WINNF-TS-0122 TEST REPORT

FCC ID	:	**2ABOF-GXRN8356900**
Equipment	:	**RN SYSTEM (Multiband)**
Brand Name	:	**Tarana**
Model Name	:	**GXRN8356900**
Applicant	:	**Tarana Wireless, Inc. 630 Alder Drive, Milpitas, CA 95035**
Manufacturer	:	**Tarana Wireless, Inc. 630 Alder Drive, Milpitas, CA 95035**
Standard	:	**WINNF-TS-0122 Version V1.0.2**
RF Interface	:	**Tarana Wireless**

The product was received on Apr. 30, 2025 and testing was performed from May 28, 2025 to Jun. 03, 2025. We, Sporton International (USA) Inc., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in WINNF-TS-0122 Version V1.0.2 and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International (USA) Inc., the test report shall not be reproduced except in full.

Neil Kao

Approved by: Neil Kao

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History of this test report

Report No.	Version	Description	Issue Date
FG250408001B	01	Initial issue of report	Jun. 09, 2025

Conformity Assessment Condition:
The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
Disclaimer:
The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

1. Administration Data

1.1 Testing Laboratory

Test Site	Sporton International (USA) Inc.
Test Site Location	1175 Montague Expressway, Milpitas, CA 95035 TEL : 408 9043300
Test Site No.	**Sporton Site No.**
	TH01-CA
Test Engineer	Thomas Chen
Temperature	21 ~ 25 ℃
Relative Humidity	50 ~ 56 %

FCC designation No.: US1250

2. General Information

2.1 Description of Unit Under Test (UUT)

Product Feature & Specification	
UUT Type	RN SYSTEM (Multiband)
Brand Name	Tarana
Model Name	GXRN8356900
FCC ID	2ABOF-GXRN8356900
Professional Installation	■ Yes ☐ No
Unit Under Test Type	☐ BTS-CBSD product (Base Station) ■ CPE-CBSD product (Customer Premises Equipment)
UUT Category	☐ Category A ■ Category B
Domain Proxy support	■ UUT with Domain Proxy ☐ UUT without Domain Proxy
UUT Antenna Gain	12.86 dBi
UUT HW Version	30-0202-001.1.0
UUT SW Version	SYS.A3.R10.XXX.3.920.046.00
UUT Serial Number	M229M1251300089, M229M1250400015
Domain Proxy SW Version	20250605140030-b3ef41e6-feature

2.2 Protocol Test Summary

Section	Test Case ID	Test Case Title	Test Result
6.1.4.1.6	WINNF.FT.D.REG.6	Domain Proxy Single-Step registration for CBSD with CPI signed data	PASS
6.1.4.2.2	WINNF.FT.D.REG.9	Domain Proxy Missing Required parameters (responseCode 102)	PASS
6.1.4.2.4	WINNF.FT.D.REG.11	Domain Proxy Pending registration (responseCode 200)	PASS
6.1.4.2.6	WINNF.FT.D.REG.13	Domain Proxy Invalid parameters (responseCode 103)	PASS
6.1.4.2.8	WINNF.FT.D.REG.15	Domain Proxy Blacklisted CBSD (responseCode 101)	PASS
6.1.4.2.10	WINNF.FT.D.REG.17	Domain Proxy Unsupported SAS protocol version responseCode 100)	PASS
6.1.4.2.12	WINNF.FT.D.REG.19	Domain Proxy Group Error (responseCode 201)	PASS
6.3.4.2.1	WINNF.FT.C.GRA.1	Unsuccessful Grant responseCode=400 (INTERFERENCE)	PASS
6.3.4.2.2	WINNF.FT.C.GRA.2	Unsuccessful Grant responseCode=401 (GRANT_CONFLICT)	PASS
6.4.4.1.2	WINNF.FT.D.HBT.2	Domain Proxy Heartbeat Success Case (first Heartbeat Response)	PASS
6.4.4.2.1	WINNF.FT.C.HBT.3	Heartbeat responseCode=105 (DEREGISTER)	PASS
6.4.4.2.3	WINNF.FT.C.HBT.5	Heartbeat responseCode=501 (SUSPENDED_GRANT) in First Heartbeat Response	PASS
6.4.4.2.4	WINNF.FT.C.HBT.6	Heartbeat responseCode=501 (SUSPENDED_GRANT) in Subsequent Heartbeat Response	PASS
6.4.4.2.5	WINNF.FT.C.HBT.7	Heartbeat responseCode=502 (UNSYNC_OP_PARAM)	PASS
6.4.4.2.6	WINNF.FT.D.HBT.8	Domain Proxy Heartbeat responseCode=500 (TEMINATED_GRANT)	PASS
6.4.4.3.1	WINNF.FT.C.HBT.9	Heartbeat Response Absent (First Heartbeat)	PASS
6.4.4.3.2	WINNF.FT.C.HBT.10	Heartbeat Response Absent (Subsequent Heartbeat)	PASS
6.5.4.2.3	WINNF.FT.C.MES.3	Grant Response contains measReportConfig	PASS
6.5.4.2.5	WINNF.FT.D.MES.5	Domain Proxy Heartbeat Response contains measReportConfig	PASS
6.6.4.1.2	WINNF.FT.D.RLQ.2	Domain Proxy Successful Relinquishment	PASS
6.7.4.1.2	WINNF.FT.D.DRG.2	Domain Proxy Successful Deregistration	PASS

Section	Test Case ID	Test Case Title	Test Result
6.8.4.1.1	WINNF.FT.C.SCS.1	Successful TLS connection between UUT and SAS Test Harness	PASS
6.8.4.2.1	WINNF.FT.C.SCS.2	TLS failure due to revoked certificate	PASS
6.8.4.2.2	WINNF.FT.C.SCS.3	TLS failure due to expired server certificate	PASS
6.8.4.2.3	WINNF.FT.C.SCS.4	TLS failure when SAS Test Harness certificate is issue by unknown CA	PASS
6.8.4.2.4	WINNF.FT.C.SCS.5	TLS failure when certificate at the SAS Test Harness is corrupted	PASS
7.1.4.1.1	WINNF.PT.C.HBT	UUT RF Transmit Power Measurement	PASS

2.3 Time test for getting Grant Summary

Trail	Time limit	Monitoring time	Measured result	Verdict
1	1 second	10 seconds	40.9ms	PASS
2	10 seconds	300 seconds	1.702s	PASS
3	20 seconds	3600 seconds	19.88s	PASS

2.4 Support Equipment

Name	Brand Name	Type/Model	Serial Number	FCC ID
G2 Base Node (BN)	Tarana	G2BNF356900	S198T1250800008	2ABOF-G2BNF356900

2.5 Measuring Equipment List

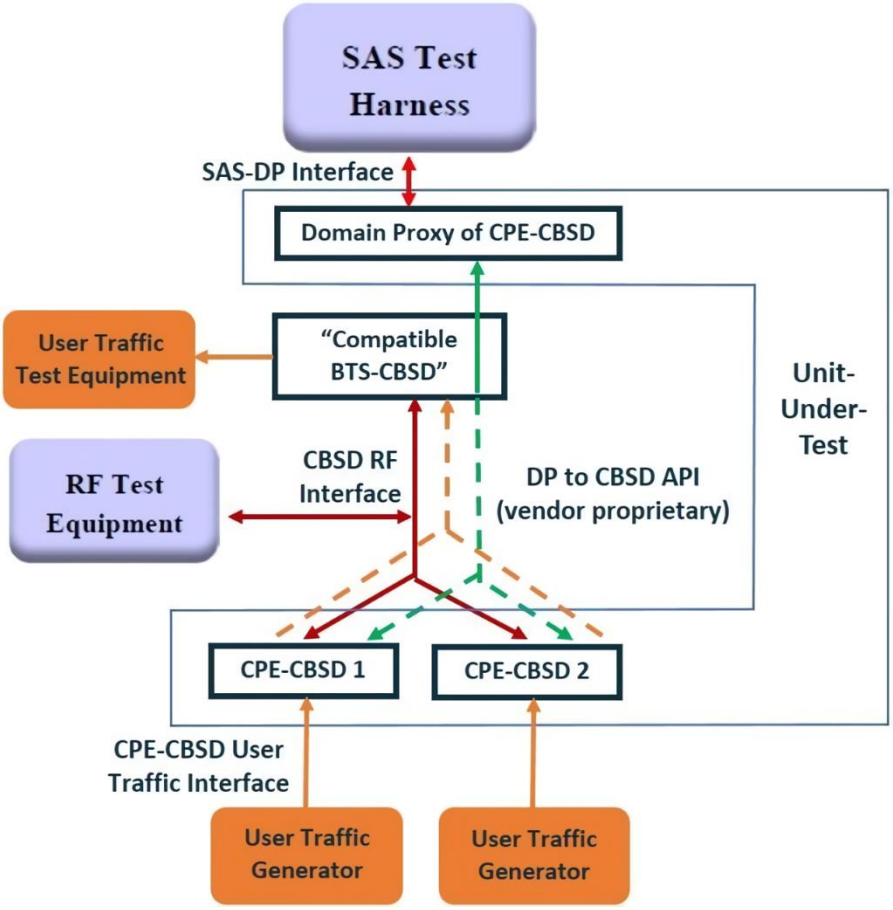
Name	Brand Name	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
Signal Analyzer	R&S	FSV3044	101128	Oct. 22, 2024	Oct. 21, 2025
Oscilloscope	NI	USB-5133	1CA35B2	Oct. 21, 2024	Oct. 20, 2025
RF Detector	Mini-Circuits	ZX47-64LN	R2190802125	Oct. 22, 2024	Oct. 21, 2025

3. Measurement Environment

Measurement Environment Information	
SAS Test Harness version	1.0.0.3
Operating System	Windows 10
TLS version	V 1.2
Python version	V 2.7.18

Conditional Test Case		
Support (Yes / No)	**Condition**	**Definition**
No	C1	Mandatory for UUT which supports multi-step registration message
No	C2	Mandatory for UUT which supports single-step registration with no CPI-signed data in the registration message. By definition, this is a subset of Category A devices which determine all registration information, including location, without CPI intervention.
Yes	C3	Mandatory for UUT which supports single-step registration containing CPIsigned data in the registration message.
No	C4	Mandatory for UUT which supports RECEIVED_POWER_WITHOUT_GRANT measurement report type
Yes	C5	Mandatory for UUT which supports RECEIVED_POWER_WITH_GRANT measurement report type.
No	C6	Mandatory for UUT which supports parameter change being made at the UUT and prior to sending a deregistration.

