

## **APPENDIX A – TEST DATA OF CONDUCTED EMISSION**

### Duty Cycle

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)
802.11a	5180	98.54%	0.06
802.11n HT20	5180	97.93%	0.09
802.11n HT40	5190	95.83%	0.18
802.11ac VHT20	5180	97.94%	0.09
802.11ac VHT40	5190	95.88%	0.18
802.11ac VHT80	5210	93.88%	0.27

## Output Power NIII

Mode	Tones/ RUIndex	Freq (MHz)	Ant	Conducted average power output(dBm)	EIRP (dBm)
802.11a	NA	5180	Ant7	17.86	15.66
		5200	Ant7	17.88	15.68
		5240	Ant7	17.83	15.63
802.11n20M		5180	Ant7	17.61	15.41
		5200	Ant7	17.70	15.5
		5240	Ant7	17.62	15.42
802.11n40M		5190	Ant7	16.61	14.41
		5230	Ant7	16.54	14.34
802.11ac20M		5180	Ant7	16.39	14.19
		5200	Ant7	16.32	14.12
		5240	Ant7	16.45	14.25
802.11ac40M		5190	Ant7	16.60	14.4
	5230	Ant7	16.59	14.39	
802.11ac80M	5210	Ant7	16.45	14.25	

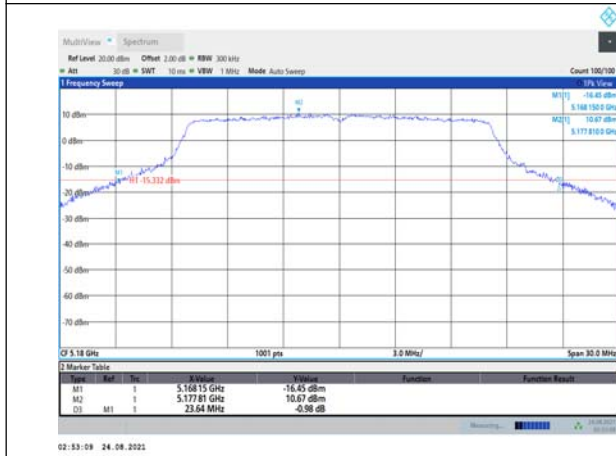
### Emission Bandwidth

Offset 11.5dB = Attenuator 10dB+ Temporary antenna connector loss 0.5dB+ Cable loss 1dB

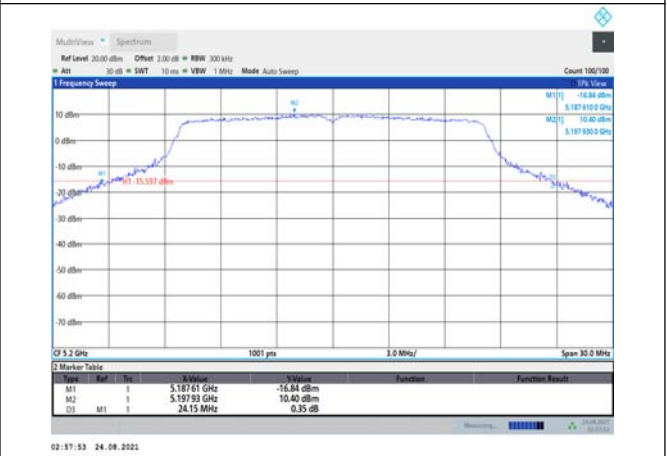
Test Mode:802.11a

Carrier frequency (MHz)	Ant	26dB Bandwidth (MHz)
5180	Ant7	23.640
5200	Ant7	24.150
5240	Ant7	23.640

Test Mode:802.11a Ant7



Test Mode:802.11a Ant7



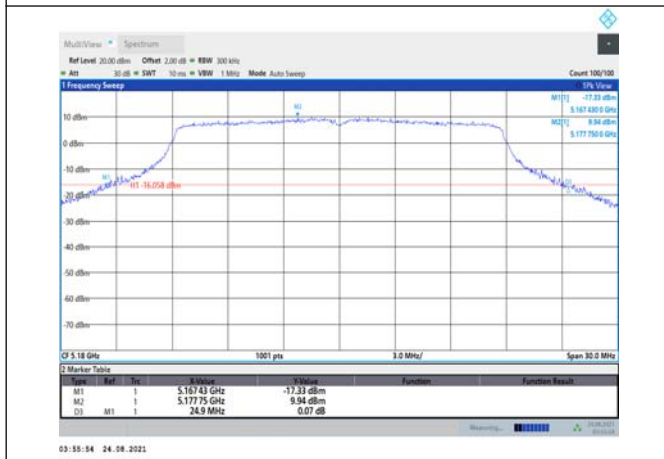
Test Mode:802.11a Ant7



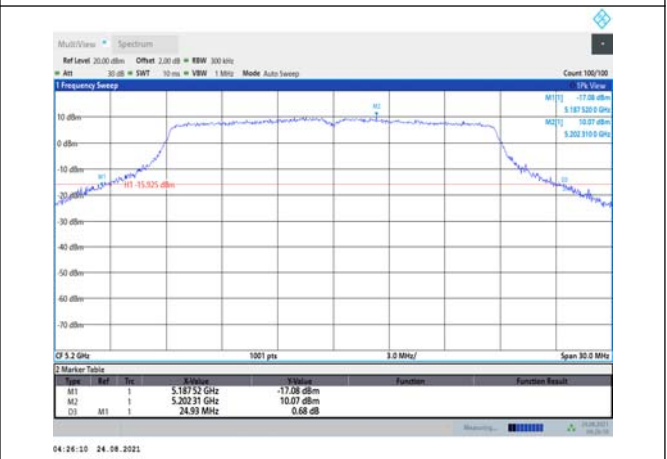
Test Mode:802. 11n HT20

Carrier frequency (MHz)	Ant	26dB Bandwidth (MHz)
5180	Ant7	24.900
5200	Ant7	24.930
5240	Ant7	24.810

