



Appendix E for BT Test Data

Product Name: Game Controller

Test Model: P5

Environmental Conditions

Temperature:	22.8° C
Relative Humidity:	51.7%
ATM Pressure:	100.0 kPa
Test Engineer:	Jay Luo
Supervised by:	Nick Peng





E.1 RF Output Power

Condition	Mode	Frequency (MHz)	Max EIRP (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	1.62	20	Pass
NVNT	1-DH5	2480	1.77	20	Pass
NVNT	2-DH5	2402	0.57	20	Pass
NVNT	2-DH5	2480	0.36	20	Pass
NVNT	3-DH5	2402	1.58	20	Pass
NVNT	3-DH5	2480	1.76	20	Pass

Condition	Mode	Frequency (MHz)	Max EIRP (dBm)	Limit (dBm)	Verdict
NVLT	1-DH5	2402	1.52	20	Pass
NVLT	1-DH5	2480	1.72	20	Pass
NVLT	2-DH5	2402	0.53	20	Pass
NVLT	2-DH5	2480	0.29	20	Pass
NVLT	3-DH5	2402	1.51	20	Pass
NVLT	3-DH5	2480	1.70	20	Pass

Condition	Mode	Frequency (MHz)	Max EIRP (dBm)	Limit (dBm)	Verdict
NVHT	1-DH5	2402	1.42	20	Pass
NVHT	1-DH5	2480	1.59	20	Pass
NVHT	2-DH5	2402	0.38	20	Pass
NVHT	2-DH5	2480	0.18	20	Pass
NVHT	3-DH5	2402	1.37	20	Pass
NVHT	3-DH5	2480	1.54	20	Pass

Note: 20 bursts had been captured for power measurement.

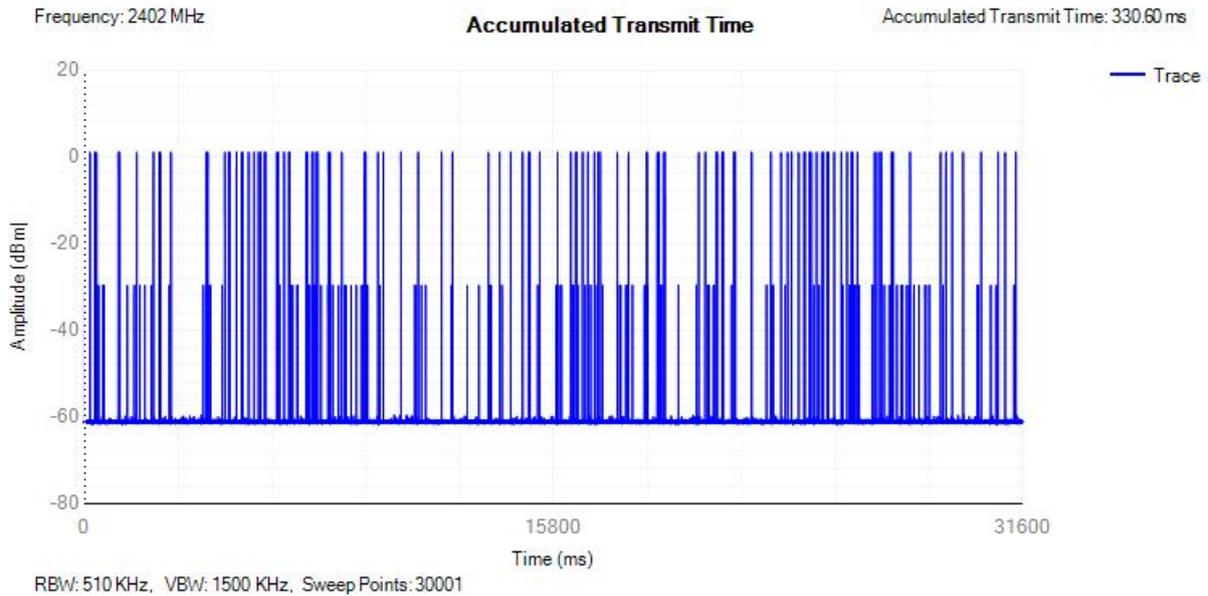




E.2 Accumulated Transmit Time

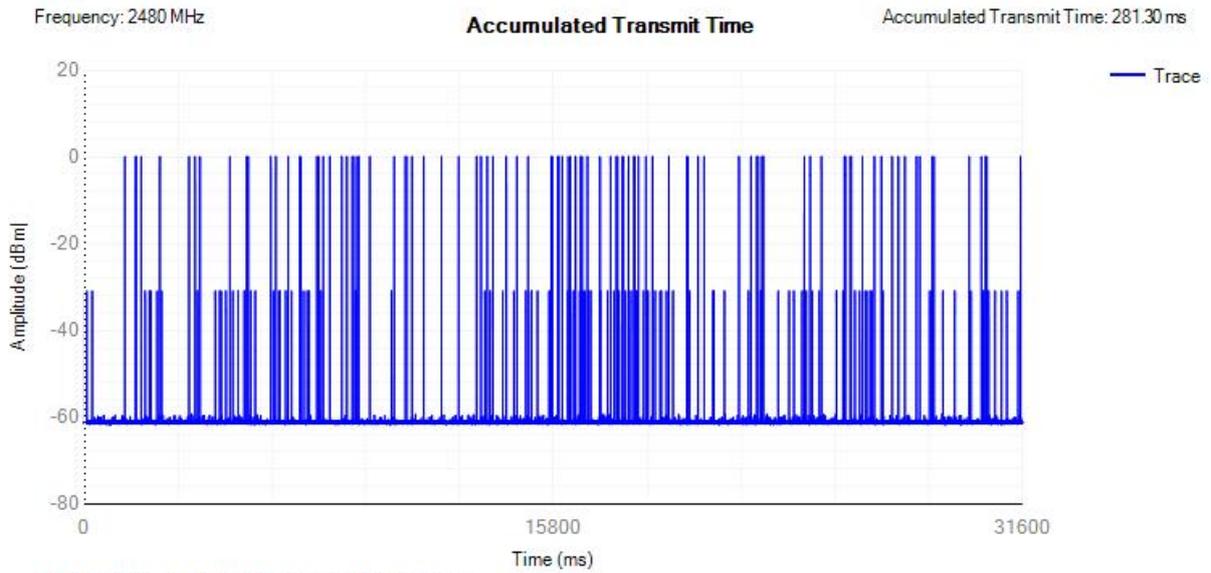
Condition	Mode	Frequency (MHz)	Accumulated Transmit Time (ms)	Limit (ms)	Sweep Time (ms)	Burst Number	Verdict
NVNT	1-DH5	2402	330.6	400	31600	114	Pass
NVNT	1-DH5	2480	281.3	400	31600	97	Pass
NVNT	2-DH5	2402	294.25	400	31600	107	Pass
NVNT	2-DH5	2480	286	400	31600	104	Pass
NVNT	3-DH5	2402	264	400	31600	96	Pass
NVNT	3-DH5	2480	272.25	400	31600	99	Pass

