

Appendix Test Data for Zigbee (Conducted Measurement)

Product Name: Smart Gateway

Trade Mark: Dusun

Test Model: DSGW-093

FCC ID: 2AUXBDSGW-093

Environmental Conditions

Temperature:	22.7℃
Relative Humidity:	56%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

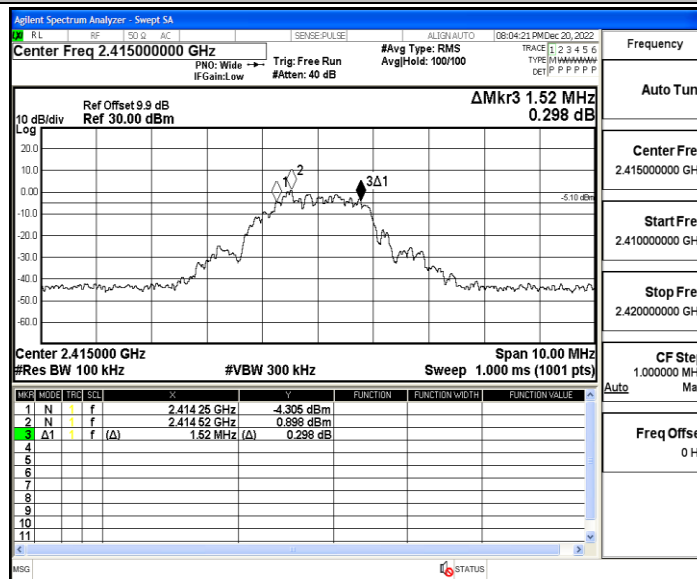
Appendix A: DTS Bandwidth

Test Result

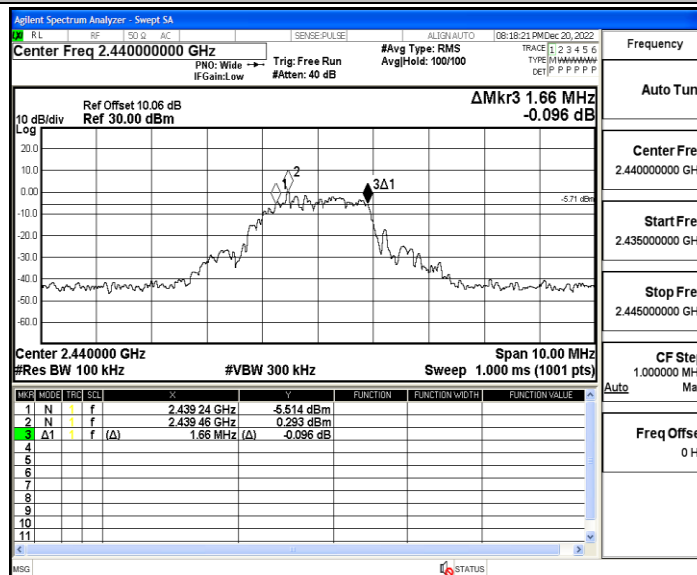
TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
ZIGB	Ant1	2415	1.520	2414.250	2415.770	0.5	PASS
		2440	1.660	2439.240	2440.900	0.5	PASS
		2480	1.770	2479.080	2480.850	0.5	PASS

