APPENDIX A – TEST DATA OF CONDUCTED EMISSION

ANT 0

Offset 28.6dB = Attenuator+ Temporary antenna connector loss + Cable loss

Duty Cycle

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)
802.11a	5260	99.67%	0
802. 11n HT20	5260	99.62%	0
802. 11n HT40	5270	99.39%	0
802. 11ac VHT20	5260	99.56%	0
802. 11ac VHT40	5270	99.42%	0
802. 11ac VHT80	5290	99.20%	0

Output Power

NII2A

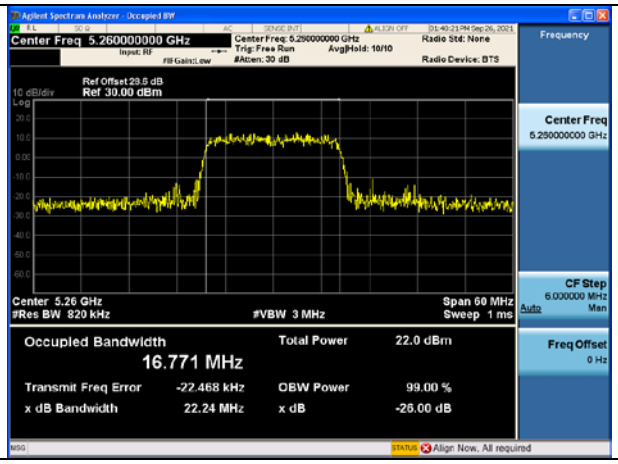
Mode	Tones/ RUIndex	Freq (MHz)	Chain	Conducted average power output(dBm)	EIRP (dBm)
802.11a	NA	5260	Chain0	16.93	17.23
		5280	Chain0	17.09	17.39
		5320	Chain0	17.47	17.77
802.11n20M		5260	Chain0	16.88	17.18
		5280	Chain0	16.81	17.11
		5320	Chain0	17.27	17.57
802.11n40M		5270	Chain0	15.96	16.26
		5310	Chain0	16.32	16.62
802.11ac20M		5260	Chain0	16.80	17.10
		5280	Chain0	16.86	17.16
		5320	Chain0	17.44	17.74
802.11ac40M		5270	Chain0	16.05	16.35
		5310	Chain0	16.43	16.73
802.11ac80M		5290	Chain0	14.71	15.01

Emission Bandwidth

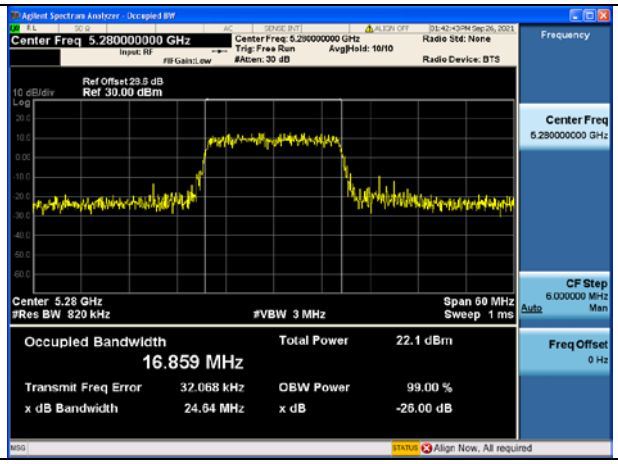
Test Mode:802.11a

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5260	Chain0	22.24
5280	Chain0	24.64
5320	Chain0	24.63

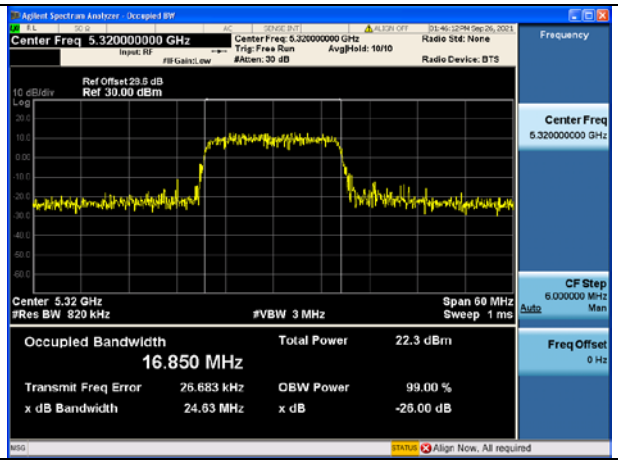
Test Mode:802.11a Chain0



Test Mode:802.11a Chain0

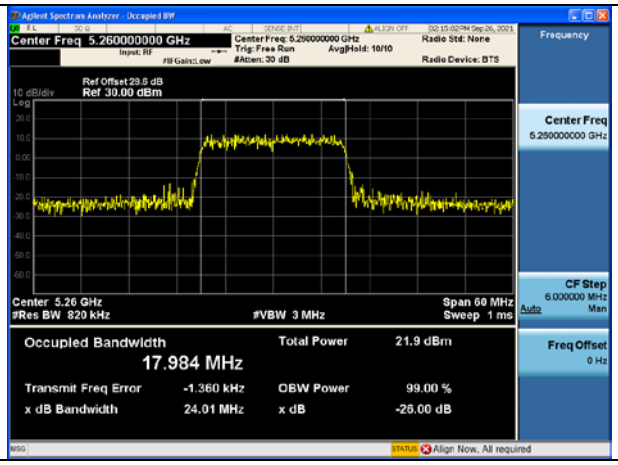
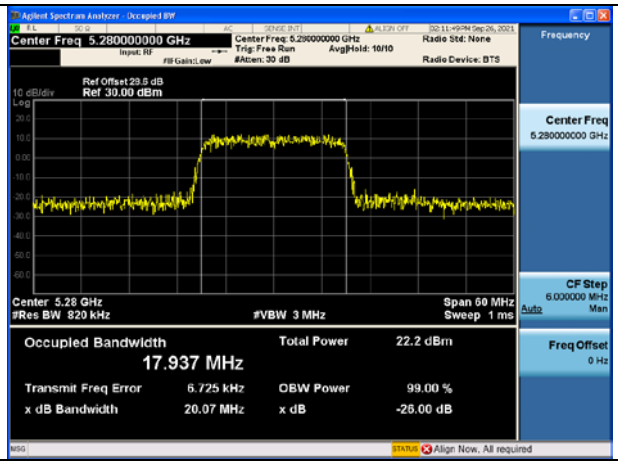
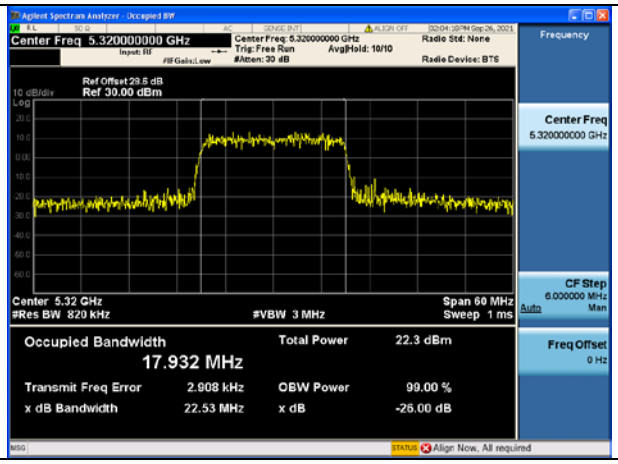


