



Appendix A

RF Test Data for 2.4G (Conducted Measurement)

Product Name: Wireless keyboard

Test Model: KB319

Environmental Conditions

Temperature:	24.2° C
Relative Humidity:	57.7%
ATM Pressure:	100.0 kPa
Test Engineer:	monkey.Li
Supervised by:	Libin

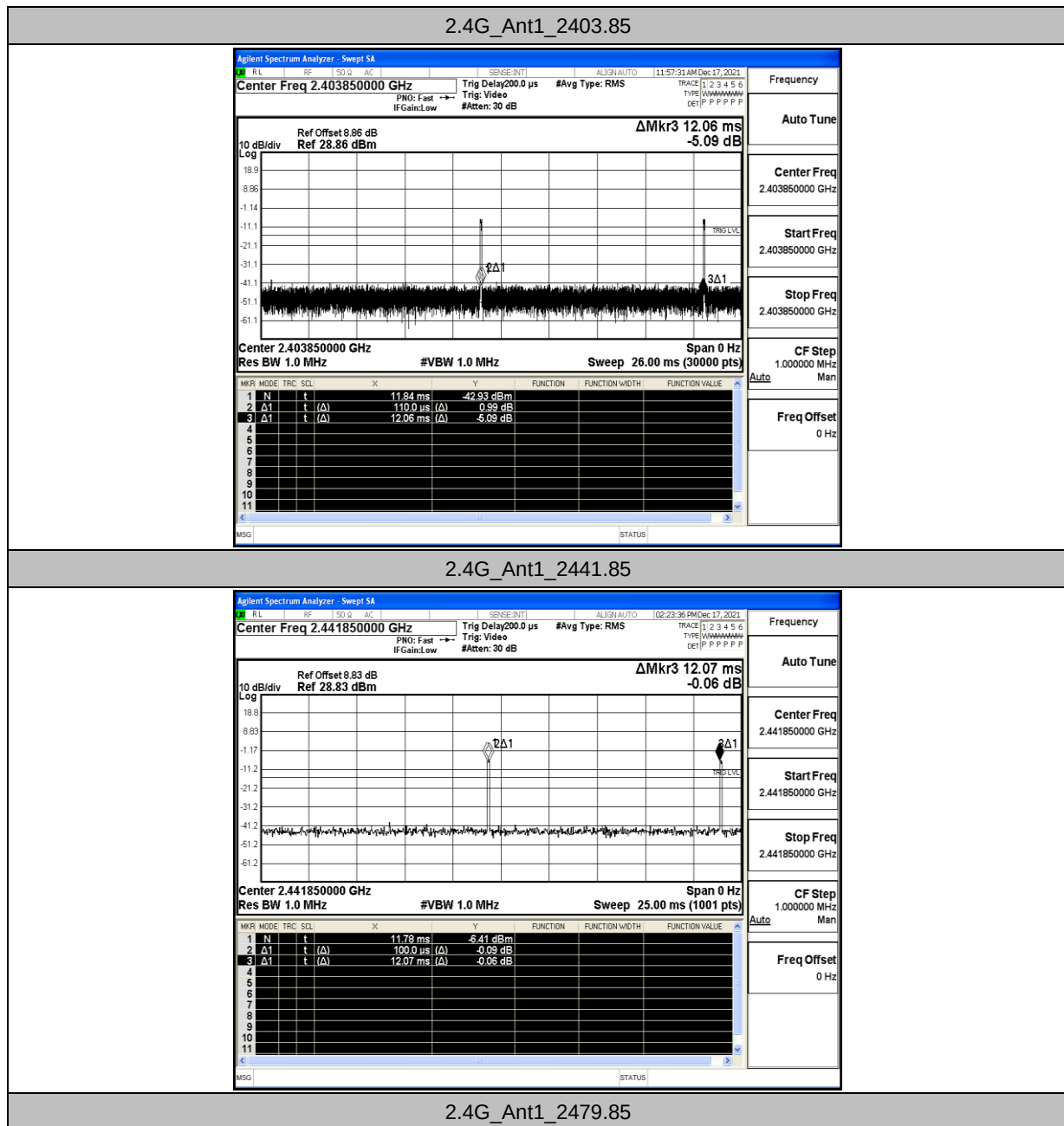


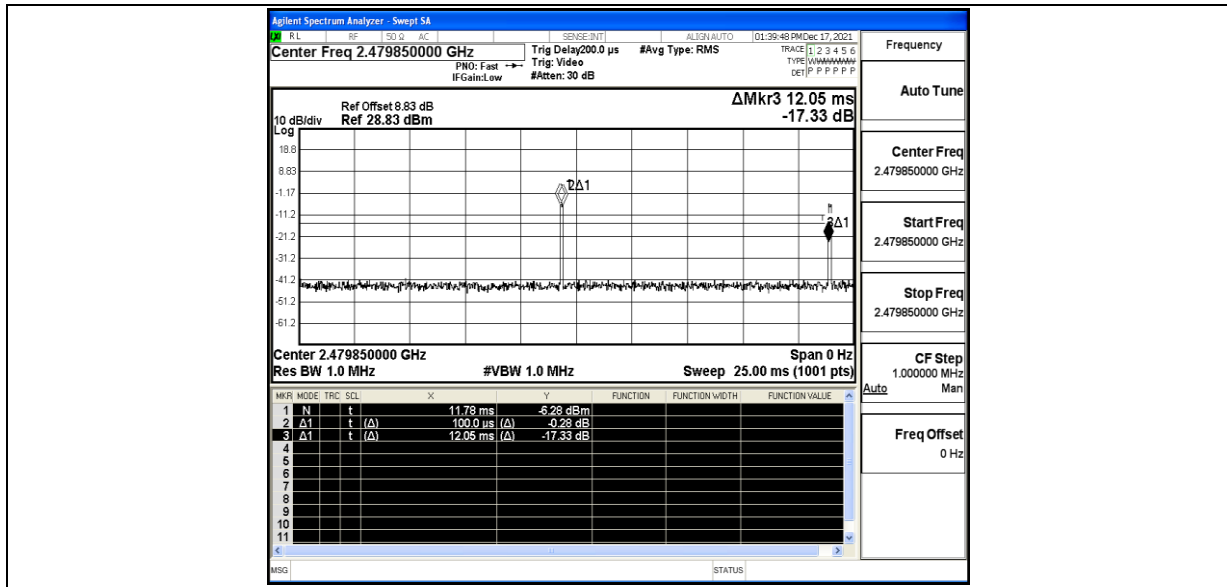
A.1 Duty Cycle

Test Result

TestMode	Antenna	Channel	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
2.4G	Ant1	2403.85	0.11	12.06	0.0091	0.91	20.41	---	PASS
		2441.85	0.10	12.07	0.0083	0.83	20.81	---	PASS
		2479.85	0.10	12.05	0.0083	0.83	20.81	---	PASS

