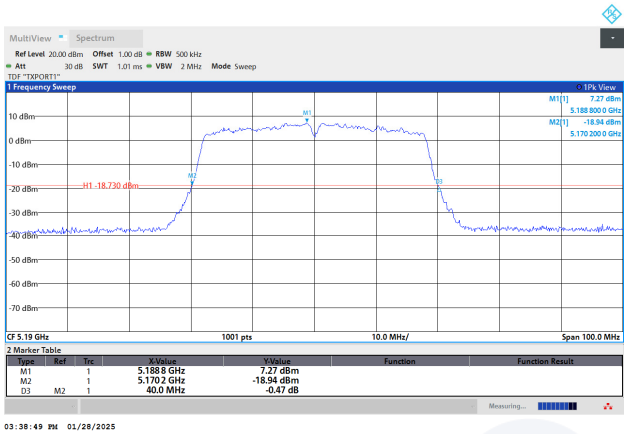
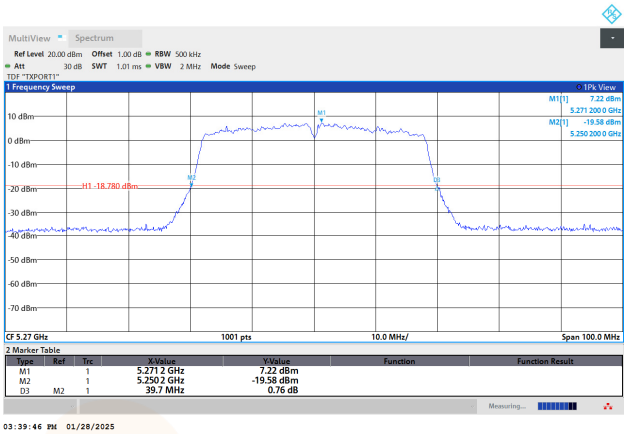
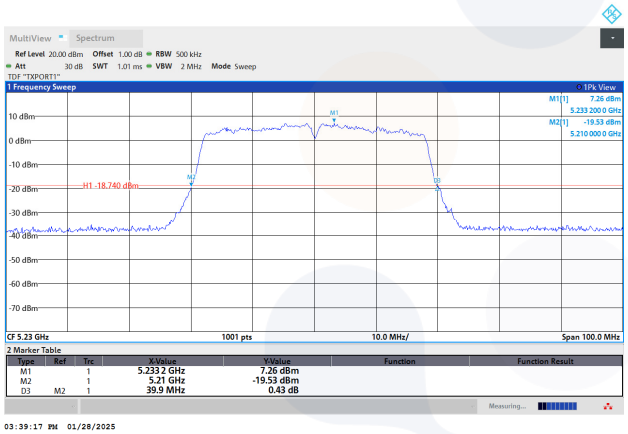
UNII 1 / 802.11ac VHT40 / Low ch.



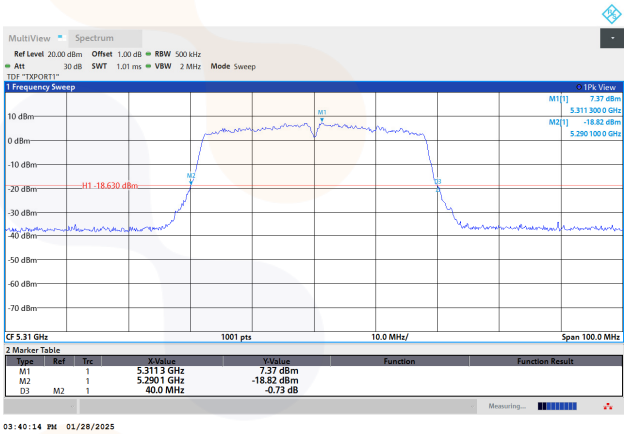
UNII 2A / 802.11ac VHT40 / Low ch.

