6	-43.7	RMS	1000	-40	3.7	0.0
mid	Wideband	6833.5	-50.7	RMS	1000	-40	10.7	0.0
mid	Wideband	10502.2	-43.9	RMS	1000	-40	3.9	0.0
mid	Wideband	19538.2	-50.0	RMS	1000	-40	10.0	0.0
mid	Wideband	30308.0	-53.6	RMS	1000	-40	13.6	0.0
mid	Wideband	39964.8	-48.7	RMS	1000	-40	8.7	0.0
high	Wideband	952.6	-45.8	RMS	1	-40	5.8	30.0
high	Wideband	1116.7	-51.1	RMS	10	-40	11.1	20.0
high	Wideband	3431.6	-53.2	RMS	100	-40	13.2	10.0
high	Wideband	3447.7	-46.8	RMS	1000	-40	6.8	0.0
high	Wideband	3551.0	-35.4	RMS	100	-25	10.4	10.0
high	Wideband	3557.3	-43.1	RMS	100	-13	30.1	10.0
high	Wideband	4305.0	-31.6	RMS	100	-13	18.6	10.0
high	Wideband	6867.1	-17.1	RMS	100	-13	4.1	10.0
high	Wideband	17893.4	-51.2	RMS	1000	-40	11.2	0.0
high	Wideband	20007.2	-43.3	RMS	1000	-40	3.3	0.0
high	Wideband	30301.5	-50.4	RMS	1000	-40	10.4	0.0
high	Wideband	39967.3	-44.4	RMS	1000	-40	4.4	0.0
high	Wideband	39967.3	-49.7	RMS	1000	-40	9.7	0.0
high	Wideband	39967.3	-53.9	RMS	1000	-40	13.9	0.0
high	Wideband	39967.3	-48.9	RMS	1000	-40	8.9	0.0

The test results relate only to the tested item. The sample has been provided by the client.

Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.

Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

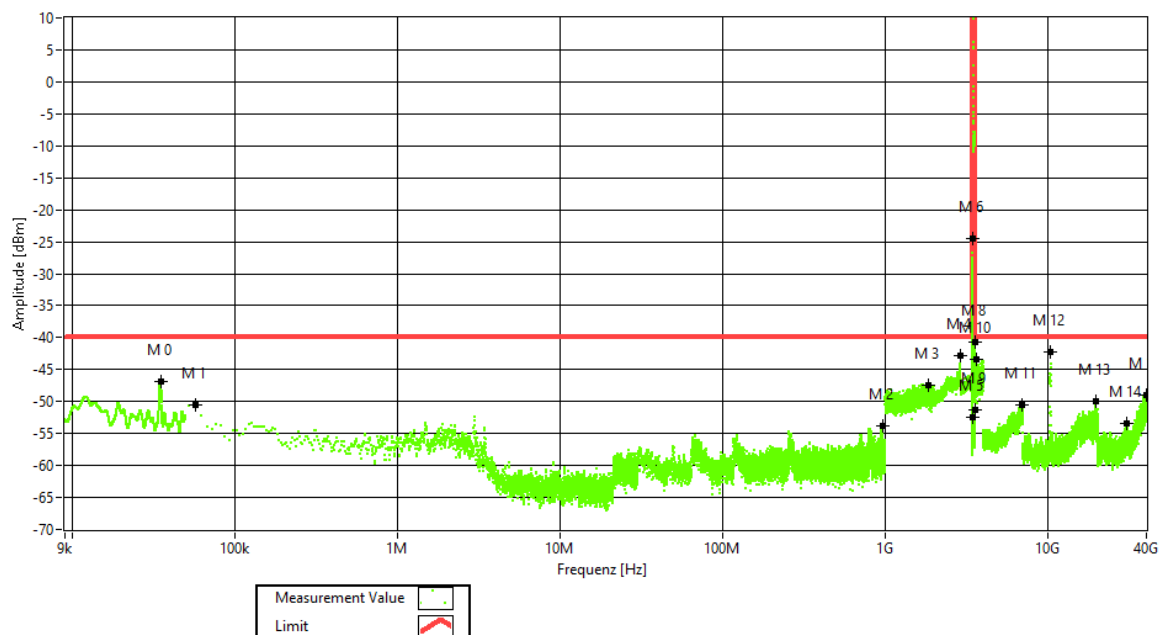
TDD 34, ANT 2; Downlink								
Test freq.	Signal type	Spurious freq. [MHz]	Spurious level [dBm]	Detector	RBW [kHz]	Limit [dBm]	Margin to limit [dB]	Corr. factor [dB]
mid	Wideband 5G	9.26623	-48.0	RMS	1	-40	8.0	30.0
mid	Wideband 5G	97.49191	-44.2	RMS	10	-40	4.2	20.0
mid	Wideband 5G	951326.5	-43.5	RMS	100	-40	3.5	10.0
mid	Wideband 5G	3425750.8	-43.0	RMS	1000	-40	3.0	0.0
mid	Wideband 5G	3430964.0	-34.4	RMS	100	-25	9.4	10.0
mid	Wideband 5G	3448114.4	-20.8	RMS	100	-13	7.8	10.0
mid	Wideband 5G	3552353.0	-20.0	RMS	100	-13	7.0	10.0
mid	Wideband 5G	3560005.1	-33.0	RMS	100	-25	8.0	10.0
mid	Wideband 5G	3614890.0	-42.2	RMS	1000	-40	2.2	0.0
mid	Wideband 5G	6877510.1	-50.2	RMS	1000	-40	10.2	0.0
mid	Wideband 5G	10535716.9	-41.3	RMS	1000	-40	1.3	0.0
mid	Wideband 5G	19540660.0	-49.9	RMS	1000	-40	9.9	0.0
mid	Wideband 5G	30346970.0	-53.2	RMS	1000	-40	13.2	0.0
mid	Wideband 5G	38523360.0	-48.9	RMS	1000	-40	8.9	0.0

Remark: Please see next sub-clause for the measurement plot.