Test Graphs







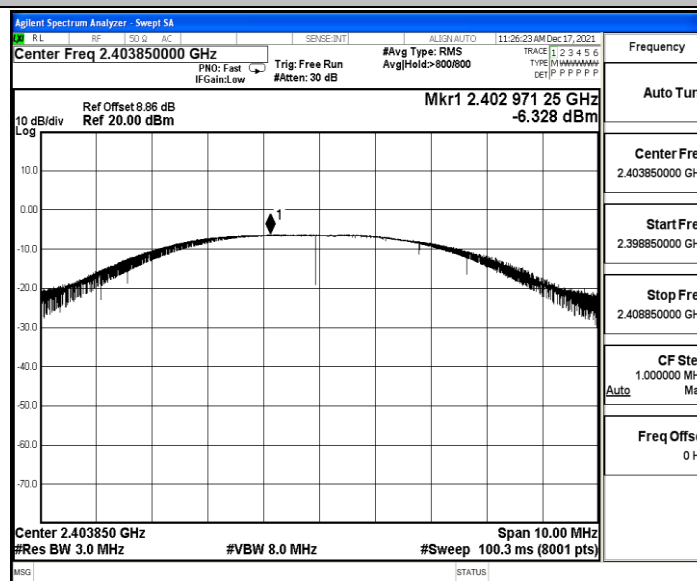
A.2 Maximum conducted output power

Test Result

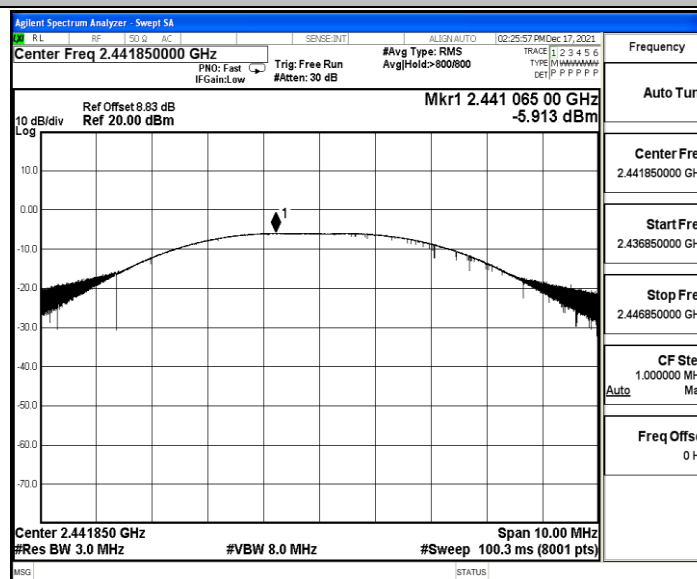
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
2.4G	Ant1	2403.85	-6.33	≤30	PASS
		2441.85	-5.91	≤30	PASS
		2479.85	-5.79	≤30	PASS

