REGULATORY COMPLIANCE TEST REPORT

FCC CFR 47 Part 15 Subpart E 15.407 (k) AFC

Report No.: RDWN99-U3a Rev A

Company: Radwin

Model Name: RADWIN 2000 E CON EC10

REGULATORY COMPLIANCE TEST REPORT

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Model Name: RADWIN 2000 E CON EC10

To: FCC CFR 47 Part 15 Subpart E 15.407 (k) AFC

Test Report Serial No.: RDWN99-U3a Rev A

This report supersedes: NONE

Applicant: Radwin
27 Habarzel Street
Tel Aviv, 6971039
Israel

Issue Date: 17th December 2024

This Test Report is Issued Under the Authority of:

MiCOM Labs, Inc.
575 Boulder Court
Pleasanton California 94566
USA
Phone: +1 (925) 462-0304
Fax: +1 (925) 462-0306
www.micomlabs.com

ACCREDITED
TESTING CERT #2381.01

MiCOM Labs is an ISO 17025 Accredited Testing Laboratory

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MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

1. ACCREDITATION, LISTINGS & RECOGNITION

1.1. TESTING ACCREDITATION

MiCOM Labs, Inc. is an accredited Electrical testing laboratory per the international standard ISO/IEC 17025:2017. The company is accredited by the American Association for Laboratory Accreditation (A2LA) www.a2la.org test laboratory number 2381.01. MiCOM Labs test schedule is available at the following URL; http://www.a2la.org/scopepdf/2381-01.pdf

Accredited Laboratory

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for technical competence in the field of

Electrical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (*refer to joint ISO-ILAC-IAF Communiqué dated April 2017*).

Presented this 28th day of February 2024.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 2381.01
Valid to November 30, 2025

For the tests to which this accreditation applies, please refer to the laboratory's Electrical Scope of Accreditation.

1.2. RECOGNITION

MiCOM Labs, Inc is widely recognized for its wireless testing and certification capabilities. In addition to being recognized for Testing and Certification under Phase 2 Mutual Recognition Agreements (MRA) with Canada, Europe, United Kingdom and Japan, our international recognition includes Conformity Assessment Body (CAB) designation status under agreements with Asia Pacific (APEC) MRA Phase 1 countries giving acceptance of MiCOM Labs test reports. MiCOM Labs test reports are accepted globally.

Country	Recognition Body	Status	MRA Phase	Identification No.
USA	Federal Communications Commission (FCC)	TCB	-	US0159 Test Firm Designation#: US1084
Canada	Industry Canada (ISED)	FCB	APEC MRA 2	US0159 ISED#: 4143A
Japan	MIC (Ministry of Internal Affairs and Communication)	CAB	Japan MRA 2	RCB 210
	Japan Approvals Institute for Telecommunication Equipment (JATE)			
	VCCI	--	--	A-0012
Europe	European Commission	NB	EU MRA 2	NB 2280
United Kingdom	Department for Business, Energy & Industrial Strategy (BEIS)	AB	UK MRA 2	AB 2280
Mexico	Instituto Federal de Telecomunicaciones (IFT)	CAB	Mexico MRA 1	US0159
Australia	Australian Communications and Media Authority (ACMA)	CAB	APEC MRA 1	US0159
Hong Kong	Office of the Telecommunication Authority (OFTA)			
Korea	Ministry of Information and Communication Radio Research Laboratory (RRL)			
Singapore	Infocomm Development Authority (IDA)			
Taiwan	National Communications Commission (NCC) Bureau of Standards, Metrology and Inspection (BSMI)			
Vietnam	Ministry of Communication (MIC)			

TCB – Telecommunications Certification Bodies (TCB)
FCB – Foreign Certification Body
CAB – Conformity Assessment Body
NB – Notified Body
AB – Approved Body
MRA – Mutual Recognition Agreement
MRA Phase Phase I - recognition for product testing
Phase II – recognition for both product testing and certification

1.3. PRODUCT CERTIFICATION

MiCOM Labs, Inc. is an accredited Product Certification Body per the international standard ISO/IEC 17065:2012. The company is accredited by the American Association for Laboratory Accreditation (A2LA) www.a2la.org test laboratory number 2381.02. MiCOM Labs test schedule is available at the following URL; http://www.a2la.org/scopepdf/2381-02.pdf

Accredited Product Certification Body

A2LA has accredited

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This product certification body is accredited in accordance with the recognized International Standard ISO/IEC 17065:2012 *Requirements for bodies certifying products, processes and services*. This product certification body also meets the *A2LA R322 – Specific Requirements – Notified Body Accreditation Requirements* and *A2LA R308 - Specific Requirements - ISO-IEC 17065 - Telecommunication Certification Body Accreditation Program*. This accreditation demonstrates technical competence for a defined scope and the operation of a management system.

Presented this 28th day of February 2024.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 2381.02
Valid to November 30, 2025

For the product certification schemes to which this accreditation applies, please refer to the organization's Product Certification Scope of Accreditation.

United States of America – Telecommunication Certification Body (TCB)
Industry Canada – Certification Body, CAB Identifier – US0159
Europe – Notified Body (NB), NB Identifier - 2280
UK – Approved Body (AB), AB Identifier - 2280
Japan – Recognized Certification Body (RCB), RCB Identifier - 210

2. DOCUMENT HISTORY

Document History		
Revision	Date	Comments
Draft	December 11, 2024	Draft for client review and comments Wi-Fi alliance AFC Device (AFC DUT) Compliance Test Plan Version 1.7 in Standard Power Access Point configuration
Draft 2	December 16, 2024	2nd Draft for client review and comments
Rev A	December 17, 2024	Initial Release

In the above table the latest report revision will replace all earlier versions.

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3. TEST RESULT CERTIFICATE

Manufacturer:	Radwin 27 Habarzel Street Tel Aviv, 6971039 Israel	**Tested By:**	MiCOM Labs, Inc. 575 Boulder Court Pleasanton, California, 94566 USA
Model(s):	RADWIN 2000 E CON EC10	**Telephone:**	+1 925 462 0304
Type Of Equipment:	6 GHz High Performance PtP Outdoor Unit	**Fax:**	+1 925 462 0306
S/N's:	Prototype 1		
Test Date(s):	18th – 26th November 2024	**Website:**	www.micomlabs.com

STANDARD(S)	TEST RESULTS
FCC CFR 47 Part 15 Subpart E 15.407 (k) Wi-Fi alliance AFC Device (AFC DUT) Compliance Test Plan Version 1.7	**EQUIPMENT COMPLIES**

MiCOM Labs, Inc. tested the equipment mentioned in accordance with the requirements set forth in the above standards. Test results indicate that the equipment tested is capable of demonstrating compliance with the requirements as documented within this report.

Notes:

1. This document reports conditions under which testing was conducted and the results of testing performed.

2. Details of test methods used have been recorded and kept on file by the laboratory.

3. Test results apply only to the item(s) tested.

A2LA ACCREDITED
TESTING CERT #2381.01

Approved & Released for MiCOM Labs, Inc. by:

Graeme Grieve
Quality Manager MiCOM Labs, Inc.

Gordon Hurst
President & CEO MiCOM Labs, Inc.

4. REFERENCES AND MEASUREMENT UNCERTAINTY

4.1. Normative References

REF.	PUBLICATION	YEAR	TITLE
I	KDB 662911 D01, D02, D03	D01 Oct 2013, D02 Oct 2011, D03 Oct 2020	Guidance for measurement of output emission of devices that employ single transmitter with multiple outputs or systems with multiple transmitters operating simultaneously in the same frequency band. 662911 D01 Multiple Transmitter Output v02r01, 662911 D02 MIMO with Cross Polarized Antenna v01, 662911 D03 MIMO Antenna Gain Measurement v01, OET 13TR1003 Directional Gain of 802 11 MIMO with CDD 04 05 2013
II	KDB 905462 D07 v02	Aug 2016	Test guidance to demonstrate compliance for U-NII devices subject to DFS requirements.
III	KDB 926956 D01 v02	Aug 2016	U-NII Device Transition Plan
IV	A2LA	16th April 2024	R105 - Requirement's When Making Reference to A2LA Accreditation Status
V	ANSI C63.10	2020	American National Standard for Testing Unlicensed Wireless Devices
VI	ANSI C63.4	2014 + 2017 Amendment	American National Standards for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz
VII	ETSI TR 100 028	2001-12	Parts 1 and 2 Electromagnetic compatibility and Radio Spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics
VIII	FCC 06-96	Jun 2006	Memorandum Opinion and Order
IX	FCC 47 CFR Part 15.407	2021	Radio Frequency Devices; Subpart E –Unlicensed National Information Infrastructure Devices
X	ICES-003	Issue 7; Oct 2020	Information Technology Equipment (Including Digital Apparatus)
XI	UKAS M3003	Edition 6 March 2024	The Expression of Uncertainty and Confidence in Measurements
XII	RSS-247 Issue 3	Aug 2023	Digital Transmission Systems (DTSs), Frequency Hopping System (FHSs) and Licence-Exempt Local Area Network (LE-LEN) Devices
XIII	RSS-Gen Issue 5	Amendment 1,2 (Feb 2021)	General Requirements for Compliance of Radio Apparatus. With Amendments 1: March 2019 and 2: Feb 2021.
XIV	FCC 47 CFR Part 2.1033	Feb 2023	FCC requirements and rules regarding photographs and test setup diagrams.
XV	KDB 789033 D02 V02r01	Dec 2017	Guidelines For Compliance Testing Of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E
XVI	UKAS LAB 12	Edition 4 April 2022	The Expression of Uncertainty in Testing
XVII	KDB 987594 D01 U-NII	Aug 22 2023	Part 15 Subpart E U-NII 6GHz General Guidance Bands 5, 6, 7, and 8
XVIII	KDB 987594 D02 U-NII	Aug 9th 2023	Guidelines For Compliance Testing Of Unlicensed National Information Infrastructure 6GHz (U-NII) Devises Part 15 Subpart E
XIV	KDB 987594 D05 U-NII	Aug 9th 2023	AFC DUT TEST HARNESS TESTING
XXI	Wi-Fi Alliance	2024	AFC Device (AFC DUT) Compliance Test Plan Version 1.7

4.2. Test and Uncertainty Procedure

Measurement uncertainty figures are calculated in accordance with ETSI TR 100 028 Parts 1 and 2.

Measurement uncertainties stated are based on a standard uncertainty multiplied by a coverage factor k = 2, providing a level of confidence of approximately 95 % in accordance with UKAS document M 3003 listed in the Normative References section of this report.