Test Mode:802.11a Chain0



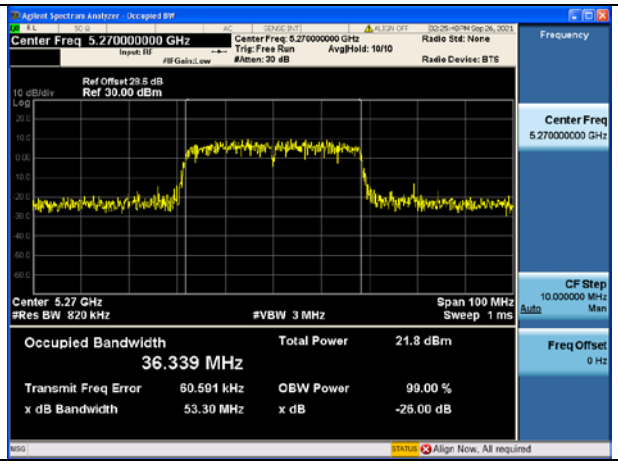
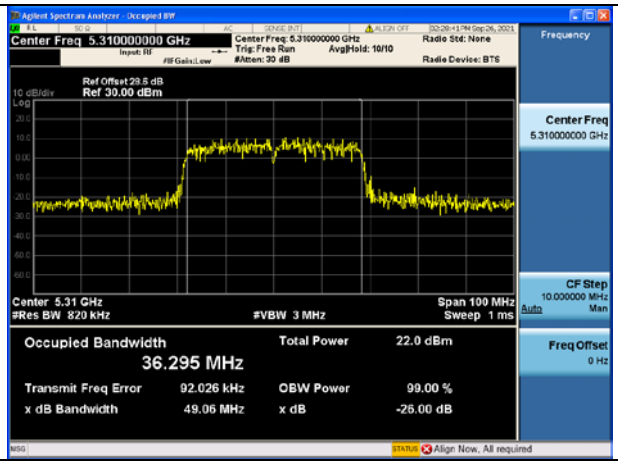
Test Mode:802. 11n HT20

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5260	Chain0	24.01
5280	Chain0	20.07
5320	Chain0	22.53

Test Mode:802. 11n HT20 Chain0	Test Mode:802. 11n HT20 Chain0
	
Test Mode:802. 11n HT20 Chain0	
	

Test Mode:802. 11n HT40

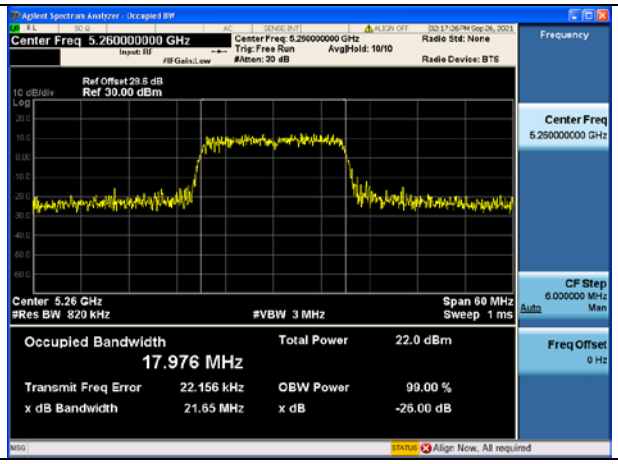
Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5270	Chain0	53.30
5310	Chain0	49.06

Test Mode:802. 11n HT40 Chain0	Test Mode:802. 11n HT40 Chain0
	

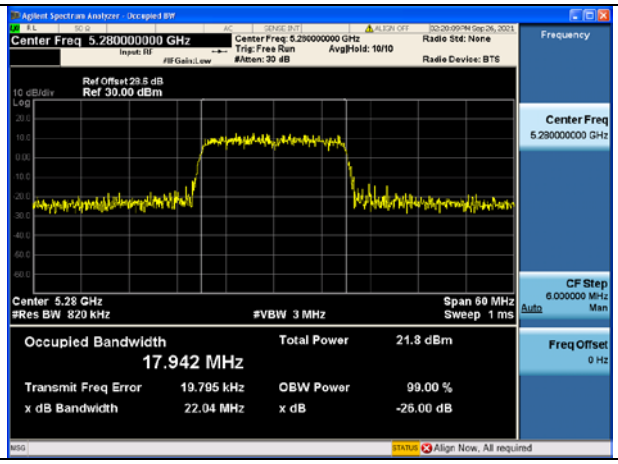
Test Mode:802. 11ac VHT20

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5260	Chain0	21.65
5280	Chain0	22.04
5320	Chain0	23.95

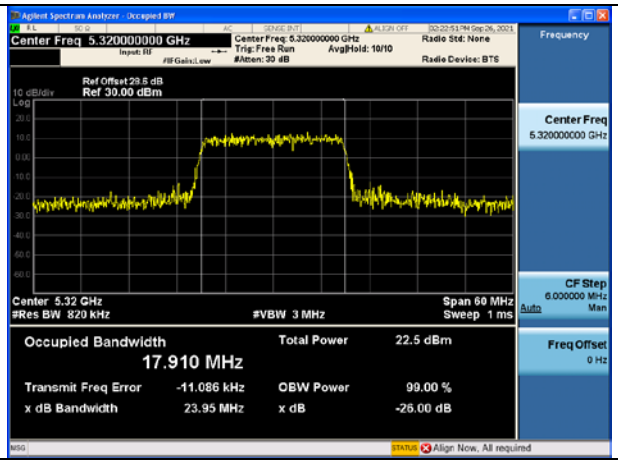
Test Mode:802. 11ac VHT20 Chain0



Test Mode:802. 11ac VHT20 Chain0

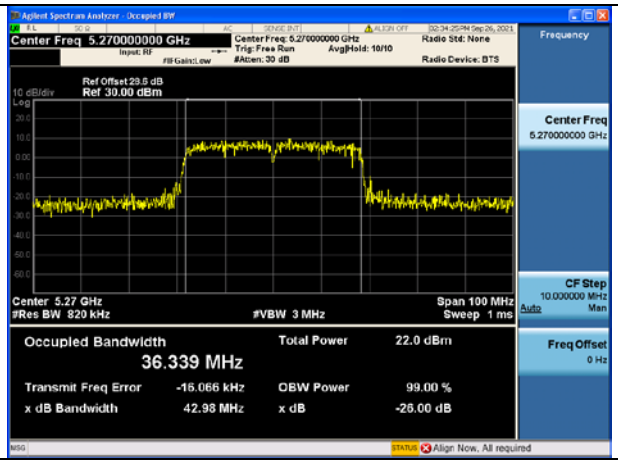
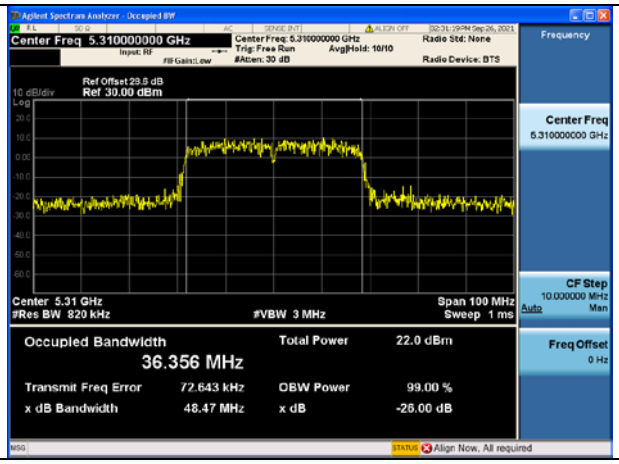


Test Mode:802. 11ac VHT20 Chain0



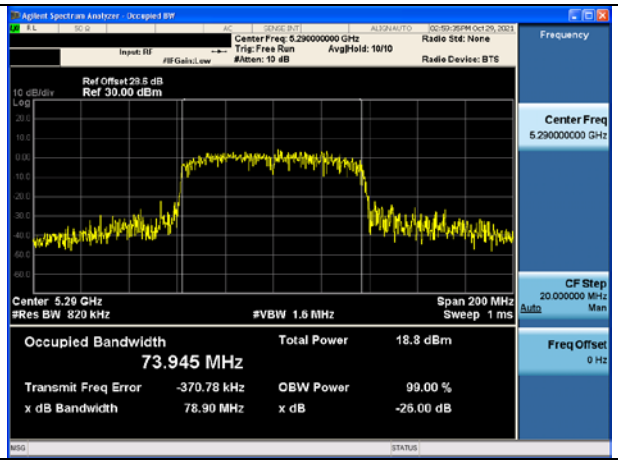
Test Mode:802. 11ac VHT40

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5270	Chain0	42.98
5310	Chain0	48.47