3.1 Test configuration with Domain Proxy



{CPE-CBSD + Domain Proxy} as UUT, BTS-CBSD direct communication.

3.2 Standards

[n.1]. FCC KDB 940660 D02 CPE-CBSD Handshake Procedures v02, 22 October 2019

[n.2]. WINNF-TS-0122 Version 1.0.2, “Conformance and Performance Test Technical Specification; CBSD/DP as Unit Under Test (UUT)”, 25 November 2020

[n.3]. WINNF-TS-0016 Version 1.2.7, “SAS to CBSD Technical Specification”, 21 March 2022

3.3 Protocol test procedure

The test cases for SAS<->CBSD protocol in [n.2] apply for CPE-CBSD device type. Following the [n.1], when running the test cases in [n.2] for CPE-CBSD device type, verify that:

1. CPE-CBSD can begin transmitting its RF only after receiving radio signal from its compatible BTS-CBSD.
2. For all CPE-CBSD RF transmissions, the CPE-CBSD UUT radio frequency range and bandwidth are less or equal to the frequency range and bandwidth of its compatible BTS-CBSD.
3. Judging the last execution step appearing in [n.2] with “User data traffics” instead of “RF transmission.”

3.4 Time test for getting Grant Procedure

Use the WInnForum SAS Harness run test case WINNF.FT.C.GRA.1. Without answering the last question in WINNF.FT.C.GRA.1 will keep UUT’s grant request being rejected, then measure the time.

4. Protocol Test Results

4.1 [WINNF.FT.D.REG.6] Domain Proxy Single-Step registration for CBSD with CPI signed data

#	Test Execution Steps	Results
1	Ensure the following conditions are met for test entry: • UUT has successfully completed SAS Discovery and Authentication with SAS Test Harness • UUT is in the Unregistered state • All of the required and REG-Conditional parameters shall be configured and CPI signature provided	--
2	The DP with two CBSDs sends Registration requests in the form of one 2-element Array or as individual messages to the SAS Test Harness: • The required userId, fccId and cbsdSerialNumber and REG- Conditional cbsdCategory, airInterface, measCapability and cpiSignatureData registration parameters shall be sent from the CBSD and conform to proper format and acceptable ranges. • Any optional registration parameters that may be included in the message shall be verified that they conform to proper format and are within acceptable ranges.	PASS
3	• SAS Test Harness sends a CBSD Registration Response in the form of one 2-element Array or as individual messages as follows: – *cbsdId* = Ci – *measReportConfig* for each CBSD shall not be included. – *responseCode* = 0 for each CBSD	--
4	After completion of step 3, SAS Test Harness will not provide any positive response (*responseCode*=0) to further request messages from the UUT.	--
5	Monitor the RF output of each UUT from start of test until 60 seconds after Step 3 is complete. This is the end of the test. Verify: • UUT shall not transmit RF	PASS

4.2 [WINNF.FT.D.REG.9] Domain Proxy Missing Required parameters (responseCode 102)

#	Test Execution Steps	Results
1	Ensure the following conditions are met for test entry: • UUT has successfully completed SAS Discovery and Authentication with SAS Test Harness • UUT is in the Unregistered state	--
2	The DP with two CBSDs sends a Registration request in the form of one 2-element Array or as individual messages to SAS Test Harness.	--
3	SAS Test Harness sends a CBSD Registration Response in the form of one 2-element Array or as individual messages as follows: – SAS response does not include a *cbsdId*. – *responseCode* = Ri for CBSD1 and CBSD2	--
4	After completion of step 3, SAS Test Harness will not provide any positive response (*responseCode*=0) to further request messages from the UUT.	--
5	Monitor the RF output of each UUT from start of test until 60 seconds after Step 3 is complete. This is the end of the test. Verify: • • UUT shall not transmit RF	PASS

4.3 [WINNF.FT.D.REG.11] Domain Proxy Pending registration (responseCode 200)

#	Test Execution Steps	Results
1	Ensure the following conditions are met for test entry: • UUT has successfully completed SAS Discovery and Authentication with SAS Test Harness • UUT is in the Unregistered state	--
2	The DP with two CBSDs sends a Registration request in the form of one 2-element Array or as individual messages to SAS Test Harness.	--
3	SAS Test Harness sends a CBSD Registration Response in the form of one 2-element Array or as individual messages as follows: – SAS response does not include a *cbsdId*. – *responseCode* = Ri for CBSD1 and CBSD2	--
4	After completion of step 3, SAS Test Harness will not provide any positive response (*responseCode*=200) to further request messages from the UUT.	--
5	Monitor the RF output of each UUT from start of test until 60 seconds after Step 3 is complete. This is the end of the test. Verify: • • UUT shall not transmit RF	PASS

4.4 [WINNF.FT.D.REG.13] Domain Proxy Invalid parameters (responseCode 103)

#	Test Execution Steps	Results
1	Ensure the following conditions are met for test entry: • UUT has successfully completed SAS Discovery and Authentication with SAS Test Harness • UUT is in the Unregistered state	--
2	The DP with two CBSDs sends a Registration request in the form of one 2-element Array or as individual messages to SAS Test Harness.	--
3	SAS Test Harness sends a CBSD Registration Response in the form of one 2-element Array or as individual messages as follows: – SAS response does not include a *cbsdId*. – *responseCode* = Ri for CBSD1 and CBSD2	--
4	After completion of step 3, SAS Test Harness will not provide any positive response (*responseCode* R1 = 0 for CBSD1 and R2 = 103 for CBSD2) to further request messages from the UUT.	--
5	Monitor the RF output of each UUT from start of test until 60 seconds after Step 3 is complete. This is the end of the test. Verify: • • UUT shall not transmit RF	PASS

4.5 [WINNF.FT.D.REG.15] Domain Proxy Blacklisted CBSD (responseCode 101)

#	Test Execution Steps	Results
1	Ensure the following conditions are met for test entry: • UUT has successfully completed SAS Discovery and Authentication with SAS Test Harness • UUT is in the Unregistered state	--
2	The DP with two CBSDs sends a Registration request in the form of one 2-element Array or as individual messages to SAS Test Harness.	--
3	SAS Test Harness sends a CBSD Registration Response in the form of one 2-element Array or as individual messages as follows: – SAS response does not include a *cbsdId*. – *responseCode* = Ri for CBSD1 and CBSD2	--
4	After completion of step 3, SAS Test Harness will not provide any positive response (*responseCode* R1 = 0 for CBSD1 and R2 = 101 for CBSD2) to further request messages from the UUT.	--
5	Monitor the RF output of each UUT from start of test until 60 seconds after Step 3 is complete. This is the end of the test. Verify: • UUT shall not transmit RF	PASS

4.6 [WINNF.FT.D.REG.17] Domain Proxy Unsupported SAS protocol version (responseCode 100)

#	Test Execution Steps	Results
1	Ensure the following conditions are met for test entry: • UUT has successfully completed SAS Discovery and Authentication with SAS Test Harness • UUT is in the Unregistered state	--
2	The DP with two CBSDs sends a Registration request in the form of one 2-element Array or as individual messages to SAS Test Harness.	--
3	SAS Test Harness sends a CBSD Registration Response in the form of one 2-element Array or as individual messages as follows: – SAS response does not include a *cbsdId*. – *responseCode* = Ri for CBSD1 and CBSD2	--
4	After completion of step 3, SAS Test Harness will not provide any positive response (*responseCode (Ri) = 100 for each CBSD)* to further request messages from the UUT.	--
5	Monitor the RF output of each UUT from start of test until 60 seconds after Step 3 is complete. This is the end of the test. Verify: • UUT shall not transmit RF	PASS

4.7 [WINNF.FT.D.REG.19] Domain Proxy Group Error (responseCode 201)

#	Test Execution Steps	Results
1	Ensure the following conditions are met for test entry: • UUT has successfully completed SAS Discovery and Authentication with SAS Test Harness • UUT is in the Unregistered state	--
2	The DP with two CBSDs sends a Registration request in the form of one 2-element Array or as individual messages to SAS Test Harness.	--
3	SAS Test Harness sends a CBSD Registration Response in the form of one 2-element Array or as individual messages as follows: – SAS response does not include a *cbsdId*. – *responseCode* = Ri for CBSD1 and CBSD2	--
4	After completion of step 3, SAS Test Harness will not provide any positive response (*responseCode* R1 = 0 for CBSD1 and R2 = 201 for CBSD2) to further request messages from the UUT.	--
5	Monitor the RF output of each UUT from start of test until 60 seconds after Step 3 is complete. This is the end of the test. Verify: • UUT shall not transmit RF	PASS

4.8 [WINNF.FT.C.GRA.1] Unsuccessful Grant responseCode=400 (INTERFERENCE)

#	Test Execution Steps	Results
1	Ensure the following conditions are met for test entry: • UUT has registered successfully with SAS Test Harness, with *cbsdId* = C	--
2	UUT sends valid Grant Request.	--
3	SAS Test Harness sends a Grant Response message, including • *cbsdId*=C • *responseCode* = R	--
4	After completion of step 3, SAS Test Harness will not provide any positive response (*responseCode*=0) to further request messages from the UUT.	--
5	Monitor the RF output of the UUT from start of test until 60 seconds after Step 3 is complete. This is the end of the test. Verify: • UUT shall not transmit RF	PASS

4.9 [WINNF.FT.C.GRA.2] Unsuccessful Grant responseCode=401 (GRANT_CONFLICT)

#	Test Execution Steps	Results
1	Ensure the following conditions are met for test entry: • UUT has registered successfully with SAS Test Harness, with *cbsdId* = C	--
2	UUT sends valid Grant Request.	--
3	SAS Test Harness sends a Grant Response message, including • *cbsdId*=C • *responseCode* = R	--
4	After completion of step 3, SAS Test Harness will not provide any positive response (*responseCode*=401) to further request messages from the UUT.	--
5	Monitor the RF output of the UUT from start of test until 60 seconds after Step 3 is complete. This is the end of the test. Verify: • UUT shall not transmit RF	PASS

4.10 [WINNF.FT.D.HBT.2] Domain Proxy Heartbeat Success Case (first Heartbeat Response)

