

Appendix F for BT LE Test Data

Product Name: AX3000 Wi-Fi 6 Bluetooth 5.0 PCIe Adapter

Test Model: WE3000S

**Additional Model No.: WE3000, WE3500, WE3600, WE4000, WE3700,
WE3800, WE3900**

Environmental Conditions

Temperature:	22.8° C
Relative Humidity:	53.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Jay Li
Supervised by:	Li Huan

F.1 RF Output Power

Condition	Mode	Frequency (MHz)	Max EIRP (dBm)	Limit (dBm)	Verdict
NVNT	BLE	2402	8.66	20	Pass
NVNT	BLE	2440	7.30	20	Pass
NVNT	BLE	2480	7.41	20	Pass

Condition	Mode	Frequency (MHz)	Max EIRP (dBm)	Limit (dBm)	Verdict
NVLT	BLE	2402	8.42	20	Pass
NVLT	BLE	2440	7.09	20	Pass
NVLT	BLE	2480	7.19	20	Pass

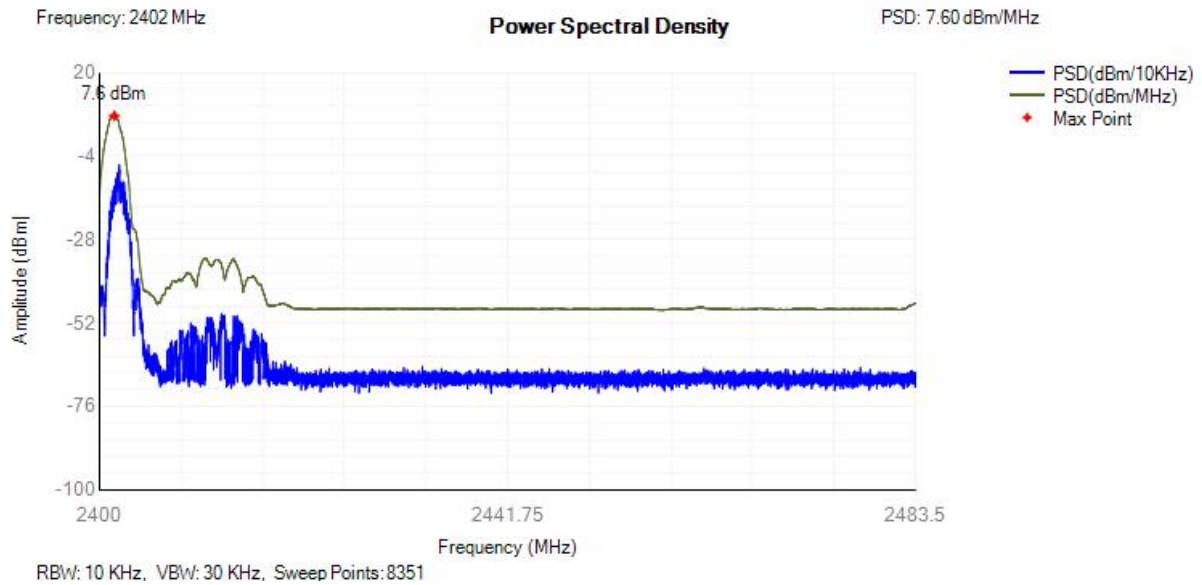
Condition	Mode	Frequency (MHz)	Max EIRP (dBm)	Limit (dBm)	Verdict
NVHT	BLE	2402	8.50	20	Pass
NVHT	BLE	2440	7.19	20	Pass
NVHT	BLE	2480	7.25	20	Pass

