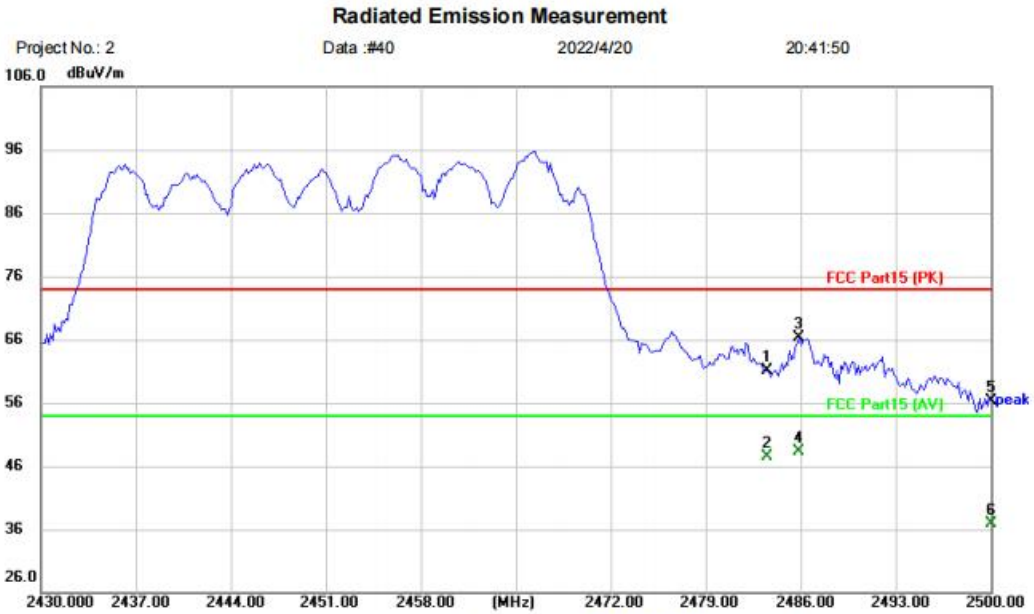
[TestMode: TX N40 high channel]; [Polarity: Horizontal]



Site
Limit: FCC Part15 (PK)
EUT: Wifi/bt Module
M/N: L297B-SR
Mode: 2.4G-N40-TX-H
Note:

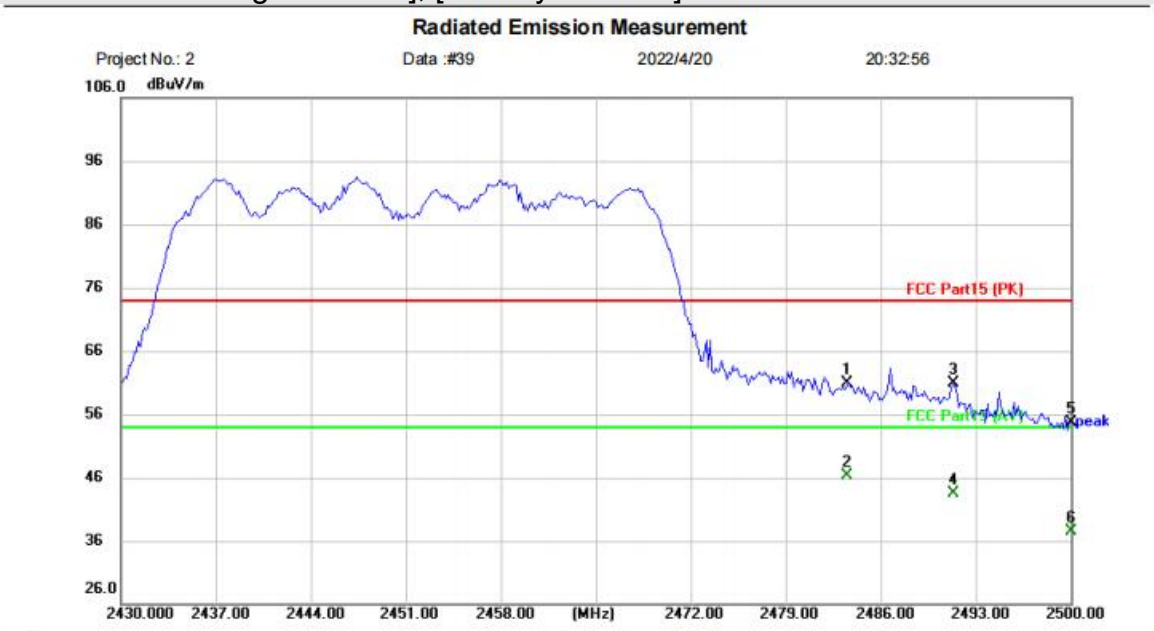
Polarization: *Horizontal*
Power:

Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		2483.500	64.15	-3.14	61.01	74.00	-12.99	peak	
2		2483.500	50.69	-3.14	47.55	54.00	-6.45	AVG	
3		2485.860	69.51	-3.14	66.37	74.00	-7.63	peak	
4	*	2485.860	51.51	-3.14	48.37	54.00	-5.63	AVG	
5		2500.000	59.35	-3.08	56.27	74.00	-17.73	peak	
6		2500.000	40.06	-3.08	36.98	54.00	-17.02	AVG	

Test Result: Pass

[TestMode: TX N40 high channel]; [Polarity: Vertical]



Site
Limit: FCC Part15 (PK)
EUT: Wifi/bt Module
M/N: L297B-SR
Mode: 2.4G-N40-TX-H
Note:

Polarization: *Vertical*
Power:

Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		2483.500	64.10	-3.14	60.96	74.00	-13.04	peak	
2	*	2483.500	49.52	-3.14	46.38	54.00	-7.62	AVG	
3		2491.320	63.99	-3.11	60.88	74.00	-13.12	peak	
4		2491.320	46.55	-3.11	43.44	54.00	-10.56	AVG	
5		2500.000	57.84	-3.08	54.76	74.00	-19.24	peak	
6		2500.000	40.55	-3.08	37.47	54.00	-16.53	AVG	

Test Result: Pass

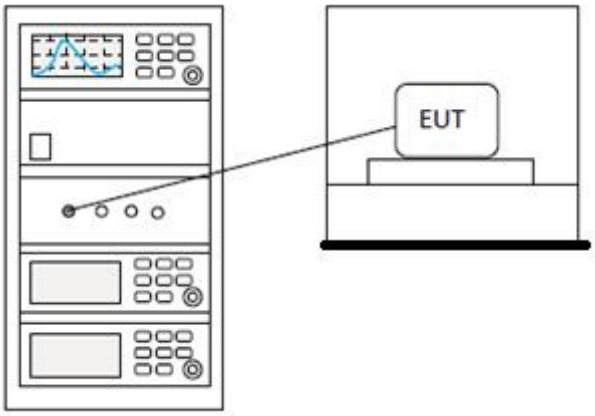
14 CONDUCTED SPURIOUS EMISSIONS

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	Jozu
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

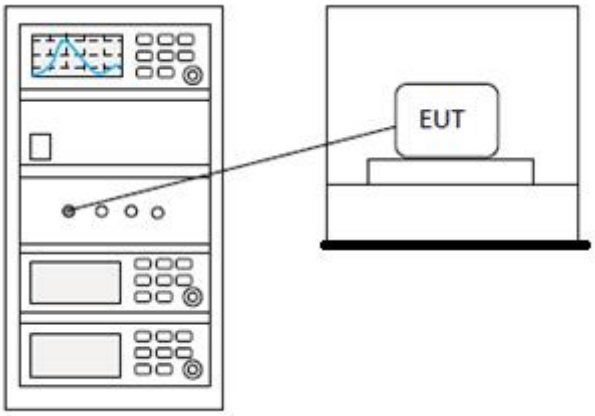
15 CONDUCTED BAND EDGES MEASUREMENT

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	Jozu
Temperature	25℃
Humidity	60%

15.1 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)).

15.2 BLOCK DIAGRAM OF TEST SETUP



15.3 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

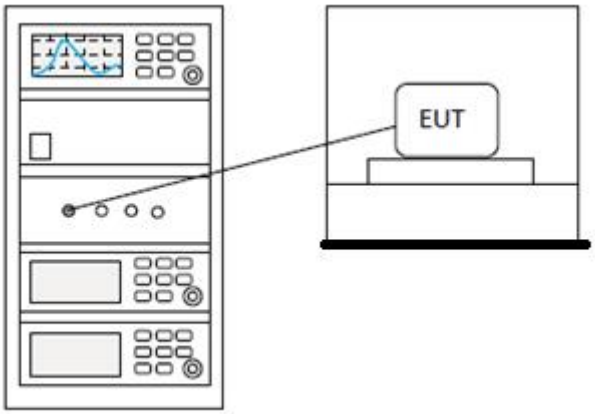
16 MINIMUM 6DB BANDWIDTH

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	Jozu
Temperature	25℃
Humidity	60%

16.1 LIMITS

Limit:	≥500 kHz

16.2 BLOCK DIAGRAM OF TEST SETUP



16.3 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

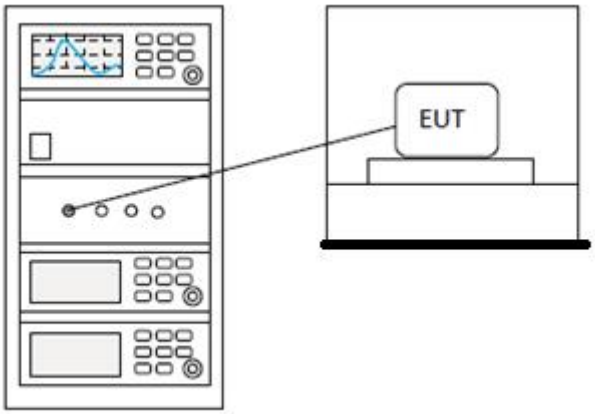
17 POWER SPECTRUM DENSITY

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	Jozu
Temperature	25℃
Humidity	60%

17.1 LIMITS

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

17.2 BLOCK DIAGRAM OF TEST SETUP



17.3 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

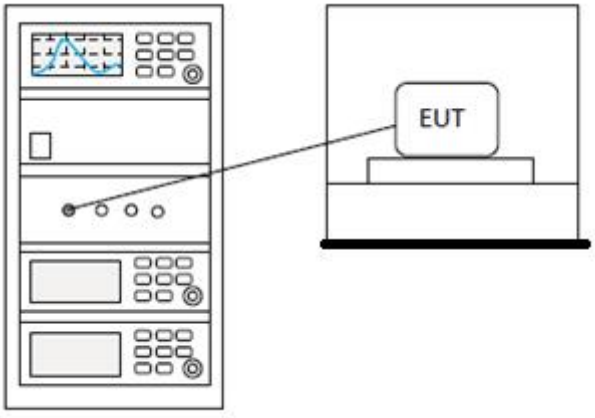
18 CONDUCTED PEAK OUTPUT POWER

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	Jozu
Temperature	25℃
Humidity	60%

18.1 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

18.2 BLOCK DIAGRAM OF TEST SETUP



18.3 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

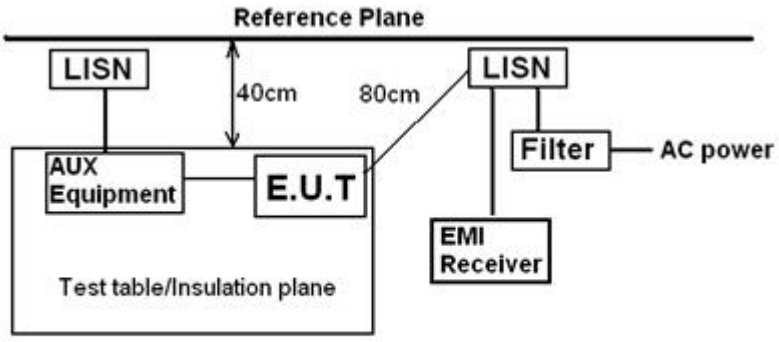
19 CONDUCTED EMISSIONS AT AC POWER LINE (150KHZ-30MHZ)

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	Jozu
Temperature	25℃
Humidity	60%

19.1 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.		

