



Appendix F for BT LE RF Test Data

Product Name: Smartphone  
Test Model: KINGKONG STAR 2

Environmental Conditions

Temperature:	23.7°C
Relative Humidity:	52.9%
ATM Pressure:	100.0 kPa
Test Engineer:	Paddi Chen
Supervised by:	Nick Peng





## F.1 RF Output Power

Condition	Mode	Frequency (MHz)	Max EIRP (dBm)	Limit (dBm)	Verdict
NVNT	BLE_1M	2402	1.87	20	Pass
NVNT	BLE_1M	2440	2.13	20	Pass
NVNT	BLE_1M	2480	1.65	20	Pass
NVNT	BLE_2M	2404	1.27	20	Pass
NVNT	BLE_2M	2440	1.14	20	Pass
NVNT	BLE_2M	2478	0.6	20	Pass

Condition	Mode	Frequency (MHz)	Max EIRP (dBm)	Limit (dBm)	Verdict
NVLT	BLE_1M	2402	1.76	20	Pass
NVLT	BLE_1M	2440	2.07	20	Pass
NVLT	BLE_1M	2480	1.55	20	Pass
NVLT	BLE_2M	2404	1.22	20	Pass
NVLT	BLE_2M	2440	1.02	20	Pass
NVLT	BLE_2M	2478	0.48	20	Pass

Condition	Mode	Frequency (MHz)	Max EIRP (dBm)	Limit (dBm)	Verdict
NVHT	BLE_1M	2402	1.68	20	Pass
NVHT	BLE_1M	2440	1.95	20	Pass
NVHT	BLE_1M	2480	1.46	20	Pass
NVHT	BLE_2M	2404	1.07	20	Pass
NVHT	BLE_2M	2440	0.91	20	Pass
NVHT	BLE_2M	2478	0.38	20	Pass

Note: 20 bursts had been captured for power measurement.

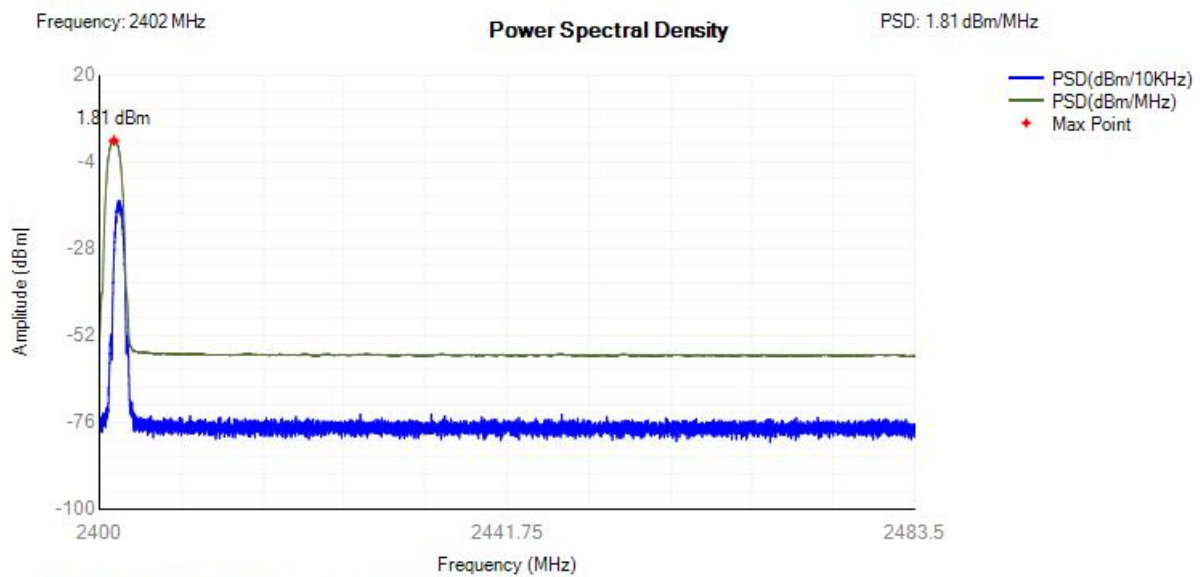




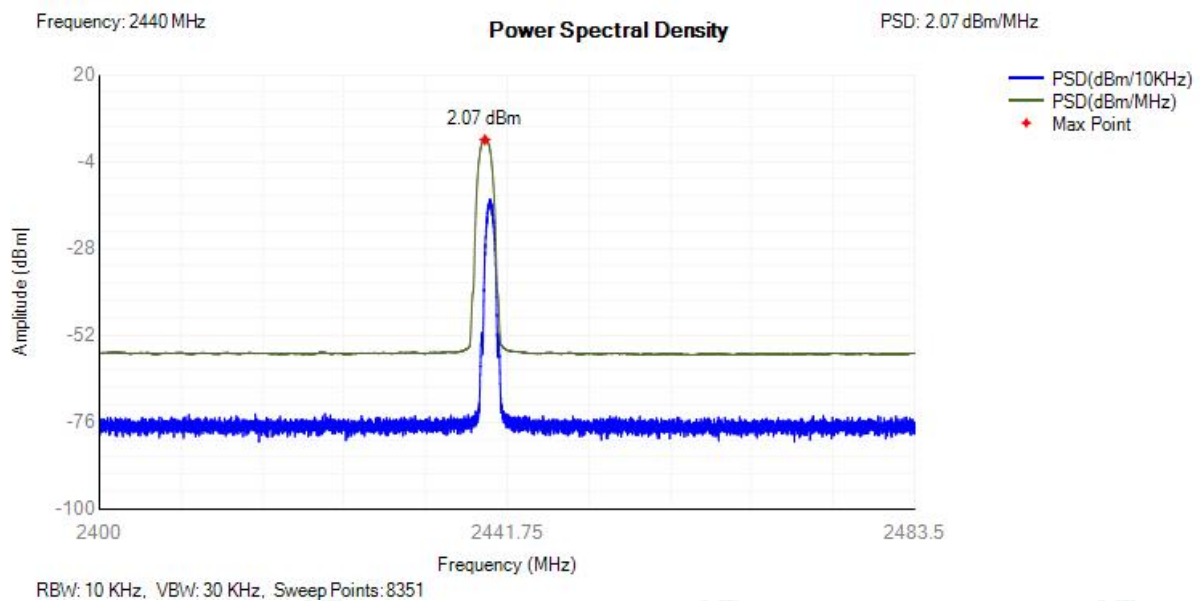
## F.2 Power Spectral Density

Condition	Mode	Frequency (MHz)	Max PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
NVNT	BLE_1M	2402	1.81	10	Pass
NVNT	BLE_1M	2440	2.07	10	Pass
NVNT	BLE_1M	2480	1.59	10	Pass
NVNT	BLE_2M	2404	0.08	10	Pass
NVNT	BLE_2M	2440	-0.03	10	Pass
NVNT	BLE_2M	2478	-0.57	10	Pass