Test Mode:802. 11ac VHT40 Chain0	Test Mode:802. 11ac VHT40 Chain0
	

Test Mode:802. 11ac VHT80

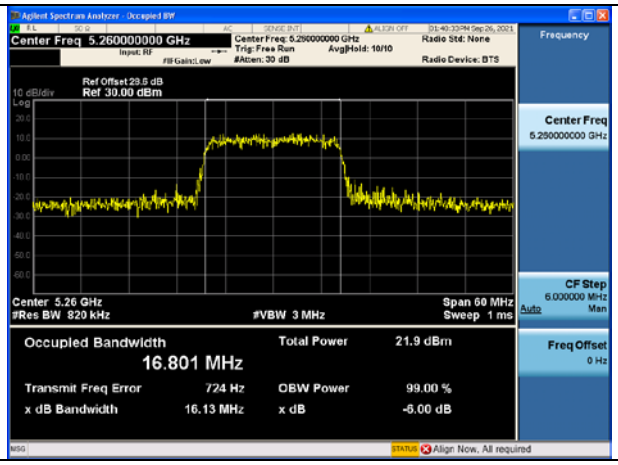
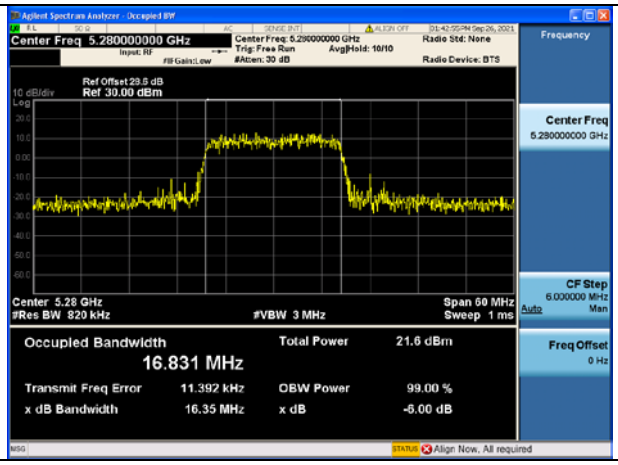
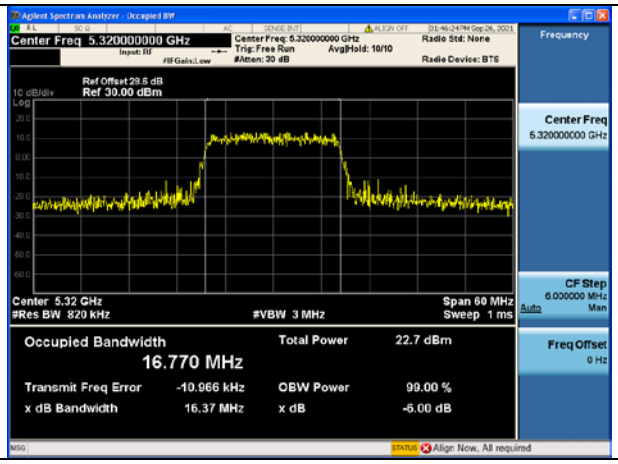
Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5290	Chain0	78.90

Test Mode:802. 11ac VHT80 Chain0	
	

Occupied Bandwidth

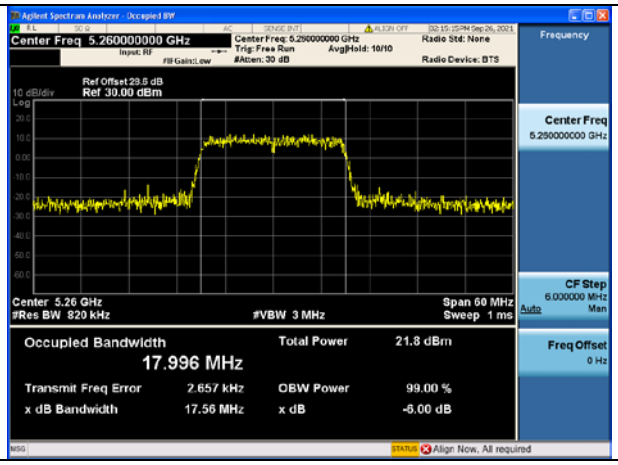
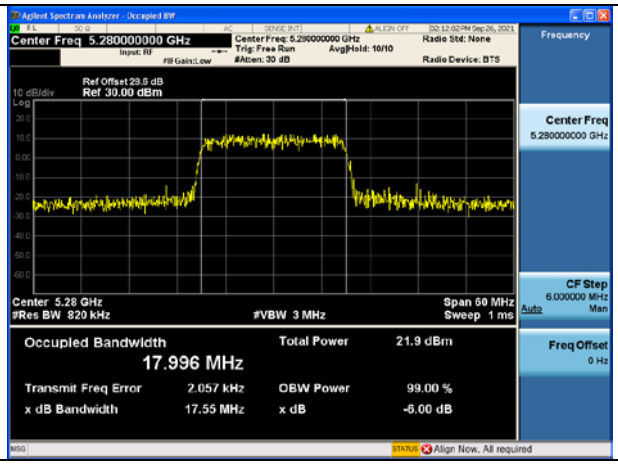
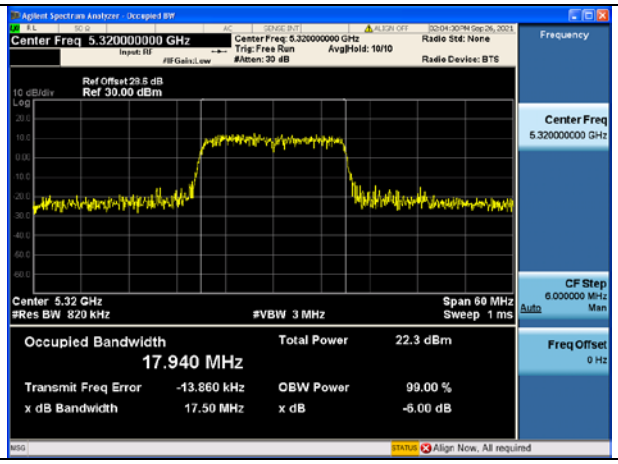
Test Mode:802.11a

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5260	Chain0	16.801
5280	Chain0	16.831
5320	Chain0	16.770

Test Mode:802.11a Chain0	Test Mode:802.11a Chain0
	
Test Mode:802.11a Chain0	
	

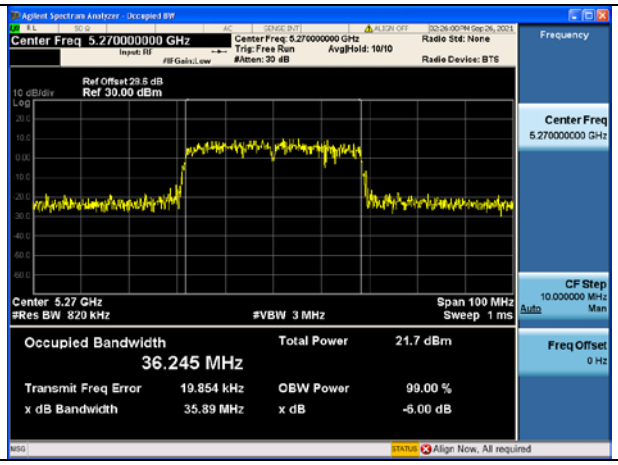
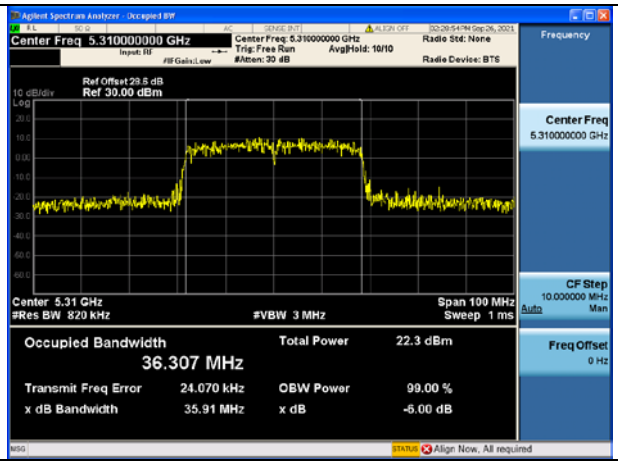
Test Mode:802. 11n HT20

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5260	Chain0	17.996
5280	Chain0	17.996
5320	Chain0	17.940

