APPENDIX A – TEST DATA OF CONDUCTED EMISSION

Duty Cycle

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)
802.11a	5260	98.96%	0.05
802. 11n HT20	5260	98.86%	0.05
802. 11n HT40	5270	97.83%	0.10
802. 11ac VHT20	5260	98.85%	0.05
802. 11ac VHT40	5270	97.75%	0.10
802. 11ac VHT80	5290	95.49%	0.20

Output Power

NII2A

Mode	Tones/ RUIndex	Freq (MHz)	Ant	Conducted average power output(dBm)	EIRP (dBm)
802.11a	NA	5260	Ant7	14.50	13.60
		5280	Ant7	14.36	13.46
		5320	Ant7	14.18	13.28
802.11n20M		5260	Ant7	14.40	13.50
		5280	Ant7	14.26	13.36
		5320	Ant7	14.06	13.16
802.11n40M		5270	Ant7	14.41	13.51
		5310	Ant7	14.09	13.19
802.11ac20M		5260	Ant7	14.36	13.46
		5280	Ant7	14.24	13.34
		5320	Ant7	14.06	13.16
802.11ac40M		5270	Ant7	14.25	13.35
		5310	Ant7	13.98	13.08
802.11ac80M		5290	Ant7	13.94	13.04

Emission Bandwidth

Offset 11.34dB = Attenuator 10dB+ Temporary antenna connector loss 0.5dB+ Cable loss 0.84dB

Test Mode:802.11a

Carrier frequency (MHz)	Ant	26dB Bandwidth (MHz)
5260	Ant7	22.22
5280	Ant7	22.04
5320	Ant7	22.64

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)
5260	Ant7	23.06
5280	Ant7	23.79
5320	Ant7	23.73

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)
5270	Ant7	40.32
5310	Ant7	40.66

Test Mode:802. 11n HT40 Ant7

Test Mode:802. 11n HT40 Ant7

Test Mode:802. 11ac VHT20

Carrier frequency (MHz)	Ant	26dB Bandwidth (MHz)
5260	Ant7	23.04
5280	Ant7	22.92
5320	Ant7	23.78

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)
5270	Ant7	40.44
5310	Ant7	40.30

Test Mode:802. 11ac VHT40 Ant7

Test Mode:802. 11ac VHT40 Ant7

Test Mode:802. 11ac VHT80

Carrier frequency (MHz)	Ant	26dB Bandwidth (MHz)
5290	Ant7	80.89

Test Mode:802. 11ac VHT80 Ant7	

Occupied Bandwidth

Offset 11.34dB = Attenuator 10dB+ Temporary antenna connector loss 0.5dB+ Cable loss 0.84dB

Test Mode:802.11a

Carrier frequency (MHz)	Ant	Occupied Bandwidth (MHz)
5260	Ant7	16.852
5280	Ant7	16.979
5320	Ant7	16.976

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)
5260	Ant7	18.132
5280	Ant7	18.117
5320	Ant7	18.226

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)
5270	Ant7	36.341
5310	Ant7	36.375

Test Mode:802. 11n HT40 Ant7

Test Mode:802. 11n HT40 Ant7

Test Mode:802. 11ac VHT20

Carrier frequency (MHz)	Ant	Occupied Bandwidth (MHz)
5260	Ant7	18.179
5280	Ant7	18.163
5320	Ant7	18.169

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)
5270	Ant7	36.425
5310	Ant7	36.288

Test Mode:802. 11ac VHT40 Ant7

Test Mode:802. 11ac VHT40 Ant7

Test Mode:802. 11ac VHT80

Carrier frequency (MHz)	Ant	Occupied Bandwidth (MHz)
5290	Ant7	75.639

Test Mode:802. 11ac VHT80 Ant7	

Transmitter Power Spectral Density

Offset 11.34dB = Attenuator 10dB+ Temporary antenna connector loss 0.5dB+ Cable loss 0.84dB

Test Mode:802.11a

Carrier frequency (MHz)	Correction Factor(dB)	Ant	Power Density (dBm/MHz)
5260	0.05	Ant7	4.796
5280		Ant7	4.412
5320		Ant7	4.416

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/MHz)
5260	0.05	Ant7	4.600
5280		Ant7	4.327
5320		Ant7	4.338

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/MHz)
5270	0.10	Ant7	1.234
5310		Ant7	1.037

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/MHz)
5260	0.05	Ant7	4.525
5280		Ant7	4.493
5320		Ant7	4.337

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/MHz)
5270	0.10	Ant7	1.081
5310		Ant7	1.124

