



Appendix E for BT RF Test Data

Product Name: Smartphone

Test Model: KINGKONG X

Environmental Conditions

Temperature:	23.6°C
Relative Humidity:	52.8%
ATM Pressure:	100.0 kPa
Test Engineer:	Paddi Chen
Supervised by:	Nick Peng





E.1 RF Output Power

Condition	Mode	Frequency (MHz)	Max EIRP (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	2.08	20	Pass
NVNT	1-DH5	2480	2.31	20	Pass
NVNT	2-DH5	2402	0.57	20	Pass
NVNT	2-DH5	2480	0.86	20	Pass
NVNT	3-DH5	2402	1.23	20	Pass
NVNT	3-DH5	2480	2.16	20	Pass

Condition	Mode	Frequency (MHz)	Max EIRP (dBm)	Limit (dBm)	Verdict
NVLT	1-DH5	2402	2.04	20	Pass
NVLT	1-DH5	2480	2.20	20	Pass
NVLT	2-DH5	2402	0.50	20	Pass
NVLT	2-DH5	2480	0.79	20	Pass
NVLT	3-DH5	2402	1.16	20	Pass
NVLT	3-DH5	2480	2.07	20	Pass

Condition	Mode	Frequency (MHz)	Max EIRP (dBm)	Limit (dBm)	Verdict
NVHT	1-DH5	2402	1.89	20	Pass
NVHT	1-DH5	2480	2.09	20	Pass
NVHT	2-DH5	2402	0.40	20	Pass
NVHT	2-DH5	2480	0.67	20	Pass
NVHT	3-DH5	2402	1.05	20	Pass
NVHT	3-DH5	2480	1.96	20	Pass

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

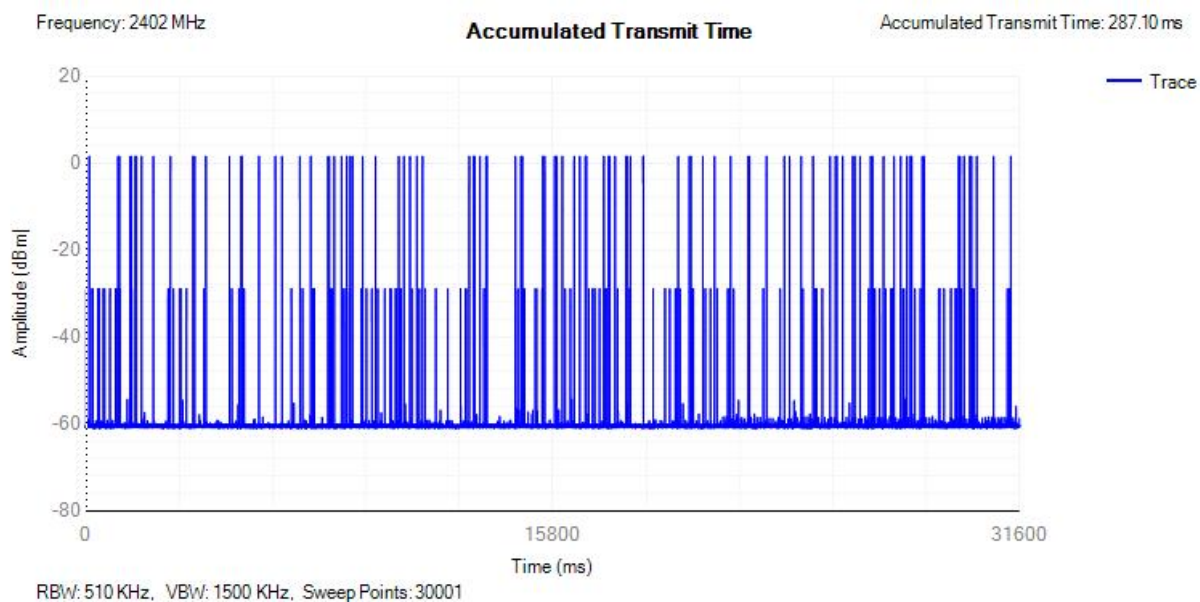




E.2 Accumulated Transmit Time

Condition	Mode	Frequency (MHz)	Accumulated Transmit Time (ms)	Limit (ms)	Sweep Time (ms)	Burst Number	Verdict
NVNT	1-DH5	2402	287.1	400	31600	99	Pass
NVNT	1-DH5	2480	301.6	400	31600	104	Pass
NVNT	2-DH5	2402	269.5	400	31600	98	Pass
NVNT	2-DH5	2480	286	400	31600	104	Pass
NVNT	3-DH5	2402	313.5	400	31600	114	Pass
NVNT	3-DH5	2480	308	400	31600	112	Pass

