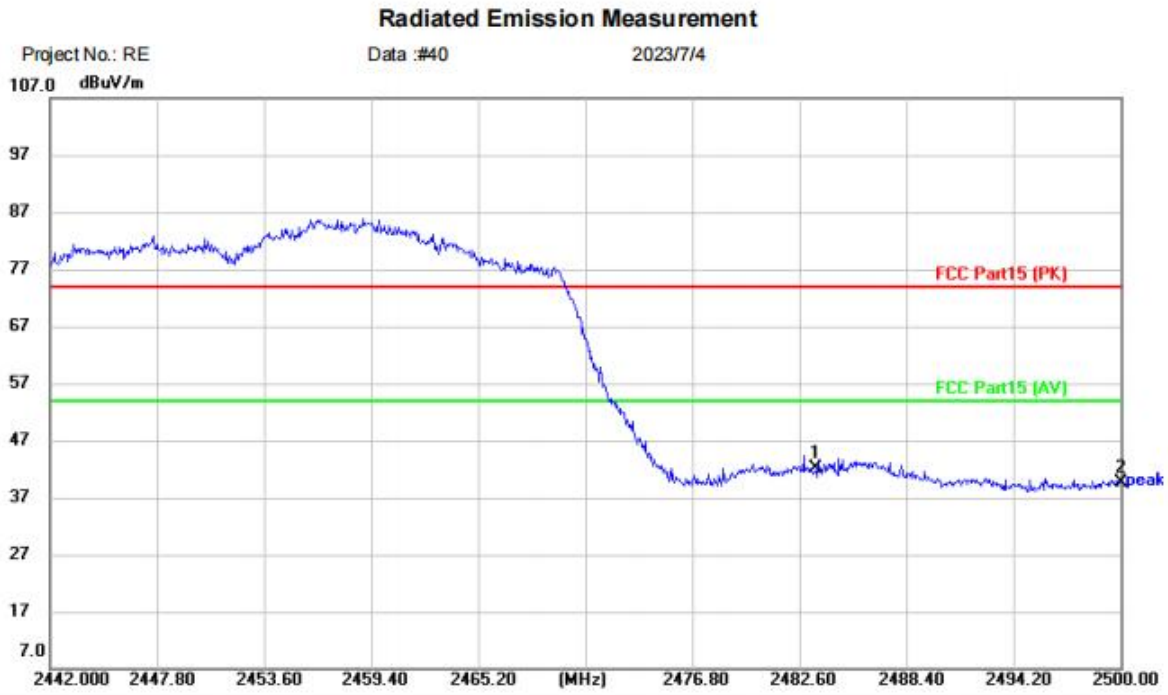
[TestMode: TX n40 high channel]; [Polarity: Vertical]



Site
Limit: FCC Part15 (PK)
EUT: PANOX V2
M/N: PIP223
Mode: 11N40 TX-H
Note:

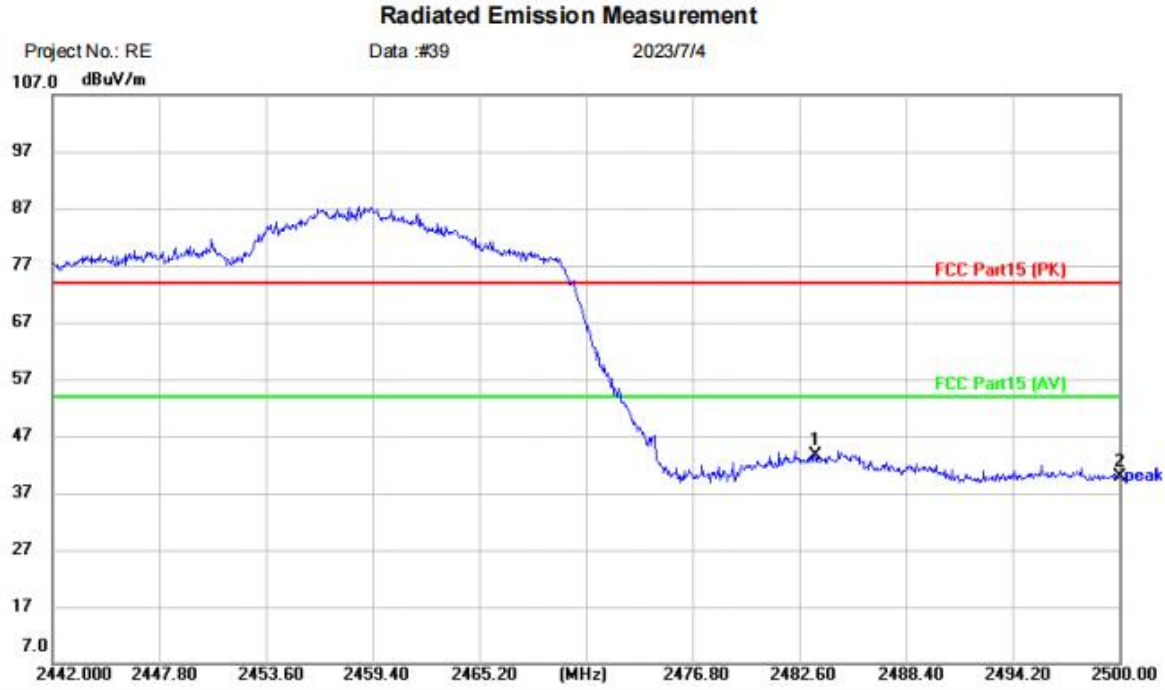
Polarization: *Vertical*
Power:

Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	2483.500	46.88	-4.64	42.24	74.00	-31.76	peak	
2		2500.000	44.50	-4.75	39.75	74.00	-34.25	peak	

Test Result: Pass

[TestMode: TX n40 high channel]; [Polarity: Horizontal]



Site
Limit: FCC Part15 (PK)
EUT: PANOX V2
M/N: PIP223
Mode: 11N40 TX-H
Note:

Polarization: *Horizontal*
Power:

Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	2483.500	48.22	-4.64	43.58	74.00	-30.42	peak	
2		2500.000	44.64	-4.75	39.89	74.00	-34.11	peak	

Test Result: Pass

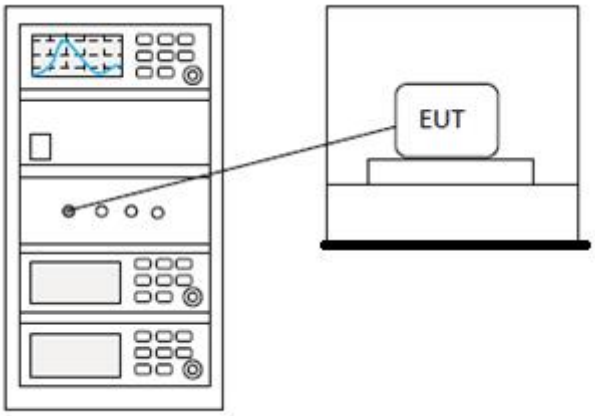
13 CONDUCTED SPURIOUS EMISSIONS

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 7.8.6 & Section 11.11
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Charlie
Temperature	25℃
Humidity	60%

13.1 LIMITS

Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

13.2 BLOCK DIAGRAM OF TEST SETUP



13.3 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

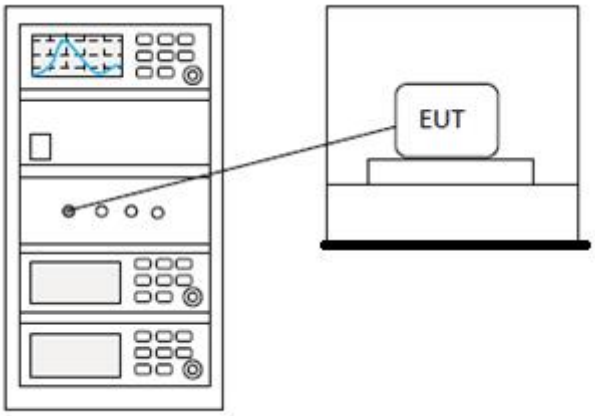
14 CONDUCTED BAND EDGES MEASUREMENT

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 7.8.8 & Section 11.13.3.2
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Charlie
Temperature	25℃
Humidity	60%

14.1 LIMITS

Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

14.2 BLOCK DIAGRAM OF TEST SETUP



14.3 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

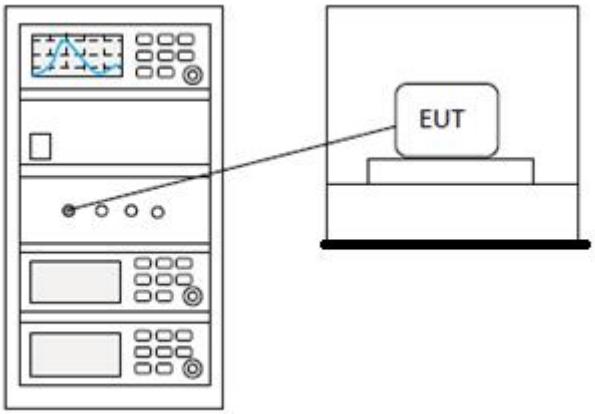
15 MINIMUM 6DB BANDWIDTH

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 11.8.1
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Charlie
Temperature	25℃
Humidity	60%

15.1 LIMITS

Limit:	≥500 kHz

15.2 BLOCK DIAGRAM OF TEST SETUP



15.3 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

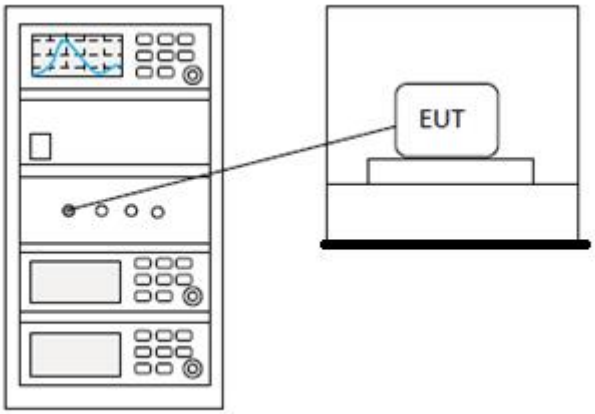
16 POWER SPECTRUM DENSITY

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 11.10.2
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Charlie
Temperature	25℃
Humidity	60%

16.1 LIMITS

Limit:	≤8dBm in any 3 kHz band during any time interval of continuous transmission

16.2 BLOCK DIAGRAM OF TEST SETUP



16.3 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

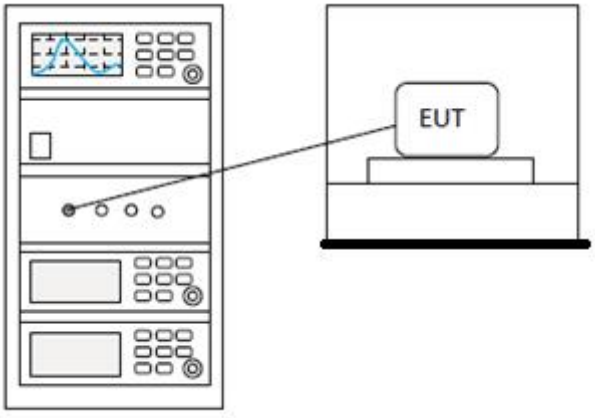
17 CONDUCTED PEAK OUTPUT POWER

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 7.8.5 & Section 11.9.1
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Charlie
Temperature	25℃
Humidity	60%

17.1 LIMITS

Frequency range(MHz)	Output power of the intentional radiator(watt)
902-928	1 for ≥50 hopping channels
	0.25 for 25≤ hopping channels <50
	1 for digital modulation
2400-2483.5	1 for ≥75 non-overlapping hopping channels
	0.125 for all other frequency hopping systems
	1 for digital modulation
5725-5850	1 for frequency hopping systems and digital modulation