Test Graphs

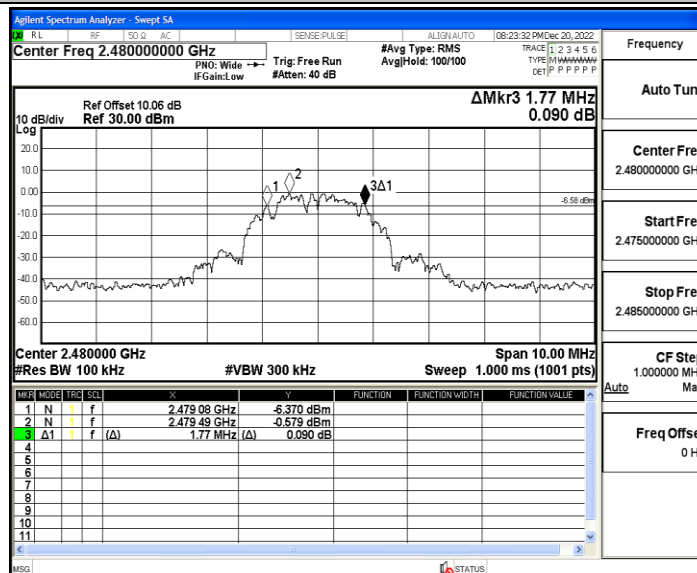
ZIGB_Ant1_2415



ZIGB_Ant1_2440



ZIGB_Ant1_2480

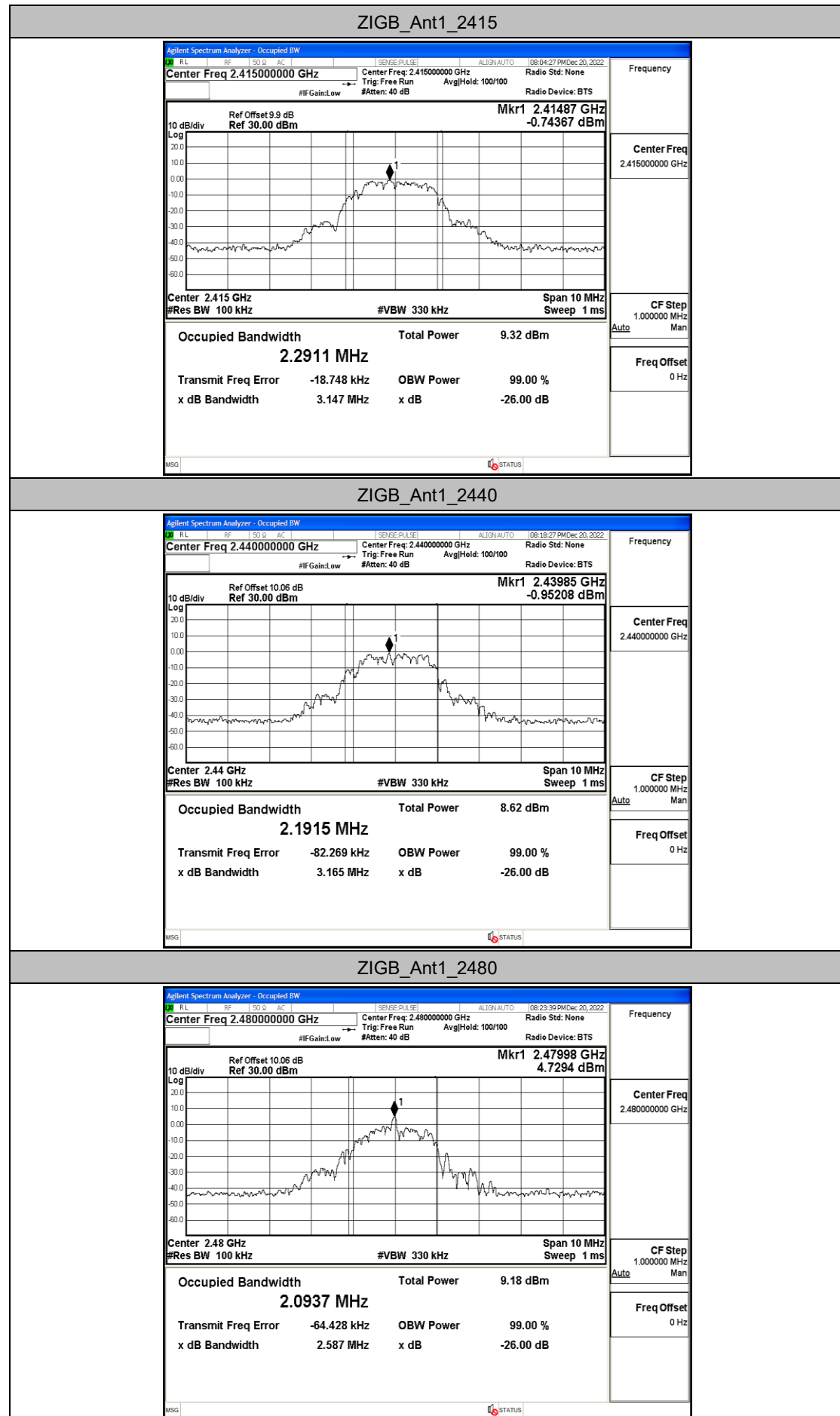


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
ZIGB	Ant1	2415	2.2911	2413.8357	2416.1268	---	---
		2440	2.1915	2438.8220	2441.0135	---	---
		2480	2.0937	2478.8887	2480.9824	---	---

