

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

Duty Cycle

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)
802.11a	5260	99.50%	0
802.11n HT20	5260	99.49%	0
802.11n HT40	5270	98.93%	0
802.11ac VHT20	5260	99.48%	0
802.11ac VHT40	5270	99.00%	0
802.11ac VHT80	5290	98.00%	0.09

Output Power NII2A

Mode	Tones/ RUIndex	Freq (MHz)	Chain	Conducted average power output(dBm)	EIRP (dBm)
802.11a	NA	5260	Chain0	11.51	10.21
		5280	Chain0	11.46	10.16
		5320	Chain0	11.47	10.17
802.11n20M		5260	Chain0	11.41	10.11
		5280	Chain0	11.35	10.05
		5320	Chain0	11.34	10.04
802.11n40M		5270	Chain0	11.48	10.18
		5310	Chain0	11.30	10.00
802.11ac20M		5260	Chain0	11.54	10.24
		5280	Chain0	11.49	10.19
		5320	Chain0	11.39	10.09
802.11ac40M		5270	Chain0	11.47	10.17
	5310	Chain0	11.35	10.05	
802.11ac80M	5290	Chain0	11.75	10.45	

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	22.84
5280	Chain0	21.49
5320	Chain0	23.06

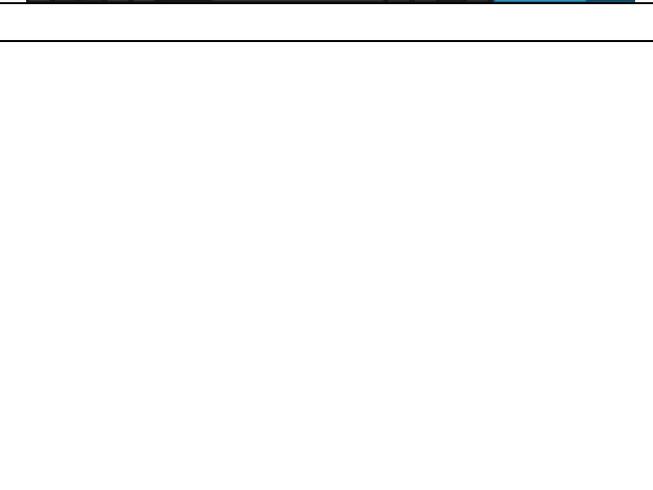
Test Mode:802.11a Chain0



Test Mode:802.11a Chain0



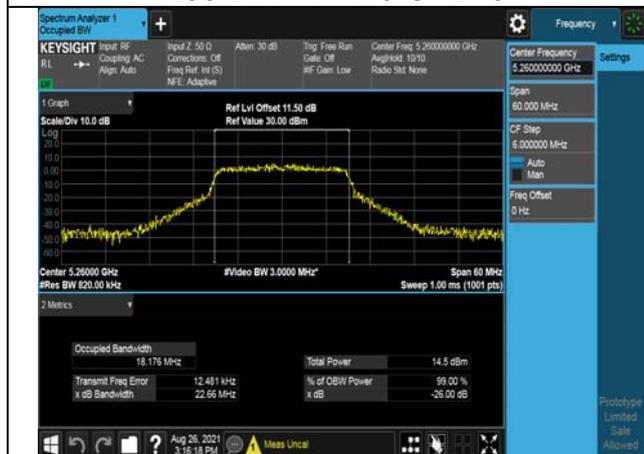
Test Mode:802.11a Chain0



Test Mode:802. 11n HT20

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5260	Chain0	22.66
5280	Chain0	23.66
5320	Chain0	23.36

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	40.50
5310	Chain0	39.61

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	23.85
5280	Chain0	24.63
5320	Chain0	24.30

