

RF Test Data for 2.4G WiFi (Conducted Measurements)

General Description of EUT	
Product Name:	Mobile Lidar Scanner
Test Model:	Lixel L2 PRO-16
Sample ID:	HC-C-202402-0069-4-01
Environmental Conditions	
Temperature:	24.5℃
Relative Humidity:	52%
Test Voltage:	DC 14.4V
Test Engineer:	Jolin Lee
Note: For a more detailed features description, please refer to the report TBR-C-202402-0069-62 The report only show the worst case data.	

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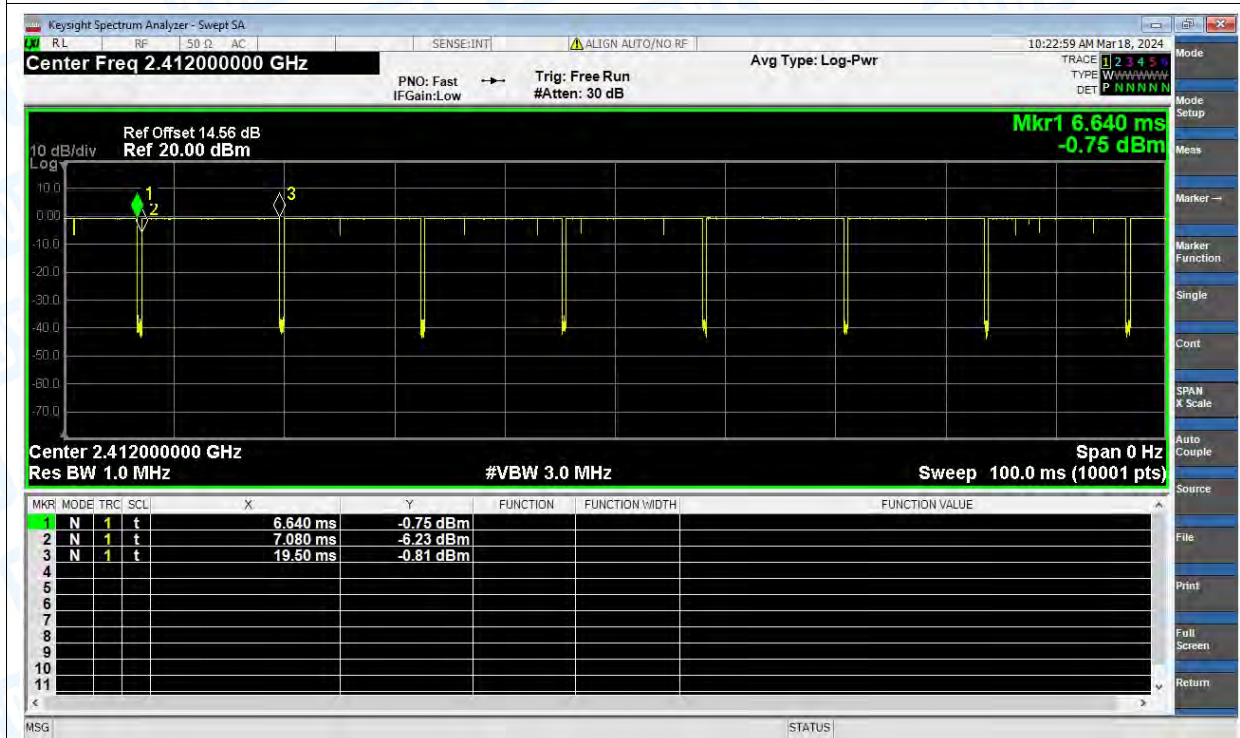
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1. Duty Cycle

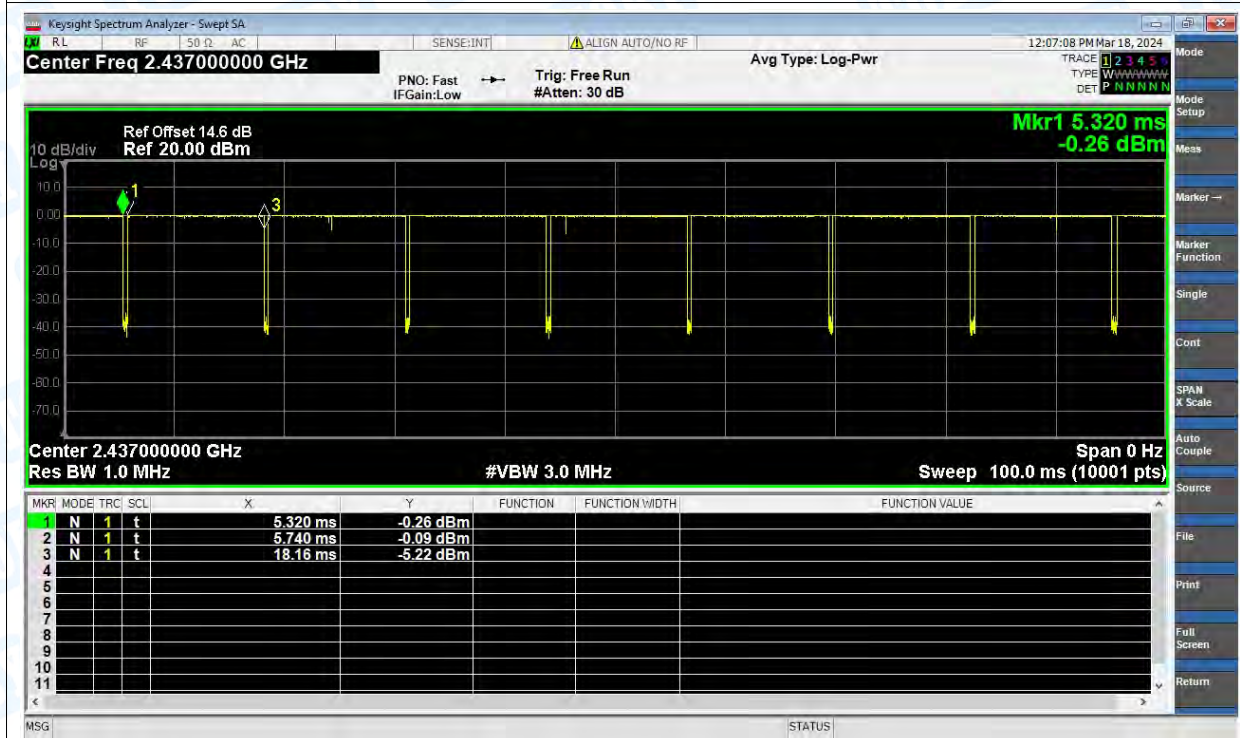
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Sum	96.58	0.15	0.08
NVNT	b	2437	Sum	96.73	0.14	0.08
NVNT	b	2462	Sum	96.73	0.14	0.08
NVNT	g	2412	Sum	90.0	0.46	0.48
NVNT	g	2437	Sum	92.79	0.32	0.49
NVNT	g	2462	Sum	93.64	0.29	0.49
NVNT	n(HT20)	2412	Sum	93.2	0.31	0.52
NVNT	n(HT20)	2437	Sum	93.2	0.31	0.52
NVNT	n(HT20)	2462	Sum	90.14	0.45	0.52
NVNT	n(HT40)	2422	Sum	84.07	0.75	1.05
NVNT	n(HT40)	2437	Sum	91.35	0.39	1.05
NVNT	n(HT40)	2452	Sum	84.68	0.72	1.06

