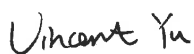




RF MEASUREMENT REPORT

FCC ID: 2ALJ3AP541E
Applicant: HAN Networks Co., Ltd.
Product: HAN Access Point
Model No.: AP541e
Brand Name: HAN NETWORKS, HANNETWORKS
FCC Classification: 15E 6GHz Standard Power Access Point (6SD)
FCC Rule Part(s): Part 15 Subpart E (Section 15.407)
Result: Complies
Received Date: 2025-12-01
Test Date: 2026-01-05 ~ 2026-02-03

Reviewed By:



Vincent Yu

Approved By:



Robin Wu



The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report. Testing was performed in accordance with the applicable measurement procedures. The test results reported herein apply only to the specific item(s) tested.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Suzhou) Co., Ltd.

Revision History

Report No.	Version	Description	Issue Date	Note
R26S1033075-U204	V01	Initial Report	2026-09-30	Valid

Note: This report is based on the original MRT report (No.: R25S1061112-U204). Only the applicant, manufacturer, and product information (including product name, model number, and brand name) have been updated. All other contents remain unchanged, and all test results are directly copied from the original report.

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1. General Information

1.1. Applicant

HAN Networks Co., Ltd.

101, 3rd Floor, Building 3, No.9 Compound, Yongfeng Road, Haidian District, Beijing, P.R. China

1.2. Manufacturer

HAN Networks Co., Ltd.

101, 3rd Floor, Building 3, No.9 Compound, Yongfeng Road, Haidian District, Beijing, P.R. China

1.3. Testing Facility

☒	Test Site - MRT Suzhou Laboratory	
	☐ Laboratory Location (Suzhou - Wuzhong)	
	D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China	
	☒ Laboratory Location (Suzhou - SIP)	
	4b Building, Liando U Valley, No.200 Xingpu Rd., Shengpu Town, Suzhou Industrial Park, China	
	☐ Laboratory Location (Suzhou - Wujiang)	
Building 1, No.1 Xingdong Road, Wujiang, Suzhou, Jiangsu, People's Republic of China		
Laboratory Accreditations		
A2LA: 3628.01		CNAS: L10551
FCC: CN1166		ISED: CN0001
☐	Test Site - MRT Shenzhen Laboratory	
	Laboratory Location (Shenzhen)	
	1G, Building A, Junxiangda Building, Zhongshanyuan Road West, Nanshan District, Shenzhen, China	
	Laboratory Accreditations	
	A2LA: 3628.02	
FCC: CN1284		ISED: CN0105

1.4. Product Information

Product Name	HAN Access Point
Model No.	AP541e
Brand Name	HAN NETWORKS, HANNETWORKS
EUT Identification No.	20251201Sample#03
DUT Type	☒ Standard Power Access Point ☐ Fixed Client
Proxy	☐ With Proxy ☒ Without Proxy
Wi-Fi Specification	802.11a/b/g/n/ac/ax/be
Bluetooth Specification	Bluetooth-LE
Zigbee Specification	802.15.4
Antenna Information	Refer to section 1.7
Working Voltage	PoE Injector input
Operating Temperature	0 ~ 50 °C
Operating Environment	Indoor Use
Power Type	AC/DC Adapter or PoE Injector
Accessory (ies)	
Adapter	Model No.: AA65U-540A Input Power: 100 – 240 V ~ 50/60 Hz, 1.6 A Output Power: 54 V = 1.2 A, 64.8 W
PoE Injector	Model: POE60U-1BT-X Input: 100-240 V ~ 1.5 A, 50-60 Hz, 98-104 VA Output: 56 V=0.535 A, 30 W PIN 3, 6+ PIN 1, 2 Return Output: 56 V=0.535 A, 30 W PIN 4, 5+ PIN 7, 8 Return
Note: The information of the EUT (Equipment Under Test) was provided by the manufacturer. The accuracy, completeness, and validity of the information are solely the responsibility of the manufacturer.	

1.5. Radio Specification under Test

Frequency Range	UNII-5: 5925 ~ 6425 MHz UNII-7: 6525 ~ 6875 MHz	
Modulation Technology	802.11ax/be: OFDMA	
Data Rate	802.11ax: up to 4804 Mbps 802.11be: up to 11528 Mbps	
Channel Puncturing Function	☐ Supported	☒ Unsupported
Support RU	☒ Full RU	☐ Partial RU

1.6. Working Frequencies

802.11ax-HE20/be-EHT20

Channel	Frequency	Channel	Frequency	Channel	Frequency
1	5955 MHz	5	5975 MHz	9	5995 MHz
13	6015 MHz	17	6035 MHz	21	6055 MHz
25	6075 MHz	29	6095 MHz	33	6115 MHz
37	6135 MHz	41	6155 MHz	45	6175 MHz
49	6195 MHz	53	6215 MHz	57	6235 MHz
61	6255 MHz	65	6275 MHz	69	6295 MHz
73	6315 MHz	77	6335 MHz	81	6355 MHz
85	6375 MHz	89	6395 MHz	93	6415 MHz
117	6535 MHz	121	6555 MHz	125	6575 MHz
129	6595 MHz	133	6615 MHz	137	6635 MHz
141	6655 MHz	145	6675 MHz	149	6695 MHz
153	6715 MHz	157	6735 MHz	161	6755 MHz
165	6775 MHz	169	6795 MHz	173	6815 MHz
177	6835 MHz	181	6855 MHz	--	--

802.11ax-HE40/be-EHT40

Channel	Frequency	Channel	Frequency	Channel	Frequency
3	5965 MHz	11	6005 MHz	19	6045 MHz
27	6085 MHz	35	6125 MHz	43	6165 MHz
51	6205 MHz	59	6245 MHz	67	6285 MHz
75	6325 MHz	83	6365 MHz	91	6405 MHz
123	6565 MHz	131	6605 MHz	139	6645 MHz
147	6685 MHz	155	6725 MHz	163	6765 MHz
171	6805 MHz	179	6845 MHz	--	--

802.11ax-HE80/be-EHT80

Channel	Frequency	Channel	Frequency	Channel	Frequency
7	5985 MHz	23	6065 MHz	39	6145 MHz
55	6225 MHz	71	6305 MHz	87	6385 MHz
135	6625 MHz	151	6705 MHz	167	6785 MHz

802.11ax-HE160/be-EHT160

Channel	Frequency	Channel	Frequency	Channel	Frequency
15	6025 MHz	47	6185 MHz	79	6345 MHz
143	6665 MHz	--	--	--	--

802.11be-EHT320-1

Channel	Frequency	Channel	Frequency	Channel	Frequency
15	6025 MHz	--	--	--	--

802.11be-EHT320-2

Channel	Frequency	Channel	Frequency	Channel	Frequency
63	6265 MHz	--	--	--	--

1.7. Antenna Details

Antenna Type	Frequency Band (MHz)	Antenna Gain (dBi)				Directional Gain (dBi)	
		Ant 0	Ant 1	Ant 2	Ant 3	For Power	For PSD
Wi-Fi Antenna (2.4 GHz / 5 GHz / 6 GHz)							
Omni-directional	2400 ~ 2483.5	3.30	3.30	3.30	3.30	3.30	9.32
	5150 ~ 5850	3.30	3.30	3.30	3.30	3.30	9.32
	5925 ~ 6425	4.40	4.40	4.40	4.40	4.40	10.42
	6525 ~ 6875	4.40	4.40	4.40	4.40	4.40	10.42

Notes:

1. The EUT supports Cyclic Delay Diversity (CDD) mode for 802.11a/b/g/n/ac/ax/be.
2. The EUT also supports Beamforming mode for 802.11n/ac/ax/be, not include 802.11a/b/g.
3. All antenna information is provided by the manufacturer.

1.8. WLAN Configuration

Model No.	WLAN Antenna Port	WLAN Config 1 - Supporting Band	WLAN Config 2 - Supporting Band
AP541e	5GHz 2TX Port	5GHz Full Band: U-NII-1 (5150-5250 MHz) U-NII-2A (5250-5350 MHz) U-NII-2C (5470-5725 MHz) U-NII-3 (5725-5850 MHz)	5GHz Low Band: U-NII-1 (5150-5250 MHz) U-NII-2A (5250-5350 MHz)
	2GHz 2TX Port	2412 to 2462 MHz	2412 to 2462 MHz
	6GHz 2TX Port	U-NII-5 (5925-6425 MHz) U-NII-7 (6525-6875 MHz)	5GHz High Band: U-NII-2C (5470-5725 MHz) U-NII-3 (5725-5850 MHz)
Note 1: WLAN Config 1 and WLAN Config 2 only differ in the software settings and there are no changes in the hardware. Note 2: For WLAN Config 2, only the 5GHz High Band was tested; the data for the 5GHz Low Band is referenced from WLAN Config 1.			