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	40.64
5310	Chain0	40.73

Test Mode:802. 11ac VHT40 Chain0



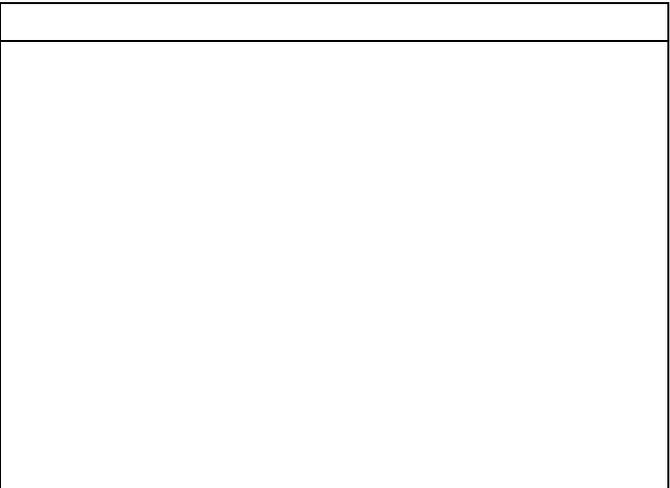
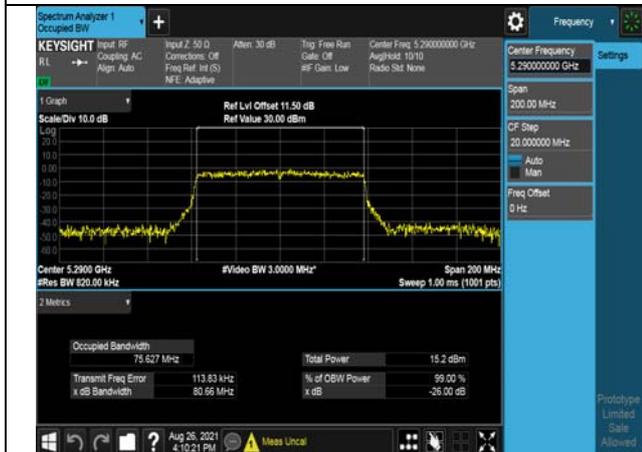
Test Mode:802. 11ac VHT40 Chain0



Test Mode:802. 11ac VHT80

Carrier frequency (MHz)	Chain	26dB Bandwidth (MHz)
5290	Chain0	80.66

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	17.050
5280	Chain0	17.009
5320	Chain0	17.066

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	18.156
5280	Chain0	18.317
5320	Chain0	18.170

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	36.393
5310	Chain0	36.354

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	18.104
5280	Chain0	18.159
5320	Chain0	18.178

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	36.360
5310	Chain0	36.381

Test Mode:802. 11ac VHT40 Chain0



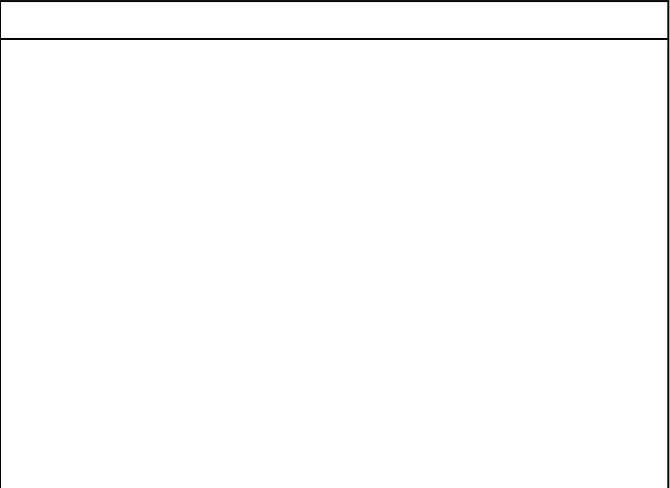
Test Mode:802. 11ac VHT40 Chain0



Test Mode:802. 11ac VHT80

Carrier frequency (MHz)	Chain	Occupied Bandwidth (MHz)
5290	Chain0	75.606

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	0.643
5280		Chain0	0.609
5320		Chain0	0.594

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	0.303
5280		Chain0	0.203
5320		Chain0	0.193