Test Graphs

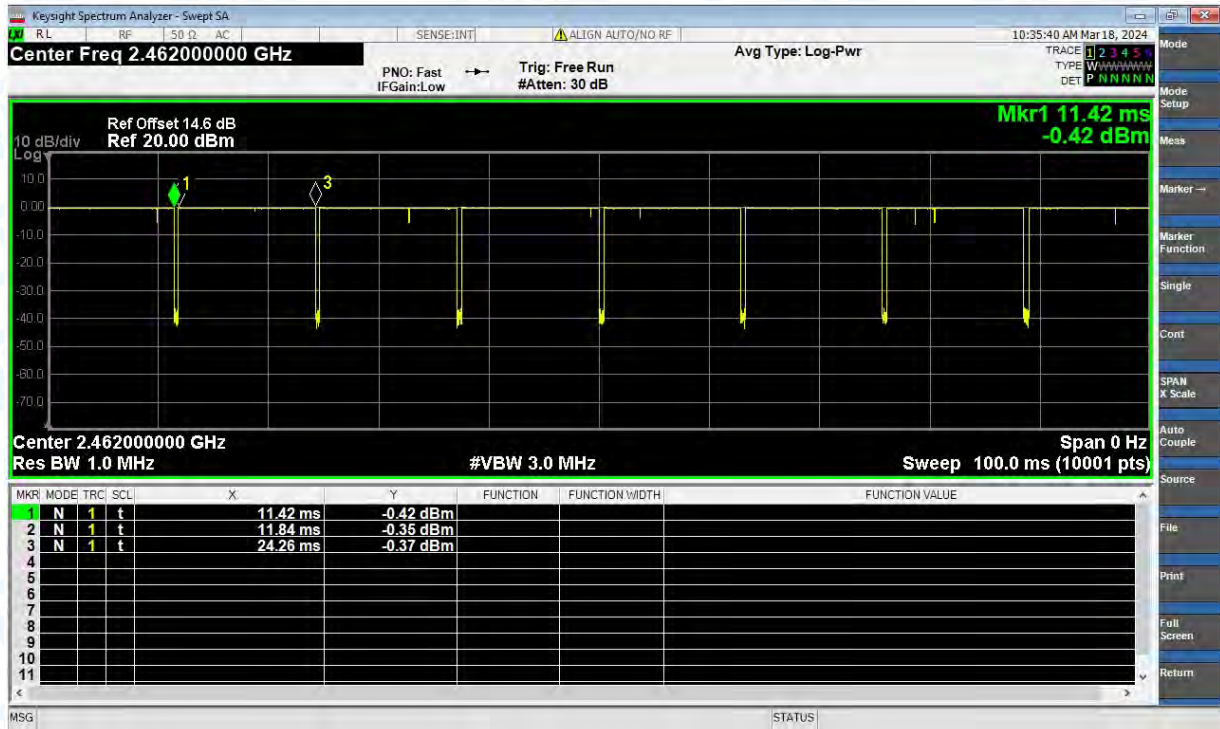
Duty Cycle NVNT b 2412MHz Sum



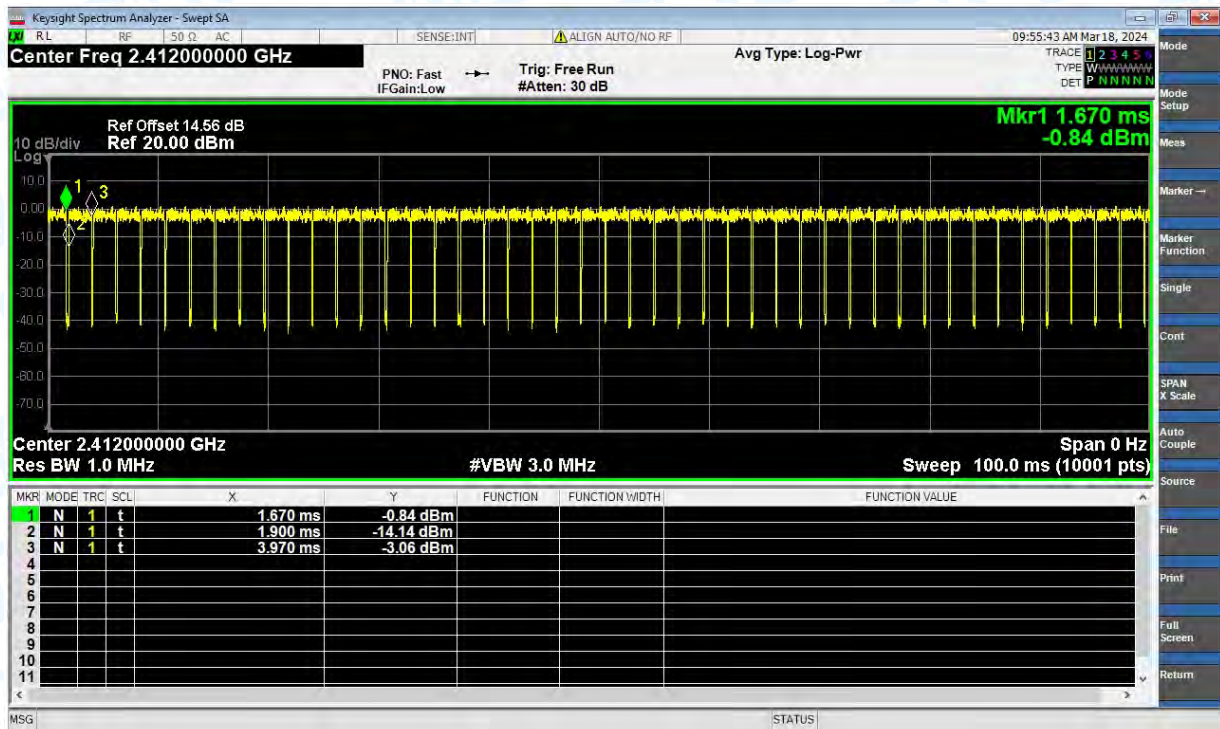
Duty Cycle NVNT b 2437MHz Sum



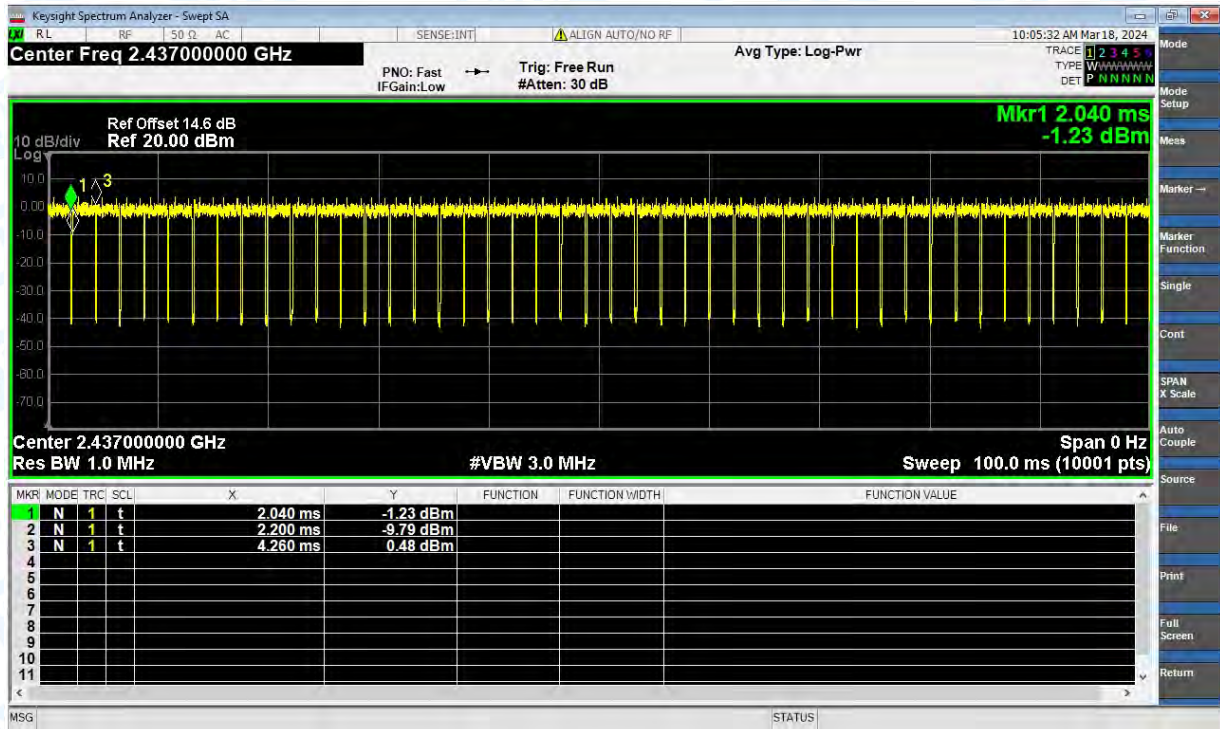
Duty Cycle NVNT b 2462MHz Sum



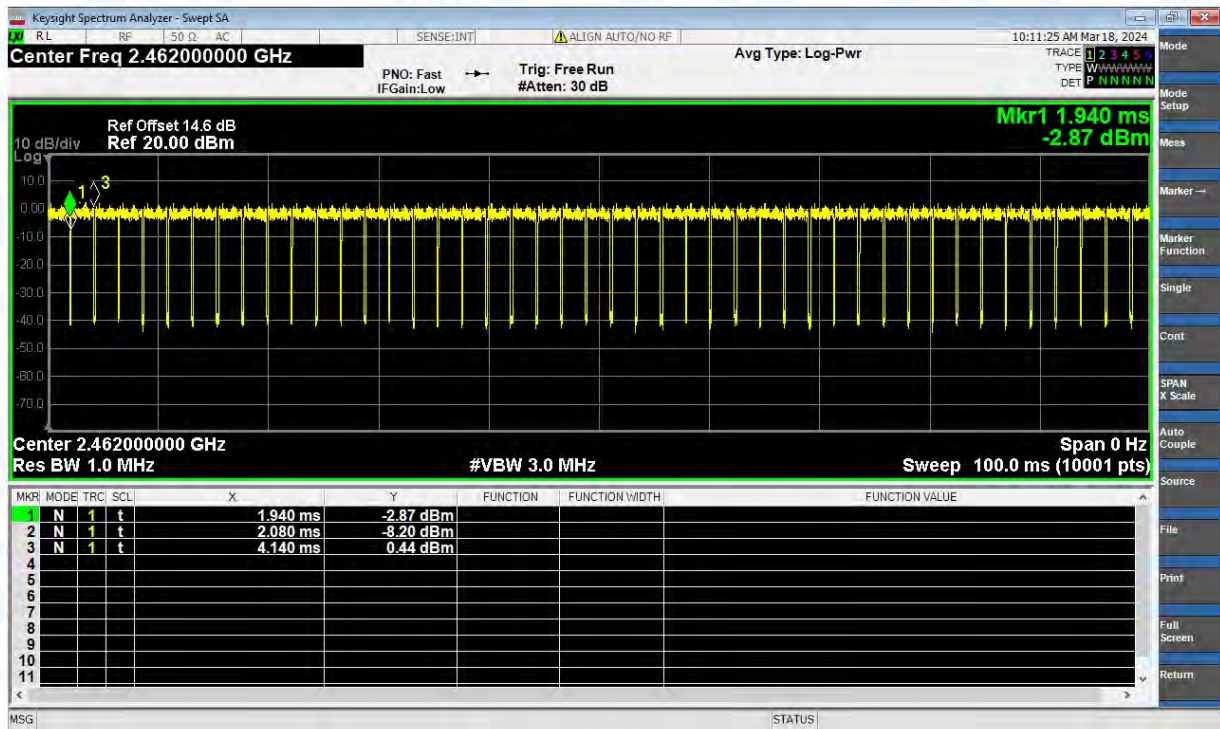
Duty Cycle NVNT g 2412MHz Sum



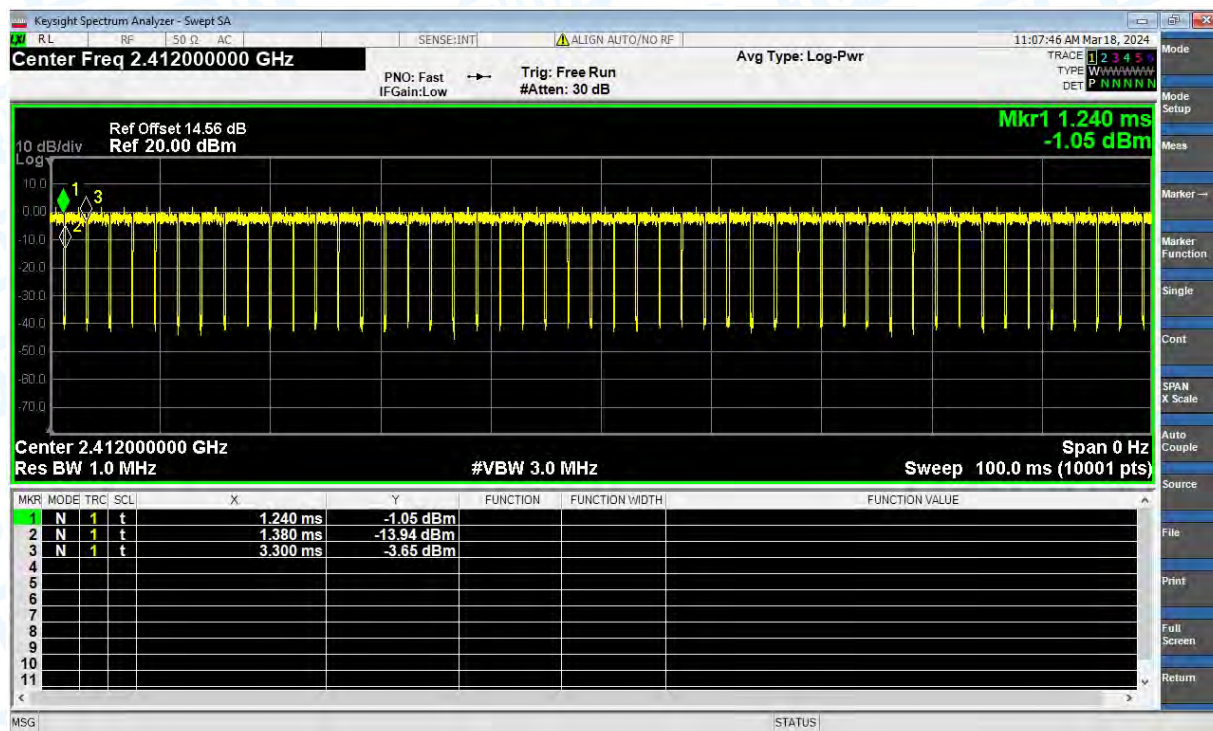
Duty Cycle NVNT g 2437MHz Sum



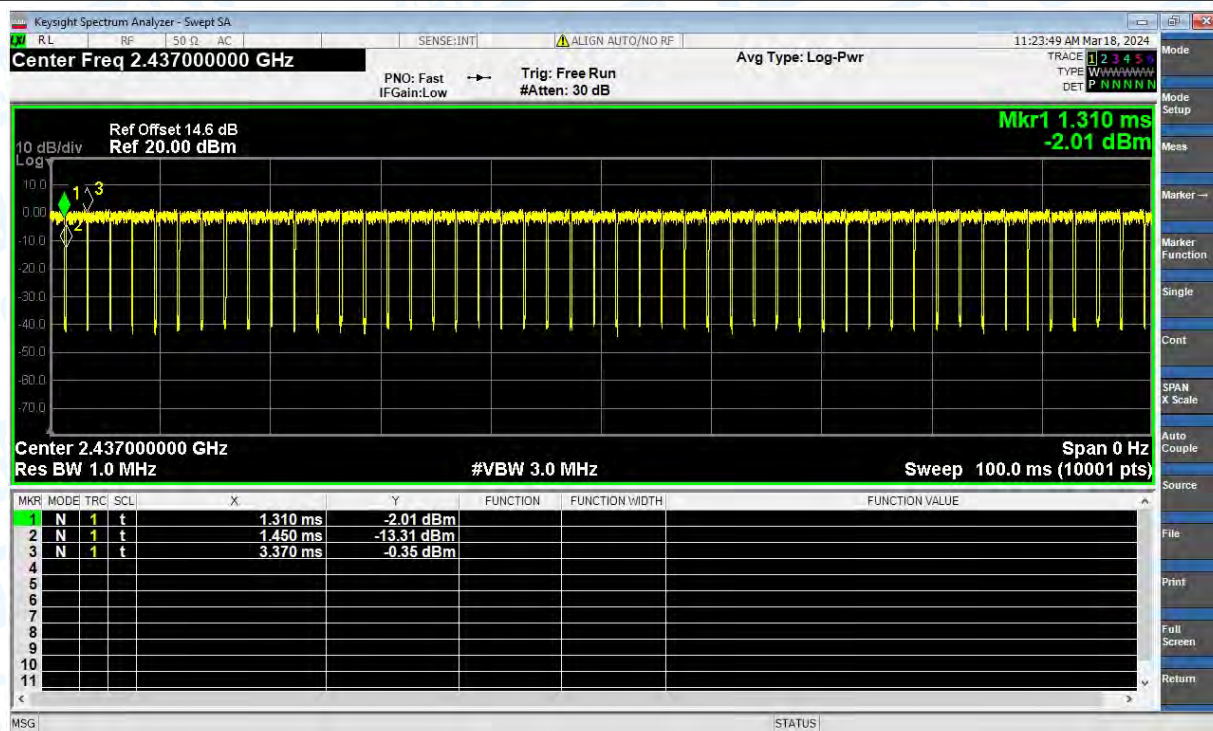
Duty Cycle NVNT g 2462MHz Sum



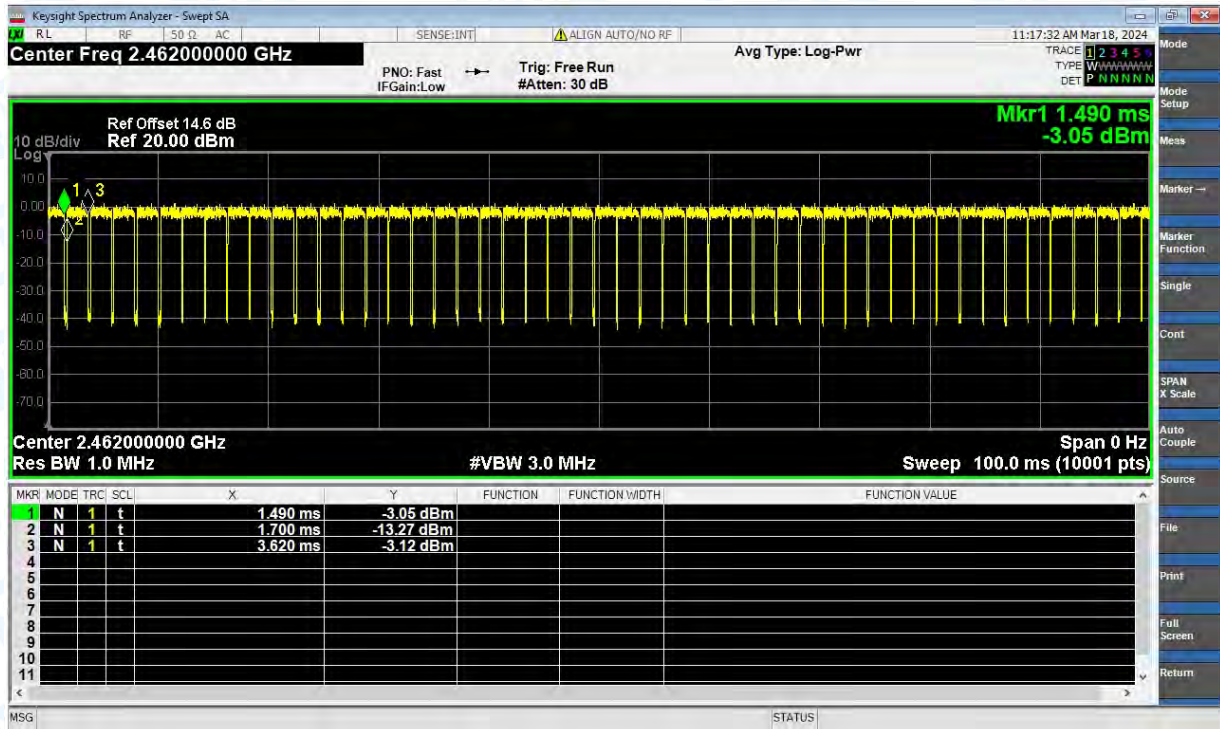
Duty Cycle NVNT n(HT20) 2412MHz Sum



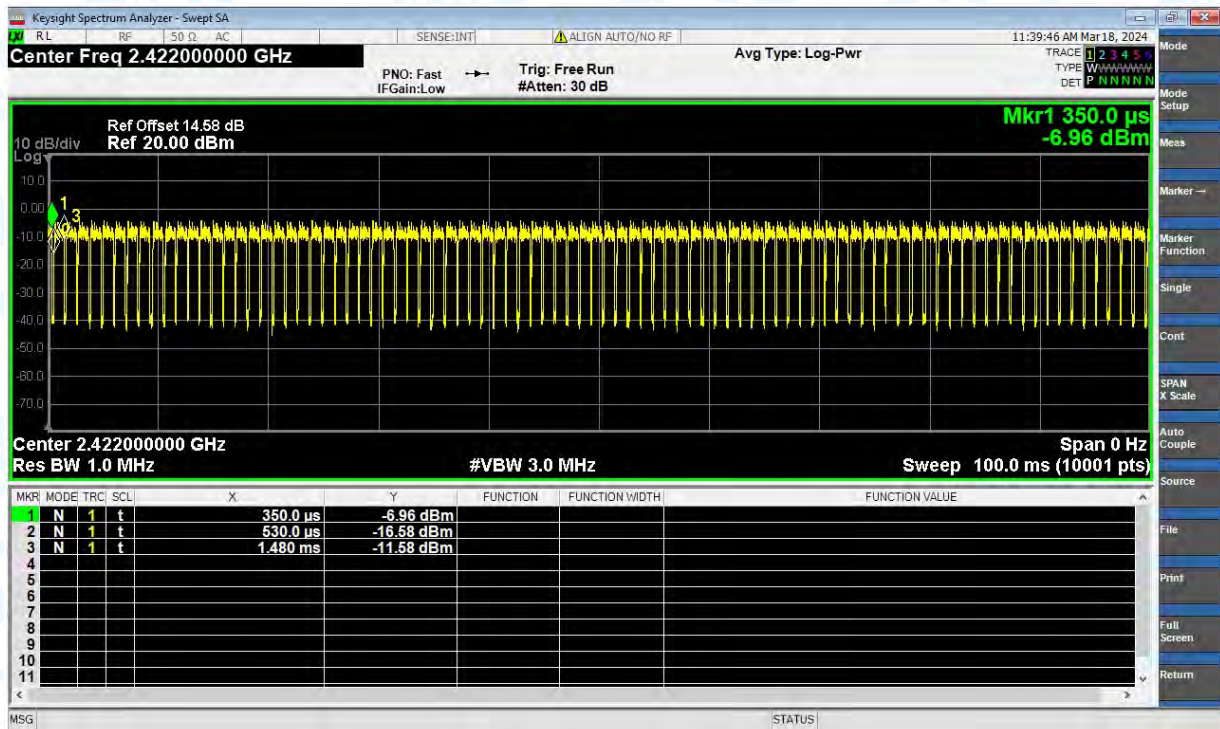
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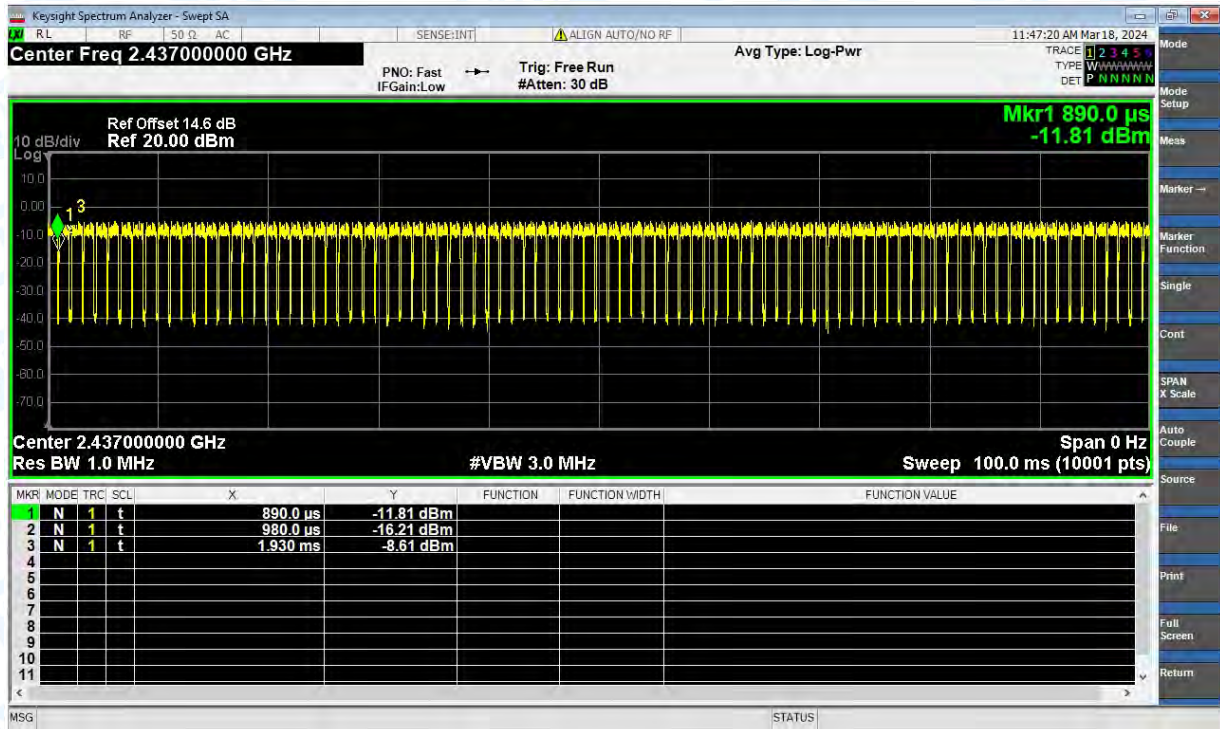
Duty Cycle NVNT n(HT20) 2462MHz Sum



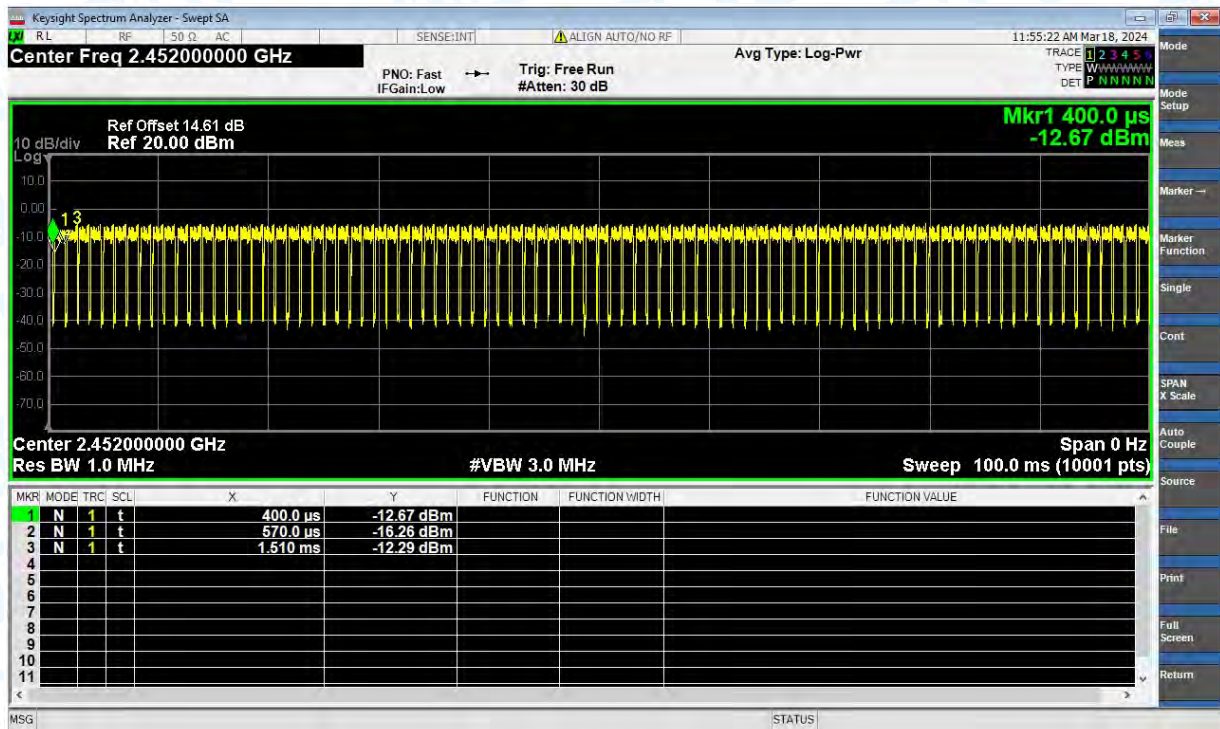
Duty Cycle NVNT n(HT40) 2422MHz Sum



Duty Cycle NVNT n(HT40) 2437MHz Sum



Duty Cycle NVNT n(HT40) 2452MHz Sum



2. Maximum Conducted Output Power

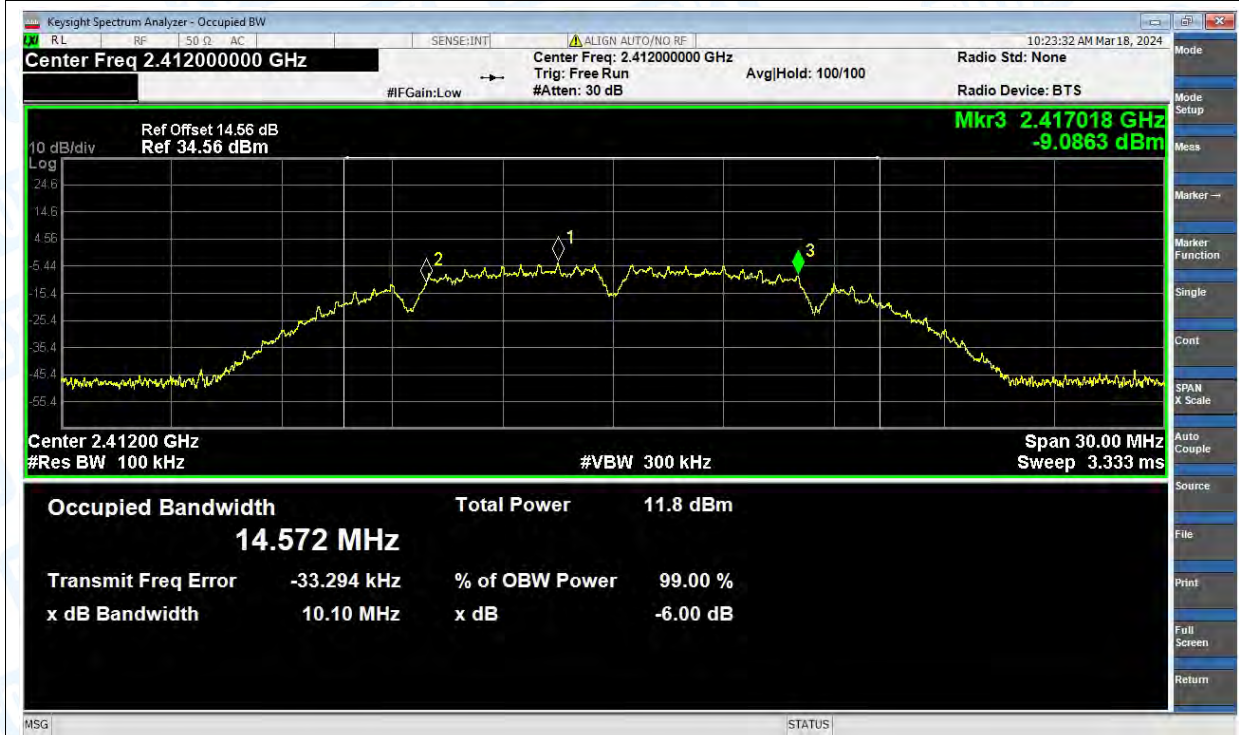
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	4.69	0.15	4.84	30	Pass
NVNT	b	2412	Ant2	5.46	0.15	5.61	30	Pass
NVNT	b	2412	Sum	8.102	0.15	8.252	30	Pass
NVNT	b	2437	Ant1	5.43	0.14	5.57	30	Pass
NVNT	b	2437	Ant2	4.51	0.14	4.65	30	Pass
NVNT	b	2437	Sum	8.005	0.14	8.145	30	Pass
NVNT	b	2462	Ant1	4.96	0.14	5.1	30	Pass
NVNT	b	2462	Ant2	5.2	0.14	5.34	30	Pass
NVNT	b	2462	Sum	8.092	0.14	8.232	30	Pass
NVNT	g	2412	Ant1	4.68	0.46	5.14	30	Pass
NVNT	g	2412	Ant2	4.76	0.46	5.22	30	Pass
NVNT	g	2412	Sum	7.73	0.46	8.19	30	Pass
NVNT	g	2437	Ant1	4.58	0.32	4.9	30	Pass
NVNT	g	2437	Ant2	4.68	0.32	5	30	Pass
NVNT	g	2437	Sum	7.641	0.32	7.961	30	Pass
NVNT	g	2462	Ant1	4.54	0.29	4.83	30	Pass
NVNT	g	2462	Ant2	5.19	0.29	5.48	30	Pass
NVNT	g	2462	Sum	7.887	0.29	8.177	30	Pass
NVNT	n(HT20)	2412	Ant1	4.69	0.31	5	30	Pass
NVNT	n(HT20)	2412	Ant2	4.55	0.31	4.86	30	Pass
NVNT	n(HT20)	2412	Sum	7.631	0.31	7.941	30	Pass
NVNT	n(HT20)	2437	Ant1	4.85	0.31	5.16	30	Pass
NVNT	n(HT20)	2437	Ant2	3.8	0.31	4.11	30	Pass
NVNT	n(HT20)	2437	Sum	7.367	0.31	7.677	30	Pass
NVNT	n(HT20)	2462	Ant1	5.05	0.45	5.5	30	Pass
NVNT	n(HT20)	2462	Ant2	4.46	0.45	4.91	30	Pass
NVNT	n(HT20)	2462	Sum	7.775	0.45	8.225	30	Pass
NVNT	n(HT40)	2422	Ant1	4.59	0.75	5.34	30	Pass
NVNT	n(HT40)	2422	Ant2	3.74	0.75	4.49	30	Pass
NVNT	n(HT40)	2422	Sum	7.196	0.75	7.946	30	Pass
NVNT	n(HT40)	2437	Ant1	5.06	0.39	5.45	30	Pass
NVNT	n(HT40)	2437	Ant2	4.33	0.39	4.72	30	Pass
NVNT	n(HT40)	2437	Sum	7.721	0.39	8.111	30	Pass
NVNT	n(HT40)	2452	Ant1	4.26	0.72	4.98	30	Pass
NVNT	n(HT40)	2452	Ant2	3.83	0.72	4.55	30	Pass
NVNT	n(HT40)	2452	Sum	7.061	0.72	7.781	30	Pass

3. -6dB Bandwidth

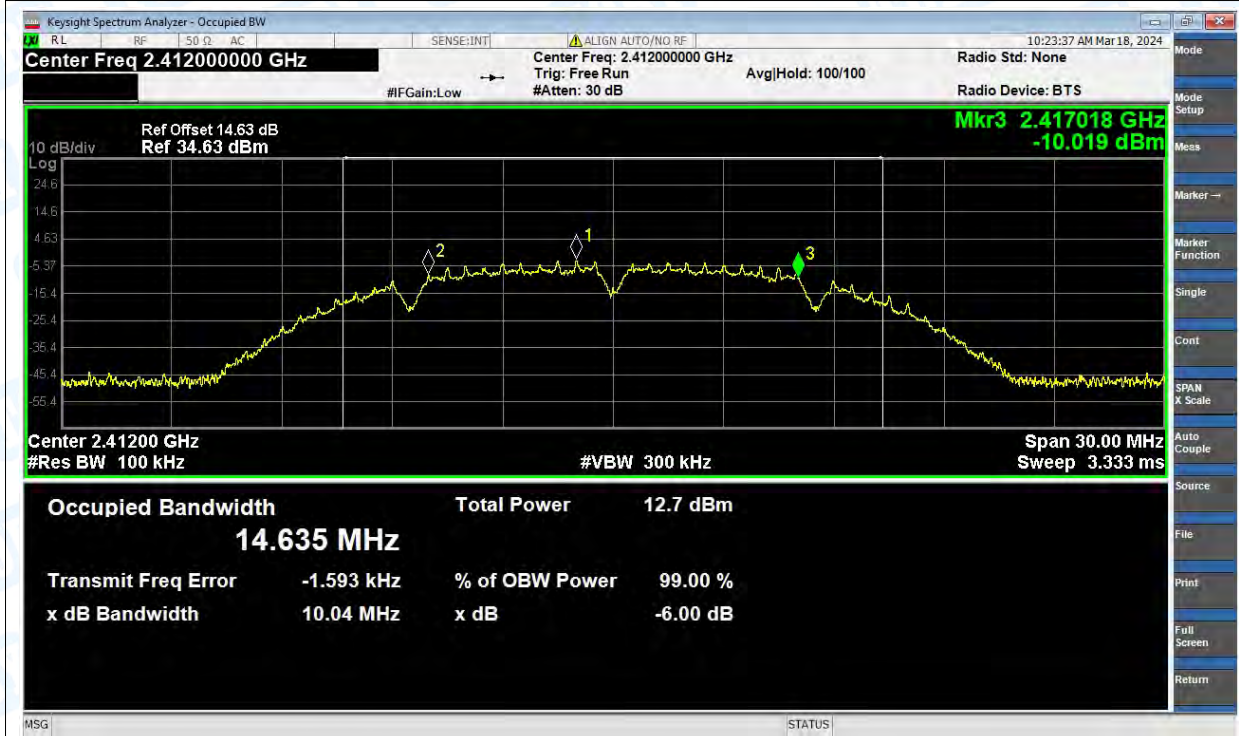
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	10.1	0.5	Pass
NVNT	b	2412	Ant2	10.04	0.5	Pass
NVNT	b	2437	Ant1	10.02	0.5	Pass
NVNT	b	2437	Ant2	10.11	0.5	Pass
NVNT	b	2462	Ant1	10.09	0.5	Pass
NVNT	b	2462	Ant2	10.1	0.5	Pass
NVNT	g	2412	Ant1	16.03	0.5	Pass
NVNT	g	2412	Ant2	15.8	0.5	Pass
NVNT	g	2437	Ant1	16.3	0.5	Pass
NVNT	g	2437	Ant2	16.28	0.5	Pass
NVNT	g	2462	Ant1	16.28	0.5	Pass
NVNT	g	2462	Ant2	15.66	0.5	Pass
NVNT	n(HT20)	2412	Ant1	16.24	0.5	Pass
NVNT	n(HT20)	2412	Ant2	16.76	0.5	Pass
NVNT	n(HT20)	2437	Ant1	15.66	0.5	Pass
NVNT	n(HT20)	2437	Ant2	16.27	0.5	Pass
NVNT	n(HT20)	2462	Ant1	16.07	0.5	Pass
NVNT	n(HT20)	2462	Ant2	16.73	0.5	Pass
NVNT	n(HT40)	2422	Ant1	35.12	0.5	Pass
NVNT	n(HT40)	2422	Ant2	34.99	0.5	Pass
NVNT	n(HT40)	2437	Ant1	35.12	0.5	Pass
NVNT	n(HT40)	2437	Ant2	34.97	0.5	Pass
NVNT	n(HT40)	2452	Ant1	33.89	0.5	Pass
NVNT	n(HT40)	2452	Ant2	34.99	0.5	Pass