Test Mode:802. 11n HT20 Chain0	Test Mode:802. 11n HT20 Chain0
	
Test Mode:802. 11n HT20 Chain0	
	

Test Mode:802. 11n HT40

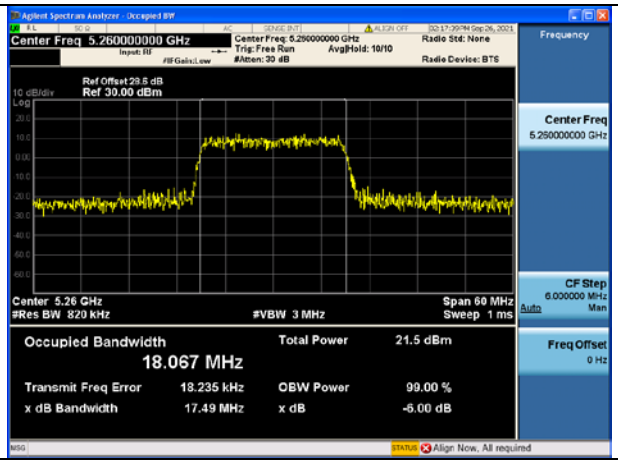
Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5270	Chain0	36.245
5310	Chain0	36.307

Test Mode:802. 11n HT40 Chain0	Test Mode:802. 11n HT40 Chain0
	

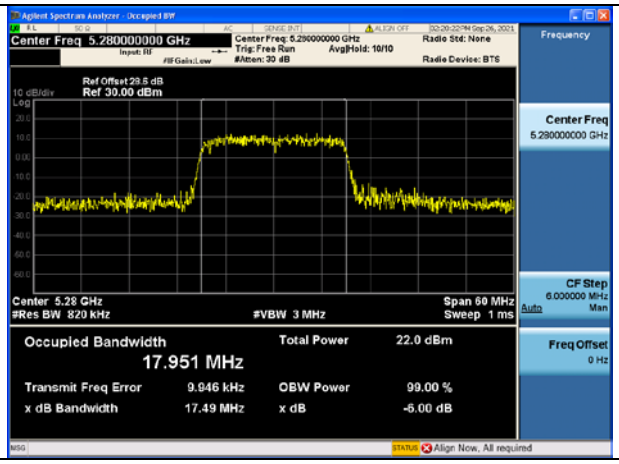
Test Mode:802. 11ac VHT20

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5260	Chain0	18.067
5280	Chain0	17.951
5320	Chain0	17.957

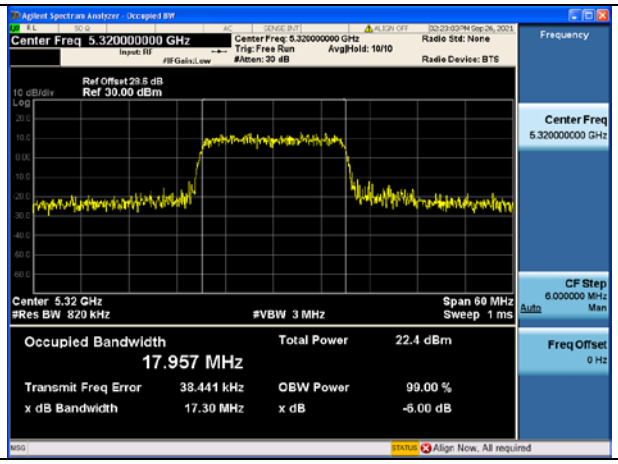
Test Mode:802. 11ac VHT20 Chain0



Test Mode:802. 11ac VHT20 Chain0

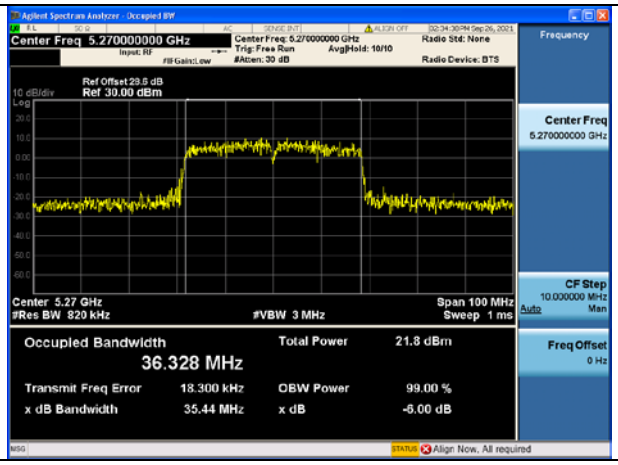
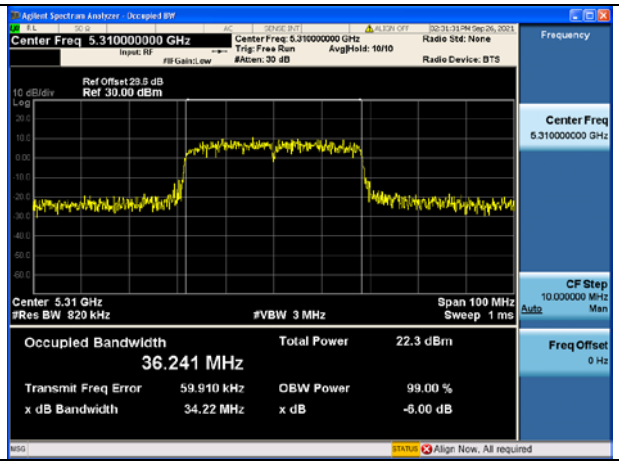


Test Mode:802. 11ac VHT20 Chain0



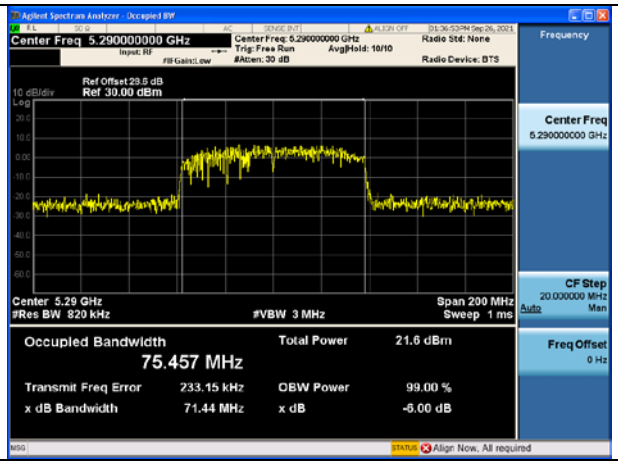
Test Mode:802. 11ac VHT40

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5270	Chain0	36.328
5310	Chain0	36.241

Test Mode:802. 11ac VHT40 Chain0	Test Mode:802. 11ac VHT40 Chain0
	

Test Mode:802. 11ac VHT80

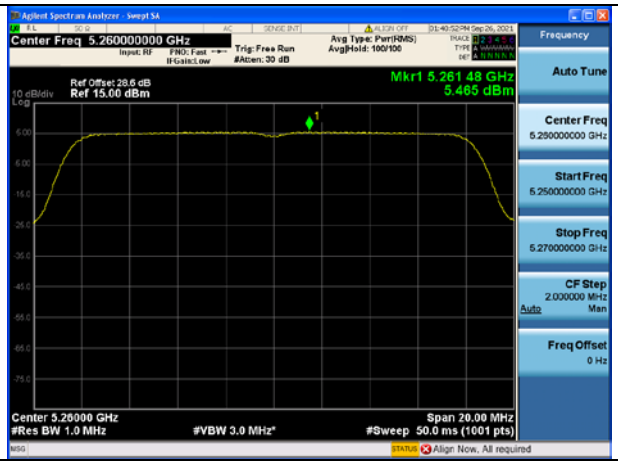
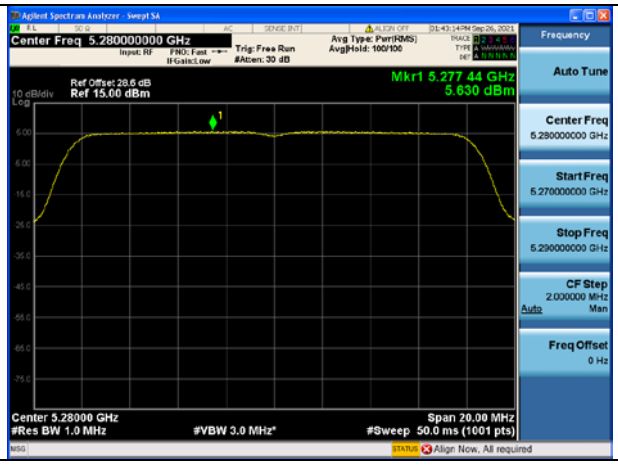
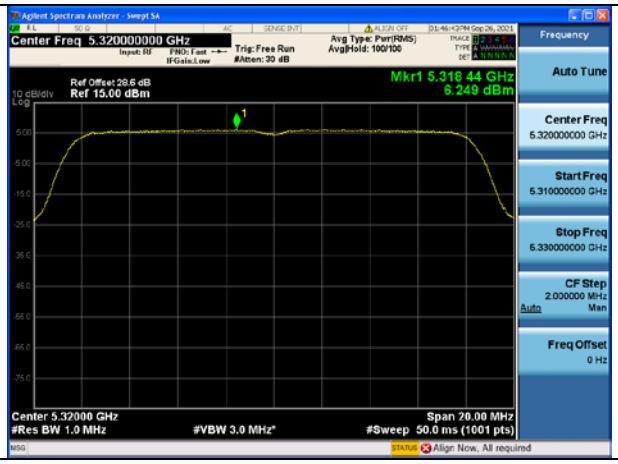
Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5290	Chain0	75.457