PSD NVNT BLE\_1M 2402MHz

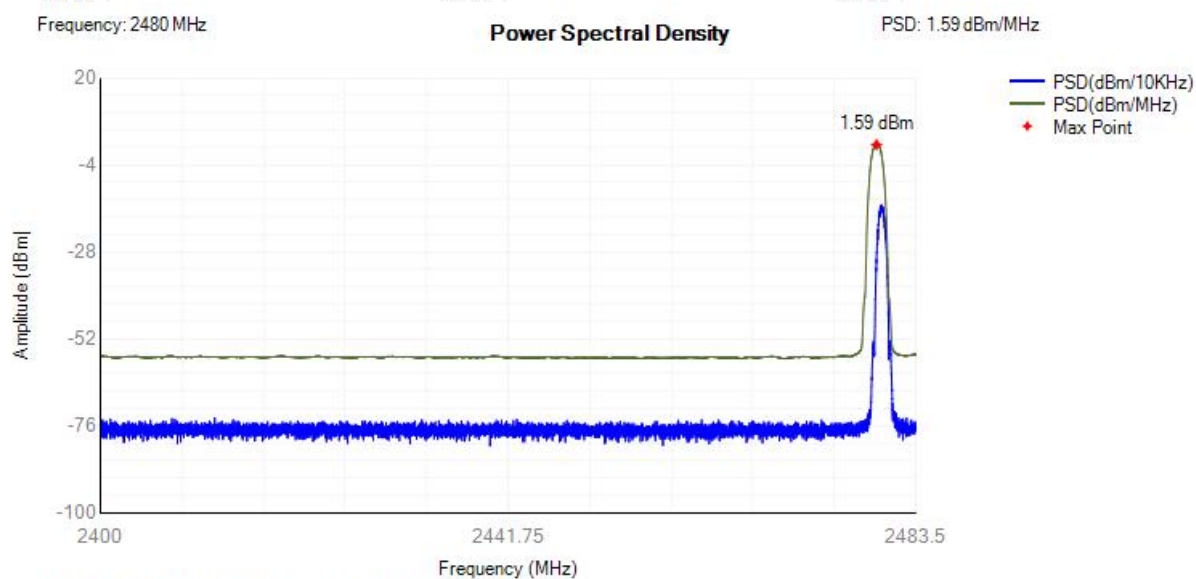


PSD NVNT BLE\_1M 2440MHz

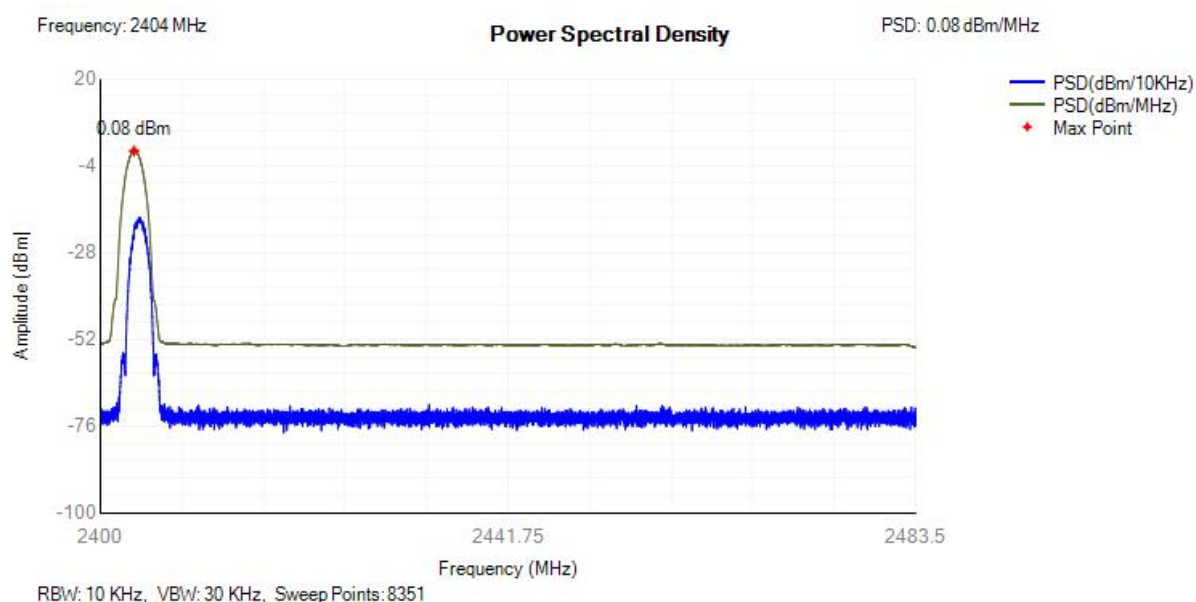




## PSD NVNT BLE\_1M 2480MHz

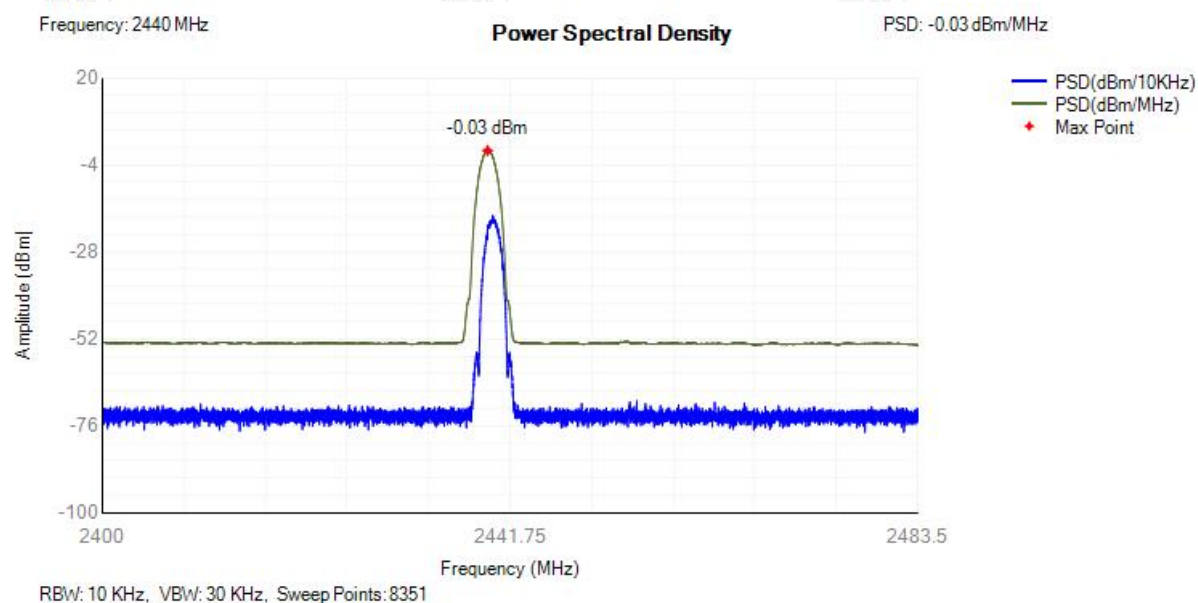


## PSD NVNT BLE\_2M 2404MHz

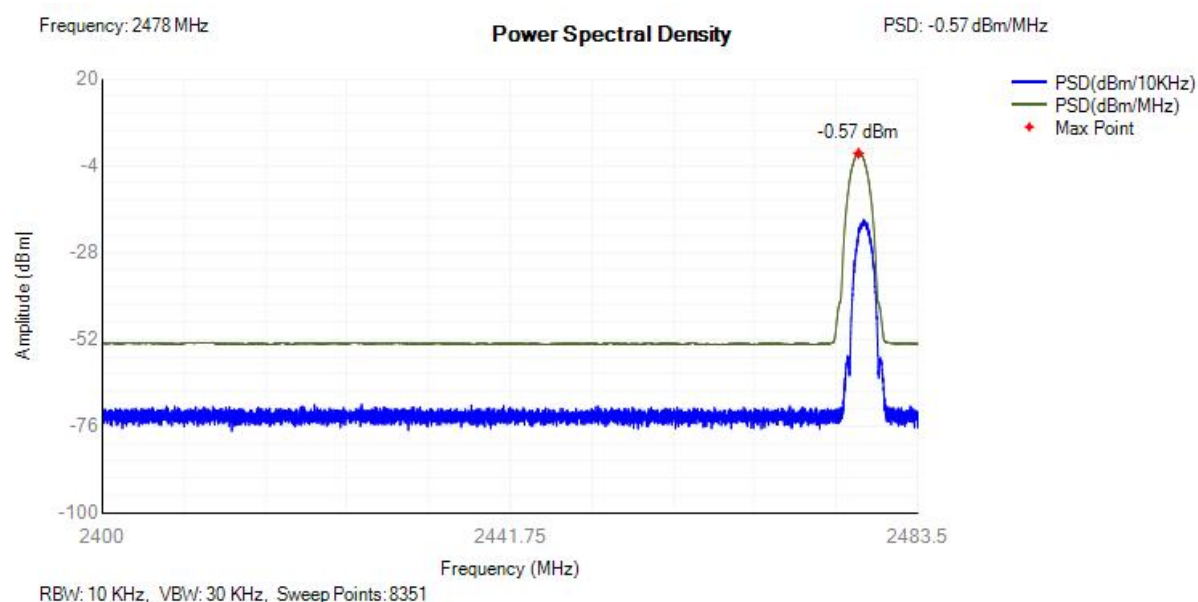




## PSD NVNT BLE\_2M 2440MHz



## PSD NVNT BLE\_2M 2478MHz

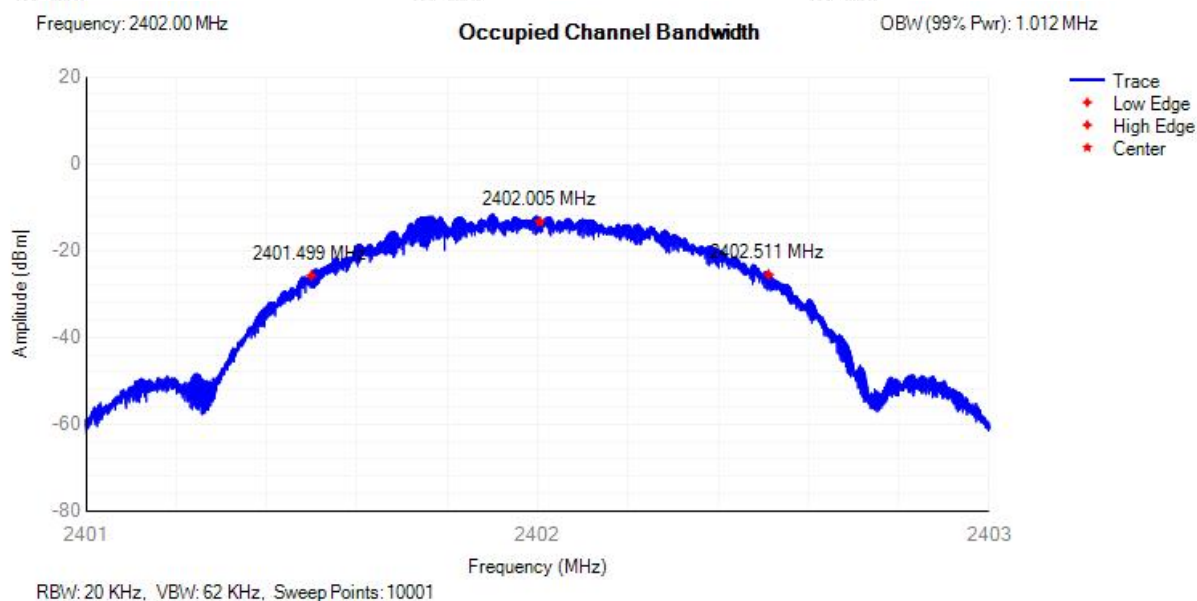




### F.3 Occupied Channel Bandwidth

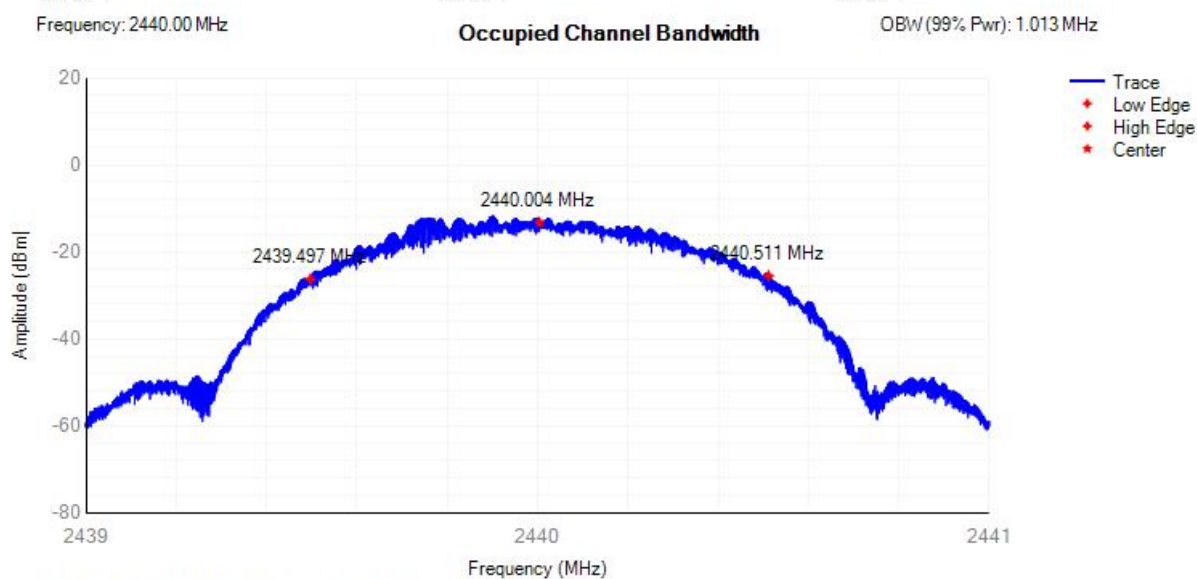
Condition	Mode	Frequency (MHz)	Center Frequency (MHz)	OBW (MHz)	Lower Edge (MHz)	Upper Edge (MHz)	Limit OBW (MHz)	Verdict
NVNT	BLE_1M	2402	2402.005	1.012	2401.499	2402.511	2400 - 2483.5MHz	Pass
NVNT	BLE_1M	2440	2440.004	1.013	2439.497	2440.511	2400 - 2483.5MHz	Pass
NVNT	BLE_1M	2480	2480.004	1.014	2479.497	2480.511	2400 - 2483.5MHz	Pass
NVNT	BLE_2M	2404	2403.999	2.022	2402.988	2405.01	2400 - 2483.5MHz	Pass
NVNT	BLE_2M	2440	2439.997	2.025	2438.985	2441.01	2400 - 2483.5MHz	Pass
NVNT	BLE_2M	2478	2477.995	2.029	2476.981	2479.01	2400 - 2483.5MHz	Pass