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5. PRODUCT DETAILS AND TEST CONFIGURATIONS

5.1. Technical Details

Details	Description
Purpose:	Test of the RADWIN 2000 E CON EC10 according to FCC CFR 47 Part 15 Subpart E 15.407 (k); AFC
Applicant:	RADWIN Ltd. 27 Habarzel Street Tel Aviv, 6971039 Israel
Manufacturer:	RADWIN Ltd.
Laboratory performing the tests:	MiCOM Labs, Inc. 575 Boulder Court Pleasanton California 94566 USA
Test report reference number:	RDWN99-U3a
Date EUT received:	18th November 2024
Standard(s) applied:	Wi-Fi alliance AFC Device (AFC DUT) Compliance Test Plan Version 1.7
Dates of test (from - to):	19th – 25th November 2024
No of Units Tested:	1
Product Family Name:	RADWIN 2000
Model(s):	RADWIN 2000 E CON EC10;
Location for use:	Outdoors
Declared Frequency Range(s):	5925 - 6425 MHz; 6525 - 6875 MHz;
Type of Modulation:	OFDM
EUT Modes of Operation:	20MHz, 40MHz, 80MHz, 160MHz
Declared Nominal Output Power (dBm):	+30
Transmit/Receive Operation:	Transceiver
Rated Input Voltage and Current:	56VDC 1A
Operating Temperature Range:	-40°C to +60°C
ITU Emission Designator:	20M0W7W, 40M0W7W, 80M0W7W, 160M0W7W
Equipment Dimensions:	4.2 / 10.1 / 4.9 in
Weight:	2.7 lbs.
Hardware Rev:	Prototype
Software configuration	Standard Power Access Point
Software Rev:	A

5.2. Scope Of Test Program

RADWIN 2000 E CON EC10

The scope of the test program was to test the RADWIN 2000 E CON EC10, in Standard Power Access Point configuration in the frequency ranges 5925 - 6425 MHz; 6525 - 6875 MHz for compliance against the following specification:

FCC CFR 47 Part 15 Subpart E 15.407(k) AFC requirements
This subpart sets out the regulations for Unlicensed National Information Infrastructure (U-NII) devices, operating as Standard Power Access Point and fixed client, in the 5.925 – 6.425 GHz and 6.525-6.875 GHz bands.
The testing is performed according to the "Wi-Fi alliance AFC Device (AFC DUT) Compliance Test Plan Version 1.7"

5.3. Equipment Model(s) and Serial Number(s)

Type	Equipment Description	Manufacturer	Model No.	Serial No.
EUT	6 GHz High Performance PtP Outdoor Unit	RADWIN	RADWIN 2000 E CON-EC10	Prototype
Support	POE Power Supply	Gospell	G0566-560-100	--
Support	Laptop	Dell	--	--

5.4. Antenna Details

Type	Manufacturer	Model	Family	Gain (dBi)	BF Gain	Dir BW	X-Pol	Frequency Band (MHz)
external	RADWIN	RW-9628-5872	Dish	28.0	-	6.0	Yes	5925 - 6875
external	RADWIN	RW-9632-5872	Dish	32.0	-	4.0	Yes	5925 - 6875

BF Gain - Beamforming Gain
Dir BW - Directional Beam Width
X-Pol - Cross Polarization

5.5. Cabling and I/O Ports

Port Type	Max Cable Length	# of Ports	Screened	Connector Type	Data Type	Bit Rate Mbit/s
Ethernet PoE IN	>30m	1	No	RJ45	Packet Data	1000

5.6. Test Configurations

Results for the following configurations are provided in this report:
Test of the RADWIN 2000 E CON EC10 in Standard Power Access Point configuration.
Tests performed in operational radio link in 20 MHz, 40 MHz, 80 MHz and 160 MHz modes.
The modulation rate during operation up to 4096 QAM (5/6)
A 28 dB antenna gain was chosen to demonstrate compliance.

5.7. AFC DUT general capabilities declaration

Item	Question	Vendor response
1	AFC DUT Type	Standard Power AP
2	Does the AFC DUT support sending an Available Spectrum Inquiry Request based on the inquired Frequency Range field?	Yes
3	Does the AFC DUT support sending an Available Spectrum Inquiry Request based on the inquired Channels fields?	No
4	If the Answer to Items 2 and 3 is "Yes", what is AFC DUT's default inquiry type?	NA
5	Does the AFC DUT need to be supplied with BSS configuration parameters?	No
6	Does the AFC DUT manufacturer attest to AFC DUT compliance with rules for LPI operation?	No
7	Does the AFC DUT need to be supplied with mandatory registration information to formulate an Available Spectrum Inquiry Request	Yes
8	If the Answer to Item 7 is "Yes". What is the geographic Supported by the AFC DUT?	Ellipse
9	Does the AFC DUT support 160 MHz channel width operation?	Yes
10	Which method does AFC DUT acting as a Fixed Client uses for sending an Available Spectrum Inquiry Request?	NA
11	Does the AFC DUT support 320 MHz channel width operation?	No

5.8. Equipment Modifications

The following modifications were required to bring the equipment into compliance:
1. NONE

5.9. Deviations from the Test Standard

The following deviations from the test standard were required to complete the test program:
1. NONE

6. TEST EQUIPMENT CONFIGURATION(S)

6.1. Principle test configuration

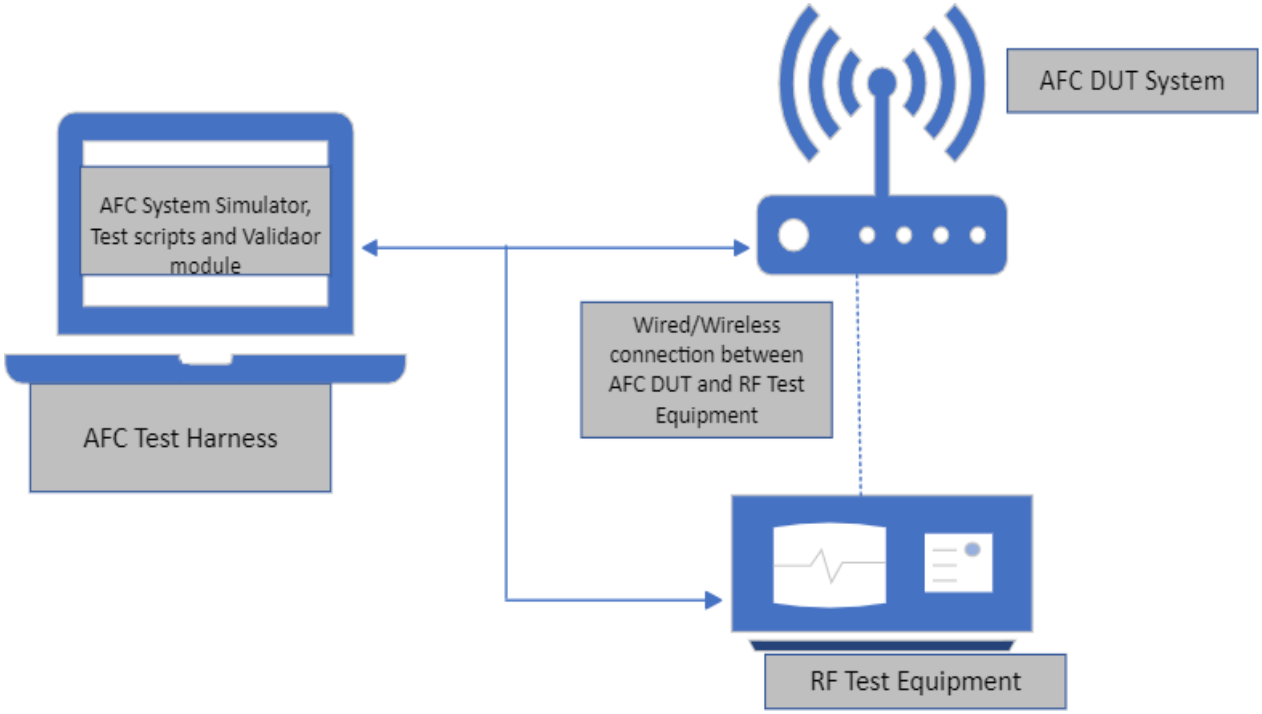

Figure 1 Standard Power Access Point Test Setup

6.2. RF Test Equipment setup

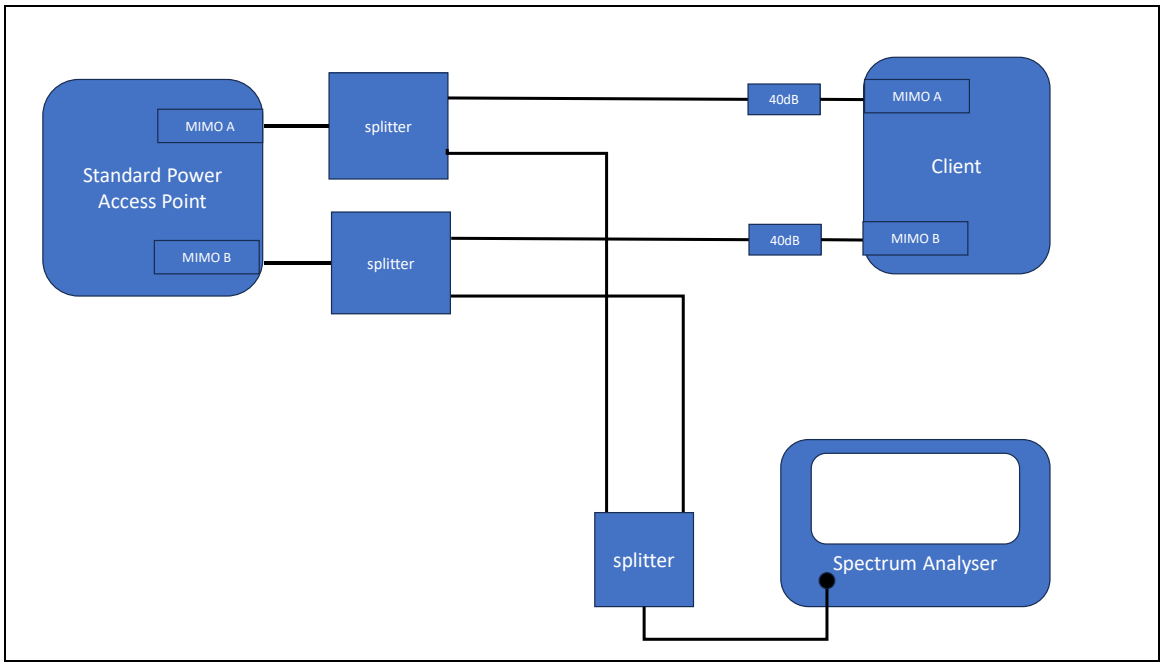

Figure 2: RF Test setup Equipment for Standard Power Access Point

A full system calibration was performed on the test setup and any resulting system losses were taken into account in the production of all final measurement data. A antenna gain of 24 dB and the duty cycle of 50% (3 dB) was also accounted for.

The measurement uncertainty is 2.7 dB with a 95% confidence level.

6.3. Test Equipment Utilized

Asset#	Description	Manufacturer	Model#	Serial#	Calibration Due Date
0266	50 GHz Signal Analyzer	Keysight	MXA N9020B	MY60110791	07 / 25 / 2025
0352	Splitter / Combiner 2-8 GHz	Pasternack	PE2031	--	N/A
0352	Splitter / Combiner 2-8 GHz	Pasternack	PE2031	--	N/A
0422	Splitter / Combiner	Mini Circuits	15542	9833	N/A
--	Laptop	Dell	--	--	N/A
--	WFA-test-harness	Wi-Fi Alliance	SW version 2.0.65.174	N A	N/A

7. TEST SUMMARY

7.1. List of Tests

Test case	Test Header	Result	Link to log files
3.1	CT_AFC_SP_AP_AFCDRSA31_Frequency_20MHz_10611_1	PASS	RSA31-20
3.1	CT_AFC_SP_AP_AFCDRSA31_Frequency_40MHz_10612_1	PASS	RSA31-40
3.1	CT_AFC_SP_AP_AFCDRSA31_Frequency_80MHz_10613_1	PASS	RSA31-80
3.1	CT_AFC_SP_AP_AFCDRSA31_Frequency_160MHz_10614_1	PASS	RSA31-160
3.2	CT_AFC_SP_AP_AFCDUSA32_Frequency_10615_1	PASS	USA 32
3.3	CT_AFC_SP_AP_AFCDSAU33_Frequency_10616_1	PASS	SAU33
3.4	CT_AFC_SP_AP_AFCDUAU34_Frequency_10617_1	PASS	UAU34
3.5	CT_AFC_ServerValidation_AP_AFCDUSV35_NonMatchSAN_10632_1	PASS	USV35
3.5	CT_AFC_ServerValidation_AP_AFCDUSV35_DifferentRootCA_10633_1	PASS	
3.5	CT_AFC_ServerValidation_AP_AFCDUSV35_MatchSuffixSAN_10634_1	PASS	
3.5	CT_AFC_ServerValidation_AP_AFCDUSV35_ServerCertRevoked_10635_1	PASS	
3.5	CT_AFC_ServerValidation_AP_AFCDUSV35_OCSPStaplingDisabled_10636_1	PASS	
3.5	CT_AFC_ServerValidation_AP_AFCDUSV35_StapledOCSPRespExpired_10637_1	PASS	
3.5	CT_AFC_ServerValidation_AP_AFCDUSV35_TLSCipherSuiteENULL_10638_1	PASS	
3.5	CT_AFC_ServerValidation_AP_AFCDUSV35_NoRootCA_10639_1	PASS	

The related RF measurements can be found in Section 9 of this report

Detailed log files are available at MiCOM Labs on request.

