

Test Report

As per

FCC Part 96 SAS requirements (CBRS Test Plan)



Add value.
Inspire trust.

on the
Cradlepoint Cellular Access point
A2415 Outdoor High-Power Unit
FCC ID: UXX-S1A415A

Issued by:
TÜV SÜD Canada Inc.
1280 Teron Rd,
Ottawa, ON K2K 2C1
Canada

Testing produced
for

Cradlepoint
(Ericsson
Enterprise Wireless
Solutions)

Scott Drysdale.
Test Personnel

A handwritten signature in black ink, appearing to read "Scott Drysdale", written over a horizontal line.

See Appendix A for
full client & EUT
details.

Nour El Masri
Report Reviewer

A handwritten signature in black ink, appearing to read "Nour El Masri", written over a horizontal line.



Testing Laboratory
Certificate #2955.19

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

Table of Contents

Table of Contents	2
Report Scope	3
Summary	4
Test Results Summary	5
Notes, Justifications, or Deviations	15
Applicable Standards, Specifications and Methods.....	16
Document Revision Status.....	17
Definitions and Acronyms	18
Testing Facility	20
Calibrations and Accreditations.....	20
Testing Environmental Conditions and Dates	21
Detailed Test Results Section	22
D.REG.....	23
D.HBT.....	31
D.RLQ.....	35
D.DRG	36
Test Equipment	37
Appendix A – EUT & Client Provided Details	38

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

Report Scope

This report addresses the EMC verification testing and test results of the **Cradlepoint (Ericsson Enterprise Wireless Solutions) A2415 Outdoor High-Power Unit** herein referred to as EUT (Equipment Under Test). The EUT was tested for compliance against the following standards:

FCC Part 96 SAS requirements (CBRS Test Plan), C2PC requirements for adding domain proxy functionality.

Test procedures, results, justifications, and engineering considerations, if any, follow later in this report.

For a more detailed list of the standards and the revision used, see the "Applicable Standards, Specifications and Methods" section of this report.

This report does not imply product endorsement by any government, accreditation agency, or TÜV SÜD Canada Inc.

Opinions or interpretations expressed in this report, if any, are outside the scope of TÜV SÜD Canada Inc accreditations. Any opinions expressed do not necessarily reflect the opinions of TÜV SÜD Canada Inc, unless otherwise stated.

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

Summary

The results contained in this report relate only to the item(s) tested.

Equipment Under Test (EUT)	A2415 Outdoor High-Power Unit
EUT passed all tests performed	Yes
Tests conducted by	Scott Drysdale

For testing dates, see 'Testing Environmental Conditions and Dates'.

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

Test Results Summary

Section as per Working Document WINNF-TS-0122

Section	CBSD	DP	Test Case ID	Test Case Title	RF Measurement Requirement	Pass / Fail
6.1.4.1.1	X	--	WINNF.FT.C. REG.1	Multi-Step registration	Monitor for 60 seconds after REG message sent. No transmission during test.	N/A
6.1.4.1.2	--	X	WINNF.FT.D. REG.2	Domain Proxy Multi-Step registration	Monitor for 60 seconds after REG message sent. No transmission during test.	P
6.1.4.1.3	X	--	WINNF.FT.C. REG.3	Single-Step registration for Category A CBSD	Monitor for 60 seconds after REG message sent. No transmission during test.	N/A
6.1.4.1.4	--	X	WINNF.FT.D. REG.4	Domain Proxy Single-Step registration for Cat A CBSD (Note: Mandatory for without CPI, if EUT will always have signed CPI – asked for email waiver)	Monitor for 60 seconds after REG message sent. No transmission during test.	N/A
6.1.4.1.5	X	--	WINNF.FT.C. REG.5	Single-Step registration for CBSD with CPI signed data	Monitor for 60 seconds after REG message sent. No transmission during test.	N/A
6.1.4.1.6	--	X	WINNF.FT.D. REG.6	Domain Proxy Single-Step registration for CBSD with CPI signed data	Monitor for 60 seconds after REG message sent. No transmission during test.	P

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

6.1.4.1.7	X	X	WINNF.FT.C. REG.7	Registration due to change of an installation parameter	Test waits until transmission starts, then trigger an installationParam change. Record time at which transmission stops. Time must be within 60 seconds of the installation Param change taking effect.	P
6.1.4.2.1	X	--	WINNF.FT.C. REG.8	Missing Required parameters (responseCode 102)	Monitor for 60 seconds after REG message sent. No transmission during test.	N/A
6.1.4.2.2	--	X	WINNF.FT.D. REG.9	Domain Proxy Missing Required parameters (responseCode 102)	Monitor for 60 seconds after REG message sent. No transmission during test.	P
6.1.4.2.3	X	--	WINNF.FT.C. REG.10	Pending registration (responseCode 200)	Monitor for 60 seconds after REG message sent. No transmission during test.	N/A
6.1.4.2.4	--	X	WINNF.FT.D. REG.11	Domain Proxy Pending registration (responseCode 200)	Monitor for 60 seconds after REG message sent. No transmission during test.	P

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

6.1.4.2.5	X	--	WINNF.FT.C. REG.12	Invalid parameter (responseCode 103)	Monitor for 60 seconds after REG message sent. No transmission during test.	N/A
6.1.4.2.6	--	X	WINNF.FT.D. REG.13	Domain Proxy Invalid parameters (responseCode 103)	Monitor for 60 seconds after REG message sent. No transmission during test.	P
6.1.4.2.7	X	--	WINNF.FT.C. REG.14	Blacklisted CBSD (responseCode 101)	Monitor for 60 seconds after REG message sent. No transmission during test.	N/A
6.1.4.2.8	--	X	WINNF.FT.D. REG.15	Domain Proxy Blacklisted CBSD (responseCode 101)	Monitor for 60 seconds after REG message sent. No transmission during test.	P
6.1.4.2.9	X	--	WINNF.FT.C. REG.16	Unsupported SAS protocol version (responseCode 100)	Monitor for 60 seconds after REG message sent. No transmission during test.	N/A
6.1.4.2.10	--	X	WINNF.FT.D. REG.17	Domain Proxy Unsupported SAS protocol version responseCode 100)	Monitor for 60 seconds after REG message sent. No transmission during test.	P
6.1.4.2.11	X	--	WINNF.FT.C. REG.18	Group Error (responseCode 201)	Monitor for 60 seconds after REG message sent. No transmission during test.	N/A
6.1.4.2.12	--	X	WINNF.FT.D. REG.19	Domain Proxy Group Error (responseCode 201)	Monitor for 60 seconds after REG message sent. No transmission during test.	P

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

6.1.4.3.1	X	X	WINNF.FT.C. REG.20	Category A CBSD location update		N/A
6.3.4.2.1	X	X	WINNF.FT.C. GRA.1 (TYPO FIXED D TO C)	Unsuccessful Grant responseCode=400 (INTERFERENCE)	Monitor for 60 seconds after REG message sent. No transmission during test.	P
6.3.4.2.2	X	X	WINNF.FT.C. GRA.2	Unsuccessful Grant responseCode=401 (GRANT_CONFLICT)	Monitor for 60 seconds after REG message sent. No transmission during test.	P
6.4.4.1.1	X	--	WINNF.FT.C. HBT.1	Heartbeat Success Case (first Heartbeat Response)	Monitor RF from start of test. Ensure that: - Transmission does not start until time of first heartbeat response or after. - After transmission starts, measure that transmission is within the granted channel (frequency Low, frequencyHigh)	N/A
6.4.4.1.2	--	X	WINNF.FT.D. HBT.2	Domain Proxy Heartbeat Success Case (first Heartbeat Response)	Monitor RF from start of test. Ensure that: Transmission does not	P

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

					start until time of first heartbeat response or after. After transmission starts, measure that transmission is within the granted channel (frequency Low, frequencyHigh)	
6.4.4.2.1	X	X	WINNF.FT.C. HBT.3	Heartbeat responseCode=105 (DEREGISTER)	Monitor RF transmission. Ensure that: CBSD stops transmission within 60 seconds of the heartbeat Response which contains responseCode = 105	N/A
6.4.4.2.2	X	--	WINNF.FT.C. HBT.4	Heartbeat responseCode=500 (TERMINATED_GRANT)		N/A
6.4.4.2.3	X	X	WINNF.FT.C. HBT.5	Heartbeat responseCode=501 (SUSPENDED_GRANT) in First	Monitor RF transmission from start of test. Ensure there is no transmission during the test	N/A

