



Appendix B

RF Test Data for BT LE V4.2 (DTS) (Conducted Measurement)

Product Name: Smartphone

Trade Mark: S Smooth

Test Model: Smooth 5.5 Lite

Environmental Conditions

Temperature:	21.1 ° C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Carl Fu
Supervised by:	Li Huan



B.1 DTS Bandwidth

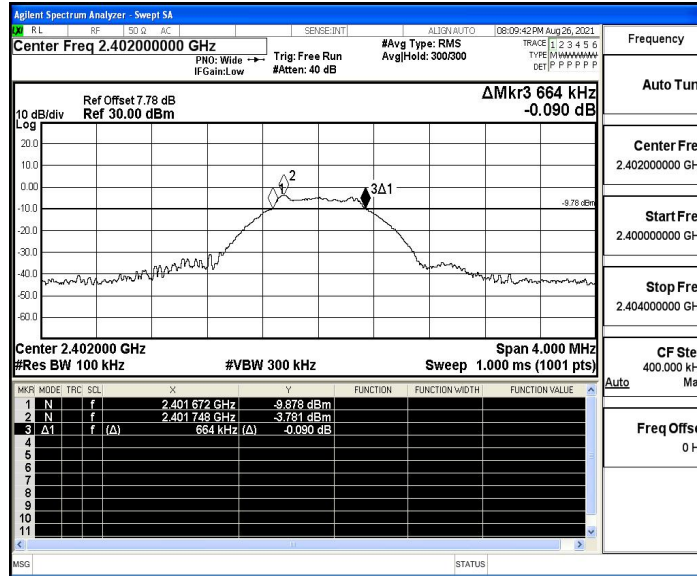
Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.664	2401.672	2402.336	≥ 0.5	PASS
		2440	0.664	2439.668	2440.332	≥ 0.5	PASS
		2480	0.680	2479.656	2480.336	≥ 0.5	PASS

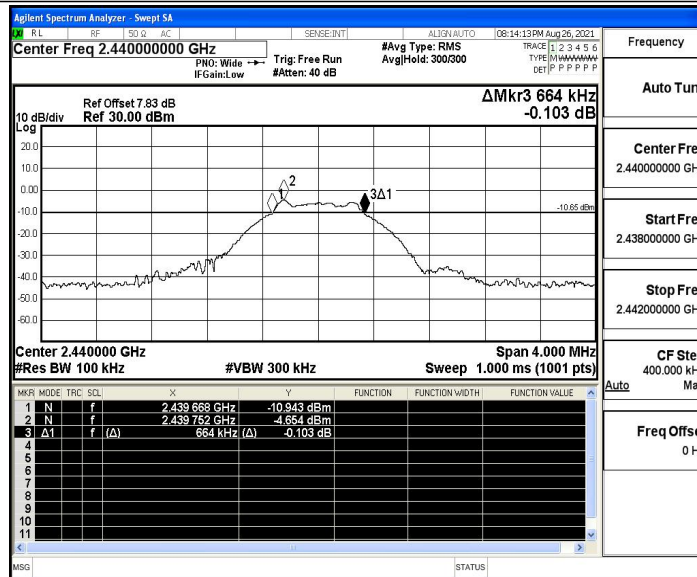


Test Graphs

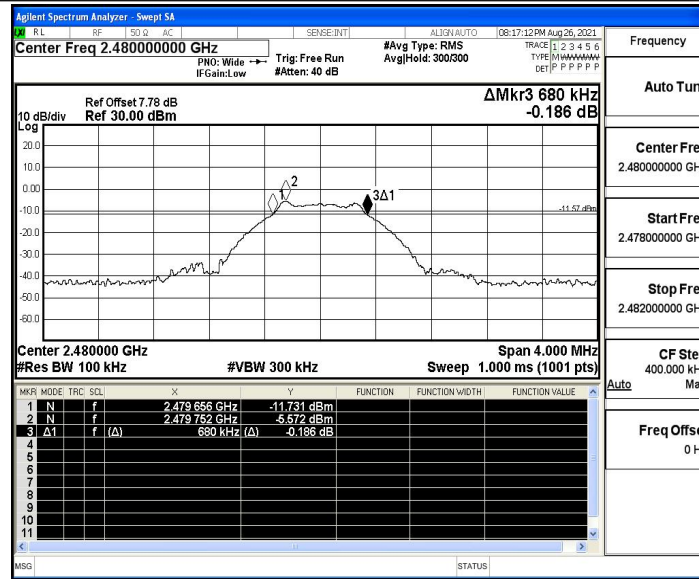
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480





