

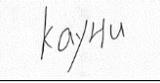
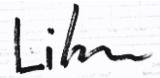


## Appendix F for BT LE Test Data

**Product Name: Magnetic Bluetooth headphone amplifier**

**Test Model: Tea**

### Environmental Conditions

Temperature:	22.3° C
Relative Humidity:	52.4%
ATM Pressure:	100.0 kPa
Test Engineer:	
Supervised by:	



## F.1 RF Output Power

### Test Result

BT LE

Test Condition	TestMode	Antenna	Channel	EIRP[dBm]	Limit[dBm]	Verdict
NTNV	BLE_1M	Ant1	2402	7.90	20	PASS
			2440	8.22	20	PASS
			2480	8.59	20	PASS

Test Condition	TestMode	Antenna	Channel	EIRP[dBm]	Limit[dBm]	Verdict
NTLV	BLE_1M	Ant1	2402	7.83	20	PASS
			2440	8.04	20	PASS
			2480	8.48	20	PASS

Test Condition	TestMode	Antenna	Channel	EIRP[dBm]	Limit[dBm]	Verdict
NTHV	BLE_1M	Ant1	2402	6.82	20	PASS
			2440	7.13	20	PASS
			2480	7.47	20	PASS

\*\*\*Note: 20 bursts had been captured for power measurement.

BT 2LE

Test Condition	TestMode	Antenna	Channel	EIRP[dBm]	Limit[dBm]	Verdict
NTNV	BLE_2M	Ant3	2402	7.84	20	PASS
			2440	8.17	20	PASS
			2480	8.53	20	PASS

Test Condition	TestMode	Antenna	Channel	EIRP[dBm]	Limit[dBm]	Verdict
NTLV	BLE_2M	Ant3	2402	7.62	20	PASS
			2440	8.09	20	PASS
			2480	8.42	20	PASS

Test Condition	TestMode	Antenna	Channel	EIRP[dBm]	Limit[dBm]	Verdict
NTHV	BLE_2M	Ant3	2402	6.74	20	PASS
			2440	7.04	20	PASS
			2480	7.45	20	PASS

\*\*\*Note: 20 bursts had been captured for power measurement.



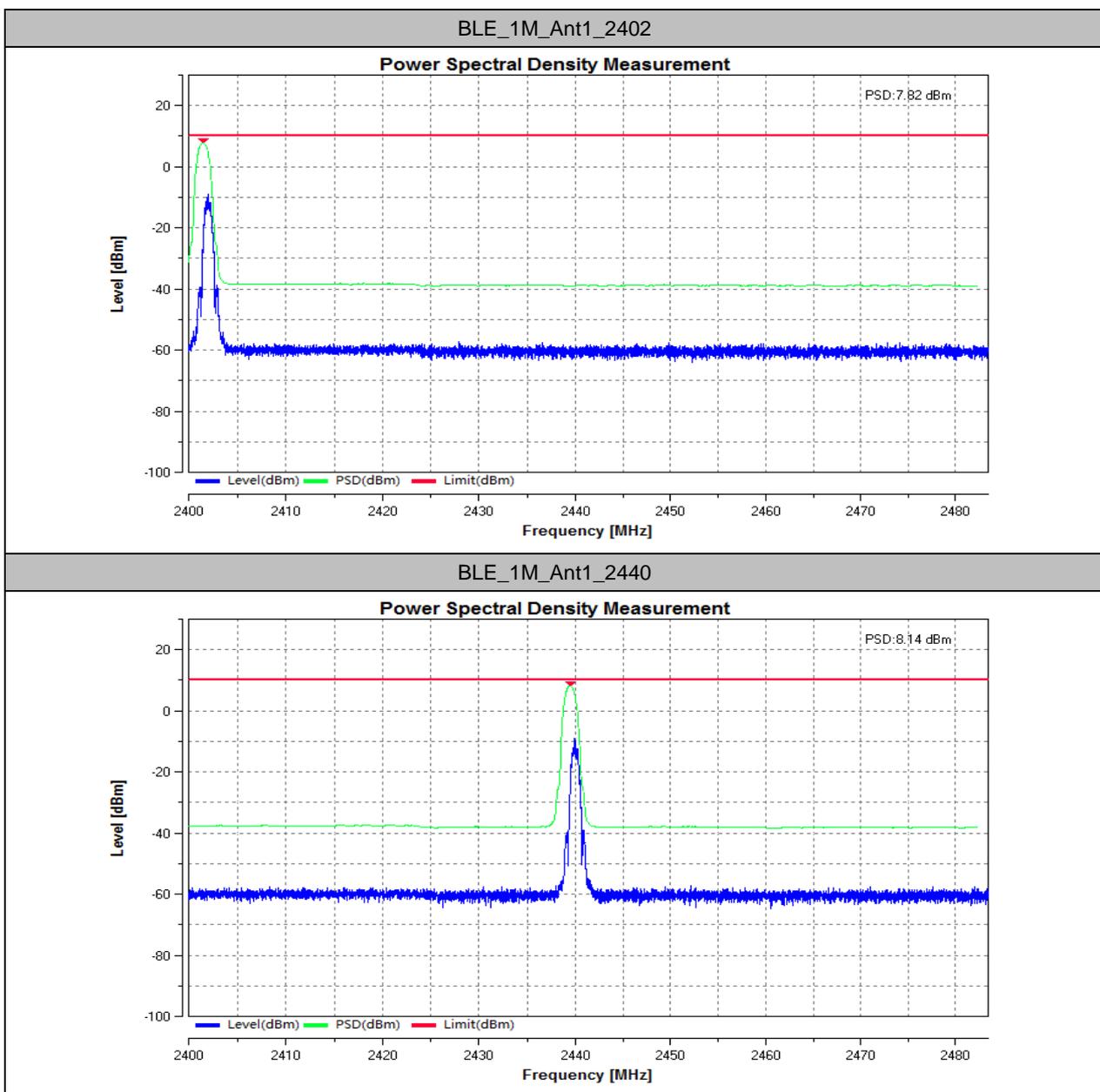
## F.2 Power Spectral Density

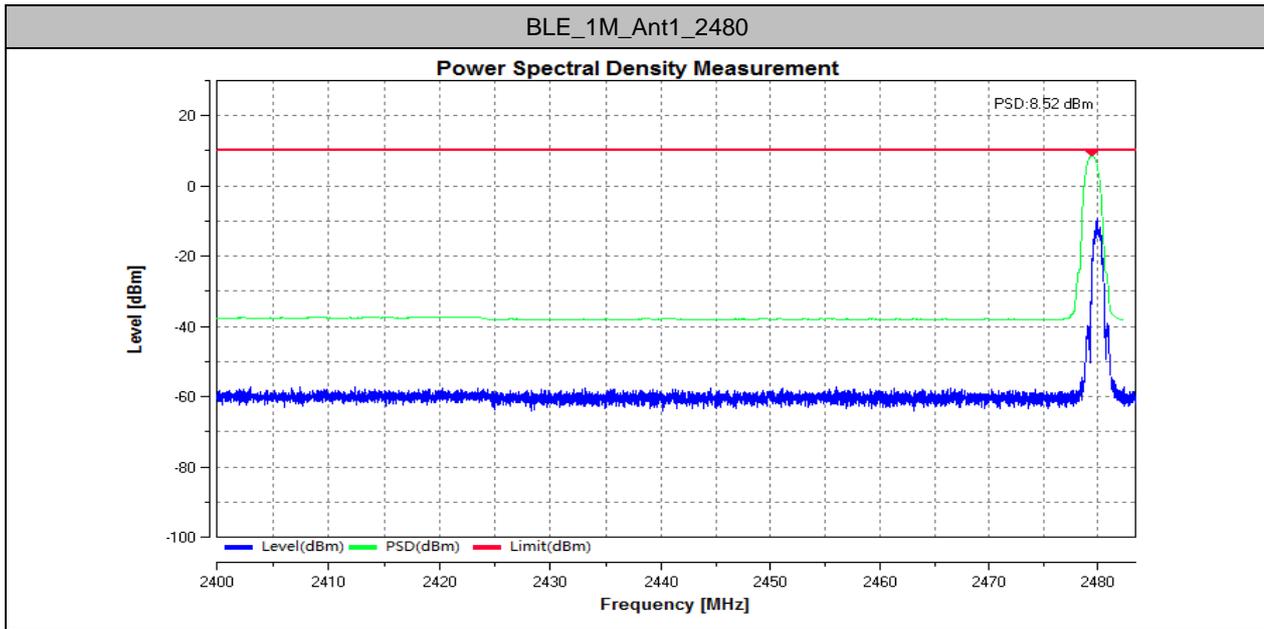
### Test Result

BT LE

TestMode	Antenna	Channel	PSD[dBm/MHz]	Limit[dBm/MHz]	Verdict
BLE_1M	Ant1	2402	7.82	10	PASS
		2440	8.14	10	PASS
		2480	8.52	10	PASS