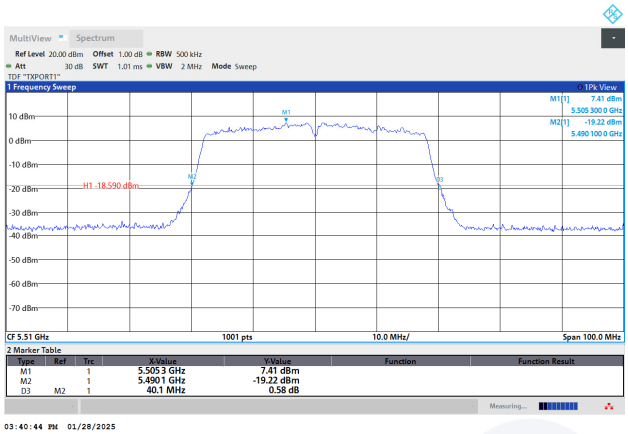
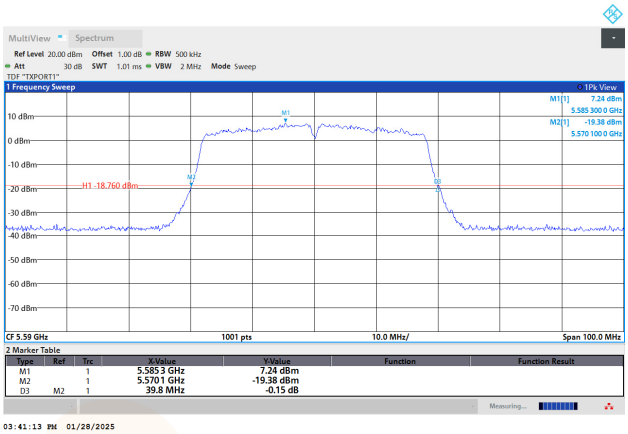
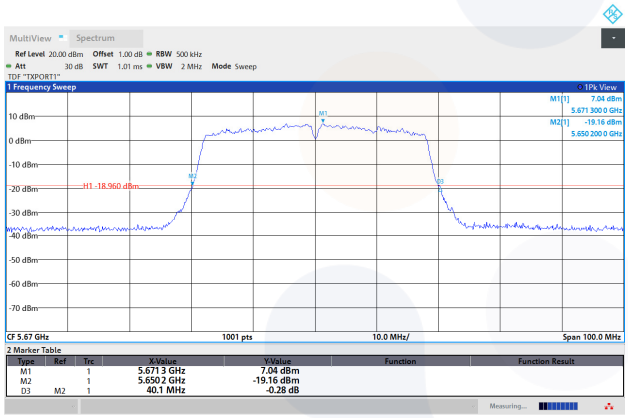


UNII 1 / 802.11ac VHT40 / High ch.

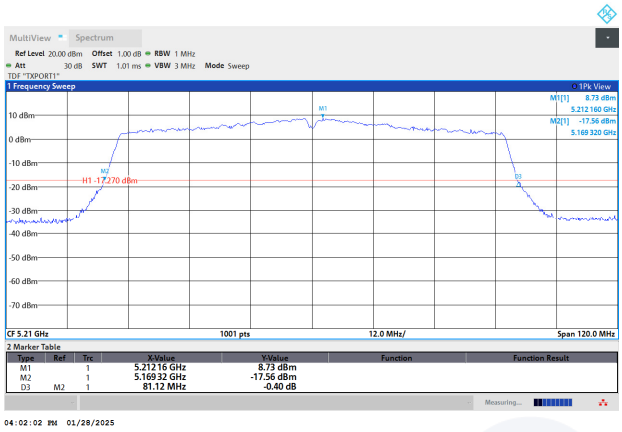


UNII 2A / 802.11ac VHT40 / High ch.

