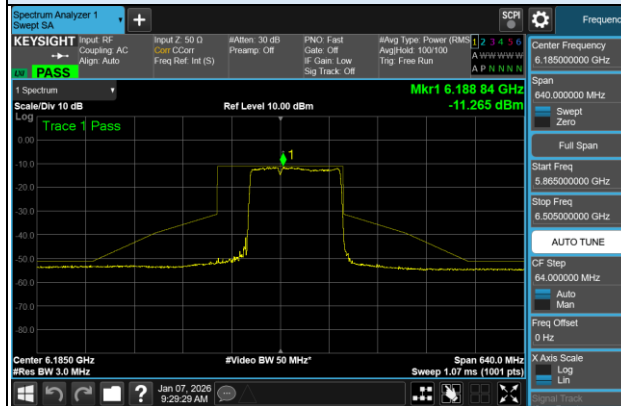




802.11be(EHT160) _ NII 5

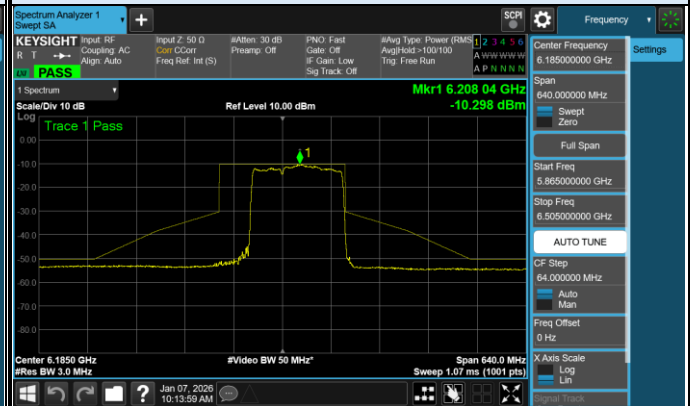
ANT 1

6 185 MHz

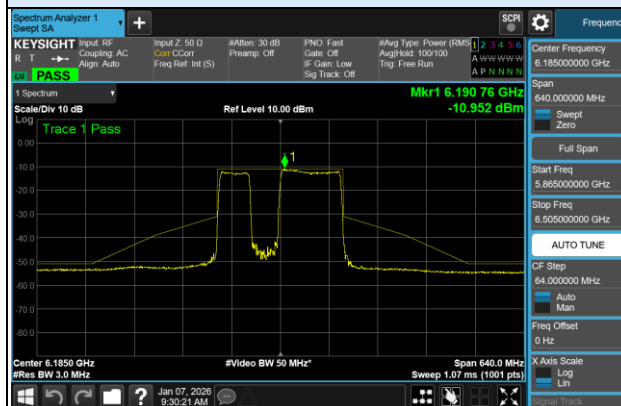


ANT 2

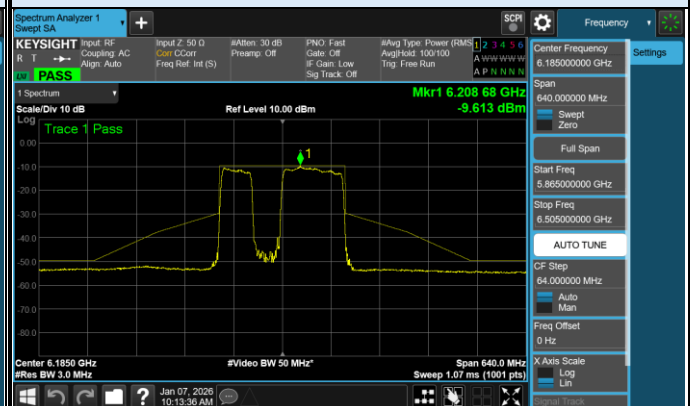
6 185 MHz



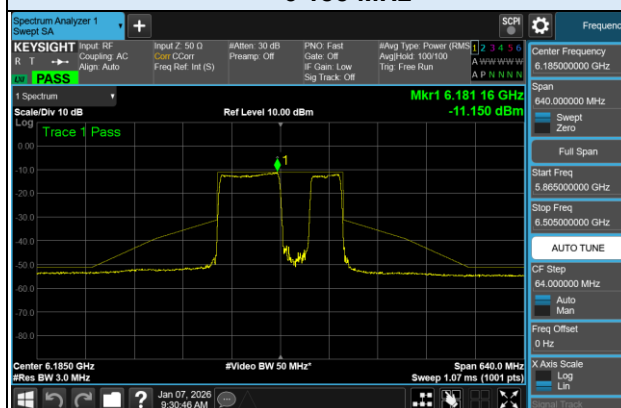
6 185 MHz



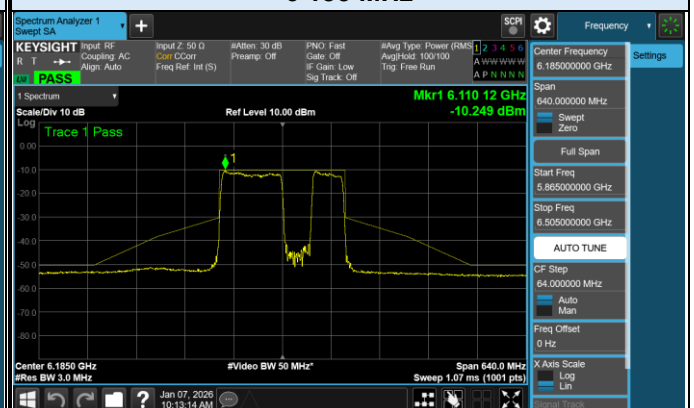
6 185 MHz



6 185 MHz

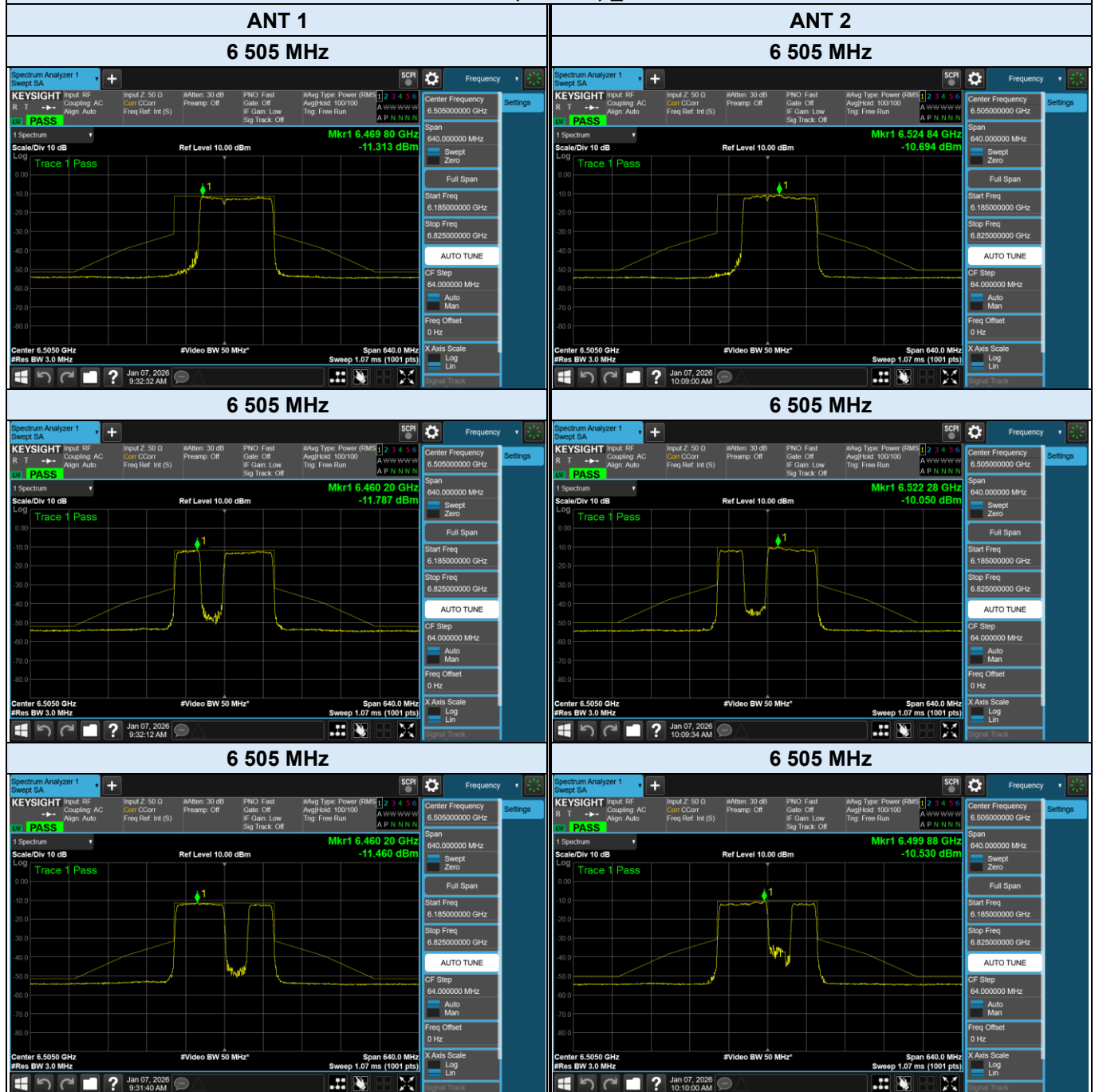


6 185 MHz





802.11be(EHT160) _ NII 6

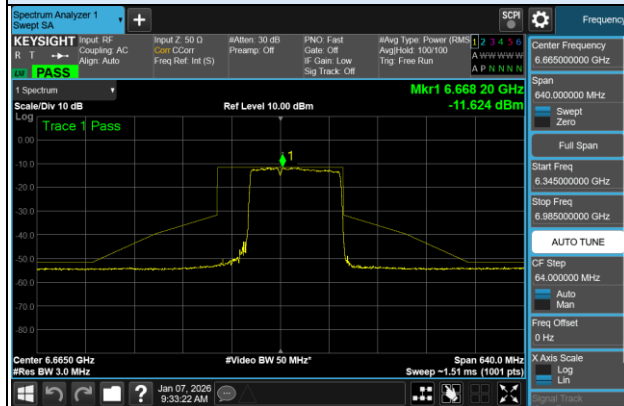




802.11be(EHT160) _ NII 7

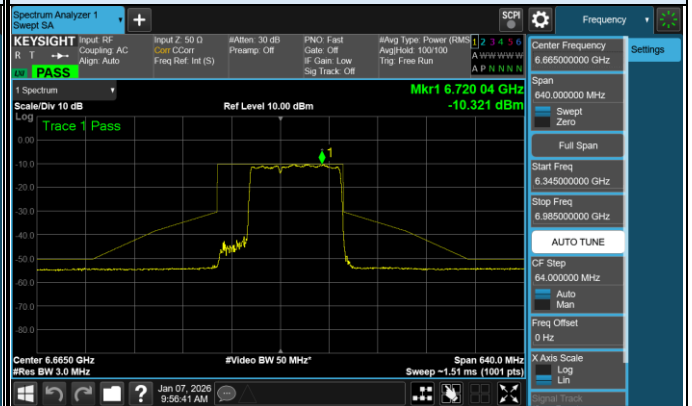
ANT 1

6 665 MHz

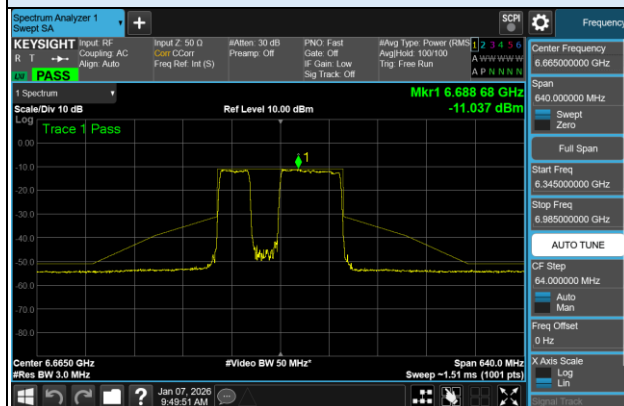


ANT 2

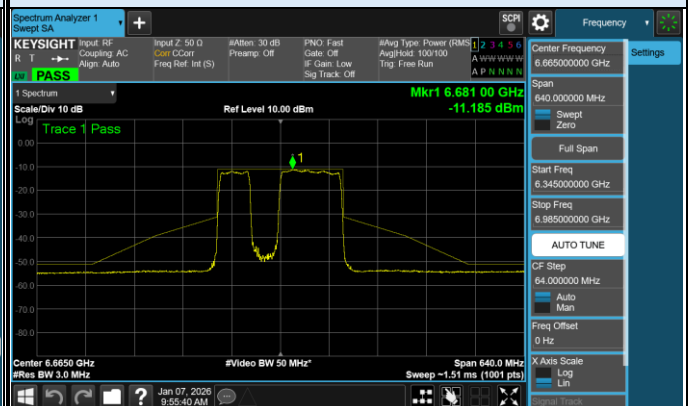
6 665 MHz



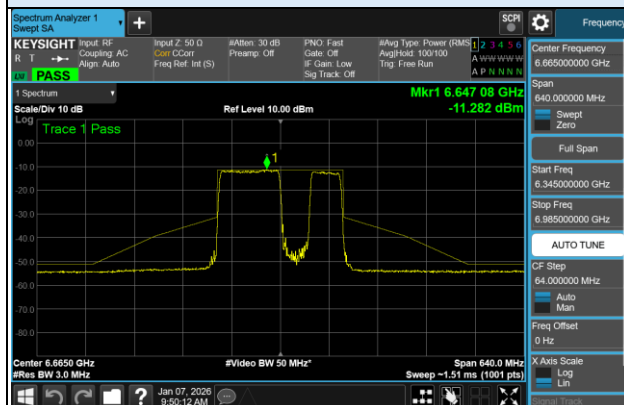
6 665 MHz



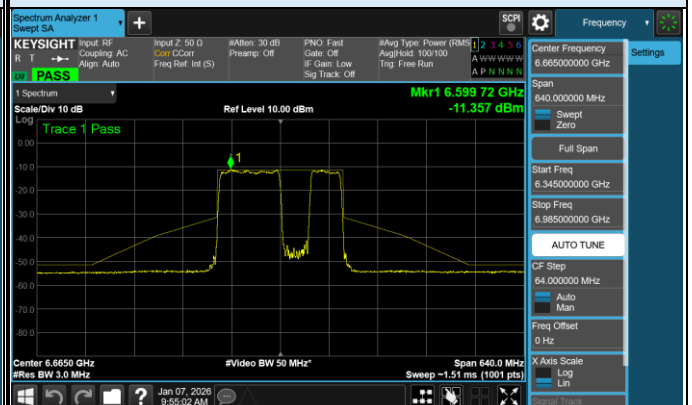
6 665 MHz



6 665 MHz



6 665 MHz

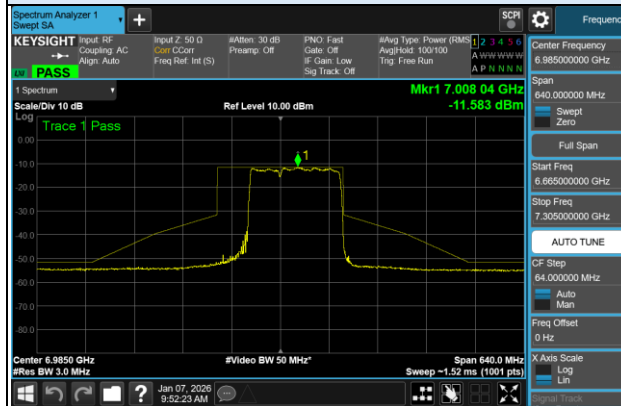




802.11be(EHT160) _ NII 8

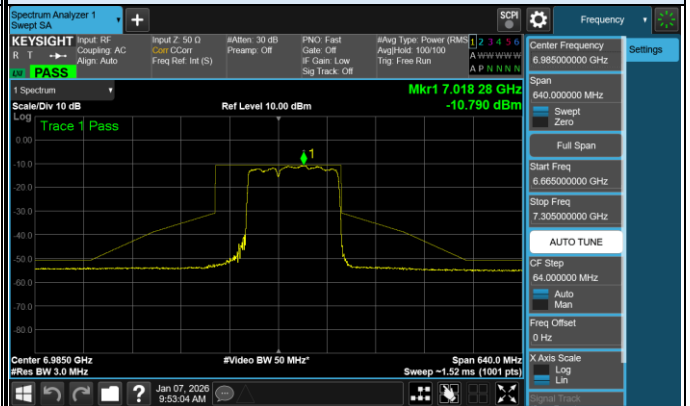
ANT 1

6 985 MHz

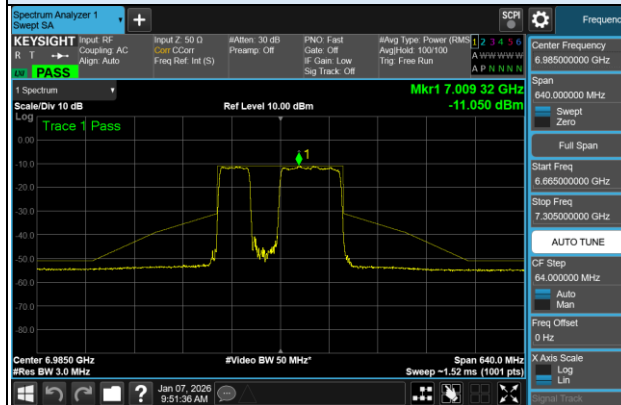


ANT 2

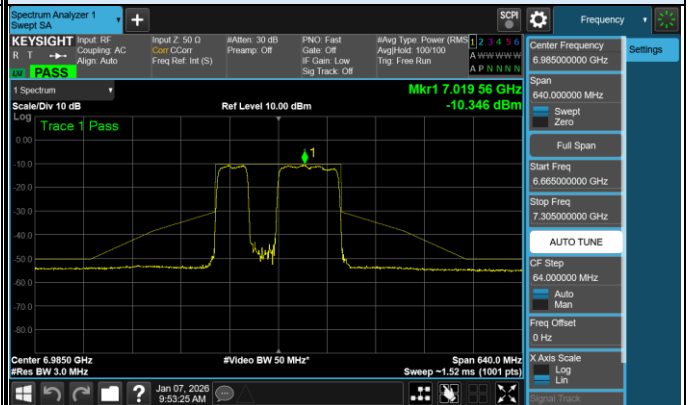