Test Graphs

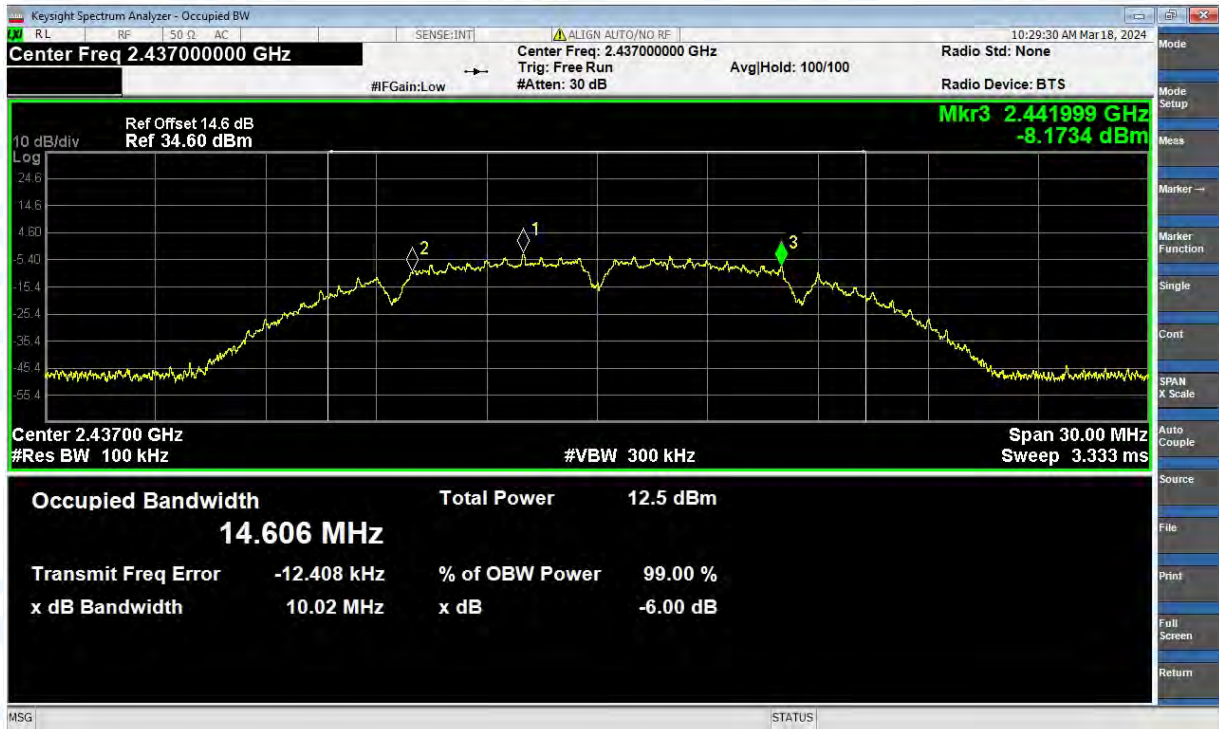
-6dB Bandwidth NVNT b 2412MHz Ant1



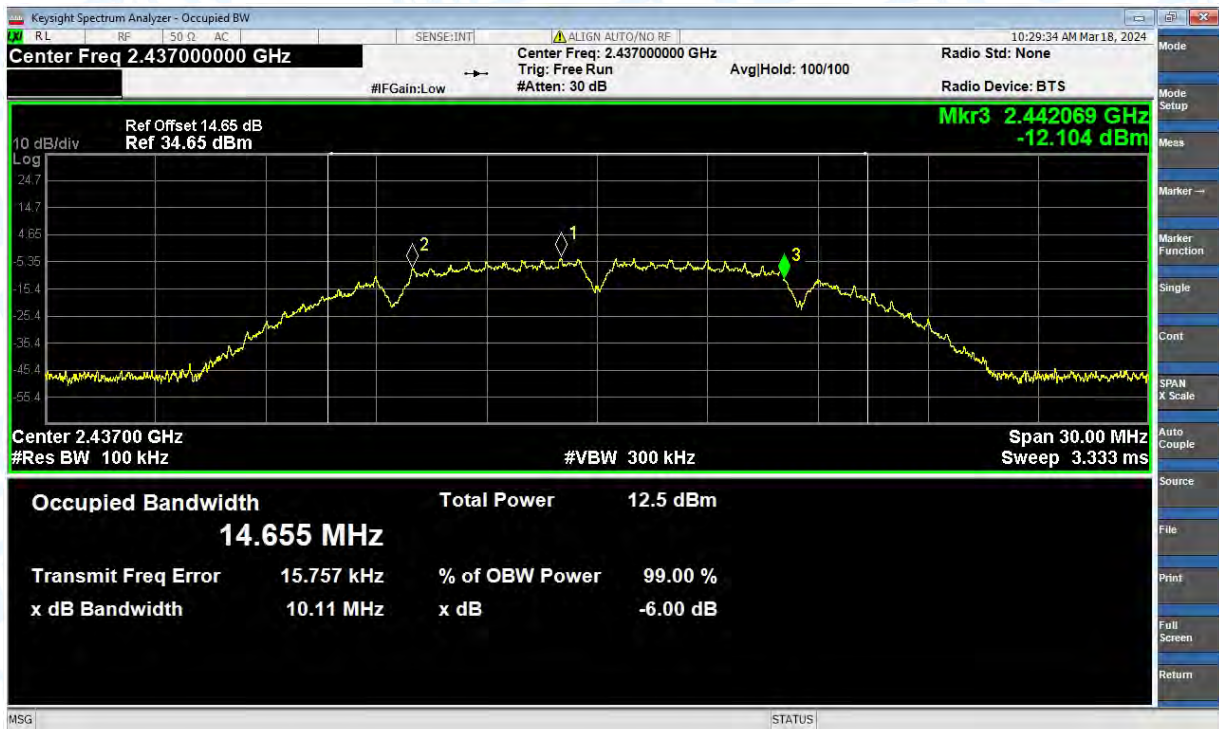
-6dB Bandwidth NVNT b 2412MHz Ant2



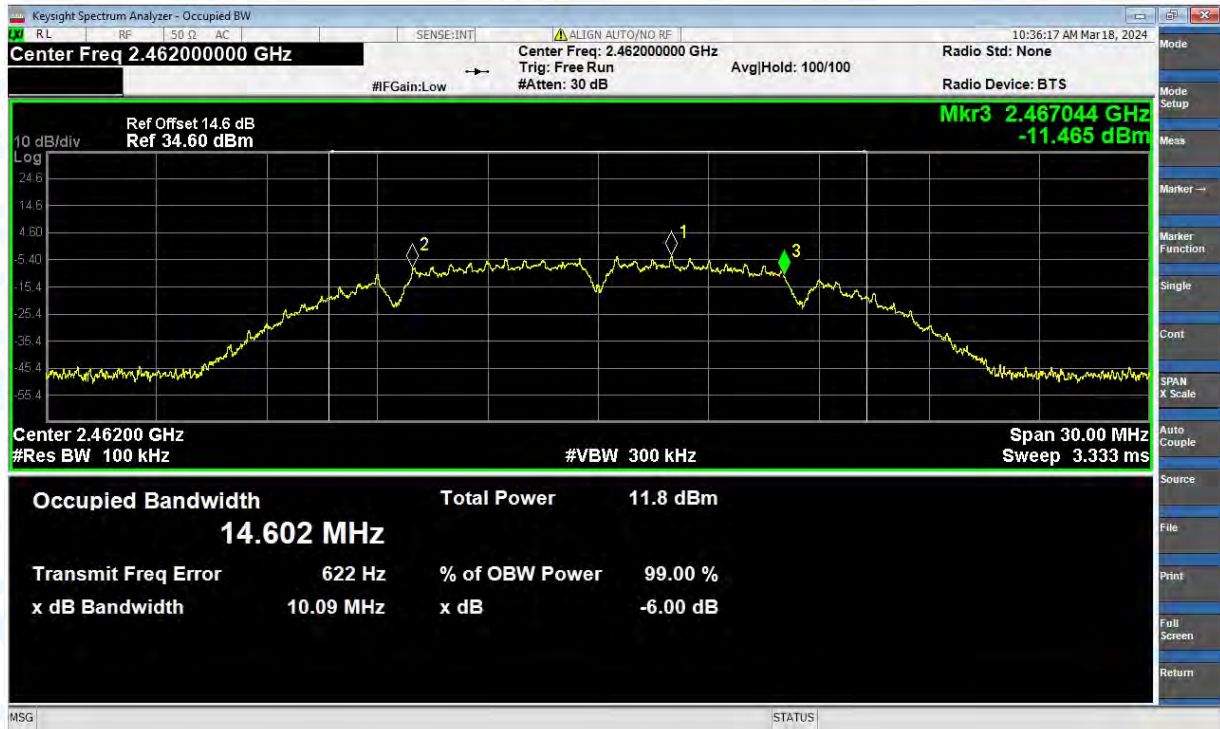
-6dB Bandwidth NVNT b 2437MHz Ant1



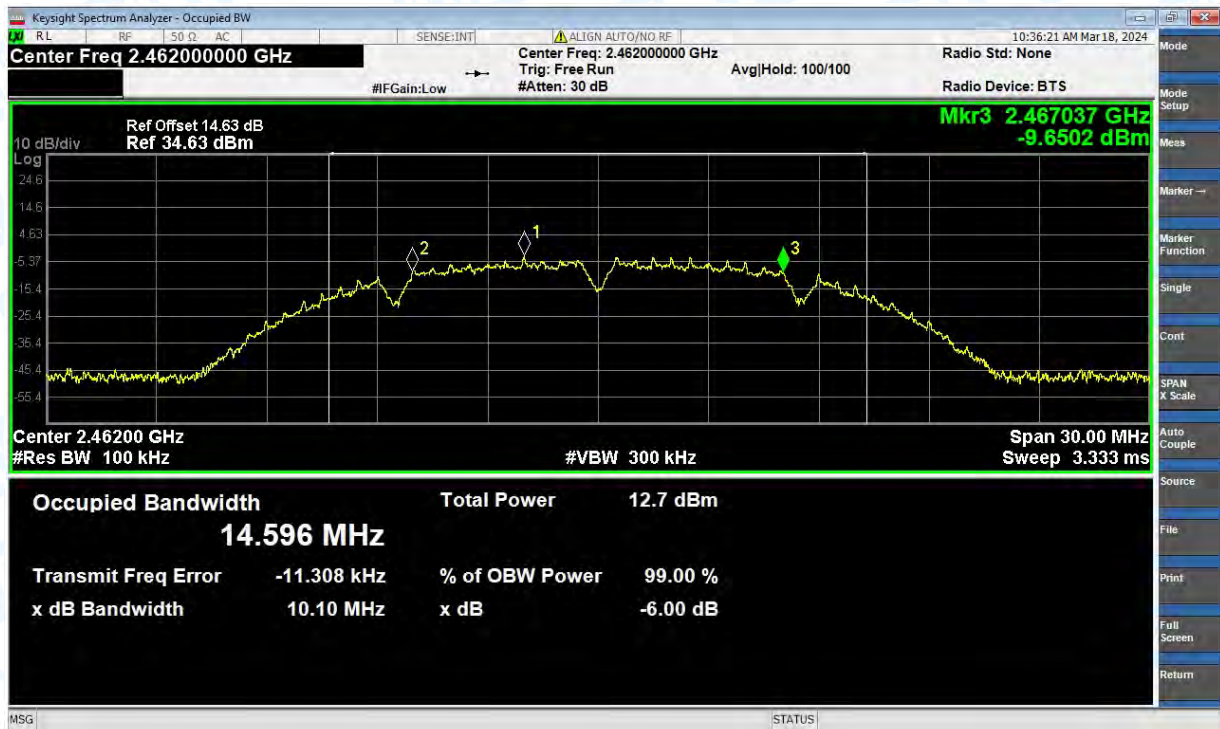
-6dB Bandwidth NVNT b 2437MHz Ant2



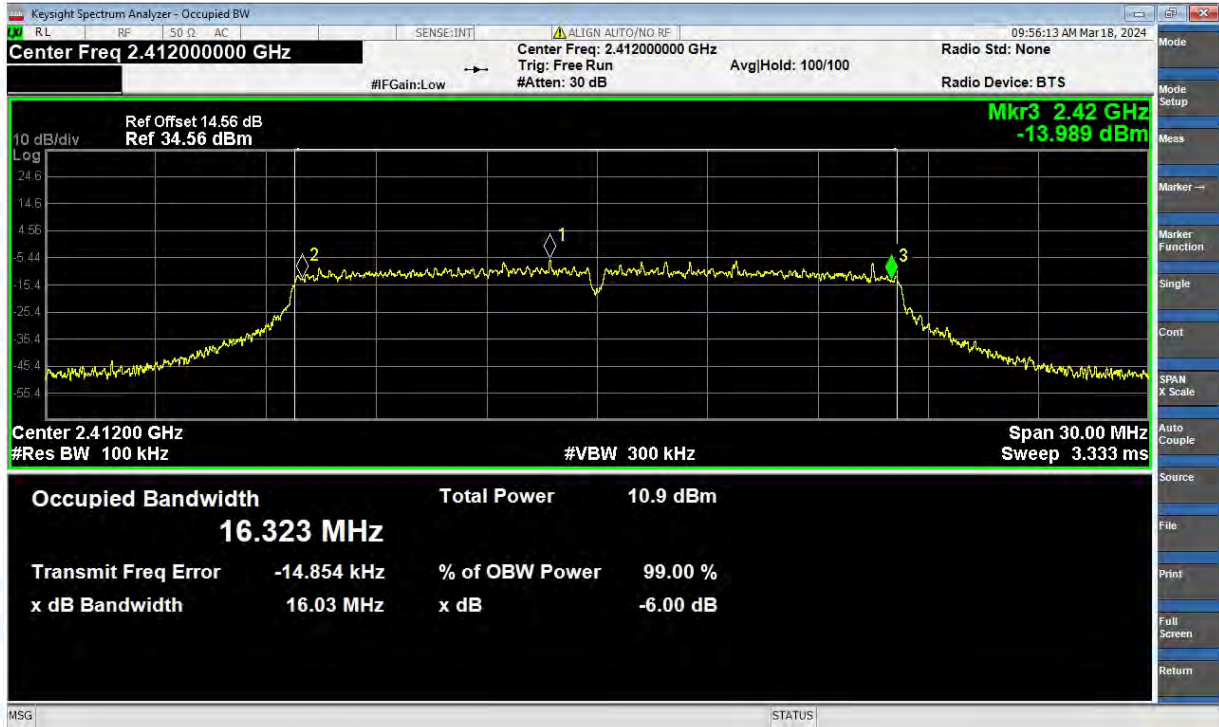
-6dB Bandwidth NVNT b 2462MHz Ant1



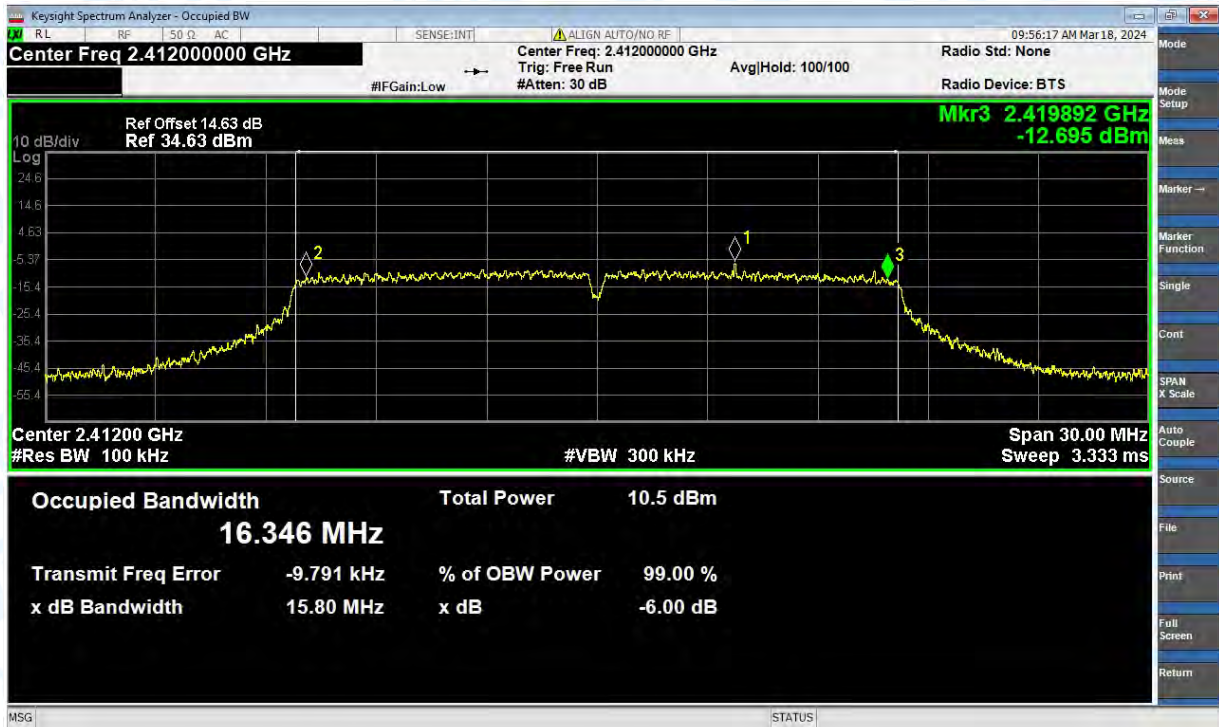
-6dB Bandwidth NVNT b 2462MHz Ant2



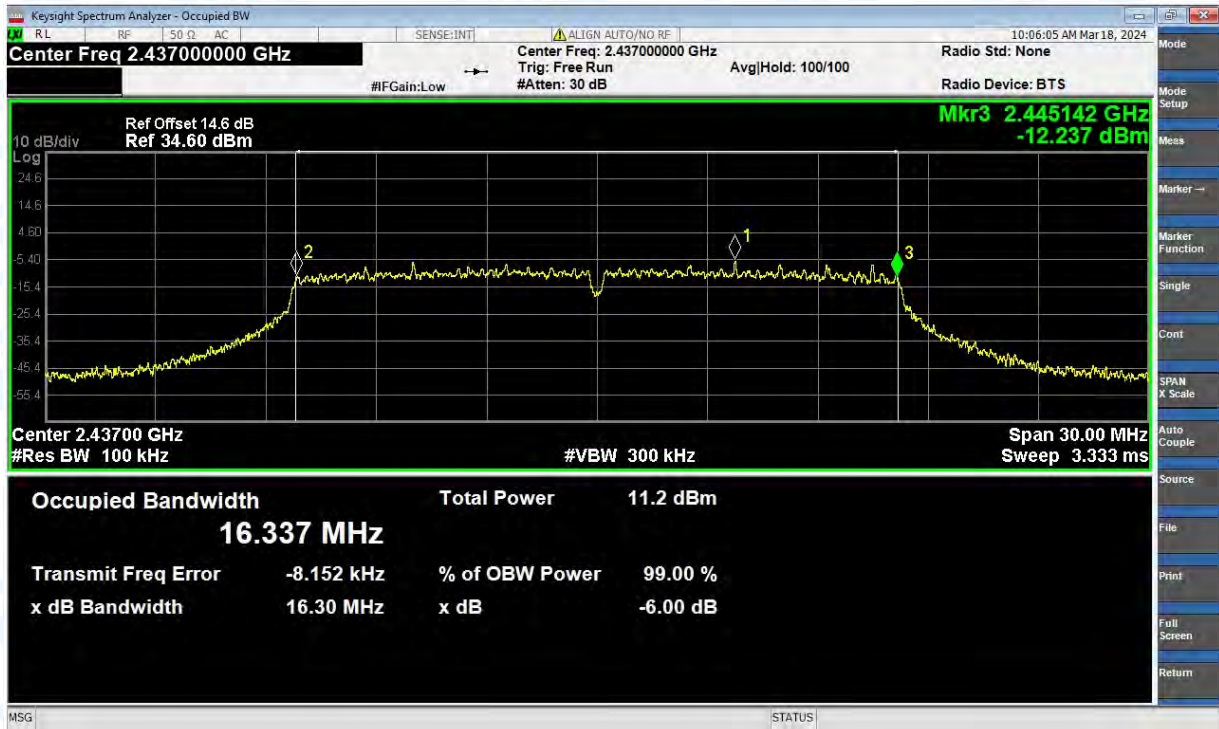
-6dB Bandwidth NVNT g 2412MHz Ant1



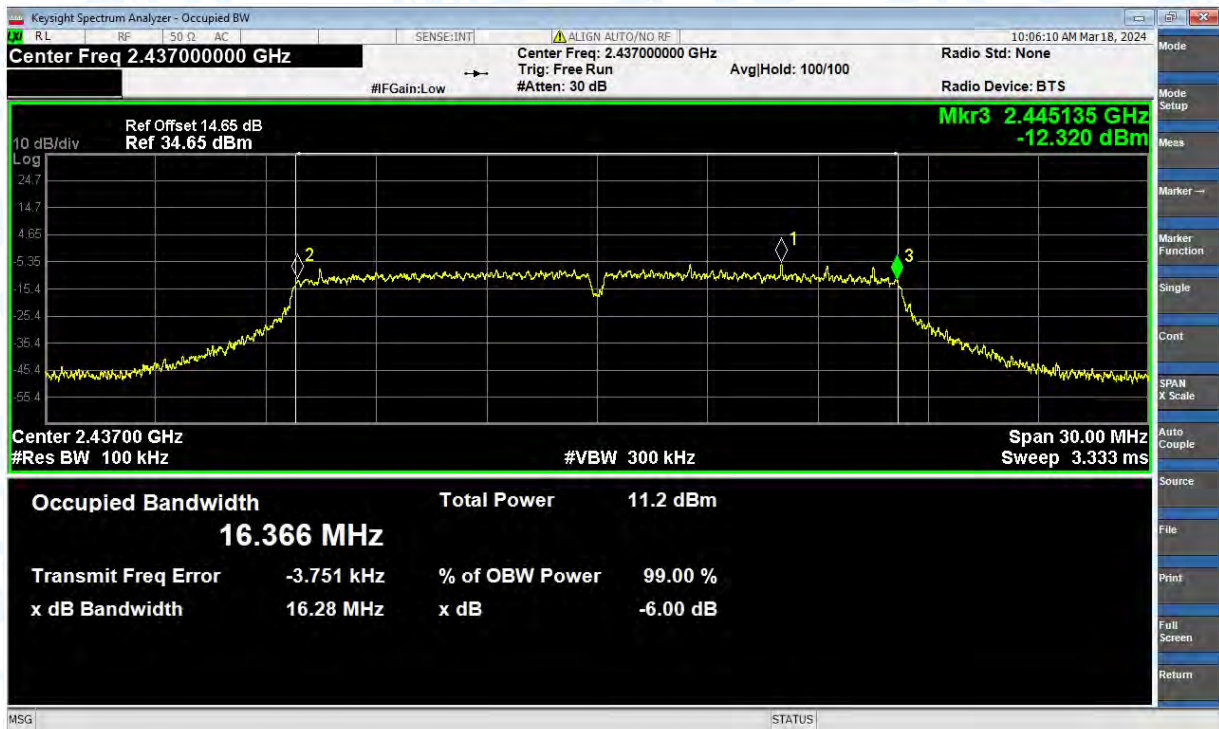
-6dB Bandwidth NVNT g 2412MHz Ant2



