

17.3 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

BlueAsia

18 CONDUCTED EMISSIONS AT AC POWER LINE (150KHZ-30MHZ)

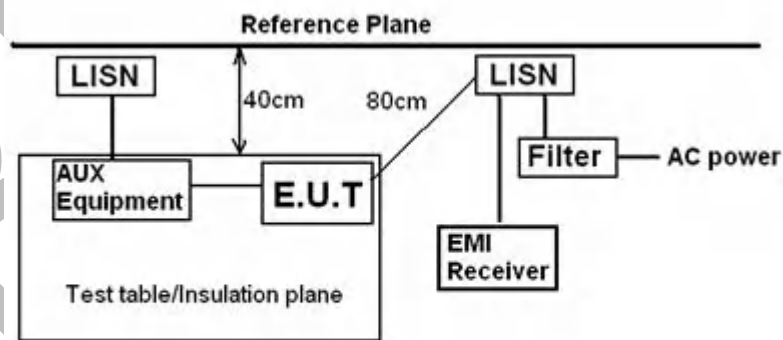
Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 6.2
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Charlie
Temperature	25°C
Humidity	60%

18.1 LIMITS

Frequency of emission(MHz)	Conducted limit(dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

18.2 BLOCK DIAGRAM OF TEST SETUP



Remark:
E.U.T: Equipment Under Test
LISN: Line Impedance Stabilization Network
Test table height=0.8m

18.3 PROCEDURE

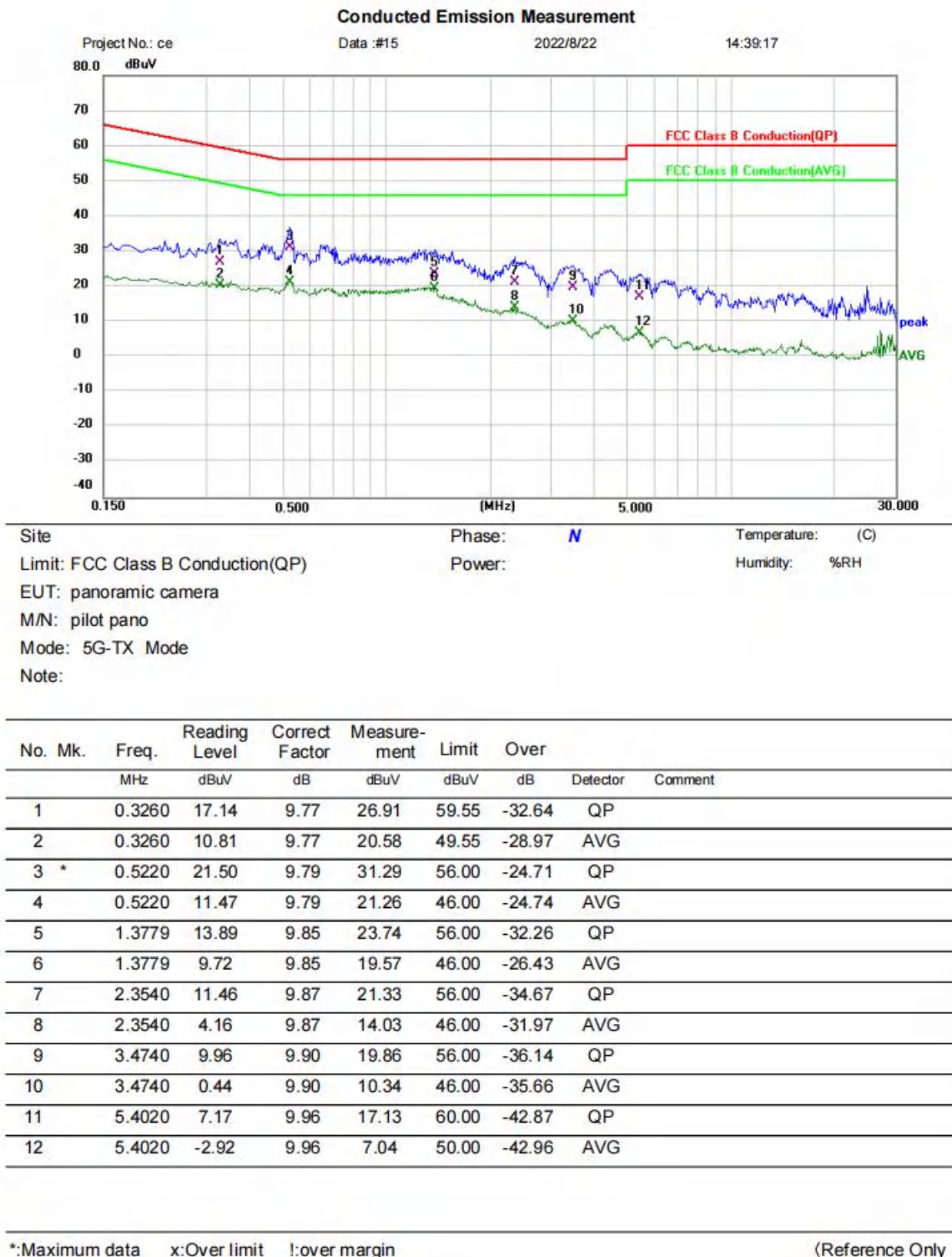
- 1) The mains terminal disturbance voltage test was conducted in a shielded room.
- 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50ohm/50H + 5ohm linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.

- 3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,
- 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.
- 5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.

Remark: $LISN = Read\ Level + Cable\ Loss + LISN\ Factor$

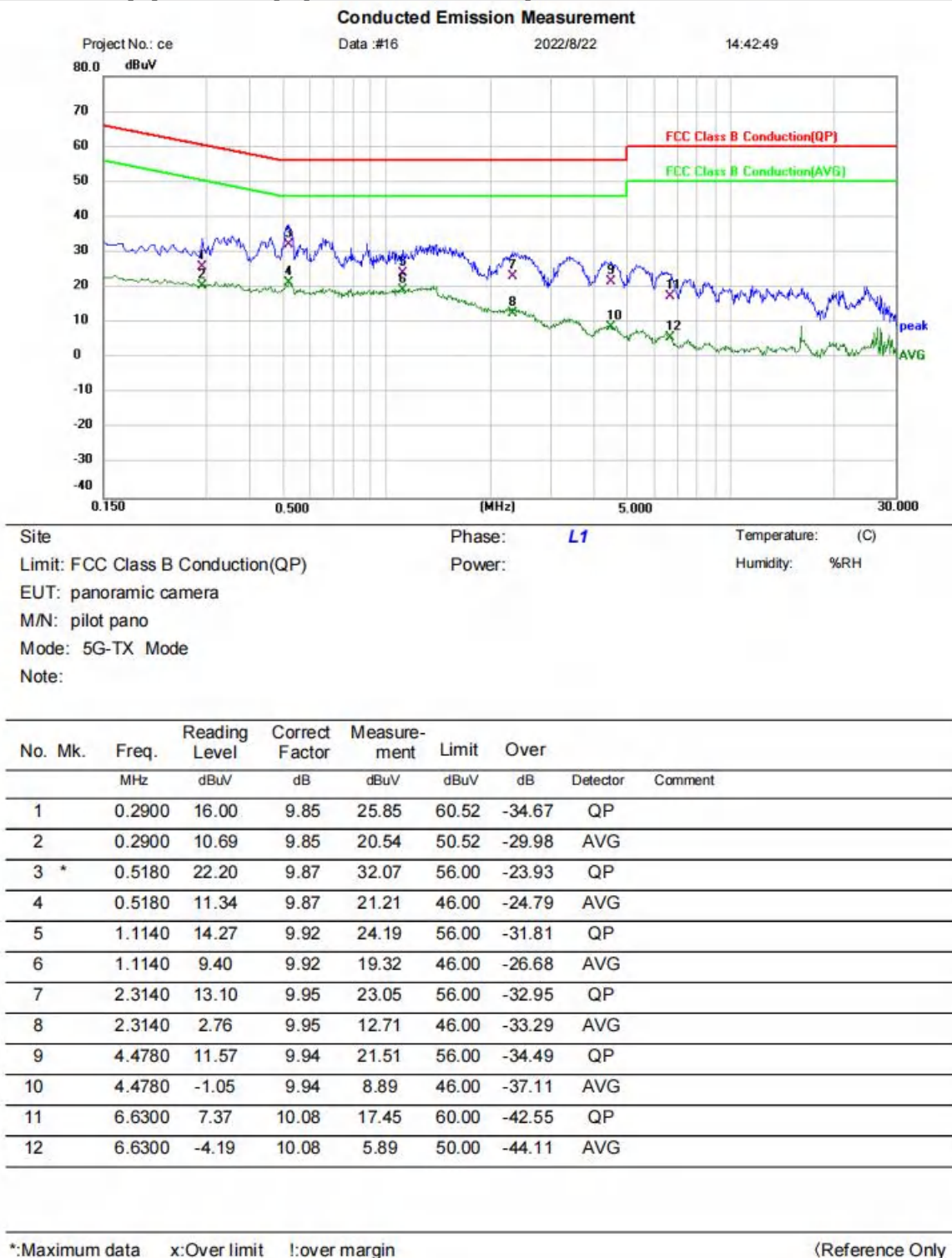
18.4 TEST DATA

[TestMode: TX]; [Line: Neutral] ; [Power:120V/60Hz]



Test Result: Pass

[TestMode: TX]; [Line: Line] ; [Power:120V/60Hz]



Test Result: Pass

19 APPENDIX

Appendix1

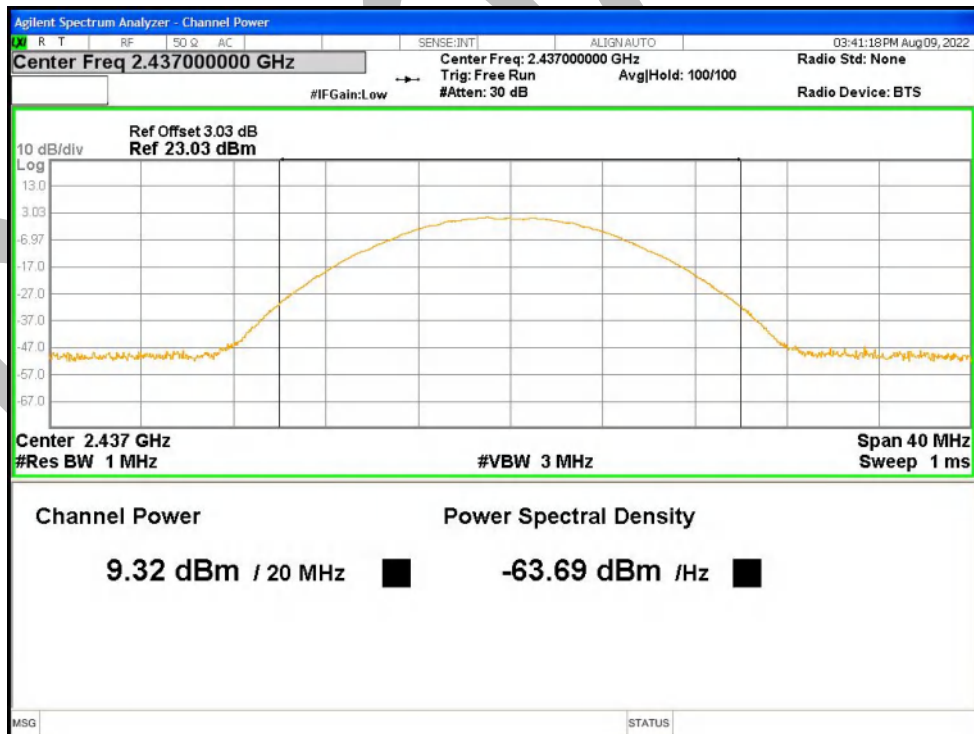
Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	8.813	30	Pass
NVNT	b	2437	Ant1	9.325	30	Pass
NVNT	b	2462	Ant1	8.676	30	Pass
NVNT	b	2412	Ant2	6.309	30	Pass
NVNT	b	2437	Ant2	7.793	30	Pass
NVNT	b	2462	Ant2	7.294	30	Pass
NVNT	g	2412	Ant1	11.301	30	Pass
NVNT	g	2437	Ant1	11.768	30	Pass
NVNT	g	2462	Ant1	11.279	30	Pass
NVNT	g	2412	Ant2	9.471	30	Pass
NVNT	g	2437	Ant2	10.172	30	Pass
NVNT	g	2462	Ant2	10.123	30	Pass
NVNT	n20	2412	Ant1	19.883	30	Pass
NVNT	n20	2412	Ant2	17.956	30	Pass
NVNT	n20	2412	Sum	22.036	30	Pass
NVNT	n20	2437	Ant1	19.725	30	Pass
NVNT	n20	2437	Ant2	18.448	30	Pass
NVNT	n20	2437	Sum	22.144	30	Pass
NVNT	n20	2462	Ant1	19.394	30	Pass
NVNT	n20	2462	Ant2	17.922	30	Pass
NVNT	n20	2462	Sum	21.73	30	Pass
NVNT	n40	2422	Ant1	19.924	30	Pass
NVNT	n40	2422	Ant2	18.33	30	Pass
NVNT	n40	2422	Sum	22.21	30	Pass
NVNT	n40	2437	Ant1	20.232	30	Pass
NVNT	n40	2437	Ant2	18.829	30	Pass
NVNT	n40	2437	Sum	22.597	30	Pass
NVNT	n40	2452	Ant1	19.523	30	Pass
NVNT	n40	2452	Ant2	18.387	30	Pass
NVNT	n40	2452	Sum	22.002	30	Pass

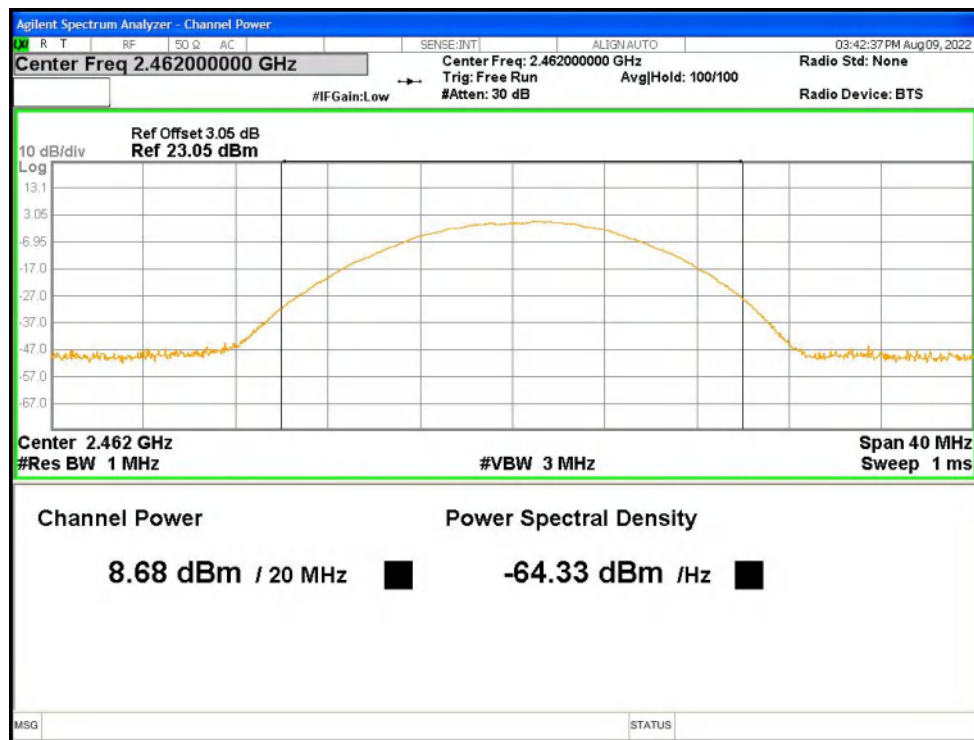
Power NVNT b 2412MHz Ant1



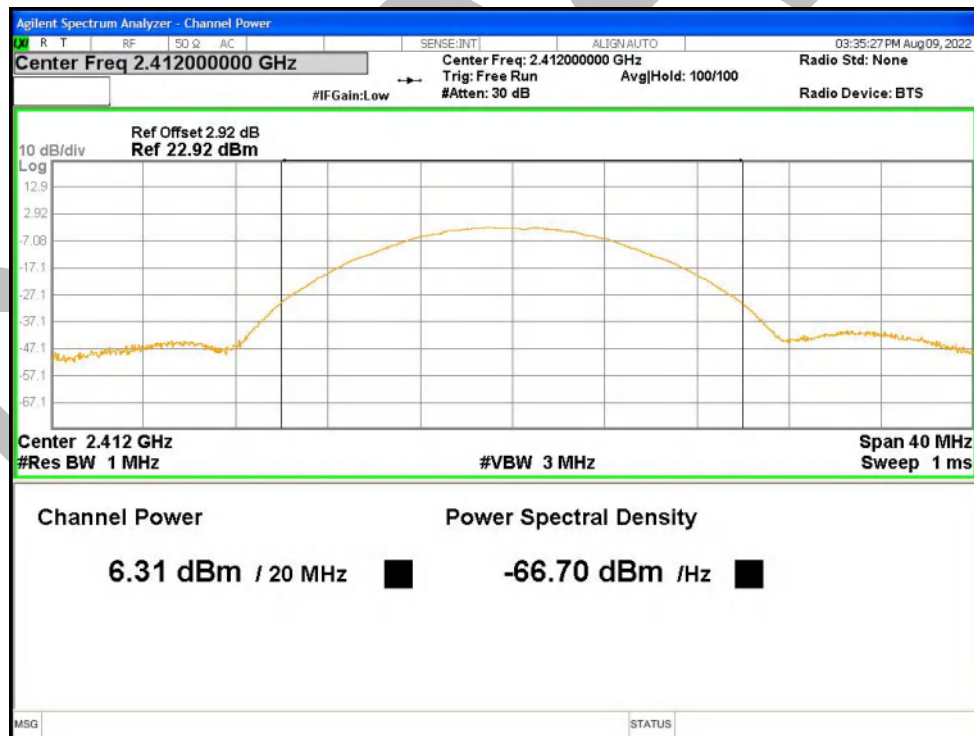
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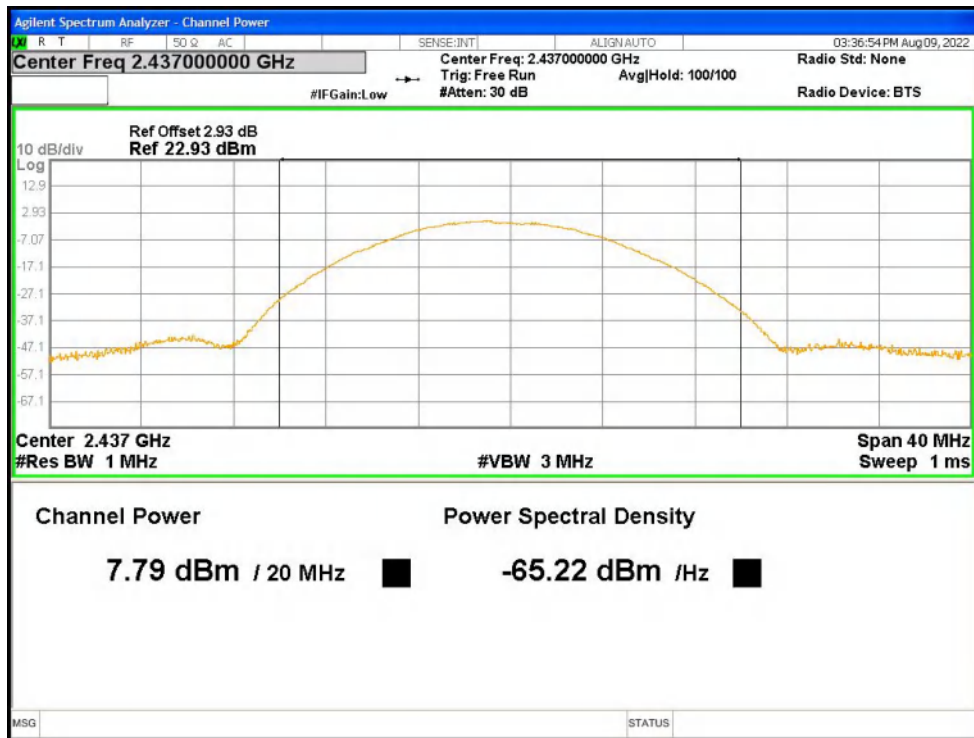
Power NVNT b 2462MHz Ant1