Dwell NVNT 1-DH5 2402MHz

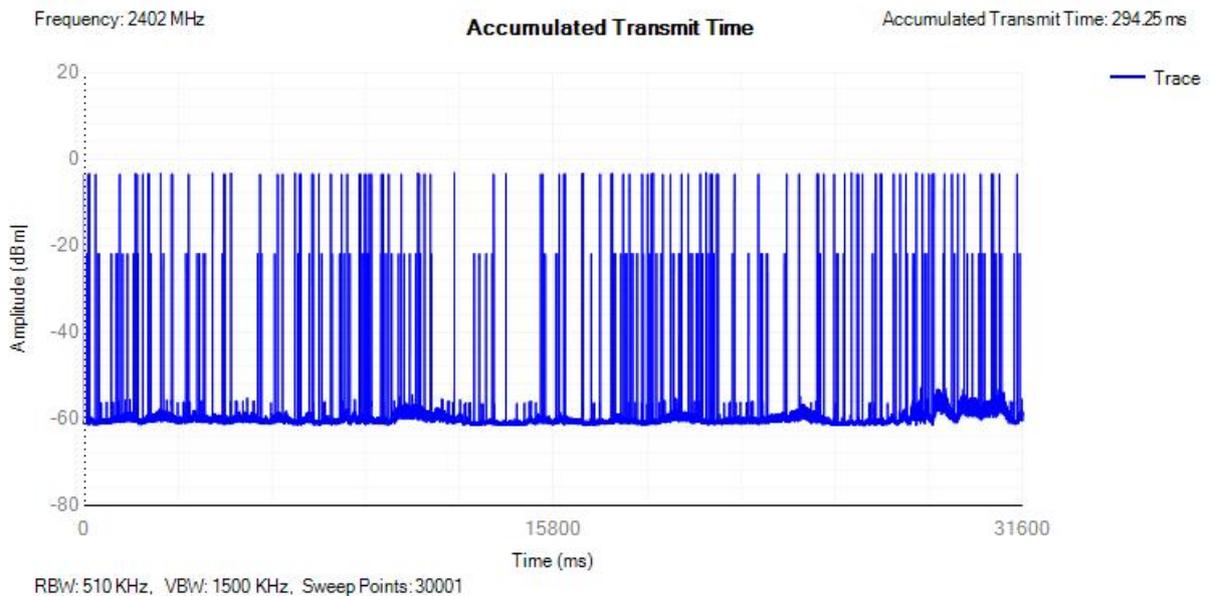




Dwell NVNT 1-DH5 2480MHz

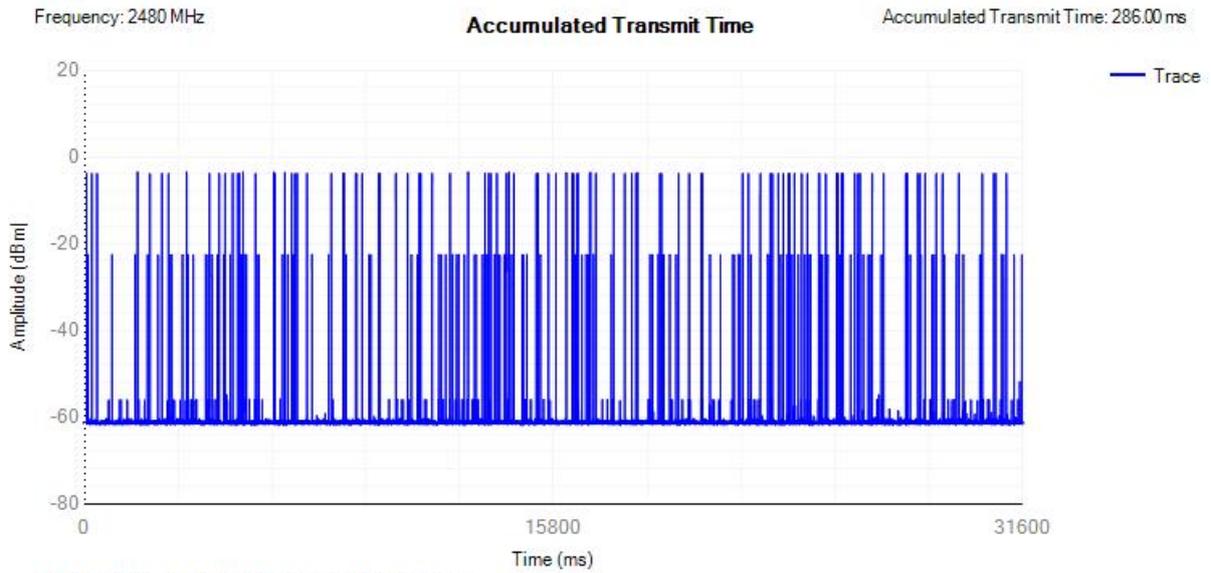


Dwell NVNT 2-DH5 2402MHz

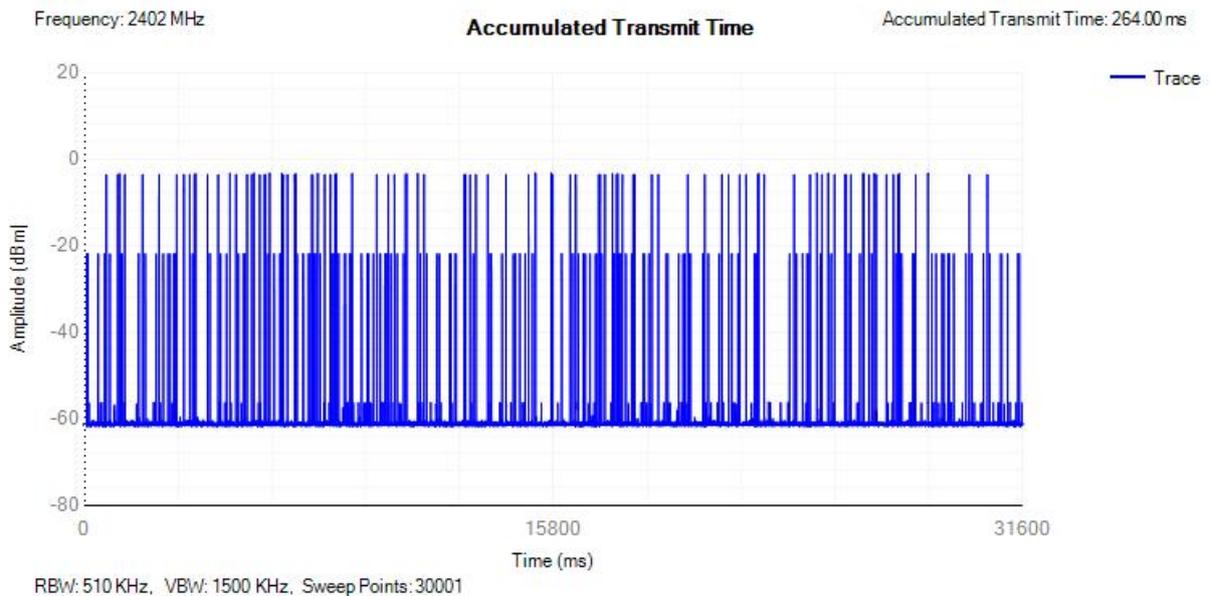




Dwell NVNT 2-DH5 2480MHz

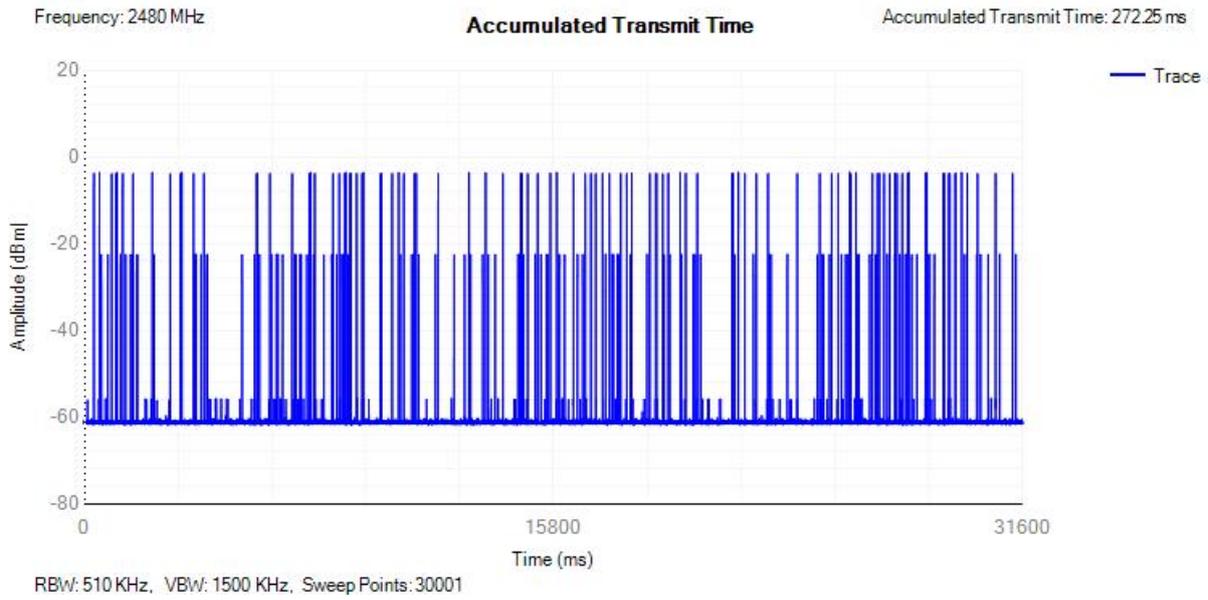


Dwell NVNT 3-DH5 2402MHz





Dwell NVNT 3-DH5 2480MHz

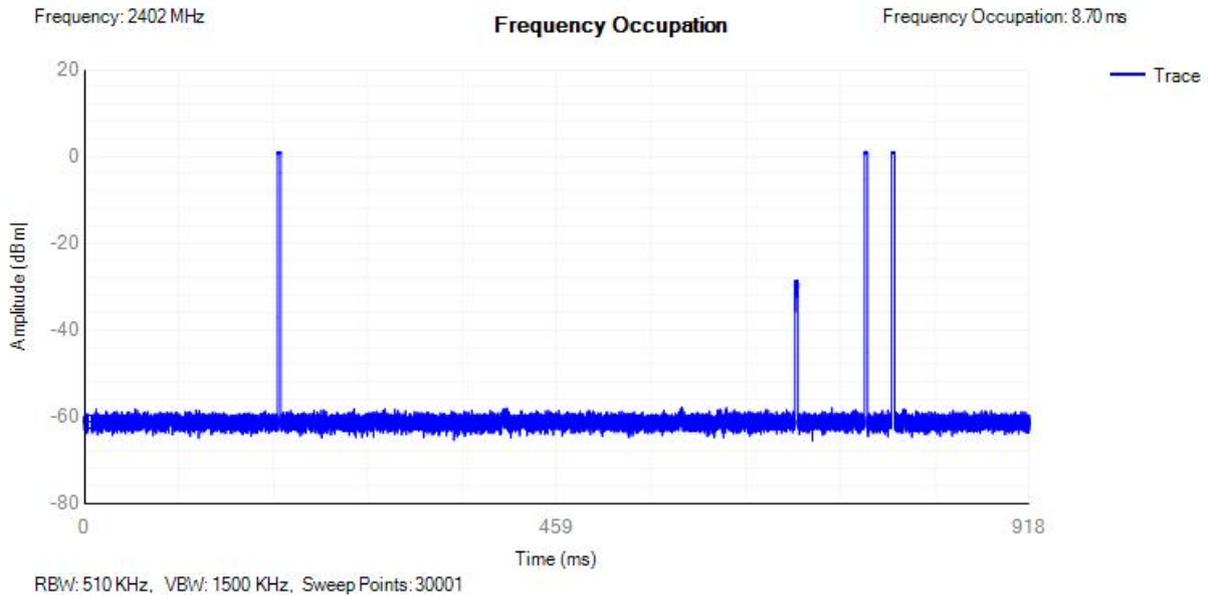




E.3 Frequency Occupation

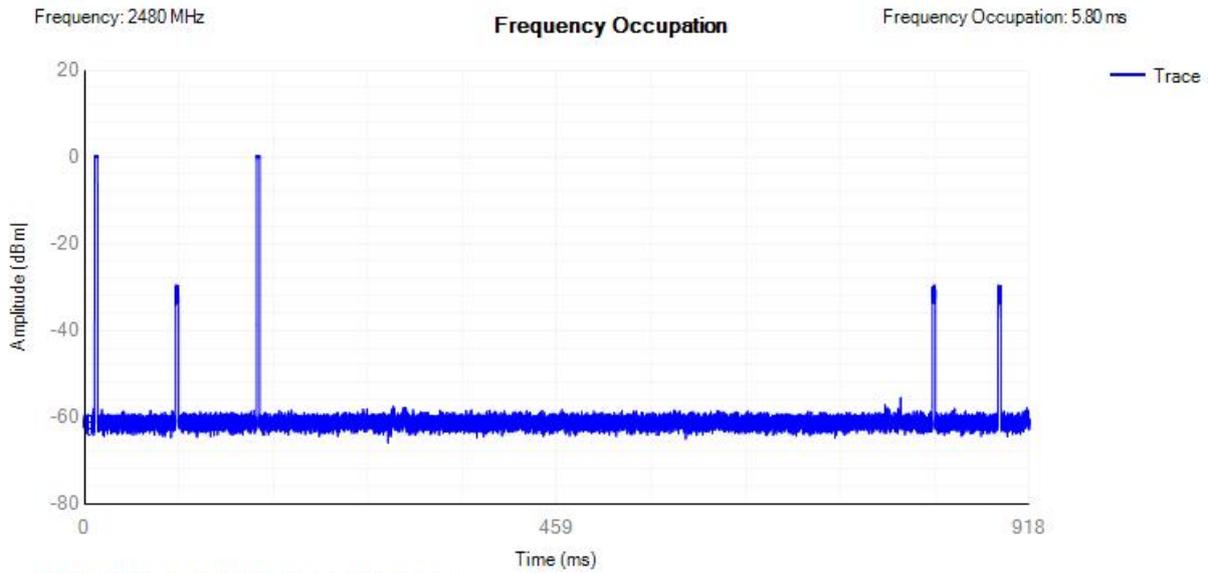
Condition	Mode	Frequency (MHz)	Frequency Occupation (ms)	Limit (ms)	Sweep Time (ms)	Burst Number	Verdict
NVNT	1-DH5	2402	8.7	0	916.4	3	Pass
NVNT	1-DH5	2480	5.8	0	916.4	2	Pass
NVNT	2-DH5	2402	2.75	0	869	1	Pass
NVNT	2-DH5	2480	5.5	0	869	2	Pass
NVNT	3-DH5	2402	2.75	0	869	1	Pass
NVNT	3-DH5	2480	13.75	0	869	5	Pass

Freq. Occup. NVNT 1-DH5 2402MHz

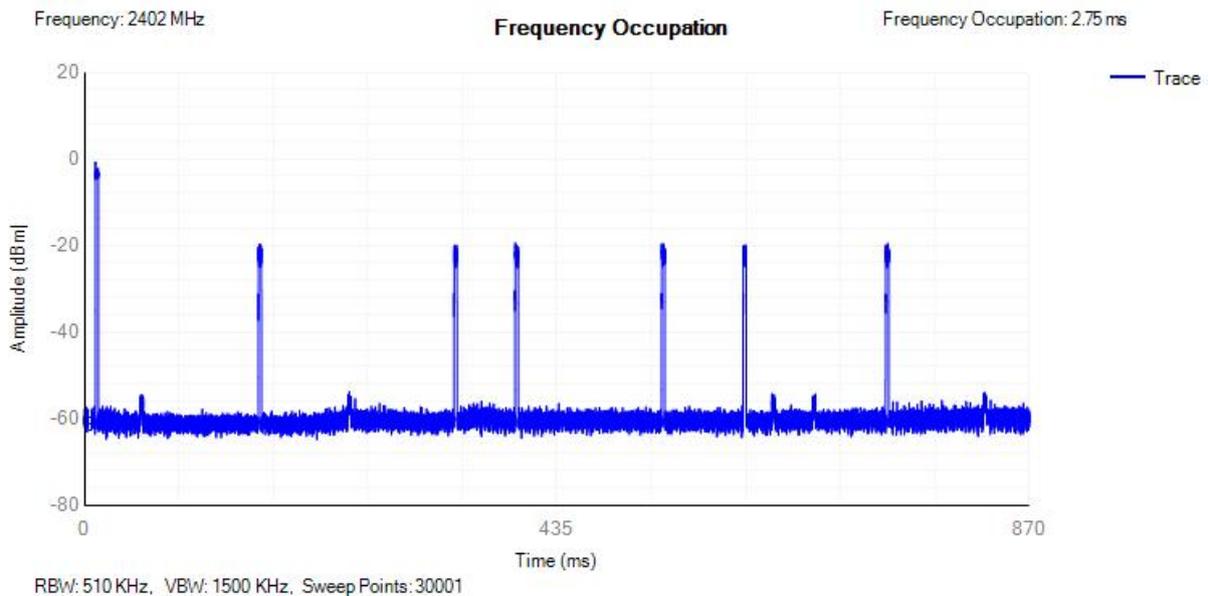




Freq. Occup. NVNT 1-DH5 2480MHz

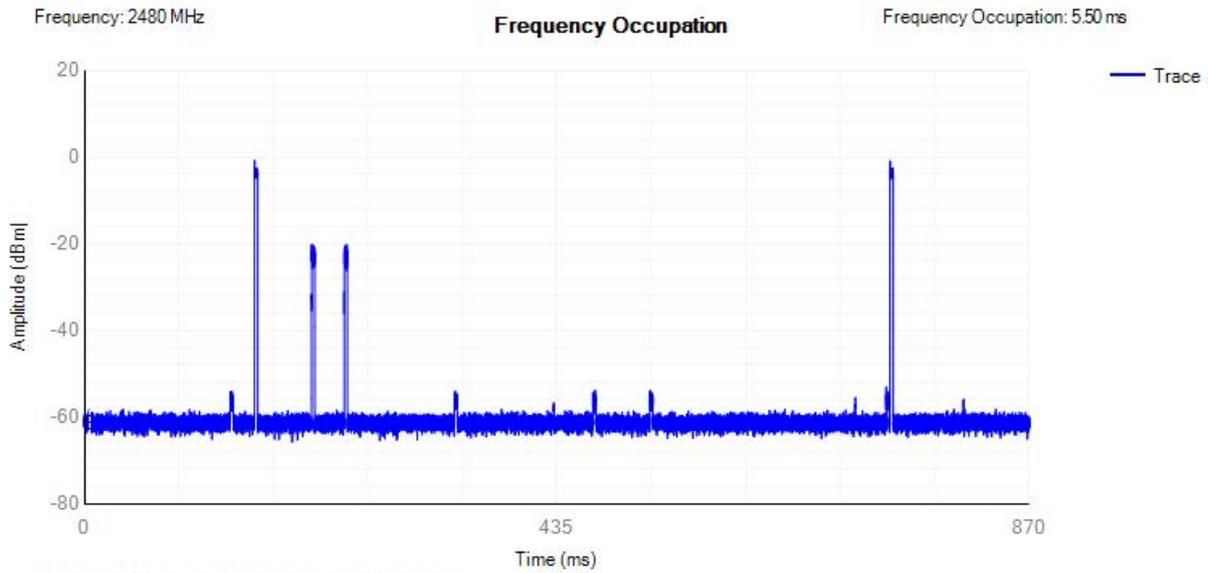


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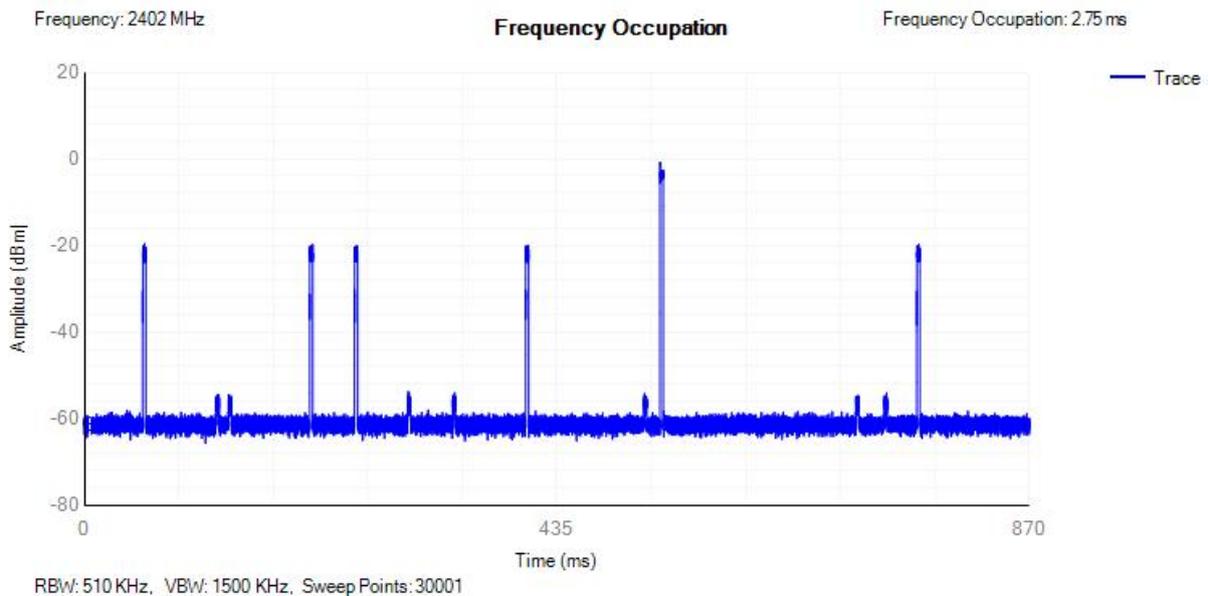