#	Test Execution Steps	Results
1	Ensure the following conditions are met for test entry: • DP has two CBSD registered successfully with SAS Test Harness, with *cbsdId* = Ci, i={1,2}	--
2	DP sends a message: • If message is a Spectrum Inquiry Request, go to step 3 • If message is a Grant Request, go to step 5	--
3	DP sends a Spectrum Inquiry Request message for each CBSD. This may occur in a separate message per CBSD, or together in a single message with array of 2. Verify Spectrum Inquiry Request message is formatted correctly for each CBSD, including for CBSDi, i={1,2}: • *cbsdId* = Ci • List of frequencyRange objects sent by DP are within the CBRS frequency range	PASS
4	If a separate Spectrum Inquiry Request message was sent for each CBSD, the SAS Test Harness shall respond to each Spectrum Inquiry Request message with a separate Spectrum Inquiry Response message. If a single Spectrum Inquiry Request message was sent containing a 2- object array (one per CBSD), the SAS Test Harness shall respond with a single Spectrum Inquiry Response message containing a 2-object array. Verify parameters for each CBSD within the Spectrum Inquiry Response message are as follows, for CBSDi, i={1,2}: • *cbsdId* = Ci • availableChannel is an array of availableChannel objects • *responseCode* = 0	--

#	Test Execution Steps	Results
5	DP sends a Grant Request message for each CBSD. This may occur in a separate message per CBSD, or together in a single message with array of 2. Verify Grant Request message is formatted correctly for each CBSD, including for CBSDi, i={1,2}: • *cbsdId* = C • maxEIRP is at or below the limit appropriate for CBSD category as defined by Part 96 • operationFrequencyRange, Fi, sent by UUT is a valid range within the CBRS band	PASS
6	If a separate Grant Request message was sent for each CBSD, the SAS Test Harness shall respond to each Grant Request message with a separate Grant Response message. If a single Grant Request message was sent containing a 2-object array (one per CBSD), the SAS Test Harness shall respond with a single Grant Response message containing a 2-object array. Verify parameters for each CBSD within the Grant Response message are as follows, for CBSDi, i={1,2}: • *cbsdId* = Ci • *grantId* = Gi = a valid grant ID • *grantExpireTime* = UTC time greater than duration of the test *responseCode* = 0	--
7	Ensure DP sends first Heartbeat Request message for each CBSD. This may occur in a separate message per CBSD, or together in a single message with array of 2. Verify Heartbeat Request message is formatted correctly for each CBSD, including, for CBSDi i={1,2}: • *cbsdId* = Ci, i={1,2} • *grantId* = Gi, i={1,2} • *operationState* = “GRANTED”	PASS

#	Test Execution Steps	Results
8	If a separate Heartbeat Request message was sent for each CBSD by the DP, the SAS Test Harness shall respond to each Heartbeat Request message with a separate Heartbeat Response message. If a single Heartbeat Request message was sent by the DP containing a 2-object array (one per CBSD), the SAS Test Harness shall respond with a single Heartbeat Response message containing a 2-object array. Verify parameters for each CBSD within the Heartbeat Response message are as follows, for CBSDi: • *cbsdId* = Ci • *grantId* = Gi • *transmitExpireTime* = current UTC time + 200 seconds • *responseCode* = 0	--
9	For further Heartbeat Request messages sent from DP after completion of step 8, validate message is sent within latest specified heartbeatInterval for CBSDi: • *cbsdId* = Ci • *grantId* = Gi • *operationState* = “AUTHORIZED” and SAS Test Harness responds with a Heartbeat Response message including the following parameters, for CBSDi • *cbsdId* = Ci • *grantId* = Gi • *transmitExpireTime* = current UTC time + 200 seconds • *responseCode* = 0	PASS
10	Monitor the RF output of the UUT from start of test until UUT transmission commences. Monitor the RF output of the UUT from start of test until RF transmission commences. Verify: • UUT does not transmit at any time prior to completion of the first heartbeat response • UUT transmits after step 8 is complete, and its transmission is limited to within the bandwidth range Fi.	PASS

4.11 [WINNF.FT.C.HBT.3] Heartbeat responseCode=105 (DEREGISTER)

#	Test Execution Steps	Results

1	Ensure the following conditions are met for test entry:
	• UUT has registered successfully with SAS Test Harness
	• UUT has a valid single grant as follows:
	  ○ valid *cbsdId* = C
	  ○ valid *grantId* = G
	  ○ grant is for frequency range F, power P
	  ○ *grantExpireTime* = UTC time greater than duration of the test
	• UUT is in AUTHORIZED state and is transmitting within the grant bandwidth F on RF interface
		--

2	UUT sends a Heartbeat Request message. Ensure Heartbeat Request message is sent within Heartbeat Interval specified in the latest Heartbeat Response, and formatted correctly, including: • *cbsdId* = C • *grantId* = G • *operationState* = "AUTHORIZED"	PASS
3	SAS Test Harness sends a Heartbeat Response message, including the following parameters: • *cbsdId* = C • *grantId* = G • *transmitExpireTime = T = Current UTC time* • *responseCode* = 105 (DEREGISTER)	--
4	After completion of step 3, SAS Test Harness shall not allow any further grants to the UUT.	--
5	Monitor the RF output of the UUT. Verify: • UUT shall stop transmission within (T + 60 seconds) of completion of step 3	PASS

4.12 [WINNF.FT.C.HBT.5] Heartbeat responseCode=501 (SUSPENDED_GRANT) in First Heartbeat Response

#	Test Execution Steps	Results

1	Ensure the following conditions are met for test entry:
	• UUT has registered successfully with SAS Test Harness
	• UUT has a valid single grant as follows:
	  ○ valid *cbsdId* = C
	  ○ valid *grantId* = G
	  ○ grant is for frequency range F, power P
	  ○ *grantExpireTime* = UTC time greater than duration of the test
	• UUT is in GRANTED, but not AUTHORIZED state (i.e. has not performed its first Heartbeat Request)
		--

2	UUT sends a Heartbeat Request message. Verify Heartbeat Request message is formatted correctly, including: • *cbsdId* = C • *grantId* = G • *operationState* = "GRANTED"	PASS
3	SAS Test Harness sends a Heartbeat Response message, including the following parameters: • *cbsdId* = C • *grantId* = G • *transmitExpireTime* = T = current UTC time • *responseCode* = 501 (SUSPENDED_GRANT)	--
4	After completion of step 3, SAS Test Harness shall not allow any further grants to the UUT.	--

5	Monitor the SAS-CBSD interface. Verify either A OR B occurs:
	A. UUT sends a Heartbeat Request message. Ensure message is sent within latest specified heartbeatInterval, and is correctly formatted with parameters:
	  • *cbsdId* = C
	  • *grantId* = G
	  • *operationState* = "GRANTED"
	B. UUT sends a Relinquishment request message. Ensure message is correctly formatted with parameters:
	  • *cbdsId* = C
	  • *grantId* = G
	Monitor the RF output of the UUT. Verify:
	• UUT does not transmit at any time
		PASS

4.13 [WINNF.FT.C.HBT.6] Heartbeat responseCode=501 (SUSPENDED_GRANT) in Subsequent Heartbeat Response

#	Test Execution Steps	Results

1	Ensure the following conditions are met for test entry:
	• UUT has registered successfully with SAS Test Harness
	• UUT has a valid single grant as follows:
	  ○ valid *cbsdId* = C
	  ○ valid *grantId* = G
	  ○ grant is for frequency range F, power P
	  ○ *grantExpireTime* = UTC time greater than duration of the test
	• UUT is in AUTHORIZED state and is transmitting within the grant bandwidth F on RF interface
		--

2	UUT sends a Heartbeat Request message. Verify Heartbeat Request message is sent within latest specified heartbeatInterval, and is formatted correctly, including: • *cbsdId* = C • *grantId* = G • *operationState* = “AUTHORIZED”	PASS
3	SAS Test Harness sends a Heartbeat Response message, including the following parameters: • *cbsdId* = C • *grantId* = G • *transmitExpireTime* = T = current UTC time • *responseCode* = 501 (SUSPENDED_GRANT)	--
4	After completion of step 3, SAS Test Harness shall not allow any further grants to the UUT.	--

#	Test Execution Steps	Results
5	Monitor the SAS-CBSD interface. Verify either A OR B occurs: A. UUT sends a Heartbeat Request message. Ensure message is sent within latest specified heartbeatInterval, and is correctly formatted with parameters: • *cbsdId* = C • *grantId* = G • *operationState* = “GRANTED” B. UUT sends a Relinquishment Request message. Ensure message is correctly formatted with parameters: • *cbdsId* = C • *grantId* = G Monitor the RF output of the UUT. Verify: • UUT shall stop transmission within (*T* + 60 seconds) of completion of step 3	PASS

4.14 [WINNF.FT.C.HBT.7] Heartbeat responseCode=502 (UNSYNC_OP_PARAM)

#	Test Execution Steps	Results
1	Ensure the following conditions are met for test entry: • UUT has registered successfully with SAS Test Harness • UUT has a valid single grant as follows: ○ valid *cbsdId* = C ○ valid *grantId* = G ○ grant is for frequency range F, power P ○ *grantExpireTime* = UTC time greater than duration of the test • UUT is in AUTHORIZED state and is transmitting within the grant bandwidth F on RF interface	--
2	UUT sends a Heartbeat Request message. Verify Heartbeat Request message is sent within latest specified *heartbeatInterval*,and is formatted correctly, including: • *cbsdId* = C • *grantId* = G • *operationState* = “AUTHORIZED”	PASS
3	SAS Test Harness sends a Heartbeat Response message, including the following parameters: • *cbsdId* = C • *grantId* = G • *transmitExpireTime* = T = Current UTC Time • *responseCode* = 502 (UNSYNC_OP_PARAM)	--
4	After completion of step 3, SAS Test Harness shall not allow any further grants to the UUT.	--
5	Monitor the SAS-CBSD interface. Verify: • UUT sends a Grant Relinquishment Request message. Verify message is correctly formatted with parameters: ○ *cbdsId* = C ○ *grantId* = G Monitor the RF output of the UUT. Verify: • UUT shall stop transmission within (T+60) seconds of completion of step 3.	PASS

4.15 [WINNF.FT.D.HBT.8] Domain Proxy Heartbeat responseCode=500 (TERMINATED_GRANT)

#	Test Execution Steps	Results

1	Ensure the following conditions are met for test entry:
	• DP has two CBSD registered successfully with SAS Test Harness
	• Each CBSD {1,2} has a valid single grant as follows:
	  ○ valid *cbsdId* = Ci, i={1,2}
	  ○ valid *grantId* = Gi, i={1,2}
	  ○ grant is for frequency range Fi, power Pi
	  ○ *grantExpireTime* = UTC time greater than duration of the test
	• Both CBSD are in AUTHORIZED state and transmitting within their granted bandwidth on RF interface
		--

2	DP sends a Heartbeat Request message for each CBSD. This may occur in a separate message per CBSD, or together in a single message with array of size 2. Verify Heartbeat Request message is sent within latest specified *heartbeatInterval*, and is formatted correctly for each CBSD, including, for CBSDi i={1,2}: • *cbsdId* = Ci, i = {1,2} • *grantId* = Gi, i = {1,2} • *operationState* = “AUTHORIZED”	PASS

#	Test Execution Steps	Results

3	If separate Heartbeat Request message was sent for each CBSD by the DP, the SAS Test Harness shall respond to each Heartbeat Request message with a separate Heartbeat Response message.
	