Test Mode:802. 11n HT20 Chain0



Test Mode:802. 11n HT20 Chain0

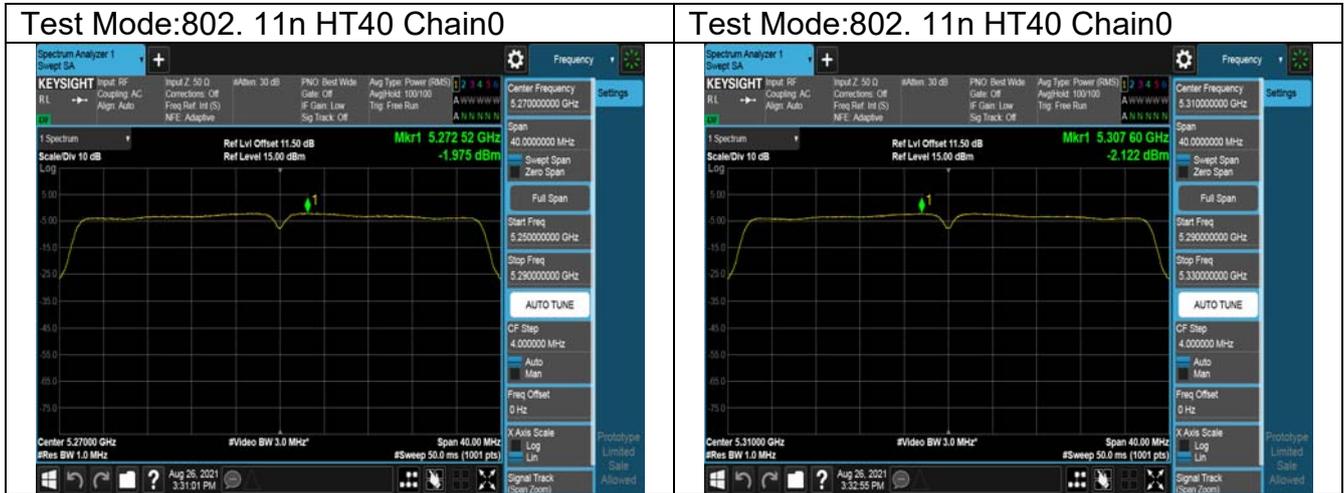


Test Mode:802. 11n HT20 Chain0



Test Mode:802. 11n HT40

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm)
5270	0	Chain0	-1.975
5310		Chain0	-2.122



Test Mode:802. 11ac VHT20

Carrier frequency (MHz)	Correction Factor(dB)	Chain	Power Density (dBm)
5260	0	Chain0	0.377
5280		Chain0	0.316
5320		Chain0	0.264

