

Appendix A: Test Results of 5.8GHz RLAN.

Duty Cycle

Test Result

Mode	Data rates	Channel	Antenna	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
IEEE 802.11a	6	149	1	0.178	0.277	63.98	0.6398	1.93	5.6180
		157		0.178	0.278	64.13	0.6413	1.93	5.6180
		165		0.178	0.278	64.06	0.6406	1.93	5.6180
IEEE 802.11n_20	MCS 0	149		0.166	0.265	62.40	0.6240	2.05	6.0241
		157		0.166	0.265	62.40	0.6240	2.05	6.0241
		165		0.166	0.265	62.38	0.6238	2.05	6.0241

Test Graphs



Conducted Output Power

Conducted output power

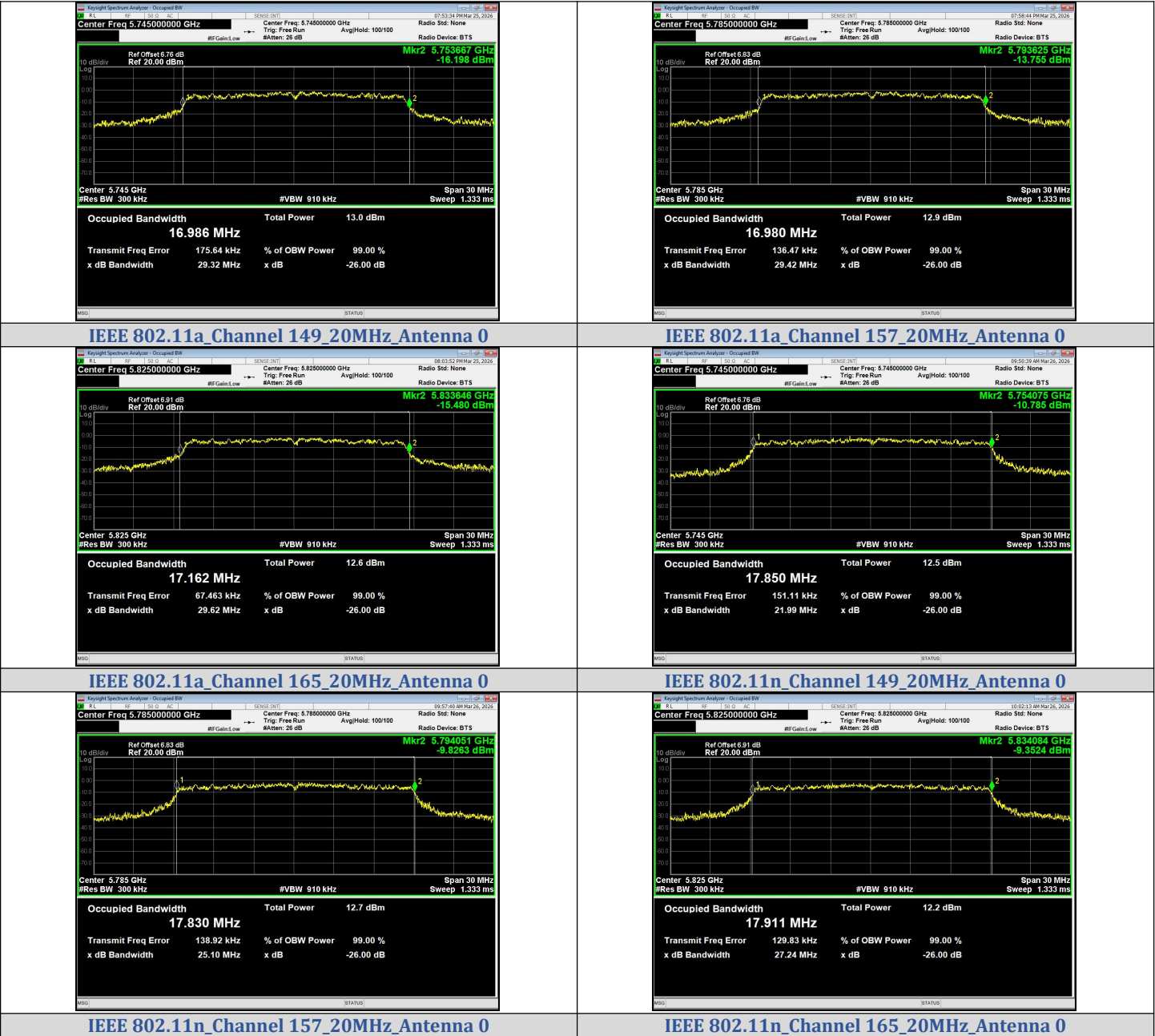
Mode	Channel	Conducted Power (dBm)	Duty Factor (dB)	Total power (dBm)	Limit (dBm)	Result
IEEE 802.11a	149	3.23	1.93	5.16	≤30	PASS
	157	3.44	1.93	5.37	≤30	PASS
	165	3.16	1.93	5.09	≤30	PASS
IEEE 802.11n_20	149	2.35	2.05	4.40	≤30	PASS
	157	2.74	2.05	4.79	≤30	PASS
	165	2.39	2.05	4.44	≤30	PASS
Note: Total power = Antenna Power + Duty Cycle Factor.						