### Test Graphs

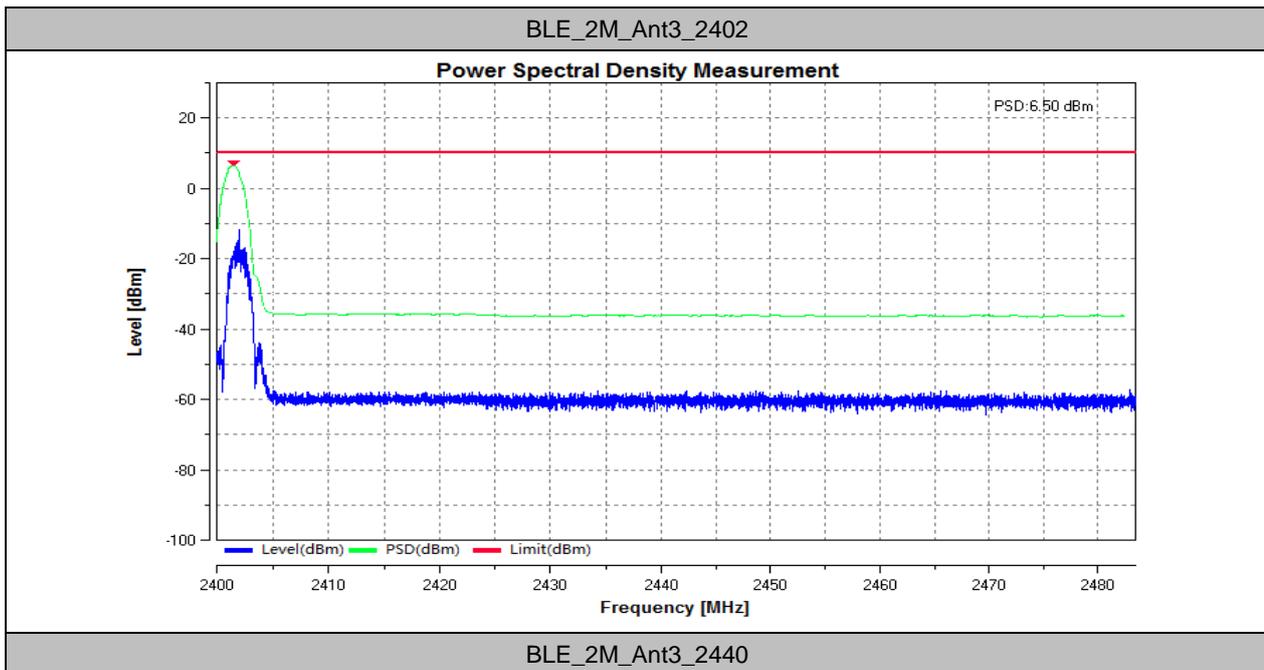


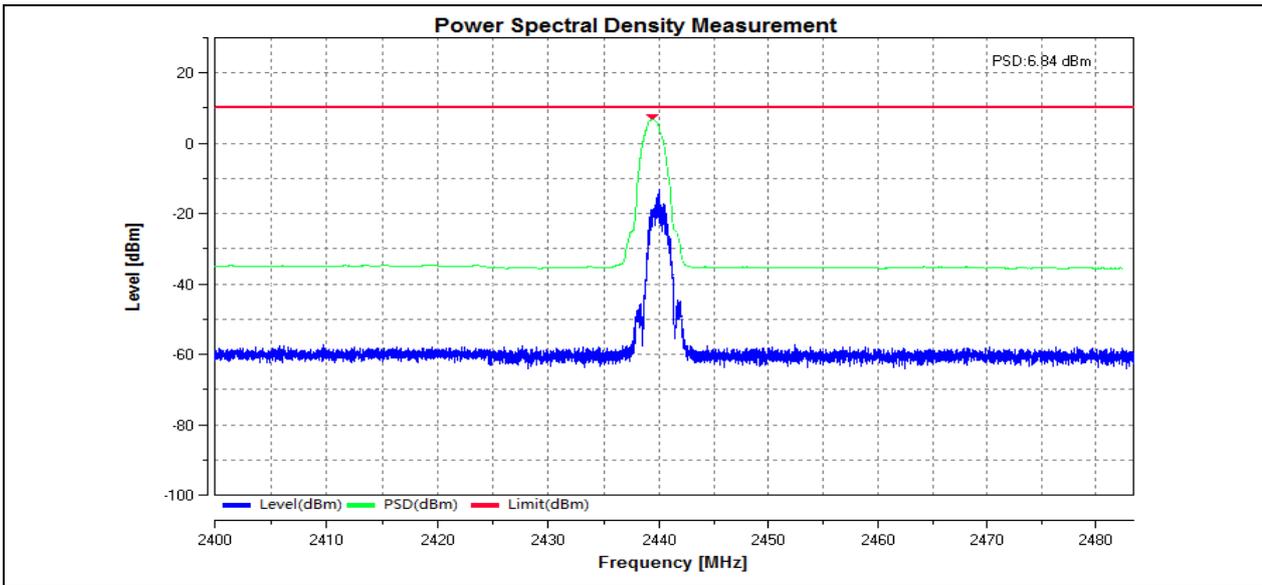


BT 2LE

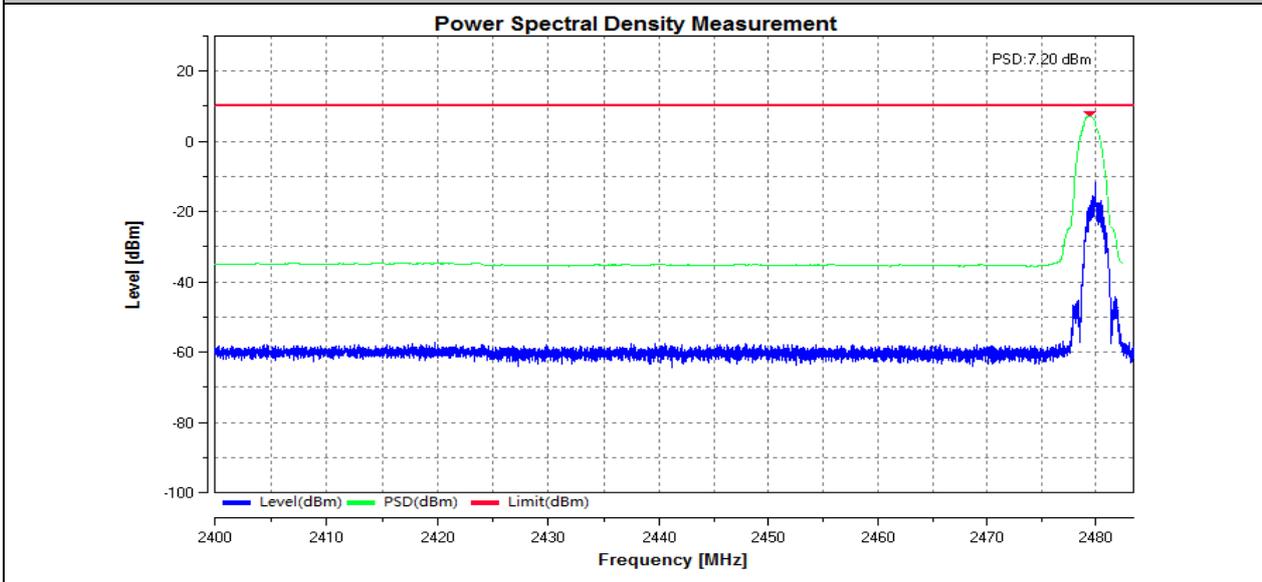
TestMode	Antenna	Channel	PSD[dBm/MHz]	Limit[dBm/MHz]	Verdict
BLE_2M	Ant3	2402	6.50	10	PASS
		2440	6.84	10	PASS
		2480	7.20	10	PASS