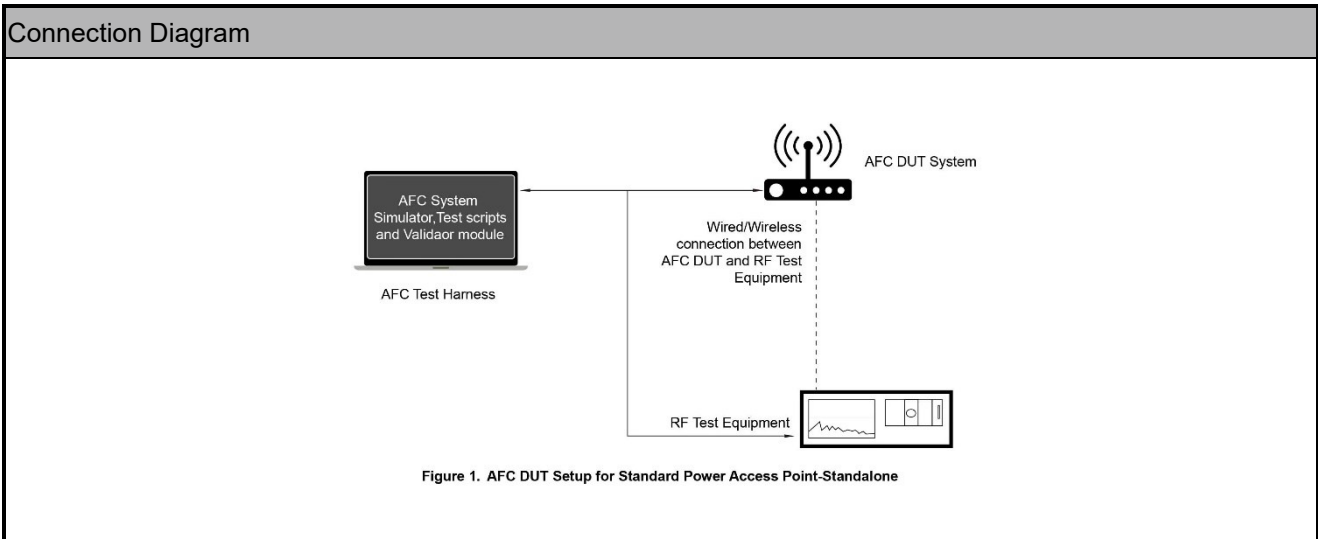
1.9. AFCD General Capabilities Declaration

Item	Question	Vendor response
1	AFC DUT Type	Standalone AP
2	Does the AFC DUT supports sending an Available Spectrum Inquiry Request based on the inquired Frequency Range field?	Yes
3	Does the AFC DUT supports 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?	No
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?	N/A
11	Does the AFC DUT support 320 MHz channel width operation?	Yes

Note: The above information was declared by manufacturer

2. Test Configuration

2.1. Test system connection diagram



2.2. Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC KDB 987594 D05 v01r01
- FCC KDB 987594 D01 v03r01
- 47 CFR FCC Part 15.407
- ANSI C63.10 - 2013
- The test guidance is the “AFC Device (AFC DUT) Compliance Test Plan”, and the version was 1.7.

2.3. Test Environment Condition

Ambient Temperature	15 ~ 35 °C
Relative Humidity	20 ~ 75%RH

3. Measuring Equipment

Instrument	Manufacturer	Model No.	Asset No.	Cali. Interval	Cali. Due Date	Test Site
Signal Analyzer	Keysight	N9030B	MRTSUE06395	1 year	2026-06-11	SIP-TR2
Thermohygrometer	testo	608-H1	MRTSUE11022	1 year	2026-10-16	SIP-TR2

Software	Version	Manufacturer	Function
AFC Test Harness	V 2.0.65.184	Wi-Fi Alliance	AFC Test Software

Client Information

Instrument	Manufacturer	Type No.	Certification Number
Wi-Fi Module	tp-link	Archer TBE550E	FCC ID: 2BCGWTBE550E

4. Decision Rules and Measurement Uncertainty

4.1. Decision Rules

The Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4: 2012 Clause 8.2.
(Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

4.2. Measurement Uncertainty

Where relevant, the following test uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Output Power
Measuring Uncertainty for a Level of Confidence of 95% ($U=2 U_c(y)$): 1.4 dB
Power Spectrum Density
Measuring Uncertainty for a Level of Confidence of 95% ($U=2 U_c(y)$): 2.9 dB

5. Test Result

5.1. Summary

FCC Section(s)	Requirement	Verdict
15.407(k)(1)	Transmit only as instructed by AFC System	Pass
15.407(k)(8)(i)	Register with AFC System prior to initial transmission. Register with AFC System after change of location	Pass
15.407(k)(8)(ii)	Provide required registration parameters. Update AFC System upon change of registration parameters	Pass
15.407(k)(8)(iii)	Registration either directly or via Network Element/Proxy	Pass
15.407(k)(8)(iv)	The device can adjust accordingly to subsequent 'daily' AFC responses with the latest list of available frequencies and the maximum permissible power	Pass
15.407(k)(8)(v)	Security of connection to AFC	Pass
15.407(k)(9)(i)	Report location and uncertainty from power-off condition	Pass

Ref Std. Clause	Test Case Name	Result
AFC capability - Inquired Frequency		
3.1.4	CT_AFC_SP_AP_AFCDRSA31_Frequency_20 MHz_10611_1	Pass
3.1.4	CT_AFC_SP_AP_AFCDRSA31_Frequency_40 MHz_10612_1	Pass
3.1.4	CT_AFC_SP_AP_AFCDRSA31_Frequency_80 MHz_10613_1	Pass
3.1.4	CT_AFC_SP_AP_AFCDRSA31_Frequency_160 MHz_10614_1	Pass
3.2.4	CT_AFC_SP_AP_AFCDUSA32_Frequency_10615_1	Pass
3.3.4	CT_AFC_SP_AP_AFCDSAU33_Frequency_10616_1	Pass
3.4.4	CT_AFC_SP_AP_AFCDUAU34_Frequency_10617_1	Pass
3.1.4	CT_AFC_SP_AP_AFCDRSA31_Frequency_320 MHz_10713_1	Pass
AFC capability - Server Validation - Mandatory		
3.5.4	CT_AFC_ServerValidation_AP_AFCDUSV35_NonMatchSAN_10632_1	Pass
3.5.4	CT_AFC_ServerValidation_AP_AFCDUSV35_DifferentRootCA_10633_1	Pass
3.5.4	CT_AFC_ServerValidation_AP_AFCDUSV35_MatchSuffixSAN_10634_1	Pass
3.5.4	CT_AFC_ServerValidation_AP_AFCDUSV35_ServerCertRevoked_10635_1	Pass
3.5.4	CT_AFC_ServerValidation_AP_AFCDUSV35_OCSPStaplingDisabled_10636_1	Pass
3.5.4	CT_AFC_ServerValidation_AP_AFCDUSV35_StapledOCSPRespExpired_10637_1	Pass
3.5.4	CT_AFC_ServerValidation_AP_AFCDUSV35_TLSCipherSuiteENULL_10638_1	Pass
3.5.4	CT_AFC_ServerValidation_AP_AFCDUSV35_NoRootCA_10639_1	Pass

Test Description	Test Case Identifier	FCC Requirement	Short Description
Successful Registration and Spectrum Access Request	AFCD.RSA	15.407(k)(1)	Transmit only as instructed by AFC System
		15.407(k)(8)(i)	Register with AFC System prior to initial transmission
		15.407(k)(8)(ii)	Provide required registration parameters
		15.407(k)(8)(iii)	Registration either directly or via proxy
		15.407(l)(ii)	Determination of appropriate channel configuration implied by AFC System response
		15.407(k)(8)(iv)	Must contact an AFC system at least once per day to obtain the latest list of available frequencies and the maximum permissible power
Unsuccessful Spectrum Access Request	AFCD.USA	15.407(k)(1)	Transmit only as instructed by AFC System
		15.407(k)(8)(i)	Register with AFC System prior to initial transmission
		15.407(k)(8)(ii)	Provide required registration parameters
		15.407(k)(8)(iii)	Registration either directly or via proxy
Successful Spectrum Access Update	AFCD.SAU	15.407(k)(8)(i)	Transmit only as instructed by AFC System
		15.407(k)(8)(ii)	Register with AFC System prior to initial transmission
		15.407(k)(9)(i)	Report location and uncertainty from power-off condition
Unsuccessful Spectrum Access Update	AFCD.UAU	15.407(k)(8)(i)	Transmit only as instructed by AFC System
		15.407(k)(8)(ii)	Register with AFC System prior to initial transmission
		15.407(k)(9)(i)	Report location and uncertainty from power-off condition
Unsuccessful Server Validation	AFCD.USV	15.407(k)(8)(v)	Incorporate adequate security measurements to prevent it from accessing AFC systems not approved by the FCC

5.2. Successful Registration and Spectrum Access Request

5.2.1. Test compliance requirement

FCC Section(s)	Requirement
15.407(k)(1)	Transmit only as instructed by AFC System
15.407(k)(8)(i)	Register with AFC System prior to initial transmission.
15.407(k)(8)(ii)	Provide required registration parameters.
15.407(k)(8)(iii)	Registration either directly or via proxy
15.407(l)(ii)	Determination of appropriate channel configuration implied by AFC System response
15.407(k)(8)(iv)	Must contact an AFC system at least once per day to obtain the latest list of available frequencies and the maximum permissible power

5.2.2. 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 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.

Step	Description
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
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 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 set to Initial Pre-test State.
14	If needed (see Table 5 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

Step	Description
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
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

5.2.3. Test Result

Refer to Appendix A.1.

5.3. Unsuccessful Spectrum Access Request

5.3.1. Test compliance requirement

FCC Section(s)	Requirement
15.407(k)(1)	Transmit only as instructed by AFC System
15.407(k)(8)(i)	Register with AFC System prior to initial transmission.
15.407(k)(8)(ii)	Provide required registration parameters.
15.407(k)(8)(iii)	Registration either directly or via proxy

5.3.2. 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 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 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 5 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
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

Step	Description
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.