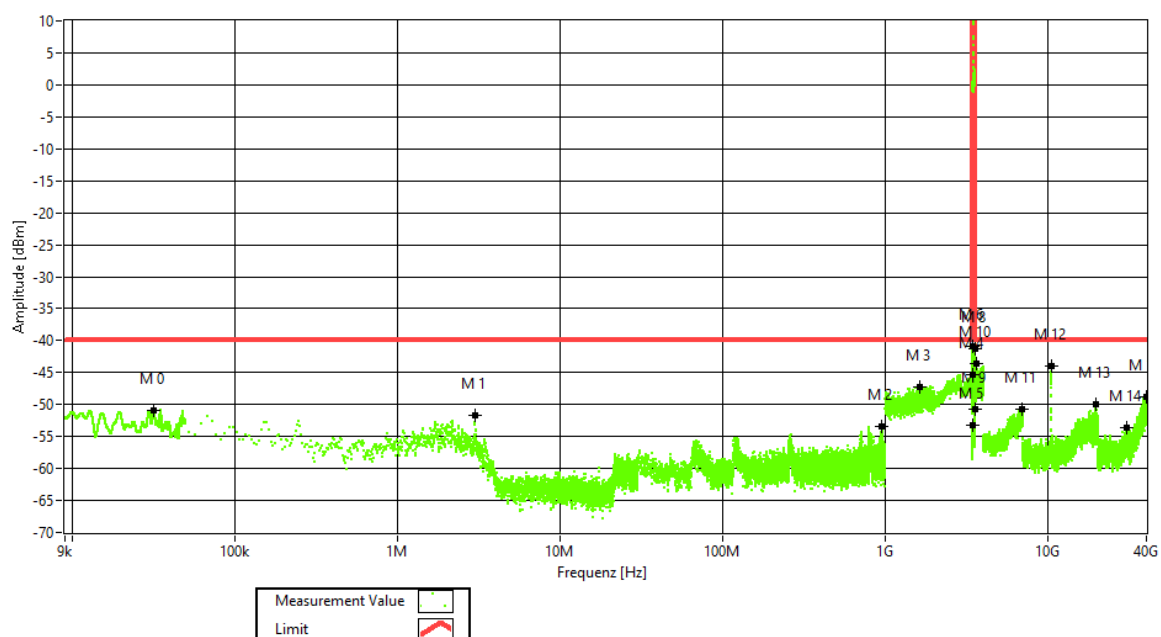
The test results relate only to the tested item. The sample has been provided by the client.
Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.

5.4.4 MEASUREMENT PLOT

Frequency band = TDD 34, ANT 2; Test frequency = low; Direction = RF downlink;
Signal type = Wideband



Frequency band = TDD 34, ANT 2; Test frequency = mid; Direction = RF downlink;
Signal type = Wideband

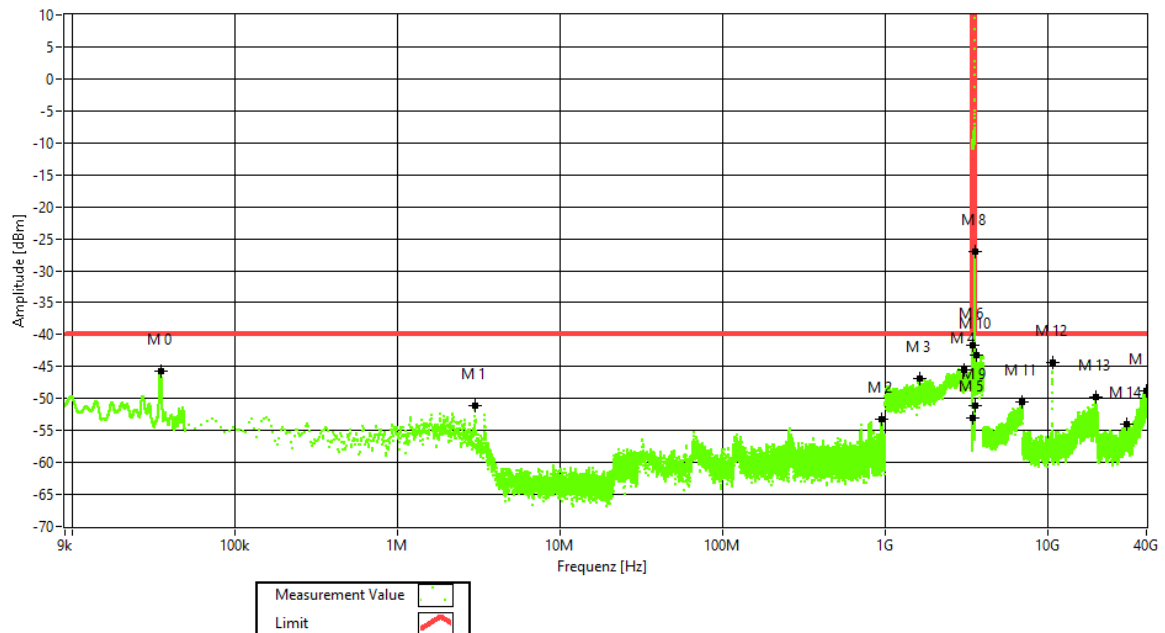


The test results relate only to the tested item. The sample has been provided by the client.
Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.

Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

Frequency band = TDD 34, ANT 2; Test frequency = high; Direction = RF downlink;
Signal type = Wideband

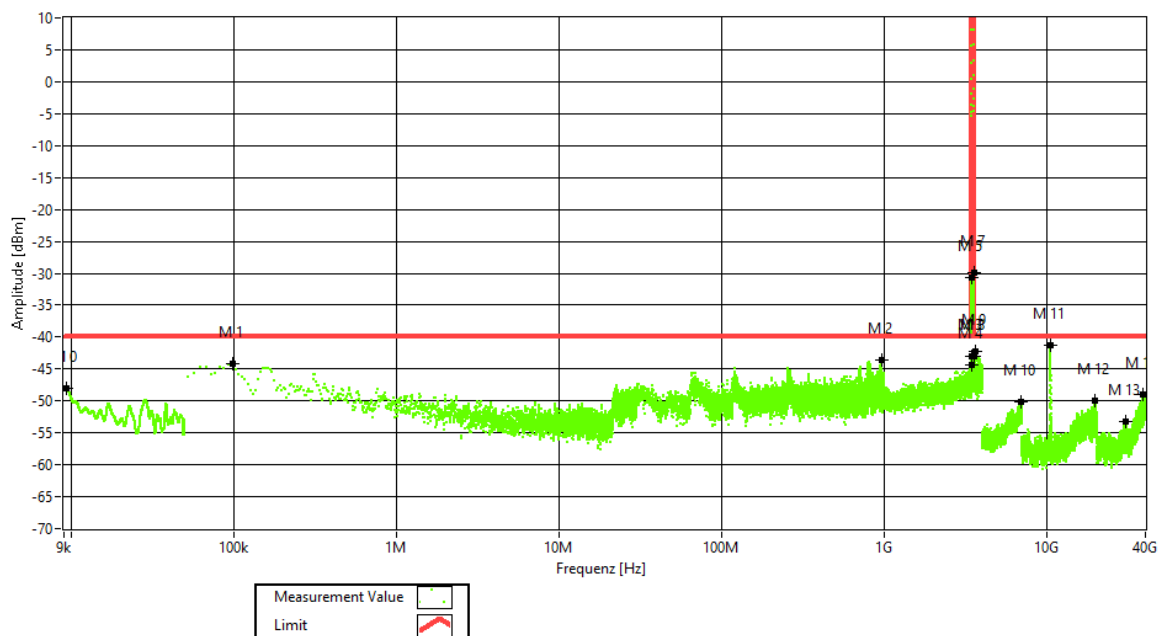


The test results relate only to the tested item. The sample has been provided by the client.
Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.

Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

Frequency band = TDD 34, ANT 2; Test frequency = mid; Direction = RF downlink;
Signal type = Wideband 5G



The test results relate only to the tested item. The sample has been provided by the client.
Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.



Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

BUREAU
VERITAS

5.4.5 TEST EQUIPMENT USED

- Conducted

The test results relate only to the tested item. The sample has been provided by the client.
Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.

2025-0163-EMC-TR-25-0149-V01

Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

5.5 OUT-OF-BAND EMISSION LIMITS

Standard FCC Part §2.1051, §27.53

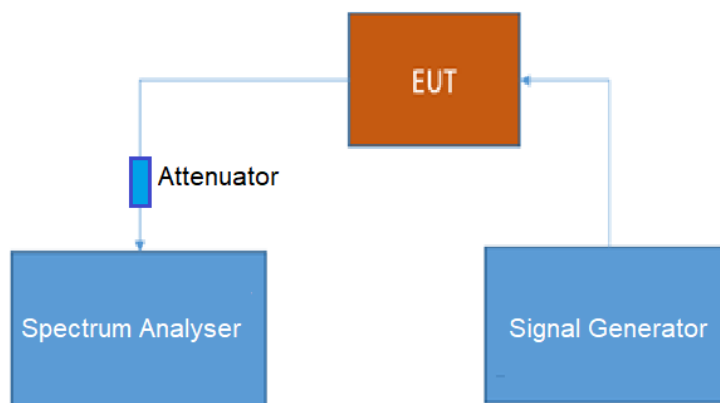
The test was performed according to:

ANSI C63.26, KDB 935210 D05 v01r04: 3.6

Test date: 2025-12-08 – 2025-12-11**Environmental conditions:** 26.5 °C; 30 % r. H. (average values from the test times)**Test engineer:** Thomas Hufnagel**TEST DESCRIPTION**

This test case is intended to demonstrate compliance to the out-of-band emission limit for industrial signal boosters. The limits itself come from the applicable rule part for each operating band.

The EUT was connected to the test setup according to the following diagram:



The attenuation of the measuring and stimulus path are known for each measured frequency and are considered.

The Spectrum Analyzer settings can be directly found in the measurement diagrams.

5.5.1 TEST REQUIREMENTS/LIMITS

Abstract from FCC Part 2:

FCC Part 2.1051; Measurement required: Spurious emissions at antenna terminal:

The radio frequency voltage or powers generated within the equipment and appearing on a spurious frequency shall be checked at the equipment output terminals when properly loaded with a suitable artificial antenna. Curves or equivalent data shall show the magnitude of each harmonic and other spurious emission that can be detected when the equipment is operated under the conditions specified in §2.1049 as appropriate. The magnitude of spurious emissions which are attenuated more than 20 dB below the permissible value need not be specified.

Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

Abstract from FCC Part 27:**Part 27; Miscellaneous Wireless Communication Services****Subpart C – Technical standards****§27.53 – Emission limits****(n) 3.5 GHz Service**

The following emission limits apply to stations transmitting in the 3450-3550 MHz band:

- (1) For base station operations in the 3450–3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed –13 dBm/MHz. Compliance with the provisions of this paragraph (n)(1) 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, but limited to a maximum of 200 kHz. 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. Notwithstanding the channel edge requirement of –13 dBm per megahertz, for base station operations in the 3450–3550 MHz band, the conducted power of any emission below 3440 MHz or above 3560 MHz shall not exceed –25 dBm/MHz, and the conducted power of emissions below 3430 MHz or above 3570 MHz shall not exceed –40 dBm/MHz.
- (2) For mobile operations in the 3450–3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed –13 dBm/MHz. Compliance with this paragraph (n)(2) 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, but limited to a maximum of 200 kHz. In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz. 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.

The test results relate only to the tested item. The sample has been provided by the client.

Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.

Abstract from ISED RSS-192:

RSS-192; 5.6.1 Unwanted emission limits for outdoor base station, point-to-point and point-to-multipoint equipment

The unwanted emissions of base station, P-P and P-MP equipment shall comply with the following:

- f) the limits in table 2 for all frequencies between 3450-3900 MHz
- g) the limits in table 3 for all frequencies between 3400-3450 MHz
- h) a limit of -13 dBm TRP /MHz or conducted power (sum of conducted power across all antenna connectors), where applicable, for all frequencies below 3400 MHz
- i) the limits in table 4 for all frequencies above 3900 MHz
- j) a limit of -30 dBm TRP /MHz or conducted power (sum of conducted power across all antenna connector), where applicable, for all frequencies between 4200-4400 MHz

Table 2: Unwanted emission limits for outdoor base station, P-P, and P-MP equipment in the band 3450-3900 MHz

Offset frequency from the edge of the frequency block group (MHz)	Non-AAS e.i.r.p. (dBm/5 MHz) per antenna	AAS TRP (dBm/5 MHz)
0-5	Min {(e.i.r.p. _{max} - 40), 21}	Min {(TRP _{max} - 40), 16}
5-10	Min {(e.i.r.p. _{max} - 43), 15}	Min {(TRP _{max} - 43), 12}
>10	Min {(e.i.r.p. _{max} - 43), 13}	Min {(TRP _{max} - 43), 1}

Note: e.i.r.p._{max} and TRP_{max} are expressed in dBm

Table 3: Unwanted emission limits for outdoor base station, P-P, and P-MP equipment in the band 3400-3450 MHz

Frequency range (MHz)	Non-AAS e.i.r.p. (dBm/5 MHz) per antenna	AAS TRP (dBm/5 MHz)
3450-3445	Min {(e.i.r.p. _{max} - 40), 21}	Min {(TRP _{max} - 40), 16}
3445-3440	Min {(e.i.r.p. _{max} - 43), 15}	Min {(TRP _{max} - 43), 12}
3440-3400	Min {(e.i.r.p. _{max} - 43), 13}	Min {(TRP _{max} - 43), 1}

Note: e.i.r.p._{max} and TRP_{max} are expressed in dBm

Table 4: Unwanted emission limits for outdoor base station, P-P and P-MP equipment above 3900 MHz

Offset from 3900 MHz band edge	TRP or conducted power (sum of conducted power across all antenna connectors), where applicable
≤1 MHz	-13 dBm/1% of OB*
>1 MHz	-13 dBm/MHz

*OB is the occupied bandwidth

5.5.2 TEST PROTOCOL

TDD 34, ANT 2; Downlink; Number of input signals = 1							
Signal type	Input power	Band edge	Signal frequency [MHz]	Input power [dBm]	Maximum out-of-band power [dBm]	Limit out-of-band power [dBm]	Margin to limit [dB]
Wideband	0.3 dB < AGC	upper	3547.5	-3.7	-22.4	-13.0	9.4
Wideband	3 dB > AGC	upper	3547.5	-0.4	-22.8	-13.0	9.8
Wideband 5G	0.3 dB < AGC	upper	3500.0	-4.0	-13.4 #	-13.0	0.4
Wideband 5G	3 dB > AGC	upper	3500.0	-1.0	-13.8 #	-13.0	0.8
Wideband	0.3 dB < AGC	lower	3452.5	-3.3	-26.2	-13.0	13.2
Wideband	3 dB > AGC	lower	3452.5	0.0	-25.6	-13.0	12.6
Wideband 5G	0.3 dB < AGC	lower	3500.0	-3.6	-15.8 #	-13.0	2.8
Wideband 5G	3 dB > AGC	lower	3500.0	-0.6	-15.4 #	-13.0	2.4

#: Measured value increased by 7 dB according to ANSI C63.26-2015 5.7.2.