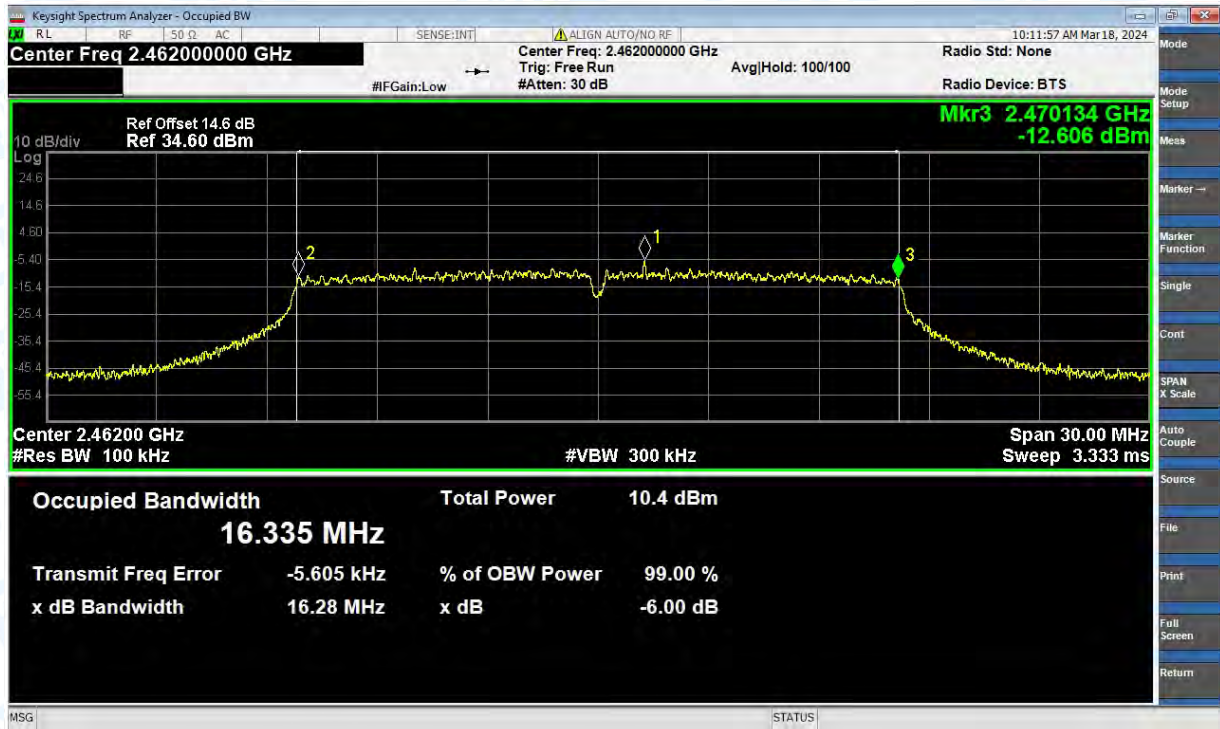
-6dB Bandwidth NVNT g 2437MHz Ant1



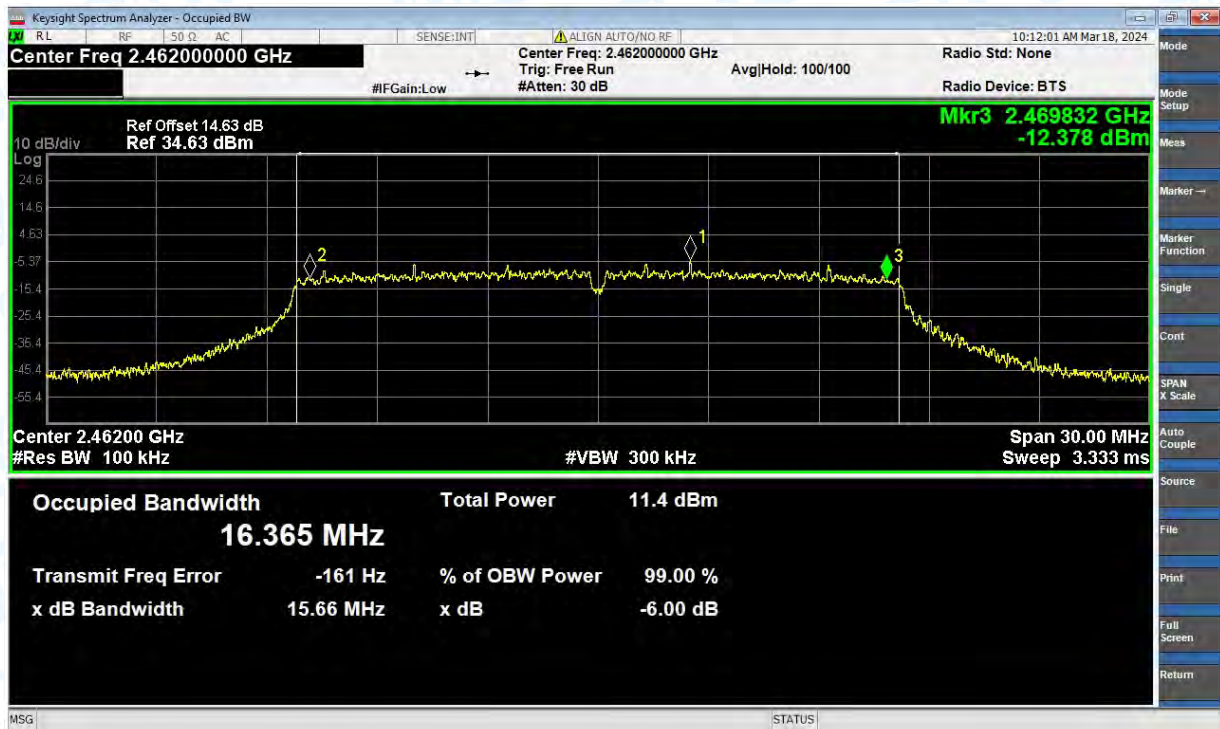
-6dB Bandwidth NVNT g 2437MHz Ant2



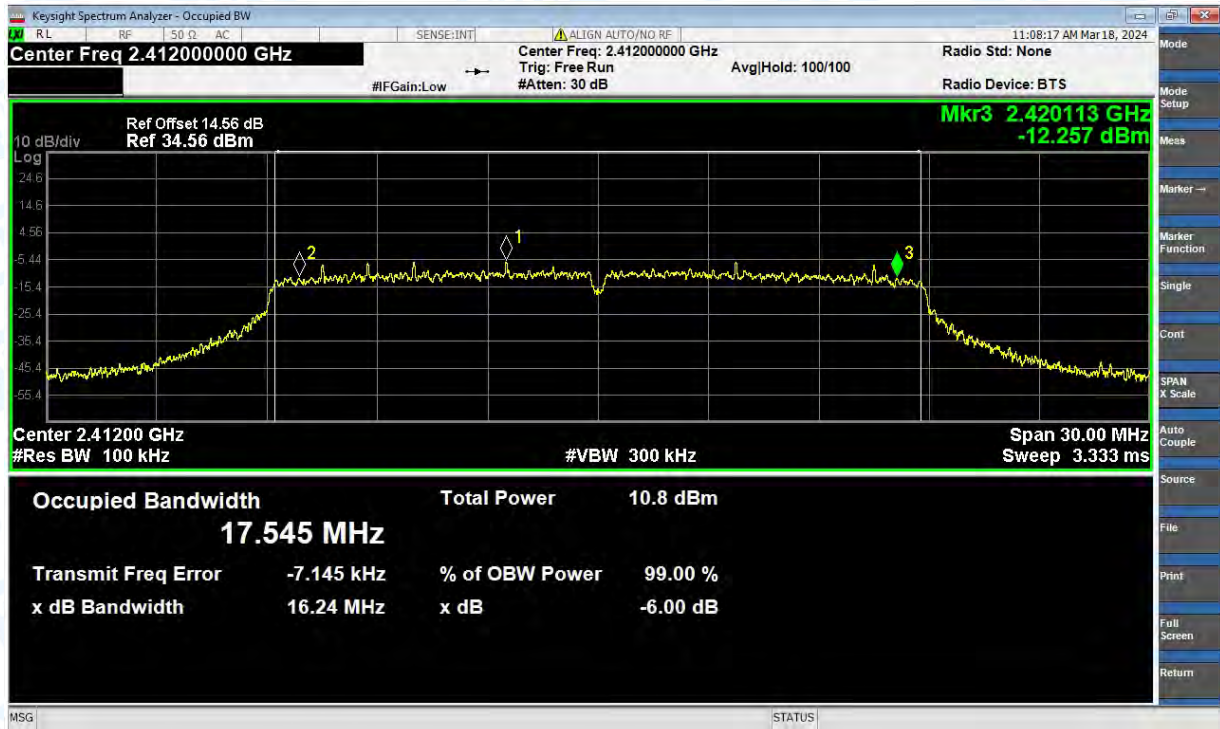
-6dB Bandwidth NVNT g 2462MHz Ant1



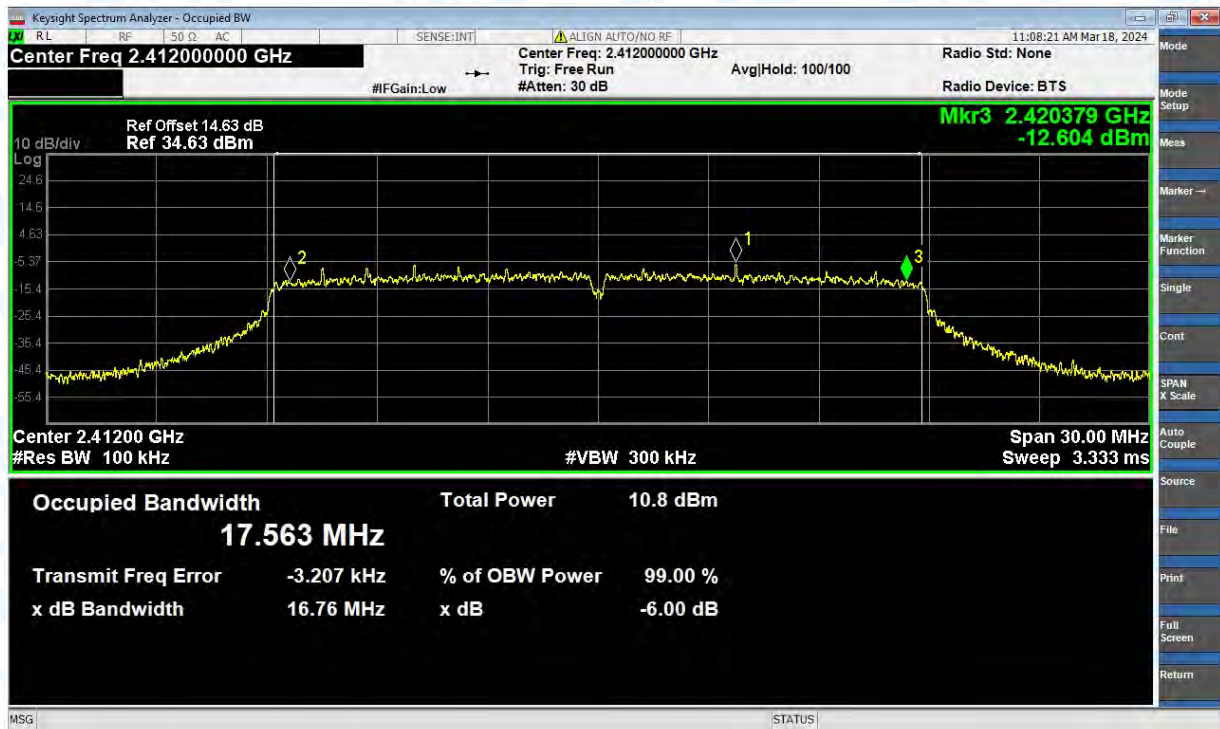
-6dB Bandwidth NVNT g 2462MHz Ant2



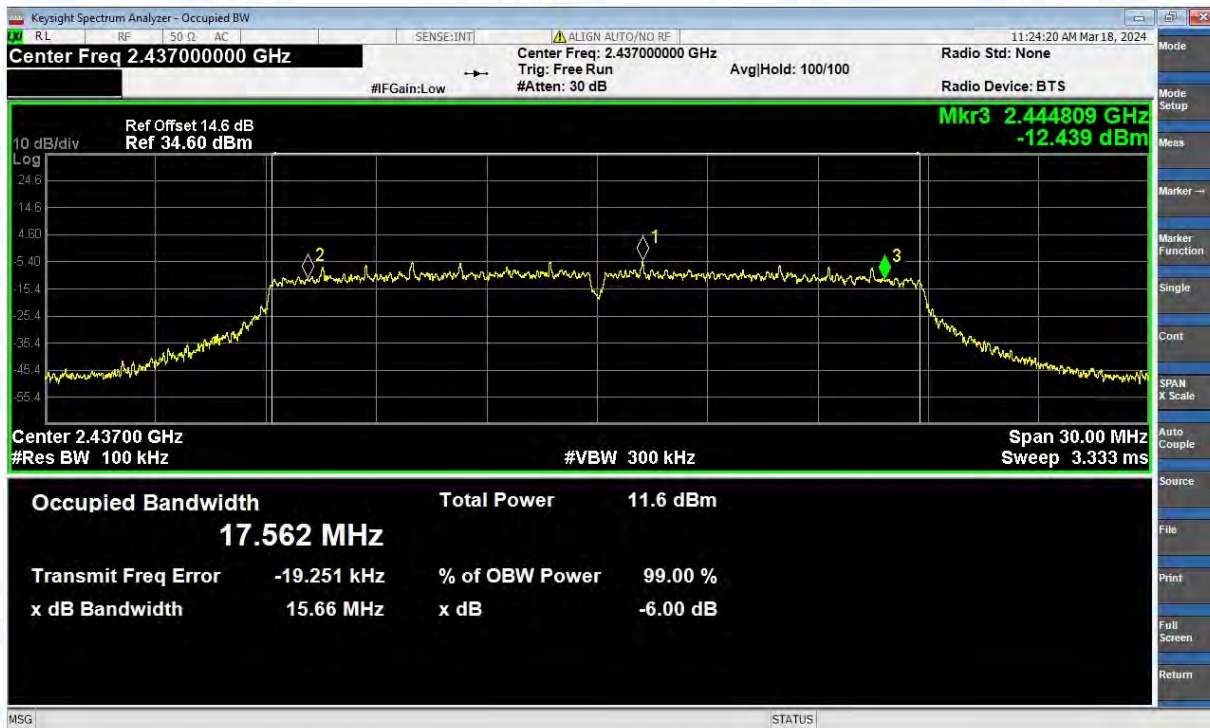
-6dB Bandwidth NVNT n(HT20) 2412MHz Ant1



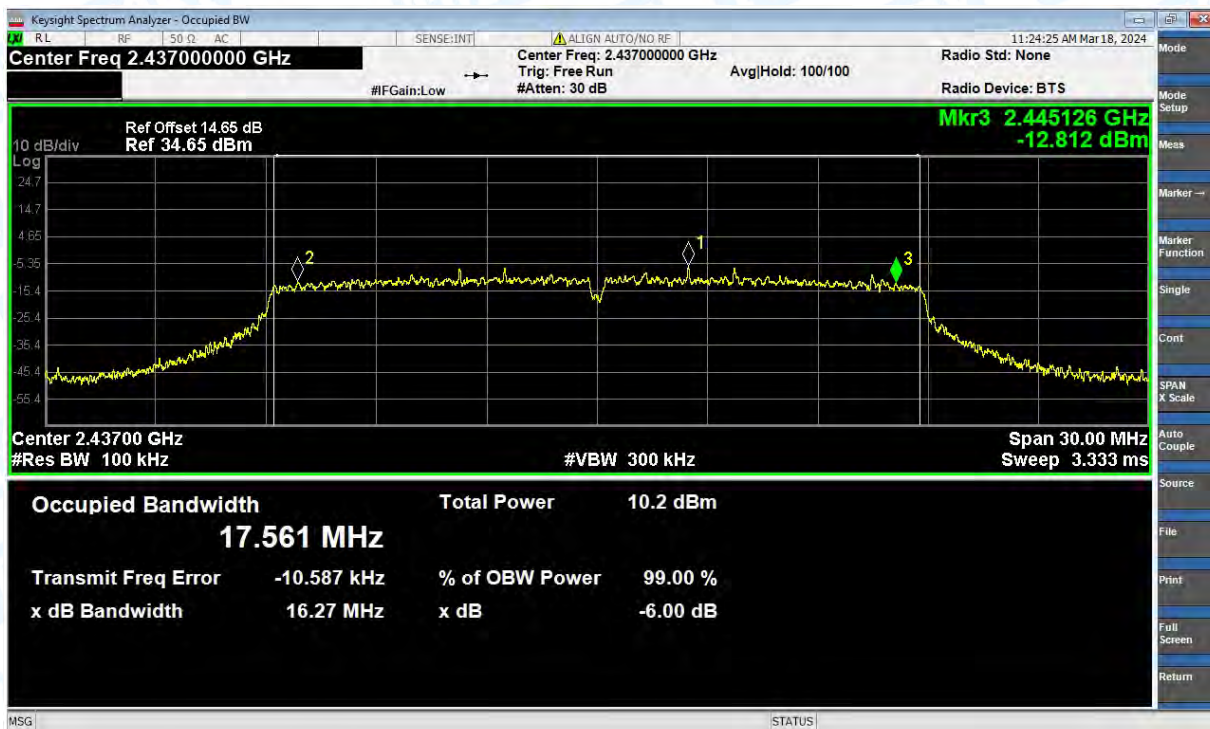
-6dB Bandwidth NVNT n(HT20) 2412MHz Ant2



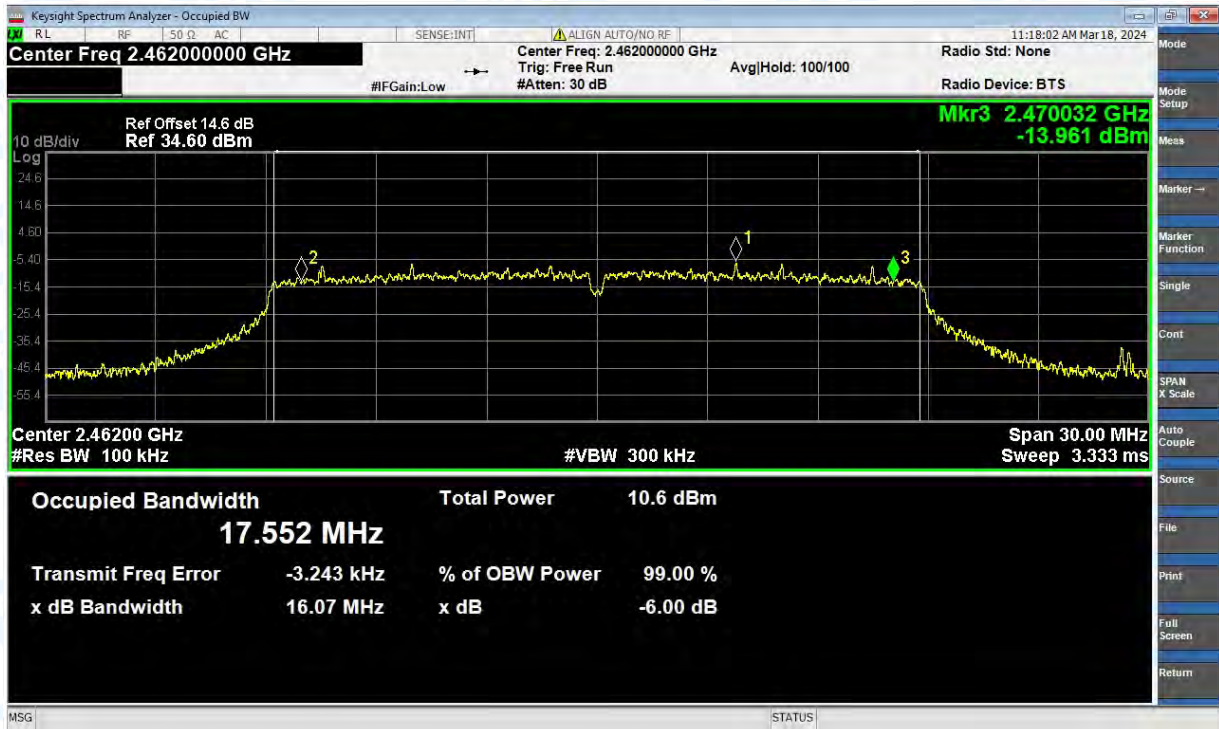
-6dB Bandwidth NVNT n(HT20) 2437MHz Ant1



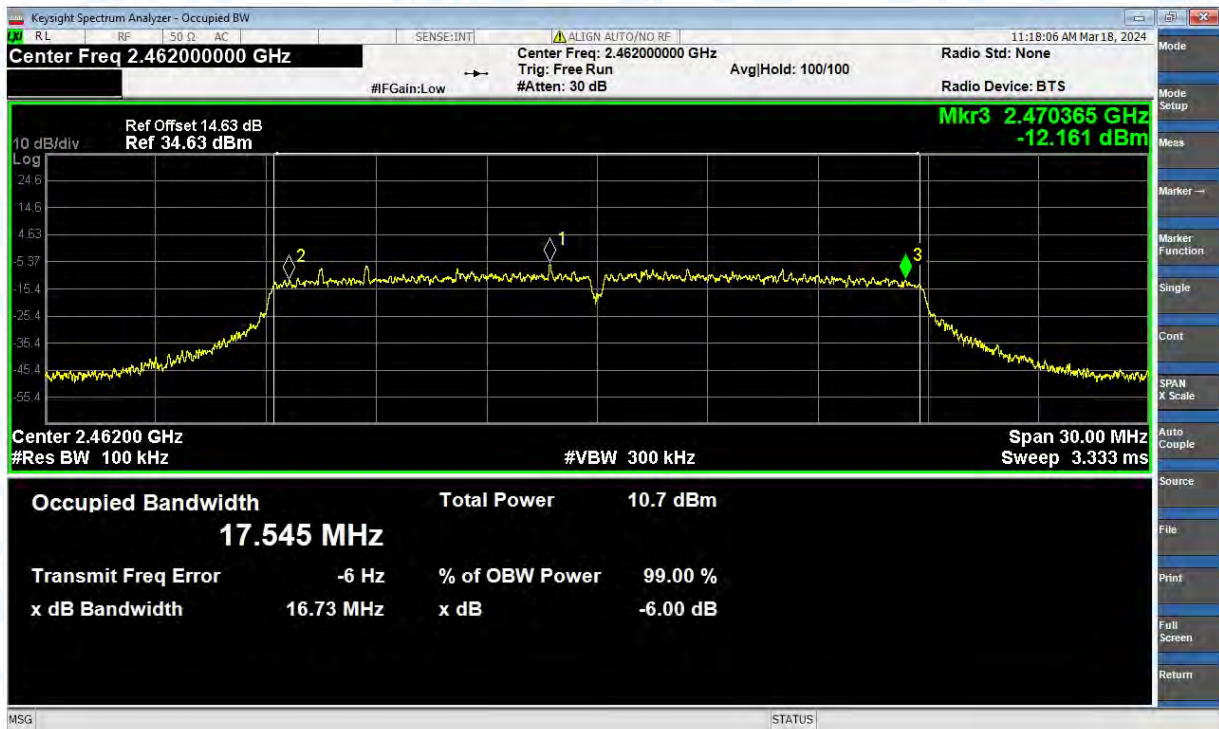
-6dB Bandwidth NVNT n(HT20) 2437MHz Ant2



