APPENDIX A – TEST DATA OF CONDUCTED EMISSION

Duty Cycle

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)
802.11a	5260	99.48%	0
802. 11n HT20	5260	99.42%	0
802. 11n HT40	5270	98.85%	0
802. 11ac VHT20	5260	99.45%	0
802. 11ac VHT40	5270	98.90%	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	11.18	10.98
		5280	Chain0	11.14	10.94
		5320	Chain0	11.09	10.89
802.11n20M		5260	Chain0	11.04	10.84
		5280	Chain0	10.99	10.79
		5320	Chain0	10.95	10.75
802.11n40M		5270	Chain0	11.54	11.34
		5310	Chain0	11.38	11.18
802.11ac20M		5260	Chain0	10.95	10.75
		5280	Chain0	10.94	10.74
		5320	Chain0	10.96	10.76
802.11ac40M		5270	Chain0	11.58	11.38
		5310	Chain0	11.36	11.16
802.11ac80M		5290	Chain0	11.11	10.91

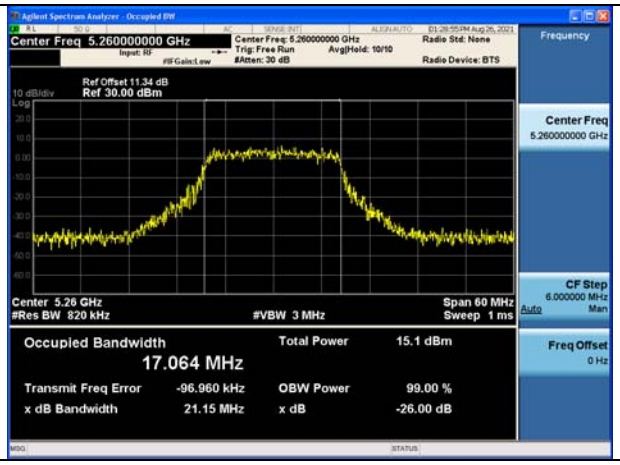
Emission Bandwidth

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

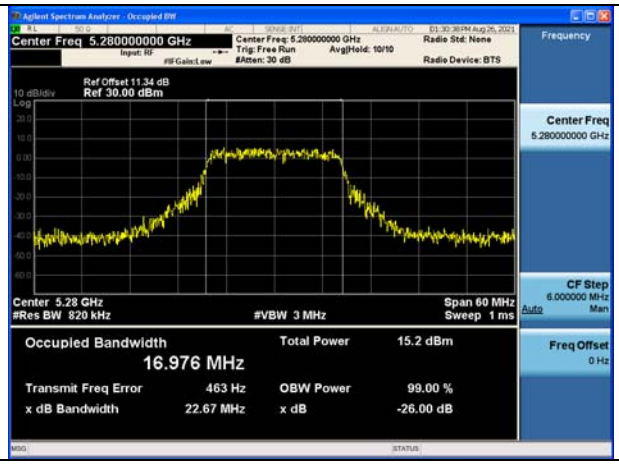
Test Mode:802.11a

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5260	Chain0	21.15
5280	Chain0	22.67
5320	Chain0	22.74

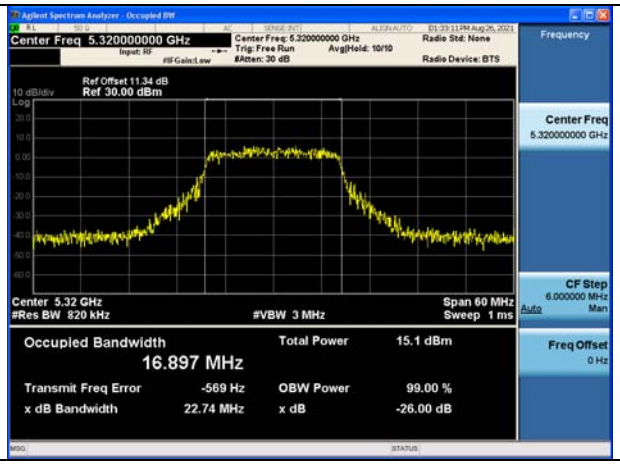
Test Mode:802.11a Chain0



Test Mode:802.11a Chain0



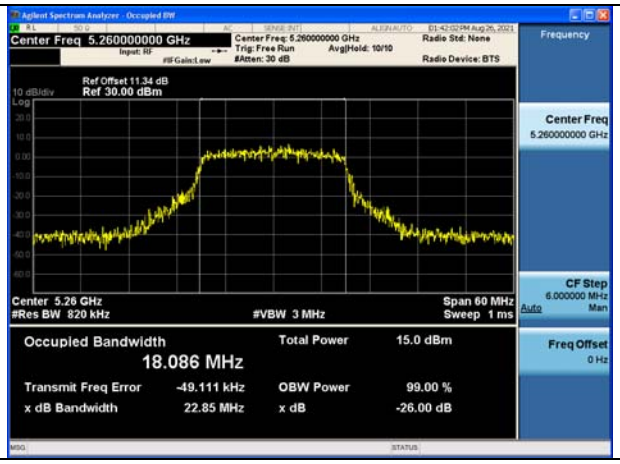
Test Mode:802.11a Chain0



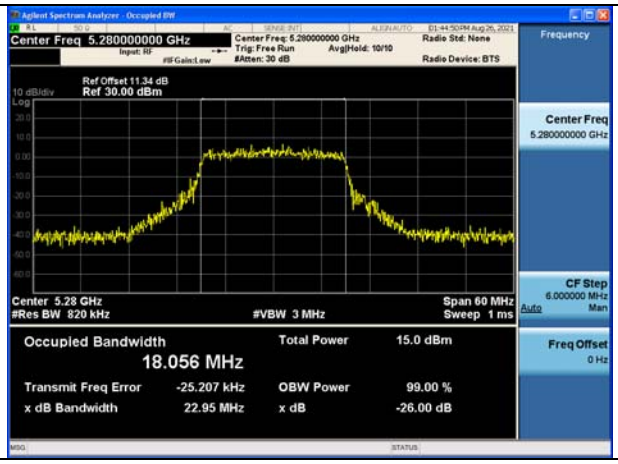
Test Mode:802. 11n HT20

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5260	Chain0	22.85
5280	Chain0	22.95
5320	Chain0	22.78

