

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

Duty Cycle

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)
802.11a	5260	99.43%	0
802.11n HT20	5260	99.44%	0
802.11n HT40	5270	98.87%	0
802.11ac VHT20	5260	99.42%	0
802.11ac VHT40	5270	99.00%	0
802.11ac VHT80	5290	97.81%	0.10

Output Power NII2A

Mode	Tones/ RUIndex	Freq (MHz)	Chain	Conducted average power output(dBm)	EIRP (dBm)
802.11a	NA	5260	Chain0	11.73	11.53
		5280	Chain0	11.61	11.41
		5320	Chain0	11.61	11.41
802.11n20M		5260	Chain0	11.58	11.38
		5280	Chain0	11.48	11.28
		5320	Chain0	11.46	11.26
802.11n40M		5270	Chain0	11.63	11.43
		5310	Chain0	11.51	11.31
802.11ac20M		5260	Chain0	11.59	11.39
		5280	Chain0	11.49	11.29
		5320	Chain0	11.47	11.27
802.11ac40M		5270	Chain0	11.63	11.43
	5310	Chain0	11.53	11.33	
802.11ac80M	5290	Chain0	11.77	11.57	

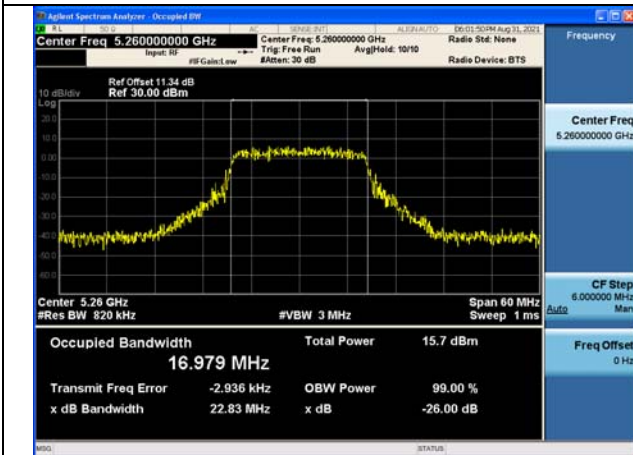
Emission Bandwidth

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

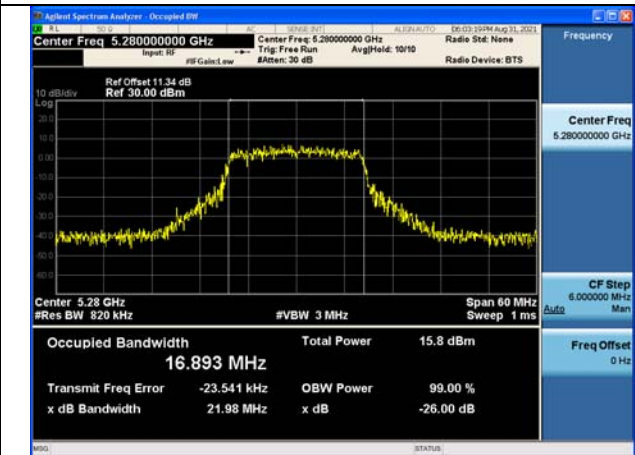
Test Mode:802.11a

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5260	Chain0	22.83
5280	Chain0	21.98
5320	Chain0	21.46

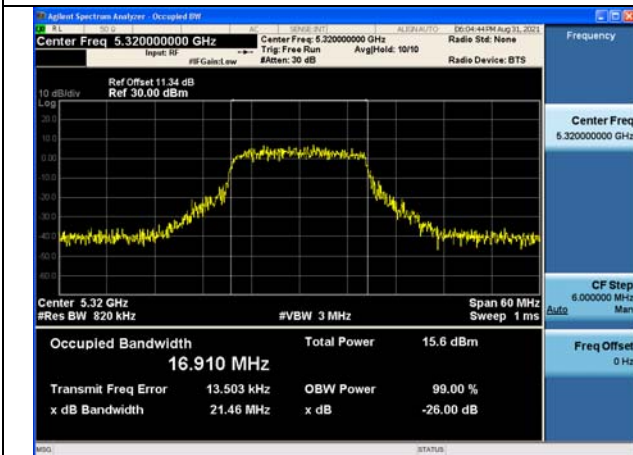
Test Mode:802.11a Chain0



Test Mode:802.11a Chain0



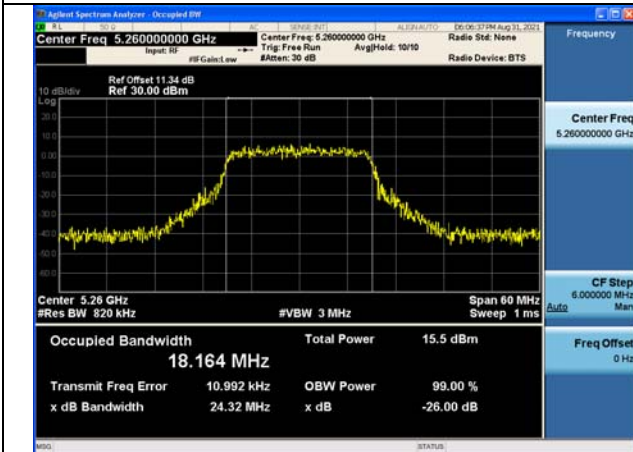
Test Mode:802.11a Chain0



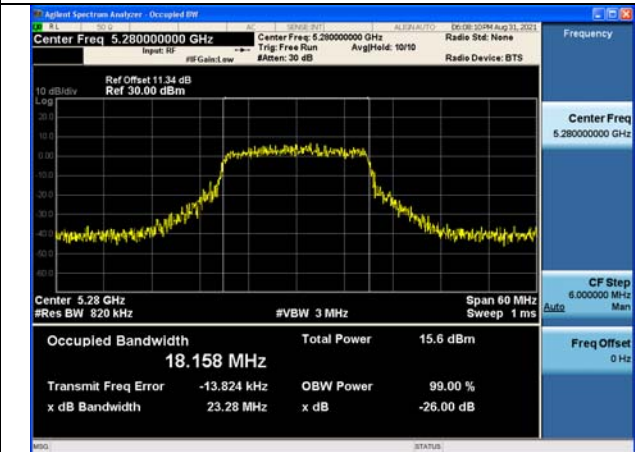
Test Mode:802. 11n HT20

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5260	Chain0	24.32
5280	Chain0	23.28
5320	Chain0	23.57