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/MHz)
5290	0.20	Ant7	-2.130

Test Mode:802. 11ac VHT80 Ant7

Dynamic Frequency Selection

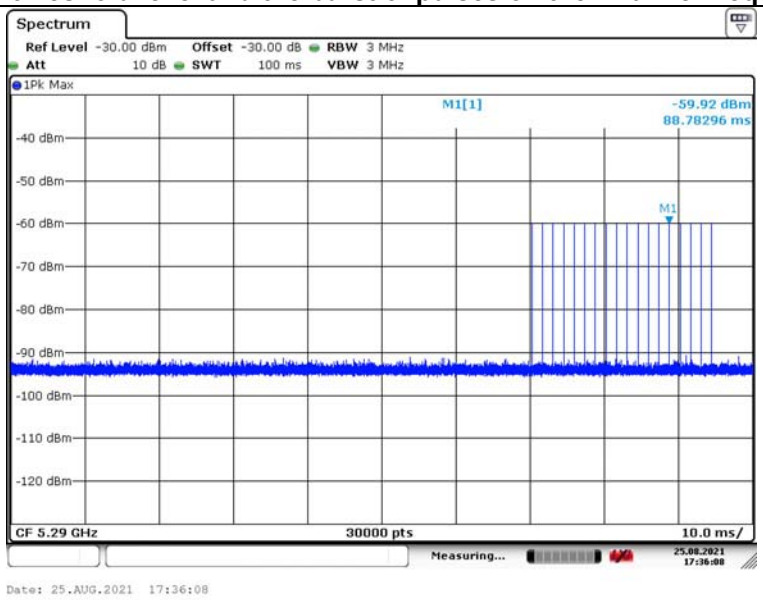
DESCRIPTION OF Master Device

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

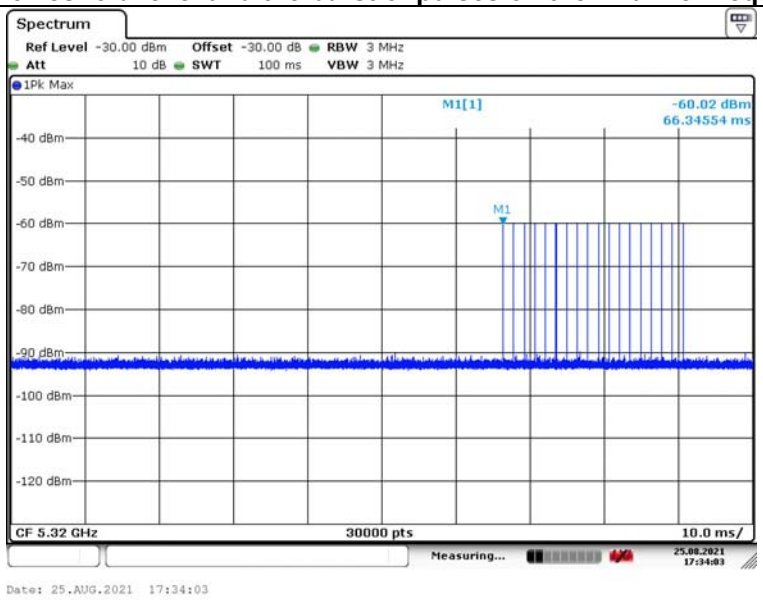
<80MHz / 5290 MHz> Radar Type 0

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

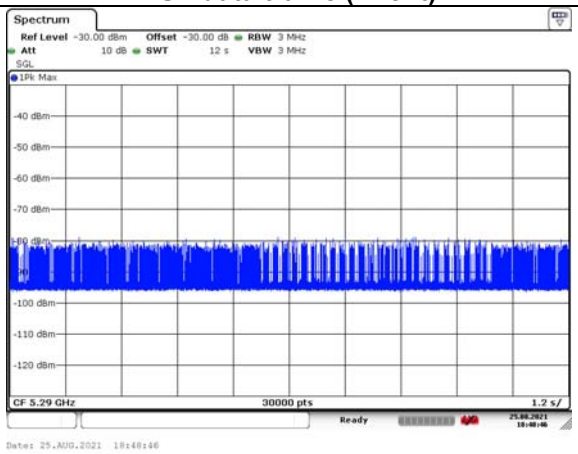
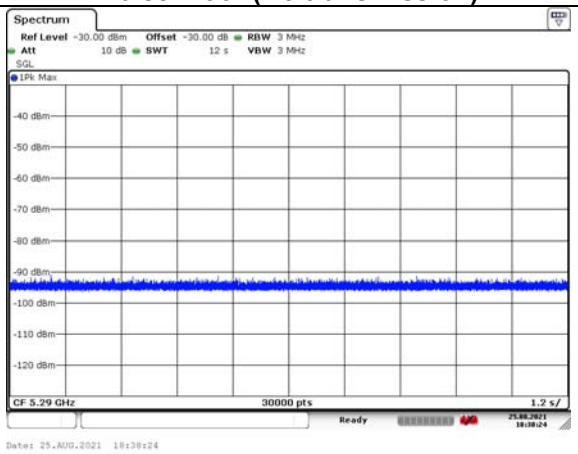
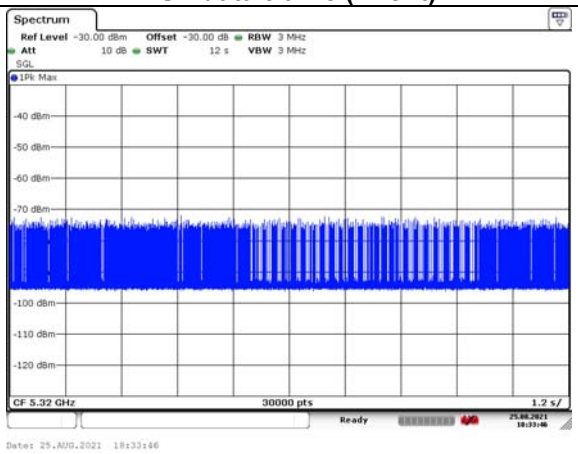