Test Graphs

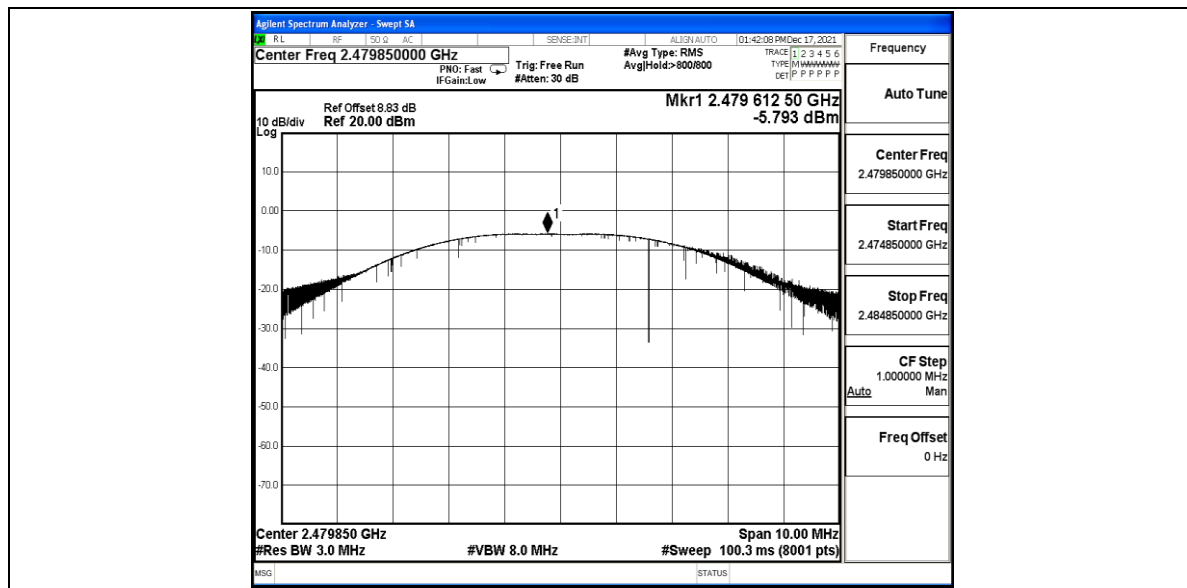
2.4G_Ant1_2403.85



2.4G_Ant1_2441.85



2.4G_Ant1_2479.85





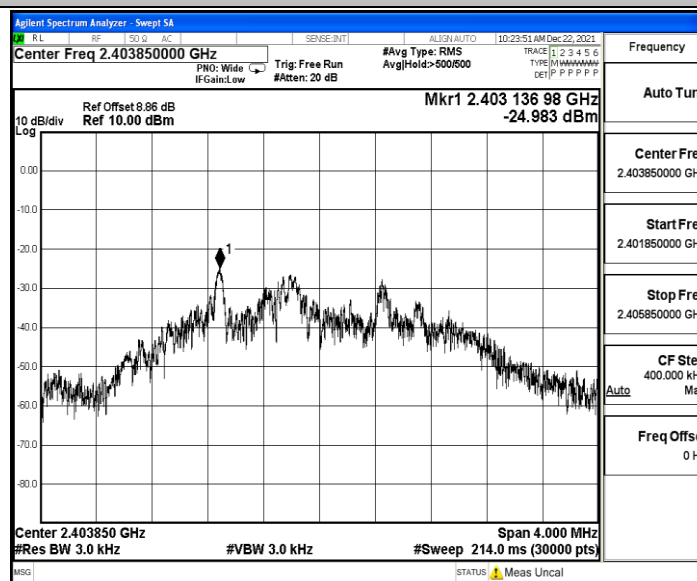
A.3 Maximum power spectral density

Test Result

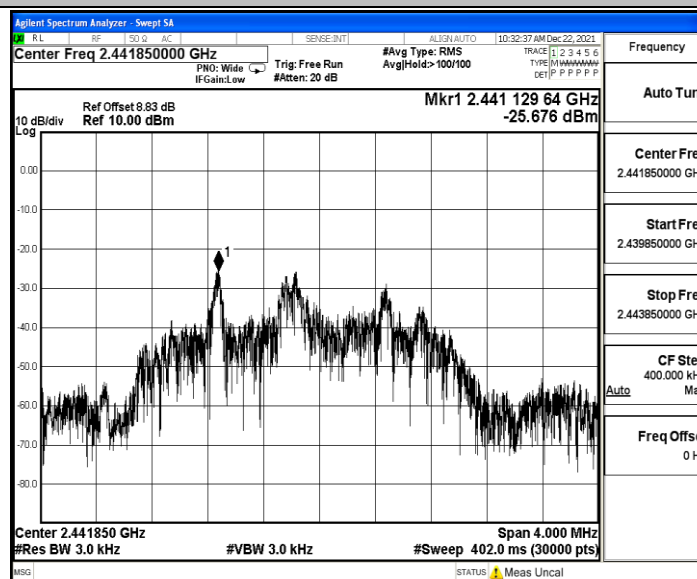
TestMode	Antenna	Channel	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
2.4G	Ant1	2403.85	-24.98	≤8.00	PASS
		2441.85	-25.68	≤8.00	PASS
		2479.85	-20.73	≤8.00	PASS

Test Graphs

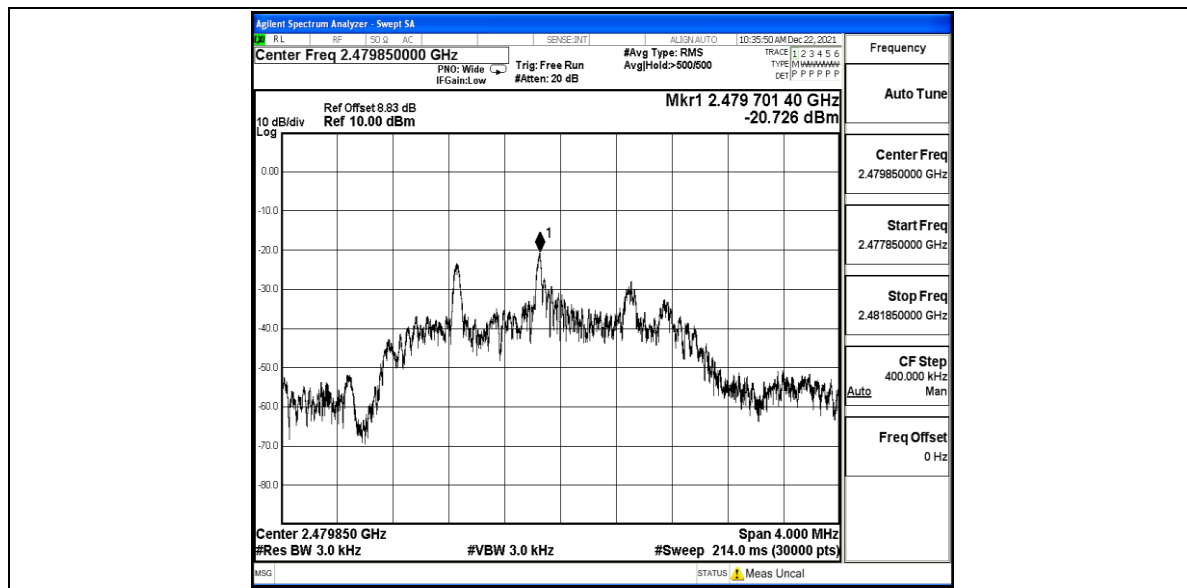
2.4G_Ant1_2403.85



2.4G_Ant1_2441.85



2.4G_Ant1_2479.85





A.4.1 6dB Bandwidth

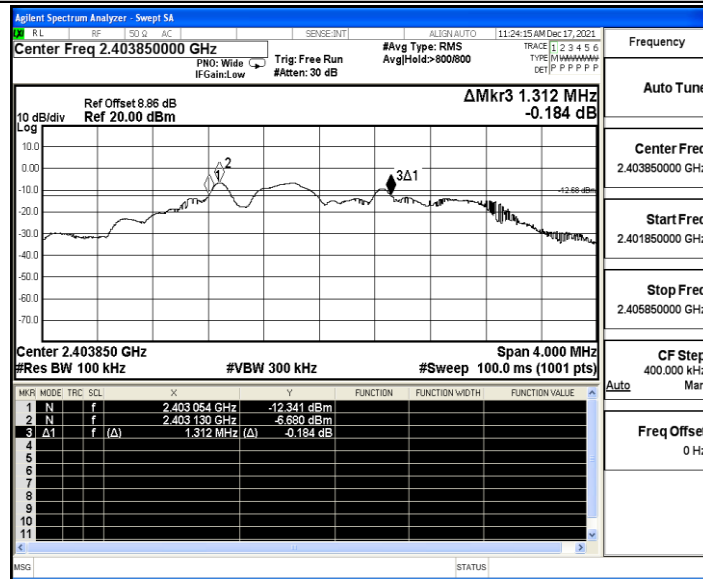
Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
2.4G	Ant1	2403.85	1.312	2403.054	2404.366	0.5	PASS
		2441.85	1.324	2441.042	2442.366	0.5	PASS
		2479.85	1.356	2479.046	2480.402	0.5	PASS