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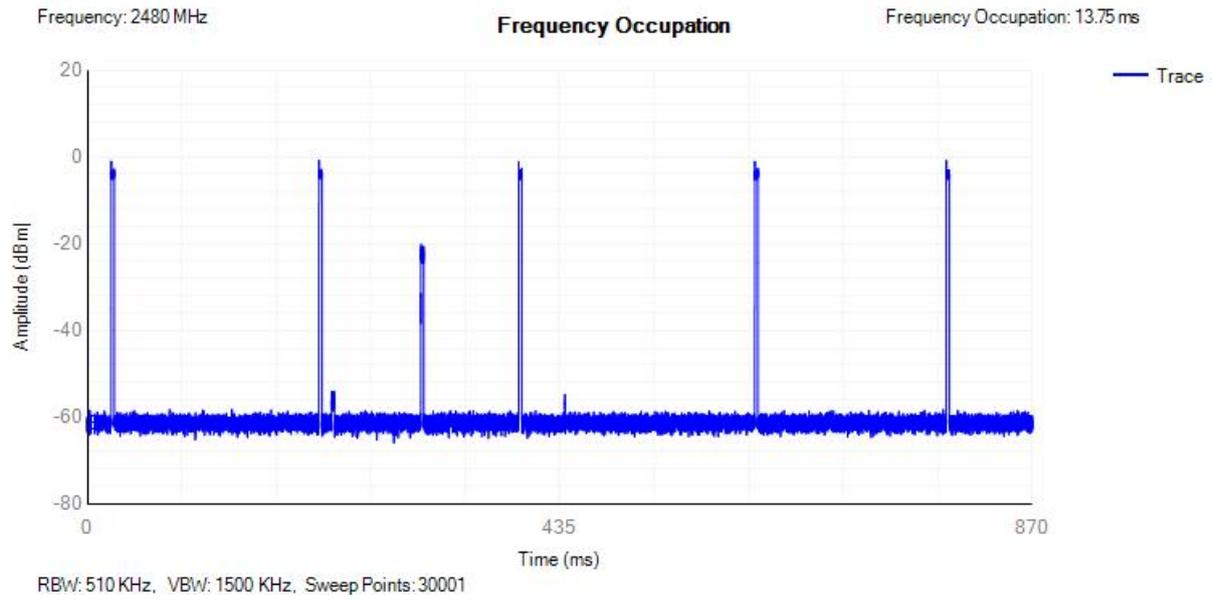


Freq. Occup. NVNT 3-DH5 2402MHz





Freq. Occup. NVNT 3-DH5 2480MHz

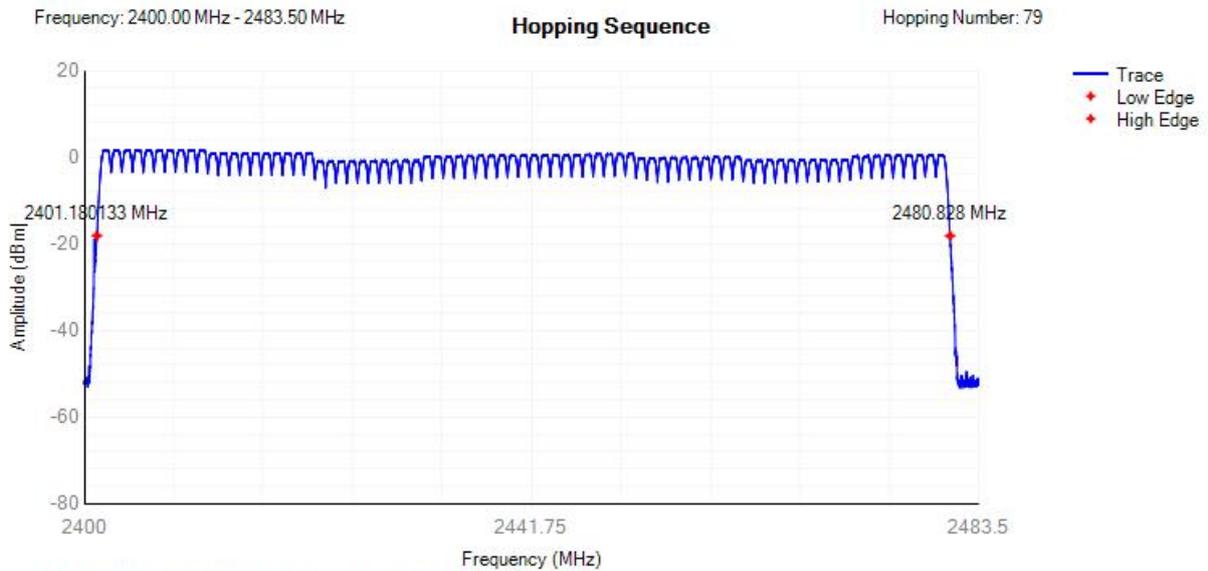




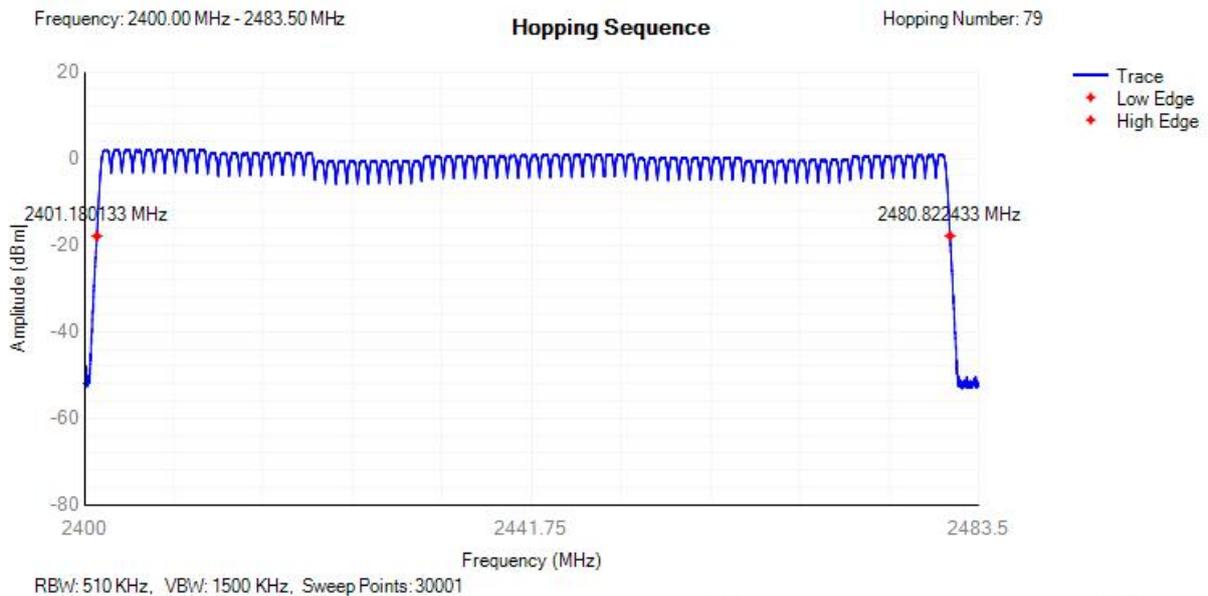
E.4 Hopping Sequence

Condition	Mode	Hopping Number	Limit	Band Allocation (%)	Limit Band Allocation (%)	Verdict
NVNT	1-DH5	79	15	95.38	70	Pass
NVNT	1-DH5	79	15	95.37	70	Pass
NVNT	2-DH5	79	15	95.94	70	Pass
NVNT	2-DH5	79	15	95.94	70	Pass
NVNT	3-DH5	79	15	95.93	70	Pass
NVNT	3-DH5	79	15	95.92	70	Pass