5.3.3. Test Result

Refer to Appendix A.2.

5.4. Successful Spectrum Access Update

5.4.1. Test compliance requirement

FCC Section(s)	Requirement
15.407(k)(8)(i)	Register with AFC System after change of location
15.407(k)(8)(ii)	Provide required registration parameters.
15.407(k)(9)(i)	Report location and uncertainty from power-off condition

5.4.2. 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 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 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.

Step	Description
7	AFC DUT is power cycled. If needed (see Table 5 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.
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 set to Initial Pre-test State.
14	If needed (see Table 5 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

Step	Description
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	AFC DUT is power cycled If needed (see Table 5 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 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 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

5.4.3. Test Result

Refer to Appendix A.3.

5.5. Unsuccessful Spectrum Access Update

5.5.1. Test compliance requirement

FCC Section(s)	Requirement
15.407(k)(8)(i)	Register with AFC System after change of location
15.407(k)(8)(ii)	Update AFC System upon change of registration parameters
15.407(k)(9)(i)	Report location and uncertainty from power-off condition

5.5.2. 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.

Step	Description
7	AFC DUT is power cycled. If needed (see Table 5 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.
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 5 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 5 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 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 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

5.5.3. Test Result

Refer to Appendix A.4.

5.6. Unsuccessful Server Validation

5.6.1. Test compliance requirement

FCC Section(s)	Requirement
15.407(k)(8)(v)	Incorporate adequate security measurements to prevent it from accessing AFC systems not approved by the FCC

5.6.2. Test Procedure

Step	Description
1	The 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 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 2.3.1 signed 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.

Step	Description
2	AFC DUT Test Harness waits 10 seconds, and verifies no Available Spectrum Inquiry Request is sent to it.
3	Steps 1and 2 are repeated for each of the remaining Runs

5.6.3. Test Result

Refer to Appendix A.5.

Appendix A - Test Result

A.1 Successful Registration and Spectrum Access Request

Test Site	SIP-TR2	Test Engineer	Nolan Chen
Test Date	2026-01-05 ~ 2026-02-03		

DUT Information

AFC DUT System	Standard Power AP
DUT Vendor Name	OmniAccess Stellar
DUT Product Model	OAW-AP1542

Test Result

FCC Requirements	TestCaseName	Test Result
15.407(k)(1), 15.407(k)(8)(i), 15.407(k)(8)(ii), 15.407(k)(8)(iii), 15.407(l)(iii), 15.407(k)(8)(iv)	CT_AFC_SP_AP_AFCDRSA31_Frequency_20MHz_10611_1(Successful registration and spectrum access request)	PASS

Test Measurements

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 (19.1 dBm/MHz PSD) on channel 1 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 (13.1 dBm/MHz PSD) on channel 17 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

Test Result

FCC Requirements	TestCaseName	Test Result
15.407(k)(1), 15.407(k)(8)(i), 15.407(k)(8)(ii), 15.407(k)(8)(iii), 15.407(l)(iii), 15.407(k)(8)(iv)	CT_AFC_SP_AP_AFCDRSA31_Frequency_40MHz_10612_1(Successful registration and spectrum access request)	PASS

Test Measurements

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 (10.7 dBm/MHz PSD) on channel center frequency index 35 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 (8.4 dBm/MHz PSD) on channel center frequency index 3 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

**Test Result**

FCC Requirements	TestCaseName	Test Result
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)	CT_AFC_SP_AP_AFCDSA31_Frequency_80MHz_10613_1 (Successful registration and spectrum access request)	PASS

Test Measurements

TestCaseName: CT_AFC_SP_AP_AFCDSA31_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 (12.2 dBm/MHz PSD) on channel center frequency index 135 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 (12.0 dBm/MHz PSD) on channel center frequency index 23 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

Test Result

FCC Requirements	TestCaseName	Test Result
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)	CT_AFC_SP_AP_AFCDSA31_Frequency_160MHz_10614_1 (Successful registration and spectrum access request)	PASS

Test Measurements

TestCaseName: CT_AFC_SP_AP_AFCDSA31_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 (10.7 dBm/MHz PSD) on channel center frequency index 47 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 (11.8 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

Test Result

FCC Requirements	TestCaseName	Test Result
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)	CT_AFC_SP_AP_AFCDRSA31_Frequency_320MHz_10713_1 (Successful registration and spectrum access request)	PASS

Test Measurements

TestCaseName: CT_AFC_SP_AP_AFCDRSA31_Frequency_320MHz_10713_1 (Successful registration and spectrum access request)

TestResult: PASS

Band: 6GHz

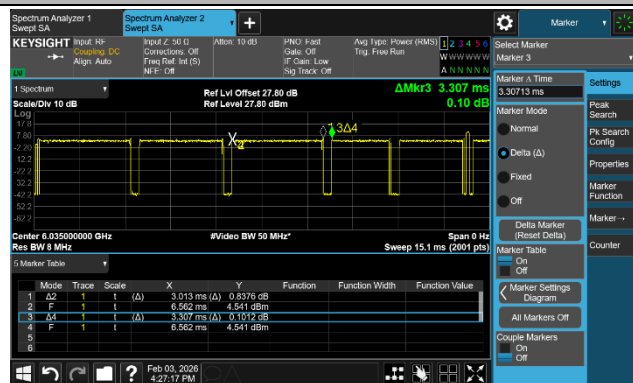
Measurements Name	Description	Value	Validation Result
AFC_DUT_SP_OPERATION	AFC DUT transmit with standard power in the band before the Spectrum Inquiry Response	false	PASS
AFC_DUT_SEND_SPECTRUM_INQUIRYREQUEST_1	AFC DUT sends an Available Spectrum Inquiry Request	true	PASS
AFC_DUT_SPECTRUM_INQUIRYREQUEST_VALID_1	Valid mandatory registration information	true	PASS
AFC_DUT_CONFORM_SPECTRUM_INQUIRYRESPONSE_1	AFC DUT conforms to the conditions in Spectrum Response (8.2 dBm/MHz PSD) on channel center frequency index 31 bandwidth 320.	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 (-1.5 dBm/MHz PSD) on channel center frequency index 31 bandwidth 320.	true	PASS
AFC_DUT_CONFORM_ADJACENT_FREQUENCIES_EMISSIONS_LIMITS_2	AFC DUT conforms to not exceed emissions limits in adjacent frequencies	true	PASS

Test Mode	Channel No.	Freq. (MHz)	PSD (dBm/MHz)				Duty Cycle (%)	EIRP PSD (dBm/MHz)	AFC Response Limit (dBm/MHz)
			Ant 0	Ant 1	Ant 2	Ant 3			
802.11be-EHT20	1	5955	-7.200	-6.499	-6.721	-7.643	91.11	9.85	19.10
802.11be-EHT20	17	6035	-7.436	-7.561	-7.097	-7.595	91.11	9.43	13.10
802.11be-EHT40	3	5965	-8.563	-14.550	-7.964	-11.426	93.12	6.82	8.40
802.11be-EHT40	35	6125	-10.070	-15.503	-10.588	-11.550	93.12	5.26	10.70
802.11be-EHT80	23	6065	-12.005	-13.343	-14.903	-11.974	94.25	3.80	12.00
802.11be-EHT80	135	6625	-10.854	-14.262	-13.951	-11.997	94.25	4.16	12.20
802.11be-EHT160	47	6185	-14.307	-15.407	-18.180	-14.568	89.74	1.54	10.70
802.11be-EHT160	79	6345	-13.936	-15.044	-16.792	-15.865	89.74	1.63	11.80
802.11be-EHT320	31	6105	-11.047	-12.950	-13.378	-12.223	87.74	4.70	8.20
802.11be-EHT320	31	6105	-18.260	-19.189	-22.436	-18.638	87.74	-2.35	-1.50

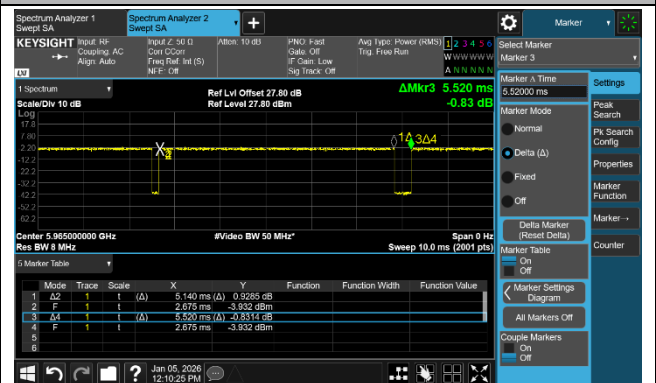
Note: EIRP PSD (dBm/MHz) = $10 \cdot \log \{ 10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)} + 10^{(\text{Ant 3 PSD}/10)} \}$ (dBm/MHz) + $10 \cdot \log (1/\text{Duty Cycle})$ + Directional Gain for PSD (dBi).