B.2 Maximum peak conducted output power

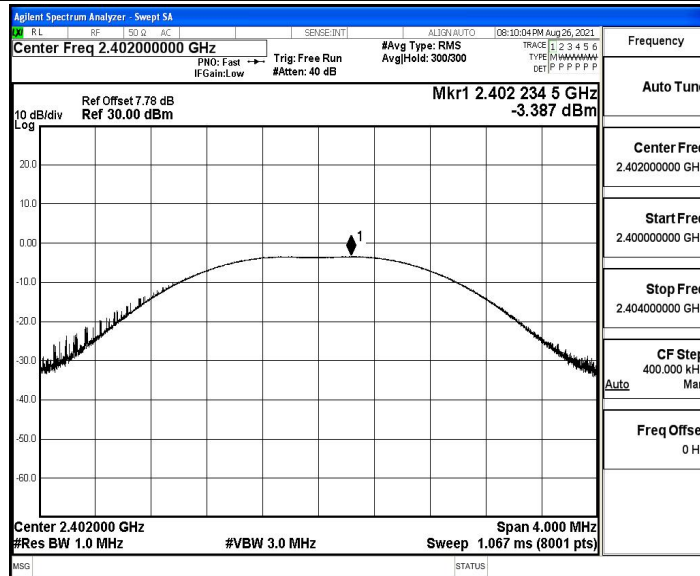
Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-3.39	≤30	PASS
		2440	-4.36	≤30	PASS
		2480	-5.17	≤30	PASS

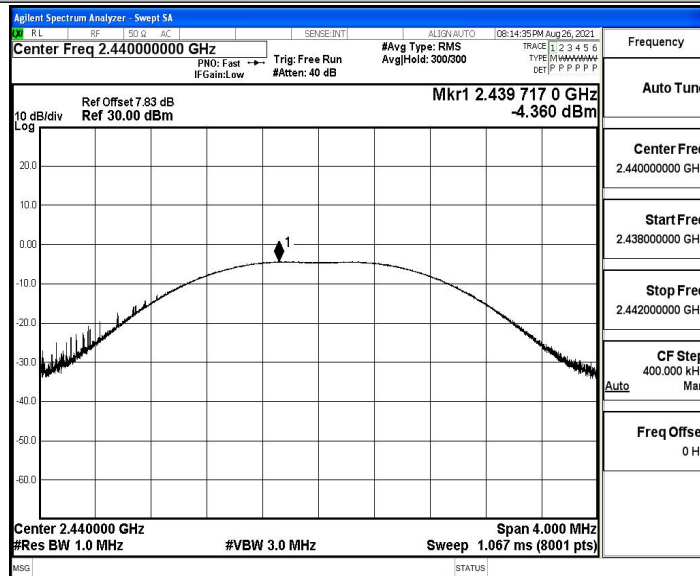


Test Graphs

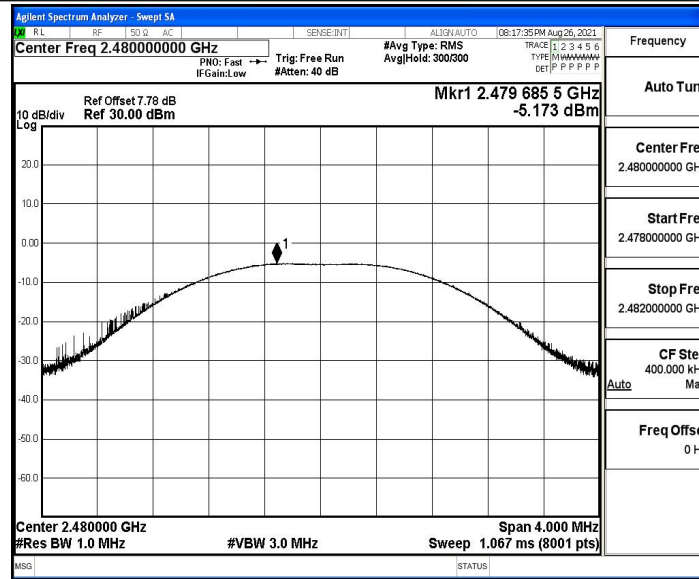
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480