OBW NVNT BLE\_1M 2402MHz

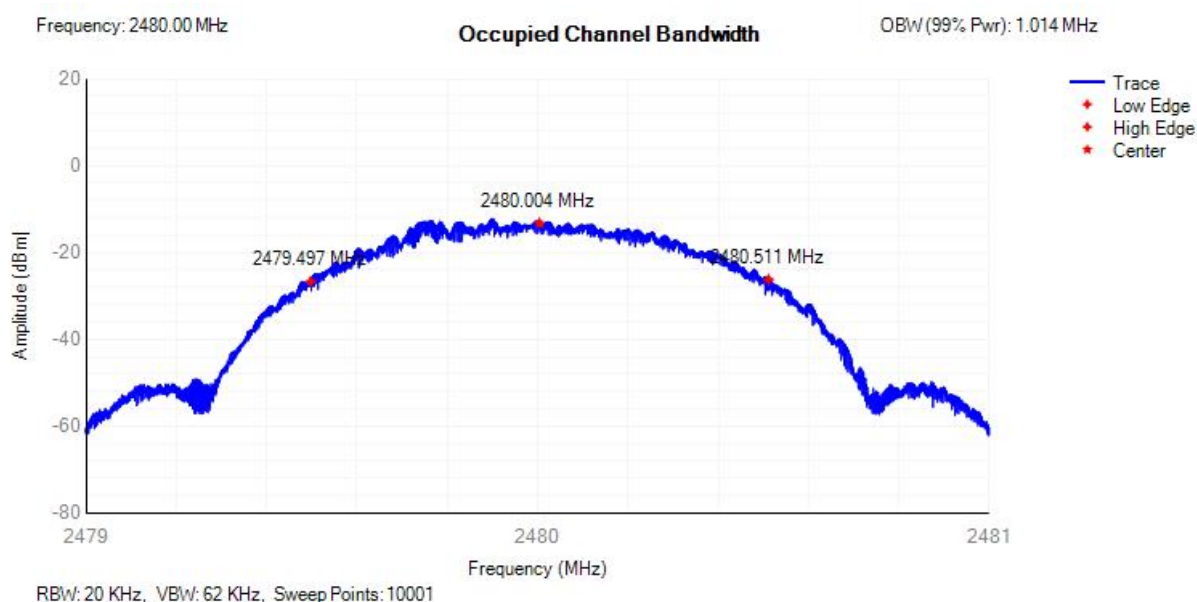




## OBW NVNT BLE\_1M 2440MHz

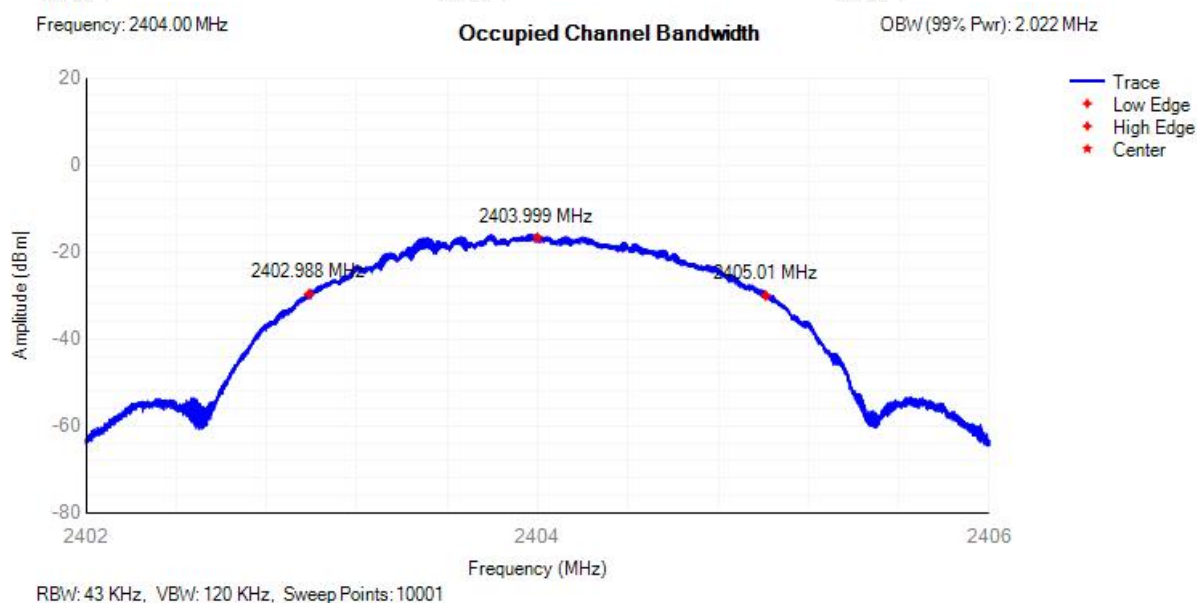


## OBW NVNT BLE\_1M 2480MHz

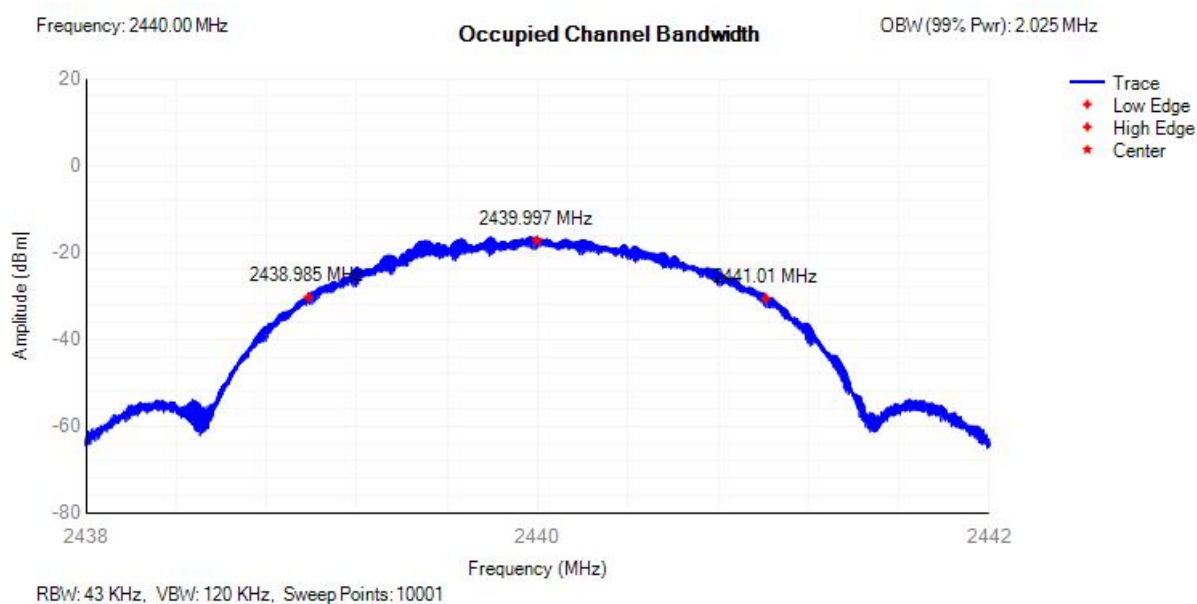




## OBW NVNT BLE\_2M 2404MHz

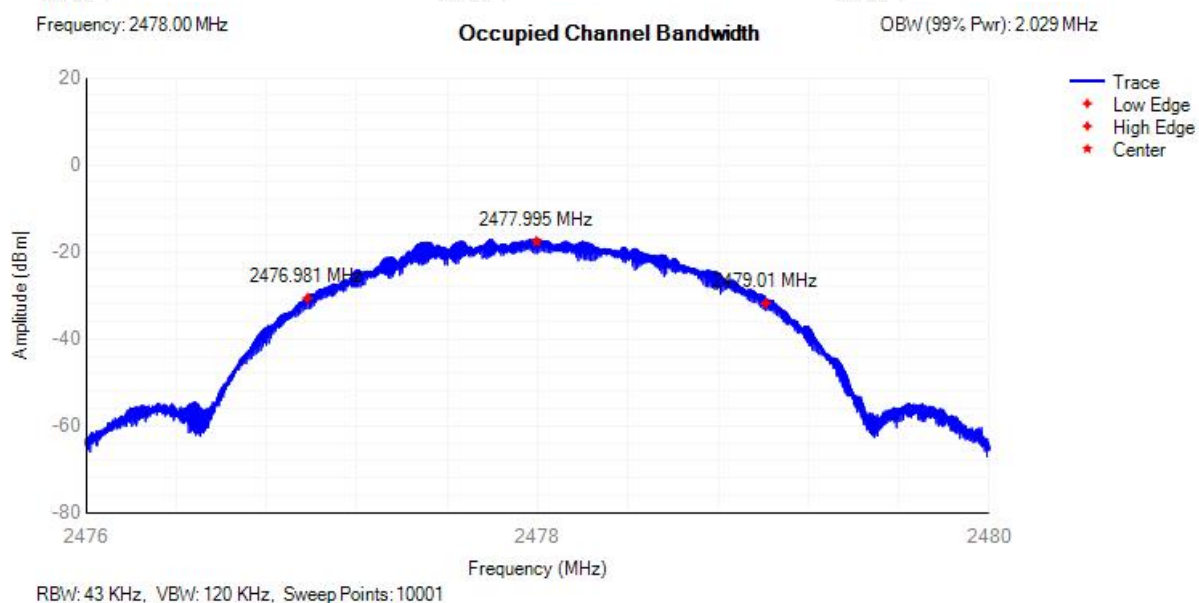


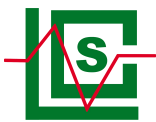
## OBW NVNT BLE\_2M 2440MHz





## OBW NVNT BLE\_2M 2478MHz

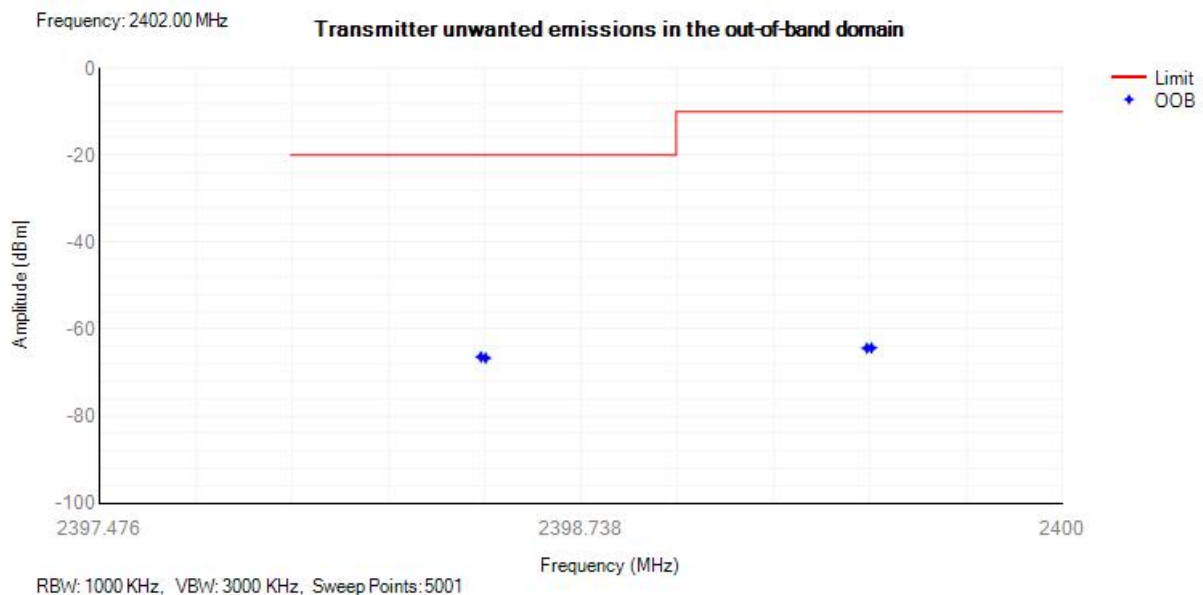




## F.4 Transmitter unwanted emissions in the out-of-band domain

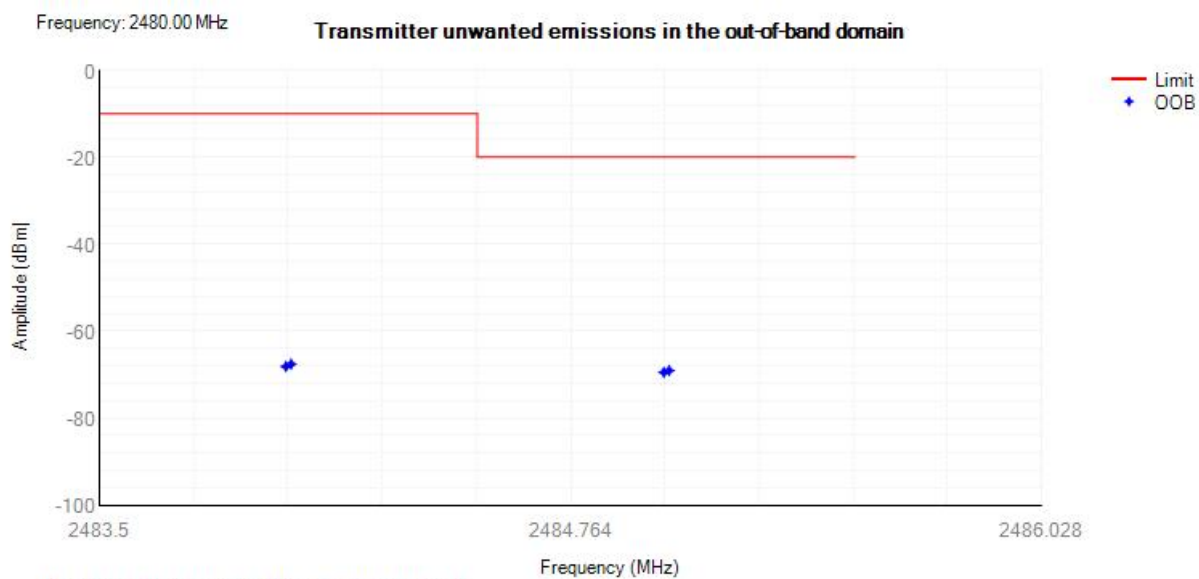
Condition	Mode	Frequency (MHz)	OOB Frequency (MHz)	Level (dBm/MHz)	Limit (dBm/MHz)	Verdict
NVNT	BLE_1M	2402	2399.5	-64.29	-10	Pass
NVNT	BLE_1M	2402	2399.488	-64.36	-10	Pass
NVNT	BLE_1M	2402	2398.488	-66.63	-20	Pass
NVNT	BLE_1M	2402	2398.476	-66.37	-20	Pass
NVNT	BLE_1M	2480	2484	-68.12	-10	Pass