TDD 34, ANT 2; Downlink; Number of input signals = 2								
Signal type	Input power	Band edge	Signal frequency f1 [MHz]	Signal frequency f2 [MHz]	Input power [dBm]	Maximum out-of-band power [dBm]	Limit out-of-band power [dBm]	Margin to limit [dB]
WB*	0.3 dB < AGC	upper	3547.5	3545.0	-3.7	-25.9	-13.0	12.9
WB*	3 dB > AGC	upper	3547.5	3545.0	-0.4	-26.3	-13.0	13.3
WB*	0.3 dB < AGC	lower	3452.5	3455.0	-3.1	-26.2	-13.0	13.2
WB*	3 dB > AGC	lower	3452.5	3455.0	0.2	-26.5	-13.0	13.5

*: Explanations concerning table with two input signals:

"WB" means Wideband.

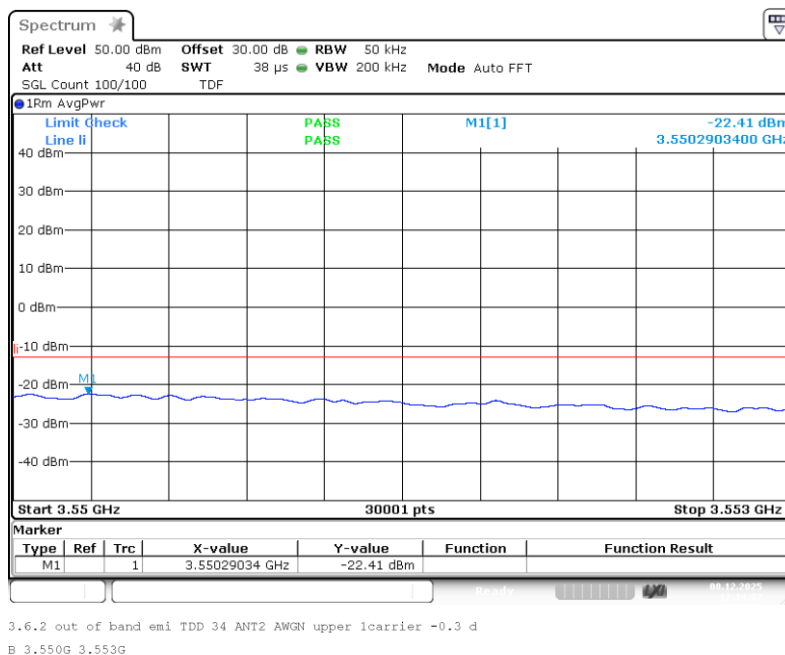
Remark: Please see next sub-clause for the measurement plot.

Test Report No.: 25-0163-EMC-TR-25-0149-V01

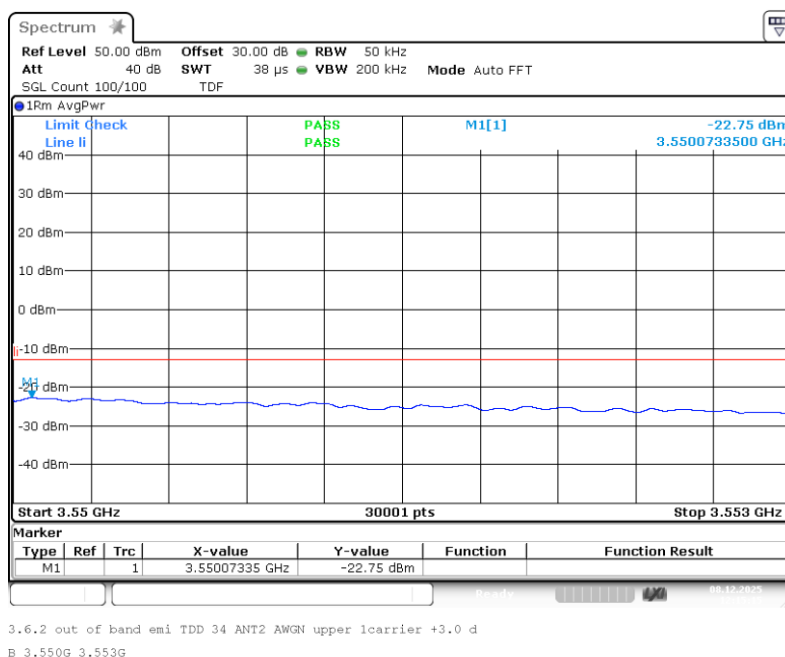
Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

5.5.3 MEASUREMENT PLOT

Band: TDD 34, ANT 2; Frequency: 3.4500 GHz to 3.5500 GHz; Band edge: upper;
Mod: AWGN; Input power = 0.3 dB < AGC; Number of signals 1



Band: TDD 34 ANT2; Frequency: 3.4500 GHz to 3.5500 GHz; Band edge: upper;
Mod: AWGN; Input power = 3 dB > AGC; Number of signals 1

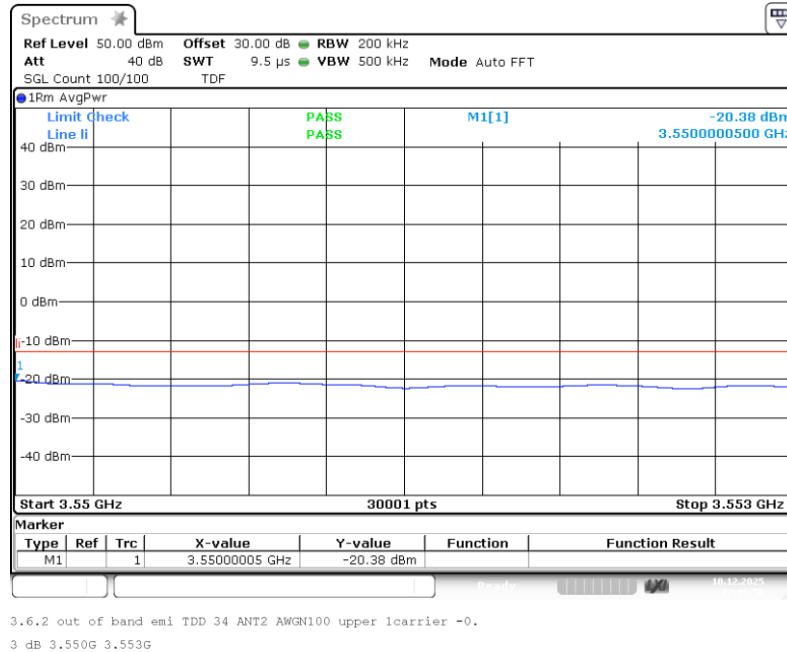


The test results relate only to the tested item. The sample has been provided by the client.
Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.