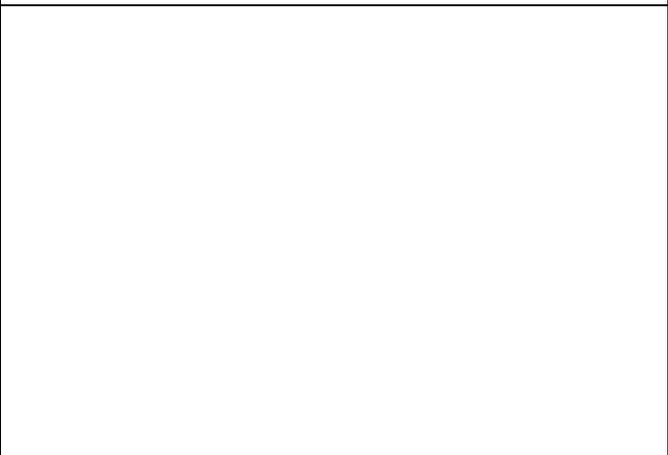
Test Mode:802. 11ac VHT20 Chain0



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	-2.002
5310		Chain0	-2.037

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	0.09	Chain0	-5.409

Test Mode:802. 11ac VHT80 Chain0



Dynamic Frequency Selection

DESCRIPTION OF Master Device

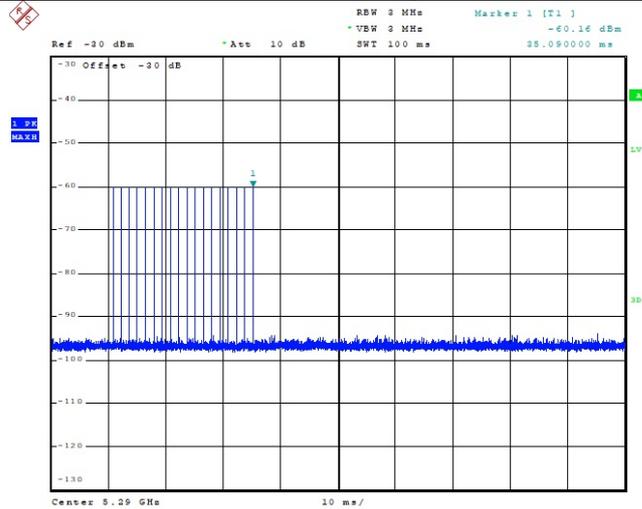
The Master Device is a SKSpruce Technologies Co., Ltd., Indoor Access Point, FCC ID: 2AHKT-WIA3300-20. The rated output power of the Master unit is > 23dBm (EIRP).

Therefore the required interference threshold level is -60 dBm.