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8. Test harness protocol tests

8.1. Successful Registration and Spectrum Access Request

FCC requirement: 15.407(k)(1), 15.407(k)(8)(i), 15.407(k)(8)(ii), 15.407(k)(8)(iii), 15.407(l)(ii), 15.407(k)(8)(iv)

8.1.1. Test procedure

Step	Description
1	If the AFC DUT is Standard Power Access Point, go to Step 2, else go to Step 12
2	AFC DUT set to Initial Pre-test State. If needed (see Table 9 declaration), configure the AFC DUT with BSS parameters per Table 14 and a temporary test regulatory identifier (e.g., FCC ID), geographic coordinates, antenna height, and uncertainty parameters. Configure the AFC DUT with AFC System URL and server root certificate. Trigger the AFC DUT to send to the AFC DUT Test Harness an Available Spectrum Inquiry Request.
3	AFC DUT sends a valid Available Spectrum Inquiry Request containing the inquired Frequency Range and/or the inquired Channels fields*.
4	AFC DUT Test Harness validates the presence of mandatory registration information
5	AFC DUT Test Harness sends an Available Spectrum Inquiry Response containing a list of available frequency ranges and/or channels and the maximum permissible transmit power in the available Frequency Info and/or available Channel Info fields.
6	Throughout Step 1 to Step 4, RF Test Equipment monitors the output of the AFC DUT to confirm that the AFC DUT does not transmit: • In the band if the AFC DUT supports only SP operation Or • Above LPI limits for AFC DUT whose manufacturer attests to its compliance with rules for LPI operation Wait for 60 seconds RF Test Equipment monitors any transmission by the AFC DUT conforms to the following: • For SP only operation, AFC DUT conforms to the conditions contained in the Available Spectrum Inquiry Response and does not exceed emissions limits in adjacent frequencies. • For AFC DUT whose manufacturer attests to its compliance with rules for LPI operation, AFC DUT transmit power in the band is less than CEILING [LPI limits, SP limits contained in the Available Spectrum Inquiry Response] and does not exceed emissions limits in adjacent frequencies.
7	Trigger the AFC DUT to send to the AFC DUT Test Harness an Available Spectrum Inquiry Request.
8	AFC DUT sends a valid Available Spectrum Inquiry Request containing the inquired Frequency Range and/or the inquired Channels fields*.
9	AFC DUT Test Harness validates the presence of mandatory registration information

Step	Description
10	AFC DUT Test Harness sends an Available Spectrum Inquiry Response containing a list of available frequency ranges and/or channels and the maximum permissible transmit power in the available Frequency Info and/or available Channel Info fields which are significantly different from Step 5.
11	Wait for 5 minutes (configurable) RF Test Equipment monitors any transmission by the AFC DUT conforms to the following: • For SP only operation, AFC DUT conforms to the conditions contained in the latest Available Spectrum Inquiry Response and does not exceed emissions limits in adjacent frequencies. • For AFC DUT whose manufacturer attests to its compliance with rules for LPI operation, AFC DUT transmit power in the band is less than CEILING [LPI limits, SP limits contained in the latest Available Spectrum Inquiry Response] and does not exceed emissions limits in adjacent frequencies
12	If the AFC DUT is Fixed Client, go to Step 13 else Stop the test
13	The AFC DUT set to Initial Pre-test State.
14	If needed (see Table 9 declaration), configure the AFC DUT with a temporary test regulatory identifier (e.g., FCC ID), geographic coordinates, antenna height, and uncertainty parameters. Configure the AFC DUT with AFC System URL and server root certificate. Trigger the AFC DUT to send to the AFC DUT Test Harness an Available Spectrum Inquiry Request using either In-band or Out-of- band methods.
15	AFC DUT sends a valid Available Spectrum Inquiry Request containing the inquired Frequency Range and/or the inquired Channels fields*
16	AFC DUT Test Harness validates the presence of mandatory registration information
17	AFC DUT Test Harness sends an Available Spectrum Inquiry Response containing a list of available frequency ranges and/or channels and the maximum permissible transmit power in the available Frequency Info and/or available Channel Info fields.
18	If AFC DUT used Out-of-band method, initiate connection procedure between AFC DUT and SP Access Point by following instructions provided by the AFC DUT Vendor
19	Wait for 60 seconds RF Test Equipment monitors any transmission by the AFC DUT conforms to the conditions contained in the Available Spectrum Inquiry Response and does not exceed emissions limits in adjacent frequencies
20	Trigger the AFC DUT to send to the AFC DUT Test Harness an Available Spectrum Inquiry Request using either In-band or Out-of- band methods
21	AFC DUT sends a valid Available Spectrum Inquiry Request containing the inquired Frequency Range and/or the inquired Channels fields*
22	AFC DUT Test Harness validates the presence of mandatory registration information
23	AFC DUT Test Harness sends an Available Spectrum Inquiry Response containing a list of available frequency ranges and/or channels and the maximum permissible transmit power in the available Frequency Info and/or available Channel Info fields which are significantly different from Step 17.

Step	Description
24	If AFC DUT used Out-of-band method, initiate connection procedure between AFC DUT and SP Access Point by following instructions provided by the AFC DUT Vendor
25	Wait for 60 seconds (configurable) RF Test Equipment monitors any transmission by the AFC DUT conforms to the conditions contained in the latest Available Spectrum Inquiry Response and does not exceed emissions limits in adjacent frequencies

8.1.2. Result logs

TestCaseName: CT_AFC_SP_AP_AFCDRSA31_Frequency_20MHz_10611_1 (Successful registration and spectrum access request)
TestResult:PASS
Band:6GHz

Measurements Name	Description	Value	Validation Result
AFC_DUT_SP_OPERATION	AFC DUT transmit with standard power in the band before the Spectrum Inquiry Response	false	PASS
AFC_DUT_SEND_SPECTRUM_INQUIRYREQUEST_1	AFC DUT sends an Available Spectrum Inquiry Request	true	PASS
AFC_DUT_SPECTRUM_INQUIRYREQUEST_VALID_1	Valid mandatory registration information	true	PASS
AFC_DUT_CONFORM_SPECTRUM_INQUIRYRESPONSE_1	AFC DUT conforms to the conditions in Spectrum Response (21.7 dBm/MHz PSD) on channel 77 bandwidth 20.	true	PASS
AFC_DUT_CONFORM_ADJACENT_FREQUENCIES_EMISSIONS_LIMITS_1	AFC DUT conforms to not exceed emissions limits in adjacent frequencies	true	PASS
AFC_DUT_SEND_SPECTRUM_INQUIRYREQUEST_2	AFC DUT sends an Available Spectrum Inquiry Request	true	PASS
AFC_DUT_SPECTRUM_INQUIRYREQUEST_VALID_2	Valid mandatory registration information	true	PASS
AFC_DUT_CONFORM_SPECTRUM_INQUIRYRESPONSE_2	AFC DUT conforms to the conditions in Spectrum Response (21.3 dBm/MHz PSD) on channel 161 bandwidth 20.	true	PASS
AFC_DUT_CONFORM_ADJACENT_FREQUENCIES_EMISSIONS_LIMITS_2	AFC DUT conforms to not exceed emissions limits in adjacent frequencies	true	PASS

Back to overview

TestCaseName: CT_AFC_SP_AP_AFCDRSA31_Frequency_40MHz_10612_1 (Successful registration and spectrum access request)
TestResult:PASS
Band:6GHz

Measurements Name	Description	Value	Validation Result
AFC_DUT_SP_OPERATION	AFC DUT transmit with standard power in the band before the Spectrum Inquiry Response	false	PASS
AFC_DUT_SEND_SPECTRUM_INQUIRYREQUEST_1	AFC DUT sends an Available Spectrum Inquiry Request	true	PASS
AFC_DUT_SPECTRUM_INQUIRYREQUEST_VALID_1	Valid mandatory registration information	true	PASS
AFC_DUT_CONFORM_SPECTRUM_INQUIRYRESPONSE_1	AFC DUT conforms to the conditions in Spectrum Response (19.5 dBm/MHz PSD) on channel center frequency index 147 bandwidth 40.	true	PASS
AFC_DUT_CONFORM_ADJACENT_FREQUENCIES_EMISSIONS_LIMITS_1	AFC DUT conforms to not exceed emissions limits in adjacent frequencies	true	PASS
AFC_DUT_SEND_SPECTRUM_INQUIRYREQUEST_2	AFC DUT sends an Available Spectrum Inquiry Request	true	PASS
AFC_DUT_SPECTRUM_INQUIRYREQUEST_VALID_2	Valid mandatory registration information	true	PASS
AFC_DUT_CONFORM_SPECTRUM_INQUIRYRESPONSE_2	AFC DUT conforms to the conditions in Spectrum Response (20.7 dBm/MHz PSD) on channel center frequency index 59 bandwidth 40.	true	PASS
AFC_DUT_CONFORM_ADJACENT_FREQUENCIES_EMISSIONS_LIMITS_2	AFC DUT conforms to not exceed emissions limits in adjacent frequencies	true	PASS

Back to overview

TestCaseName: CT_AFC_SP_AP_AFCDRSA31_Frequency_80MHz_10613_1 (Successful registration and spectrum access request)
TestResult:PASS
Band:6GHz

Measurements Name	Description	Value	Validation Result
AFC_DUT_SP_OPERATION	AFC DUT transmit with standard power in the band before the Spectrum Inquiry Response	false	PASS
AFC_DUT_SEND_SPECTRUM_INQUIRYREQUEST_1	AFC DUT sends an Available Spectrum Inquiry Request	true	PASS
AFC_DUT_SPECTRUM_INQUIRYREQUEST_VALID_1	Valid mandatory registration information	true	PASS
AFC_DUT_CONFORM_SPECTRUM_INQUIRYRESPONSE_1	AFC DUT conforms to the conditions in Spectrum Response (11.6 dBm/MHz PSD) on channel center frequency index 167 bandwidth 80.	true	PASS
AFC_DUT_CONFORM_ADJACENT_FREQUENCIES_EMISSIONS_LIMITS_1	AFC DUT conforms to not exceed emissions limits in adjacent frequencies	true	PASS
AFC_DUT_SEND_SPECTRUM_INQUIRYREQUEST_2	AFC DUT sends an Available Spectrum Inquiry Request	true	PASS
AFC_DUT_SPECTRUM_INQUIRYREQUEST_VALID_2	Valid mandatory registration information	true	PASS
AFC_DUT_CONFORM_SPECTRUM_INQUIRYRESPONSE_2	AFC DUT conforms to the conditions in Spectrum Response (12.2 dBm/MHz PSD) on channel center frequency index 87 bandwidth 80.	true	PASS
AFC_DUT_CONFORM_ADJACENT_FREQUENCIES_EMISSIONS_LIMITS_2	AFC DUT conforms to not exceed emissions limits in adjacent frequencies	true	PASS