17.2 BLOCK DIAGRAM OF TEST SETUP



17.3 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

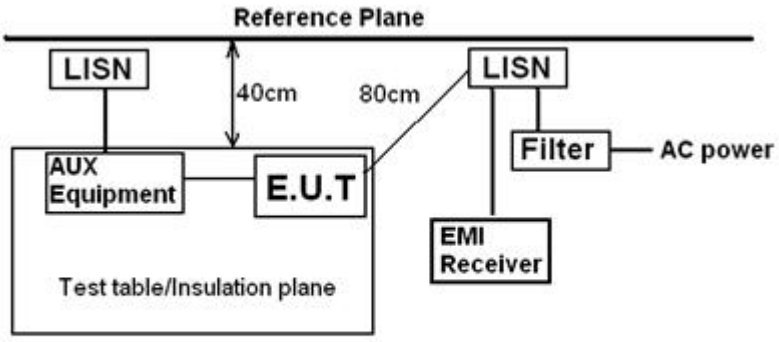
18 CONDUCTED EMISSIONS AT AC POWER LINE (150KHZ-30MHZ)

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℃
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 Impedence Stabilization Network
Test table height=0.8m

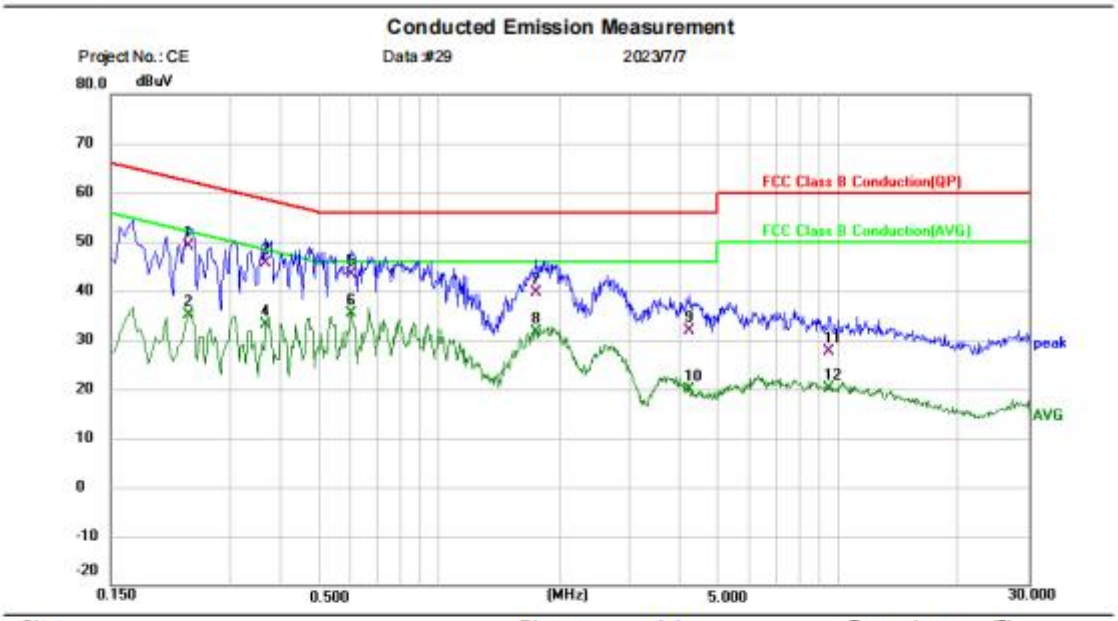
18.3 PROCEDURE

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

18.1 TEST DATA

[TestMode: Transmitting mode]; [Line: Line] ;[Power:AC120V/60Hz]



Site
Limit: FCC Class B Conduction(QP)
EUT: PANOX V2
M/N: PIP223
Mode: 2.4G TX mode
Note:

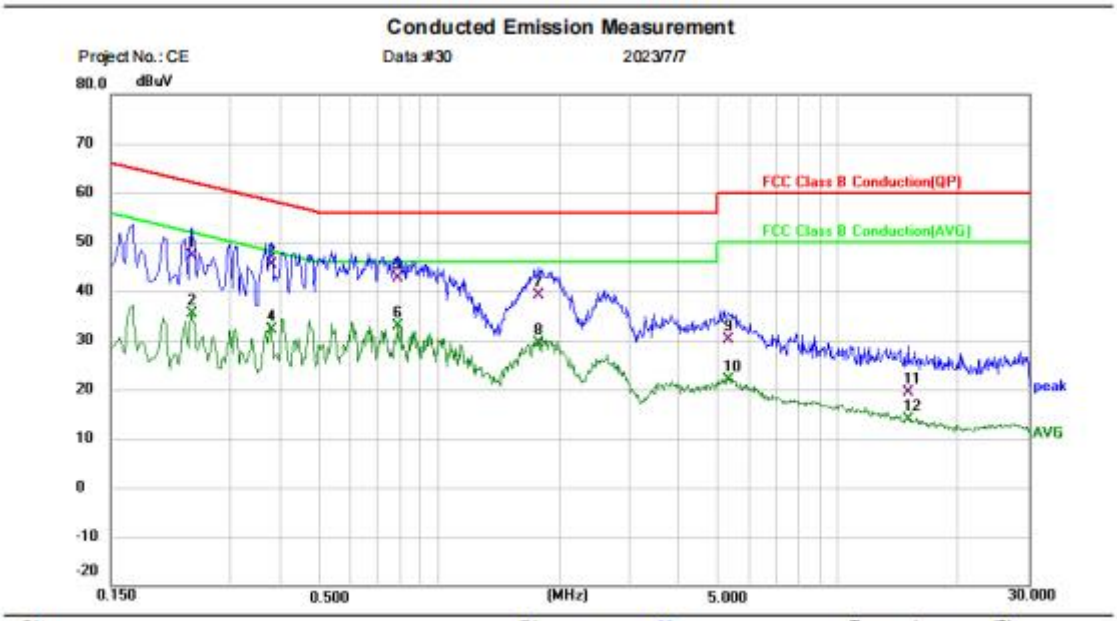
Phase: L1
Power:
Distance:
RBW: 9 KHz
VBW: 30 KHz