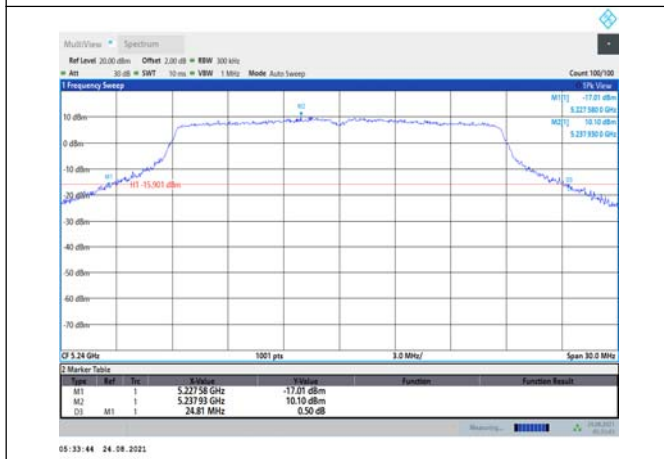
Test Mode:802. 11n HT20 Ant7



Test Mode:802. 11n HT20 Ant7



Test Mode:802. 11n HT20 Ant7



Test Mode:802. 11n HT40

Carrier frequency (MHz)	Ant	26dB Bandwidth (MHz)
5190	Ant7	41.940
5230	Ant7	42.120

Test Mode:802. 11n HT40 Ant7



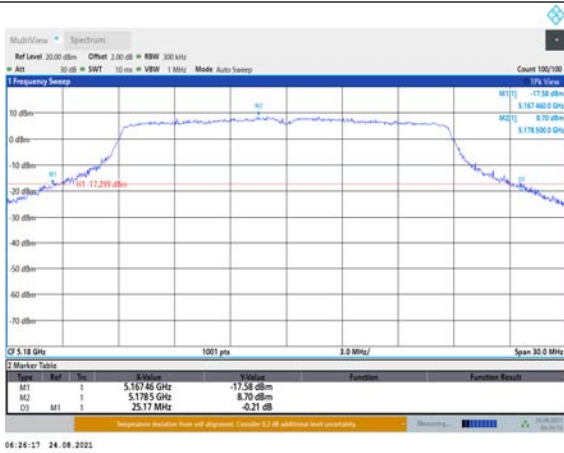
Test Mode:802. 11n HT40 Ant7



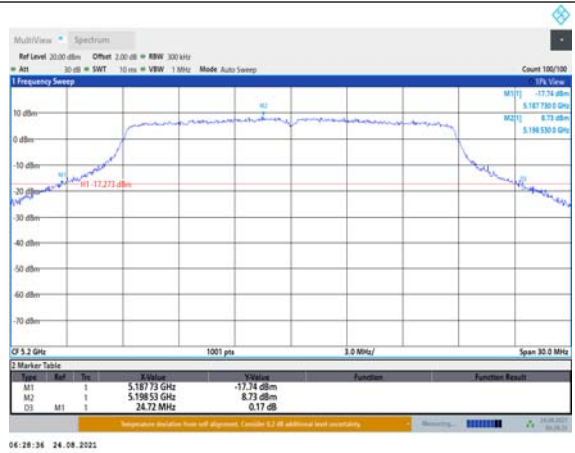
Test Mode:802. 11ac VHT20

Carrier frequency (MHz)	Ant	26dB Bandwidth (MHz)
5180	Ant7	25.170
5200	Ant7	24.720
5240	Ant7	24.990

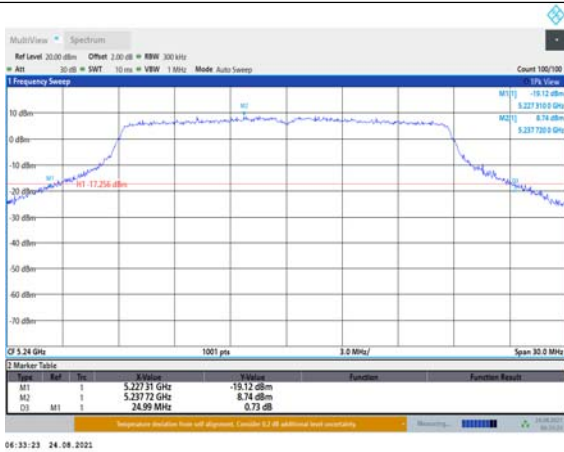
Test Mode:802. 11ac VHT20 Ant7



Test Mode:802. 11ac VHT20 Ant7



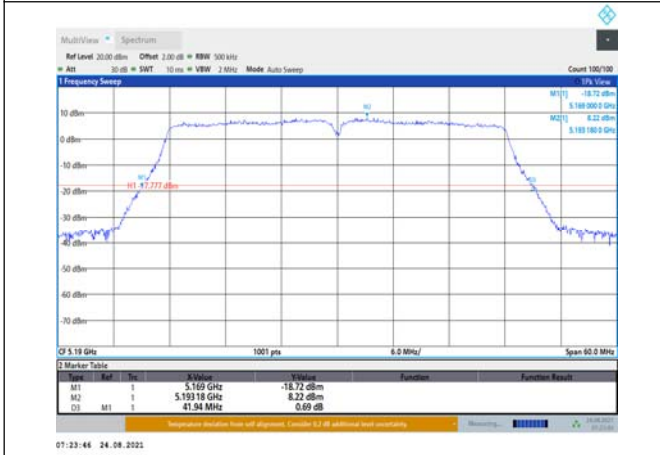
Test Mode:802. 11ac VHT20 Ant7



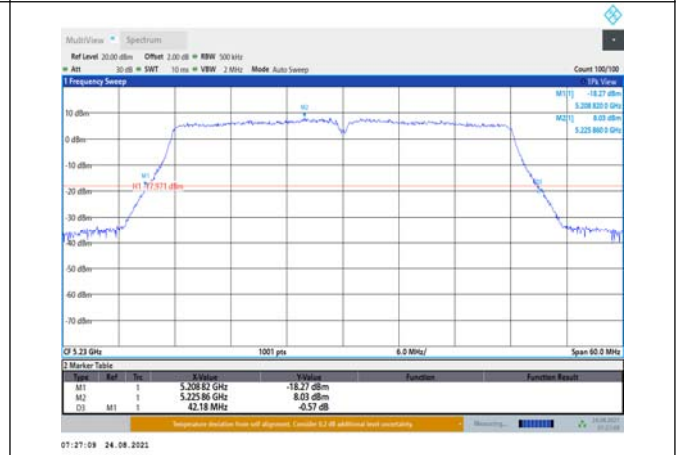
Test Mode:802. 11ac VHT40

Carrier frequency (MHz)	Ant	26dB Bandwidth (MHz)
5190	Ant7	41.940
5230	Ant7	42.180