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TestCaseName: CT_AFC_SP_AP_AFCDRSA31_Frequency_160MHz_10614_1 (Successful registration and spectrum access request)
TestResult:PASS
Band:6GHz

Measurements Name	Description	Value	Validation Result
AFC_DUT_SP_OPERATION	AFC DUT transmit with standard power in the band before the Spectrum Inquiry Response	false	PASS
AFC_DUT_SEND_SPECTRUM_INQUIRYREQUEST_1	AFC DUT sends an Available Spectrum Inquiry Request	true	PASS
AFC_DUT_SPECTRUM_INQUIRYREQUEST_VALID_1	Valid mandatory registration information	true	PASS
AFC_DUT_CONFORM_SPECTRUM_INQUIRYRESPONSE_1	AFC DUT conforms to the conditions in Spectrum Response (11.4 dBm/MHz PSD) on channel center frequency index 143 bandwidth 160.	true	PASS
AFC_DUT_CONFORM_ADJACENT_FREQUENCIES_EMISSIONS_LIMITS_1	AFC DUT conforms to not exceed emissions limits in adjacent frequencies	true	PASS
AFC_DUT_SEND_SPECTRUM_INQUIRYREQUEST_2	AFC DUT sends an Available Spectrum Inquiry Request	true	PASS
AFC_DUT_SPECTRUM_INQUIRYREQUEST_VALID_2	Valid mandatory registration information	true	PASS
AFC_DUT_CONFORM_SPECTRUM_INQUIRYRESPONSE_2	AFC DUT conforms to the conditions in Spectrum Response (14.1 dBm/MHz PSD) on channel center frequency index 79 bandwidth 160.	true	PASS
AFC_DUT_CONFORM_ADJACENT_FREQUENCIES_EMISSIONS_LIMITS_2	AFC DUT conforms to not exceed emissions limits in adjacent frequencies	true	PASS

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8.2. Unsuccessful spectrum access request

FCC requirement: 15.407(k)(1), 15.407(k)(8)(i), 15.407(k)(8)(ii), 15.407(k)(8)(iii)

8.2.1. Test procedure

Step	Description
1	If the AFC DUT is Standard Power Access Point, go to Step 2, else go to Step 7
2	AFC DUT set to Initial Pre-test State. If needed (see Table 9 declaration), configure the AFC DUT with BSS parameters per Table 14 and a temporary test regulatory identifier (e.g., FCC ID), geographic coordinates, antenna height, and uncertainty parameters. Configure the AFC DUT with AFC System URL and server root certificate. Trigger the AFC DUT to send to the AFC DUT Test Harness an Available Spectrum Inquiry Request.
3	AFC DUT sends a valid Available Spectrum Inquiry Request containing the inquired Frequency Range and/or the inquired Channels fields*.
4	AFC DUT Test Harness validates mandatory registration information.
5	AFC DUT Test Harness sends an Available Spectrum Inquiry Response indicating that no frequency ranges and/or channels are available.
6	Throughout Step 2 to Step 5 and subsequent to Step 5, RF Test Equipment monitors the output of the AFC DUT to confirm the following: For SP only operation, AFC DUT does not transmit in the band. For AFC DUT whose manufacturer attests to its compliance with rules for LPI operation, the AFC DUT does not transmit above LPI limits.
7	If the AFC DUT is Fixed Client, go to Step 8 else Stop the test
8	The AFC DUT set to Initial Pre-test State.
9	If needed (see Table 9 declaration), configure the AFC DUT with a temporary test regulatory identifier (e.g., FCC ID or IC ID), geographic coordinates, antenna height, and uncertainty parameters. Configure the AFC DUT with AFC System URL and server root certificate. Trigger the AFC DUT to send to the AFC DUT Test Harness an Available Spectrum Inquiry Request.
10	AFC DUT sends a valid Available Spectrum Inquiry Request containing the inquired Frequency Range and/or the inquired Channels fields*.
11	AFC DUT Test Harness validates mandatory registration information.
12	AFC DUT Test Harness sends an Available Spectrum Inquiry Response indicating that no frequency ranges and/or channels are available using either In-band or Out-of-band methods.
13	If AFC DUT used Out-of-band method, initiate connection procedure between Fixed Client and SP Access Point by following instructions provided by the AFC DUT Vendor
14	Wait for 60 seconds RF Test Equipment monitors that the AFC DUT does not transmit above maximum transmit power limits advertised by the Standard Power Access Point for Standard Client Devices in the channel.

8.2.2. Result logs

TestCaseName: CT_AFC_SP_AP_AFCDUSA32_Frequency_10615_1 (Unsuccessful registration and spectrum access request)
TestResult:PASS
Band:6GHz

Measurements Name	Description	Value	Validation Result
AFC_DUT_SP_OPERATION	AFC DUT transmit with standard power in the band before the Spectrum Inquiry Response	false	PASS
AFC_DUT_SEND_SPECTRUM_INQUIRYREQUEST	AFC DUT sends an Available Spectrum Inquiry Request	true	PASS
AFC_DUT_SPECTRUM_INQUIRYREQUEST_VALID	Valid mandatory registration information	true	PASS
AFC_DUT_CONFORM_SPECTRUM_INQUIRYRESPONSE	AFC DUT conforms to the conditons in the Spectrum Inquiry Response	true	PASS

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8.3. Successful spectrum access update

FCC requirement: 15.407(k)(8)(i), 15.407(k)(8)(ii), 15.407(k)(9)(i)

8.3.1. Test procedure

Step	Description
1	If the AFC DUT is Standard Power Access Point, go to Step 2, else go to Step 12
2	AFC DUT set to Initial Pre-test State. If needed (see Table 9 declaration), configure the DUT with BSS parameters per Table 14 and a temporary test regulatory identifier (e.g., FCC ID), geographic coordinates, antenna height, and uncertainty parameters. Configure the AFC DUT with AFC System URL and server root certificate. Trigger the AFC DUT to send to the AFC DUT Test Harness an Available Spectrum Inquiry Request.
3	AFC DUT sends a valid Available Spectrum Inquiry Request containing the inquired Frequency Range and/or the inquired Channels fields*.
4	AFC DUT Harness validates mandatory registration information.
5	AFC DUT Test Harness sends an Available Spectrum Inquiry Response containing a list of available frequency ranges and/or channels and the maximum permissible transmit power in the available Frequency Info and/or available Channel Info fields.
6	Throughout the preceding steps, RF Test Equipment monitors the output of the AFC DUT to confirm that the AFC DUT does not transmit: In the band if the AFC DUT supports only SP operation Or • Above LPI limits for AFC DUT whose manufacturer attests to its compliance with rules for LPI operation Wait for 60 seconds RF Test Equipment monitors any transmission by the AFC DUT conforms to the following: For SP only operation, AFC DUT conforms to the conditions contained in the Available Spectrum Inquiry Response and does not exceed emissions limits in adjacent frequencies. For AFC DUT whose manufacturer attests to its compliance with rules for LPI operation, AFC DUT transmit power in the band is less than CEILING [LPI limits, SP limits contained in the Available Spectrum Inquiry Response] and does not exceed emissions limits in adjacent frequencies.
7	AFC DUT is power cycled. If needed (see Table 9declaration), configure the AFC DUT with a temporary test regulatory identifier (e.g., FCC ID), new geographic coordinates, antenna height, and uncertainty parameters. Configure the AFC DUT with AFC System URL and server root certificate.

Step	Description
8	Wait for 60 seconds If the AFC DUT does not send an Available Spectrum Inquiry Request, RF Test Equipment monitors the output of the AFC DUT to verify the following and STOP the test For SP only operation, AFC DUT does not transmit in the band. For AFC DUT whose manufacturer attests to its compliance with rules for LPI operation, the AFC DUT does not transmit above LPI limits. If the AFC DUT sends an Available Spectrum Inquiry Request, then CONTINUE with Step 9
9	AFC DUT Test Harness evaluates validity of mandatory registration information
10	AFC DUT Test Harness waits for 60 seconds before sending an Available Spectrum Inquiry Response containing a list of available frequency ranges and/or channels and the maximum permissible transmit power in the available Frequency Info and/or available Channel Info fields which are significantly different from Step 5. During the 60 seconds wait time: ▪ For AFC DUT whose manufacturer attests to its compliance with rules for LPI operation, RF Test Equipment monitors the output of the AFC DUT to confirm that AFC DUT does not transmit above LPI threshold limits ▪ For SP only operation, RF Test Equipment monitors the output of the AFC DUT to confirm that AFC DUT doesn't transmit in the band
11	Wait for 60 seconds RF Test Equipment monitors any transmission by the AFC DUT conforms to the following: For SP only operation, AFC DUT conforms to the conditions contained in the Available Spectrum Inquiry Response and does not exceed emissions limits in adjacent frequencies. For AFC DUT whose manufacturer attests to its compliance with rules for LPI operation, AFC DUT transmit power in the band is less than CEILING [LPI limits, SP limits contained in the Available Spectrum Inquiry Response] and does not exceed emissions limits in adjacent frequencies.
12	If the AFC DUT is Fixed Client, go to Step 13 else Stop the test
13	The AFC DUT is set to Initial Pre-test State.
14	If needed (see Table 9 declaration), configure the AFC DUT with a temporary test regulatory identifier (e.g., FCC ID), geographic coordinates, antenna height, and uncertainty parameters. Configure the AFC DUT with AFC System URL and server root certificate. Trigger the AFC DUT to send to the AFC DUT Test Harness an Available Spectrum Inquiry Request using either In-band or Out-of-band methods.
15	AFC DUT sends a valid Available Spectrum Inquiry Request containing the inquired Frequency Range and/or the inquired Channels fields*
16	AFC DUT Test Harness validates the presence of mandatory registration information

Step	Description
17	AFC DUT Test Harness sends an Available Spectrum Inquiry Response containing a list of available frequency ranges and/or channels and the maximum permissible transmit power in the available Frequency Info and/or available Channel Info fields.
18	If AFC DUT uses Out-of-band method, initiate connection procedure between AFC DUT and SP Access Point by following instructions provided by the AFC DUT Vendor
19	Wait for 60 seconds RF Test Equipment monitors any transmission by the AFC DUT conforms to the conditions contained in the Available Spectrum Inquiry Response and does not exceed emissions limits in adjacent frequencies
20	AFC DUT is power cycled. If needed (see Table 9 declaration), configure the AFC DUT with a temporary test regulatory identifier (e.g., FCC ID), new geographic coordinates, antenna height, and uncertainty parameters. Configure the AFC DUT with AFC System URL and server root certificate
21	Wait for 60 seconds If the AFC DUT does not send an Available Spectrum Inquiry Request, RF Test Equipment monitors the output of the AFC DUT to verify the AFC DUT does not transmit above maximum transmit power limits advertised by the Standard Power Access Point for Standard Client Devices in the channel and STOP the test. If the AFC DUT sends an Available Spectrum Inquiry Request, then CONTINUE with Step 21
22	AFC DUT Test Harness evaluates validity of mandatory registration information
23	AFC DUT Test Harness waits for 60 seconds before sending an Available Spectrum Inquiry Response containing a list of available frequency ranges and/or channels and the maximum permissible transmit power in the available Frequency Info and/or available Channel Info fields which are significantly different from step 17. During the 60 seconds wait time, RF Test Equipment monitors the output of the AFC DUT to confirm that the AFC DUT does not transmit above maximum transmit power limits advertised by the Standard Power Access Point for Standard Client Devices in the channel.
24	If AFC DUT uses Out-of-band method, initiate connection procedure between AFC DUT and SP Access Point by following instructions provided by the AFC DUT Vendor
25	Wait for 60 seconds RF Test Equipment monitors any transmission by the AFC DUT conforms to the conditions contained in the Available Spectrum Inquiry Response and does not exceed emissions limits in adjacent frequencies