NVNT	BLE_1M	2480	2484.014	-67.58	-10	Pass
NVNT	BLE_1M	2480	2485.014	-69.47	-20	Pass
NVNT	BLE_1M	2480	2485.028	-69.06	-20	Pass
NVNT	BLE_2M	2404	2399.5	-69.71	-10	Pass
NVNT	BLE_2M	2404	2398.5	-70.64	-10	Pass
NVNT	BLE_2M	2404	2398.478	-70.28	-10	Pass
NVNT	BLE_2M	2404	2397.478	-71.15	-20	Pass
NVNT	BLE_2M	2404	2396.478	-71.9	-20	Pass
NVNT	BLE_2M	2404	2396.456	-71.62	-20	Pass
NVNT	BLE_2M	2478	2484	-70.73	-10	Pass
NVNT	BLE_2M	2478	2485	-71.27	-10	Pass
NVNT	BLE_2M	2478	2485.029	-71.23	-10	Pass
NVNT	BLE_2M	2478	2486.029	-71.62	-20	Pass
NVNT	BLE_2M	2478	2487.029	-72.07	-20	Pass
NVNT	BLE_2M	2478	2487.058	-72.25	-20	Pass

Tx. Emissions OOB NVNT BLE\_1M 2402MHz

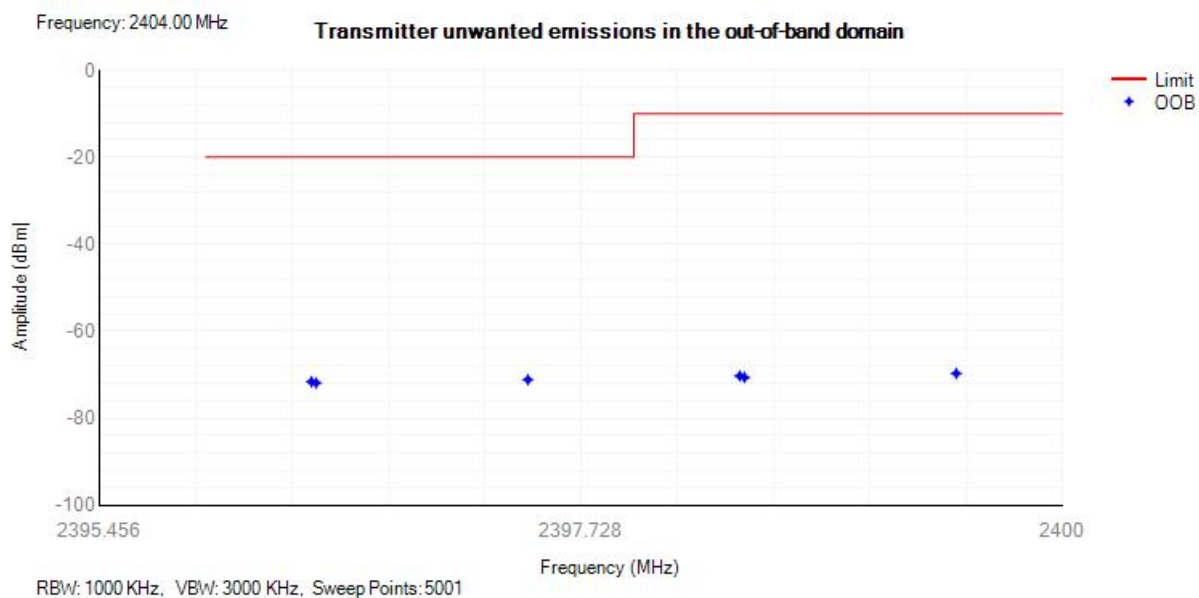




## Tx. Emissions OOB NVNT BLE\_1M 2480MHz



## Tx. Emissions OOB NVNT BLE\_2M 2404MHz



Shenzhen LCS Compliance Testing Laboratory Ltd.