6 985 MHz



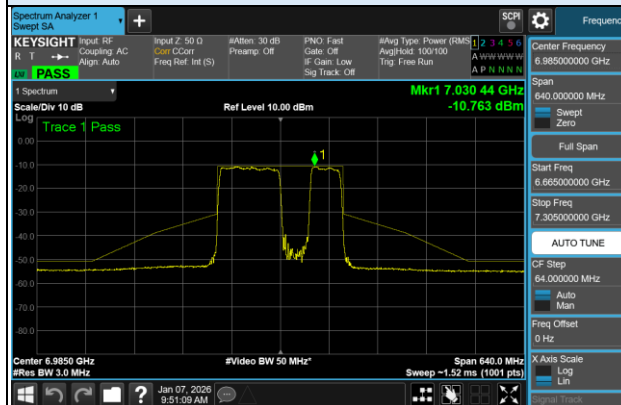
6 985 MHz



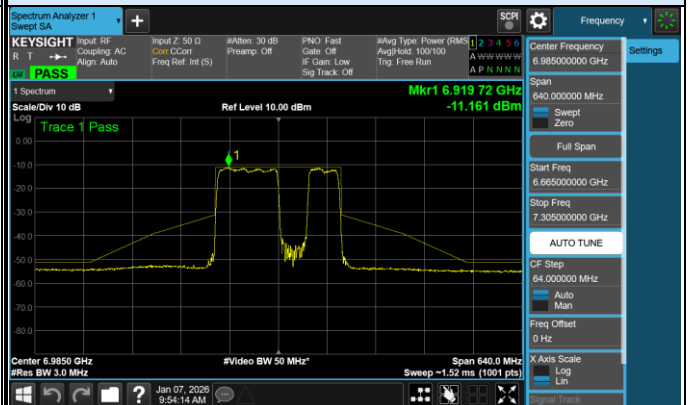
6 985 MHz



6 985 MHz



6 985 MHz

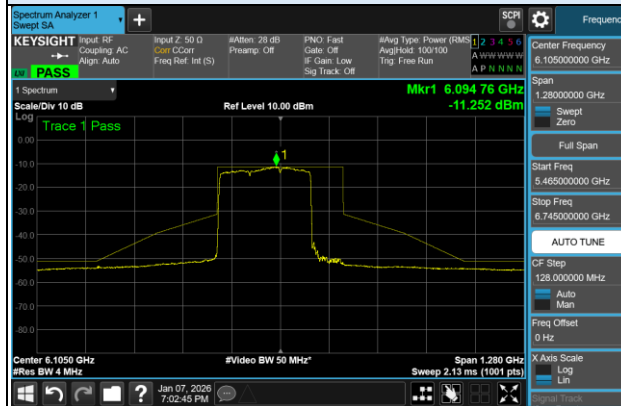




802.11be(EHT320) _ NII 5

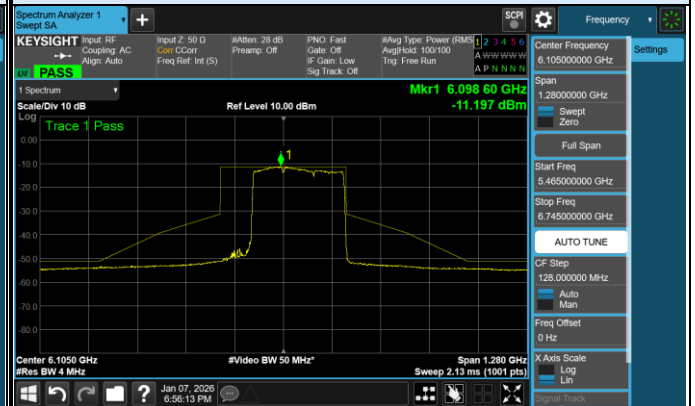
ANT 1

6 105 MHz

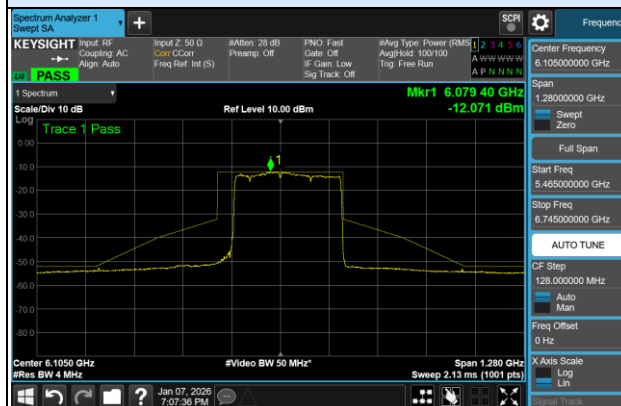


ANT 2

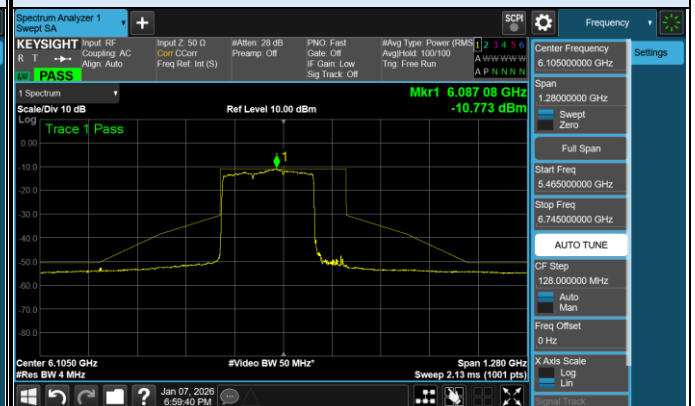
6 105 MHz



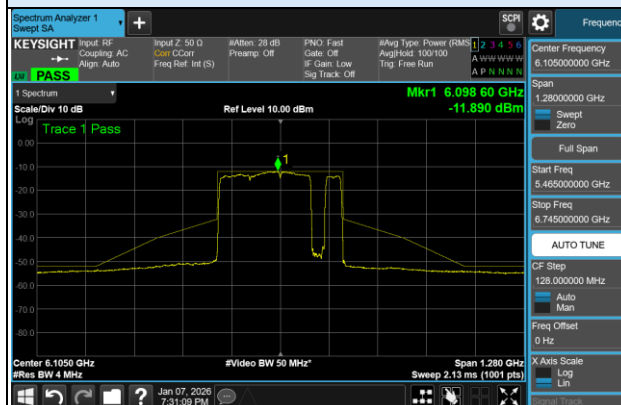
6 105 MHz



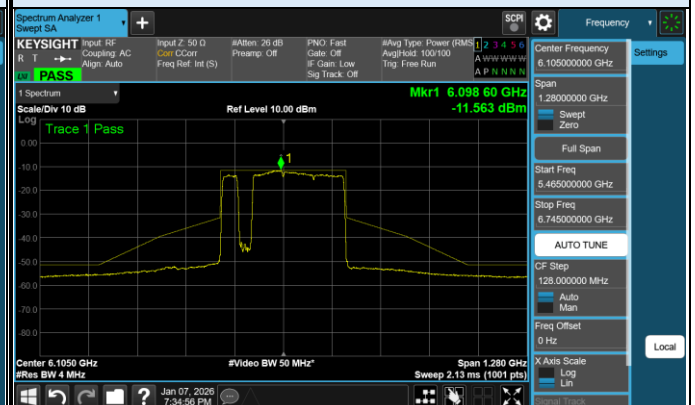
6 105 MHz



6 105 MHz



6 105 MHz

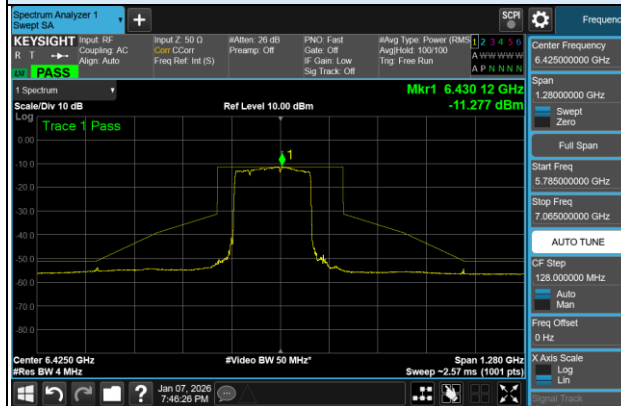




802.11be(EHT320) _ NII 6

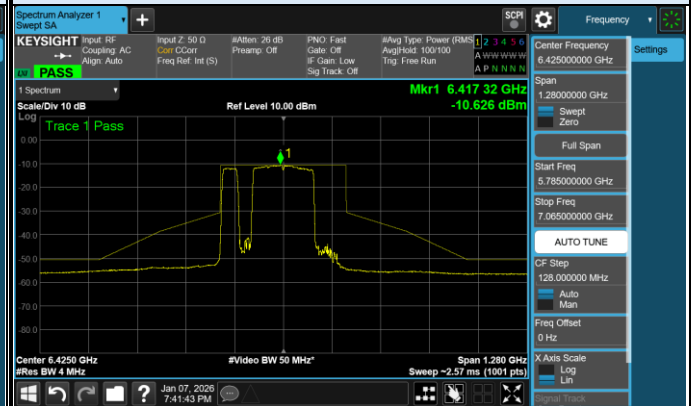
ANT 1

6 425 MHz

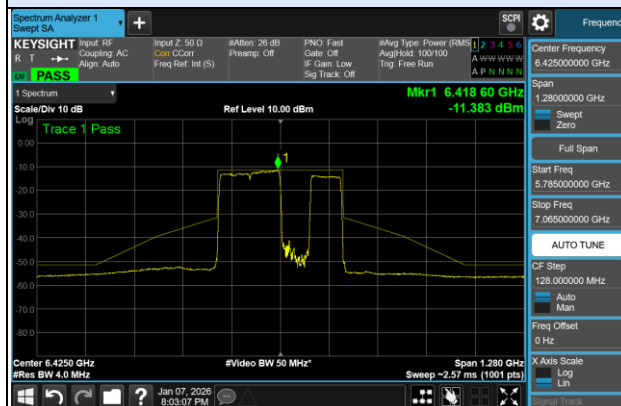


ANT 2

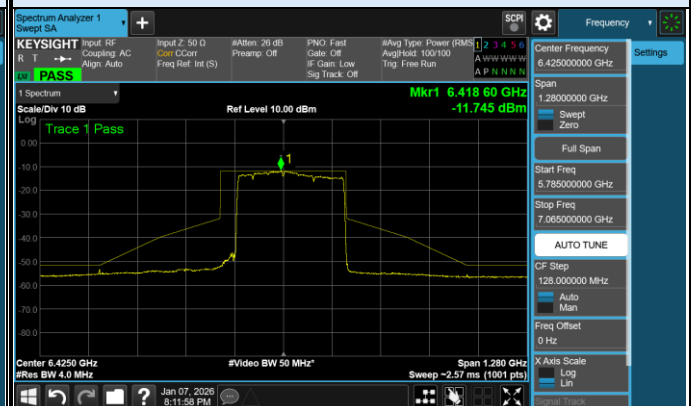
6 425 MHz



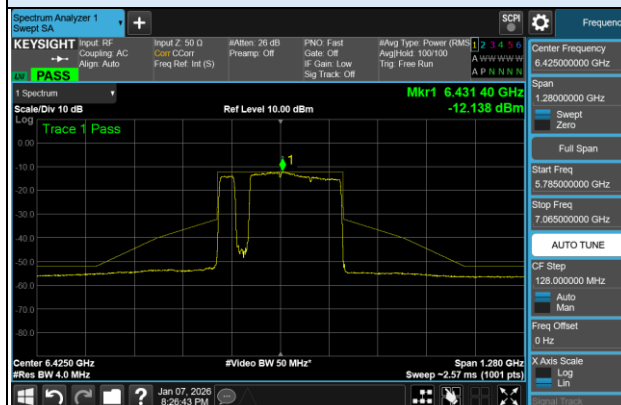
6 425 MHz



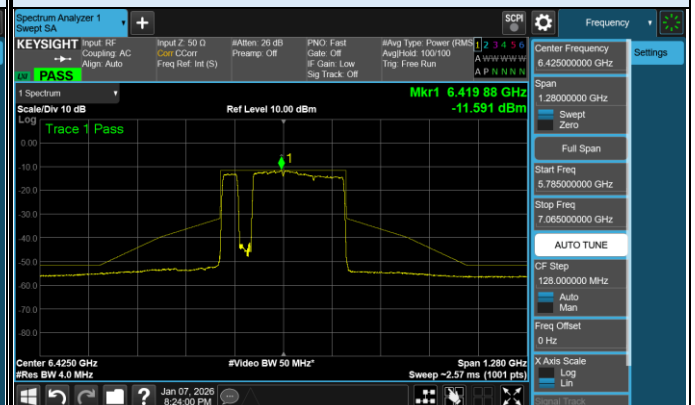
6 425 MHz



6 425 MHz



6 425 MHz

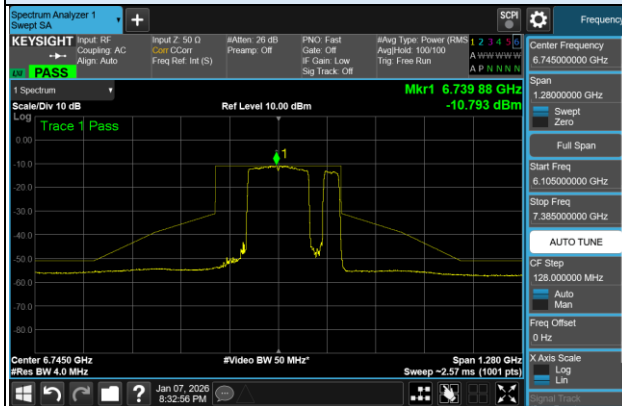




802.11be(EHT320) _ NII 7

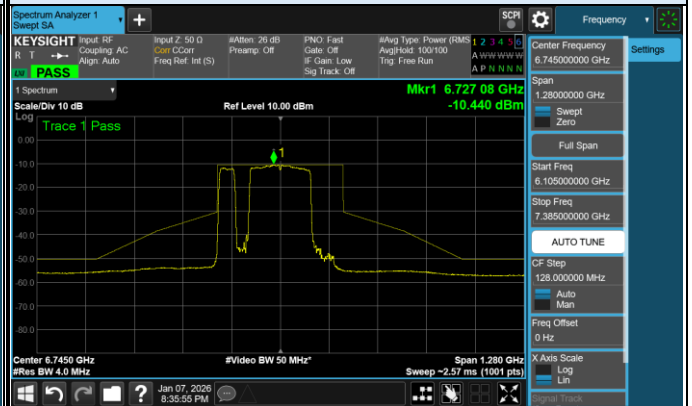
ANT 1