8.3.2. Result log

TestCaseName: CT_AFC_SP_AP_AFCDSAU33_Frequency_10616_1 (Successful spectrum access update)
TestResult:PASS
Band:6GHz

Measurements Name	Description	Value	Validation Result
AFC_DUT_SP_OPERATION_1	AFC DUT transmit with standard power in the band before the Spectrum Inquiry Response	false	PASS
AFC_DUT_SEND_SPECTRUM_INQUIRYREQUEST	AFC DUT sends an Available Spectrum Inquiry Request	true	PASS
AFC_DUT_SPECTRUM_INQUIRYREQUEST_VALID_1	Valid mandatory registration information	true	PASS
AFC_DUT_CONFORM_SPECTRUM_INQUIRYRESPONSE_1	AFC DUT conforms to the conditions in Spectrum Response (17.0 dBm/MHz PSD) on channel 13 bandwidth 20.	true	PASS
AFC_DUT_CONFORM_ADJACENT_FREQUENCIES_EMISSIONS_LIMITS_1	AFC DUT conforms to not exceed emissions limits in adjacent frequencies	true	PASS
AFC_DUT_SP_OPERATION_NO_REQ	AFC DUT transmit with standard power in the band in no Spectrum Inquiry Request case	false	PASS

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8.4. Unsuccessful spectrum access update

FCC requirement: 15.407(k)(8)(i), 15.407(k)(8)(ii), 15.407(k)(9)(i)

8.4.1. Test procedure

Step	Description
1	If the AFC DUT is Standard Power Access Point, go to Step 2, else go to Step 12
2	AFC DUT set to Initial Pre-test State. If needed (see Table 5 declaration), configure the AFC DUT with BSS parameters per Table 9 and a temporary test regulatory identifier (e.g., FCC ID), geographic coordinates, antenna height, and uncertainty parameters. Configure the DUT with AFC System URL and server root certificate. Trigger the DUT to send to the AFC DUT Test Harness an Available Spectrum Inquiry Request using either In-band or Out-of-band methods.
3	AFC DUT sends a valid Available Spectrum Inquiry Request containing the inquired Frequency Range and/or the inquired Channels fields.
4	AFC DUT Test Harness validates mandatory registration information
5	AFC DUT Test Harness sends an Available Spectrum Inquiry Response containing a list of available frequency ranges and/or channels and the maximum permissible transmit power in the available Frequency Info and/or available Channel Info fields.
6	Throughout the Step 2 to 5, RF Test Equipment monitors the output of the AFC DUT to confirm that the AFC DUT does not transmit: In the band if the AFC DUT supports only SP operation Or • Above LPI limits for AFC DUT whose manufacturer attests to its compliance with rules for LPI operation Wait for 60 seconds RF Test Equipment monitors any transmission by the AFC DUT conforms to the following: For SP only operation, AFC DUT conforms to the conditions contained in the Available Spectrum Inquiry Response and does not exceed emissions limits in adjacent frequencies. For AFC DUT whose manufacturer attests to its compliance with rules for LPI operation, AFC DUT transmit power in the band is less than CEILING [LPI limits, SP limits contained in the Available Spectrum Inquiry Response] and does not exceed emissions limits in adjacent frequencies
7	AFC DUT is power cycled. If needed (see Table 9declaration), configure the AFC DUT with a temporary test regulatory identifier (e.g., FCC ID), new geographic coordinates, antenna height, and uncertainty parameters. Configure the AFC DUT with AFC System URL and server root certificate.

Step	Description
8	Wait for 60 seconds If the AFC DUT does not send an Available Spectrum Inquiry Request, RF Test Equipment monitors the output of the DUT to verify the following and STOP the test: ▪ For SP only operation, AFC DUT does not transmit in the band, ▪ For AFC DUT whose manufacturer attests to its compliance with rules for LPI operation, the AFC DUT does not transmit above LPI limits. If the AFC DUT sends an Available Spectrum Inquiry Request, then CONTINUE with Step 8
9	AFC DUT Test Harness evaluates validity of mandatory registration information.
10	AFC DUT Test Harness sends an Available Spectrum Inquiry Response indicating that no frequency ranges and/or channels are available.
11	Throughout Step 7 to 10 and subsequent to Step 10 Test Equipment monitors the output of the AFC DUT to confirm that: For SP only operation, AFC DUT does not transmit in the band. For AFC DUT whose manufacturer attests to its compliance with rules for LPI operation, the AFC DUT does not transmit above LPI limits.
12	If the AFC DUT is Fixed Client, go to Step 13 else Stop the test
13	The AFC DUT set to Initial Pre-test State.
14	If needed (see Table 9 declaration), configure the DUT with a temporary test regulatory identifier (e.g., FCC ID), geographic coordinates, antenna height, and uncertainty parameters. Configure the AFC DUT with AFC System URL and server root certificate. Trigger the AFC DUT to send to the AFC DUT Test Harness an Available Spectrum Inquiry Request using either In-band or Out-of- band methods.
15	AFC DUT sends a valid Available Spectrum Inquiry Request containing the inquired Frequency Range and/or the inquired Channels fields*
16	AFC DUT Test Harness validates the presence of mandatory registration information
17	AFC DUT Test Harness sends an Available Spectrum Inquiry Response containing a list of available frequency ranges and/or channels and the maximum permissible transmit power in the available Frequency Info and/or available Channel Info fields.
18	If AFC DUT used Out-of-band method, initiate connection procedure between AFC DUT and SP Access Point by following instructions provided by the AFC DUT Vendor
19	Wait for 60 seconds RF Test Equipment monitors any transmission by the AFC DUT conforms to the conditions contained in the Available Spectrum Inquiry Response and does not exceed emissions limits in adjacent frequencies

Step	Description
20	AFC DUT is power cycled. If needed (see Table 9 declaration), configure the AFC DUT with a temporary test regulatory identifier (e.g., FCC ID or IC ID), new geographic coordinates, antenna height, and uncertainty parameters. Configure the AFC DUT with AFC System URL and server root certificate
21	Wait for 60 seconds If the AFC DUT does not send an Available Spectrum Inquiry Request, RF Test Equipment monitors that the AFC DUT does not transmit above maximum transmit power limits advertised by the Standard Power Access Point for Standard Client Devices in the channel., If the AFC DUT sends an Available Spectrum Inquiry Request, then CONTINUE with Step 22 else STOP the test
22	AFC DUT Test Harness evaluates validity of mandatory registration information.
23	AFC DUT Test Harness sends an Available Spectrum Inquiry Response indicating that no frequency ranges and/or channels are available.
24	If AFC DUT used Out-of-band method, initiate connection procedure between AFC DUT and SP Access Point by following instructions provided by the AFC DUT Vendor
25	Wait for 60 seconds RF Test Equipment monitors that the AFC DUT does not transmit above maximum transmit power limits advertised by the Standard Power Access Point for Standard Client Devices in the channel.

8.4.2. Result log

TestCaseName: CT_AFC_SP_AP_AFCDUAU34_Frequency_10617_1 (Unsuccessful spectrum access update)
TestResult:PASS
Band:6GHz

Measurements Name	Description	Value	Validation Result
AFC_DUT_SP_OPERATION	AFC DUT transmit with standard power in the band before the Spectrum Inquiry Response	false	PASS
AFC_DUT_SEND_SPECTRUM_INQUIRYREQUEST	AFC DUT sends an Available Spectrum Inquiry Request	true	PASS
AFC_DUT_SPECTRUM_INQUIRYREQUEST_VALID_1	Valid mandatory registration information	true	PASS
AFC_DUT_CONFORM_SPECTRUM_INQUIRYRESPONSE_1	AFC DUT conforms to the conditions in Spectrum Response (23 dBm/MHz PSD) on channel 13 bandwidth 20.	true	PASS
AFC_DUT_CONFORM_ADJACENT_FREQUENCIES_EMISSIONS_LIMITS	AFC DUT conforms to not exceed emissions limits in adjacent frequencies	true	PASS
AFC_DUT_SP_OPERATION_NO_REQ	AFC DUT transmit with standard power in the band in no Spectrum Inquiry Request case	false	PASS

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8.5. Unsuccessful server validation

FCC requirement: 15.407(k)(8)(v)

8.5.1. Test procedure

Step	Description
1	The AFC DUT set to Initial Pre-test State. If needed (see Table 9 declaration), configure the AFC DUT with BSS parameters per Table 14 and a temporary test regulatory identifier (e.g., FCC ID), geographic coordinates, antenna height, and uncertainty parameters. Configure the AFC DUT Test Harness with TLS configuration that is the same as the default configuration defined in Section 2.3.1 except for the following: Run 1: A different server certificate (and private key) with SAN domain name entry "badafc.com" (i.e. that does not match AFC system URL's domain name); signed by the same root certificate as per Section 2.3.1 Run 2: A different server certificate (and private key) where all attributes other than Public Key are the same as the server certificate per Section 2.3.1, but the certificate is signed by a different root certificate Run 3: A different server certificate (and private key) with SAN domain name entry "wfatestorg.org" only (i.e. SAN domain name only matches suffix of AFC server's hostname); signed by the same root certificate as per Section 2.3.1 Run 4: A different server certificate (and private key) where all attributes other than Public Key are the same as the server certificate per Section 2.3.1signed by the same root certificate as per Section 2.3.1, but the server certificate is revoked as indicated in stapled OCSP response Run 5: Same configuration as per Section 2.3.1, except OCSP stapling is disabled and CRL/OCSP servers are not available Run 6: Same configuration as per Section 2.3.1, except stapled OCSP response has expired and CRL/OCSP servers are not available Run 7: Same configuration as per Section 2.3.1, except only the TLS cipher suite "eNULL" (no encryption) is enabled Run 8: N/A (same configuration as per Section 2.3.1) Configure the AFC DUT with the AFC System URL and the following root certificate: Runs 1-7: Root certificate as per Section 2.3.1 Run 8: No root certificate Trigger the AFC DUT to send to the AFC DUT Test Harness an Available Spectrum Inquiry Request using either In-band or Out-of- band methods.
2	AFC DUT Test Harness waits 10 seconds, and verifies no Available Spectrum Inquiry Request is sent to it.
3	Steps 1 and 2 are repeated for each of the remaining Runs

8.5.2. Result logs

TestCaseName: CT_AFC_ServerValidation_AP_AFCDUSV35_NonMatchSAN_10632_1 (Unsuccessful server validation)
TestResult:PASS
Band:6GHz

Measurements Name	Description	Value	Validation Result
AFC_DUT_SEND_SPECTRUM_INQUIRYREQUEST	AFC DUT sends an Available Spectrum Inquiry Request	false	PASS

TestCaseName: CT_AFC_ServerValidation_AP_AFCDUSV35_DifferentRootCA_10633_1 (Unsuccessful server validation)
TestResult:PASS
Band:6GHz

Measurements Name	Description	Value	Validation Result
AFC_DUT_SEND_SPECTRUM_INQUIRYREQUEST	AFC DUT sends an Available Spectrum Inquiry Request	false	PASS

TestCaseName: CT_AFC_ServerValidation_AP_AFCDUSV35_MatchSuffixSAN_10634_1 (Unsuccessful server validation)
TestResult:PASS
Band:6GHz

Measurements Name	Description	Value	Validation Result
AFC_DUT_SEND_SPECTRUM_INQUIRYREQUEST	AFC DUT sends an Available Spectrum Inquiry Request	false	PASS

TestCaseName: CT_AFC_ServerValidation_AP_AFCDUSV35_ServerCertRevoked_10635_1 (Unsuccessful server validation)
TestResult:PASS
Band:6GHz

Measurements Name	Description	Value	Validation Result
AFC_DUT_SEND_SPECTRUM_INQUIRYREQUEST	AFC DUT sends an Available Spectrum Inquiry Request	false	PASS

