

TEST REPORT

Product Name : ASIAIR Plus

Brand Mark : N/A

Model No. : ASIAIR Plus

Report Number : BLA-EMC-202206-A10702

FCC ID : 2A7R3-ASIAIRPLUS

Date of Sample Receipt : 2022/6/27

Date of Test : 2022/6/27 to 2022/7/29

Date of Issue : 2022/7/29

Test Standard : 47 CFR Part 15, Subpart C 15.247

Test Result : Pass

Jose Blue hong

Prepared for:

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Date:







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REPORT REVISE RECORD

Version No.	ersion No. Date Description	
00	2022/7/29	Original





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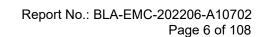
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1 TEST SUMMARY

Test item	Test Requirement	Test Method	Class/Severity	Result
Power Spectrum Density	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 11.10.2	47 CFR Part 15, Subpart C 15.247(e)	Pass
Conducted Peak Output Power	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 7.8.5 & Section 11.9.1	47 CFR Part 15, Subpart C 15.247(b)(1) & 15.247(b)(3)	Pass
Conducted Emissions at AC Power Line (150kHz-30MHz)	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 6.2	47 CFR Part 15, Subpart C 15.207	Pass
Antenna Requirement	47 CFR Part 15, Subpart C 15.247	N/A	47 CFR Part 15, Subpart C 15.203 & 15.247(c)	Pass
Radiated Spurious Emissions	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 6.4,6.5,6.6	47 CFR Part 15, Subpart C 15.209 & 15.247(d)	Pass
Radiated Emissions which fall in the restricted bands	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 6.10.5	47 CFR Part 15, Subpart C 15.209 & 15.247(d)	Pass
Conducted Spurious Emissions	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 7.8.6 & Section 11.11	47 CFR Part 15, Subpart C 15.247(d)	Pass
Conducted Band Edges Measurement	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 7.8.8 & Section 11.13.3.2	47 CFR Part 15, Subpart C 15.247(d)	Pass
Minimum 6dB Bandwidth	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 11.8.1	47 CFR Part 15, Subpart C 15.247a(2)	Pass





2 GENERAL INFORMATION

Applicant	SUZHOU ZWO CO., LTD.
Address	Building#2, Peninsula Life Plaza, Moon bay road 6#, SuZhou Industrial Park, JiangSu , China
Manufacturer	SUZHOU ZWO CO., LTD.
Address	Building#2, Peninsula Life Plaza, Moon bay road 6#, SuZhou Industrial Park, JiangSu , China
Factory	SUZHOU ZWO CO., LTD.
Address	Building#2, Peninsula Life Plaza, Moon bay road 6#, SuZhou Industrial Park, JiangSu , China
Product Name	ASIAIR Plus
Test Model No.	ASIAIR Plus

3 GENERAL DESCRIPTION OF E.U.T.

Hardware Version	V3.3
Software Version	N/A
Operation Frequency:	802.11b/g/n(HT20): 2412MHz to 2462MHz 802.11n(HT40): 2422MHz to 2452MHz
Modulation Type:	802.11b: DSSS (CCK, DQPSK, DBPSK) 802.11g/n: OFDM (64QAM, 16QAM, QPSK, BPSK)
Channel Spacing:	5MHz
Number of Channels:	802.11b/g/n(HT20):11 802.11n(HT40):7
Antenna Type:	External Antenna
Antenna Gain:	3dBi (Provided by the applicant)



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4 TEST ENVIRONMENT

Environment	Temperature	Voltage	
Normal	25℃	DC12V	

5 TEST MODE

TEST MODE	TEST MODE DESCRIPTION			
Transmitting	Keep the EUT in continuously transmitting mode with modulation. (The duty cycle is			
mode	greater than 98%)			
Remark: Full battery is used during all test except ac conducted emission, 802.11b/g/n(HT20) and				
802.11n(HT40) all have been tested, During the radiated spurious emission test,				
802.11b/11g/11nH20/11nH40 modulations all have been tested, only worse case 802.11b is reported.				

6 MEASUREMENT UNCERTAINTY

Parameter	Expanded Uncertainty (Confidence of 95%)		
Radiated Emission(9kHz-30MHz)	±4.34dB		
Radiated Emission(30Mz-1000MHz)	±4.24dB		
Radiated Emission(1GHz-18GHz)	±4.68dB		
AC Power Line Conducted Emission(150kHz-30MHz)	±3.45dB		

Parameter	Expanded Uncertainty (Confidence of 95%)		
Occupied Channel Bandwidth	±5 %		
RF output power, conducted	±1.5 dB		
Power Spectral Density, conducted	±3.0 dB		
Unwanted Emissions, conducted	±3.0 dB		
Temperature	±3 °C		
Supply voltages	±3 %		
Time	±5 %		
Unwanted Radiated Emission (30MHz ~ 1000MHz)	±4.35 dB		
Unwanted Radiated Emission (1GHz ~ 18GHz)	±4.44 dB		



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7 DESCRIPTION OF SUPPORT UNIT

Device Type	Manufacturer	Model Name	Serial No.	Remark
AC Adapter	UGREEN	CD112	N/A	N/A

8 LABORATORY LOCATION

All tests were performed at:

BlueAsia of Technical Services(Shenzhen) Co., Ltd.

Building C, No. 107, Shihuan Road, Shiyan Sub-District, Baoan District, Shenzhen, Guangdong Province,

China

Telephone: TEL: +86-755-28682673 FAX: +86-755-28682673

No tests were sub-contracted.





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9 TEST INSTRUMENTS LIST

Test Equipment Of Power Spectrum Density					
Equipment	Manufacturer	S/N	Cal.Date	Cal.Due	
Spectrum	R&S	FSP40	100817	24/9/2021	23/9/2022
Spectrum	Agilent	N9020A	MY49100060	24/9/2021	23/9/2022
Signal Generator	Agilent	N5182A	MY49060650	24/9/2021	23/9/2022
Signal Generator	Agilent	E8257D	MY44320250	24/9/2021	23/9/2022

Test Equipment Of Conducted Peak Output Power					
Equipment	Manufacturer	Model	S/N	Cal.Date	Cal.Due
Spectrum	R&S	FSP40	100817	24/9/2021	23/9/2022
Spectrum	Agilent	N9020A	MY49100060	24/9/2021	23/9/2022
Signal Generator	Agilent	N5182A	MY49060650	24/9/2021	23/9/2022
Signal Generator	Agilent	E8257D	MY44320250	24/9/2021	23/9/2022

Test Equipment Of Conducted Emissions at AC Power Line (150kHz-30MHz)					
Equipment	Manufacturer	Model	S/N	Cal.Date	Cal.Due
Shield room	SKET	833	N/A	25/11/2020	24/11/2023
Receiver	R&S	ESPI3	101082	24/9/2021	23/9/2022
LISN	R&S	ENV216	3560.6550.15	24/9/2021	23/9/2022
LISN	AT	AT166-2	AKK1806000003	26/9/2021	25/9/2022
EMI software	EZ	EZ-EMC	N/A	N/A	N/A



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Test Equipment Of Radiated Spurious Emissions					
Equipment	Manufacturer	Model	S/N	Cal.Date	Cal.Due
Chamber	SKET	966	N/A	10/11/2020	9/11/2023
Spectrum	R&S	FSP40	100817	24/9/2021	23/9/2022
Receiver	R&S	ESR7	101199	24/9/2021	23/9/2022
broadband Antenna	Schwarzbeck	VULB9168	00836 P:00227	26/9/2020	25/9/2022
Horn Antenna	Schwarzbeck	9120D	01892 P:00331	26/9/2020	25/9/2022
Amplifier	SKET	LNPA-0118-45	N/A	24/9/2021	23/9/2022
EMI software	EZ	EZ-EMC	N/A	N/A	N/A
Loop antenna	SCHNARZBECK	FMZB1519B	00102	26/9/2020	25/9/2022

Test Equipment Of	Test Equipment Of Radiated Emissions which fall in the restricted bands				
Equipment	Manufacturer	Model	S/N	Cal.Date	Cal.Due
Chamber	SKET	966	N/A	10/11/2020	9/11/2023
Spectrum	R&S	FSP40	100817	24/9/2021	23/9/2022
Receiver	R&S	ESR7	101199	24/9/2021	23/9/2022
broadband Antenna	Schwarzbeck	VULB9168	00836 P:00227	26/9/2020	25/9/2022
Horn Antenna	Schwarzbeck	9120D	01892 P:00331	26/9/2020	25/9/2022
Amplifier	SKET	LNPA-0118-45	N/A	24/9/2021	23/9/2022
EMI software	EZ	EZ-EMC	N/A	N/A	N/A
Loop antenna	SCHNARZBECK	FMZB1519B	00102	26/9/2020	25/9/2022



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Test Equipment Of Conducted Spurious Emissions					
Equipment	Manufacturer	Model	S/N	Cal.Date	Cal.Due
Spectrum	R&S	FSP40	100817	24/9/2021	23/9/2022
Spectrum	Agilent	N9020A	MY49100060	24/9/2021	23/9/2022
Signal Generator	Agilent	N5182A	MY49060650	24/9/2021	23/9/2022
Signal Generator	Agilent	E8257D	MY44320250	24/9/2021	23/9/2022