Hopping Seq. NVNT 1-DH5 2402MHz

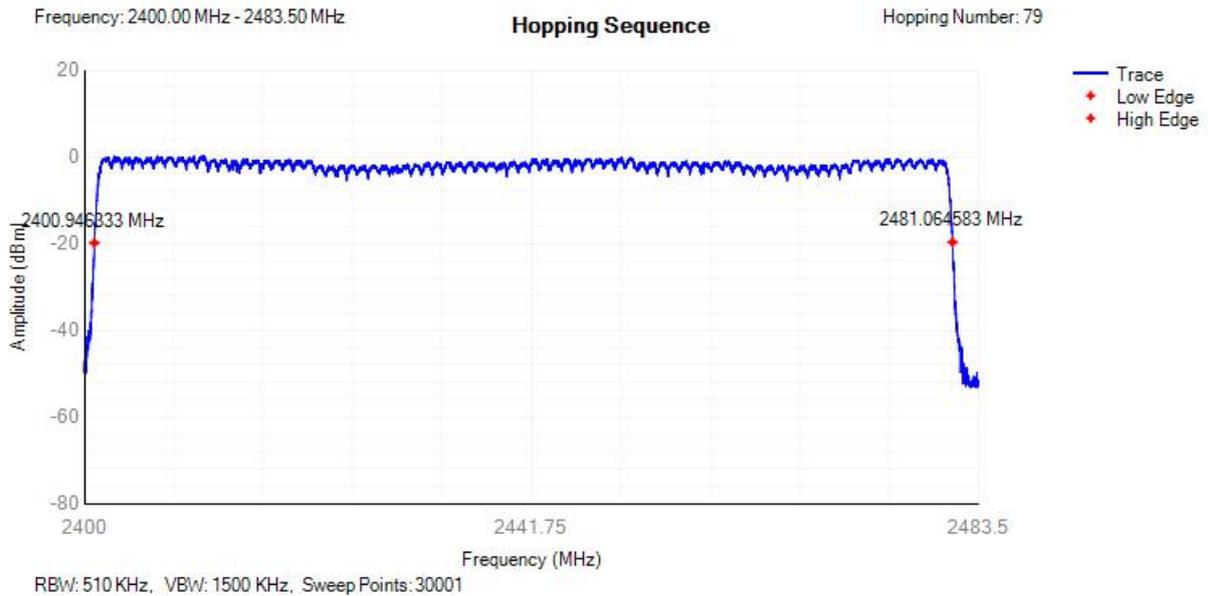


Hopping Seq. NVNT 1-DH5 2480MHz

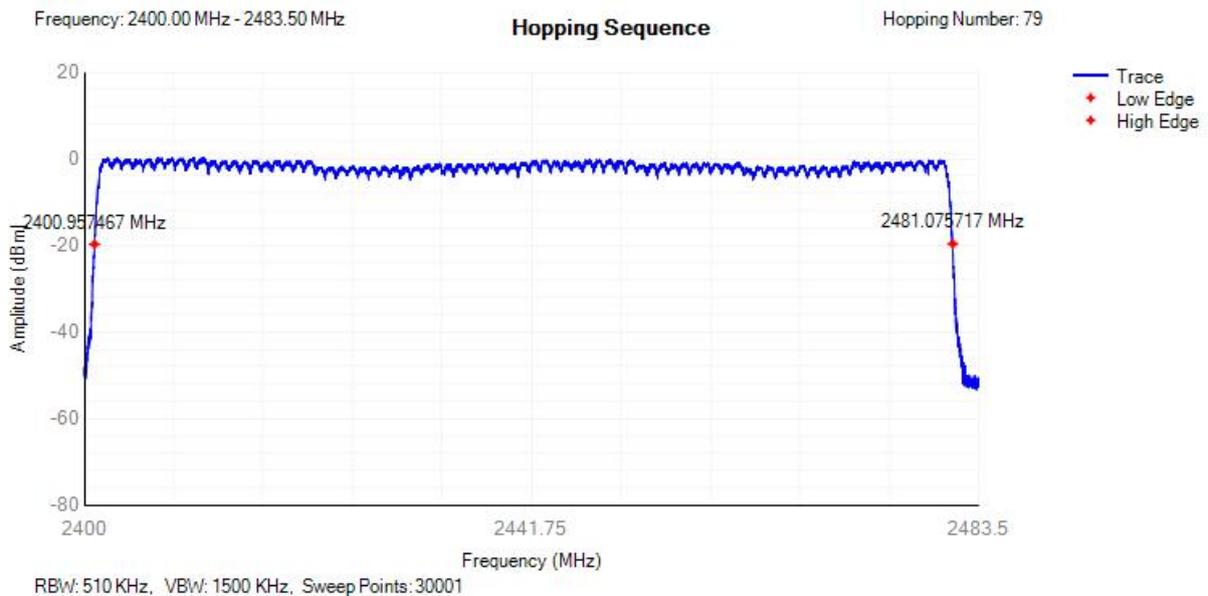




Hopping Seq. NVNT 2-DH5 2402MHz



Hopping Seq. NVNT 2-DH5 2480MHz



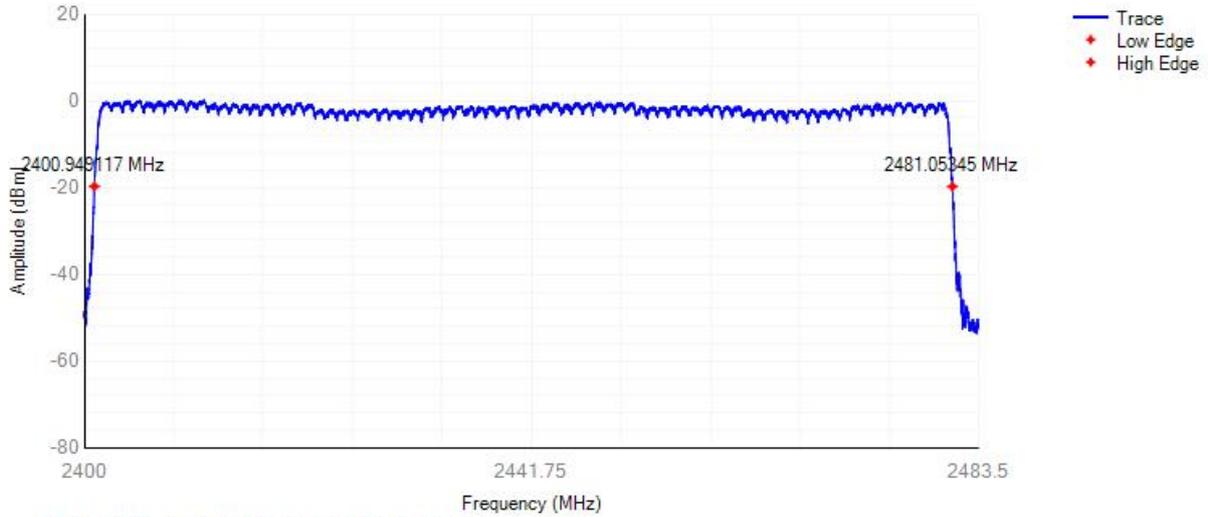


Hopping Seq. NVNT 3-DH5 2402MHz

Frequency: 2400.00 MHz - 2483.50 MHz

Hopping Sequence

Hopping Number: 79

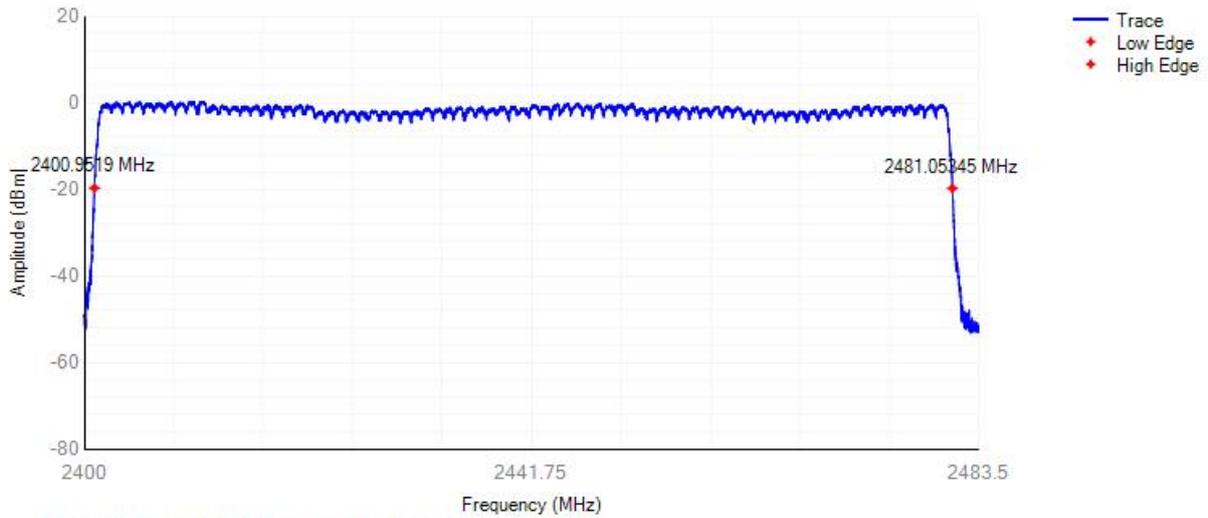


Hopping Seq. NVNT 3-DH5 2480MHz

Frequency: 2400.00 MHz - 2483.50 MHz

Hopping Sequence

Hopping Number: 79



立讯检测股份
ng Lab

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LCS Testing Lab

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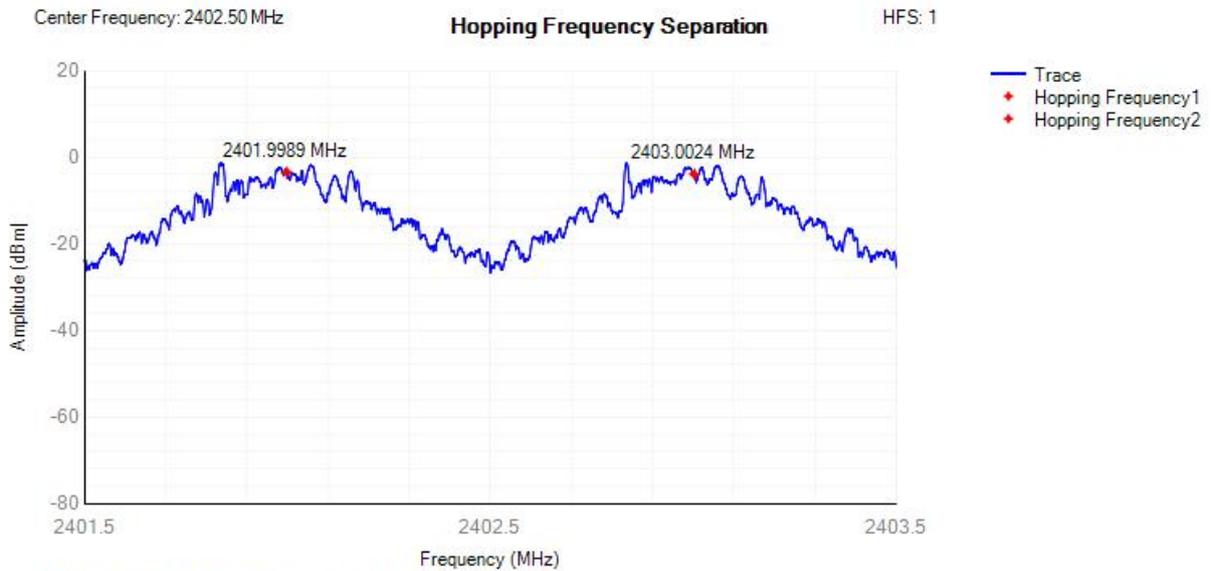
立讯检测股份
LCS Testing Lab



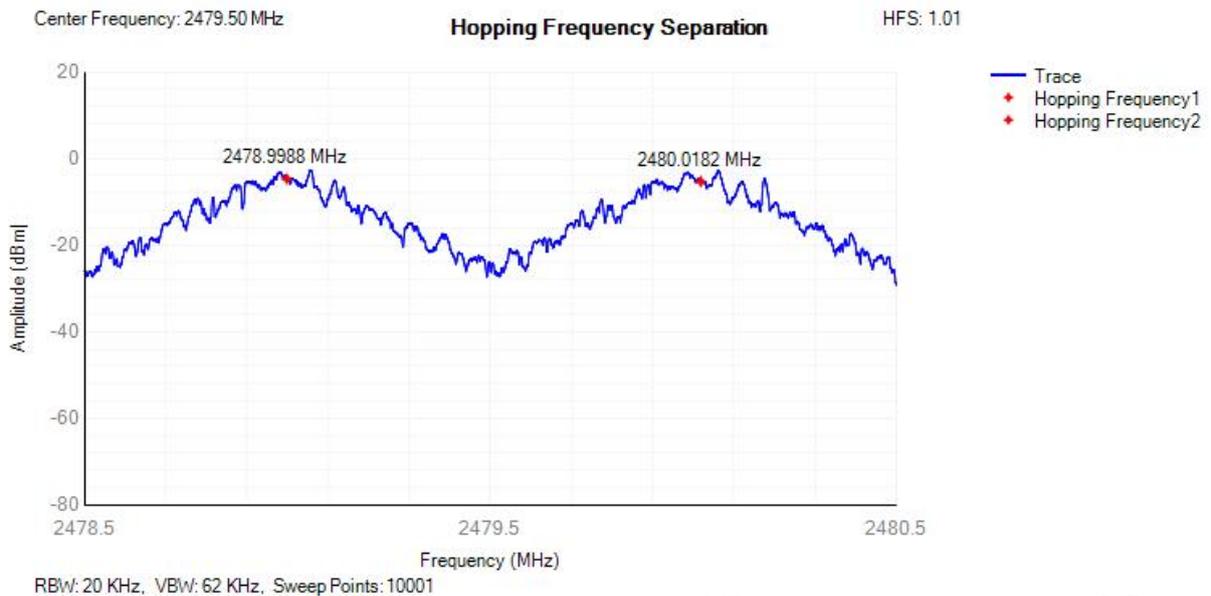
E.5 Hopping Frequency Separation

Condition	Mode	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	2401.9989	2403.0024	1	0.1	Pass
NVNT	1-DH5	2478.9988	2480.0182	1.01	0.1	Pass
NVNT	2-DH5	2402.0177	2403.0867	1.06	0.1	Pass
NVNT	2-DH5	2479.0042	2480.1582	1.15	0.1	Pass
NVNT	3-DH5	2402.0185	2403.0258	1	0.1	Pass
NVNT	3-DH5	2479.0065	2480.0359	1.02	0.1	Pass

HFS NVNT 1-DH5 2402MHz



HFS NVNT 1-DH5 2480MHz



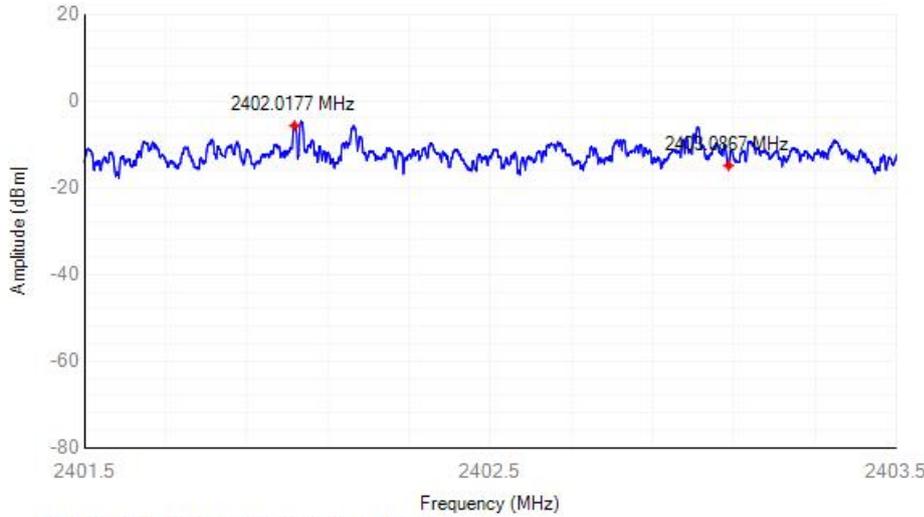


HFS NVNT 2-DH5 2402MHz

Center Frequency: 2402.50 MHz

Hopping Frequency Separation

HFS: 1.06



- Trace
- ◆ Hopping Frequency1
- ◆ Hopping Frequency2

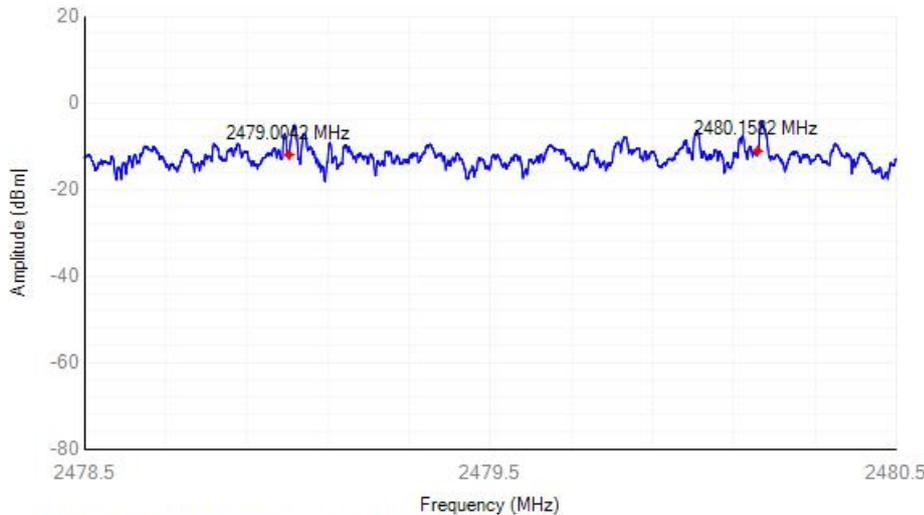
RBW: 20 KHz, VBW: 62 KHz, Sweep Points: 10001

HFS NVNT 2-DH5 2480MHz

Center Frequency: 2479.50 MHz

Hopping Frequency Separation

HFS: 1.15



- Trace
- ◆ Hopping Frequency1
- ◆ Hopping Frequency2

RBW: 20 KHz, VBW: 62 KHz, Sweep Points: 10001



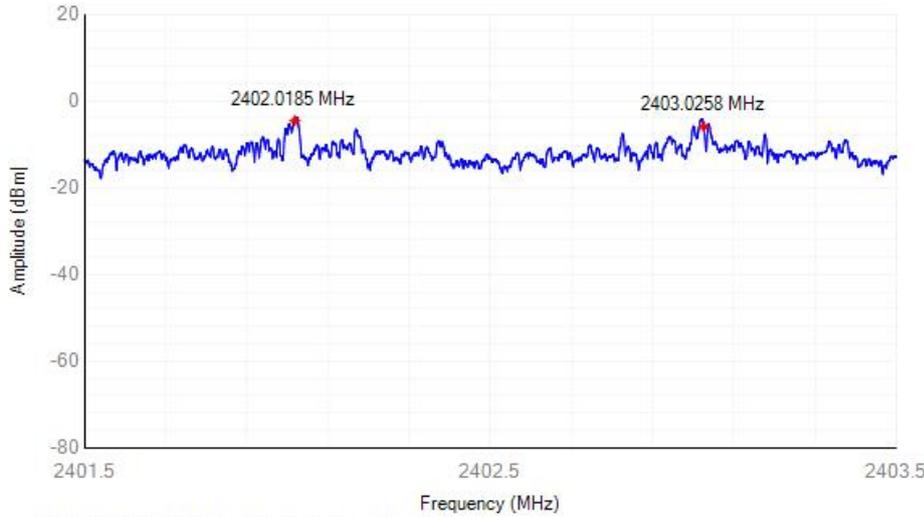


HFS NVNT 3-DH5 2402MHz

Center Frequency: 2402.50 MHz

Hopping Frequency Separation

HFS: 1



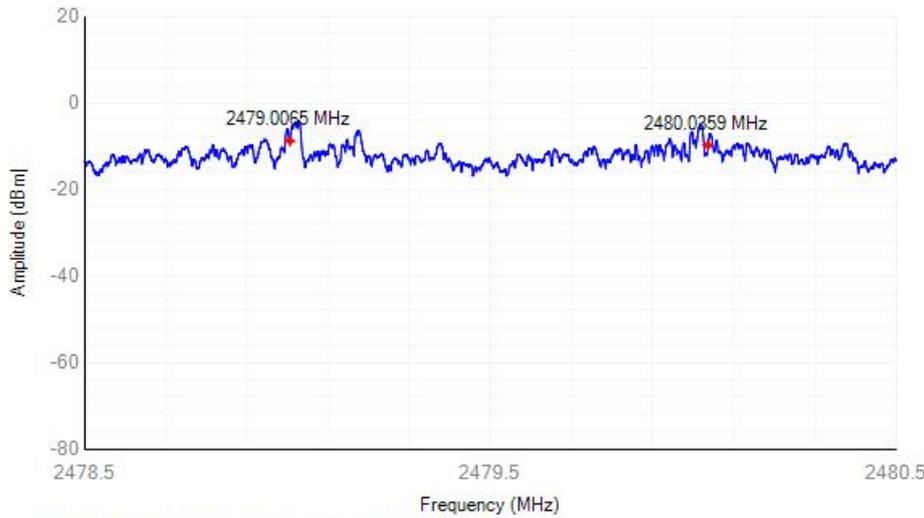
RBW: 20 KHz, VBW: 62 KHz, Sweep Points: 10001