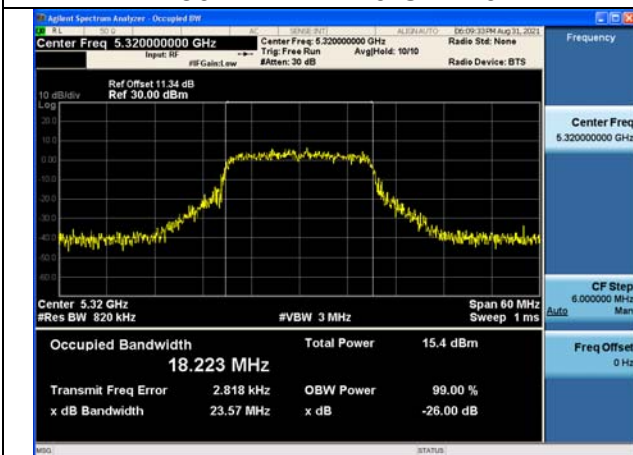
Test Mode:802. 11n HT20 Chain0



Test Mode:802. 11n HT20 Chain0



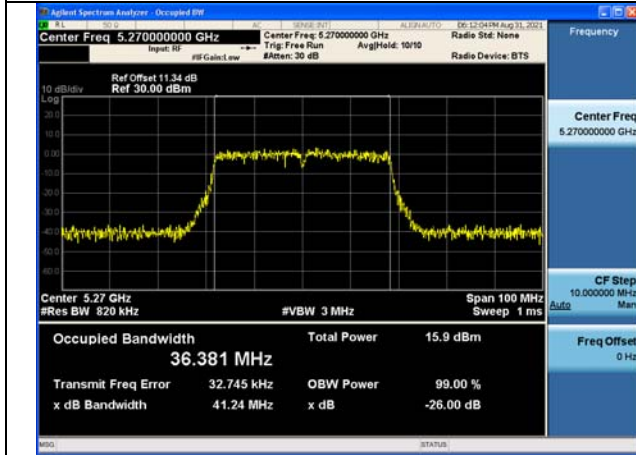
Test Mode:802. 11n HT20 Chain0



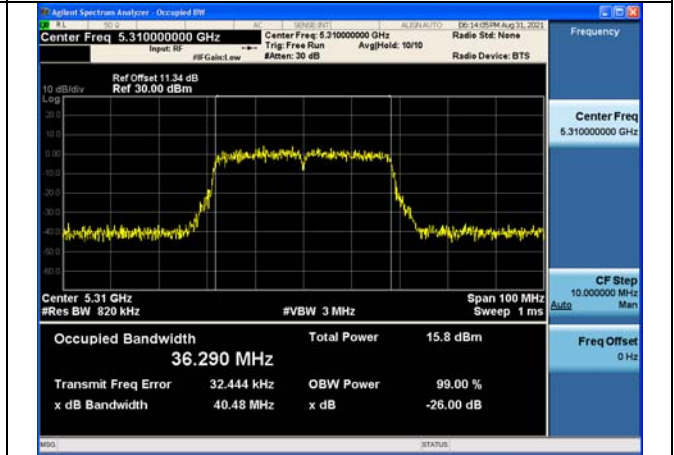
Test Mode:802. 11n HT40

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5270	Chain0	41.24
5310	Chain0	40.48

Test Mode:802. 11n HT40 Chain0



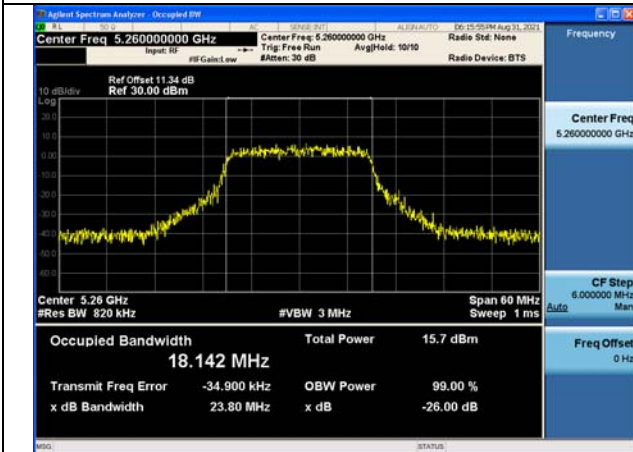
Test Mode:802. 11n HT40 Chain0



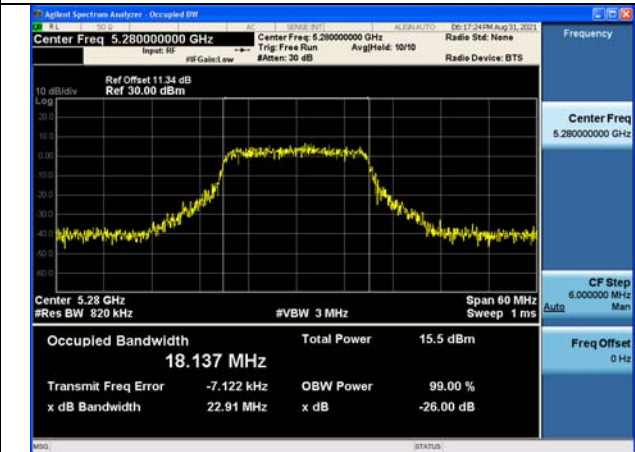
Test Mode:802. 11ac VHT20

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5260	Chain0	23.80
5280	Chain0	22.91
5320	Chain0	23.27