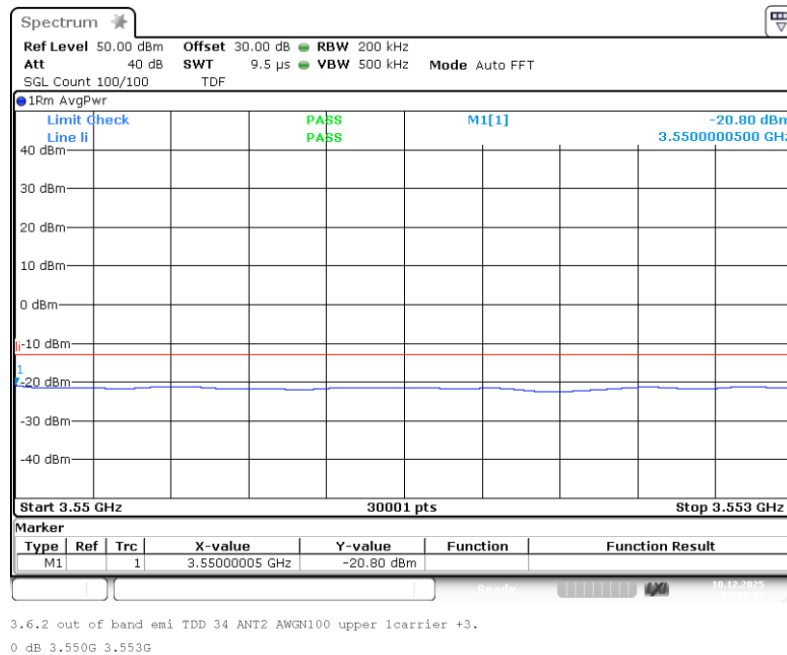
Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

Band: TDD 34 ANT2; Frequency: 3.4500 GHz to 3.5500 GHz; Band edge: upper;
Mod: AWGN100; Input power = 0.3 dB < AGC; Number of signals 1



Band: TDD 34 ANT2; Frequency: 3.4500 GHz to 3.5500 GHz; Band edge: upper;
Mod: AWGN100; Input power = 3 dB > AGC; Number of signals 1

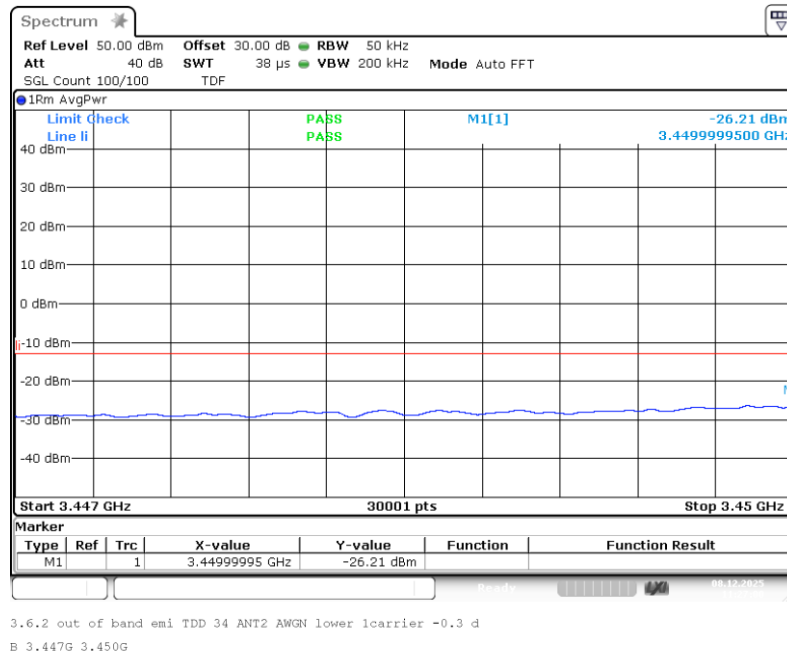


The test results relate only to the tested item. The sample has been provided by the client.
Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.

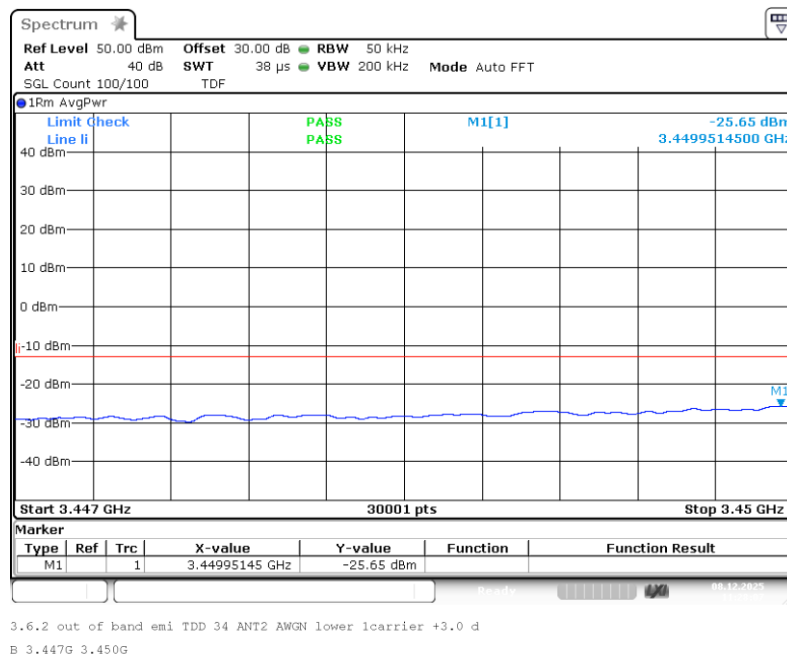
Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

Band: TDD 34 ANT2; Frequency: 3.4500 GHz to 3.5500 GHz; Band edge: lower; Mod: AWGN; Input power = 0.3 dB < AGC; Number of signals 1