HFS NVNT 3-DH5 2480MHz

Center Frequency: 2479.50 MHz

Hopping Frequency Separation

HFS: 1.02



RBW: 20 KHz, VBW: 62 KHz, Sweep Points: 10001

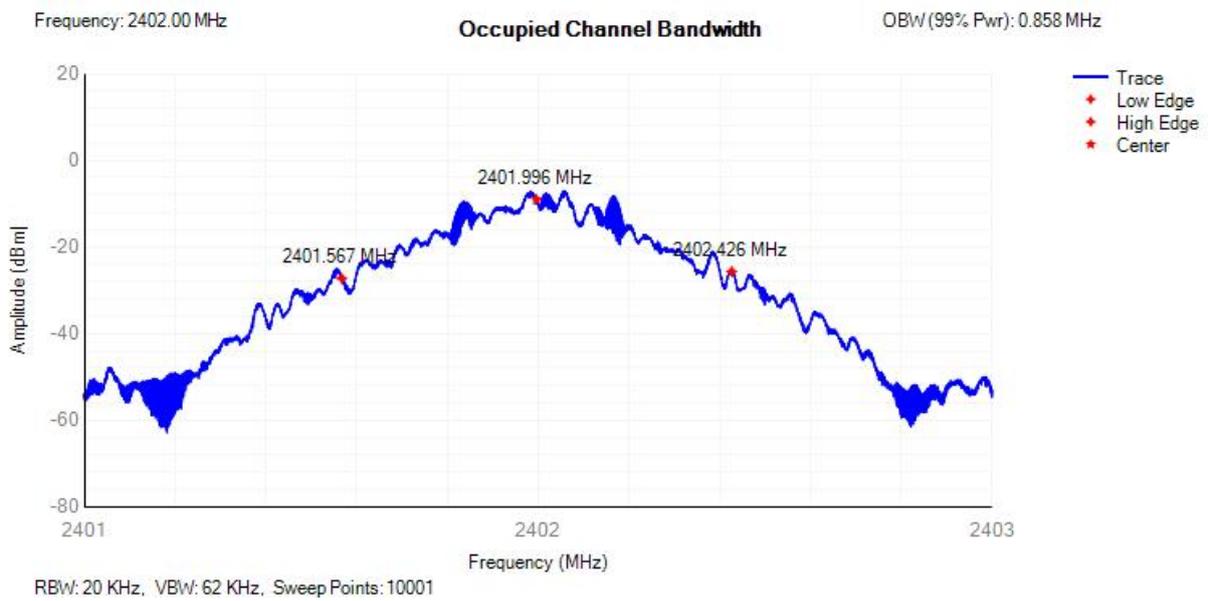




E.6 Occupied Channel Bandwidth

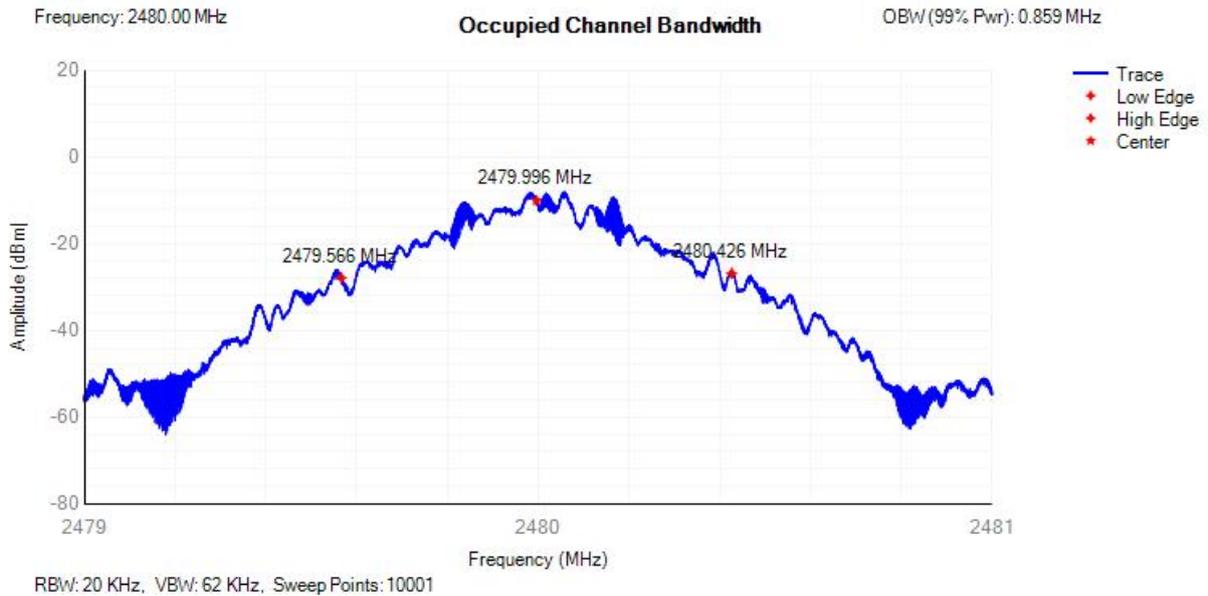
Condition	Mode	Frequency (MHz)	Center Frequency (MHz)	OBW (MHz)	Lower Edge (MHz)	Upper Edge (MHz)	Limit OBW (MHz)	Verdict
NVNT	1-DH5	2402	2401.996	0.858	2401.567	2402.426	2400 - 2483.5MHz	Pass
NVNT	1-DH5	2480	2479.996	0.859	2479.566	2480.426	2400 - 2483.5MHz	Pass
NVNT	2-DH5	2402	2401.997	1.177	2401.408	2402.586	2400 - 2483.5MHz	Pass
NVNT	2-DH5	2480	2479.997	1.178	2479.408	2480.586	2400 - 2483.5MHz	Pass
NVNT	3-DH5	2402	2401.995	1.192	2401.398	2402.591	2400 - 2483.5MHz	Pass
NVNT	3-DH5	2480	2479.995	1.193	2479.398	2480.592	2400 - 2483.5MHz	Pass

OBW NVNT 1-DH5 2402MHz

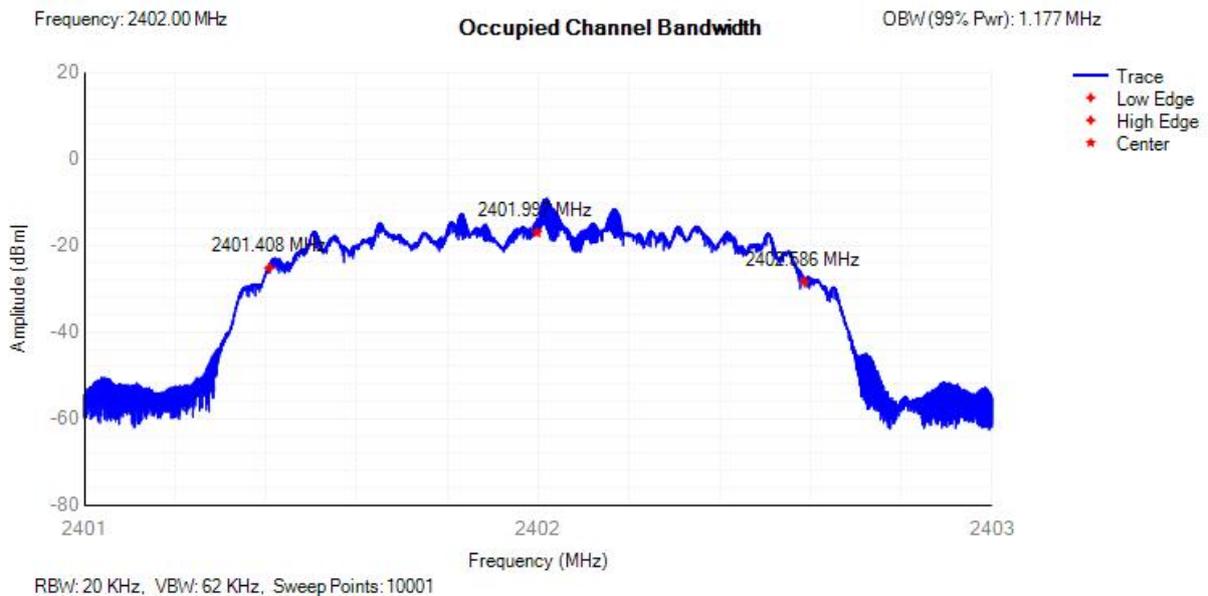




OBW NVNT 1-DH5 2480MHz



OBW NVNT 2-DH5 2402MHz



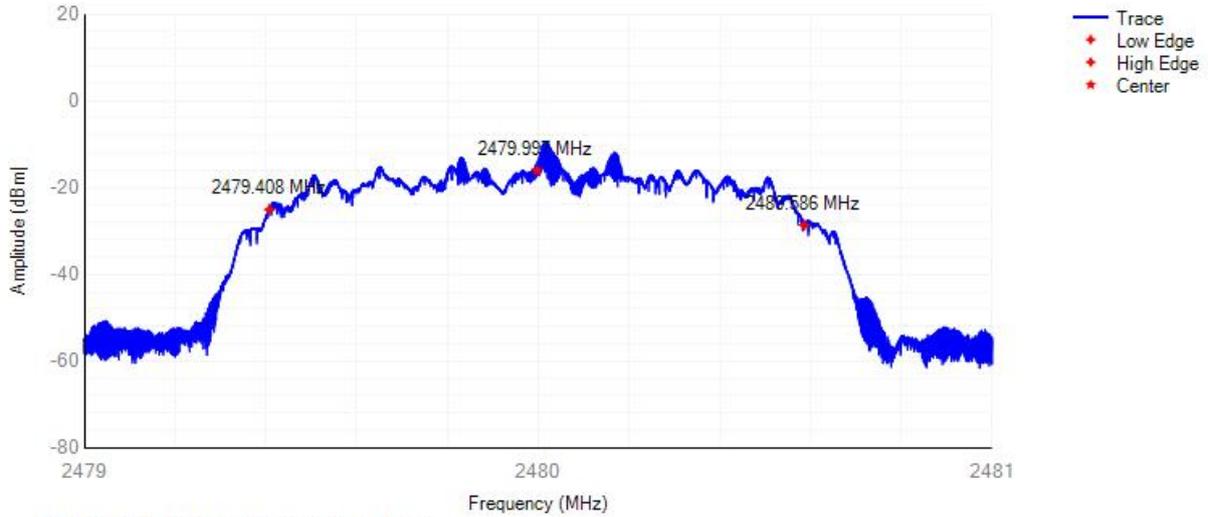


OBW NVNT 2-DH5 2480MHz

Frequency: 2480.00 MHz

Occupied Channel Bandwidth

OBW (99% Pwr): 1.178 MHz

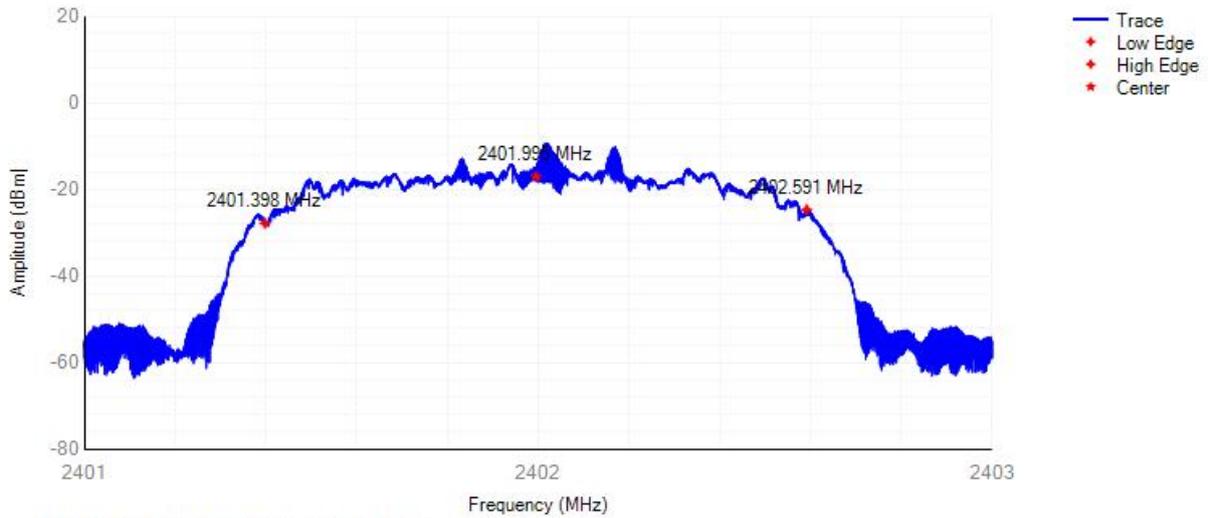


OBW NVNT 3-DH5 2402MHz

Frequency: 2402.00 MHz

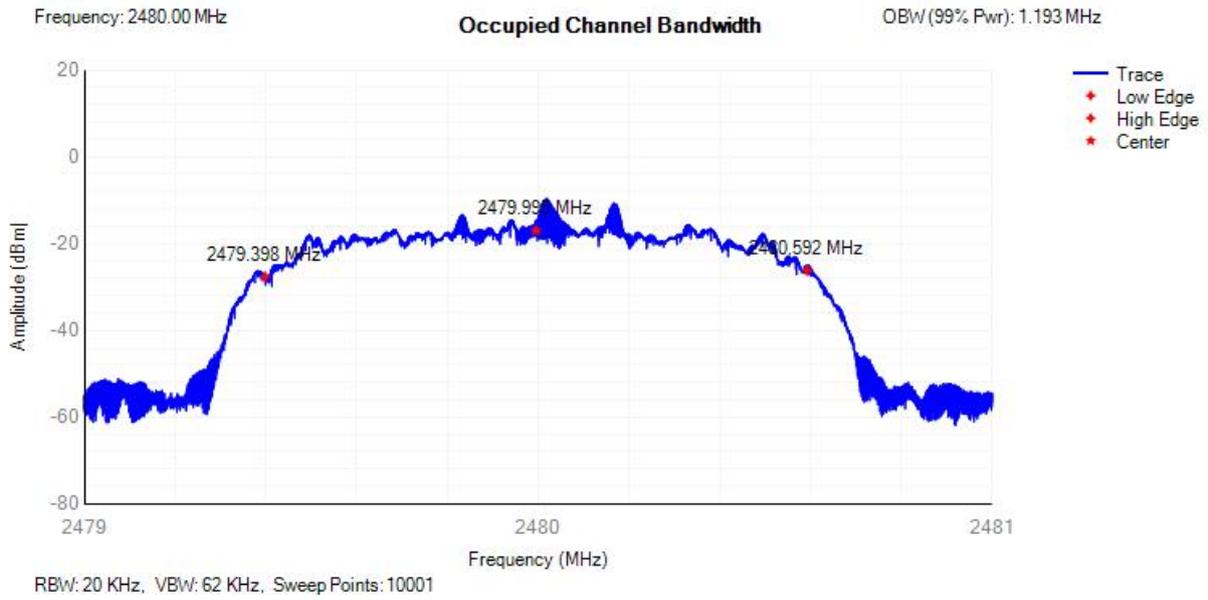
Occupied Channel Bandwidth

OBW (99% Pwr): 1.192 MHz





OBW NVNT 3-DH5 2480MHz



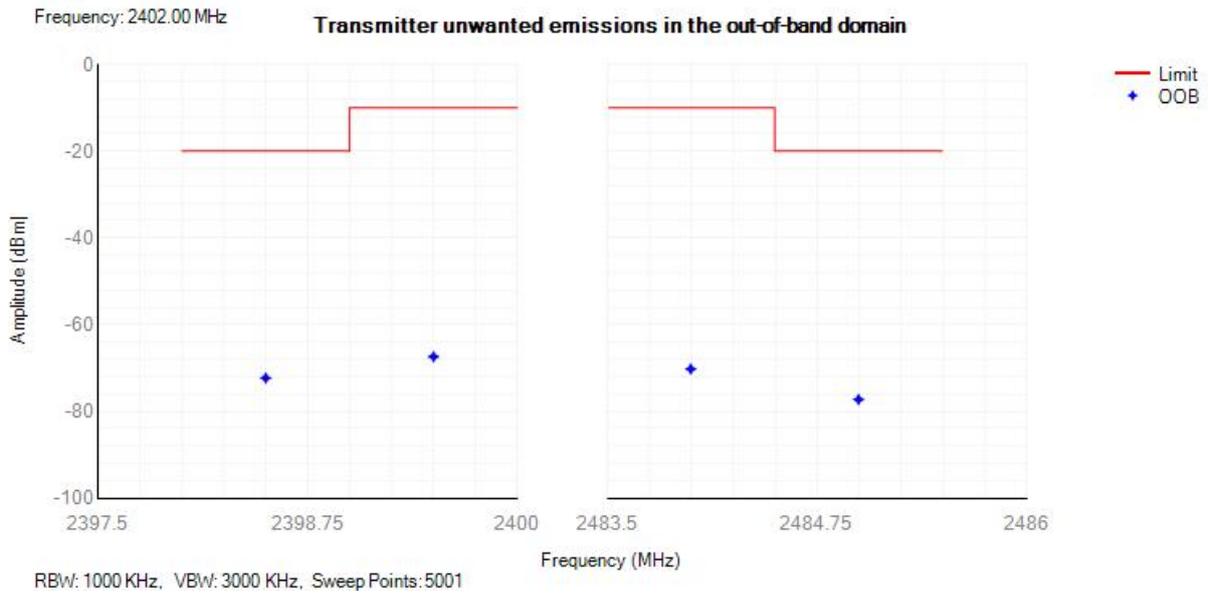
**E.7 Transmitter unwanted emissions in the out-of-band domain**