Test Graphs



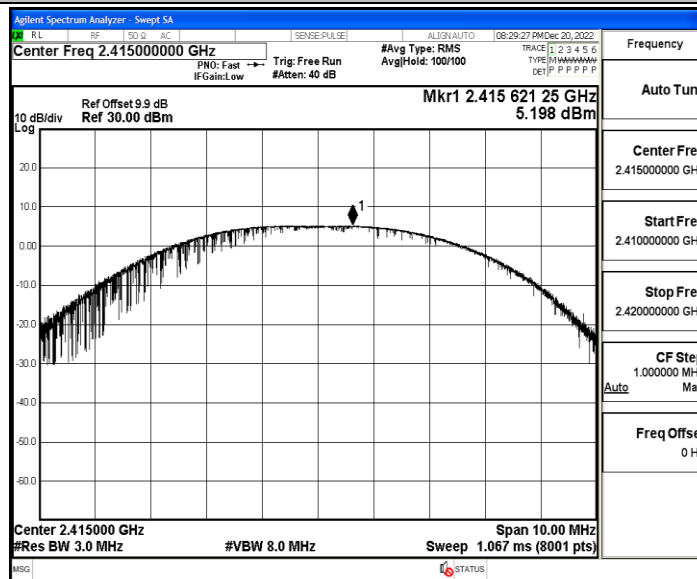
Appendix C: Maximum conducted output power

Test Result

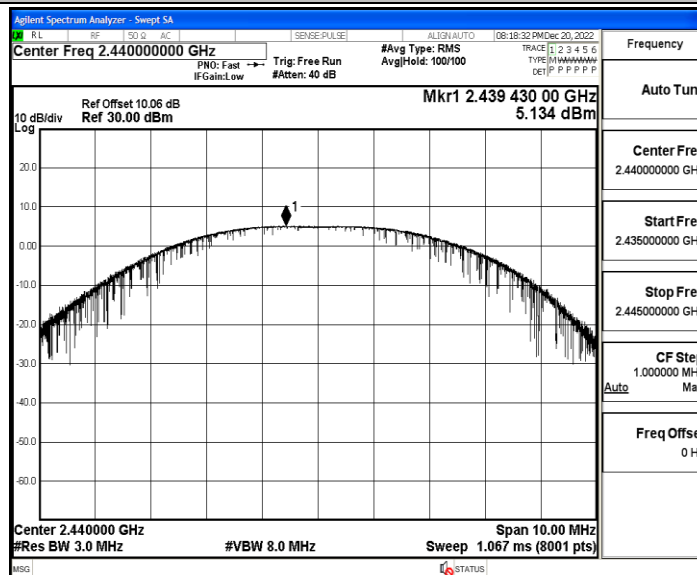
TestMode	Antenna	Freq(MHz)	Result[dBm]	Limit[dBm]	Verdict
ZIGB	Ant1	2415	5.2	≤30	PASS
		2440	5.13	≤30	PASS
		2480	5.11	≤30	PASS