Dwell NVNT 1-DH5 2402MHz



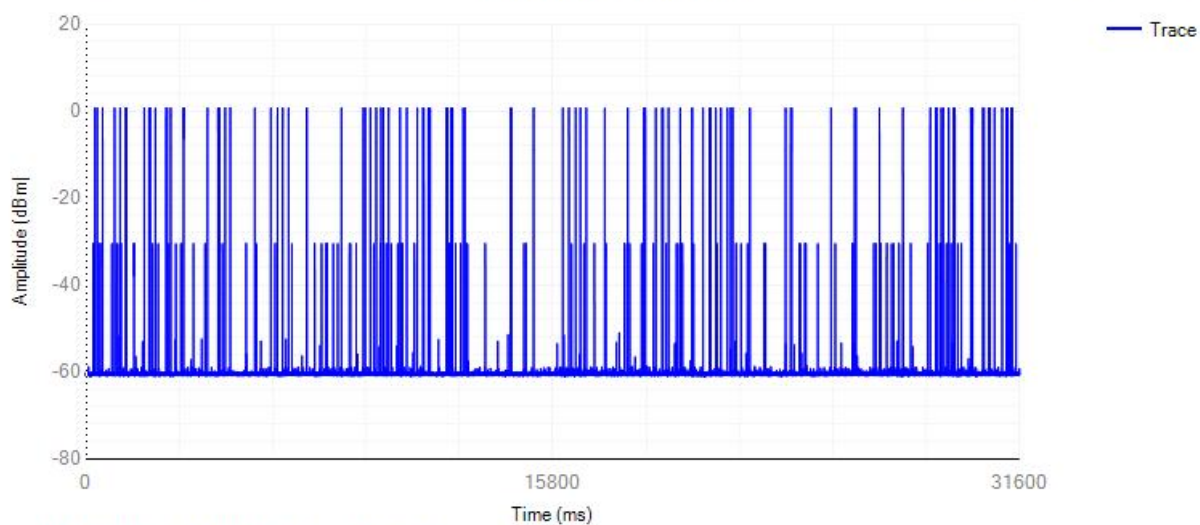


Dwell NVNT 1-DH5 2480MHz

Frequency: 2480 MHz

Accumulated Transmit Time

Accumulated Transmit Time: 301.60 ms

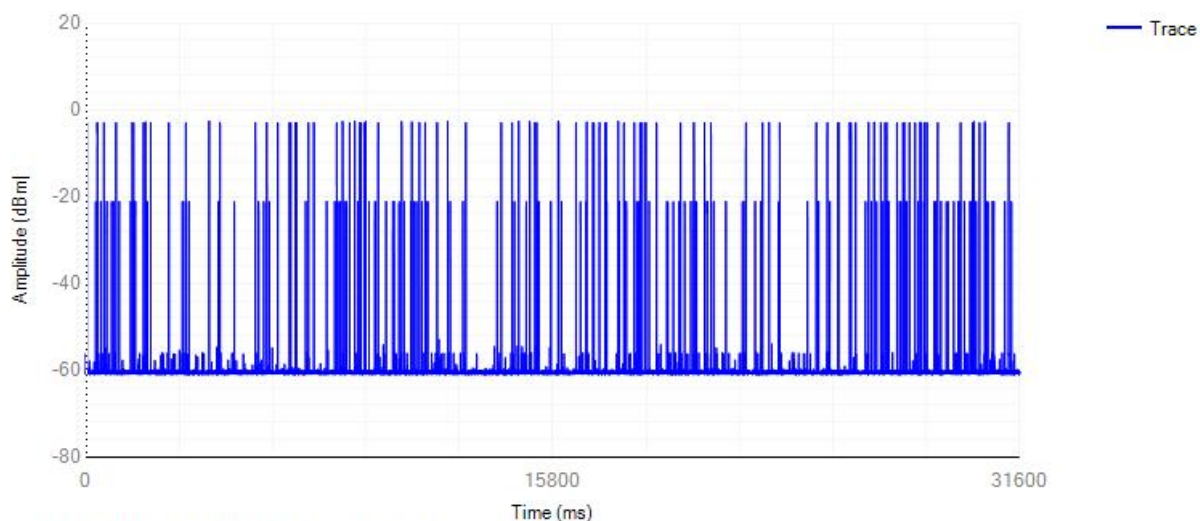


Dwell NVNT 2-DH5 2402MHz

Frequency: 2402 MHz

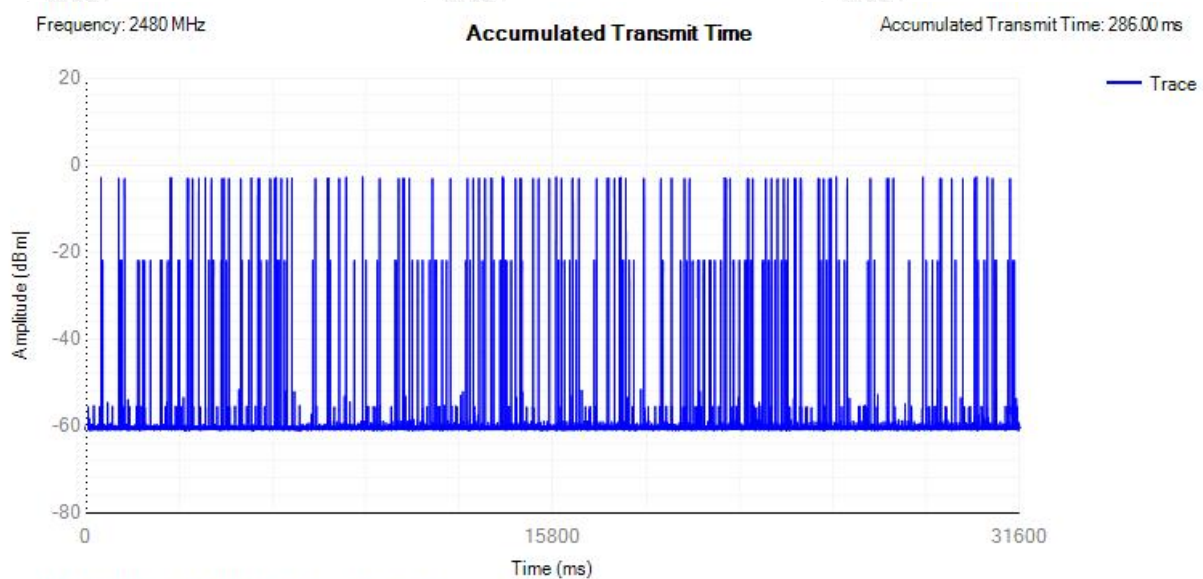
Accumulated Transmit Time

Accumulated Transmit Time: 269.50 ms

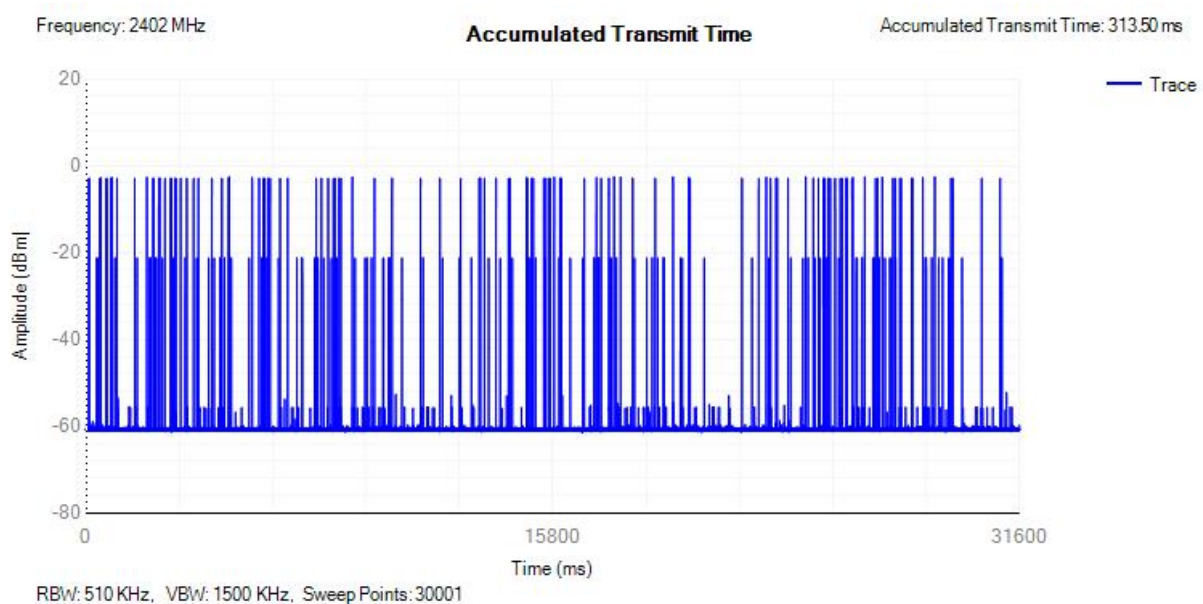


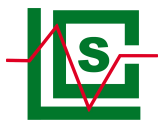


Dwell NVNT 2-DH5 2480MHz

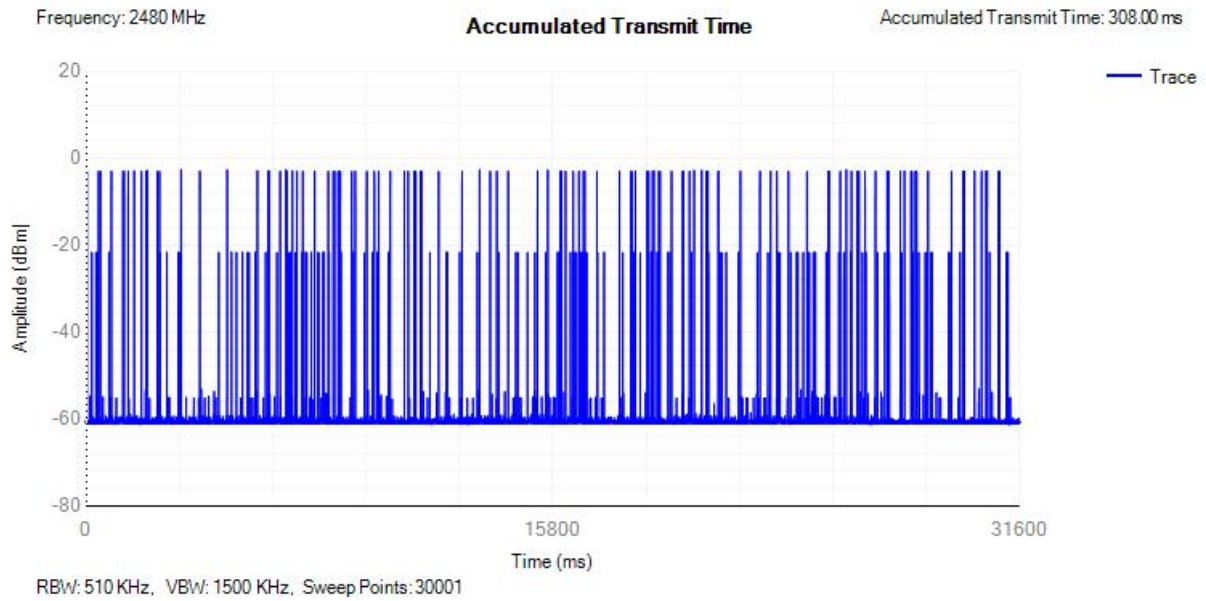


Dwell NVNT 3-DH5 2402MHz





Dwell NVNT 3-DH5 2480MHz

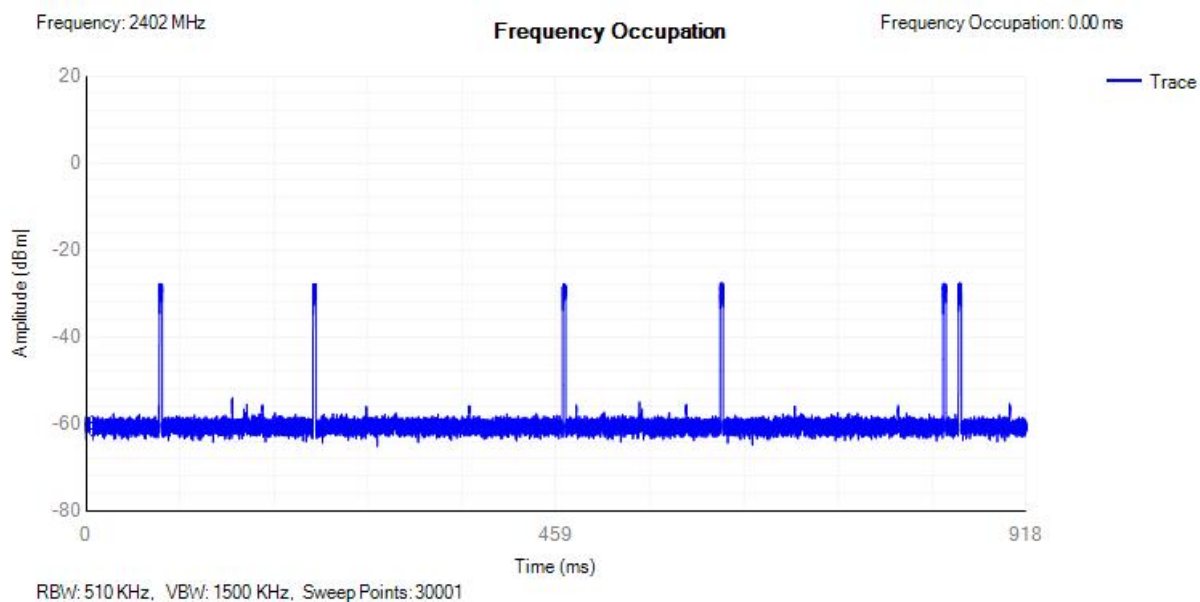




E.3 Frequency Occupation

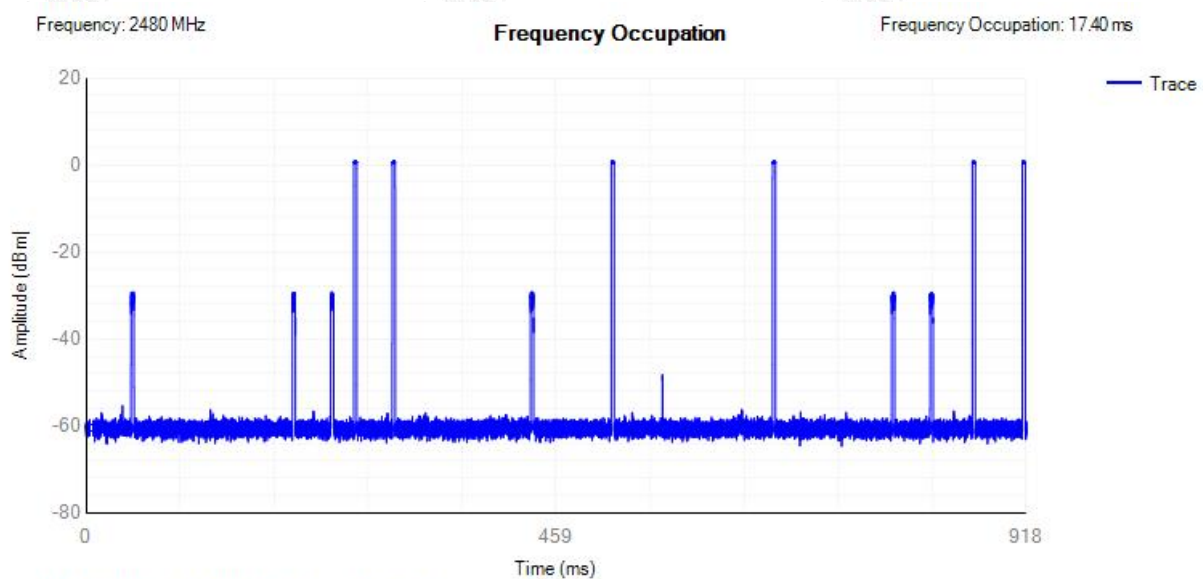
Condition	Mode	Frequency (MHz)	Frequency Occupation (ms)	Limit (ms)	Sweep Time (ms)	Burst Number	Verdict
NVNT	1-DH5	2402	0	0	916.4	0	Pass
NVNT	1-DH5	2480	17.4	0	916.4	6	Pass
NVNT	2-DH5	2402	5.5	0	869	2	Pass
NVNT	2-DH5	2480	5.5	0	869	2	Pass
NVNT	3-DH5	2402	5.5	0	869	2	Pass
NVNT	3-DH5	2480	8.25	0	869	3	Pass