Duty Cycle

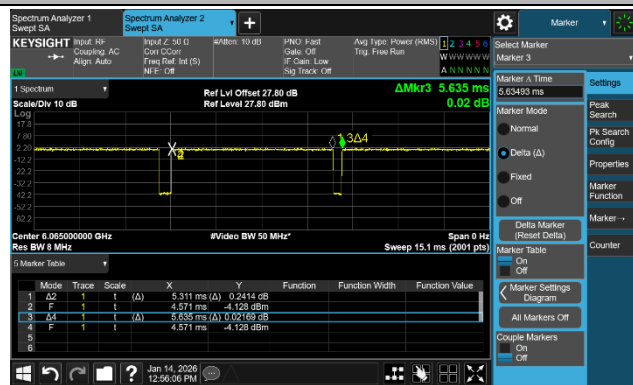
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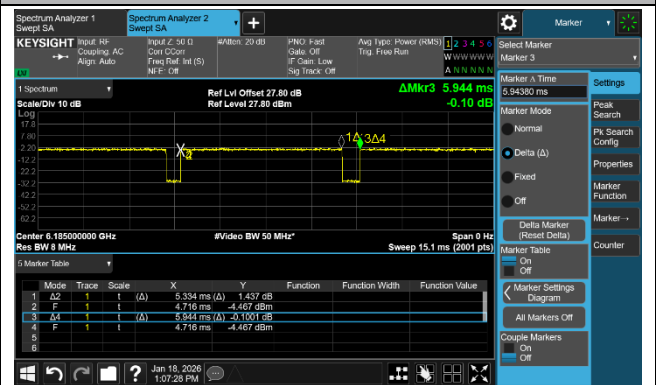
802.11be-EHT40



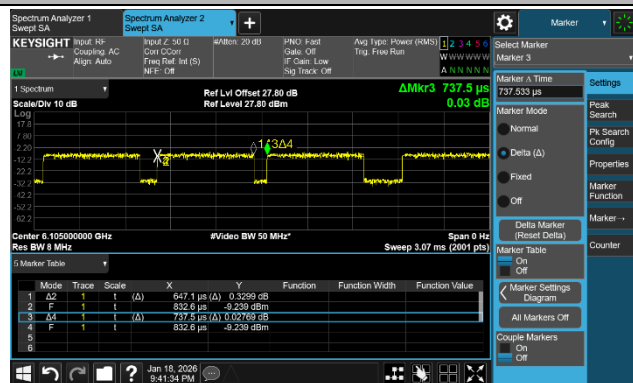
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802.11be-EHT160

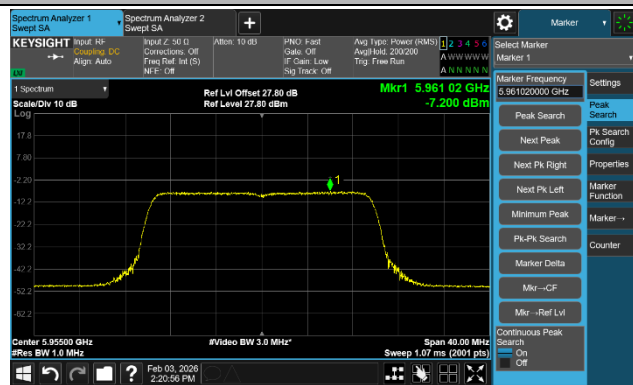


802.11be-EHT320

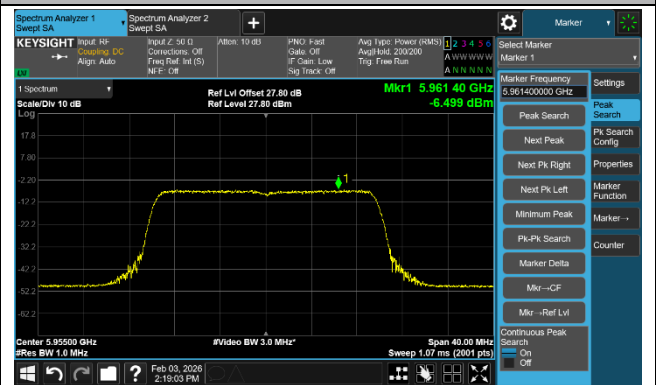


802.11be-EHT20 - Channel 1 (5955 MHz) Power Spectral Density

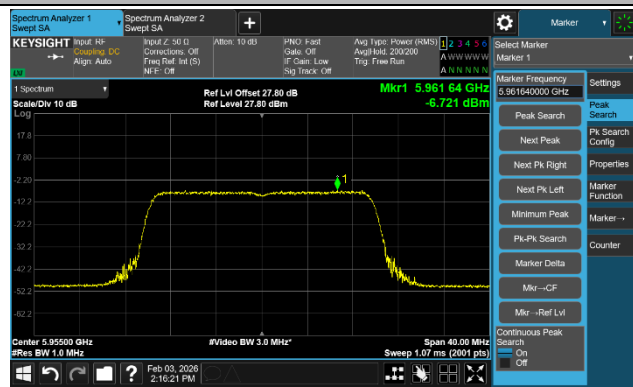
Ant 0



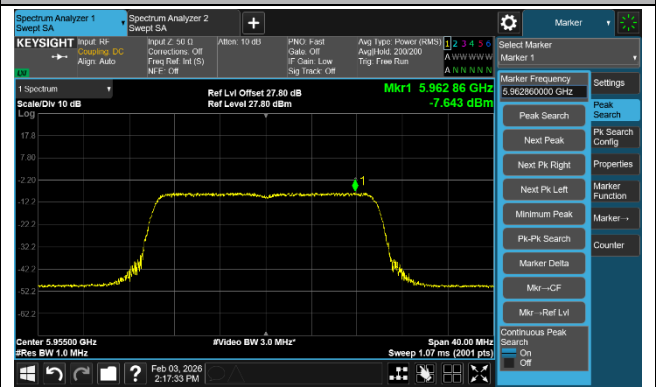
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Ant 2

