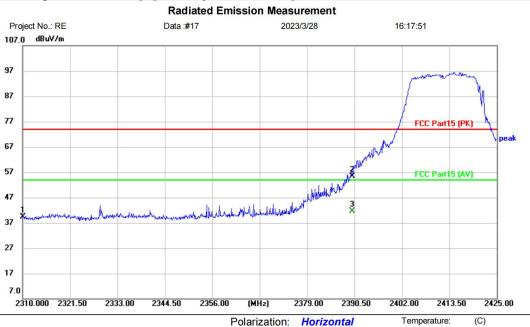
Humidity:

%RH



[TestMode: TX g low channel]; [Polarity: Horizontal]



Site

Limit: FCC Part15 (PK) EUT: Nooie Air Puifier

M/N: NCA01

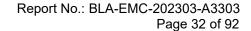
Mode: 2.4Gwifi-11G-TX-L

Note:

No. Mk	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1	2310.000	43.73	-4.27	39.46	74.00	-34.54	peak	
2	2390.000	59.09	-3.82	55.27	74.00	-18.73	peak	
3 *	2390.000	45.47	-3.82	41.65	54.00	-12.35	AVG	

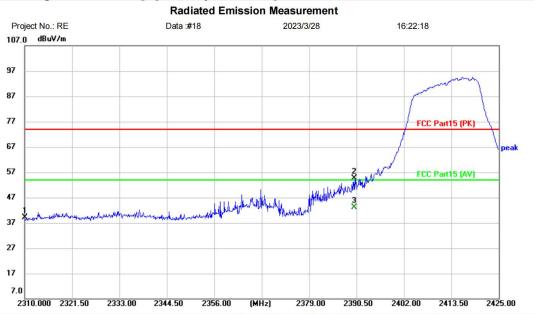
Power:

*:Maximum data x:Over limit !:over margin \(\text{Reference Only}





[TestMode: TX g low channel]; [Polarity: Vertical]



Polarization:

Power:

Vertical

Temperature:

Humidity:

(C)

%RH

Site

Limit: FCC Part15 (PK) EUT: Nooie Air Puifier

M/N: NCA01

Mode: 2.4Gwifi-11G-TX-L

Note:

No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1	2310.000	43.43	-4.27	39.16	74.00	-34.84	peak	
2	2390.000	58.48	-3.82	54.66	74.00	-19.34	peak	
3 *	2390.000	46.85	-3.82	43.03	54.00	-10.97	AVG	

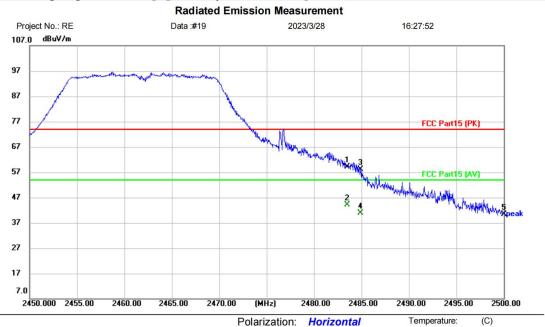
*:Maximum data x:Over limit !:over margin \(\text{Reference Only}

Humidity:

%RH



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



Site Limit: FCC Part15 (PK)

EUT: Nooie Air Puifier

M/N: NCA01

Mode: 2.4Gwifi-11G-TX-H

Note:

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	62.98	-3.96	59.02	74.00	-14.98	peak	
2	*	2483.500	48.04	-3.96	44.08	54.00	-9.92	AVG	
3		2484.900	62.16	-3.97	58.19	74.00	-15.81	peak	
4		2484.900	44.80	-3.97	40.83	54.00	-13.17	AVG	
5		2500.000	44.47	-4.00	40.47	74.00	-33.53	peak	

Power:

*:Maximum data x:Over limit !:over margin \(\text{Reference Only}



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

Radiated Emission Measurement Project No.: RE Data:#20 2023/3/28 16:35:14 107.0 dBuV/m 97 87 77 FCC Part15 (PK) 67 57 47 X 37 27 17 2450.000 2455.00 2460.00 2465.00 2470.00 (MHz) 2480.00 2485.00 2490.00 2495.00 2500.00