B.3 Maximum power spectral density

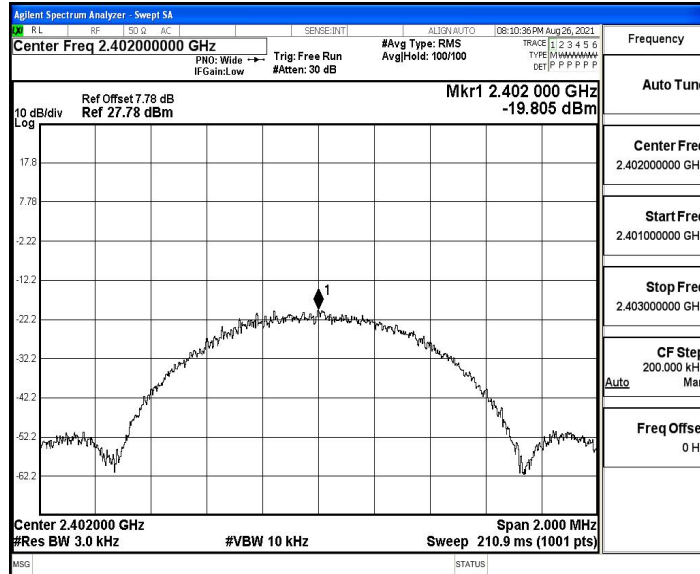
Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-19.81	≤8	PASS
		2440	-20.68	≤8	PASS
		2480	-21.58	≤8	PASS

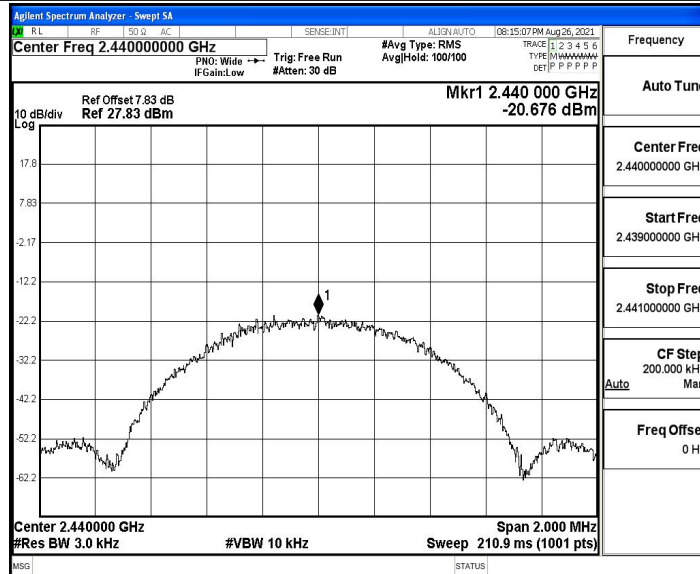


Test Graphs

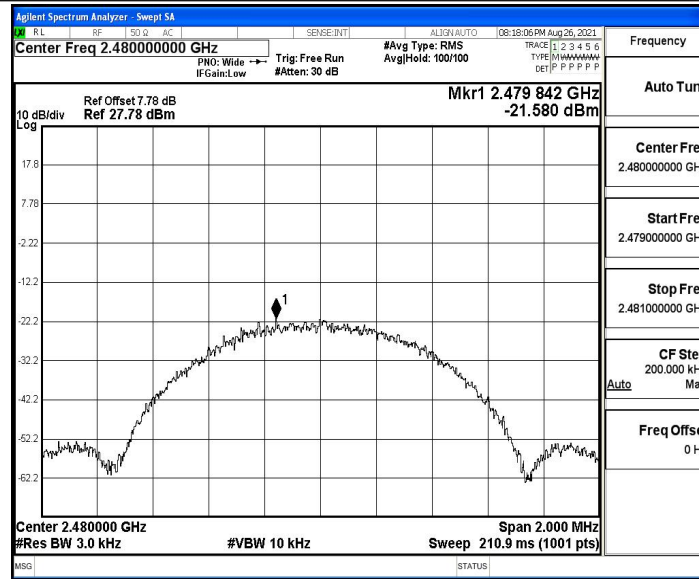
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480