Freq. Occup. NVNT 1-DH5 2402MHz

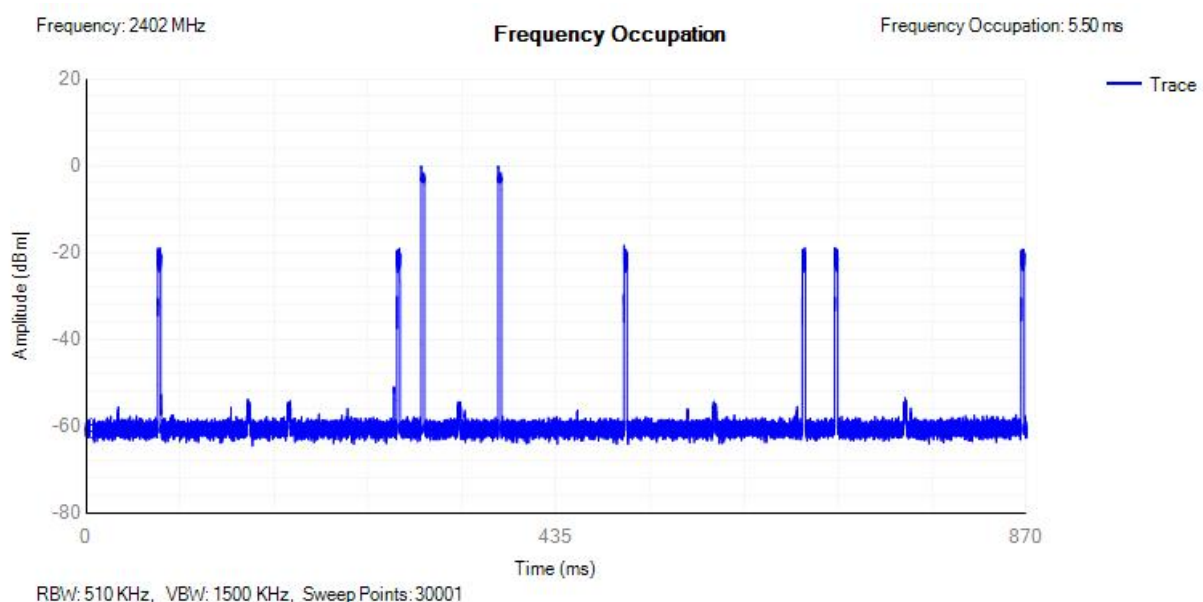




Freq. Occup. NVNT 1-DH5 2480MHz

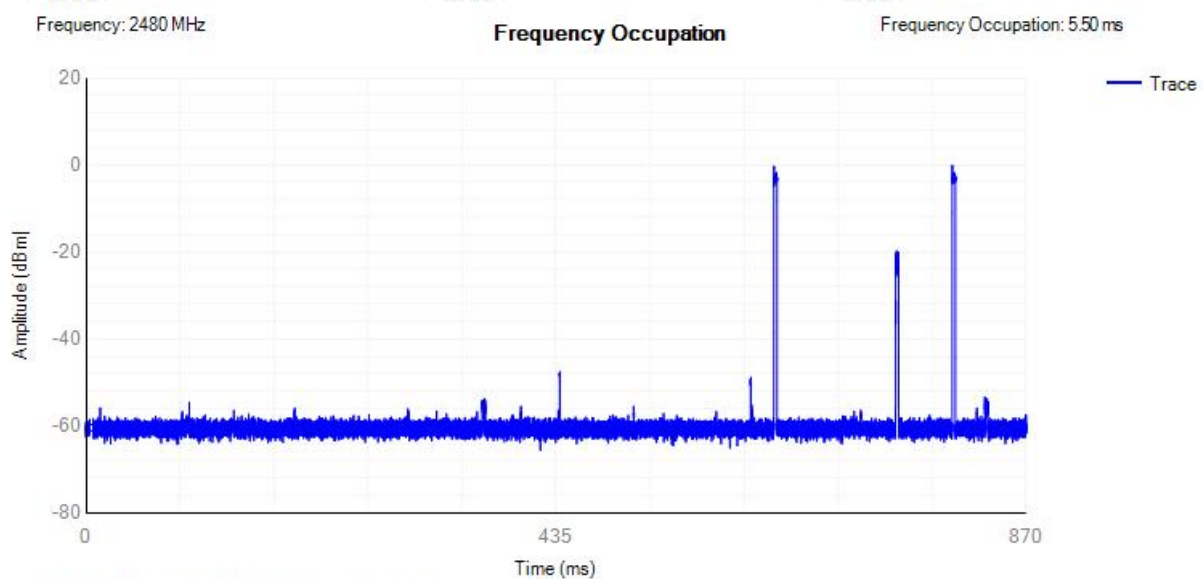


Freq. Occup. NVNT 2-DH5 2402MHz

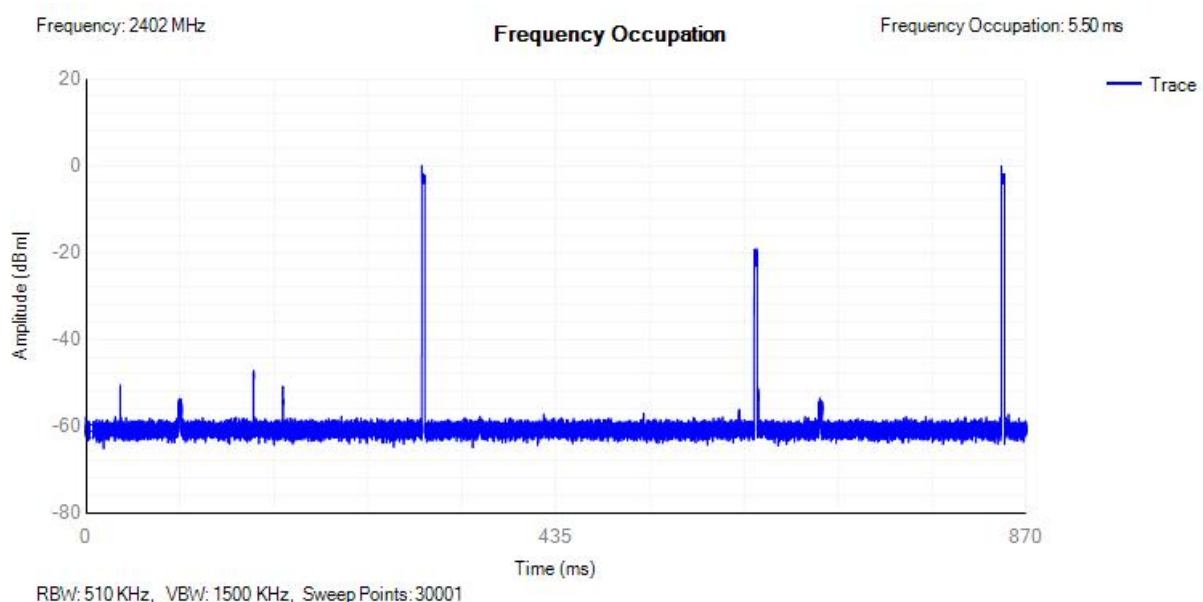




Freq. Occup. NVNT 2-DH5 2480MHz

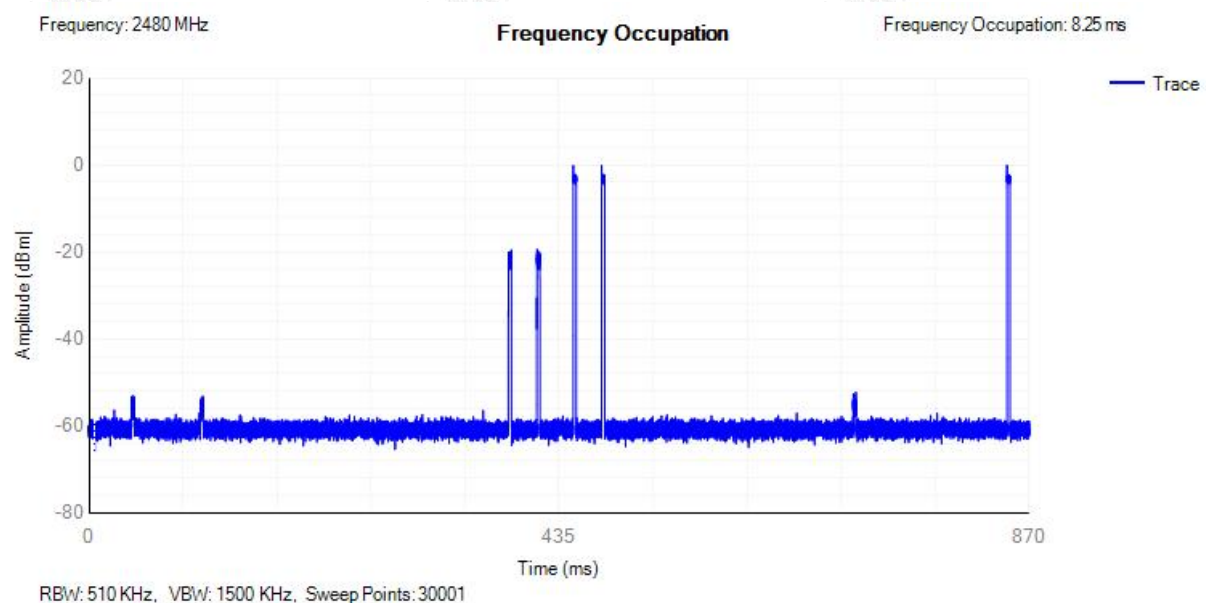


Freq. Occup. NVNT 3-DH5 2402MHz





Freq. Occup. NVNT 3-DH5 2480MHz

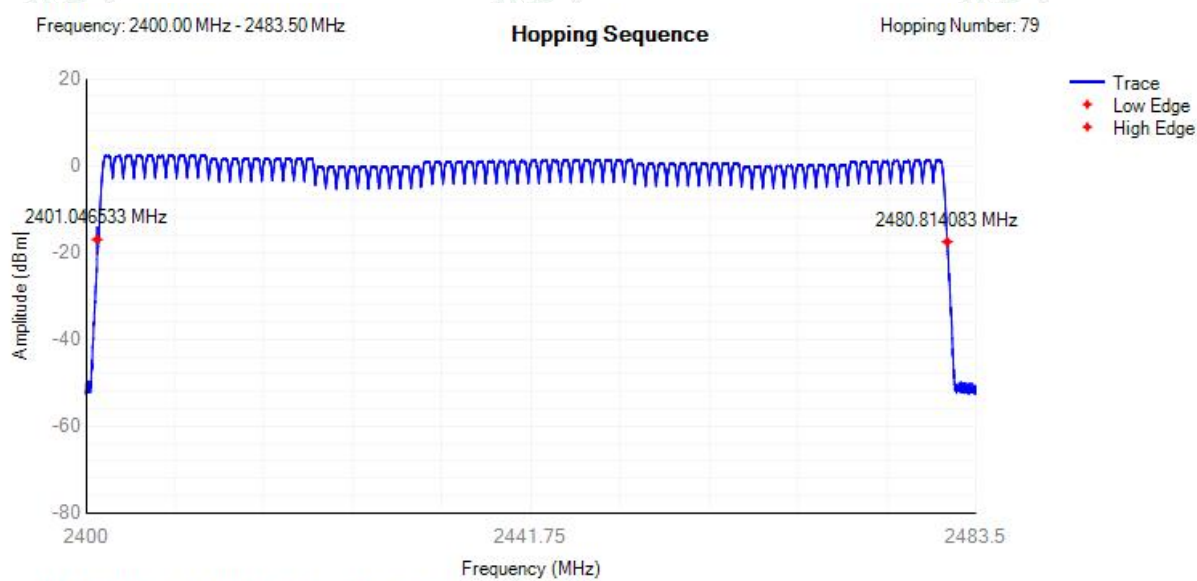




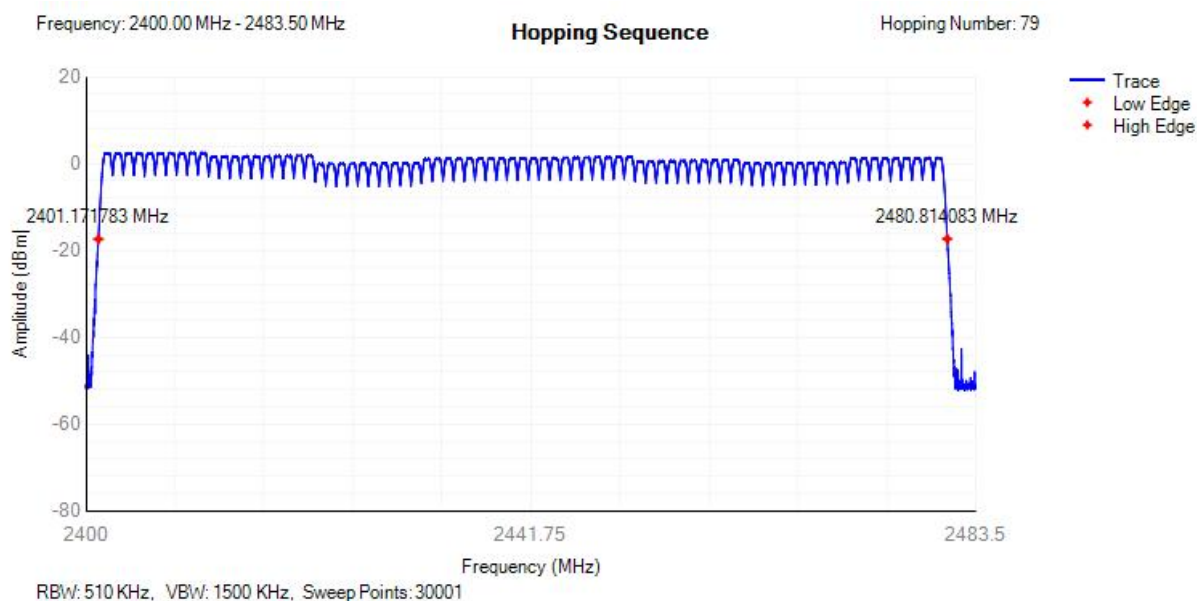
E.4 Hopping Sequence

Condition	Mode	Hopping Number	Limit	Band Allocation (%)	Limit Band Allocation (%)	Verdict
NVNT	1-DH5	79	15	95.53	70	Pass
NVNT	1-DH5	79	15	95.37	70	Pass
NVNT	2-DH5	79	15	95.97	70	Pass
NVNT	2-DH5	79	15	95.96	70	Pass
NVNT	3-DH5	79	15	95.96	70	Pass
NVNT	3-DH5	79	15	95.95	70	Pass