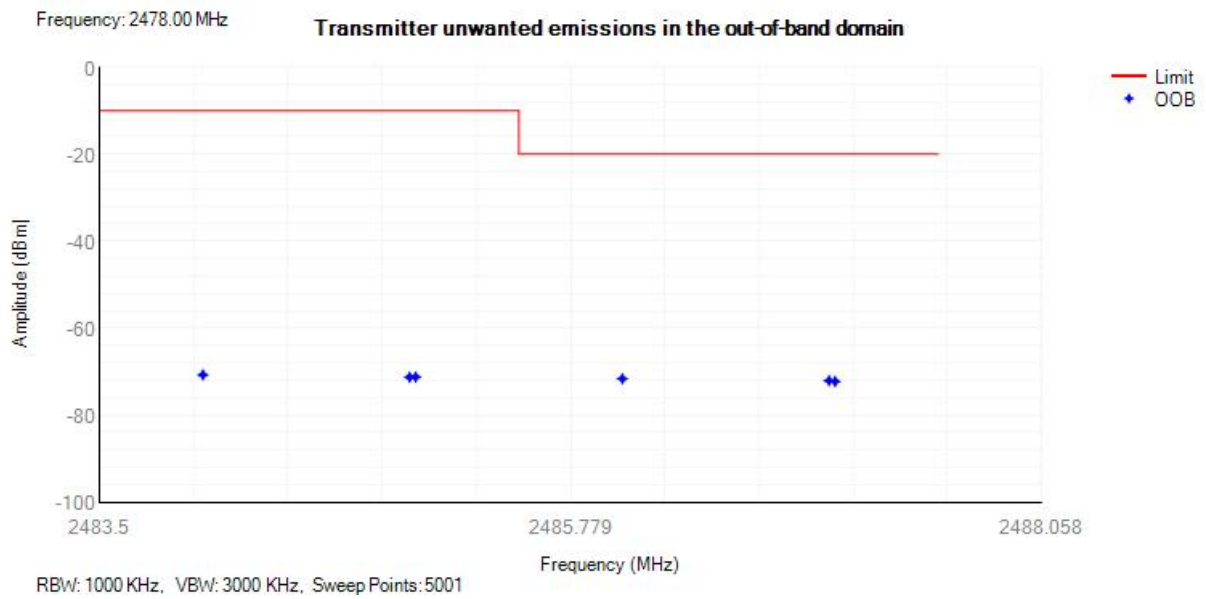
Add: Room 101, 201, Building A and Room 301, Building C, Juji Industrial Park, Yabianxueziwei, Shajing Street, Bao'an District, Shenzhen, Guangdong, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity



## Tx. Emissions OOB NVNT BLE\_2M 2478MHz

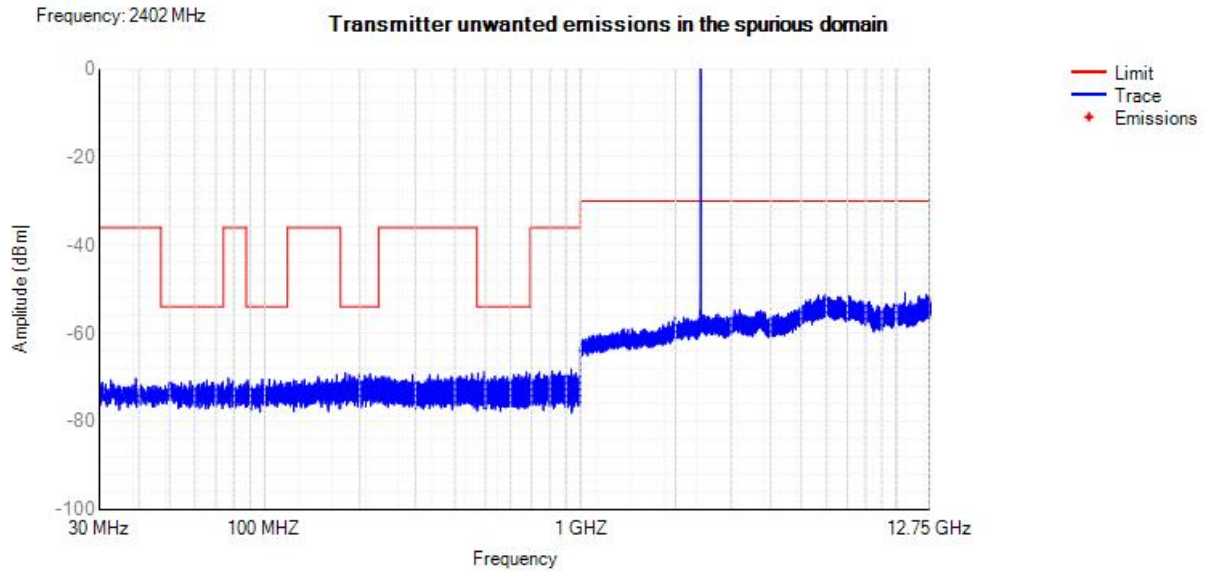




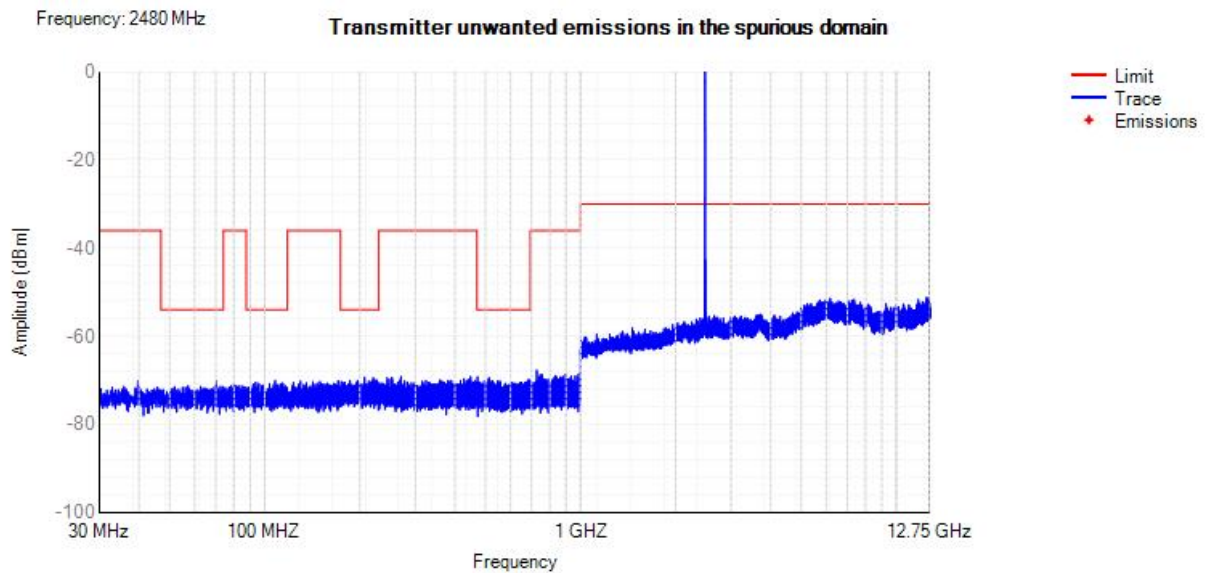
## F.5 Transmitter unwanted emissions in the spurious domain

Condition	Mode	Frequency (MHz)	Range	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
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Tx. Spurious NVNT BLE\_1M 2402MHz



Tx. Spurious NVNT BLE\_1M 2480MHz



Shenzhen LCS Compliance Testing Laboratory Ltd.

