

Appendix D: Test results

1 Occupied 6 dB Bandwidth

1.1 Test Data

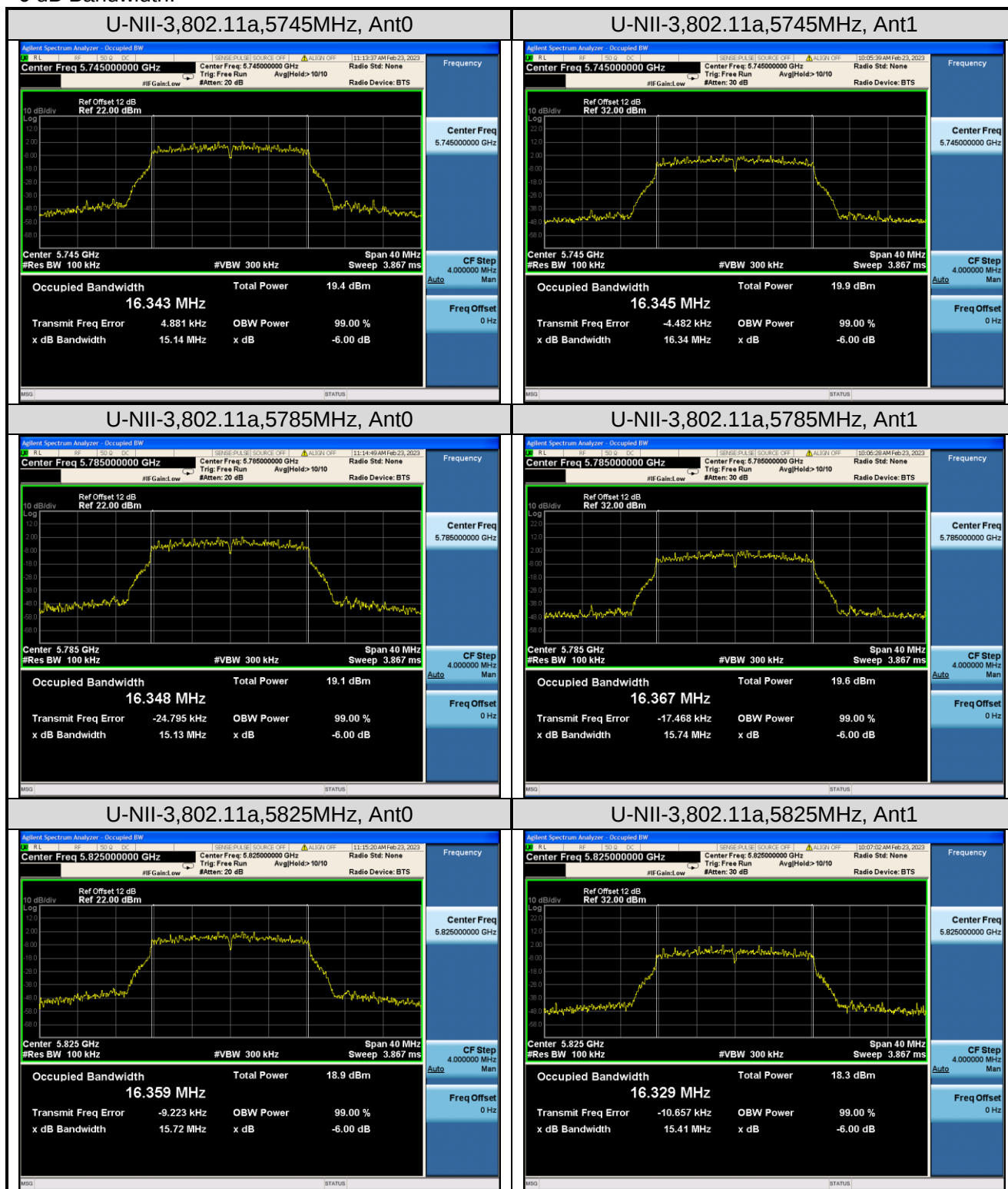
U-NII-3 Occupied 6 dB Bandwidth				
Mode	Test Frequency (MHz)	Ant	Occupied Bandwidth (MHz)	Result
802.11a	5745	Ant0	15.14	Pass
		Ant1	16.34	Pass
	5785	Ant0	15.13	Pass
		Ant1	15.74	Pass
	5825	Ant0	15.72	Pass
		Ant1	15.41	Pass

U-NII-3 99% Occupied Bandwidth				
Mode	Test Frequency (MHz)	Ant	Occupied Bandwidth (MHz)	Result
802.11a	5745	Ant0	16.453	Pass
		Ant1	16.544	Pass
	5785	Ant0	16.483	Pass
		Ant1	16.428	Pass
	5825	Ant0	16.503	Pass
		Ant1	16.483	Pass