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

				Heartbeat Response		
6.4.4.2.4	X	X	WINNF.FT.C. HBT.6	Heartbeat responseCode=501 (SUSPENDED_G RANT) in Subsequent Heartbeat Response	Monitor RF transmission. Ensure: CBSD stops transmission within 60 seconds of heartbeat Response which contains responseCode=501	N/A
6.4.4.2.5	X	X	WINNF.FT.C. HBT.7	Heartbeat responseCode=502 (UNSYNC_OP_P ARAM)	Monitor RF transmission. Ensure: CBSD stops transmission within 60 seconds of heartbeat Response which contains responseCode=502	N/A
6.4.4.2.6	--	X	WINNF.FT.D. HBT.8	Domain Proxy Heartbeat responseCode=500 (TEMINATED_G RANT)	Monitor RF transmission. CBSDs will have different behavior: CBSD1: will continue to transmit to end of test (this is not a pass/fail criteria, but check)	P

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

					CBSD2: must stop transmission within 60 seconds of being sent heartbeat Response with responseCode = 500	
6.4.4.3.1	X	X	WINNF.FT.C.HBT.9	Heartbeat Response Absent (First Heartbeat)	Monitor RF from start of test to 60 seconds after last heartbeatResponse message was sent. CBSD should not transmit at any time during test	N/A
6.4.4.3.2	X	X	WINNF.FT.C.HBT.10	Heartbeat Response Absent (Subsequent Heartbeat)	Monitor RF transmission. Verify: CBSD must stop transmission within transmitExpireTime+ 60 seconds, where transmitExpireTime is from last successful heartbeat Response message	N/A
6.5.4.2.1	X	--	WINNF.FT.C.MES.1	Registration Response contains measReportConfig	No RF monitoring	N/A
6.5.4.2.2	--	X	WINNF.FT.D.MES.2	Domain Proxy Registration Response contains measReportConfig	No RF monitoring	P

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

6.5.4.2.3	X	X	WINNF.FT.C. MES.3	Grant Response contains measReportConfig	No RF monitoring	N/A
6.5.4.2.4	X	--	WINNF.FT.C. MES.4	Heartbeat Response contains measReportConfig	No RF monitoring	N/A
6.5.4.2.5	--	X	WINNF.FT.D. MES.5	Domain Proxy Heartbeat Response contains measReportConfig	No RF monitoring	P
6.6.4.1.1	X	--	WINNF.FT.C. RLQ.1	Successful Relinquishment	Monitor RF transmission. Ensure: • CBSD stops transmission at any time prior to sending the relinquishmentRequest message.	N/A
6.6.4.1.2	--	X	WINNF.FT.D. RLQ.2	Domain Proxy Successful Relinquishment	Monitor RF transmission. Ensure: • CBSD stops transmission at any time prior to sending the relinquishmentRequest message.	P
6.7.4.1.1	X	--	WINNF.FT.C. DRG.1	Successful Deregistration	Monitor RF transmission. Ensure: • CBSD stops transmission at any time prior to sending the relinquishmentRequest	N/A

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

					message or deregistrationRequest message (whichever is sent first)	
6.7.4.1.2	--	X	WINNF.FT.D.DRG.2	Domain Proxy Successful Deregistration	Monitor RF transmission. Ensure: CBSD stops transmission at any time prior to sending the relinquishmentRequest message or deregistrationRequest message (whichever is sent first)	P
6.8.4.1.1	X	X	WINNF.FT.C.SCS.1	Successful TLS connection between UUT and SAS Test Harness	No RF transmission during test Check the tcpdump for the TLS information	N/A
6.8.4.2.1	X	X	WINNF.FT.C.SCS.2	TLS failure due to revoked certificate	No RF transmission during test Check the tcpdump for the TLS information	N/A
6.8.4.2.2	X	X	WINNF.FT.C.SCS.3	TLS failure due to expired server certificate	No RF transmission during test Check the tcpdump for the TLS information	N/A
6.8.4.2.3	X	X	WINNF.FT.C.SCS.4	TLS failure when SAS Test Harness certificate is issued by unknown CA	No RF transmission during test	N/A

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

					Check the tcpdump for the TLS information	
6.8.4.2.4	X	X	WINNF.FT.C.SCS.5	TLS failure when certificate at the SAS Test Harness is corrupted	No RF transmission during test Check the tcpdump for the TLS information	N/A
7.1.4.1.1	X	X	WINNF.PT.C.HBT	UUT RF Transmit Power Measurement	Power Spectral Density test case. Assume we use 1 carrier bandwidth (say, 5 or 10 MHz), one frequency (say middle channel in band) for test. Measure at max transmit power, and reduce in steps of 3 dB to minimum declared transmit power.	N/A

If the product as tested complies with the specification, the EUT is deemed to comply with the standard and is deemed a 'PASS' or 'P' grade. If not 'FAIL' grade is issued. Where 'N/A' is stated this means the test case is not applicable, and see Notes, Justifications or Deviations Section for details.

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

Notes, Justifications, or Deviations

The following notes, justifications for tests not performed or deviations from the above listed specifications apply:

A later revision of the standard may have been substituted in place of the previous dated referenced revision. The year of the specification used is listed under applicable standards. Using the later revision accomplishes the goal of ensuring compliance to the intent of the previous specification, while allowing the laboratory to incorporate the extensions and clarifications made available by a later revision.

For the N/A test cases, the following justifications apply:

- a. EUT is a CBSD with Domain Proxy functionality being added only, previous testing was not deemed to be affected
- b. Conditional functionality from WINNF-TS-0122-V1.0.0, Table 6-2:
 - i. C1 – Multi-step registration (WINNF.FT.D.REG.2)
 - ii. C3 – Single step registration containing CPI-signed data in the registration message (WINNF.FT.D.REG.6)
 - iii. C4 – RECEIVED_POWER_WITHOUT_GRANT measurement report (WINNF.FT.D.MES.2)
 - iv. C5 – RECEIVED_POWER_WITH_GRANT measurement report (WINNF.FT.D.MES.3, WINNF.FT.D.MES.5)
 - v. C6 – UUT supports installation parameter change (WINNF.FT.C.REG.7)
- c. Optional test cases were not performed

The device does not use single-step registration (as defined in condition C2 in WINNF-TS-0122-V1.0.0, Table 6-2), therefore test cases 6.1.4.1.4, and 6.1.4.3.1 are not applicable as per WINNF-TS-0122-V1.0.0, Table 6-3 and therefore not required or performed.

Note, where graph sweeps are incomplete, this was used to set the time stamp of when the events occurred. This can be accomplished by determining the time at which the graph was captured and subtracting the remaining time. For example if there was a 30 second sweep, and 9 out of 10 is complete, that means the end occurred at the 27 second mark. If the time on the graph was 12:03:35, this means the graph started at 12:03:08. This allows us to co-ordinate graph with timing provided in the logs.

Logs are kept on file.

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

Applicable Standards, Specifications and Methods

ANSI C63.26:2015	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services
CFR47 FCC Part 96	Code of Federal Regulations – Citizens Broadband Radio Service
WINNF-TS-0122 Version V1.0.2 25 November 2020	Conformance and Performance Test Technical Specification; CBSD/DP as Unit Under Test (UUT) Working Document
ISO/IEC 17025:2017	General requirements for the competence of testing and calibration laboratories

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

Document Revision Status

7169014474 000: March 7, 2025 – Draft Release.

7169014474 001: March 9, 2025 – Signed. First issue.

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

Definitions and Acronyms

The following definitions and acronyms are applicable in this report.
See also ANSI C63.14.

AE – Auxiliary Equipment. A digital accessory that feeds data into or receives data from another device (host) that in turn, controls its operation.

AM – Amplitude Modulation

Class A device – A device that is marketed for use in a commercial, industrial or business environment. A 'Class A' device should not be marketed for use by the general public and the instructions for use accompanying the product shall contain the following text:

Caution: This equipment is not intended for use in residential environments and may not provide adequate protection to radio reception in such environments.

Class B device – A device that is marketed for use in a residential environment and may also be used in a commercial, business or industrial environments.

EMC – Electro-Magnetic Compatibility. The ability of an equipment or system to function satisfactorily in its electromagnetic environment without introducing intolerable electromagnetic disturbances to anything in that environment.

EMI – Electro-Magnetic Immunity. The ability to maintain a specified performance when the equipment is subjected to disturbance (unwanted) signals of specified levels.

Enclosure Port – Physical boundary of equipment through which electromagnetic fields may radiate or impinge.

EUT – Equipment Under Test. A device or system being evaluated for compliance that is representative of a product to be marketed.