Test Mode:802. 11ac VHT80 Chain0	
	

Transmitter Power Spectral Density

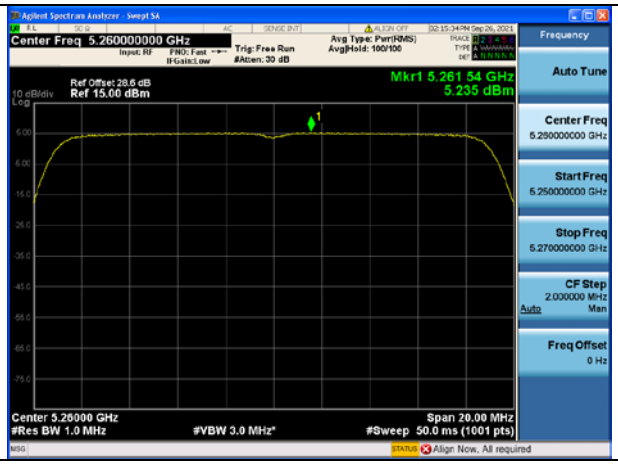
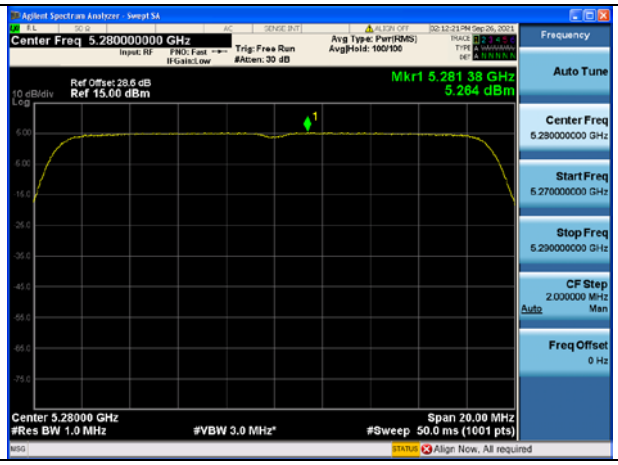
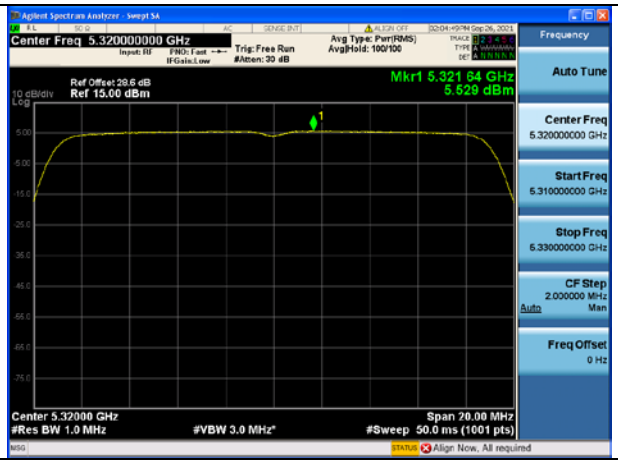
Test Mode:802.11a

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm)
5260	0	Chain0	5.465
5280		Chain0	5.63
5320		Chain0	6.249

Test Mode:802.11a Chain0	Test Mode:802.11a Chain0
	
Test Mode:802.11a Chain0	
	

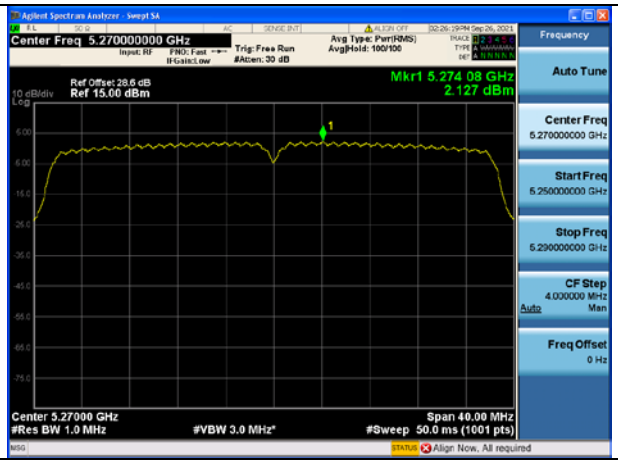
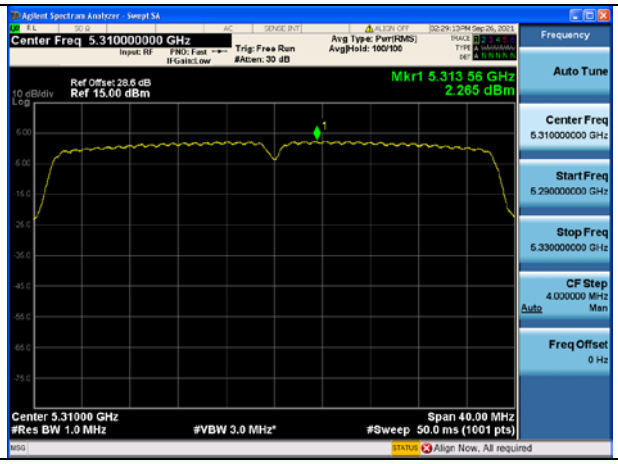
Test Mode:802. 11n HT20

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm)
5260	0	Chain0	5.235
5280		Chain0	5.264
5320		Chain0	5.529

Test Mode:802. 11n HT20 Chain0	Test Mode:802. 11n HT20 Chain0
	
Test Mode:802. 11n HT20 Chain0	
	

Test Mode:802. 11n HT40

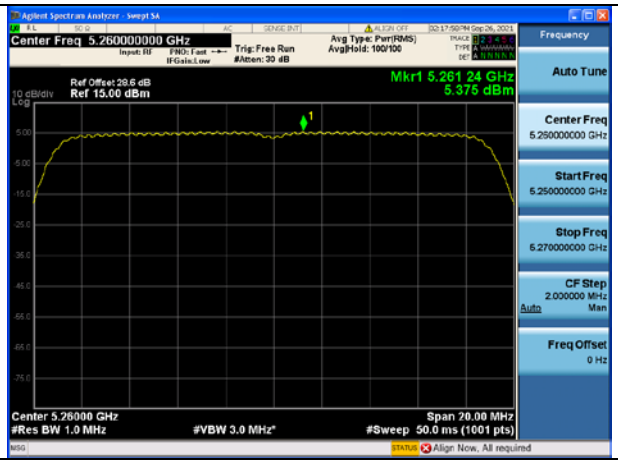
Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm)
5270	0	Chain0	2.127
5310		Chain0	2.265

Test Mode:802. 11n HT40 Chain0	Test Mode:802. 11n HT40 Chain0
	

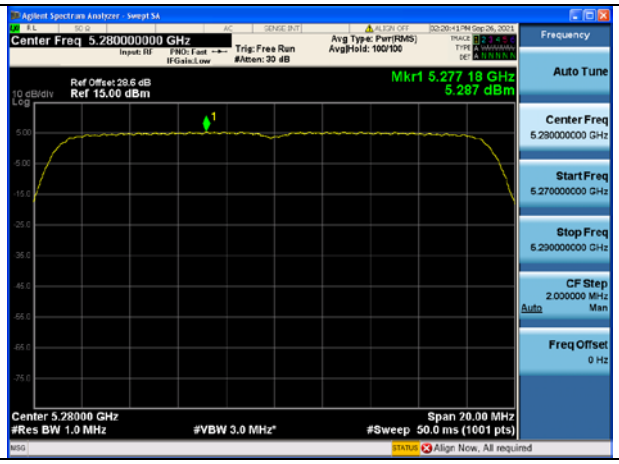
Test Mode:802. 11ac VHT20

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm)
5260	0	Chain0	5.375
5280		Chain0	5.287
5320		Chain0	5.686