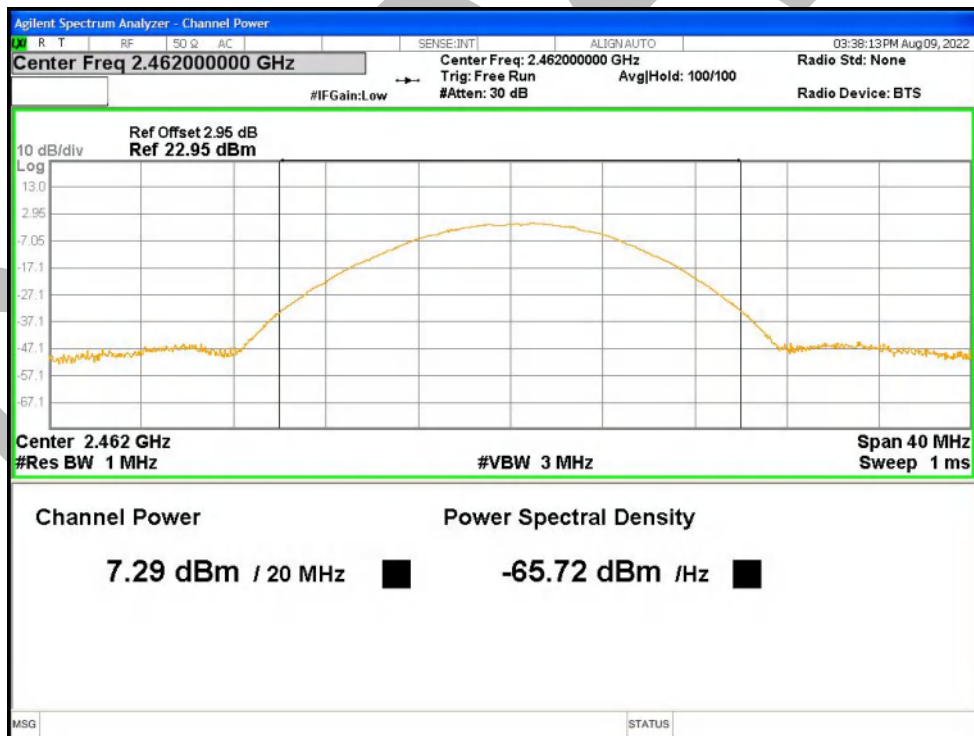
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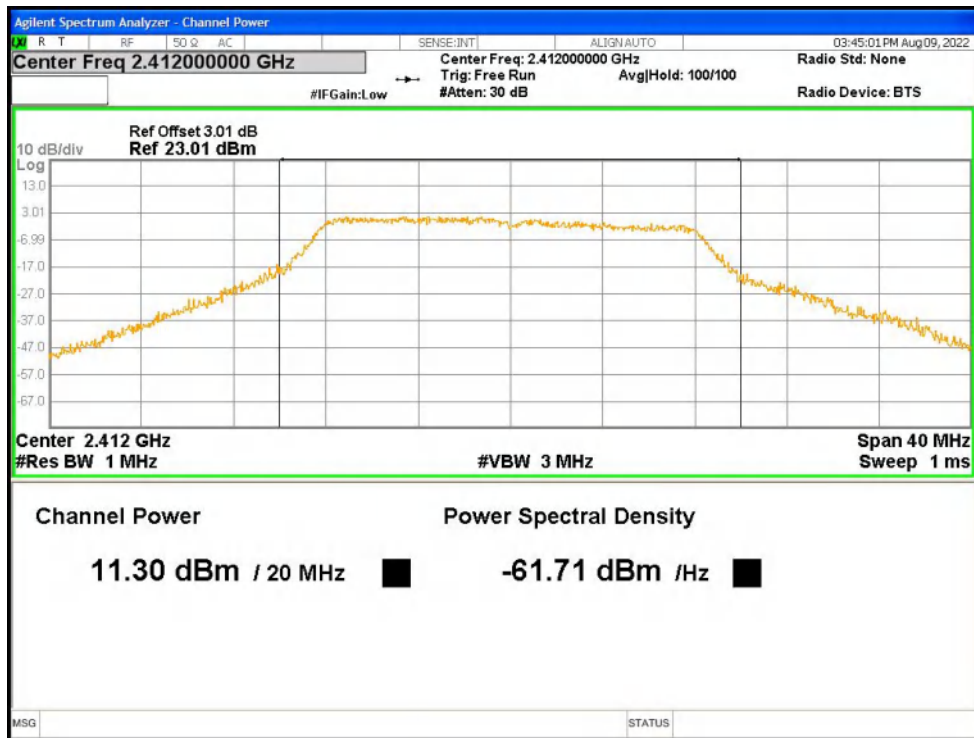
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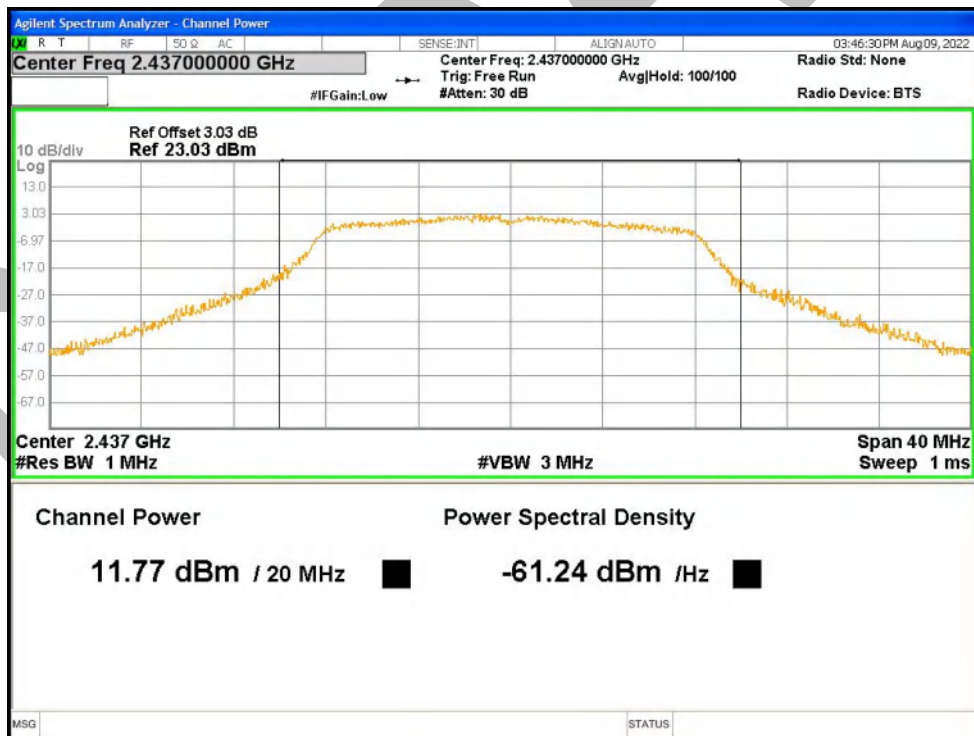
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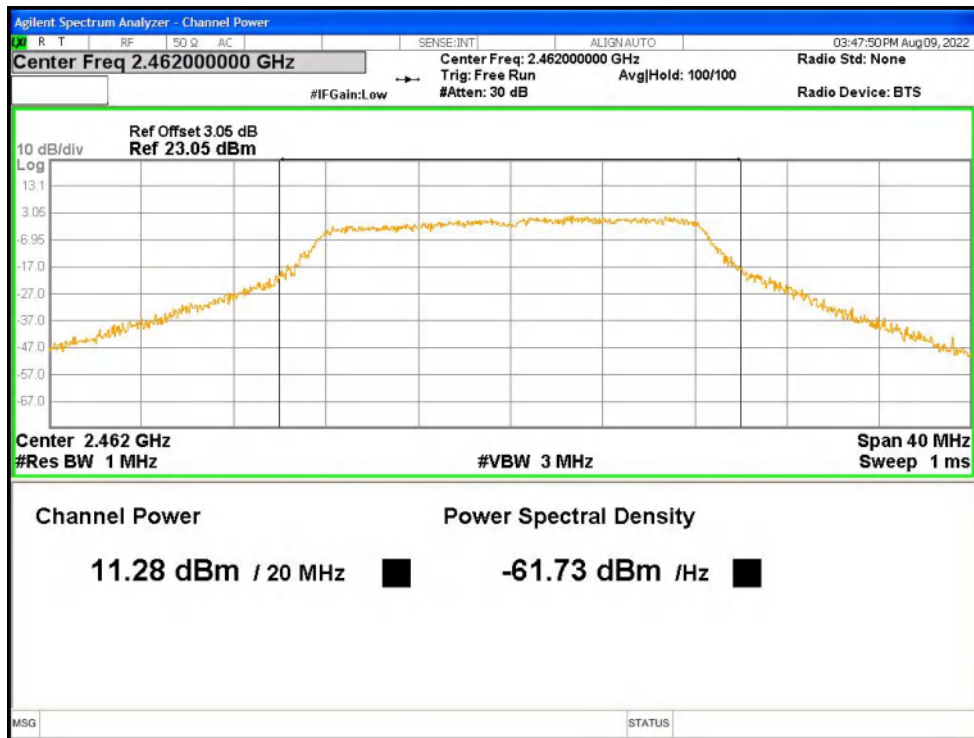
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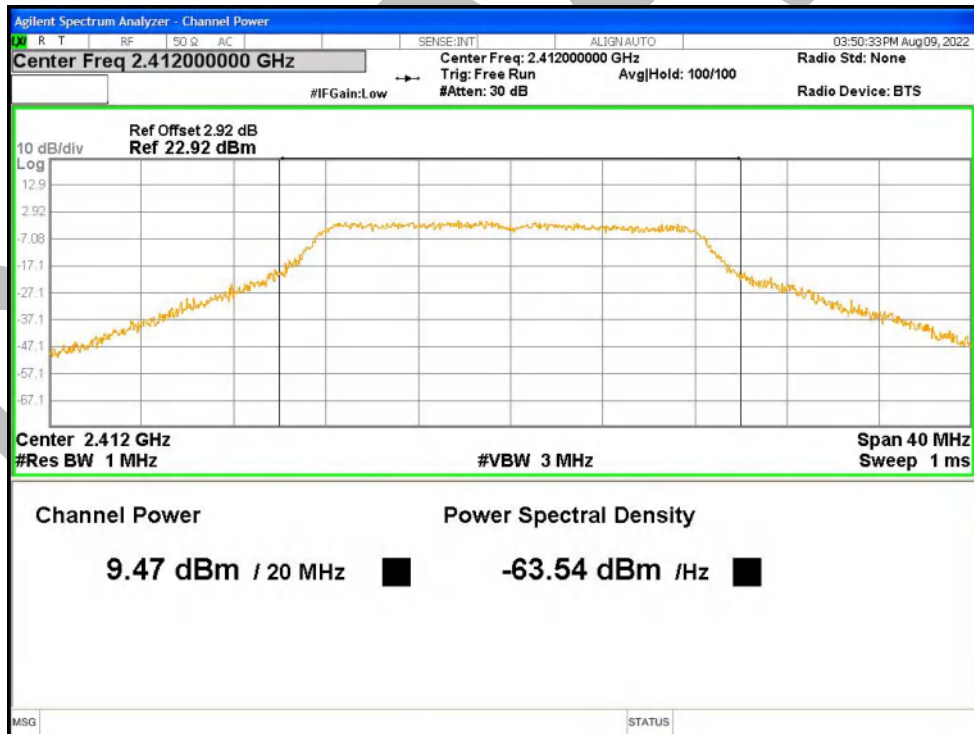
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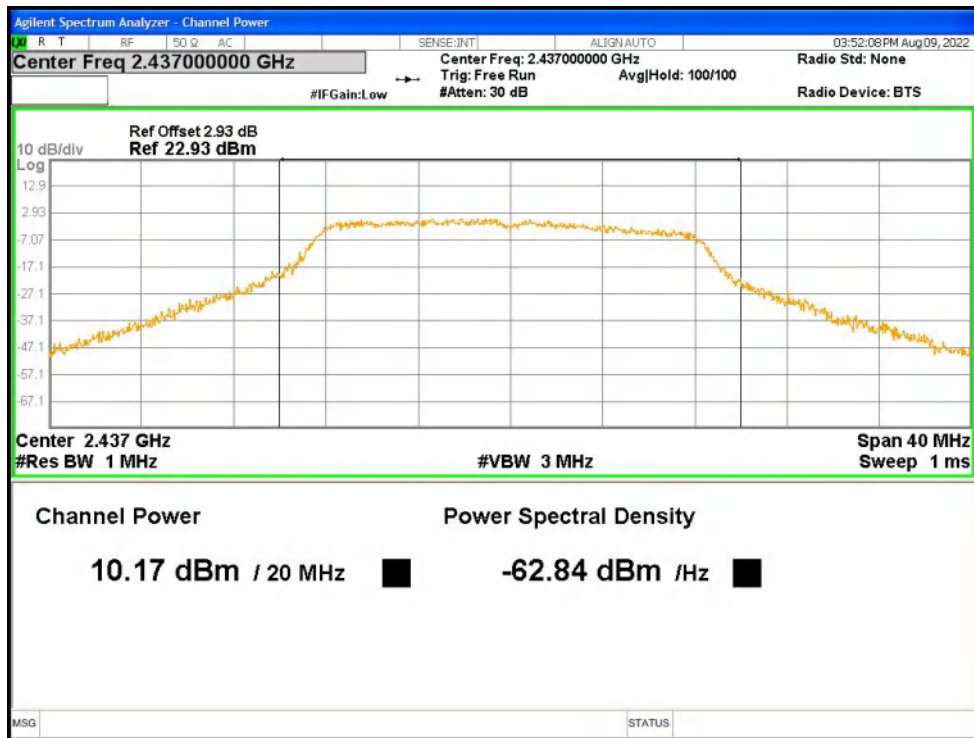
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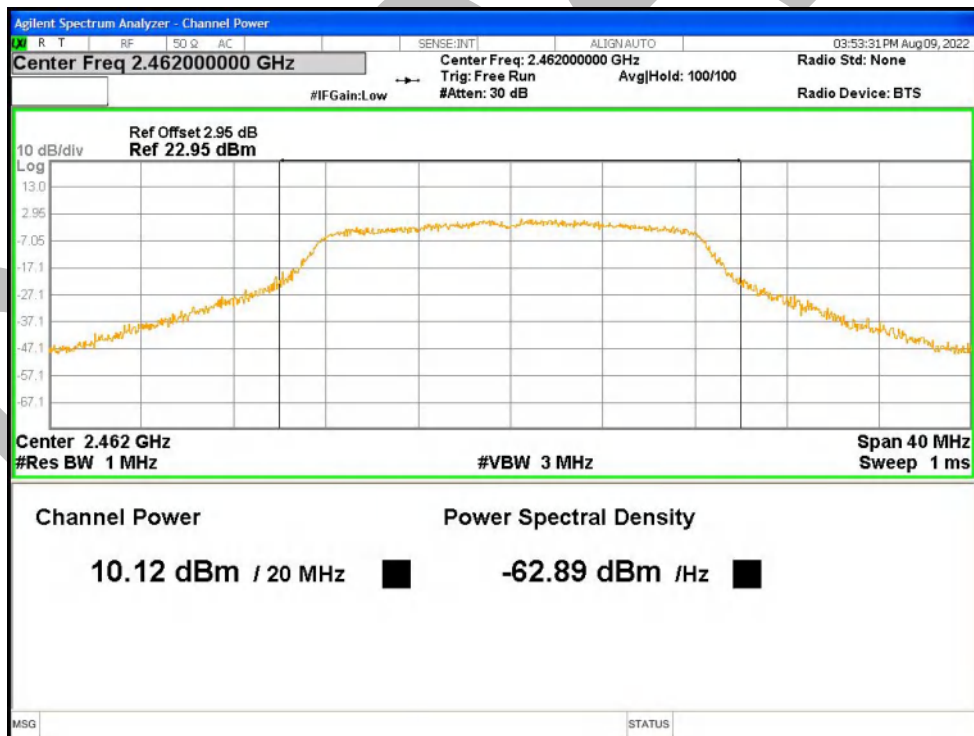
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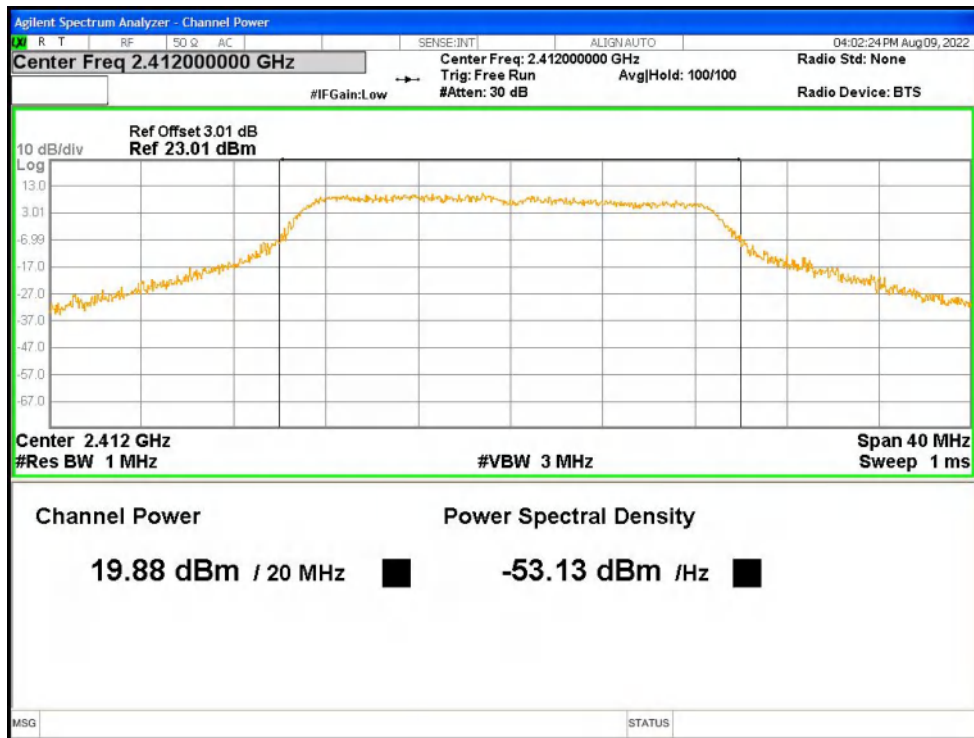
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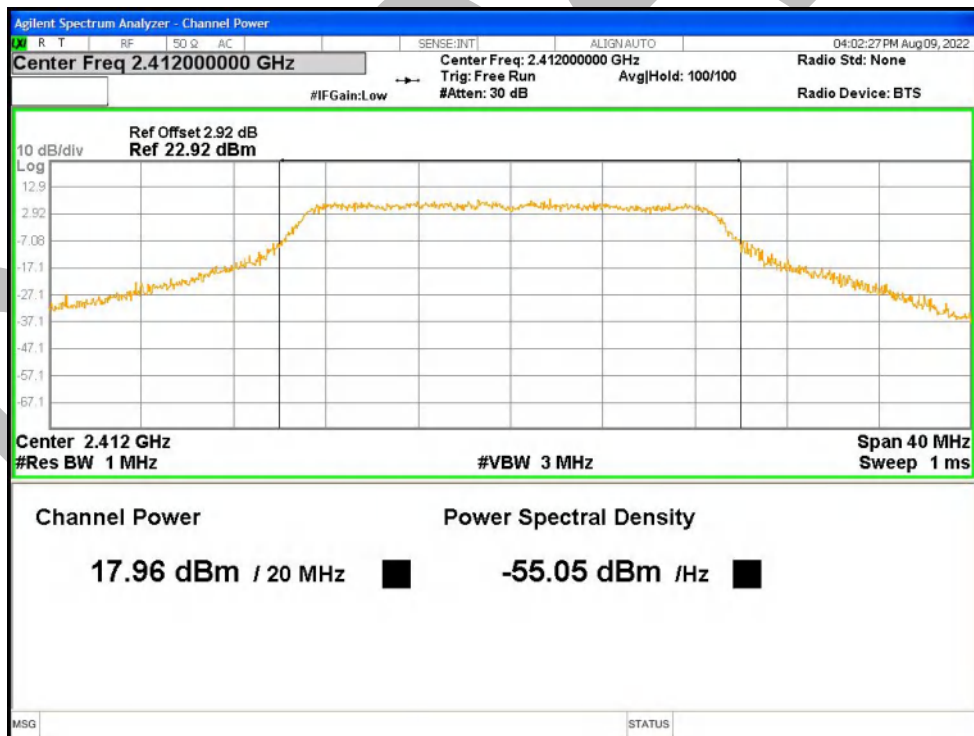
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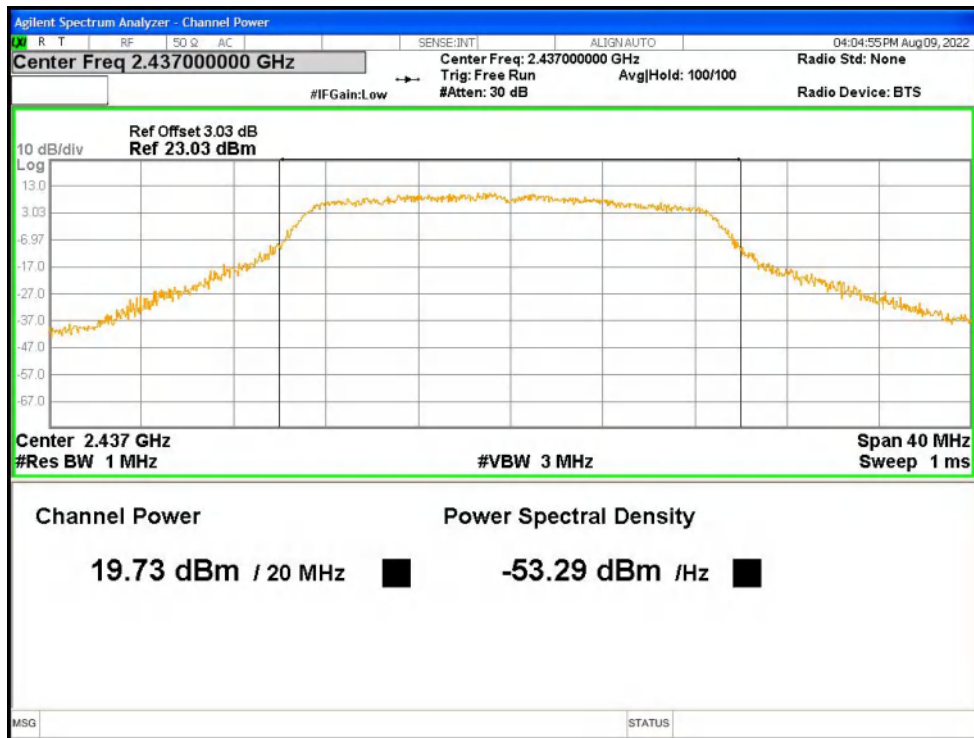
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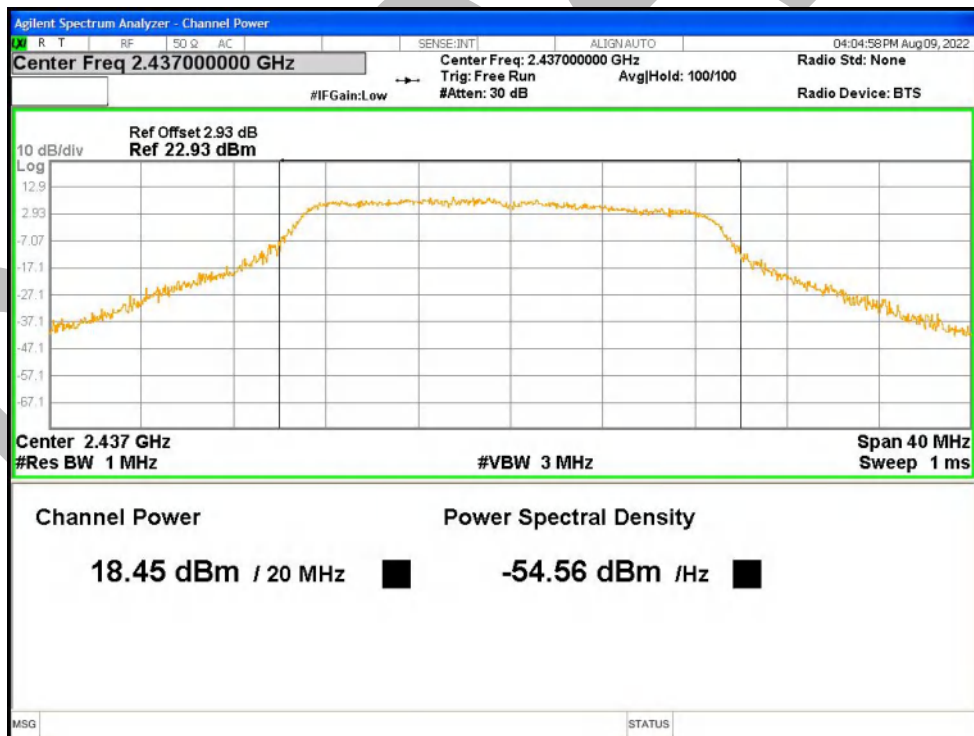
Power NVNT n20 2412MHz Ant2