Hopping Seq. NVNT 1-DH5 2402MHz

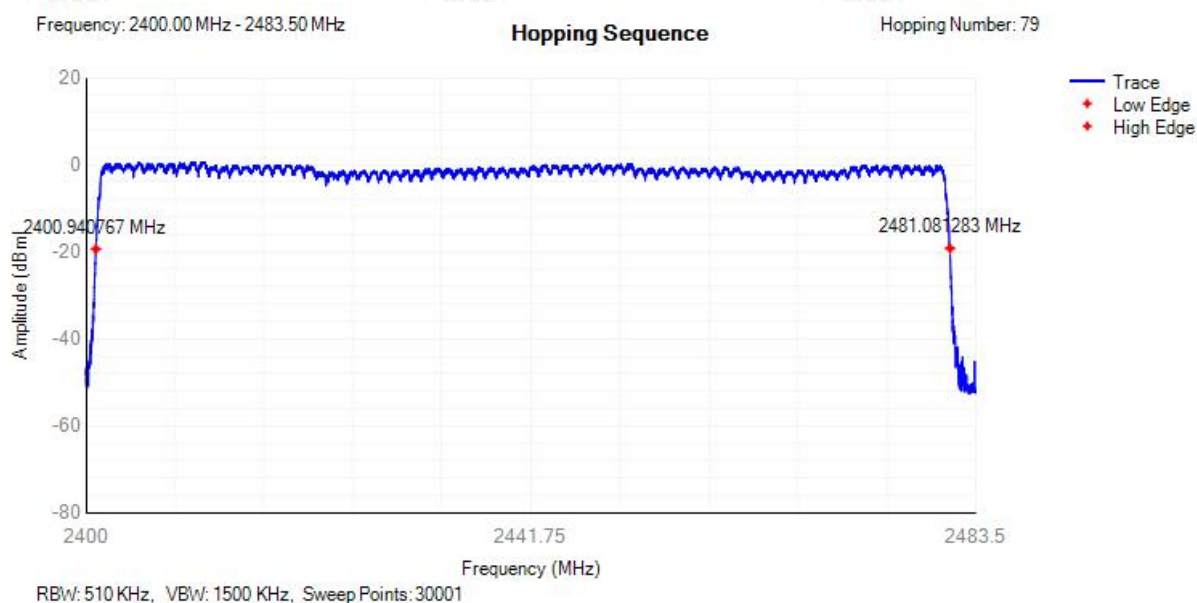


Hopping Seq. NVNT 1-DH5 2480MHz

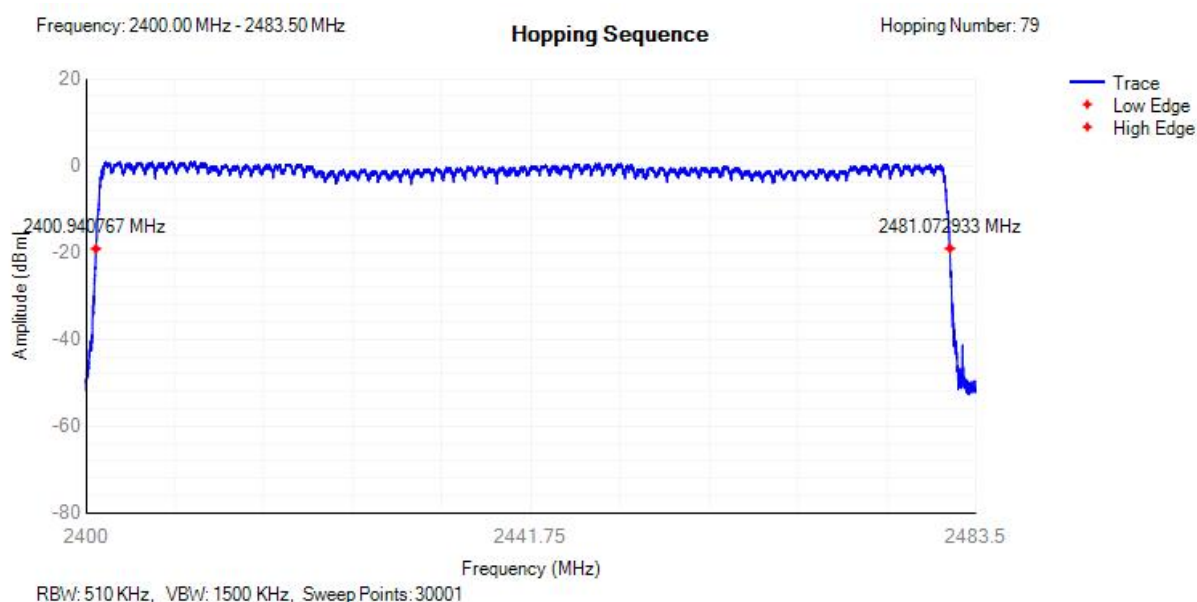




Hopping Seq. NVNT 2-DH5 2402MHz

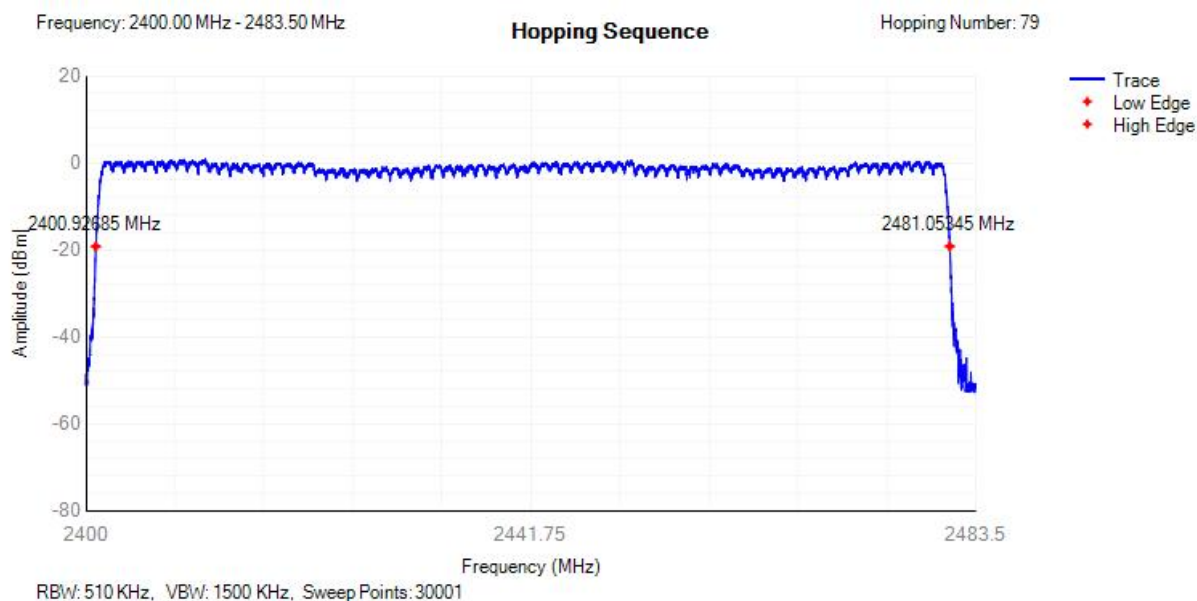


Hopping Seq. NVNT 2-DH5 2480MHz

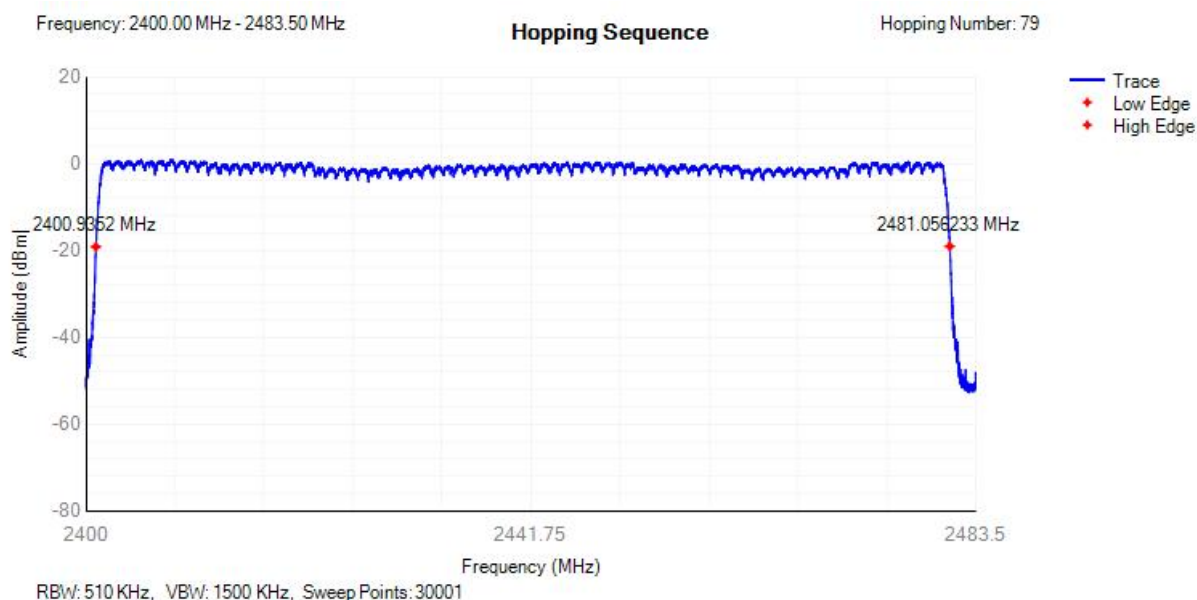




Hopping Seq. NVNT 3-DH5 2402MHz



Hopping Seq. NVNT 3-DH5 2480MHz

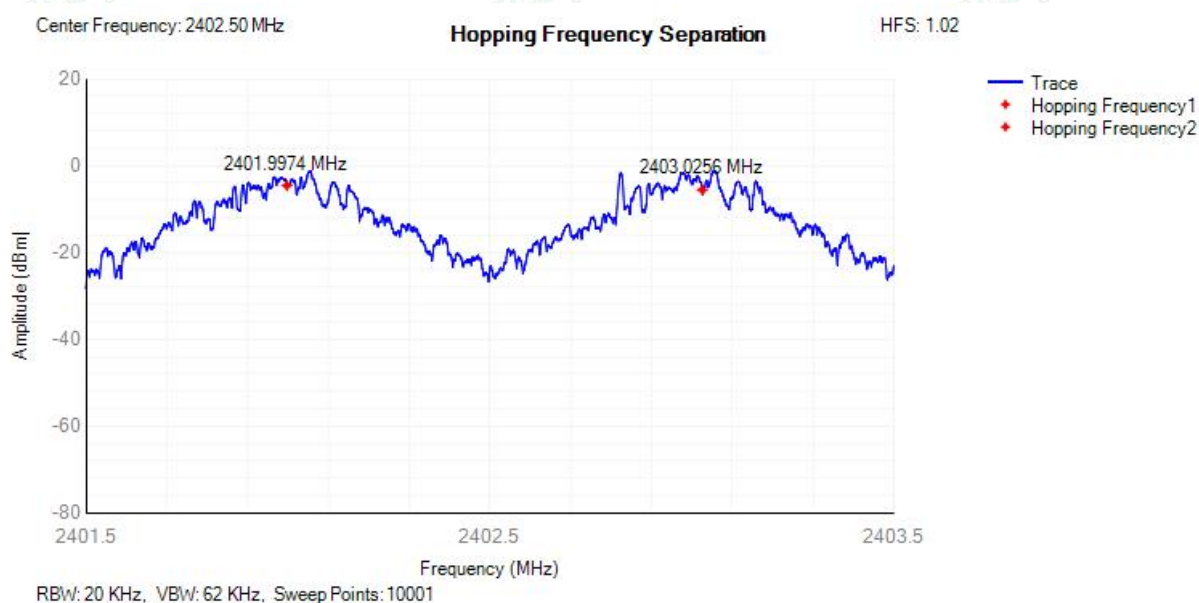




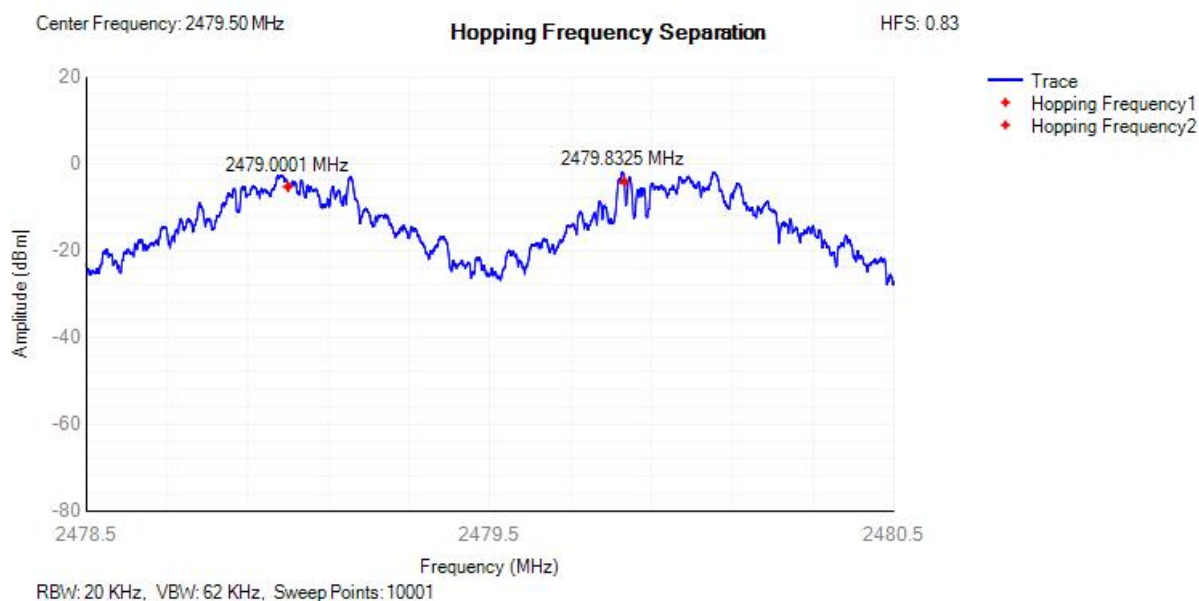
E.5 Hopping Frequency Separation

Condition	Mode	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	2401.9974	2403.0256	1.02	0.1	Pass
NVNT	1-DH5	2479.0001	2479.8325	0.83	0.1	Pass
NVNT	2-DH5	2402.0041	2403.0292	1.02	0.1	Pass
NVNT	2-DH5	2479.0049	2479.9364	0.93	0.1	Pass
NVNT	3-DH5	2401.946	2403.1954	1.24	0.1	Pass
NVNT	3-DH5	2479.0365	2480.0158	0.97	0.1	Pass