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

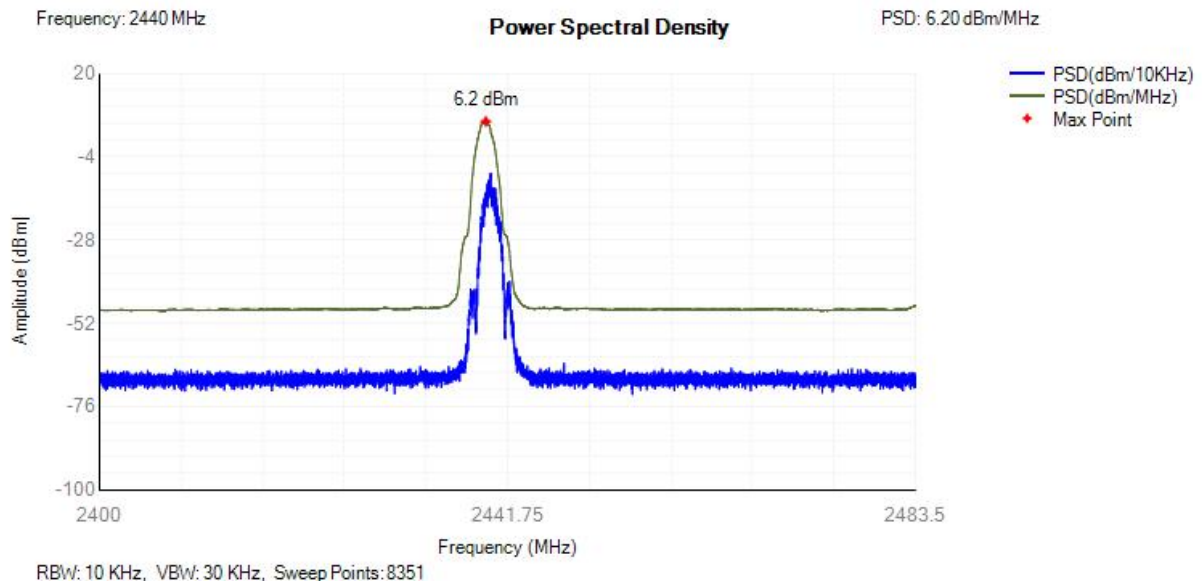
F.2 Power Spectral Density

Condition	Mode	Frequency (MHz)	Max PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
NVNT	BLE	2402	7.6	10	Pass
NVNT	BLE	2440	6.2	10	Pass
NVNT	BLE	2480	6.31	10	Pass