19.2 BLOCK DIAGRAM OF TEST SETUP



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

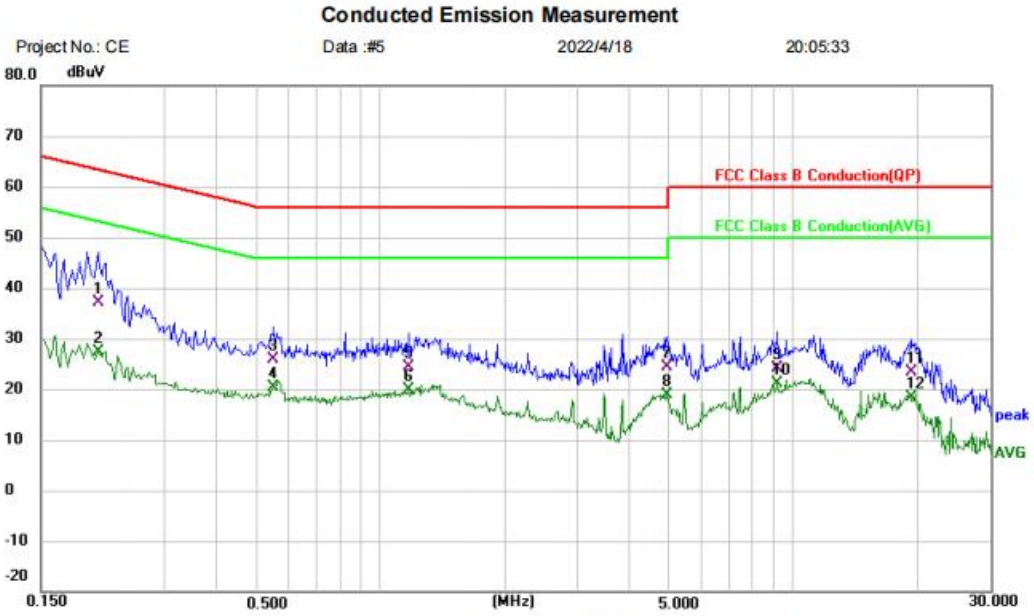
19.3 PROCEDURE

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

19.4 TEST DATA

[TestMode: TX]; [Line: Line] ;[Power:AC120V/60Hz]



Site
Limit: FCC Class B Conduction(QP)
EUT: Wifi/bt Module
M/N: L27B-SR
Mode: 2.4G-TX Mode
Note:

Phase: *L1*
Power:

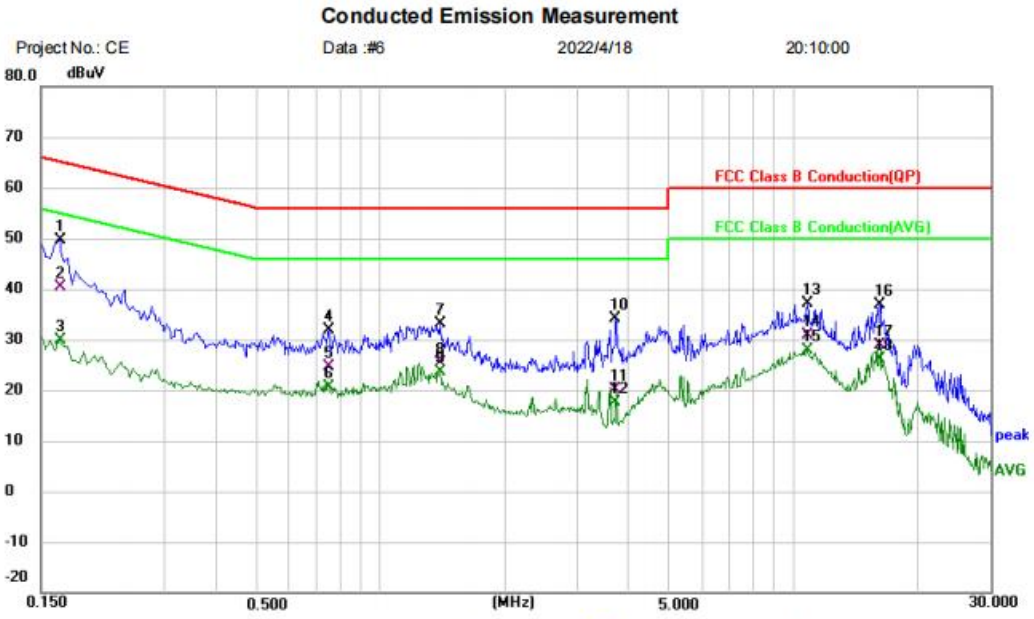
Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.2060	26.76	10.25	37.01	63.37	-26.36	QP	
2		0.2060	17.19	10.25	27.44	53.37	-25.93	AVG	
3		0.5500	16.09	9.87	25.96	56.00	-30.04	QP	
4	*	0.5500	10.41	9.87	20.28	46.00	-25.72	AVG	
5		1.1700	14.51	9.92	24.43	56.00	-31.57	QP	
6		1.1700	9.88	9.92	19.80	46.00	-26.20	AVG	
7		4.9380	14.38	10.01	24.39	56.00	-31.61	QP	
8		4.9380	8.97	10.01	18.98	46.00	-27.02	AVG	
9		9.1300	13.64	10.44	24.08	60.00	-35.92	QP	
10		9.1300	10.66	10.44	21.10	50.00	-28.90	AVG	
11		19.2260	12.95	10.42	23.37	60.00	-36.63	QP	
12		19.2260	7.97	10.42	18.39	50.00	-31.61	AVG	