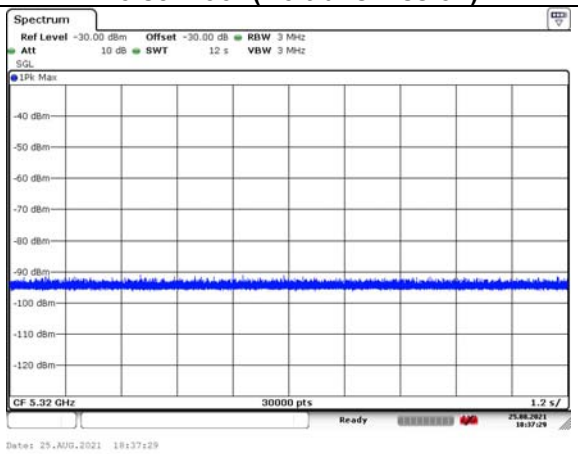


<20MHz / 5320 MHz> Radar Type 0

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

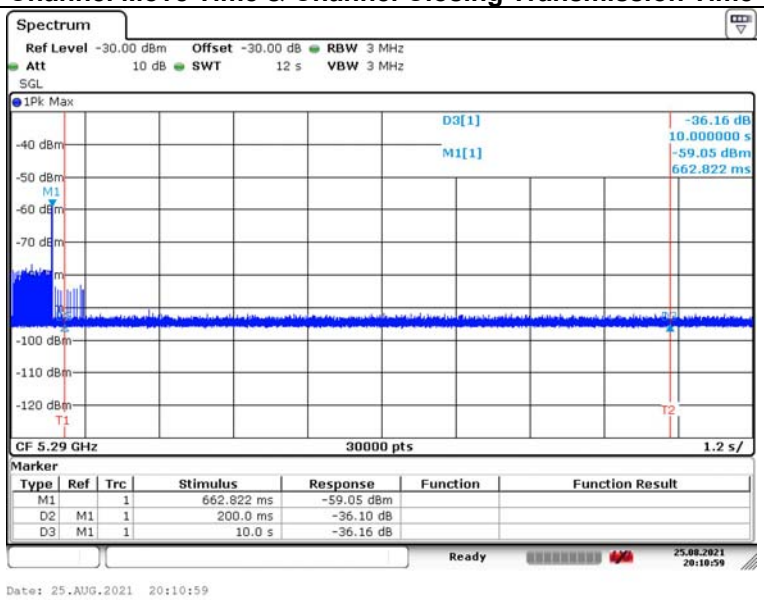
Frequency	Test Item	Test Result	Limit	Pass/Fail
5290MHz	Channel Move Time	＜ 10s*	＜ 10s	Pass
	Channel Closing Transmission Time	200ms +2.4ms	＜ 260ms	Pass
	Non-Occupancy Period	≥ 30	≥ 30 min	Pass
5320MHz	Channel Move Time	＜ 10s*	＜ 10s	Pass
	Channel Closing Transmission Time	200ms +2.8ms	＜ 260ms	Pass
	Non-Occupancy 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.