TestCaseName: CT_AFC_ServerValidation_AP_AFCDUSV35_OCSPStaplingDisabled_10636_1 (Unsuccessful server validation)
TestResult:PASS
Band:6GHz

Measurements Name	Description	Value	Validation Result
AFC_DUT_SEND_SPECTRUM_INQUIRYREQUEST	AFC DUT sends an Available Spectrum Inquiry Request	false	PASS

TestCaseName: CT_AFC_ServerValidation_AP_AFCDUSV35_StapledOCSPRespExpired_10637_1 (Unsuccessful server validation)
TestResult:PASS
Band:6GHz

Measurements Name	Description	Value	Validation Result
AFC_DUT_SEND_SPECTRUM_INQUIRYREQUEST	AFC DUT sends an Available Spectrum Inquiry Request	false	PASS

TestCaseName: CT_AFC_ServerValidation_AP_AFCDUSV35_TLSCipherSuiteENULL_10638_1 (Unsuccessful server validation)
TestResult:PASS
Band:6GHz

Measurements Name	Description	Value	Validation Result
AFC_DUT_SEND_SPECTRUM_INQUIRYREQUEST	AFC DUT sends an Available Spectrum Inquiry Request	false	PASS

TestCaseName: CT_AFC_ServerValidation_AP_AFCDUSV35_NoRootCA_10639_1 (Unsuccessful server validation)
TestResult:PASS
Band:6GHz

Measurements Name	Description	Value	Validation Result
AFC_DUT_SEND_SPECTRUM_INQUIRYREQUEST	AFC DUT sends an Available Spectrum Inquiry Request	false	PASS

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9. RF testing

9.1. Result summary table

Test	BW (MHz)	Frequency (MHz)	Channel #	EIRP PSD (dBm/MHz)	AFC limit EIRP PSD (dBm/MHz)	Verdict	Plot Reference
RSA 31	20	6335	77	19.6	21.7	PASS	RSA 31-1
		6755	161	20.5	21.3	PASS	RSA 31-2
	40	6685	127	17.9	19.5	PASS	RSA 31-3
		6245	69	18.7	20.7	PASS	RSA 31-4
	80	6785	167	8.1	11.6	PASS	RSA 31-5
		6385	87	7.7	12.2	PASS	RSA 31-6
	160	6665	143	7	11.4	PASS	RSA 31-7
		6345	79	10.4	14.1	PASS	RSA 31-8
SAU-33	20	6015	13	16.3	17.0	PASS	SAU 33-1
UAU-34	20	6015	13	22.9	23.0	PASS	UAU 34-1

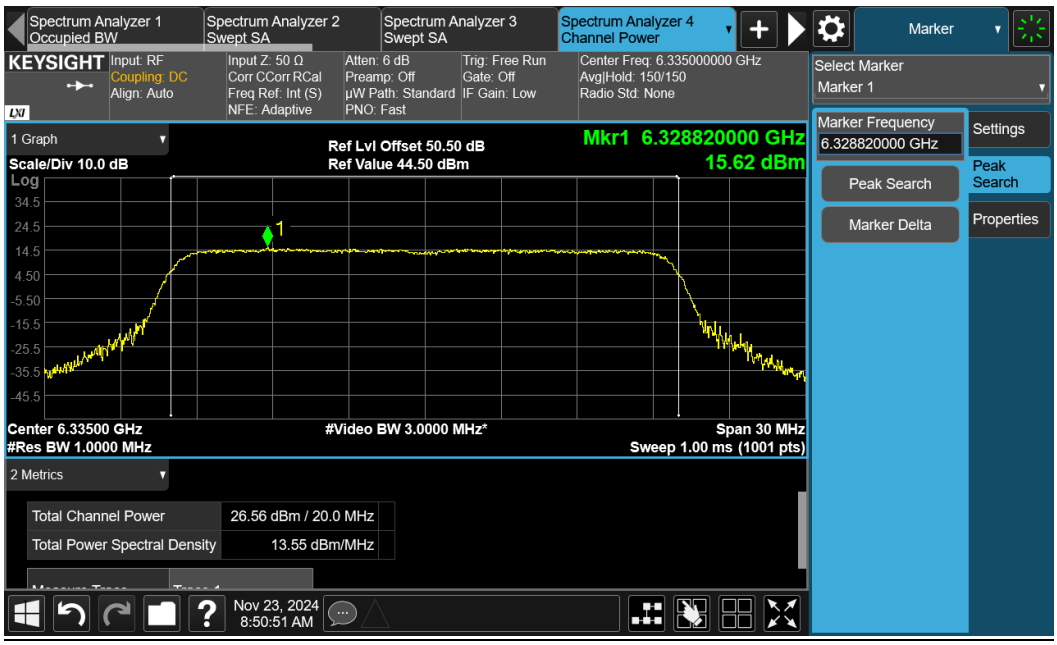
Note:

The AFC DUT was configured for a 28 dBi antenna gain while the offset in the spectrum analyzer was calculated for a 24 dBi antenna. The actual measured value is 4 dB higher than the plots show.

The values in this table represent the corrected measurement values

9.2. Measurement plots

RSA 31-1



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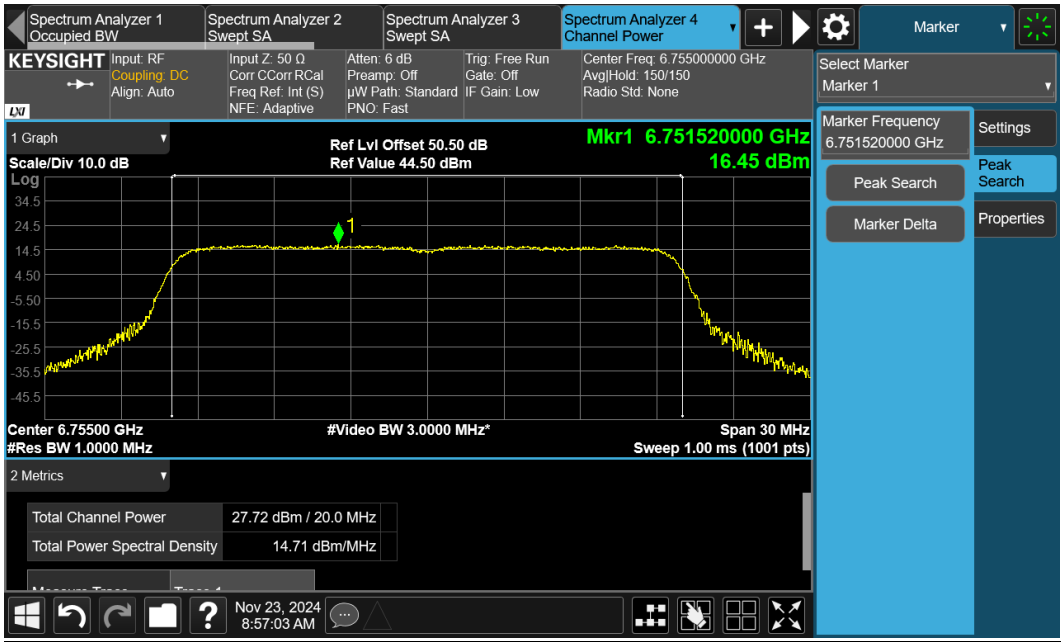
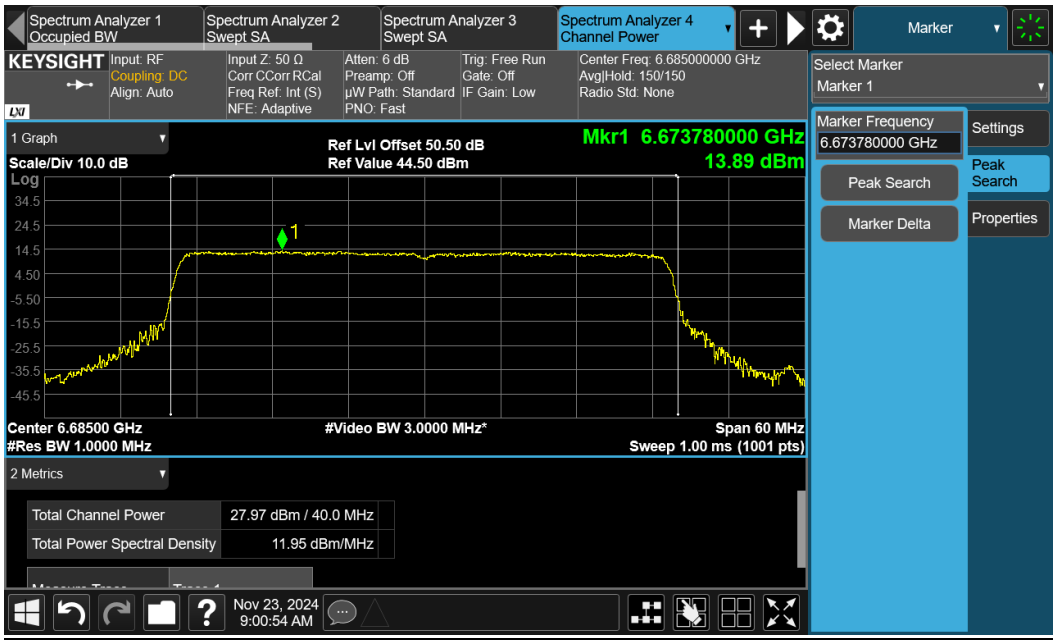
RSA 31-2