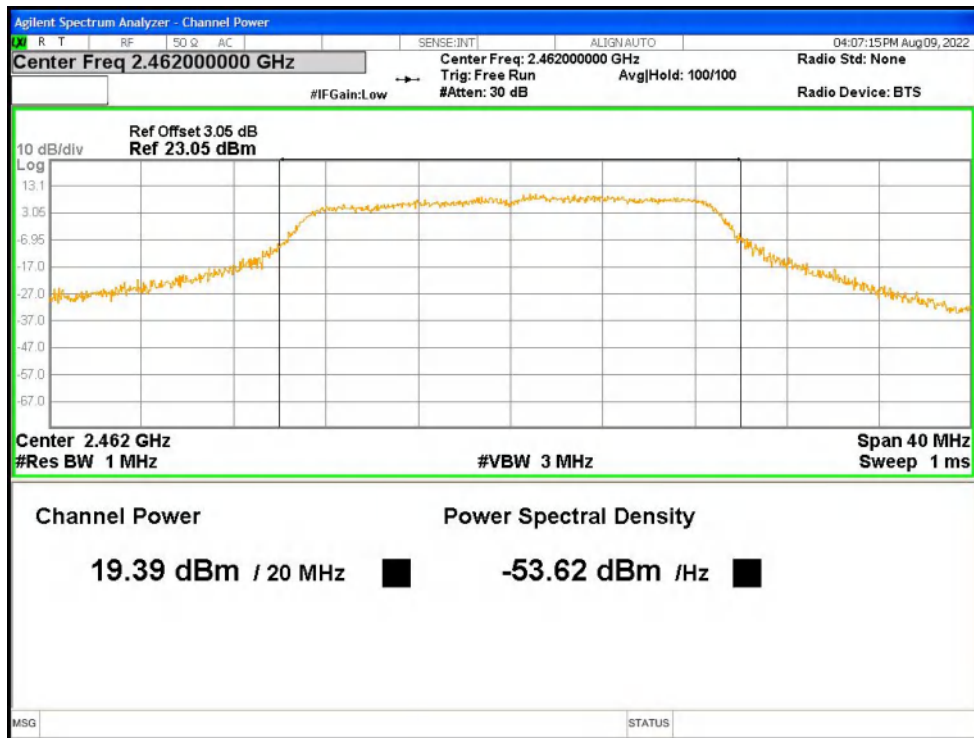
Power NVNT n20 2437MHz Ant1



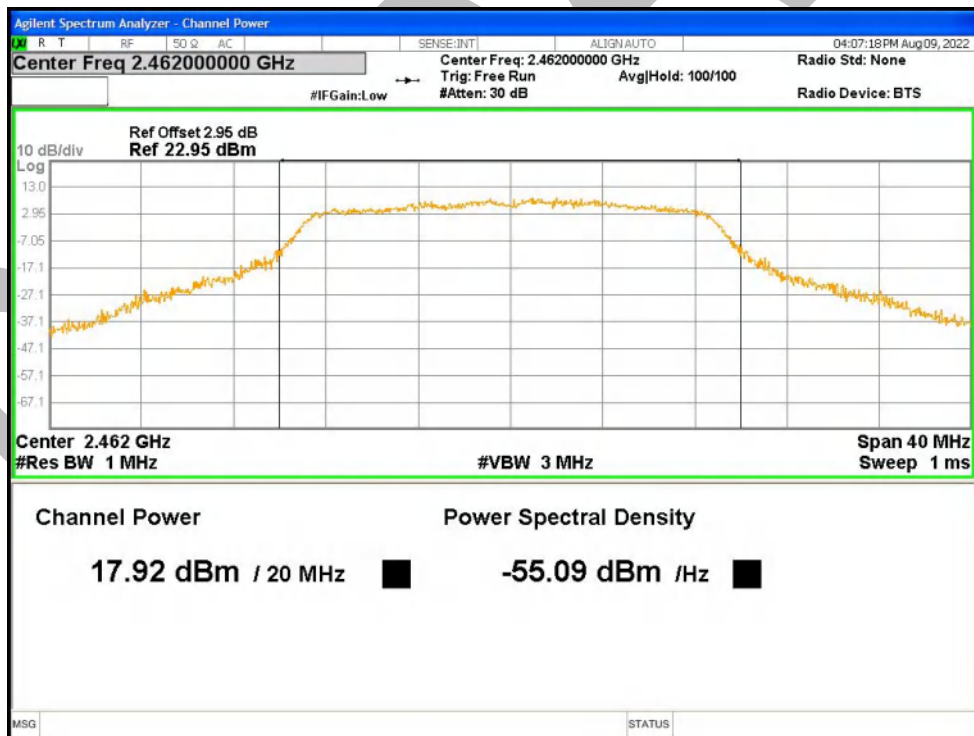
Power NVNT n20 2437MHz Ant2



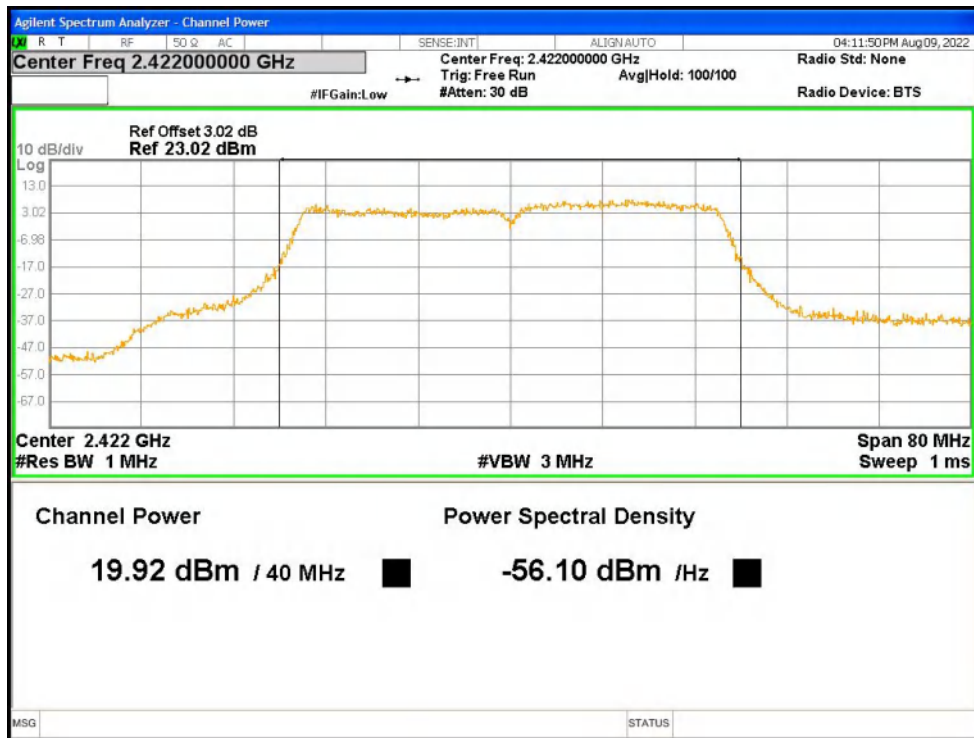
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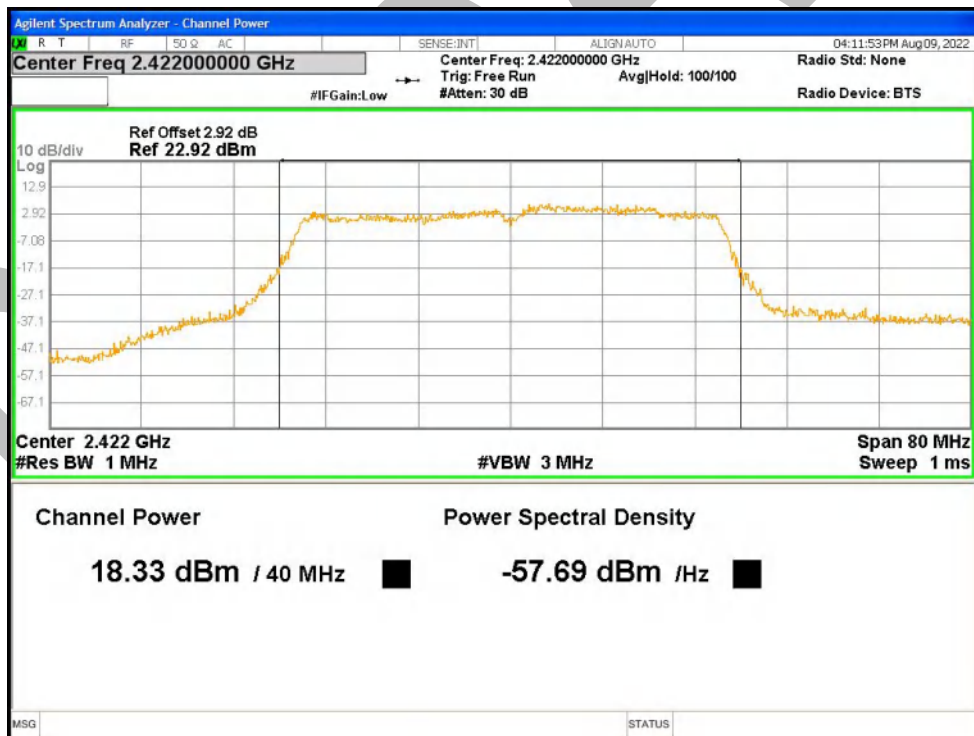
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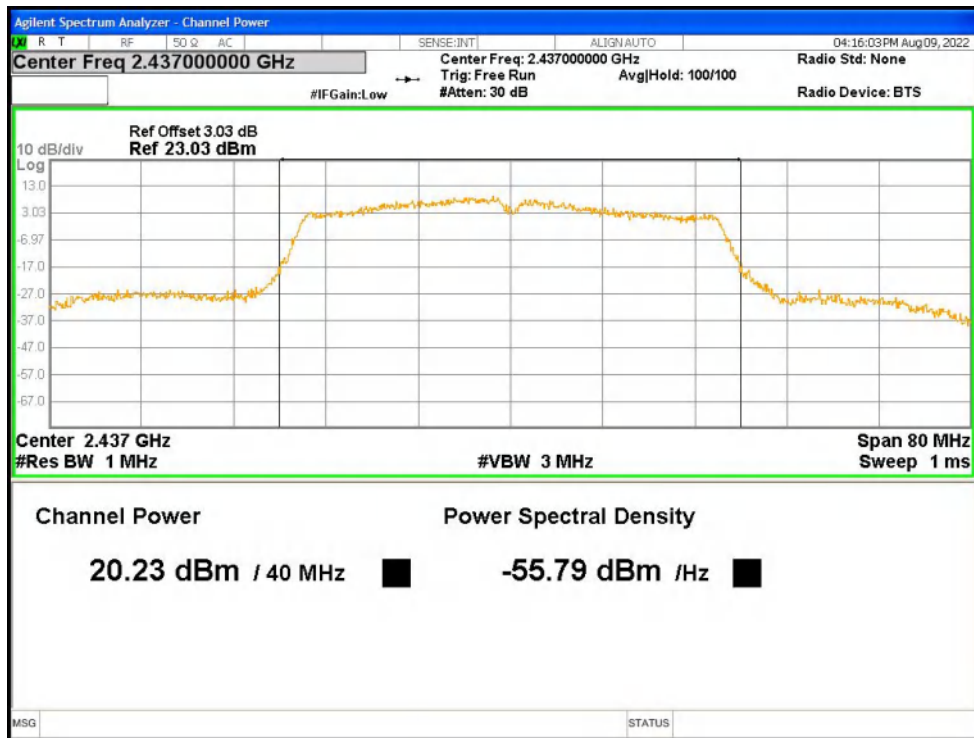
Power NVNT n40 2422MHz Ant1