Test Graphs

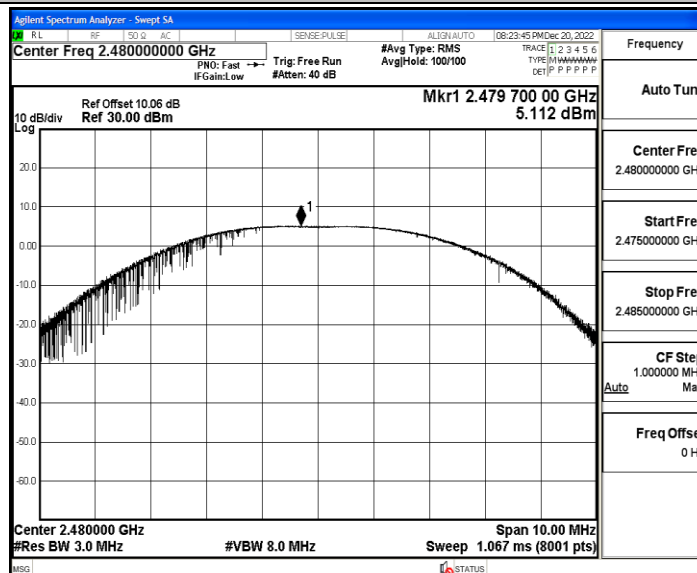
ZIGB_Ant1_2415



ZIGB_Ant1_2440



ZIGB_Ant1_2480



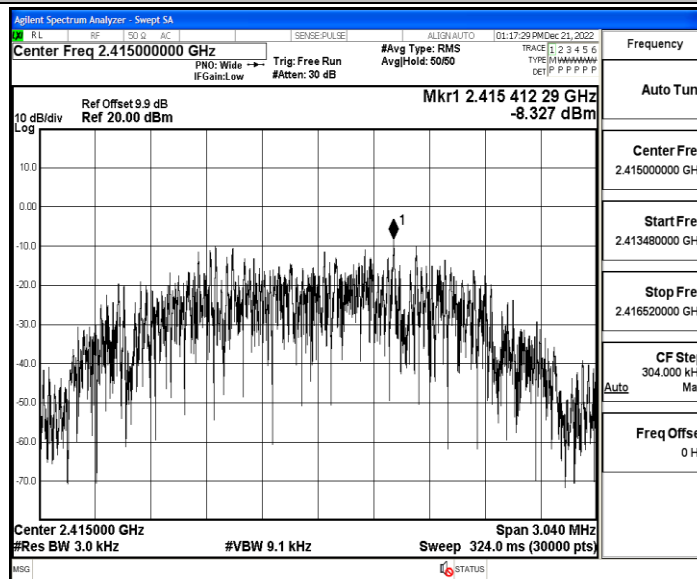
Appendix D: Maximum power spectral density

Test Result

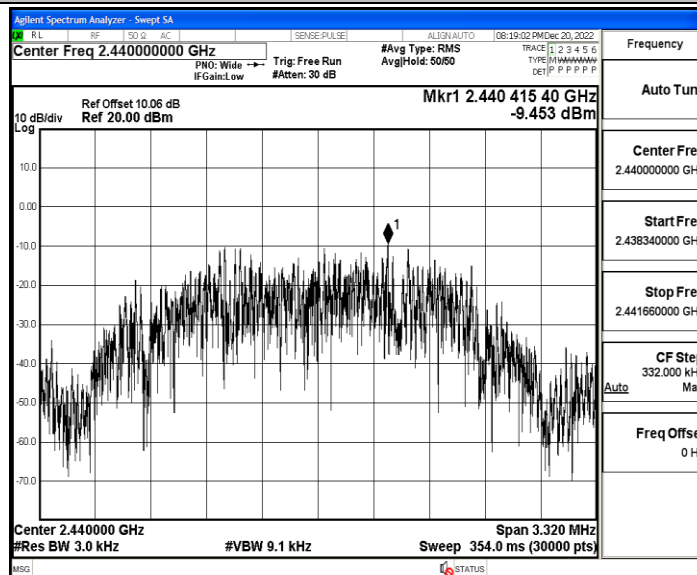
TestMode	Antenna	Freq(MHz)	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
ZIGB	Ant1	2415	-8.33	≤8.00	PASS
		2440	-9.45	≤8.00	PASS
		2480	-8.45	≤8.00	PASS