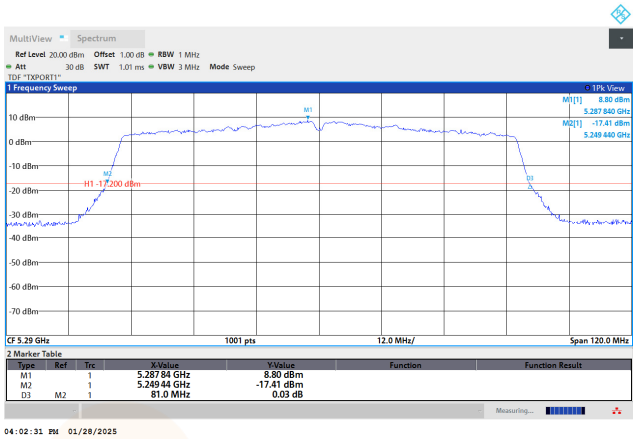


UNII 2C / 802.11ac VHT40 / Low ch.	UNII 2C / 802.11ac VHT40 / Mid ch.
	
UNII 2C / 802.11ac VHT40 / High ch.	**-**
	Blank

UNII 1 / 802.11ac VHT80 / Mid ch.

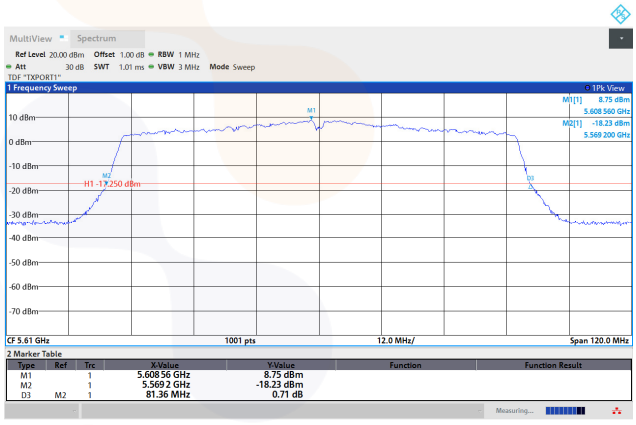


UNII 2A / 802.11ac VHT80 / Mid ch.



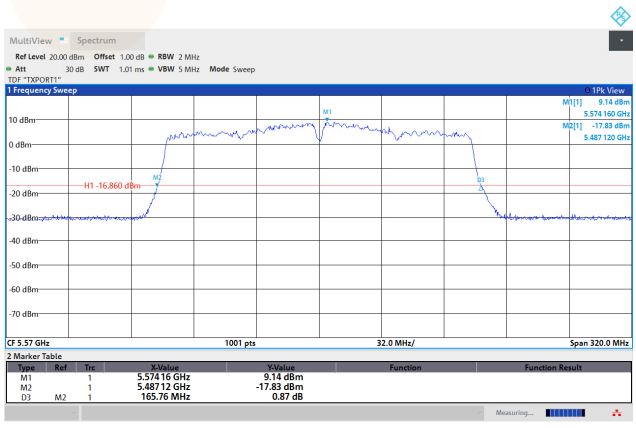
UNII 2C / 802.11ac VHT80 / Low ch.

UNII 2C / 802.11ac VHT80 / High ch.