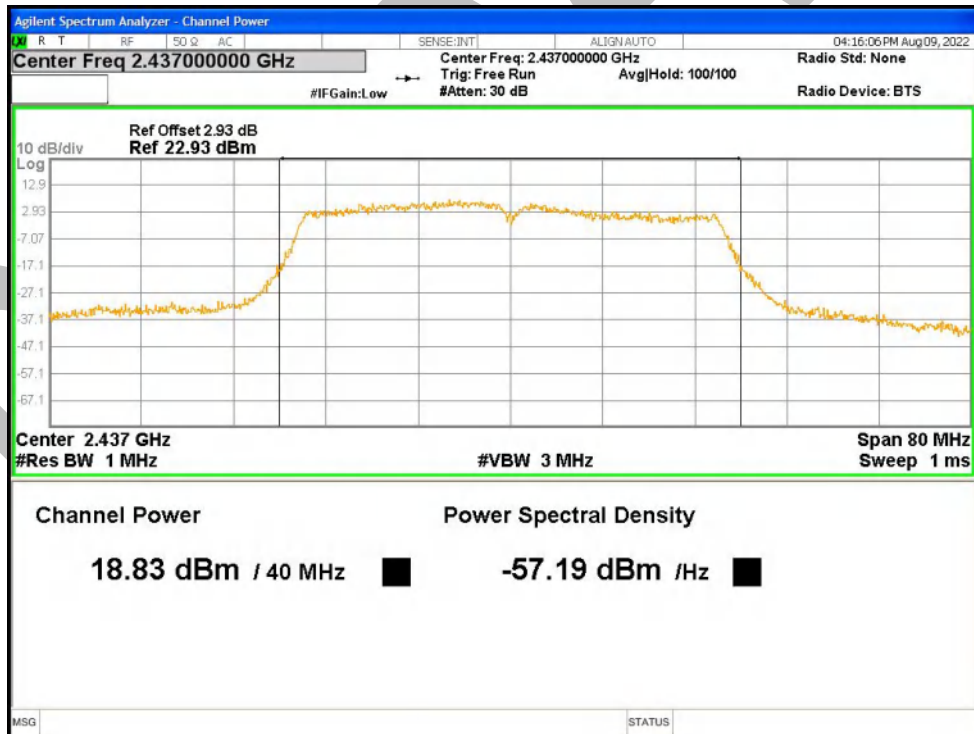
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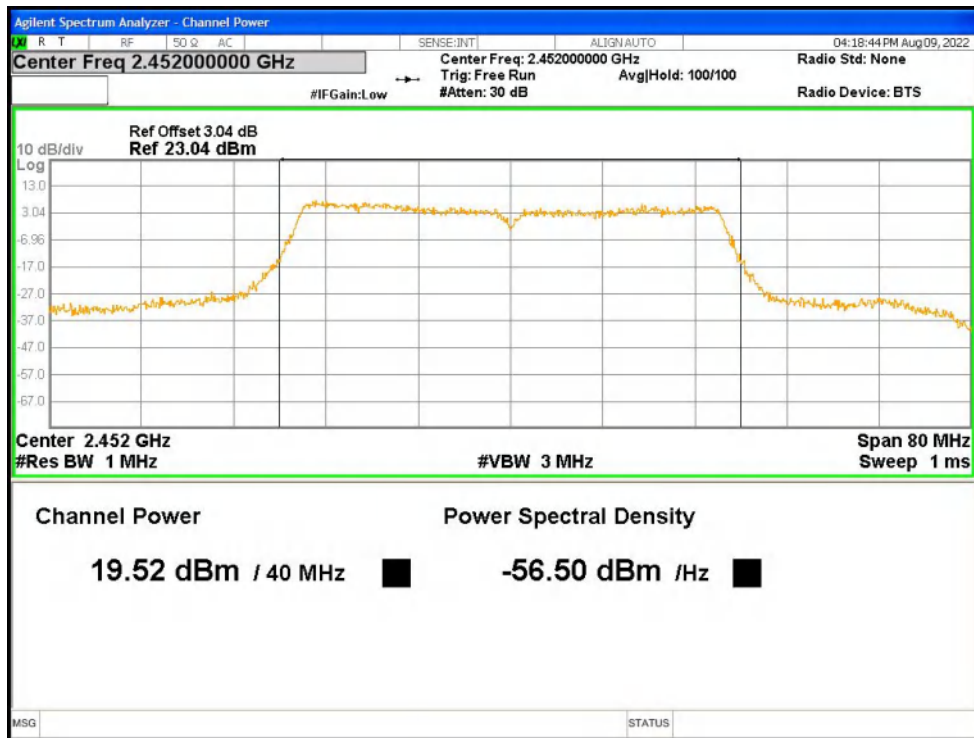
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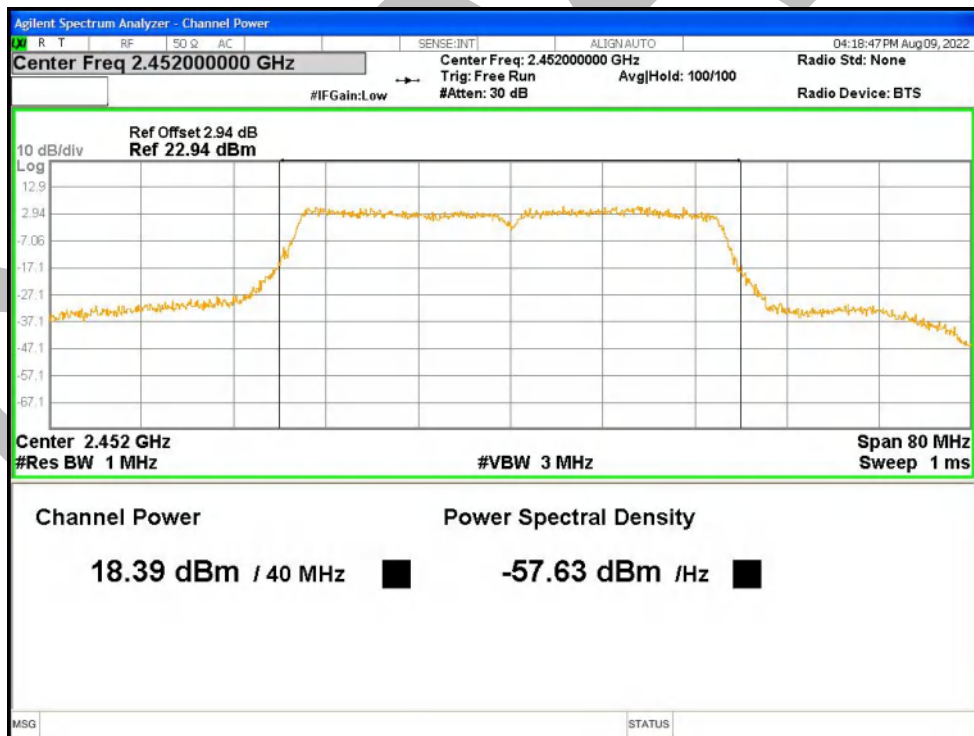
Power NVNT n40 2437MHz Ant2



Power NVNT n40 2452MHz Ant1



Power NVNT n40 2452MHz Ant2



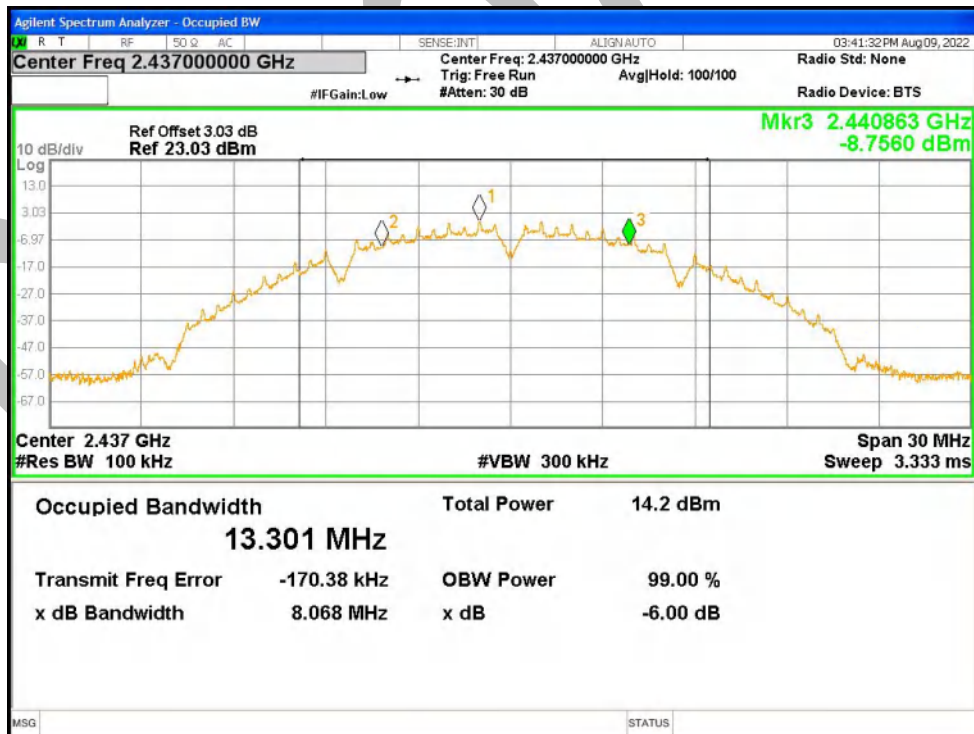
-6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	8.114	0.5	Pass
NVNT	b	2437	Ant1	8.068	0.5	Pass
NVNT	b	2462	Ant1	9.045	0.5	Pass
NVNT	b	2412	Ant2	9.054	0.5	Pass
NVNT	b	2437	Ant2	8.101	0.5	Pass
NVNT	b	2462	Ant2	8.048	0.5	Pass
NVNT	g	2412	Ant1	14.477	0.5	Pass
NVNT	g	2437	Ant1	13.522	0.5	Pass
NVNT	g	2462	Ant1	15.621	0.5	Pass
NVNT	g	2412	Ant2	16.045	0.5	Pass
NVNT	g	2437	Ant2	13.14	0.5	Pass
NVNT	g	2462	Ant2	15.88	0.5	Pass
NVNT	n20	2412	Ant1	16.312	0.5	Pass
NVNT	n20	2412	Ant2	17.557	0.5	Pass
NVNT	n20	2437	Ant1	12.461	0.5	Pass
NVNT	n20	2437	Ant2	16.289	0.5	Pass
NVNT	n20	2462	Ant1	13.599	0.5	Pass
NVNT	n20	2462	Ant2	13.728	0.5	Pass
NVNT	n40	2422	Ant1	35.089	0.5	Pass
NVNT	n40	2422	Ant2	35.081	0.5	Pass
NVNT	n40	2437	Ant1	27.578	0.5	Pass
NVNT	n40	2437	Ant2	33.767	0.5	Pass
NVNT	n40	2452	Ant1	36.305	0.5	Pass
NVNT	n40	2452	Ant2	35.721	0.5	Pass