6 745 MHz

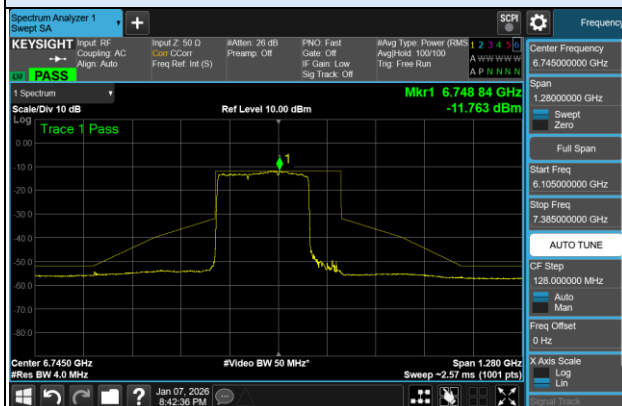


ANT 2

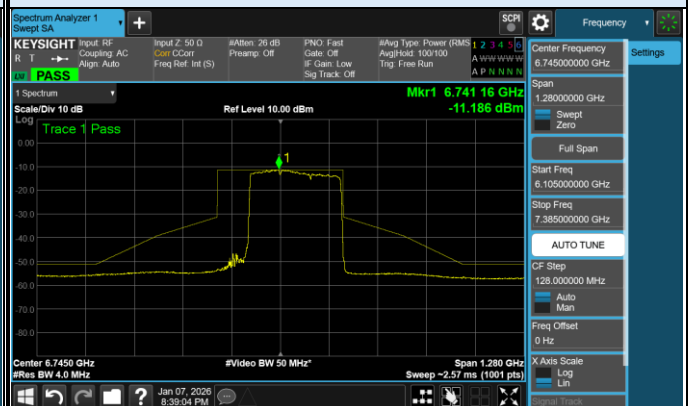
6 745 MHz



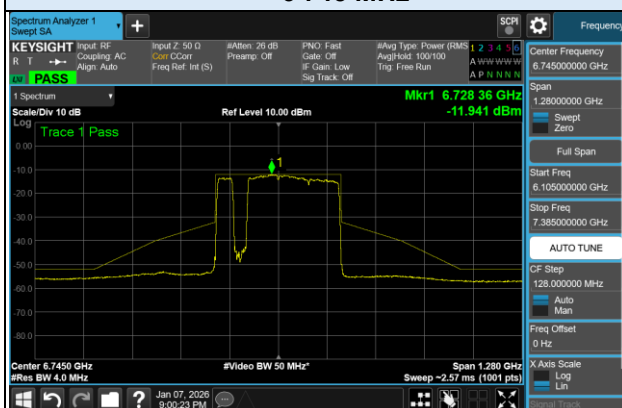
6 745 MHz



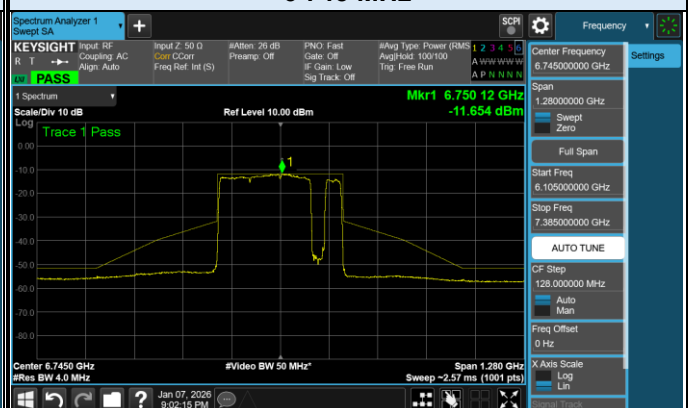
6 745 MHz



6 745 MHz



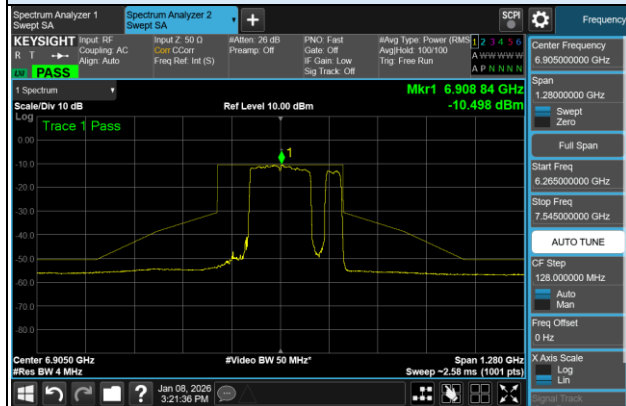
6 745 MHz





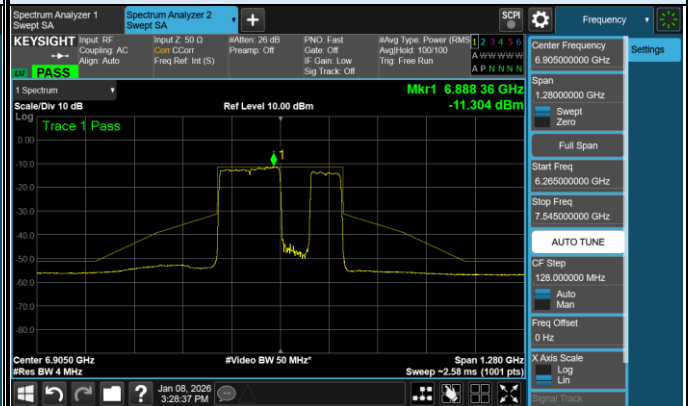
ANT 1

6 905 MHz

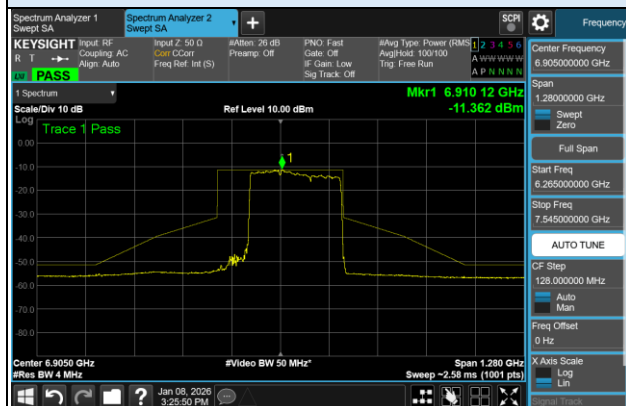


ANT 2

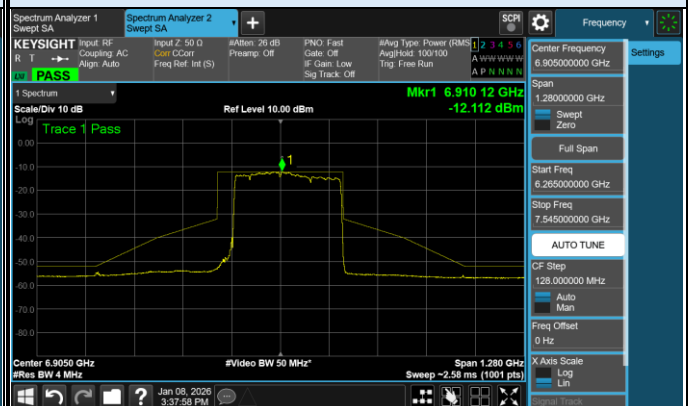
6 905 MHz



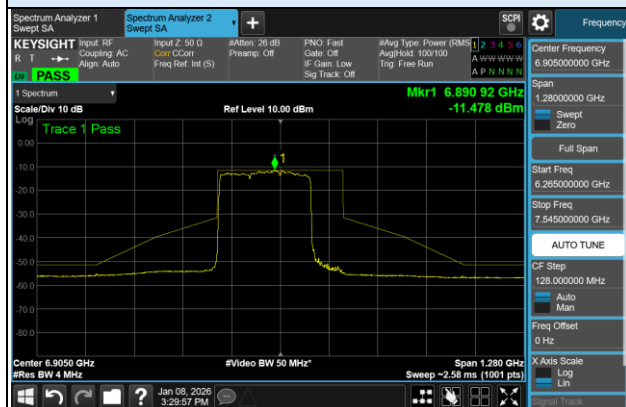
6 905 MHz



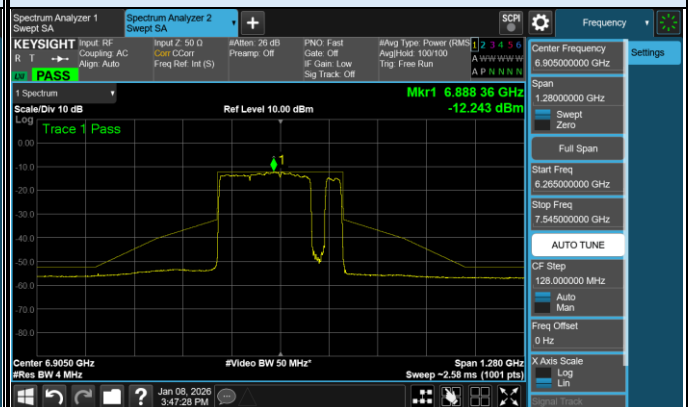
6 905 MHz



6 905 MHz



6 905 MHz





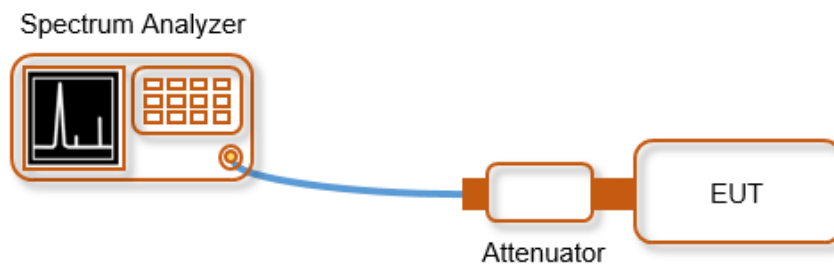
3.6 Duty Cycle

3.6.1 Test Procedure

Duty Cycle $[X = \text{On Time} / (\text{On} + \text{Off time})]$ is measured using Measurement Procedure of KDB789033 D02v02r01

1. Set the center frequency of the spectrum analyzer to the center frequency of the transmission.
2. Set $\text{RBW} \geq \text{EBW}$ if possible; otherwise, set RBW to the largest available value.
3. Set $\text{VBW} \geq \text{RBW}$. Set detector = peak.
4. Note : The zero-span measurement method shall not be used unless both RBW and VBW are $> 50/T$, where T is defined in section II.B.1.a), and the number of sweep points across duration T exceeds 100. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring duty cycle shall not be used if $T \leq 16.7$ microseconds.) T : The minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
(T = On time of the above table since the EUT operates with above fixed Duty Cycle and it is the minimum On time)

3.6.2 Test Setup





3.6.3 Test Result

[OFDM]

Test Mode	Pulse Width [ms]	Period [ms]	Duty Cycle [D]	DCCF [dB]
802.11 a	2.098	2.116	99.15	0.00
802.11 ax	5.446	5.464	99.67	0.00
802.11 be	5.452	5.472	99.63	0.00
802.11 ax40	5.452	5.476	99.56	0.00
802.11 be40	5.452	5.476	99.56	0.00
802.11 ax80	5.45	5.47	99.63	0.00
802.11 be80	5.454	5.474	99.63	0.00
802.11 ax160	5.454	5.476	99.60	0.00
802.11 be160	5.452	5.454	99.96	0.00
802.11 be320	5.454	5.472	99.67	0.00