Band: TDD 34 ANT2; Frequency: 3.4500 GHz to 3.5500 GHz; Band edge: lower; Mod: AWGN; Input power = 3 dB > AGC; Number of signals 1

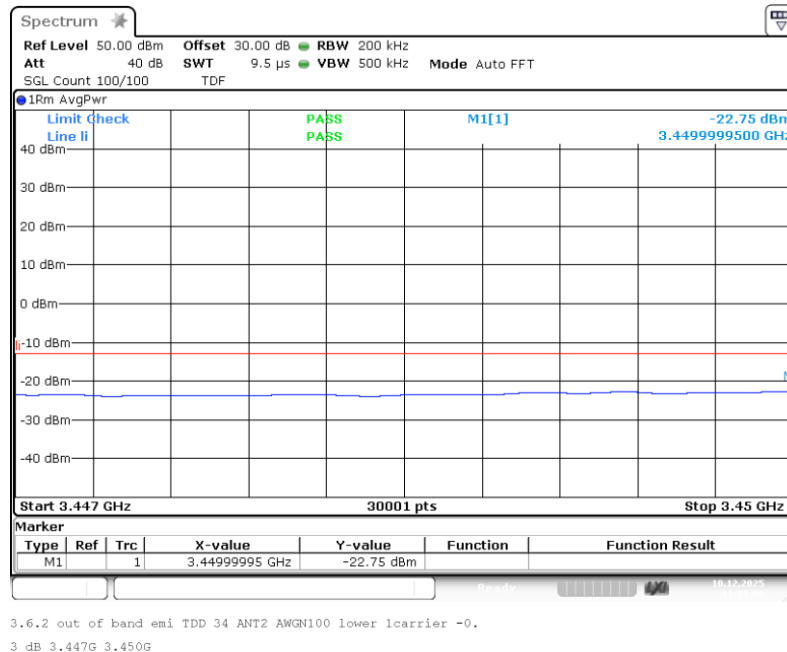


The test results relate only to the tested item. The sample has been provided by the client.
Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.

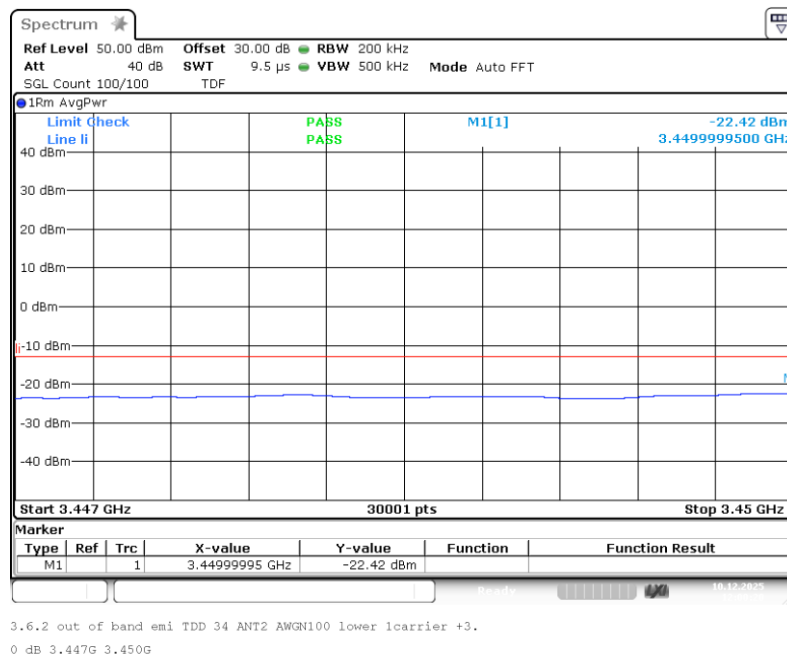
Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

Band: TDD 34 ANT2; Frequency: 3.4500 GHz to 3.5500 GHz; Band edge: lower;
Mod: AWGN100; Input power = 0.3 dB < AGC; Number of signals 1



Band: TDD 34 ANT2; Frequency: 3.4500 GHz to 3.5500 GHz; Band edge: lower;
Mod: AWGN100; Input power = 3 dB > AGC; Number of signals 1

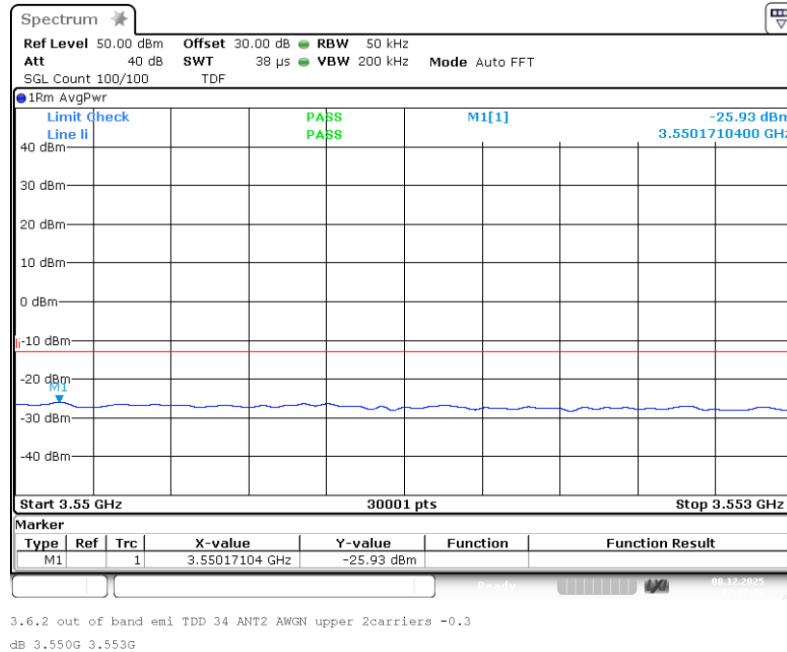


The test results relate only to the tested item. The sample has been provided by the client.
Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.