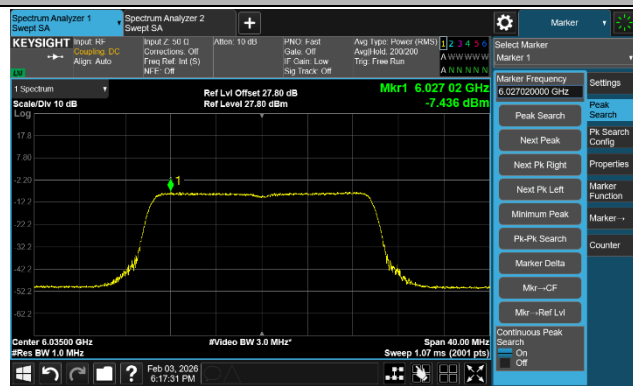


Ant 3

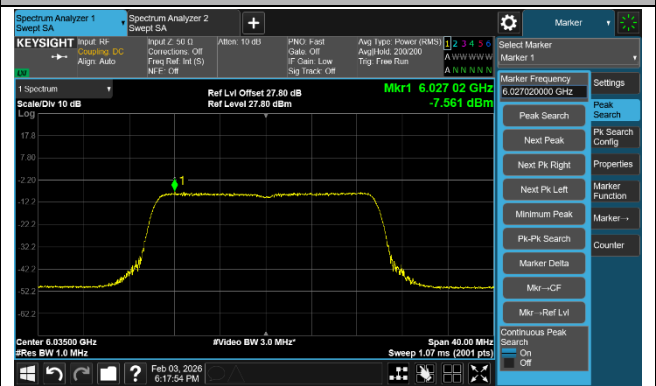


802.11be-EHT20 - Channel 17 (6035 MHz) Power Spectral Density

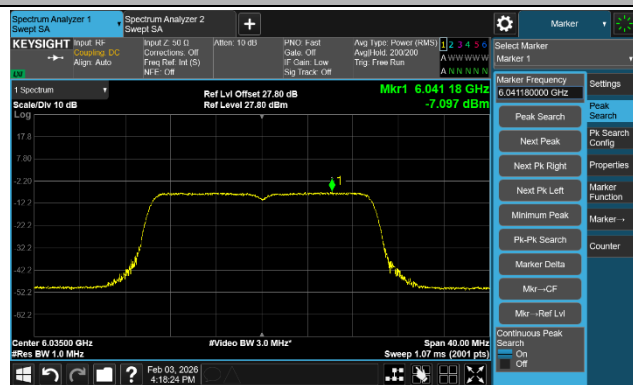
Ant 0



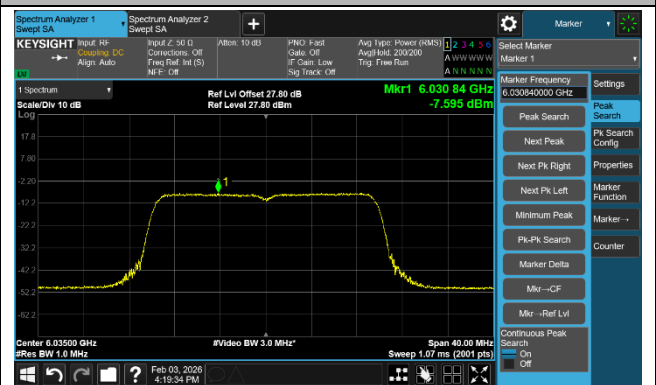
Ant 1



Ant 2

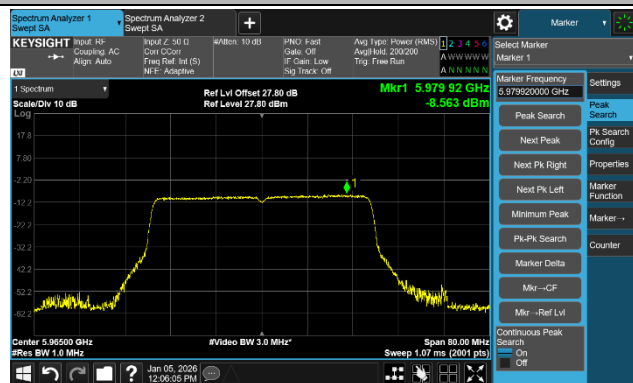


Ant 3

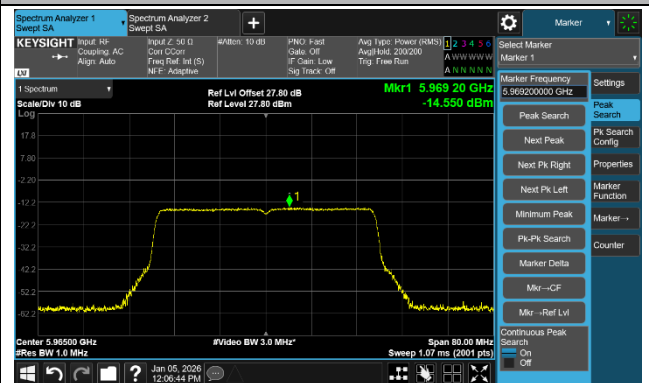


802.11be-EHT40 - Channel 3 (5965 MHz) Power Spectral Density

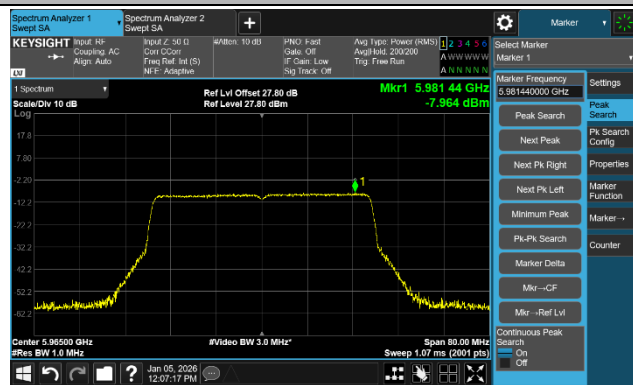
Ant 0



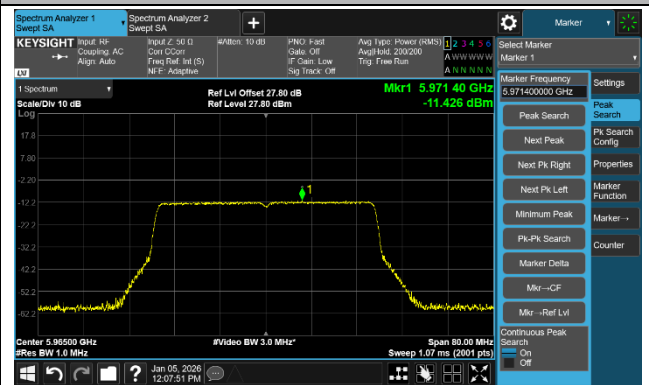
Ant 1



Ant 2

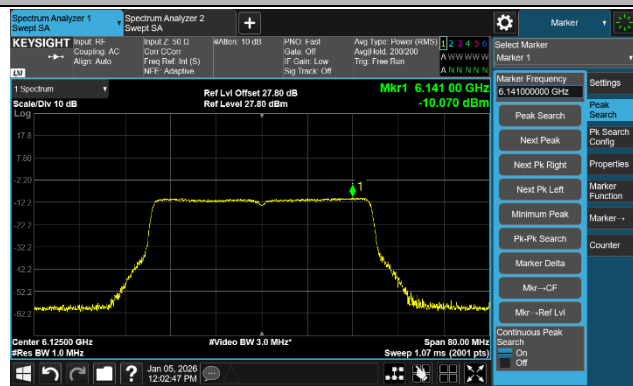


Ant 3

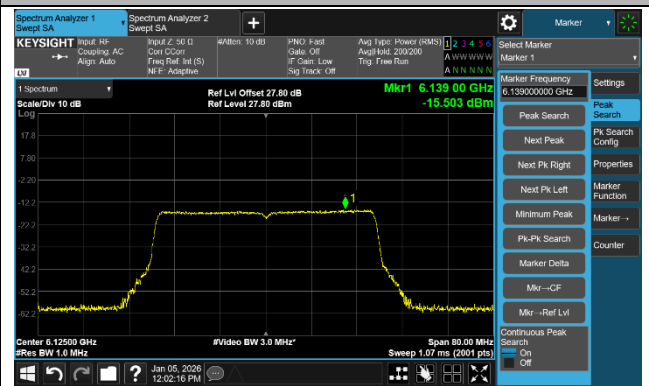


802.11be-EHT40 - Channel 35 (6125 MHz) Power Spectral Density

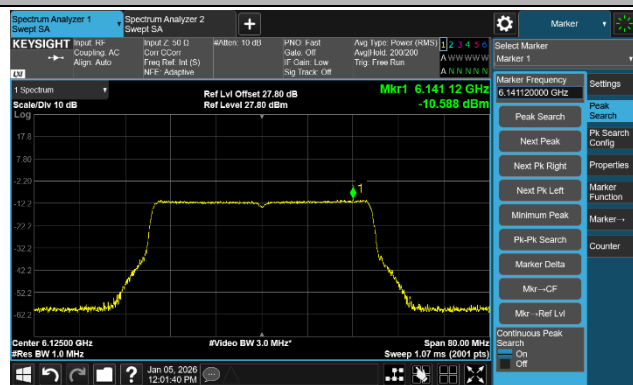
Ant 0



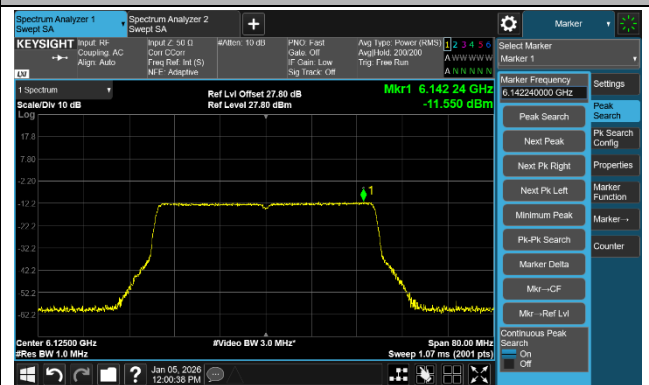
Ant 1



Ant 2

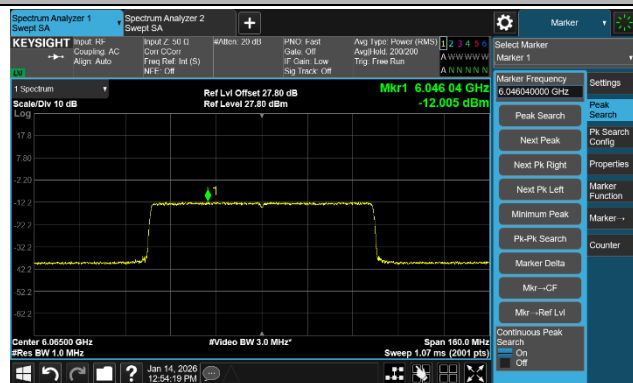


Ant 3

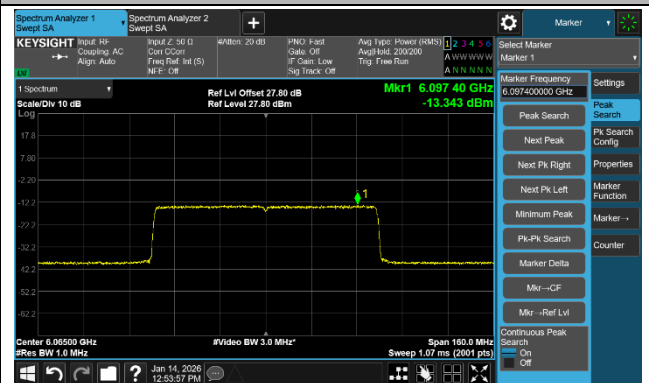


802.11be-EHT80 - Channel 23 (6065 MHz) Power Spectral Density

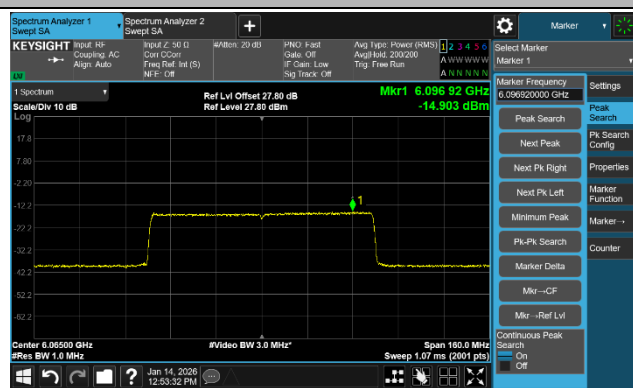
Ant 0



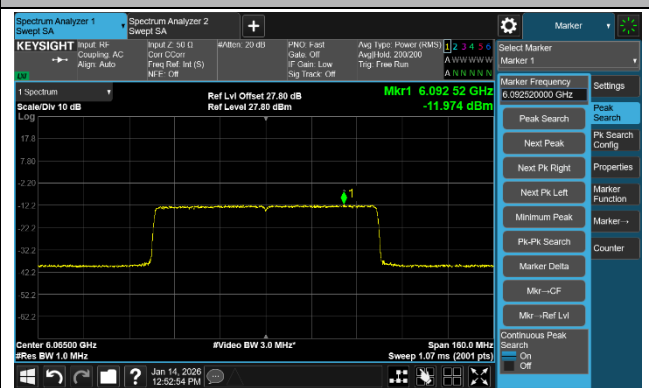
Ant 1



Ant 2

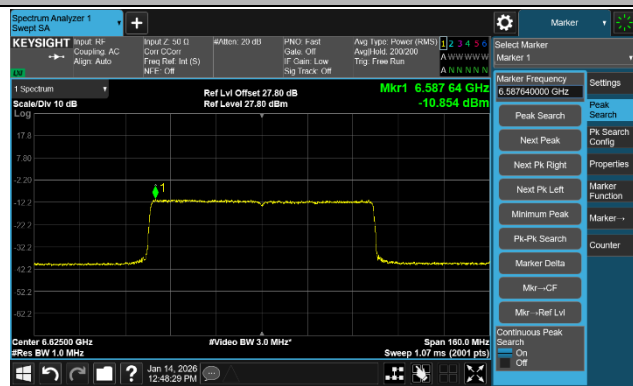


Ant 3

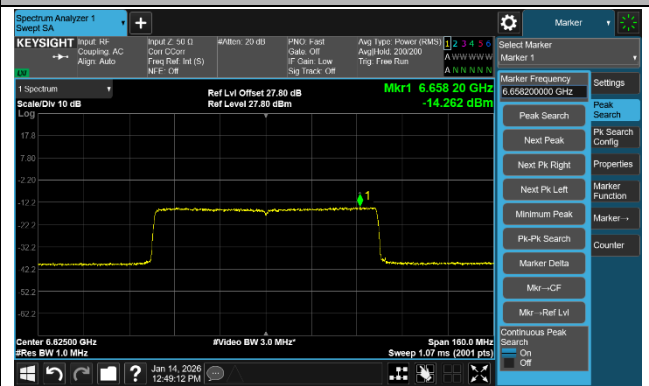