	If a single Heartbeat Request message was sent by the DP containing a 2-object array (one per CBSD), the SAS Test Harness shall respond with a single Heartbeat Response message containing a 2-object array.
	
	Parameters for each CBSD within the Heartbeat Response message should be as follows, for CBSDi:
	• *cbsdId* = Ci
	• *grantId* = Gi
	• For CBSD1:
	  ○ *transmitExpireTime* = current UTC time + 200 seconds
	  ○ *responseCode* = 0
	• For CBSD2:
	  ○ *transmitExpireTime* = T = current UTC time
	  o *responseCode* = 500 (TERMINATED_GRANT)
		--

4	After completion of step 3, SAS Test Harness shall not allow any further grants to the UUT. If CBSD sends further Heartbeat Request messages for CBSD1, SAS Test Harness shall respond with a Heartbeat Response message with parameters: • *cbsdId* = C1 • *grantId* = G1 • *transmitExpireTime* = current UTC time + 200 seconds • *responseCode* = 0 • Heartbeat Request message is within *heartbeatInterval* of previous Heartbeat Request message	--
5	Monitor the RF output of CBSD2. Verify: • CBSD2 shall stop transmission within bandwidth F2 within (T + 60 seconds) of completion of step 3	PASS

4.16 [WINNF.FT.C.HBT.9] Heartbeat Response Absent (First Heartbeat)

#	Test Execution Steps	Results

1	Ensure the following conditions are met for test entry:
	• UUT has registered successfully with SAS Test Harness
	• UUT has a valid single grant as follows:
	  ○ valid *cbsdId* = C
	  ○ valid *grantId* = G
	  ○ grant is for frequency range F, power P
	  ○ *grantExpireTime* = UTC time greater than duration of the test
	• UUT is in GRANTED, but not AUTHORIZED state (i.e. has not performed its first Heartbeat Request)
		--

2	UUT sends a Heartbeat Request message. Ensure Heartbeat Request message is sent within latest specified *heartbeatInterval*, and is formatted correctly, including: • *cbsdId* = C • *grantId* = G • *operationState* = “GRANTED”	PASS
3	After completion of Step 2, SAS Test Harness does not respond to any further messages from UUT to simulate loss of network connection	--
4	Monitor the RF output of the UUT from start of test to 60 seconds after step 3. Verify: • At any time during the test, UUT shall not transmit on RF interface	PASS

4.17 [WINNF.FT.C.HBT.10] Heartbeat Response Absent (Subsequent Heartbeat)

#	Test Execution Steps	Results

1	Ensure the following conditions are met for test entry:
	• UUT has registered successfully with SAS Test Harness
	• UUT has a valid single grant as follows:
	  ○ valid *cbsdId* = C
	  ○ valid *grantId* = G
	  ○ grant is for frequency range F, power P
	  ○ *grantExpireTime* = UTC time greater than duration of the test
	• UUT is in AUTHORIZED state and is transmitting within the grant bandwidth F on RF interface
		--

2	UUT sends a Heartbeat Request message. Verify Heartbeat Request message issent within the latest specified *heartbeatInterval*, and is formatted correctly, including: • *cbsdId* = C • *grantId* = G • *operationState* = “AUTHORIZED”	PASS
3	SAS Test Harness sends a Heartbeat Response message, with the following parameters: • *cbsdId* = C • *grantId* = G • *transmitExpireTime* = current UTC time + 200 seconds • *responseCode* = 0	--
4	After completion of Step 3, SAS Test Harness does not respond to any further messages from UUT	--
5	Monitor the RF output of the UUT. Verify: • UUT shall stop all transmission on RF interface within (*transmitExpireTime* + 60 seconds), using the transmitExpireTime sent in Step 3.	PASS

4.18 [WINNF.FT.C.MES.3] Grant Response contains measReportConfig

#	Test Execution Steps	Results
1	Ensure the following conditions are met for test entry: • UUT has successfully completed SAS Discovery and Authentication with SAS Test Harness • UUT has successfully registered with SAS Test Harness, with *cbsdId*=C and *measCapability* = "RECEIVED_POWER_WITH_GRANT"	--
2	UUT sends a Grant Request message. Verify Grant Request message contains all required parameters properly formatted, and specifically: • *cbsdId* = C • *operationParam* is present and format is valid	PASS
3	SAS Test Harness sends a Grant Response message, with the following parameters: • *cbsdId* = C • *grantId* = G = valid grant ID • *grantExpireTime* = UTC time in the future • *heartbeatInterval* = 60 seconds • *measReportConfig*= "RECEIVED_POWER_WITH_GRANT" • *operationParam* is set to valid operating parameters • *channelType* = "GAA" • *responseCode* = 0	--
4	UUT sends a Heartbeat Request message. Verify message contains all required parameters properly formatted, and specifically: • *cbsdId* = C • *grantId* = G • *operationState* = "GRANTED"	PASS
5	If Heartbeat Request message (step 4) contains *measReport* object, then: • verify *measReport* is properly formatted as object *rcvdPowerMeasReport* • end test, with PASS result else, if Heartbeat Request message (step 4) does not contain measReport object, then: If number of Heartbeat Requests sent by UUT after Step 3 is = 5, then stop test with result of FAIL	PASS

#	Test Execution Steps	Results
6	SAS Test Harness sends a Heartbeat Response message, containing all required parameters properly formatted, and specifically: • *cbsdId* = C • *grantId* = *G* • *transmitExpireTime* = current UTC time + 200 seconds • *responseCode* = 0 Go to Step 4, above	--

4.19 [WINNF.FT.D.MES.5] Domain Proxy Heartbeat Response contains measReportConfig

#	Test Execution Steps	Results
1	Ensure the following conditions are met for test entry: • DP has successfully completed SAS Discovery and Authentication with SAS Test Harness • DP has successfully registered 2 CBSD with SAS Test Harness, each with *cbsdId*=Ci, i={1,2} and *measCapability* = "RECEIVED_POWER_WITH_GRANT" • DP has received a valid grant with *grantId* = Gi, i={1,2} for each CBSD • Both CBSD are in Grant State AUTHORIZED and actively transmitting within the bounds of their grants. • Grants have *heartbeatInterval* =60 seconds	--
2	Verify DP sends a Heartbeat Request message for each CBSD. This may occur in a separate message per CBSD, or together in a single message with array of 2. Verify Heartbeat Request message contains all required parameters properly formatted for each CBSD, specifically, for CBSDi: • *cbsdId* = Ci • *grantId* = Gi • *operationState* = "AUTHORIZED"	PASS
3	If a separate Heartbeat Request message was sent for each CBSD by the DP, the SAS Test Harness shall respond to each Heartbeat Request message with a separate Heartbeat Response message. If a single Heartbeat Request message was sent by the DP containing a 2-object array (one per CBSD), the SAS Test Harness shall respond with a single Heartbeat Response message containing a 2-object array. Parameters for each CBSD within the Heartbeat Response message containing all required parameters properly formatted, and specifically: • *cbsdId* = Ci • *grantId = Gi* • *measReportConfig*= "RECEIVED_POWER_WITH_GRANT" • *responseCode* = 0	--

#	Test Execution Steps	Results
4	Verify DP sends a Heartbeat Request message for each CBSD. This may occur in a separate message per CBSD, or together in a single message with array of 2. Verify Heartbeat Request message contains all required parameters properly formatted for each CBSD, and specifically, for CBSDi, i = {1,2}: • *cbsdId* = Ci • *grantId* = Gi • operationState = “AUTHORIZED” • Check whether *measReport* is present, and if present, ensure it is a properly formatted *rcvdPowerMeasReport* object, and record its reception for each CBSDi, i = {1,2}.	PASS
5	If Heartbeat Request message (step 4) contains *measReport* object, then: • Verify *measReport* is properly formatted as object *rcvdPowerMeasReport* • record which CBSD have successfully sent a *measReport* object If all CBSDi, i = {1,2} have successfully sent a measReport object, then • end test, with PASS result else, if the number of Heartbeat Requests sent per CBSD is 5 or more, then stop test with result of FAIL	PASS
6	If a separate Heartbeat Request message was sent for each CBSD by the DP, the SAS Test Harness shall respond to each Heartbeat Request message with a separate Heartbeat Response message. If a single Heartbeat Request message was sent by the DP containing a 2-object array (one per CBSD), the SAS Test Harness shall respond with a single Heartbeat Response message containing a 2-object array. Parameters for each CBSD within the Heartbeat Response message containing all required parameters properly formatted, and specifically: • *cbsdId* = Ci • *grantId = Gi* • *responseCode* = 0 Go to Step 4, above.	--

4.20 [WINNF.FT.C.RLQ.1] Successful Relinquishment

#	Test Execution Steps	Results
1	Ensure the following conditions are met for test entry: • UUT has successfully completed SAS Discovery and Authentication with SAS Test Harness • UUT has successfully registered with SAS Test Harness, with *cbsdId*=C • UUT has received a valid grant with *grantId* = G • UUT is in Grant State AUTHORIZED and is actively transmitting within the bounds of its grant. Invoke trigger to relinquish UUT Grant from the SAS Test Harness	--
2	UUT sends a Relinquishment Request message. Verify message contains all required parameters properly formatted, and specifically: • *cbsdId* = C • *grantId* = G	PASS
3	SAS Test Harness shall approve the request with a Relinquishment Response message with parameters: – *cbsdId* = C – *grantId* = G – *responseCode* = 0	--
4	After completion of step 3, SAS Test Harness will not provide any additional positive response (*responseCode*=0) to further request messages from the UUT.	--
5	Monitor the RF output of the UUT from start of test until 60 seconds after Step 3 is complete. This is the end of the test. Verify: • UUT shall stop RF transmission at any time between triggering the relinquishment and UUT sending the relinquishment request	PASS