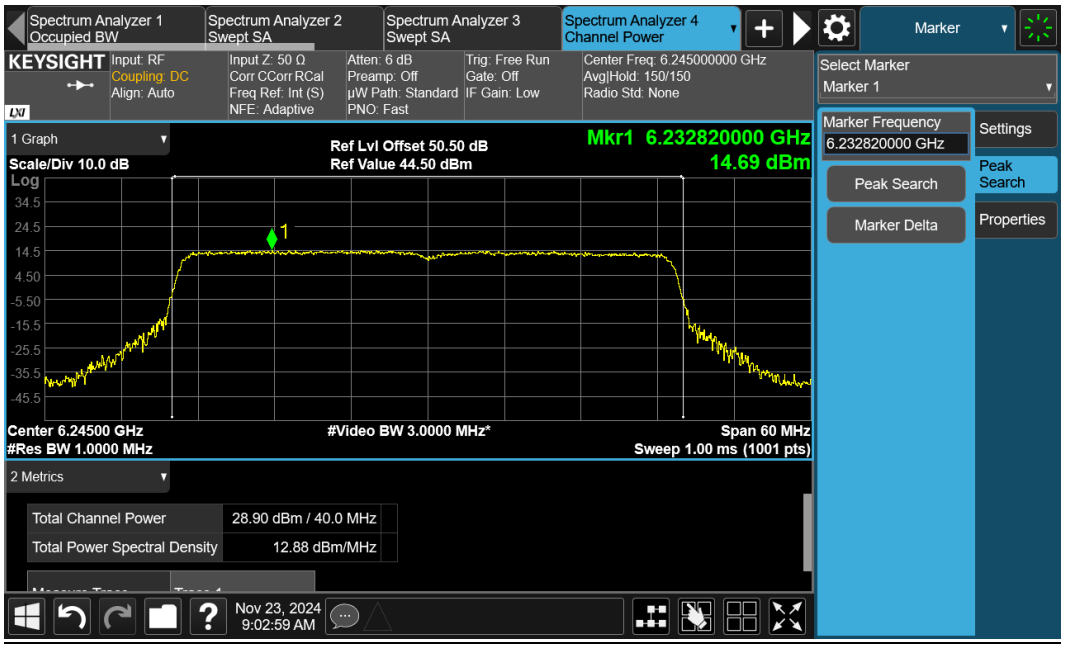
Back to summery table

RSA 31-3



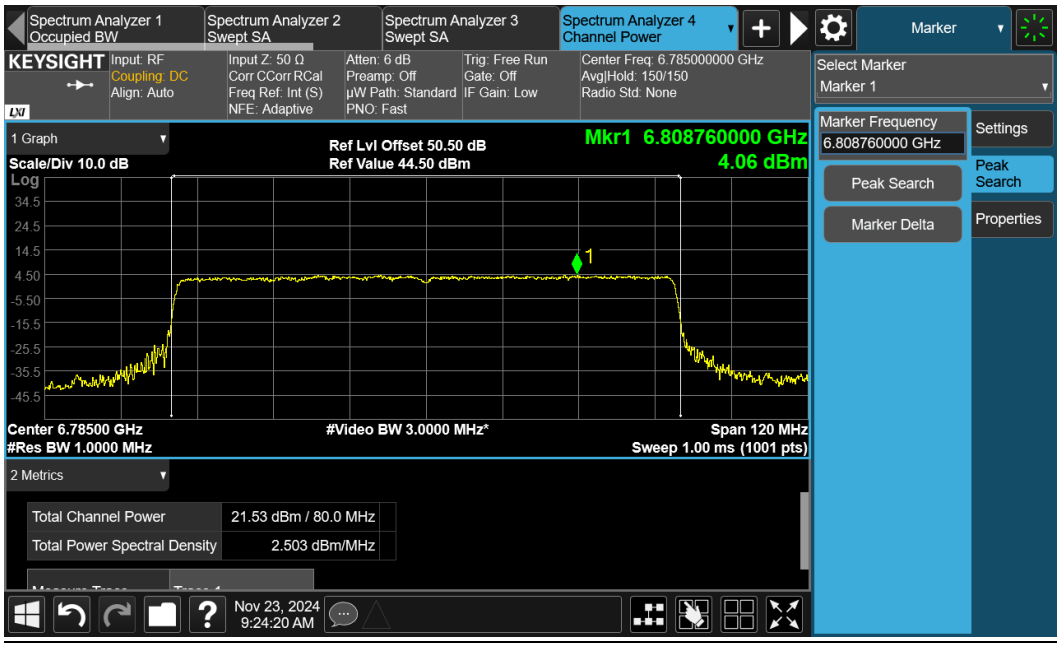
Back to summery table

RSA 31-4



Back to summery table

RSA 31-5



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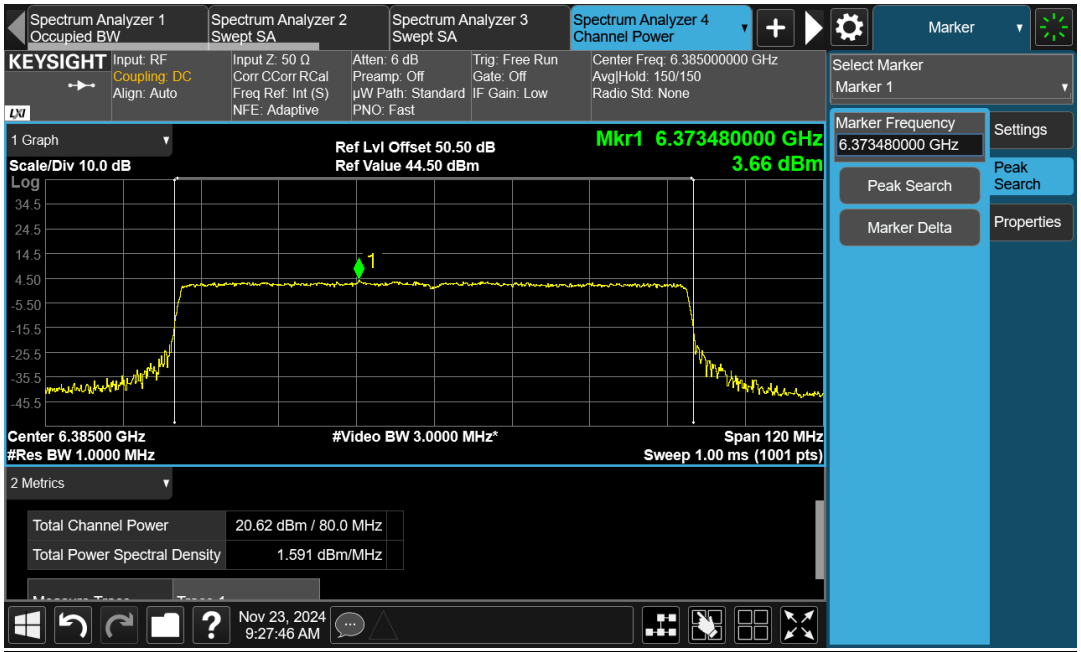
RSA 31-6



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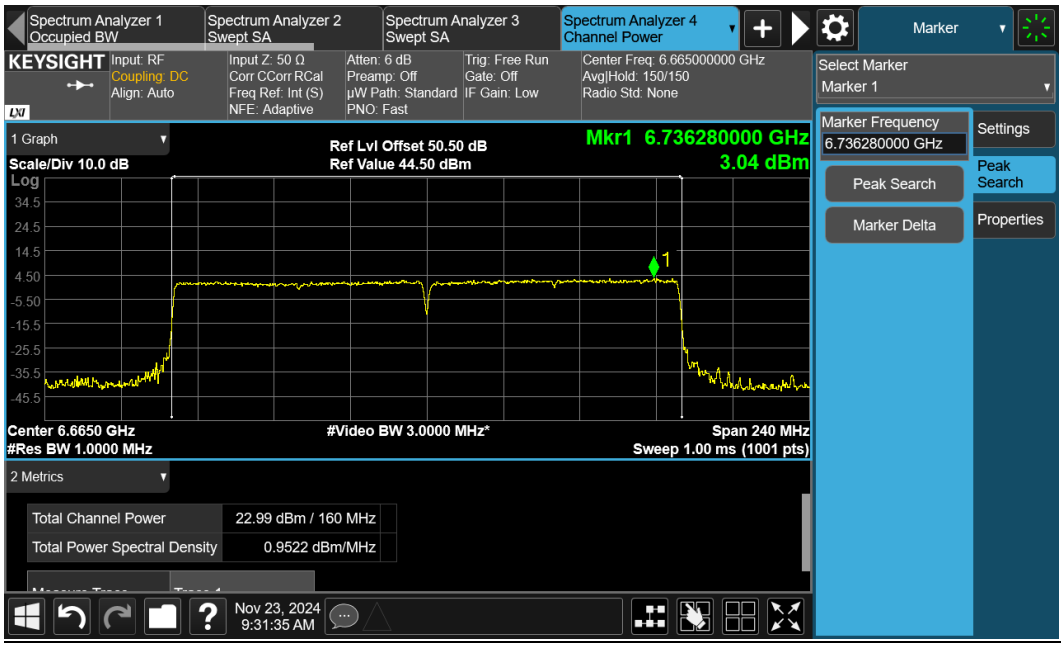
RSA 31-7



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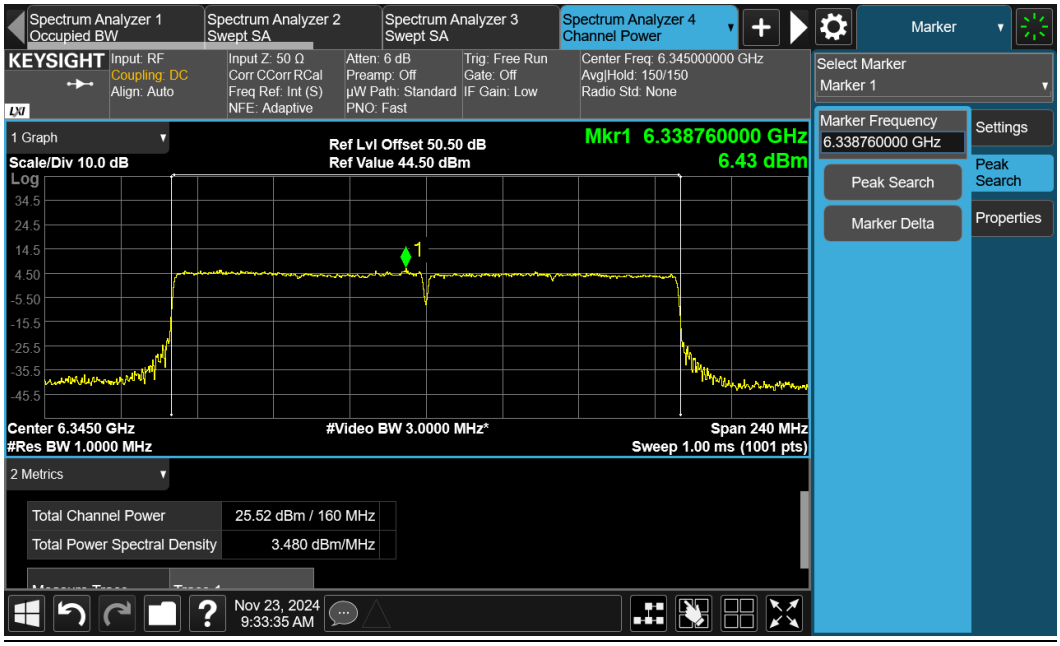
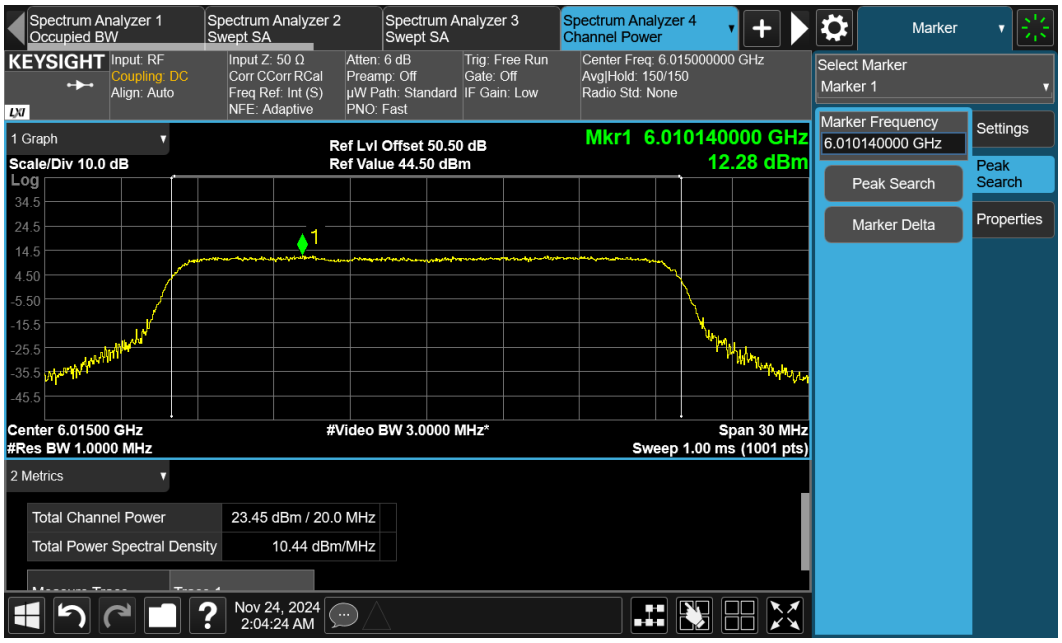
RSA 31-8