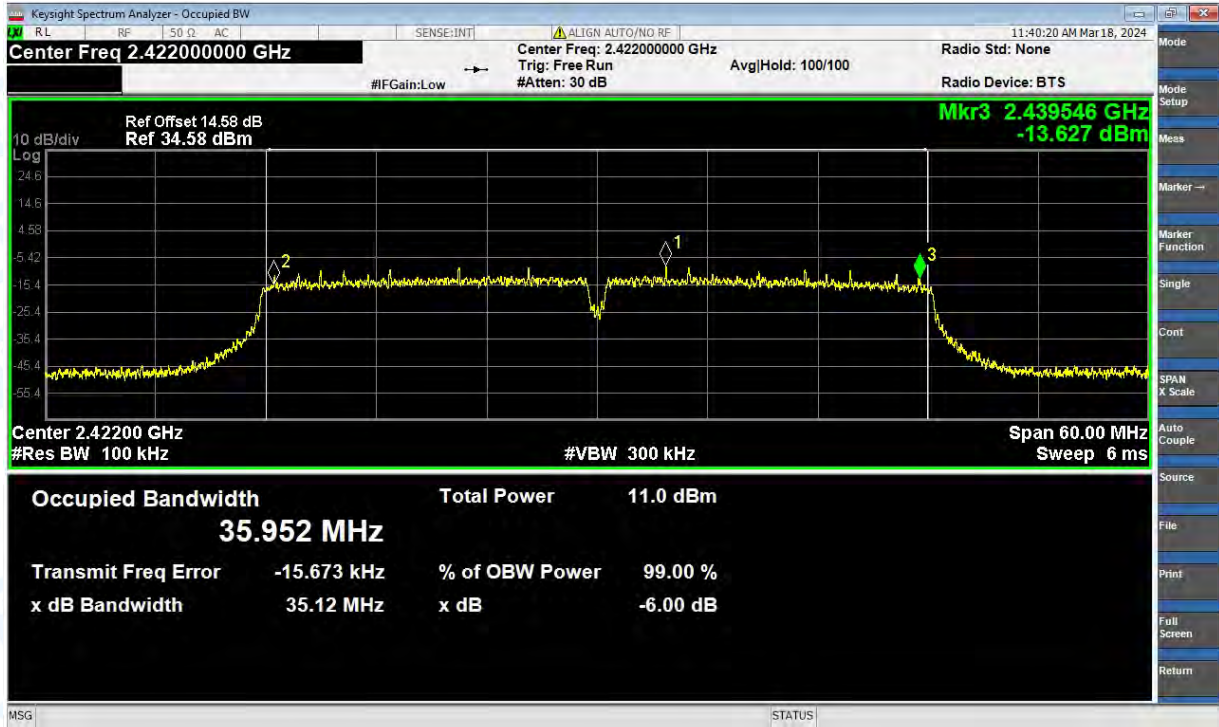
-6dB Bandwidth NVNT n(HT20) 2462MHz Ant1



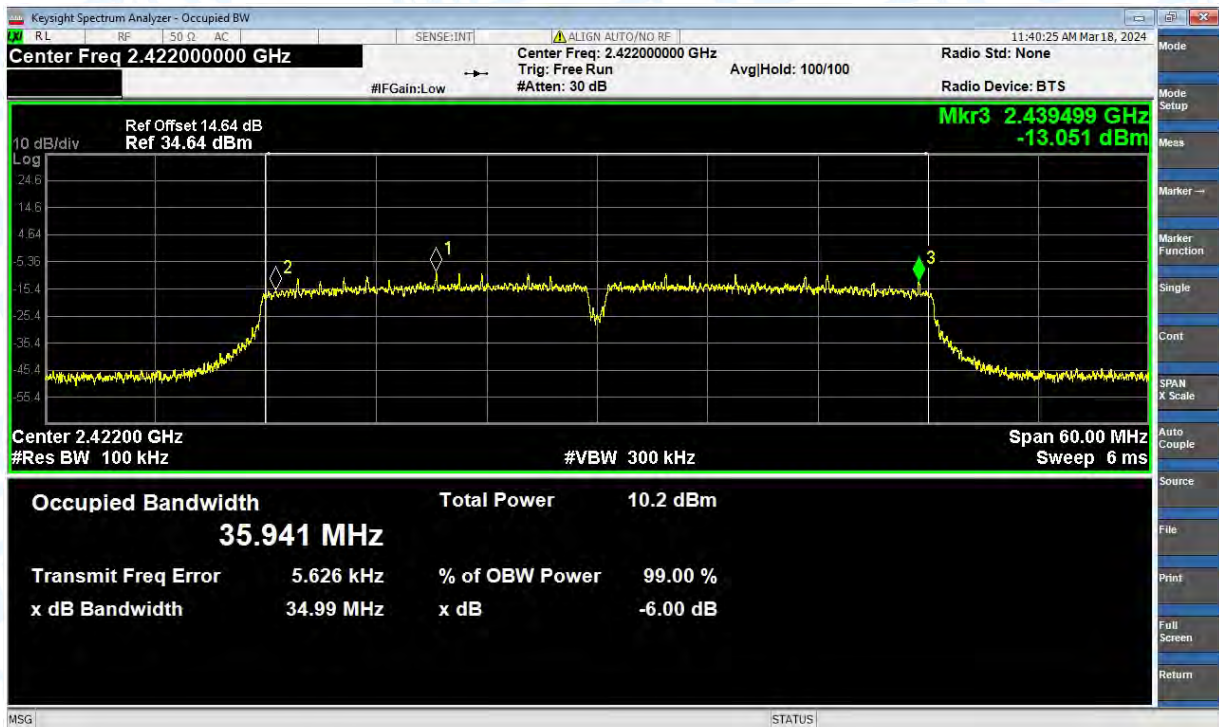
-6dB Bandwidth NVNT n(HT20) 2462MHz Ant2



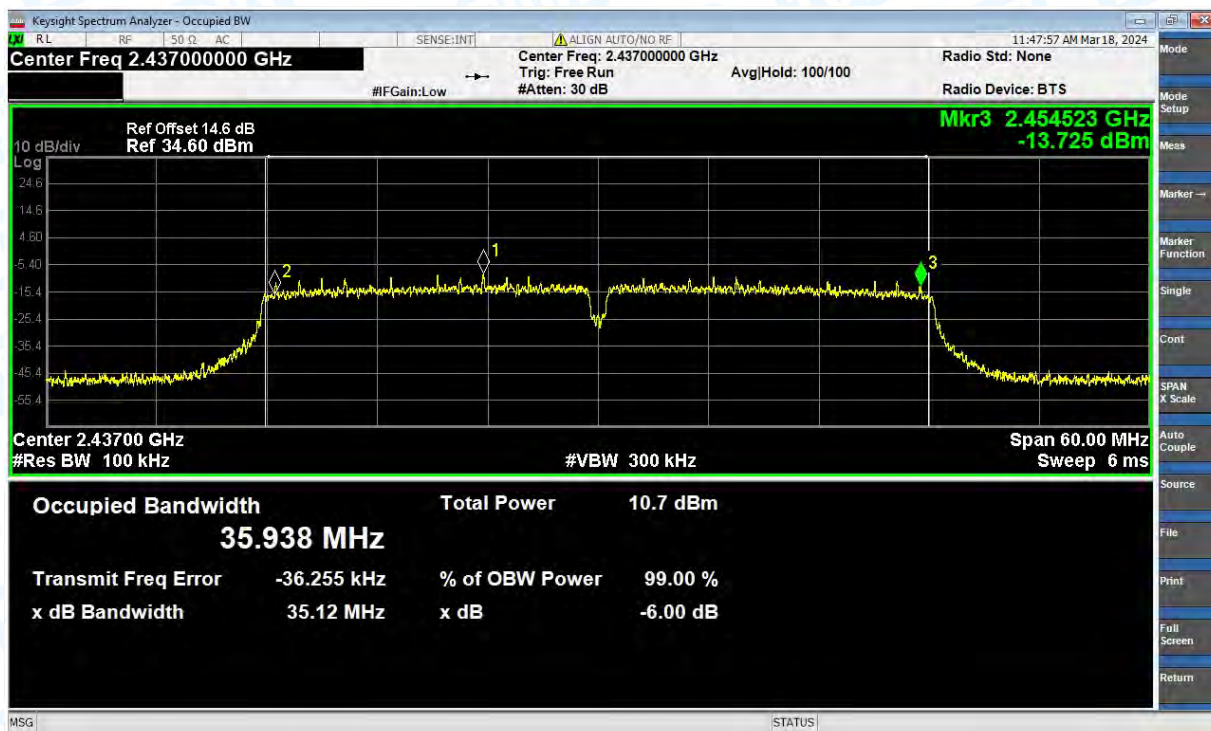
-6dB Bandwidth NVNT n(HT40) 2422MHz Ant1



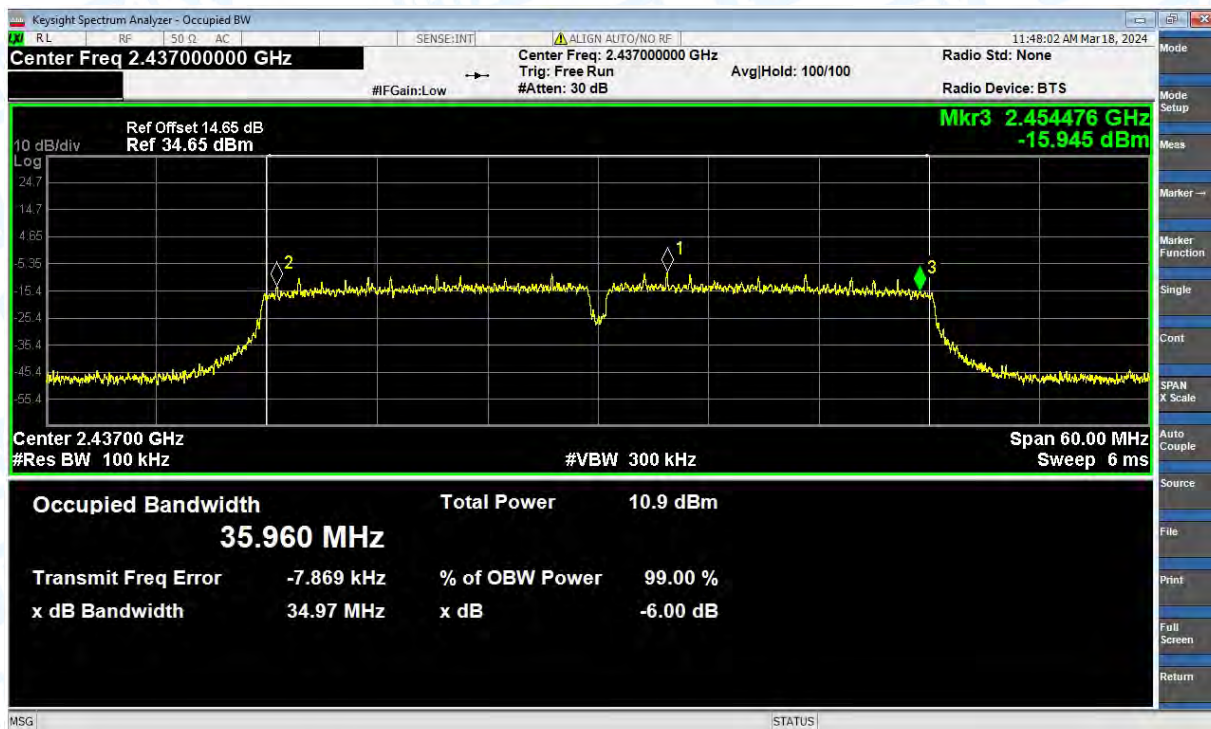
-6dB Bandwidth NVNT n(HT40) 2422MHz Ant2



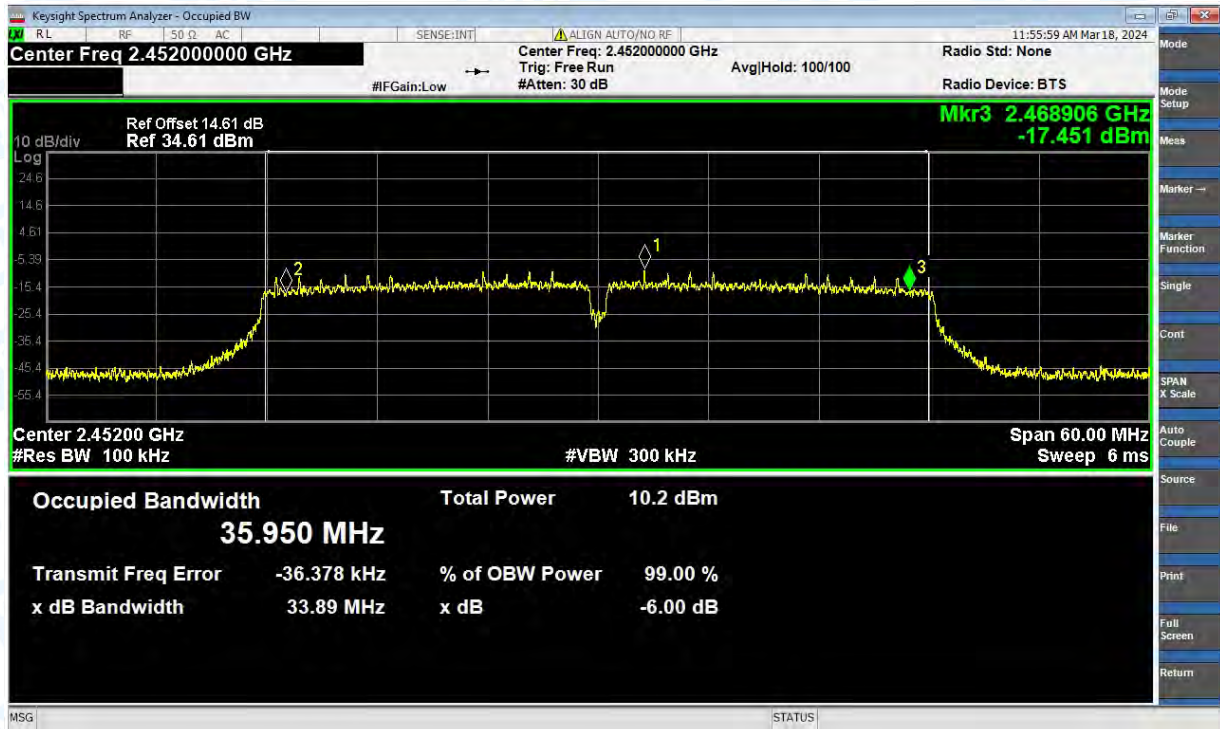
-6dB Bandwidth NVNT n(HT40) 2437MHz Ant1



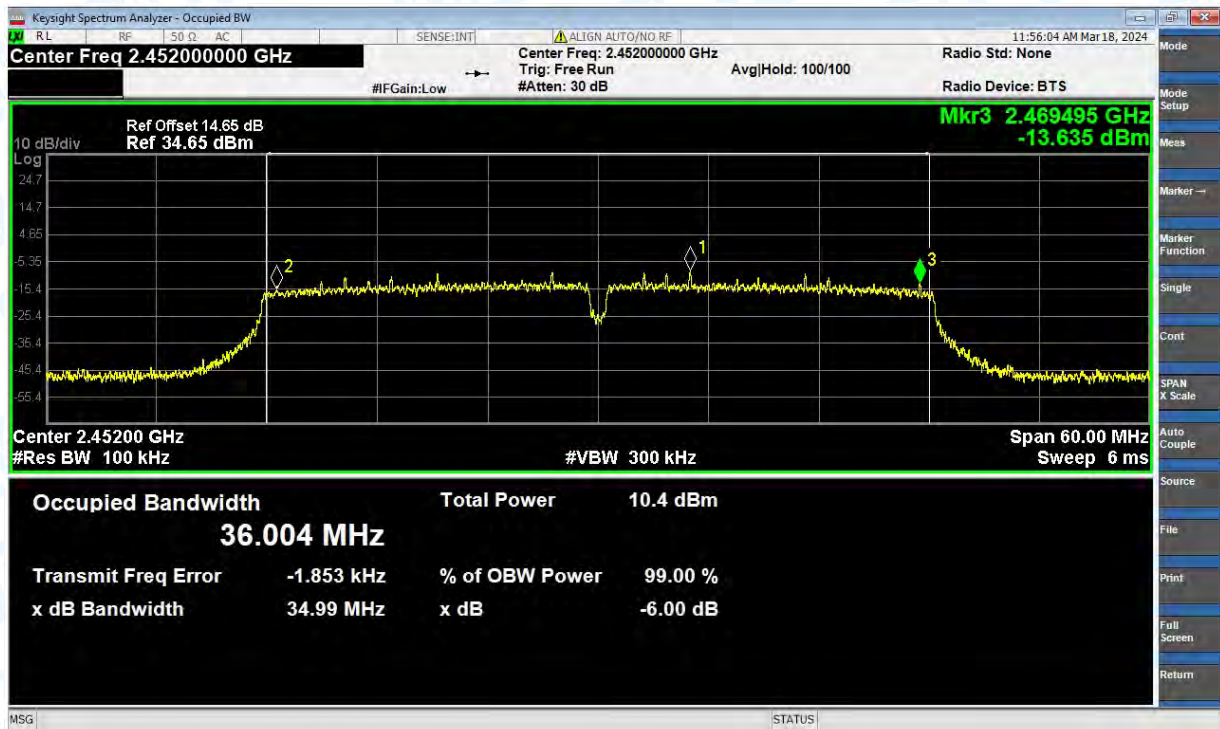
-6dB Bandwidth NVNT n(HT40) 2437MHz Ant2



-6dB Bandwidth NVNT n(HT40) 2452MHz Ant1



-6dB Bandwidth NVNT n(HT40) 2452MHz Ant2

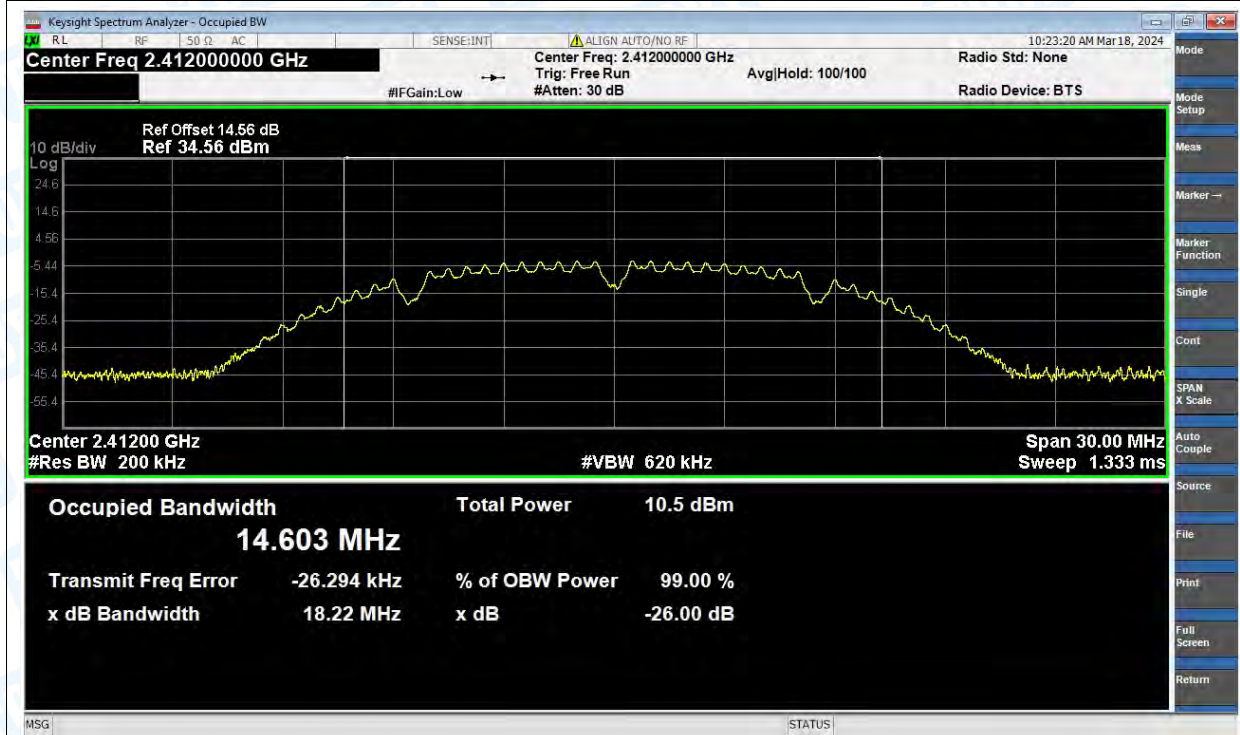


4. Occupied Channel Bandwidth

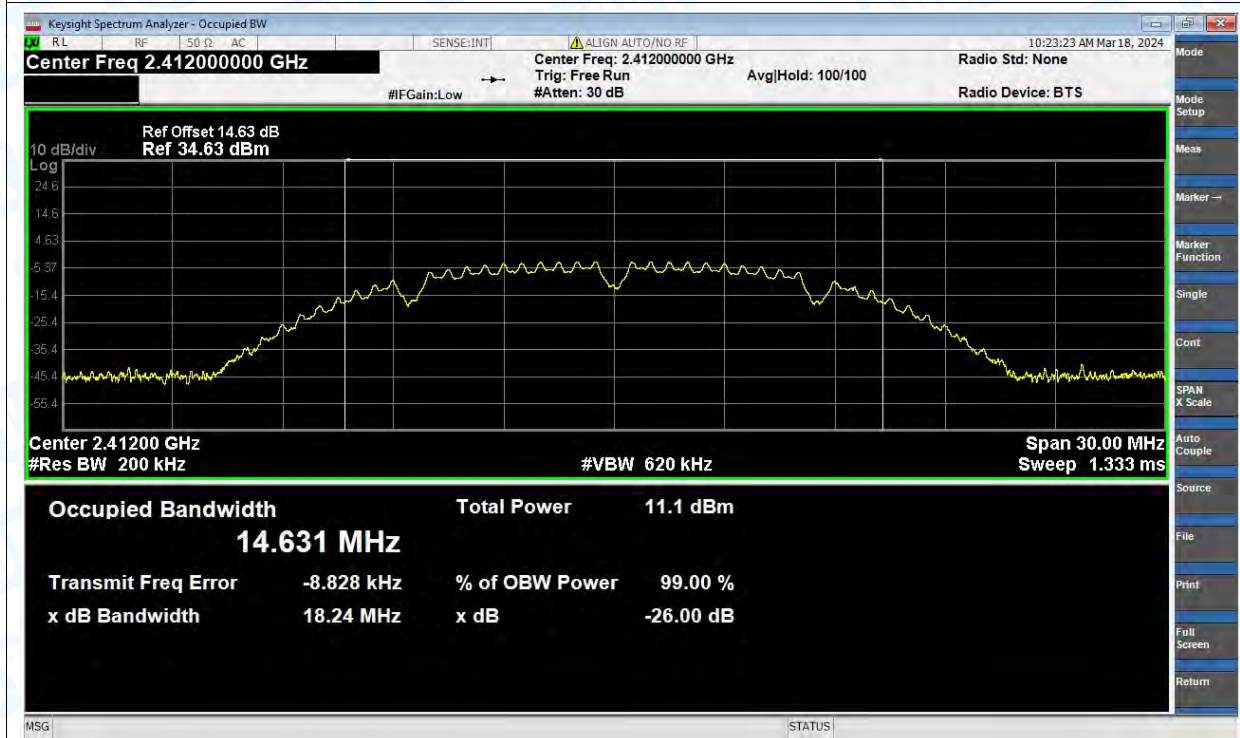
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	b	2412	Ant1	14.603
NVNT	b	2412	Ant2	14.631
NVNT	b	2437	Ant1	14.608
NVNT	b	2437	Ant2	14.634
NVNT	b	2462	Ant1	14.592
NVNT	b	2462	Ant2	14.672
NVNT	g	2412	Ant1	16.379
NVNT	g	2412	Ant2	16.405
NVNT	g	2437	Ant1	16.385
NVNT	g	2437	Ant2	16.401
NVNT	g	2462	Ant1	16.377
NVNT	g	2462	Ant2	16.421
NVNT	n(HT20)	2412	Ant1	17.582
NVNT	n(HT20)	2412	Ant2	17.602
NVNT	n(HT20)	2437	Ant1	17.584
NVNT	n(HT20)	2437	Ant2	17.603
NVNT	n(HT20)	2462	Ant1	17.592
NVNT	n(HT20)	2462	Ant2	17.586
NVNT	n(HT40)	2422	Ant1	36.066
NVNT	n(HT40)	2422	Ant2	36.002
NVNT	n(HT40)	2437	Ant1	36.051
NVNT	n(HT40)	2437	Ant2	36.084
NVNT	n(HT40)	2452	Ant1	36.121
NVNT	n(HT40)	2452	Ant2	36.133