4.21 [WINNF.FT.C.DRG.1] Successful Deregistration

#	Test Execution Steps	Results
1	Ensure the following conditions are met for test entry: • UUT has successfully completed SAS Discovery and Authentication with SAS Test Harness • UUT has successfully registered with SAS Test Harness, with *cbsdId*=C • UUT has received a valid grant with *grantId* = G • UUT is in Grant State AUTHORIZED and is actively transmitting within the bounds of its grant. Invoke trigger to deregister UUT from the SAS Test Harness	--
2	UUT sends a Relinquishment request and receives Relinquishment response with *responseCode*=0	--
3	UUT sends Deregistration Request to SAS Test Harness with *cbsdId* = C.	PASS
4	SAS Test Harness shall approve the request with a Deregistration Response message with parameters: • *cbsdId* = C • *responseCode* = 0	--
5	After completion of step 3, SAS Test Harness will not provide any additional positive response (*responseCode*=0) to further request messages from the UUT.	--
6	Monitor the RF output of the UUT from start of test until 60 seconds after Step 4 is complete. This is the end of the test. Verify: • UUT stopped RF transmission at any time between triggering the deregistration and either A OR B occurs: A. UUT sending a Registration Request message, as this is not mandatory B. UUT sending a Deregistration Request message	PASS

4.22 [WINNF.FT.C.SCS.1] Successful TLS connection between UUT and SAS Test Harness

#	Test Execution Steps	Results
1	• UUT shall start CBSD-SAS communication with the security procedure • The UUT shall establish a TLS handshake with the SAS Test Harness using configured certificate. • Configure the SAS Test Harness to accept the security procedure and establish the connection	PASS

2	• Make sure that Mutual authentication happens between UUT and the SAS Test Harness.
	• Make sure that UUT uses TLS v1.2
	• Make sure that cipher suites from one of the following is selected,
	  • TLS_RSA_WITH_AES_128_GCM_SHA256
	  • TLS_RSA_WITH_AES_256_GCM_SHA384
	  • TLS_ECDHE_ECDSA_WITH_AES_128_GCM_SHA2 56
	  • TLS_ECDHE_ECDSA_WITH_AES_256_GCM_SHA3 84
	  • TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256
		PASS

3	A successful registration is accomplished using one of the test cases described in section 6.1.4.1, depending on CBSD capability. • UUT sends a registration request to the SAS Test Harness and the SAS Test Harness sends a Registration Response with *responseCode* = 0 and *cbsdId*.	PASS
4	Monitor the RF output of the UUT from start of test until 60 seconds after Step 3 is complete. This is the end of the test. Verify: • UUT shall not transmit RF	PASS

4.23 [WINNF.FT.C.SCS.2] TLS failure due to revoked certificate

#	Test Execution Steps	Results
1	• UUT shall start CBSD-SAS communication with the security procedures	PASS
2	• Make sure that UUT uses TLS v1.2 for security establishment. • Make sure UUT selects the correct cipher suite. • UUT shall use CRL or OCSP to verify the validity of the server certificate. • Make sure that Mutual authentication does not happen between UUT and the SAS Test Harness.	PASS
3	UUT may retry for the security procedure which shall fail	PASS
4	SAS Test-Harness shall not receive any Registration request or any application data.	--
5	Monitor the RF output of the UUT from start of test until 60 seconds after Step 3 is complete. This is the end of the test. Verify: • UUT shall not transmit RF	PASS

4.24 [WINNF.FT.C.SCS.3] TLS failure due to expired server certificate

#	Test Execution Steps	Results
1	• UUT shall start CBSD-SAS communication with the security procedures	PASS
2	• Make sure that UUT uses TLS v1.2 for security establishment. • Make sure UUT selects the correct cipher suite. • UUT shall use CRL or OCSP to verify the validity of the server certificate. • Make sure that Mutual authentication does not happen between UUT and the SAS Test Harness.	PASS
3	UUT may retry for the security procedure which shall fail.	PASS
4	SAS Test-Harness shall not receive any Registration request or any application data.	--
5	Monitor the RF output of the UUT from start of test until 60 seconds after Step 3 is complete. This is the end of the test. Verify: • UUT shall not transmit RF	PASS

4.25 [WINNF.FT.C.SCS.4] TLS failure when SAS Test Harness certificate is issued by an unknown CA

#	Test Execution Steps	Results
1	• UUT shall start CBSD-SAS communication with the security procedures	PASS
2	• Make sure that UUT uses TLS v1.2 for security establishment. • Make sure UUT selects the correct cipher suite. • UUT shall use CRL or OCSP to verify the validity of the server certificate • Make sure that Mutual authentication does not happen between UUT and the SAS Test Harness.	PASS
3	UUT may retry for the security procedure which shall fail.	PASS
4	SAS Test-Harness shall not receive any Registration request or any application data.	--
5	Monitor the RF output of the UUT from start of test until 60 seconds after Step 3 is complete. This is the end of the test. Verify: • UUT shall not transmit RF	PASS

4.26 [WINNF.FT.C.SCS.5] TLS failure when certificate at the SAS Test Harness is corrupted

#	Test Execution Steps	Results
1	• UUT shall start CBSD-SAS communication with the security procedures	PASS
2	• Make sure that UUT uses TLS v1.2 for security establishment. • Make sure UUT selects the correct cipher suite. • UUT shall use CRL or OCSP to verify the validity of the server certificate. • Make sure that Mutual authentication does not happen between UUT and the SAS Test Harness.	PASS
3	UUT may retry for the security procedure which shall fail.	PASS
4	SAS Test-Harness shall not receive any Registration request or any application data.	--
5	Monitor the RF output of the UUT from start of test until 60 seconds after Step 3 is complete. This is the end of the test. Verify: • UUT shall not transmit RF	PASS

4.27 [WINNF.PT.C.HBT] UUT RF Transmit Power Measurement

#	Test Execution Steps	Results
1	Ensure the following conditions are met for test entry: • UUT has successfully completed SAS Discovery and Authentication with the SAS Test Harness • UUT has registered with the SAS, with CBSD ID = C • UUT has a single valid grant G with parameters {lowFrequency = F_L, highFrequency = F_H, maxEirp = P_i}, with grant in AUTHORIZED state, and grantExpireTime set to a value far past the duration of this test case *Note: in order for the UUT to request a grant with the parameters {lowFrequency, highFrequency, maxEirp), the SAS Test Harness may need to provide appropriate guidance in the availableChannel object of the spectrumInquiry response message, and the operationParam object of the grant response message. Alternately, the UUT vendor may provide the ability to set those parameters on the UUT so that the UUT will request a grant with those parameters.*	--

2	UUT and SAS Test Harness perform a series of Heartbeat Request/Response cycles, which continues until the other test steps are complete. Messaging for each cycle is as follows:
	• UUT sends Heartbeat Request, including:
	  ○ *cbsdId* = C
	  ○ *grantId* = G
	• SAS Test Harness responds with Heartbeat Response, including:
	  ○ *cbsdId* = C
	  ○ *grantId* = G
	  ○ *transmitExpireTime* = current UTC time + 200 seconds
	  ○ *responseCode* = 0
		--

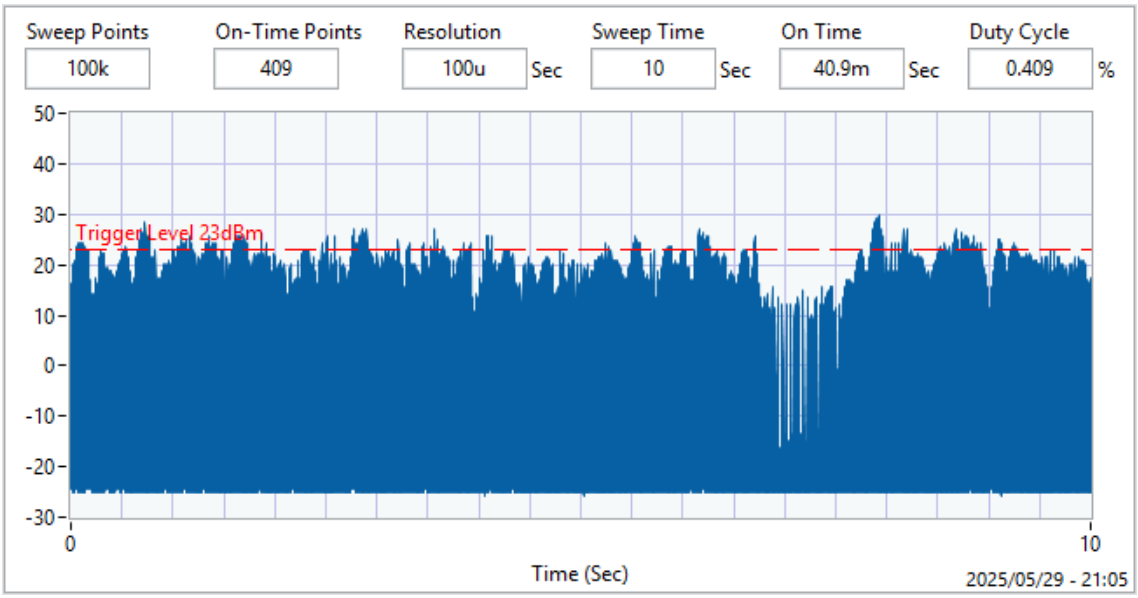
#	Test Execution Steps	Results
3	Tester performs power measurement on RF interface(s) of UUT, and verifies it complies with the maxEirp setting, P_i. The RF measurement method is out of scope of this document, but may include additional configuration of the UUT, as required, to fulfil the requirements of the power measurement method. *Note: it may be required for the vendor to provide a method or configuration to bring the UUT to a mode which is required by the measurement methodology. Any such mode is vendor-specific and depends upon UUT behavior and the measurement methodology.*	PASS

Note: For test 4.27, please find the Appendix B for RF measurement plots.