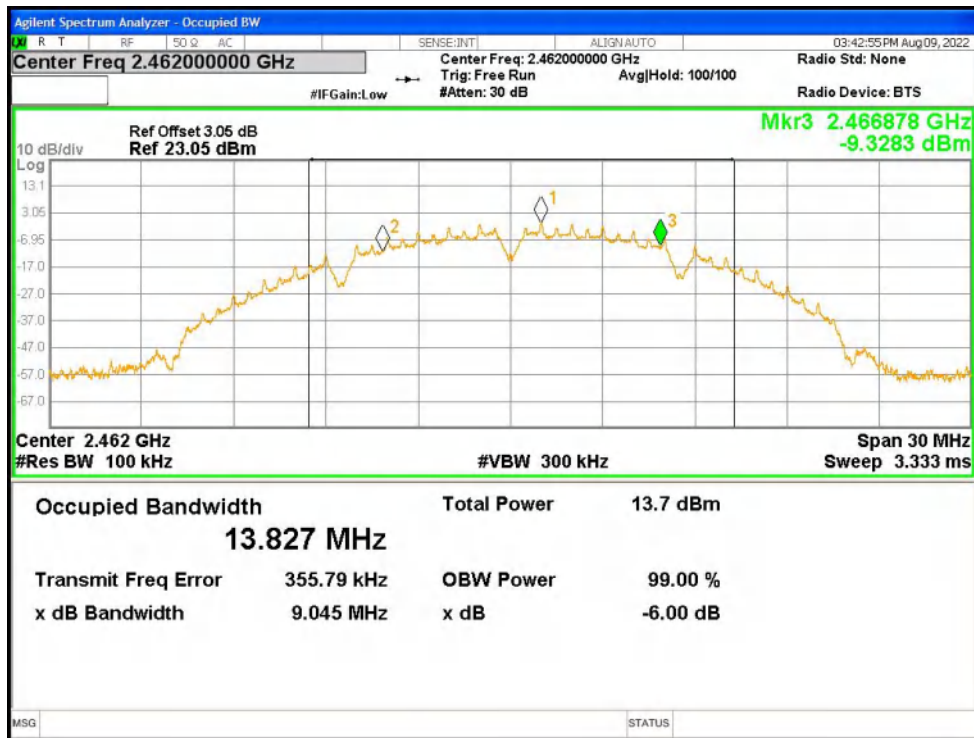
-6dB Bandwidth NVNT b 2412MHz Ant1



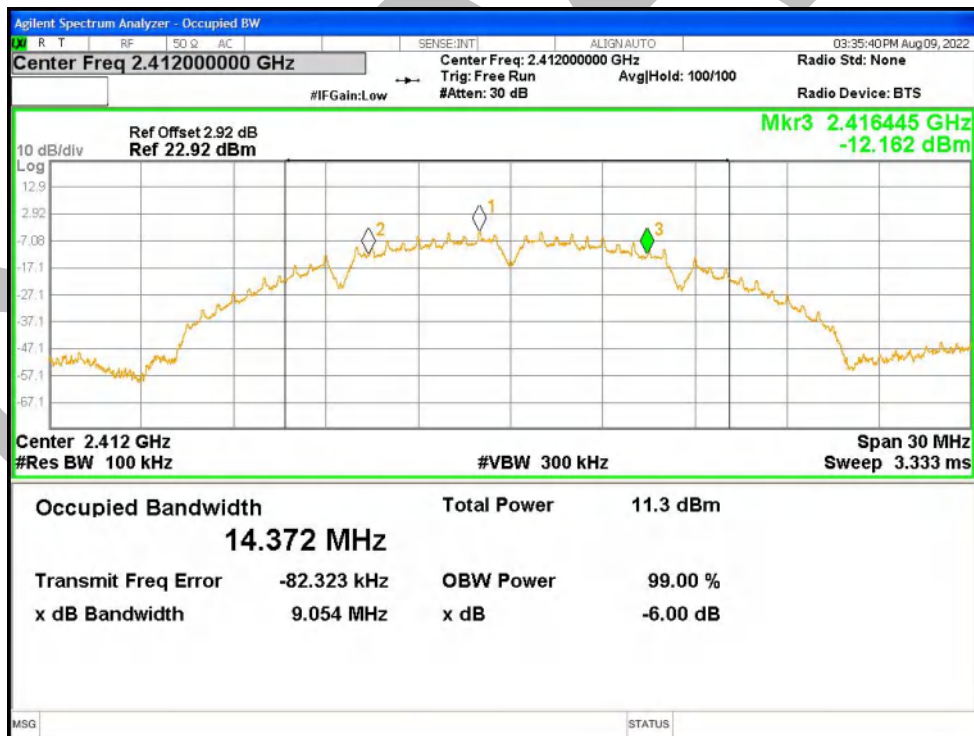
-6dB Bandwidth NVNT b 2437MHz Ant1



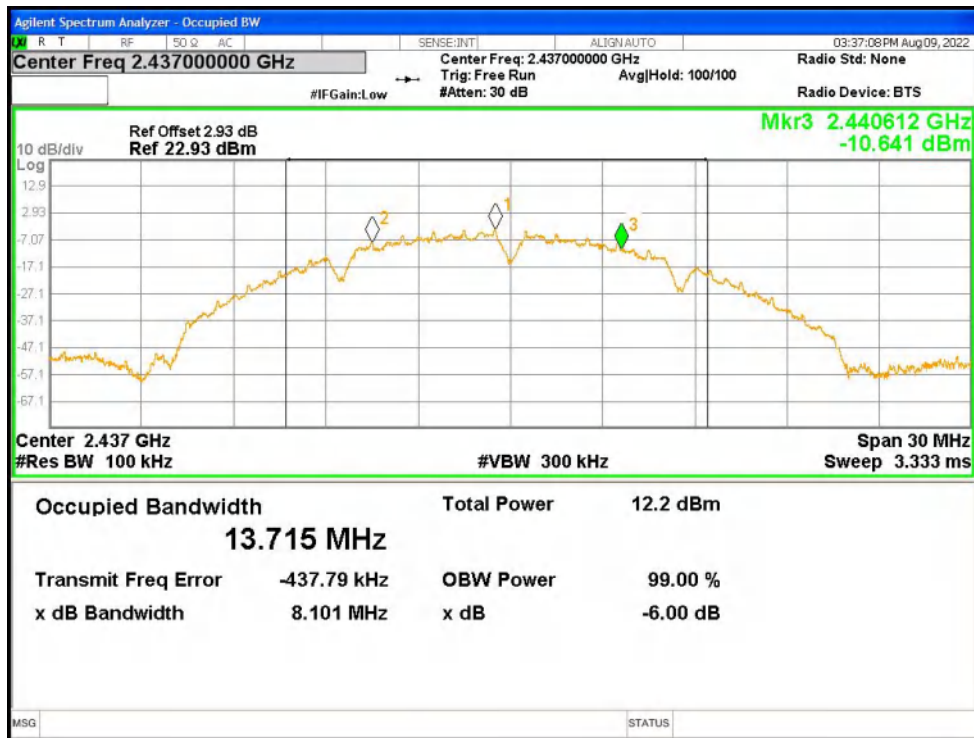
-6dB Bandwidth NVNT b 2462MHz Ant1



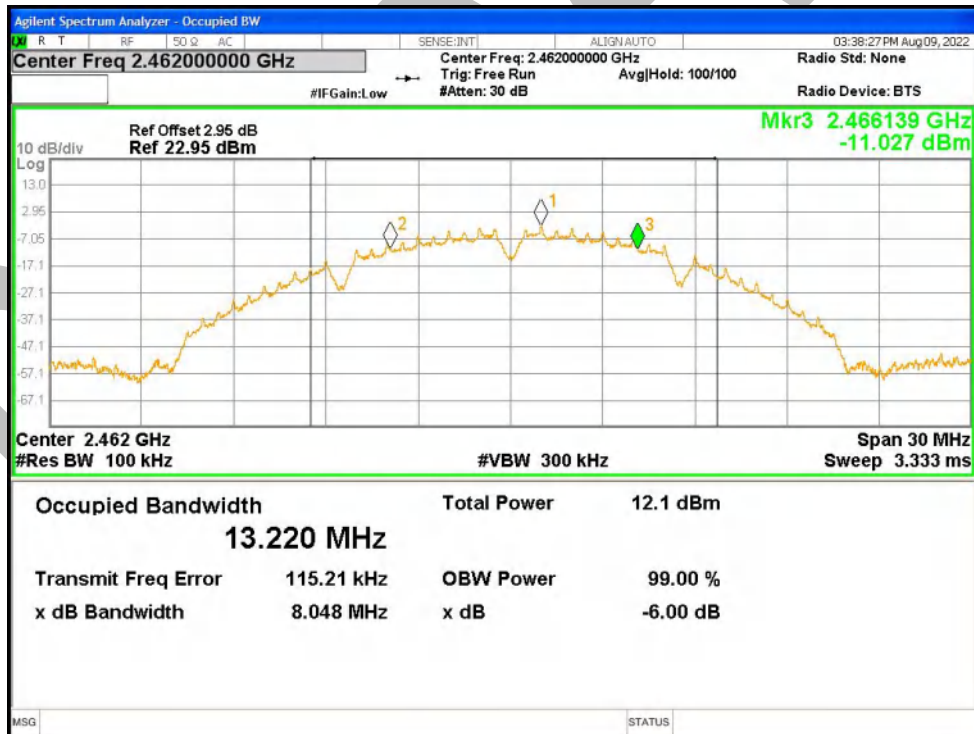
-6dB Bandwidth NVNT b 2412MHz Ant2



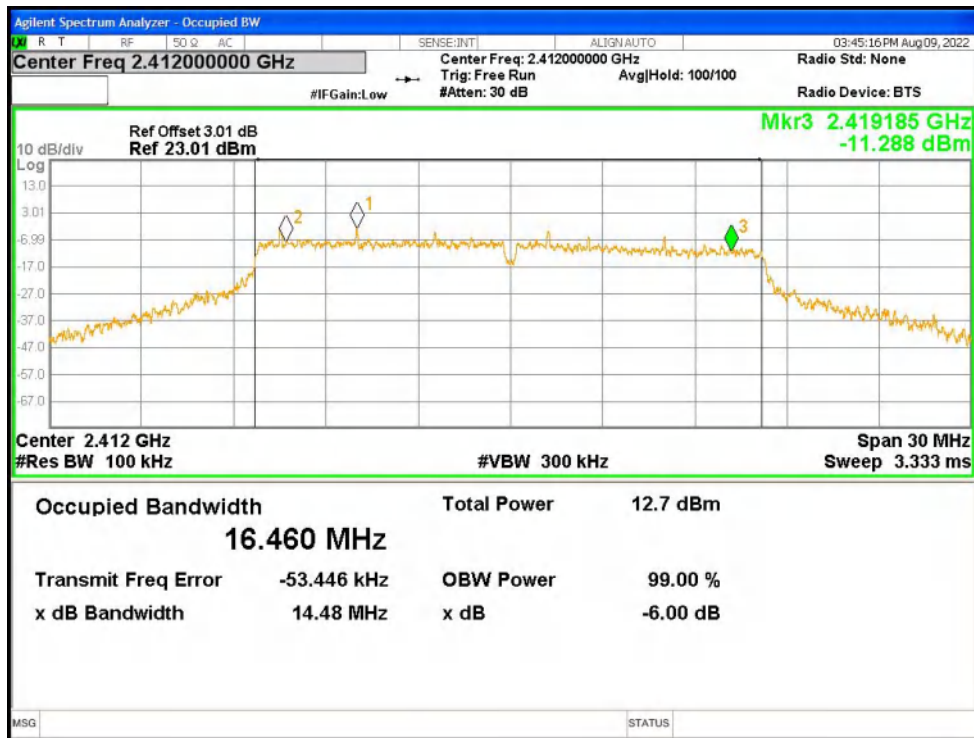
-6dB Bandwidth NVNT b 2437MHz Ant2



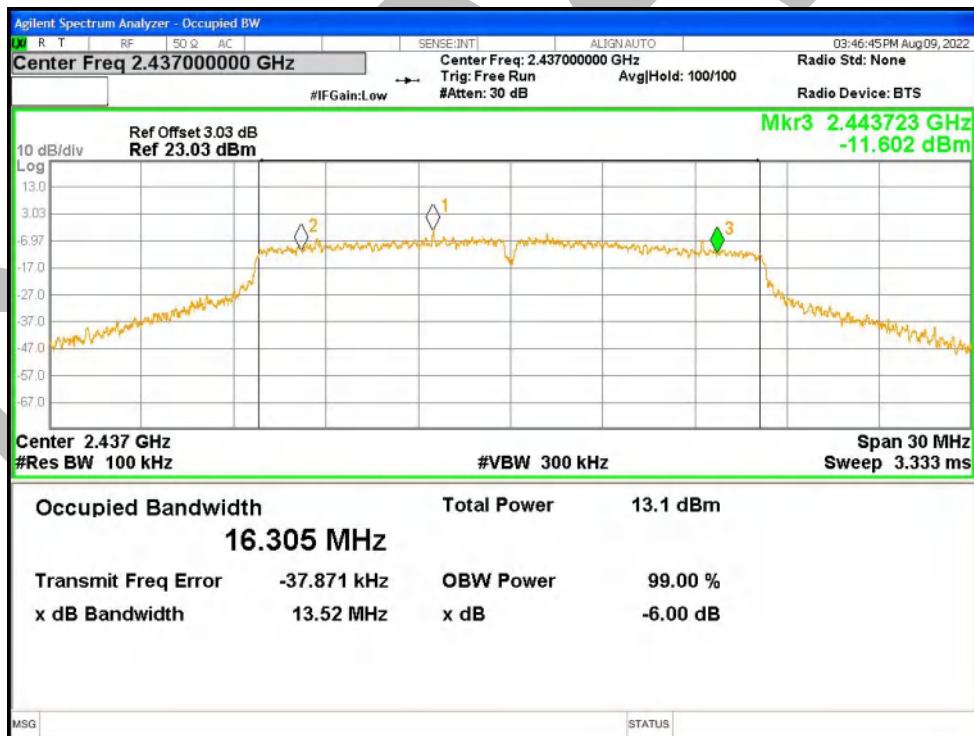
-6dB Bandwidth NVNT b 2462MHz Ant2



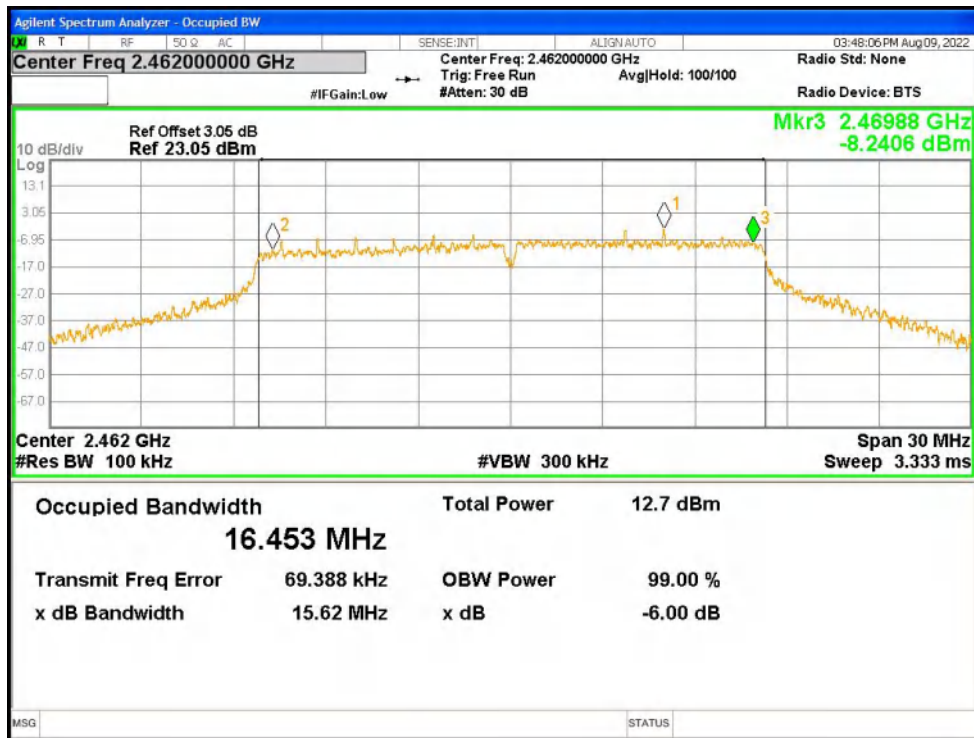
-6dB Bandwidth NVNT g 2412MHz Ant1



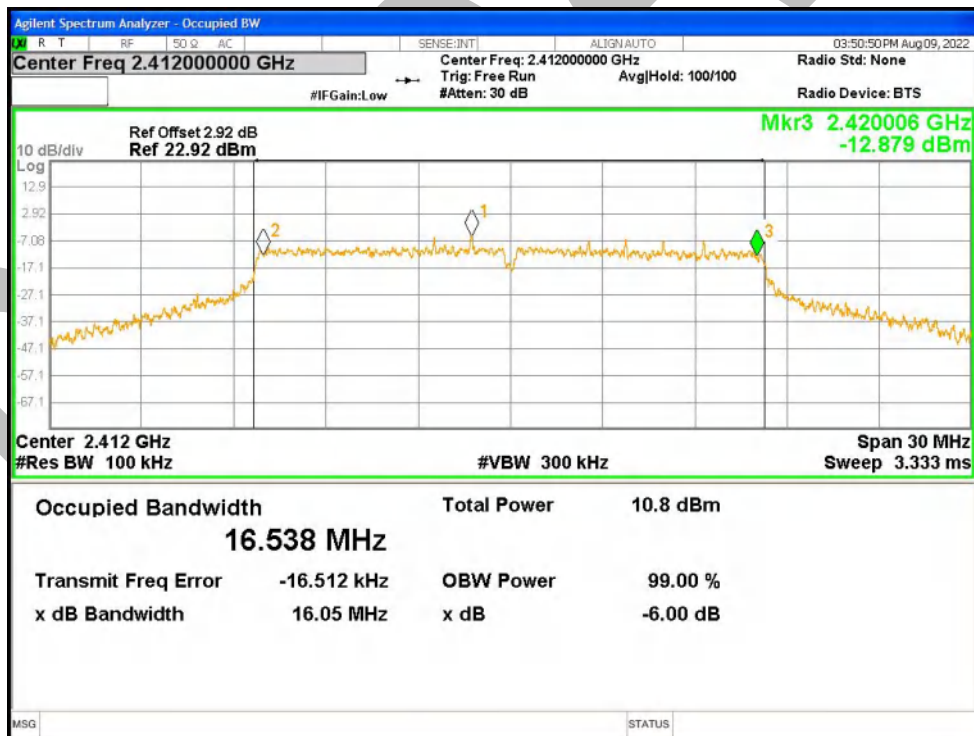
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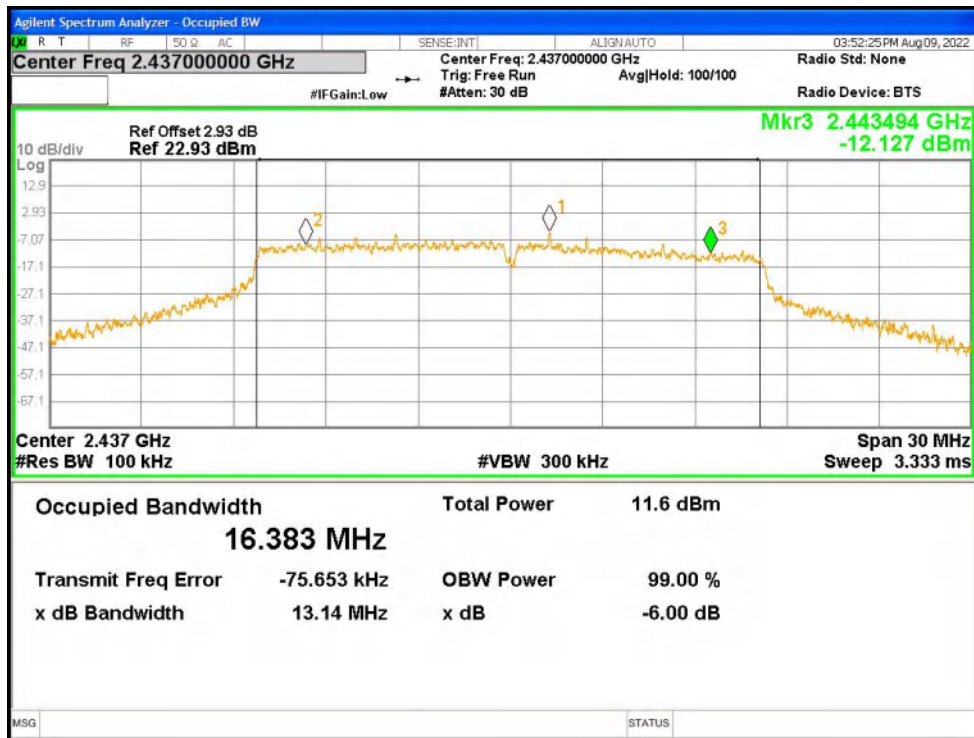
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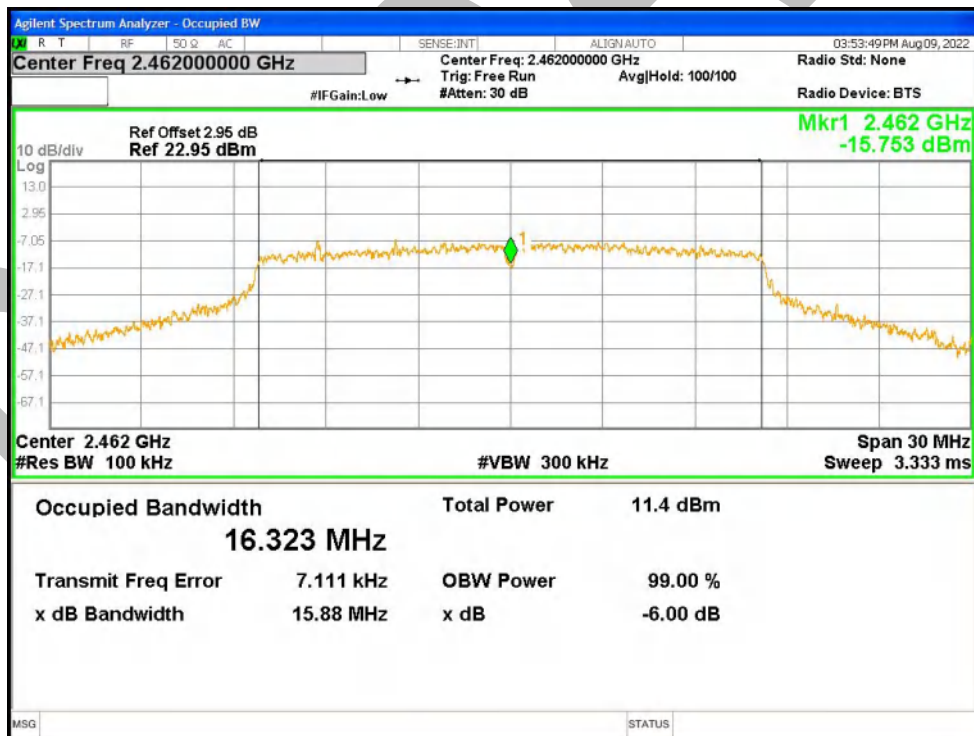
-6dB Bandwidth NVNT g 2412MHz Ant2



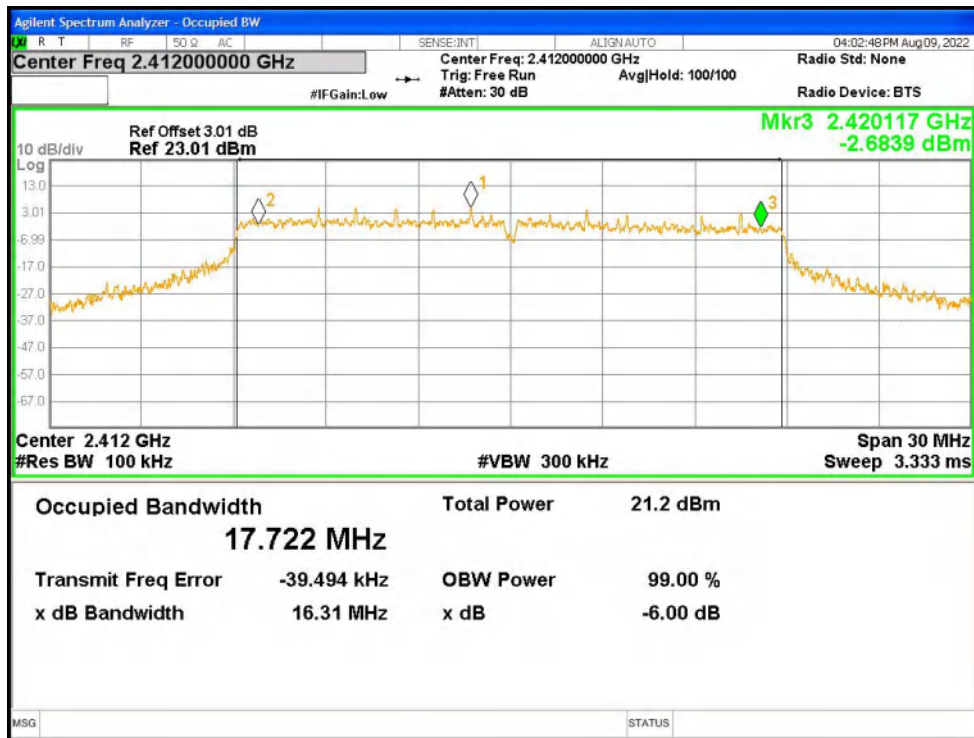
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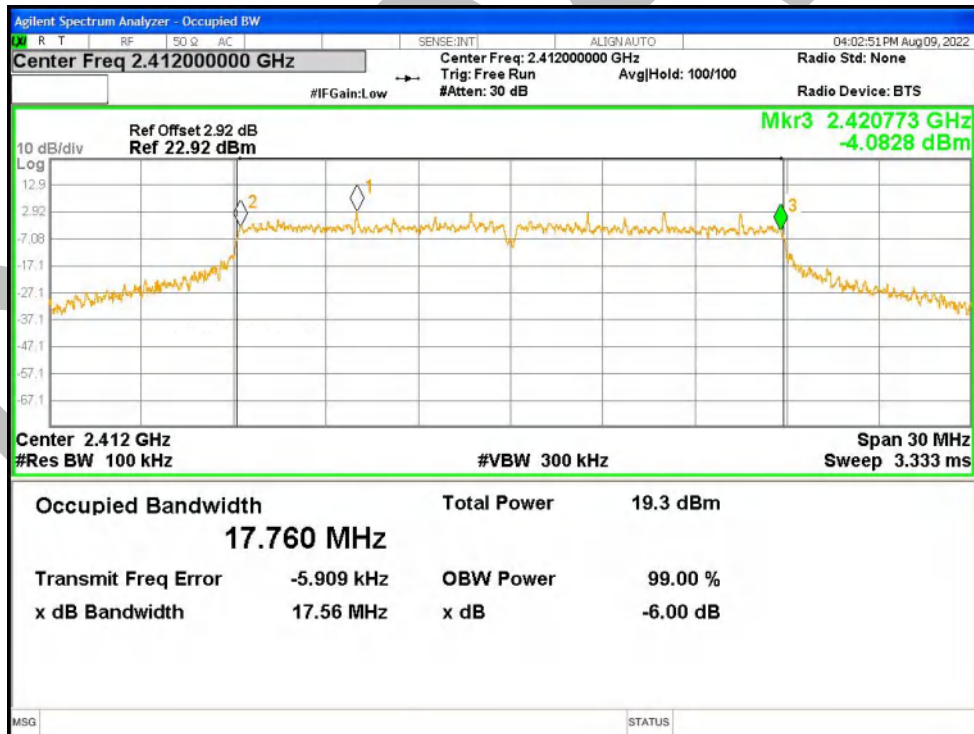
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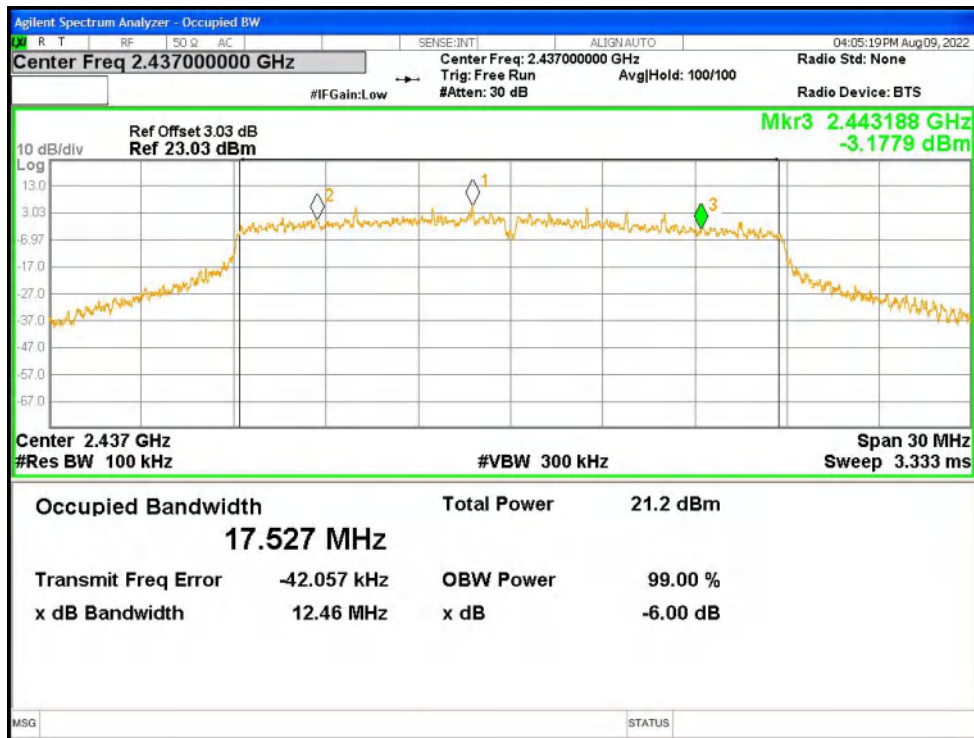
-6dB Bandwidth NVNT n20 2412MHz Ant1