Polarization:

Power:

Vertical

Temperature:

Humidity:

(C)

%RH

Site

Limit: FCC Part15 (PK) EUT: Nooie Air Puifier

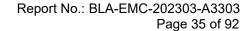
M/N: NCA01

Mode: 2.4Gwifi-11G-TX-H

Note:

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	62.40	-3.96	58.44	74.00	-15.56	peak	
2	*	2483.500	46.86	-3.96	42.90	54.00	-11.10	AVG	
3		2500.000	46.30	-4.00	42.30	74.00	-31.70	peak	

*:Maximum data x:Over limit !:over margin \(\text{Reference Only}





[TestMode: TX n20 low channel]; [Polarity: Horizontal]

Radiated Emission Measurement 2023/3/28 Project No.: RE Data:#21 16:43:17 107.0 dBuV/m 97 87 77 67 57 FCC Part15 (AV) worth proportion for the world for the second throught or many 47 37 27 17 7.0 2310.000 2321.50 2333.00 2344.50 2356.00 (MHz) 2390.50 2413.50 2425.00

Polarization:

Power:

Vertical

Temperature:

Humidity:

(C)

%RH

Site

Limit: FCC Part15 (PK) EUT: Nooie Air Puifier

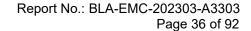
M/N: NCA01

Mode: 2.4Gwifi-11N20-TX-L

Note:

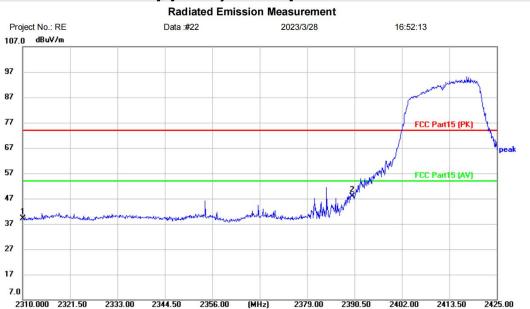
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		2310.000	43.40	-4.27	39.13	74.00	-34.87	peak	
2		2390.000	60.90	-3.82	57.08	74.00	-16.92	peak	
3	*	2390.000	44.21	-3.82	40.39	54.00	-13.61	AVG	

*:Maximum data x:Over limit !:over margin \(\text{Reference Only}





[TestMode: TX n20 low channel]; [Polarity: Vertical]



Polarization:

Power:

Horizontal

Temperature:

Humidity:

(C)

%RH

Site Limit: FCC Part15 (PK)

EUT: Nooie Air Puifier

M/N: NCA01

Mode: 2.4Gwifi-11N20-TX-L

Note:

No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1	2310.000	43.29	-4.27	39.02	74.00	-34.98	peak	
2 *	2390.000	51.62	-3.82	47.80	74.00	-26.20	peak	

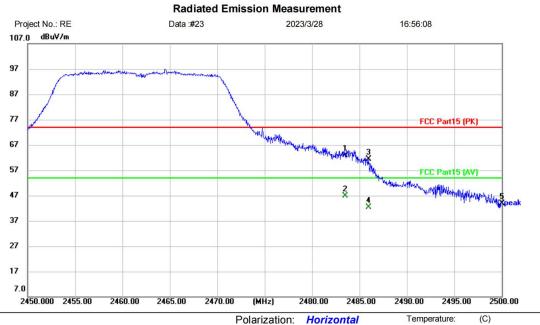
*:Maximum data x:Over limit !:over margin \(\text{Reference Only}

Humidity:

%RH



[TestMode: TX n20 high channel]; [Polarity: Horizontal]



Site

Limit: FCC Part15 (PK) EUT: Nooie Air Puifier

M/N: NCA01

Mode: 2.4Gwifi-11N20-TX-H

Note:

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	66.75	-3.96	62.79	74.00	-11.21	peak	
2	*	2483.500	50.85	-3.96	46.89	54.00	-7.11	AVG	
3		2485.950	65.27	-3.97	61.30	74.00	-12.70	peak	
4		2485.950	46.35	-3.97	42.38	54.00	-11.62	AVG	
5		2500.000	47.76	-4.00	43.76	74.00	-30.24	peak	

Power:

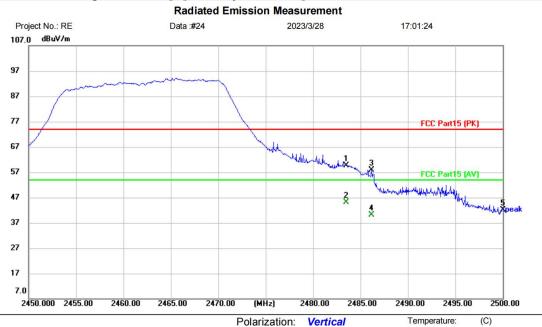
*:Maximum data x:Over limit !:over margin \(\text{Reference Only}

Humidity:

%RH



[TestMode: TX n20 high channel]; [Polarity: Vertical]



Site Limit: FCC Part15 (PK)

EUT: Nooie Air Puifier

M/N: NCA01

Mode: 2.4Gwifi-11N20-TX-H

Note:

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	63.62	-3.96	59.66	74.00	-14.34	peak	
2	*	2483.500	49.07	-3.96	45.11	54.00	-8.89	AVG	
3		2486.150	61.96	-3.97	57.99	74.00	-16.01	peak	
4		2486.150	44.21	-3.97	40.24	54.00	-13.76	AVG	
5		2500.000	46.16	-4.00	42.16	74.00	-31.84	peak	

Power:

*:Maximum data x:Over limit !:over margin \(\text{Reference Only}



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Remark:

- 1. Final Level =Receiver Read level + Correct factor
- 2. Correct factor = Antenna Factor + Cable Loss Preamplifier Factor
- 3. The emission levels of other frequencies are very lower than the limit and not show in test report.





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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	Jozu
Temperature	25℃
Humidity	60%

13.1 LIMITS

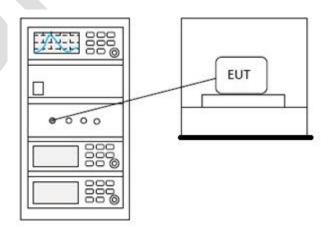
Limit:

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

In any 100 kHz bandwidth outside the frequency band in which the spread

13.2 BLOCK DIAGRAM OF TEST SETUP

emission limits specified in §15.209(a) (see §15.205(c)).





13.3 TEST DATA





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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	Jozu
Temperature	25℃
Humidity	60%

14.1 LIMITS

Limit:

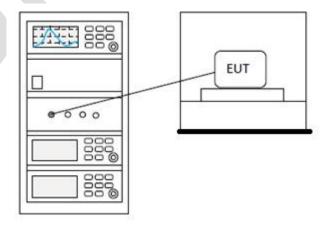
spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or 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)).

In any 100 kHz bandwidth outside the frequency band in which the spread

14.2 BLOCK DIAGRAM OF TEST SETUP





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14.3 TEST DATA





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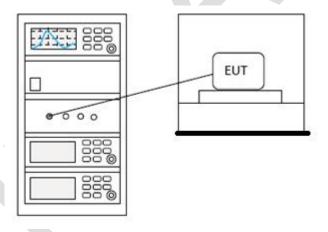
15 MINIMUM 6DB BANDWIDTH

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	Jozu
Temperature	25℃
Humidity	60%

15.1 LIMITS

Limit:	≥500 kHz			
L'IIIII.	_500 K112			

15.2 BLOCK DIAGRAM OF TEST SETUP



15.3 TEST DATA



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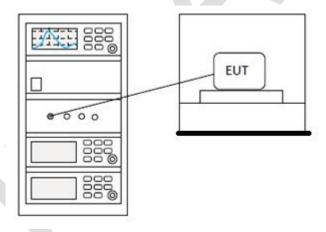
16 POWER SPECTRUM DENSITY