Test Graphs

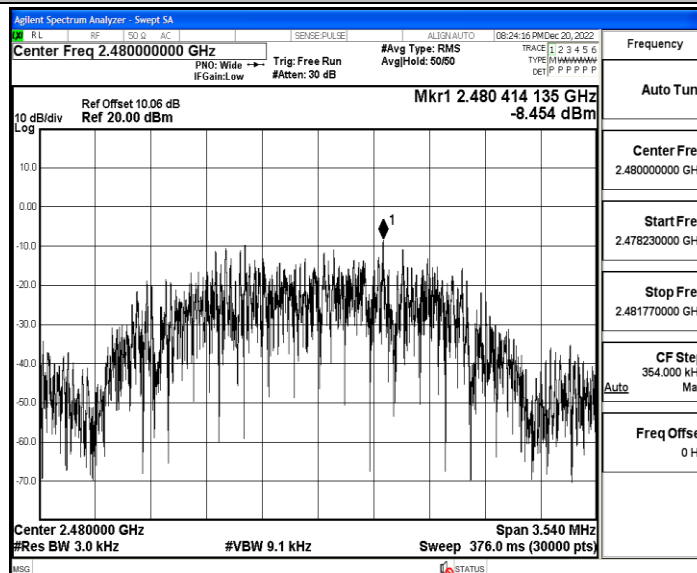
ZIGB_Ant1_2415



ZIGB_Ant1_2440



ZIGB_Ant1_2480



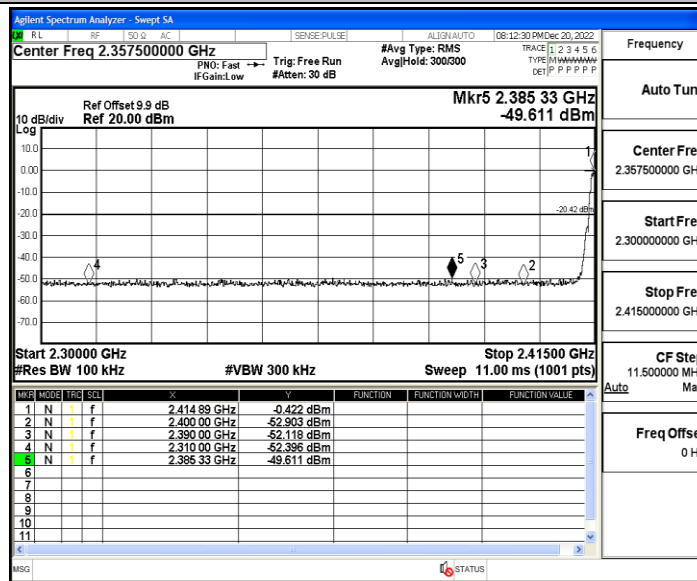
Appendix E: Band edge measurements

Test Result

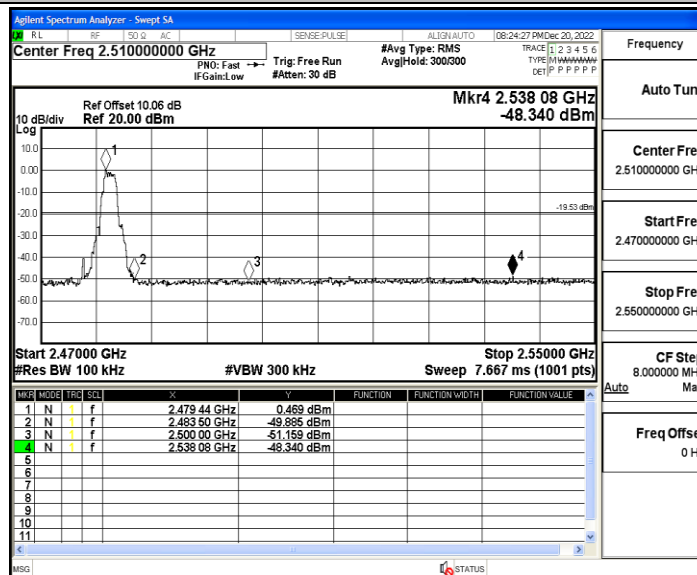
TestMod e	Antenn a	ChNam e	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdic t
ZIGB	Ant1	Low	2415	-0.42	-49.61	≤-20.42	PASS
		High	2480	0.47	-48.34	≤-19.53	PASS