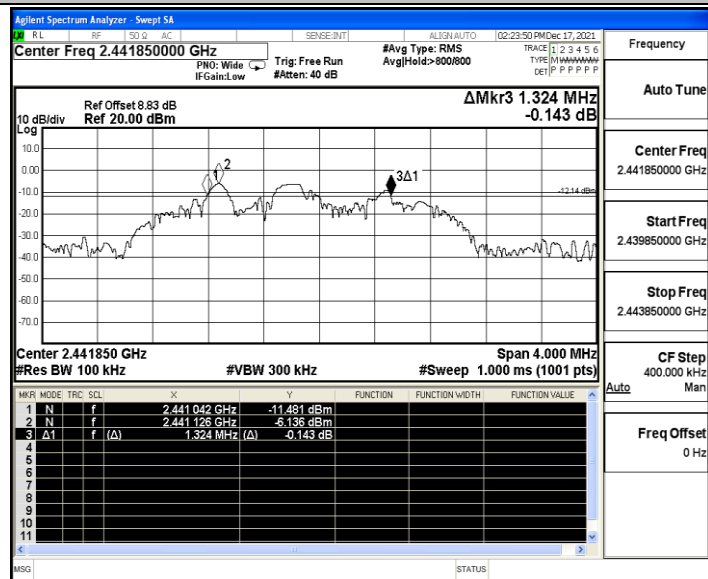


Test Graphs

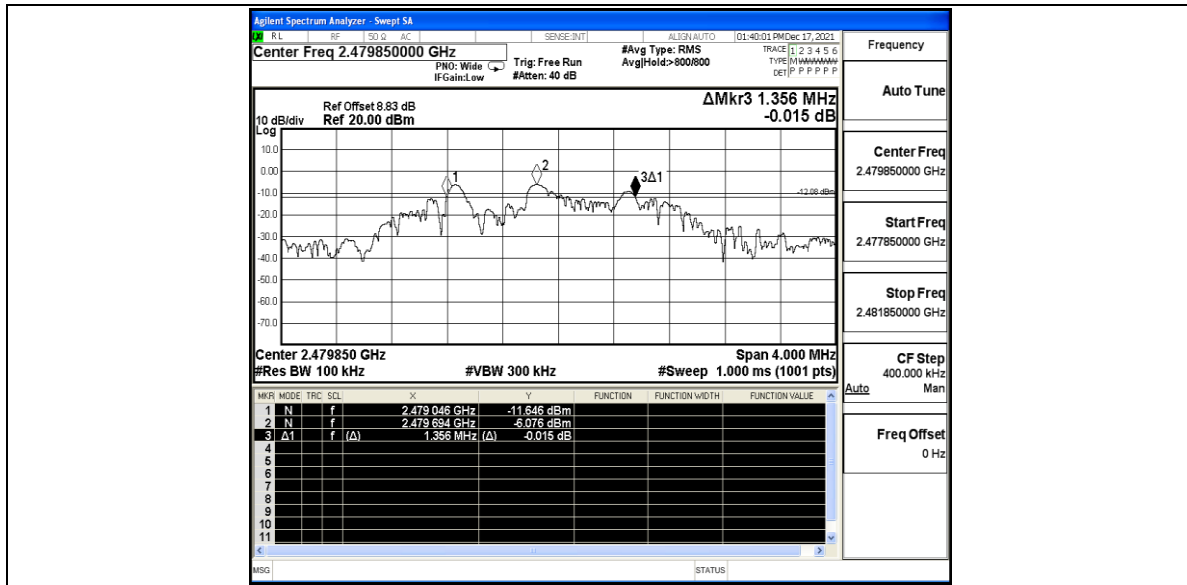
2.4G_Ant1_2403.85



2.4G_Ant1_2441.85



2.4G_Ant1_2479.85

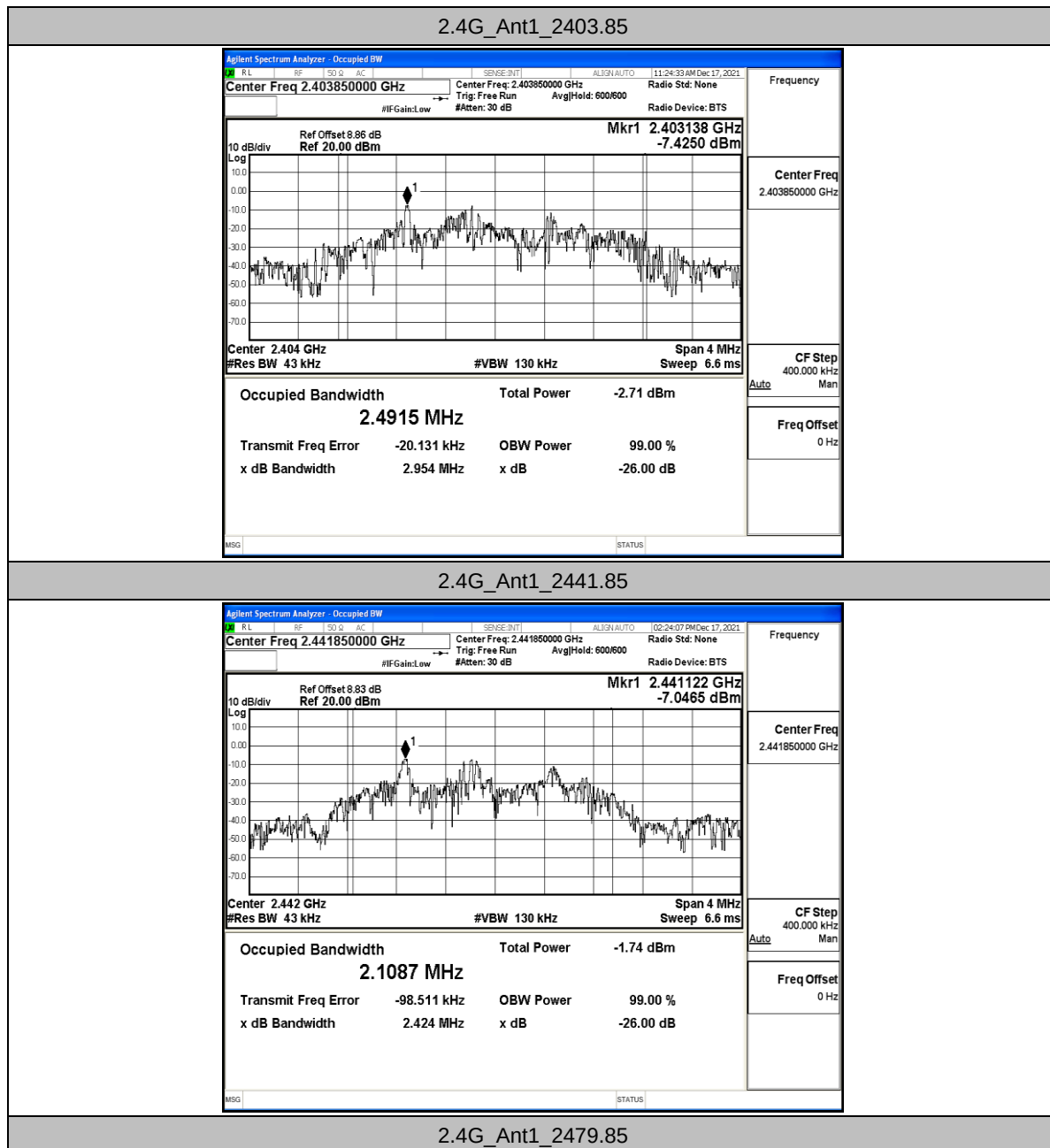


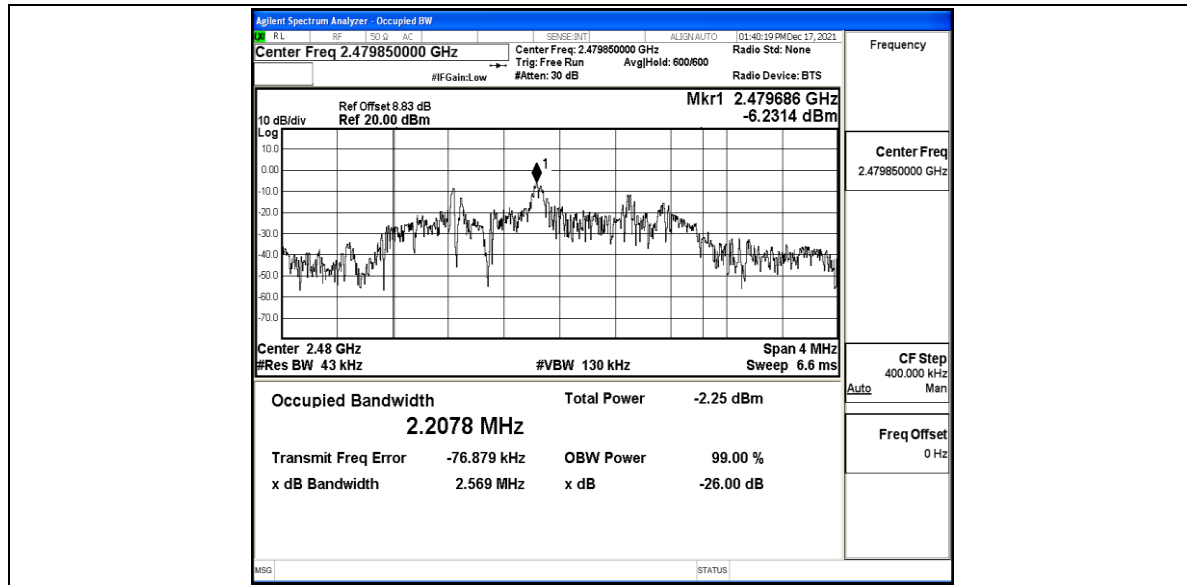


A.4.2 Occupied Channel Bandwidth

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
2.4G	Ant1	2403.85	2.4915	2402.584	2405.076	---	PASS
		2441.85	2.1087	2440.697	2442.806	---	PASS
		2479.85	2.2078	2478.669	2480.877	---	PASS

Test Graphs