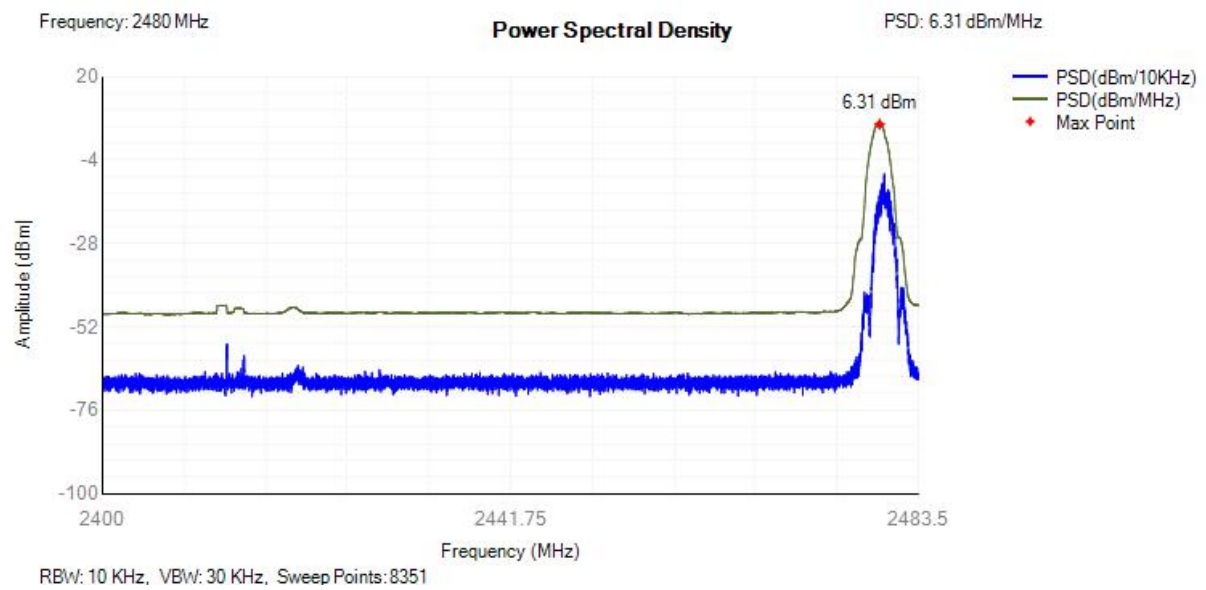
PSD NVNT BLE 2402MHz



PSD NVNT BLE 2440MHz



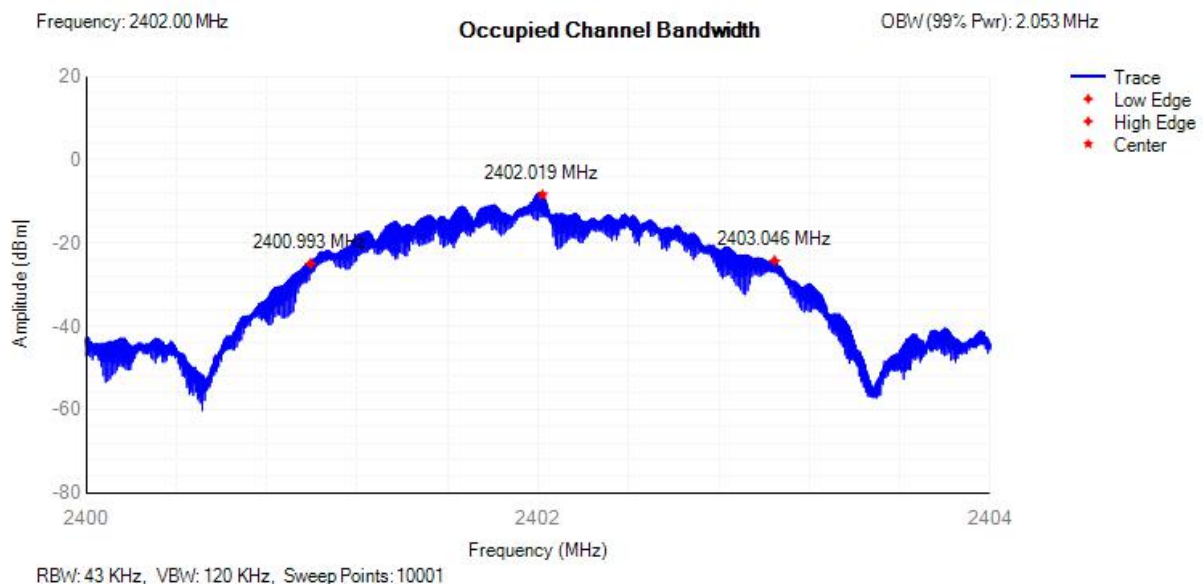
PSD NVNT BLE 2480MHz



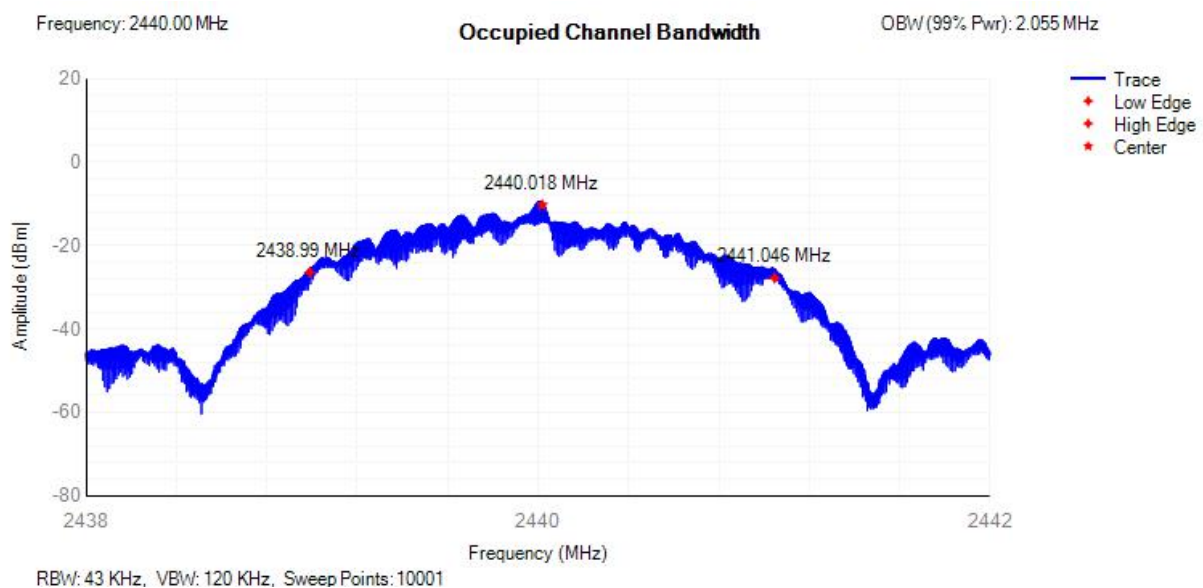
F.3 Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Center Frequency (MHz)	OBW (MHz)	Lower Edge (MHz)	Upper Edge (MHz)	Limit OBW (MHz)	Verdict
NVNT	BLE	2402	2402.019	2.053	2400.993	2403.046	2400 - 2483.5MHz	Pass
NVNT	BLE	2440	2440.018	2.055	2438.99	2441.046	2400 - 2483.5MHz	Pass
NVNT	BLE	2480	2480.017	2.055	2478.989	2481.045	2400 - 2483.5MHz	Pass