Test Graphs





BLE\_2M\_Ant3\_2480





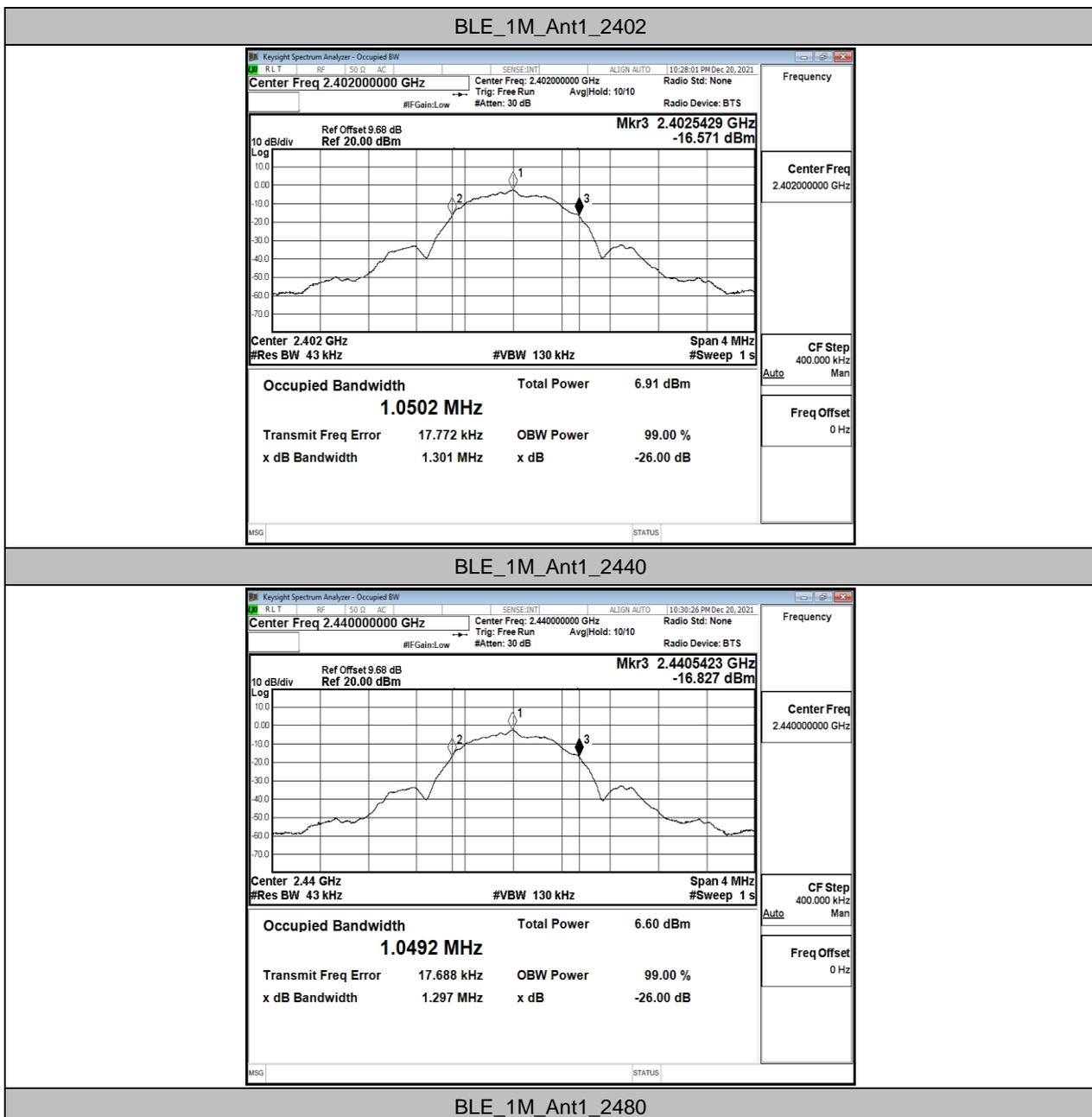
### F.3 Occupied Channel Bandwidth

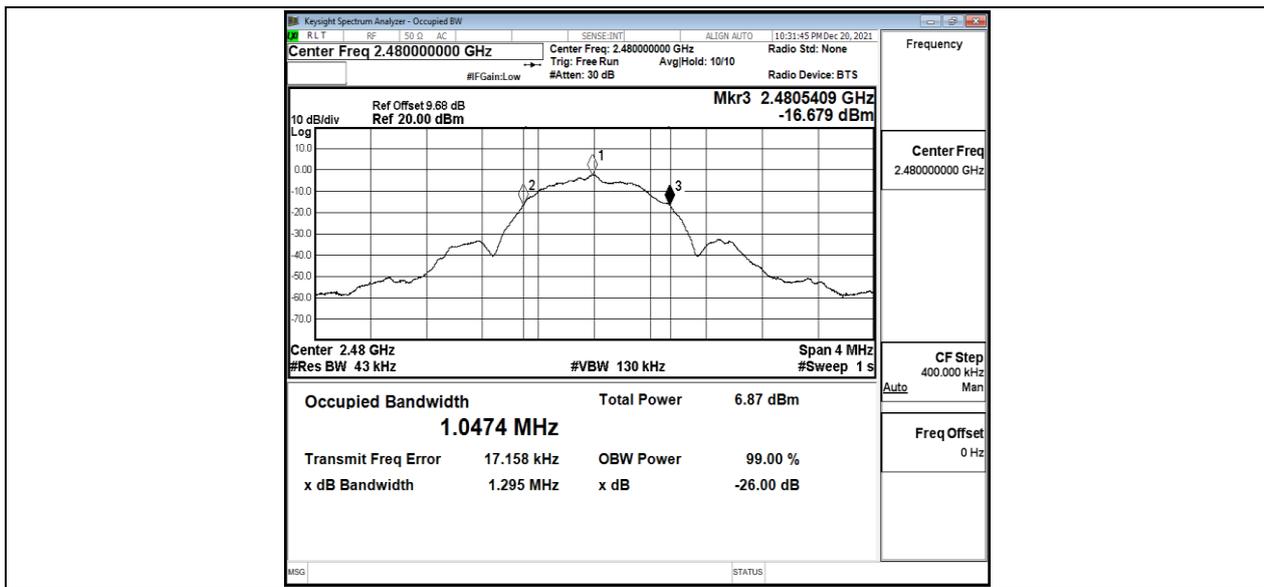
#### Test Result

BT LE

TestMode	Antenna	Channel	OCB[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0502	2401.4927	2402.5429	2400 to 2483.5	PASS
		2440	1.0492	2439.4931	2440.5423	2400 to 2483.5	PASS
		2480	1.0474	2479.4935	2480.5409	2400 to 2483.5	PASS