[OFDMA]

Test Mode	Pulse Width [ms]	Period [ms]	Duty Cycle [D]	DCCF [dB]
802.11 a	2.098	2.116	99.15	0.00
802.11 ax	5.446	5.464	99.67	0.00
802.11 be	5.452	5.472	99.63	0.00
802.11 ax40	5.452	5.476	99.56	0.00
802.11 be40	5.452	5.476	99.56	0.00
802.11 ax80	5.45	5.47	99.63	0.00
802.11 be80	5.454	5.474	99.63	0.00
802.11 ax160	5.454	5.476	99.60	0.00
802.11 be160	5.452	5.454	99.96	0.00
802.11 be320	5.454	5.472	99.67	0.00



3.7 Contention Based Protocol

3.7.1 Regulation

Part. 15.407(d)

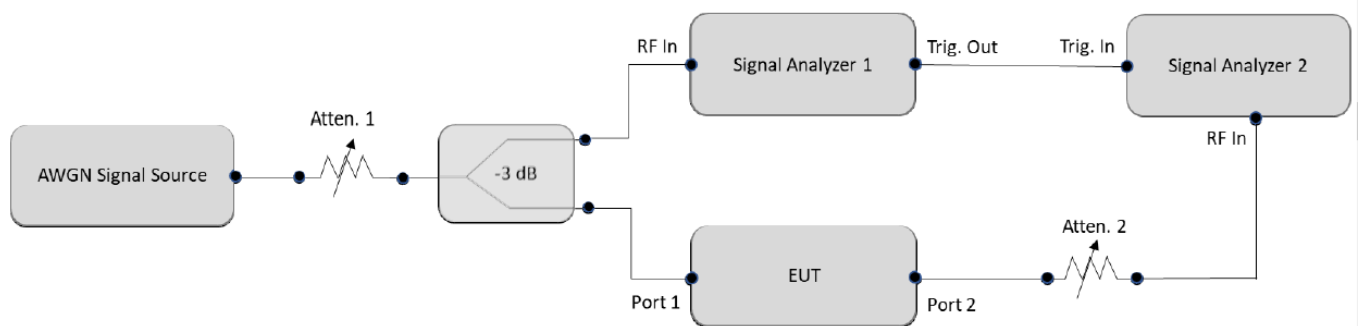
(6) Indoor access points, subordinate devices and client devices operating in the 5.925–7.125 GHz band must employ a contention-based protocol.

3.7.2 Test Procedure

Maximum Power Spectral Density is measured using Measurement Procedure of KDB987594 D02v03

1. Configure the EUT to transmit with a constant duty cycle.
2. Set the operating parameters of the EUT including power level, operating frequency, modulation and bandwidth.
3. Set the signal analyzer center frequency to the nominal EUT channel center frequency. The span range of the signal analyzer shall be between two times and five times the OBW of the EUT.
4. Monitoring the signal analyzer 2, verify the EUT is operating and transmitting with the parameters set at step two.
5. Using an AWGN signal source, generate (but do not transmit, i.e., RF OFF) a 10 MHz-wide AWGN signal. Use Table 1 to determine the center frequency of the 10 MHz AWGN signal relative to the EUT's channel bandwidth and center frequency.
6. Set the AWGN signal power to an extremely low level (more than 20 dB below the -62 dBm threshold). Connect the AWGN signal source, via a 3-dB splitter, to the signal analyzer 1 and the EUT as shown in Figure 2.
7. Transmit the AWGN signal (RF ON) and verify its characteristics on the signal analyzer 1.
8. Monitor the signal analyzer 2 to verify if the AWGN signal has been detected and the EUT has ceased transmission. If the EUT continues to transmit, then incrementally increase the AWGN signal power level until the EUT stops transmitting.
9. (Including all losses in the RF paths) Determine and record the AWGN signal power level (at the EUT's antenna port) at which the EUT ceased transmission. Repeat the procedure at least 10 times to verify the EUT can detect an AWGN signal with 90% (or better) level of certainty.
10. Refer to Table 1 to determine number of times the detection threshold testing needs to be repeated. If testing is required more than once, then go back to step 5, choose a different center frequency for the AWGN signal and repeat the process.

3.7.3 Test Setup



Note 1: used call simulator(cmx500).



3.7.4 Test Result

LPI	Ch. BW (MHz)	Freq. [MHz]	Incumbent freq. (MHz)	CBL [dB]	Normal [dBm]	Minimal [dBm]	Ceased [dBm]	Ant Gain [dBi]	Detect Limit [dBm]	Limit w/ Ant Gain [dBm]	Margin [dB]
NII5	20	6115	6115	13.15	-80.41	-77.54	-75.23	0.59	-62	-61.41	-13.82
NII6	20	6435	6435	13.23	-82.54	-78.15	-76.84	0.48	-62	-61.52	-15.32
NII7	20	6595	6595	13.45	-81.51	-77.49	-74.47	0.31	-62	-61.69	-12.78
NII8	20	6755	6755	13.42	-80.59	-75.25	-73.05	0.41	-62	-61.59	-11.46
NII5	320	6105	5950	13.06	-80.23	-65.28	-62.16	0.48	-62	-61.52	-0.64
			6105	13.15	-81.12	-66.18	-63.48	0.48	-62	-61.52	-1.96
			6260	13.18	-80.34	-64.28	-63.24	0.48	-62	-61.52	-1.72
NII 5/6	320	6425	6270	13.21	-80.61	-65.17	-62.27	0.48	-62	-61.52	-0.75
			6425	13.23	-80.17	-65.39	-62.51	0.48	-62	-61.52	-0.99
			6580	13.28	-82.08	-64.89	-63.59	0.48	-62	-61.52	-2.07
NII 7/8	320	6745	6590	13.45	-80.11	-65.24	-62.33	0.31	-62	-61.69	-0.64
			6745	13.42	-81.72	-66.33	-63.45	0.31	-62	-61.69	-1.76
			6900	13.53	-80.52	-68.44	-63.51	0.31	-62	-61.69	-1.82
NII 8	320	6905	6750	13.44	-80.24	-67.51	-62.85	0.41	-62	-61.59	-1.26
			6905	13.53	-80.76	-67.24	-63.02	0.41	-62	-61.59	-1.43
			7060	13.59	-80.42	-66.96	-63.19	0.41	-62	-61.59	-1.60

NOTE1: Margin = Ceased - Limit w/ ant gain

NOTE2: Detection Result – All Tx Cease

NOTE3: Normal & Minimal & Ceased Value include CBL.



VLP	Ch. BW (MHz)	Freq. [MHz]	Incumbent freq. (MHz)	CBL [dB]	Normal [dBm]	Minimal [dBm]	Ceased [dBm]	Ant Gain [dBi]	Detect Limit [dBm]	Limit w/ Ant Gain [dBm]	Margin [dB]
NII5	20	6115	6115	13.15	-82.54	-78.49	-75.15	0.59	-62	-61.41	-13.74
NII6	20	6435	6435	13.23	-83.69	-77.67	-76.69	0.48	-62	-61.52	-15.17
NII7	20	6595	6595	13.45	-80.57	-76.27	-74.37	0.31	-62	-61.69	-12.68
NII8	20	6755	6755	13.42	-80.96	-77.74	-73.24	0.41	-62	-61.59	-11.65
NII5	320	6105	5950	13.06	-80.68	-66.54	-62.28	0.48	-62	-61.52	-0.76
			6105	13.15	-82.36	-68.15	-62.39	0.48	-62	-61.52	-0.87
			6260	13.18	-83.14	-65.08	-62.43	0.48	-62	-61.52	-0.91
NII 5/6	320	6425	6270	13.21	-80.24	-66.05	-62.15	0.48	-62	-61.52	-0.63
			6425	13.23	-81.69	-67.85	-62.69	0.48	-62	-61.52	-1.17
			6580	13.28	-83.25	-68.68	-62.75	0.48	-62	-61.52	-1.23
NII 7/8	320	6745	6590	13.45	-80.67	-66.47	-62.48	0.31	-62	-61.69	-0.79
			6745	13.42	-81.17	-67.28	-63.05	0.31	-62	-61.69	-1.36
			6900	13.53	-81.94	-68.09	-63.15	0.31	-62	-61.69	-1.46
NII 8	320	6905	6750	13.44	-81.21	-67.22	-63.21	0.41	-62	-61.59	-1.62
			6905	13.53	-80.97	-66.86	-62.76	0.41	-62	-61.59	-1.17
			7060	13.59	-80.61	-67.04	-63.14	0.41	-62	-61.59	-1.55

NOTE1: Margin = Ceased - Limit w/ ant gain

NOTE2: Detection Result – All Tx Cease

NOTE3: Normal & Minimal & Ceased Value include CBL.