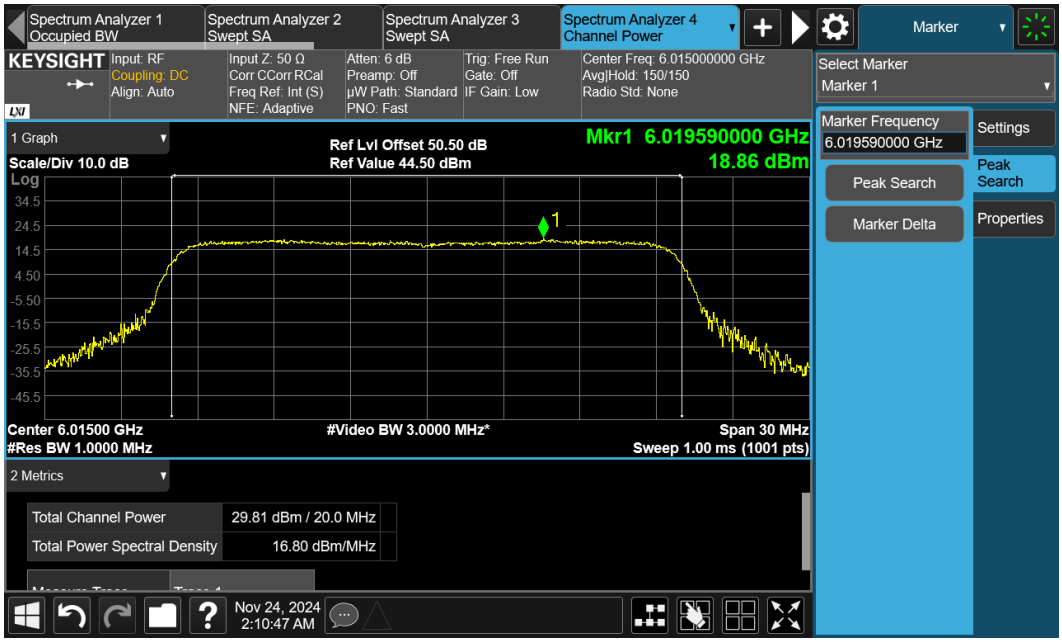
Back to summery table

SAU 33-1



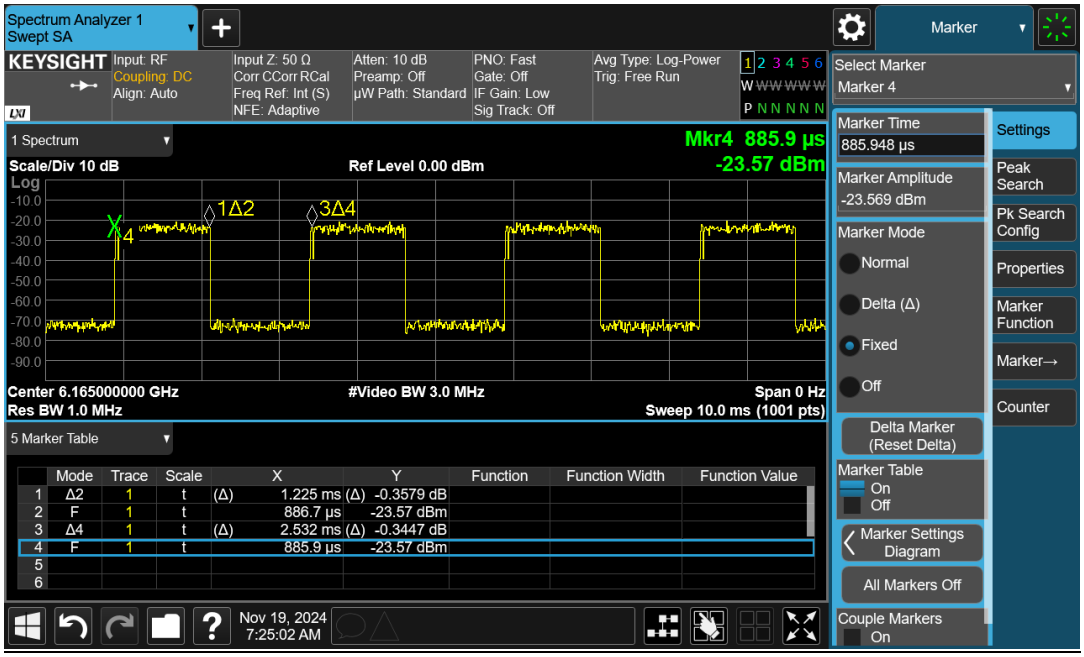
Back to summery table

UAU 34-1

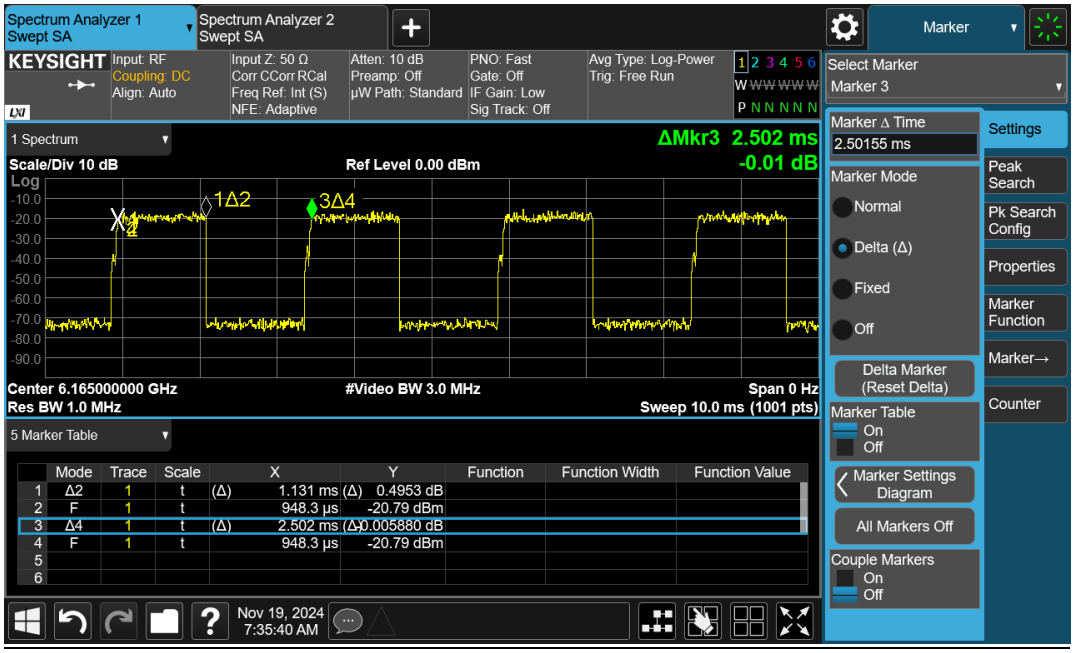


Back to summery table

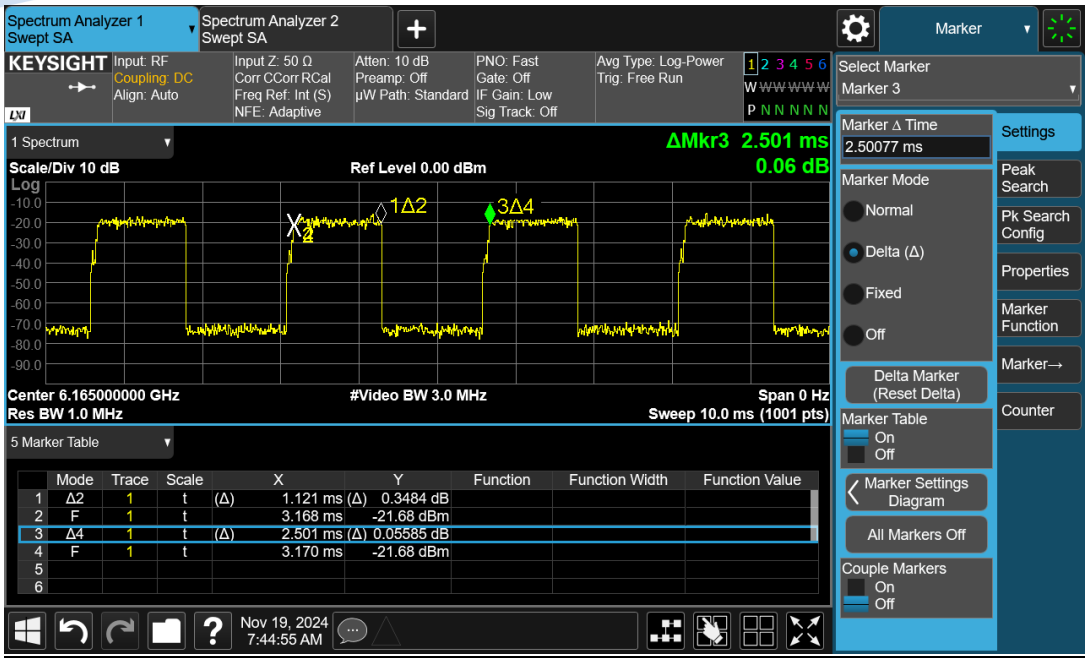
9.3. Duty cycle measurements



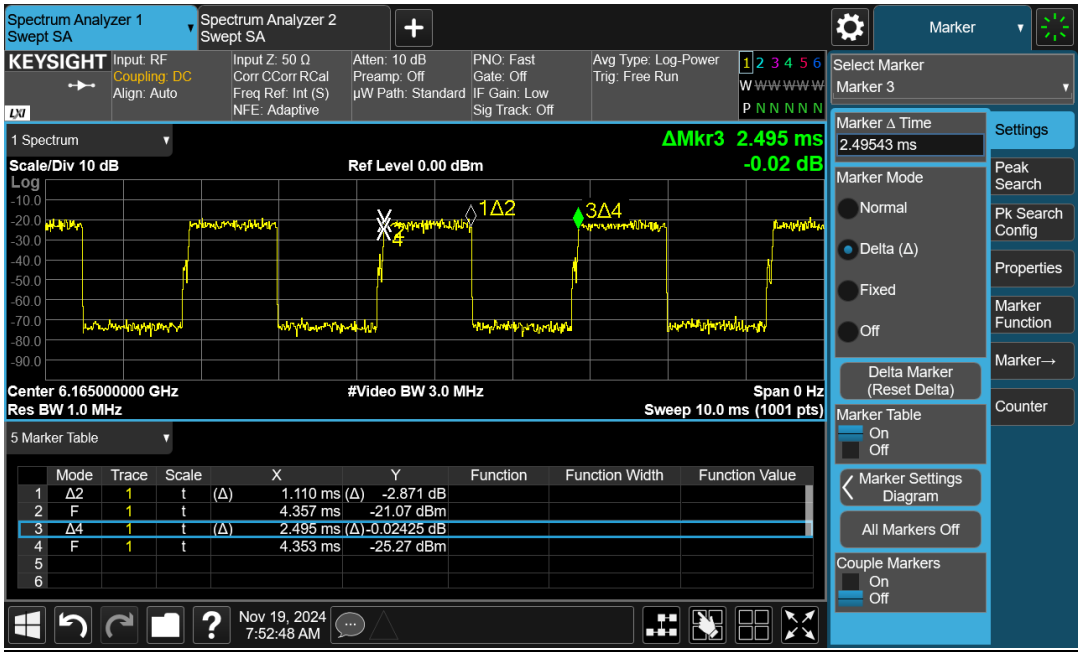
20 MHz



40 MHz



80 MHz



160 MHz

ANNEX A – DETAILED TEST LOG FILES

The detailed test log files are available, see MiCOM Labs RDWN99-U3a Log File Annex

MiCOM Labs, 575 Boulder Court, Pleasanton, California 94566 USA, Phone: +1 (925) 462 0304, Fax: +1 (925) 462 0306, www.micomlabs.com

575 Boulder Court
Pleasanton, California 94566, USA
Tel: +1 (925) 462 0304
Fax: +1 (925) 462 0306
www.micomlabs.com