5. Result of Time test for getting Grant

5.1 1 second within any 10-second period

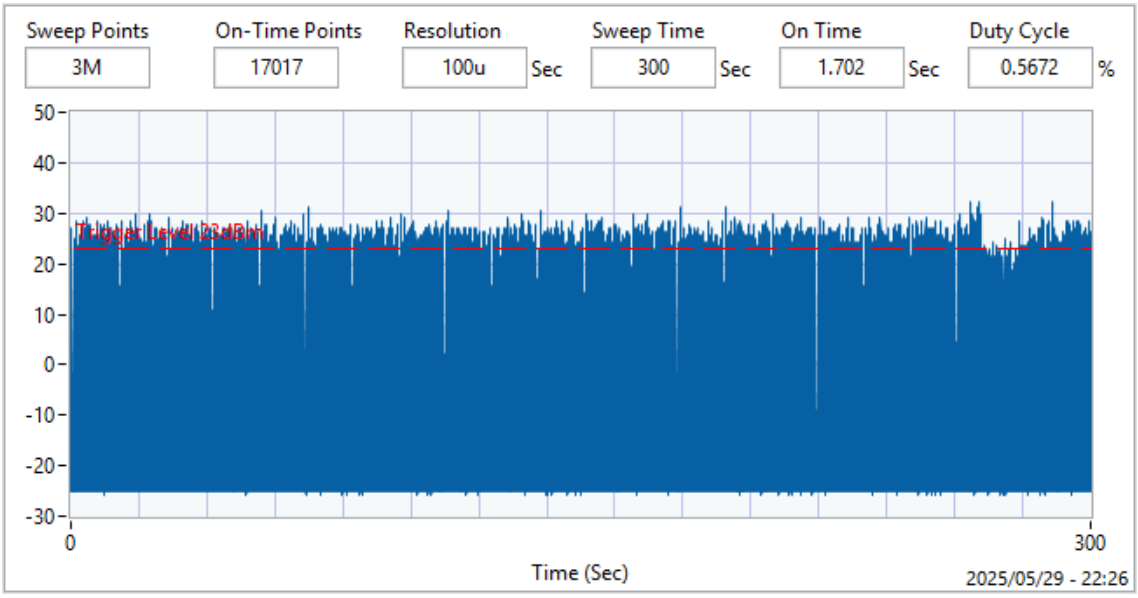
Oscilloscope Calculated Result



The sum of On Time: 40.9ms < 1s, Pass.

5.2 10 seconds within any 300-second period

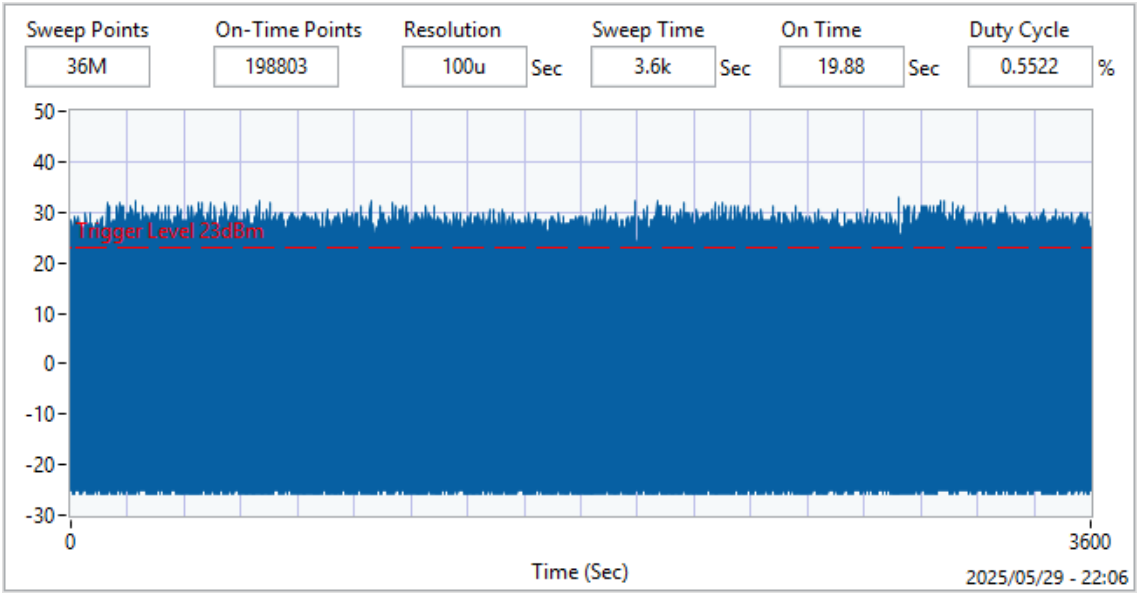
Oscilloscope Calculated Result



The sum of On Time: 1.702s < 10s, Pass.

5.3 20 seconds within any 3600-second period

Oscilloscope Calculated Result



The sum of On Time: 19.88s < 20s, Pass.

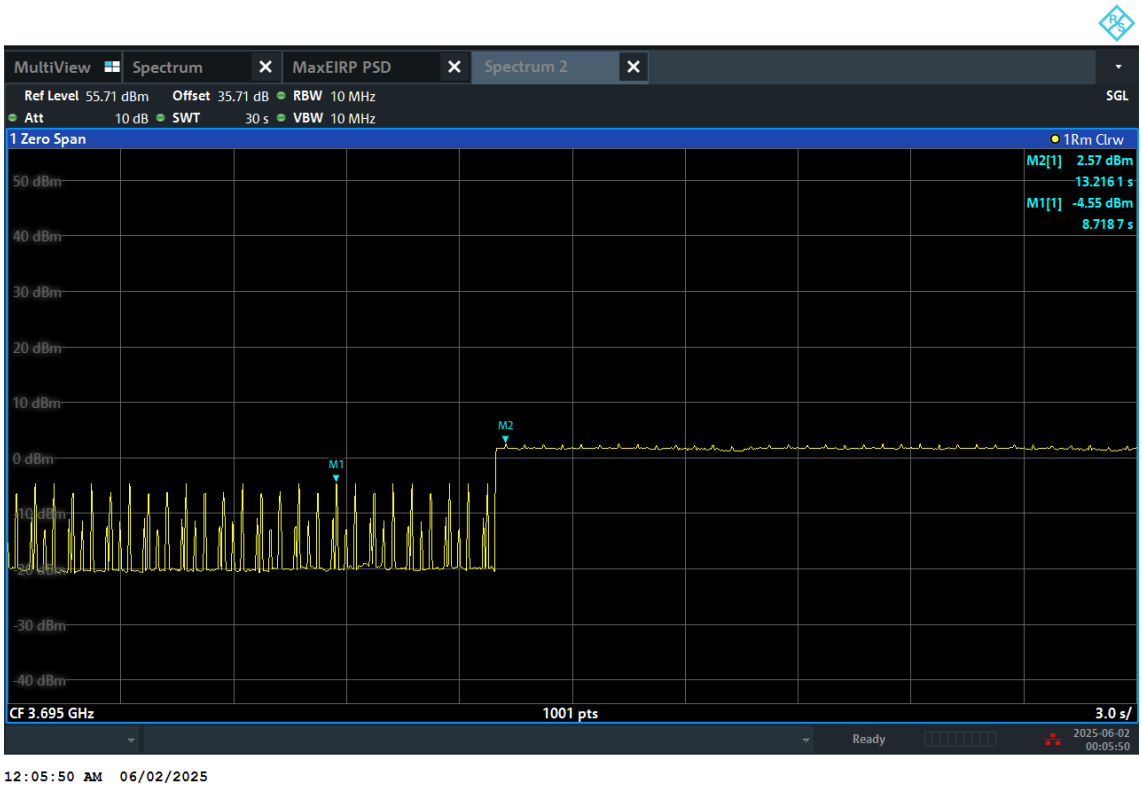
6. UUT register with the SAS irrespective of power levels

6.1 Test Procedure

1. Set the SAS test harness to grant UUT with the highest EIRP higher than 23 dBm.
2. Check if UUT has successfully registered with SAS Test Harness, when operating EIRP less than 23 dBm.
3. After the UUT granted/authorized by the SAS, it can transmit with power less than the maxEIRP granted from SAS.

6.2 Result

The UUT can register with SAS under above operating conditions to meet the FCC criteria that the UUT will register with the SAS irrespective of power levels at which the device is set to operate – even below 23 dBm.



The UUT successfully registered with SAS Test Harness, when operating EIRP less than 23 dBm.
Test Result: PASS

Note: The total offset 35.71 dB includes the antenna gain 12.86 dBi, directional gain 3.01 dBi, and cable path loss 19.84 dB.

Marker 1: The UUT successfully registered with SAS Test Harness, when operating -4.55 dBm EIRP.

Marker 2: After the UUT granted/authorized by the SAS, it can transmit with power less than the maxEIRP granted from SAS.

Appendix B. RF measurement plots

Appendix B.1 [WINNF.PT.C.HBT] UUT RF Transmit Power Measurement

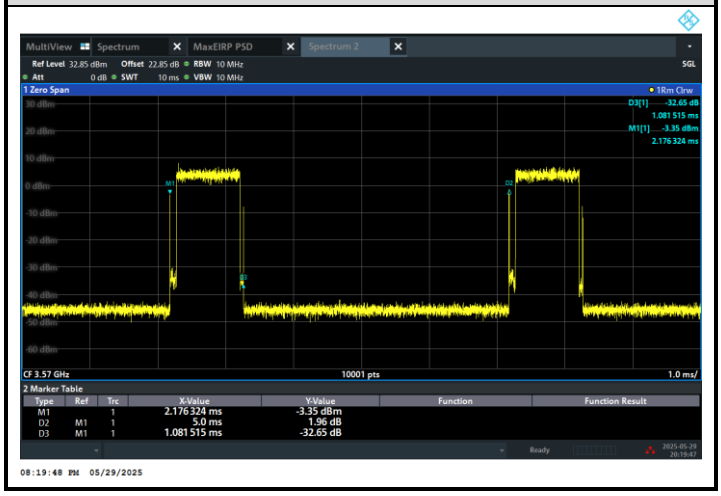
Report Clause 4.27 [WINNF.PT.C.HBT] UUT RF Transmit Power Measurement

Center Freq [MHz]	BW [MHz]	SAS Granted MaxEIRP [dBm/MHz]	Conducted PSD [dBm/MHz]		Antenna Gain [dBi]	Duty Cycle Factor [dB]	UUT Internal Loss [dB]	UUT Total EIRP PSD [dBm/MHz]
			Pol H	Pol V				
3695	10	37	-6.69	-6.71	15.87	6.65	17.76	36.59
		35	-9.41	-9.42				33.87
		30	-13.89	-14.09				29.30
		25	-18.74	-19.01				24.42
		23	-20.89	-20.77				22.46
3570	40	37	-13.31	-12.15				30.60
		35	-13.57	-12.47				30.30
		30	-13.96	-13.17				29.74
		25	-19.56	-19.84				23.59
		23	-20.51	-21.03				22.53

Note 1: The total path loss is offset with 22.85 dB.