#### Test Graphs

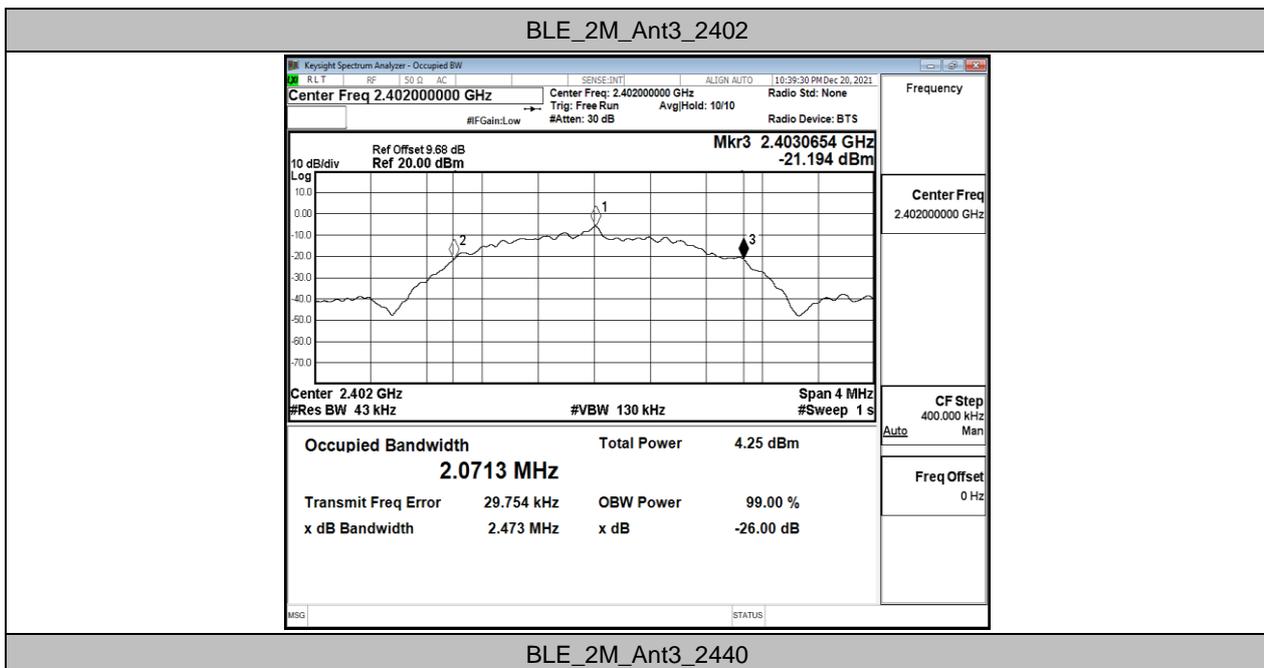


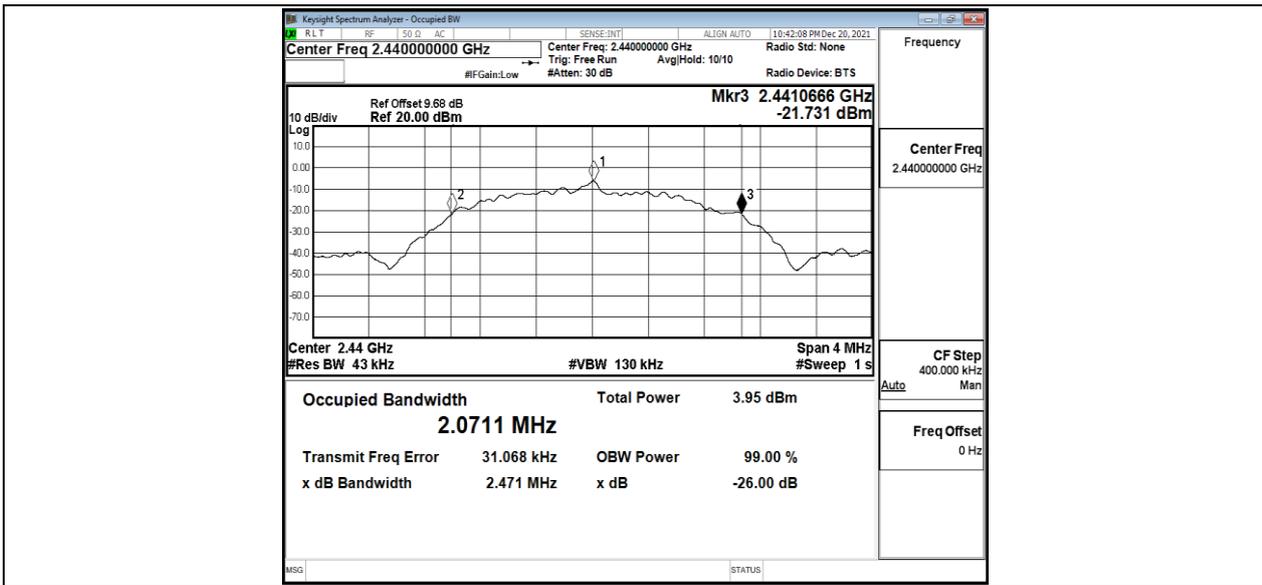


BT 2LE

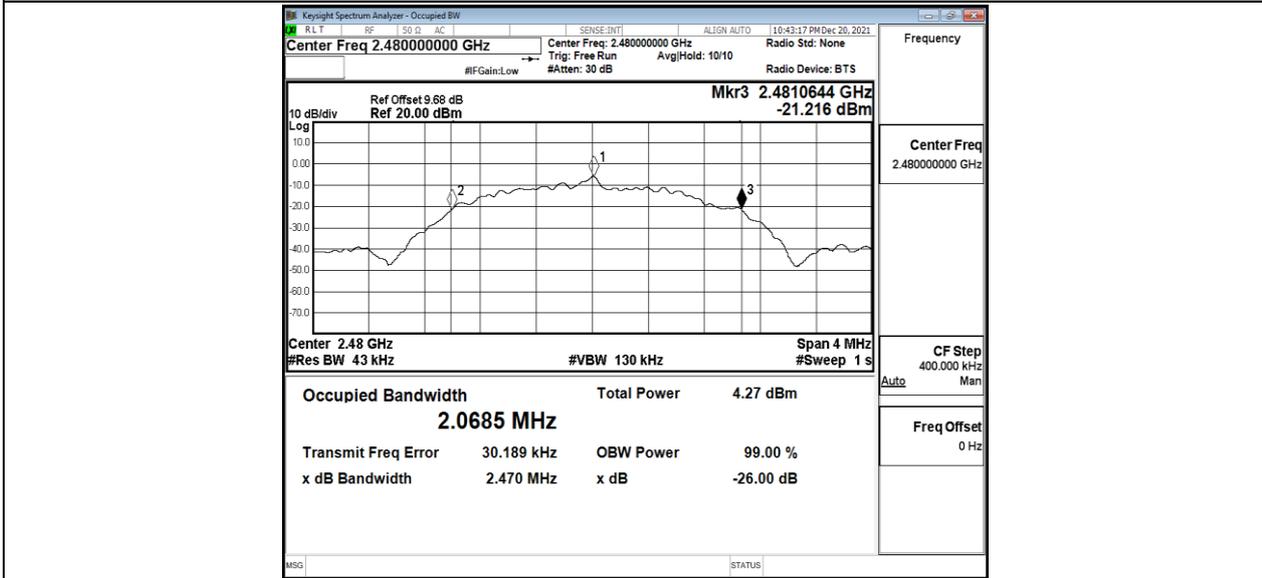
TestMode	Antenna	Channel	OCB[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_2M	Ant3	2402	2.0713	2400.9941	2403.0654	2400 to 2483.5	PASS
		2440	2.0711	2438.9955	2441.0666	2400 to 2483.5	PASS
		2480	2.0685	2478.9959	2481.0644	2400 to 2483.5	PASS

Test Graphs





BLE\_2M\_Ant3\_2480





### F.4 Transmitter Unwanted Emissions In The Out-Of-BandDomain

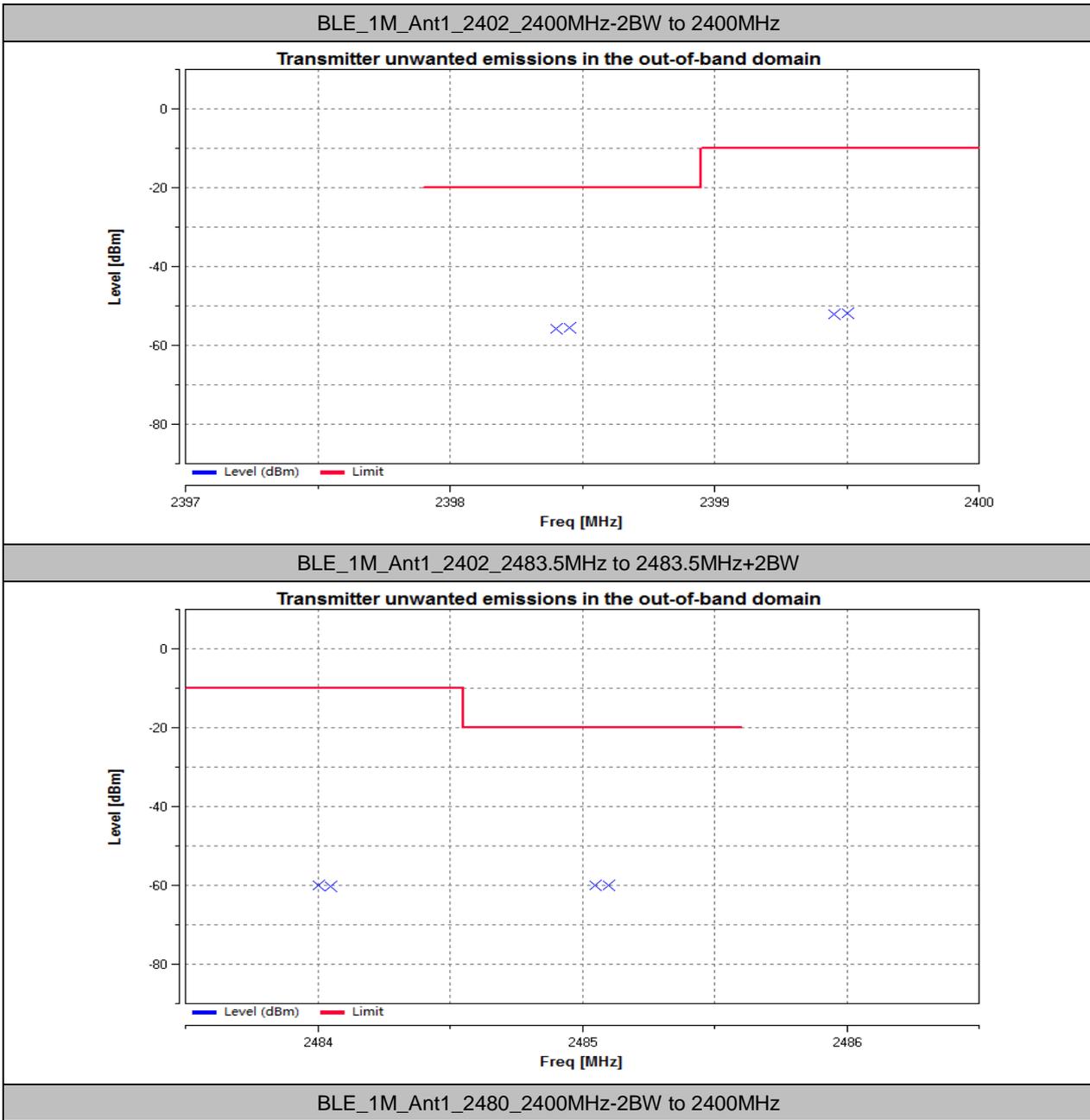
#### Test Result

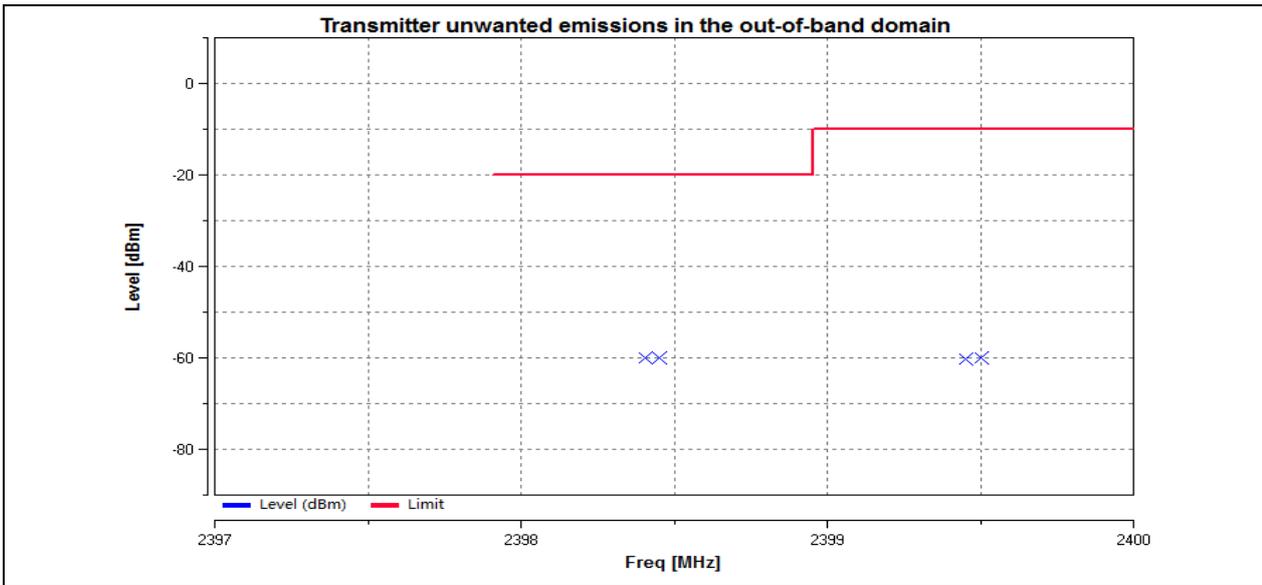
BT LE

TestMode	Antenna	Channel	Freq. [MHz]	Level[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	2398.3996	-55.75	-20.00	PASS
			2398.4498	-55.63	-20.00	PASS
			2399.4498	-52.16	-10.00	PASS
			2399.5	-51.80	-10.00	PASS
			2484	-60.12	-10.00	PASS
			2484.0502	-60.17	-10.00	PASS
			2485.0502	-60.11	-20.00	PASS
			2485.1004	-60.09	-20.00	PASS
		2480	2398.4052	-60.06	-20.00	PASS
			2398.4526	-60.05	-20.00	PASS
			2399.4526	-60.14	-10.00	PASS
			2399.5	-60.08	-10.00	PASS
			2484	-56.35	-10.00	PASS
			2484.0474	-56.39	-10.00	PASS
			2485.0474	-57.39	-20.00	PASS
			2485.0948	-57.46	-20.00	PASS