*:Maximum data x:Over limit !:over margin (Reference Only

Test Result: Pass

[TestMode: TX]; [Line: Nutral] ;[Power:AC120V/60Hz]



Site
Phase: N
Temperature: (C)
Limit: FCC Class B Conduction(QP)
Power:
Humidity: %RH
EUT: Wifi/bt Module
M/N: L27B-SR
Mode: 2.4G-TX Mode
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1660	39.53	10.08	49.61	65.16	-15.55	peak	m
2		0.1660	30.39	10.08	40.47	65.16	-24.69	QP	
3		0.1660	19.82	10.08	29.90	55.16	-25.26	AVG	
4		0.7500	21.98	9.82	31.80	56.00	-24.20	peak	m
5		0.7500	14.77	9.82	24.59	56.00	-31.41	QP	
6		0.7500	10.72	9.82	20.54	46.00	-25.46	AVG	
7		1.3940	23.24	9.85	33.09	56.00	-22.91	peak	m
8		1.3940	15.62	9.85	25.47	56.00	-30.53	QP	
9		1.3940	13.74	9.85	23.59	46.00	-22.41	AVG	
10		3.7180	24.18	9.91	34.09	56.00	-21.91	peak	m
11		3.7180	10.24	9.91	20.15	56.00	-35.85	QP	
12		3.7180	7.80	9.91	17.71	46.00	-28.29	AVG	
13		10.8420	26.98	10.18	37.16	60.00	-22.84	peak	m