Test Graphs

ZIGB_Ant1_Low_2415



ZIGB_Ant1_High_2480

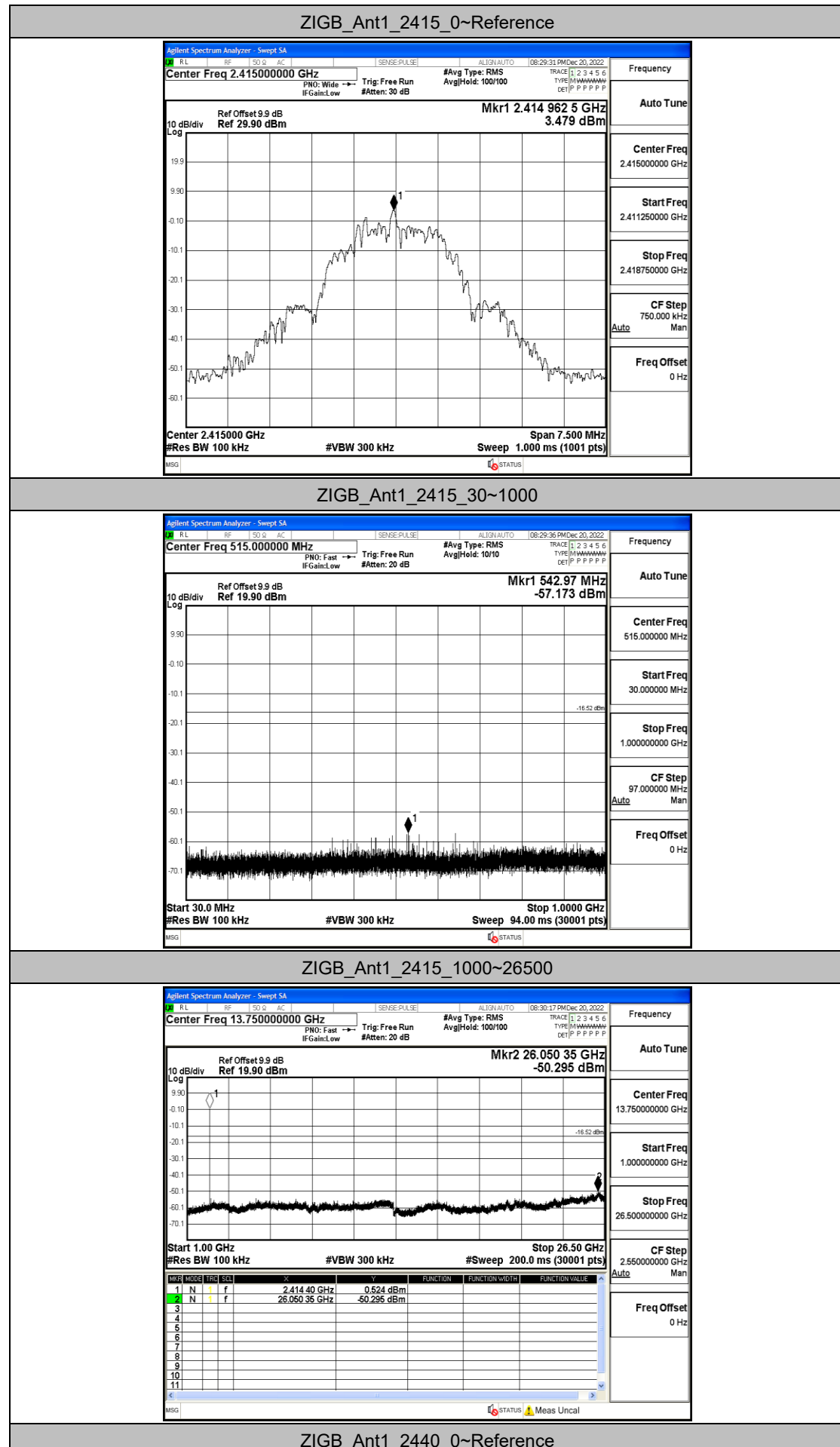


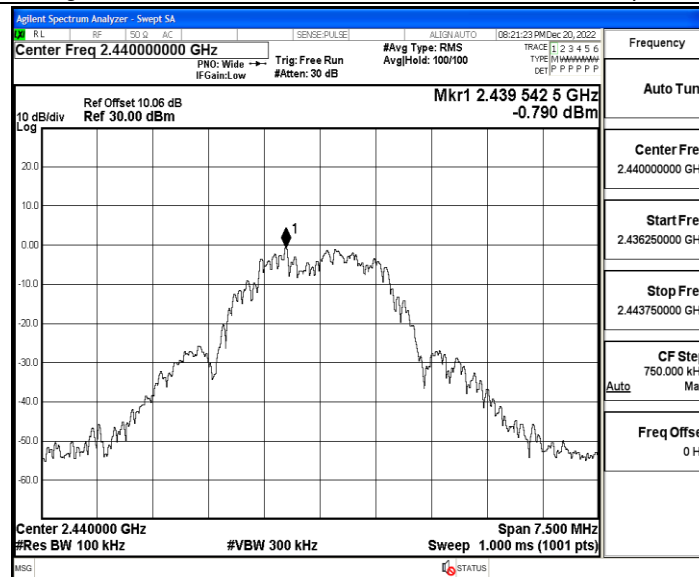
Appendix F: Conducted Spurious Emission

Test Result

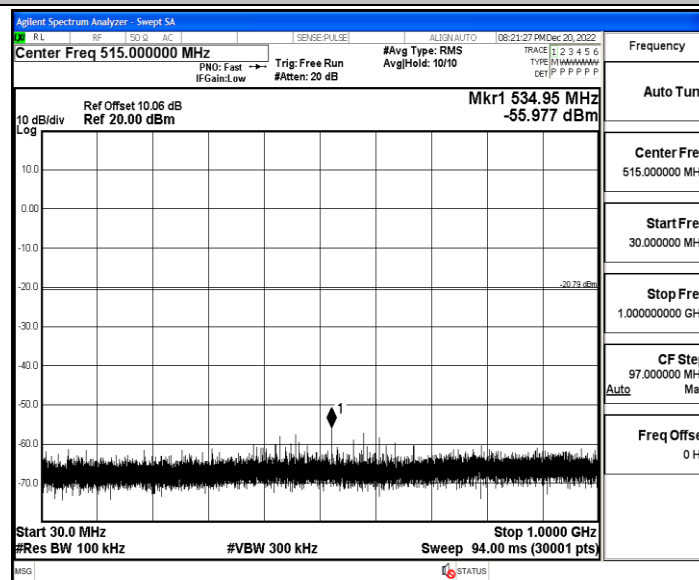
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
ZIGB	Ant1	2415	Reference	3.48	3.48	---	PASS
			30~1000	3.48	-57.17	≤-16.52	PASS
			1000~26500	3.48	-50.3	≤-16.52	PASS
		2440	Reference	-0.79	-0.79	---	PASS
			30~1000	-0.79	-55.98	≤-20.79	PASS
			1000~26500	-0.79	-49.42	≤-20.79	PASS
		2480	Reference	0.62	0.62	---	PASS
			30~1000	0.62	-57.07	≤-19.38	PASS
			1000~26500	0.62	-49.23	≤-19.38	PASS