LISN – Line Impedance Stabilization Network

NCR – No Calibration Required

NSA – Normalized Site Attenuation

RF – Radio Frequency

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

EMC Test Plan – An EMC test plan established prior to testing. See 'Appendix A – EUT & Client Provided Details'.

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

Testing Facility

Testing for EMC on the EUT was carried out at customer location as described in Appendix A.

Calibrations and Accreditations

TÜV SÜD Canada Inc is accredited to ISO/IEC 17025 by A2LA with Testing Certificate #2955.19. The laboratory's current scope of accreditation listing can be found as listed on the A2LA website. All measuring equipment is calibrated on an annual or bi-annual basis as listed for each respective test.

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

Testing Environmental Conditions and Dates

Following environmental conditions were recorded in the facility during time of testing

Date	Test	Initials	Temperature (°C)	Humidity (%)	Pressure (kPa)
Feb 24, 2025	All	SD	20-23	40-55	101.4

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

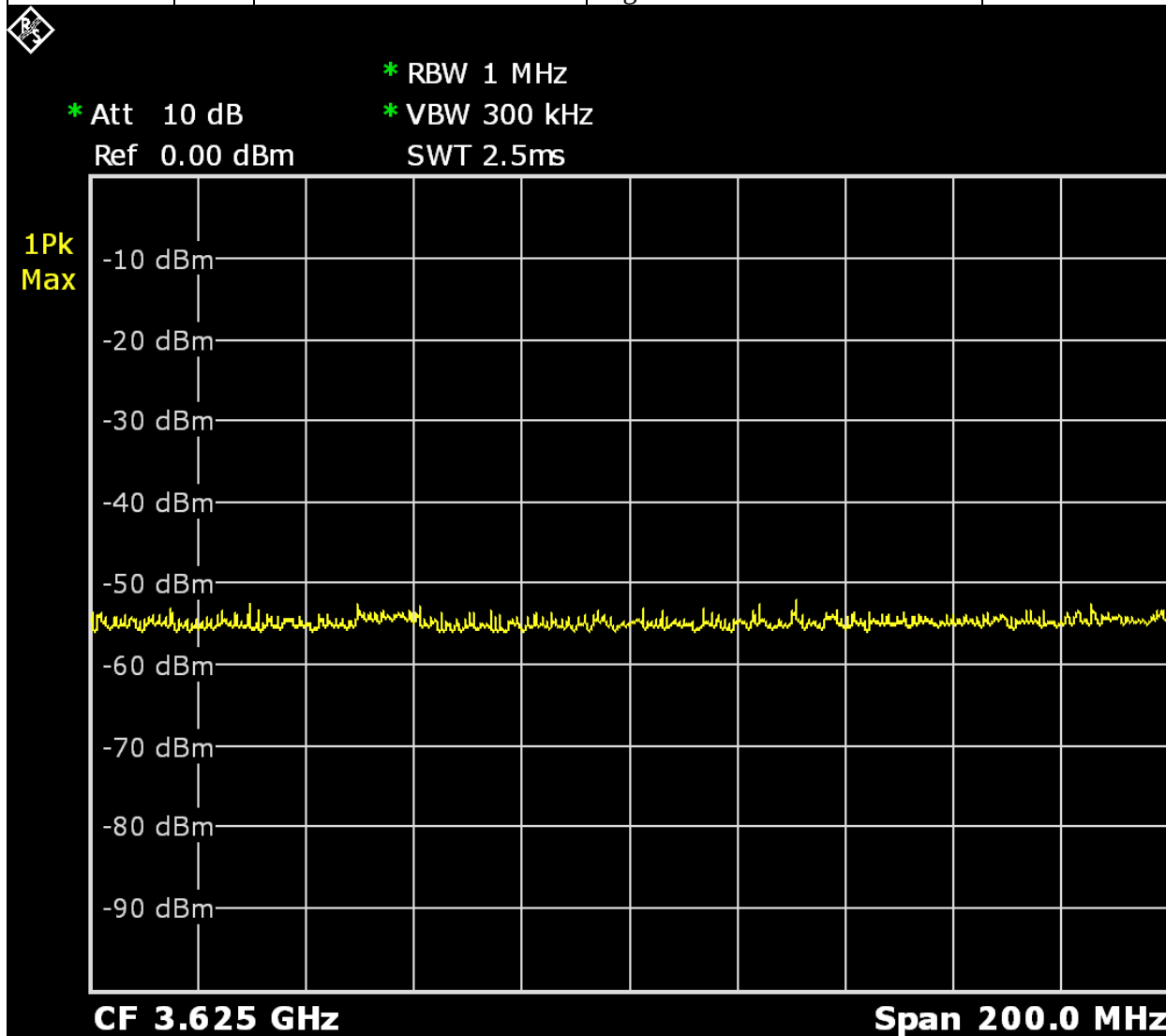
Detailed Test Results Section

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

D.REG

Authorization transmit after it receives authorization from a SAS.

Section	DP	Test Case ID	Test Case Title	Pass / Fail
6.1.4.1.2	X	WINNF.FT.D.REG.2	Domain Proxy Multi-Step registration	P

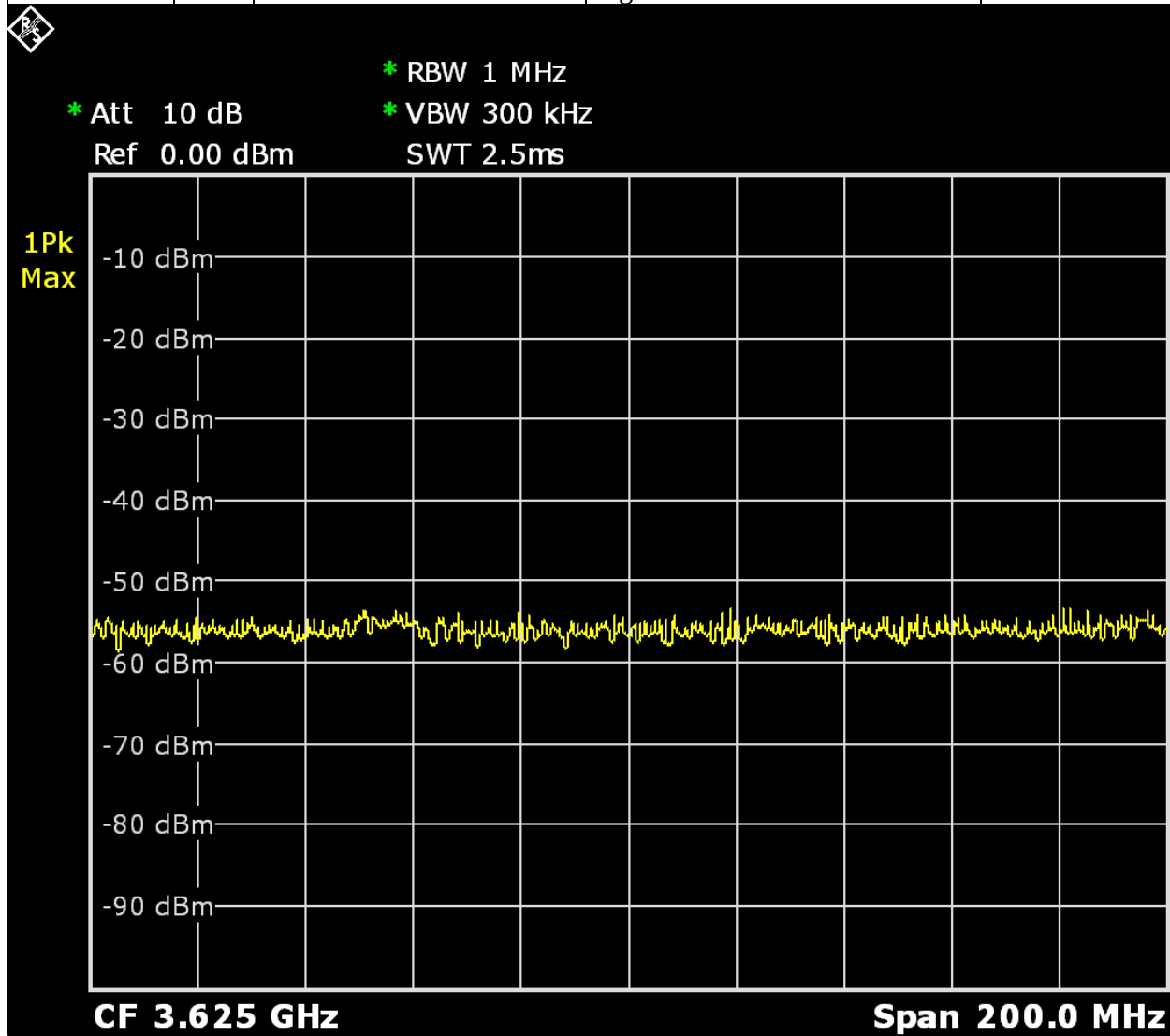


Date: 24.FEB.2025 10:02:01

Test Harness logs and timing on graph was verified, the EUT passed the requirement.