A.5 Conducted Spurious Emission

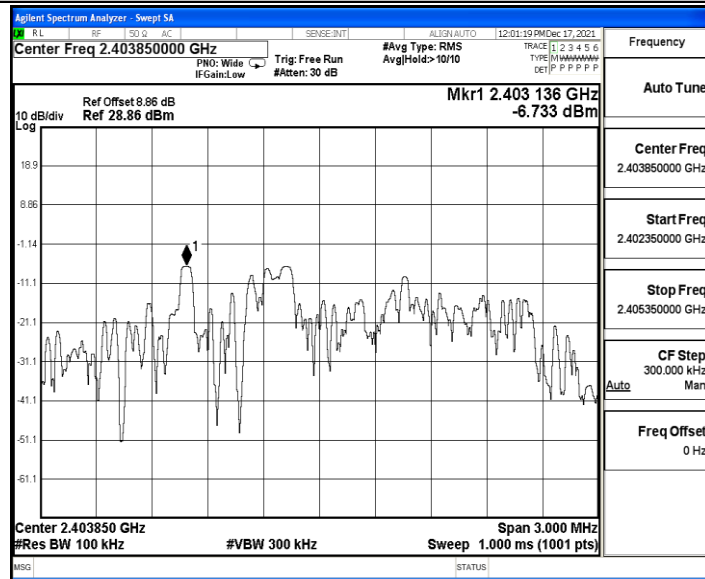
Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
2.4G	Ant1	2403.85	Reference	-6.73	-6.73	---	PASS
			30~1000	-6.73	-59.73	≤ -26.73	PASS
			1000~26500	-6.89	-38.98	≤ -26.73	PASS
		2441.85	Reference	-6.42	-6.42	---	PASS
			30~1000	-6.42	-60.44	≤ -26.42	PASS
			1000~26500	-6.42	-38.66	≤ -26.42	PASS
		2479.85	Reference	-6.37	-6.37	---	PASS
			30~1000	-6.37	-60.59	≤ -26.37	PASS
			1000~26500	-6.37	-45.41	≤ -26.37	PASS