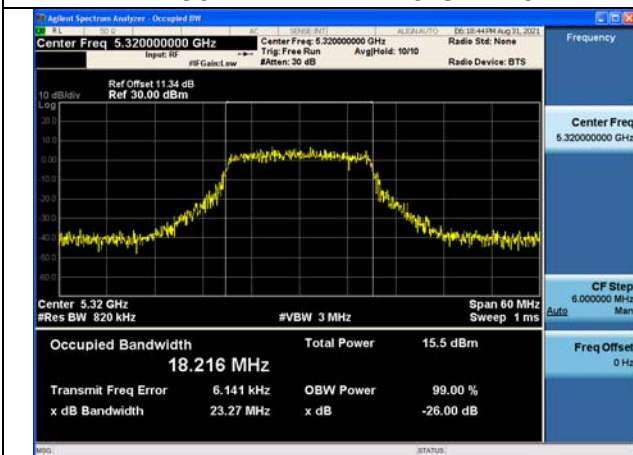
Test Mode:802. 11ac VHT20 Chain0



Test Mode:802. 11ac VHT20 Chain0



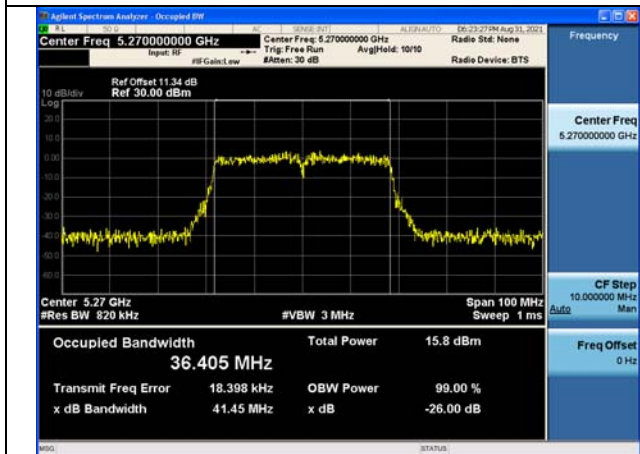
Test Mode:802. 11ac VHT20 Chain0



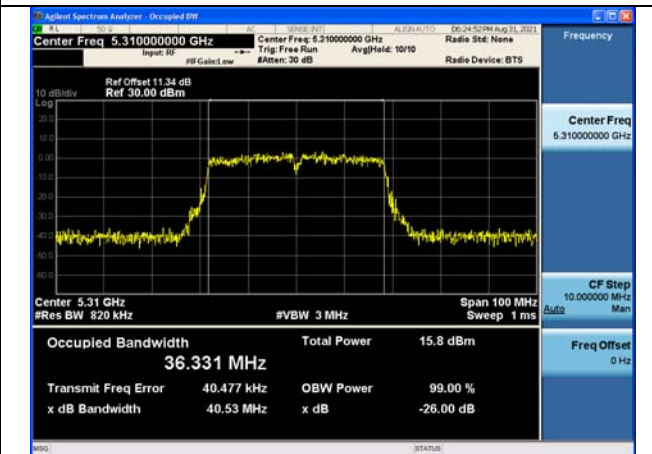
Test Mode:802. 11ac VHT40

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5270	Chain0	41.45
5310	Chain0	40.53

Test Mode:802. 11ac VHT40 Chain0



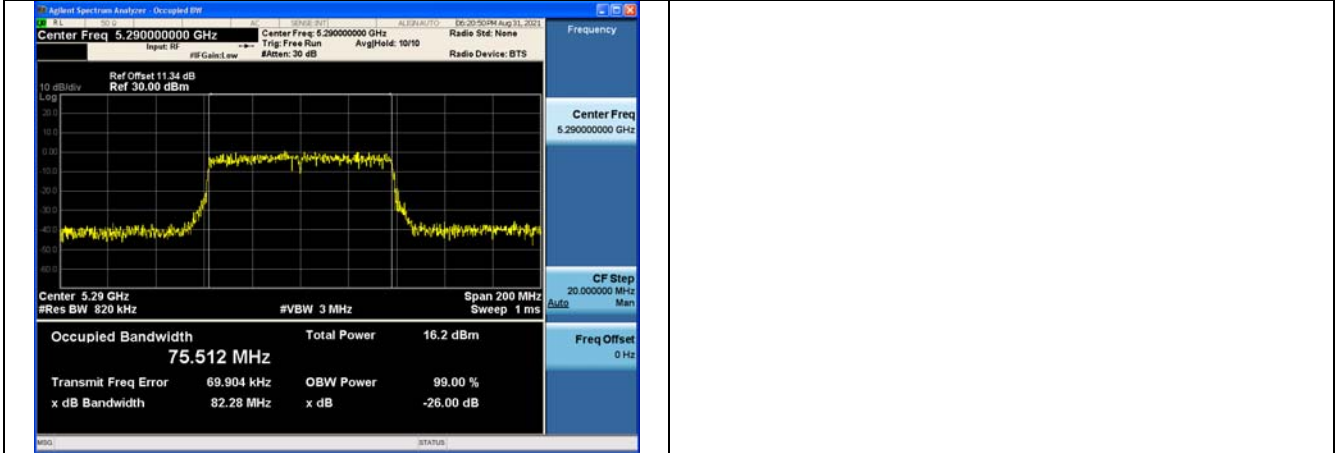
Test Mode:802. 11ac VHT40 Chain0



Test Mode:802. 11ac VHT80

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5290	Chain0	82.28

Test Mode:802. 11ac VHT80 Chain0



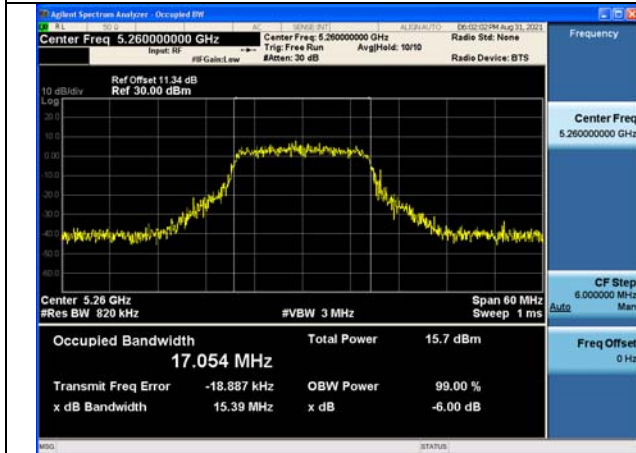
Occupied Bandwidth

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

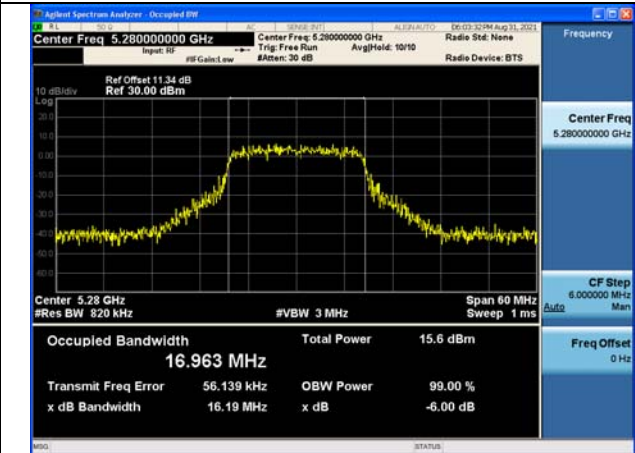
Test Mode:802.11a

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5260	Chain0	17.054
5280	Chain0	16.963
5320	Chain0	16.918