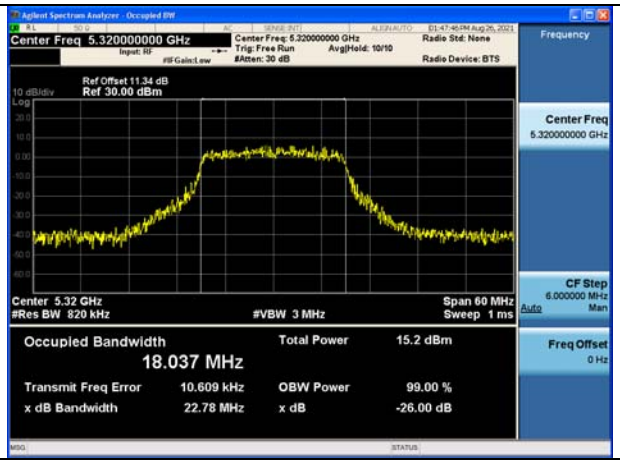
Test Mode:802. 11n HT20 Chain0



Test Mode:802. 11n HT20 Chain0

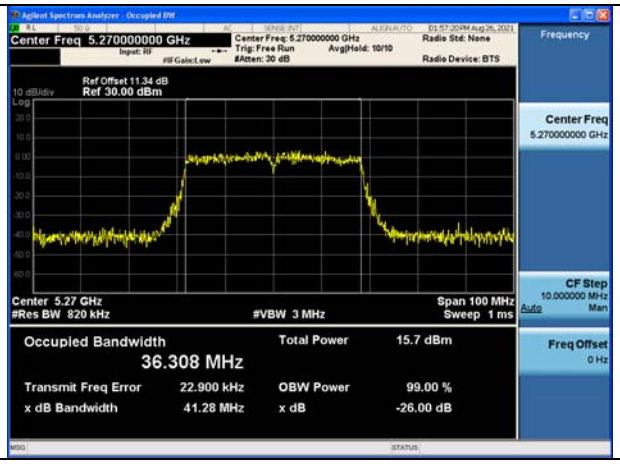
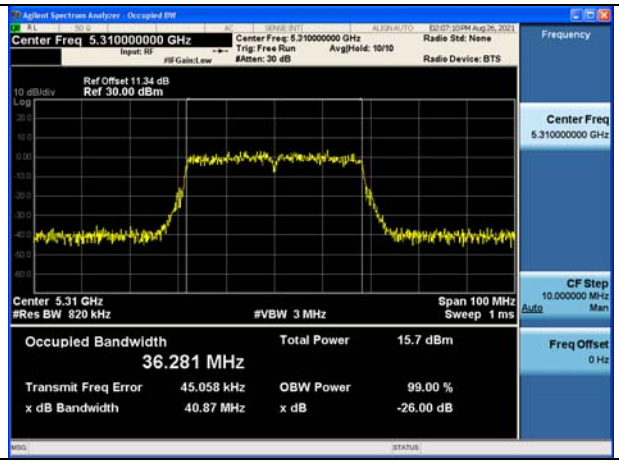


Test Mode:802. 11n HT20 Chain0



Test Mode:802. 11n HT40

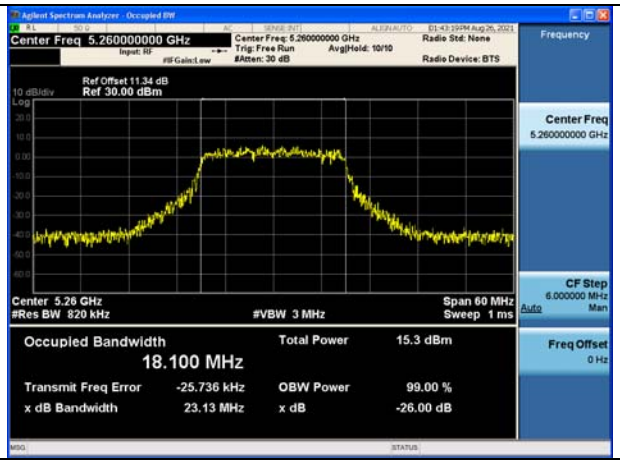
Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5270	Chain0	41.28
5310	Chain0	40.87

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

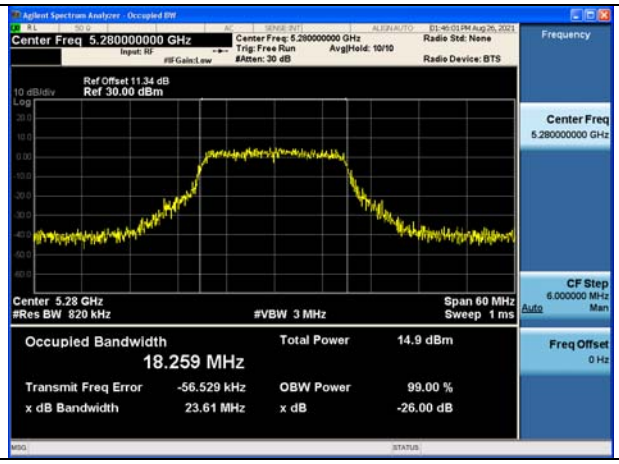
Test Mode:802. 11ac VHT20

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5260	Chain0	23.13
5280	Chain0	23.61
5320	Chain0	23.14