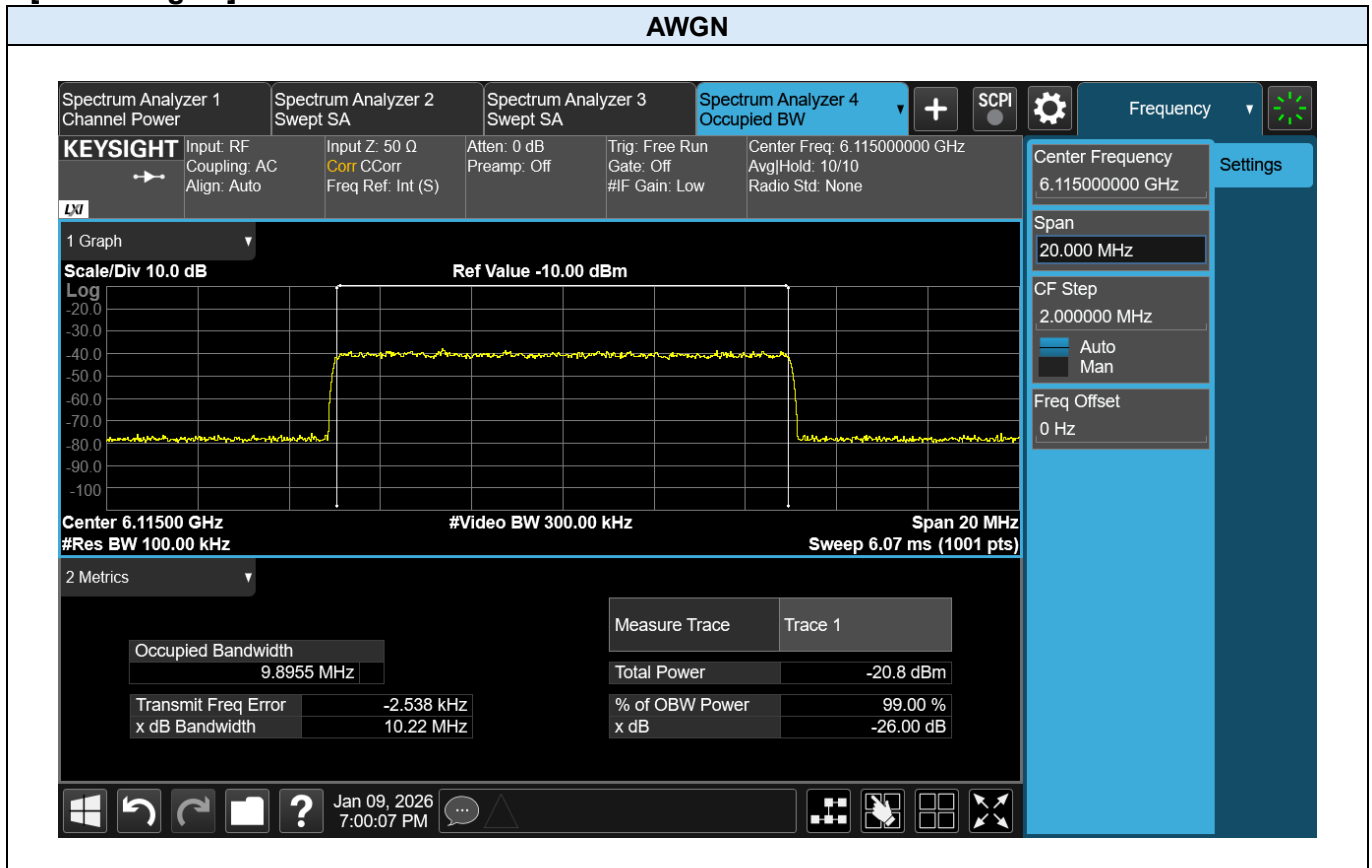
CBP Detection (o = Detection, X = No Detection)														
LPI	Ch. BW (MHz)	Freq. [MHz]	Incumbent freq. (MHz)	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
NII5	20	6115	6115	o	o	o	o	o	o	o	o	o	o	100
NII6	20	6435	6435	o	o	o	o	o	o	o	o	o	o	100
NII7	20	6595	6595	o	o	o	o	o	o	o	o	o	o	100
NII8	20	6755	6755	o	o	o	o	o	o	o	o	o	o	100
NII5	320	6105	5950	o	o	o	o	X	o	o	o	o	o	90
			6105	o	o	o	o	o	o	o	o	o	o	100
			6260	o	o	o	o	o	o	o	o	o	o	100
NII 5/6	320	6425	6270	o	o	o	o	o	o	o	X	o	o	90
			6425	o	o	o	o	o	o	o	o	o	o	100
			6580	o	o	o	o	o	o	o	o	o	o	100
NII 7/8	320	6745	6590	o	X	o	o	o	o	o	o	o	o	90
			6745	o	o	o	o	o	o	o	o	o	o	100
			6900	o	o	o	o	o	o	o	o	o	o	100
NII 8	320	6905	6750	o	o	o	o	o	o	X	o	o	o	90
			6905	o	o	o	o	o	o	o	o	o	o	100
			7060	o	o	o	o	o	o	o	o	o	o	100



CBP Detection (o = Detection, X = No Detection)														
VLP	Ch. BW (MHz)	Freq. [MHz]	Incumbent freq. (MHz)	1	2	3	4	5	6	7	8	9	10	Detection Rate (%)
NII5	20	6115	6115	o	o	o	o	o	o	o	o	o	o	100
NII6	20	6435	6435	o	o	o	X	o	o	o	o	o	o	90
NII7	20	6595	6595	o	o	o	o	o	o	o	o	o	o	100
NII8	20	6755	6755	o	o	o	o	o	o	o	o	o	o	100
NII5	320	6105	5950	o	X	o	o	o	o	o	o	o	o	90
			6105	o	o	o	o	o	o	o	o	o	o	100
			6260	o	o	o	o	o	o	o	o	o	o	100
NII 5/6	320	6425	6270	o	o	o	o	o	o	o	o	X	o	90
			6425	o	o	o	o	o	o	o	o	o	o	100
			6580	o	o	o	o	o	o	o	o	o	o	100
NII 7/8	320	6745	6590	o	o	o	X	o	o	o	o	o	o	90
			6745	o	o	o	o	o	o	o	o	o	o	100
			6900	o	o	o	o	o	o	o	o	o	o	100
NII 8	320	6905	6750	o	o	o	o	o	o	o	o	o	o	100
			6905	o	o	o	o	o	o	o	o	o	o	100
			7060	o	o	o	o	o	o	o	o	X	o	90

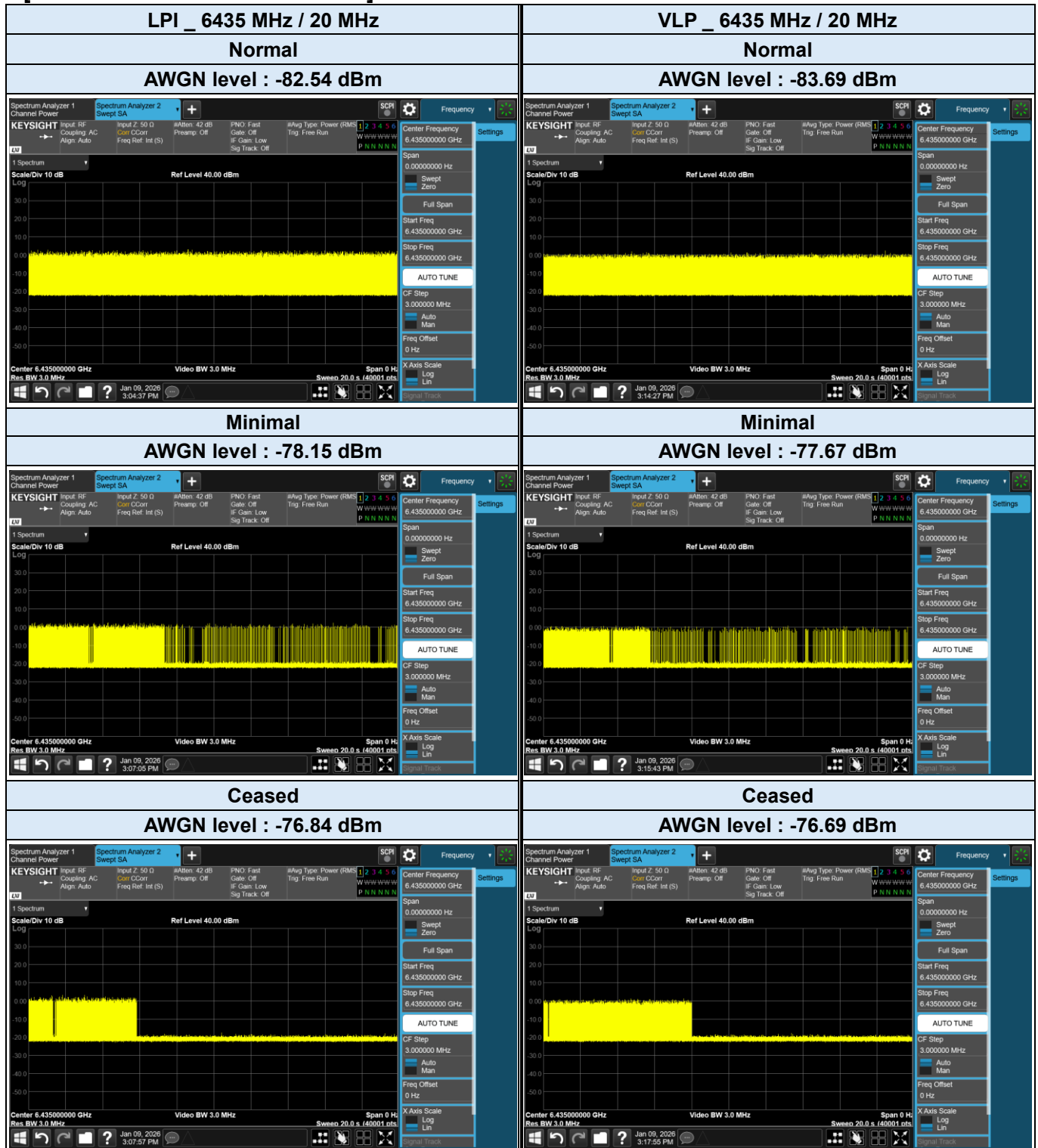


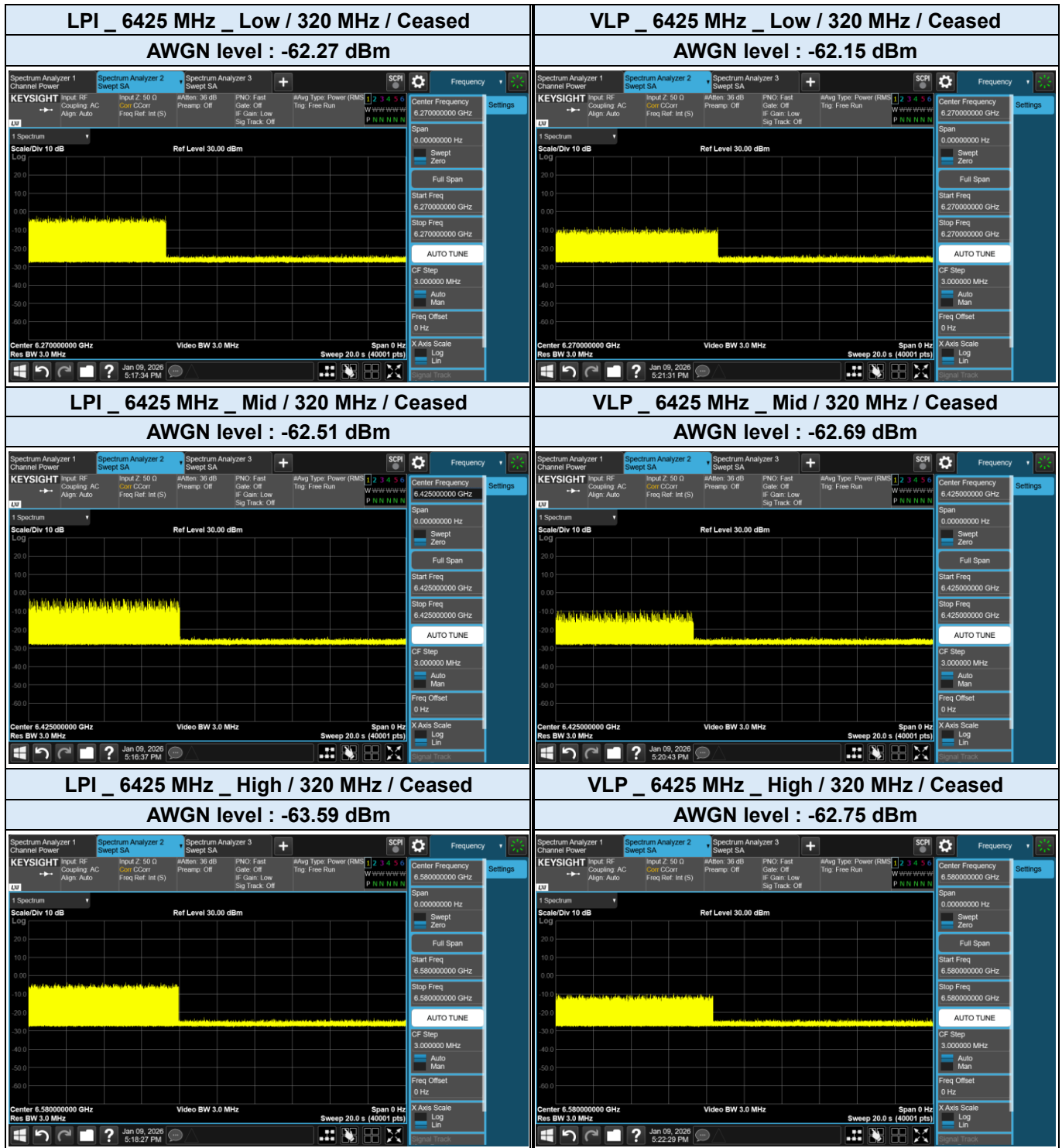
[AWGN Signal]