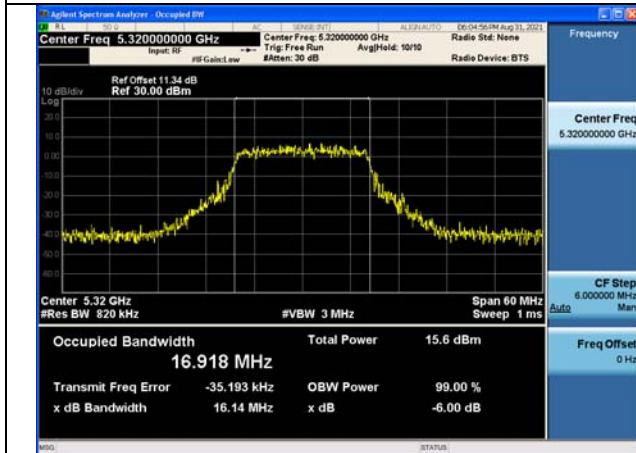
Test Mode:802.11a Chain0



Test Mode:802.11a Chain0



Test Mode:802.11a Chain0



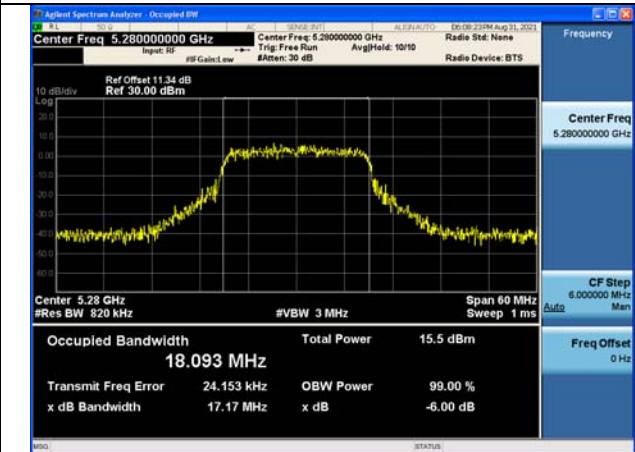
Test Mode:802. 11n HT20

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5260	Chain0	18.152
5280	Chain0	18.093
5320	Chain0	18.160

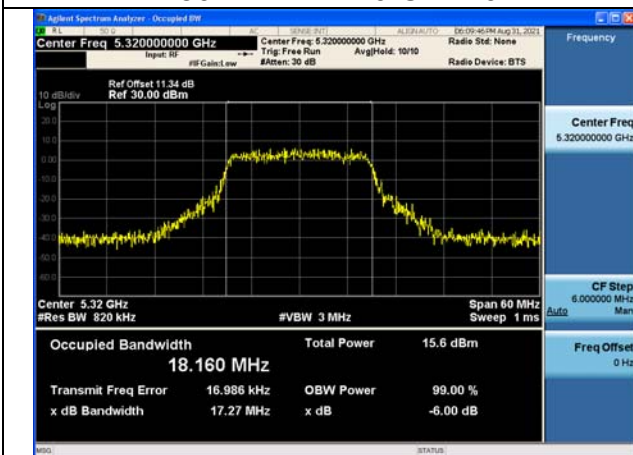
Test Mode:802. 11n HT20 Chain0



Test Mode:802. 11n HT20 Chain0



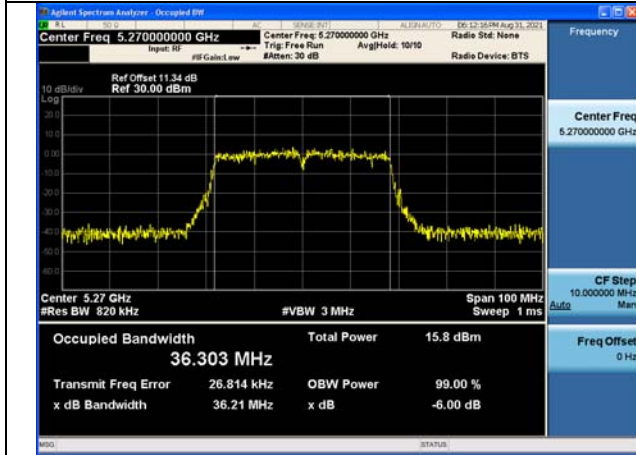
Test Mode:802. 11n HT20 Chain0



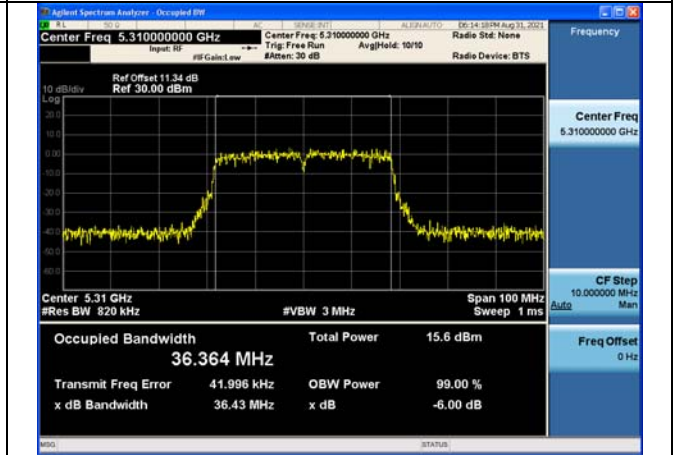
Test Mode:802. 11n HT40

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5270	Chain0	36.303
5310	Chain0	36.364

Test Mode:802. 11n HT40 Chain0



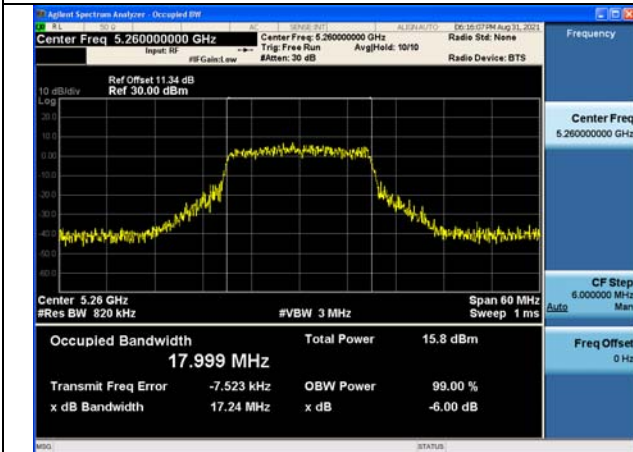
Test Mode:802. 11n HT40 Chain0



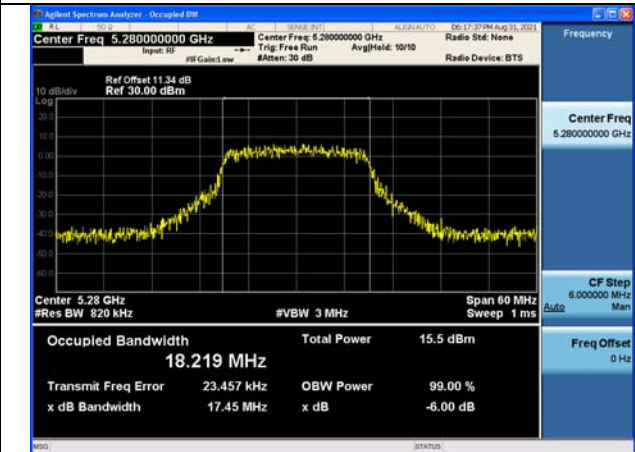
Test Mode:802. 11ac VHT20

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5260	Chain0	17.999
5280	Chain0	18.219
5320	Chain0	18.111