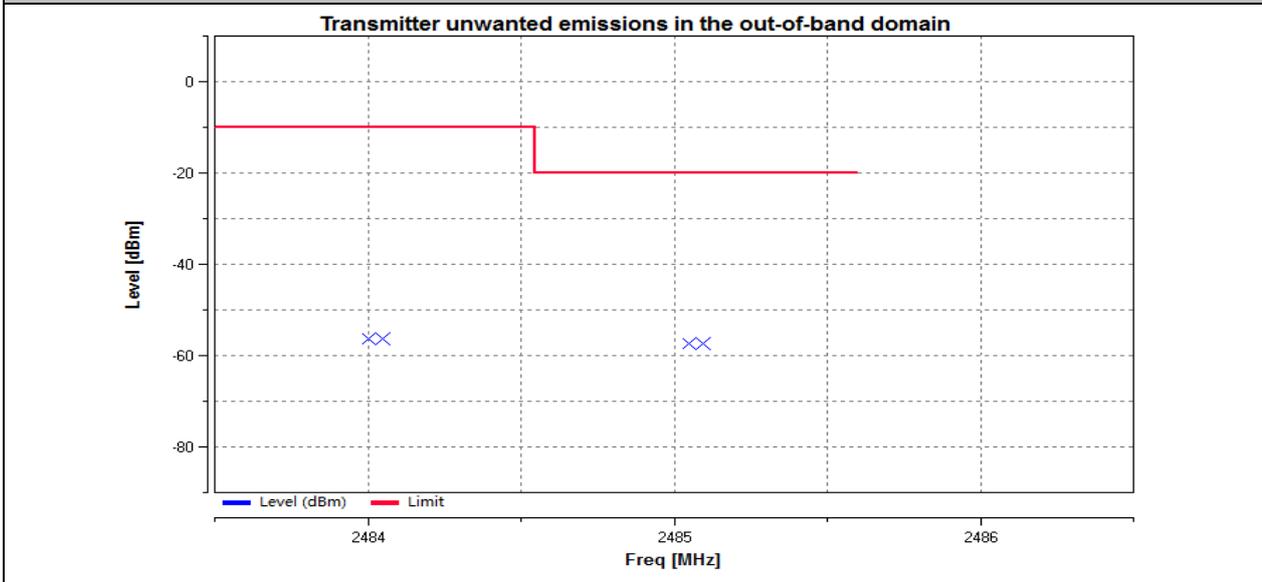


### Test Graphs





BLE\_1M\_Ant1\_2480\_2483.5MHz to 2483.5MHz+2BW



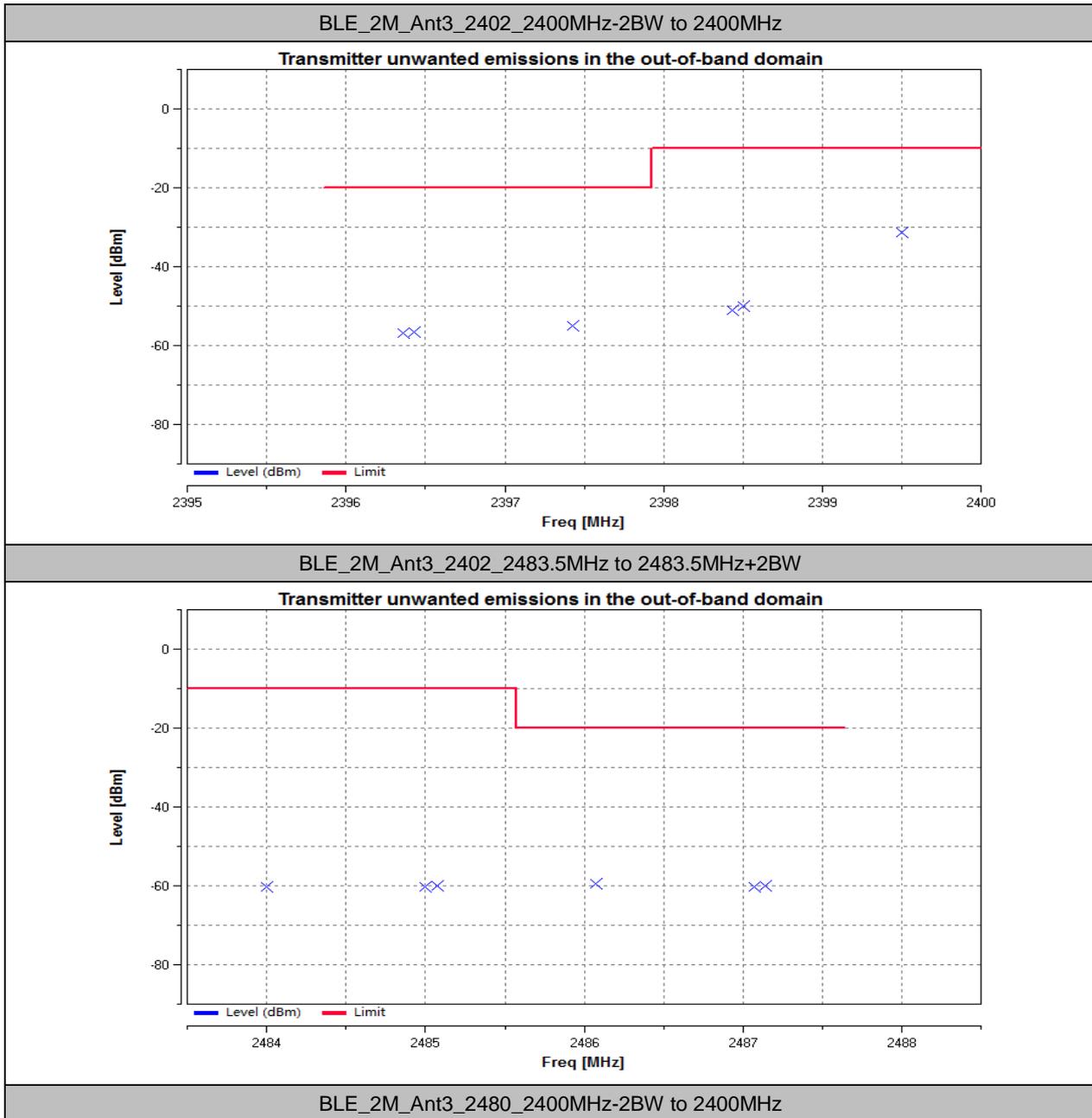


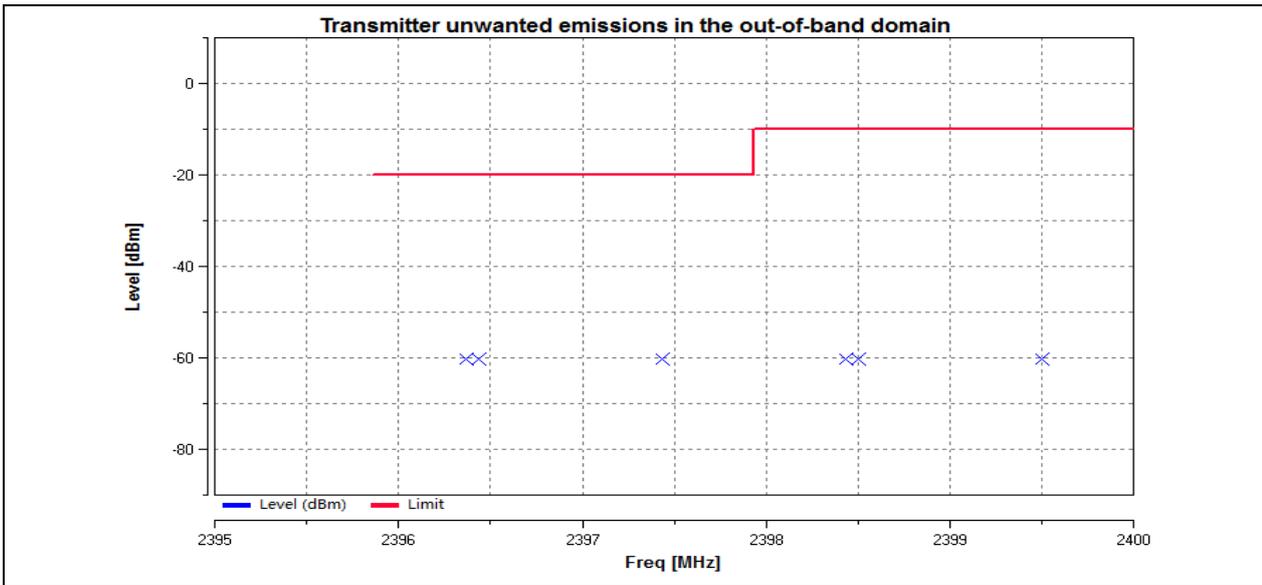
BT 2LE

TestMode	Antenna	Channel	Freq. [MHz]	Level[dBm]	Limit[dBm]	Verdict
BLE_2M	Ant3	2402	2396.3574	-56.83	-20.00	PASS
			2396.4287	-56.66	-20.00	PASS
			2397.4287	-54.93	-20.00	PASS
			2398.4287	-50.99	-10.00	PASS
			2398.5	-50.03	-10.00	PASS
			2399.5	-31.40	-10.00	PASS
			2484	-60.34	-10.00	PASS
			2485	-60.14	-10.00	PASS
			2485.0713	-60.11	-10.00	PASS
			2486.0713	-59.60	-20.00	PASS
			2487.0713	-60.14	-20.00	PASS
			2487.1426	-60.07	-20.00	PASS
		2480	2396.363	-60.19	-20.00	PASS
			2396.4315	-60.15	-20.00	PASS
			2397.4315	-60.33	-20.00	PASS
			2398.4315	-60.21	-10.00	PASS
			2398.5	-60.30	-10.00	PASS
			2399.5	-60.30	-10.00	PASS
			2484	-54.53	-10.00	PASS
			2485	-57.53	-10.00	PASS
			2485.0685	-57.61	-10.00	PASS
			2486.0685	-58.67	-20.00	PASS
			2487.0685	-59.19	-20.00	PASS
			2487.137	-59.17	-20.00	PASS