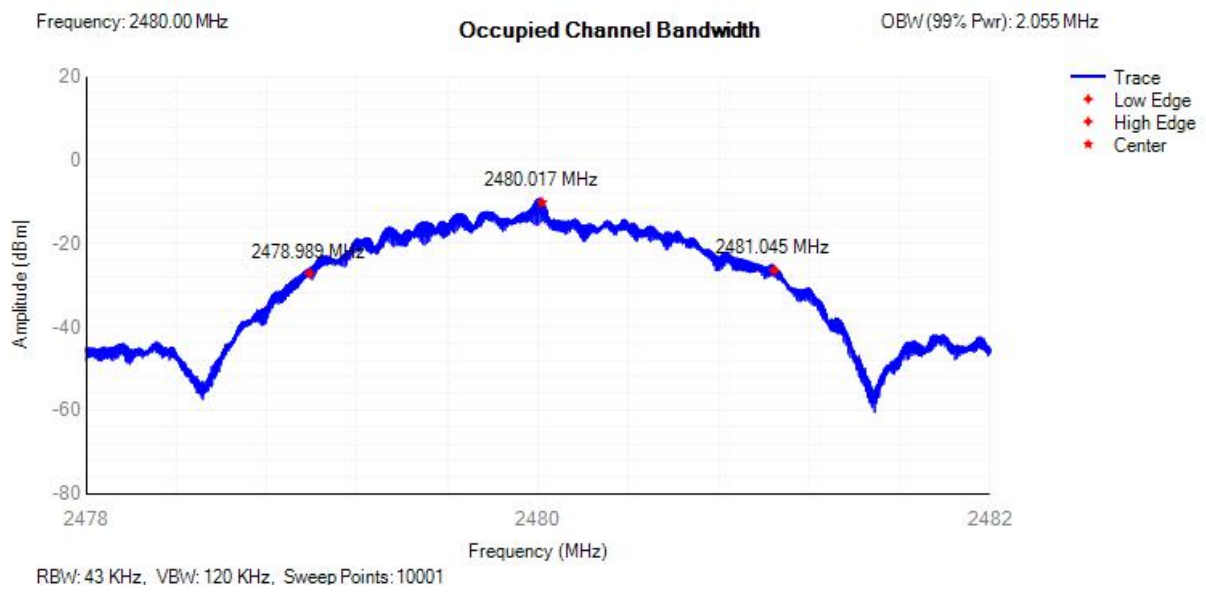
OBW NVNT BLE 2402MHz



OBW NVNT BLE 2440MHz



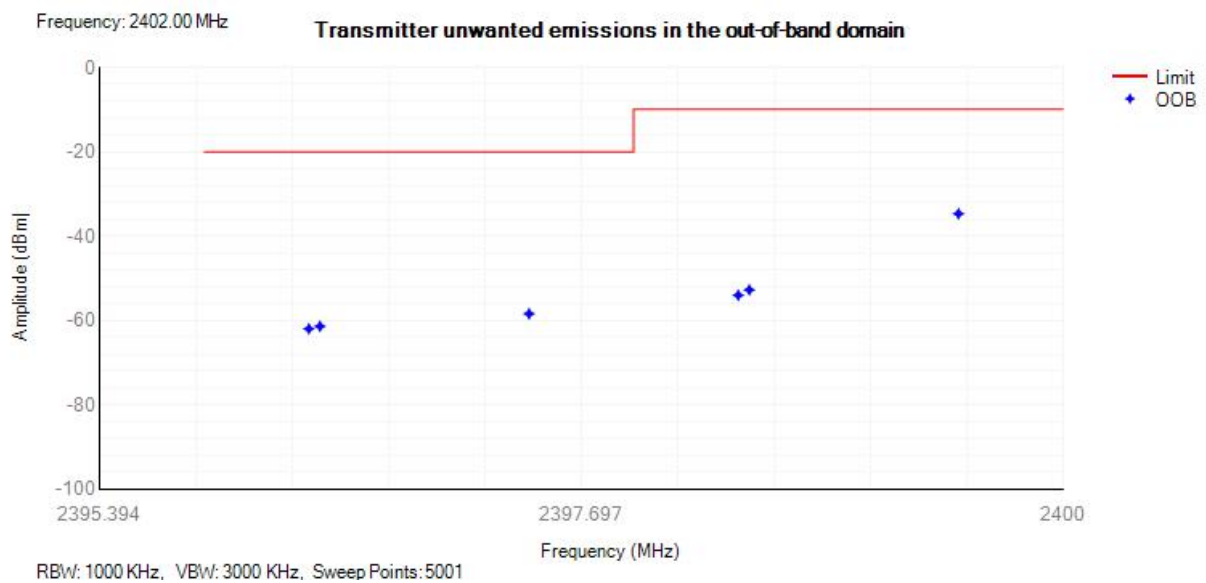
OBW NVNT BLE 2480MHz



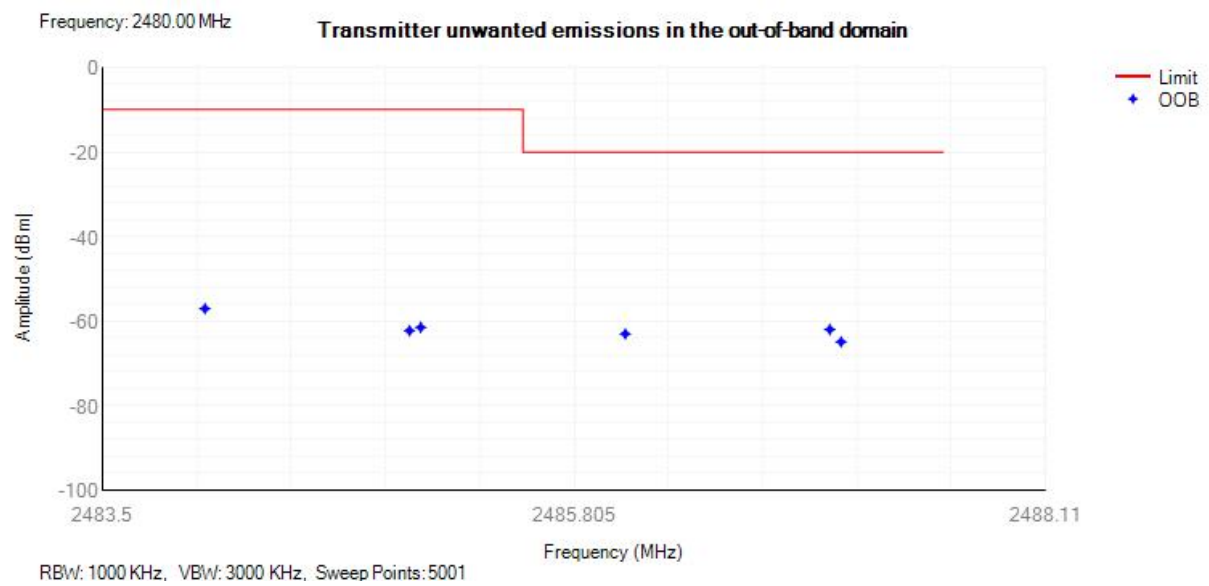
F.4 Transmitter unwanted emissions in the out-of-band domain

Condition	Mode	Frequency (MHz)	OOB Frequency (MHz)	Level (dBm/MHz)	Limit (dBm/MHz)	Verdict
NVNT	BLE	2402	2399.5	-34.7	-10	Pass
NVNT	BLE	2402	2398.5	-52.74	-10	Pass
NVNT	BLE	2402	2398.447	-54.02	-10	Pass
NVNT	BLE	2402	2397.447	-58.41	-20	Pass
NVNT	BLE	2402	2396.447	-61.37	-20	Pass
NVNT	BLE	2402	2396.394	-61.97	-20	Pass
NVNT	BLE	2480	2484	-57.07	-10	Pass
NVNT	BLE	2480	2485	-62.28	-10	Pass
NVNT	BLE	2480	2485.055	-61.5	-10	Pass
NVNT	BLE	2480	2486.055	-63.04	-20	Pass
NVNT	BLE	2480	2487.055	-62.01	-20	Pass
NVNT	BLE	2480	2487.11	-64.93	-20	Pass