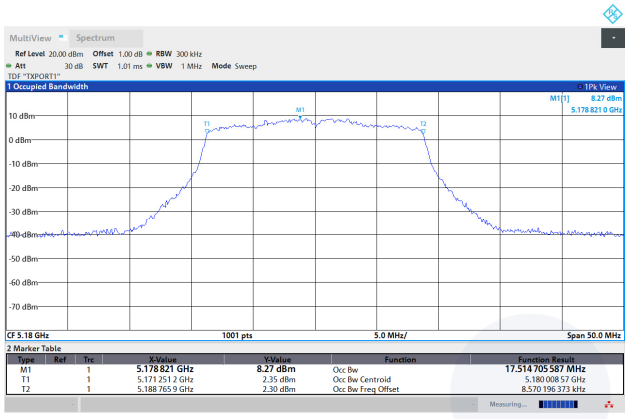
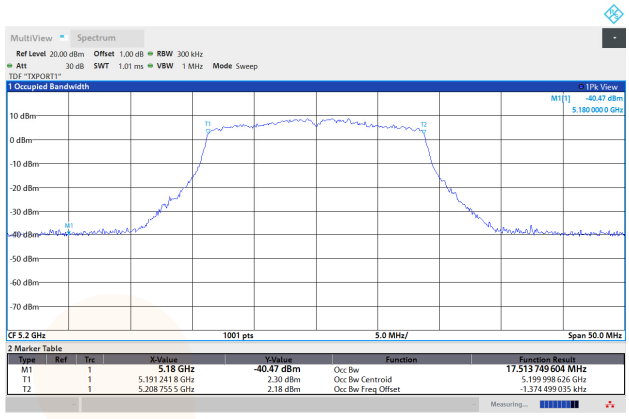
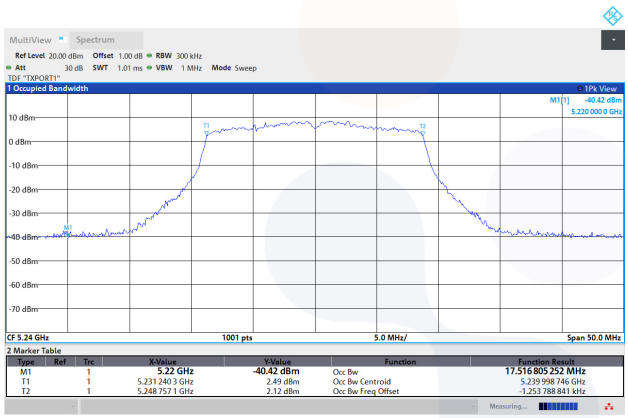
UNII 1&2A / 802.11ac VHT160 / Mid ch.

UNII 2C / 802.11ac VHT160 / Mid ch.

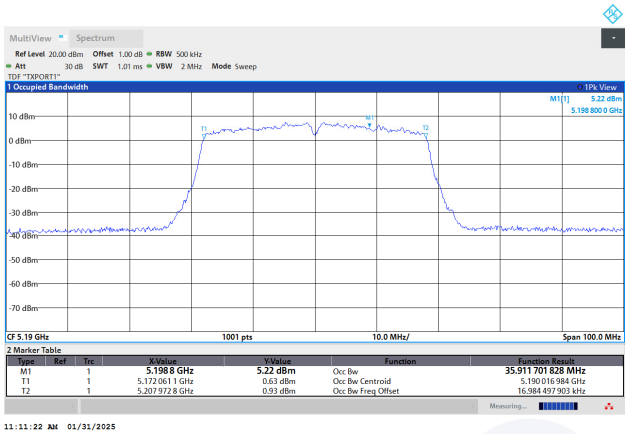


99% bandwidth

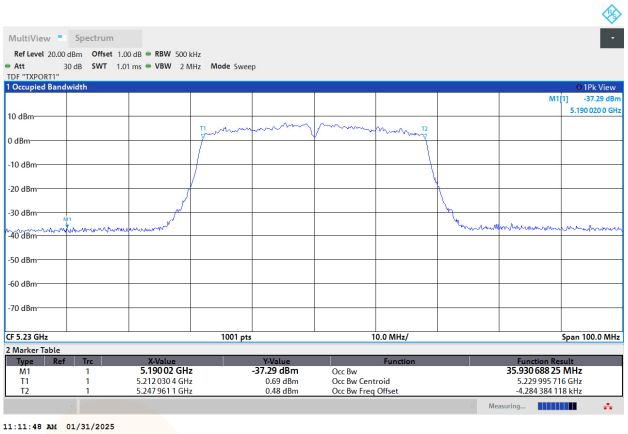
MIMO

UNII 1 / 802.11ac VHT20 / Low ch.	UNII 1 / 802.11ac VHT20 / Mid ch.
	
UNII 1 / 802.11ac VHT20 / High ch.	**-**
	Blank

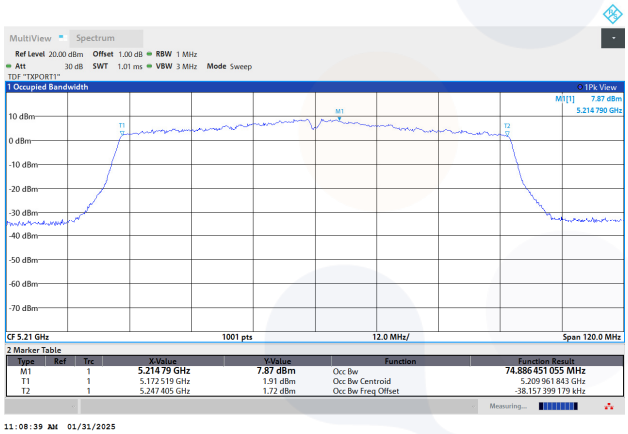
UNII 1 / 802.11ac VHT40 / Low ch.