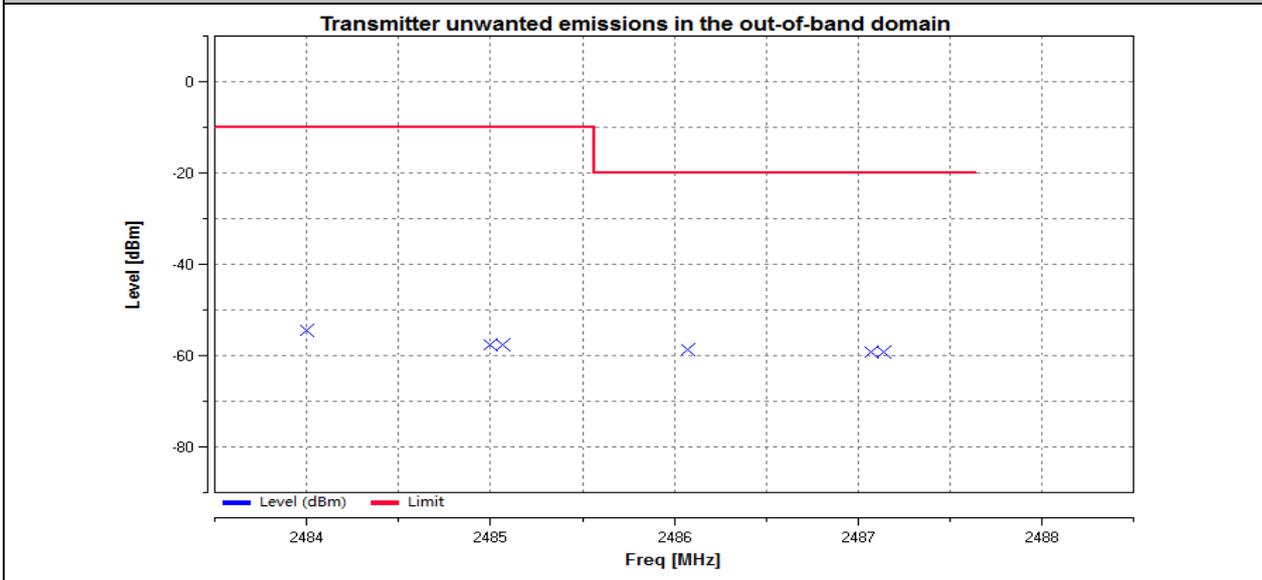


### Test Graphs





BLE\_2M\_Ant3\_2480\_2483.5MHz to 2483.5MHz+2BW





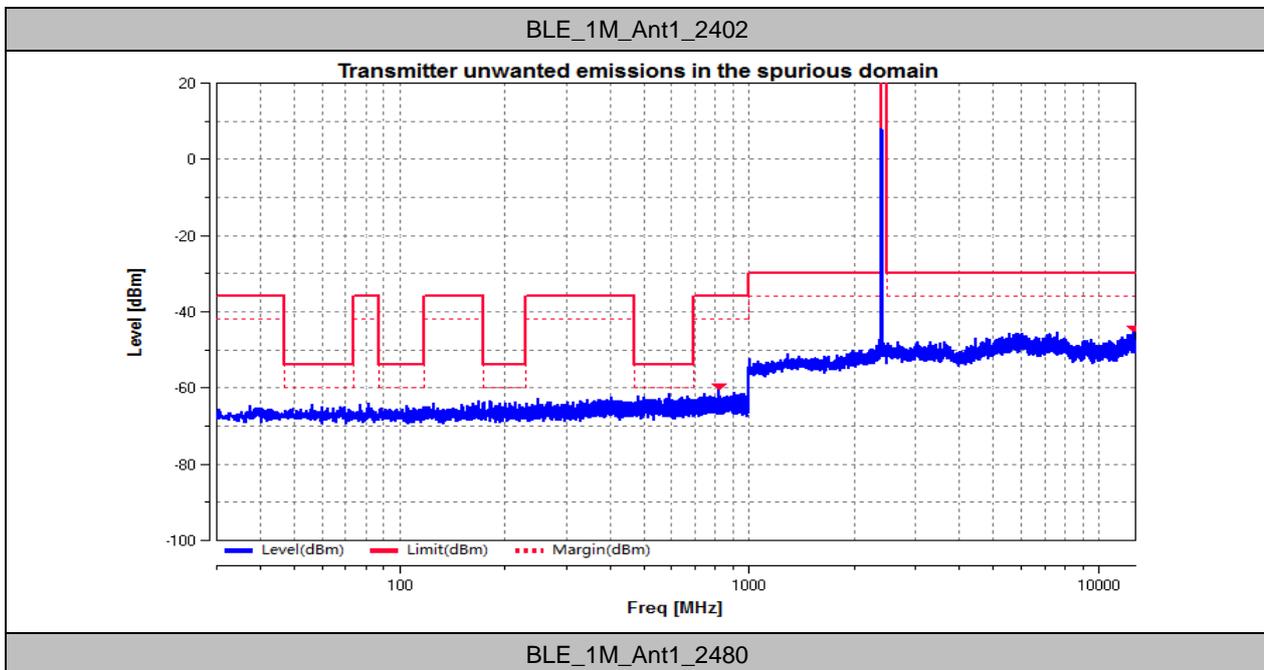
## F.5 Transmitter unwanted emissions in the spurious domain

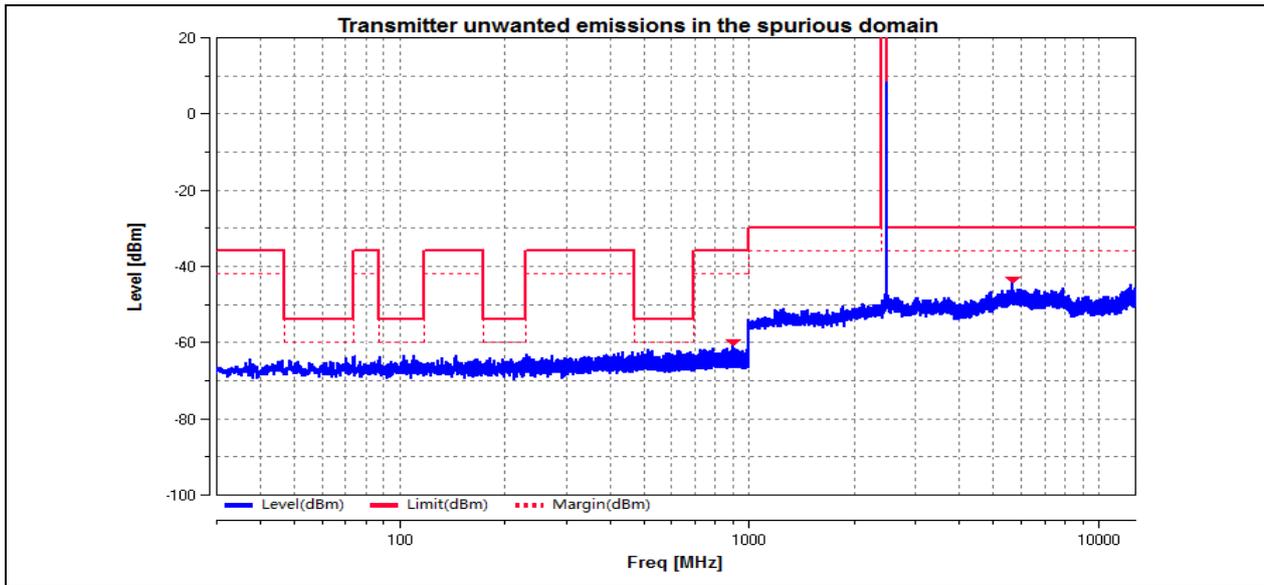
### Test Result-Pre-scan

BT LE

TestMode	Antenna	Channel	Freq. [MHz]	Level[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	821.52	-60.66	-36	PASS
			12597.25	-45.45	-30	PASS
		2480	898.27	-60.94	-36	PASS
			5654.47	-44.57	-30	PASS