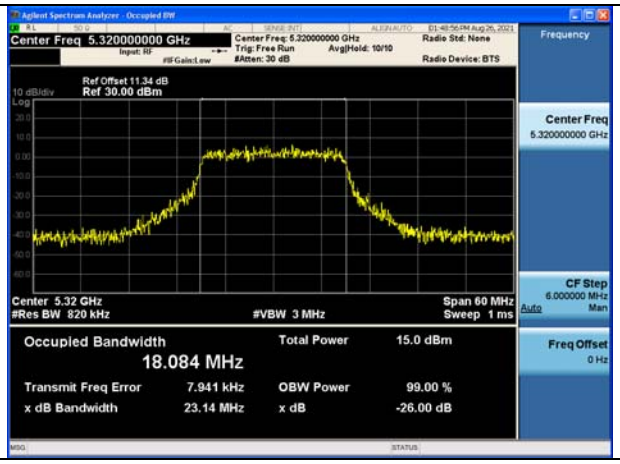
Test Mode:802. 11ac VHT20 Chain0



Test Mode:802. 11ac VHT20 Chain0

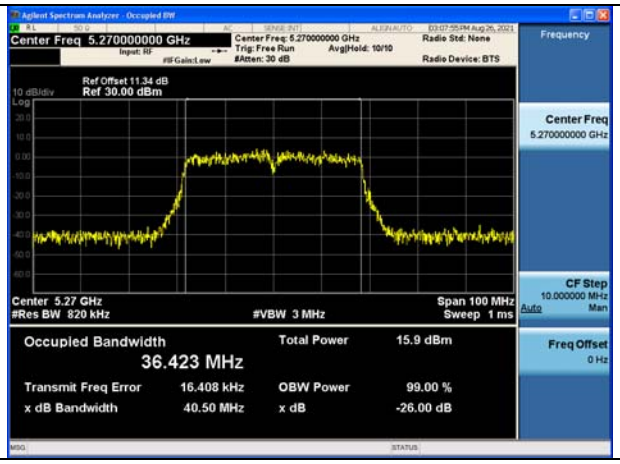
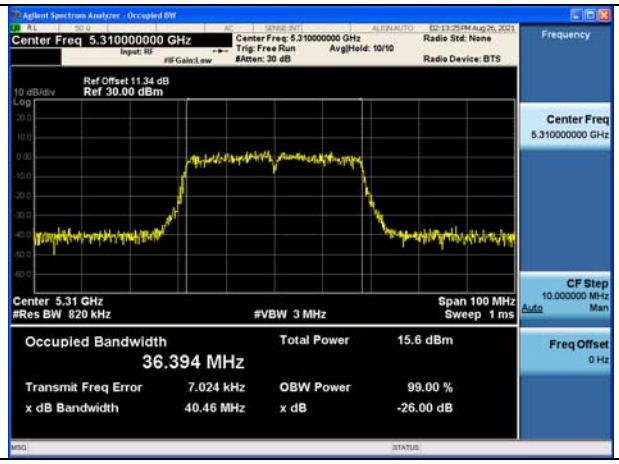


Test Mode:802. 11ac VHT20 Chain0



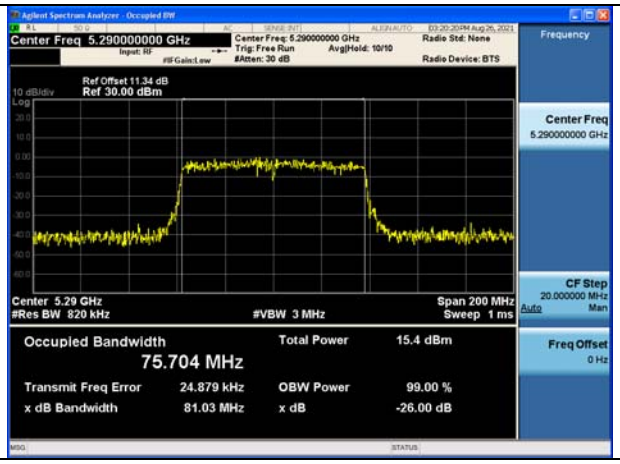
Test Mode:802. 11ac VHT40

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5270	Chain0	40.50
5310	Chain0	40.46