*:Maximum data x:Over limit !:over margin (Reference Only

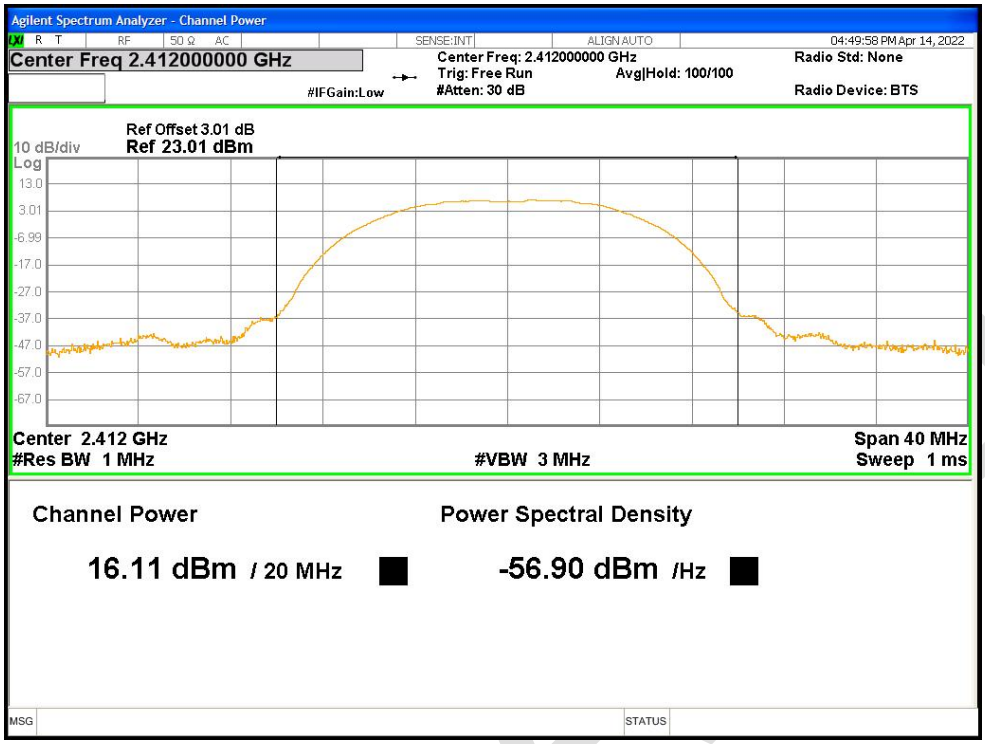
Test Result: Pass

20 APPENDIX

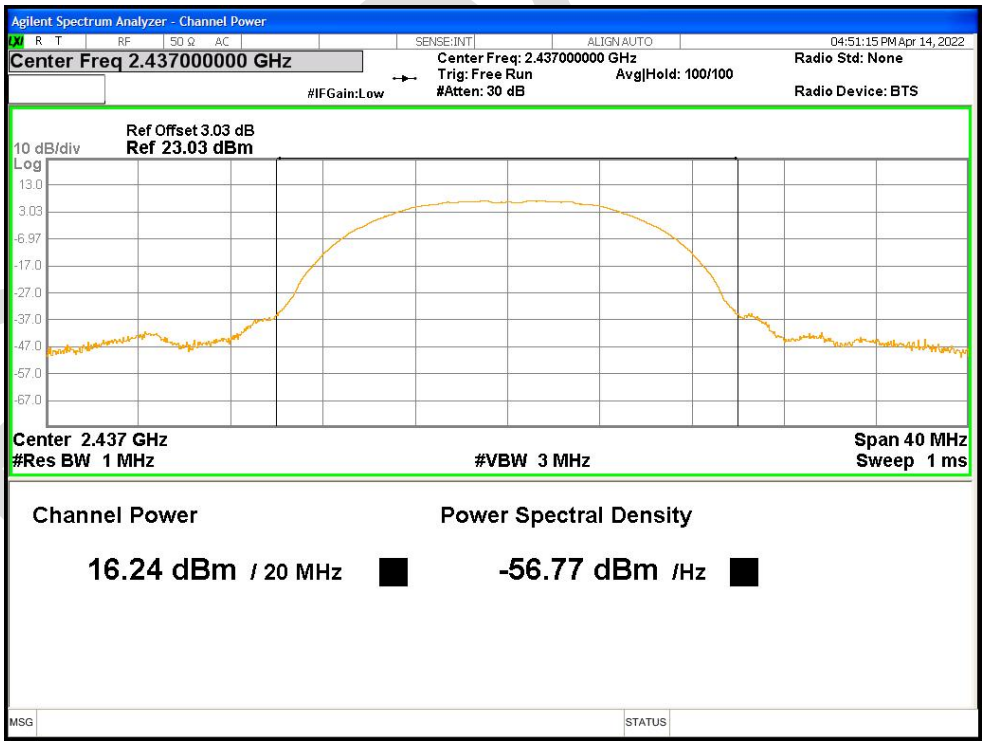
Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	16.106	29	Pass
NVNT	b	2437	Ant1	16.243	29	Pass
NVNT	b	2462	Ant1	16.768	29	Pass
NVNT	b	2412	Ant2	17.519	29	Pass
NVNT	b	2437	Ant2	15.467	29	Pass
NVNT	b	2462	Ant2	16.186	29	Pass
NVNT	g	2412	Ant1	15.174	29	Pass
NVNT	g	2437	Ant1	15.285	29	Pass
NVNT	g	2462	Ant1	15.9	29	Pass
NVNT	g	2412	Ant2	16.543	29	Pass
NVNT	g	2437	Ant2	16.602	29	Pass
NVNT	g	2462	Ant2	17.191	29	Pass
NVNT	n20	2412	Ant1	10.373	29	Pass
NVNT	n20	2412	Ant2	12.105	29	Pass
NVNT	n20	2412	Sum	14.335	29	Pass
NVNT	n20	2437	Ant1	10.507	29	Pass
NVNT	n20	2437	Ant2	12.084	29	Pass
NVNT	n20	2437	Sum	14.377	29	Pass
NVNT	n20	2462	Ant1	11.059	29	Pass
NVNT	n20	2462	Ant2	12.619	29	Pass
NVNT	n20	2462	Sum	14.919	29	Pass
NVNT	n40	2422	Ant1	10.408	29	Pass
NVNT	n40	2422	Ant2	11.972	29	Pass
NVNT	n40	2422	Sum	14.27	29	Pass
NVNT	n40	2437	Ant1	10.195	29	Pass
NVNT	n40	2437	Ant2	12.339	29	Pass
NVNT	n40	2437	Sum	14.408	29	Pass
NVNT	n40	2452	Ant1	10.336	29	Pass
NVNT	n40	2452	Ant2	12.423	29	Pass
NVNT	n40	2452	Sum	14.514	29	Pass