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

6.1.4.1.6	X	WINNF.FT.D.REG.6	Domain Proxy Single-Step registration for CBSD with CPI signed data	P
-----------	---	------------------	---	---

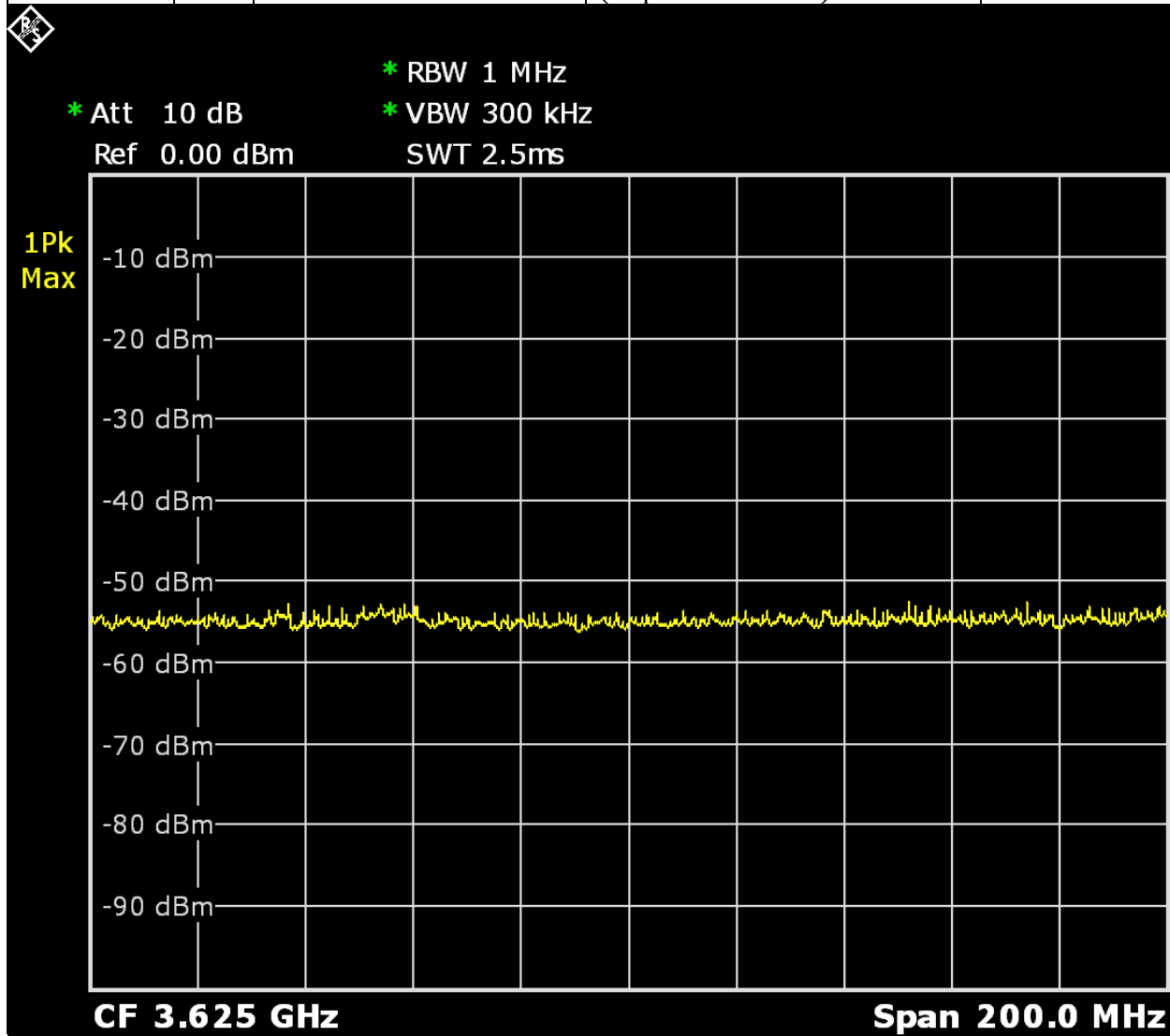


Date: 24.FEB.2025 10:03:09

Test Harness logs and timing on graph was verified, the EUT passed the requirement.

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

6.1.4.2.2	X	WINNF.FT.D.REG.9	Domain Proxy Missing Required parameters (responseCode 102)	P
-----------	---	------------------	---	---

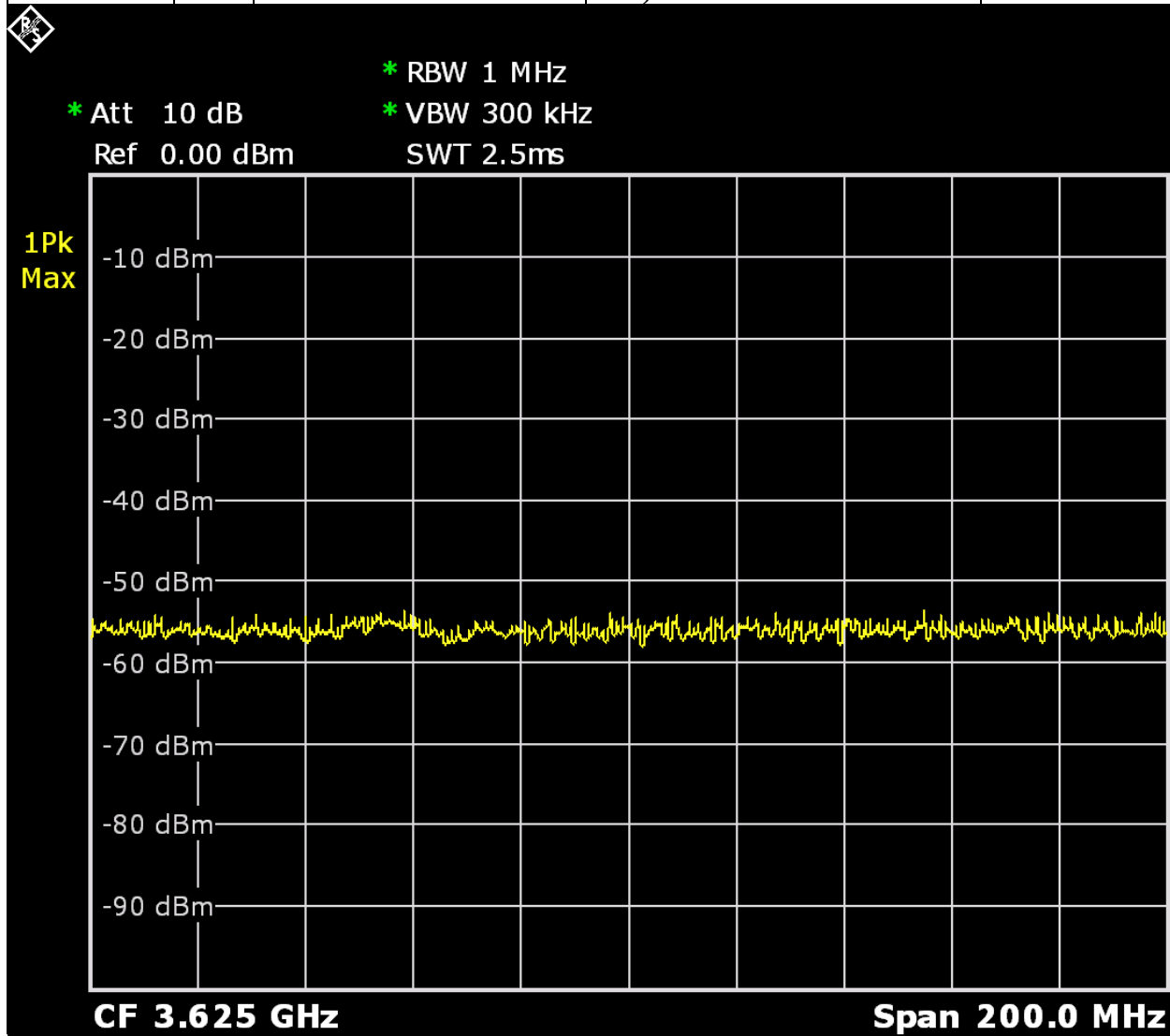


Date: 24.FEB.2025 10:08:18

Test Harness logs and timing on graph was verified, the EUT passed the requirement.