Condition	Mode	Frequency (MHz)	OOB Frequency (MHz)	Level (dBm/MHz)	Limit (dBm/MHz)	Verdict
NVNT	1-DH5	2402	2399.5	-67.39	-10	Pass
NVNT	1-DH5	2402	2398.5	-72.31	-20	Pass
NVNT	1-DH5	2402	2484	-70.22	-10	Pass
NVNT	1-DH5	2402	2485	-77.25	-20	Pass
NVNT	1-DH5	2480	2399.5	-74.14	-10	Pass
NVNT	1-DH5	2480	2398.5	-72.8	-20	Pass
NVNT	1-DH5	2480	2484	-73.5	-10	Pass
NVNT	1-DH5	2480	2485	-73.38	-20	Pass
NVNT	2-DH5	2402	2399.5	-76.05	-10	Pass
NVNT	2-DH5	2402	2398.5	-72.58	-20	Pass
NVNT	2-DH5	2402	2484	-67.14	-10	Pass
NVNT	2-DH5	2402	2485	-67.16	-20	Pass
NVNT	2-DH5	2480	2399.5	-77.79	-10	Pass
NVNT	2-DH5	2480	2398.5	-67.18	-20	Pass
NVNT	2-DH5	2480	2484	-66.88	-10	Pass
NVNT	2-DH5	2480	2485	-73.85	-20	Pass
NVNT	3-DH5	2402	2399.5	-73.9	-10	Pass
NVNT	3-DH5	2402	2398.5	-76.66	-20	Pass
NVNT	3-DH5	2402	2484	-70.41	-10	Pass
NVNT	3-DH5	2402	2485	-74.94	-20	Pass
NVNT	3-DH5	2480	2399.5	-69.49	-10	Pass
NVNT	3-DH5	2480	2398.5	-71.91	-20	Pass
NVNT	3-DH5	2480	2484	-68.45	-10	Pass
NVNT	3-DH5	2480	2485	-73.89	-20	Pass