Note 2: Directional gain: 12.86 dBi + 10log (Ntx = 4 / Nss = 2) = 15.87 dBi.

Duty Cycle factor

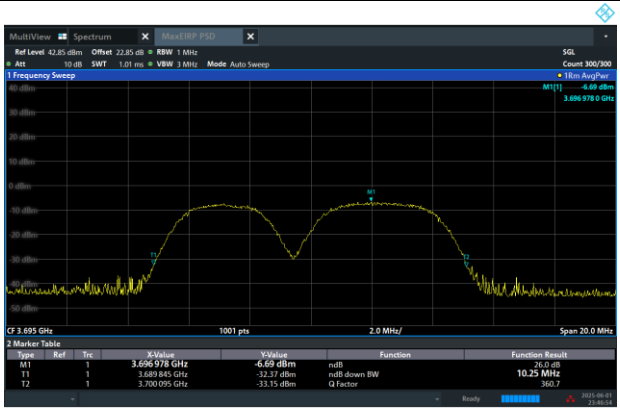
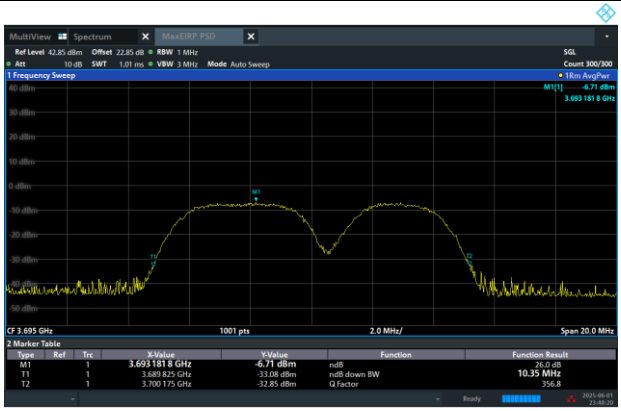


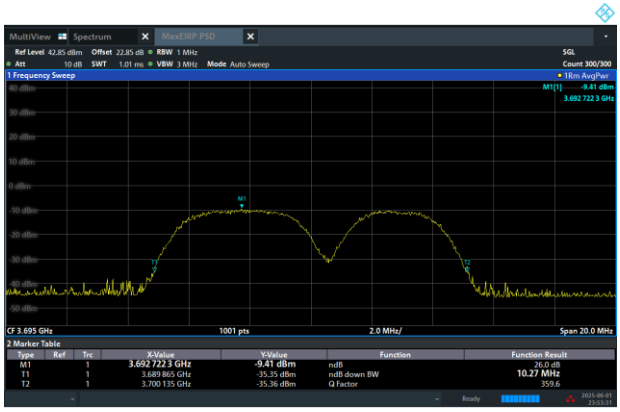
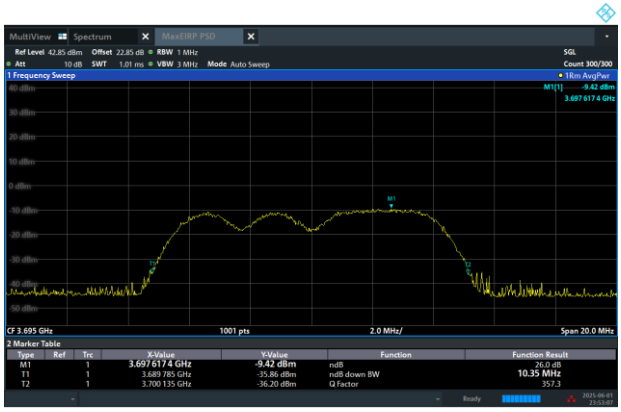
Note: The duty cycle value is 21.63%, add 10log(1/duty cycle) to the measured power level to compute the average power during continuous transmission.

Appendix B.1.1 Test Procedure

[WINNF.PT.C.HBT] UUT RF Transmit Power Measurement defined in clause 4.27 of this test report.

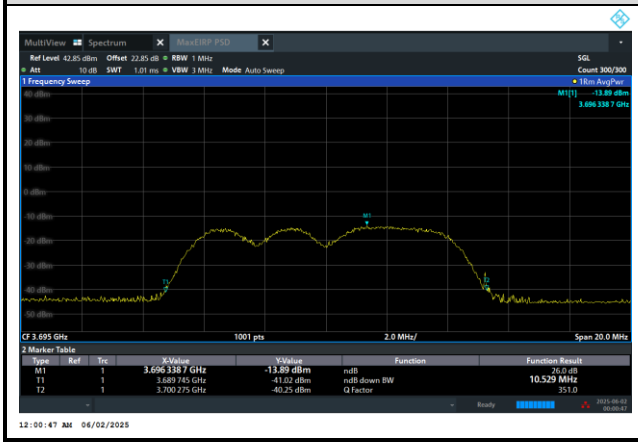
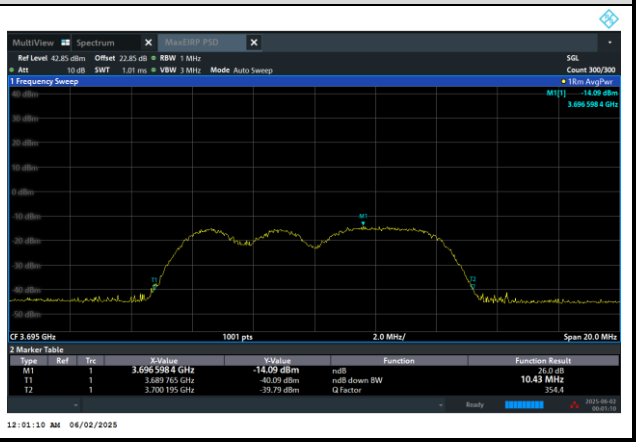
Appendix B.1.2 Test Result

SAS Granted MaxEIRP 37 [dBm/MHz] UUT Center Frequency 3695 MHz, Bandwidth 10 MHz, Total MaxEIRP PSD 36.59 [dBm/MHz]	
Polarization H	**Polarization V**
	

SAS Granted MaxEIRP 35 [dBm/MHz] UUT Center Frequency 3695 MHz, Bandwidth 10 MHz, Total MaxEIRP PSD 33.87 [dBm/MHz]	
Polarization H	**Polarization V**
	

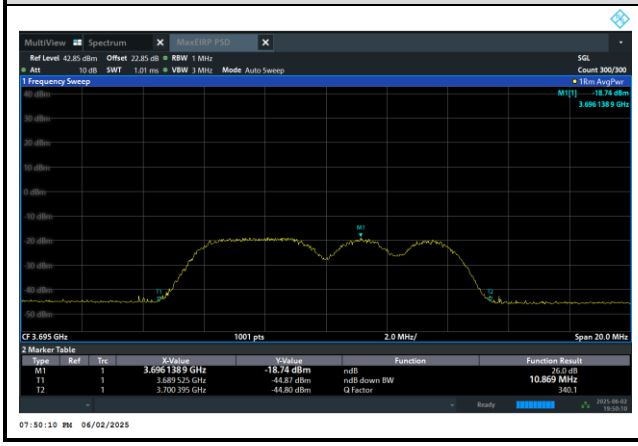
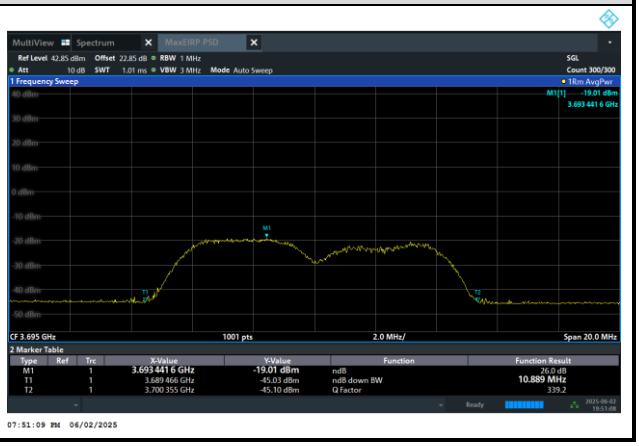
SAS Granted MaxEIRP 30 [dBm/MHz]

UUT Center Frequency 3695 MHz, Bandwidth 10 MHz, Total MaxEIRP PSD 29.30 [dBm/MHz]

Polarization H	Polarization V
	

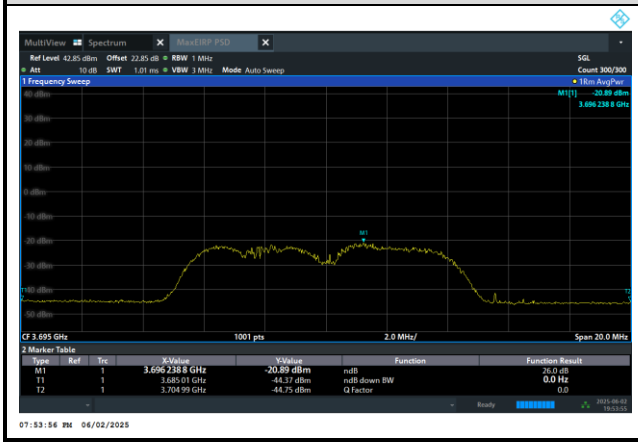
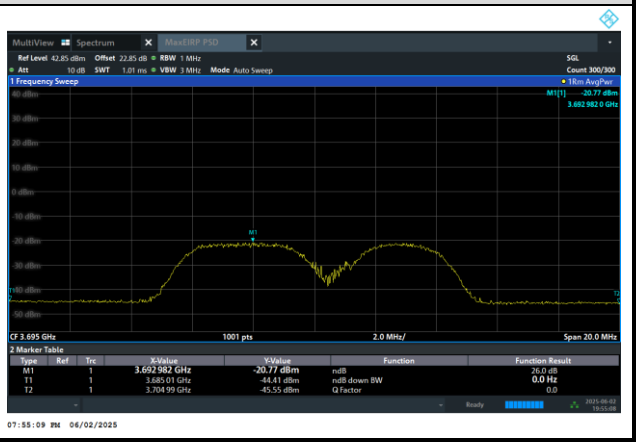
SAS Granted MaxEIRP 25 [dBm/MHz]

UUT Center Frequency 3695 MHz, Bandwidth 10 MHz, Total MaxEIRP PSD 24.42 [dBm/MHz]