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

6.1.4.2.4	X	WINNF.FT.D.REG.11	Domain Proxy Pending registration (responseCode 200)	P
-----------	---	-------------------	--	---

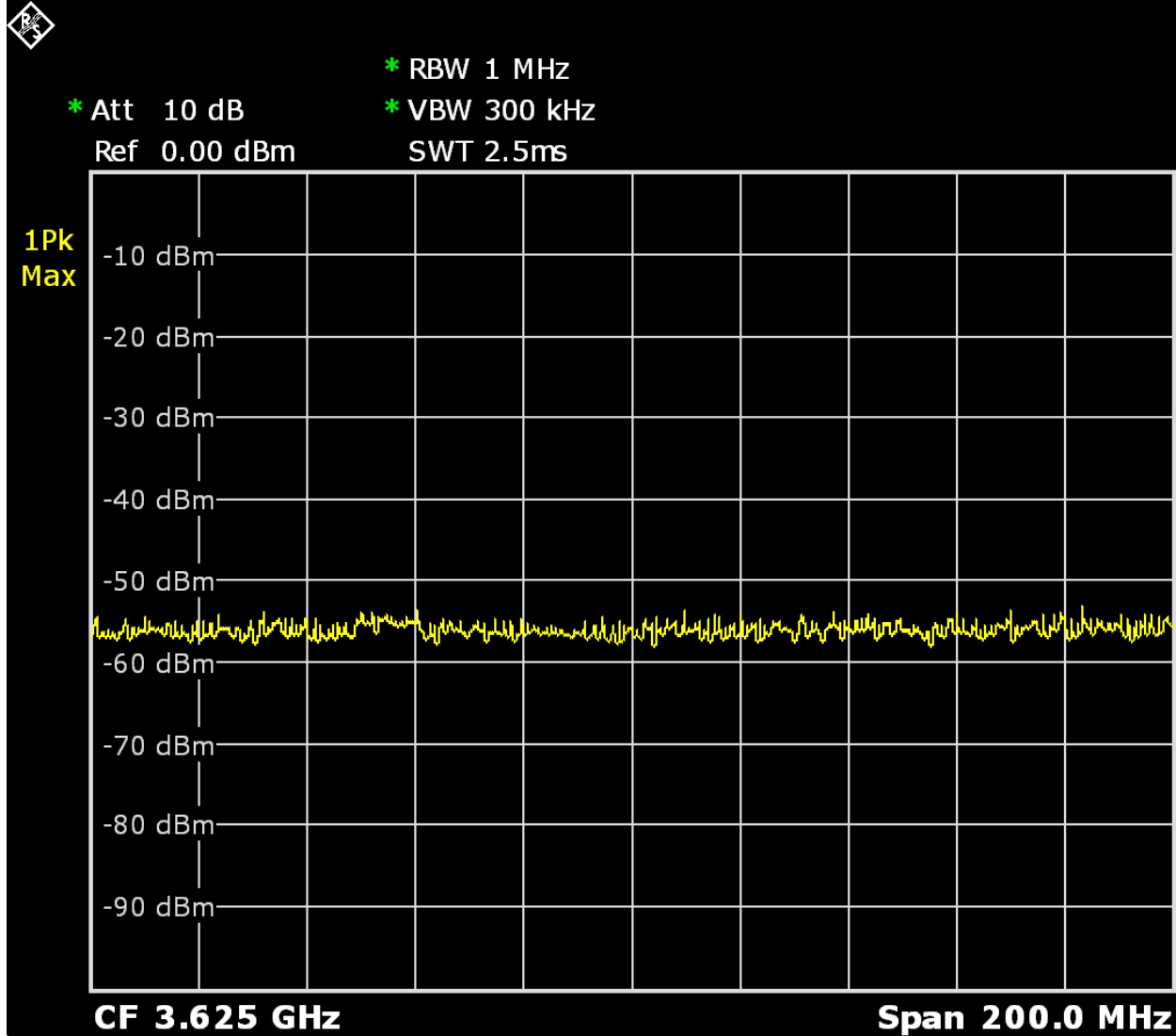


Date: 24.FEB.2025 10:09:32

Test Harness logs and timing on graph was verified, the EUT passed the requirement.

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

6.1.4.2.6	X	WINNF.TT.D.REG.13	Domain Proxy Invalid parameters (responseCode 103)	P
-----------	---	-------------------	--	---

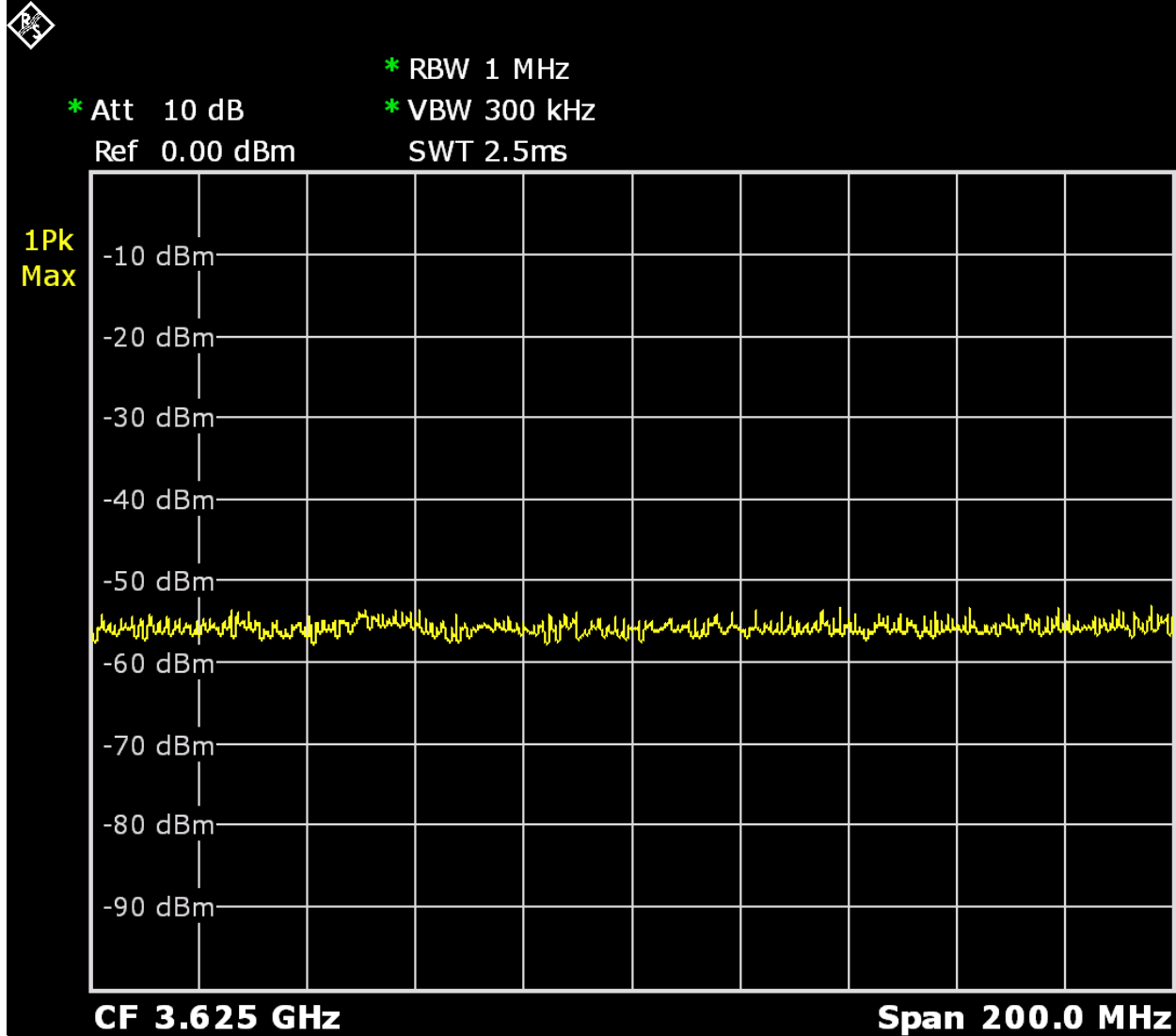


Date: 24.FEB.2025 10:10:39

Test Harness logs and timing on graph was verified, the EUT passed the requirement.