Add: Room 101, 201, Building A and Room 301, Building C, Juji Industrial Park, Yabianxueziwei, Shajing Street, Bao'an District, Shenzhen, Guangdong, China

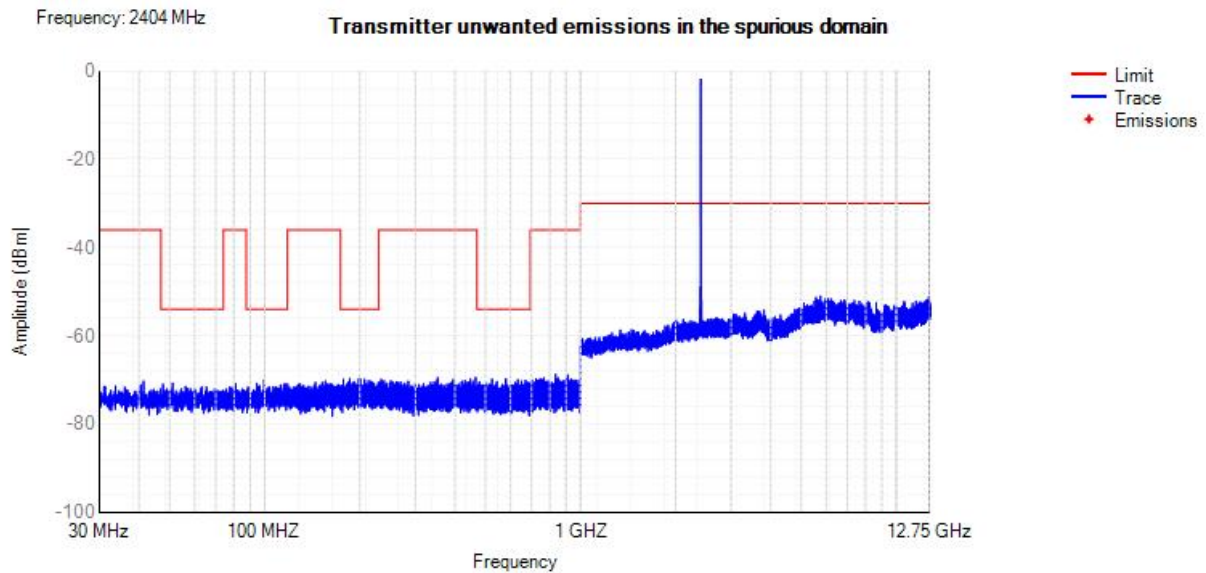
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

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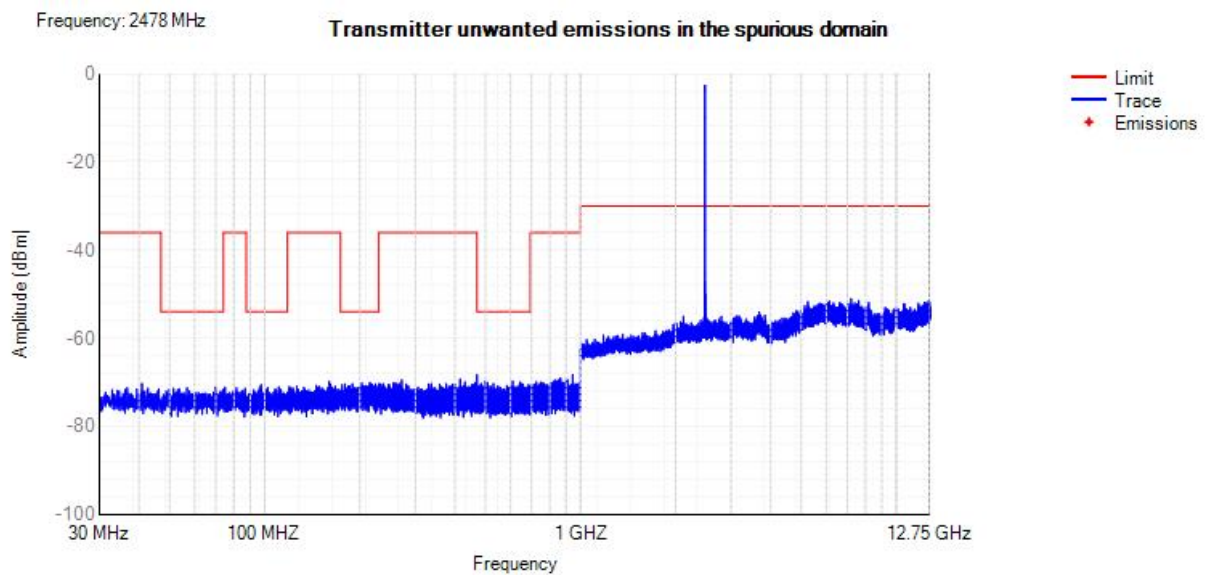


Condition	Mode	Frequency (MHz)	Range	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
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## Tx. Spurious NVNT BLE\_2M 2404MHz