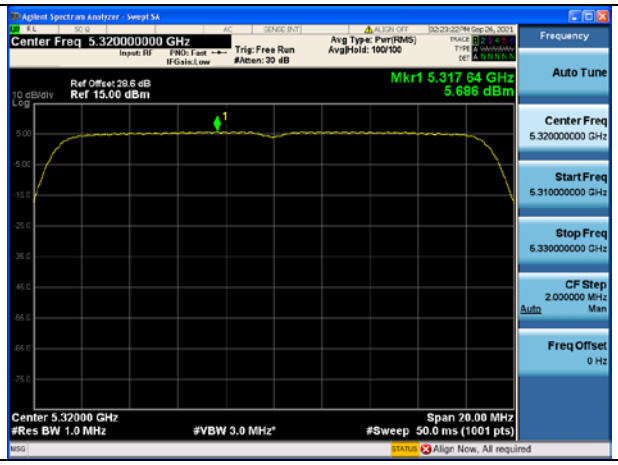
Test Mode:802. 11ac VHT20 Chain0



Test Mode:802. 11ac VHT20 Chain0

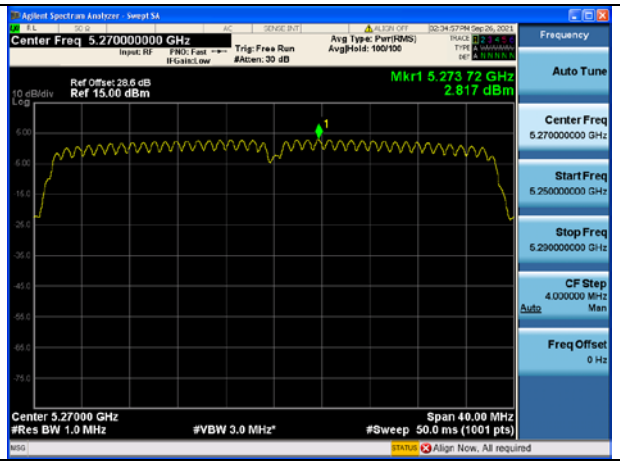
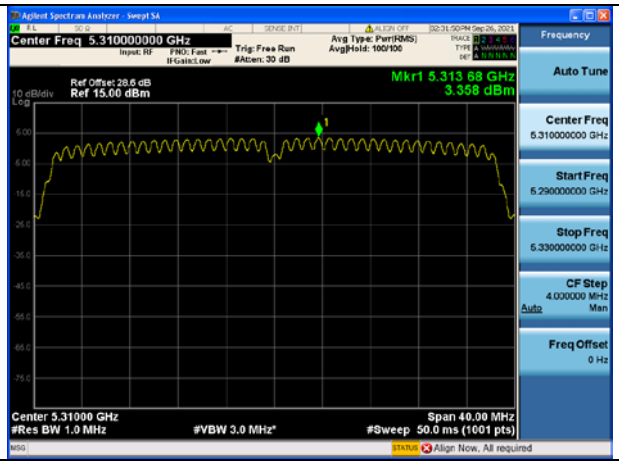


Test Mode:802. 11ac VHT20 Chain0



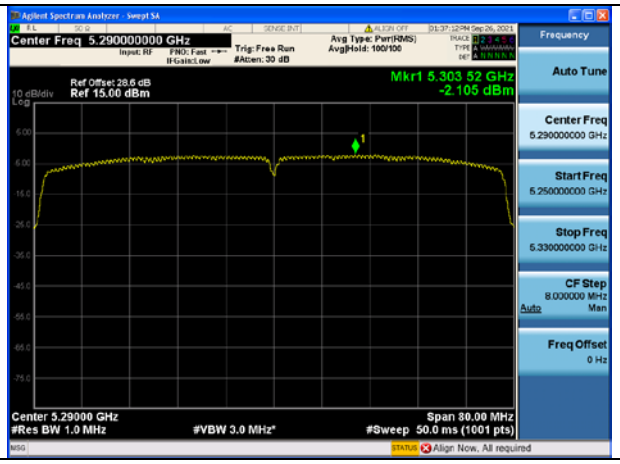
Test Mode:802. 11ac VHT40

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm)
5270	0	Chain0	2.817
5310		Chain0	3.358

Test Mode:802. 11ac VHT40 Chain0	Test Mode:802. 11ac VHT40 Chain0
	

Test Mode:802. 11ac VHT80

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm)
5290	0	Chain0	-2.105

Test Mode:802. 11ac VHT80 Chain0	
	

ANT 1

Offset 6dB = Attenuator + Temporary antenna connector loss + Cable loss

Duty Cycle

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)
802.11a	5260	77.37%	1.11
802. 11n HT20	5260	93.42%	0.30
802. 11n HT40	5270	89.25%	0.49
802. 11ac VHT20	5260	93.48%	0.29
802. 11ac VHT40	5270	89.99%	0.46
802. 11ac VHT80	5290	85.47%	0.68

Output Power

NII2A

Mode	Tones/ RUIndex	Freq (MHz)	Chain	Conducted average power output(dBm)	EIRP (dBm)
802.11a	NA	5260	Chain1	10.12	11.12
		5280	Chain1	10.22	11.22
		5320	Chain1	10.27	11.27
802.11n20M		5260	Chain1	16.40	16.70
		5280	Chain1	16.37	16.67
		5320	Chain1	16.38	16.68
802.11n40M		5270	Chain1	15.49	15.79
		5310	Chain1	15.68	15.98
802.11ac20M		5260	Chain1	16.35	16.65
		5280	Chain1	16.44	16.74
		5320	Chain1	16.67	16.97
802.11ac40M		5270	Chain1	15.57	15.87
		5310	Chain1	15.79	16.09
802.11ac80M		5290	Chain1	14.26	14.56

Emission Bandwidth

Test Mode:802.11a

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5260	Chain1	18.38
5280	Chain1	19.38
5320	Chain1	18.57

Test Mode:802.11a Chain1

Test Mode:802.11a Chain1

Test Mode:802.11a Chain1

Test Mode:802. 11n HT20

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5260	Chain1	20.26
5280	Chain1	21.91
5320	Chain1	19.63

Test Mode:802. 11n HT20 Chain1

Test Mode:802. 11n HT20 Chain1

Test Mode:802. 11n HT20 Chain1

Test Mode:802. 11n HT40

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5270	Chain1	43.07
5310	Chain1	40.06

Test Mode:802. 11n HT40 Chain1	Test Mode:802. 11n HT40 Chain1
	

Test Mode:802. 11ac VHT20

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5260	Chain1	20.13
5280	Chain1	20.57
5320	Chain1	21.36

Test Mode:802. 11ac VHT20 Chain1

Test Mode:802. 11ac VHT20 Chain1

Test Mode:802. 11ac VHT20 Chain1

Test Mode:802. 11ac VHT40

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5270	Chain1	39.85
5310	Chain1	40.40

Test Mode:802. 11ac VHT40 Chain1	Test Mode:802. 11ac VHT40 Chain1
	

Test Mode:802. 11ac VHT80

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5290	Chain1	78.32

Test Mode:802. 11ac VHT80 Chain1	
	

Occupied Bandwidth

Test Mode:802.11a

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5260	Chain1	16.792
5280	Chain1	16.777
5320	Chain1	16.763

Test Mode:802.11a Chain1

Test Mode:802.11a Chain1

Test Mode:802.11a Chain1

Test Mode:802. 11n HT20

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5260	Chain1	17.871
5280	Chain1	17.944
5320	Chain1	17.871

Test Mode:802. 11n HT20 Chain1

Test Mode:802. 11n HT20 Chain1

Test Mode:802. 11n HT20 Chain1

Test Mode:802. 11n HT40

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5270	Chain1	36.238
5310	Chain1	36.187