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

6.1.4.2.8	X	WINNF.FT.D.REG.15	Domain Proxy Blacklisted CBSD (responseCode 101)	P
-----------	---	-------------------	---	---

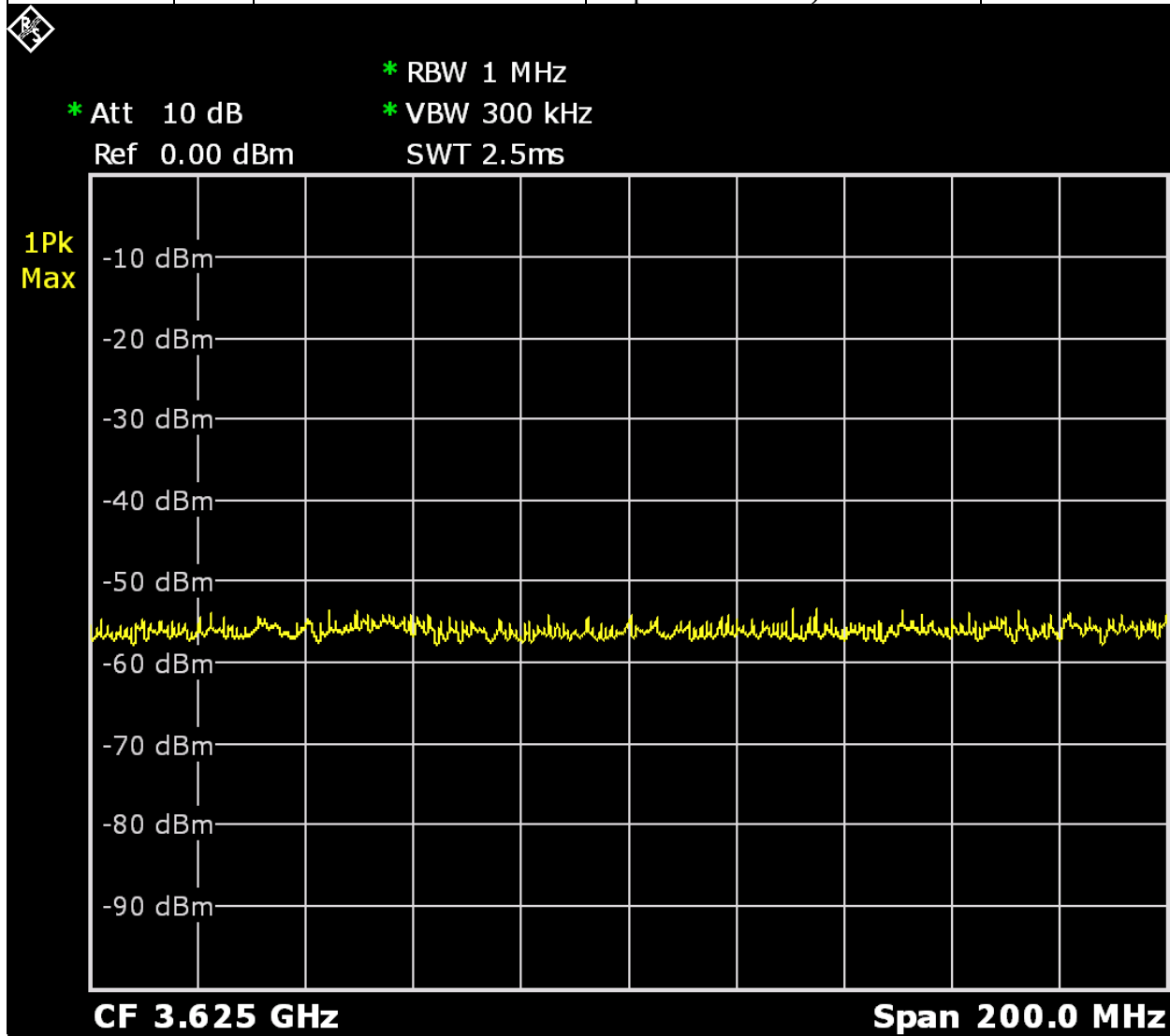


Date: 24.FEB.2025 10:12:25

Test Harness logs and timing on graph was verified, the EUT passed the requirement.

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

6.1.4.2.10	X	WINNF.TT.D.REG.17	Domain Proxy Unsupported SAS protocol version responseCode 100)	P
------------	---	-------------------	---	---

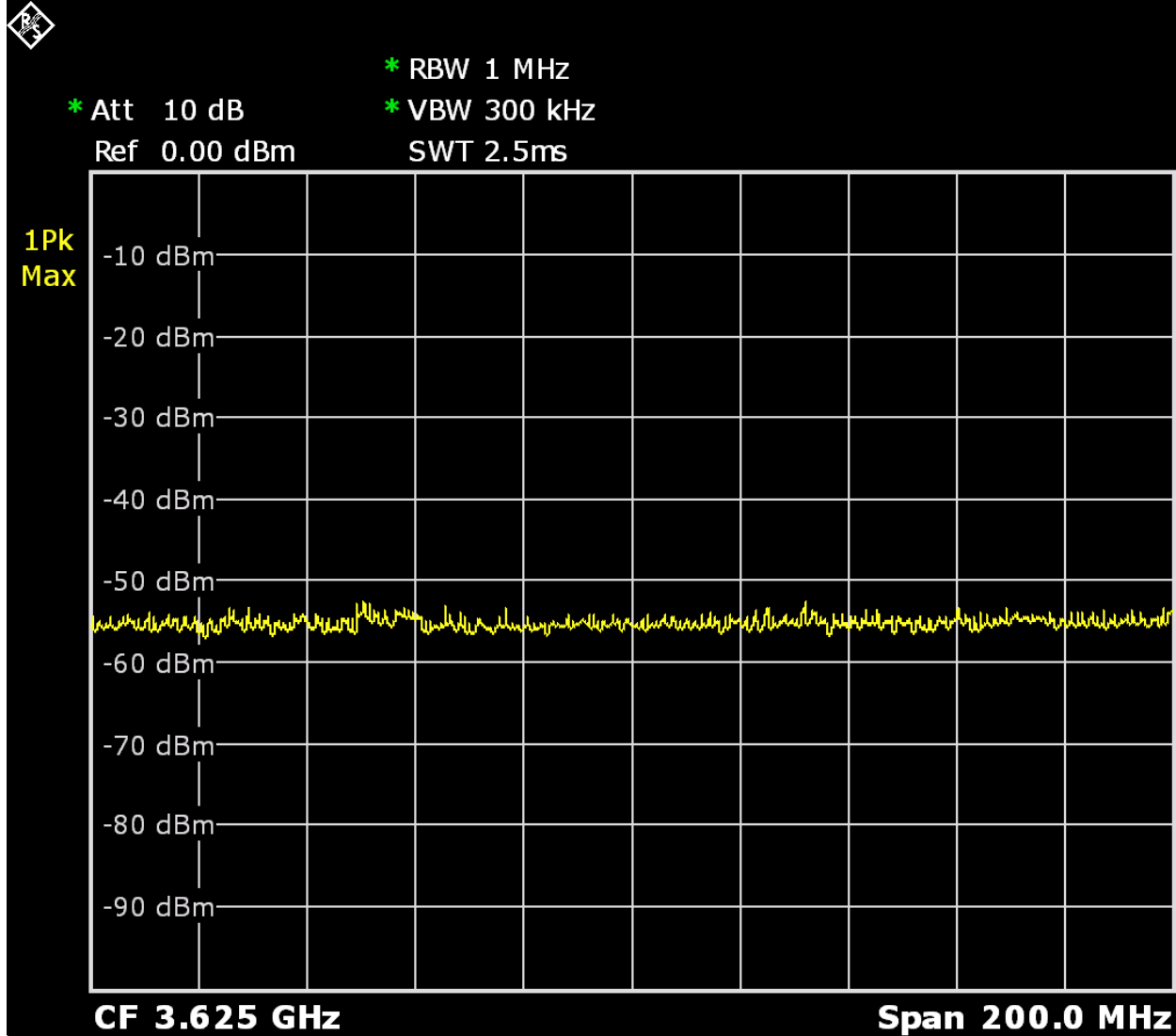


Date: 24.FEB.2025 10:14:31

Test Harness logs and timing on graph was verified, the EUT passed the requirement.