Test Mode:802. 11ac VHT40 Ant7



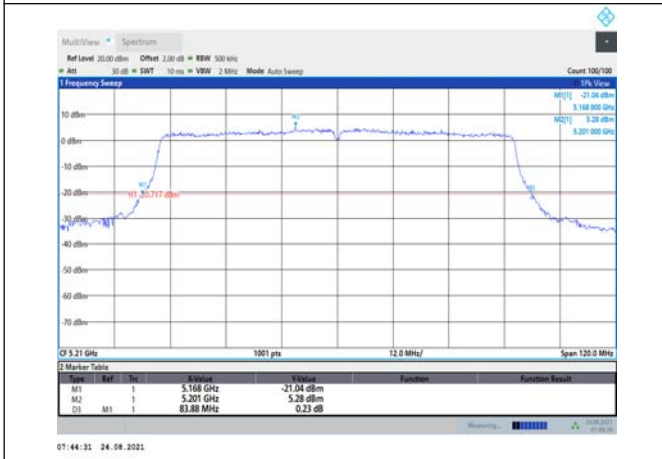
Test Mode:802. 11ac VHT40 Ant7



Test Mode:802. 11ac VHT80

Carrier frequency (MHz)	Ant	26dB Bandwidth (MHz)
5210	Ant7	83.880

Test Mode:802. 11ac VHT80 Ant7





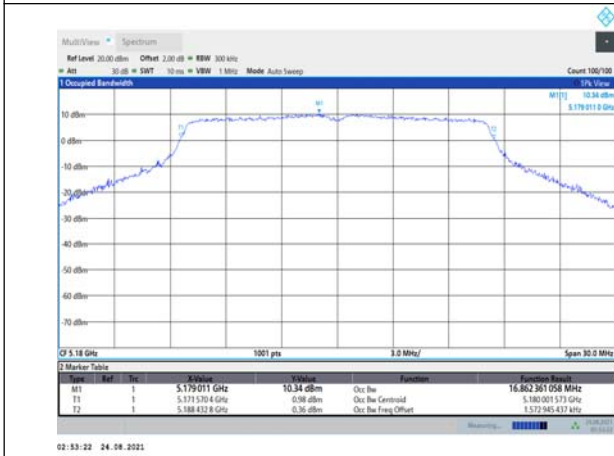
### Occupied Bandwidth

Offset 11.5dB = Attenuator 10dB+ Temporary antenna connector loss 0.5dB+ Cable loss 1dB

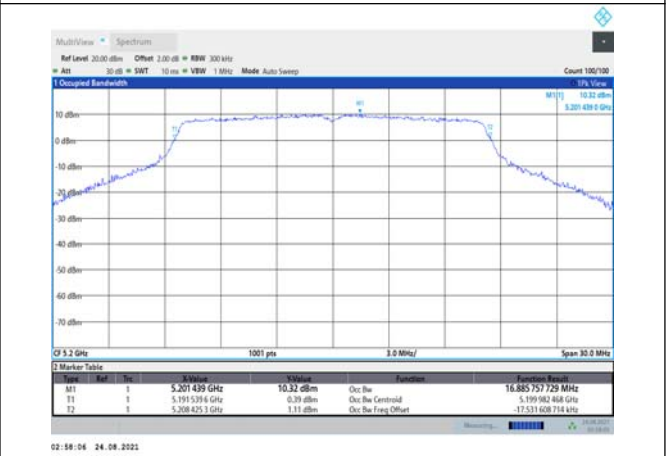
Test Mode:802.11a

Carrier frequency (MHz)	Ant	Occupied Bandwidth (MHz)
5180	Ant7	16.862
5200	Ant7	16.886
5240	Ant7	16.86