Polarization H	Polarization V
	

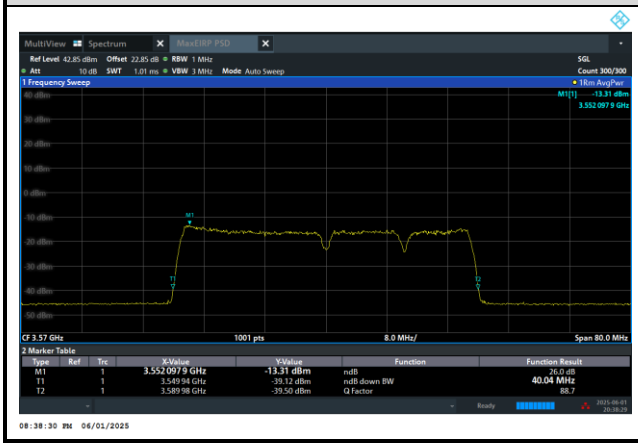
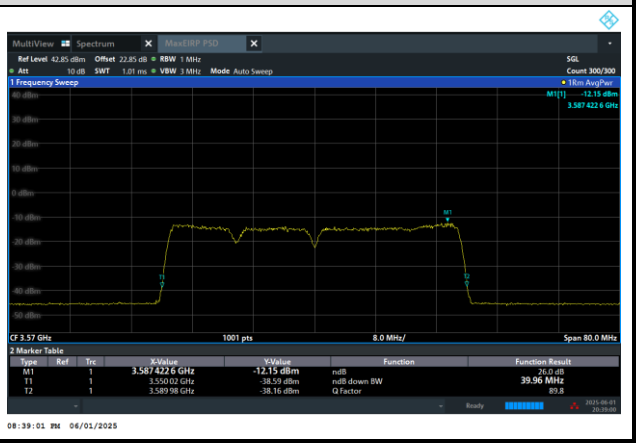
SAS Granted MaxEIRP 23 [dBm/MHz]

UUT Center Frequency 3695 MHz, Bandwidth 10 MHz, Total MaxEIRP PSD 22.46 [dBm/MHz]

Polarization H	Polarization V
	

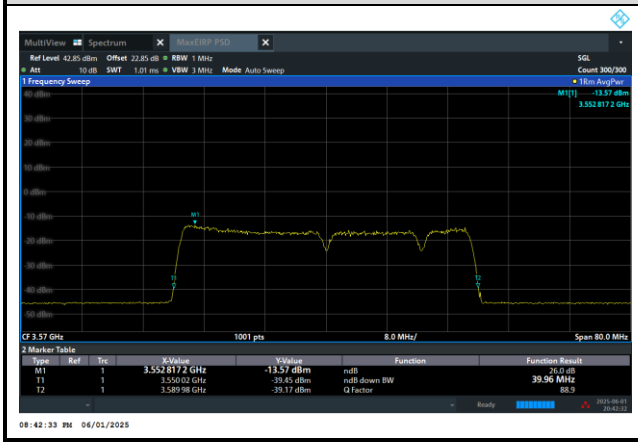
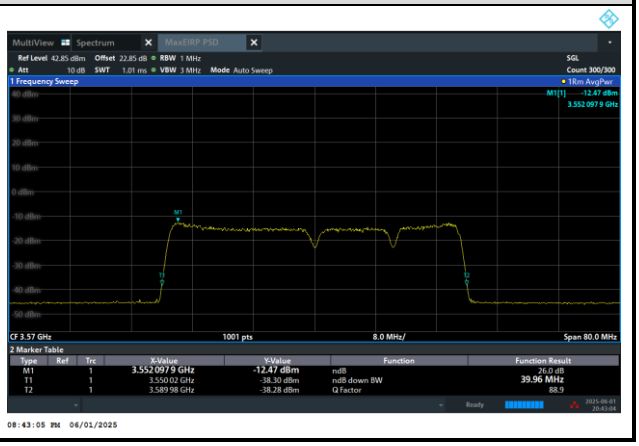
SAS Granted MaxEIRP 37 [dBm/MHz]

UUT Center Frequency 3570 MHz, Bandwidth 40 MHz, Total MaxEIRP PSD 30.60 [dBm/MHz]

Polarization H	Polarization V
	

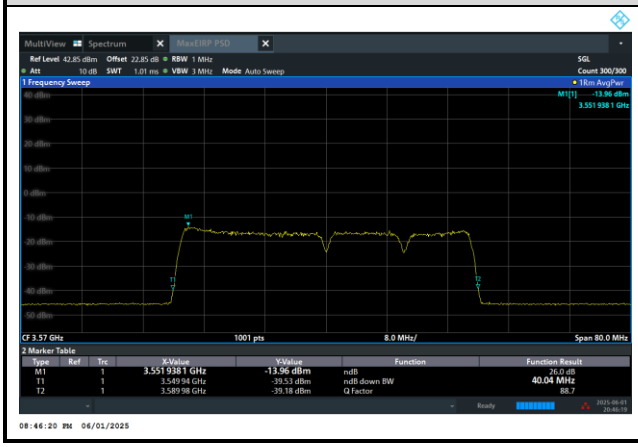
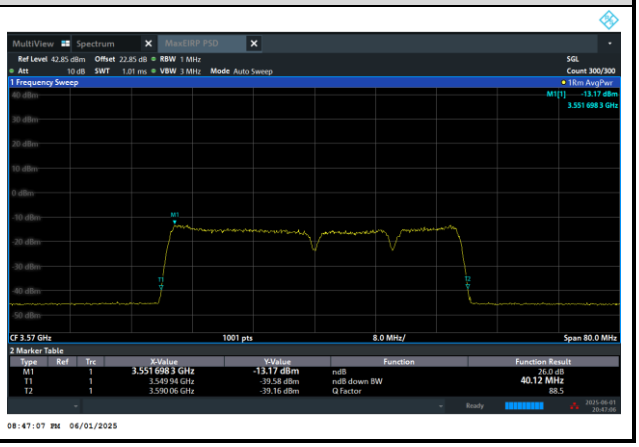
SAS Granted MaxEIRP 35 [dBm/MHz]

UUT Center Frequency 3570 MHz, Bandwidth 40 MHz, Total MaxEIRP PSD 30.30 [dBm/MHz]

Polarization H	Polarization V
	

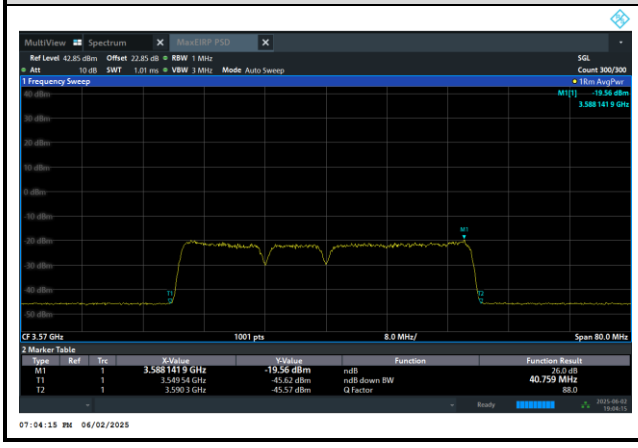
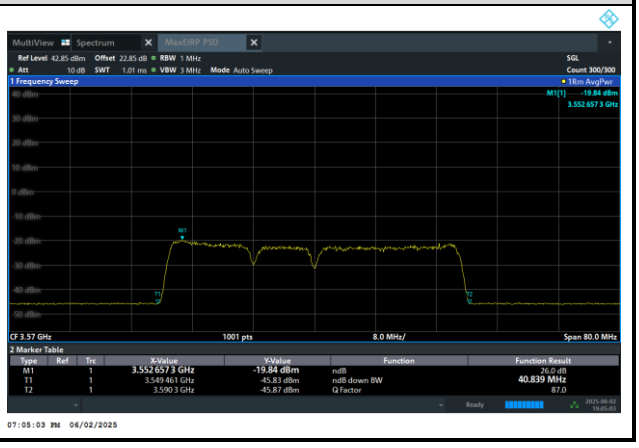
SAS Granted MaxEIRP 30 [dBm/MHz]

UUT Center Frequency 3570 MHz, Bandwidth 40 MHz, Total MaxEIRP PSD 29.74 [dBm/MHz]

Polarization H	Polarization V
	

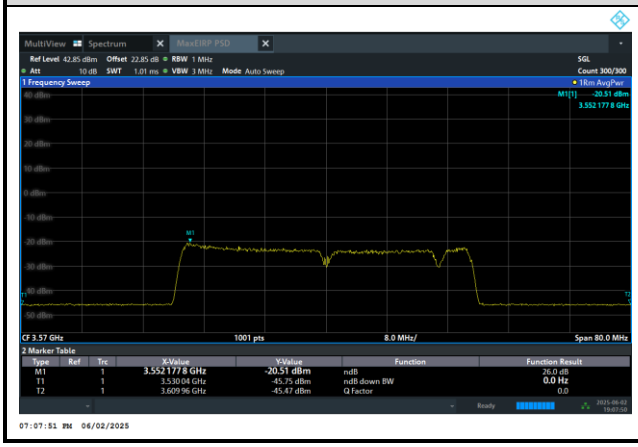
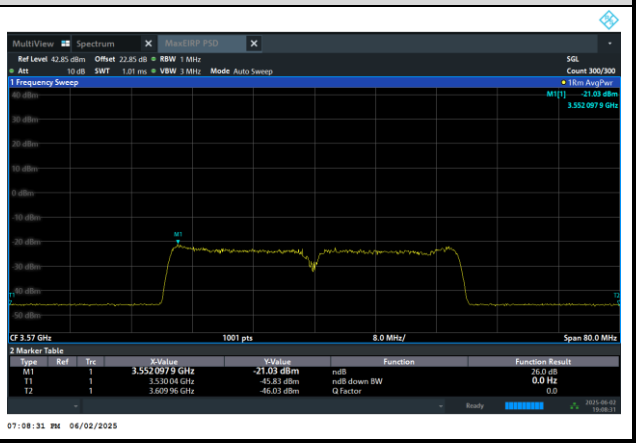
SAS Granted MaxEIRP 25 [dBm/MHz]

UUT Center Frequency 3570 MHz, Bandwidth 40 MHz, Total MaxEIRP PSD 23.59 [dBm/MHz]

Polarization H	Polarization V
	

SAS Granted MaxEIRP 23 [dBm/MHz]

UUT Center Frequency 3570 MHz, Bandwidth 40 MHz, Total MaxEIRP PSD 22.53 [dBm/MHz]

Polarization H	Polarization V
	

———THE END———