Temperature: (C)
Humidity: %RH
Sweep Time: 10 ms

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		0.2340	38.51	10.57	49.08	62.31	-13.23	QP			
2		0.2340	24.56	10.57	35.13	52.31	-17.18	AVG			
3		0.3660	35.68	10.07	45.75	58.59	-12.84	QP			
4		0.3660	22.95	10.07	33.02	48.59	-15.57	AVG			
5		0.6020	33.19	10.08	43.27	56.00	-12.73	QP			
6	*	0.6020	25.34	10.08	35.42	46.00	-10.58	AVG			
7		1.7460	29.26	10.26	39.52	56.00	-16.48	QP			
8		1.7460	21.28	10.26	31.54	46.00	-14.46	AVG			
9		4.2460	21.82	10.08	31.90	56.00	-24.10	QP			
10		4.2460	9.75	10.08	19.83	46.00	-26.17	AVG			
11		9.4740	17.60	10.13	27.73	60.00	-32.27	QP			
12		9.4740	9.99	10.13	20.12	50.00	-29.88	AVG			

Test Result: Pass

[TestMode: Transmitting mode]; [Line: Neutral] ;[Power:AC120V/60Hz]



Site
Limit: FCC Class B Conduction(QP)
EUT: PANOX V2
M/N: PIP223
Mode: 2.4G TX mode
Note:

Phase: N
Power:
Distance:
RBW: 9 KHz
VBW: 30 KHz

Temperature: (C)
Humidity: %RH
Sweep Time: 10 ms

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		0.2380	36.60	10.55	47.15	62.17	-15.02	QP			
2		0.2380	24.86	10.55	35.41	52.17	-16.76	AVG			
3	*	0.3780	35.41	10.06	45.47	58.32	-12.85	QP			
4		0.3780	22.14	10.06	32.20	48.32	-16.12	AVG			
5		0.7860	32.49	10.02	42.51	56.00	-13.49	QP			
6		0.7860	22.89	10.02	32.91	46.00	-13.09	AVG			
7		1.7740	29.12	10.09	39.21	56.00	-16.79	QP			
8		1.7740	19.21	10.09	29.30	46.00	-16.70	AVG			
9		5.3060	20.26	9.82	30.08	60.00	-29.92	QP			
10		5.3060	12.02	9.82	21.84	50.00	-28.16	AVG			
11		14.9140	9.39	10.07	19.46	60.00	-40.54	QP			
12		14.9140	3.74	10.07	13.81	50.00	-36.19	AVG			