Test Graphs

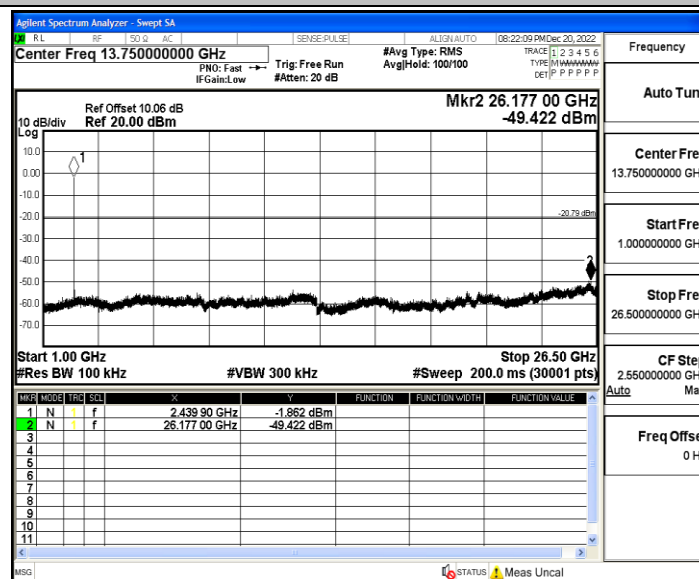




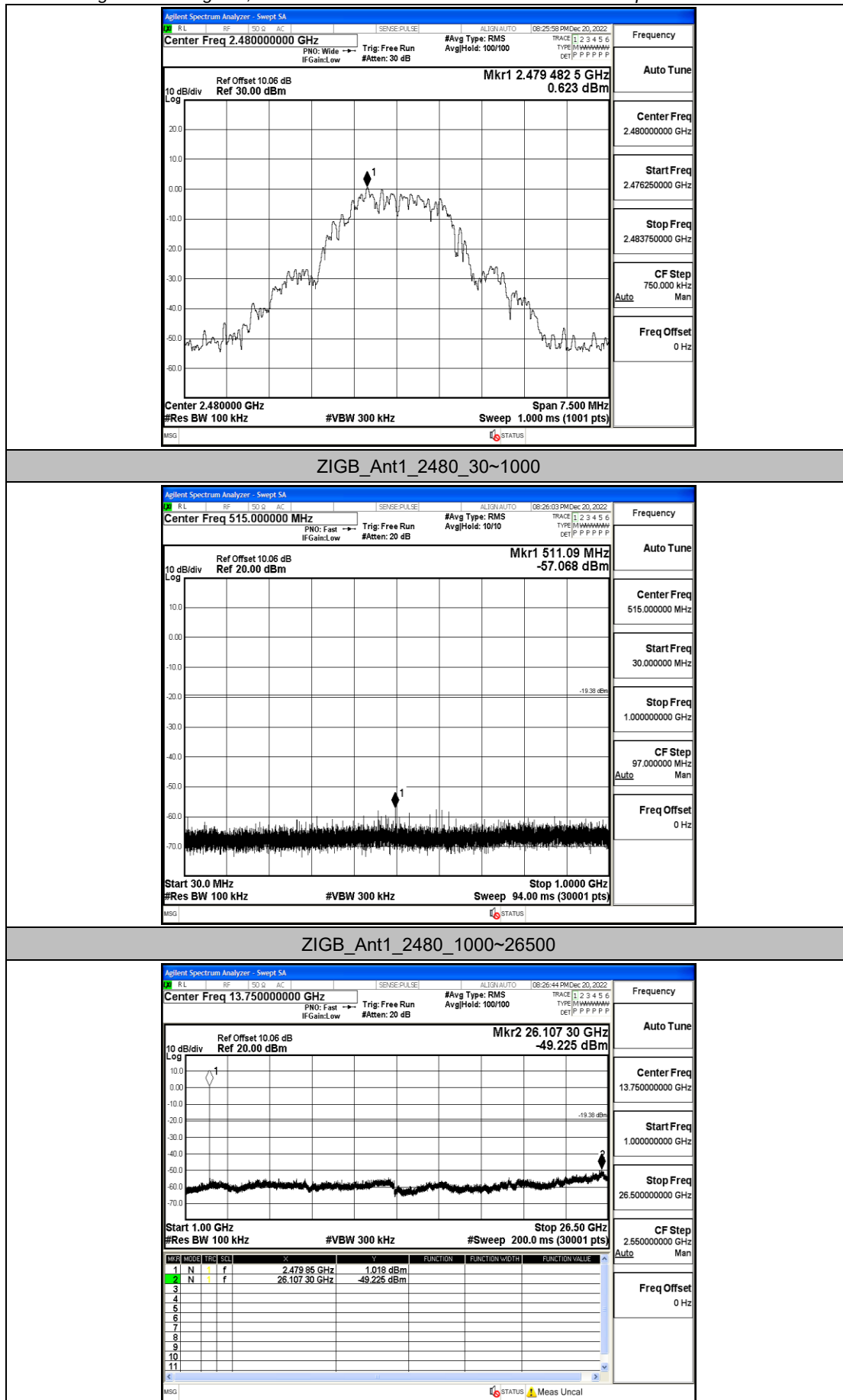
ZIGB_Ant1_2440_30~1000



ZIGB_Ant1_2440_1000~26500



ZIGB_Ant1_2480_0~Reference



Appendix G: Duty Cycle

Test Result

TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
ZIGB	Ant1	2415	0.88	16.93	5.20	---	---
		2440	0.87	16.91	5.14	---	---
		2480	0.87	16.92	5.14	---	---

Test Graphs