Tx. Emissions OOB NVNT BLE 2402MHz

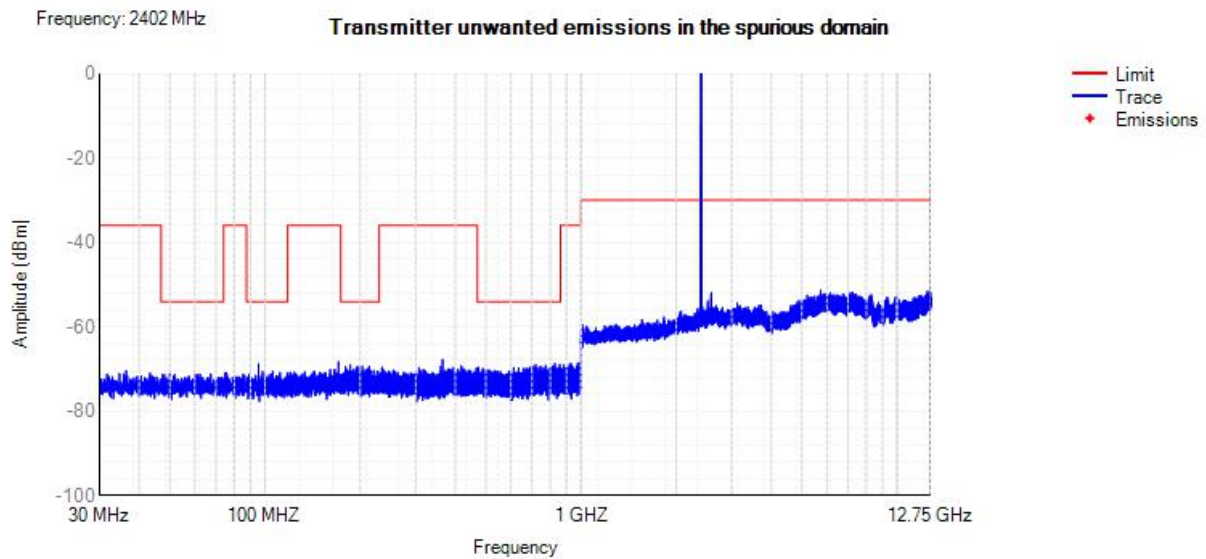


Tx. Emissions OOB NVNT BLE 2480MHz

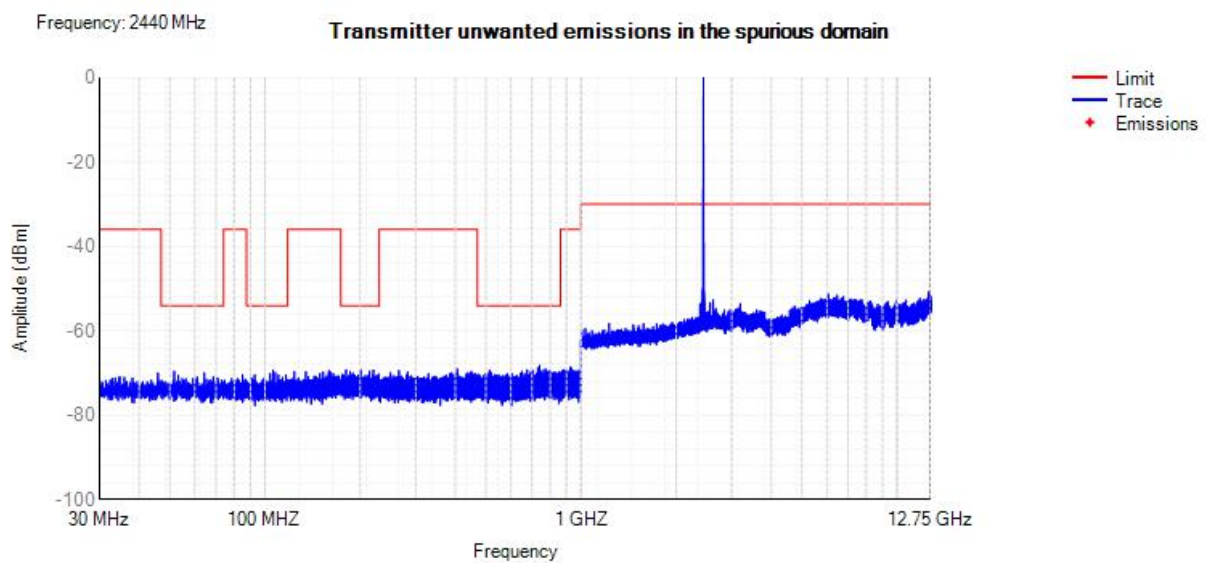


F.5 Transmitter unwanted emissions in the spurious domain

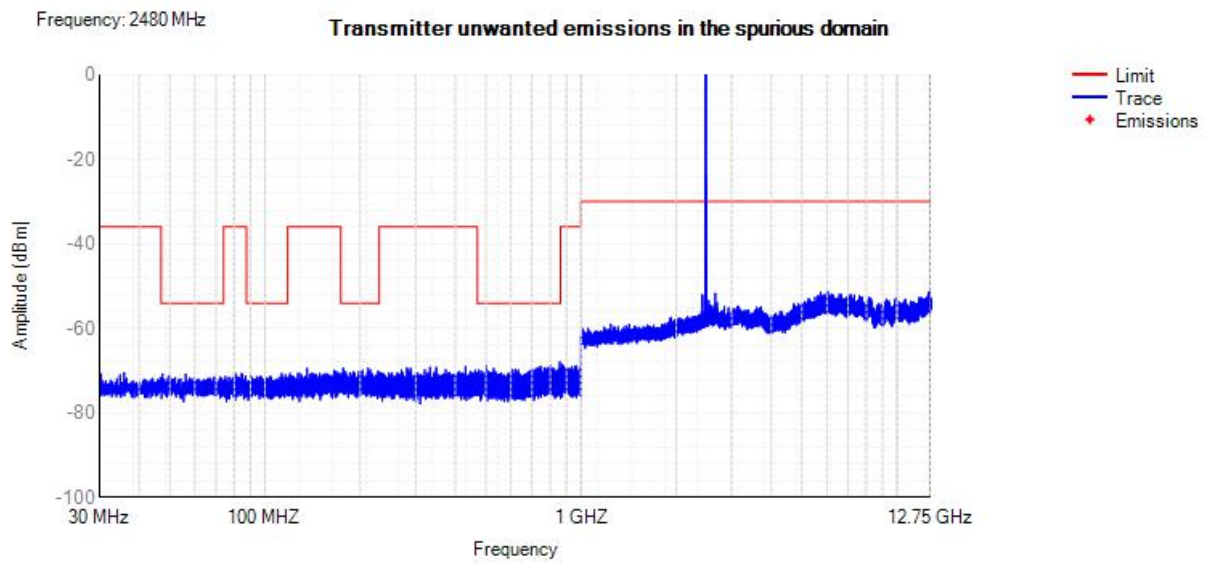
Tx. Spurious NVNT BLE 2402MHz



Tx. Spurious NVNT BLE 2440MHz



Tx. Spurious NVNT BLE 2480MHz

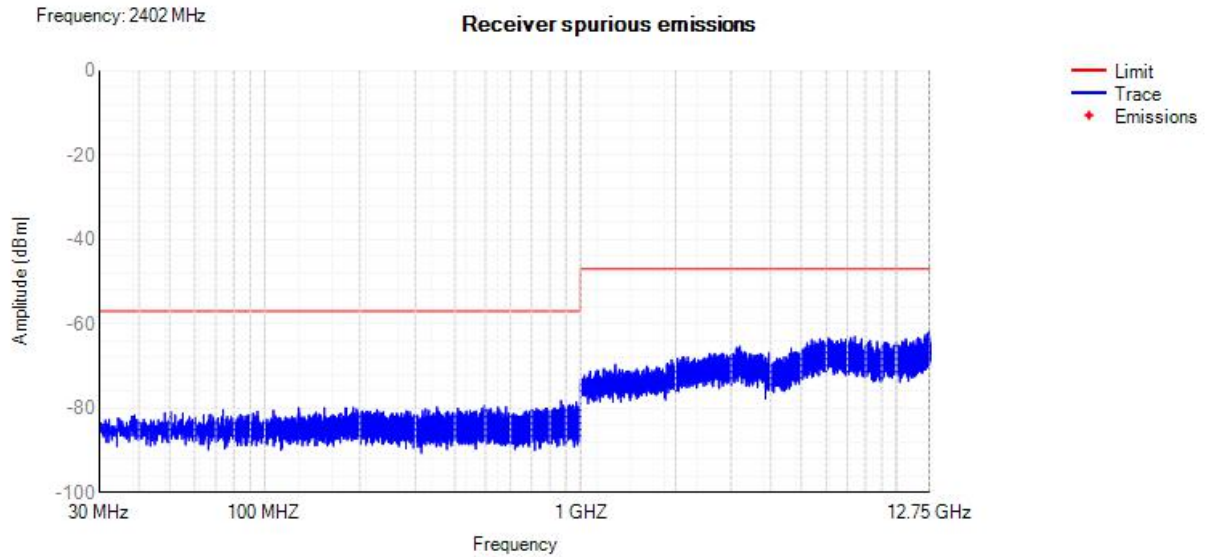


Tx. Spurious NVNT BLE

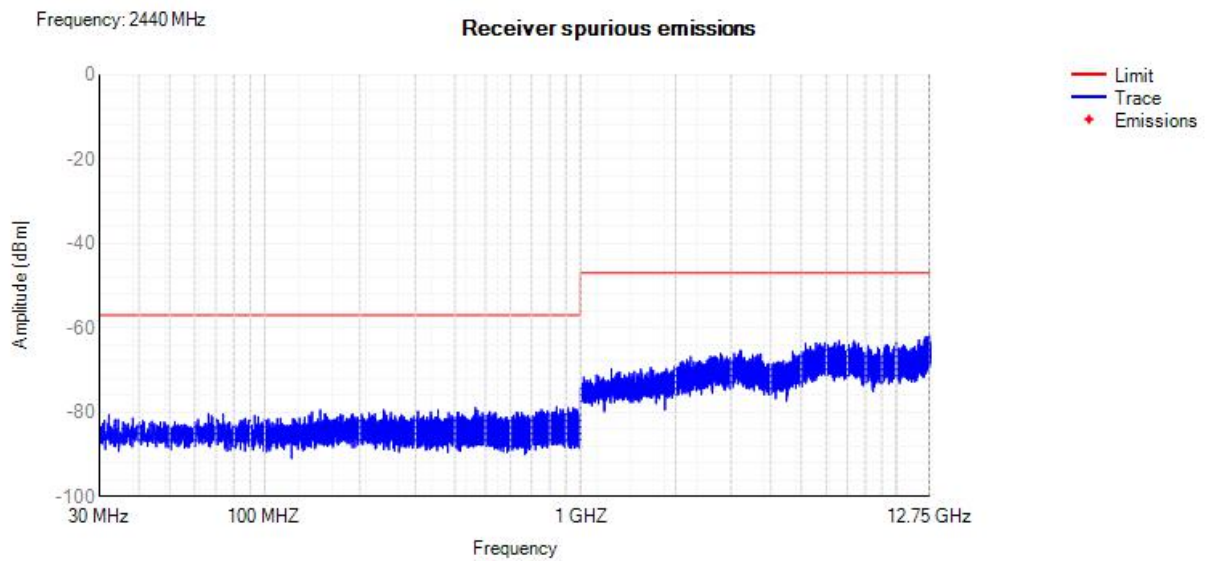
Frequency (MHz)	Polarization (H/V)	Measure Level (dBm)	Limit (dBm)	Margin (dB)	Detector
Channel 0 (2402MHz)					
109.21	H	-64.39	-54.00	-10.39	PK
149.30	V	-48.96	-36.00	-12.96	PK
909.15	H	-49.59	-36.00	-13.59	PK
994.63	V	-49.78	-36.00	-13.78	PK
4804.01	H	-41.13	-30.00	-11.13	PK
4803.99	V	-41.14	-30.00	-11.14	PK
7206.00	H	-40.36	-30.00	-10.36	PK
7205.98	V	-41.36	-30.00	-11.36	PK
Channel 39 (2480MHz)					
151.39	H	-64.65	-54.00	-10.65	PK
161.20	V	-64.99	-54.00	-10.99	PK
849.60	H	-48.88	-36.00	-12.88	PK
890.51	V	-50.78	-36.00	-14.78	PK
4959.99	H	-41.44	-30.00	-11.44	PK
4960.03	V	-44.71	-30.00	-14.71	PK
7439.98	H	-40.35	-30.00	-10.35	PK
7440.01	V	-41.21	-30.00	-11.21	PK