B.4 Band edge measurements

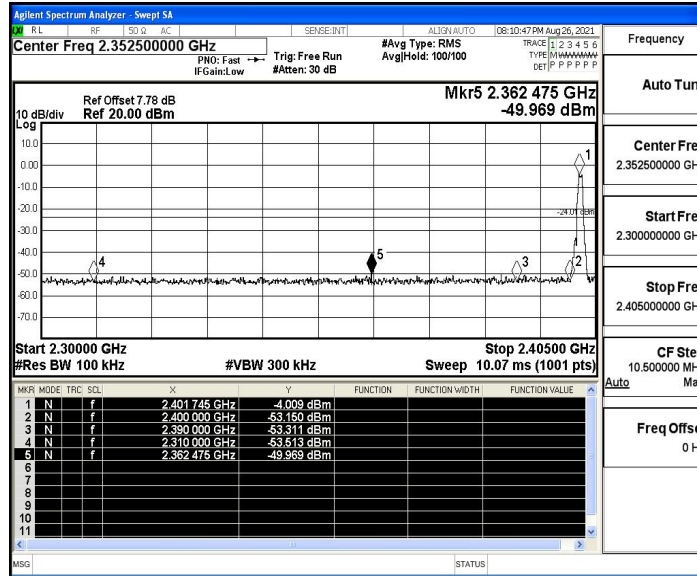
Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-4.01	-49.97	≤ -24.01	PASS
		High	2480	-5.53	-49.34	≤ -25.53	PASS

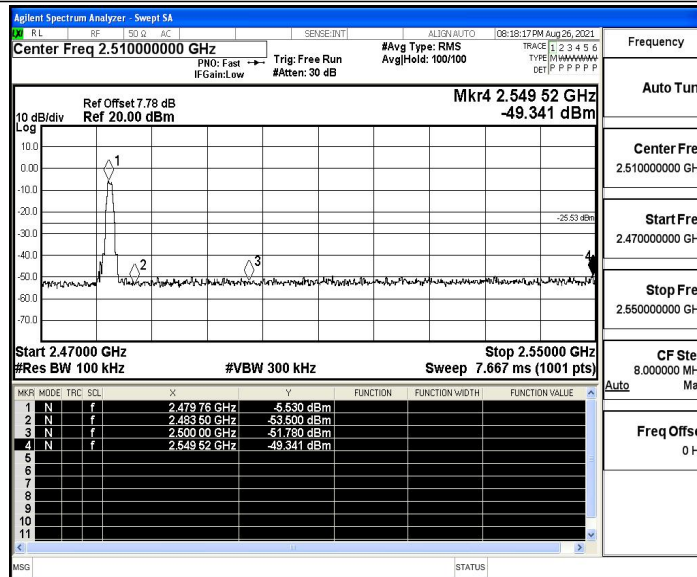


Test Graphs

BLE_1M_Ant1_Low_2402



BLE_1M_Ant1_High_2480





B.5 Conducted Spurious Emission

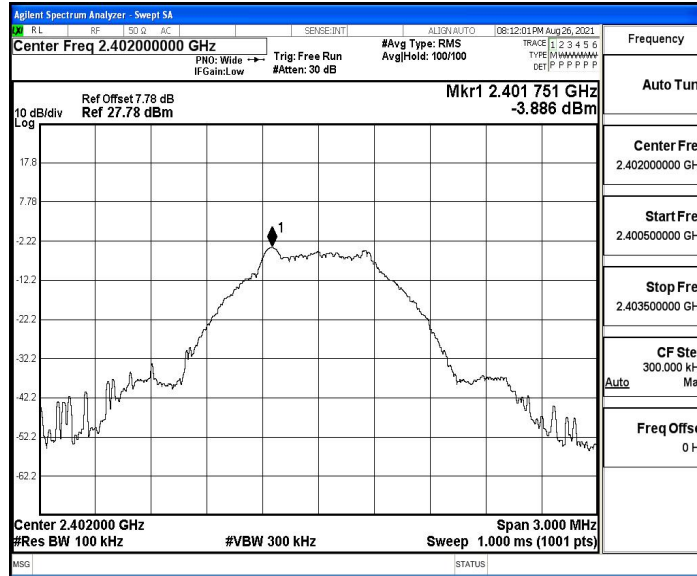
Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-3.89	-3.89	---	PASS
			30~1000	-3.89	-60.64	≤ -23.89	PASS
			1000~26500	-3.89	-47.75	≤ -23.89	PASS
		2440	Reference	-4.78	-4.78	---	PASS
			30~1000	-4.78	-60.71	≤ -24.78	PASS
			1000~26500	-4.78	-47.53	≤ -24.78	PASS
		2480	Reference	-5.61	-5.61	---	PASS
			30~1000	-5.61	-61.39	≤ -25.61	PASS
			1000~26500	-5.61	-47.31	≤ -25.61	PASS