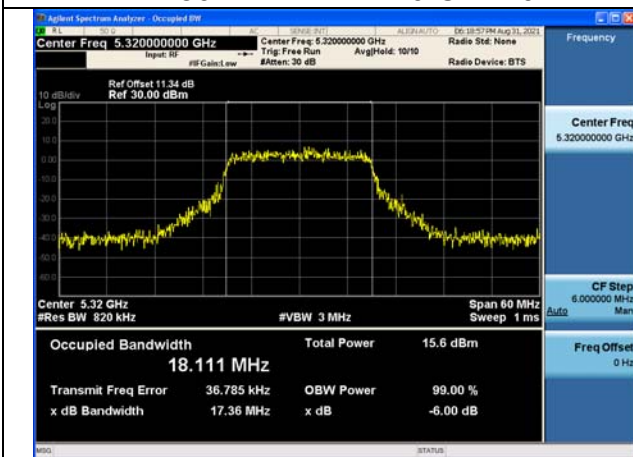
Test Mode:802. 11ac VHT20 Chain0



Test Mode:802. 11ac VHT20 Chain0



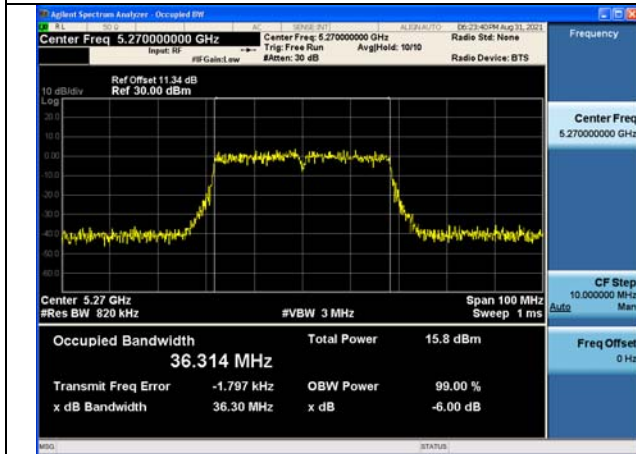
Test Mode:802. 11ac VHT20 Chain0



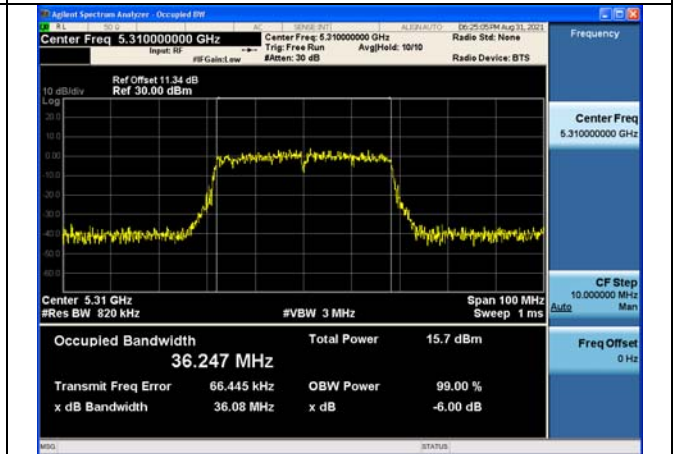
Test Mode:802. 11ac VHT40

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5270	Chain0	36.314
5310	Chain0	36.247

Test Mode:802. 11ac VHT40 Chain0



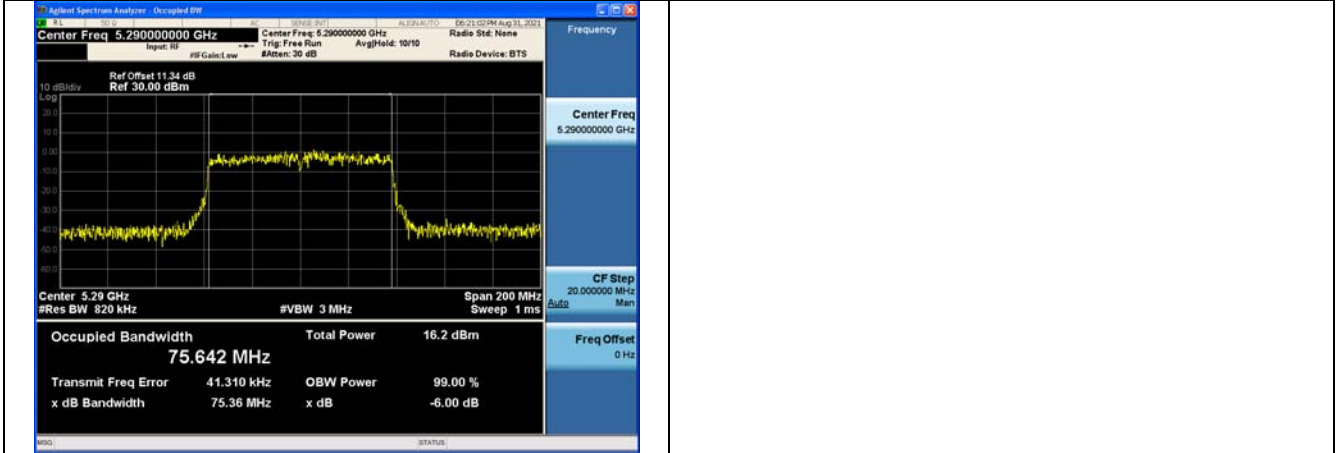
Test Mode:802. 11ac VHT40 Chain0



Test Mode:802. 11ac VHT80

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5290	Chain0	75.642

Test Mode:802. 11ac VHT80 Chain0



Transmitter Power Spectral Density

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

Test Mode:802.11a

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm)
5260	0	Chain0	0.867
5280		Chain0	0.671
5320		Chain0	0.782

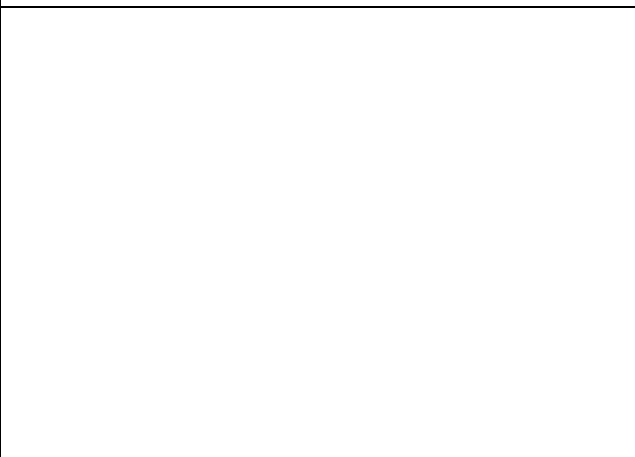
Test Mode:802.11a Chain0



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	0.442
5280		Chain0	0.322
5320		Chain0	0.307