Test Equipment Of Conducted Band Edges Measurement					
Equipment	Manufacturer	Model	S/N	Cal.Date	Cal.Due
Spectrum	R&S	FSP40	100817	24/9/2021	23/9/2022
Spectrum	Agilent	N9020A	MY49100060	24/9/2021	23/9/2022
Signal Generator	Agilent	N5182A	MY49060650	24/9/2021	23/9/2022
Signal Generator	Agilent	E8257D	MY44320250	24/9/2021	23/9/2022

Test Equipment Of Minimum 6dB Bandwidth					
Equipment	Manufacturer	Model	S/N	Cal.Date	Cal.Due
Spectrum	R&S	FSP40	100817	24/9/2021	23/9/2022
Spectrum	Agilent	N9020A	MY49100060	24/9/2021	23/9/2022
Signal Generator	Agilent	N5182A	MY49060650	24/9/2021	23/9/2022
Signal Generator	Agilent	E8257D	MY44320250	24/9/2021	23/9/2022



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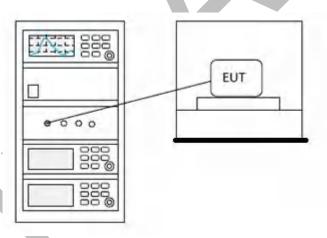
10 POWER SPECTRUM DENSITY

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%				

10.1 LIMITS

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

10.2 BLOCK DIAGRAM OF TEST SETUP



10.3 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details



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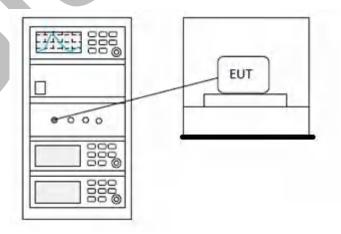
11 CONDUCTED PEAK OUTPUT POWER

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%				

11.1 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

11.2 BLOCK DIAGRAM OF TEST SETUP

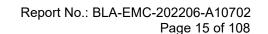




11.3 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details







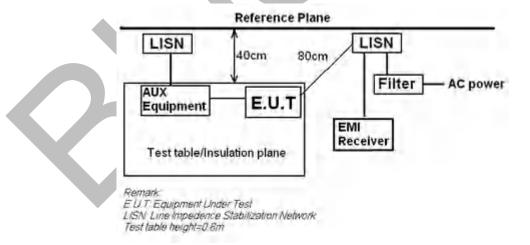
12 CONDUCTED EMISSIONS AT AC POWER LINE (150KHZ-30MHZ)

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%				

12.1 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.					

12.2 BLOCK DIAGRAM OF TEST SETUP



12.3 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.

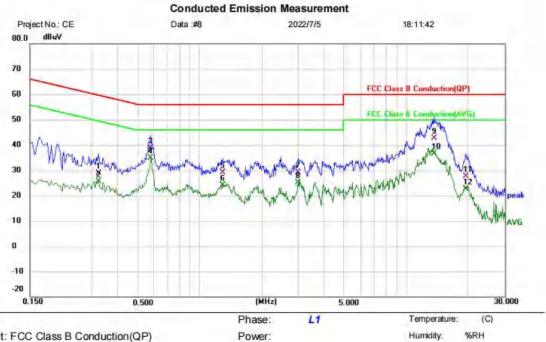
Remark: LISN=Read Level+ Cable Loss+ LISN Factor





12.4 TEST DATA

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



Limit: FCC Class B Conduction(QP)

EUT: ASIAIR Plus M/N: ASIAIR Plus Mode: 2.4G TX mode

Note:

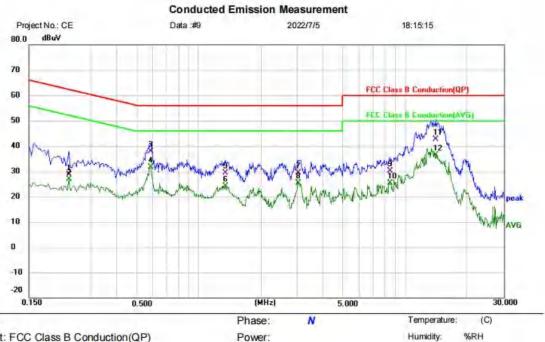
Site

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.3220	19.10	9.78	28.88	59.66	-30.78	QP	
2		0.3220	15.88	9.78	25.66	49.66	-24.00	AVG	
3		0.5780	29.09	9.74	38.83	56.00	-17.17	QP	
4	*	0.5780	25.09	9.74	34.83	46.00	-11.17	AVG	
5		1.2940	19.36	9.82	29.18	56.00	-26.82	QP	
6		1.2940	14.24	9.82	24.06	46.00	-21.94	AVG	
7		2.9900	19.19	9.87	29.06	56.00	-26.94	QP	
8		2.9900	15.17	9.87	25.04	46.00	-20.96	AVG	
9		13.6300	32.60	9.95	42.55	60.00	-17.45	QP	
10		13.6300	26.64	9.95	36.59	50.00	-13.41	AVG	
11		19.4460	17.48	10.03	27.51	60.00	-32.49	QP	
12		19.4460	12.64	10.03	22.67	50.00	-27.33	AVG	

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



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



Limit: FCC Class B Conduction(QP)

EUT: ASIAIR Plus M/N: ASIAIR Plus Mode: 2.4G TX mode

Note:

Site

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.2340	18.38	10.32	28.70	62.31	-33.61	QP	
2		0.2340	16.67	10.32	26.99	52.31	-25.32	AVG	
3		0.5820	28.05	9.74	37.79	56.00	-18.21	QP	
4		0.5820	22.00	9.74	31.74	46.00	-14.26	AVG	
5		1.3460	19.67	9.83	29.50	56.00	-26.50	QP	
6		1.3460	14.41	9.83	24.24	46.00	-21.76	AVG	
7		3.0300	19.51	9.89	29.40	56.00	-26.60	QP	
8		3.0300	15.46	9.89	25.35	46.00	-20.65	AVG	
9		8.4980	20.12	9.89	30.01	60.00	-29.99	QP	
10		8.4980	15.51	9.89	25.40	50.00	-24.60	AVG	
11		14.0260	32.62	10.00	42.62	60.00	-17.38	QP	
12	*	14.0260	26.26	10.00	36.26	50.00	-13.74	AVG	

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



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13 ANTENNA REQUIREMENT

Test Standard	47 CFR Part 15, Subpart C 15.247					
Test Method	N/A					

13.1 CONCLUSION

EUT Antenna:

15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

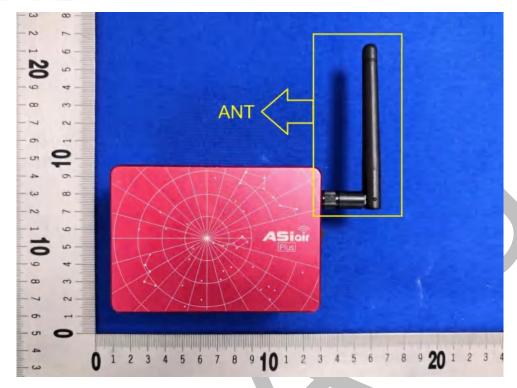
15.247(c) (1)(i) requirement:

(i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.

Evaluation Information:

Product uses uniquely coupled antenna with intentional radiator, detachable non-standard jack antenna, it is reverse polarity, connector is RP-SMA, female screw female. fulfill the requirement of this section.









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14 RADIATED SPURIOUS EMISSIONS

Test Standard	47 CFR Part 15, Subpart C 15.247					
Test Method	ANSI C63.10 (2013) Section 6.4,6.5,6.6					
Test Mode (Pre-Scan)	TX					
Test Mode (Final Test)	TX					
Tester	Jozu					
Temperature	25℃					
Humidity	60%					

14.1 LIMITS

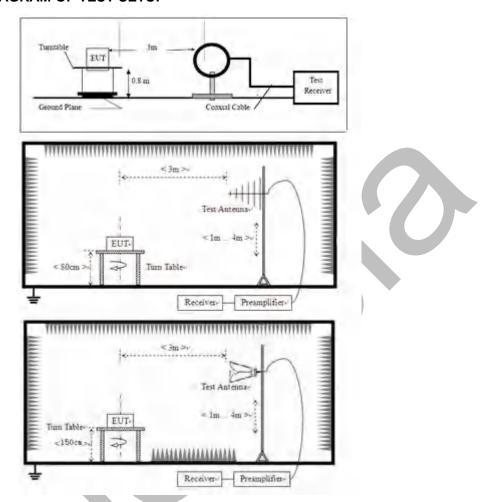
Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.



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14.2 BLOCK DIAGRAM OF TEST SETUP



14.3 PROCEDURE

- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- g. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.



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h. Test the EUT in the lowest channel, the middle channel, the Highest channel.

- i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- j. Repeat above procedures until all frequencies measured was complete.

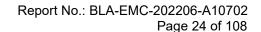
Remark:

- 1) For emission below 1GHz, through pre-scan found the worst case is the lowest channel. Only the worst case is recorded in the report.
- 2) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading + Antenna Factor + Cable Factor - Preamplifier Factor

- 3) Scan from 9kHz to 25GHz, the disturbance above 12.75GHz and below 30MHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported. fundamental frequency is blocked by filter, and only spurious emission is shown.
- 4) For frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.