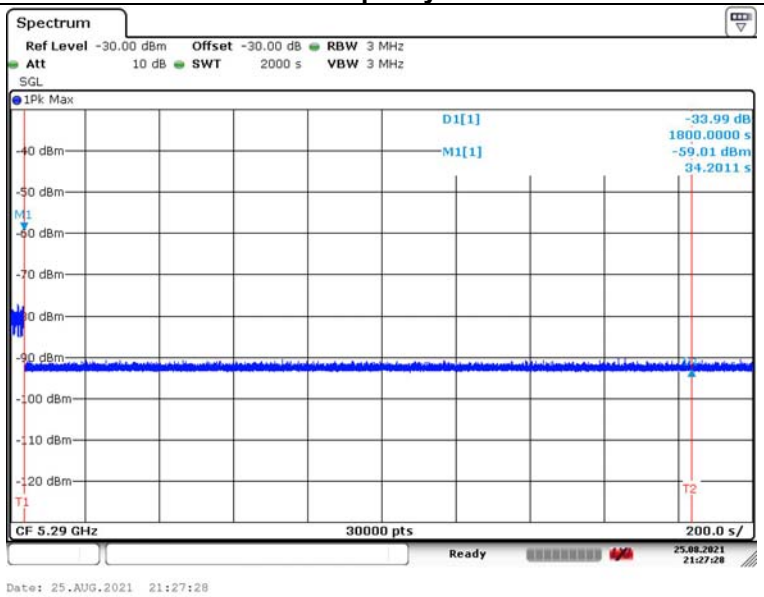
Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period for Client Beacon Test Plots

<80MHz / 5290 MHz>

Channel Move Time & Channel Closing Transmission Time



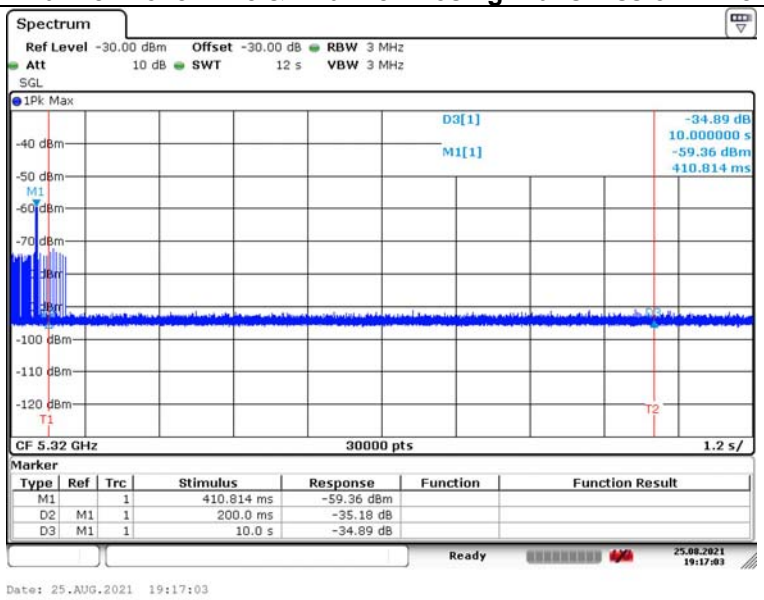
Non-Occupancy Period



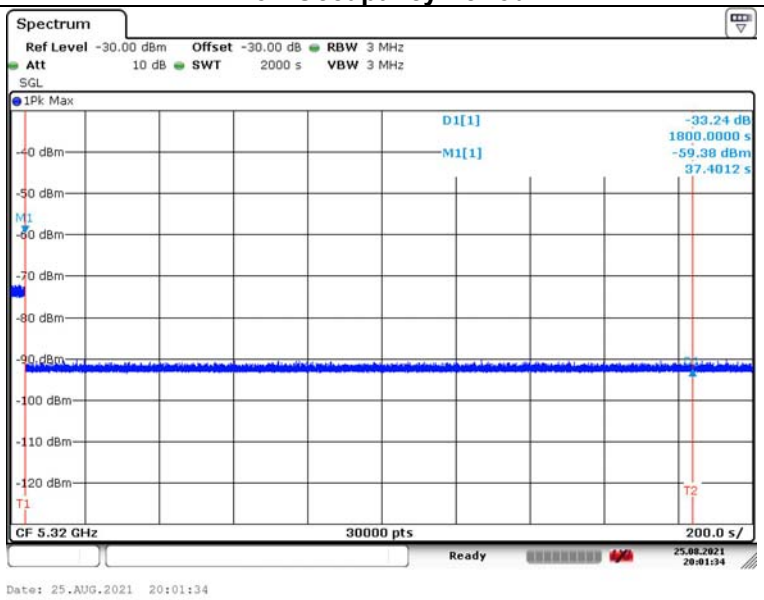
Note:
Dwell (0.4 ms)= Sweep Time (12000 ms) / Sweep Point Bins (30000)
Channel Closing Transmission Time (200 + 24 ms) = 200 + Number of beacon after 200ms(6) X Dwell (0.4 ms) < 260ms

<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