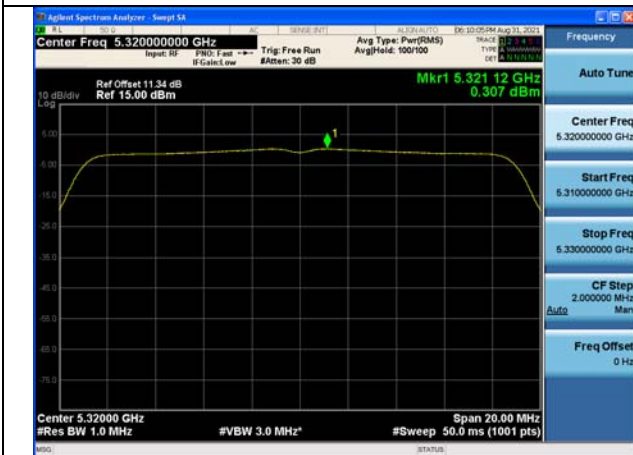
Test Mode:802. 11n HT20 Chain0



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	-2.43
5310		Chain0	-2.628

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	0.433
5280		Chain0	0.337
5320		Chain0	0.419

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	-2.419
5310		Chain0	-2.508

Test Mode:802. 11ac VHT40 Chain0



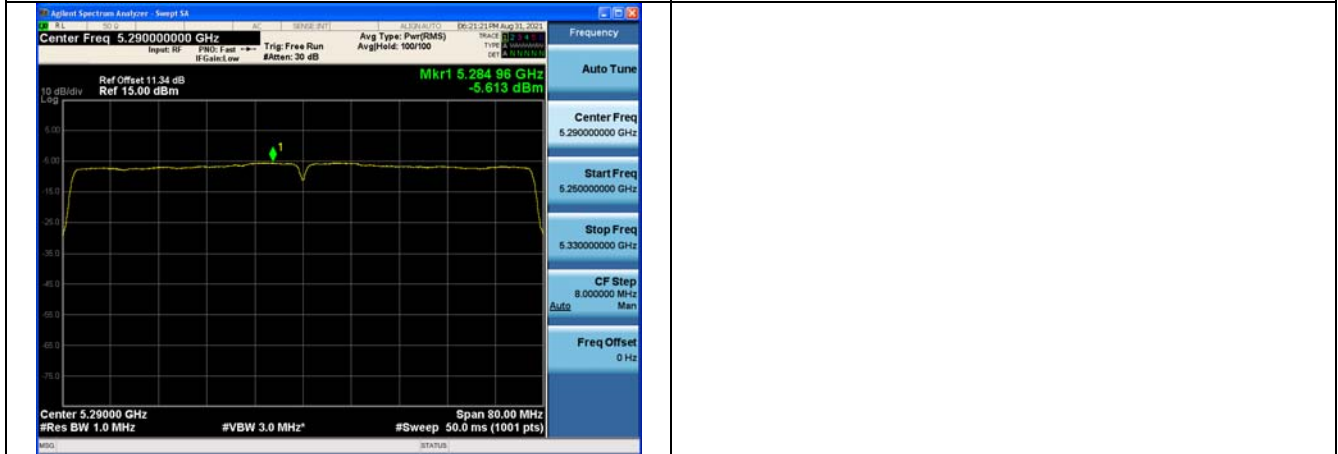
Test Mode:802. 11ac VHT40 Chain0



Test Mode:802. 11ac VHT80

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm)
5290	0.10	Chain0	-5.513

Test Mode:802. 11ac VHT80 Chain0



Dynamic Frequency Selection

DESCRIPTION OF Master Device

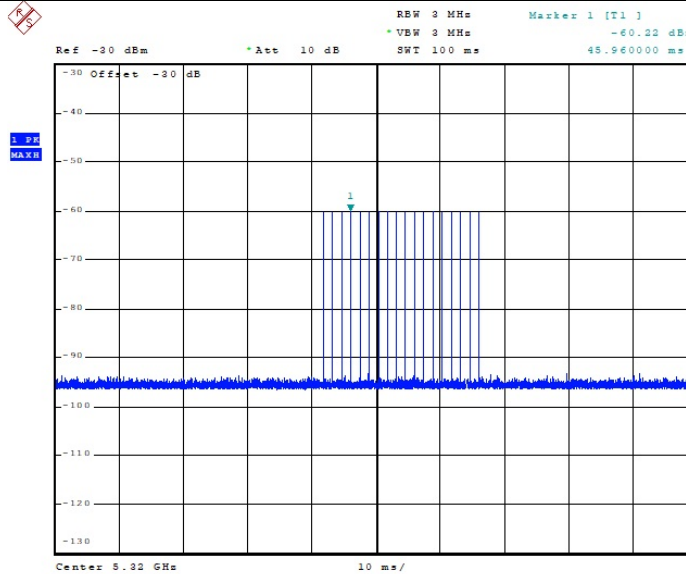
The Master Device is a SKSpruce Technologies Co., Ltd., Indoor Access Point, FCC ID: 2AHKT-WIA3300-20. The rated output power of the Master unit is > 23dBm (EIRP).

Therefore the required interference threshold level is -60 dBm.