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	Jozu						
Temperature	25℃						
Humidity	60%						

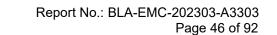
16.1 LIMITS

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





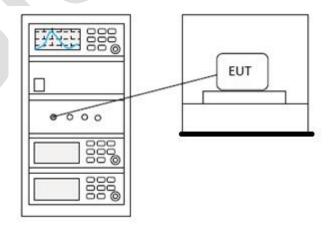
17 CONDUCTED PEAK OUTPUT POWER

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	Jozu					
Temperature	25℃					
Humidity	60%					

17.1 LIMITS

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

17.2 BLOCK DIAGRAM OF TEST SETUP





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17.3 TEST DATA





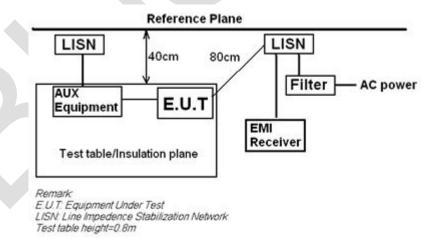
18 CONDUCTED EMISSIONS AT AC POWER LINE (150KHZ-30MHZ)

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	Jozu						
Temperature	25℃						
Humidity	60%						

18.1 LIMITS

Frequency of	Conducted limit(dBµV)					
emission(MHz)	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



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.



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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.

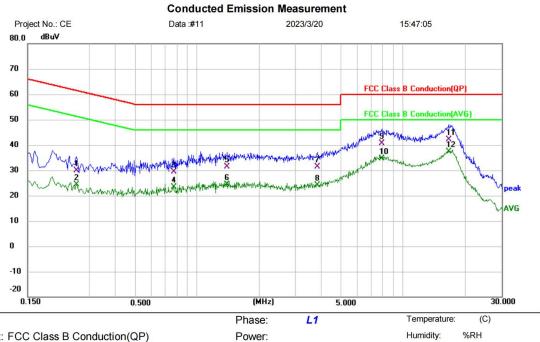
5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.

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



18.4 TEST DATA

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



Limit: FCC Class B Conduction(QP)

EUT: Nooie Air Purifier

M/N: NCA01 Mode: TX mode

Note:

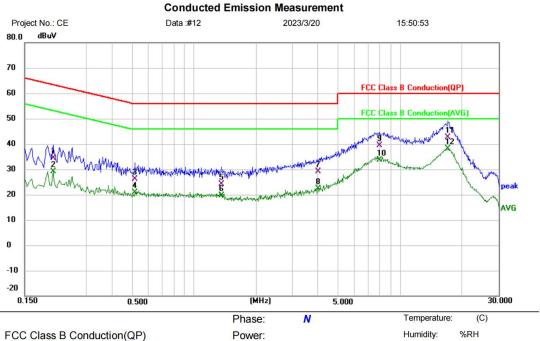
Site

No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.2580	19.18	10.62	29.80	61.50	-31.70	QP	
2	0.2580	13.86	10.62	24.48	51.50	-27.02	AVG	
3	0.7700	19.21	10.09	29.30	56.00	-26.70	QP	
4	0.7700	13.30	10.09	23.39	46.00	-22.61	AVG	
5	1.4020	21.15	10.19	31.34	56.00	-24.66	QP	
6	1.4020	14.29	10.19	24.48	46.00	-21.52	AVG	
7	3.8380	21.17	10.12	31.29	56.00	-24.71	QP	
8	3.8380	14.11	10.12	24.23	46.00	-21.77	AVG	
9	7.8620	30.50	10.08	40.58	60.00	-19.42	QP	
10	7.8620	24.52	10.08	34.60	50.00	-15.40	AVG	
11	16.5940	32.18	9.96	42.14	60.00	-17.86	QP	
12 *	16.5940	27.34	9.96	37.30	50.00	-12.70	AVG	

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



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



Limit: FCC Class B Conduction(QP)

EUT: Nooie Air Purifier

M/N: NCA01 Mode: TX mode

Note:

Site

No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.2060	23.97	10.49	34.46	63.37	-28.91	QP	
2	0.2060	18.58	10.49	29.07	53.37	-24.30	AVG	
3	0.5140	16.10	10.05	26.15	56.00	-29.85	QP	
4	0.5140	10.93	10.05	20.98	46.00	-25.02	AVG	
5	1.3580	13.98	10.05	24.03	56.00	-31.97	QP	
6	1.3580	9.62	10.05	19.67	46.00	-26.33	AVG	
7	4.0020	19.35	9.90	29.25	56.00	-26.75	QP	
8	4.0020	12.39	9.90	22.29	46.00	-23.71	AVG	
9	7.9100	29.56	9.88	39.44	60.00	-20.56	QP	
10	7.9100	23.71	9.88	33.59	50.00	-16.41	AVG	
11	16.9900	32.55	10.04	42.59	60.00	-17.41	QP	
12 *	16.9900	28.10	10.04	38.14	50.00	-11.86	AVG	

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



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Notes:

- 1. An initial pre-scan was performed on the line and neutral lines with peak detector.
- 2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
- 3. Final Level =Receiver Read level + LISN Factor + Cable Loss.



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19 APPENDIX

Appendix1

Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	ь	2412	Ant1	13.228	30	Pass
NVNT	ь	2437	Ant1	13.038	30	Pass
NVNT	b	2462	Ant1	13.529	30	Pass
NVNT	g	2412	Ant1	12.935	30	Pass
NVNT	g	2437	Ant1	13.03	30	Pass
NVNT	g	2462	Ant1	13.388	30	Pass
NVNT	n20	2412	Ant1	12.883	30	Pass
NVNT	n20	2437	Ant1	12.685	30	Pass
NVNT	n20	2462	Ant1	13.197	30	Pass