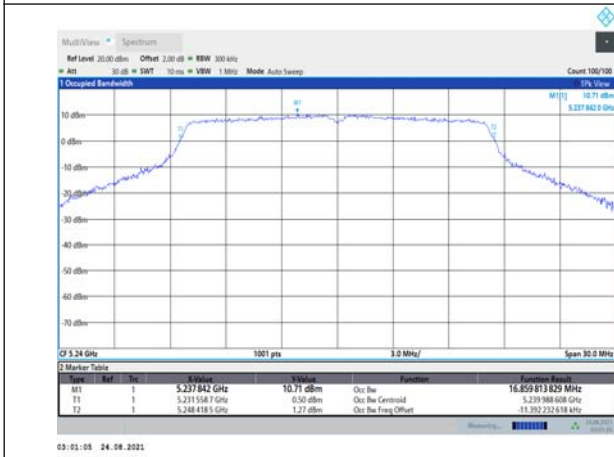
Test Mode:802.11a Ant7



Test Mode:802.11a Ant7



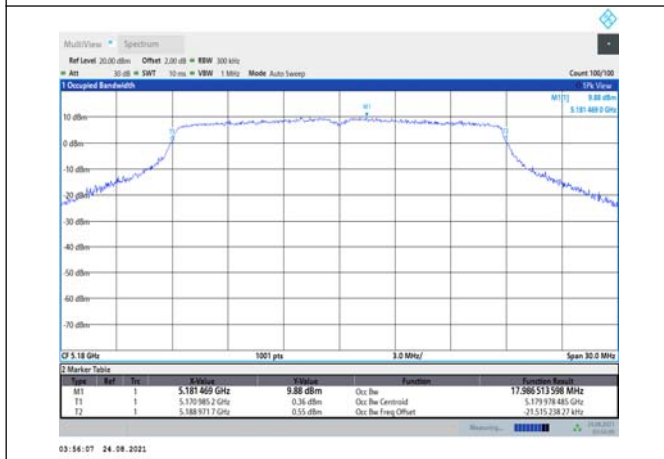
Test Mode:802.11a Ant7



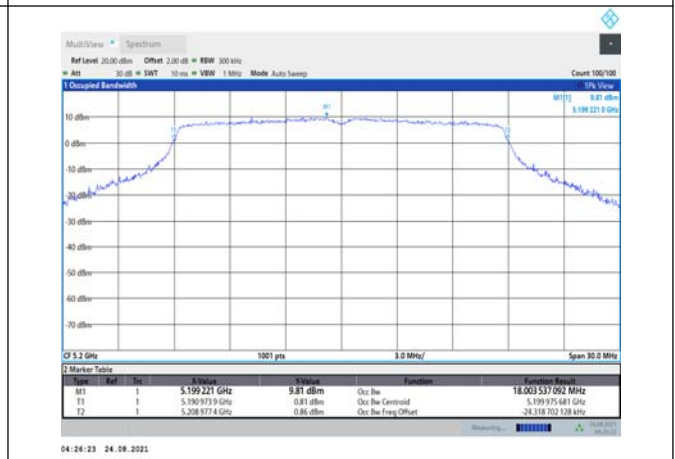
Test Mode:802. 11n HT20

Carrier frequency (MHz)	Ant	Occupied Bandwidth (MHz)
5180	Ant7	17.987
5200	Ant7	18.004
5240	Ant7	18.002

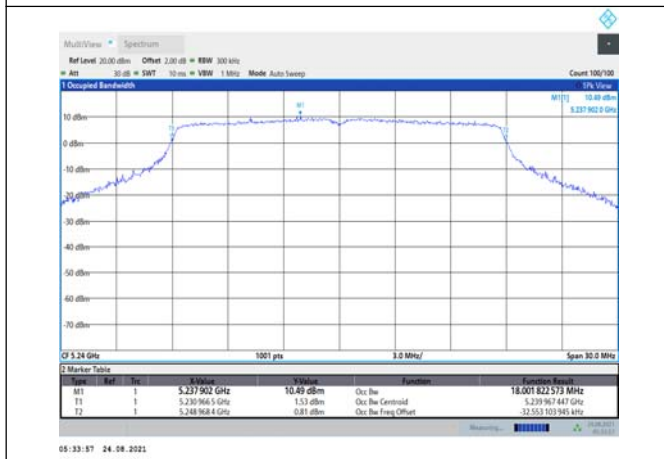
Test Mode:802. 11n HT20 Ant7



Test Mode:802. 11n HT20 Ant7



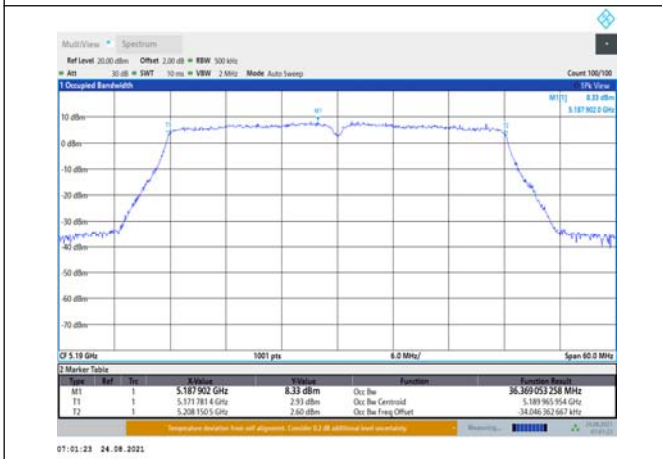
Test Mode:802. 11n HT20 Ant7



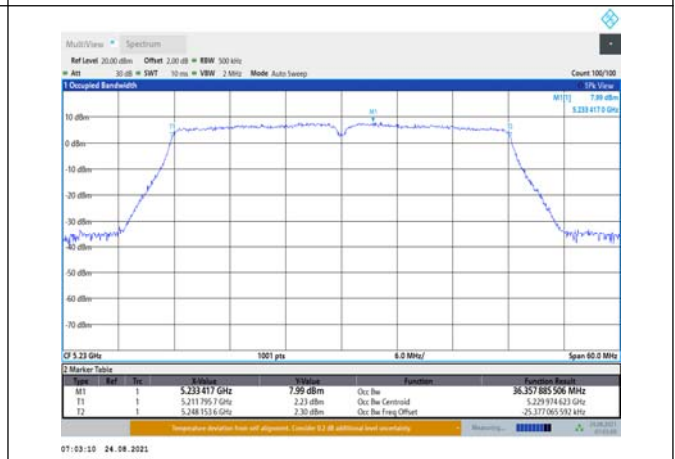
Test Mode:802. 11n HT40

Carrier frequency (MHz)	Ant	Occupied Bandwidth (MHz)
5190	Ant7	36.369
5230	Ant7	36.358