### Test Graphs-Pre-scan

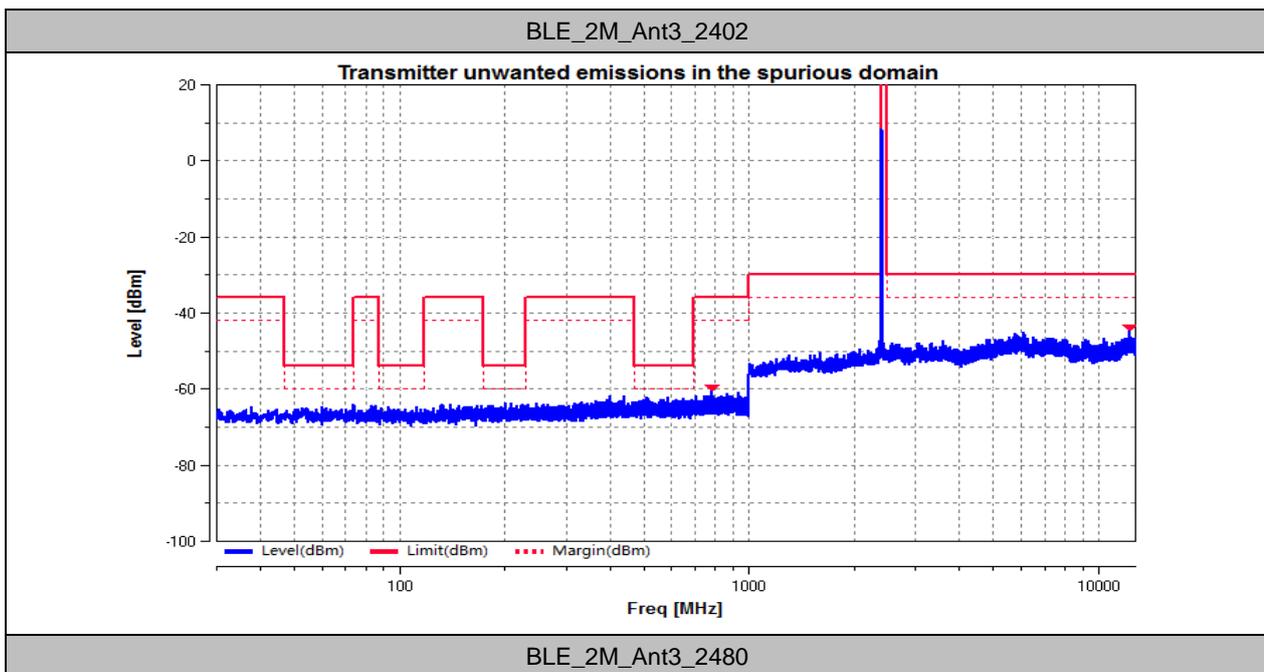


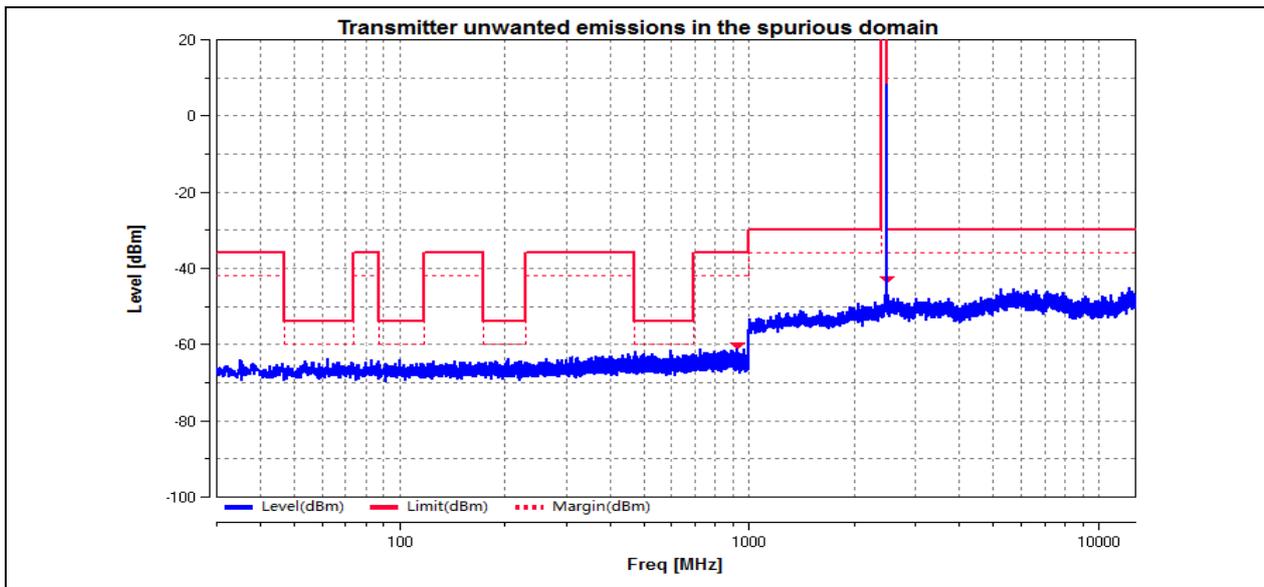


BT 2LE

TestMode	Antenna	Channel	Freq. [MHz]	Level[dBm]	Limit[dBm]	Verdict
BLE_2M	Ant3	2402	786.84	-60.4	-36	PASS
			12296.16	-44.75	-30	PASS
		2480	930.89	-61.11	-36	PASS
			2487.84	-43.9	-30	PASS

Test Graphs-Pre-scan







## F.6 Receiver spurious emissions

### Test Result-Pre-scan

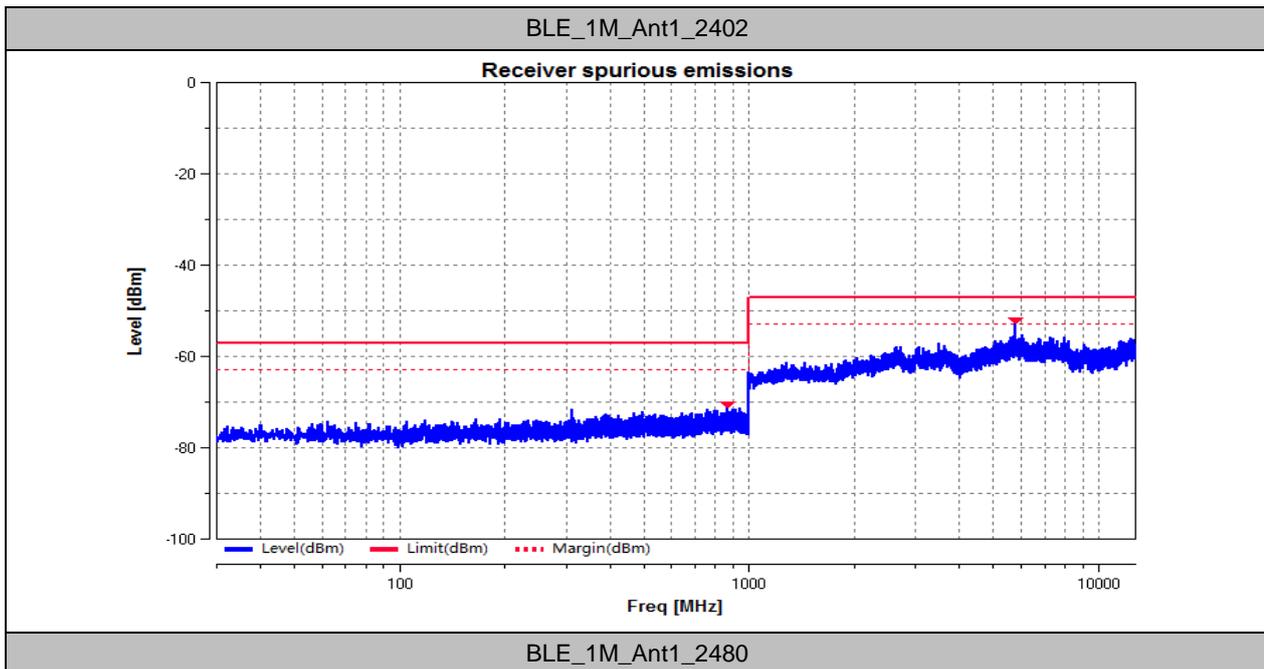
BT LE

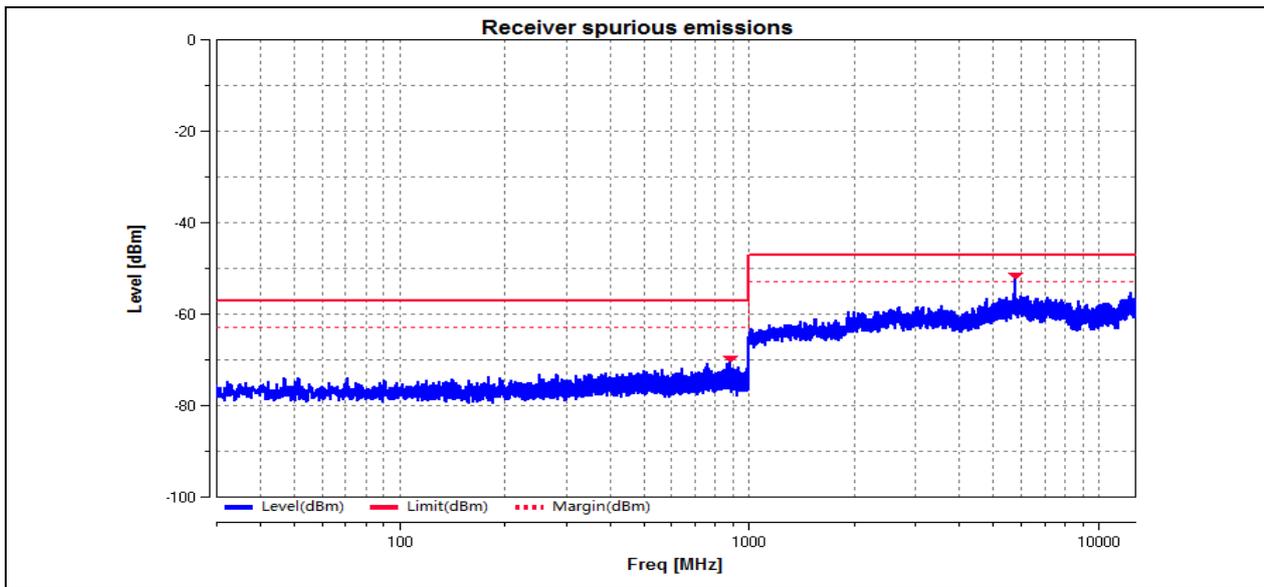
TestMode	Antenna	Channel	Freq. [MHz]	Level[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	5760.22	-52.83	-47	See table below
		2480	5760.22	-52.29	-47	See table below

### Test Result- Emissions identified during the pre-scan

TestMode	Antenna	Channel	Freq. [MHz]	Level[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	5760.22	-74.68	-47	PASS
		2480	5760.22	-79.80	-47	PASS