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	81.03

Test Mode:802. 11ac VHT80 Chain0	
	

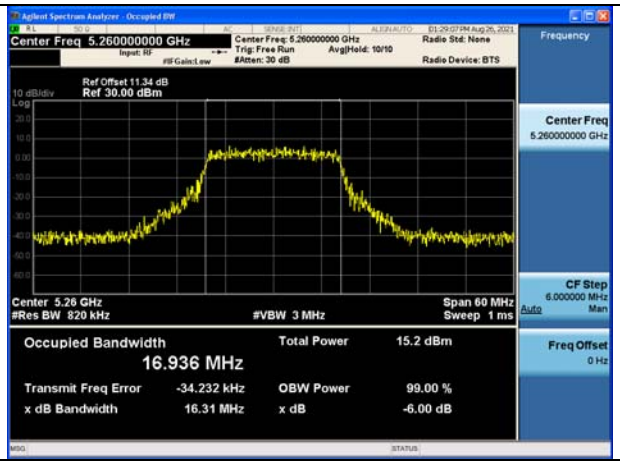
Occupied Bandwidth

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

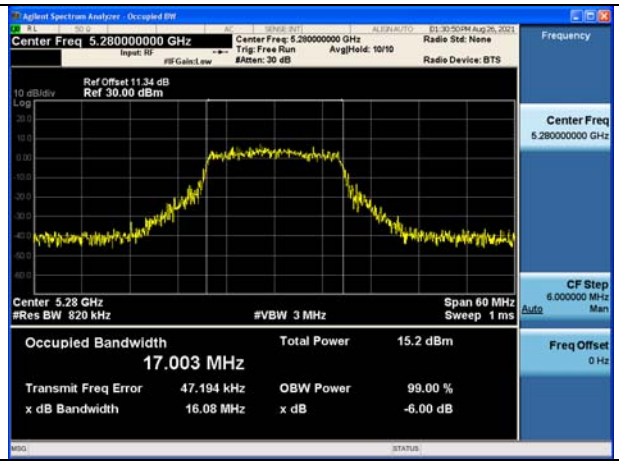
Test Mode:802.11a

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5260	Chain0	16.936
5280	Chain0	17.003
5320	Chain0	16.885

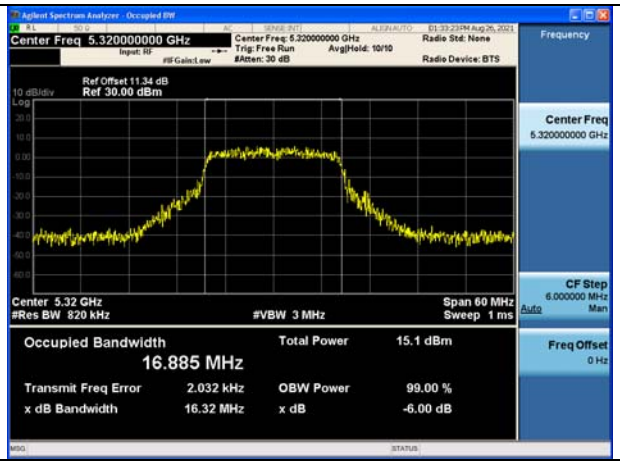
Test Mode:802.11a Chain0



Test Mode:802.11a Chain0



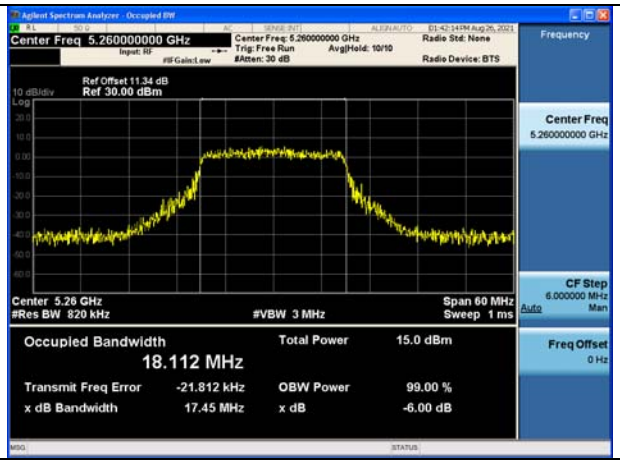
Test Mode:802.11a Chain0



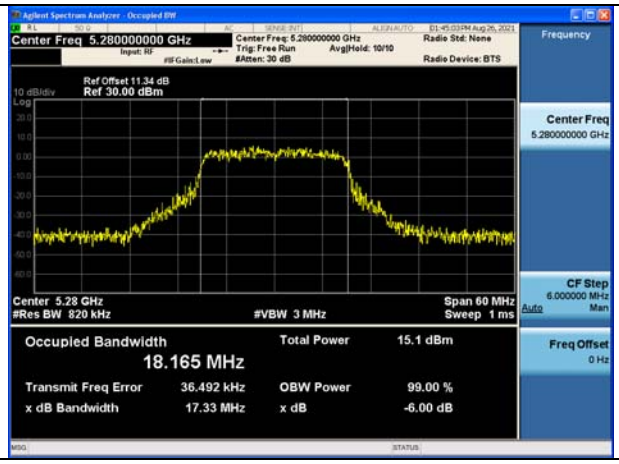
Test Mode:802. 11n HT20

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5260	Chain0	18.112
5280	Chain0	18.165
5320	Chain0	18.069