99% Bandwidth

Test Result

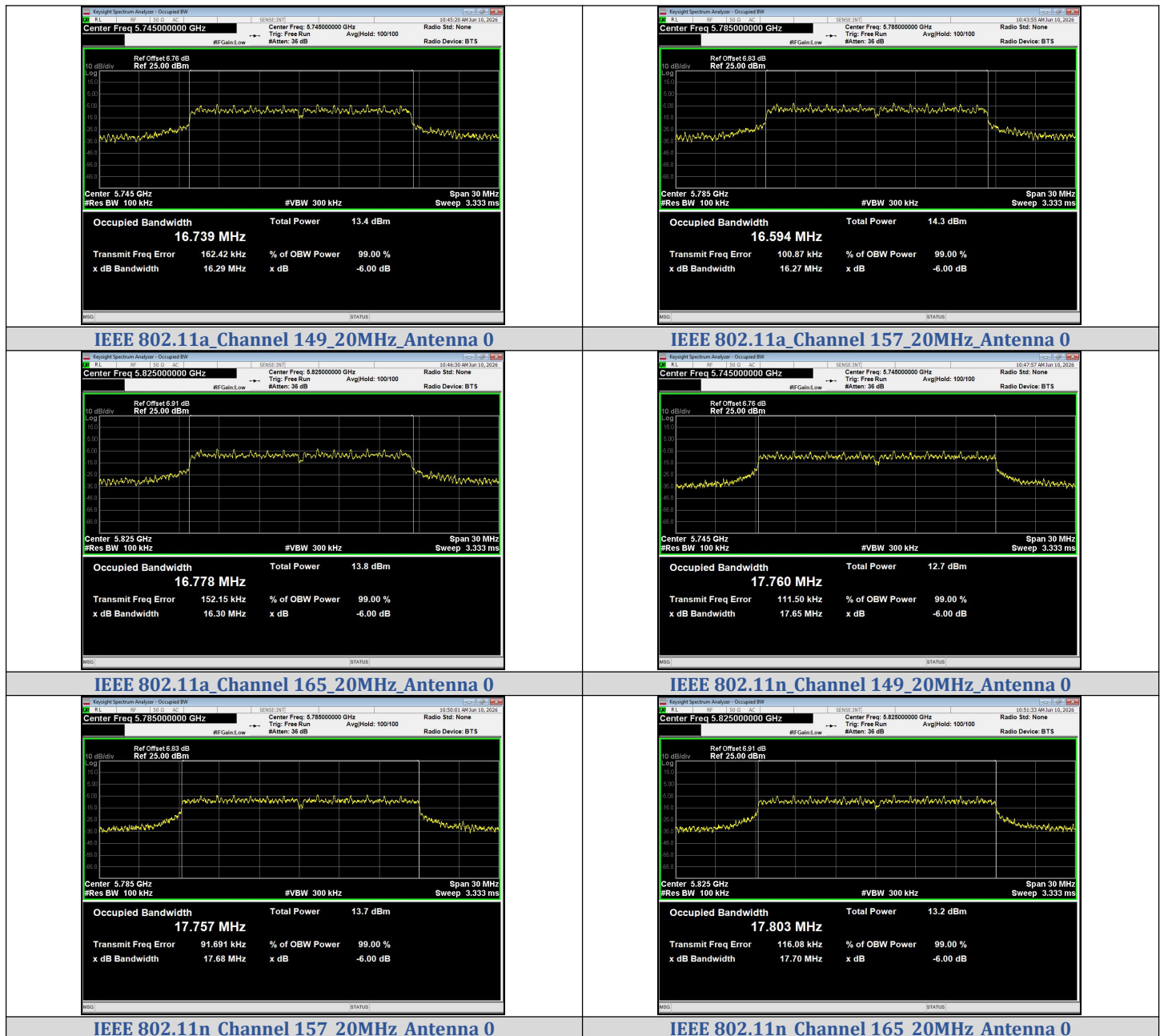
Mode	Channel	Ant.	Center Frequency (MHz)	99% BW (MHz)
IEEE 802.11a	149	0	5745	16.986
	157		5785	16.980
	165		5825	17.162
IEEE 802.11n_20	149		5745	17.850
	157		5785	17.830
	165		5825	17.911