## Tx. Spurious NVNT BLE\_2M 2478MHz

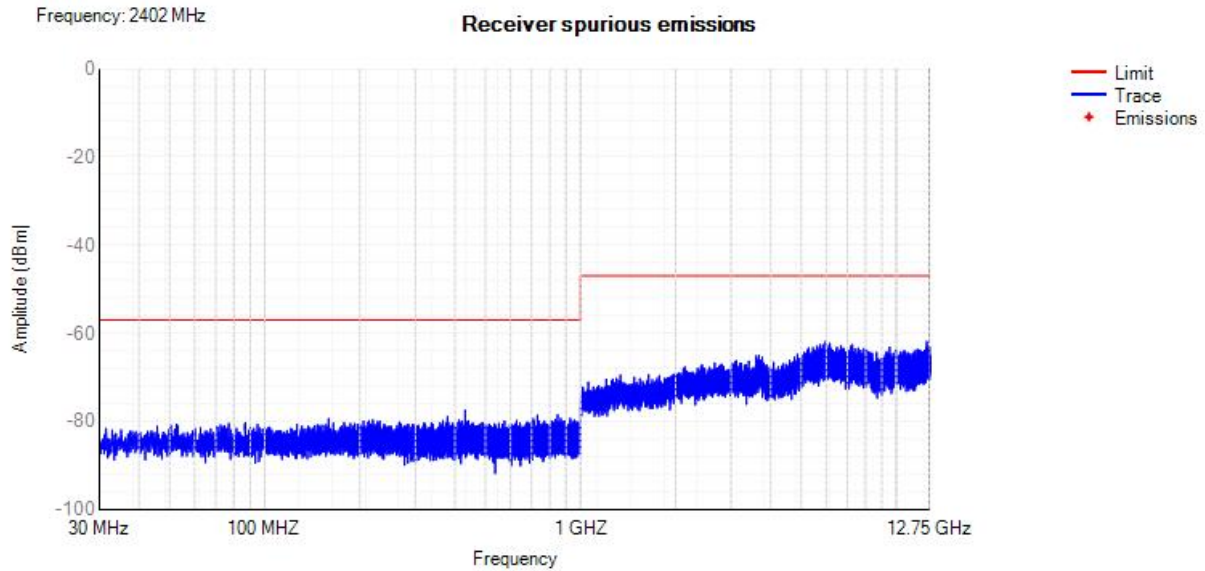




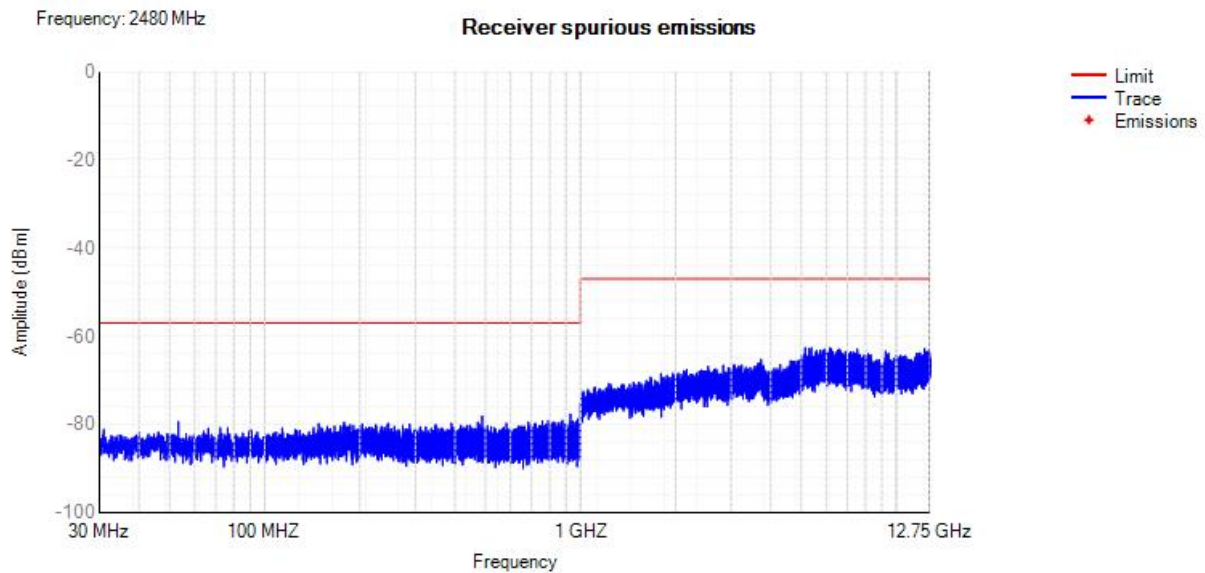
## F.6 Receiver spurious emissions

Condition	Mode	Frequency (MHz)	Range	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
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Rx. Spurious NVNT BLE\_1M 2402MHz



Rx. Spurious NVNT BLE\_1M 2480MHz

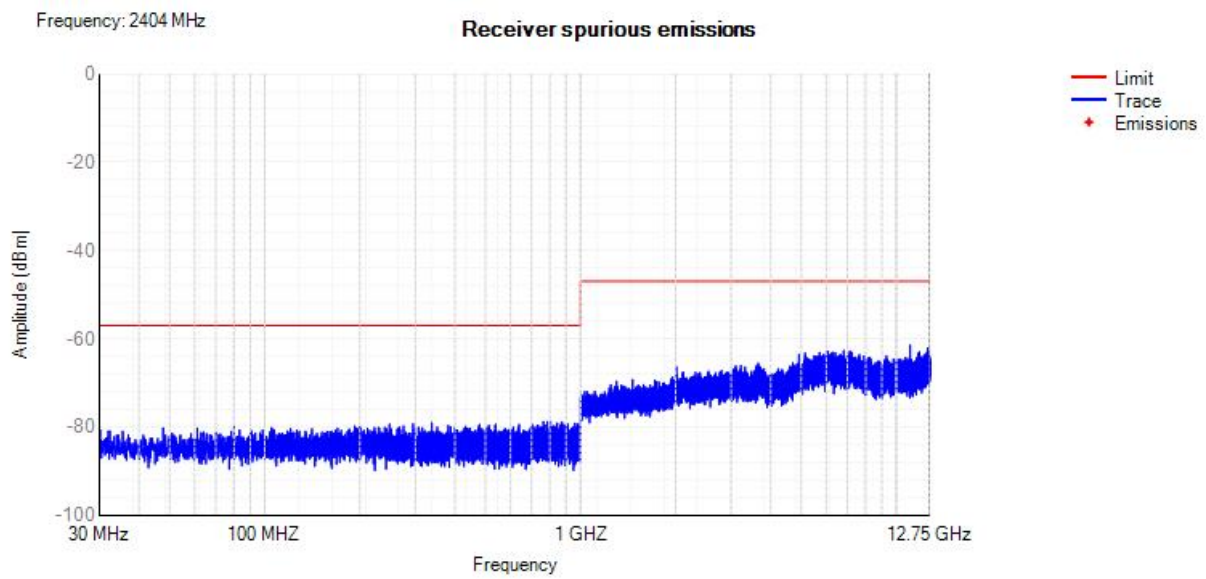


Condition	Mode	Frequency (MHz)	Range	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
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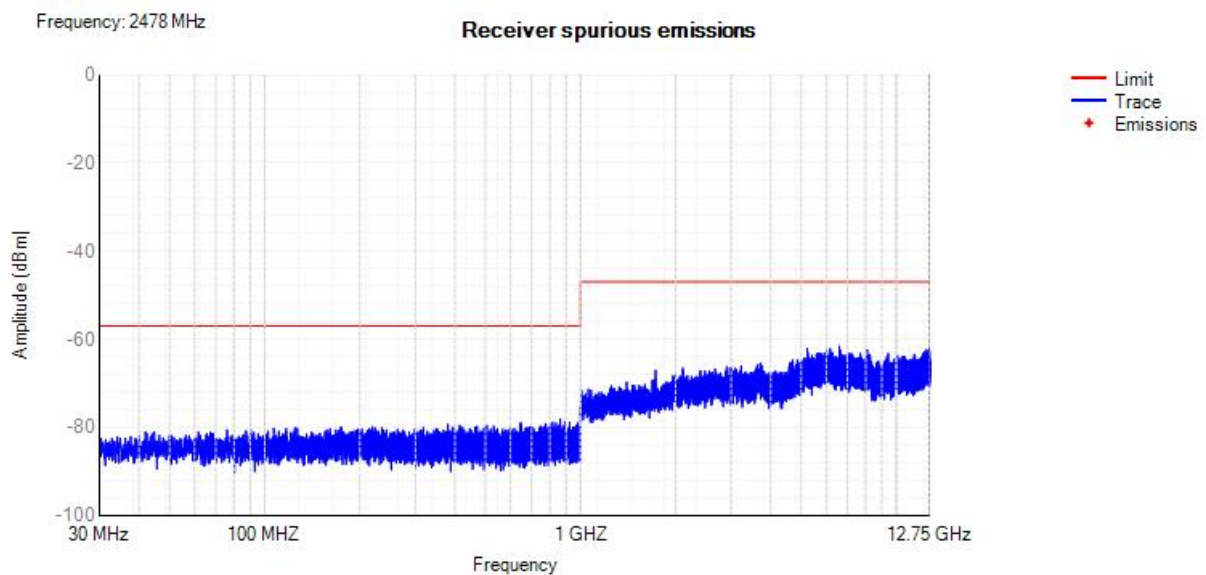




## Rx. Spurious NVNT BLE\_2M 2404MHz



## Rx. Spurious NVNT BLE\_2M 2478MHz



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## 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_1M	2402	-69	2380	-26	≥-34	CW	2.71	10	Pass
			2504	-22	≥-34	CW	2.59	10	Pass
			2300	-25	≥-34	CW	0.85	10	Pass
			2584	-24	≥-34	CW	1.90	10	Pass
	2480	-69	2380	-30	≥-34	CW	3.32	10	Pass
			2504	-25	≥-34	CW	3.18	10	Pass
			2300	-27	≥-34	CW	3.78	10	Pass
			2584	-20	≥-34	CW	1.99	10	Pass
BLE_2M	2402	-69	2380	-20	≥-34	CW	4.99	10	Pass
			2504	-21	≥-34	CW	4.45	10	Pass
			2300	-29	≥-34	CW	1.36	10	Pass
			2584	-26	≥-34	CW	4.16	10	Pass
	2480	-69	2380	-23	≥-34	CW	5.25	10	Pass
			2504	-28	≥-34	CW	1.88	10	Pass
			2300	-24	≥-34	CW	2.90	10	Pass
			2584	-20	≥-34	CW	1.30	10	Pass