F.6 Receiver spurious emissions

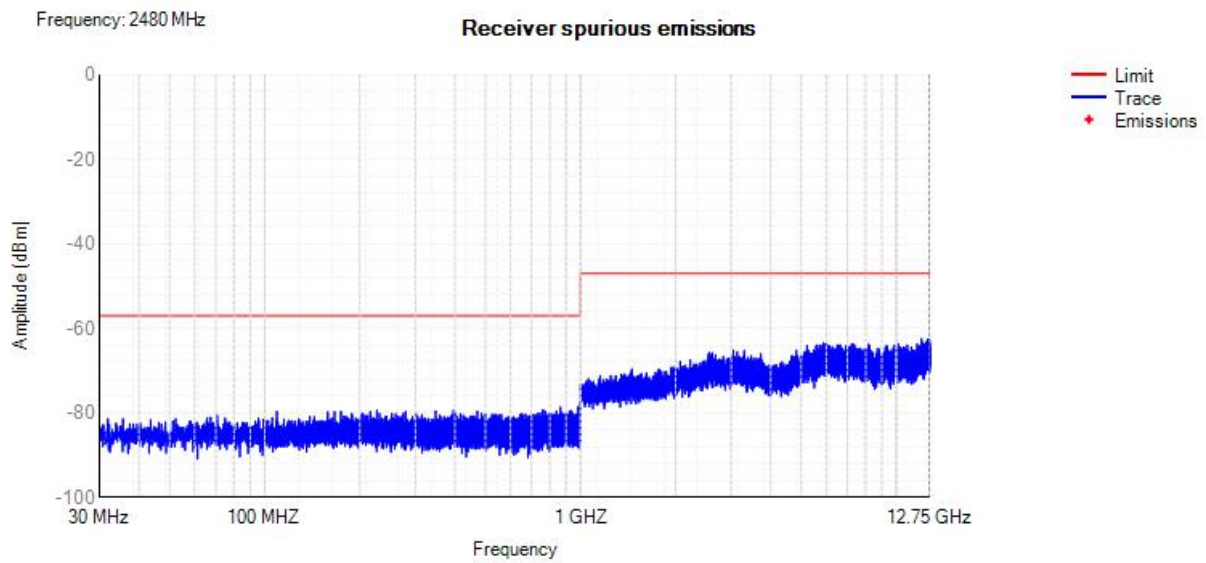
Rx. Spurious NVNT BLE 2402MHz



Rx. Spurious NVNT BLE 2440MHz



Rx. Spurious NVNT BLE 2480MHz



Rx. Spurious NVNT BLE

Frequency (MHz)	Polarization (H/V)	Measure Level (dBm)	Limit (dBm)	Margin (dB)	Detector
Channel 0 (2402MHz)					
248.05	H	-71.71	-57.00	-14.71	PK
104.17	V	-67.66	-57.00	-10.66	PK
837.67	H	-71.52	-57.00	-14.52	PK
852.62	V	-69.71	-57.00	-12.71	PK
1588.50	H	-58.74	-47.00	-11.74	PK
1310.22	V	-58.05	-47.00	-11.05	PK
2259.39	H	-59.93	-47.00	-12.93	PK
2442.11	V	-57.08	-47.00	-10.08	PK
Channel 39 (2480MHz)					
163.54	H	-70.25	-57.00	-13.25	PK
161.78	V	-70.90	-57.00	-13.90	PK
914.12	H	-67.57	-57.00	-10.57	PK
877.00	V	-68.29	-57.00	-11.29	PK
1609.97	H	-58.28	-47.00	-11.28	PK
1595.86	V	-59.04	-47.00	-12.04	PK
2105.25	H	-60.71	-47.00	-13.71	PK
2876.18	V	-59.65	-47.00	-12.65	PK

F.7 Receiver Blocking

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	-66	2380	-29.4	≥ -34	CW	6.44	10	Pass
			2504	-29.7	≥ -34	CW	6.41	10	Pass
			2300	-29.2	≥ -34	CW	6.20	10	Pass
			2584	-29.7	≥ -34	CW	6.19	10	Pass
	2480	-66	2380	-30.8	≥ -34	CW	6.47	10	Pass
			2504	-30.9	≥ -34	CW	6.48	10	Pass
			2300	-29.8	≥ -34	CW	6.19	10	Pass
			2584	-30.5	≥ -34	CW	6.04	10	Pass