[Test Contention Based Protocol]

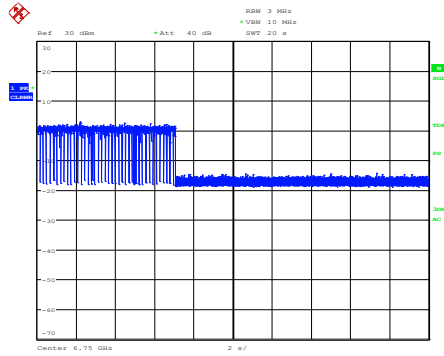






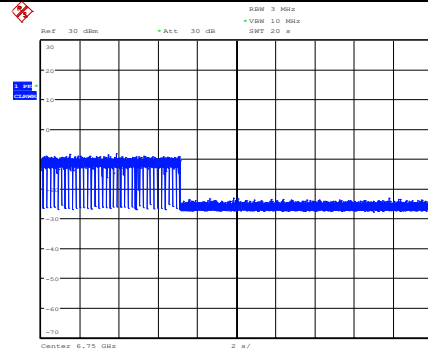
LPI_ 6905 MHz _ Low / 320 MHz / Ceased

AWGN level : -62.85 dBm



VLP_ 6905 MHz _ Low / 320 MHz / Ceased

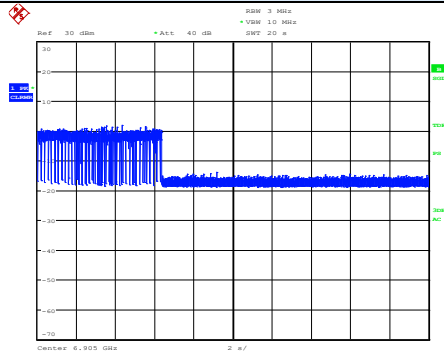
AWGN level : -63.21 dBm



Date: 31.JAN.2026 22:33:39

LPI_ 6905 MHz _ Mid / 320 MHz / Ceased

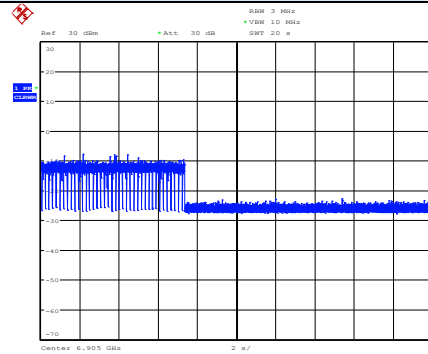
AWGN level : -63.02 dBm



Date: 31.JAN.2026 22:27:36

VLP_ 6905 MHz _ Mid / 320 MHz / Ceased

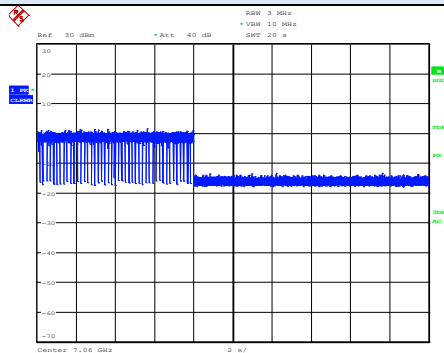
AWGN level : -62.76 dBm



Date: 31.JAN.2026 22:32:52

LPI_ 6905 MHz _ High / 320 MHz / Ceased

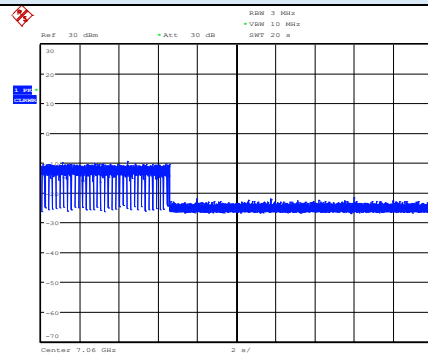
AWGN level : -63.19 dBm



Date: 31.JAN.2026 22:29:14

VLP_ 6905 MHz _ High / 320 MHz / Ceased

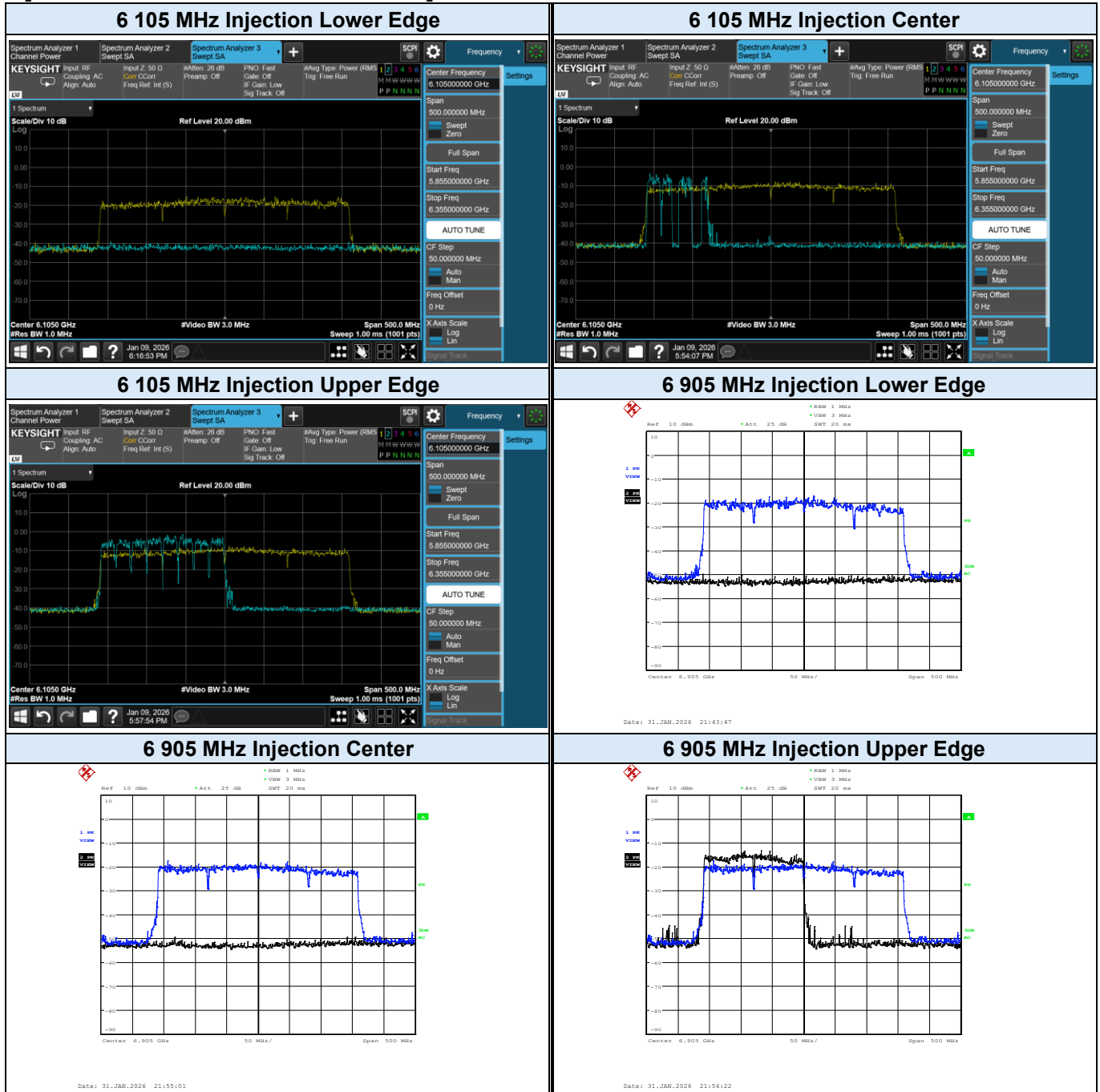
AWGN level : -63.14 dBm



Date: 31.JAN.2026 22:32:13



[Test Channel Bandwidth Reduction]



NOTE1: This section demonstrates the effect of AWGN signal injection at various frequency offsets within the 802.11be 320 MHz operating bandwidth. In accordance with regulatory requirements, the EUT is allowed to operate at a reduced bandwidth in the presence of an incumbent signal, as long as spectral overlap with the incumbent channel does not occur. The spectrum plots compare the EUT transmission before and after AWGN injection. The yellow trace corresponds to the baseline 320 MHz transmission without interference, whereas the blue trace illustrates the spectral response following AWGN injection. As observed in the three test cases, the EUT dynamically modifies its occupied bandwidth depending on the location of the injected noise, maintaining compliance by avoiding overlap with the affected frequency region.



3.8 Power Reduction Verification for Standard client device

3.8.1 Regulation

Part. 15.407(a)

(7) For client devices, except for fixed client devices as defined in this subpart, operating under the control of a standard power access point in 5.925-6.425 GHz and 6.525-6.875 GHz bands, the maximum power spectral density must not exceed 17 dBm e.i.r.p. in any 1-megahertz band, and the maximum e.i.r.p. over the frequency band of operation must not exceed 30 dBm and **the device must limit its power to no more than 6 dB below its associated standard power access point's authorized transmit power.**

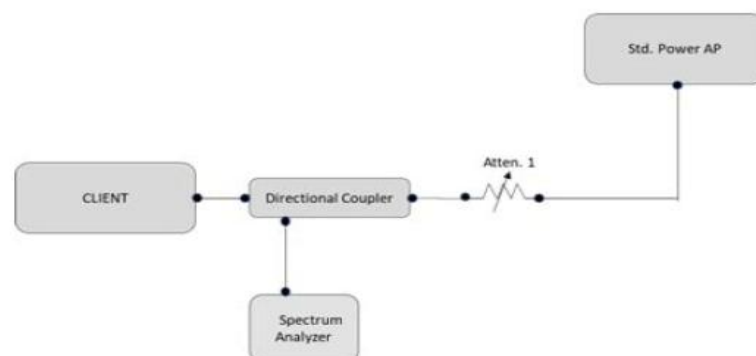
3.8.2 Test Procedure

3.8.2.1 Proper Power Adjustment, Client Devices Connected to a Standard Power Access Point (APC)

A client device that connects to a Standard Power AP must limit its power to a minimum of 6 dB lower than its associated Standard Power access point's authorized transmit power. The term "authorized" means the AFC-approved power level for the AP to use on a particular channel.