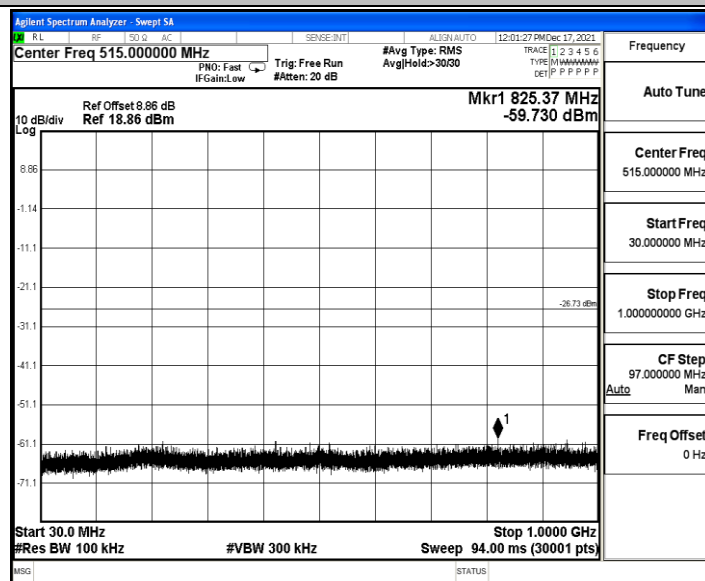


Test Graphs

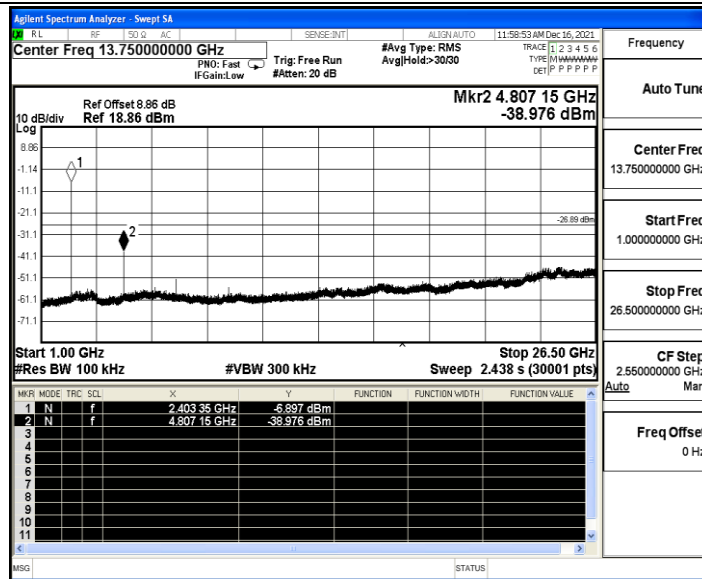
2.4G_Ant1_2403.85_0~Reference



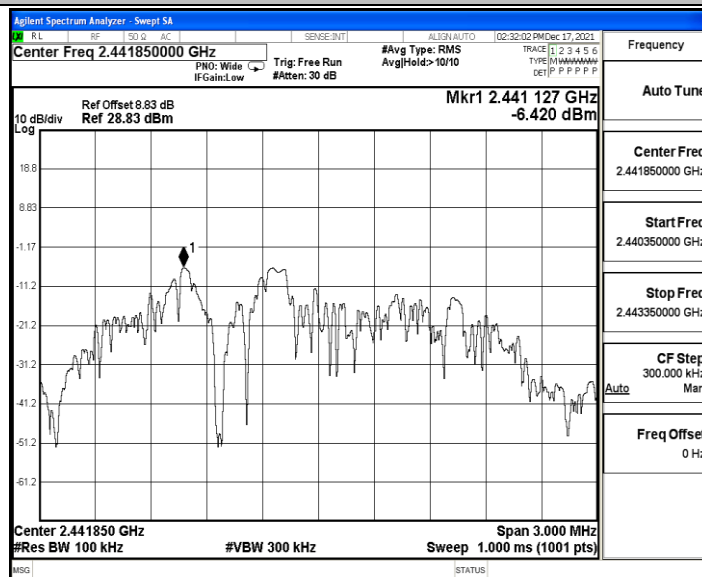
2.4G_Ant1_2403.85_30~1000



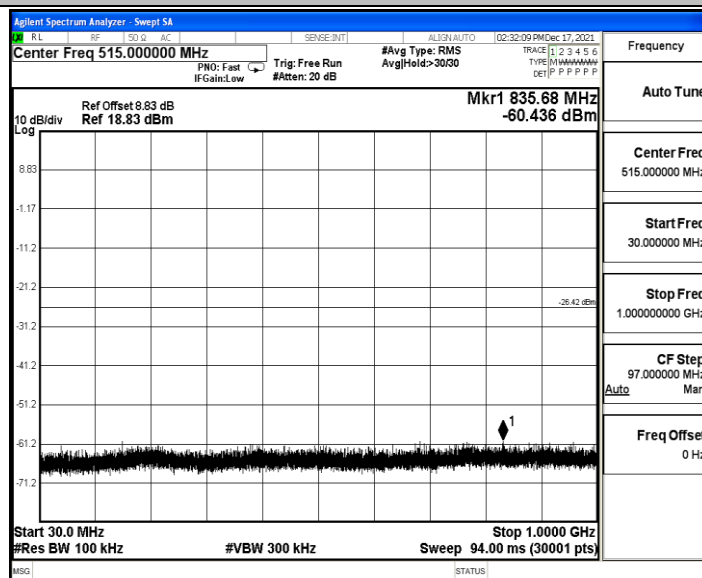
2.4G_Ant1_2403.85_1000~26500



2.4G_Ant1_2441.85_0~Reference

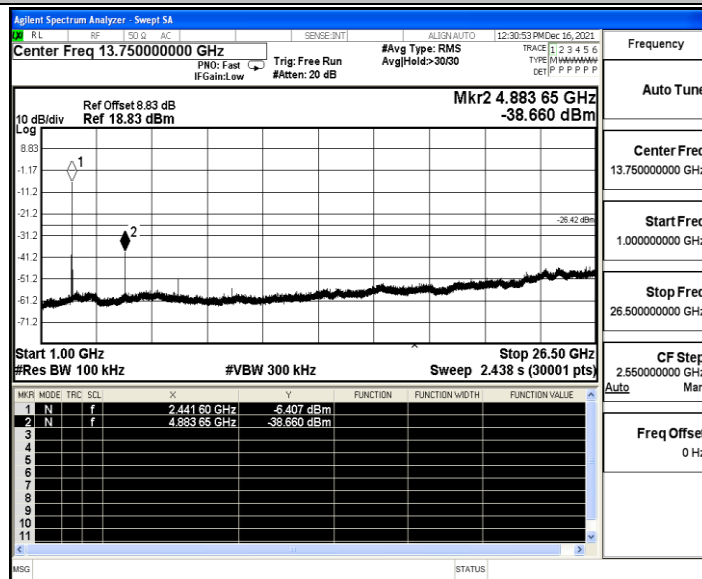


2.4G_Ant1_2441.85_30~1000

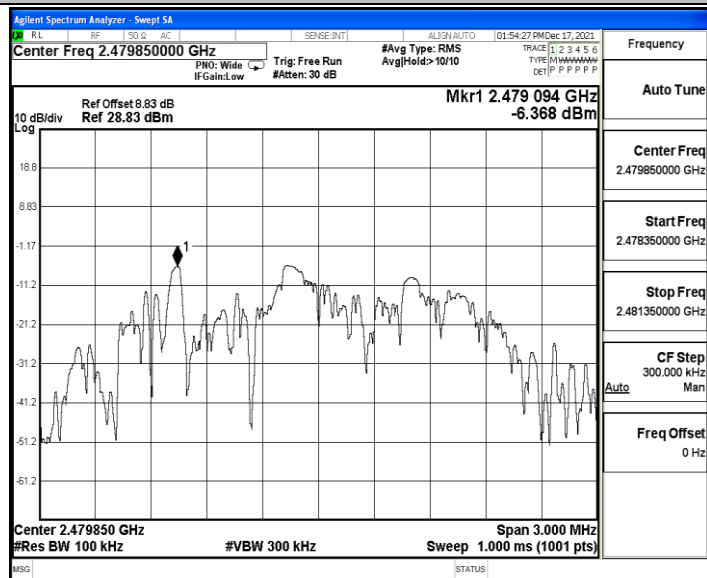




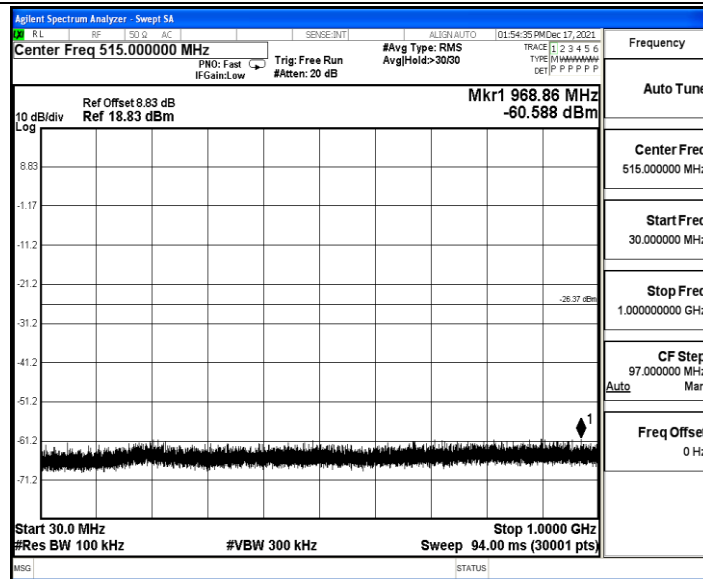
2.4G_Ant1_2441.85_1000~26500



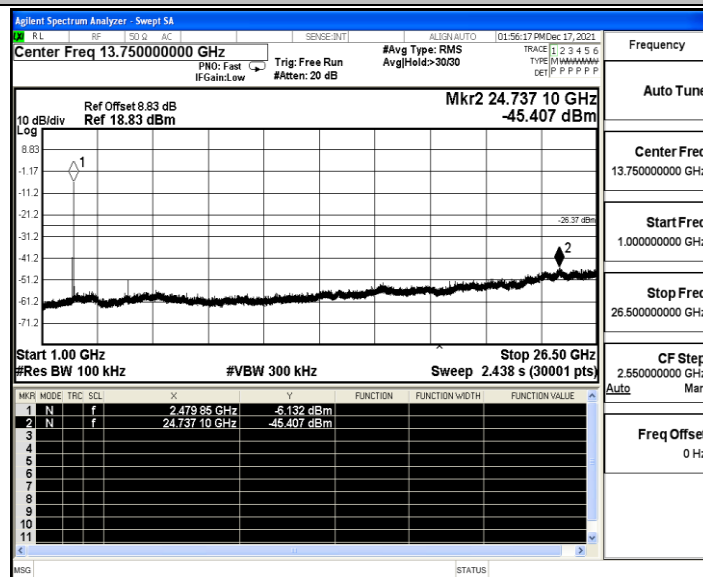
2.4G_Ant1_2479.85_0~Reference



2.4G_Ant1_2479.85_30~1000



2.4G_Ant1_2479.85_1000~26500