802.11be-EHT80 - Channel 135 (6625 MHz) Power Spectral Density

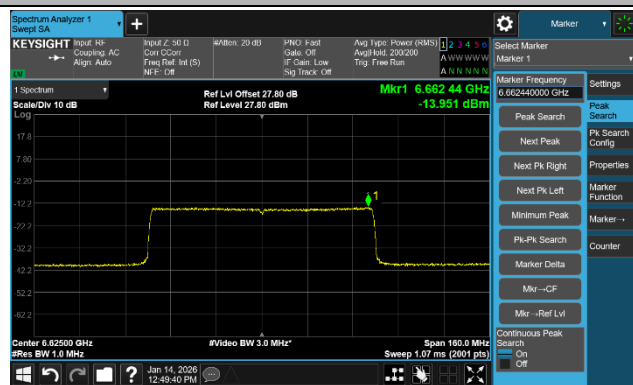
Ant 0



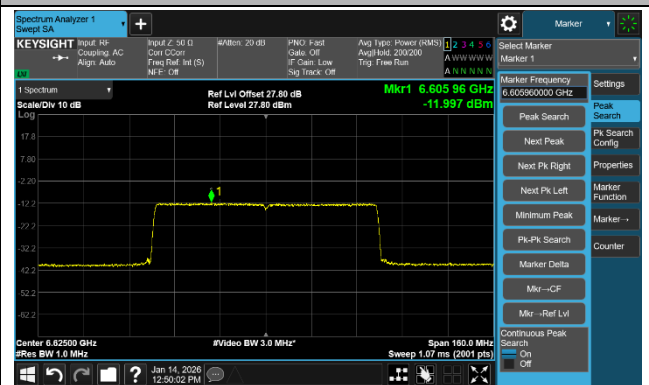
Ant 1



Ant 2

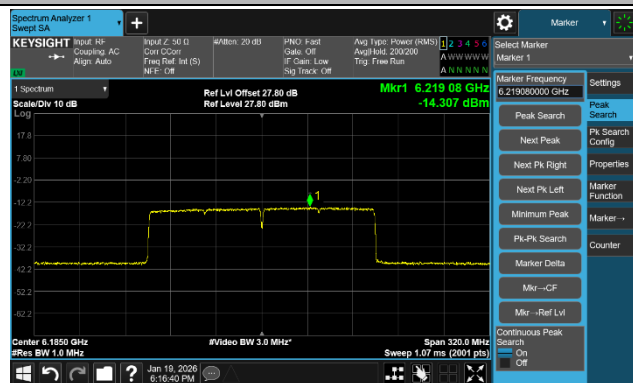


Ant 3

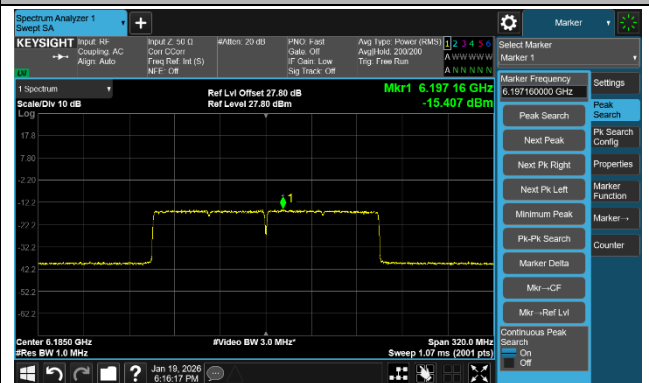


802.11be-EHT160 - Channel 47 (6185 MHz) Power Spectral Density

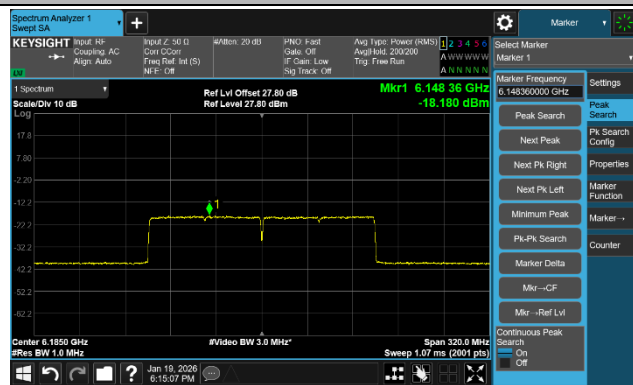
Ant 0



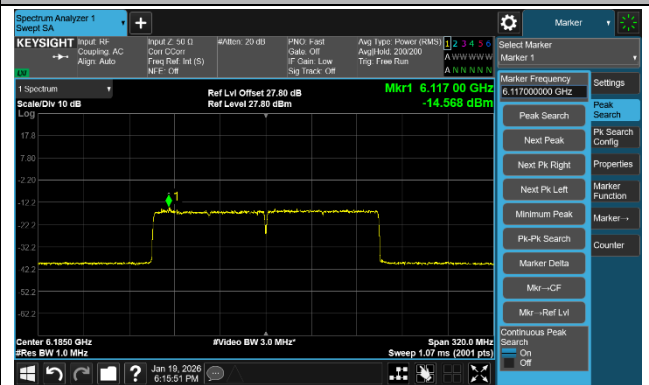
Ant 1



Ant 2

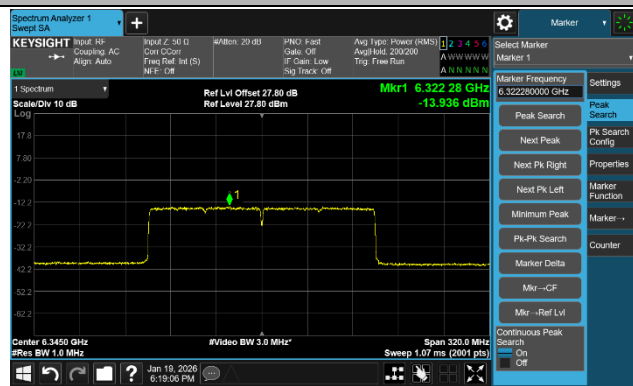


Ant 3

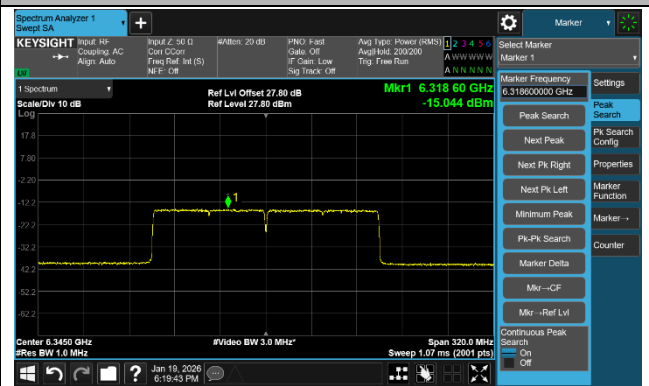


802.11be-EHT160 - Channel 79 (6345 MHz) Power Spectral Density

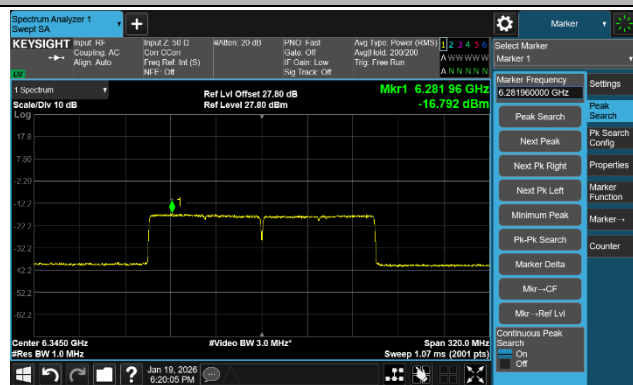
Ant 0



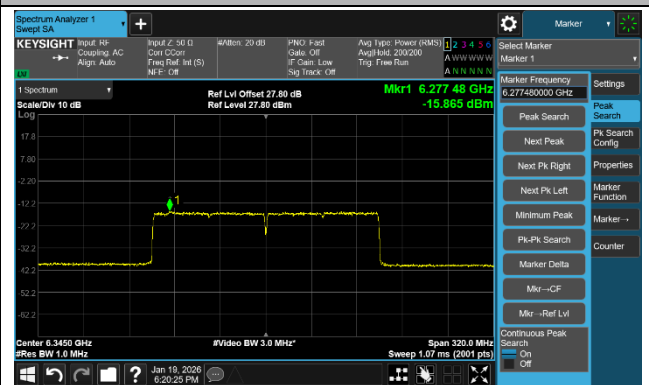
Ant 1



Ant 2

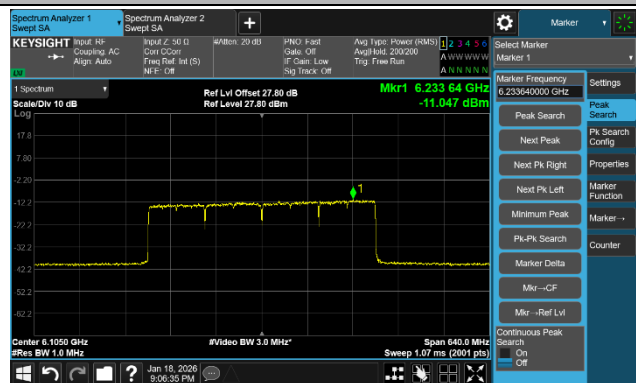


Ant 3

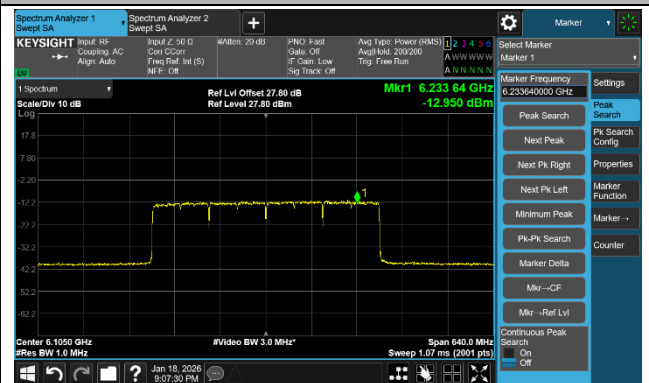


802.11be-EHT320 - Channel 31 (6105 MHz) Power Spectral Density

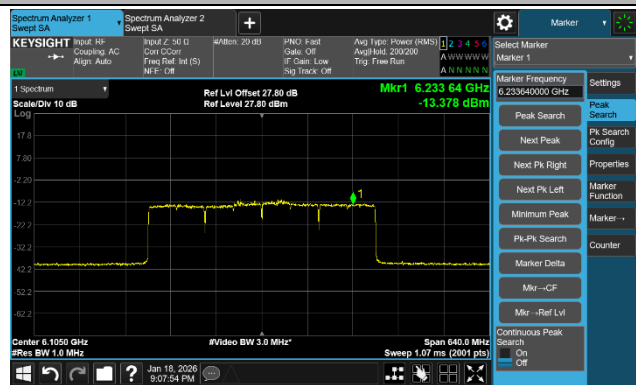
Ant 0



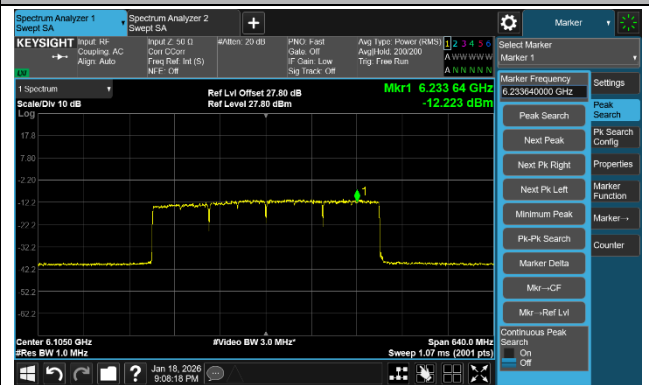
Ant 1



Ant 2

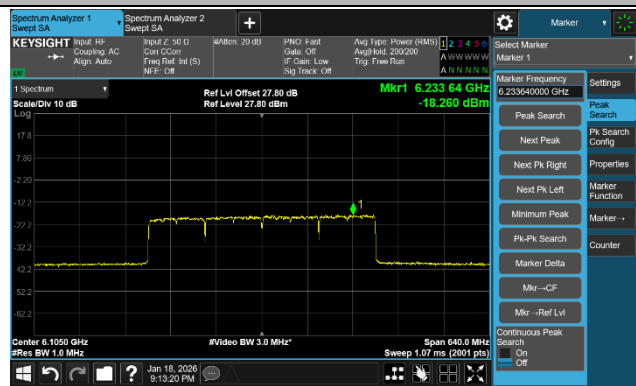


Ant 3

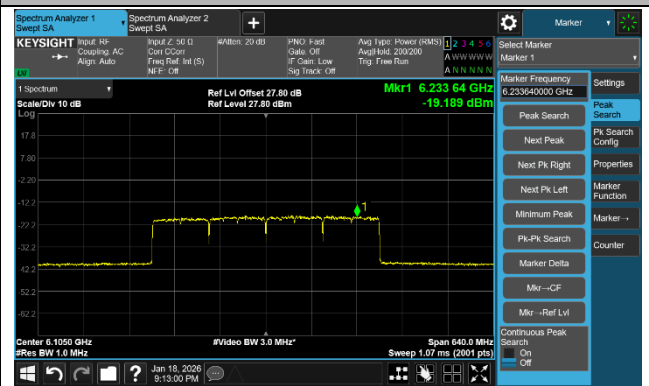


802.11be-EHT320 - Channel 31 (6105 MHz) Power Spectral Density