Test Graphs

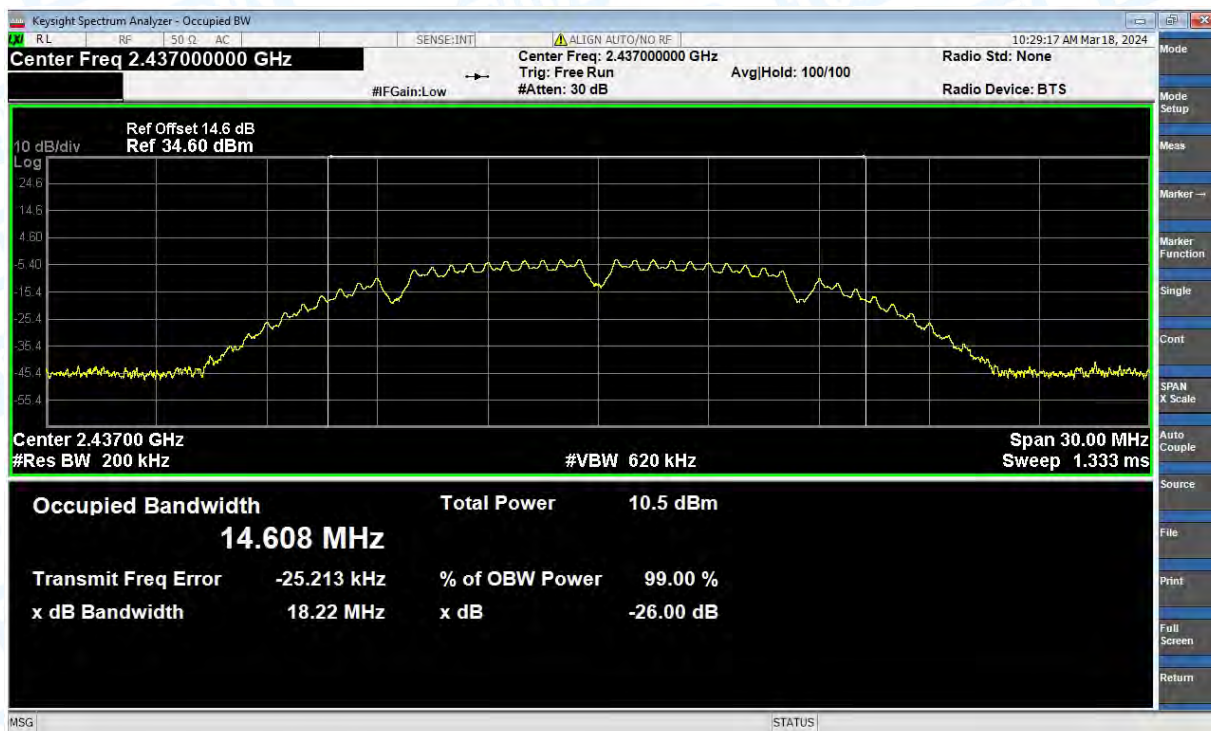
OBW NVNT b 2412MHz Ant1



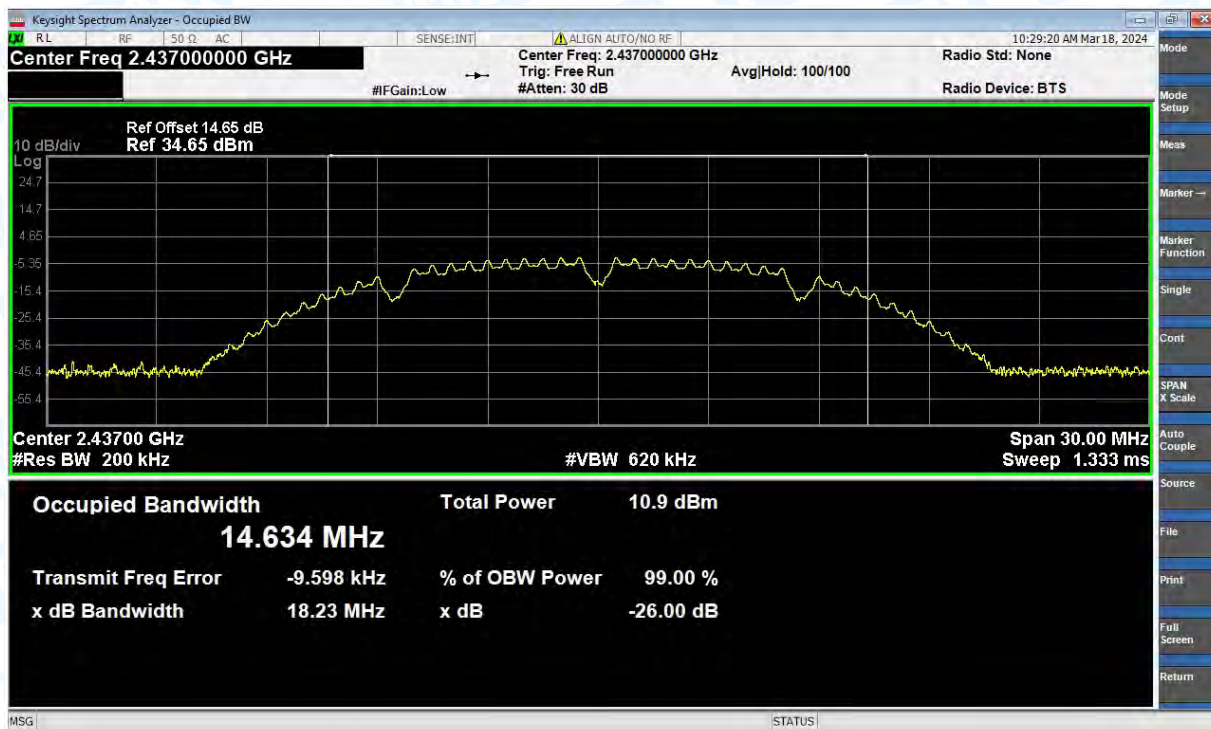
OBW NVNT b 2412MHz Ant2



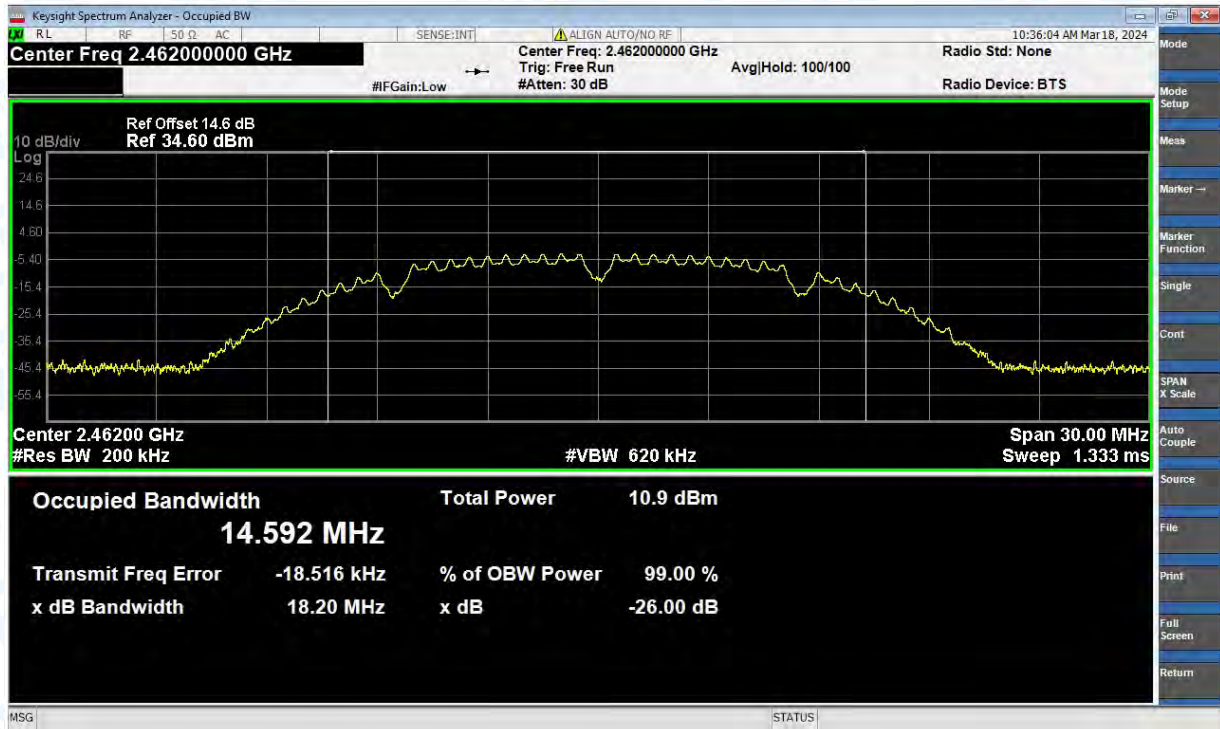
OBW NVNT b 2437MHz Ant1



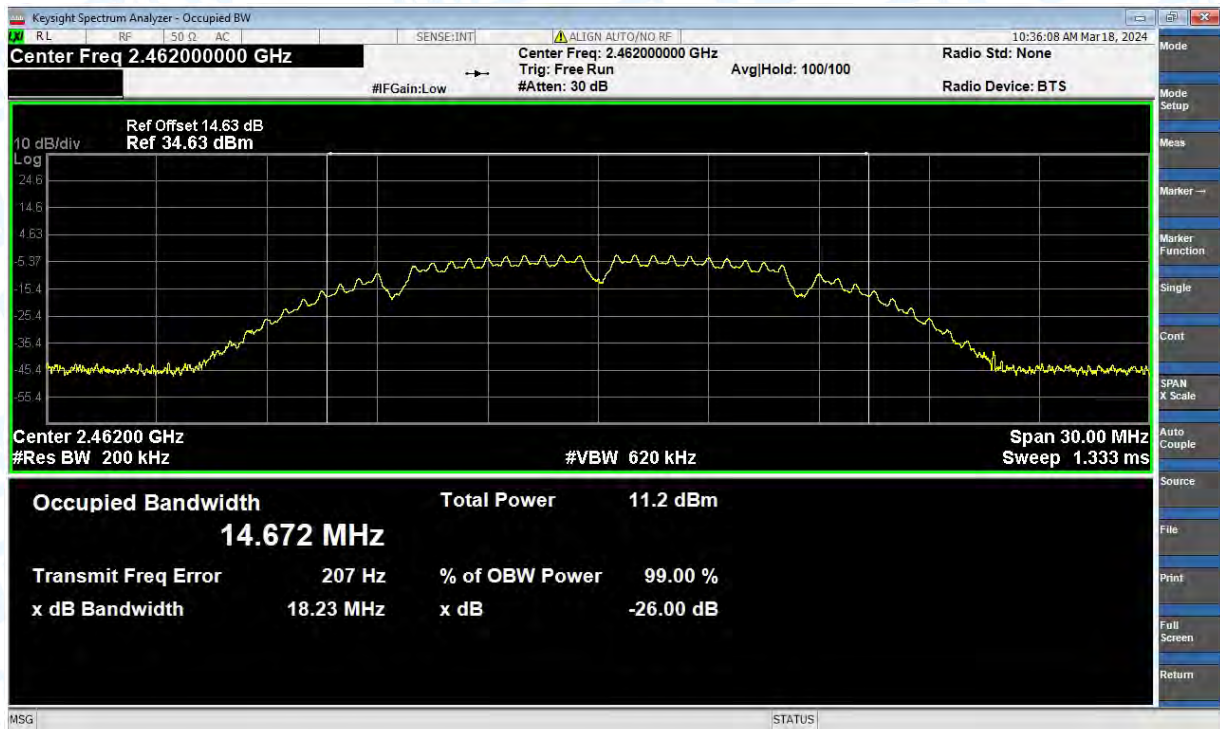
OBW NVNT b 2437MHz Ant2



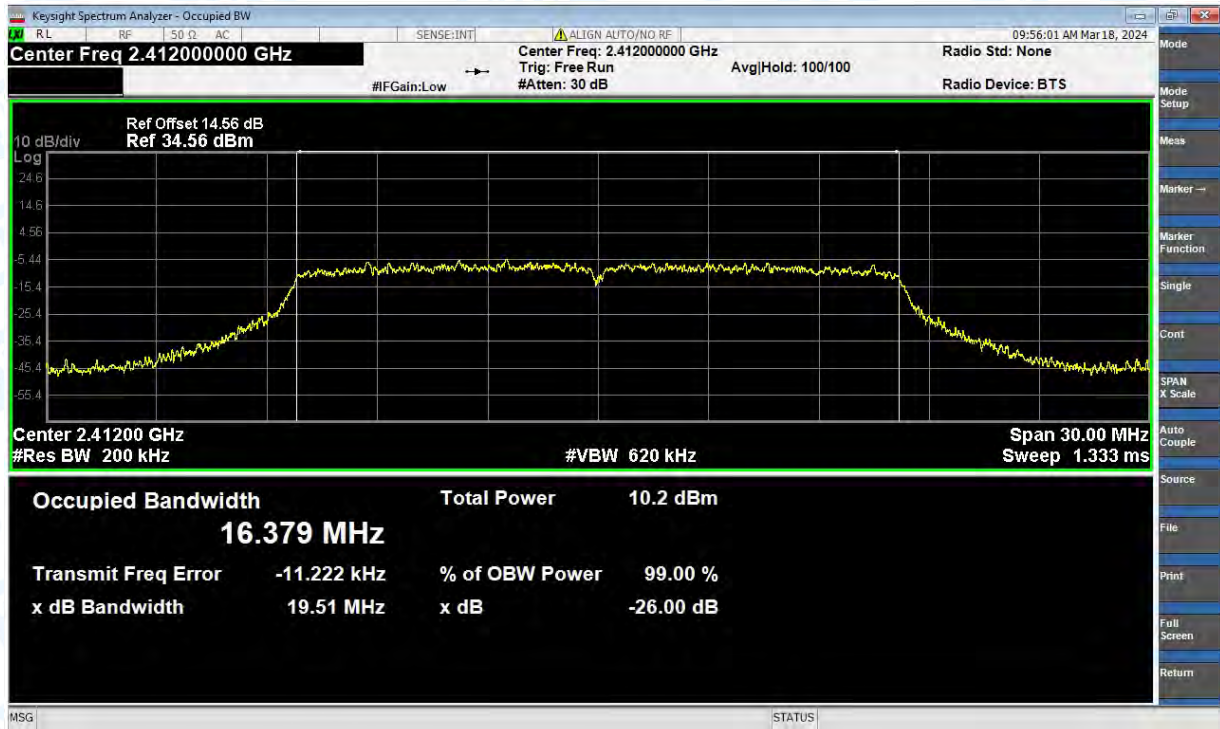
OBW NVNT b 2462MHz Ant1



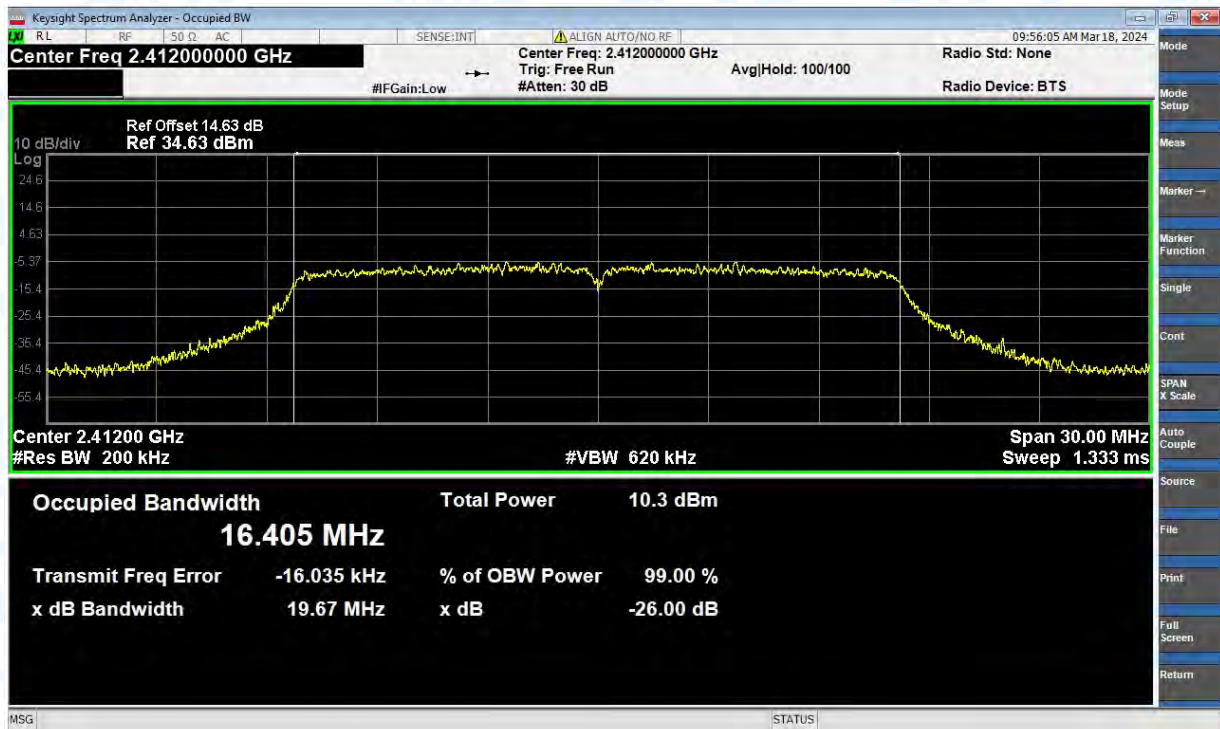
OBW NVNT b 2462MHz Ant2



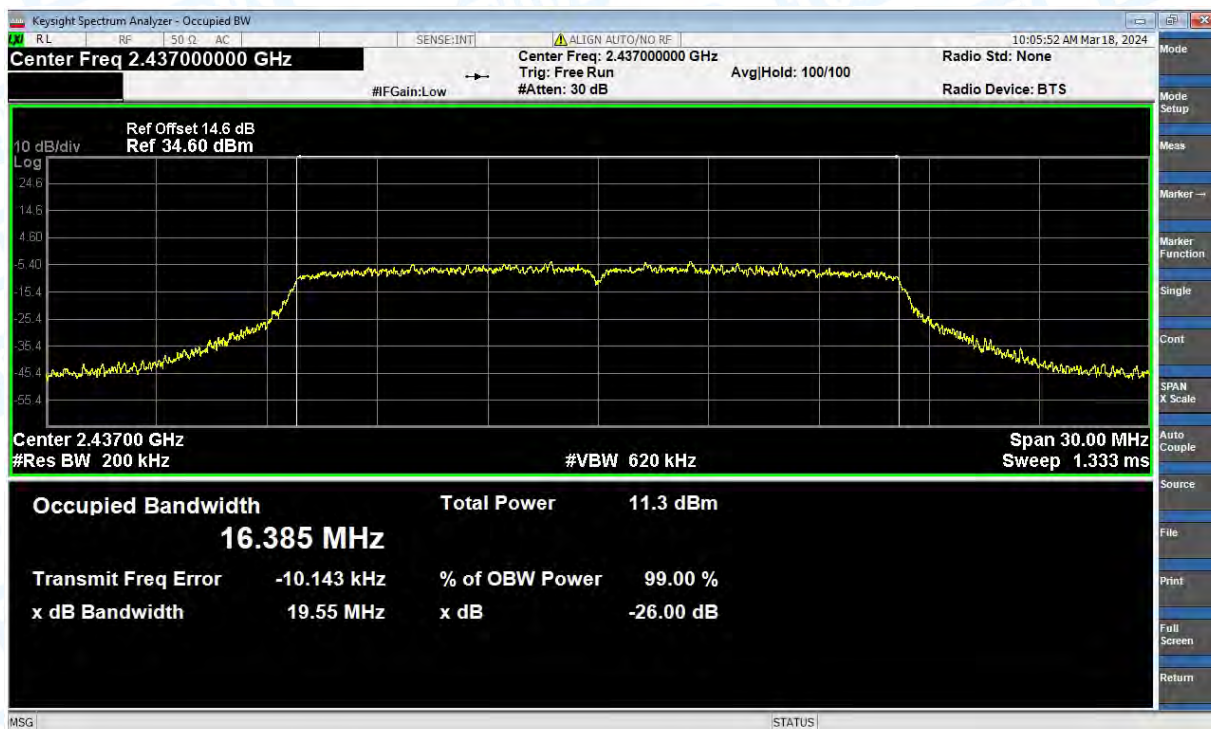
OBW NVNT g 2412MHz Ant1



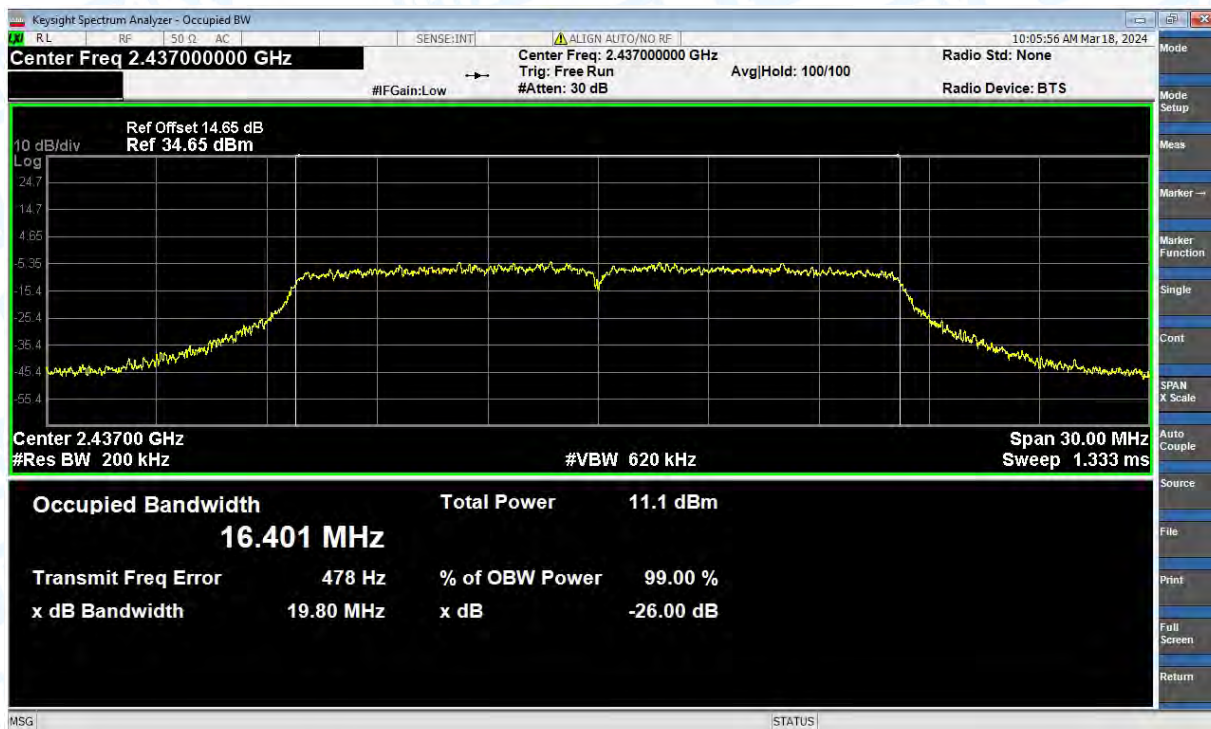
OBW NVNT g 2412MHz Ant2



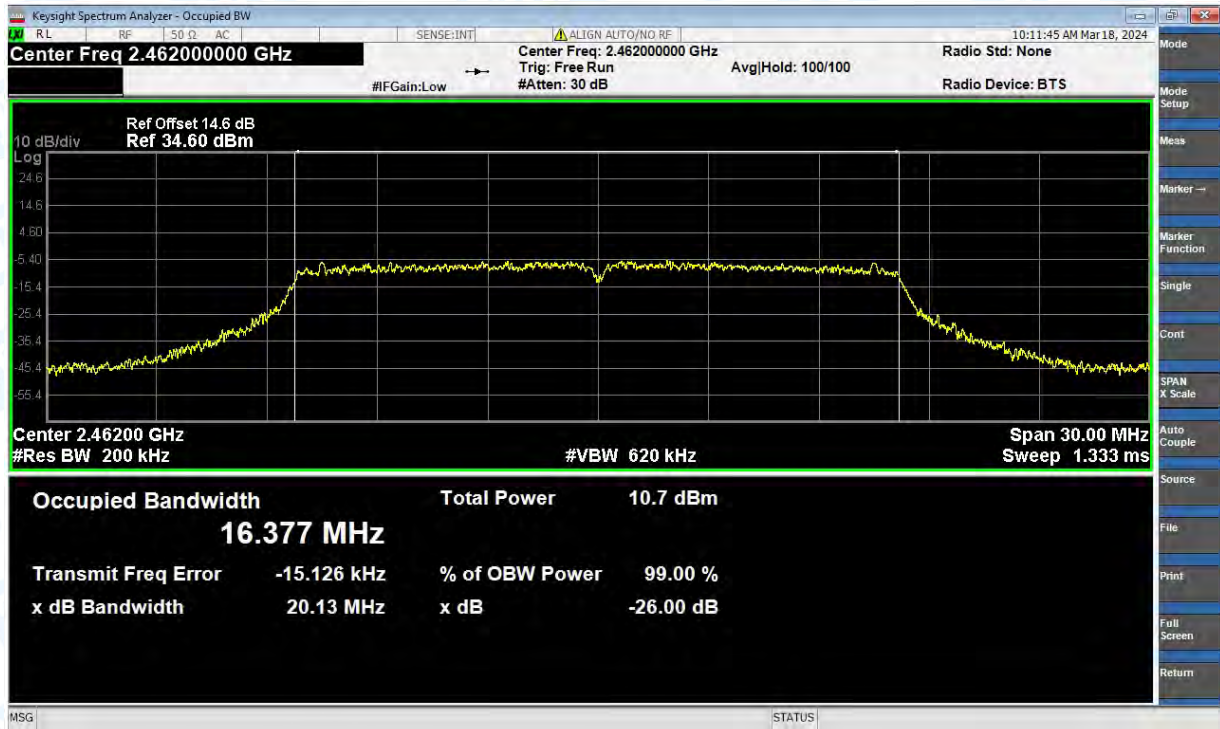
OBW NVNT g 2437MHz Ant1



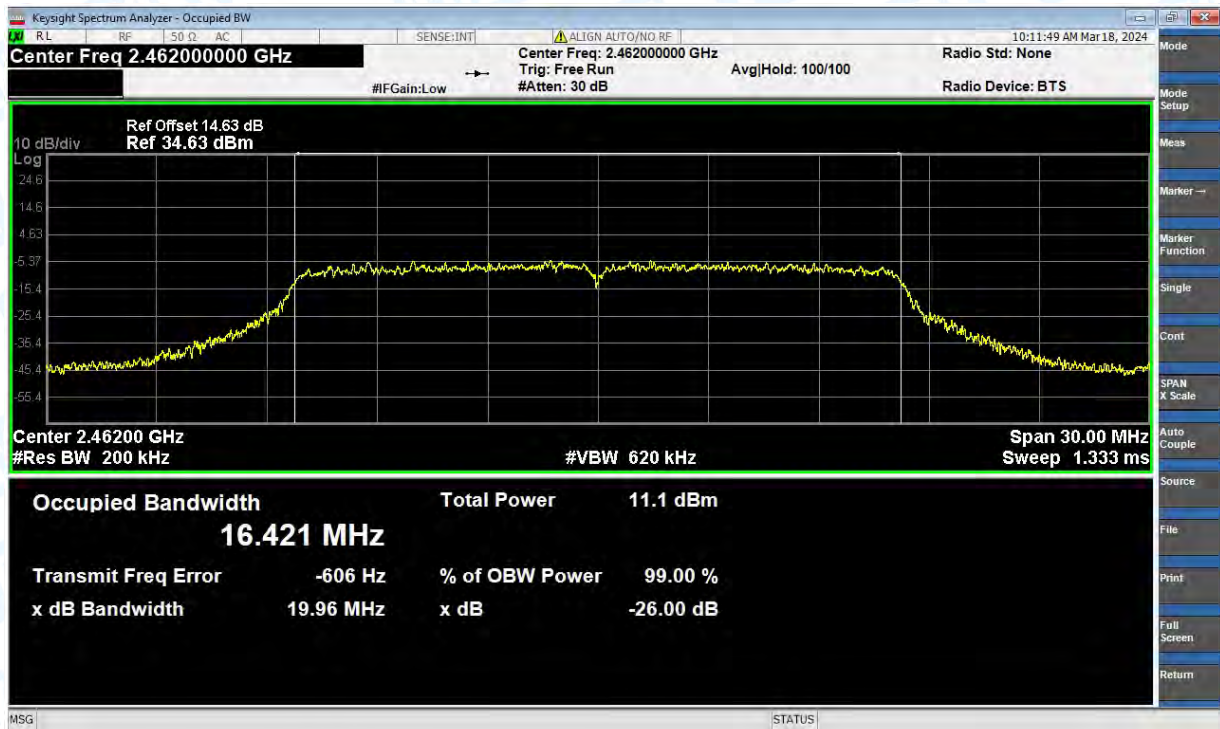
OBW NVNT g 2437MHz Ant2



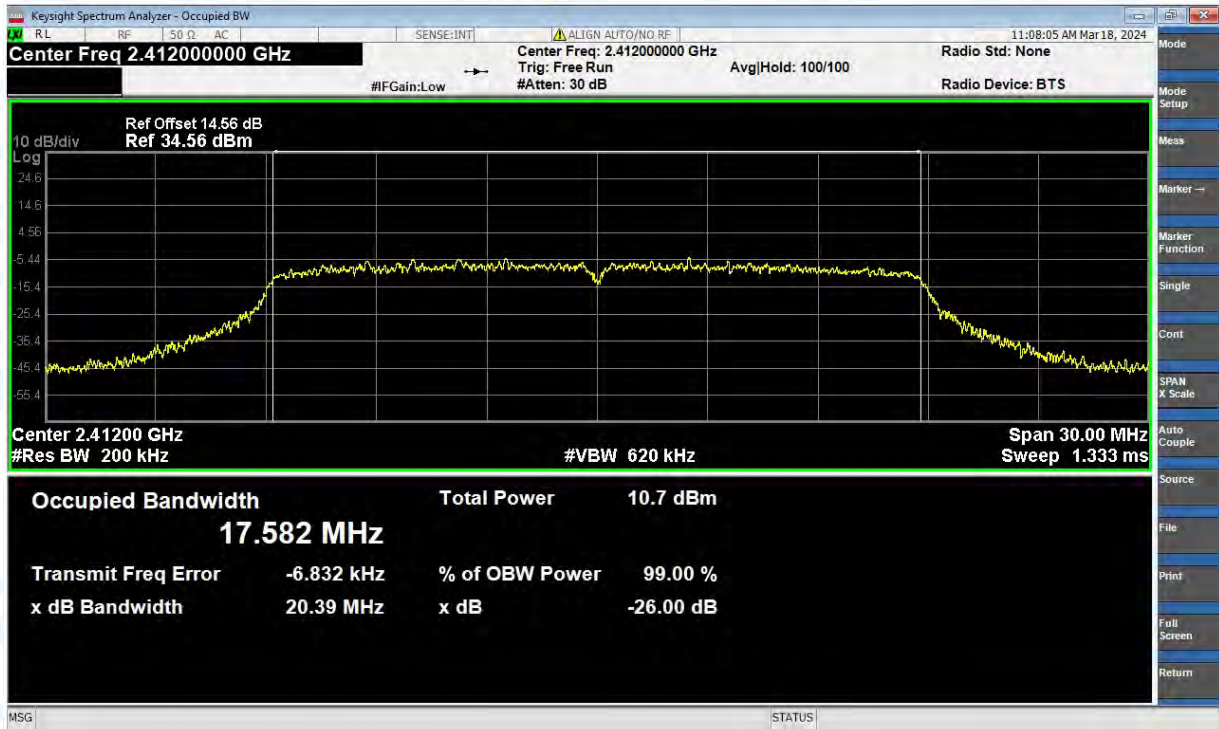
OBW NVNT g 2462MHz Ant1



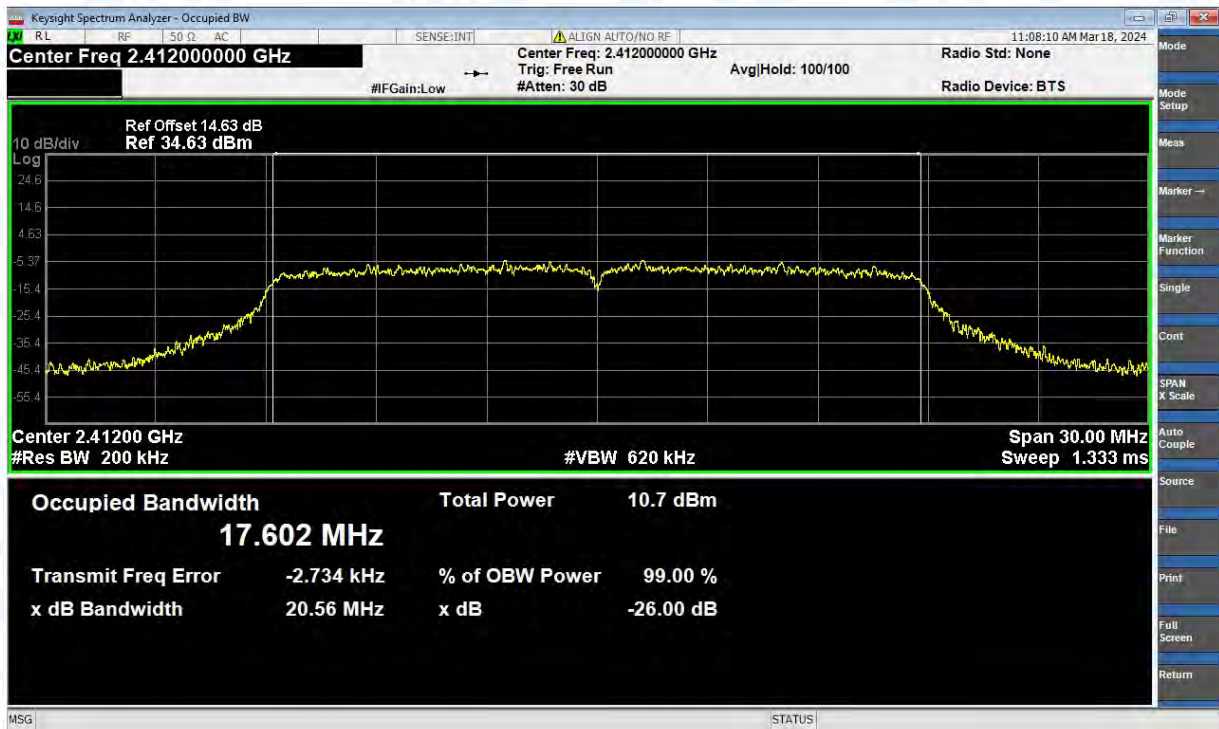
OBW NVNT g 2462MHz Ant2



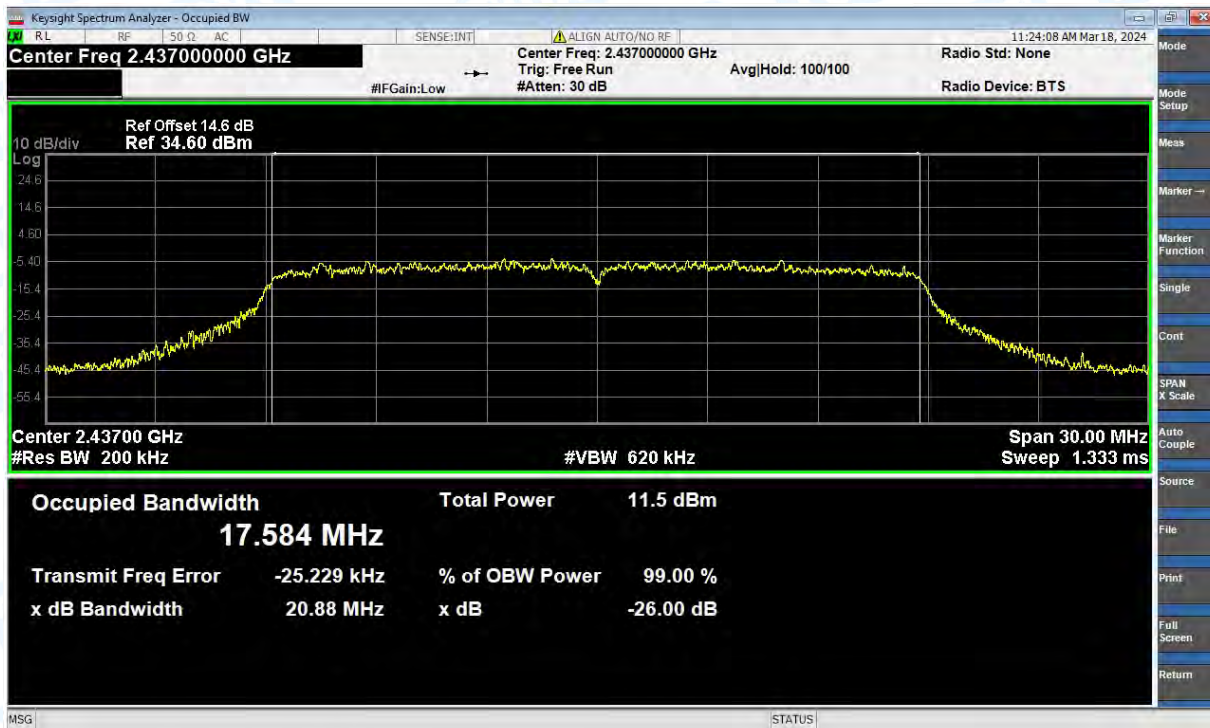
OBW NVNT n(HT20) 2412MHz Ant1



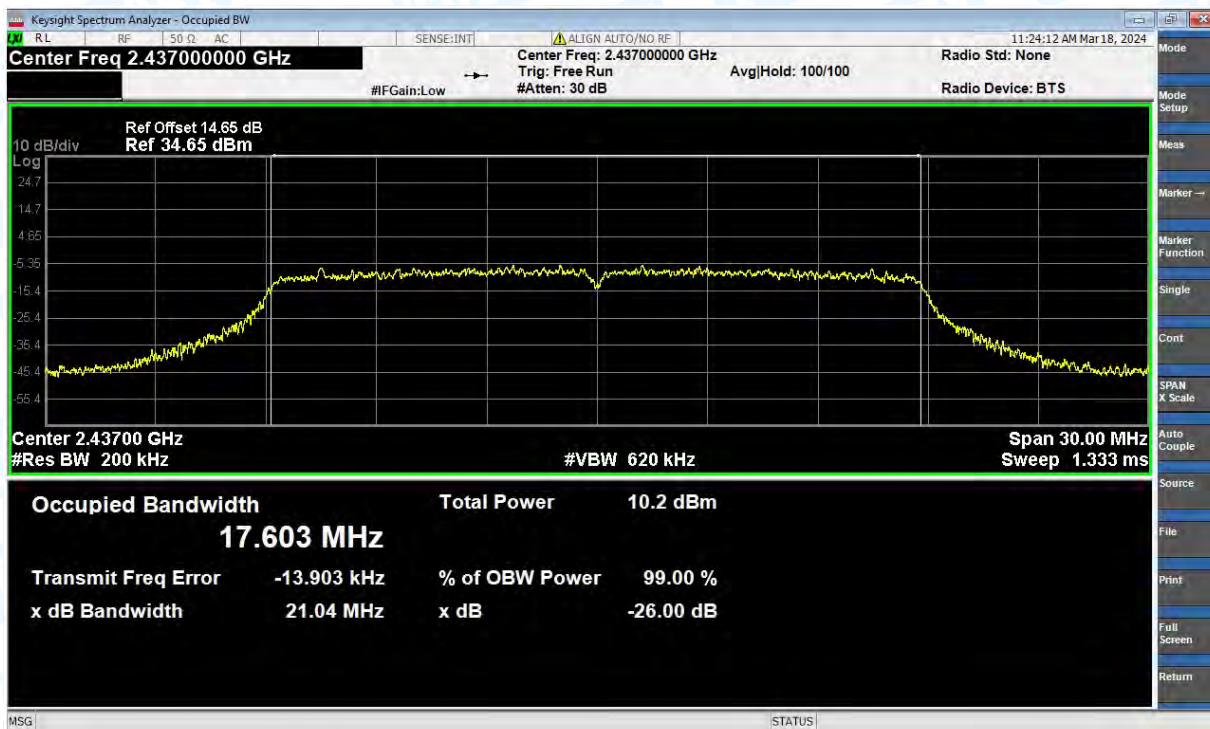
OBW NVNT n(HT20) 2412MHz Ant2



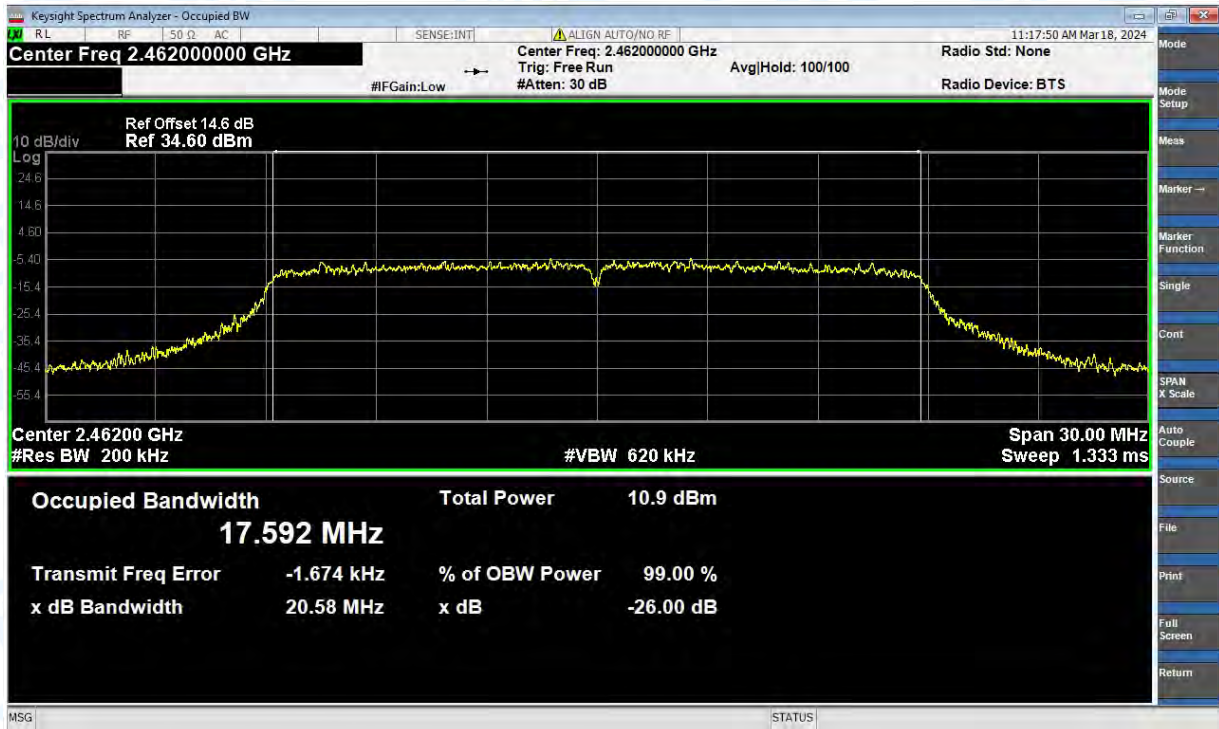
OBW NVNT n(HT20) 2437MHz Ant1