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

6.1.4.2.12	X	WINNF.TT.D.REG.19	Domain Proxy Group Error (responseCode 201)	P
------------	---	-------------------	--	---



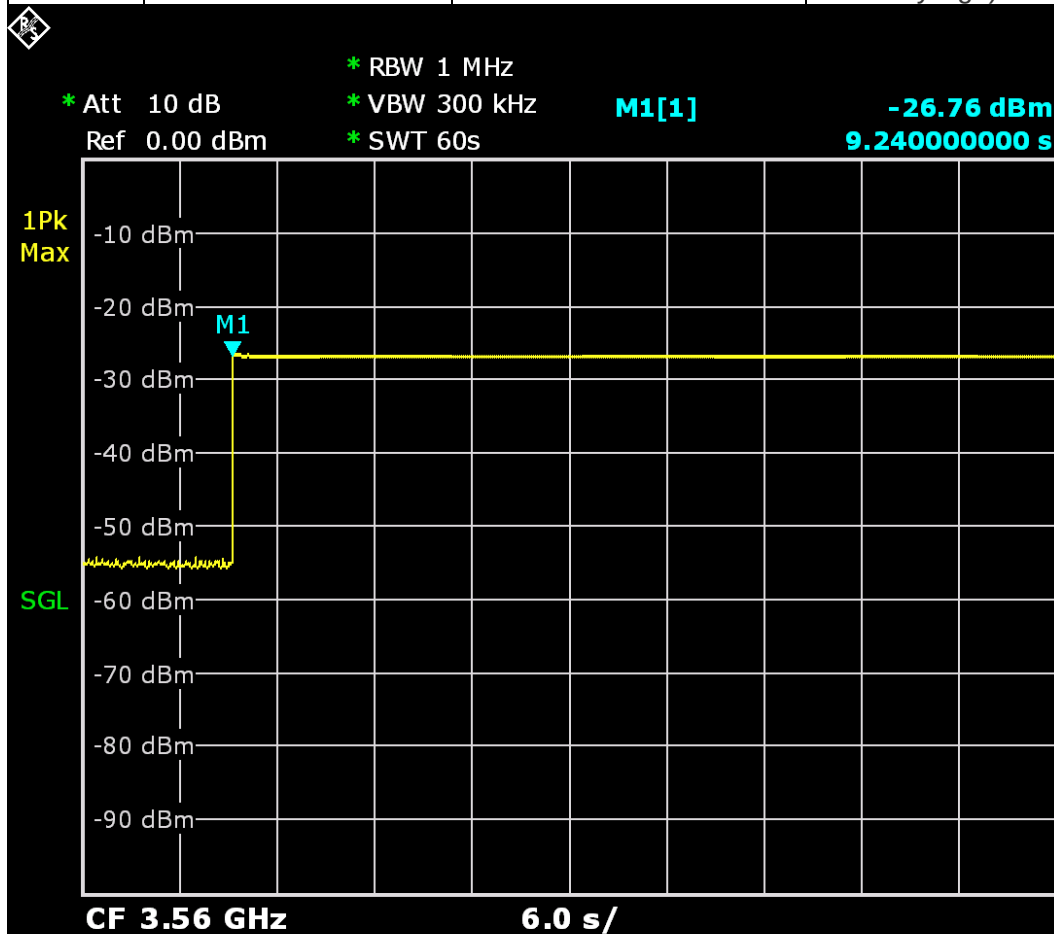
Date: 24.FEB.2025 10:16:45

Test Harness logs and timing on graph was verified, the EUT passed the requirement.

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

D.HBT

6.4.4.1.2	WINNF.FT.D.HBT.2	Domain Proxy Heartbeat Success Case (first Heartbeat Response)	Monitor RF from start of test. Ensure that: - Transmission does not start until time of first heartbeat response or after. - After transmission starts, measure that transmission is within the granted channel (frequencyLow, frequencyHigh)	P
-----------	------------------	--	--	---

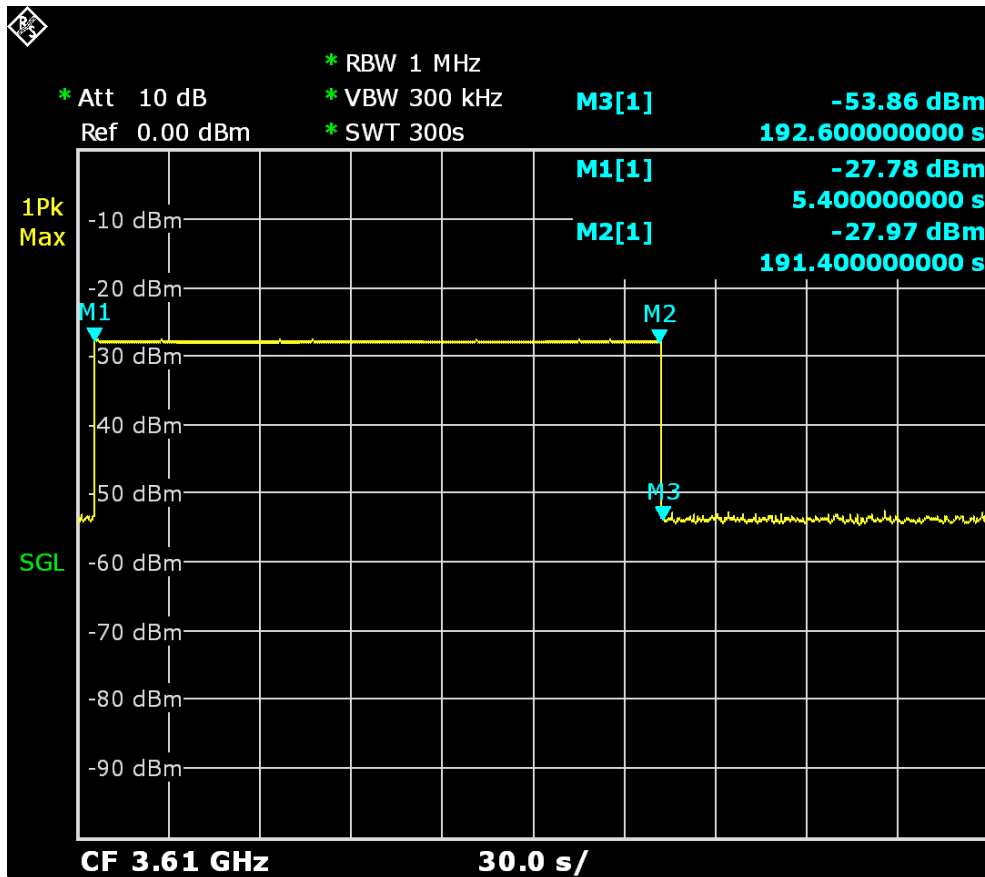


Date: 24.FEB.2025 10:25:30

Test Harness logs and timing on graph was verified, the EUT passed the requirement.

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

6.4.4.2.6	--	X	WINNF.FT.D.H BT.8	Domain Proxy Heartbeat responseCode=500 (TEMINATED_GR ANT)	Monitor RF transmission. CBSDs will have different behavior: • CBSD1: will continue to transmit to end of test (this is not a pass/fail criteria, but check) • CBSD2: must stop transmission within 60 seconds of being sent heartbeatResponse with responseCode = 500	P
-----------	----	---	-------------------	--	---	---



Date: 24.FEB.2025 11:26:58

Test Harness logs and timing on graph was verified, the EUT passed the requirement.

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

6.5.4.2.2	WINNF.FT.D.MES.2	Domain Proxy Registration Response contains measReportConfig	No RF monitoring	P
-----------	------------------	---	------------------	---

Pass. "measreportconfig" in logs.

```

2025-02-24T19:54:50.636Z - INFO - Response message contains measReportConfig
2025-02-24T19:54:50.636Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbsdId": "UXX-S1A415AMock-SAS1202000240218LY0170",
      "measReportConfig": [
        "RECEIVED_POWER_WITHOUT_GRANT"
      ]
    }
  ]
}

```

All other requirements verified.

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

6.5.4.2.5	WINNF.FT.D.MES.5	Domain Proxy Heartbeat Response contains measReportConfig	No RF monitoring	P
-----------	------------------	---	------------------	---

Pass. "measreportconfig" in logs.