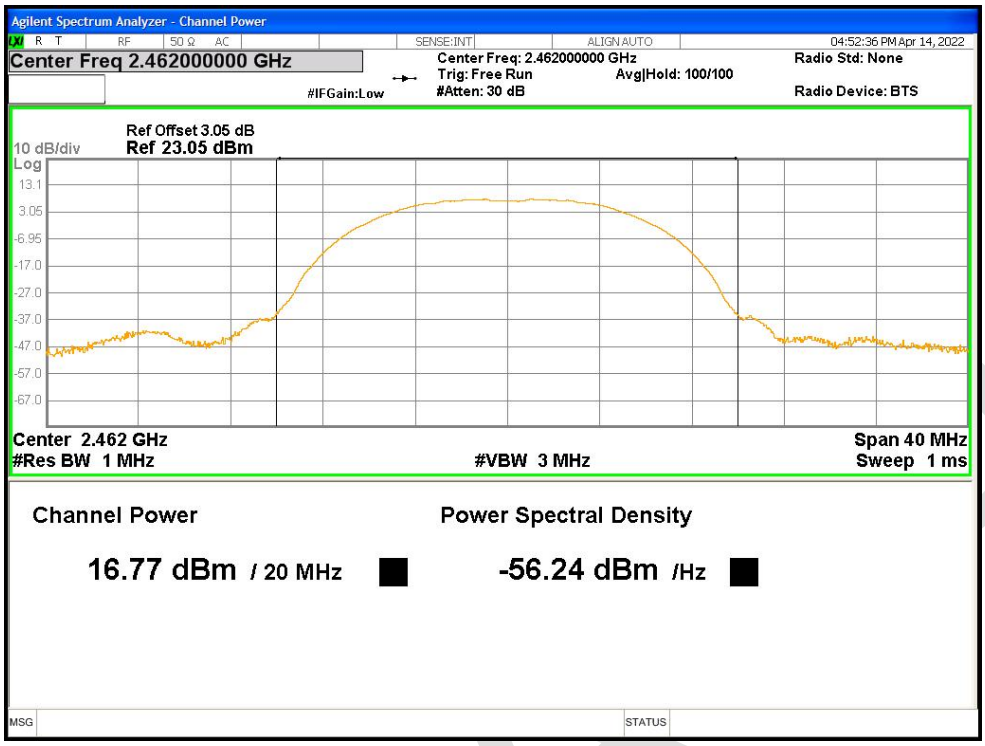
Power NVNT b 2412MHz Ant1



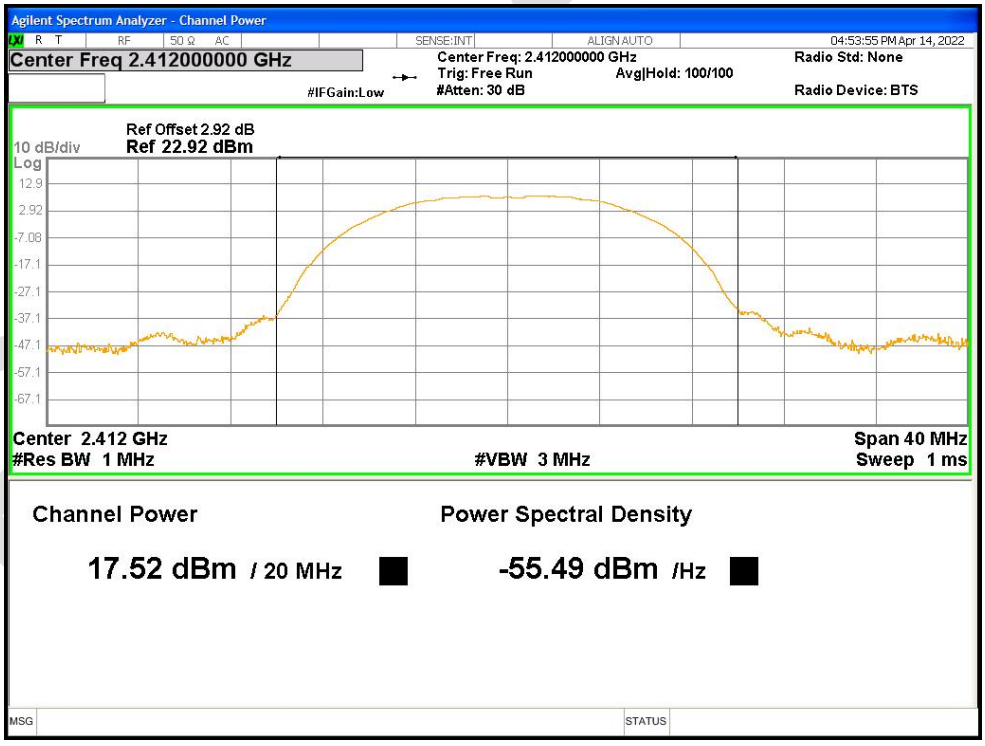
Power NVNT b 2437MHz Ant1



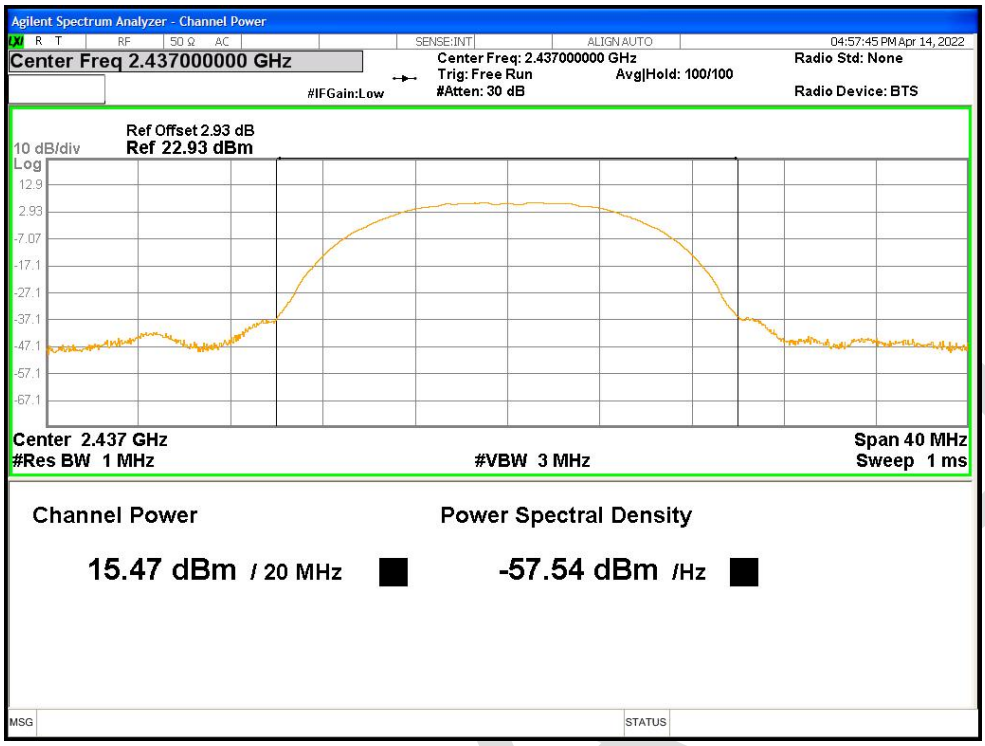
Power NVNT b 2462MHz Ant1