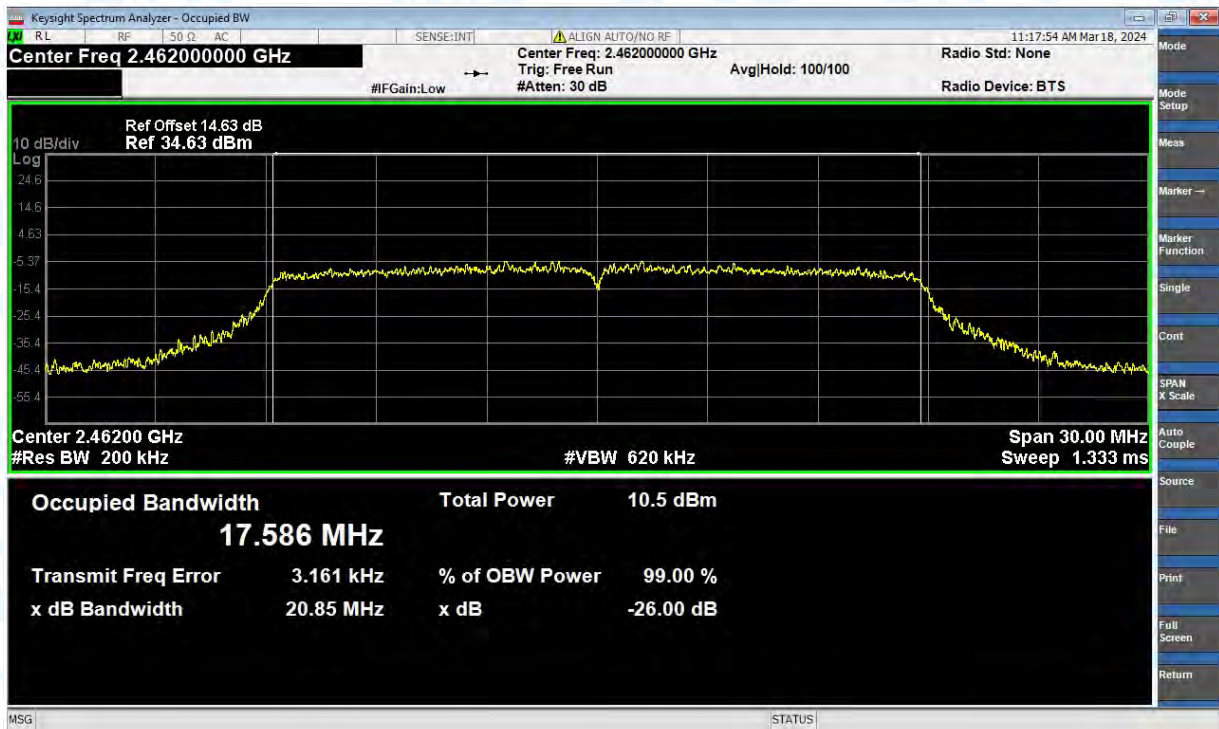
OBW NVNT n(HT20) 2437MHz Ant2



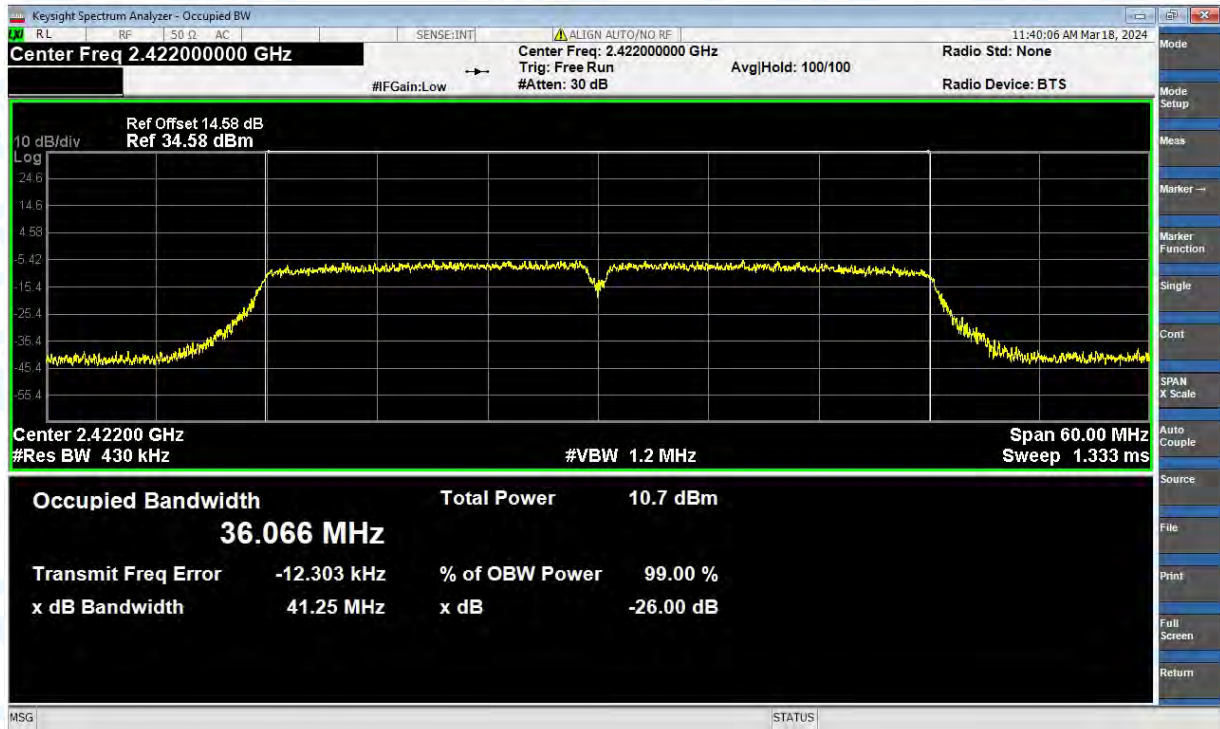
OBW NVNT n(HT20) 2462MHz Ant1



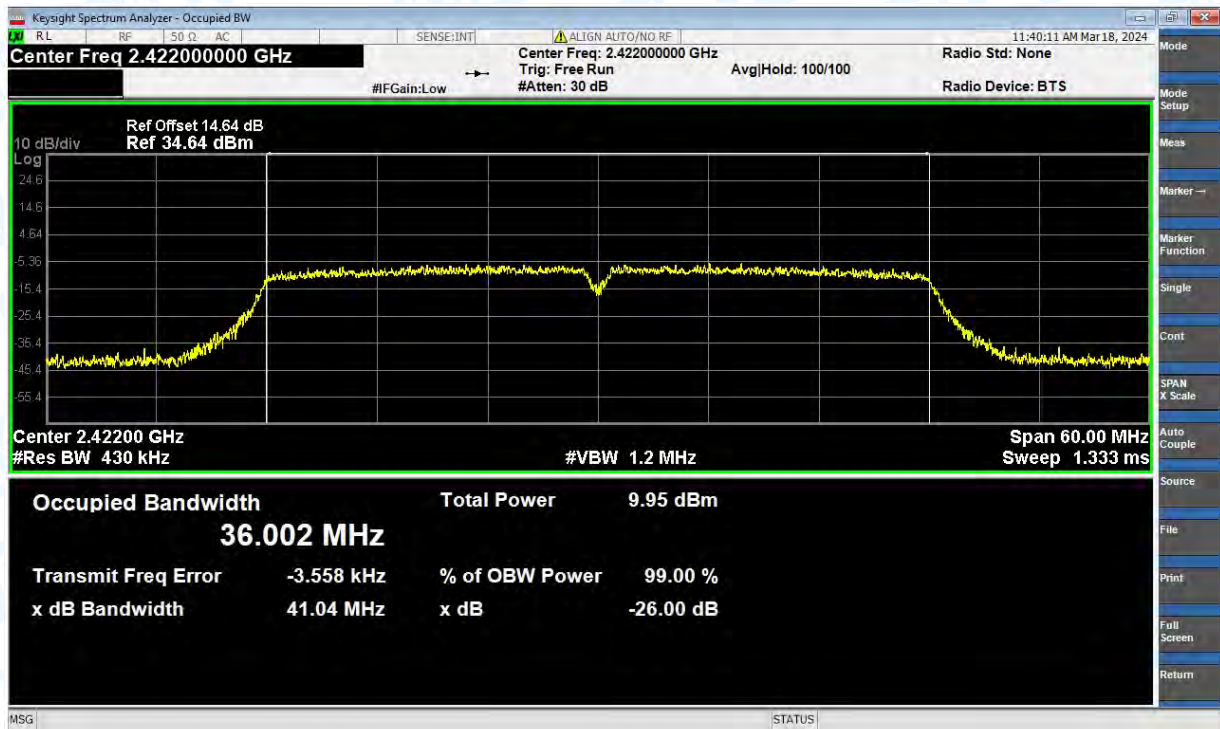
OBW NVNT n(HT20) 2462MHz Ant2



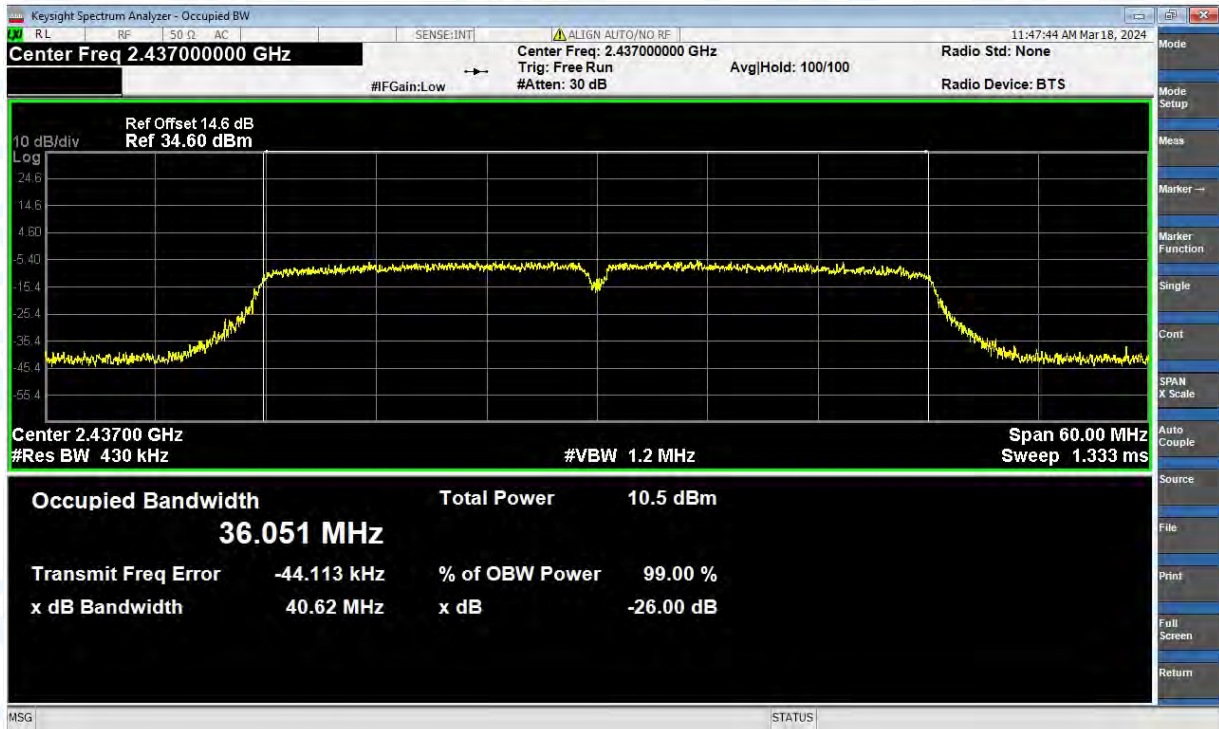
OBW NVNT n(HT40) 2422MHz Ant1



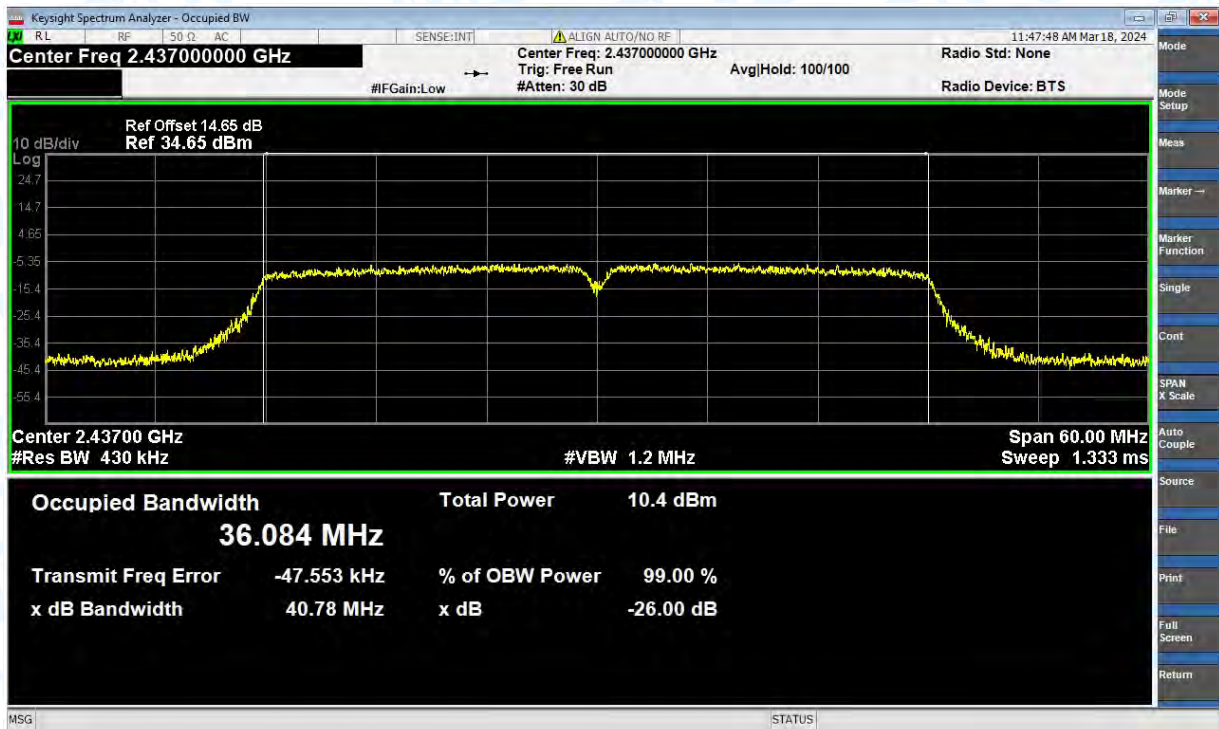
OBW NVNT n(HT40) 2422MHz Ant2



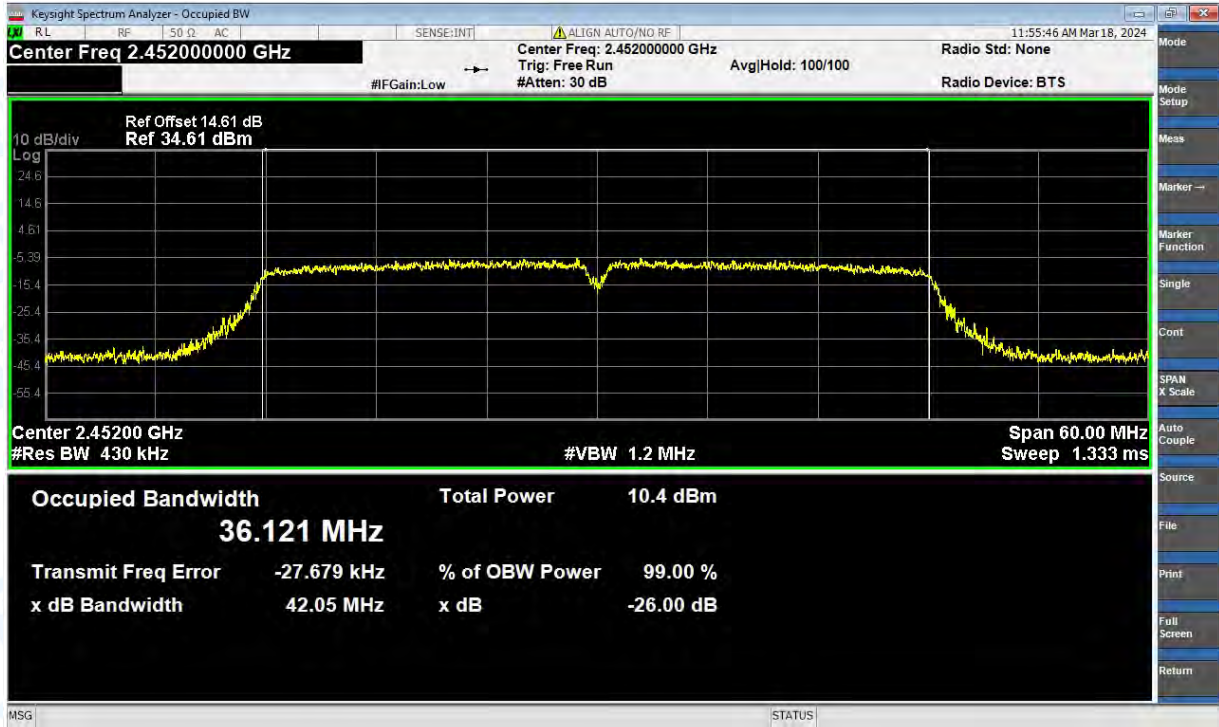
OBW NVNT n(HT40) 2437MHz Ant1



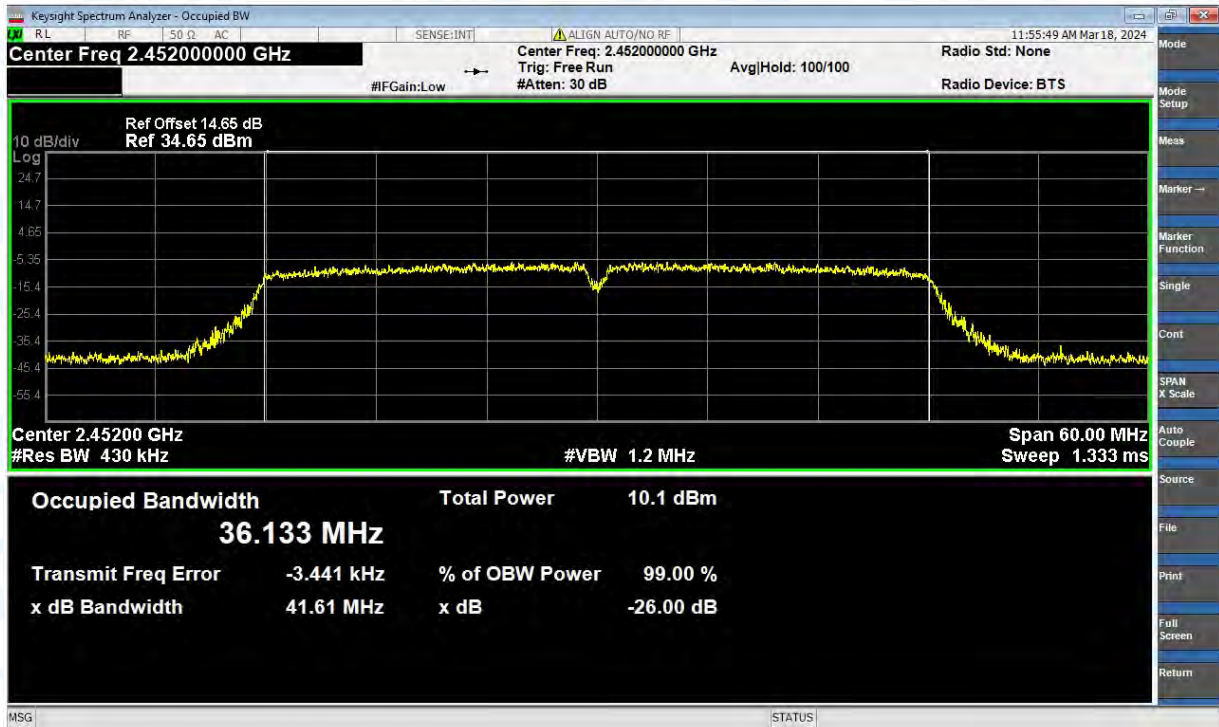
OBW NVNT n(HT40) 2437MHz Ant2



OBW NVNT n(HT40) 2452MHz Ant1



OBW NVNT n(HT40) 2452MHz Ant2



5. Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	b	2412	Ant1	-27.673	8	Pass
NVNT	b	2412	Ant2	-26.54	8	Pass
NVNT	b	2412	Sum	-24.059	8	Pass
NVNT	b	2437	Ant1	-26.792	8	Pass
NVNT	b	2437	Ant2	-27.828	8	Pass
NVNT	b	2437	Sum	-24.269	8	Pass
NVNT	b	2462	Ant1	-27.481	8	Pass
NVNT	b	2462	Ant2	-26.782	8	Pass
NVNT	b	2462	Sum	-24.107	8	Pass
NVNT	g	2412	Ant1	-29.215	8	Pass
NVNT	g	2412	Ant2	-29.354	8	Pass
NVNT	g	2412	Sum	-26.274	8	Pass
NVNT	g	2437	Ant1	-28.455	8	Pass