HFS NVNT 1-DH5 2402MHz



HFS NVNT 1-DH5 2480MHz



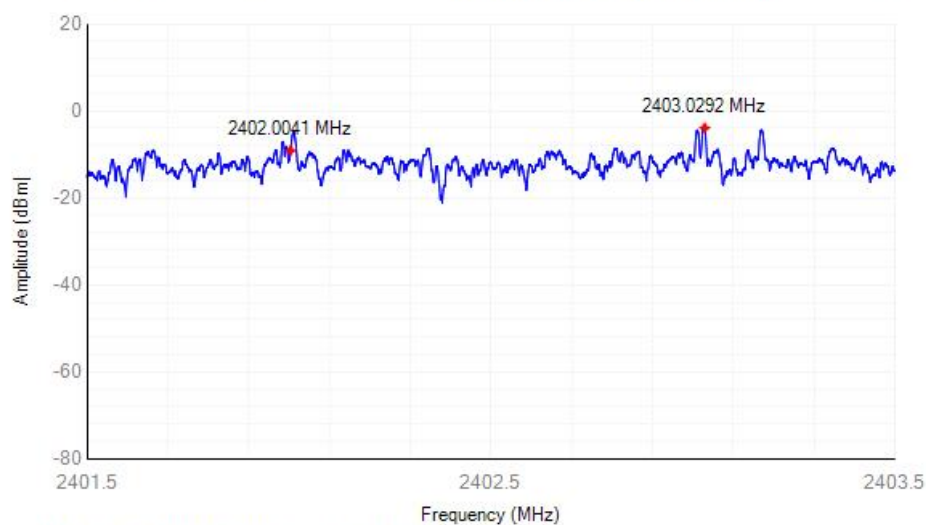


HFS NVNT 2-DH5 2402MHz

Center Frequency: 2402.50 MHz

Hopping Frequency Separation

HFS: 1.02

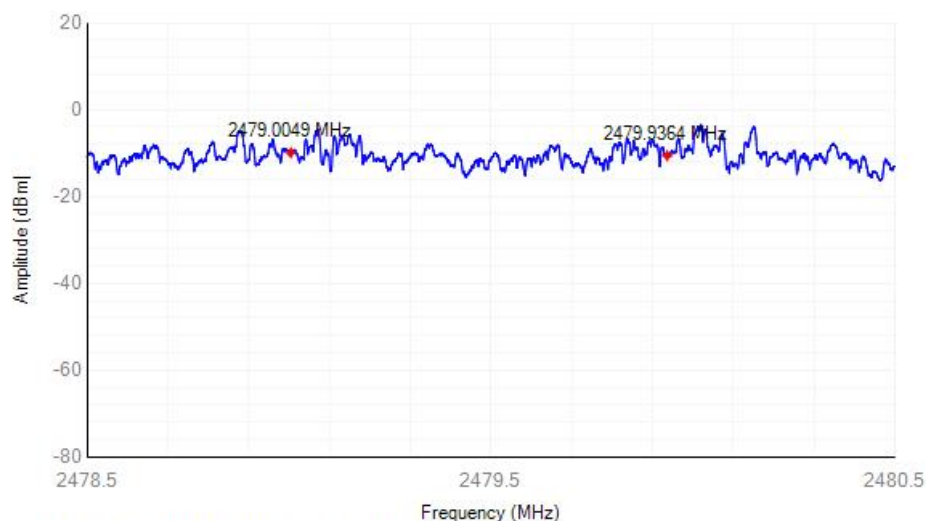


HFS NVNT 2-DH5 2480MHz

Center Frequency: 2479.50 MHz

Hopping Frequency Separation

HFS: 0.93



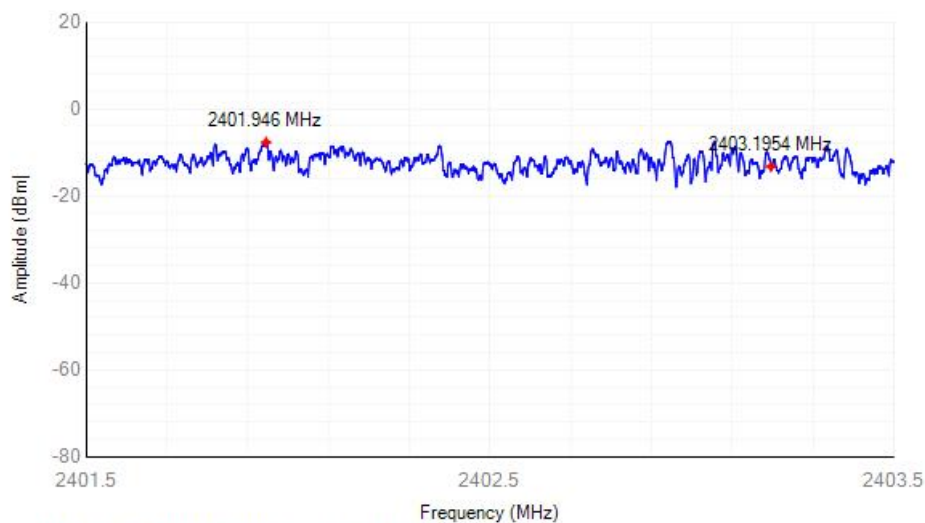


HFS NVNT 3-DH5 2402MHz

Center Frequency: 2402.50 MHz

Hopping Frequency Separation

HFS: 1.24

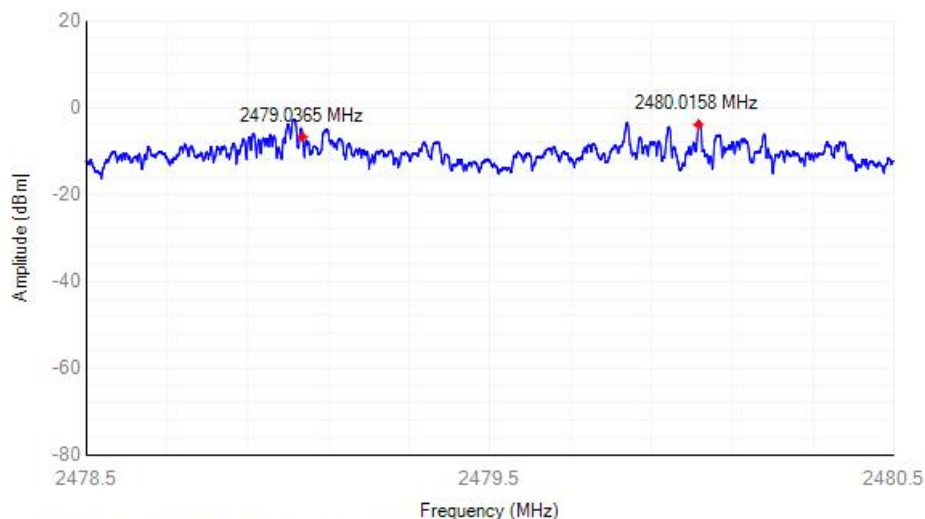


HFS NVNT 3-DH5 2480MHz

Center Frequency: 2479.50 MHz

Hopping Frequency Separation

HFS: 0.97

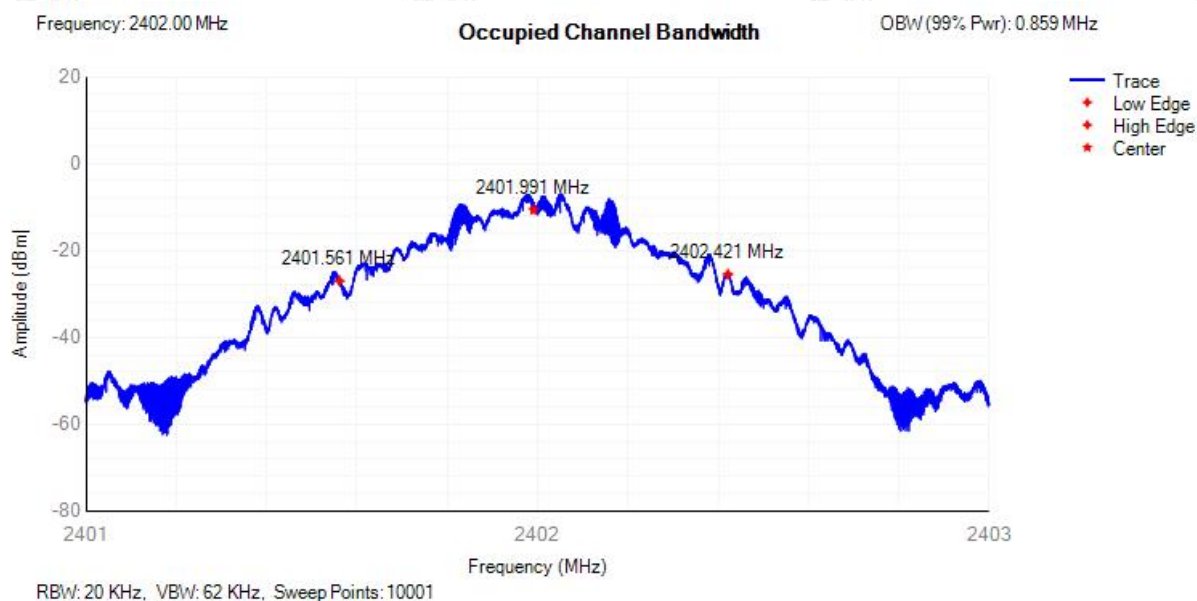




E.6 Occupied Channel Bandwidth

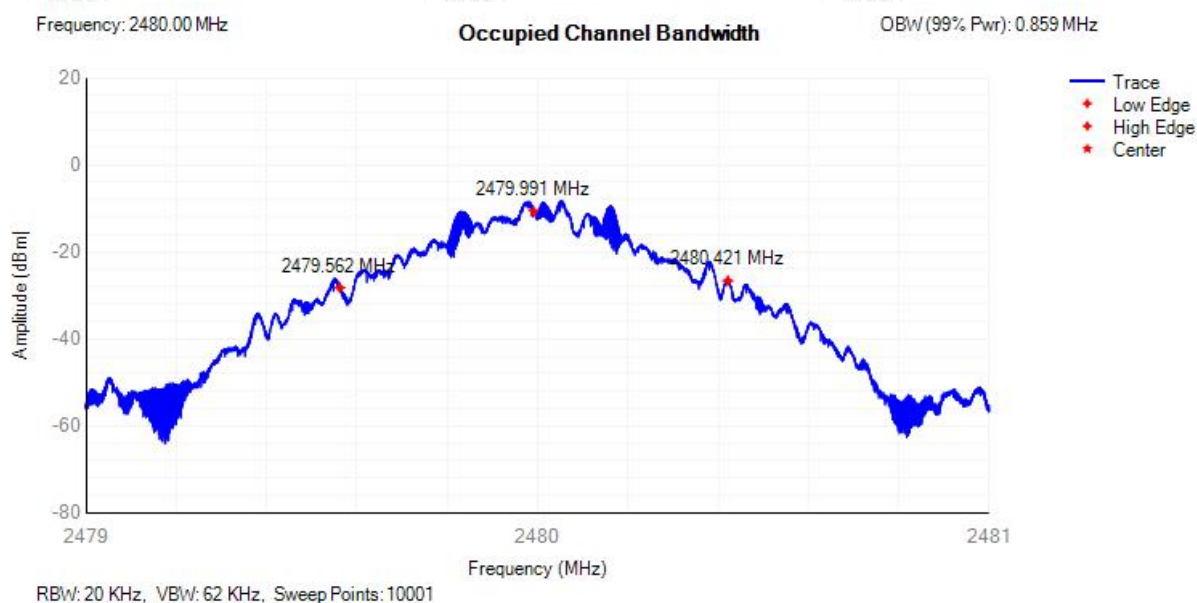
Condition	Mode	Frequency (MHz)	Center Frequency (MHz)	OBW (MHz)	Lower Edge (MHz)	Upper Edge (MHz)	Limit OBW (MHz)	Verdict
NVNT	1-DH5	2402	2401.991	0.859	2401.561	2402.421	2400 - 2483.5MHz	Pass
NVNT	1-DH5	2480	2479.991	0.859	2479.562	2480.421	2400 - 2483.5MHz	Pass
NVNT	2-DH5	2402	2401.994	1.178	2401.405	2402.583	2400 - 2483.5MHz	Pass
NVNT	2-DH5	2480	2479.994	1.179	2479.404	2480.583	2400 - 2483.5MHz	Pass
NVNT	3-DH5	2402	2401.992	1.193	2401.396	2402.589	2400 - 2483.5MHz	Pass
NVNT	3-DH5	2480	2479.992	1.194	2479.395	2480.59	2400 - 2483.5MHz	Pass

OBW NVNT 1-DH5 2402MHz

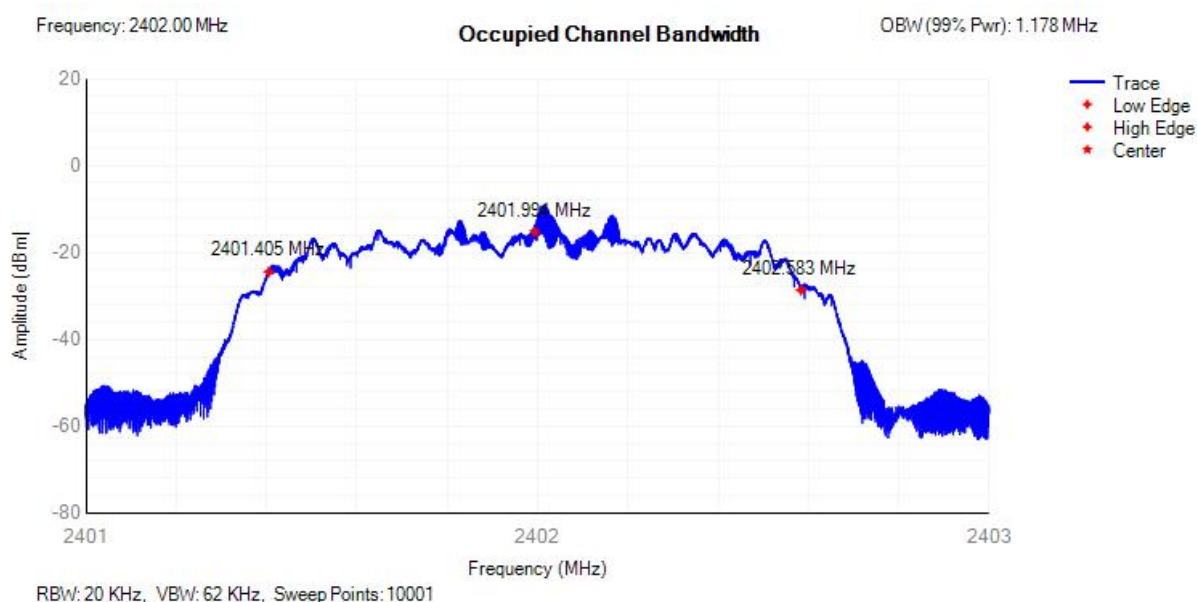




OBW NVNT 1-DH5 2480MHz

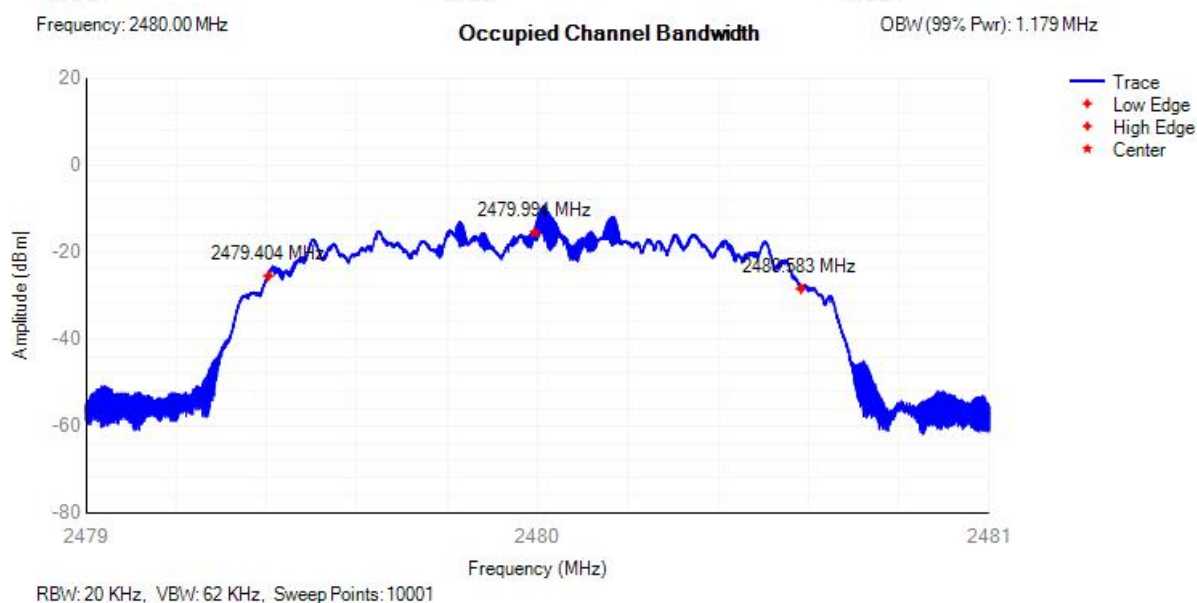


OBW NVNT 2-DH5 2402MHz

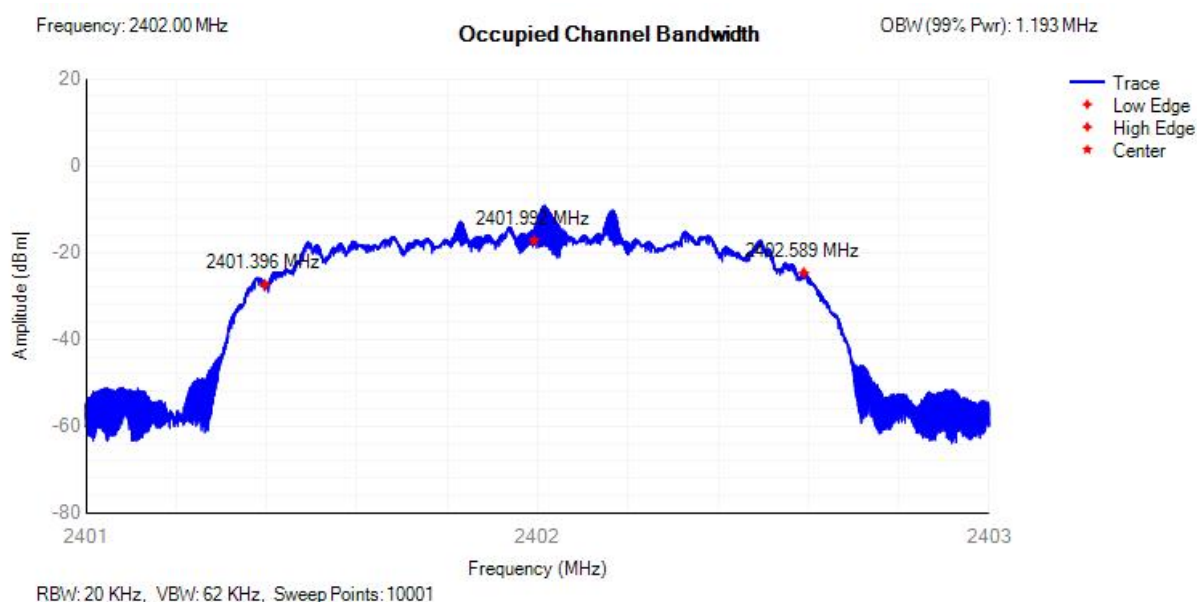




OBW NVNT 2-DH5 2480MHz

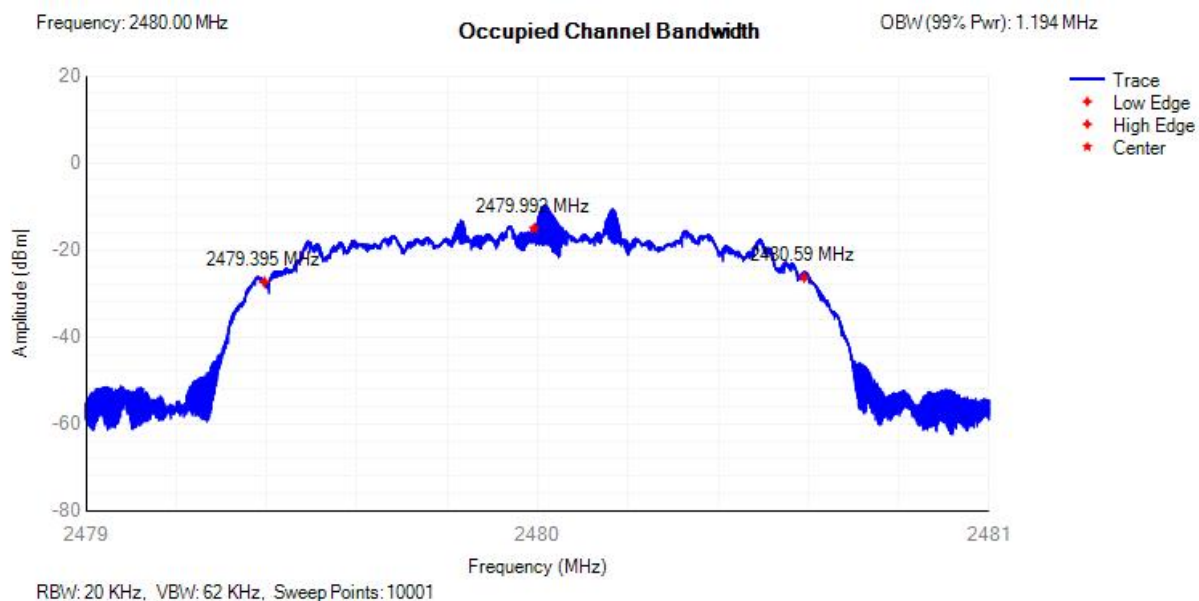


OBW NVNT 3-DH5 2402MHz





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	-76.6	-10	Pass
NVNT	1-DH5	2402	2398.5	-75.82	-20	Pass
NVNT	1-DH5	2402	2484	-74.51	-10	Pass
NVNT	1-DH5	2402	2485	-74.75	-20	Pass
NVNT	1-DH5	2480	2399.5	-76.95	-10	Pass
NVNT	1-DH5	2480	2398.5	-69.24	-20	Pass
NVNT	1-DH5	2480	2484	-74.04	-10	Pass
NVNT	1-DH5	2480	2485	-74.38	-20	Pass
NVNT	2-DH5	2402	2399.5	-72.86	-10	Pass
NVNT	2-DH5	2402	2399.322	-72.89	-10	Pass
NVNT	2-DH5	2402	2398.322	-77	-20	Pass
NVNT	2-DH5	2402	2398.144	-74.47	-20	Pass
NVNT	2-DH5	2402	2484	-77.07	-10	Pass
NVNT	2-DH5	2402	2484.179	-77.01	-10	Pass
NVNT	2-DH5	2402	2485.179	-75.51	-20	Pass
NVNT	2-DH5	2402	2485.358	-72.15	-20	Pass
NVNT	2-DH5	2480	2399.5	-57.3	-10	Pass
NVNT	2-DH5	2480	2399.322	-76.76	-10	Pass
NVNT	2-DH5	2480	2398.322	-76.82	-20	Pass
NVNT	2-DH5	2480	2398.144	-75.73	-20	Pass
NVNT	2-DH5	2480	2484	-76.88	-10	Pass
NVNT	2-DH5	2480	2484.179	-76.94	-10	Pass
NVNT	2-DH5	2480	2485.179	-67	-20	Pass
NVNT	2-DH5	2480	2485.358	-76.8	-20	Pass
NVNT	3-DH5	2402	2399.5	-75.3	-10	Pass
NVNT	3-DH5	2402	2399.307	-77.3	-10	Pass
NVNT	3-DH5	2402	2398.307	-72.1	-20	Pass
NVNT	3-DH5	2402	2398.114	-73.45	-20	Pass
NVNT	3-DH5	2402	2484	-73.87	-10	Pass
NVNT	3-DH5	2402	2484.194	-77.15	-10	Pass
NVNT	3-DH5	2402	2485.194	-77.13	-20	Pass
NVNT	3-DH5	2402	2485.388	-77.19	-20	Pass
NVNT	3-DH5	2480	2399.5	-74.84	-10	Pass
NVNT	3-DH5	2480	2399.307	-74.82	-10	Pass
NVNT	3-DH5	2480	2398.307	-75.94	-20	Pass