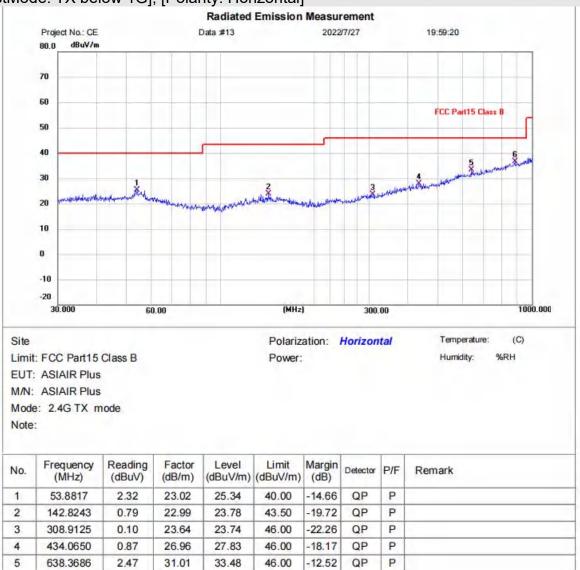






14.4 TEST DATA

[TestMode: TX below 1G]; [Polarity: Horizontal]



*:Maximum data x:Over limit !:over margin

2.15

34.49

36.64

46.00

QP

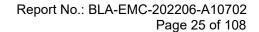
-9.36

P

Test Result: Pass

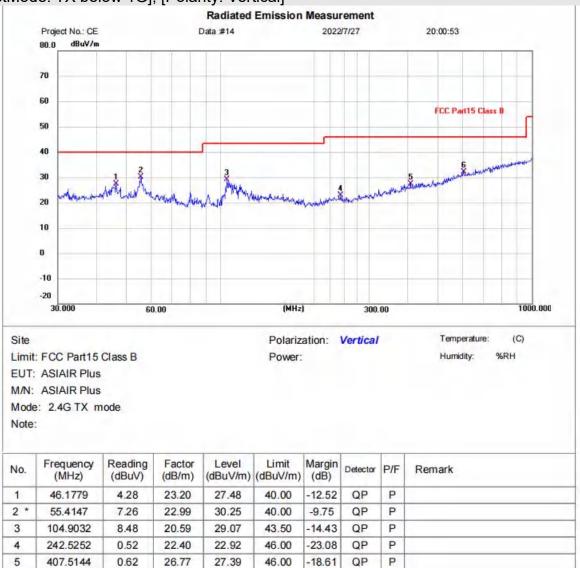
881.4067

6





[TestMode: TX below 1G]; [Polarity: Vertical]



*:Maximum data x:Over limit !:over margin

1.27

30.76

32.03

46.00

-13.97

QP

P

Test Result: Pass

6

603.5391



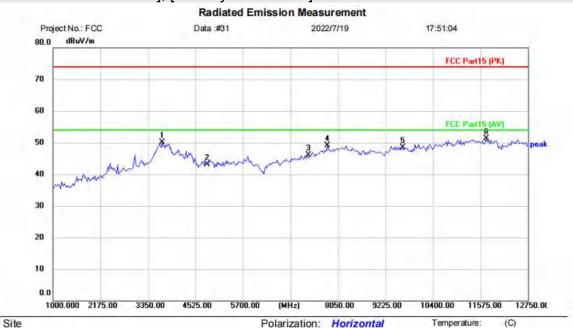
Humidity:

%RH

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Remark: During the test, pre-scan the 802.11b/g/n mode, and found the 802.11b mode which it is worse case.

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



Limit: FCC Part15 (PK)

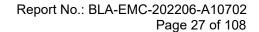
EUT: ASIAIR Plus M/N: ASIAIR Plus Mode: 2.4G11B TX-L

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment	
1		3702.500	42.30	7.72	50.02	74.00	-23.98	peak		
2		4824.000	39.56	3.62	43.18	74.00	-30.82	peak		
3		7326.000	39.68	6.44	46.12	74.00	-27.88	peak		
4		7791.500	41.38	7.68	49.06	74.00	-24.94	peak		
5		9648.000	39.12	9.37	48.49	74.00	-25.51	peak		
6	*	11716.000	39.54	11.76	51.30	74.00	-22.70	peak		

Power:

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



%RH



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



Limit: FCC Part15 (PK)

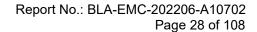
EUT: ASIAIR Plus M/N: ASIAIR Plus Mode: 2.4G11B TX-L

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		3655.500	42.29	7.76	50.05	74.00	-23.95	peak	
2		4824.000	39.30	3.62	42.92	74.00	-31.08	peak	
3		7326.000	39.09	6.44	45.53	74.00	-28.47	peak	
4		8238.000	40.78	8.22	49.00	74.00	-25.00	peak	
5		9648.000	39.14	9.37	48.51	74.00	-25.49	peak	
6	* -	11763.000	39.90	11.63	51.53	74.00	-22.47	peak	

Power:

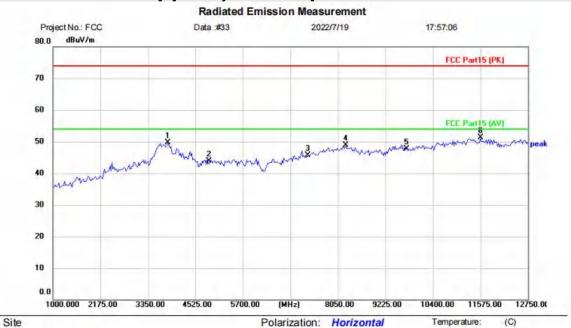
*:Maximum data x:Over limit !:over margin (Reference Only



%RH



[TestMode: TX mid channel]; [Polarity: Horizontal]



Limit: FCC Part15 (PK)

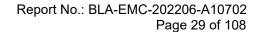
EUT: ASIAIR Plus M/N: ASIAIR Plus Mode: 2.4G11B TX-M

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment	
1		3843.500	42.49	7.12	49.61	74.00	-24.39	peak		
2		4874.000	40.59	3.39	43.98	74.00	-30.02	peak		
3		7311.000	39.25	6.37	45.62	74.00	-28.38	peak		
4		8238.000	40.73	8.22	48.95	74.00	-25.05	peak		
5		9748.000	38.17	9.59	47.76	74.00	-26.24	peak		
6	*	11575.000	39.27	12.02	51.29	74.00	-22.71	peak		

Power:

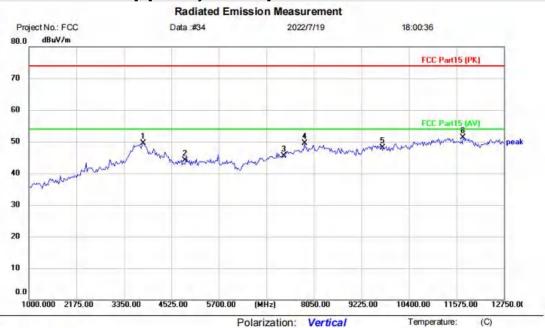
*:Maximum data x:Over limit !:over margin (Reference Only



%RH



[TestMode: TX mid channel]; [Polarity: Vertical]



Limit: FCC Part15 (PK)

EUT: ASIAIR Plus M/N: ASIAIR Plus Mode: 2.4G11B TX-M

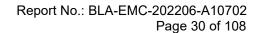
Note:

Site

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		3820.000	42.10	7.41	49.51	74.00	-24.49	peak	
2		4874.000	40.71	3.39	44.10	74.00	-29.90	peak	
3		7311.000	39.04	6.37	45.41	74.00	-28.59	peak	
4		7815.000	41.74	7.72	49.46	74.00	-24.54	peak	
5		9748.000	38.46	9.59	48.05	74.00	-25.95	peak	
6	* 1	11739.500	39.62	11.70	51.32	74.00	-22.68	peak	

Power:

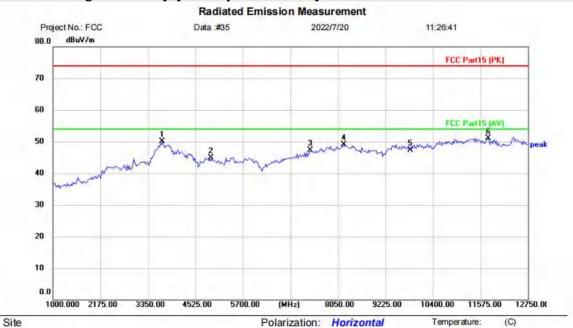
*:Maximum data x:Over limit !:over margin (Reference Only



%RH



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



Limit: FCC Part15 (PK)

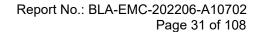
EUT: ASIAIR Plus M/N: ASIAIR Plus Mode: 2.4G11B TX-H

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		3702.500	42.33	7.72	50.05	74.00	-23.95	peak	
2		4924.000	41.39	3.46	44.85	74.00	-29.15	peak	
3		7386.000	40.65	6.68	47.33	74.00	-26.67	peak	
4		8191.000	40.88	8.20	49.08	74.00	-24.92	peak	
5		9848.000	37.50	9.88	47.38	74.00	-26.62	peak	
6	* .	11763.000	39.39	11.63	51.02	74.00	-22.98	peak	

Power:

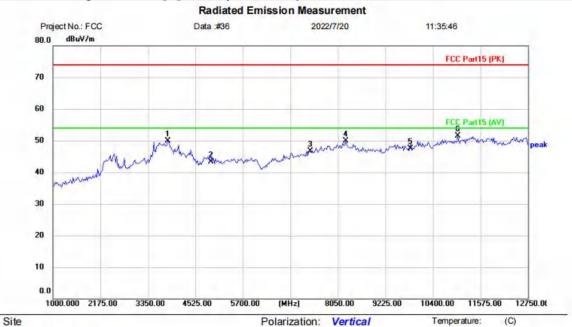
*:Maximum data x:Over limit !:over margin (Reference Only