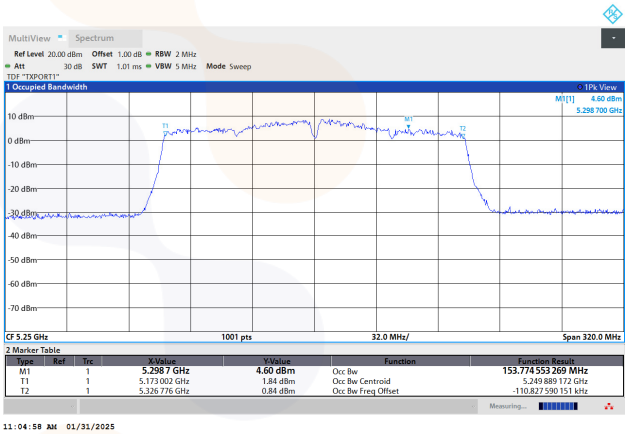
UNII 1 / 802.11ac VHT40 / High ch.



UNII 1 / 802.11ac VHT80 / Mid ch.

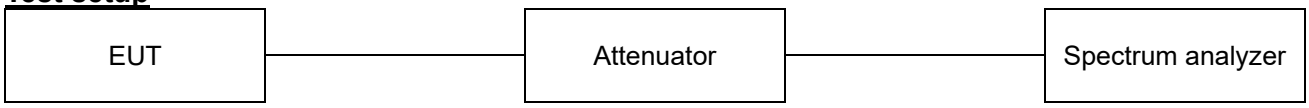


UNII 1&2A / 802.11ac VHT160 / Mid ch.



8.4. 6 dB Bandwidth

Test setup



Limit

According to §15.407(e),

Within the 5.725-5.850 ㎓ and 5.850-5.895 ㎓ bands, the minimum 6 ㏈ bandwidth of U-NII devices shall be at least 500㎑.

Test procedure

ANSI C63.10-2013 Section 6.9.2
KDB 789033 D02 v02r01 - Section C.2
KDB 291074 D02 v01 – 2.11

Test settings

Minimum Emission Bandwidth for the band 5.725−5.85 ㎓ and 5.850–5.895 ㎓.

Section 15.407(e) specifies the minimum 6 ㏈ emission bandwidth of at least 500 ㎑ for the band 5.725−5.85 ㎓ and 5.850-5.895 ㎓ band. The following procedure shall be used for measuring this Bandwidth:

1. Set RBW = 100 ㎑.
2. Set the video bandwidth (VBW) ≥ 3 RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 ㏈ relative to the maximum level measured in the fundamental emission.