Radar Waveform Calibration Result

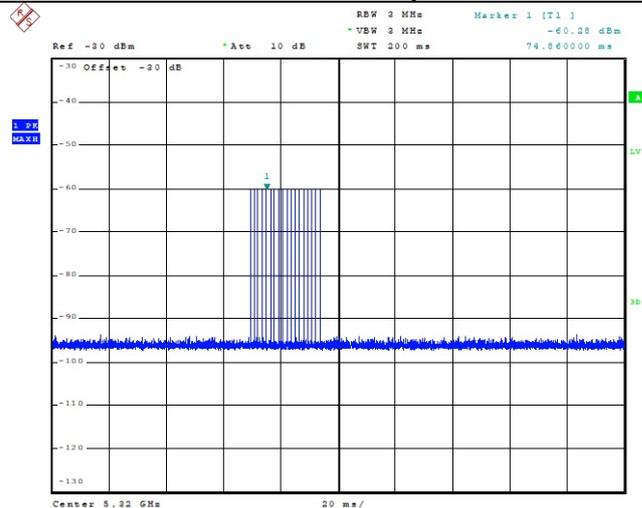
<80MHz / 5290 MHz> Radar Type 0

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

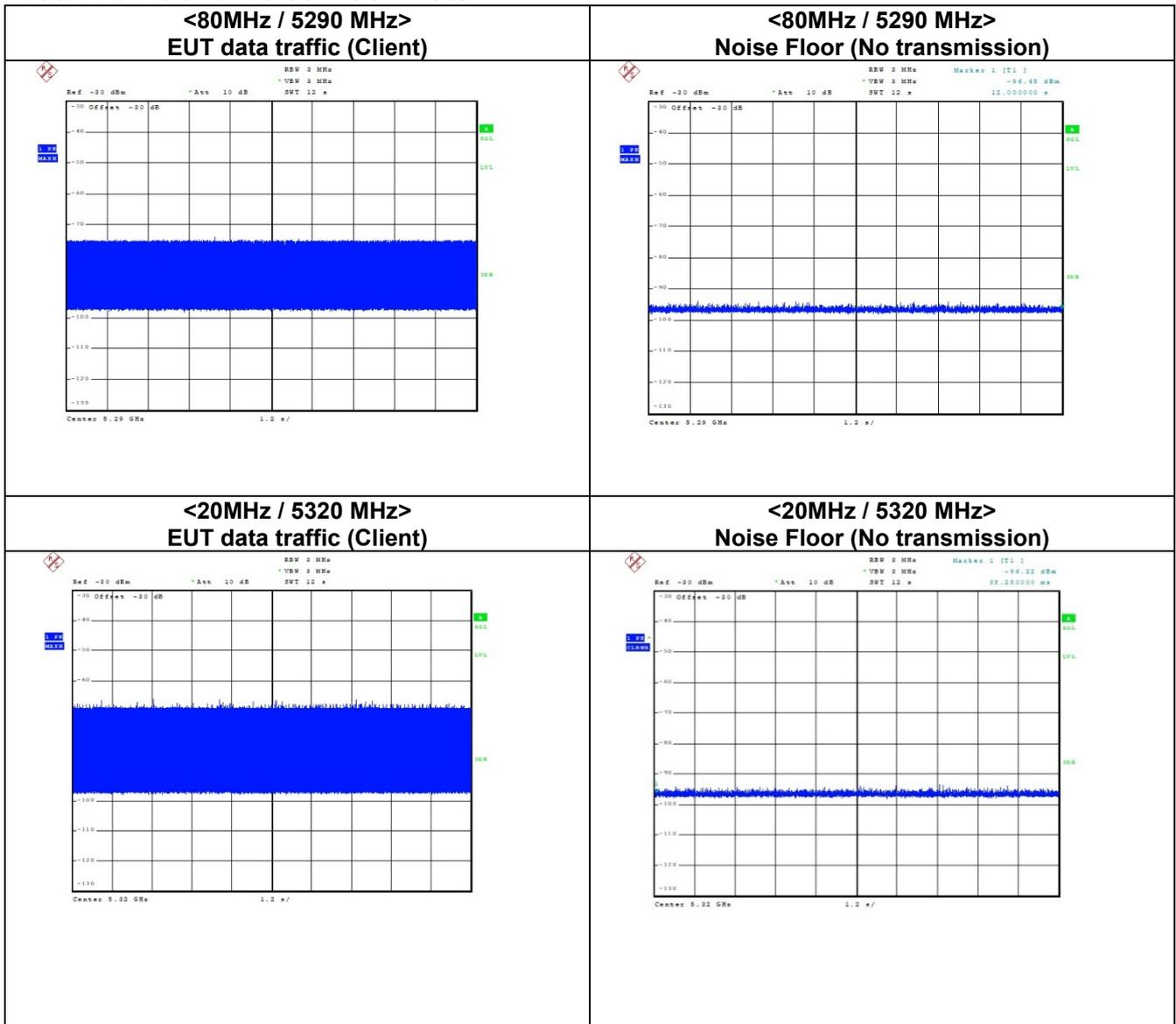