Test Mode:802. 11n HT40 Chain1	Test Mode:802. 11n HT40 Chain1
	

Test Mode:802. 11ac VHT20

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5260	Chain1	17.908
5280	Chain1	17.918
5320	Chain1	17.949

Test Mode:802. 11ac VHT20 Chain1

Test Mode:802. 11ac VHT20 Chain1

Test Mode:802. 11ac VHT20 Chain1

Test Mode:802. 11ac VHT40

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5270	Chain1	36.150
5310	Chain1	36.159

Test Mode:802. 11ac VHT40 Chain1	Test Mode:802. 11ac VHT40 Chain1
	

Test Mode:802. 11ac VHT80

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5290	Chain1	74.921

Test Mode:802. 11ac VHT80 Chain1	
	

Transmitter Power Spectral Density

Test Mode:802.11a

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm)
5260	1.11	Chain1	-0.153
5280		Chain1	-0.121
5320		Chain1	0.03

Test Mode:802.11a Chain1

Test Mode:802.11a Chain1

Test Mode:802.11a Chain1

Test Mode:802. 11n HT20

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm)
5260	0.30	Chain1	4.976
5280		Chain1	5.212
5320		Chain1	5.248

Test Mode:802. 11n HT20 Chain1

Test Mode:802. 11n HT20 Chain1

Test Mode:802. 11n HT20 Chain1

Test Mode:802. 11n HT40

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm)
5270	0.49	Chain1	1.769
5310		Chain1	1.833

Test Mode:802. 11n HT40 Chain1	Test Mode:802. 11n HT40 Chain1
	

Test Mode:802. 11ac VHT20

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm)
5260	0.29	Chain1	5.291
5280		Chain1	5.487
5320		Chain1	5.112

Test Mode:802. 11ac VHT20 Chain1	Test Mode:802. 11ac VHT20 Chain1
	

Test Mode:802. 11ac VHT20 Chain1	
	

Test Mode:802. 11ac VHT40

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm)
5270	0.46	Chain1	2.265
5310		Chain1	2.237

Test Mode:802. 11ac VHT40 Chain1	Test Mode:802. 11ac VHT40 Chain1
	

Test Mode:802. 11ac VHT80

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm)
5290	0.68	Chain1	-2.182

Test Mode:802. 11ac VHT80 Chain1	
	

MIMO

Mode	Tones/ RUIndex	Freq (MHz)	Chain	Conducted average power output(dBm)	EIRP (dBm)	Power Density (dBm)
802.11n20M	NA	5260	MIMO	19.66	19.96	8.12
		5280	MIMO	19.61	19.91	8.25
		5320	MIMO	19.86	20.16	8.40
802.11n40M		5270	MIMO	18.74	19.04	4.96
		5310	MIMO	19.02	19.32	5.06
802.11ac20M		5260	MIMO	19.59	19.89	8.34
		5280	MIMO	19.67	19.97	8.40
		5320	MIMO	20.08	20.38	8.42
802.11ac40M		5270	MIMO	18.83	19.13	5.56
		5310	MIMO	19.13	19.43	5.84
802.11ac80M		5290	MIMO	17.50	17.80	0.87

Dynamic Frequency Selection

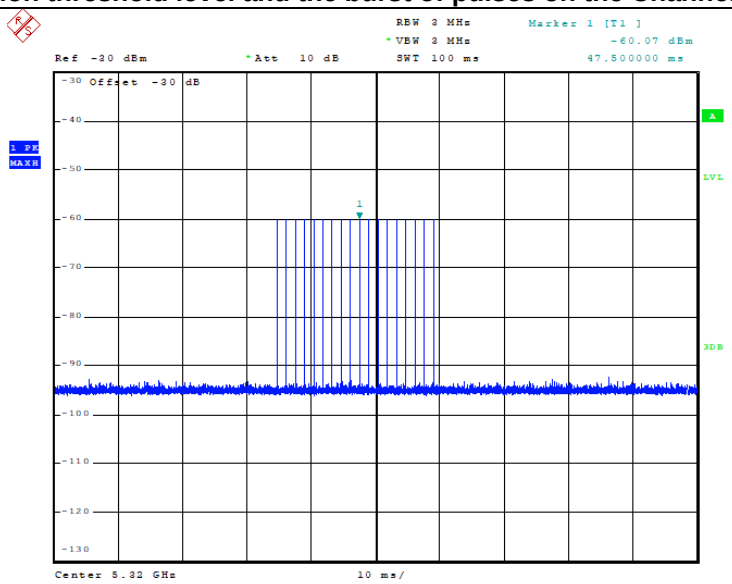
DESCRIPTION OF Master Device

The Master Device is a SKSpruce Technologies Co., Ltd., Indoor Access Point, FCC ID: 2AHKT-WIA3300-20. The rated output power of the Master unit is > 23dBm (EIRP). Therefore the required interference threshold level is –60 dBm.

Radar Waveform Calibration Result

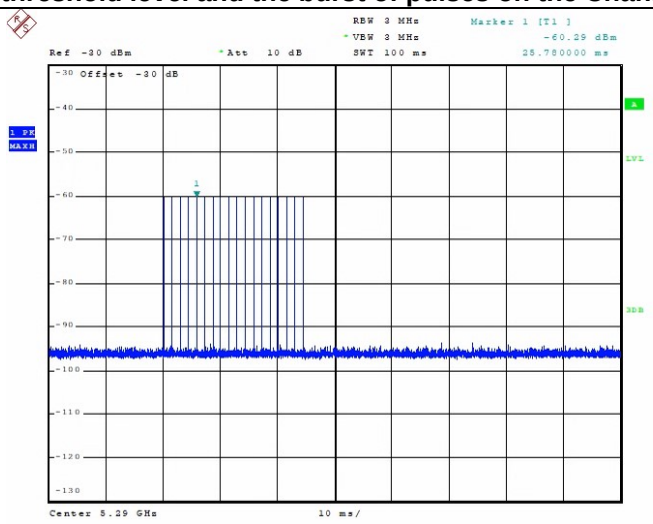
<20MHz / 5320 MHz> Radar Type 0

Radar / DFS detection threshold level and the burst of pulses on the Channel frequency

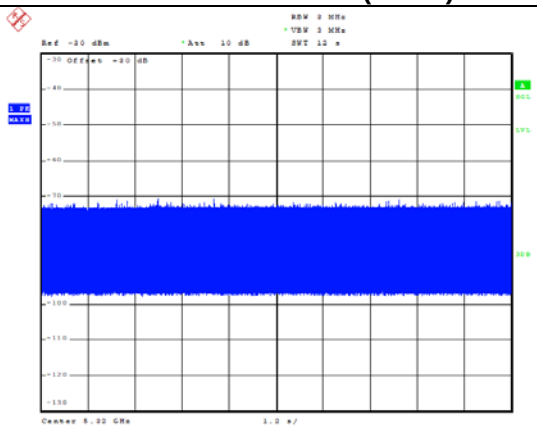
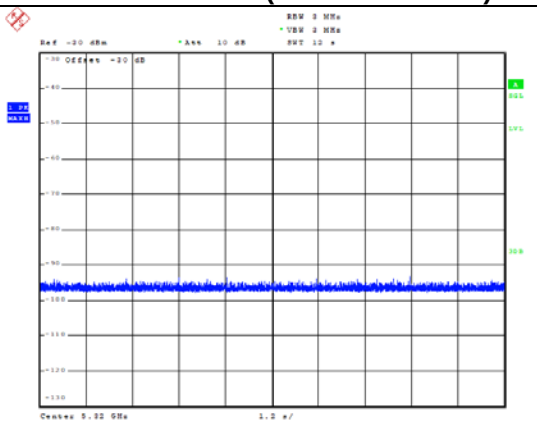
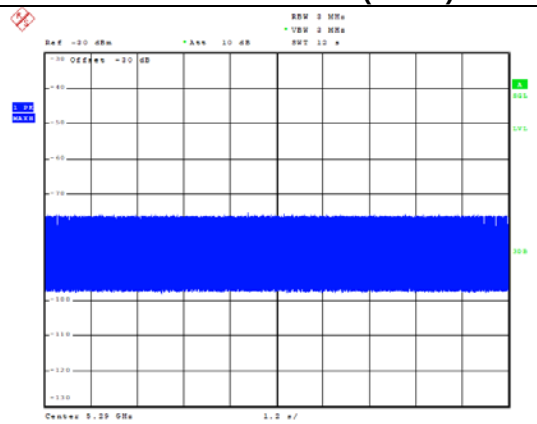
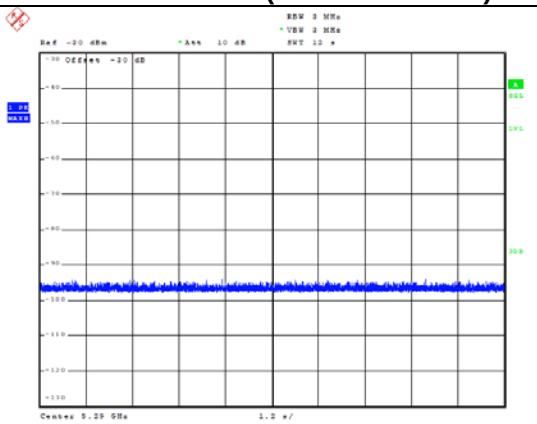