Test Result: Pass

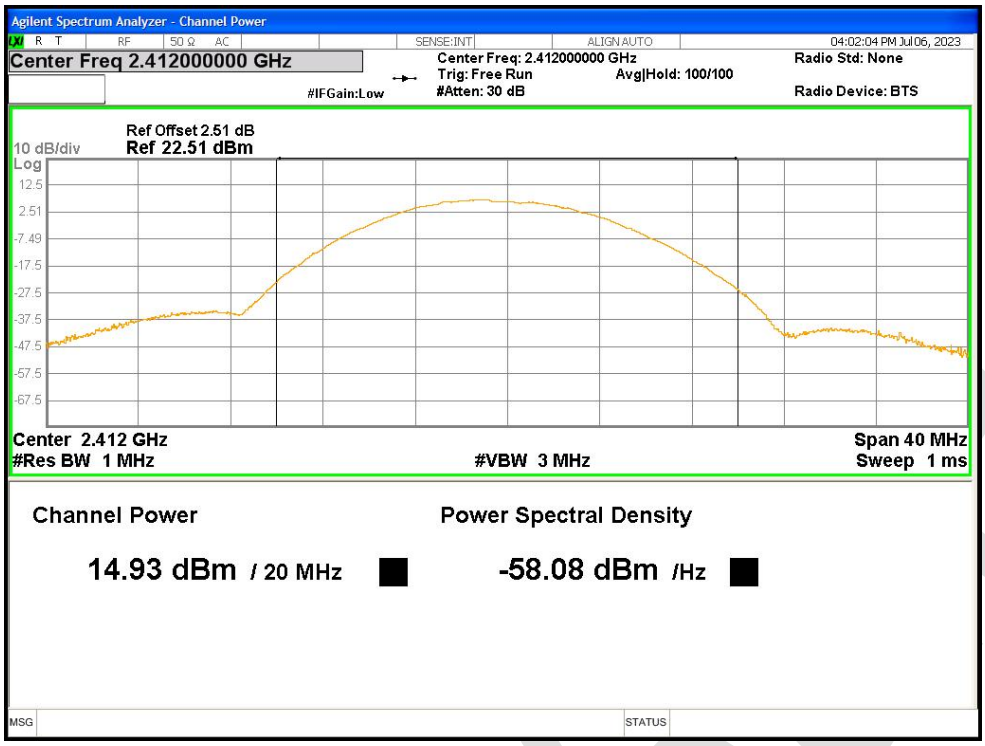
19 APPENDIX

Appendix1

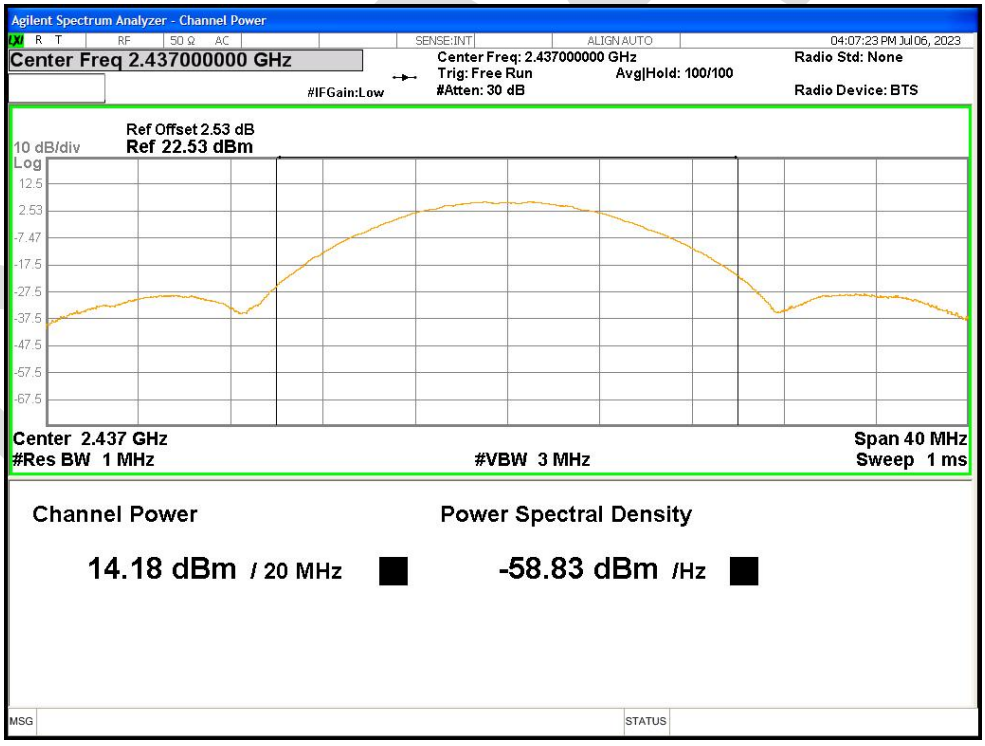
19.1 MAXIMUM CONDUCTED OUTPUT POWER

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	14.931	30	Pass
NVNT	b	2437	Ant1	14.179	30	Pass
NVNT	b	2462	Ant1	14.778	30	Pass
NVNT	b	2412	Ant2	15.344	30	Pass
NVNT	b	2437	Ant2	14.264	30	Pass
NVNT	b	2462	Ant2	14.934	30	Pass
NVNT	g	2412	Ant1	17.598	30	Pass
NVNT	g	2437	Ant1	16.742	30	Pass
NVNT	g	2462	Ant1	17.475	30	Pass
NVNT	g	2412	Ant2	18.151	30	Pass
NVNT	g	2437	Ant2	17.033	30	Pass
NVNT	g	2462	Ant2	17.737	30	Pass
NVNT	n20	2412	Ant1	17.836	30	Pass
NVNT	n20	2412	Ant2	18.274	30	Pass
NVNT	n20	2412	Sum	21.071	30	Pass
NVNT	n20	2437	Ant1	16.946	30	Pass
NVNT	n20	2437	Ant2	17.107	30	Pass
NVNT	n20	2437	Sum	20.038	30	Pass
NVNT	n20	2462	Ant1	17.156	30	Pass
NVNT	n20	2462	Ant2	17.892	30	Pass
NVNT	n20	2462	Sum	20.55	30	Pass
NVNT	n40	2422	Ant1	17.369	30	Pass
NVNT	n40	2422	Ant2	17.732	30	Pass
NVNT	n40	2422	Sum	20.565	30	Pass
NVNT	n40	2437	Ant1	17.866	30	Pass
NVNT	n40	2437	Ant2	17.747	30	Pass
NVNT	n40	2437	Sum	20.817	30	Pass
NVNT	n40	2452	Ant1	18.673	30	Pass
NVNT	n40	2452	Ant2	18.879	30	Pass
NVNT	n40	2452	Sum	21.788	30	Pass