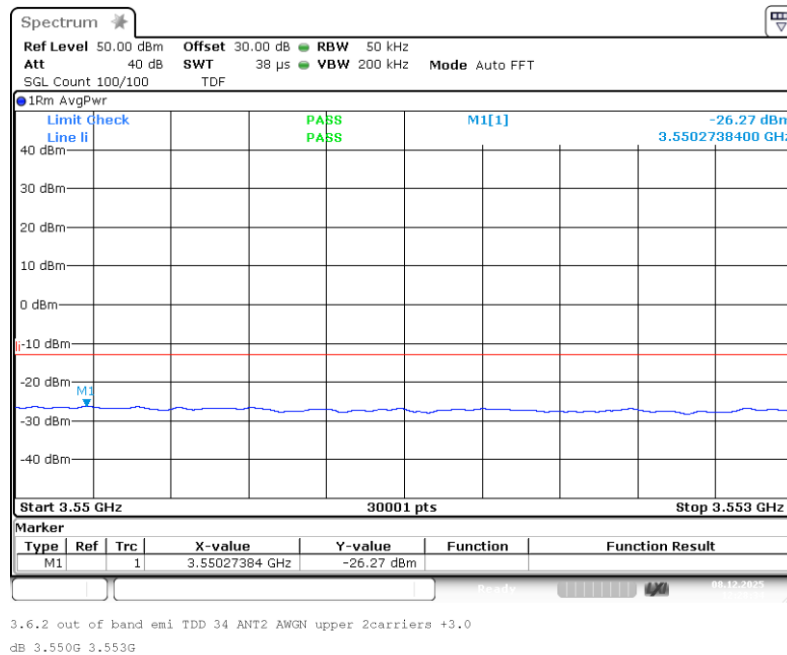
Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

Band: TDD 34 ANT2; Frequency: 3.4500 GHz to 3.5500 GHz; Band edge: upper;
Mod: AWGN; Input power = 0.3 dB < AGC; Number of signals 2



Band: TDD 34 ANT2; Frequency: 3.4500 GHz to 3.5500 GHz; Band edge: upper;
Mod: AWGN; Input power = 3 dB > AGC; Number of signals 2

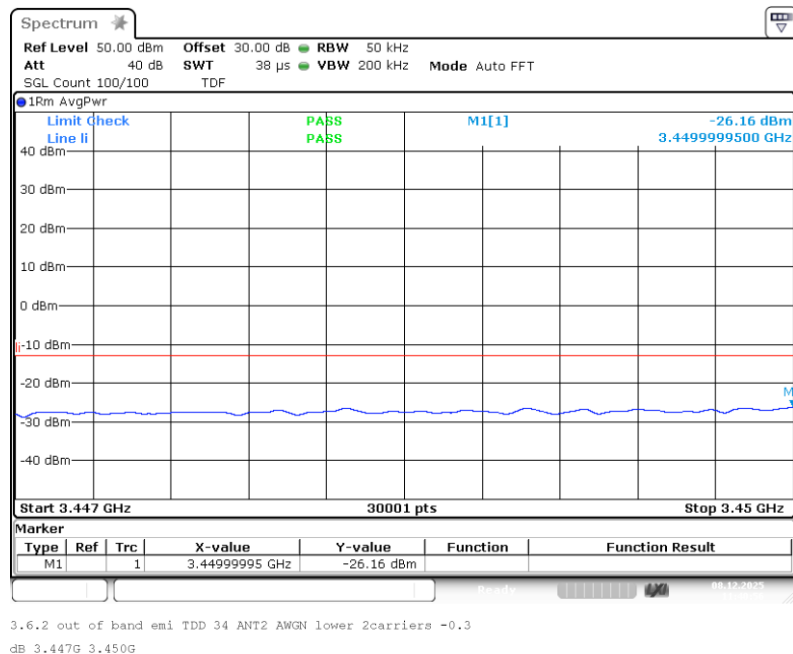


The test results relate only to the tested item. The sample has been provided by the client.
Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.

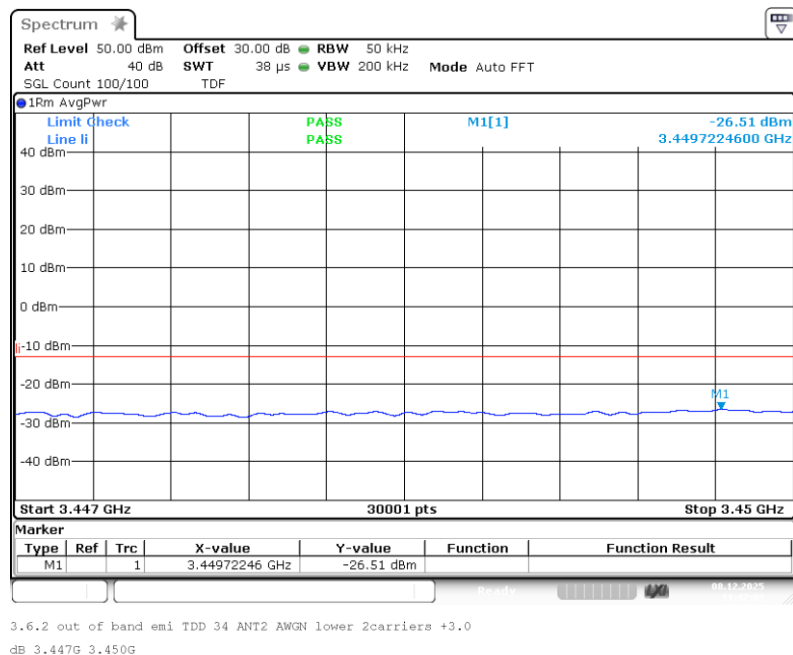
Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

Band: TDD 34 ANT2; Frequency: 3.4500 GHz to 3.5500 GHz; Band edge: lower;
Mod: AWGN; Input power = 0.3 dB < AGC; Number of signals 2



Band: TDD 34 ANT2; Frequency: 3.4500 GHz to 3.5500 GHz; Band edge: lower;
Mod: AWGN; Input power = 3 dB > AGC; Number of signals 2



The test results relate only to the tested item. The sample has been provided by the client.
Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.



Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

BUREAU
VERITAS

5.5.4 TEST EQUIPMENT USED

- Conducted

The test results relate only to the tested item. The sample has been provided by the client.
Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.

2025-0163-EMC-TR-25-0149-V01

Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

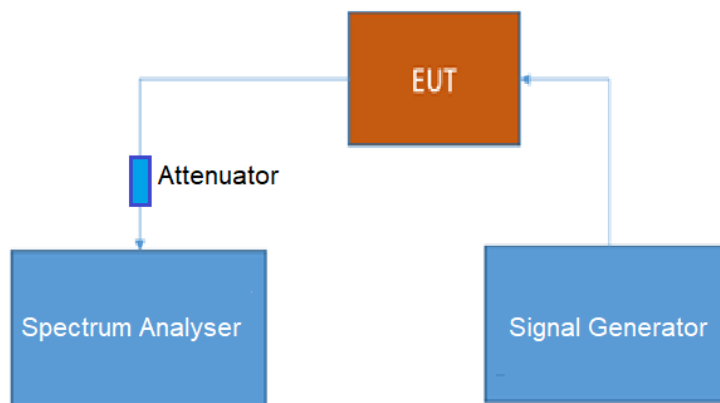
5.6 OUT-OF-BAND REJECTION

Standard FCC Part 27

The test was performed according to:
ANSI C63.26**Test date:** 2025-07-23**Environmental conditions:** 28.9 °C; 34 % r. H.**Test engineer:** Thomas Hufnagel**5.6.1 TEST DESCRIPTION**

This test case is intended to demonstrate compliance to the out-of-band rejection test case for industrial signal boosters.