Test Mode:802. 11n HT40 Ant7



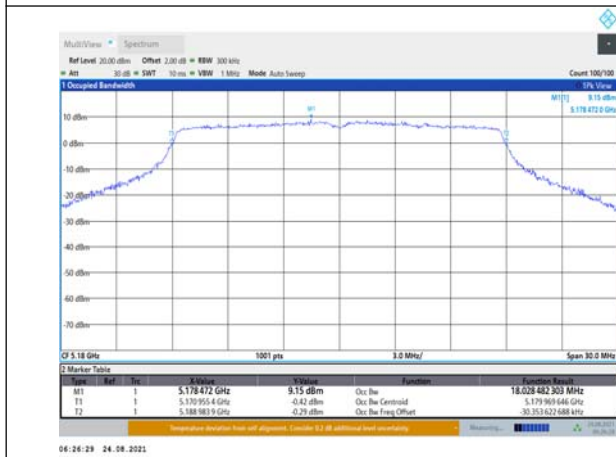
Test Mode:802. 11n HT40 Ant7



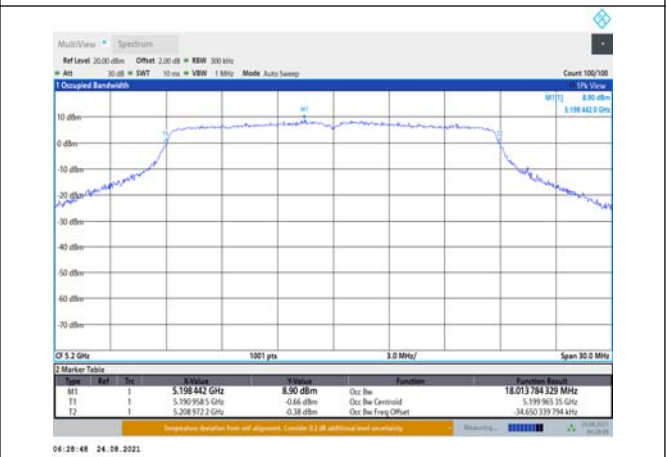
Test Mode:802. 11ac VHT20

Carrier frequency (MHz)	Ant	Occupied Bandwidth (MHz)
5180	Ant7	18.028
5200	Ant7	18.014
5240	Ant7	18.005

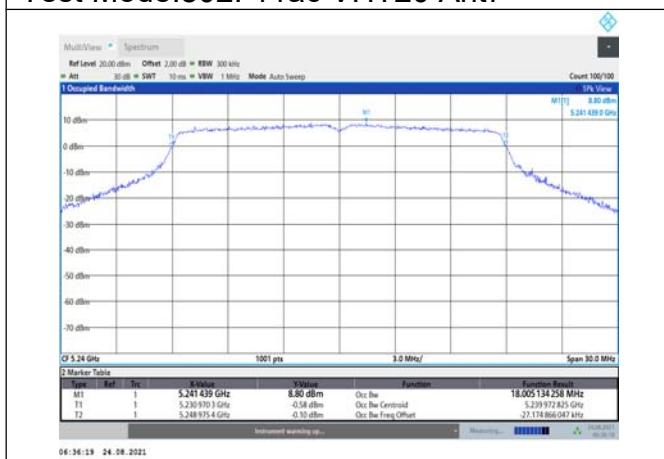
Test Mode:802. 11ac VHT20 Ant7



Test Mode:802. 11ac VHT20 Ant7



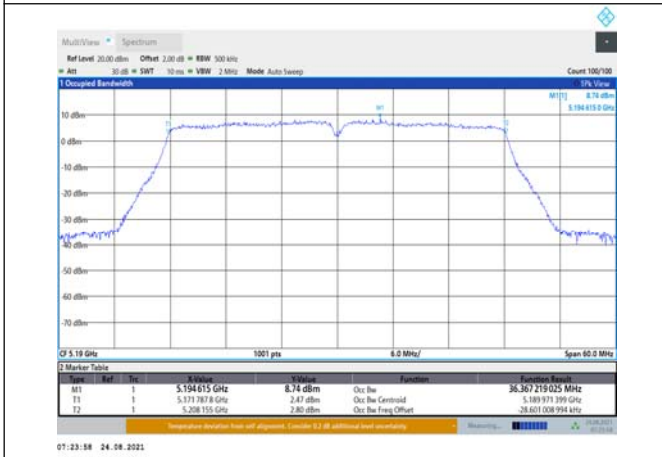
Test Mode:802. 11ac VHT20 Ant7



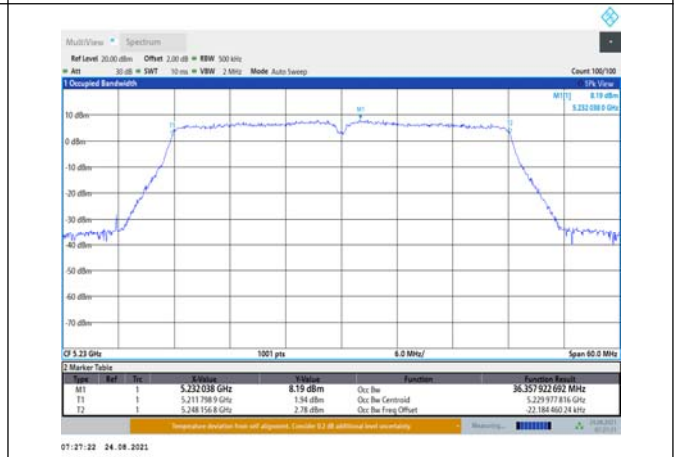
Test Mode:802. 11ac VHT40

Carrier frequency (MHz)	Ant	Occupied Bandwidth (MHz)
5190	Ant7	36.367
5230	Ant7	36.358