<20MHz / 5320 MHz> Radar Type 0

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



Data Traffic and Noise Floor Plots

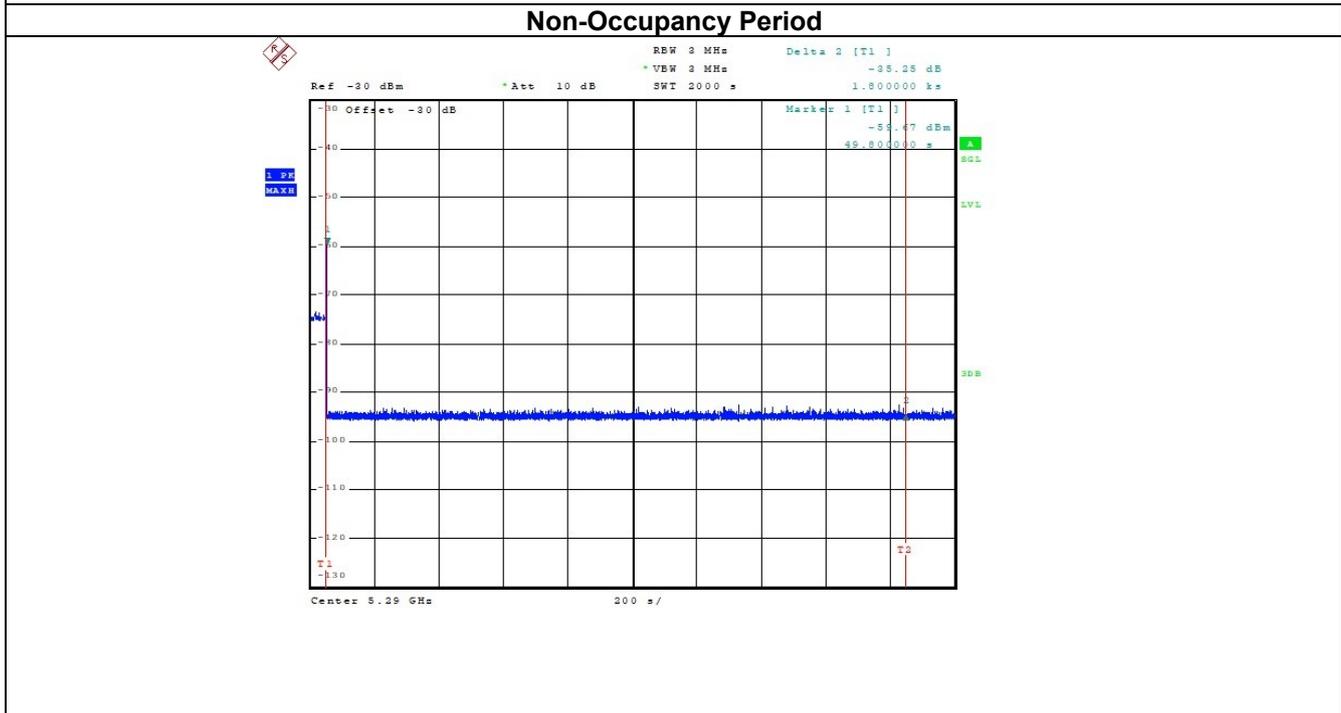
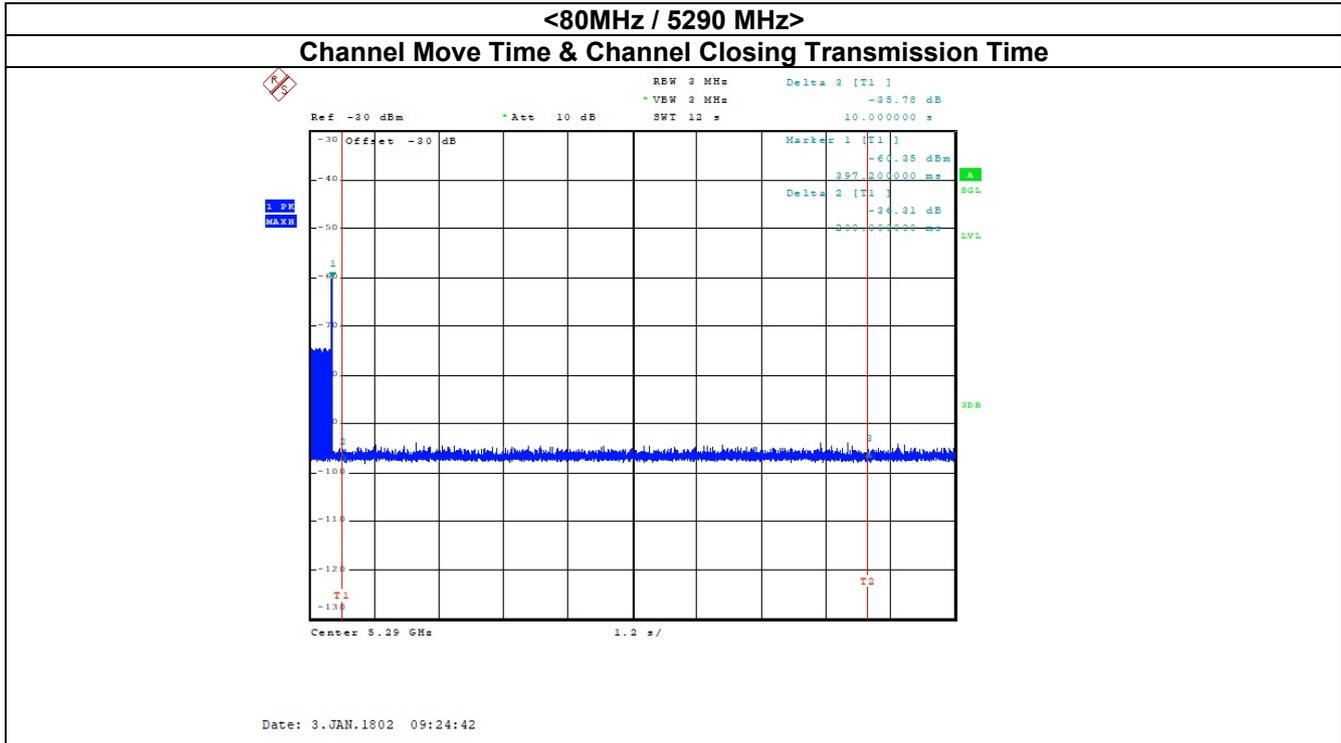


Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period for Client Beacon Test

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.

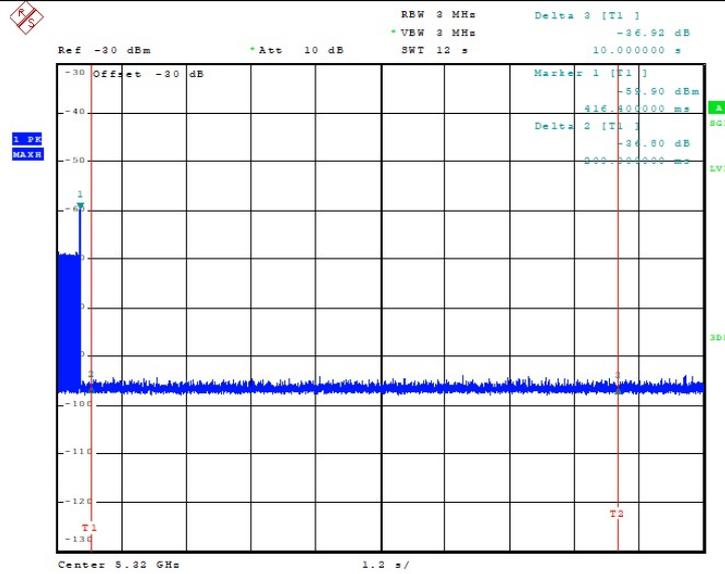
Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period for Client Beacon Test Plots



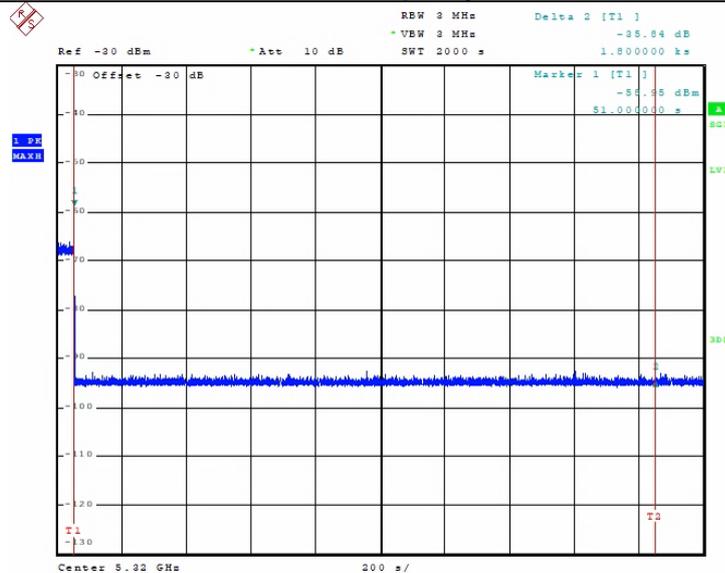
Note:
 Dwell (0.4 ms)= Sweep Time (12000 ms) / Sweep Point Bins (30000)
 Channel Closing Transmission Time (200 + 24 ms) = 200 + Number of beacon after 200ms(6) X Dwell (0.4 ms)
 < 260ms

<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