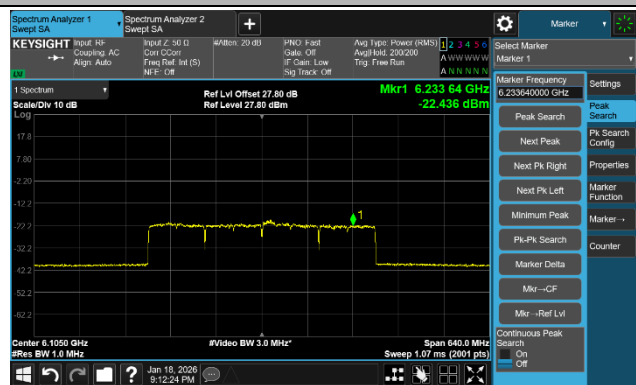
Ant 0



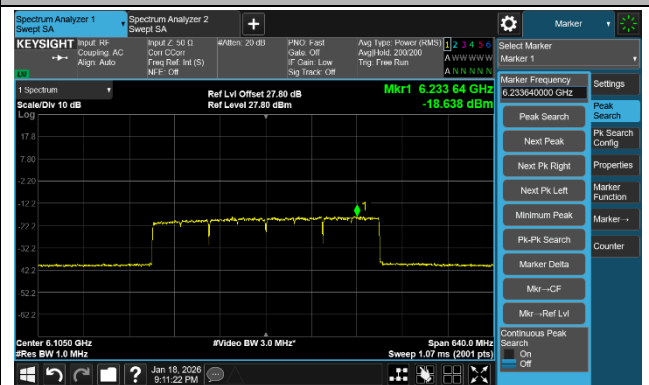
Ant 1



Ant 2



Ant 3



2026-02-03T11:16:40Z

```
{
  "headers": {
    "Host": "testserver.wfatestorg.org",
    "User-Agent": "curl/8.6.0",
    "Accept": "*/*",
    "Content-Type": "application/json",
    "X-Forwarded-For": "192.168.0.120",
    "X-Forwarded-Host": "testserver.wfatestorg.org",
    "X-Forwarded-Server": "testserver.wfatestorg.org",
    "Content-Length": "1058",
    "Connection": "Keep-Alive"
  },
  "body": {
    "version": "1.4",
    "availableSpectrumInquiryRequests": [
      {
        "requestId": "AFC_AP_001",
        "deviceDescriptor": {
          "serialNumber": "ABCDEFGH",
          "certificationId": [
            {
              "rulesetId": "US_47_CFR_PART_15_SUBPART_E",
              "id": "EFGHIJK"
            }
          ]
        }
      }
    ],
    "location": {
      "ellipse": {
        "center": {
          "longitude": -121.98586998164663,
          "latitude": 37.38193354300452
        },
        "majorAxis": 150,
        "minorAxis": 150,
        "orientation": 0
      },
      "elevation": {
        "height": 15,