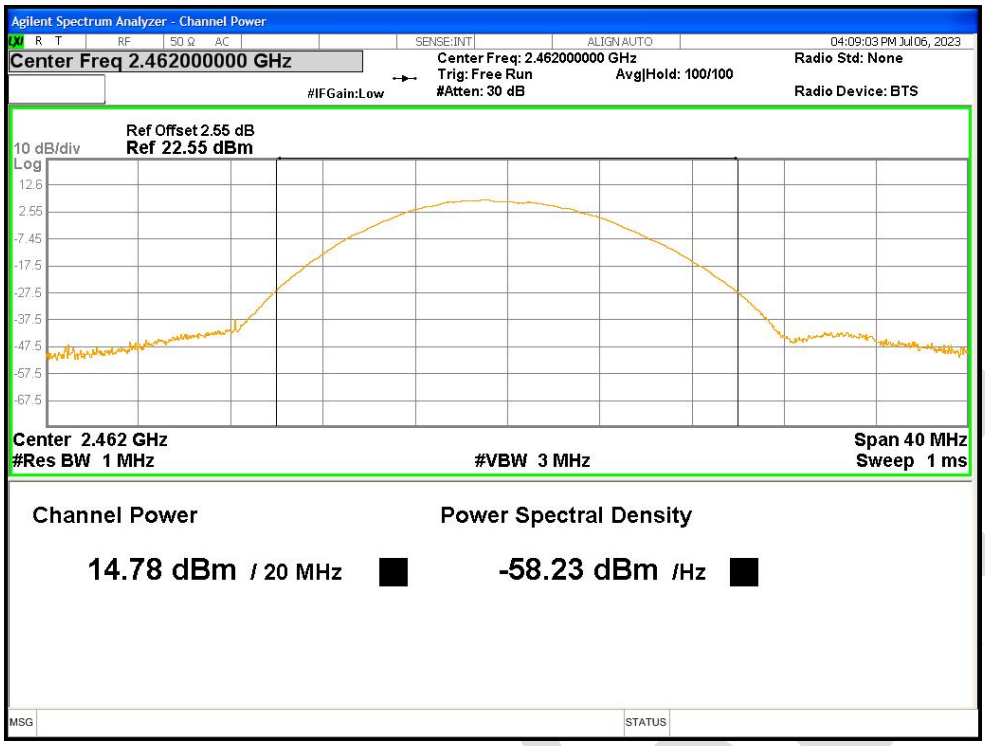
Power NVNT b 2412MHz Ant1



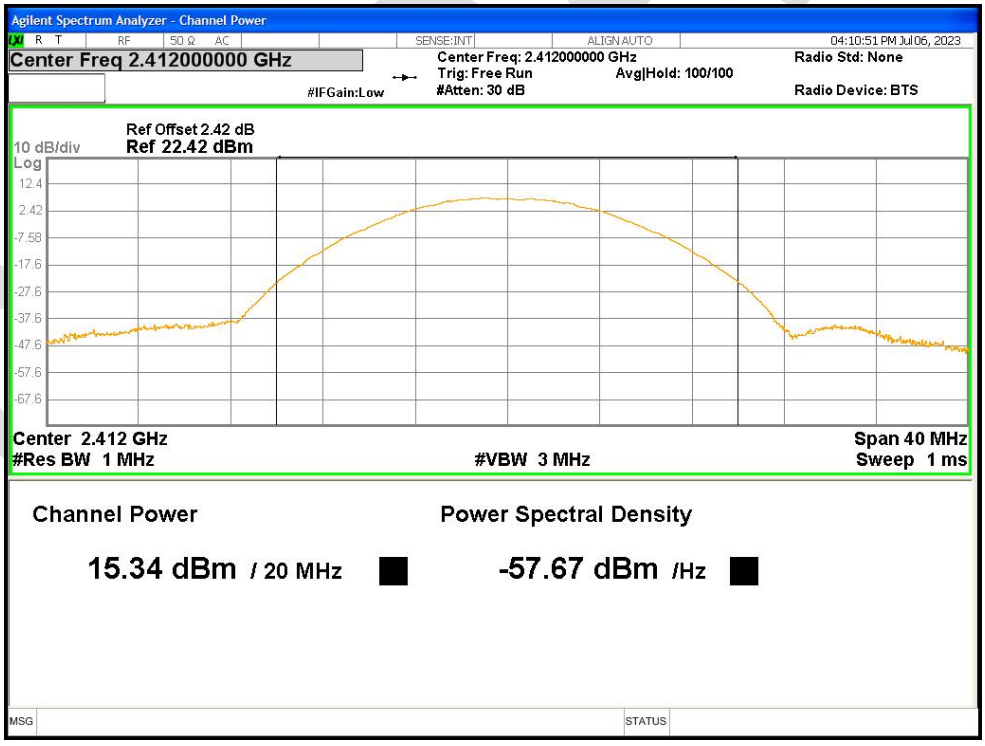
Power NVNT b 2437MHz Ant1



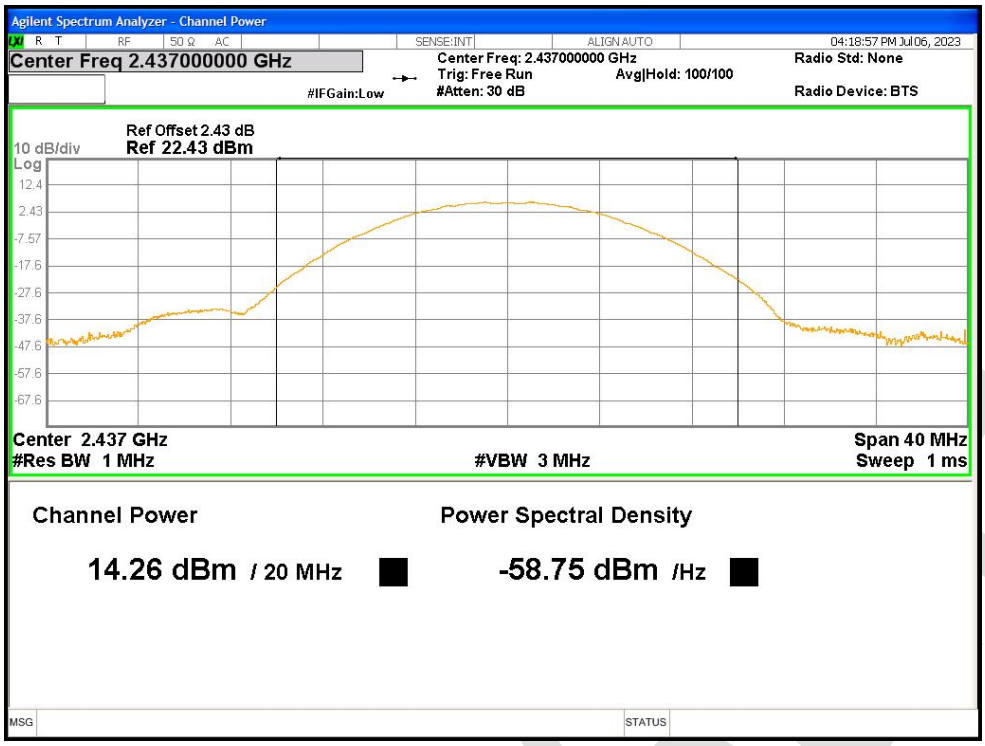
Power NVNT b 2462MHz Ant1