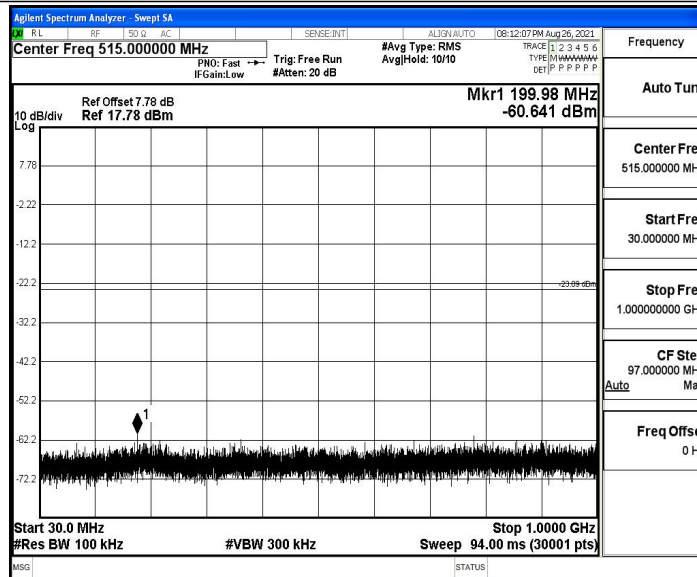


Test Graphs

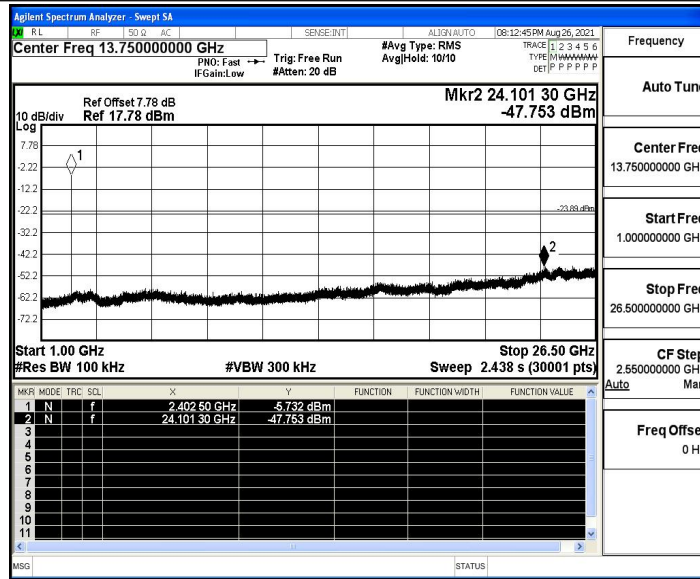
BLE_1M_Ant1_2402_0~Reference



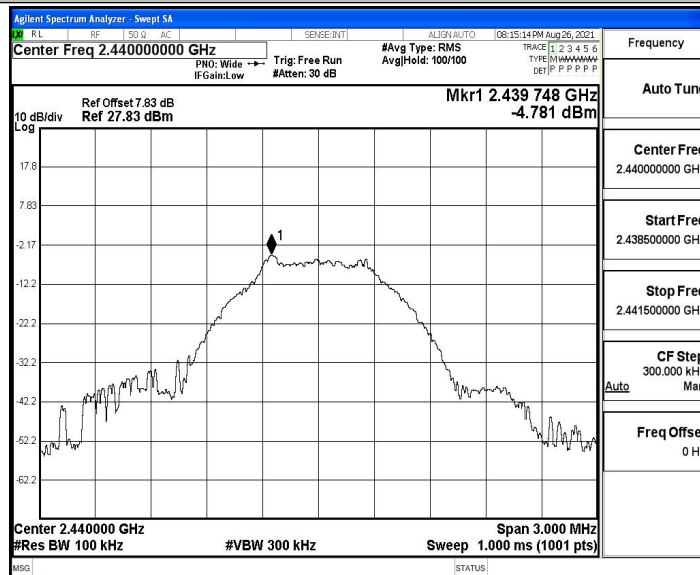
BLE_1M_Ant1_2402_30~1000



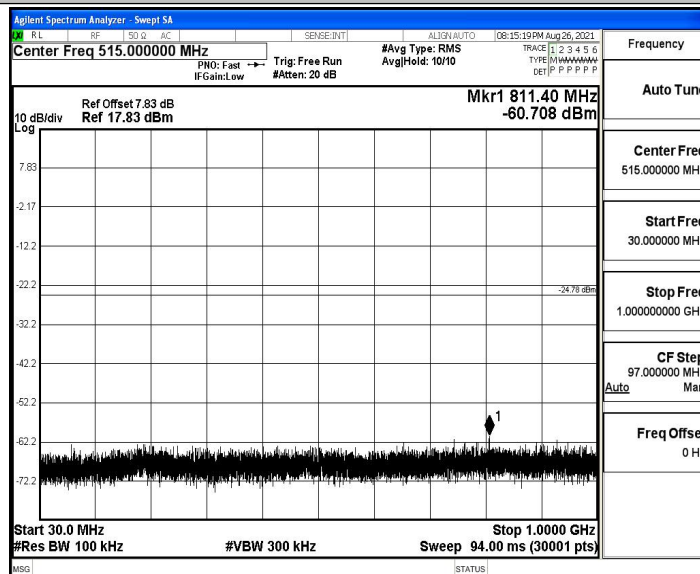
BLE_1M_Ant1_2402_1000~26500



BLE_1M_Ant1_2440_0~Reference

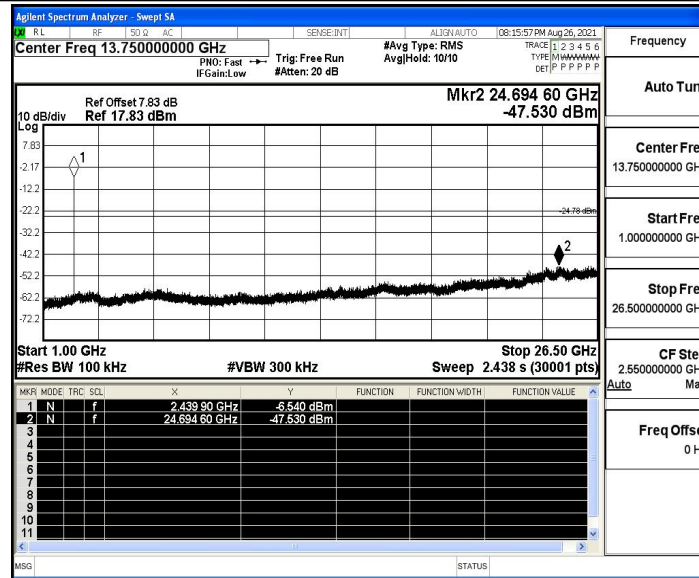


BLE_1M_Ant1_2440_30~1000

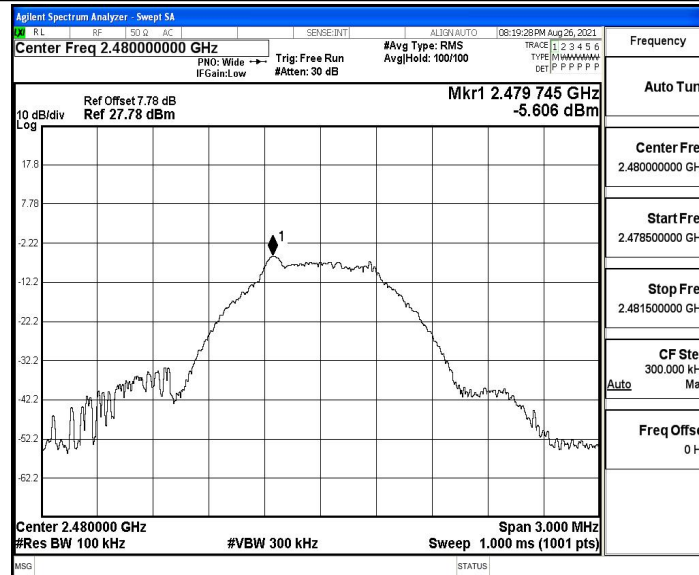