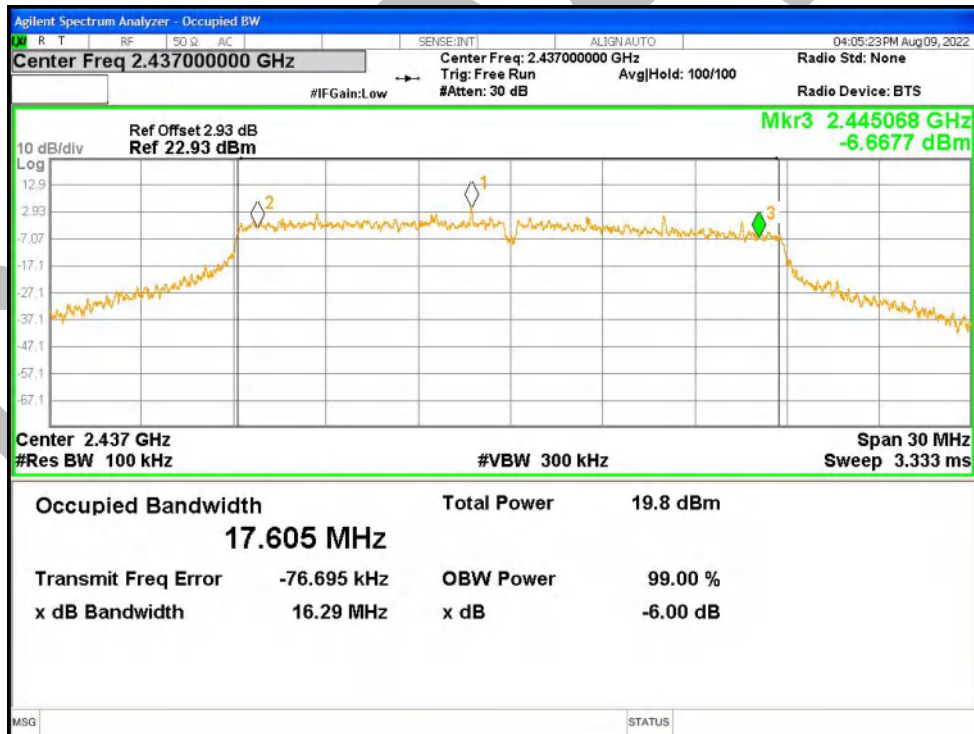
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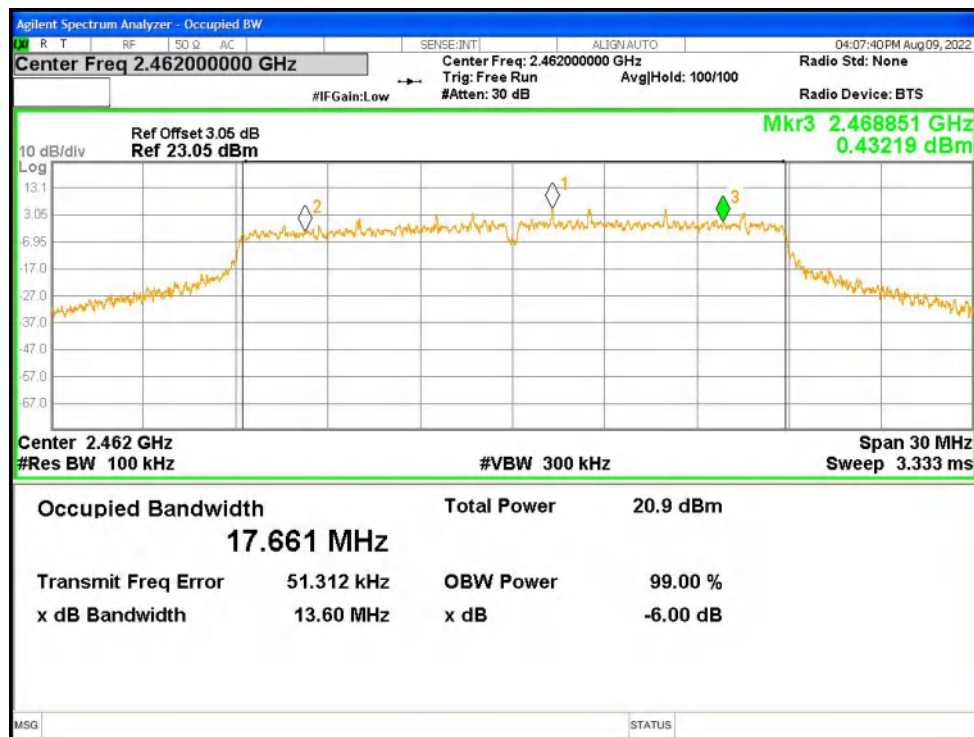
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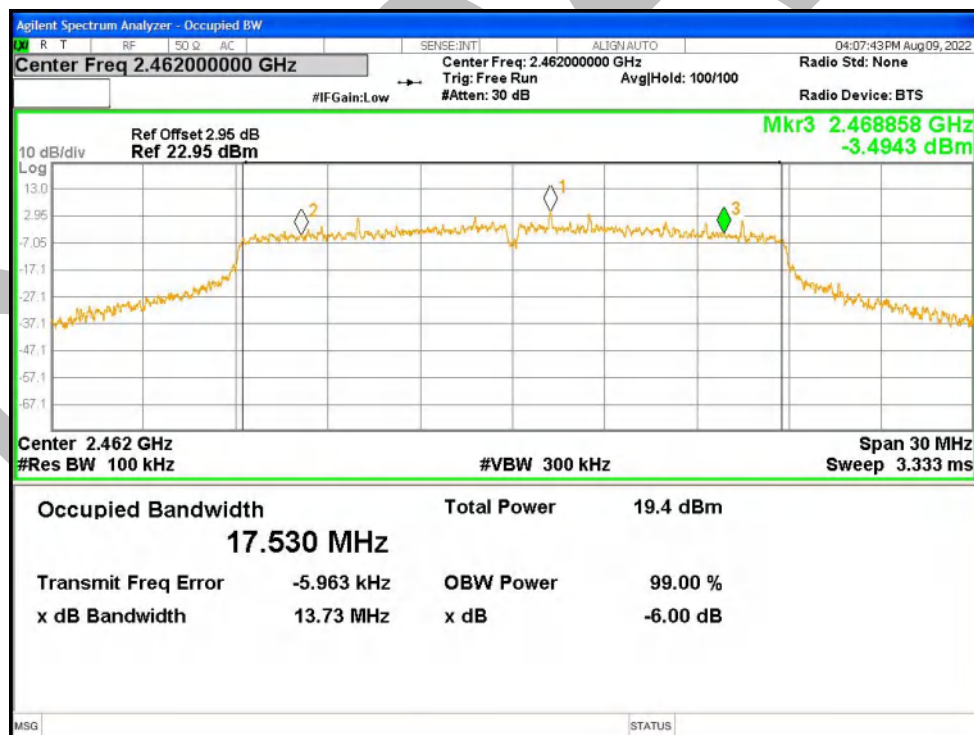
-6dB Bandwidth NVNT n20 2437MHz Ant2



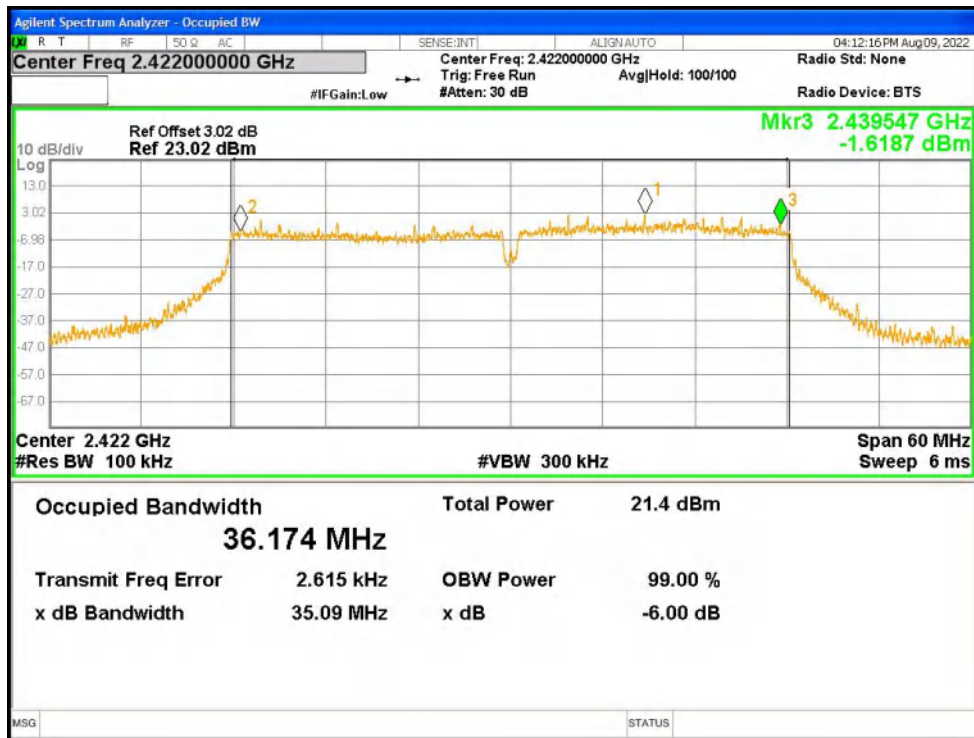
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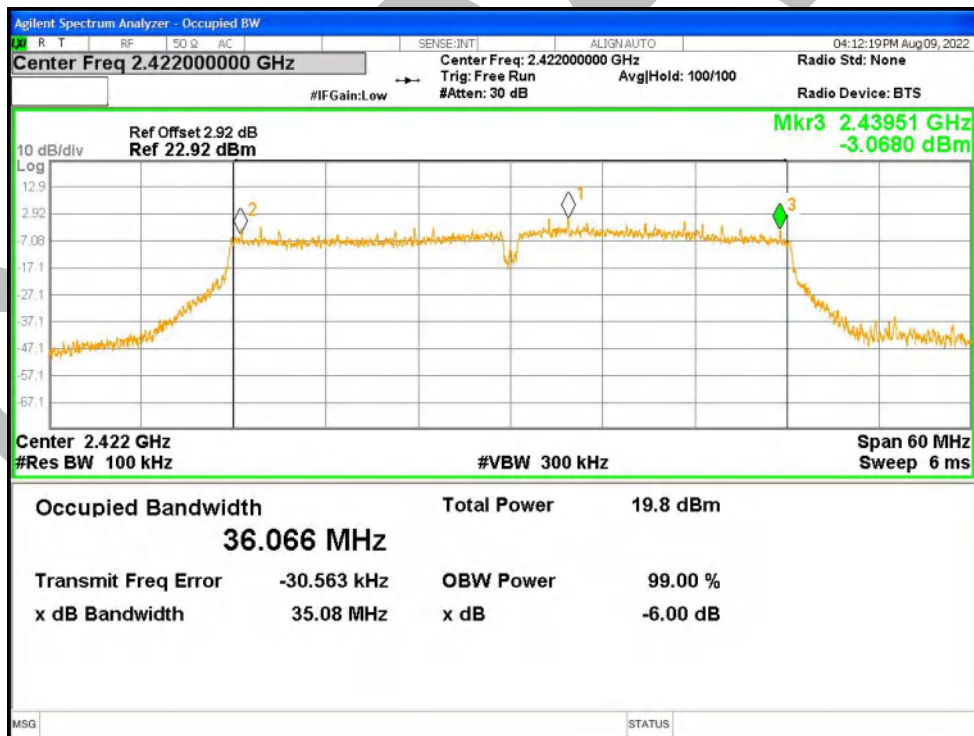
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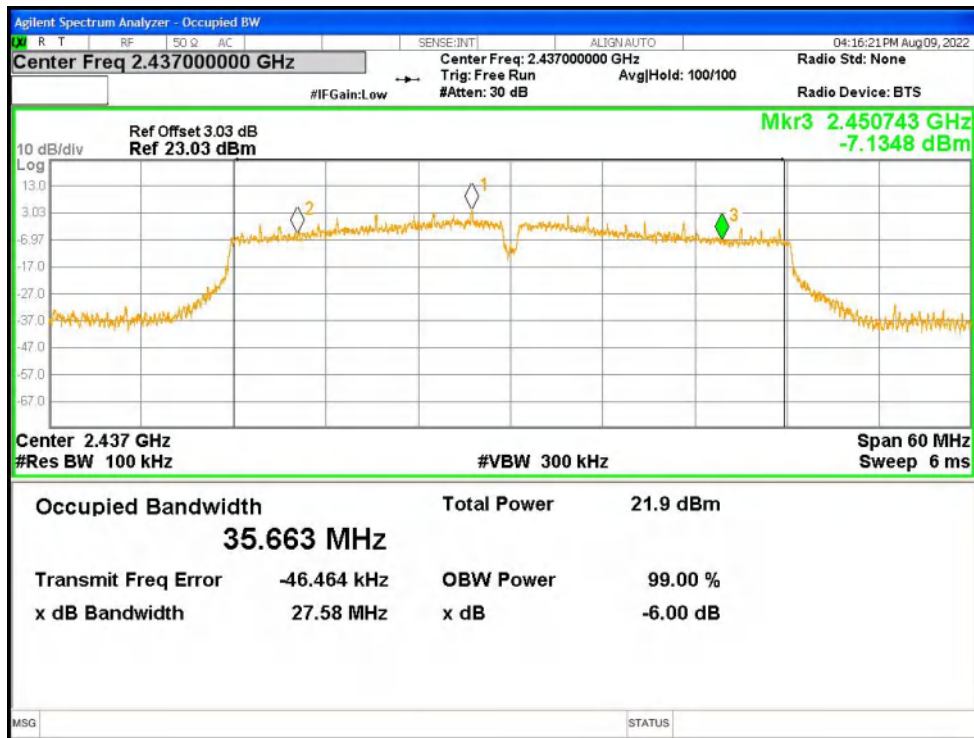
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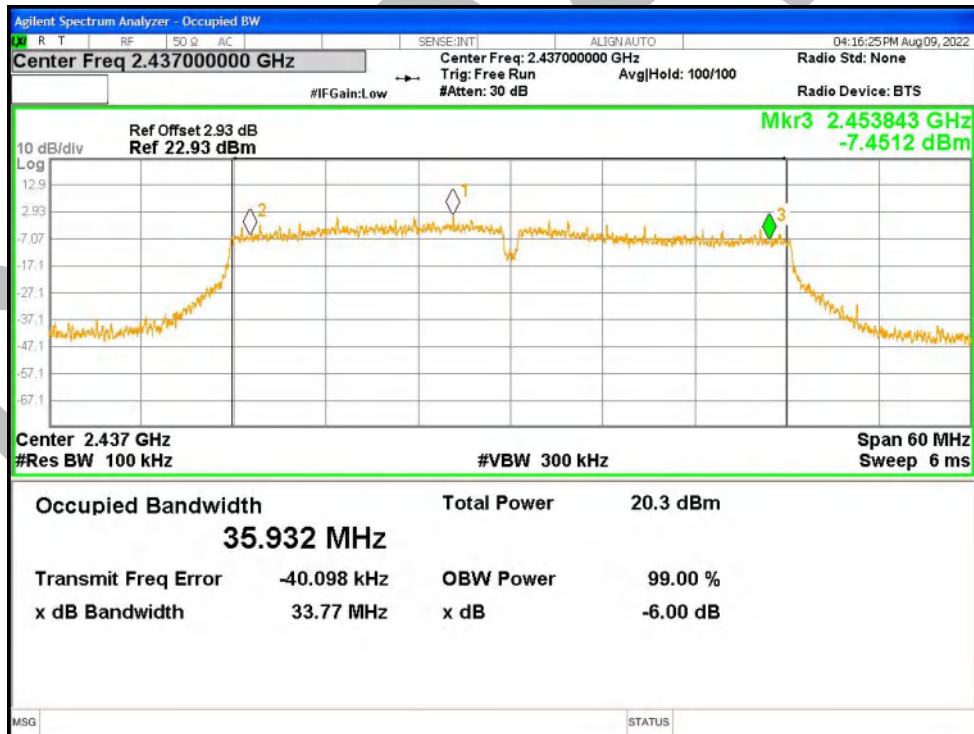
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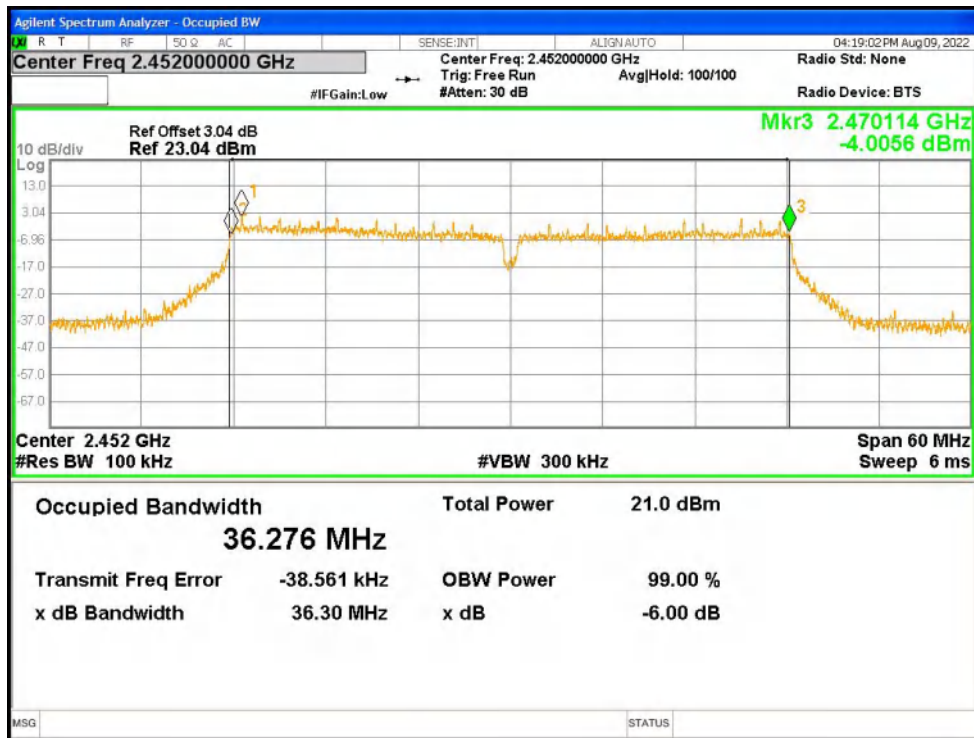
-6dB Bandwidth NVNT n40 2437MHz Ant1