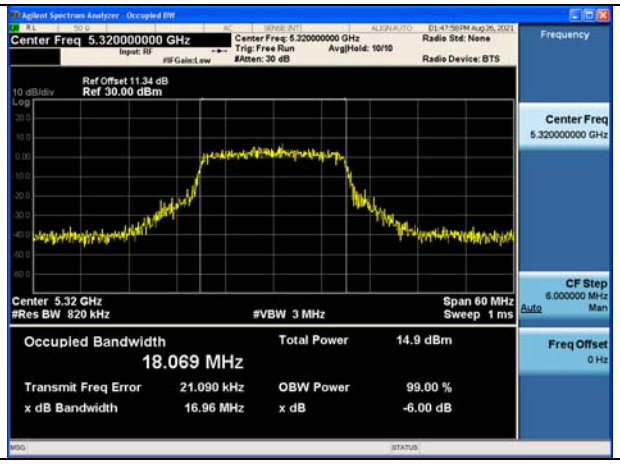
Test Mode:802. 11n HT20 Chain0



Test Mode:802. 11n HT20 Chain0

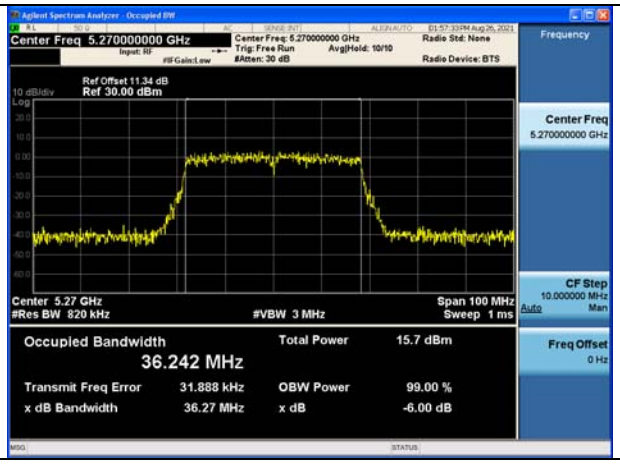
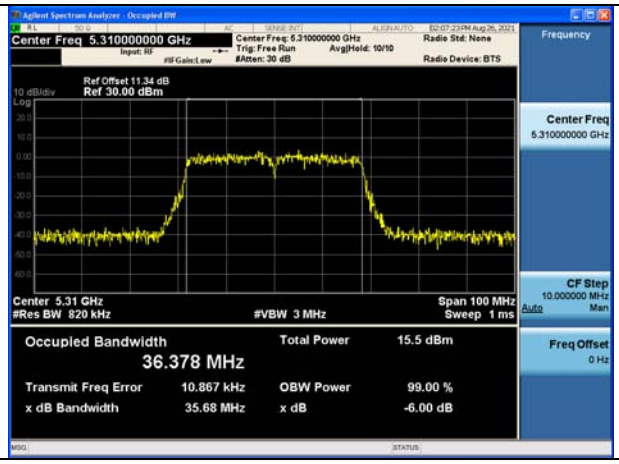


Test Mode:802. 11n HT20 Chain0



Test Mode:802. 11n HT40

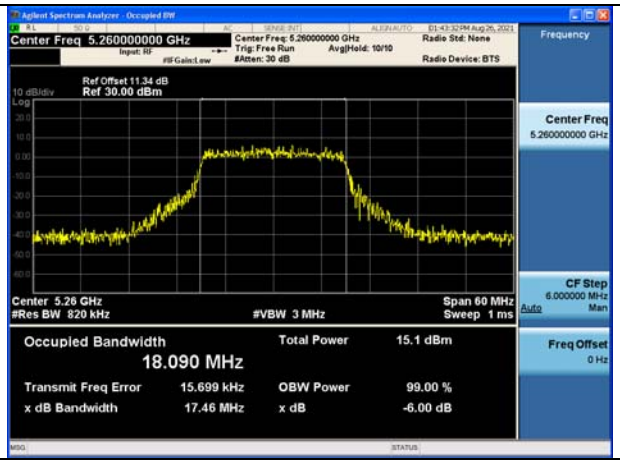
Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5270	Chain0	36.242
5310	Chain0	36.378

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

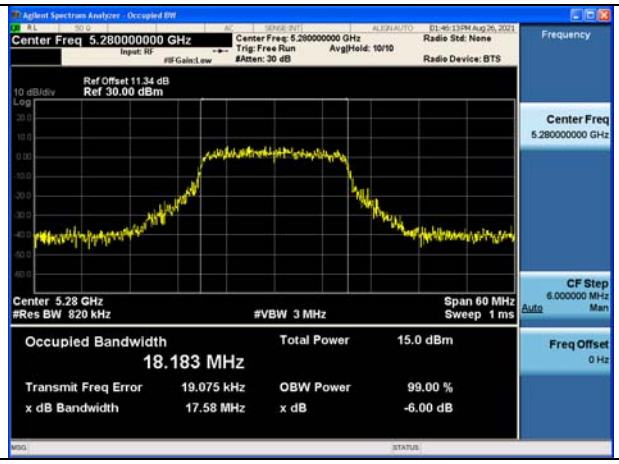
Test Mode:802. 11ac VHT20

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5260	Chain0	18.090
5280	Chain0	18.183
5320	Chain0	18.113