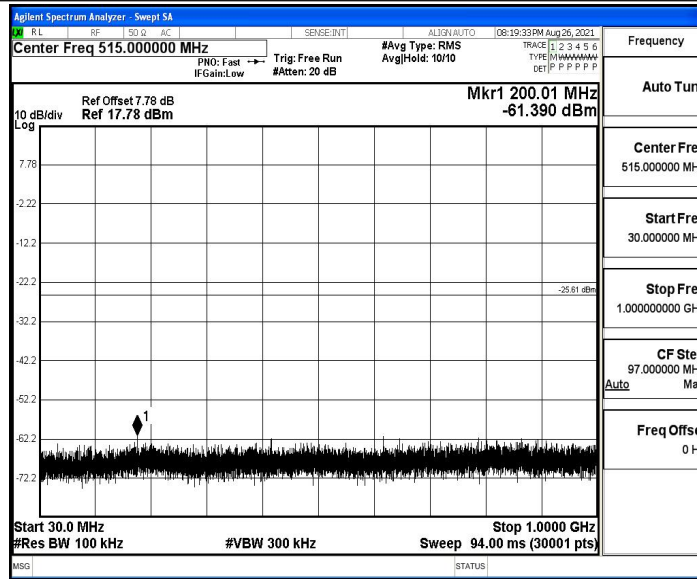
BLE_1M_Ant1_2440_1000~26500



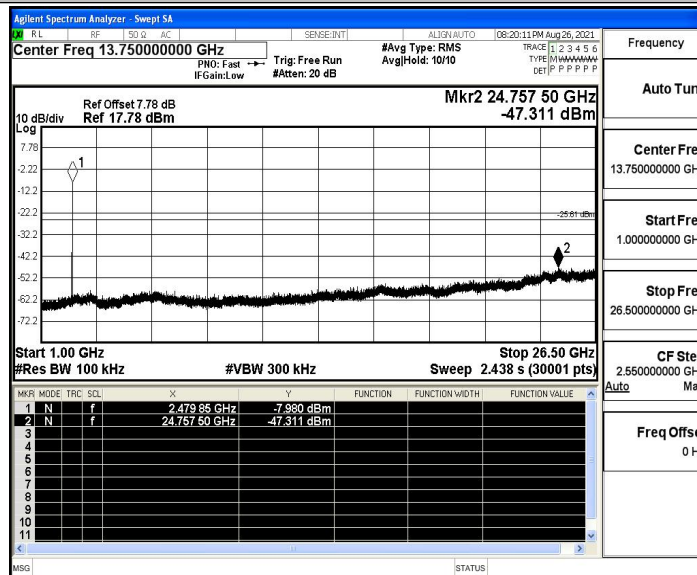
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500





B.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
BLE_1M	Ant1	Low	2402	AV	2310.000	-49.01	≤-41.20	46.19	≤54	PASS
				AV	2389.880	-48.45	≤-41.20	46.75	≤54	PASS
				AV	2390.000	-48.45	≤-41.20	46.75	≤54	PASS
				Peak	2310.000	-42.4	≤-21.20	52.80	≤74	PASS
				Peak	2324.675	-39.09	≤-21.20	56.11	≤74	PASS
				Peak	2390.000	-42.62	≤-21.20	52.58	≤74	PASS
		High	2480	AV	2483.500	-48.05	≤-41.20	47.15	≤54	PASS
				AV	2498.480	-47.82	≤-41.20	47.38	≤54	PASS
				AV	2500.000	-47.89	≤-41.20	47.31	≤54	PASS
				Peak	2483.500	-41.51	≤-21.20	53.69	≤74	PASS
				Peak	2499.280	-37.9	≤-21.20	57.30	≤74	PASS
				Peak	2500.000	-41.85	≤-21.20	53.35	≤74	PASS