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

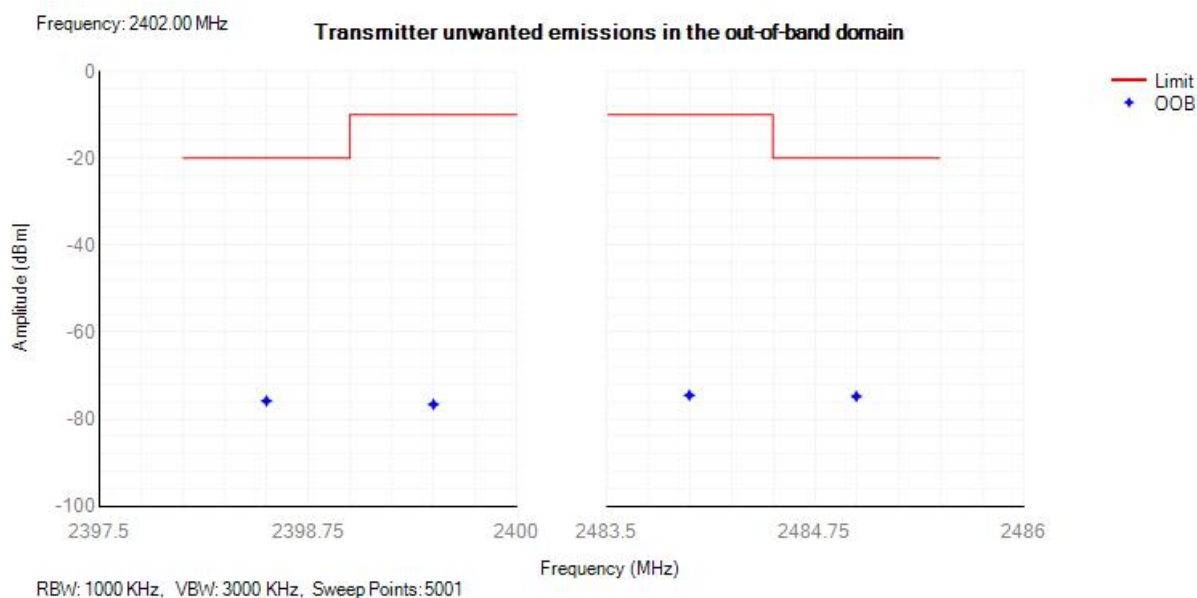
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity

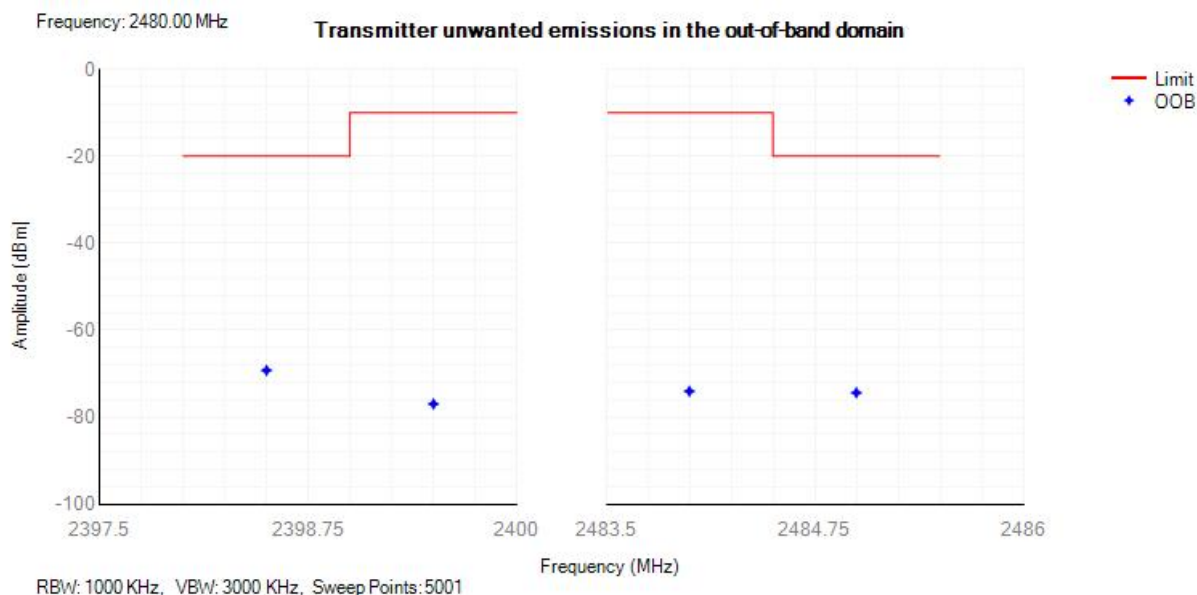


NVNT	3-DH5	2480	2398.114	-67.79	-20	Pass
NVNT	3-DH5	2480	2484	-77.02	-10	Pass
NVNT	3-DH5	2480	2484.194	-71.8	-10	Pass
NVNT	3-DH5	2480	2485.194	-72.41	-20	Pass
NVNT	3-DH5	2480	2485.388	-76.86	-20	Pass