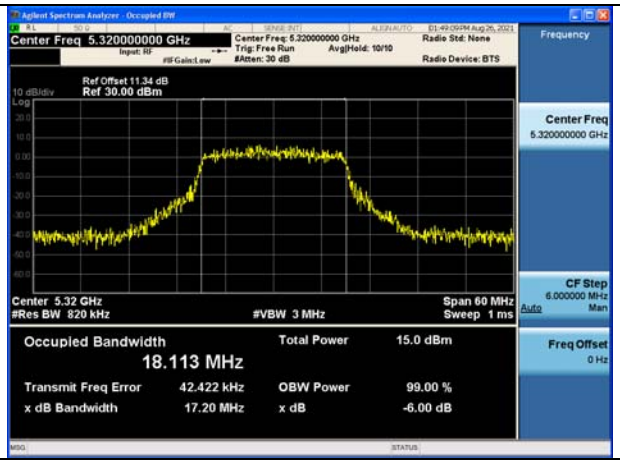
Test Mode:802. 11ac VHT20 Chain0



Test Mode:802. 11ac VHT20 Chain0

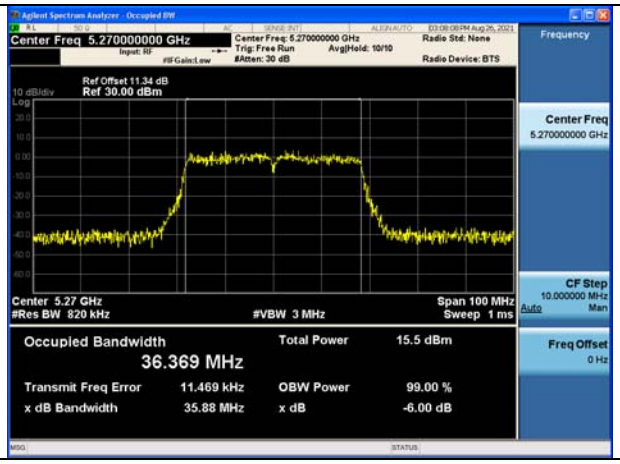
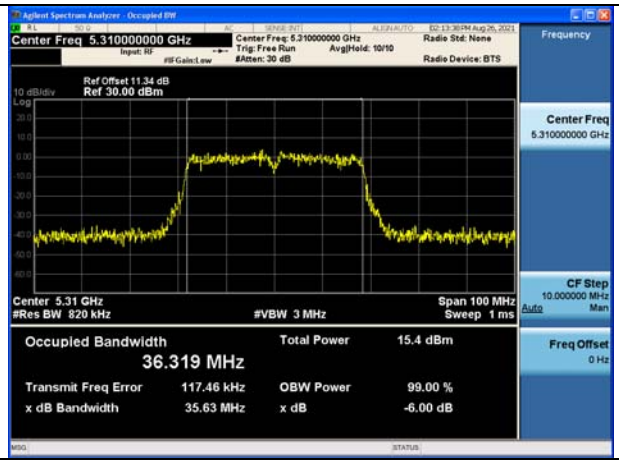


Test Mode:802. 11ac VHT20 Chain0



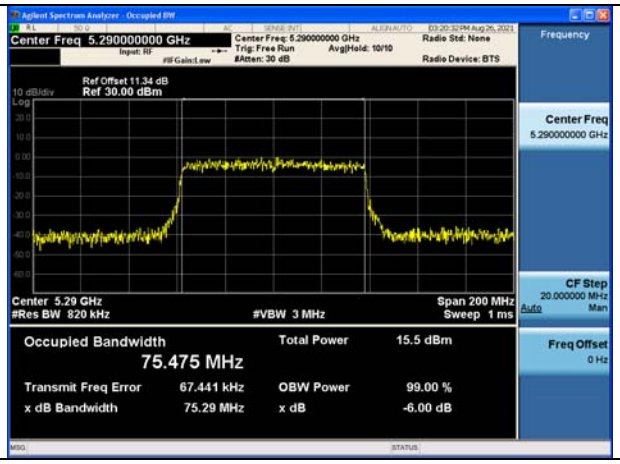
Test Mode:802. 11ac VHT40

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5270	Chain0	36.369
5310	Chain0	36.319

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	75.475

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	0.265
5280		Chain0	0.218
5320		Chain0	0.205

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	-0.197
5280		Chain0	-0.103
5320		Chain0	-0.231

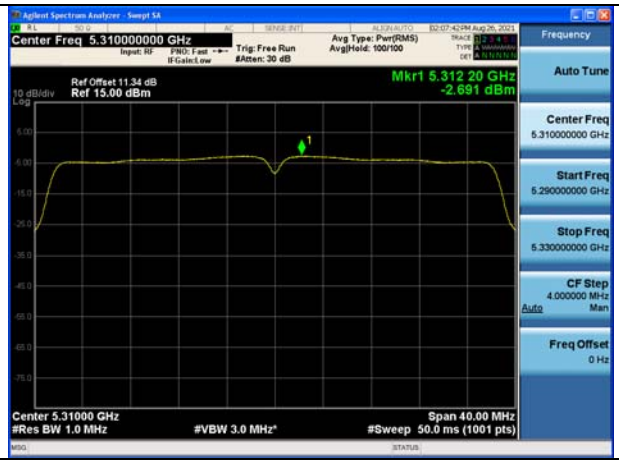
Test Mode:802. 11n HT20 Chain0

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	-2.616
5310		Chain0	-2.691

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	-0.180
5280		Chain0	-0.184
5320		Chain0	-0.254