%RH



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



Limit: FCC Part15 (PK)

EUT: ASIAIR Plus M/N: ASIAIR Plus Mode: 2.4G11B 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		3843.500	42.81	7.12	49.93	74.00	-24.07	peak	
2		4924.000	39.80	3.46	43.26	74.00	-30.74	peak	
3		7386.000	39.93	6.68	46.61	74.00	-27.39	peak	
4		8238.000	41.73	8.22	49.95	74.00	-24.05	peak	
5		9848.000	37.59	9.88	47.47	74.00	-26.53	peak	
6	*	11011.000	39.44	11.99	51.43	74.00	-22.57	peak	

Power:

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



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15 RADIATED EMISSIONS WHICH FALL IN THE RESTRICTED BANDS

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 6.10.5
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Jozu
Temperature	25℃
Humidity	60%

15.1 LIMITS

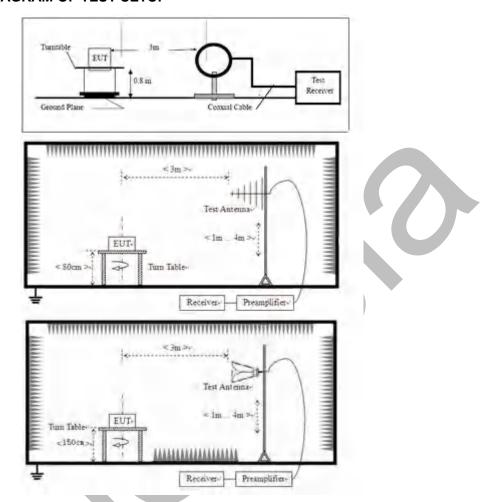
Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.



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15.2 BLOCK DIAGRAM OF TEST SETUP



15.3 PROCEDURE

- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- g. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.



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h. Test the EUT in the lowest channel, the middle channel, the Highest channel.

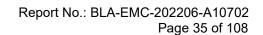
i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.

j. Repeat above procedures until all frequencies measured was complete.

Remark 1: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

Remark 2: For frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.



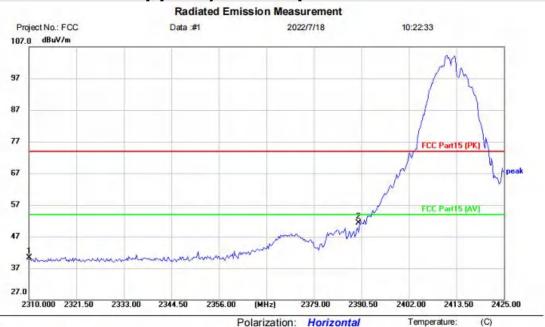


%RH



15.4 TEST DATA

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



Limit: FCC Part15 (PK)

EUT: ASIAIR Plus M/N: ASIAIR Plus Mode: 2.4G 11B TX-L

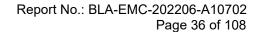
Note:

Site

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment dBuV/m		Over	Detector	Comment	
							dB			
1		2310.000	44.22	-3.93	40.29	74.00	-33.71	peak		
2	*	2390.000	54.82	-3.58	51.24	74.00	-22.76	peak		

Power:

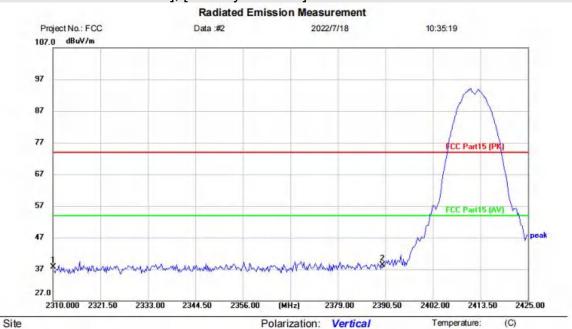
*:Maximum data x:Over limit !:over margin (Reference Only



%RH



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



Limit: FCC Part15 (PK)

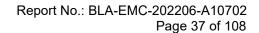
EUT: ASIAIR Plus M/N: ASIAIR Plus Mode: 2.4G 11B TX-L

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	41.65	-3.93	37.72	74.00	-36.28	peak		
2	*	2390.000	41.98	-3.58	38.40	74.00	-35.60	peak		

Power:

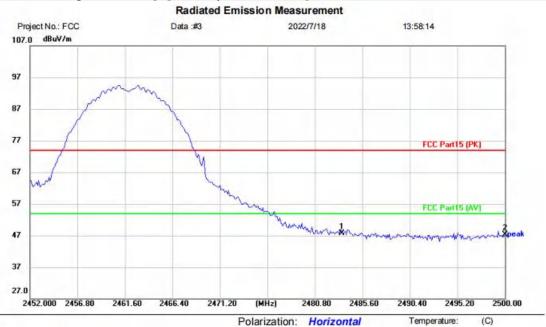
*:Maximum data x:Over limit !:over margin (Reference Only



%RH



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



Limit: FCC Part15 (PK)

EUT: ASIAIR Plus M/N: ASIAIR Plus Mode: 2.4G 11B TX-H

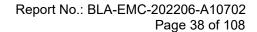
Note:

Site

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	50.92	-3.14	47.78	74.00	-26.22	peak		
2		2500.000	50.33	-3.08	47.25	74.00	-26.75	peak		

Power:

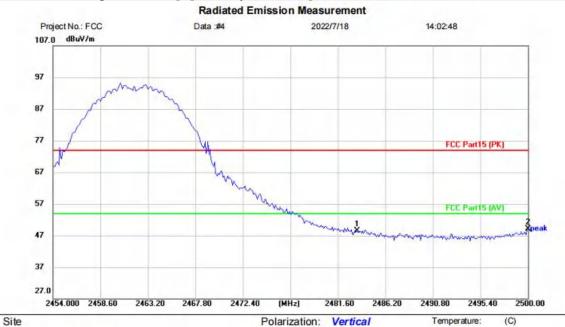
*:Maximum data x:Over limit !:over margin (Reference Only



%RH



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



Limit: FCC Part15 (PK)

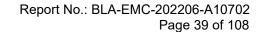
EUT: ASIAIR Plus M/N: ASIAIR Plus Mode: 2.4G 11B TX-H

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	51.60	-3.14	48.46	74.00	-25.54	peak		
2	*	2500.000	52.21	-3.08	49.13	74.00	-24.87	peak		

Power:

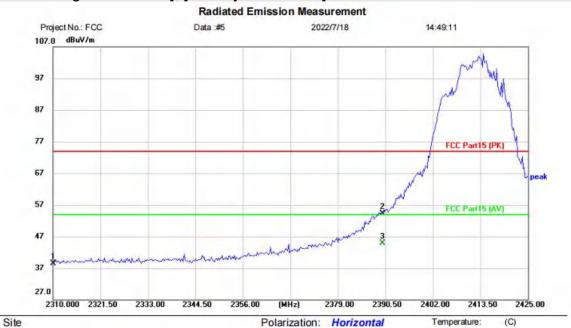
*:Maximum data x:Over limit !:over margin (Reference Only



%RH



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



Limit: FCC Part15 (PK)

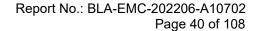
EUT: ASIAIR Plus M/N: ASIAIR Plus Mode: 2.4G 11G TX-L

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	42.49	-3.93	38.56	74.00	-35.44	peak		
2		2390.000	57.89	-3.58	54.31	74.00	-19.69	peak		
3	*	2390.000	48.49	-3.58	44.91	54.00	-9.09	AVG		

Power:

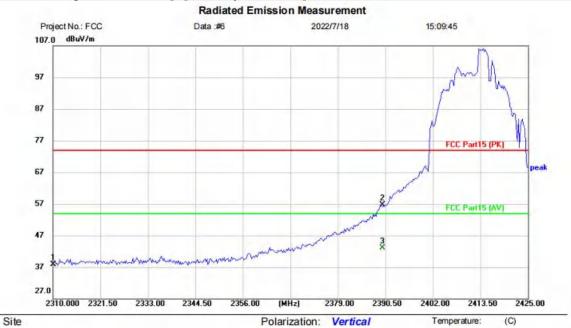
*:Maximum data x:Over limit !:over margin (Reference Only



%RH



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



Limit: FCC Part15 (PK)

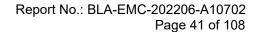
EUT: ASIAIR Plus M/N: ASIAIR Plus Mode: 2.4G 11G TX-L

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	41.92	-3.93	37.99	74.00	-36.01	peak		
2		2390.000	60.26	-3.58	56.68	74.00	-17.32	peak		
3	*	2390.000	46.76	-3.58	43.18	54.00	-10.82	AVG		

Power:

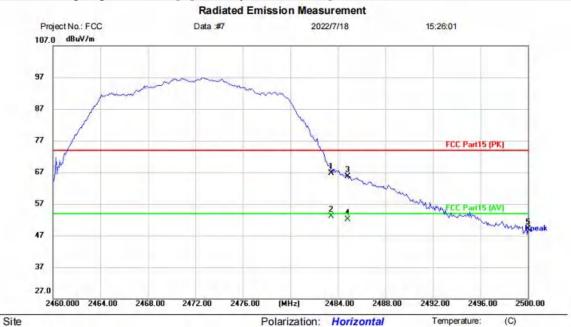
*:Maximum data x:Over limit !:over margin (Reference Only