Tx. Emissions OOB NVNT 1-DH5 2402MHz

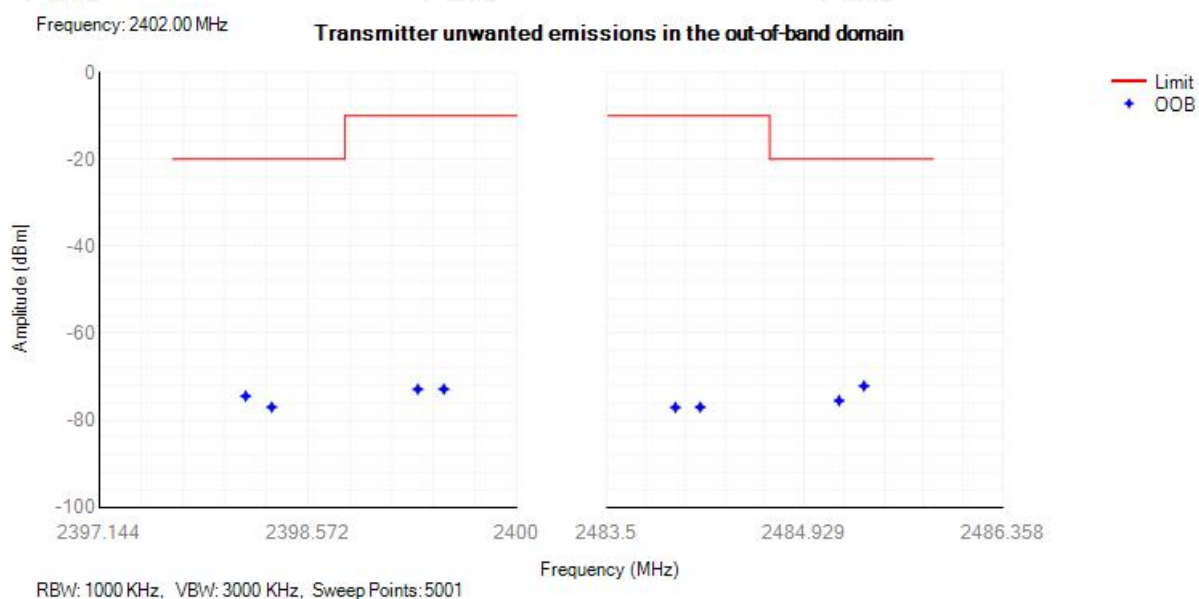


Tx. Emissions OOB NVNT 1-DH5 2480MHz

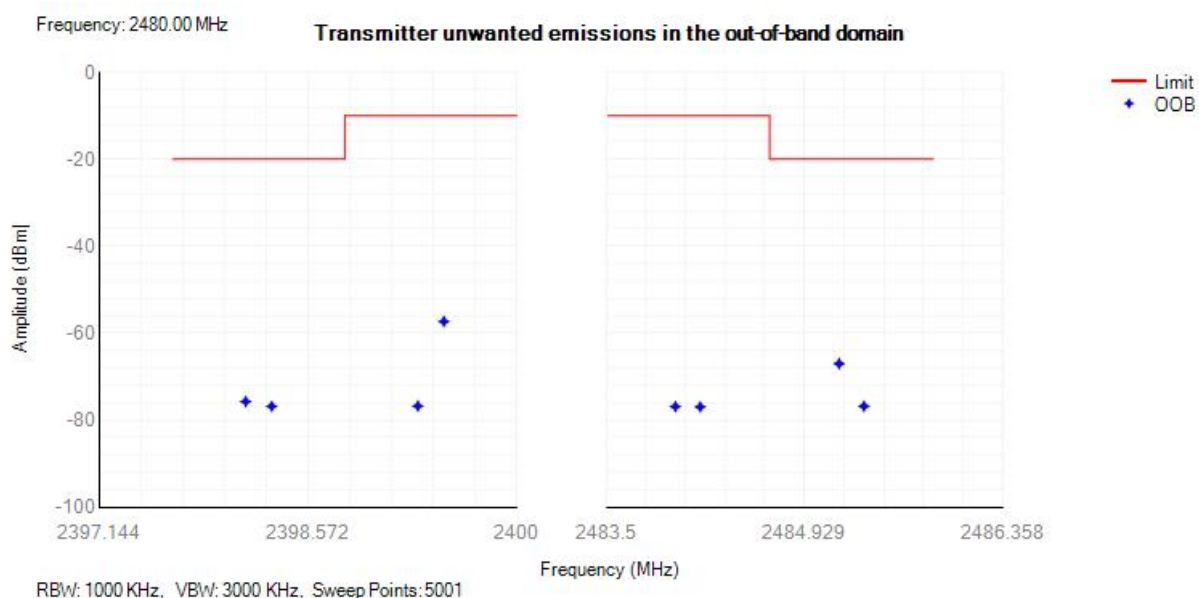




Tx. Emissions OOB NVNT 2-DH5 2402MHz

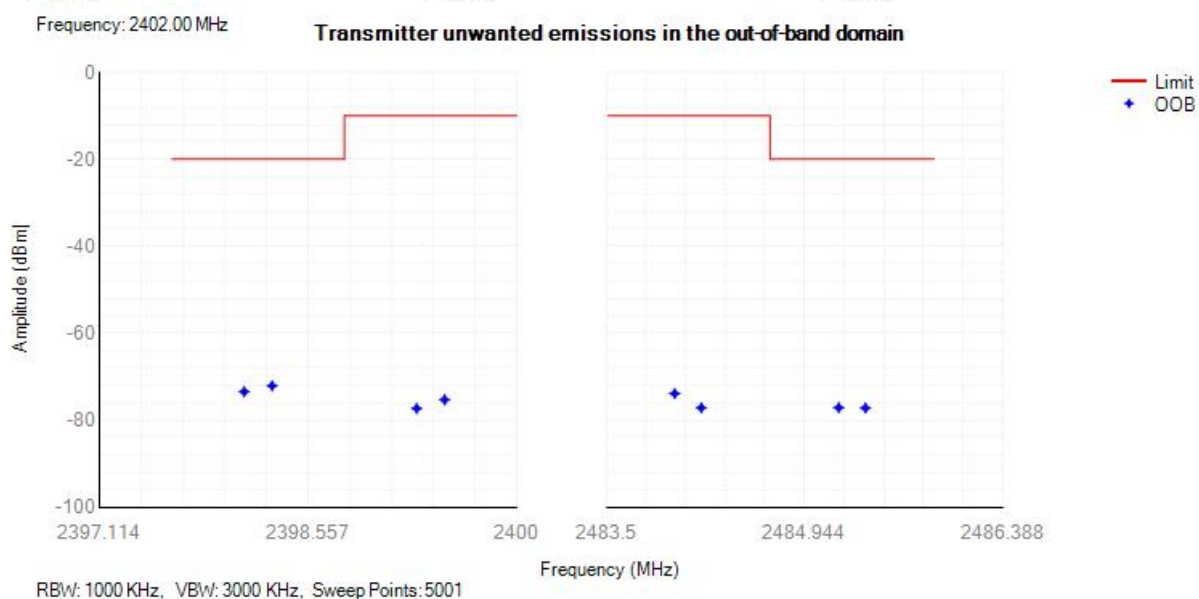


Tx. Emissions OOB NVNT 2-DH5 2480MHz

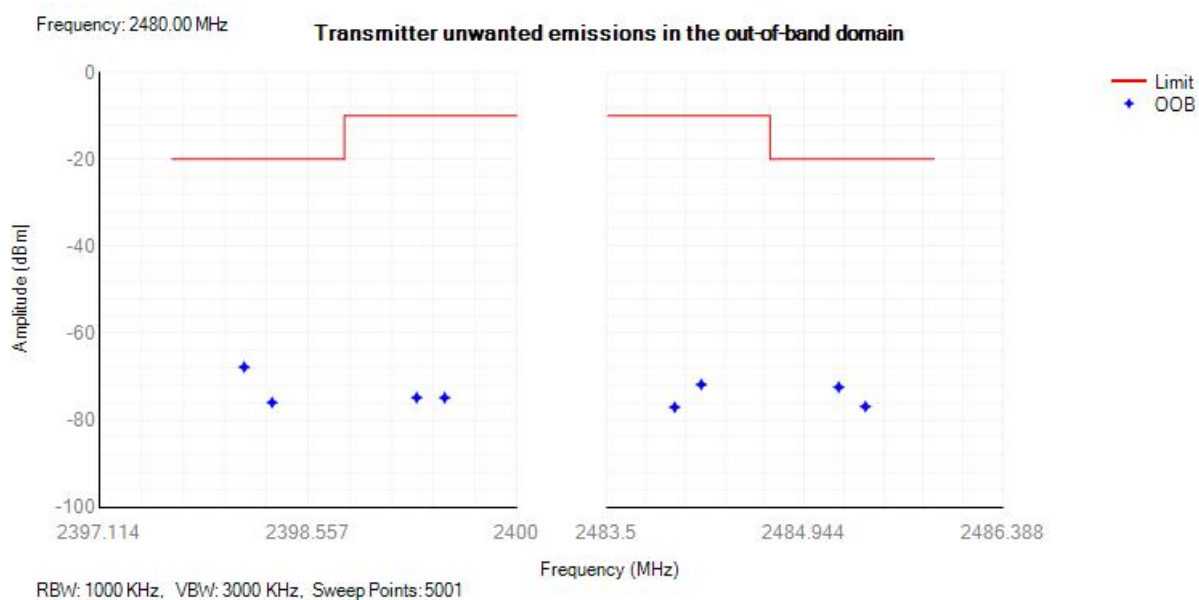




Tx. Emissions OOB NVNT 3-DH5 2402MHz



Tx. Emissions OOB NVNT 3-DH5 2480MHz

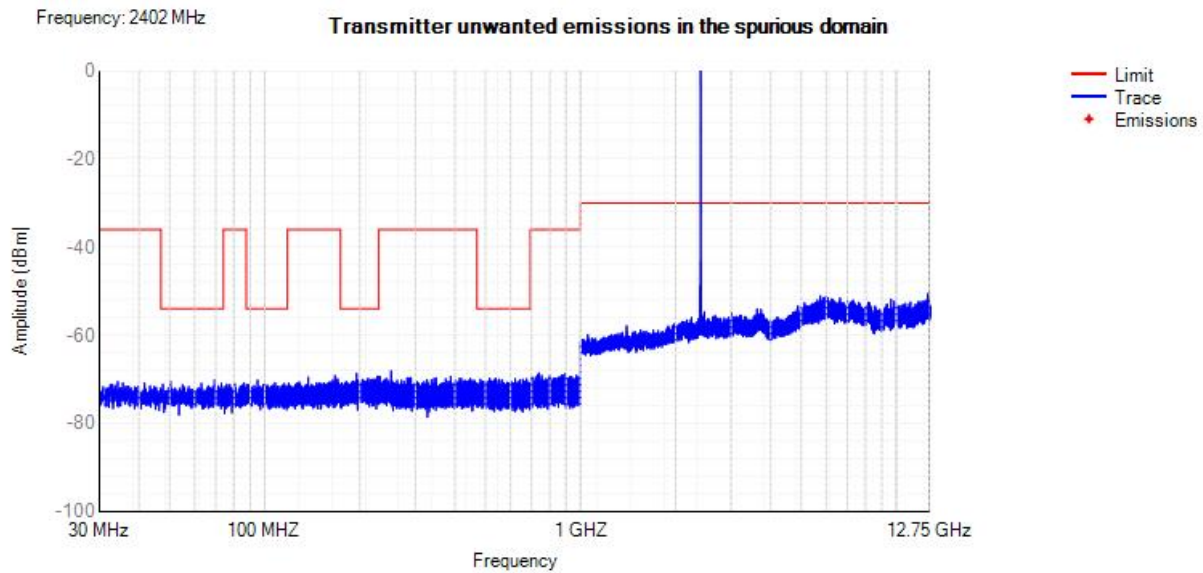




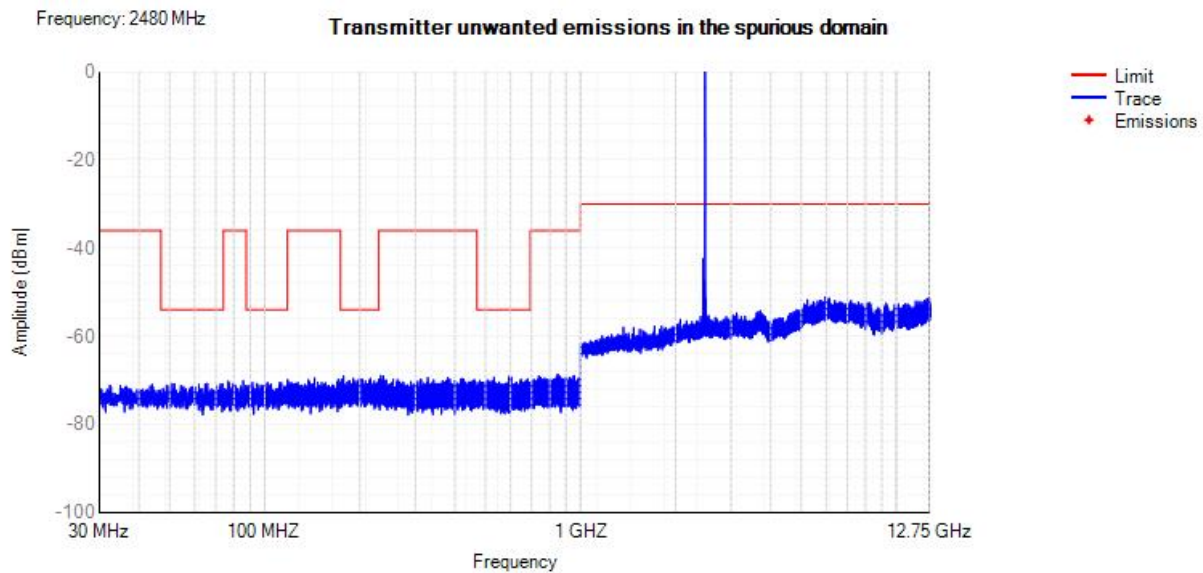
E.8 Transmitter unwanted emissions in the spurious domain