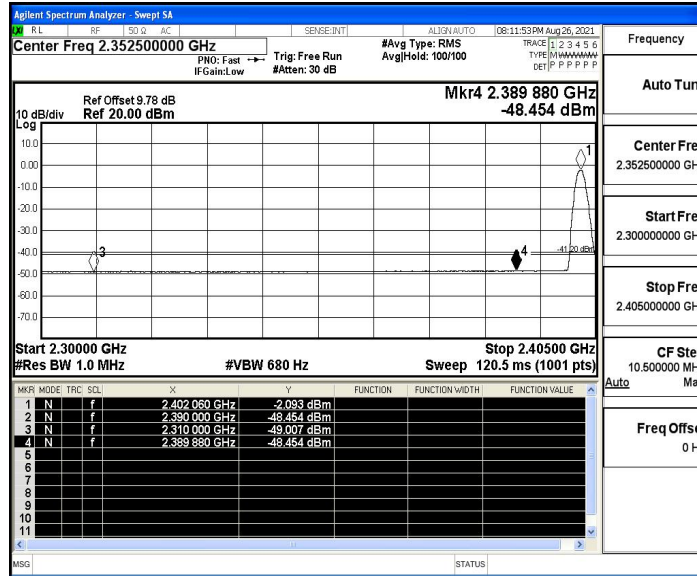
Note:

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.

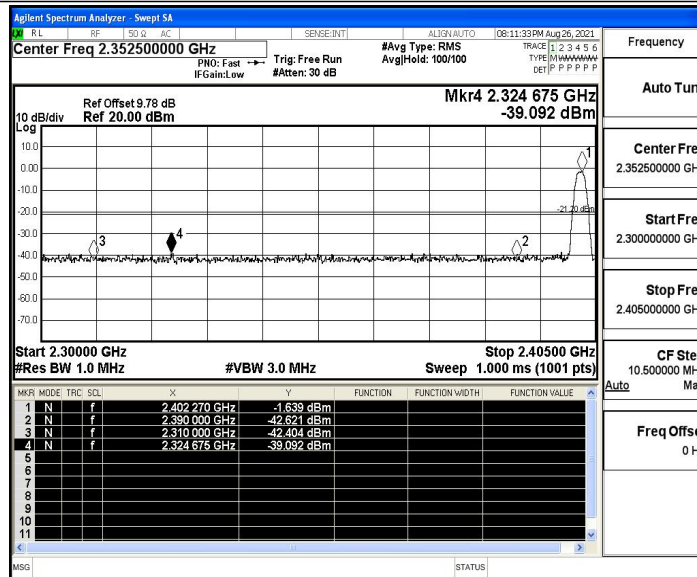


Test Graphs

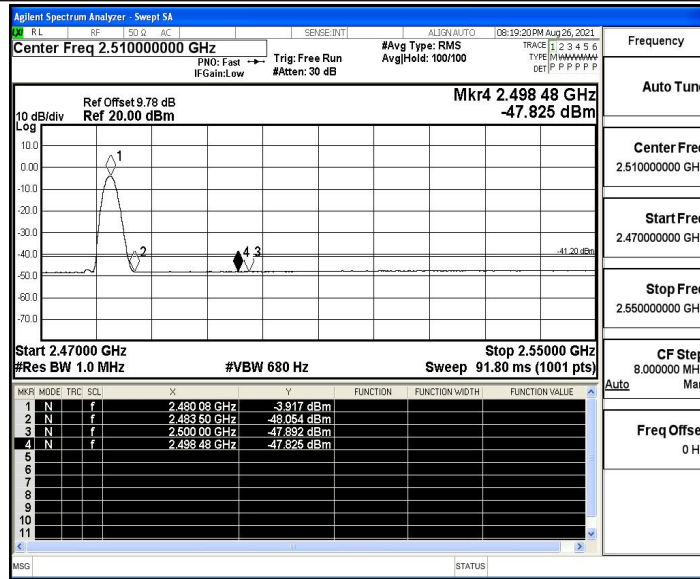
BLE_1M_Ant1_Low_2402_AV



BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV



BLE_1M_Ant1_High_2480_Peak