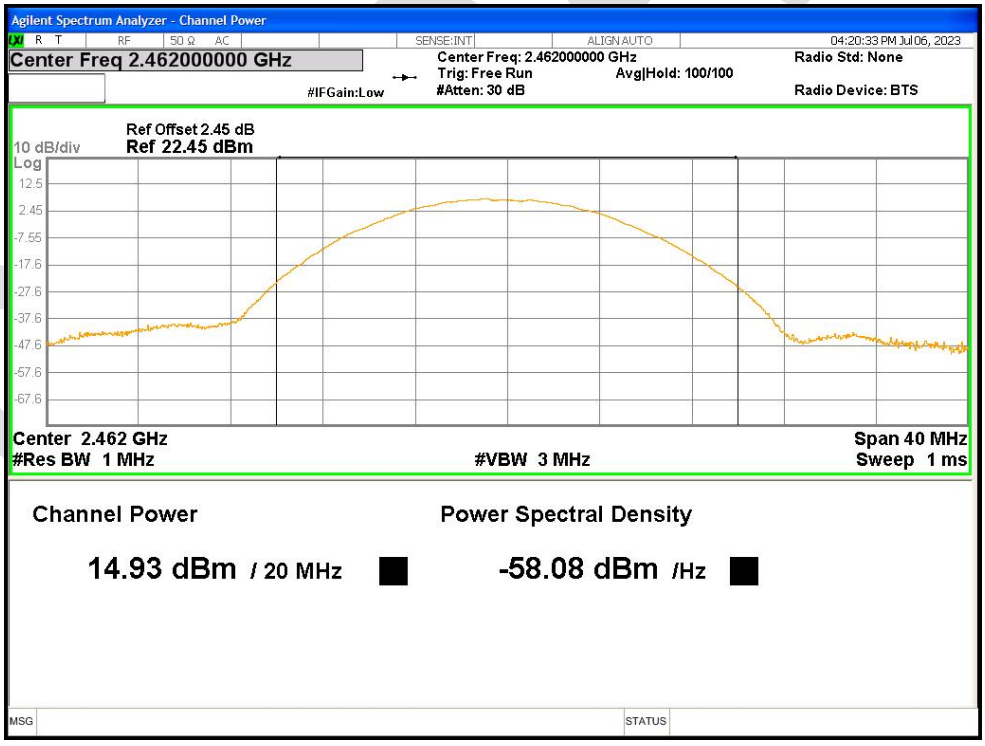
Power NVNT b 2412MHz Ant2



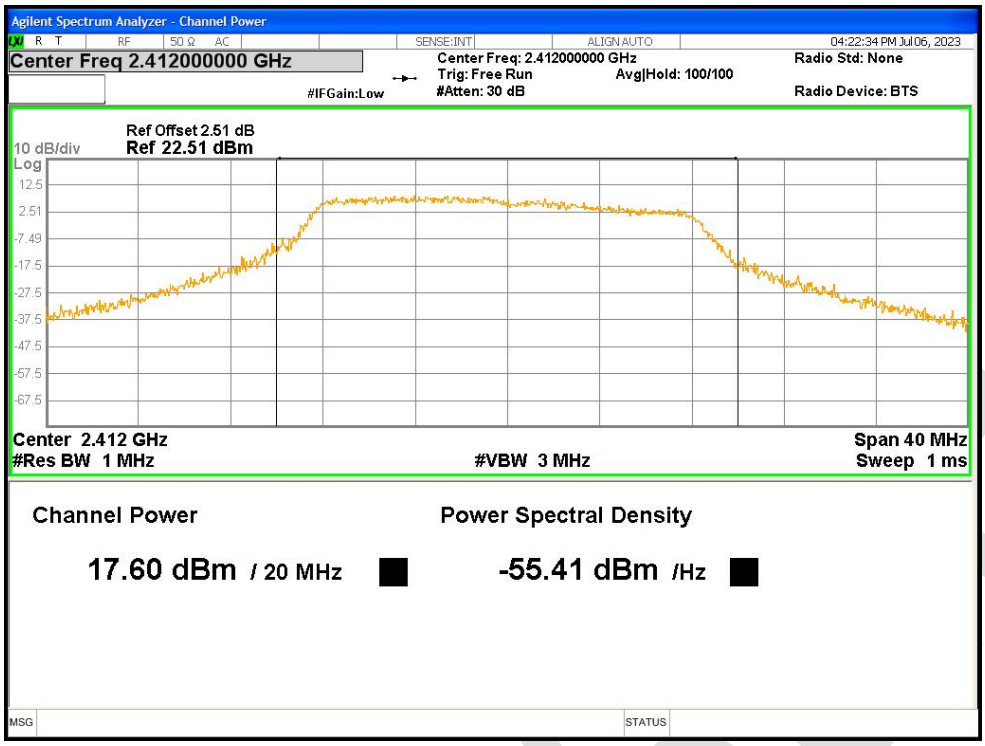
Power NVNT b 2437MHz Ant2



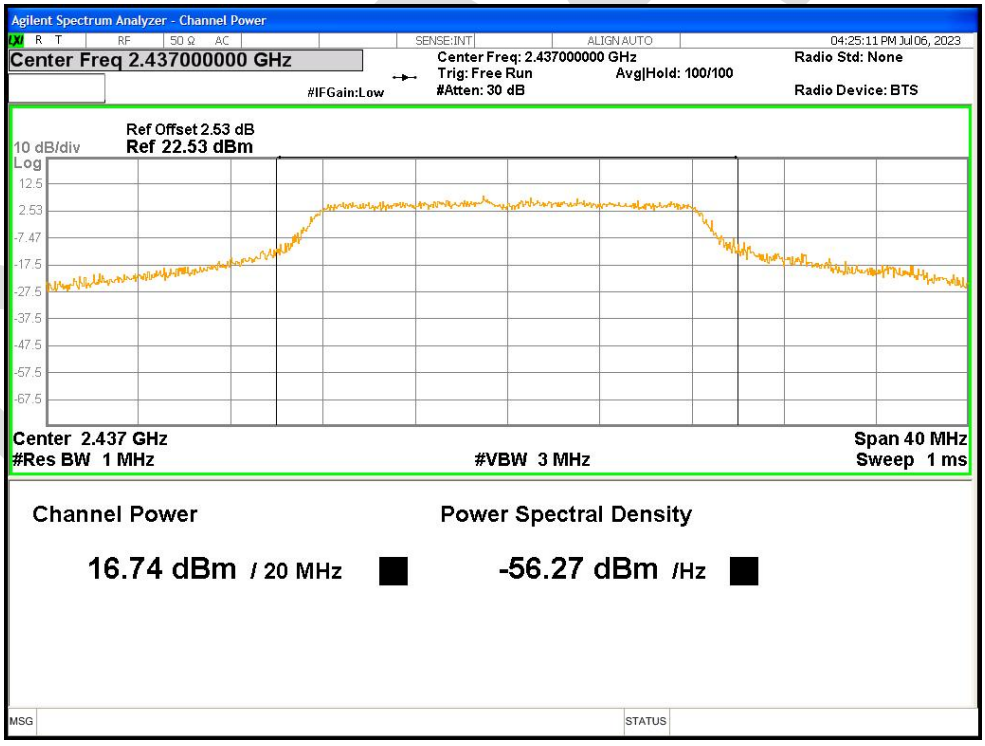
Power NVNT b 2462MHz Ant2