%RH



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



Limit: FCC Part15 (PK)

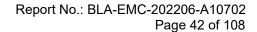
EUT: ASIAIR Plus M/N: ASIAIR Plus Mode: 2.4G 11G TX-H

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	69.93	-3.14	66.79	74.00	-7.21	peak	
2	*	2483.500	56.33	-3.14	53.19	54.00	-0.81	AVG	
3		2484.800	68.93	-3.14	65.79	74.00	-8.21	peak	
4		2484.800	55.25	-3.14	52.11	54.00	-1.89	AVG	
5		2500.000	52.14	-3.08	49.06	74.00	-24.94	peak	

Power:

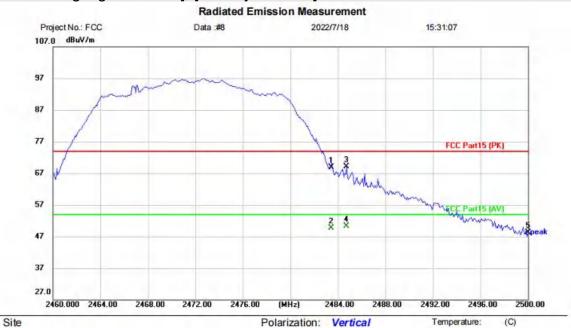
*:Maximum data x:Over limit !:over margin (Reference Only



%RH



[TestMode: TX g high c hannel]; [Polarity: Vertical]



Limit: FCC Part15 (PK)

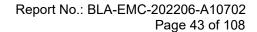
EUT: ASIAIR Plus M/N: ASIAIR Plus Mode: 2.4G 11G TX-H

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	72.02	-3.14	68.88	74.00	-5.12	peak	
2		2483.500	52.81	-3.14	49.67	54.00	-4.33	AVG	
3		2484.720	72.17	-3.14	69.03	74.00	-4.97	peak	
4	*	2484.720	53.38	-3.14	50.24	54.00	-3.76	AVG	
5		2500.000	51.45	-3.08	48.37	74.00	-25.63	peak	

Power:

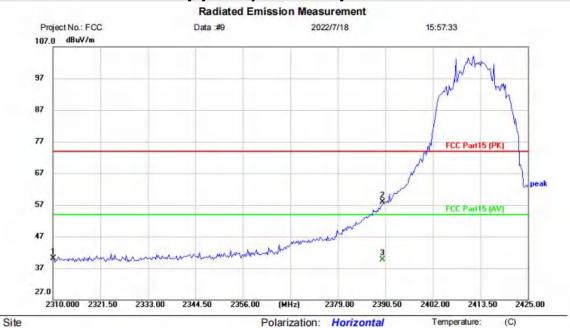
*:Maximum data x:Over limit !:over margin (Reference Only



%RH



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



Limit: FCC Part15 (PK)

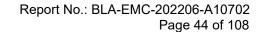
EUT: ASIAIR Plus M/N: ASIAIR Plus Mode: 2.4G 11N20 TX-L

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	43.98	-3.93	40.05	74.00	-33.95	peak		
2		2390.000	61.53	-3.58	57.95	74.00	-16.05	peak		
3	*	2390.000	43.23	-3.58	39.65	54.00	-14.35	AVG		

Power:

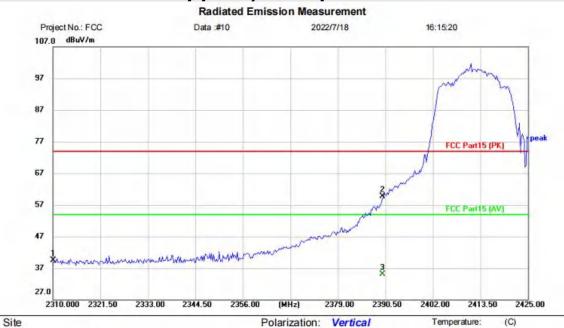
*:Maximum data x:Over limit !:over margin (Reference Only



%RH



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



Limit: FCC Part15 (PK)

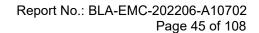
EUT: ASIAIR Plus M/N: ASIAIR Plus Mode: 2.4G 11N20 TX-L

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	43.39	-3.93	39.46	74.00	-34.54	peak		
2	*	2390.000	63.28	-3.58	59.70	74.00	-14.30	peak		
3		2390.000	38.68	-3.58	35.10	54.00	-18.90	AVG		

Power:

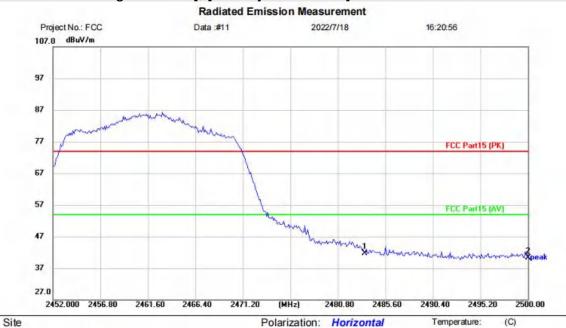
*:Maximum data x:Over limit !:over margin (Reference Only



%RH



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



Limit: FCC Part15 (PK)

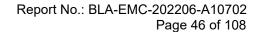
Note:

EUT: ASIAIR Plus M/N: ASIAIR Plus Mode: 2.4G 11N20 TX-H

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	44.93	-3.14	41.79	74.00	-32.21	peak		
2		2500.000	43.36	-3.08	40.28	74.00	-33.72	peak		

Power:

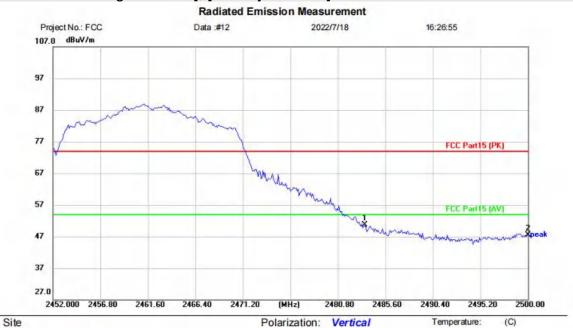
*:Maximum data x:Over limit !:over margin (Reference Only



%RH



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



Limit: FCC Part15 (PK)

EUT: ASIAIR Plus M/N: ASIAIR Plus

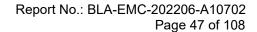
Mode: 2.4G 11N20 TX-H

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	53.80	-3.14	50.66	74.00	-23.34	peak		
2		2500.000	50.51	-3.08	47.43	74.00	-26.57	peak		

Power:

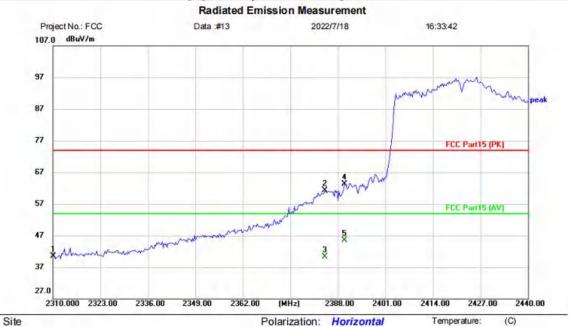
*:Maximum data x:Over limit !:over margin (Reference Only



%RH



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



Limit: FCC Part15 (PK)

EUT: ASIAIR Plus M/N: ASIAIR Plus Mode: 2.4G 11N40 TX-L

2390.000 49.03

-3.58

45.45

Note:

5

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	44.45	-3.93	40.52	74.00	-33.48	peak		
2		2384.360	64.86	-3.60	61.26	74.00	-12.74	peak		
3		2384.360	43.90	-3.60	40.30	54.00	-13.70	AVG		
4		2390.000	66.80	-3.58	63.22	74.00	-10.78	peak		

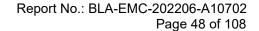
54.00

-8.55

AVG

Power:

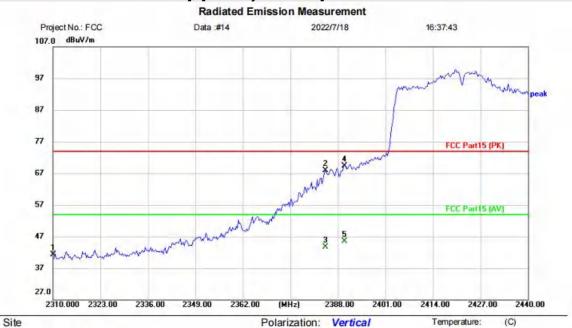
*:Maximum data x:Over limit !:over margin (Reference Only



%RH



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



Limit: FCC Part15 (PK)

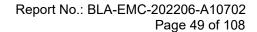
EUT: ASIAIR Plus M/N: ASIAIR Plus Mode: 2.4G 11N40 TX-L

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	45.28	-3.93	41.35	74.00	-32.65	peak	
2		2384.620	71.58	-3.60	67.98	74.00	-6.02	peak	
3		2384.620	47.40	-3.60	43.80	54.00	-10.20	AVG	
4	*	2390.000	72.83	-3.58	69.25	74.00	-4.75	peak	
5		2390.000	49.01	-3.58	45.43	54.00	-8.57	AVG	