The EUT was connected to the test setup according to the following diagram:



The attenuation of the measuring and stimulus path are known for each measured frequency and are considered.

The Spectrum Analyzer settings can be directly found in the measurement diagrams.

5.6.2 TEST REQUIREMENTS/LIMITS

For this test case exists no applicable limit

Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

5.6.3 TEST PROTOCOL

Band TDD 34, ANT 2; Downlink				
Highest Power Frequency [MHz]	Output Power [dBm]	Lower Highest Power -20 dB Frequency [MHz]	Upper Highest Power -20 dB Frequency [MHz]	20 dB Bandwidth [MHz]
3546.0	32.58	3446.475	3553.625	107.150

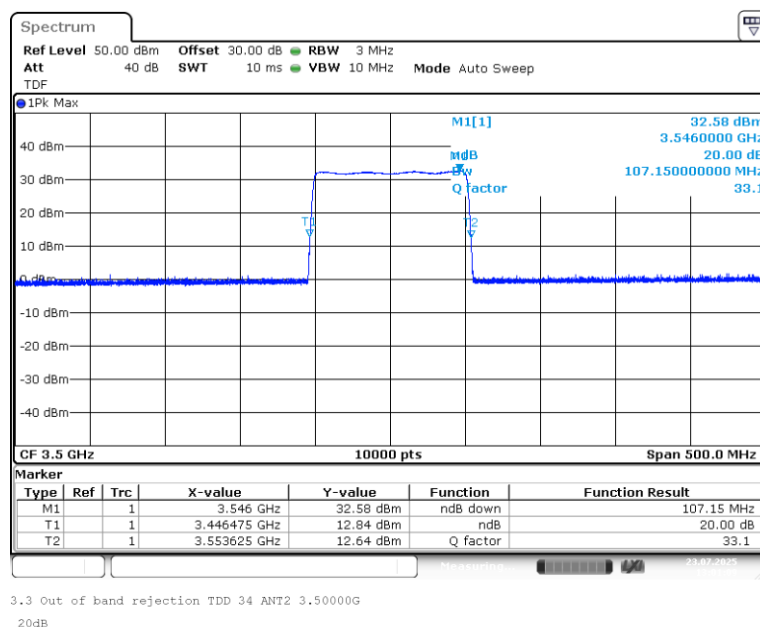
Remark: Please see next sub-clause for the measurement plots.

Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

5.6.4 MEASUREMENT PLOT

Frequency band = TDD 34, ANT 2; Direction = RF downlink



5.6.5 TEST EQUIPMENT USED

- Conducted

5.7 FREQUENCY STABILITY

The frequency stability test case was not carried out, as any frequency errors are eliminated by the given system architecture. This is achieved by generating the LOs in the head-end station and the LOs in the remote unit with a common reference clock. This reference clock is transmitted from the head-end station to the remote unit and regenerated there. This means that the same reference frequency is used for all signal conversions (up- and down-conversion as well as analog-to-digital and digital-to-analog conversion) and any frequency error in the reference clock is compensated therefore. This is already clear from the measurement markings for the occupied bandwidth (26dB bandwidth). It can be seen that the DUT has no influence on the frequency (comparison between input and output signal). In addition, it is operationally necessary for the frequency deviation to be significantly smaller than the spectral distance between the transmission bandwidth edge and the channel bandwidth edge in order to meet the signal quality requirement (signal purity) and such ensure that the fundamental emissions remain within the authorized bands of operation.

Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

6 TEST EQUIPMENT

6.1 CONDUCTED

Ref.No.	Type	Description	Manufacturer	Inventory no.	Last calibration	Calibration due
1.1	FSV40	Signal Analyzer 10 Hz - 40 GHz	Rohde & Schwarz	E-003138	2023-10	2025-10/ 2026-10
1.2	SMBV100A	Vector Signal Generator 9 kHz - 6 GHz	Rohde & Schwarz	E-003206	2023-01	2026-01
1.3	9070-10dB	Attenuator 10 dB	Inmet	E-003996	2024-01	2026-01
1.4	CA-2.92MF-20-40-20W-RD	Attenuator 20 dB	Tactron	E-003946	2025-02	2027-02
1.5	CA-SMAMF-10-26.5-10W-RDA2	Attenuator 10 dB	Tactron	E-004096	2025-02	2027-02
1.6	48-20-33	Attenuator 20 dB	BFI IBEXSA	E-003056	2024-10	2026-10
1.7	3.3 GHz - 3.8 GHz	Notch Filter	Tactron	E-004115	2025-07	2027-07
1.8	Arduino & HTY939	Thermo-Hygrometer	Bureau Veritas	E-003998	2025-03	2026-03
1.9	Auto Messung 1 Channel V8.1	Software	Bureau Veritas	Software V8.1	---	---

The calibration interval is the time interval between "Last Calibration" and "Calibration Due".

6.2 ANTENNA FACTORS. CABLE LOSS AND SAMPLE CALCULATION

The used factors for antennas, cables etc. are deposited in the used test systems (LabView program and BAT EMC programm). They are actualised by the returning calibration control.

Sample calculation

$$E \text{ (dB } \mu\text{V/m)} = U \text{ (dB } \mu\text{V)} + AF \text{ (dB 1/m)} + \text{Corr. (dB)}$$

U = Receiver reading

AF = Antenna factor

Corr. = Sum of single correction factors of used cables, switch unit, distance correction, amplifier (if applicable)

Linear interpolation will be used for frequencies in between the values in the test software.

distance correction = $-20 * \text{LOG} (d_{\text{Limit}} / d_{\text{used}})$

Linear interpolation will be used for frequencies in between the values in the test software.

**Test Report No.: 25-0163-EMC-TR-25-0149-V01**

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

**BUREAU
VERITAS**

7 PHOTO REPORT

Please see separate photo report.

The test results relate only to the tested item. The sample has been provided by the client.
Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.

2025-0163-EMC-TR-25-0149-V01

**Test Report No.: 25-0163-EMC-TR-25-0149-V01**

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

**BUREAU
VERITAS**

Annex A: Accreditation certificate (for information)

The accreditation relates to competences stated on the accreditation certificate. The current certificate is available on the homepage of the DAkkS and can be downloaded under accredited bodies with the processing number:

<https://www.dakks.de/en>

The test results relate only to the tested item. The sample has been provided by the client.
Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.

2025-0163-EMC-TR-25-0149-V01



Test Report No.: 25-0163-EMC-TR-25-0149-V01

Tests performed on CAP H2 34T/37T F-AC-F1 [34T]

**BUREAU
VERITAS**

Annex B: Additional information provided by client

None.

***** End of test report *****

The test results relate only to the tested item. The sample has been provided by the client.
Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this report shall not be reproduced.

2025-0163-EMC-TR-25-0149-V01