2025-02-24T20:04:49.219Z - INFO - Response message contains **measReportConfig**

2025-02-24T20:04:49.219Z - INFO - engine sent successfully, the response to CBRS : {

"heartbeatResponse": [

{

"cbsdId": "UXX-S1A415AMock-SAS1202000240218LY0170",

"grantId": "913538101",

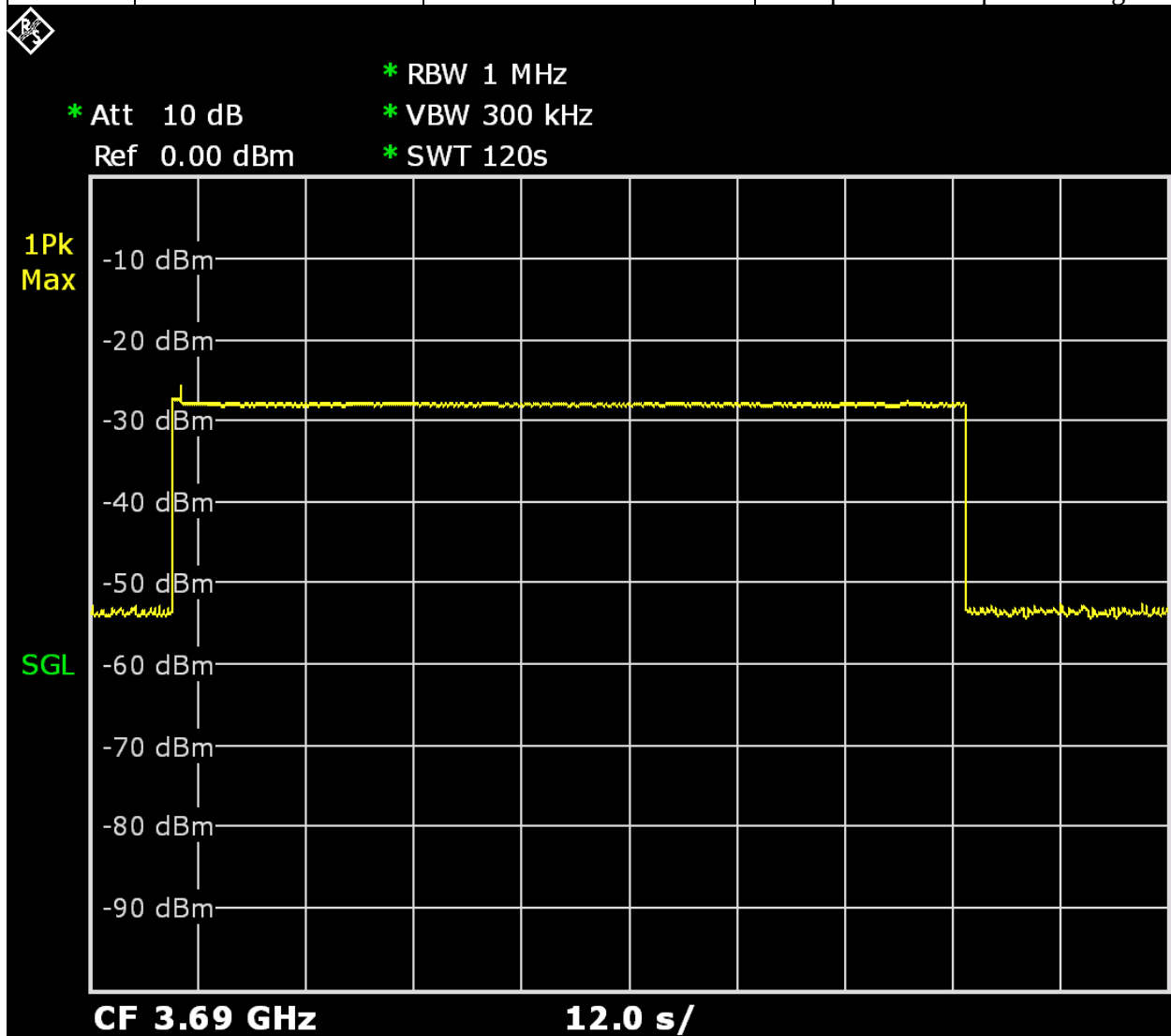
"measReportConfig": [

All other requirements verified.

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

D.RLQ

6.6.4.1.2	WINNF.FT.D.RLQ.2	Domain Proxy Successful Relinquishment	Monitor RF transmission. Ensure: • CBSD stops transmission at any time prior to sending the relinquishmentRequest message.	P
-----------	------------------	--	--	---



Date: 24.FEB.2025 12:37:42

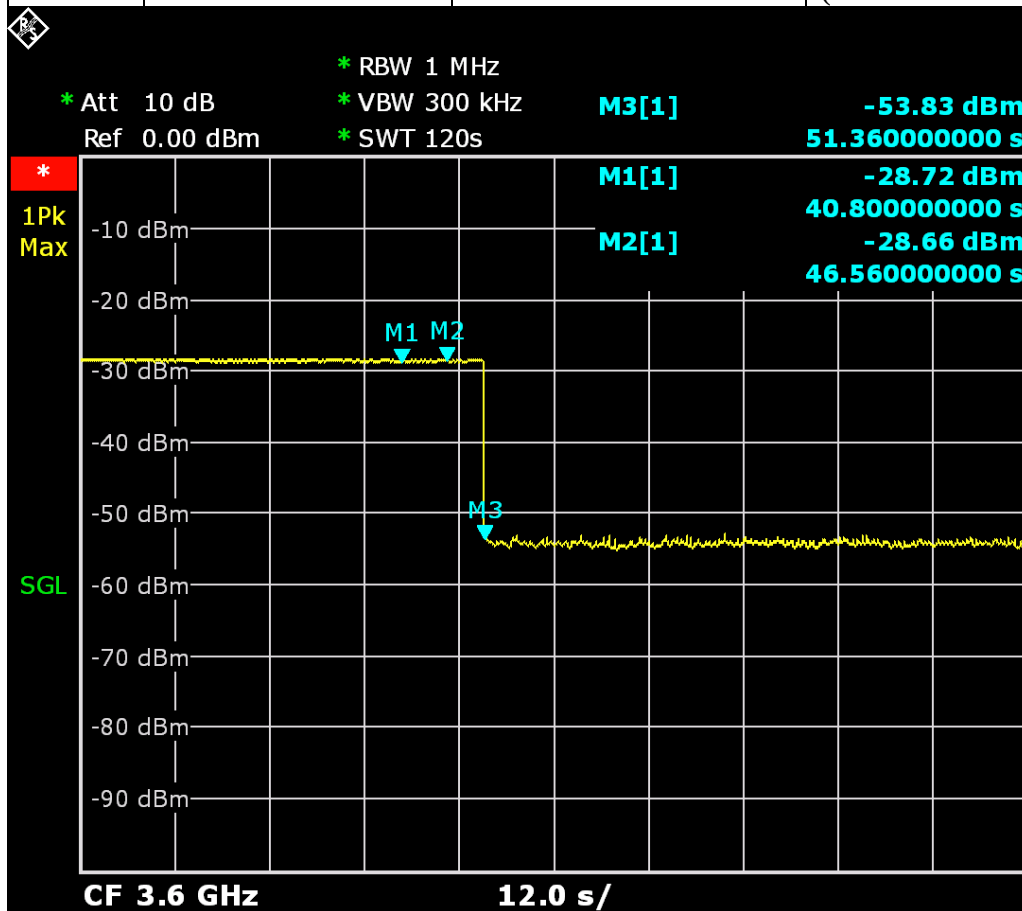
Test Harness logs and timing on graph was verified, the EUT passed the requirement.

Shutdown time taken from Domain Proxy logs, and shutdown confirmed by RF monitoring.

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

D.DRG

6.7.4.1.2	WINNF.FT.D.DRG.2	Domain Proxy Successful Deregistration	Monitor RF transmission. Ensure: CBSD stops transmission at any time prior to sending the relinquishmentRequest message or deregistrationRequest message (whichever is sent first)	P
-----------	------------------	--	--	---



Date: 24.FEB.2025 12:48:00

Test Harness logs and timing on graph was verified, the EUT passed the requirement.

Shutdown time taken from Domain Proxy logs, and shutdown confirmed by RF monitoring.

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

Test Equipment

device-no.	name	manufacturer	type	last calibration	valid until
'FRGE06006	Spectrum Analyzer	Rohde & Schwarz	FSL6	17.04.2024	17.04.2025

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

Appendix A – EUT & Client Provided Details

Client	Cradlepoint (Ericsson Enterprise Wireless Solutions)	
Product	A2415 Outdoor High-Power Unit	
Standard(s)	FCC Part 96 SAS requirements (CBRS Test Plan)	

General EUT Description

A2415 units used for testing:

CBSD 1.

S/N number: 1202000240218LY0170

FCC-ID: UXX-S1A415A

Mac: 48:bf:74:1f:f0:2d

CBSD 2.

S/N number: 1202000240218LY0131

FCC-ID: UXX-S1A415A

Mac: 48:bf:74:1f:f0:06

A2415 Sw version: **A2415.GA.25.30.1**

Domain Proxy Build number: **1.325.1722**

Client Address and test location:

CradlePoint (Ericsson Enterprise Wireless Solutions)

2755 Augustine Drive, Building C

95054 Santa Clara, USA

Phone: +1 (408) 750-5000