Power:

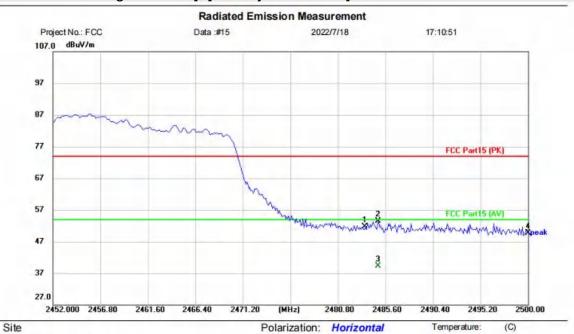
*:Maximum data x:Over limit !:over margin (Reference Only



%RH



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



Limit: FCC Part15 (PK)

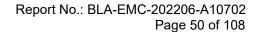
EUT: ASIAIR Plus M/N: ASIAIR Plus Mode: 2.4G 11N40 TX-H

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	54.86	-3.14	51.72	74.00	-22.28	peak	
2		2484.832	56.67	-3.14	53.53	74.00	-20.47	peak	
3	*	2484.832	42.40	-3.14	39.26	54.00	-14.74	AVG	
4		2500.000	52.82	-3.08	49.74	74.00	-24.26	peak	

Power:

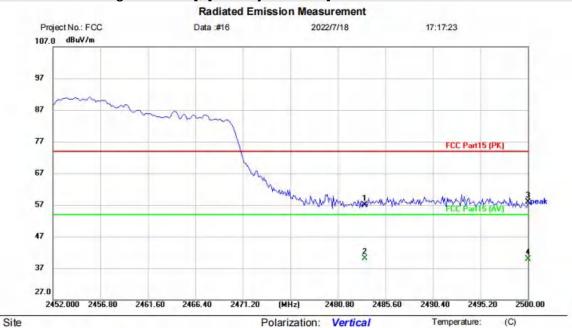
*:Maximum data x:Over limit 1:over margin (Reference Only



%RH



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



Limit: FCC Part15 (PK)

EUT: ASIAIR Plus M/N: ASIAIR Plus Mode: 2.4G 11N40 TX-H

Note:

No. I	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment	
1		2483.500	60.09	-3.14	56.95	74.00	-17.05	peak		
2	*	2483.500	43.31	-3.14	40.17	54.00	-13.83	AVG		
3		2500.000	60.98	-3.08	57.90	74.00	-16.10	peak		
4		2500.000	42.98	-3.08	39.90	54.00	-14.10	AVG		

Power:

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



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16 CONDUCTED SPURIOUS EMISSIONS

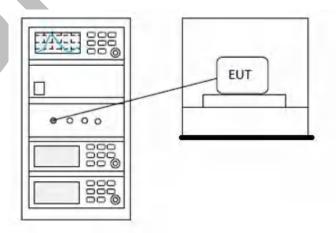
Test Standard	47 CFR Part 15, Subpart C 15.247				
Test Method	ANSI C63.10 (2013) Section 7.8.6 & Section 11.11				
Test Mode (Pre-Scan)	TX				
Test Mode (Final Test)	TX				
Tester	Jozu				
Temperature	25℃				
Humidity	60%				

16.1 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)).

16.2 BLOCK DIAGRAM OF TEST SETUP





16.3 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details





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17 CONDUCTED BAND EDGES MEASUREMENT

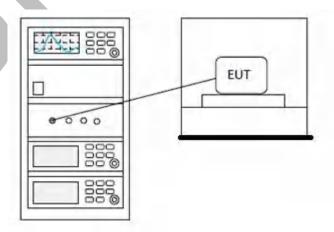
Test Standard	47 CFR Part 15, Subpart C 15.247				
Test Method	ANSI C63.10 (2013) Section 7.8.8 & Section 11.13.3.2				
Test Mode (Pre-Scan)	TX				
Test Mode (Final Test)	TX				
Tester	Jozu				
Temperature	25℃				
Humidity	60%				

17.1 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)).

17.2 BLOCK DIAGRAM OF TEST SETUP





17.3 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details





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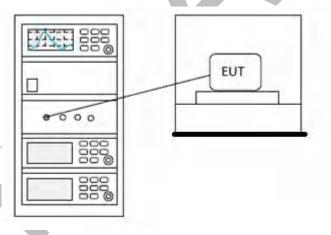
18 MINIMUM 6DB BANDWIDTH

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%

18.1 LIMITS

Limit: ≥500 kHz

18.2 BLOCK DIAGRAM OF TEST SETUP



18.3 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details



Report No.: BLA-EMC-202206-A10702

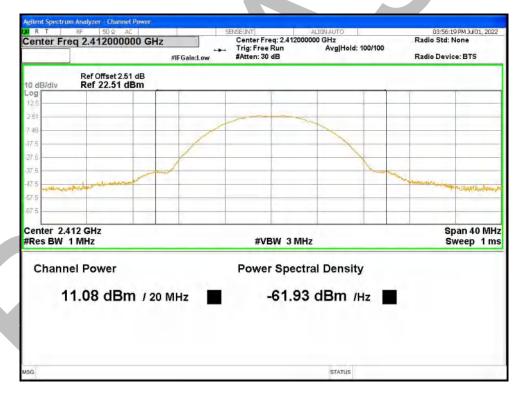
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19 APPENDIX

Maximum Conducted Output Power

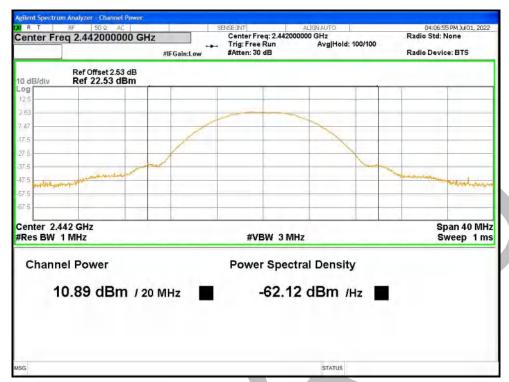
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	ь	2412	Ant1	11.084	30	Pass
NVNT	ь	2442	Ant1	10.886	30	Pass
NVNT	ь	2462	Ant1	11.41	30	Pass
NVNT	g	2412	Ant1	14.004	30	Pass
NVNT	g	2442	Ant1	13.987	30	Pass
NVNT	g	2462	Ant1	14.737	30	Pass
NVNT	n20	2412	Ant1	13.574	30	Pass
NVNT	n20	2442	Ant1	13.4	30	Pass
NVNT	n20	2462	Ant1	14.183	30	Pass
NVNT	n40	2422	Ant1	15.393	30	Pass
NVNT	n40	2437	Ant1	15.177	30	Pass
NVNT	n40	2452	Ant1	15.345	30	Pass