Radar Waveform Calibration Result

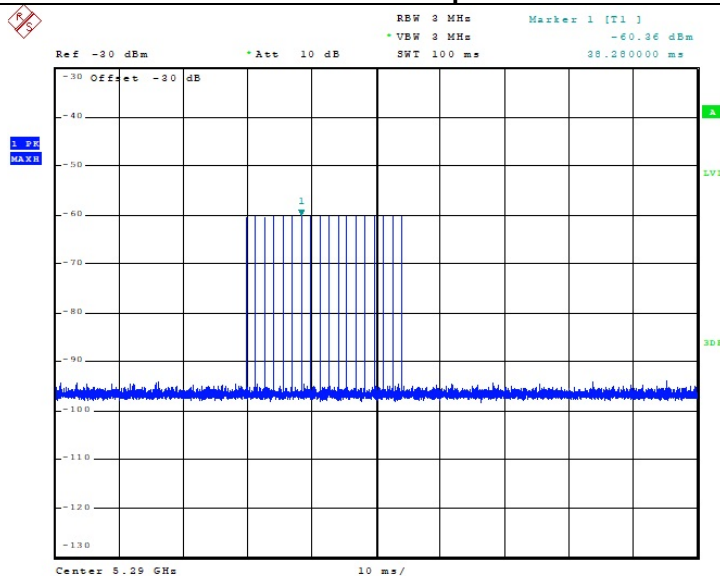
<20MHz / 5320 MHz> Radar Type 0

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

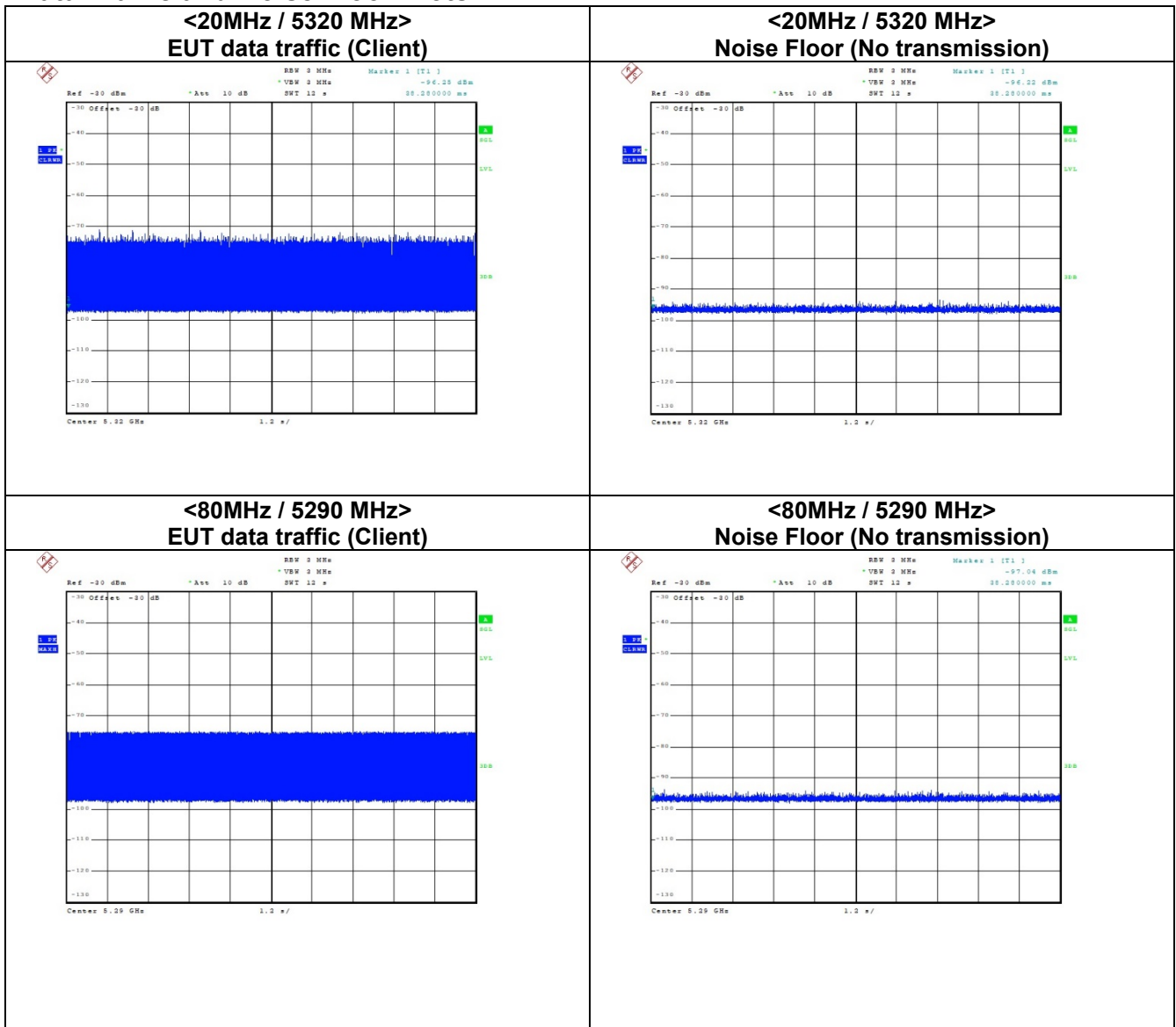


<80MHz / 5290 MHz> Radar Type 0

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



Data Traffic and Noise Floor Plots

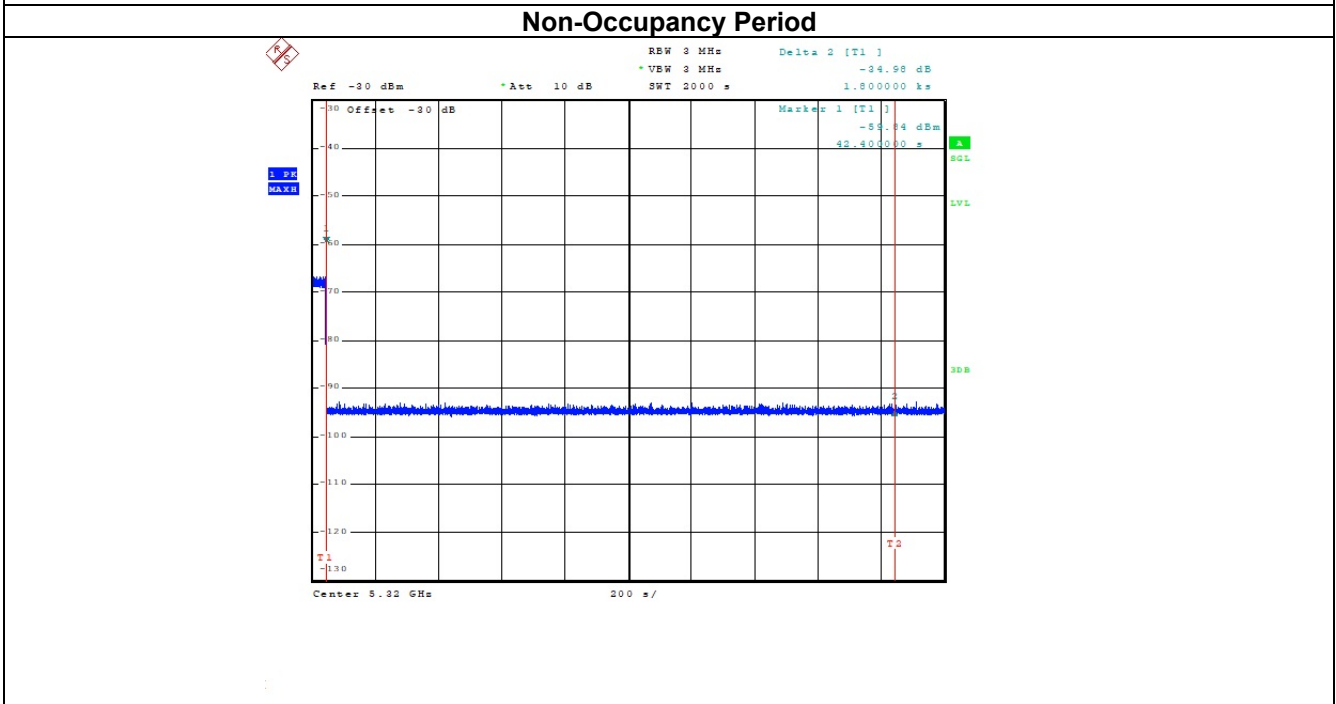
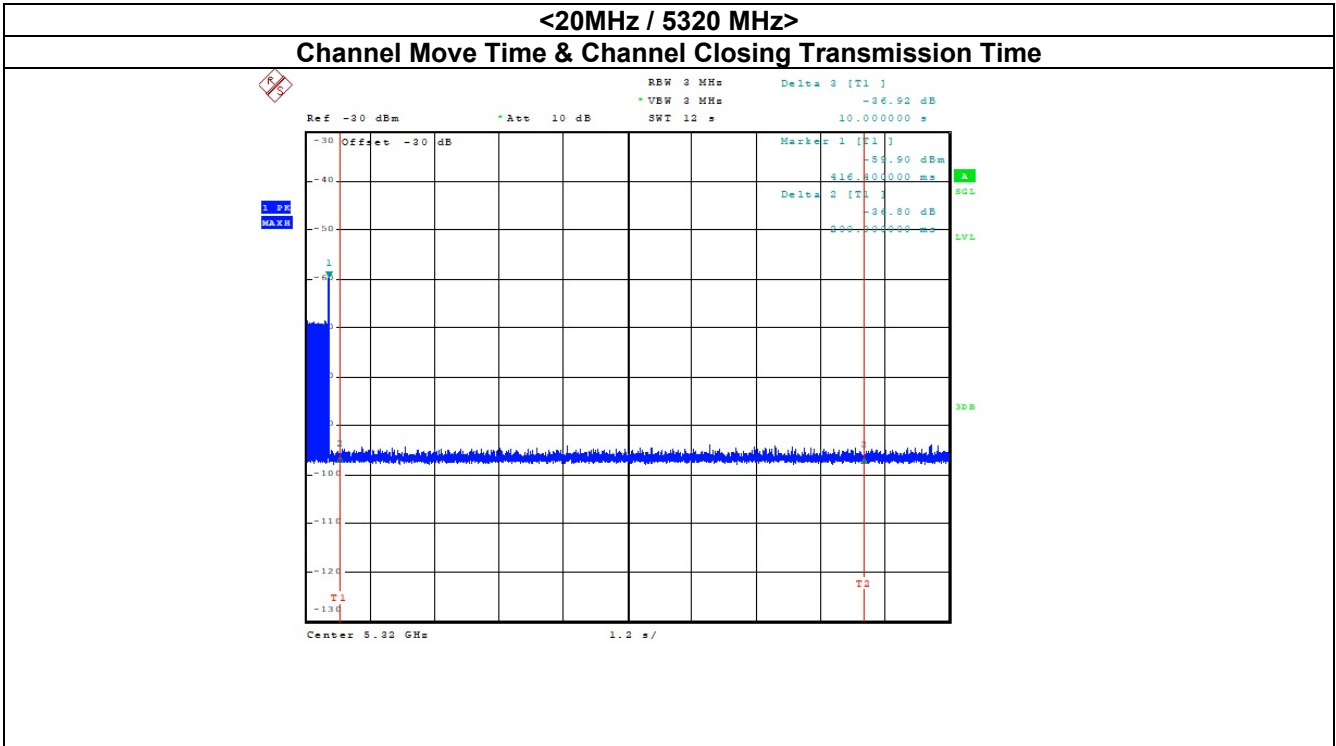


Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period for Client Beacon Test

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.

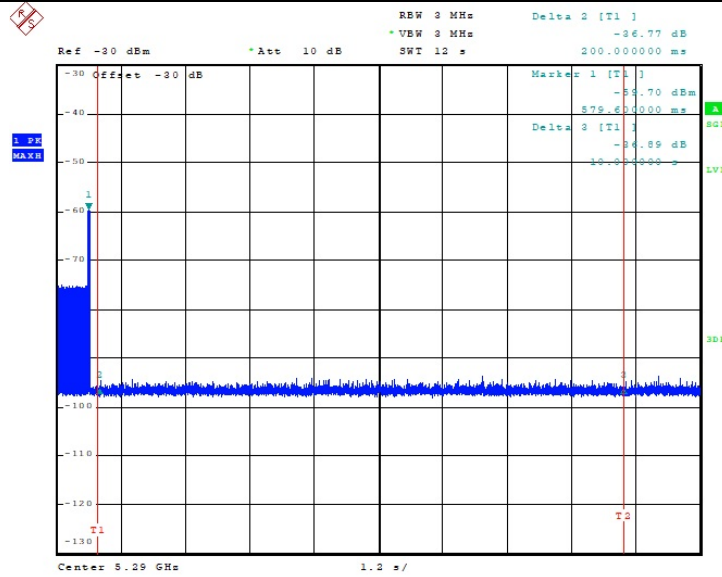
Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period for Client Beacon Test Plots



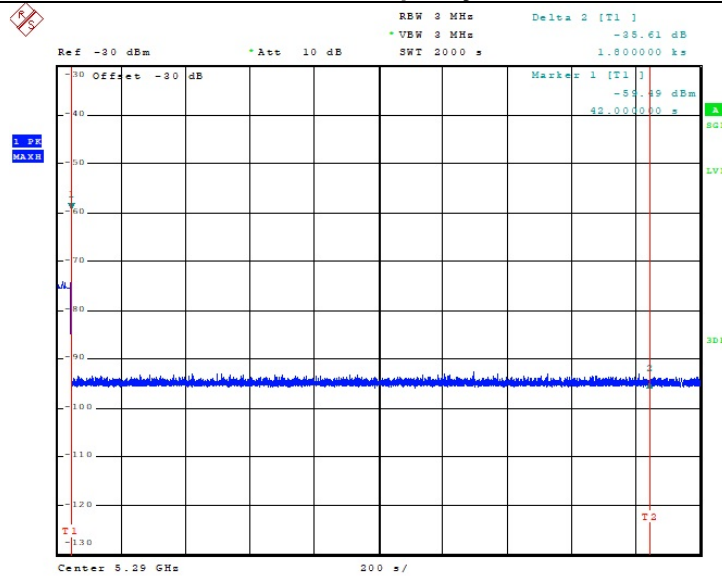
Note:
Dwell (1.2 ms) = Sweep Time (12000 ms) / Sweep Point Bins (10000)

<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)