Test Mode:802. 11ac VHT40 Ant7



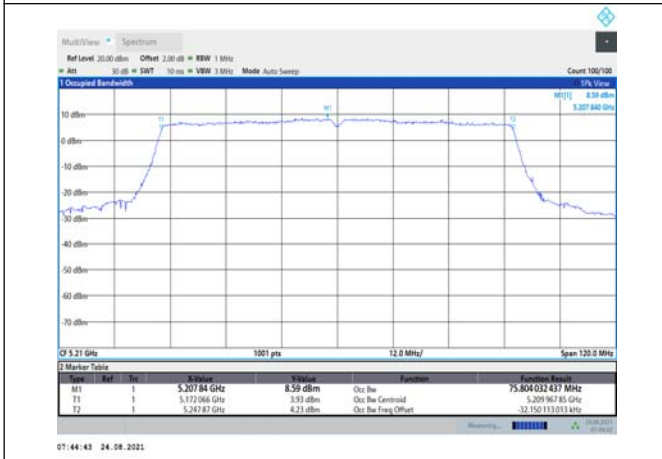
Test Mode:802. 11ac VHT40 Ant7



Test Mode:802. 11ac VHT80

Carrier frequency (MHz)	Ant	Occupied Bandwidth (MHz)
5210	Ant7	75.804

Test Mode:802. 11ac VHT80 Ant7



### Transmitter Power Spectral Density

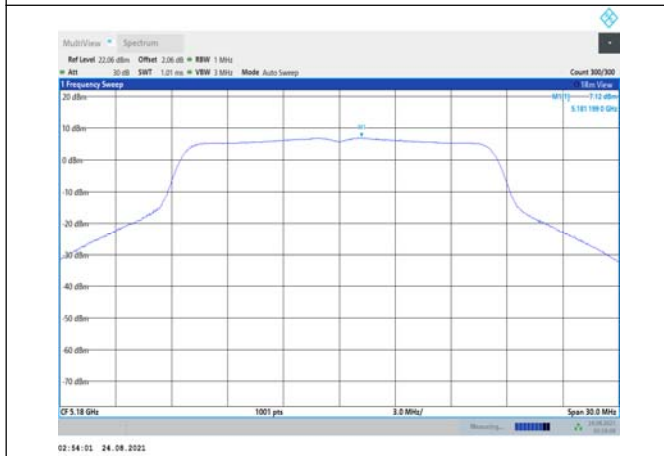
Offset 11.5dB = Attenuator 10dB+ Temporary antenna connector loss 0.5dB+ Cable loss 1dB

The Correction Factor is compensated in the graph.

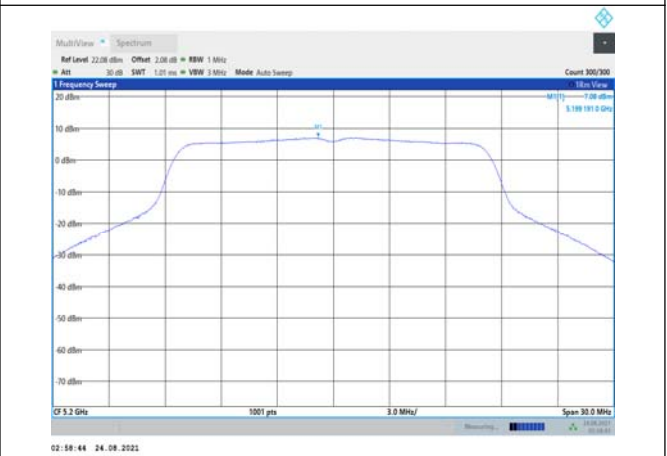
Test Mode:802.11a

Carrier frequency (MHz)	Correction Factor(dB)	Ant	Power Density (dBm)
5180	0.06	Ant7	7.12
5200		Ant7	7.08
5240		Ant7	7

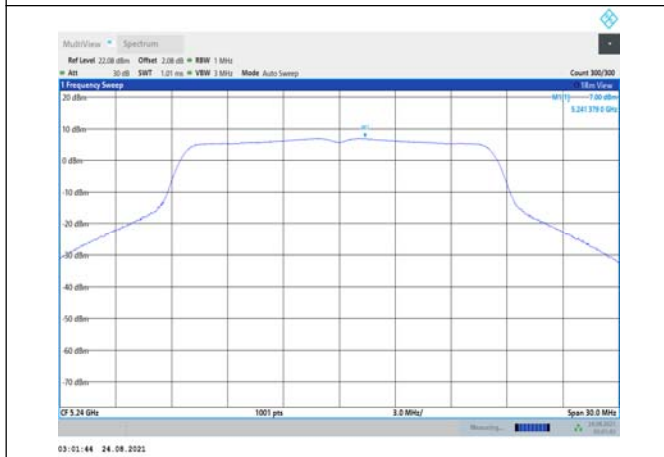
Test Mode:802.11a Ant7



Test Mode:802.11a Ant7



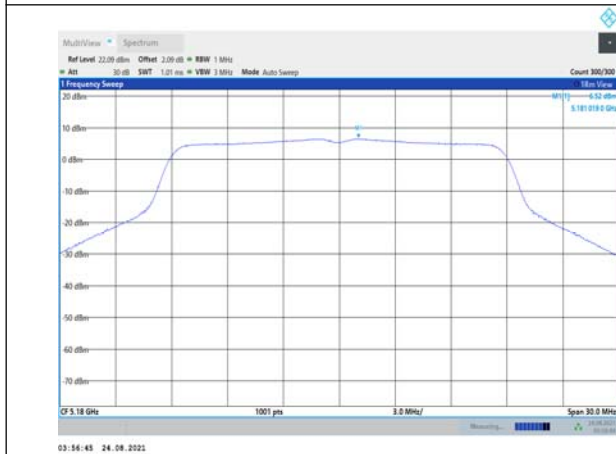
Test Mode:802.11a Ant7



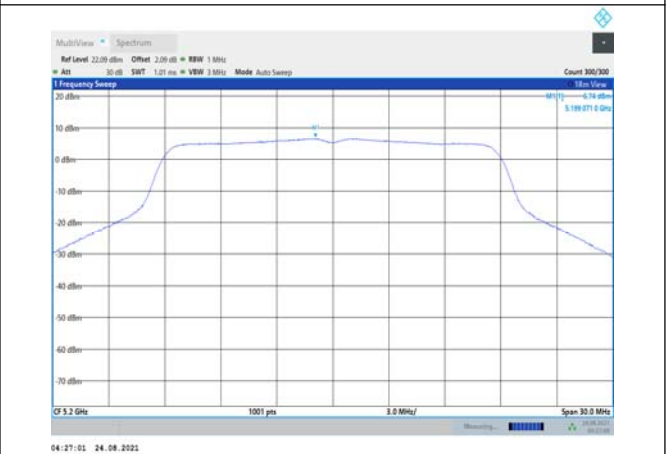
Test Mode:802. 11n HT20

Carrier frequency (MHz)	Correction Factor(dB)	Ant	Power Density (dBm)
5180	0.09	Ant7	6.52
5200		Ant7	6.74
5240		Ant7	6.62