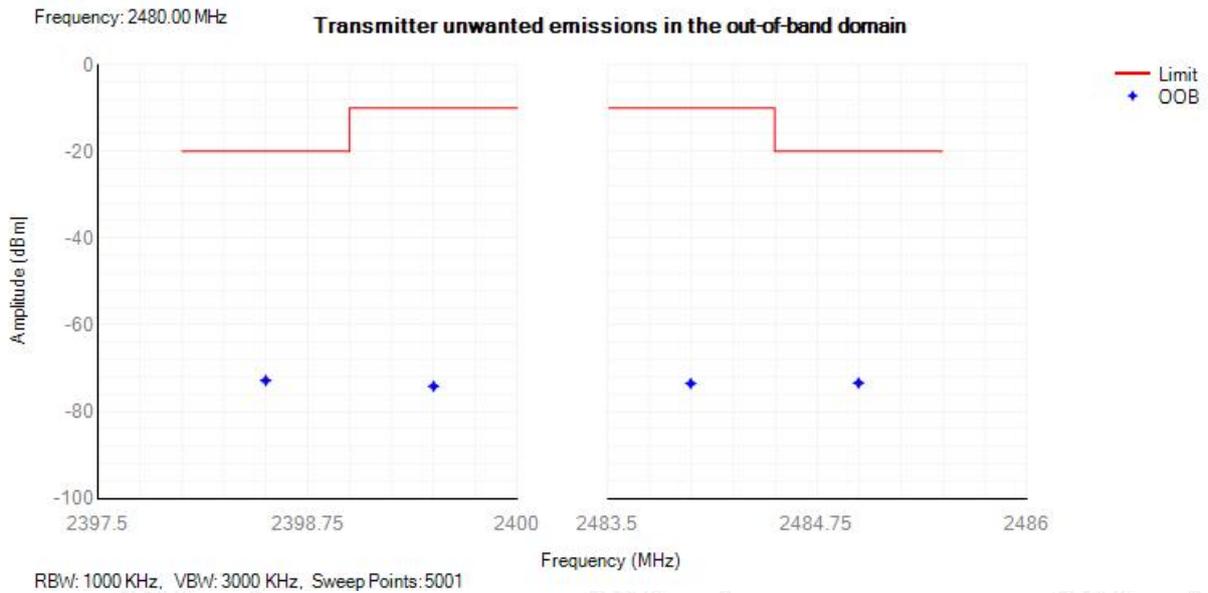




Tx. Emissions OOB NVNT 1-DH5 2402MHz

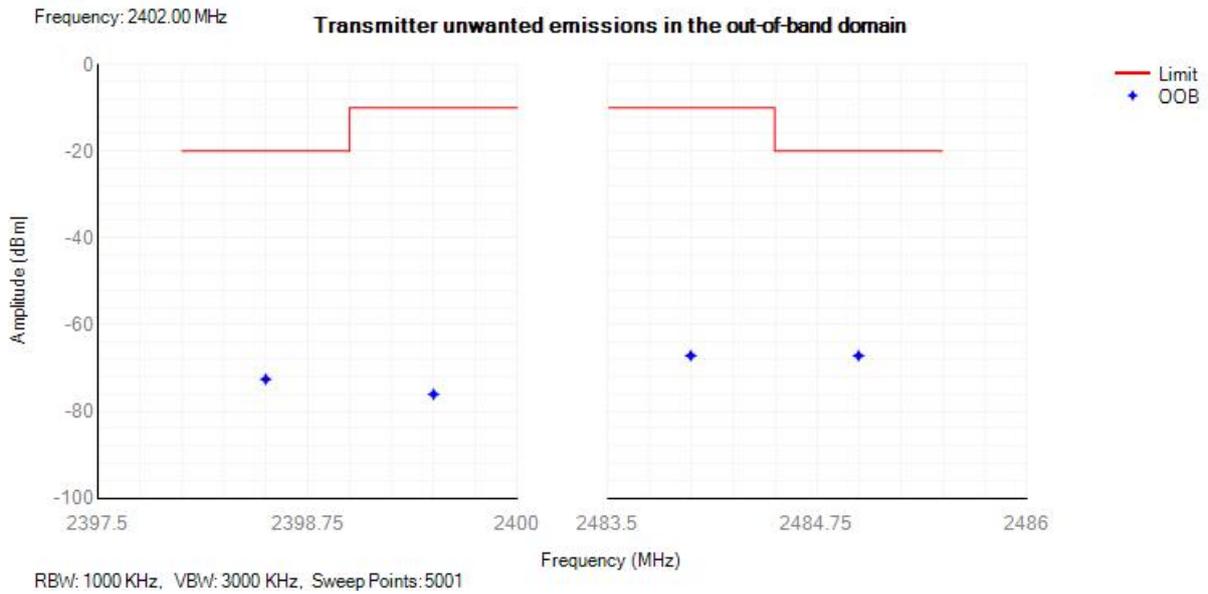


Tx. Emissions OOB NVNT 1-DH5 2480MHz

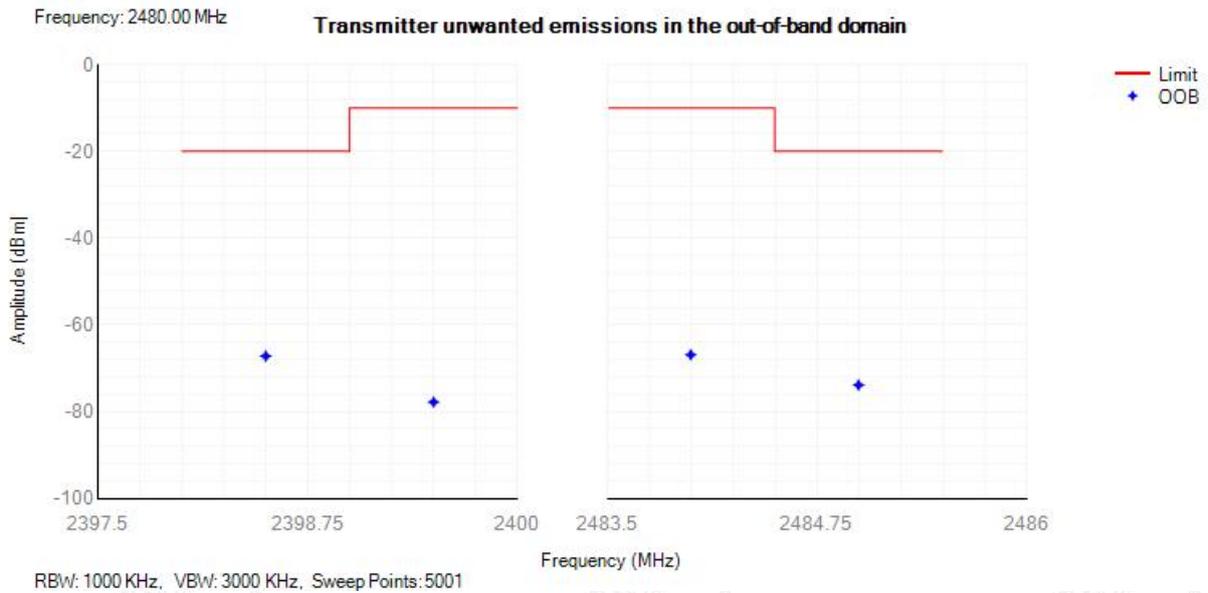




Tx. Emissions OOB NVNT 2-DH5 2402MHz

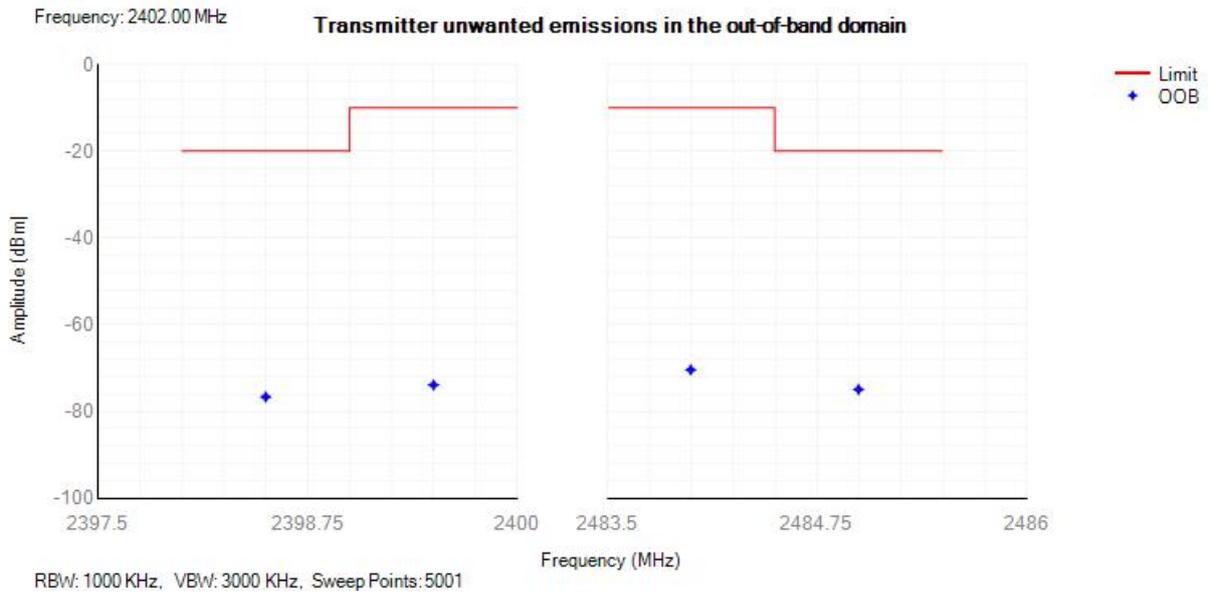


Tx. Emissions OOB NVNT 2-DH5 2480MHz

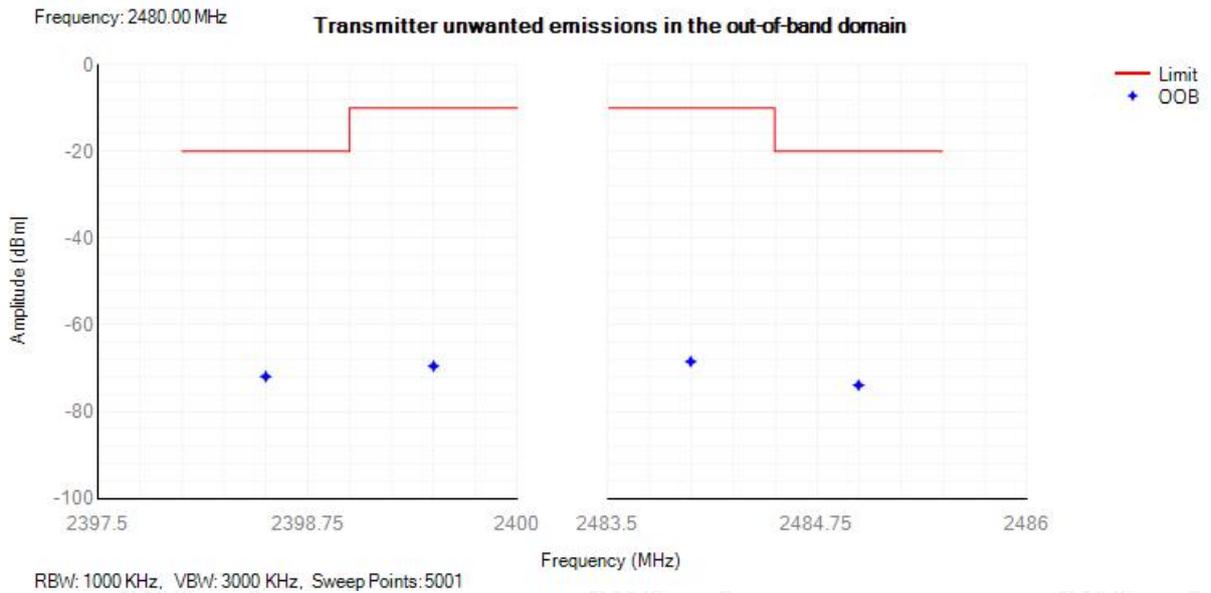




Tx. Emissions OOB NVNT 3-DH5 2402MHz



Tx. Emissions OOB NVNT 3-DH5 2480MHz

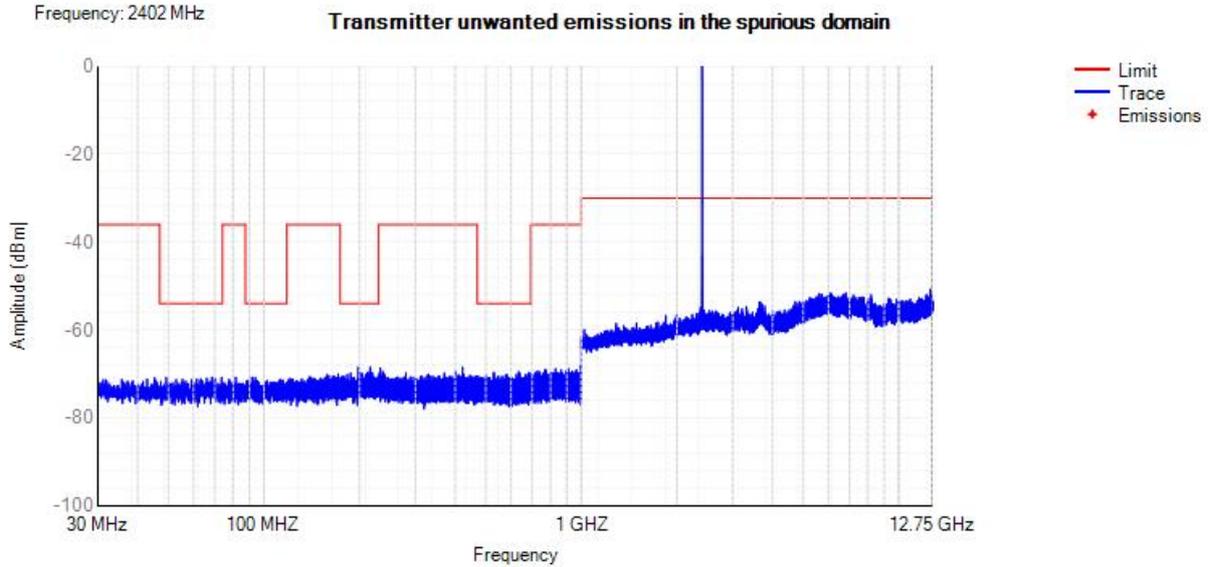




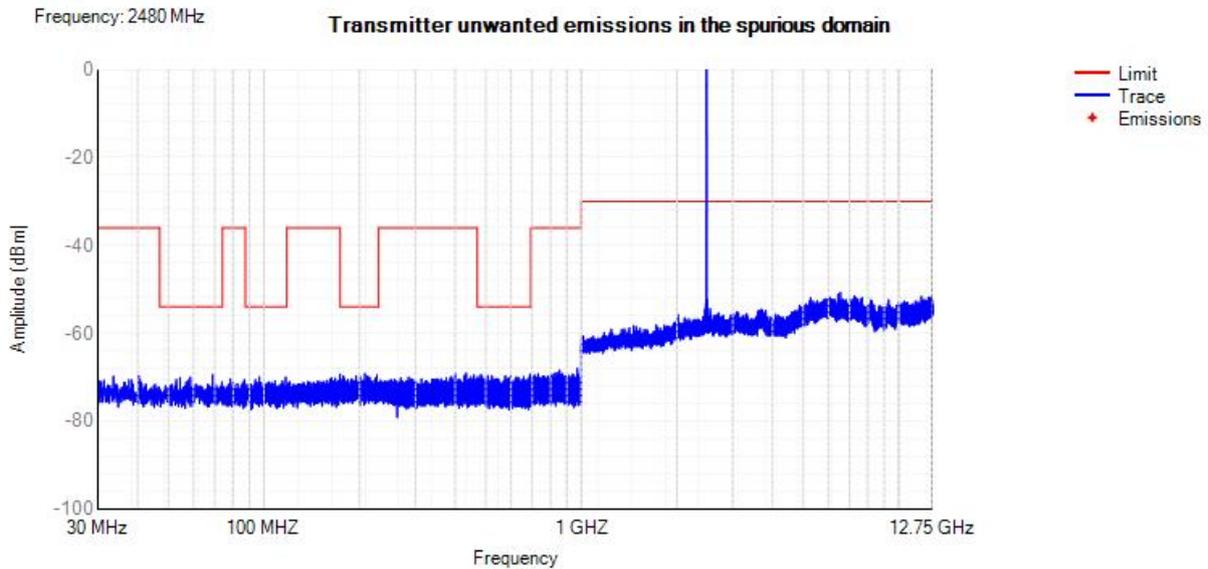
E.8 Transmitter unwanted emissions in the spurious domain

Condition	Mode	Frequency (MHz)	Range	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
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Tx. Spurious NVNT 1-DH5 2402MHz