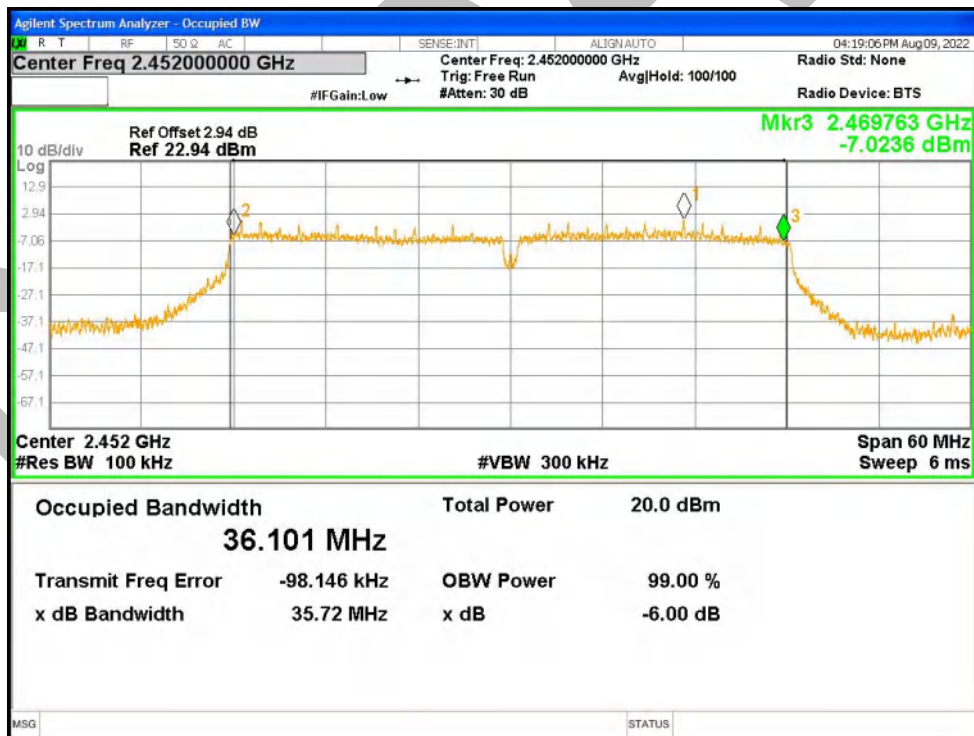
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-6dB Bandwidth NVNT n40 2452MHz Ant1



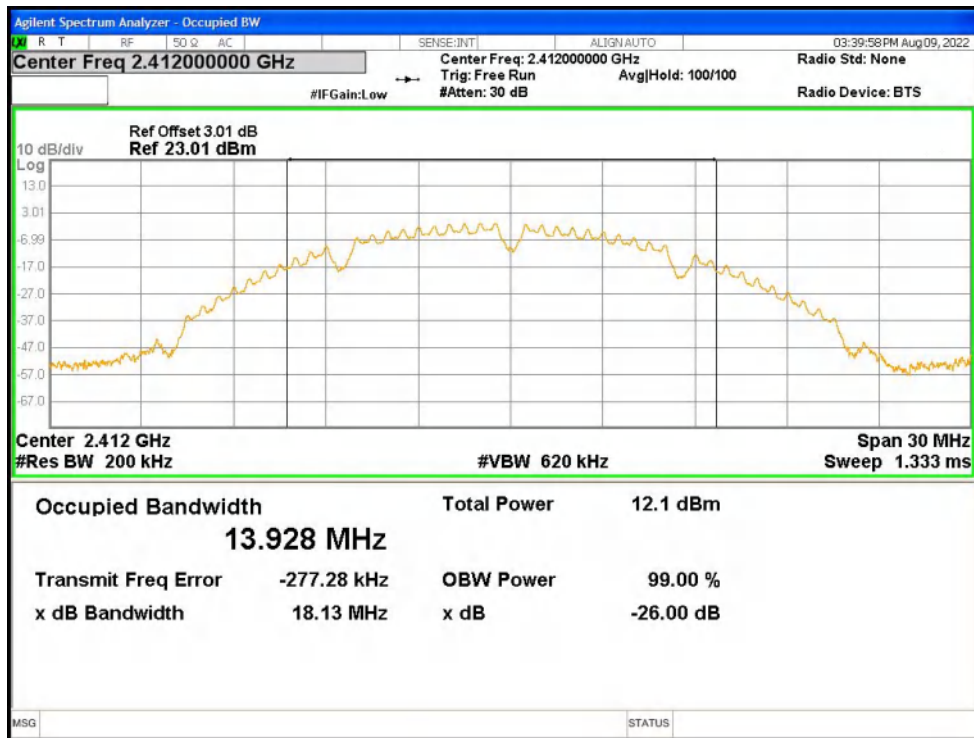
-6dB Bandwidth NVNT n40 2452MHz Ant2



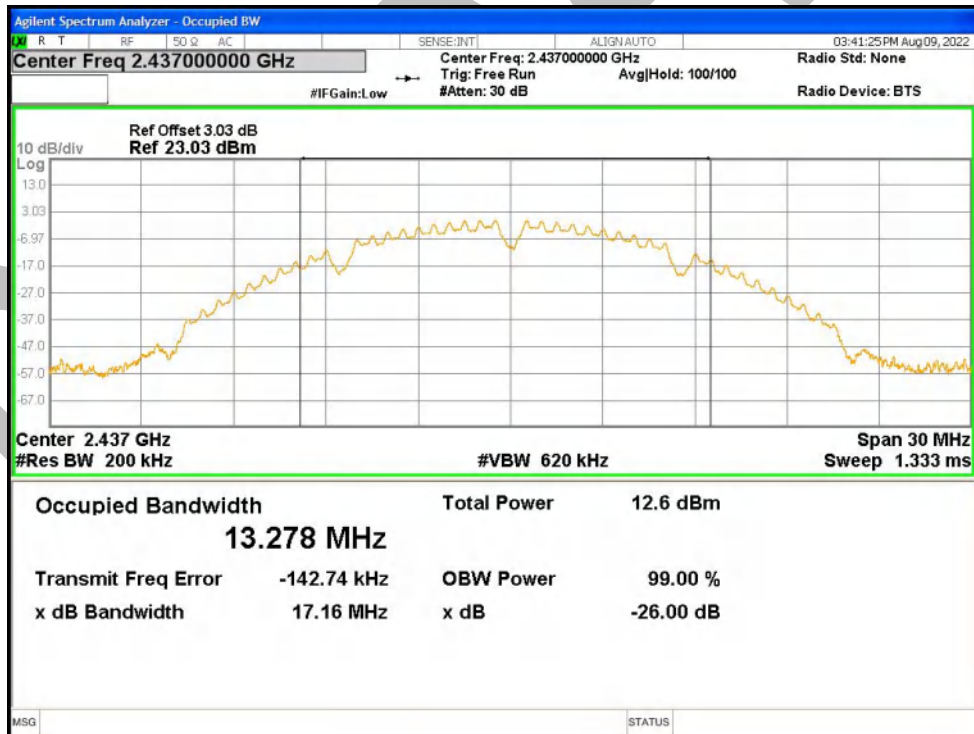
Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	b	2412	Ant1	13.928
NVNT	b	2437	Ant1	13.278
NVNT	b	2462	Ant1	13.863
NVNT	b	2412	Ant2	14.393
NVNT	b	2437	Ant2	13.708
NVNT	b	2462	Ant2	13.184
NVNT	g	2412	Ant1	16.558
NVNT	g	2437	Ant1	16.297
NVNT	g	2462	Ant1	16.530
NVNT	g	2412	Ant2	16.668
NVNT	g	2437	Ant2	16.440
NVNT	g	2462	Ant2	16.346
NVNT	n20	2412	Ant1	17.832
NVNT	n20	2412	Ant2	17.866
NVNT	n20	2437	Ant1	17.539
NVNT	n20	2437	Ant2	17.650
NVNT	n20	2462	Ant1	17.757
NVNT	n20	2462	Ant2	17.548
NVNT	n40	2422	Ant1	36.253
NVNT	n40	2422	Ant2	36.122
NVNT	n40	2437	Ant1	35.686
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NVNT	n40	2452	Ant1	36.464
NVNT	n40	2452	Ant2	36.229