Test results

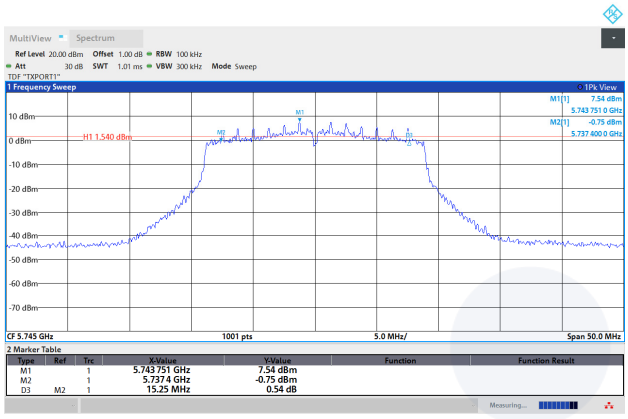
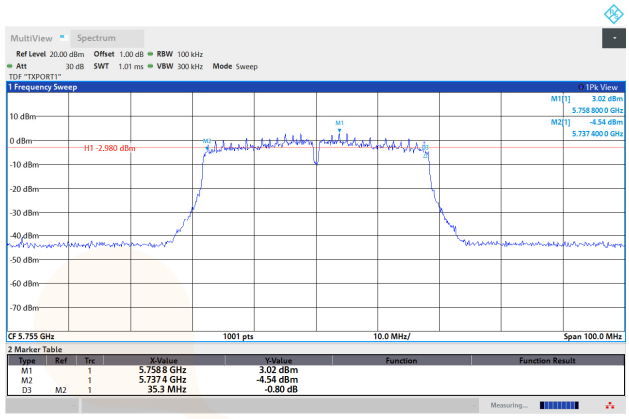
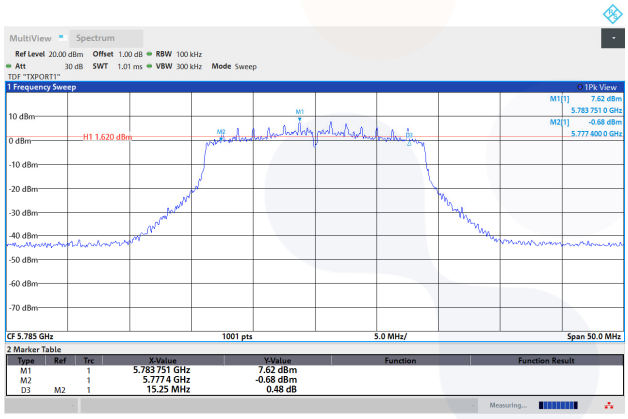
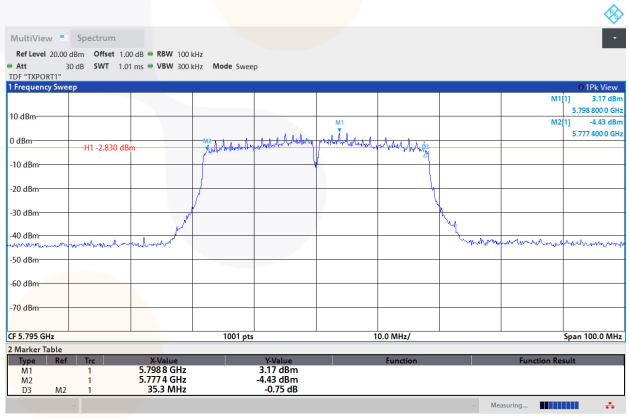
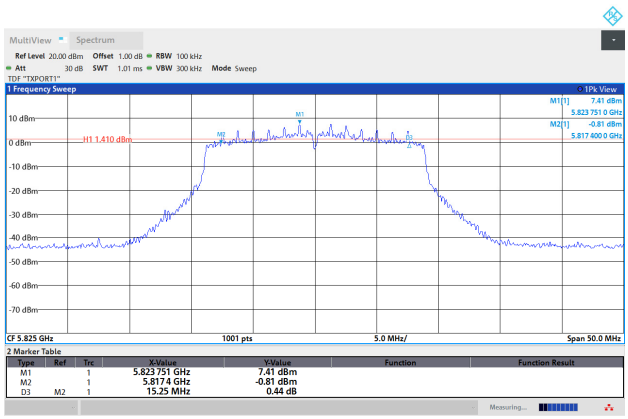
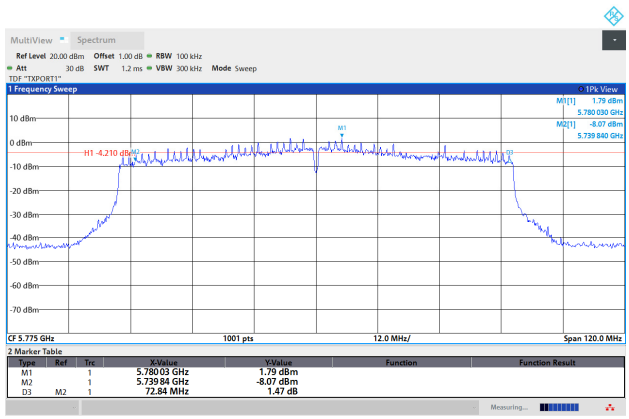
MIMO