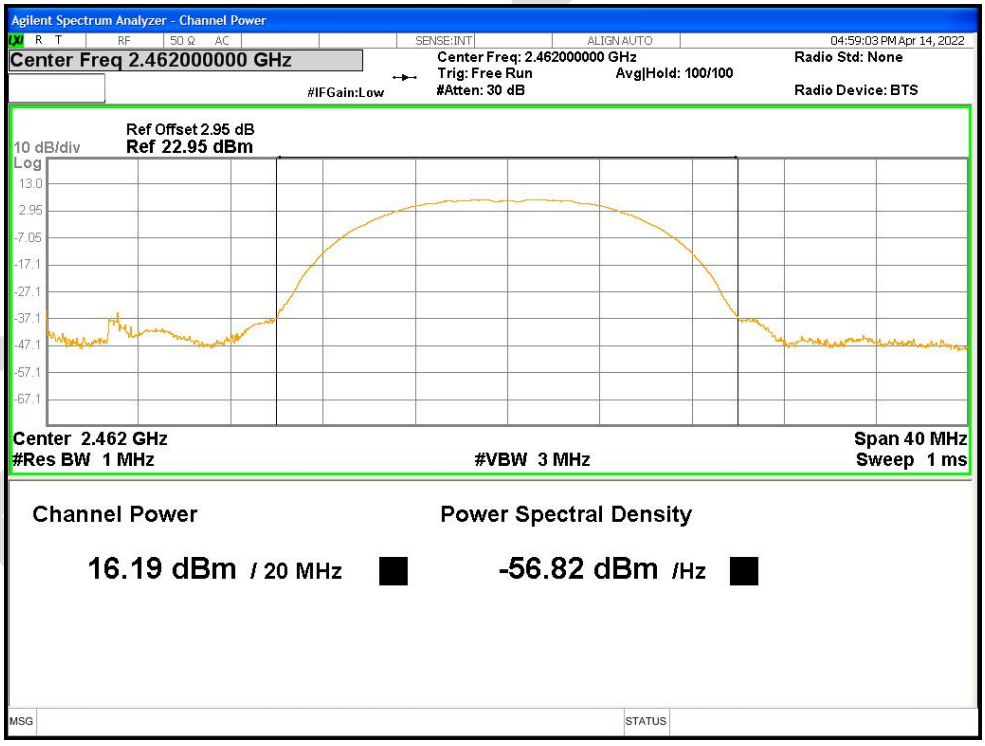
Power NVNT b 2412MHz Ant2



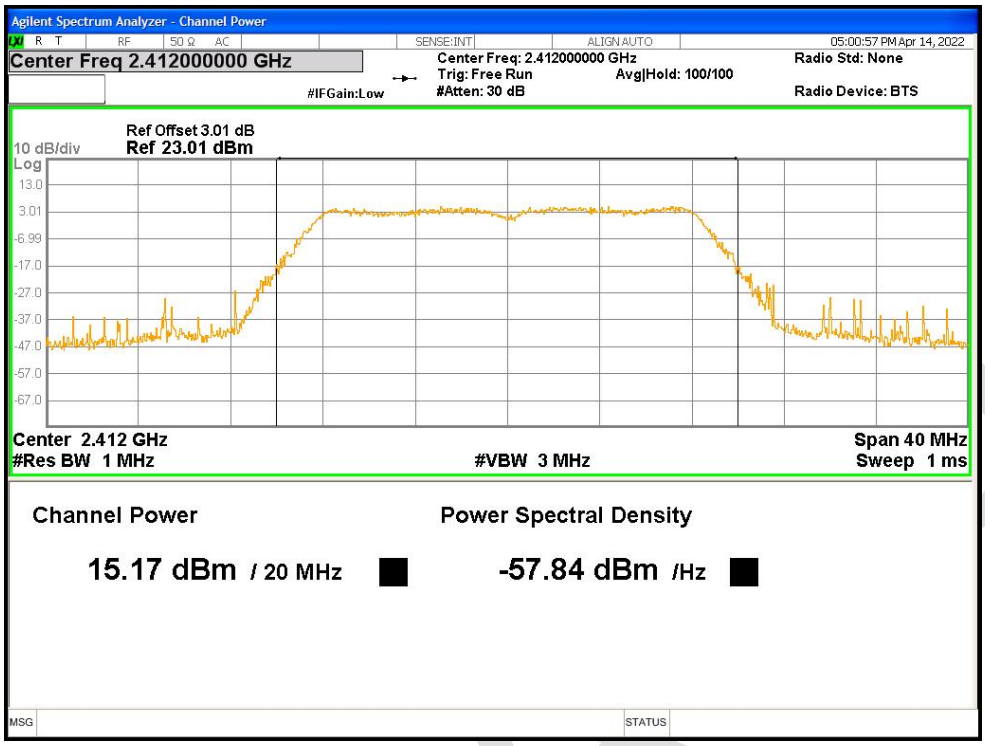
Power NVNT b 2437MHz Ant2



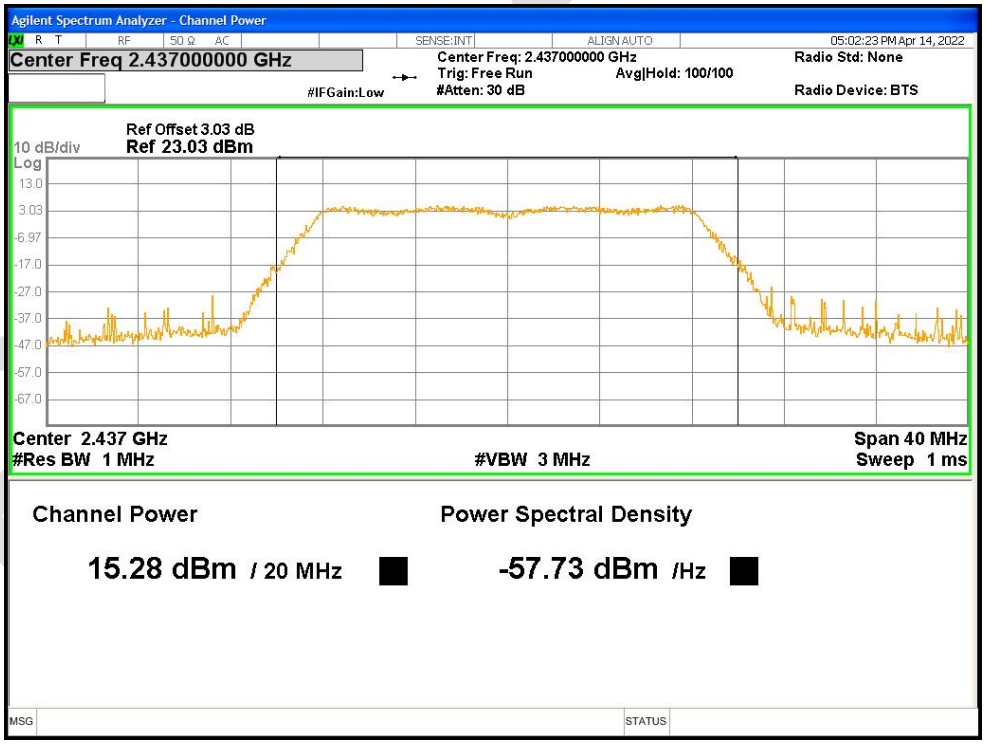
Power NVNT b 2462MHz Ant2