Test Graphs



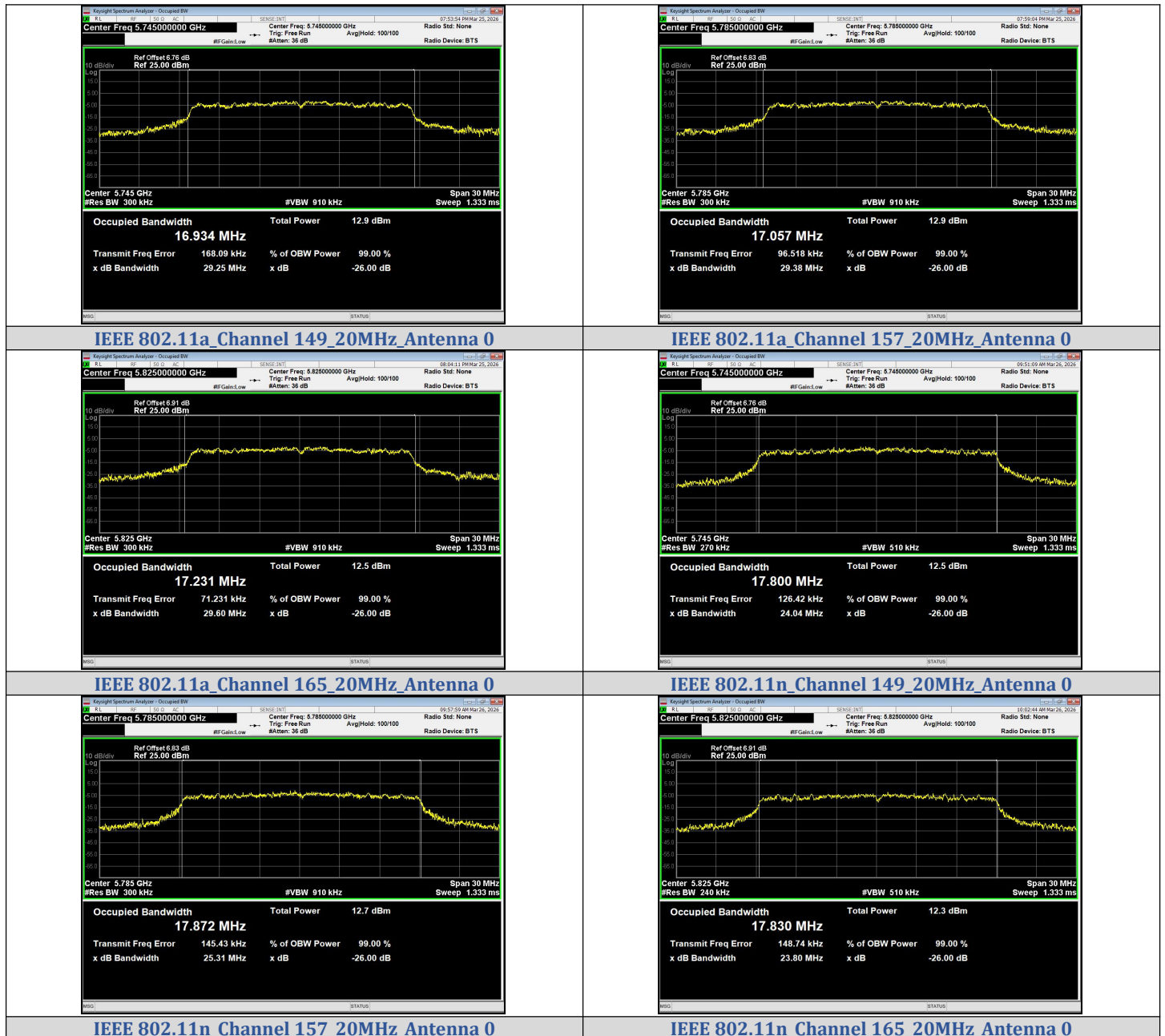
6dB Bandwidth**Test Result**

Mode	Channel	Ant.	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11a	149	0	5745	16.29	≥0.5	PASS
	157		5785	16.27		PASS
	165		5825	16.30		PASS
IEEE 802.11n_20	149		5745	17.65		PASS
	157		5785	17.68		PASS
	165		5825	17.70		PASS

Test Graphs

26dB Bandwidth**Test Result**

Mode	Channel	Ant.	Center Frequency (MHz)	26 dB Bandwidth (MHz)	RBW/EBW
IEEE 802.11a	149	0	5745	29.25	1.03
	157		5785	29.38	1.02
	165		5825	29.60	1.01
IEEE 802.11n_20	149		5745	24.04	1.09
	157		5785	25.31	1.19
	165		5825	23.80	1.07

Test Graphs

Power Spectral Density

Test Result

Mode	Channel	Ant. 0 Meas PSD (dBm/500kHz)	Ant. 0 Corr'd PSD (dBm/500kHz)	Limit (dBm/500kHz)	Result
IEEE 802.11a	149	-8.451	-6.521	30	PASS
	157	-7.598	-5.668		PASS
	165	-8.135	-6.205		PASS
IEEE 802.11n_20	149	-9.982	-7.932		PASS
	157	-8.596	-6.546		PASS
	165	-9.282	-7.232		PASS

Test Graphs