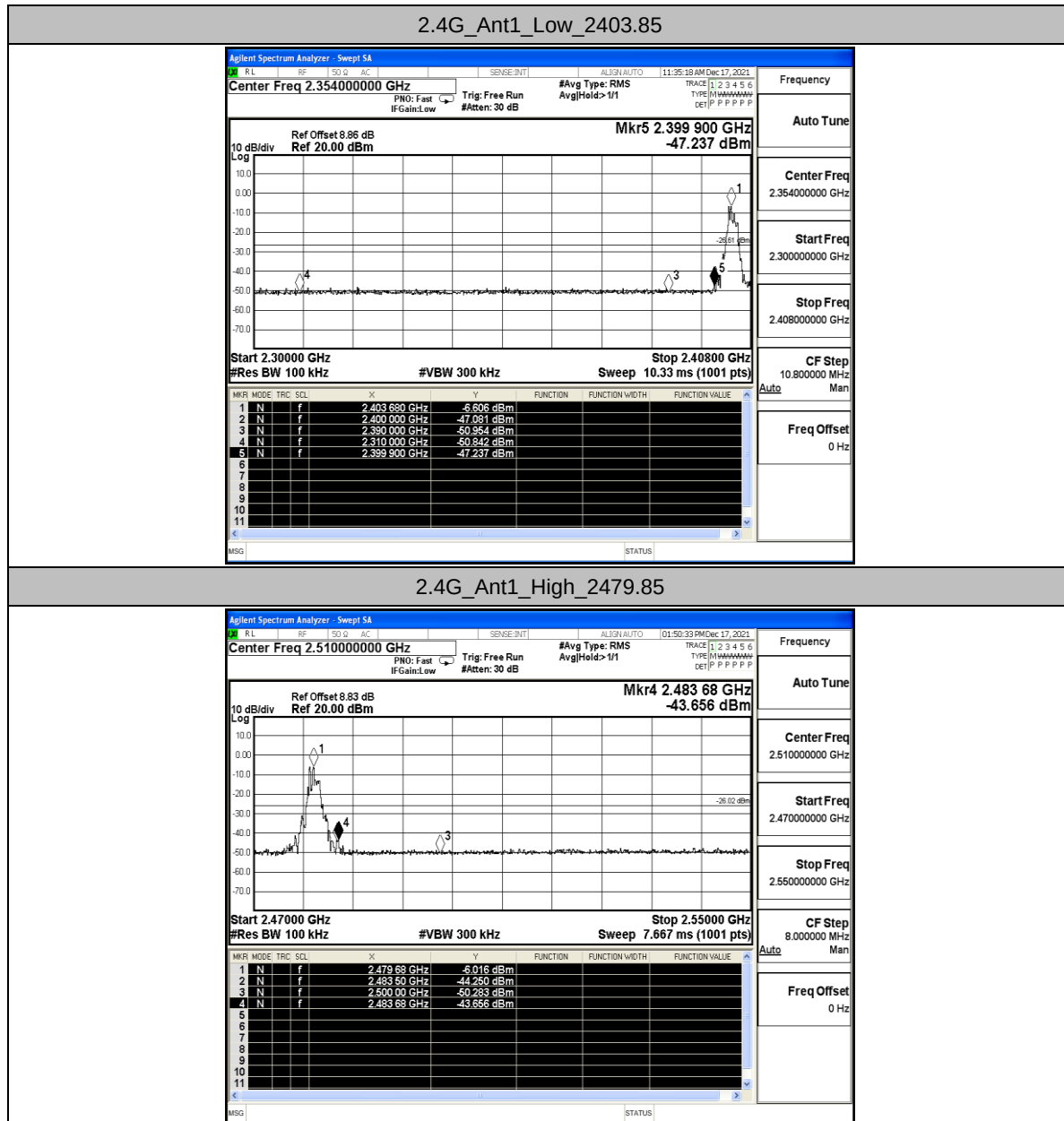


A.6 Band edge measurements

Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
2.4G	Ant1	Low	2403.85	-6.79	-48.53	≤-26.79	PASS
		High	2479.85	-6.02	-43.66	≤-26.02	PASS

Test Graphs





A.7 Emissions in Restricted Bands

Test Result

TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
2.4G	Ant1	Low	2403.85	AV	2310.000	-55.61	≤-41.20	49.08	≤54	PASS
				AV	2389.100	-52.51	≤-41.20	49.87	≤54	PASS
				AV	2390.000	-52.74	≤-41.20	49.40	≤54	PASS
				Peak	2310.000	-37.91	≤-21.20	57.29	≤74	PASS
				Peak	2321.924	-35.39	≤-21.20	59.81	≤74	PASS
				Peak	2390.000	-36.72	≤-21.20	58.48	≤74	PASS