TEST REPORT

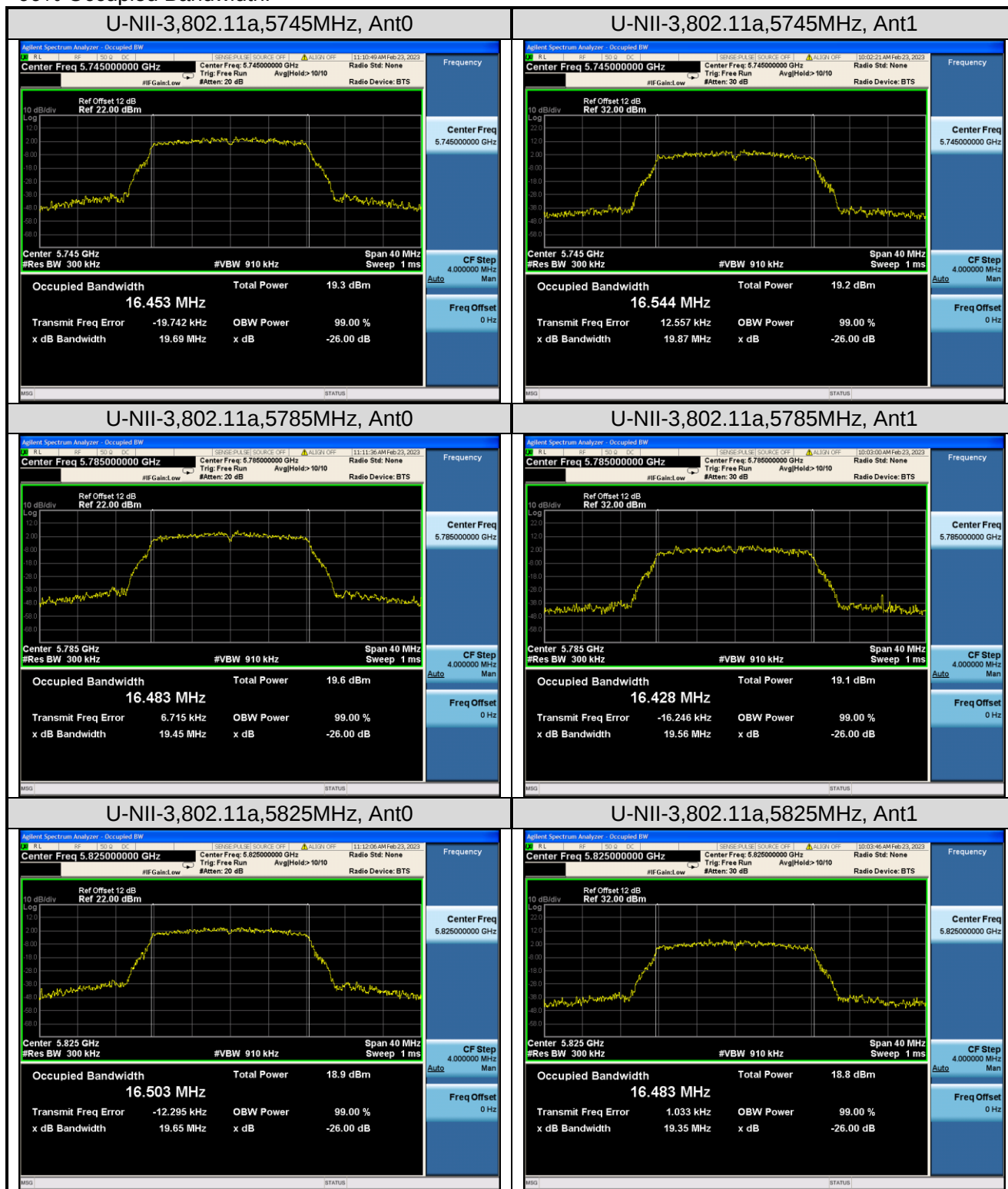
1.2 Test Plots

6 dB Bandwidth:



TEST REPORT

99% Occupied Bandwidth:



2 AVGSA Output Power

2.1 Test Data

U-NII-3 AVGSA Output Power						
Mode	Test Frequency (MHz)	Ant	Duty Cycle Factor (dB)	Max Power (dBm)	FCC Limit (dBm)	Result
802.11a	5745	Ant0	1.19	13.25	30	Pass
		Ant1		13.21		
	5785	Ant0		13.52	30	Pass
		Ant1		13.21		
	5825	Ant0		13.01	30	Pass
		Ant1		12.64		

Note: The Duty Cycle Factor is compensated in the Max Power.

Frequency Band	Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Completely uncorrelated chains directional	Power Limits (dBm)
U-NII-1	4.39	4.39	4.39	24
U-NII-2A	4.39	4.39	4.39	24
U-NII-2C	4.39	4.39	4.39	24
U-NII-3	4.39	4.39	4.39	30

Basic methodology with N_{ANT} transmit antennas, each with the same directional gain G_{ANT} dBi, being driven by N_{ANT} transmitter outputs of equal power. Directional gain is to be computed as follows:

If all transmit signals are completely uncorrelated with each other,

Directional gain = G_{ANT}

3 AVGSA Power Spectral Density

3.1 Test Data

U-NII-3 AVGSA Power Spectral Density							
Mode	Test Frequency (MHz)	Ant	Duty Cycle Factor (dB)	PSD (dBm)	RBW (kHz)	FCC Limit (dBm)	Result
802.11a	5745	Ant0	1.19	1.024	510	30	Pass
		Ant1		0.891			
	5785	Ant0		1.188	510	30	Pass
		Ant1		0.566			
	5825	Ant0		0.786	510	30	Pass
		Ant1		0.168			

Note: The Duty Cycle Factor is compensated in the PSD.

Frequency Band	Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Completely uncorrelated chains directional	PSD Limits (dBm/MHz or dBm/500kHz)
U-NII-1	4.39	4.39	4.39	11
U-NII-2A	4.39	4.39	4.39	11
U-NII-2C	4.39	4.39	4.39	11
U-NII-3	4.39	4.39	4.39	30

Basic methodology with N_{ANT} transmit antennas, each with the same directional gain G_{ANT} dBi, being driven by N_{ANT} transmitter outputs of equal power. Directional gain is to be computed as follows:

If all transmit signals are completely uncorrelated with each other,

Directional gain = G_{ANT}

3.2 Test Plots