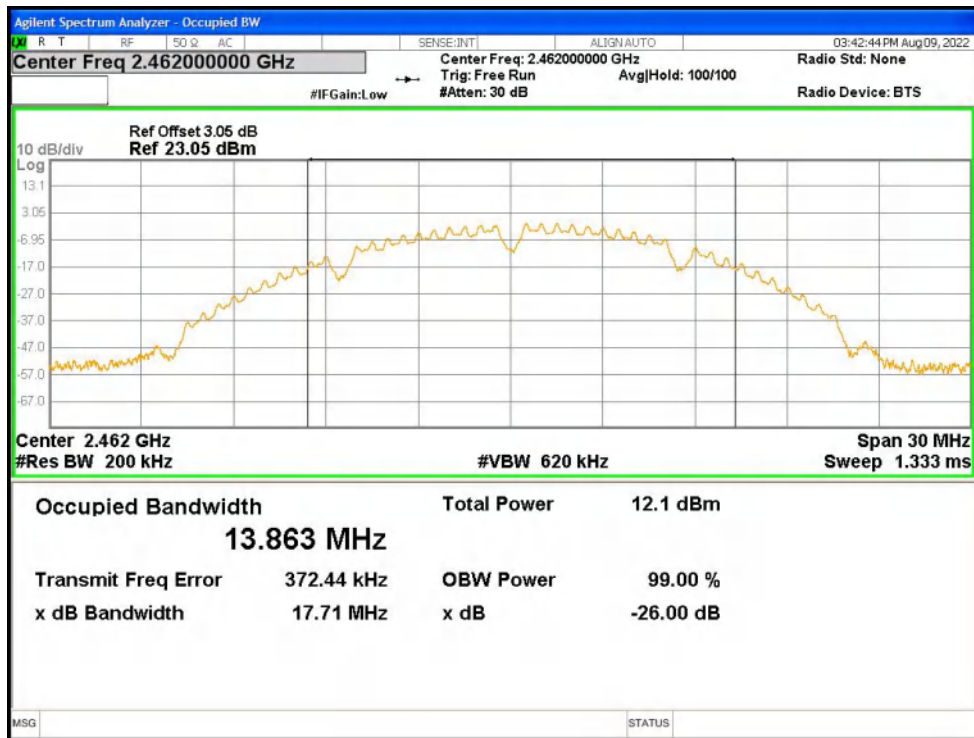
OBW NVNT b 2412MHz Ant1



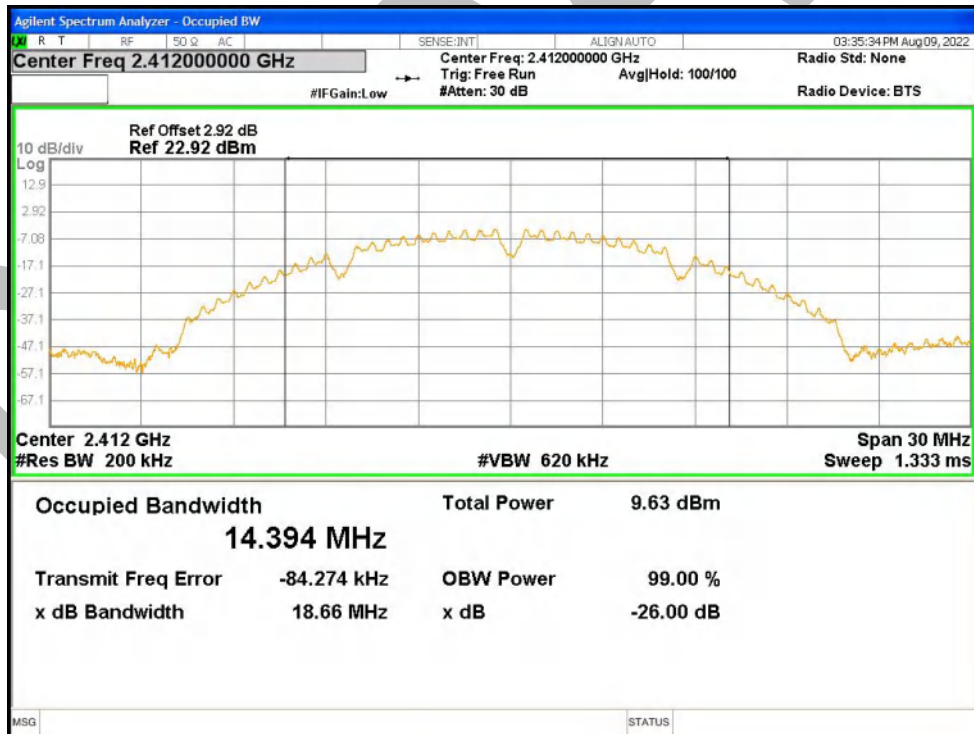
OBW NVNT b 2437MHz Ant1



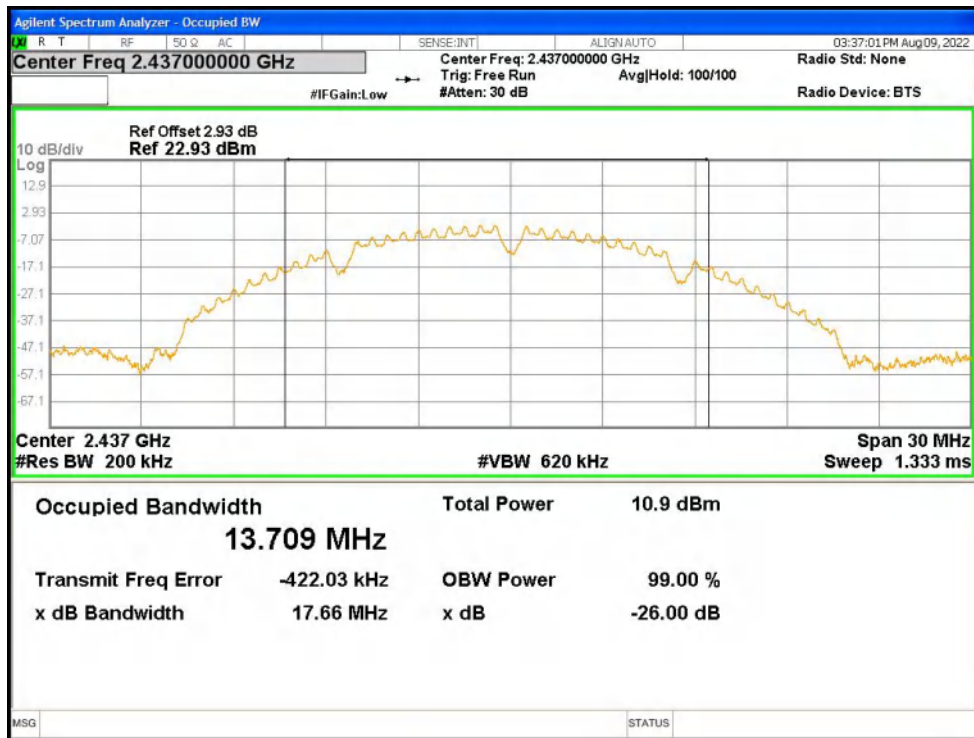
OBW NVNT b 2462MHz Ant1



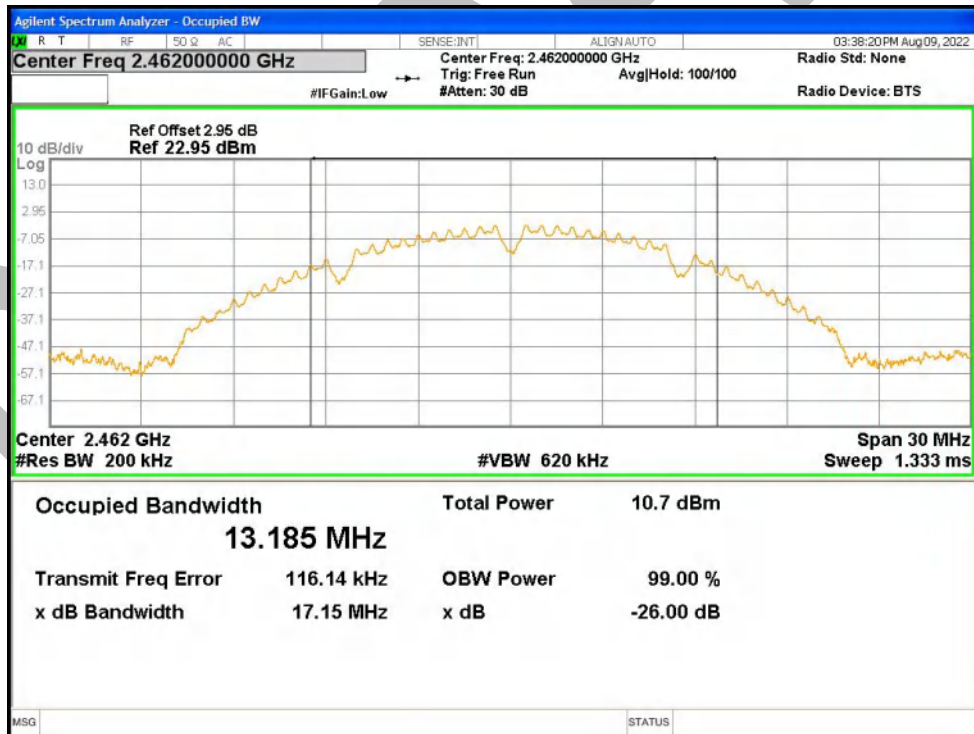
OBW NVNT b 2412MHz Ant2



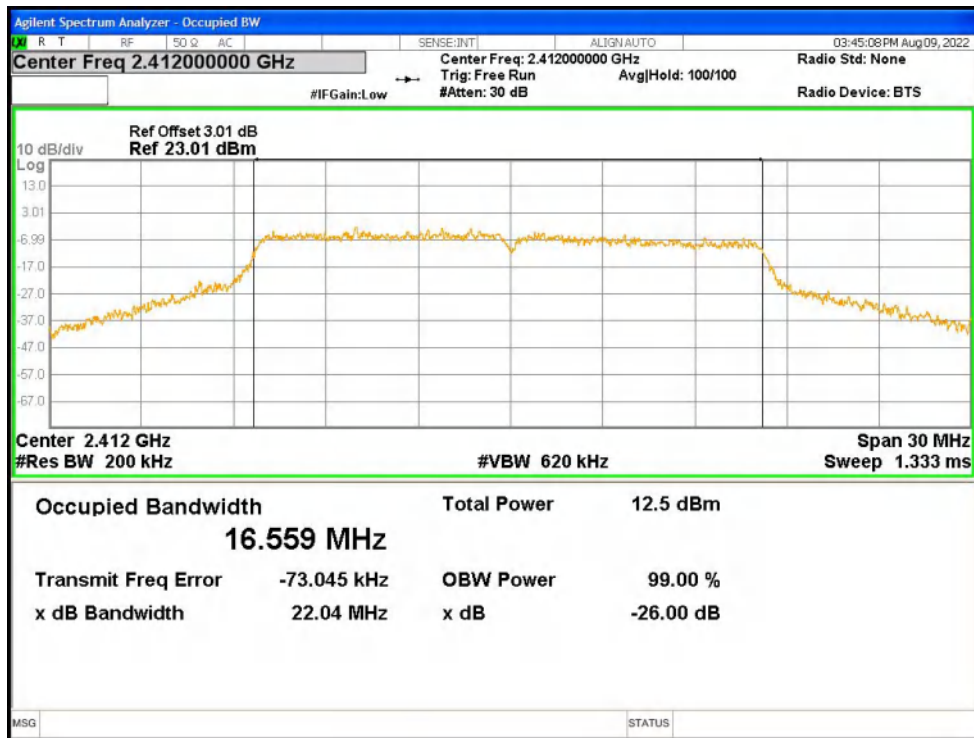
OBW NVNT b 2437MHz Ant2



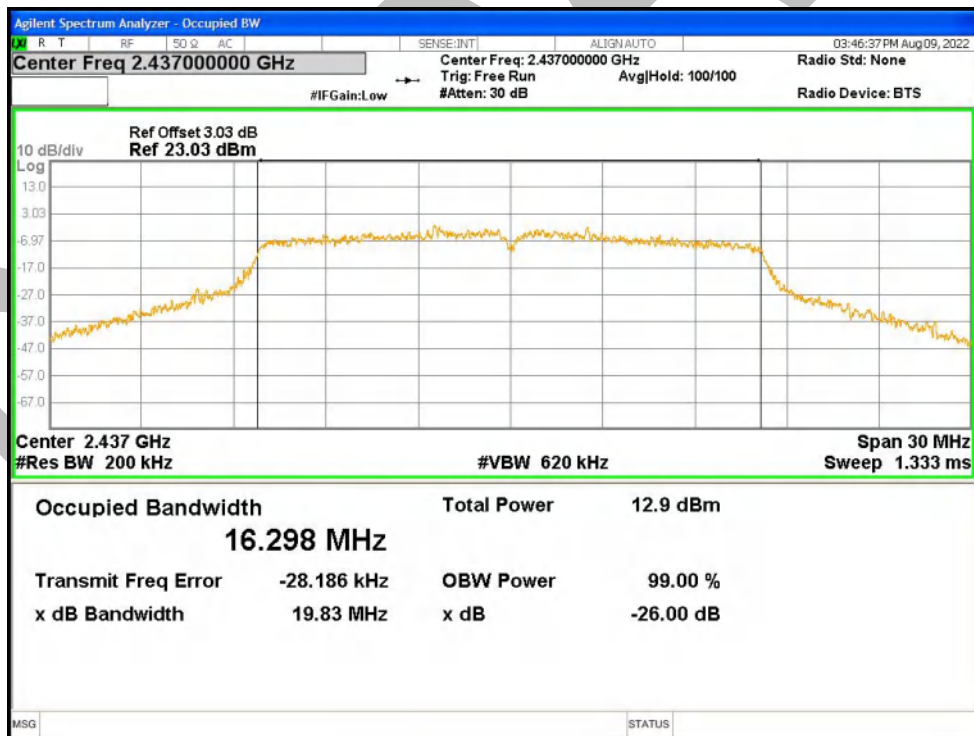
OBW NVNT b 2462MHz Ant2



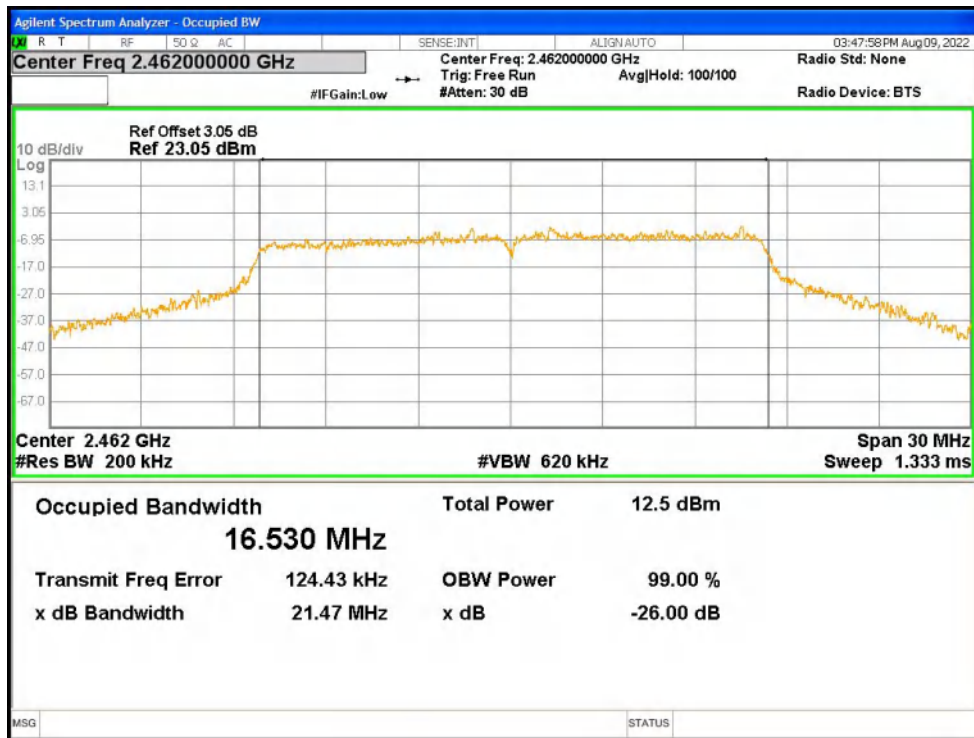
OBW NVNT g 2412MHz Ant1



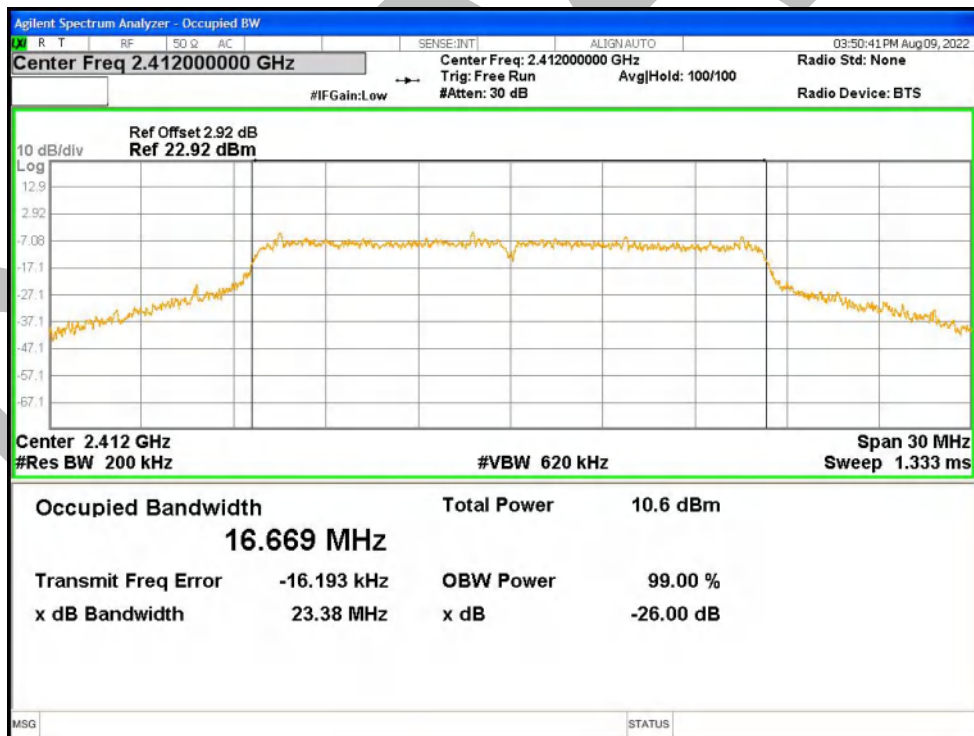
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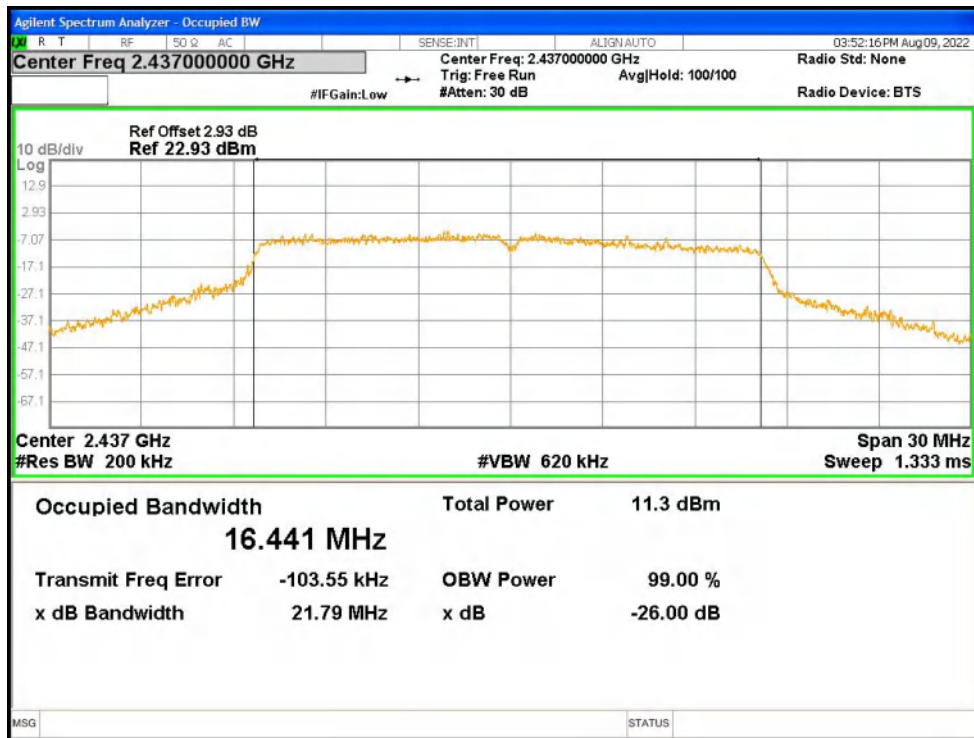
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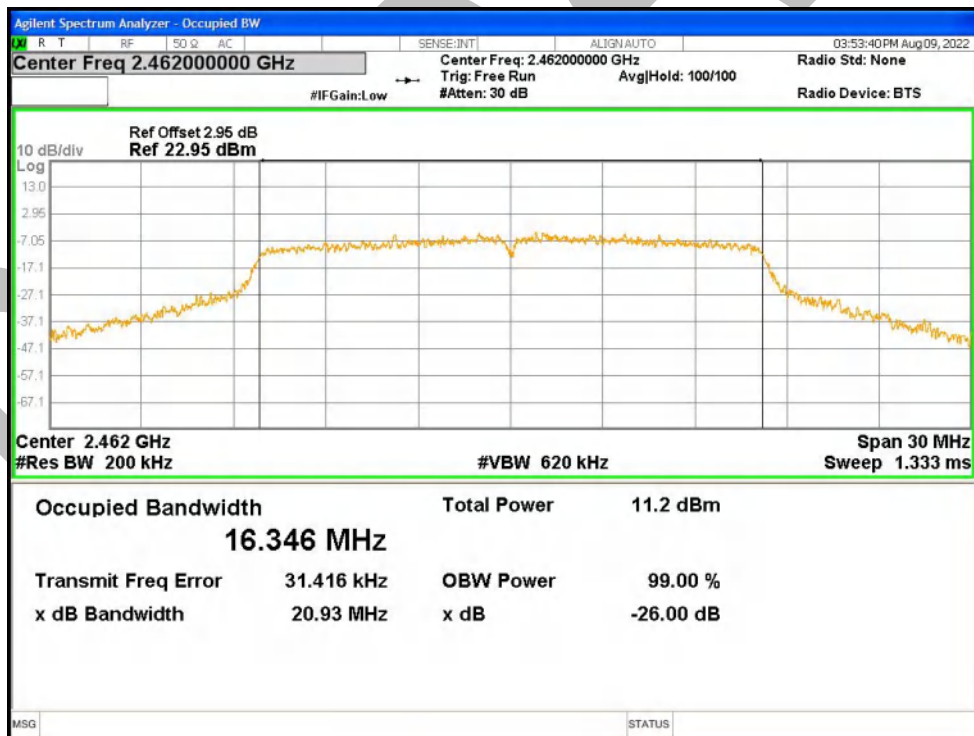
OBW NVNT g 2412MHz Ant2



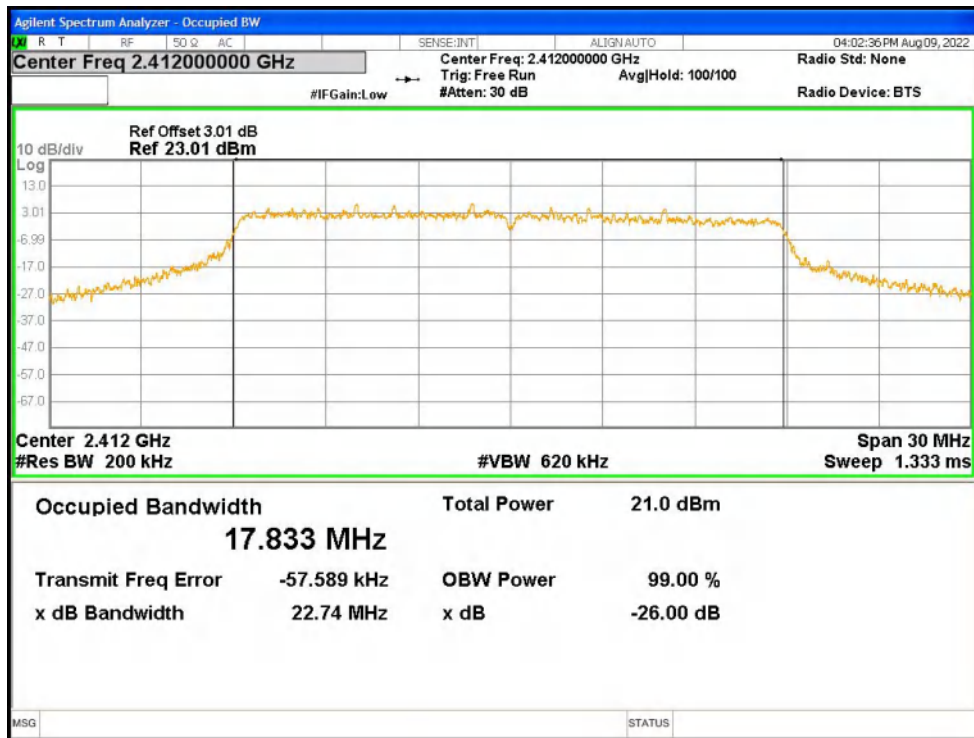
OBW NVNT g 2437MHz Ant2



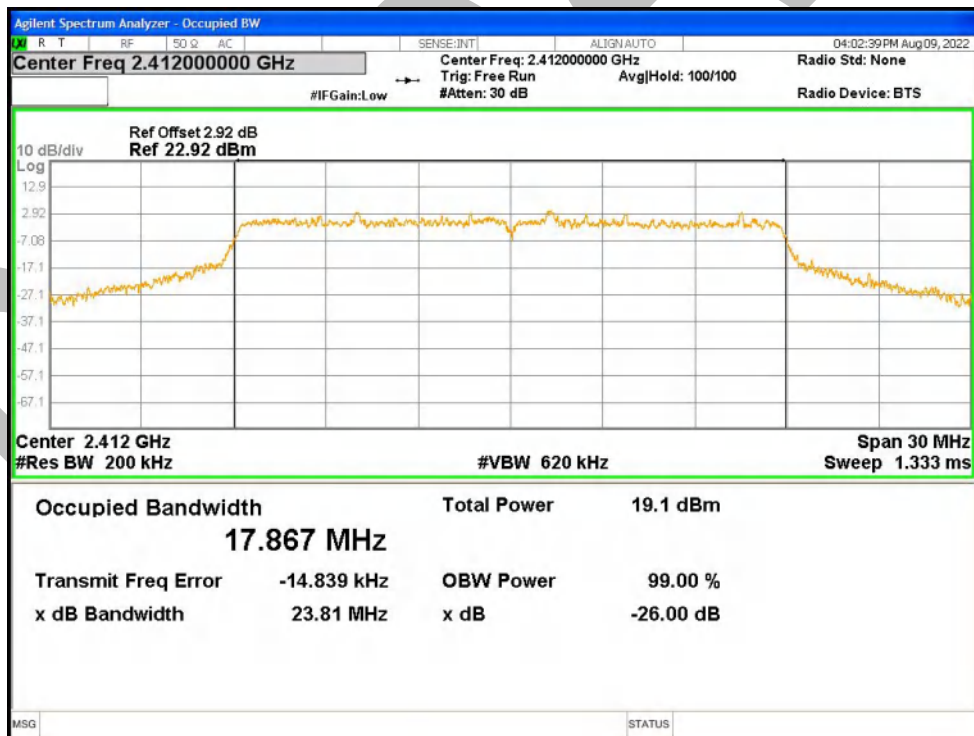
OBW NVNT g 2462MHz Ant2



OBW NVNT n20 2412MHz Ant1



OBW NVNT n20 2412MHz Ant2



OBW NVNT n20 2437MHz Ant1