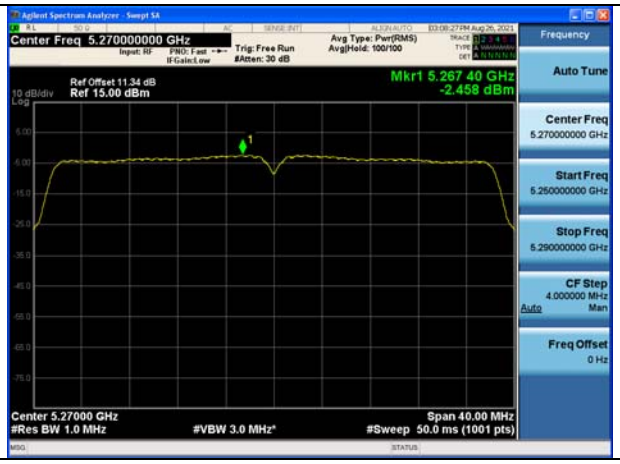
Test Mode:802. 11ac VHT20 Chain0

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	-2.458
5310		Chain0	-2.661

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	0.1	Chain0	-6.057

Test Mode:802. 11ac VHT80 Chain0	
	

Dynamic Frequency Selection

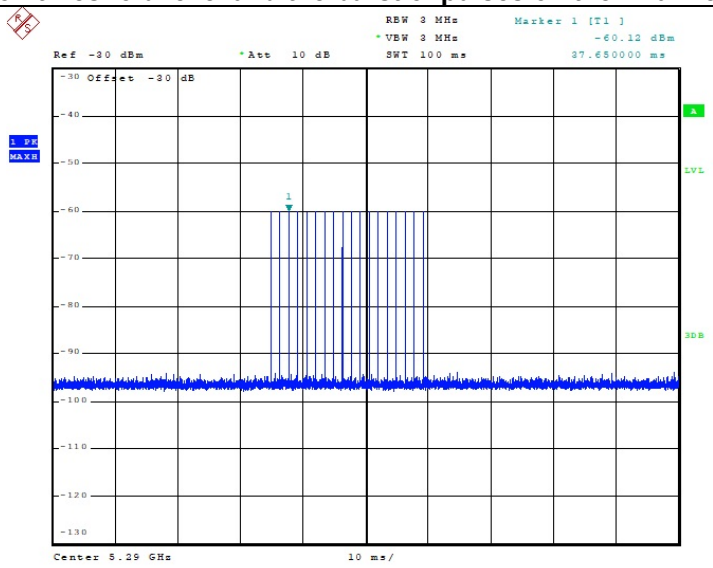
DESCRIPTION OF Master Device

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

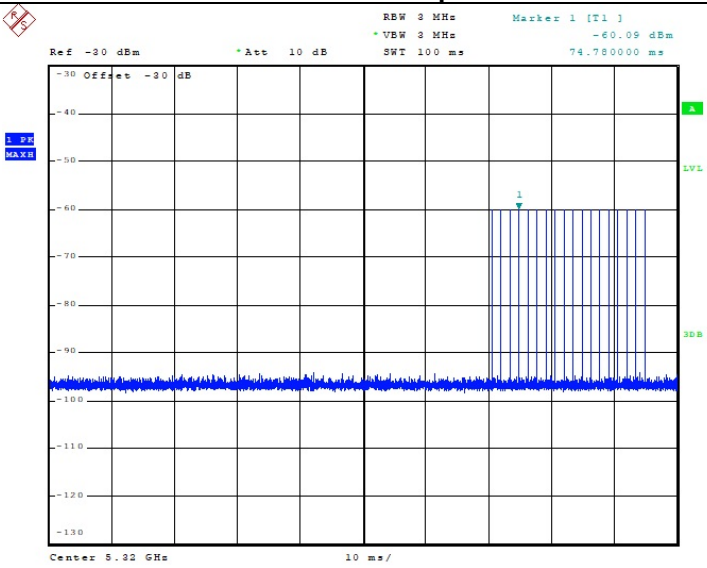
<80MHz / 5290 MHz> Radar Type 0

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

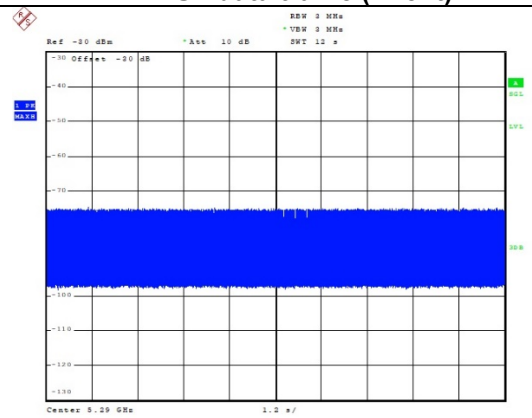
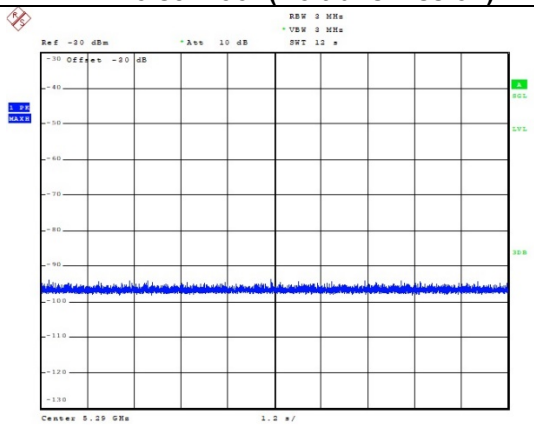
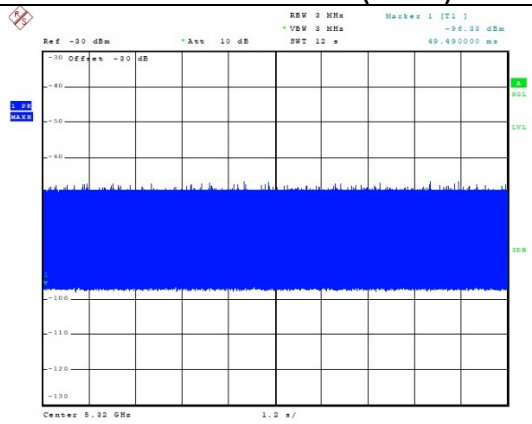
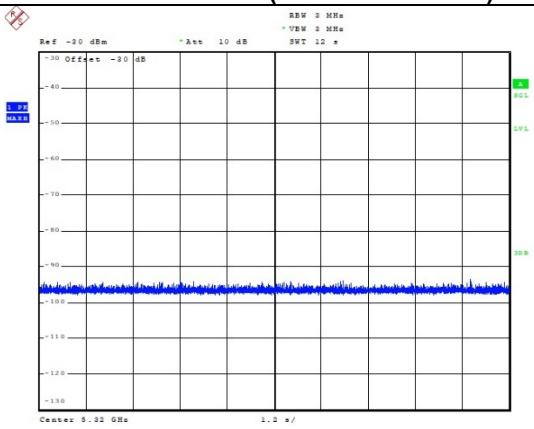