1. Connect equipment as shown in 3.8.2.2 below.
2. In the figure, the Std Power AP can be configured using a developmental board, an Access Point incorporated with test software, or any other hardware configuration that adequately demonstrates proper client power adjustment.
3. Adjust Atten 1 to Std Power AP to facilitate error-free communication with the Client but protect the Client receiver from overload or damage.
4. Configure the Client and AP to associate and send data (stream data). The AP should be configured so its registered power is 36 dBm EIRP.
5. Verify transmission between the Client and the Standard Power AP. Additional attenuators may be required to protect measurement equipment. Measure the Client Rpower using any of the methods in C63.10 for NII devices. Use this power and its antenna gain to calculate the Client EIRP.
6. The Client EIRP should be minimally 6 dB lower than the APs.
7. Repeat Steps 2 through 5 at two other selected measurement points—the first at the midpoint and the second at the client's lowest rated power, as declared by the manufacturer.

3.8.2.2 Test Setup



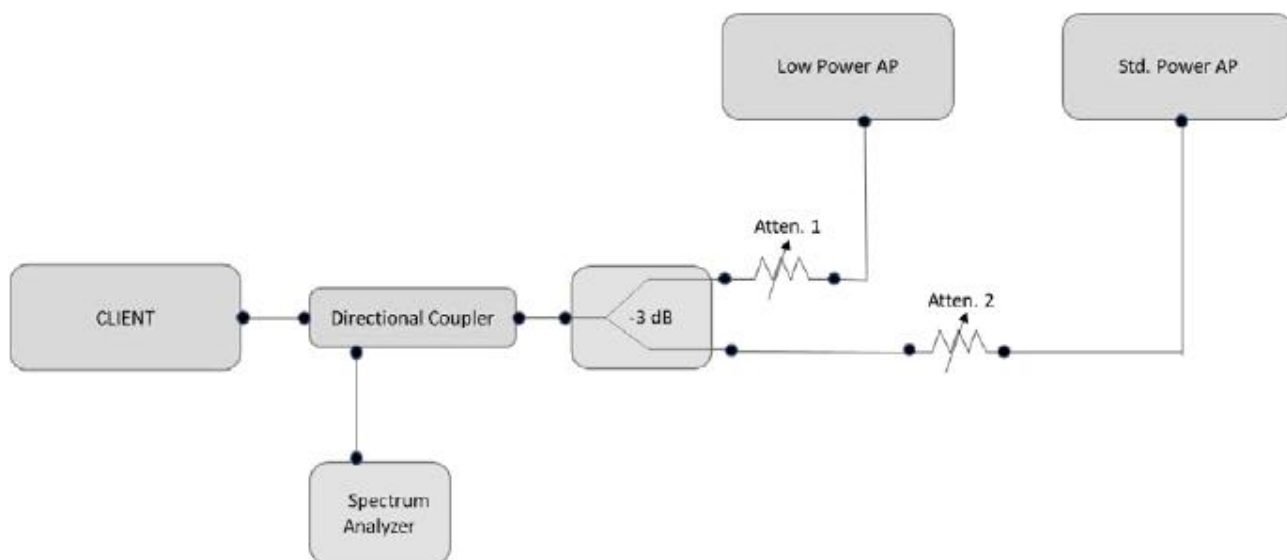
Note 1: used call simulator(cmx500) instead of Standard AP.

3.8.2.3 Dual Client Test, Demonstration of Proper Power Adjustment based on Associated AP

A client device may connect to a Standard Power AP with a maximum power level of 30 dBm EIRP or a Low Power indoor AP, but the power level is limited to a maximum of 24 dBm EIRP. If a client has the flexibility to connect to both APs, verification is needed to show that it can distinguish between the two configurations and then control the power levels accordingly.

1. Connect equipment as shown in Figure 3.8.2.4 below.
2. Adjust Atten 2 to Standard Power AP to facilitate error-free communication with the Client (Atten 1 should be set to High on the RF path to the Low Power AP).
3. Configure the Client and APs to associate and send data (stream data). The client must be configured to transmit at its highest power level. Initially, because the attenuation on Atten 1 is set high, the Client will only associate with the Std Power AP.
4. Verify transmission between the Client and the Standard Power AP. Additional attenuators may be required to protect measurement equipment. Measure the Client RF power using any of the methods in C63.10 for NII devices.
5. Gradually increase Atten 2 while decreasing Atten 1. This simulates the Client moving from outdoors to indoors. At some level of attenuation, the Client should associate with the Low-Power indoor AP. Verify transmission between the Client and the Low-Power AP.
6. Measure the RF power of the Client device using the same method as in step 4. Verify the power is no more than 24 dBm EIRP.

3.8.2.4 Tse Setup



Note 1: used call simulator(cmx500) instead of Standard AP and ASUS(BE9700) was used as the Low Power AP.



3.8.3 Test Result

[Multi-Link Mode]

Freq. [MHz]	EIRP For SP AP [dBm]	ANT1 Conducted Power [dBm]	ANT2 Conducted Power [dBm]	MIMO Conducted Power [dBm]	Direction Ant Gain [dBi]	EIRP [dBm]	Client Limit [dBm]	Margin [dBm]
6215	36	6.61	6.98	9.81	3.75	13.56	30	-16.44
6215	28	6.69	7.02	9.87	3.75	13.62	22	-8.38
6215	20	6.45	6.92	9.70	3.75	13.45	14	-0.55

Freq. [MHz]	AP Mode	ANT1 Conducted Power [dBm]	ANT2 Conducted Power [dBm]	MIMO Conducted Power [dBm]	Direction Ant Gain [dBi]	EIRP [dBm]	Client Limit [dBm]	Margin [dBm]
6215	SP	6.51	6.94	9.74	3.75	13.49	30	-16.51
6215	LPI	1.89	2.12	5.02	3.75	8.77	24	-15.23



Standard AP Power 36 dBm

- [-]  Element
 -  Check (1)
 -  Element ID = Transmit Power Envelope (195)
- [-]  IE = TransmitPowerEnv_LV (195)
 - [-]  Transmit Power Envelope LV
 -  Length = (2)
 - [-]  Choice = TransmitPowerEnv_Value (1)
 - [-]  TransmitPowerEnv_Value
 - [-]  TPE_TransmitPowerInfo
 -  Max TX Power Count = (0)
 -  Interpretation = Local EIRP (0)
 -  Category = Default (0)
 - [-]  MTP = TPE_EIRP (0)
 - [-]  EIRP Max Tx Power List
 - [-]  Max TX Power For 20 MHz
 -  isEnabled (1)
 -  Max Tx Power = (36)

Standard AP Power 28 dBm

- [-]  Element
 -  Check (1)
 -  Element ID = Transmit Power Envelope (195)
- [-]  IE = TransmitPowerEnv_LV (195)
 - [-]  Transmit Power Envelope LV
 -  Length = (2)
 - [-]  Choice = TransmitPowerEnv_Value (1)
 - [-]  TransmitPowerEnv_Value
 - [-]  TPE_TransmitPowerInfo
 -  Max TX Power Count = (0)
 -  Interpretation = Local EIRP (0)
 -  Category = Default (0)
 - [-]  MTP = TPE_EIRP (0)
 - [-]  EIRP Max Tx Power List
 - [-]  Max TX Power For 20 MHz
 -  isEnabled (1)
 -  Max Tx Power = (28)



Standard AP Power 20 dBm

- [-]  Element
 -  Check (1)
 -  Element ID = Transmit Power Envelope (195)
- [-]  IE = TransmitPowerEnv_LV (195)
 - [-]  Transmit Power Envelope LV
 -  Length = (2)
 - [-]  Choice = TransmitPowerEnv_Value (1)
 - [-]  TransmitPowerEnv_Value
 - [-]  TPE_TransmitPowerInfo
 -  Max TX Power Count = (0)
 -  Interpretation = Local EIRP (0)
 -  Category = Default (0)
 - [-]  MTP = TPE_EIRP (0)
 - [-]  EIRP Max Tx Power List
 - [-]  Max TX Power For 20 MHz
 -  isEnabled (1)
 -  Max Tx Power = (20)



3.9 Transmit Power Control (TPC)

3.9.1 Regulation

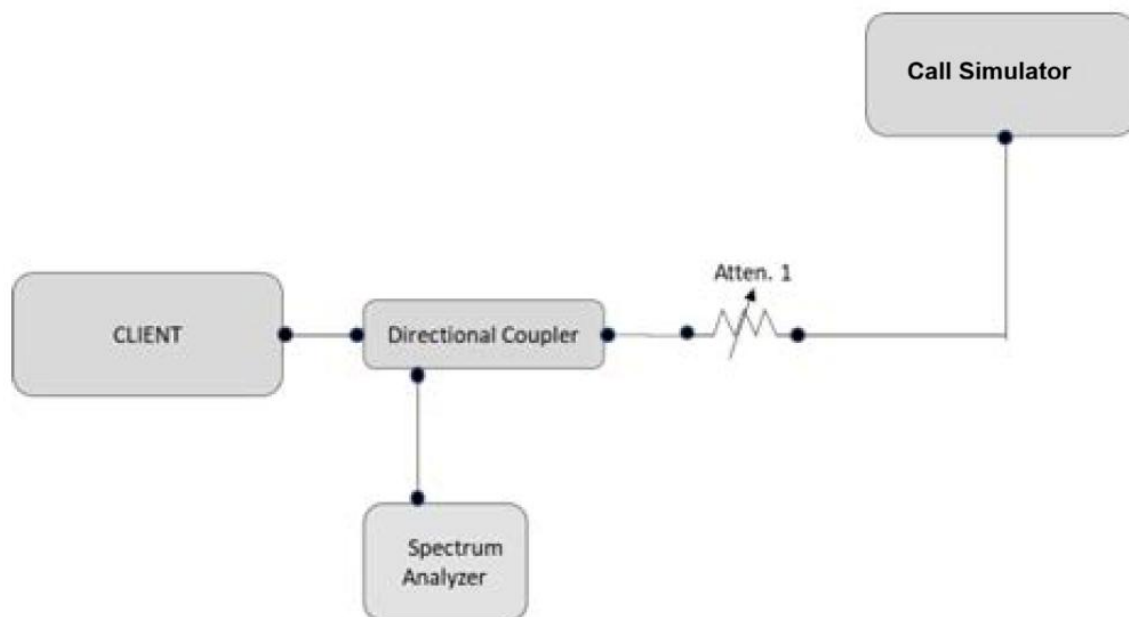
Part. 15.407(d)

(10) Very low power devices operating in the 5.925-7.125 GHz band shall employ a transmit power control (TPC) mechanism. **A very low power device is required to have the capability to operate at least 6 dB below the maximum EIRP PSD value of -5 dBm/MHz.**

3.9.2 Test Procedure

1. Connect the equipment as shown in the test configuration.
2. Configure the client and Call simulator (AP mode) to connect data (stream data) and initiate transmission it is important to configure the client to transmit at the highest power level.
3. Check the transfer between the client and the call simulator (AP mode). Additional attenuators may be required to protect the measuring equipment. For NII devices, measure the client RF power using one of the methods in C63.10.
Verify that the power does not exceed -5 dBm/MHz PSD EIRP.
4. Enable Transmission Power Control (TPC) mode. Check the transmission between the client and Call simulator (AP mode).
5. Measure the RF power of the client device in the same way as in step 3. Make sure the power does not exceed the -11 dBm/MHz PSD EIRP

3.9.3 Test Setup



Note 1: used call simulator(cmx500).