		High	2479.85	AV	2483.500	-43.92	≤-41.20	47.71	≤54	PASS
				AV	2483.500	-43.92	≤-41.20	47.89	≤54	PASS
				AV	2500.000	-60.37	≤-41.20	47.86	≤54	PASS
				Peak	2483.500	-27.84	≤-21.20	67.36	≤74	PASS
				Peak	2483.600	-27.52	≤-21.20	67.68	≤74	PASS
				Peak	2500.000	-36.8	≤-21.20	58.40	≤74	PASS

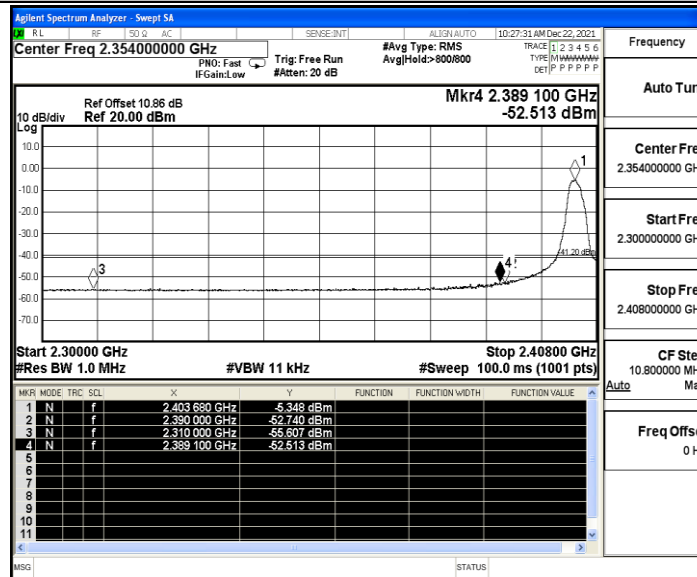
Note:

1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

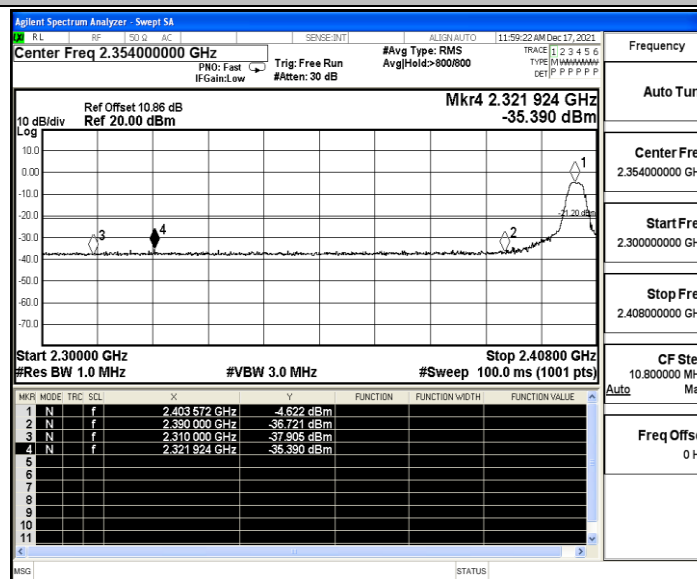


Test Graphs

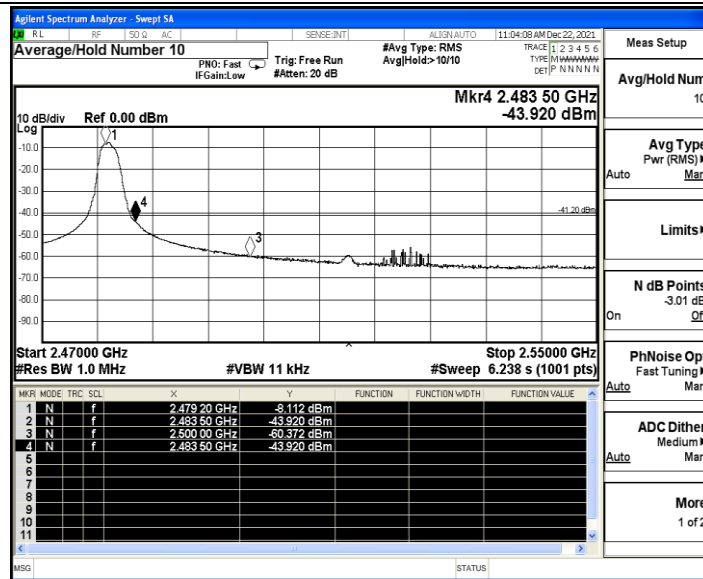
2.4G_Ant1_Low_2403.85_AV



2.4G_Ant1_Low_2403.85_Peak



2.4G_Ant1_High_2479.85_AV



2.4G_Ant1_High_2479.85_Peak