<20MHz / 5320 MHz> Radar Type 0

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



Data Traffic and Noise Floor Plots

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

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

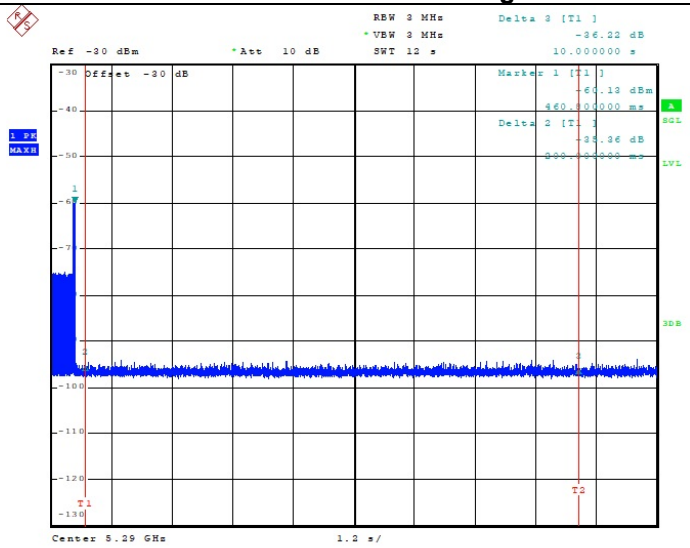
Frequency	Test Item	Test Result	Limit	Pass/Fail
5290MHz	Channel Move Time	＜ 10s*	＜ 10s	Pass
	Channel Closing Transmission Time	200ms	＜ 260ms	Pass
	Non-Occupancy Period	≥ 30	≥ 30 min	Pass
5320MHz	Channel Move Time	＜ 10s*	＜ 10s	Pass
	Channel Closing Transmission Time	200ms	＜ 260ms	Pass
	Non-Occupancy Period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

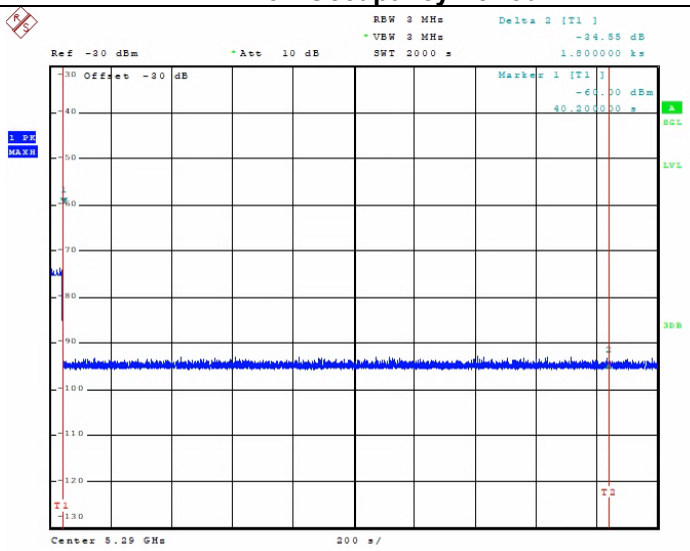
Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period for Client Beacon Test Plots

<80MHz / 5290 MHz>

Channel Move Time & Channel Closing Transmission Time



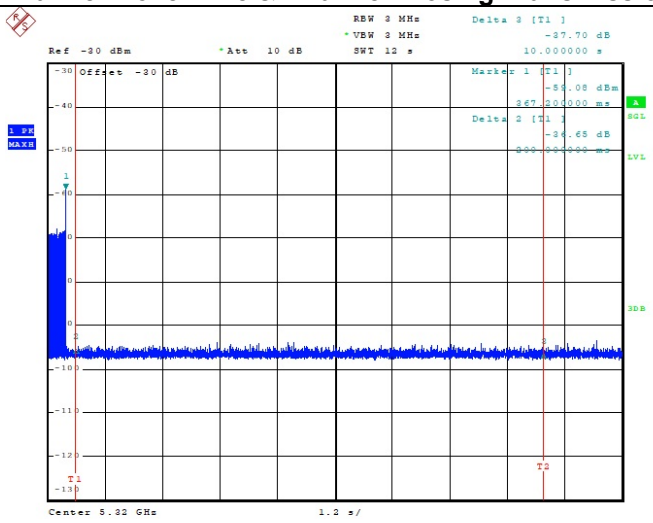
Non-Occupancy Period



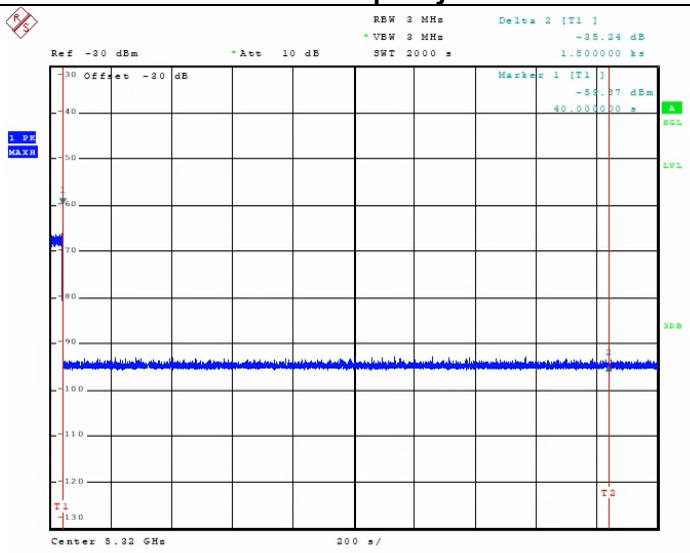
Note:
Dwell (0.4 ms)= Sweep Time (12000 ms) / Sweep Point Bins (30000)
Channel Closing Transmission Time (200 + 24 ms) = 200 + Number of beacon after 200ms(6) X Dwell (0.4 ms) < 260ms

<20MHz / 5320 MHz>

Channel Move Time & Channel Closing Transmission Time



Non-Occupancy Period



Note:
Dwell (0.4 ms)= Sweep Time (12000 ms) / Sweep Point Bins (30000)
Channel Closing Transmission Time (200 + 24 ms) = 200 + Number of beacon after 200ms(7) X Dwell (0.4 ms) < 260ms