Test mode	Band	Frequency (㎒)	6㏈ bandwidth (㎒)		Limit (㎒)
			ANT1	ANT2	
802.11a	UNII 3	5 745	15.25	15.20	0.50
		5 785	15.25	15.20	
		5 825	15.25	15.20	
	UNII 4	5 845	16.00	15.60	
		5 865	15.85	15.45	
		5 885	16.00	15.45	
802.11n HT20	UNII 3	5 745	15.25	15.20	
		5 785	15.25	15.20	
		5 825	15.25	15.20	
	UNII 4	5 845	16.50	16.10	
		5 865	16.35	16.05	
		5 885	16.55	16.10	
802.11n HT40	UNII 3	5 755	35.30	35.30	
		5 795	35.30	35.30	
	UNII 4	5 835	35.80	35.80	
		5 875	35.70	35.70	
802.11ac VHT20	UNII 3	5 745	15.25	15.25	
		5 785	15.25	15.25	
		5 825	15.25	15.25	
	UNII 4	5 845	16.60	16.45	
		5 865	16.10	16.50	
		5 885	16.40	16.45	
802.11ac VHT40	UNII 3	5 755	35.30	35.30	
		5 795	35.30	35.30	
	UNII 4	5 835	35.90	35.60	
		5 875	35.80	35.40	
802.11ac VHT80	UNII 3	5 775	72.84	70.32	
	UNII 4	5 855	71.04	71.88	
802.11ac VHT160	UNII 3&4	5 815	147.84	150.40	

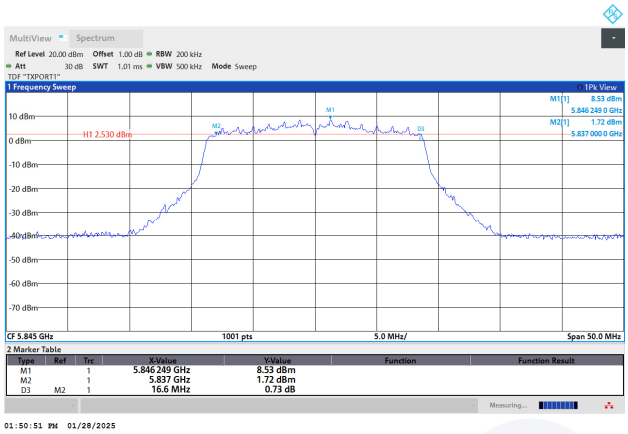
In order to simplify the report, only MIMO ANT2 ac mode test plots are attached

6 dB bandwidth

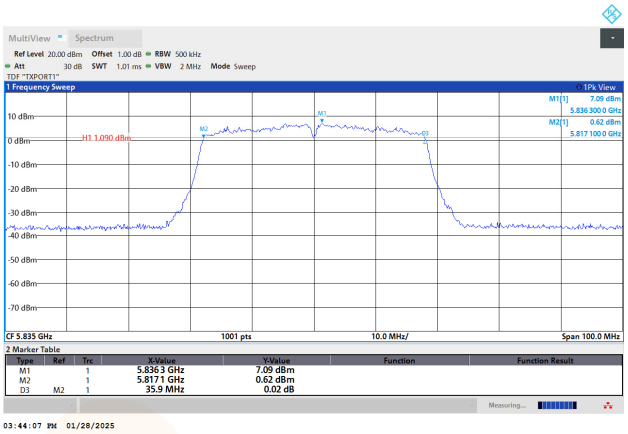
MIMO

UNII 3 / 802.11ac VHT 20 / Low ch.	UNII 3 / 802.11ac VHT40 / Low ch.
	
UNII 3 / 802.11ac VHT 20 / Mid ch.	UNII 3 / 802.11ac VHT40 / High ch.
	
UNII 3 / 802.11ac VHT 20 / High ch.	UNII 3 / 802.11ac VHT80 / Mid ch.
	