Power NVNT b 2412MHz Ant1



Power NVNT b 2442MHz Ant1





Power NVNT b 2462MHz Ant1

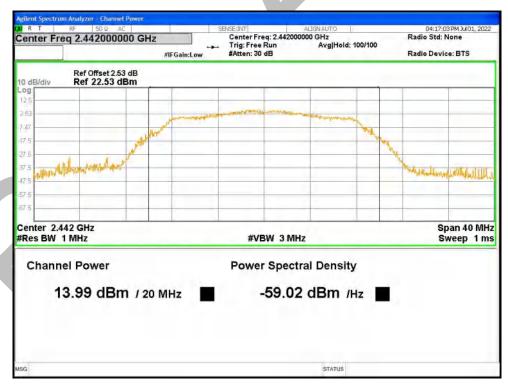


Power NVNT g 2412MHz Ant1



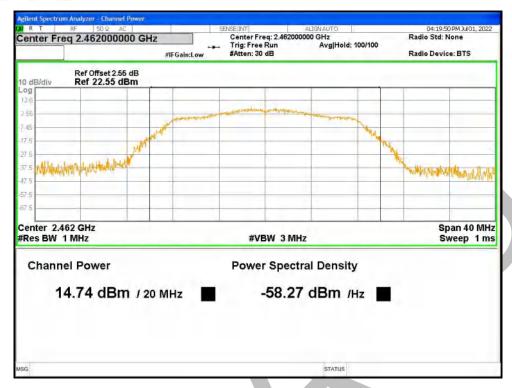


Power NVNT g 2442MHz Ant1



Power NVNT g 2462MHz Ant1





Power NVNT n20 2412MHz Ant1



Power NVNT n20 2442MHz Ant1



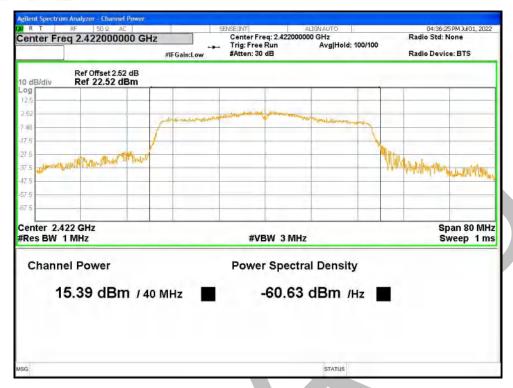


Power NVNT n20 2462MHz Ant1

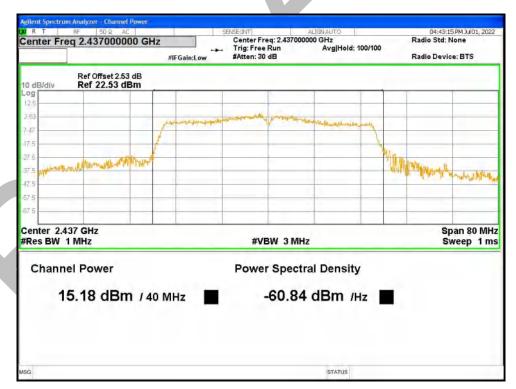


Power NVNT n40 2422MHz Ant1



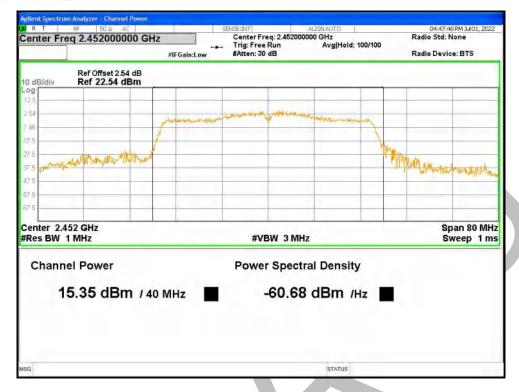


Power NVNT n40 2437MHz Ant1



Power NVNT n40 2452MHz Ant1







-6dB Bandwidth

Condition	Mode	Frequency	Antenna	-6 dB Bandwidth	Limit -6 dB	Verdict
		(MHz)		(MHz)	Bandwidth (MHz)	
NVNT	b	2412	Ant1	6.578	0.5	Pass
NVNT	ь	2442	Ant1	7.532	0.5	Pass
NVNT	ь	2462	Ant1	8.034	0.5	Pass
NVNT	g	2412	Ant1	14.365	0.5	Pass
NVNT	g	2442	Ant1	15.414	0.5	Pass
NVNT	g	2462	Ant1	15.068	0.5	Pass
NVNT	n20	2412	Ant1	15.145	0.5	Pass
NVNT	n20	2442	Ant1	16.384	0.5	Pass
NVNT	n20	2462	Ant1	15.165	0.5	Pass
NVNT	n40	2422	Ant1	35.392	0.5	Pass
NVNT	n40	2437	Ant1	35.413	0.5	Pass
NVNT	n40	2452	Ant1	35.168	0.5	Pass

-6dB Bandwidth NVNT b 2412MHz Ant1



-6dB Bandwidth NVNT b 2442MHz Ant1



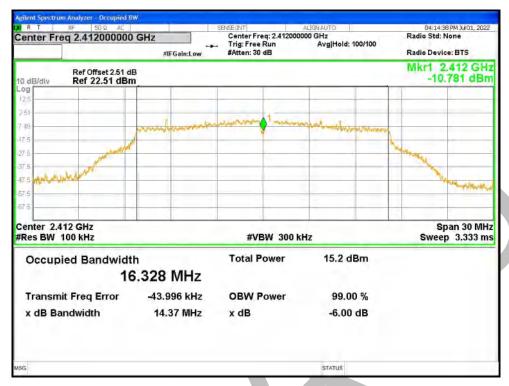


-6dB Bandwidth NVNT b 2462MHz Ant1



-6dB Bandwidth NVNT g 2412MHz Ant1





-6dB Bandwidth NVNT g 2442MHz Ant1



-6dB Bandwidth NVNT g 2462MHz Ant1





-6dB Bandwidth NVNT n20 2412MHz Ant1



-6dB Bandwidth NVNT n20 2442MHz Ant1





-6dB Bandwidth NVNT n20 2462MHz Ant1



-6dB Bandwidth NVNT n40 2422MHz Ant1





-6dB Bandwidth NVNT n40 2437MHz Ant1



-6dB Bandwidth NVNT n40 2452MHz Ant1







Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	ь	2412	Ant1	10.179
NVNT	b	2442	Ant1	10.261
NVNT	ь	2462	Ant1	10.300
NVNT	g	2412	Ant1	16.394
NVNT	g	2442	Ant1	16.430
NVNT	g	2462	Ant1	16.281
NVNT	n20	2412	Ant1	17.559
NVNT	n20	2442	Ant1	17.518
NVNT	n20	2462	Ant1	17.449
NVNT	n40	2422	Ant1	35.837
NVNT	n40	2437	Ant1	35.998
NVNT	n40	2452	Ant1	35.969

OBW NVNT b 2412MHz Ant1



OBW NVNT b 2442MHz Ant1





OBW NVNT b 2462MHz Ant1



OBW NVNT g 2412MHz Ant1





OBW NVNT g 2442MHz Ant1



OBW NVNT g 2462MHz Ant1



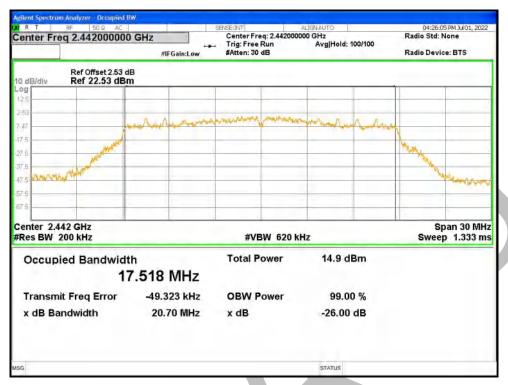


OBW NVNT n20 2412MHz Ant1



OBW NVNT n20 2442MHz Ant1





OBW NVNT n20 2462MHz Ant1



OBW NVNT n40 2422MHz Ant1





OBW NVNT n40 2437MHz Ant1



OBW NVNT n40 2452MHz Ant1







Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	1.498	8	Pass
NVNT	b	2442	Ant1	1.914	8	Pass
NVNT	b	2462	Ant1	2.141	8	Pass
NVNT	g	2412	Ant1	-2.119	8	Pass
NVNT	g	2442	Ant1	-2.065	8	Pass
NVNT	g	2462	Ant1	-0.999	8	Pass
NVNT	n20	2412	Ant1	-1.729	8	Pass
NVNT	n20	2442	Ant1	-1.691	8	Pass
NVNT	n20	2462	Ant1	-0.362	8	Pass
NVNT	n40	2422	Ant1	-2.699	8	Pass
NVNT	n40	2437	Ant1	-2.813	8	Pass
NVNT	n40	2452	Ant1	-2.831	8	Pass

PSD NVNT b 2412MHz Ant1



PSD NVNT b 2442MHz Ant1





PSD NVNT b 2462MHz Ant1



PSD NVNT g 2412MHz Ant1





PSD NVNT g 2442MHz Ant1



PSD NVNT g 2462MHz Ant1





PSD NVNT n20 2412MHz Ant1



PSD NVNT n20 2442MHz Ant1





PSD NVNT n20 2462MHz Ant1

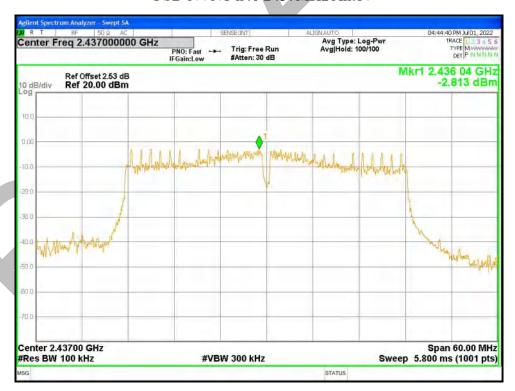


PSD NVNT n40 2422MHz Ant1





PSD NVNT n40 2437MHz Ant1



PSD NVNT n40 2452MHz Ant1







Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	ь	2412	Ant1	-57.18	-30	Pass
NVNT	ь	2462	Ant1	-55.81	-30	Pass
NVNT	g	2412	Ant1	-48.9	-30	Pass
NVNT	g	2462	Ant1	-47.42	-30	Pass
NVNT	n20	2412	Ant1	-50.21	-30	Pass
NVNT	n20	2462	Ant1	-50.06	-30	Pass
NVNT	n40	2422	Ant1	-37.67	-30	Pass
NVNT	n40	2452	Antl	-36.41	-30	Pass