```

```
        "heightType": "AGL",
        "verticalUncertainty": 2
    },
    "indoorDeployment": 0
},
"inquiredFrequencyRange": [
    {
        "lowFrequency": 5925,
        "highFrequency": 7125
    }
],
"inquiredChannels": [
    {
        "globalOperatingClass": 132,
        "channelCfi": [
            1,
            5,
            9,
            13,
            17,
            21,
            25,
            29,
            33,
            37,
            41,
            45,
            49,
            53,
            57,
            61,
            65,
            69,
            73,
            77,
            81,
            85,
            89,
            93,
```

```
97,  
101,  
105,  
109,  
113,  
117,  
121,  
125,  
129,  
133,  
137,  
141,  
145,  
149,  
153,  
157,  
161,  
165  
]  
,  
{  
  "globalOperatingClass": 133,  
  "channelCfi": [  
    3,  
    11,  
    19,  
    27,  
    35,  
    43,  
    51,  
    59,  
    67,  
    75,  
    83,  
    91,  
    99,  
    107,  
    115,  
    123,
```

```
        131,  
        139,  
        147,  
        155,  
        163  
    ]  
  },  
  {  
    "globalOperatingClass": 134,  
    "channelCfi": [  
      5,  
      21,  
      37,  
      53,  
      69,  
      85,  
      101,  
      117,  
      133,  
      149,  
      165  
    ]  
  },  
  {  
    "globalOperatingClass": 135,  
    "channelCfi": [  
      13,  
      45,  
      77,  
      109,  
      141  
    ]  
  }  
]  
}  
]  
}  
]  
}
```

2026-02-03T11:16:40Z

```
{
  "availableSpectrumInquiryResponses": [
    {
      "response": {
        "responseCode": 0,
        "shortDescription": "SUCCESS"
      },
      "availableFrequencyInfo": [
        {
          "frequencyRange": {
            "highFrequency": 5965,
            "lowFrequency": 5945
          },
          "maxPsd": 19.1
        },
        {
          "frequencyRange": {
            "highFrequency": 5985,
            "lowFrequency": 5965
          },
          "maxPsd": 20.5
        },
        {
          "frequencyRange": {
            "highFrequency": 6005,
            "lowFrequency": 5985
          },
          "maxPsd": 10.2
        },
        {
          "frequencyRange": {
            "highFrequency": 6025,
            "lowFrequency": 6005
          },
          "maxPsd": 15.1
        },
        {
          "frequencyRange": {
```

```
        "highFrequency": 6285,
        "lowFrequency": 6265
    },
    "maxPsd": 20.4
},
{
    "frequencyRange": {
        "highFrequency": 6305,
        "lowFrequency": 6285
    },
    "maxPsd": 17.9
},
{
    "frequencyRange": {
        "highFrequency": 6325,
        "lowFrequency": 6305
    },
    "maxPsd": 19.6
},
{
    "frequencyRange": {
        "highFrequency": 6345,
        "lowFrequency": 6325
    },
    "maxPsd": 17.2
},
{
    "frequencyRange": {
        "highFrequency": 6685,
        "lowFrequency": 6665
    },
    "maxPsd": 17.5
},
{
    "frequencyRange": {
        "highFrequency": 6705,
        "lowFrequency": 6685
    },
    "maxPsd": 15.7
}
```

```
    },
    {
      "frequencyRange": {
        "highFrequency": 6725,
        "lowFrequency": 6705
      },
      "maxPsd": 11.2
    },
    {
      "frequencyRange": {
        "highFrequency": 6745,
        "lowFrequency": 6725
      },
      "maxPsd": 19.3
    },
    {
      "frequencyRange": {
        "highFrequency": 6765,
        "lowFrequency": 6745
      },
      "maxPsd": 16.5
    },
    {
      "frequencyRange": {
        "highFrequency": 6785,
        "lowFrequency": 6765
      },
      "maxPsd": 13.2
    },
    {
      "frequencyRange": {
        "highFrequency": 6805,
        "lowFrequency": 6785
      },
      "maxPsd": 16.3
    },
    {
      "frequencyRange": {
        "highFrequency": 6825,
```

```
        "lowFrequency": 6805
      },
      "maxPsd": 15.1
    }
  ],
  "requestId": "AFC_AP_001",
  "availabilityExpireTime": "2026-02-04T11:16:40Z",
  "rulesetId": "US_47_CFR_PART_15_SUBPART_E"
}
],
"version": "1.4"
}

##### 2026-02-03T11:17:58Z #####
{
  "headers": {
    "Host": "testserver.wfatestorg.org",
    "User-Agent": "curl/8.6.0",
    "Accept": "*/*",
    "Content-Type": "application/json",
    "X-Forwarded-For": "192.168.0.120",
    "X-Forwarded-Host": "testserver.wfatestorg.org",
    "X-Forwarded-Server": "testserver.wfatestorg.org",
    "Content-Length": "1058",
    "Connection": "Keep-Alive"
  },
  "body": {
    "version": "1.4",
    "availableSpectrumInquiryRequests": [
      {
        "requestId": "AFC_AP_001",
        "deviceDescriptor": {
          "serialNumber": "ABCDEFGH",
          "certificationId": [
            {
              "rulesetId": "US_47_CFR_PART_15_SUBPART_E",
              "id": "EFGHIJK"
            }
          ]
        }
      }
    ]
  }
}
```

```
    },
    "location": {
      "ellipse": {
        "center": {
          "longitude": -121.98586998164663,
          "latitude": 37.38193354300452
        },
        "majorAxis": 150,
        "minorAxis": 150,
        "orientation": 0
      },
      "elevation": {
        "height": 15,
        "heightType": "AGL",
        "verticalUncertainty": 2
      },
      "indoorDeployment": 0
    },
    "inquiredFrequencyRange": [
      {
        "lowFrequency": 5925,
        "highFrequency": 7125
      }
    ],
    "inquiredChannels": [
      {
        "globalOperatingClass": 132,
        "channelCfi": [
          1,
          5,
          9,
          13,
          17,
          21,
          25,
          29,
          33,
          37,
          41,
```

```
45,  
49,  
53,  
57,  
61,  
65,  
69,  
73,  
77,  
81,  
85,  
89,  
93,  
97,  
101,  
105,  
109,  
113,  
117,  
121,  
125,  
129,  
133,  
137,  
141,  
145,  
149,  
153,  
157,  
161,  
165  
]  
,  
{  
  "globalOperatingClass": 133,  
  "channelCfi": [  
    3,  
    11,  
    19,
```

```
        27,  
        35,  
        43,  
        51,  
        59,  
        67,  
        75,  
        83,  
        91,  
        99,  
        107,  
        115,  
        123,  
        131,  
        139,  
        147,  
        155,  
        163  
    ]  
},  
{  
    "globalOperatingClass": 134,  
    "channelCfi": [  
        5,  
        21,  
        37,  
        53,  
        69,  
        85,  
        101,  
        117,  
        133,  
        149,  
        165  
    ]  
},  
{  
    "globalOperatingClass": 135,  
    "channelCfi": [  

```

```
        13,  
        45,  
        77,  
        109,  
        141  
    ]  
}  
]  
}  
]  
}
```

2026-02-03T11:17:58Z

```
{  
  "availableSpectrumInquiryResponses": [  
    {  
      "response": {  
        "responseCode": 0,  
        "shortDescription": "SUCCESS"  
      },  
      "availableFrequencyInfo": [  
        {  
          "frequencyRange": {  
            "highFrequency": 6045,  
            "lowFrequency": 6025  
          },  
          "maxPsd": 13.1  
        },  
        {  
          "frequencyRange": {  
            "highFrequency": 6065,  
            "lowFrequency": 6045  
          },  
          "maxPsd": 15.1  
        },  
        {  
          "frequencyRange": {  
            "highFrequency": 6085,
```

```
        "lowFrequency": 6065
      },
      "maxPsd": 21.5
    },
    {
      "frequencyRange": {
        "highFrequency": 6105,
        "lowFrequency": 6085
      },
      "maxPsd": 9.3
    },
    {
      "frequencyRange": {
        "highFrequency": 6125,
        "lowFrequency": 6105
      },
      "maxPsd": 18.0
    },
    {
      "frequencyRange": {
        "highFrequency": 6145,
        "lowFrequency": 6125
      },
      "maxPsd": 16.2
    },
    {
      "frequencyRange": {
        "highFrequency": 6165,
        "lowFrequency": 6145
      },
      "maxPsd": 15.8
    },
    {
      "frequencyRange": {
        "highFrequency": 6185,
        "lowFrequency": 6165
      },
      "maxPsd": 10.6
    },
  ],
```

```
{
  "frequencyRange": {
    "highFrequency": 6205,
    "lowFrequency": 6185
  },
  "maxPsd": 16.5
},
{
  "frequencyRange": {
    "highFrequency": 6225,
    "lowFrequency": 6205
  },
  "maxPsd": 17.3
},
{
  "frequencyRange": {
    "highFrequency": 6245,
    "lowFrequency": 6225
  },
  "maxPsd": 9.5
},
{
  "frequencyRange": {
    "highFrequency": 6265,
    "lowFrequency": 6245
  },
  "maxPsd": 17.3
},
{
  "frequencyRange": {
    "highFrequency": 6365,
    "lowFrequency": 6345
  },
  "maxPsd": 11.2
},
{
  "frequencyRange": {
    "highFrequency": 6385,
    "lowFrequency": 6365
```