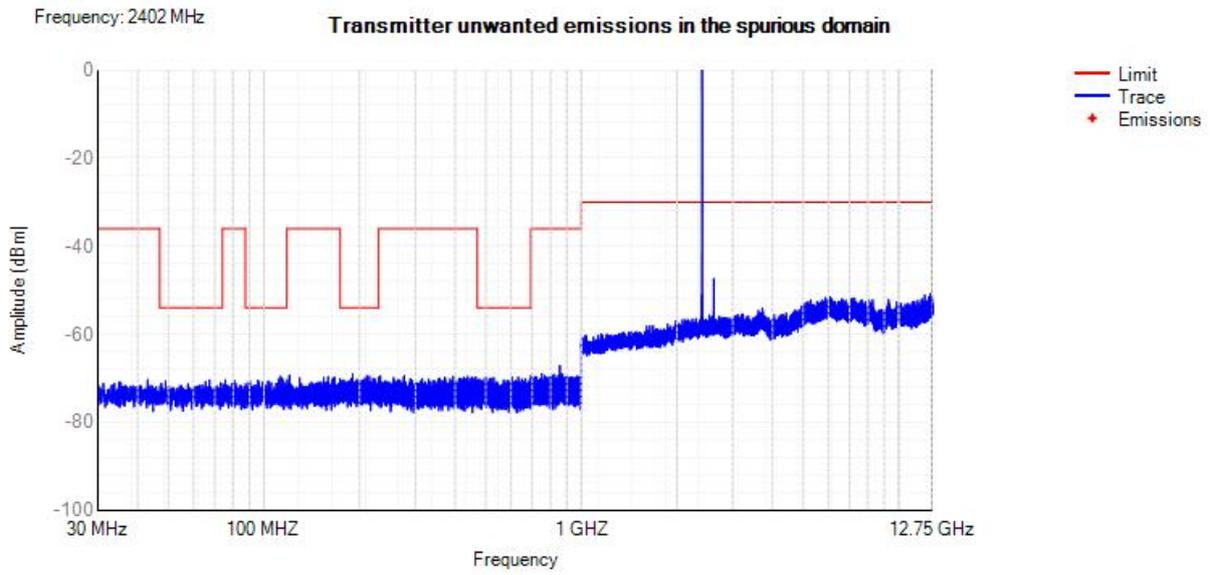


Tx. Spurious NVNT 1-DH5 2480MHz

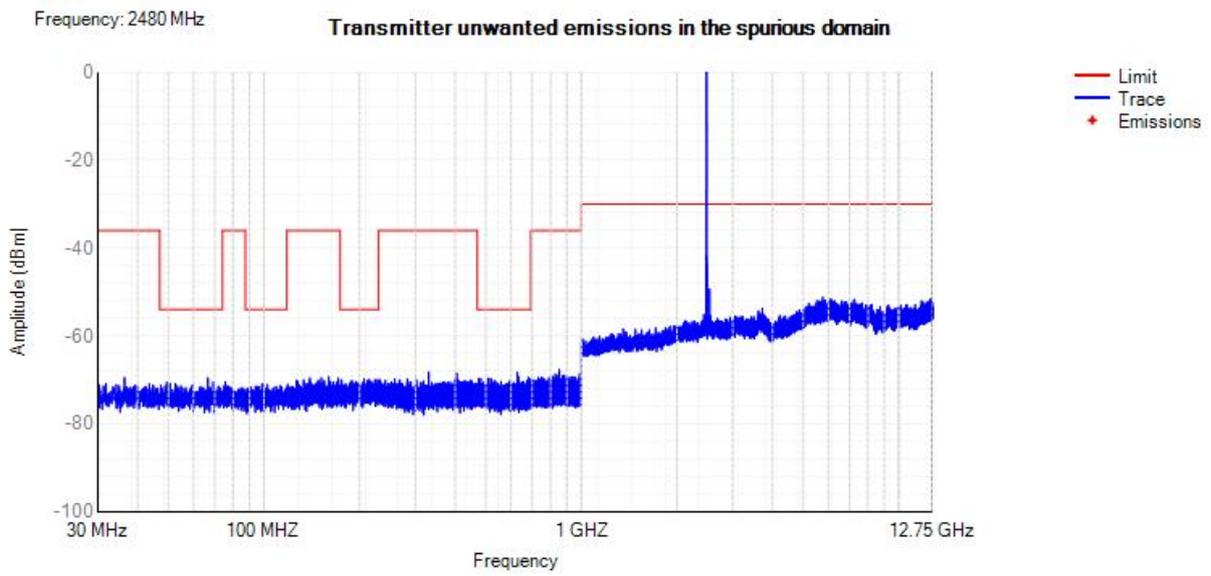




Tx. Spurious NVNT 2-DH5 2402MHz

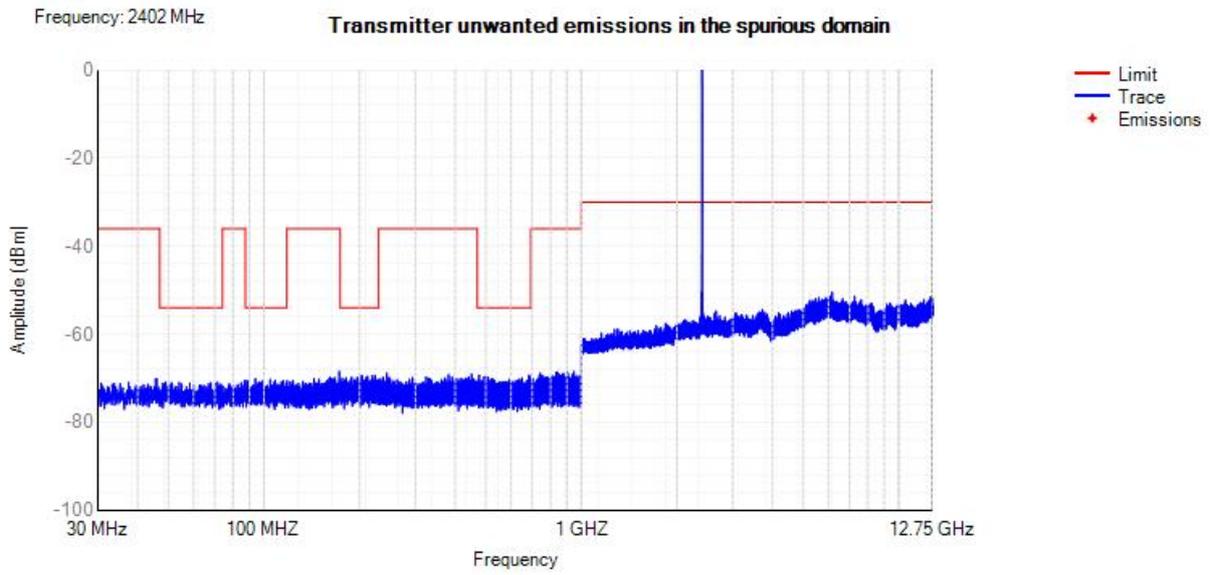


Tx. Spurious NVNT 2-DH5 2480MHz

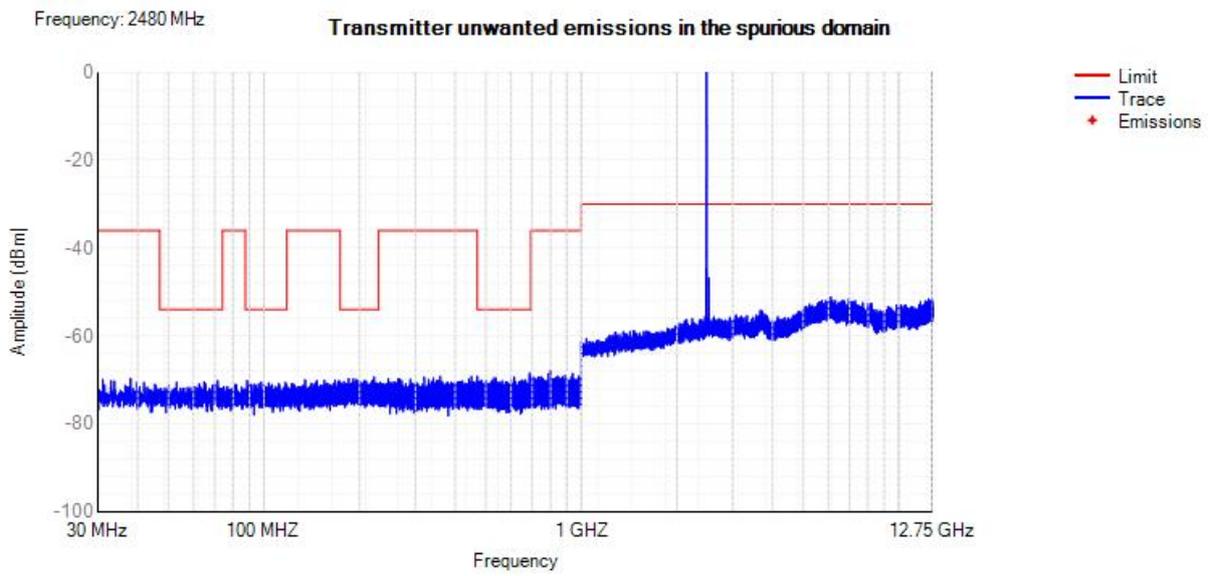




Tx. Spurious NVNT 3-DH5 2402MHz



Tx. Spurious NVNT 3-DH5 2480MHz

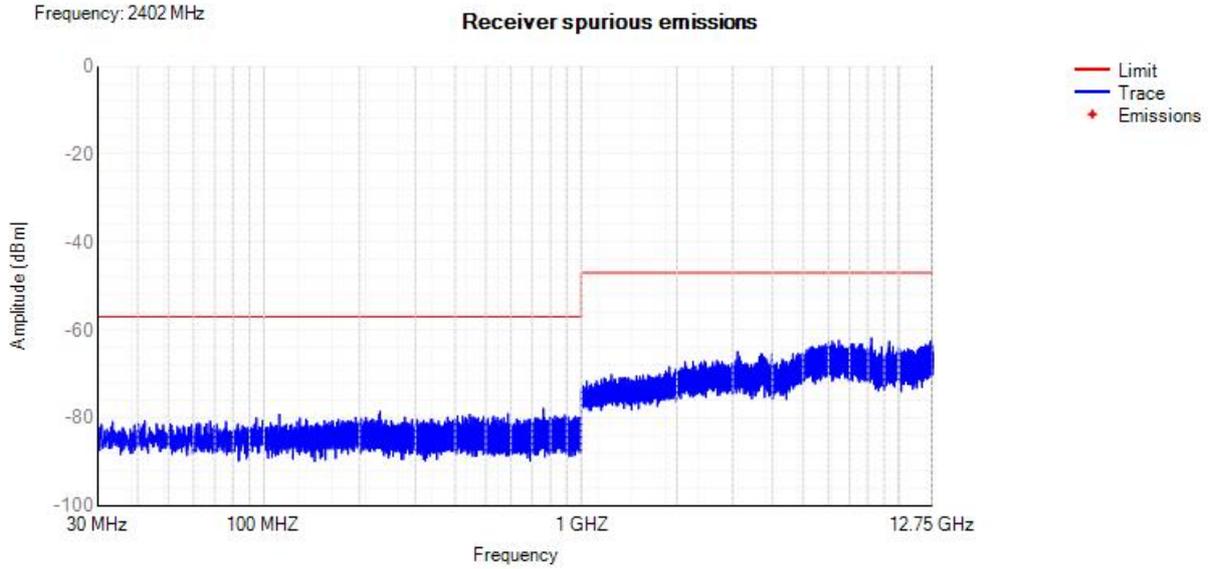




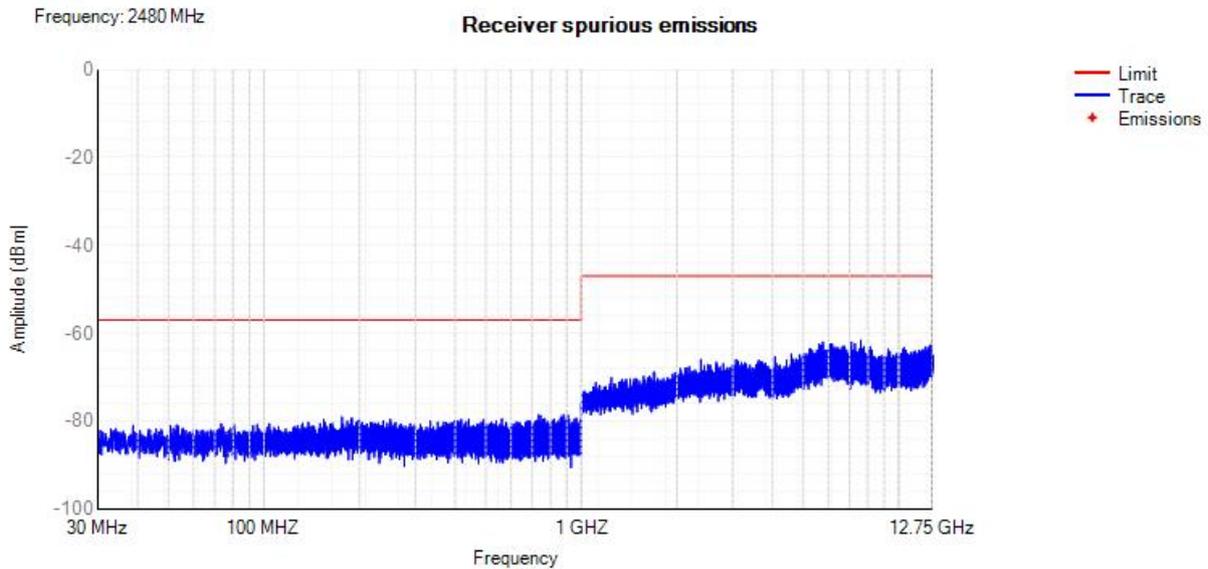
E.9 Receiver spurious emissions

Condition	Mode	Frequency (MHz)	Range	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
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Rx. Spurious NVNT 1-DH5 2402MHz

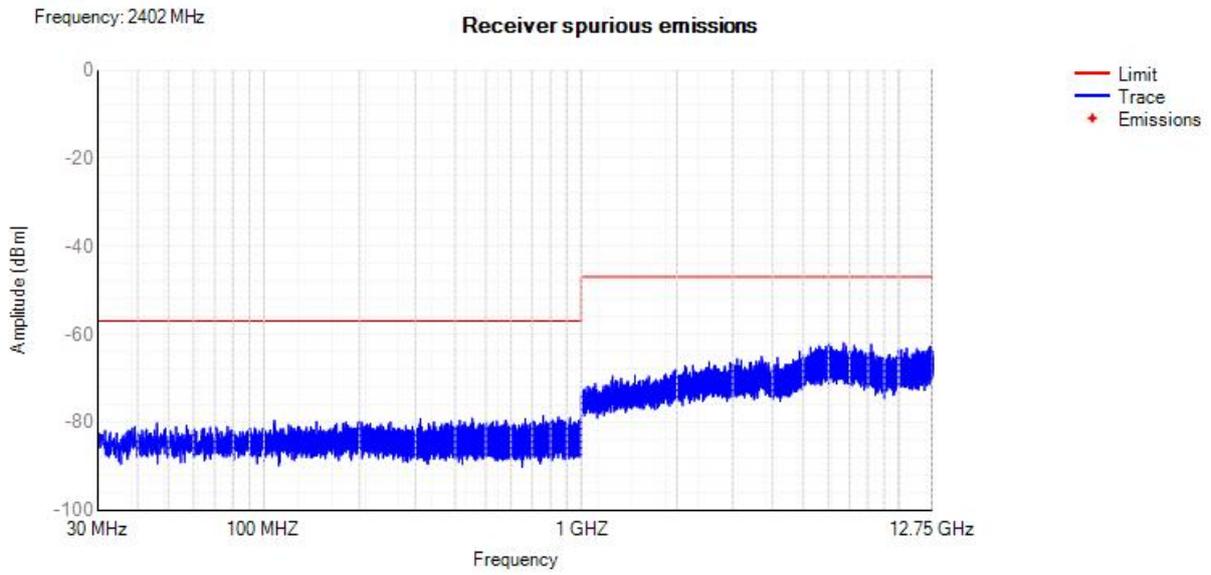


Rx. Spurious NVNT 1-DH5 2480MHz

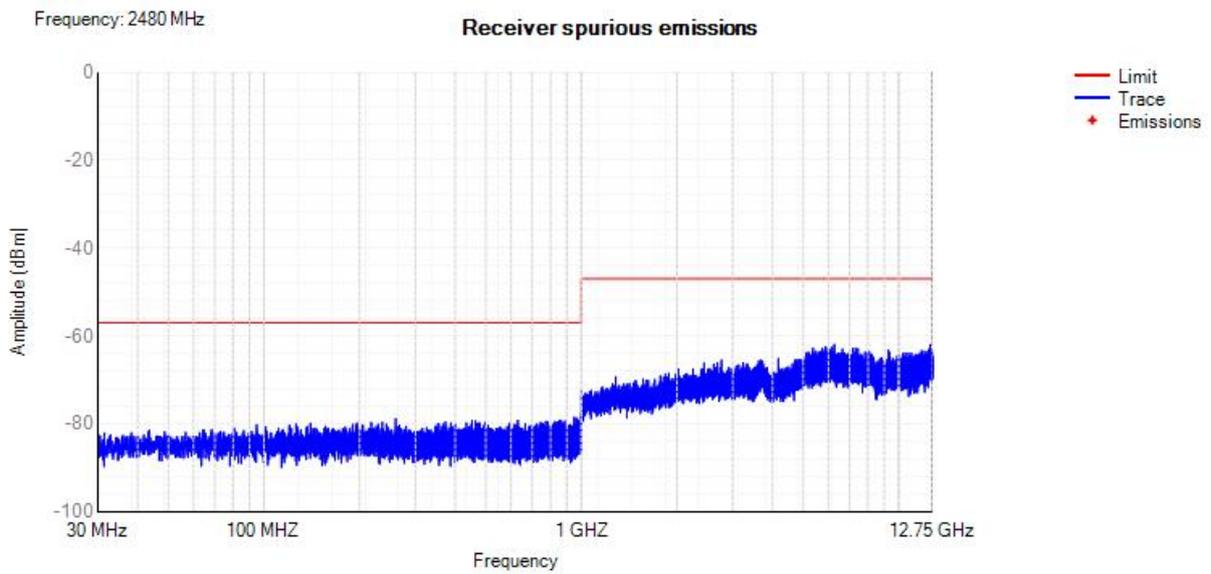




Rx. Spurious NVNT 2-DH5 2402MHz

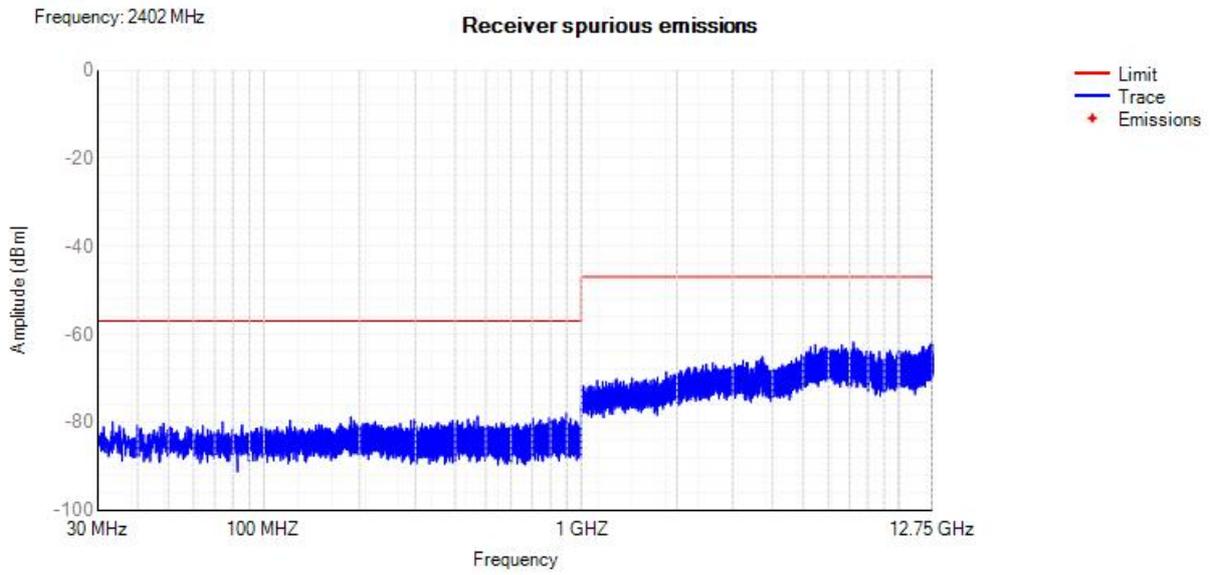


Rx. Spurious NVNT 2-DH5 2480MHz

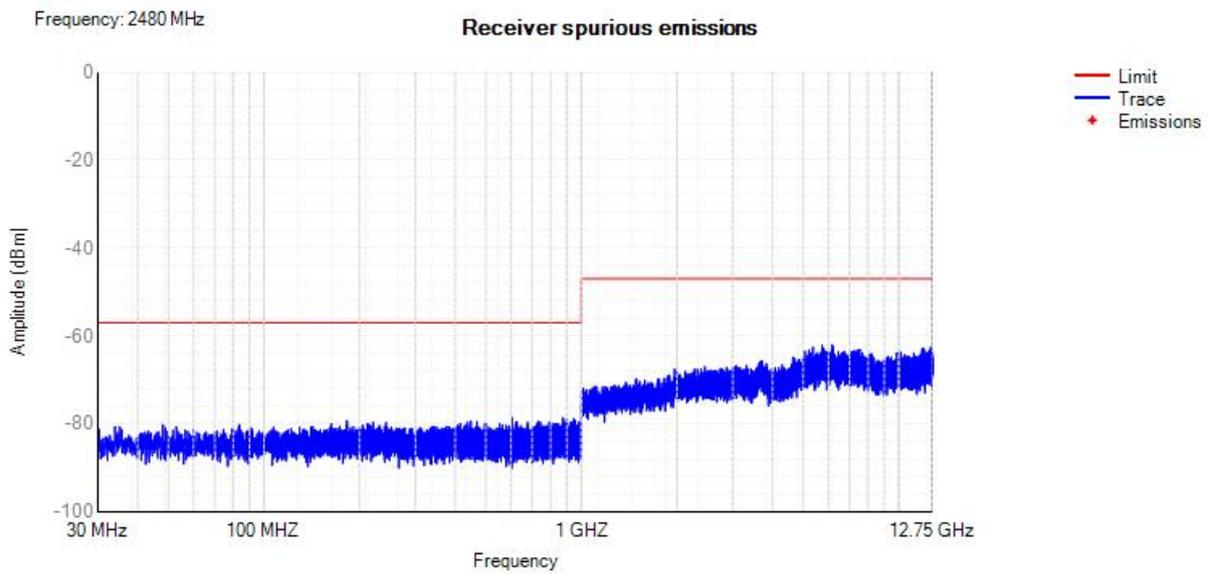




Rx. Spurious NVNT 3-DH5 2402MHz



Rx. Spurious NVNT 3-DH5 2480MHz





E.10 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	
DH5	2402	-70	2380	-28	≥-34	CW	1.96	10	Pass
			2504	-23	≥-34	CW	1.83	10	Pass
			2300	-25	≥-34	CW	1.23	10	Pass
			2584	-24	≥-34	CW	0.89	10	Pass
	2480	-70	2380	-30	≥-34	CW	1.41	10	Pass
			2504	-24	≥-34	CW	2.11	10	Pass
			2300	-28	≥-34	CW	2.72	10	Pass
			2584	-22	≥-34	CW	0.62	10	Pass
2DH5	2402	-68	2380	-21	≥-34	CW	3.77	10	Pass
			2504	-20	≥-34	CW	3.16	10	Pass
			2300	-29	≥-34	CW	2.56	10	Pass
			2584	-27	≥-34	CW	3.30	10	Pass
	2480	-68	2380	-22	≥-34	CW	5.64	10	Pass
			2504	-28	≥-34	CW	1.41	10	Pass
			2300	-23	≥-34	CW	0.73	10	Pass
			2584	-20	≥-34	CW	1.22	10	Pass
3DH5	2402	-68	2380	-21	≥-34	CW	3.16	10	Pass
			2504	-25	≥-34	CW	2.47	10	Pass
			2300	-26	≥-34	CW	3.48	10	Pass
			2584	-25	≥-34	CW	1.97	10	Pass
	2480	-68	2380	-30	≥-34	CW	2.54	10	Pass
			2504	-26	≥-34	CW	5.79	10	Pass
			2300	-22	≥-34	CW	5.68	10	Pass
			2584	-24	≥-34	CW	4.65	10	Pass