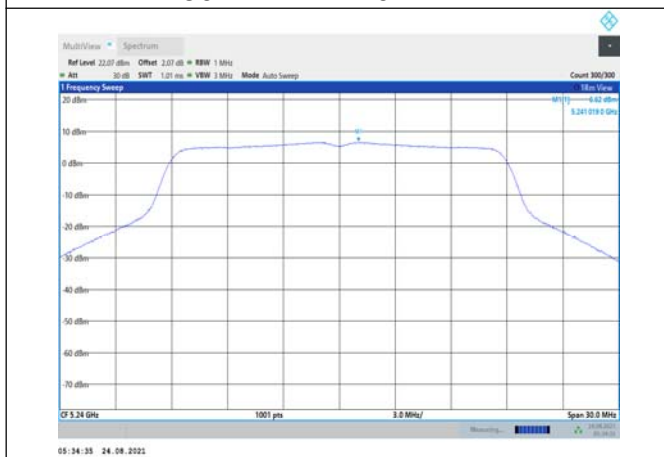
Test Mode:802. 11n HT20 Ant7



Test Mode:802. 11n HT20 Ant7



Test Mode:802. 11n HT20 Ant7

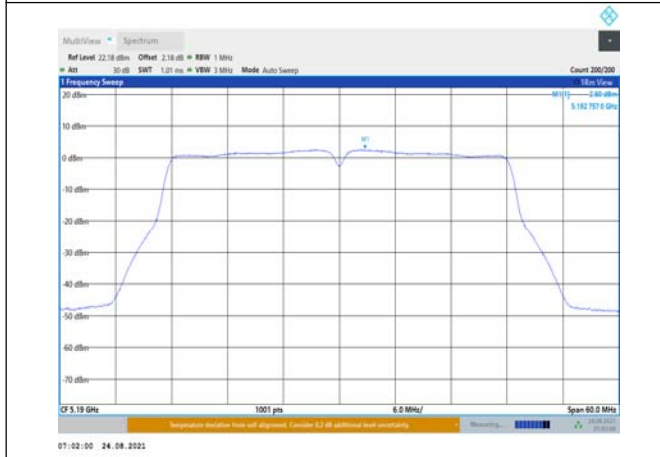




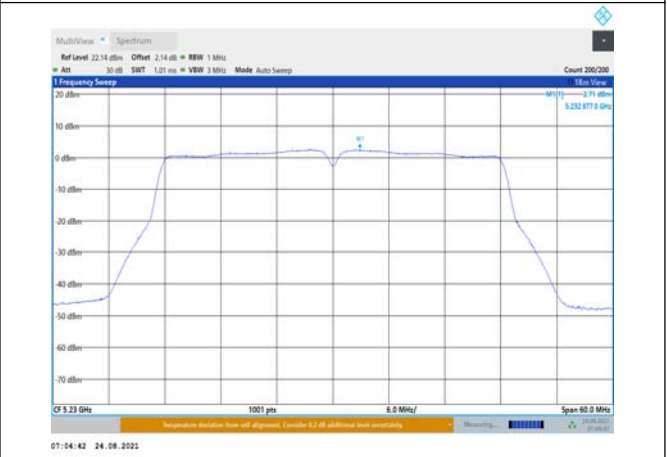
Test Mode:802. 11n HT40

Carrier frequency (MHz)	Correction Factor(dB)	Ant	Power Density (dBm)
5190	0.18	Ant7	2.6
5230		Ant7	2.71

Test Mode:802. 11n HT40 Ant7



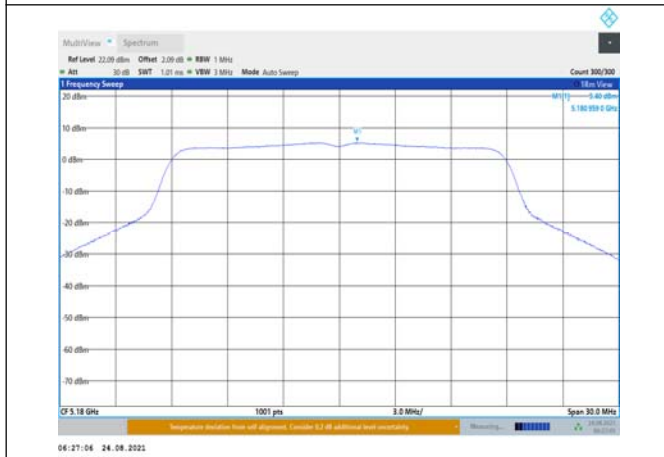
Test Mode:802. 11n HT40 Ant7



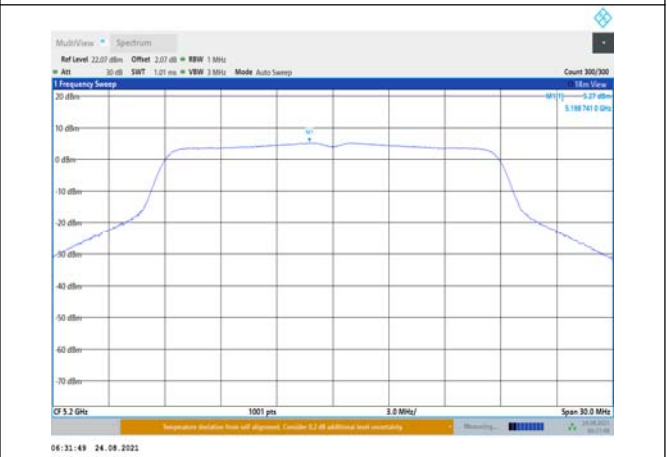
Test Mode:802. 11ac VHT20

Carrier frequency (MHz)	Correction Factor(dB)	Ant	Power Density (dBm)
5180	0.09	Ant7	5.4
5200		Ant7	5.27
5240		Ant7	5.39