<80MHz / 5290 MHz> Radar Type 0

Radar / DFS detection threshold level and the burst of pulses on the Channel frequency



Data Traffic and Noise Floor Plots

<20MHz / 5320 MHz> EUT data traffic (Client)	<20MHz / 5320 MHz> Noise Floor (No transmission)
	
<80MHz / 5290 MHz> EUT data traffic (Client)	**<80MHz / 5290 MHz> Noise Floor (No transmission)**
	

Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period for Client Beacon Test

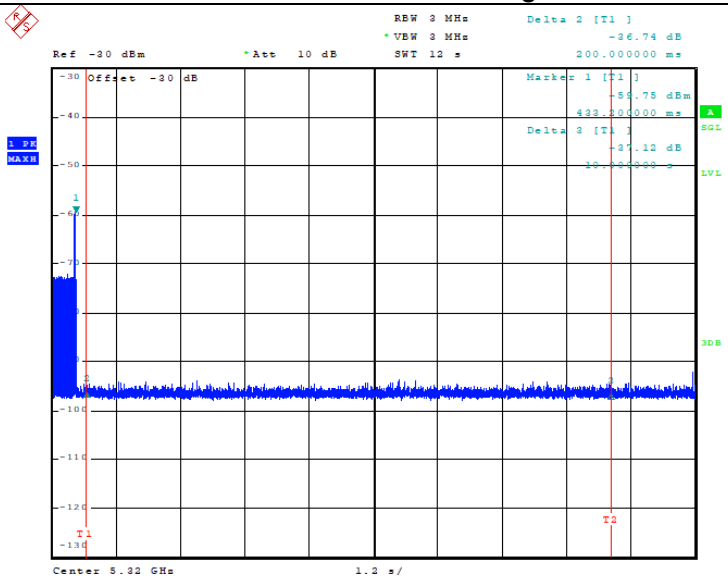
Frequency	Test Item	Test Result	Limit	Pass/Fail
5320MHz	Channel Move Time	＜ 10s*	＜ 10s	Pass
	Channel Closing Transmission Time	200ms	＜ 260ms	Pass
	Non-Occupancy Period	≥ 30	≥ 30 min	Pass
5290MHz	Channel Move Time	＜ 10s*	＜ 10s	Pass
	Channel Closing Transmission Time	200ms	＜ 260ms	Pass
	Non-Occupancy Period	≥ 30	≥ 30 min	Pass

Note*: We notice clearly that “Channel Move Time” is less than 10s from the figure.
The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 seconds period. The aggregate duration of control signals will not count quiet periods in between transmissions.

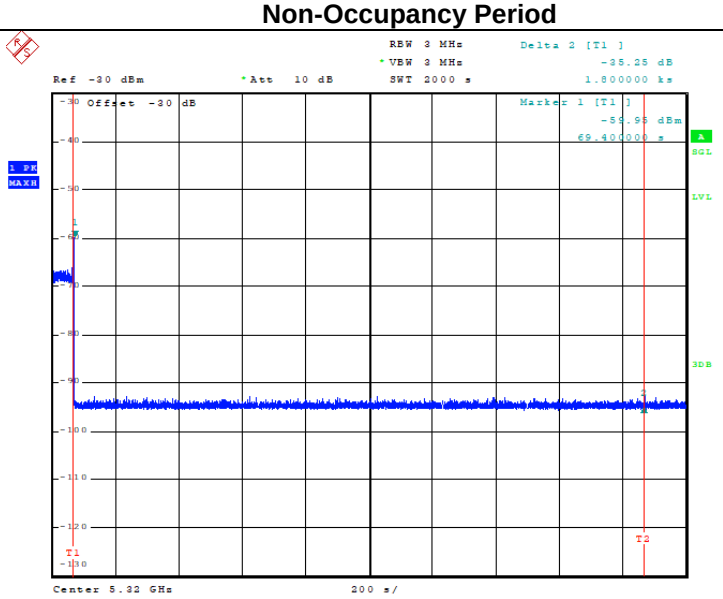
Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period for Client Beacon Test Plots

<20MHz / 5320 MHz>

Channel Move Time & Channel Closing Transmission Time



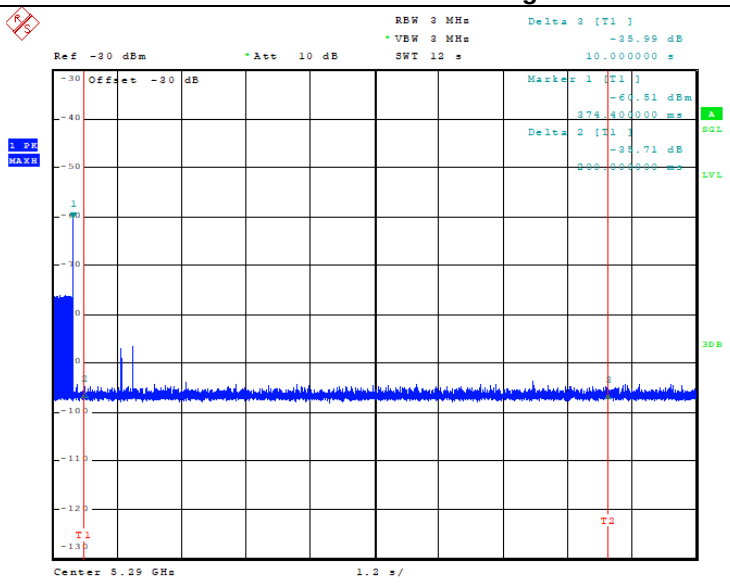
Non-Occupancy Period



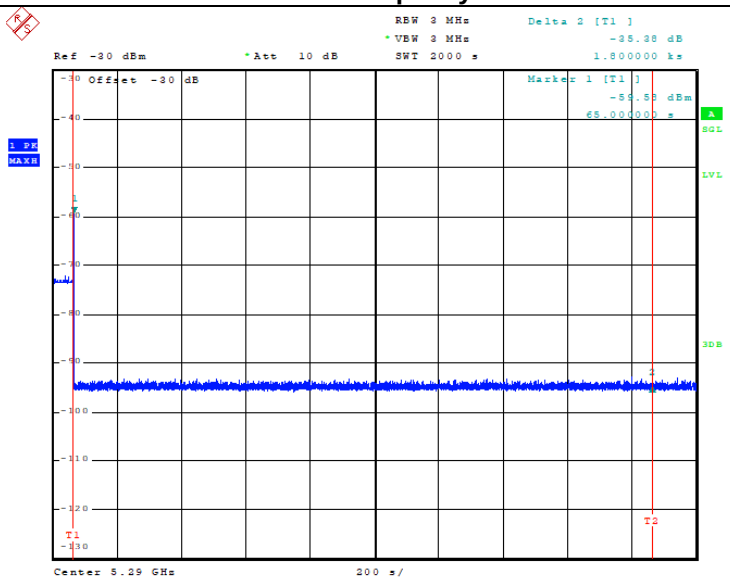
Note:
Dwell (1.2 ms)= Sweep Time (12000 ms) / Sweep Point Bins (10000)

<80MHz / 5290MHz>

Channel Move Time & Channel Closing Transmission Time



Non-Occupancy Period



Note:
Dwell (1.2 ms)= Sweep Time (12000 ms) / Sweep Point Bins (10000)