NVNT	g	2437	Ant2	-28.699	8	Pass
NVNT	g	2437	Sum	-25.565	8	Pass
NVNT	g	2462	Ant1	-29.27	8	Pass
NVNT	g	2462	Ant2	-28.5	8	Pass
NVNT	g	2462	Sum	-25.858	8	Pass
NVNT	n(HT20)	2412	Ant1	-29.298	8	Pass
NVNT	n(HT20)	2412	Ant2	-29.568	8	Pass
NVNT	n(HT20)	2412	Sum	-26.421	8	Pass
NVNT	n(HT20)	2437	Ant1	-28.256	8	Pass
NVNT	n(HT20)	2437	Ant2	-28.666	8	Pass
NVNT	n(HT20)	2437	Sum	-25.446	8	Pass
NVNT	n(HT20)	2462	Ant1	-29.353	8	Pass
NVNT	n(HT20)	2462	Ant2	-29.68	8	Pass
NVNT	n(HT20)	2462	Sum	-26.503	8	Pass
NVNT	n(HT40)	2422	Ant1	-32.788	8	Pass
NVNT	n(HT40)	2422	Ant2	-33.694	8	Pass
NVNT	n(HT40)	2422	Sum	-30.207	8	Pass
NVNT	n(HT40)	2437	Ant1	-33.129	8	Pass
NVNT	n(HT40)	2437	Ant2	-33.175	8	Pass
NVNT	n(HT40)	2437	Sum	-30.142	8	Pass
NVNT	n(HT40)	2452	Ant1	-33.42	8	Pass
NVNT	n(HT40)	2452	Ant2	-33.688	8	Pass
NVNT	n(HT40)	2452	Sum	-30.542	8	Pass

Note: The Duty Cycle Factor is compensated in the graph.

Test Graphs

PSD NVNT b 2412MHz Ant1



PSD NVNT b 2412MHz Ant2



PSD NVNT b 2437MHz Ant1



PSD NVNT b 2437MHz Ant2



PSD NVNT b 2462MHz Ant1



PSD NVNT b 2462MHz Ant2