Power NVNT b 2412MHz Ant1

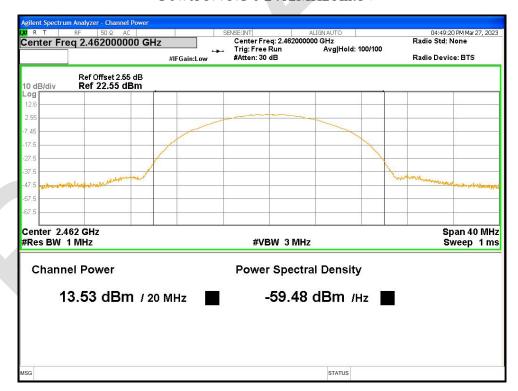


Power NVNT b 2437MHz Ant1



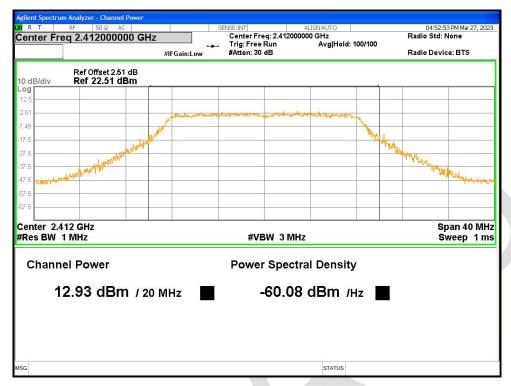


Power NVNT b 2462MHz Ant1

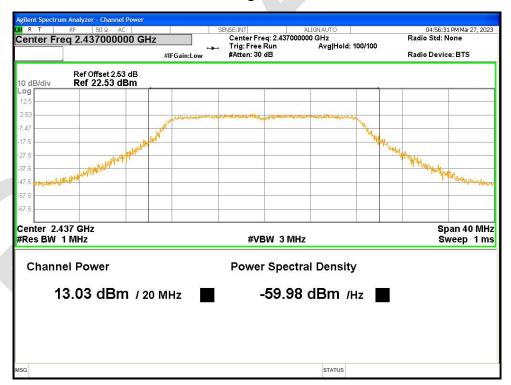


Power NVNT g 2412MHz Ant1



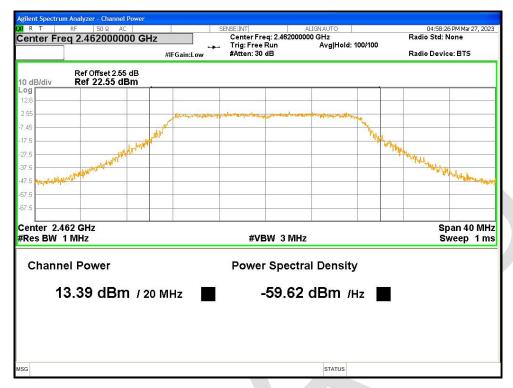


Power NVNT g 2437MHz Ant1

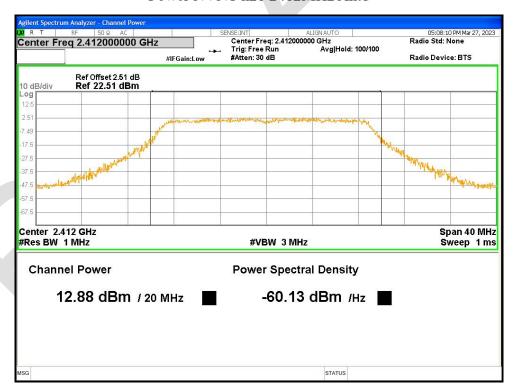


Power NVNT g 2462MHz Ant1





Power NVNT n20 2412MHz Ant1

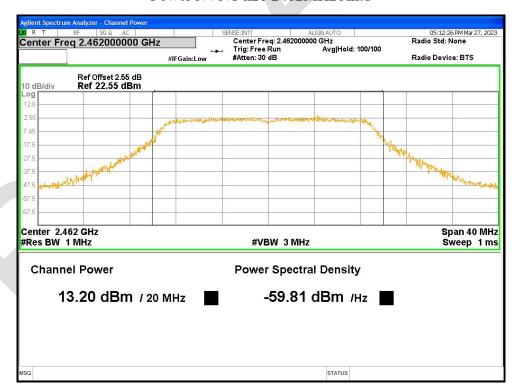


Power NVNT n20 2437MHz Ant1





Power NVNT n20 2462MHz Ant1





-6dB Bandwidth

Condition	Mode	Frequency	Antenna	-6 dB Bandwidth	Limit -6 dB	Verdict
		(MHz)		(MHz)	Bandwidth (MHz)	
NVNT	b	2412	Ant1	8.997	0.5	Pass
NVNT	ь	2437	Ant1	8.6	0.5	Pass
NVNT	b	2462	Ant1	9.009	0.5	Pass
NVNT	g	2412	Ant1	16.446	0.5	Pass
NVNT	g	2437	Ant1	16.445	0.5	Pass
NVNT	g	2462	Ant1	16.47	0.5	Pass
NVNT	n20	2412	Ant1	17.691	0.5	Pass
NVNT	n20	2437	Ant1	17.65	0.5	Pass
NVNT	n20	2462	Ant1	17.61	0.5	Pass

-6dB Bandwidth NVNT b 2412MHz Ant1



-6dB Bandwidth NVNT b 2437MHz Ant1





-6dB Bandwidth NVNT b 2462MHz Ant1

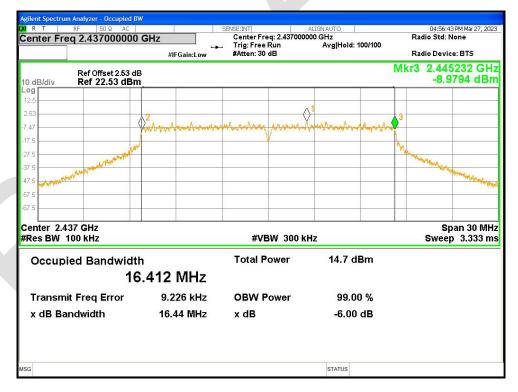


-6dB Bandwidth NVNT g 2412MHz Ant1





-6dB Bandwidth NVNT g 2437MHz Ant1



-6dB Bandwidth NVNT g 2462MHz Ant1