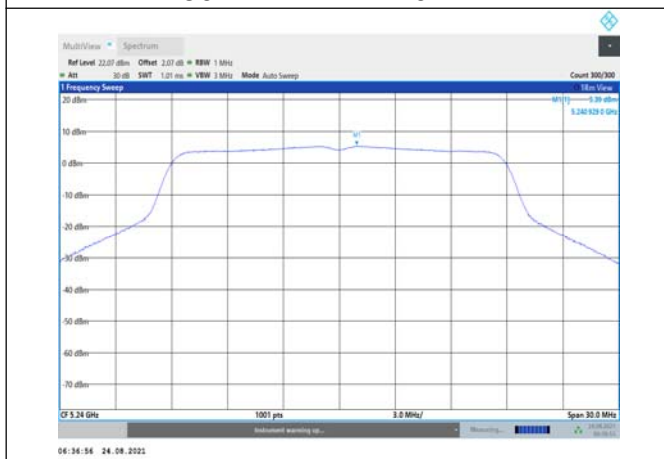
Test Mode:802. 11ac VHT20 Ant7



Test Mode:802. 11ac VHT20 Ant7



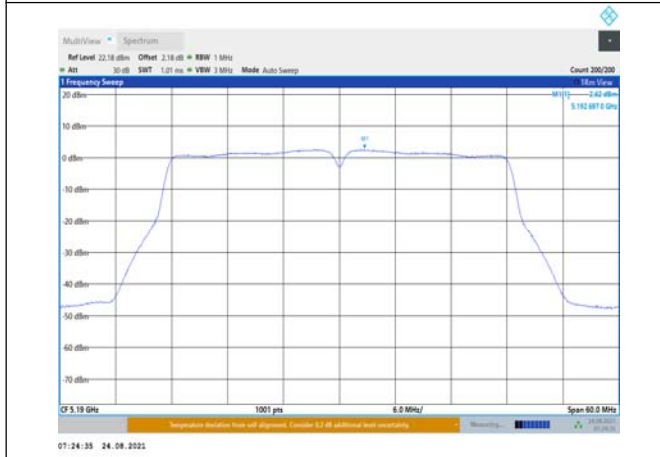
Test Mode:802. 11ac VHT20 Ant7



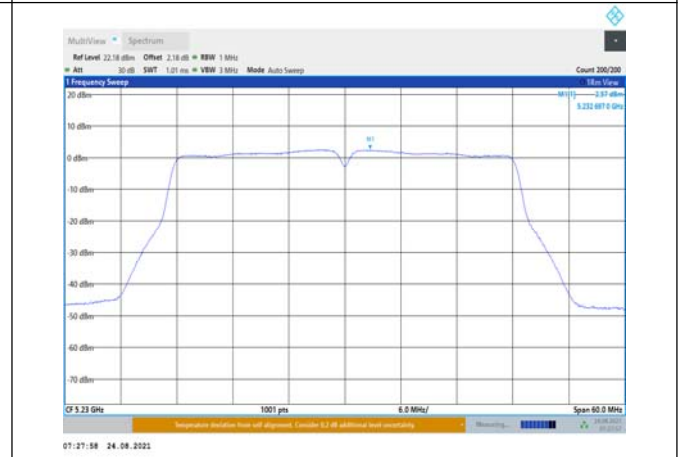
Test Mode:802. 11ac VHT40

Carrier frequency (MHz)	Correction Factor(dB)	Ant	Power Density (dBm)
5190	0.18	Ant7	2.62
5230		Ant7	2.57

Test Mode:802. 11ac VHT40 Ant7



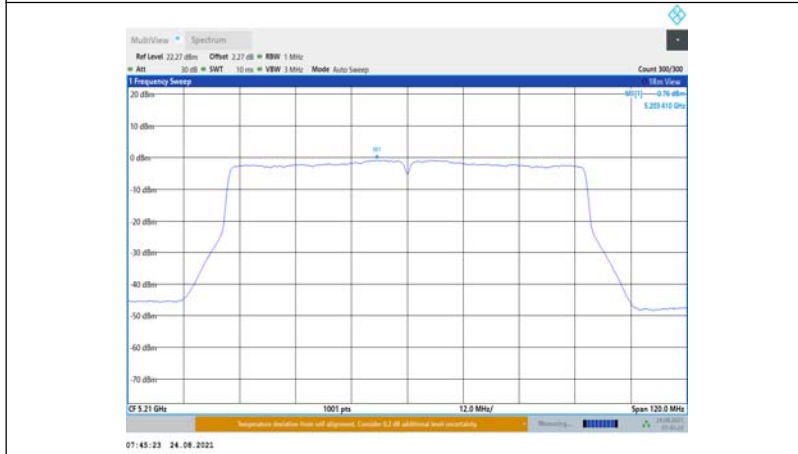
Test Mode:802. 11ac VHT40 Ant7



Test Mode:802. 11ac VHT80

Carrier frequency (MHz)	Correction Factor(dB)	Ant	Power Density (dBm)
5210	0.27	Ant7	-0.76

Test Mode:802. 11ac VHT80 Ant7



## Frequency Stability

### NII1

Mode	Data Rate	Ant	Center Frequency (MHz)	Deviation Frequency (Hz)	Frequency Stability (ppm)	Voltage (V)	Temperature (°C)
802.11a	6Mbps	Ant7	5180	-15000	-2.896	HV	+20
			5180	-15000	-2.896	LV	+20
			5180	-15000	-2.896	NV	-30
			5180	0	0.000	NV	-20
			5180	-15000	-2.896	NV	-10
			5180	-15000	-2.896	NV	0
			5180	-15000	-2.896	NV	+10
			5180	-15000	-2.896	NV	+20
			5180	-15000	-2.896	NV	+30
			5180	-15000	-2.896	NV	+40
			5180	-15000	-2.896	NV	+50