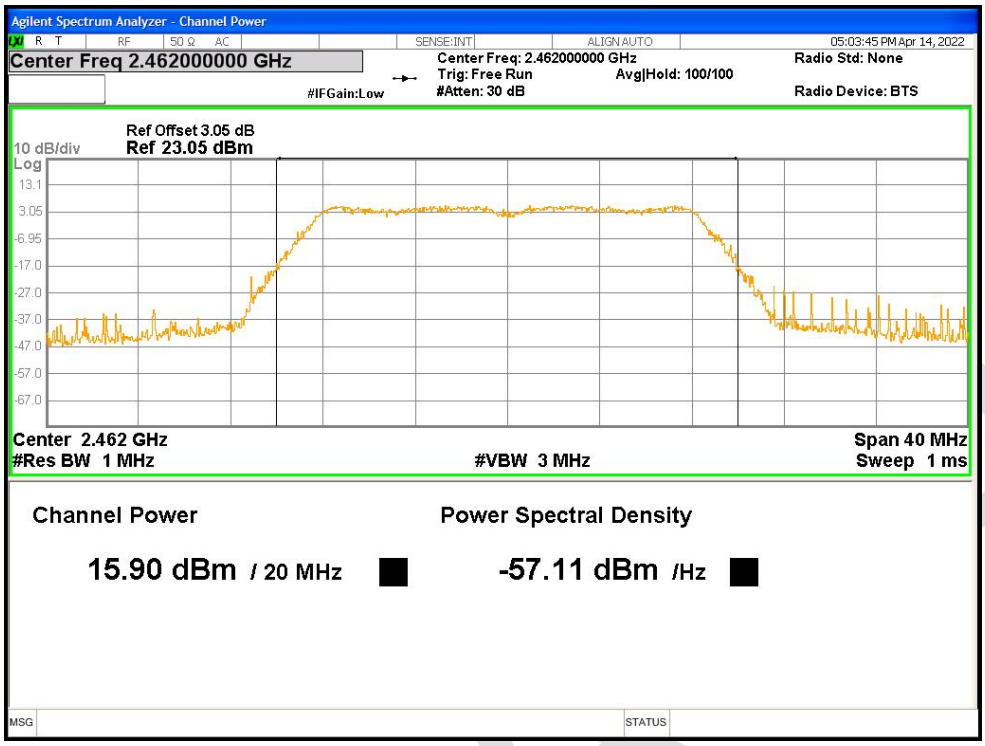
Power NVNT g 2412MHz Ant1



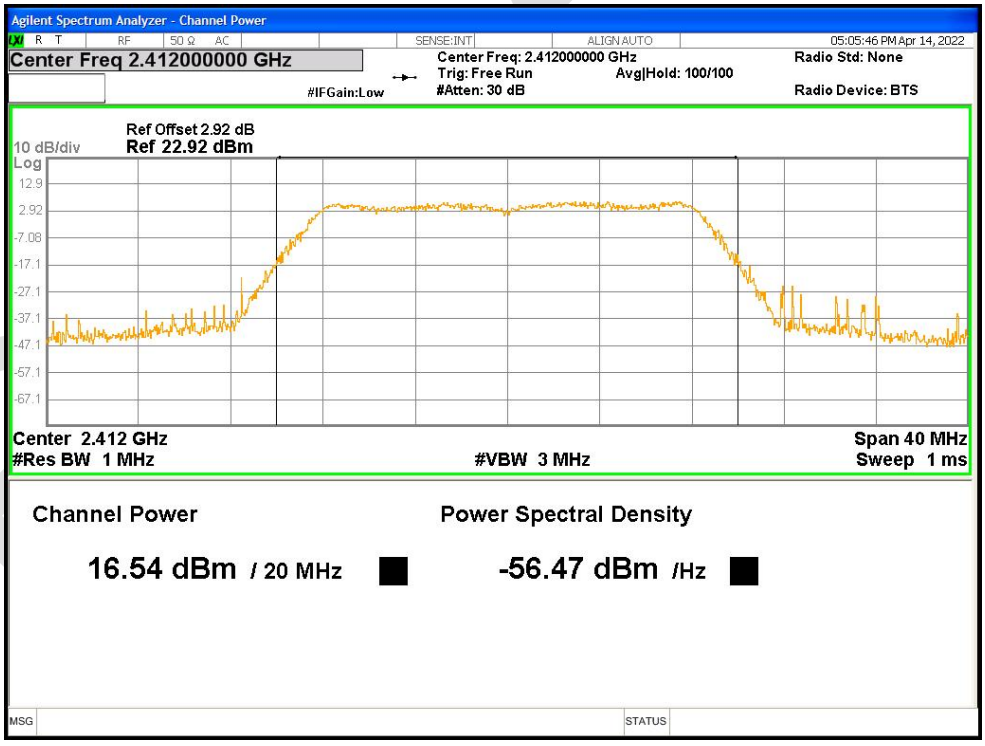
Power NVNT g 2437MHz Ant1



Power NVNT g 2462MHz Ant1



Power NVNT g 2412MHz Ant2



Power NVNT g 2437MHz Ant2