UNII 4 / 802.11ac VHT 20 / Low ch.

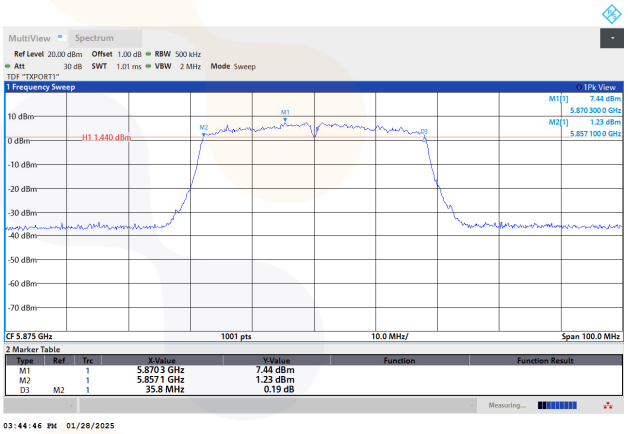


UNII 4 / 802.11ac VHT40 / Low ch.

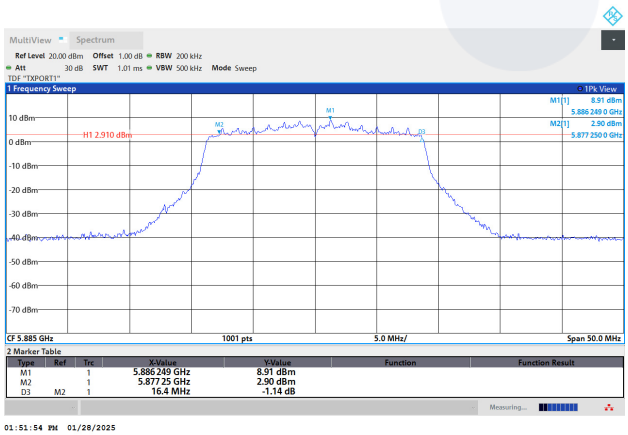


UNII 4 / 802.11ac VHT 20 / Mid ch.

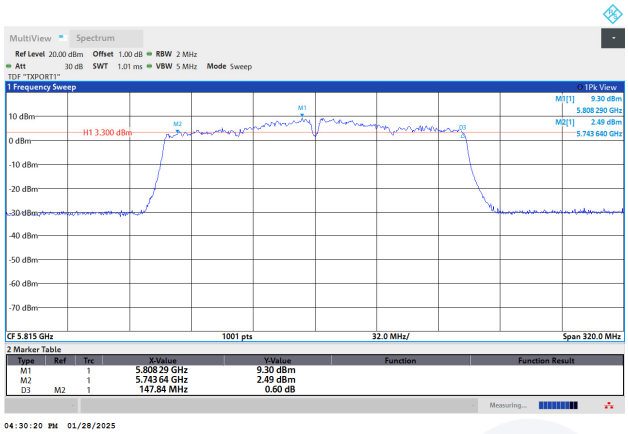
UNII 4 / 802.11ac VHT40 / High ch.



UNII 4 / 802.11ac VHT 20 / High ch.



UNII 4 / 802.11ac VHT80 / Mid ch.

UNII 3&4 / 802.11ac VHT 160 / Mid ch.	-
	Blank

8.5. Straddle channel

26dB bandwidth

MIMO

Test mode	Band	Frequency (MHz)	26dB Bandwidth (MHz)	
			ANT1	ANT2
802.11a	UNII 2C	5 720	14.70	14.50
802.11n HT20			15.15	15.25
802.11ac VHT20			15.20	14.90
802.11a	UNII 3	5 720	4.75	4.55
802.11n HT20			5.05	5.05
802.11ac VHT20			5.25	5.00
802.11n HT40	UNII 2C	5 710	34.80	35.00
802.11ac VHT40			34.90	34.90
802.11n HT40	UNII 3	5 710	5.00	5.20
802.11ac VHT40			5.10	4.50
802.11ac VHT80	UNII 2C	5 690	75.68	75.56
	UNII 3	5 690	5.68	5.32