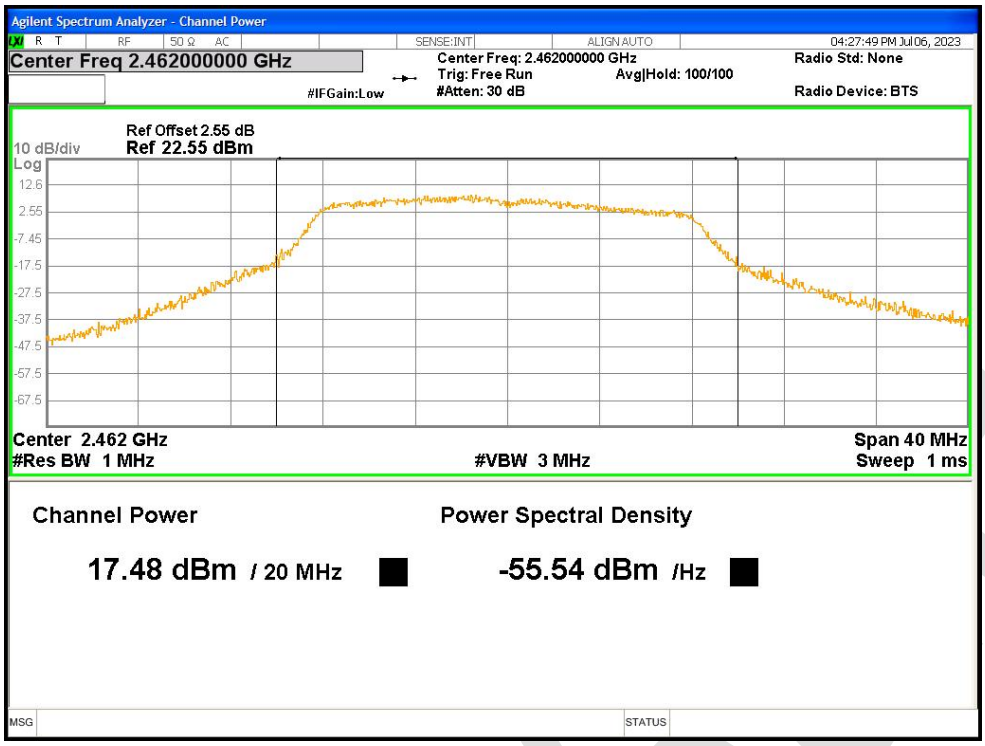
Power NVNT g 2412MHz Ant1



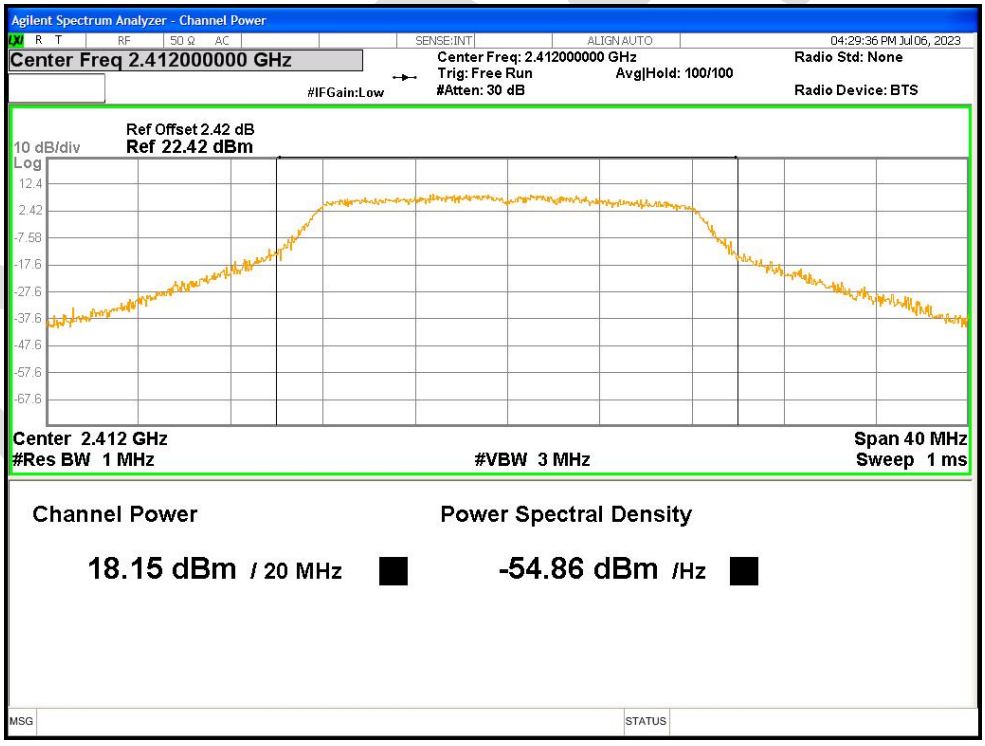
Power NVNT g 2437MHz Ant1



Power NVNT g 2462MHz Ant1



Power NVNT g 2412MHz Ant2



Power NVNT g 2437MHz Ant2