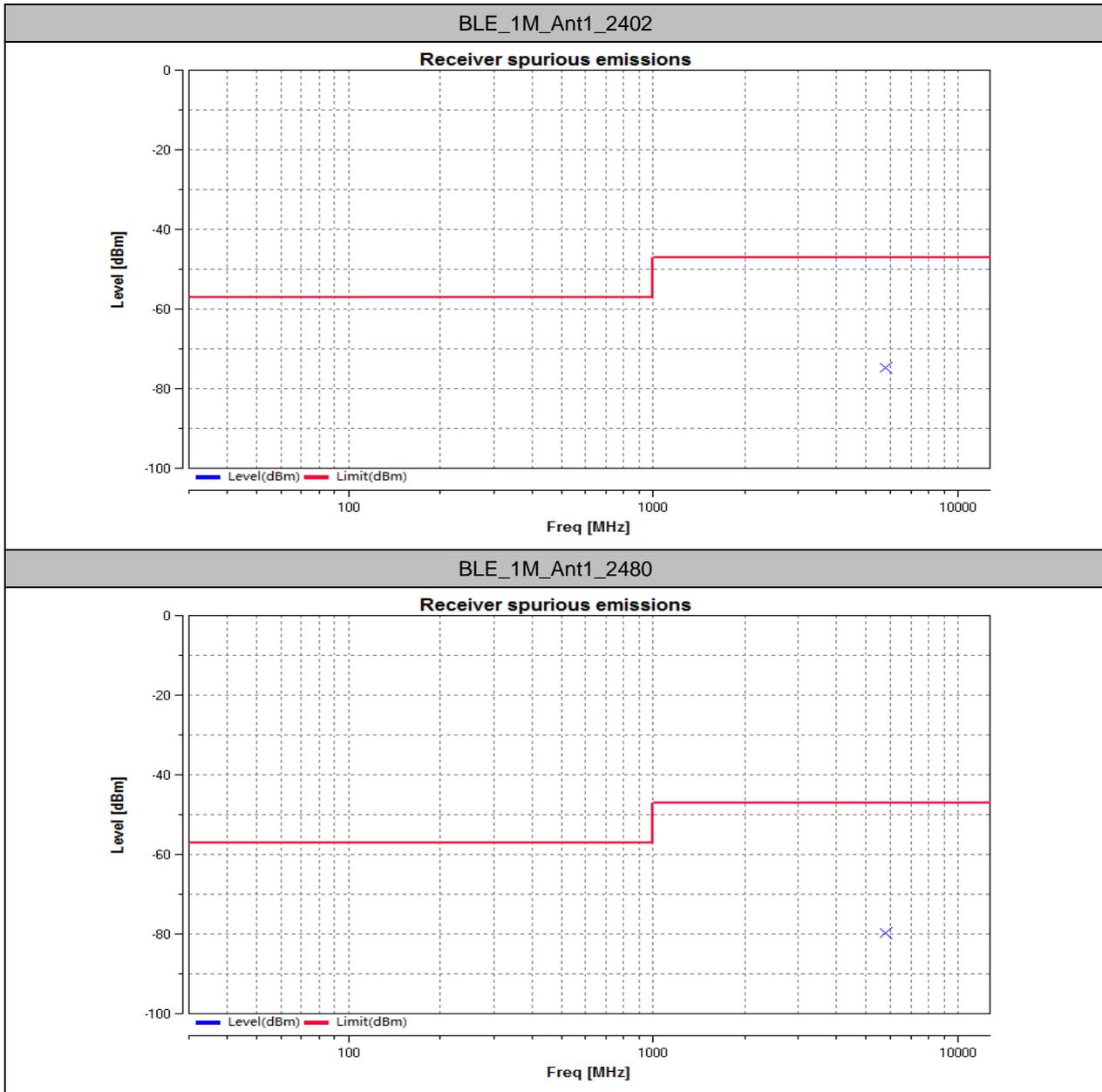
### Test Graphs-Pre-scan







### Test Graphs- Emissions identified during the pre-scan

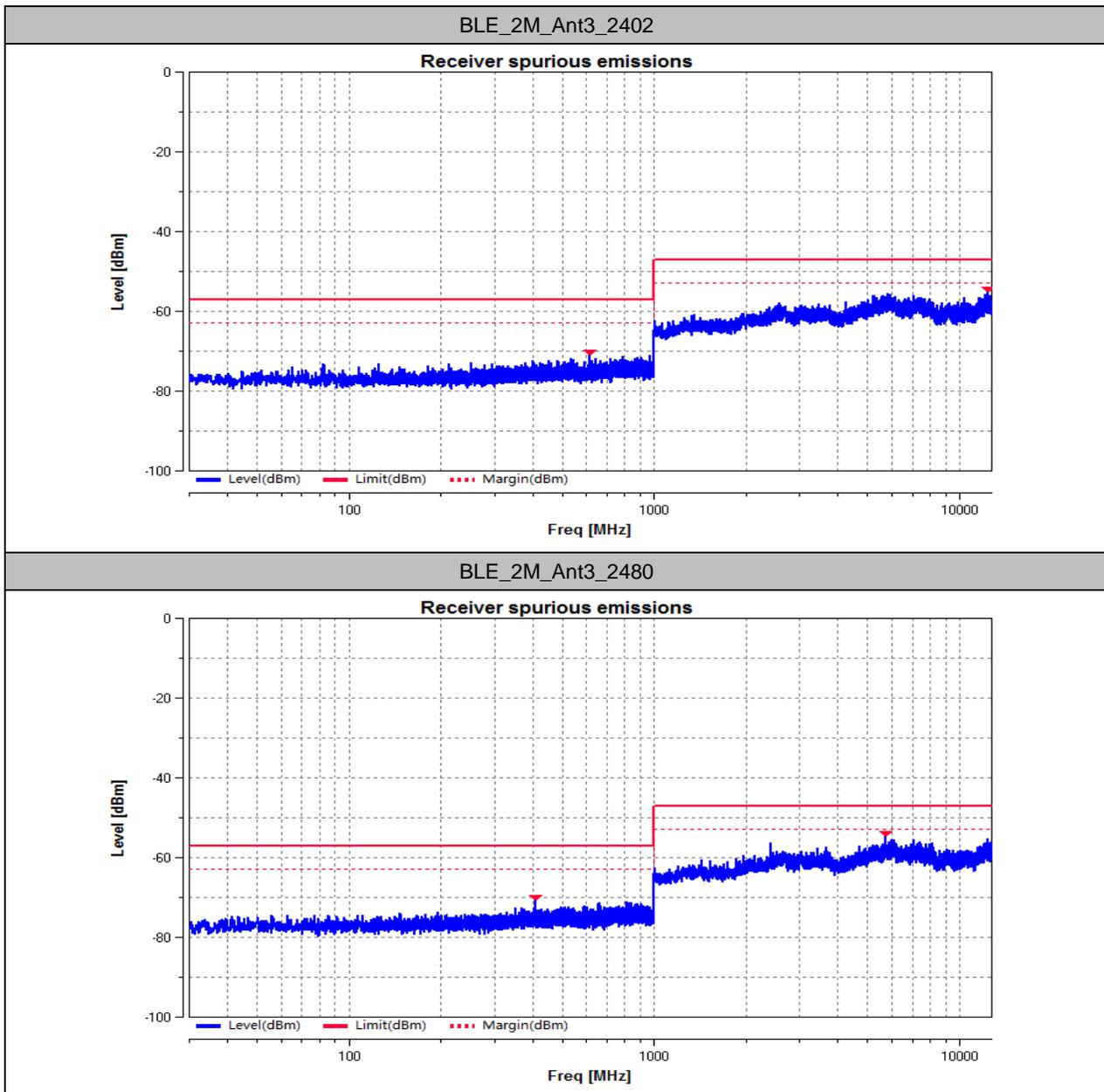




BT 2LE

TestMode	Antenna	Channel	Freq. [MHz]	Level[dBm]	Limit[dBm]	Verdict
BLE_2M	Ant3	2402	613.46	-71.13	-57.00	PASS
			12360.78	-55.25	-47.00	PASS
		2480	407.57	-70.84	-57.00	PASS
			5723.5	-54.8	-47.00	PASS

### Test Graphs-Pre-scan





## F.7 Receiver Blocking

BT LE

Test Mode	Test Channel (MHz)	Wanted Signal Mean Power from Companion Device (dBm)	Blocking Signal Frequency (MHz)	Blocking Signal Power (dBm)		Type of Blocking Signal	PER(%)		Test Result
				Test Value	Limit		Test Value	Limit	
BLE	2402	-59	2380	-25	$\geq -34$	CW	6.58	10	Pass
			2504	-33	$\geq -34$	CW	4.66	10	Pass
			2300	-23	$\geq -34$	CW	6.97	10	Pass
			2584	-26	$\geq -34$	CW	6.71	10	Pass
	2480	-59	2380	-24	$\geq -34$	CW	5.31	10	Pass
			2504	-24	$\geq -34$	CW	3.95	10	Pass
			2300	-29	$\geq -34$	CW	3.32	10	Pass
			2584	-23	$\geq -34$	CW	6.84	10	Pass

BT 2LE

Test Mode	Test Channel (MHz)	Wanted Signal Mean Power from Companion Device (dBm)	Blocking Signal Frequency (MHz)	Blocking Signal Power (dBm)		Type of Blocking Signal	PER(%)		Test Result
				Test Value	Limit		Test Value	Limit	
BLE	2402	-59	2380	-29	$\geq -34$	CW	6.88	10	Pass
			2504	-30	$\geq -34$	CW	3.20	10	Pass
			2300	-31	$\geq -34$	CW	6.50	10	Pass
			2584	-22	$\geq -34$	CW	6.53	10	Pass
	2480	-59	2380	-25	$\geq -34$	CW	4.85	10	Pass
			2504	-33	$\geq -34$	CW	3.61	10	Pass
			2300	-23	$\geq -34$	CW	5.05	10	Pass
			2584	-24	$\geq -34$	CW	4.10	10	Pass