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

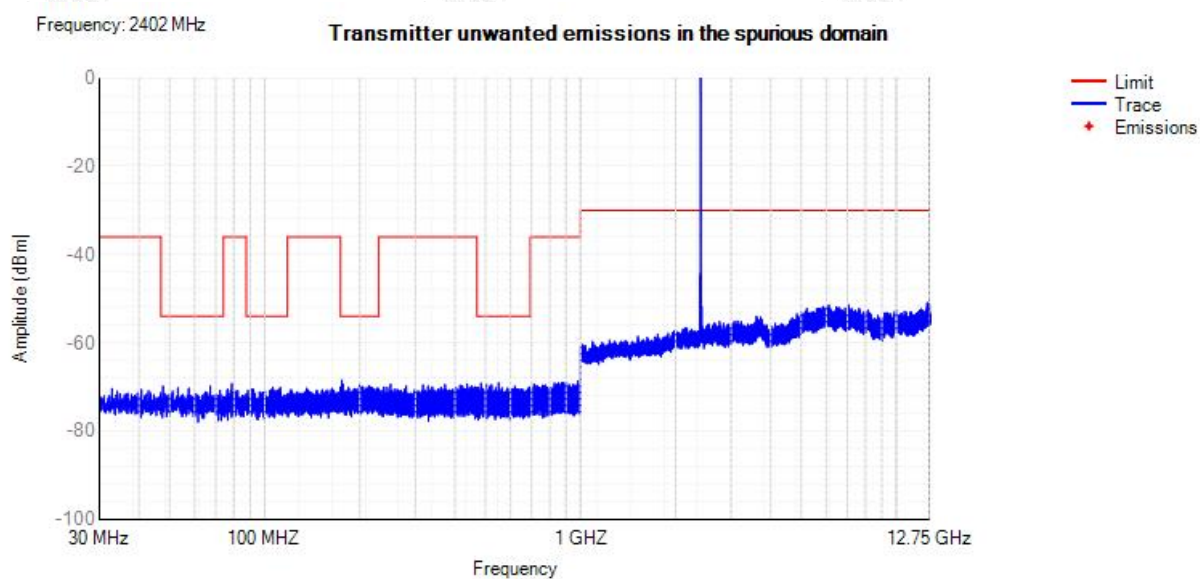


Tx. Spurious NVNT 1-DH5 2480MHz

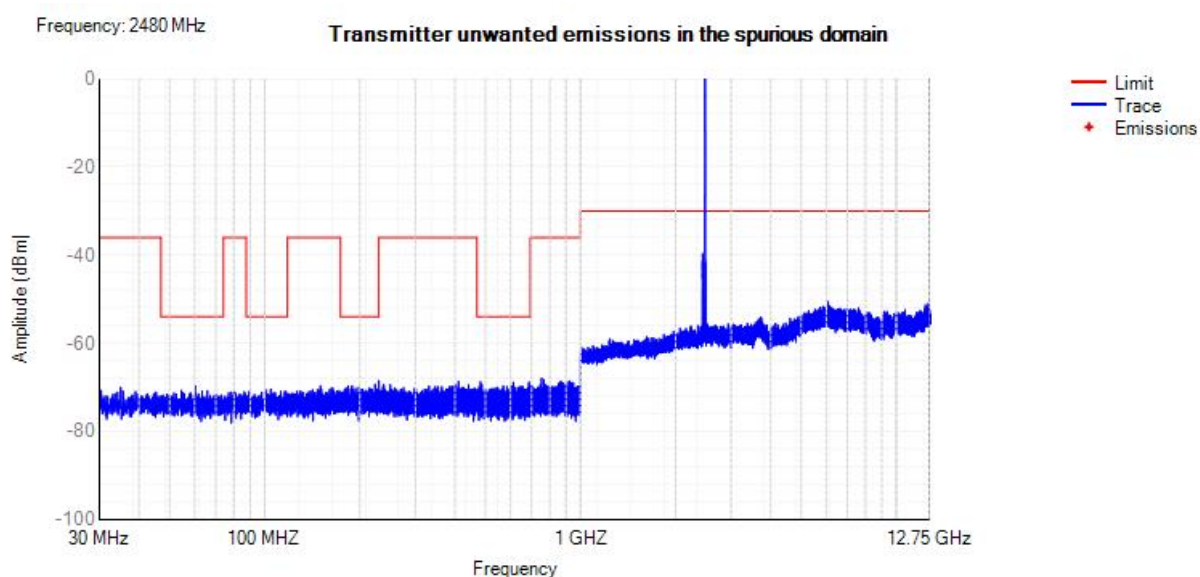




Tx. Spurious NVNT 2-DH5 2402MHz

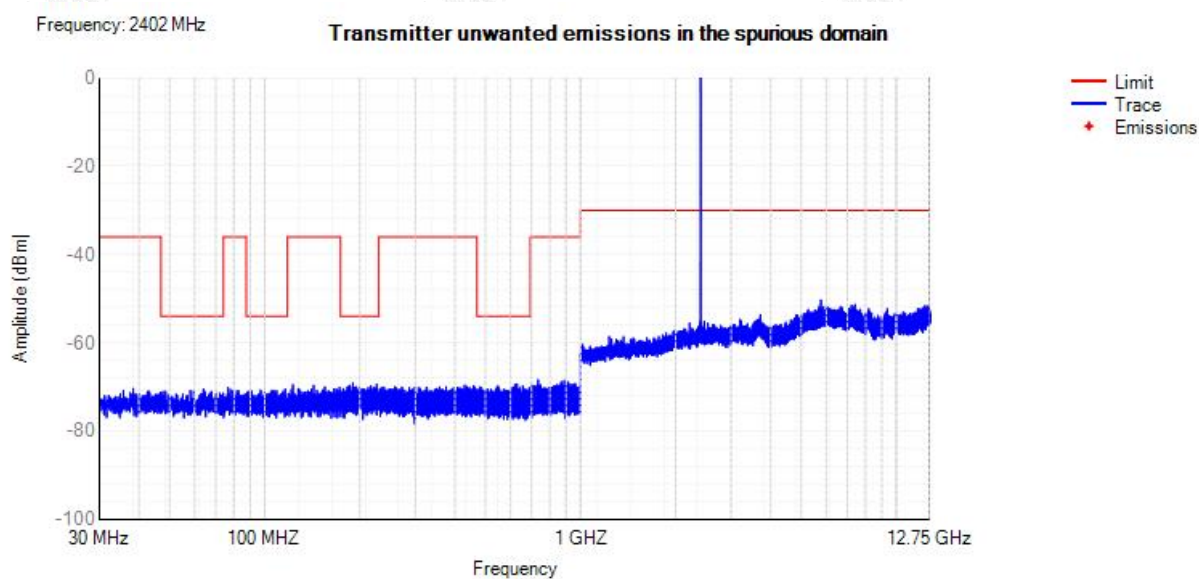


Tx. Spurious NVNT 2-DH5 2480MHz

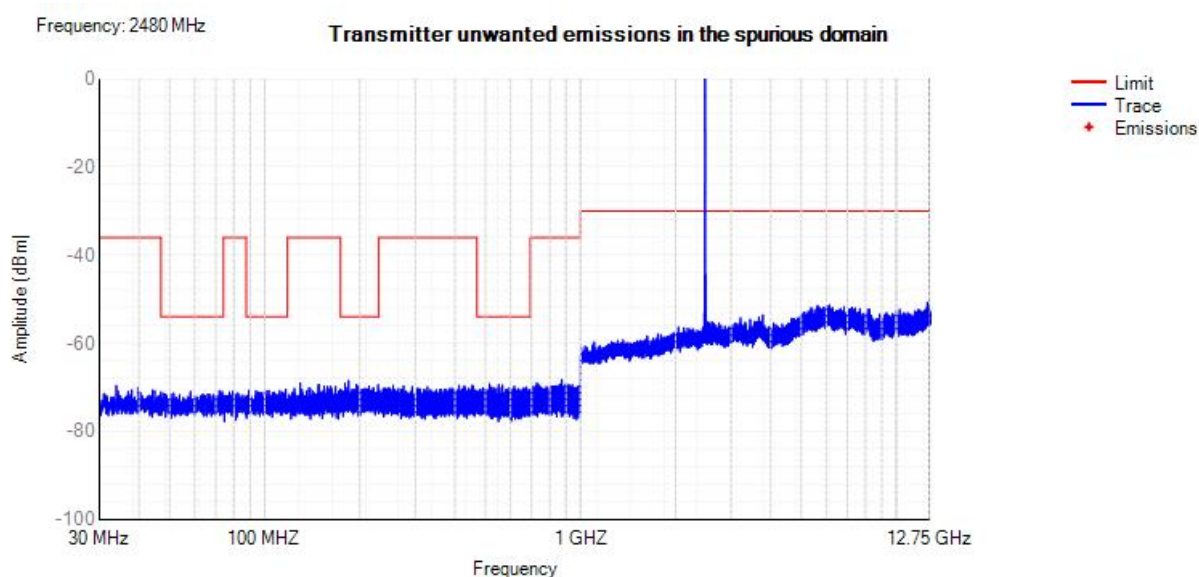




Tx. Spurious NVNT 3-DH5 2402MHz



Tx. Spurious NVNT 3-DH5 2480MHz

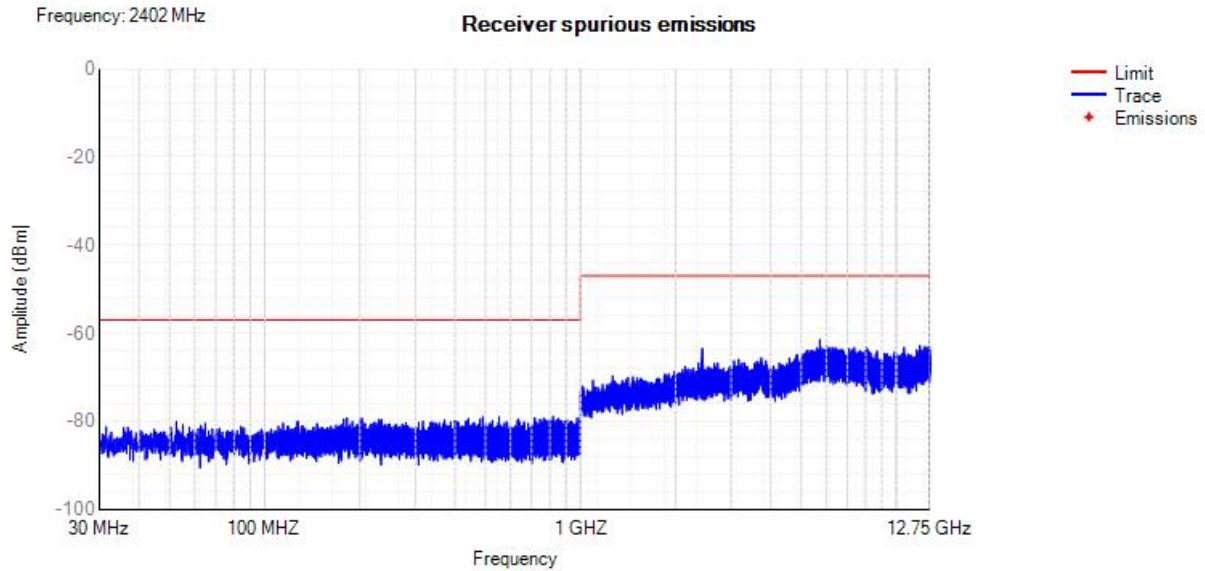




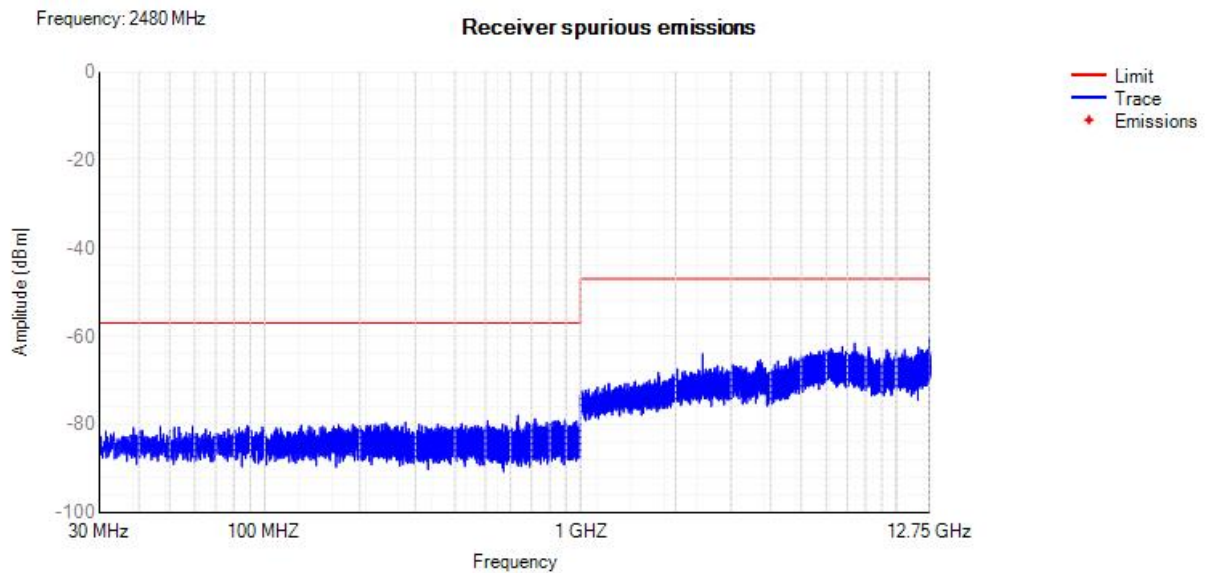
E.9 Receiver spurious emissions

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

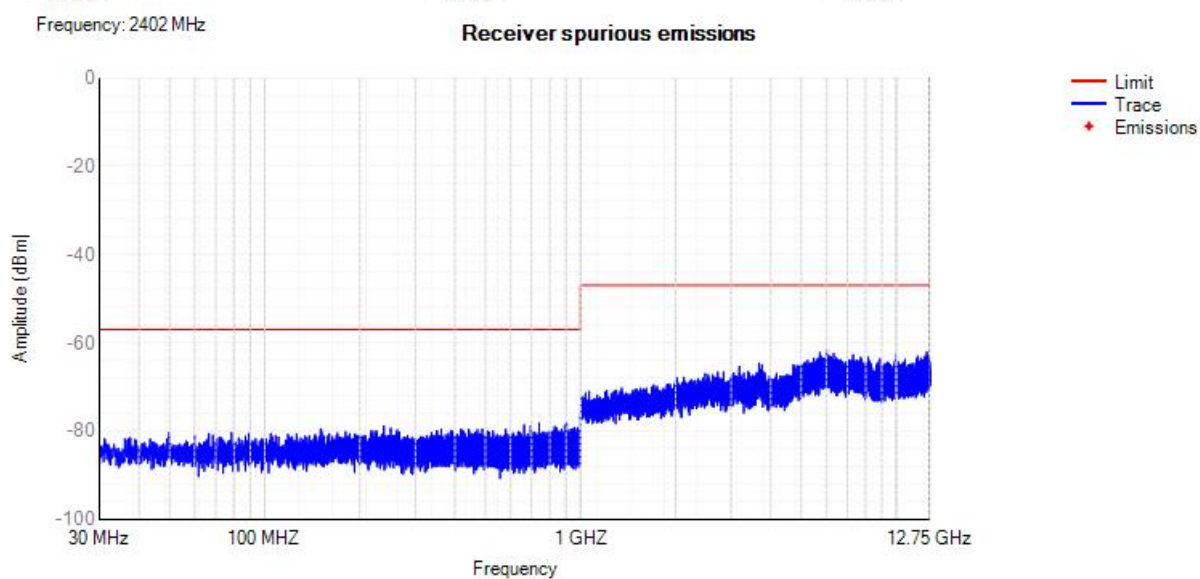


Rx. Spurious NVNT 1-DH5 2480MHz

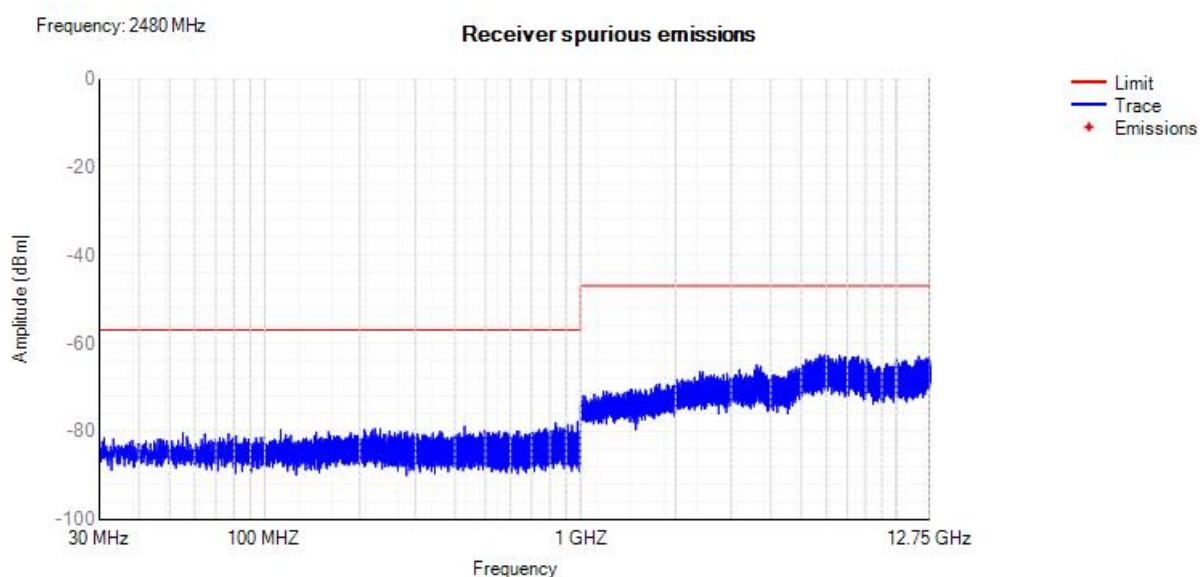




Rx. Spurious NVNT 2-DH5 2402MHz

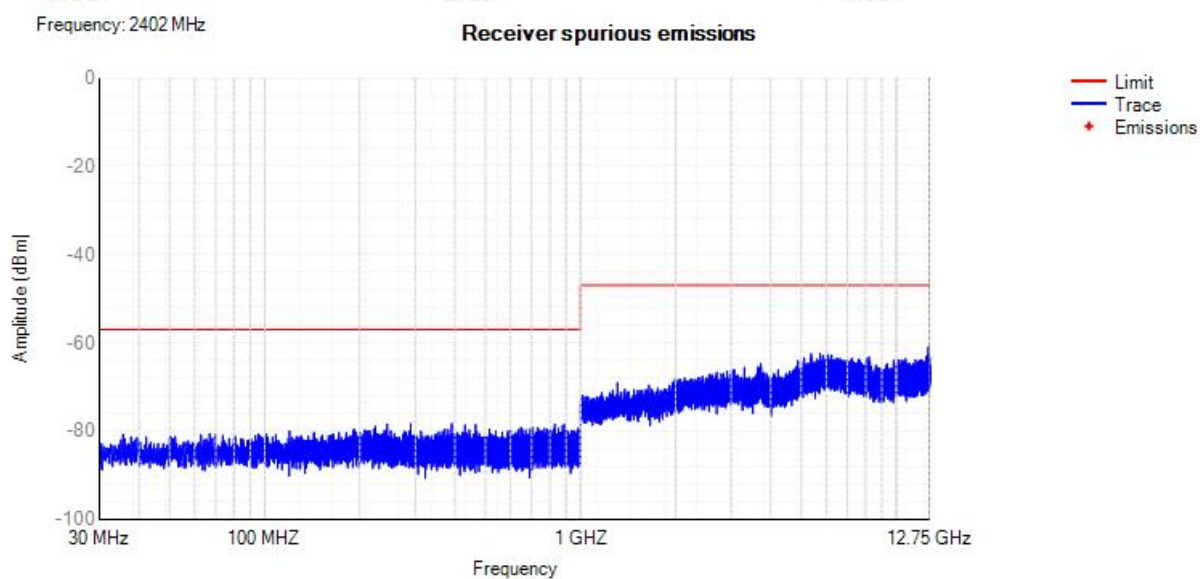


Rx. Spurious NVNT 2-DH5 2480MHz

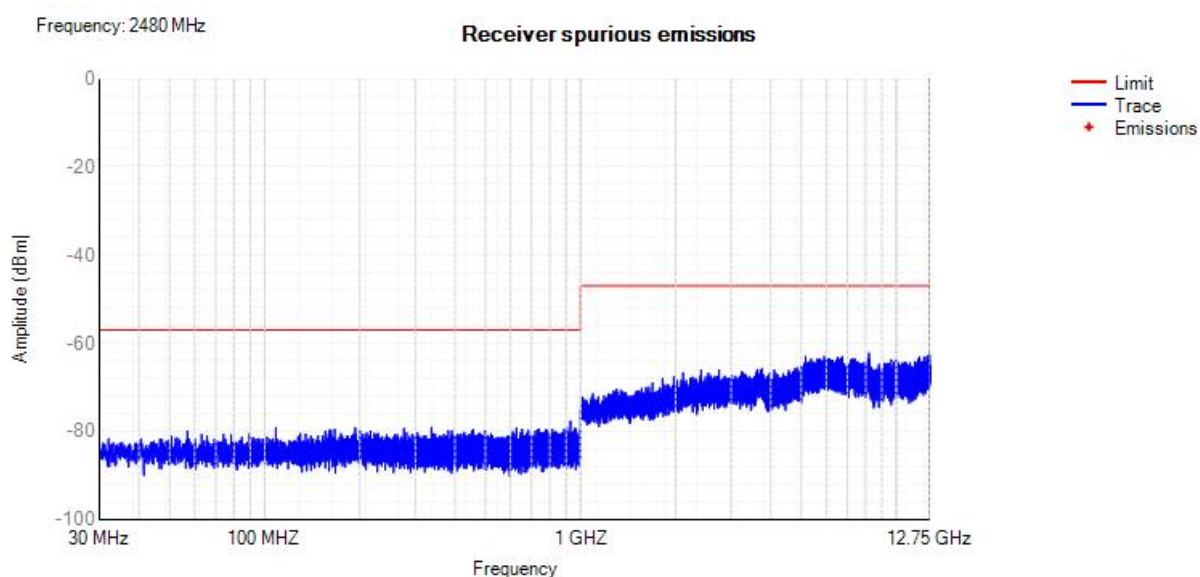




Rx. Spurious NVNT 3-DH5 2402MHz



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	-26	≥-34	CW	1.43	10	Pass
			2504	-23	≥-34	CW	1.41	10	Pass
			2300	-26	≥-34	CW	1.82	10	Pass
			2584	-25	≥-34	CW	3.11	10	Pass
	2480	-70	2380	-31	≥-34	CW	2.29	10	Pass
			2504	-25	≥-34	CW	3.38	10	Pass
			2300	-27	≥-34	CW	2.55	10	Pass
			2584	-21	≥-34	CW	1.53	10	Pass
2DH5	2402	-68	2380	-21	≥-34	CW	5.44	10	Pass
			2504	-21	≥-34	CW	1.99	10	Pass
			2300	-29	≥-34	CW	1.69	10	Pass
			2584	-27	≥-34	CW	2.85	10	Pass
	2480	-68	2380	-23	≥-34	CW	3.29	10	Pass
			2504	-27	≥-34	CW	3.17	10	Pass
			2300	-25	≥-34	CW	1.10	10	Pass
			2584	-20	≥-34	CW	2.95	10	Pass
3DH5	2402	-68	2380	-21	≥-34	CW	4.17	10	Pass
			2504	-25	≥-34	CW	2.74	10	Pass
			2300	-26	≥-34	CW	3.15	10	Pass
			2584	-25	≥-34	CW	2.10	10	Pass
	2480	-68	2380	-30	≥-34	CW	2.15	10	Pass
			2504	-25	≥-34	CW	5.77	10	Pass
			2300	-21	≥-34	CW	5.76	10	Pass
			2584	-24	≥-34	CW	3.21	10	Pass