Band Edge NVNT b 2412MHz Ant1 Ref



Band Edge NVNT b 2412MHz Ant1 Emission



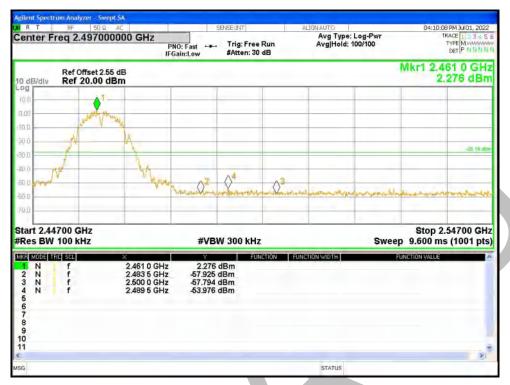


Band Edge NVNT b 2462MHz Ant1 Ref



Band Edge NVNT b 2462MHz Ant1 Emission



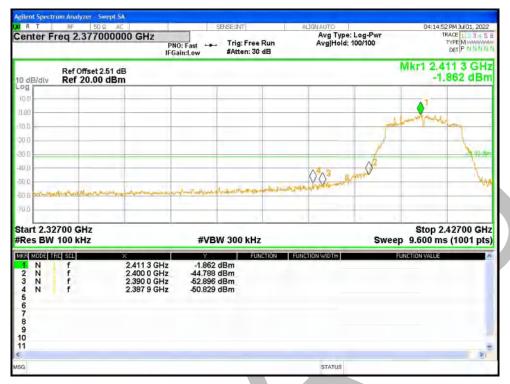


Band Edge NVNT g 2412MHz Ant1 Ref



Band Edge NVNT g 2412MHz Ant1 Emission



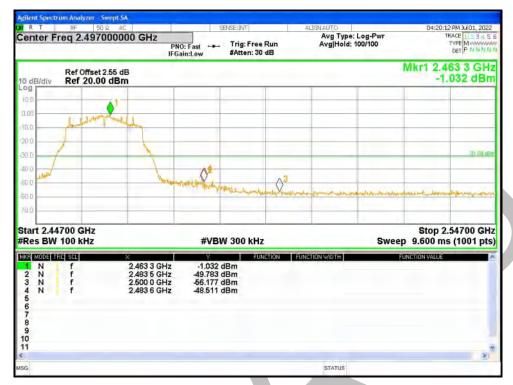


Band Edge NVNT g 2462MHz Ant1 Ref



Band Edge NVNT g 2462MHz Ant1 Emission



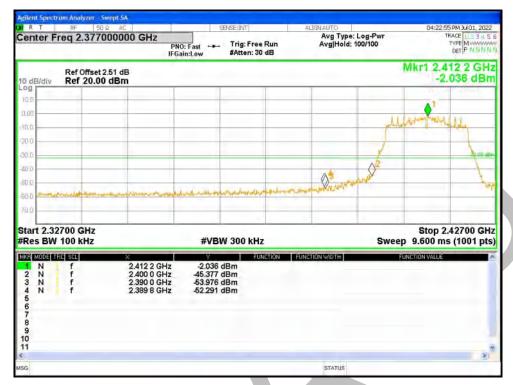


Band Edge NVNT n20 2412MHz Ant1 Ref



Band Edge NVNT n20 2412MHz Ant1 Emission



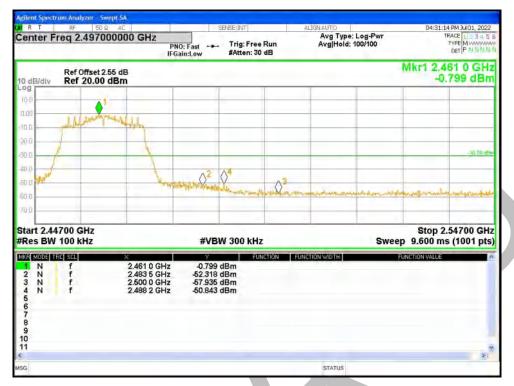


Band Edge NVNT n20 2462MHz Ant1 Ref



Band Edge NVNT n20 2462MHz Ant1 Emission





Band Edge NVNT n40 2422MHz Ant1 Ref



Band Edge NVNT n40 2422MHz Ant1 Emission



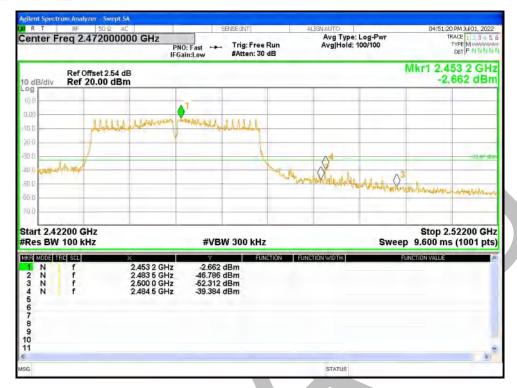


Band Edge NVNT n40 2452MHz Ant1 Ref



Band Edge NVNT n40 2452MHz Ant1 Emission







Conducted RF Spurious Emission

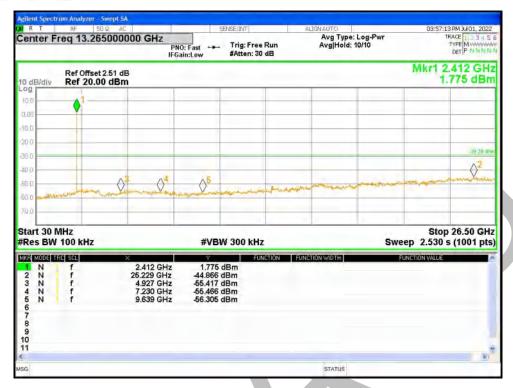
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-45.57	-30	Pass
NVNT	ь	2442	Ant1	-45.45	-30	Pass
NVNT	b	2462	Ant1	-47.38	-30	Pass
NVNT	g	2412	Ant1	-43.04	-30	Pass
NVNT	g	2442	Ant1	-42.8	-30	Pass
NVNT	g	2462	Ant1	-43.83	-30	Pass
NVNT	n20	2412	Ant1	-42.77	-30	Pass
NVNT	n20	2442	Ant1	-43.26	-30	Pass
NVNT	n20	2462	Ant1	-44.06	-30	Pass
NVNT	n40	2422	Ant1	-42.17	-30	Pass
NVNT	n40	2437	Ant1	-41.34	-30	Pass
NVNT	n40	2452	Ant1	-42.23	-30	Pass

Tx. Spurious NVNT b 2412MHz Ant1 Ref



Tx. Spurious NVNT b 2412MHz Ant1 Emission



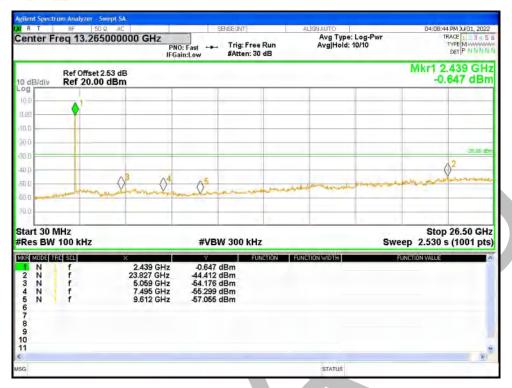


Tx. Spurious NVNT b 2442MHz Ant1 Ref



Tx. Spurious NVNT b 2442MHz Ant1 Emission



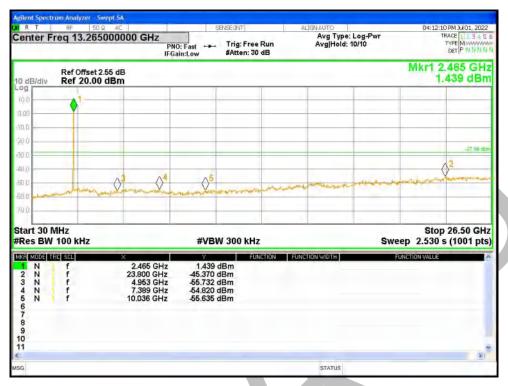


Tx. Spurious NVNT b 2462MHz Ant1 Ref



Tx. Spurious NVNT b 2462MHz Ant1 Emission



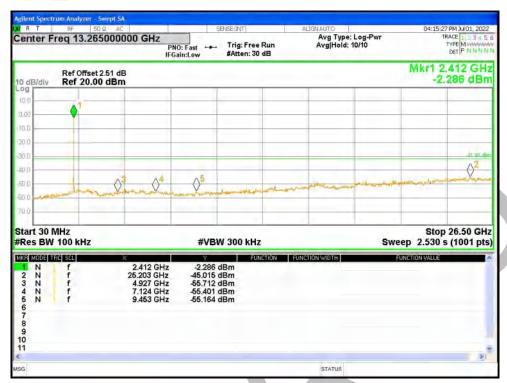


Tx. Spurious NVNT g 2412MHz Ant1 Ref



Tx. Spurious NVNT g 2412MHz Ant1 Emission



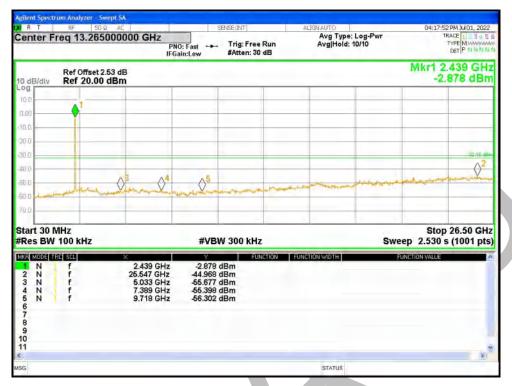


Tx. Spurious NVNT g 2442MHz Ant1 Ref



Tx. Spurious NVNT g 2442MHz Ant1 Emission



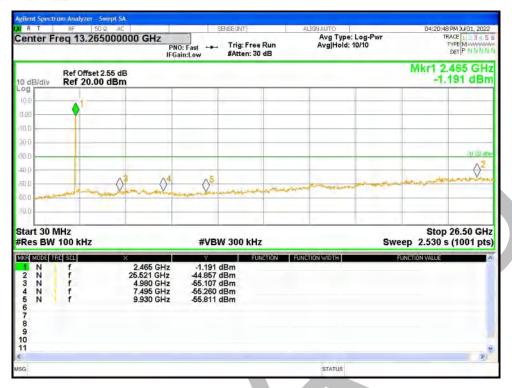


Tx. Spurious NVNT g 2462MHz Ant1 Ref



Tx. Spurious NVNT g 2462MHz Ant1 Emission



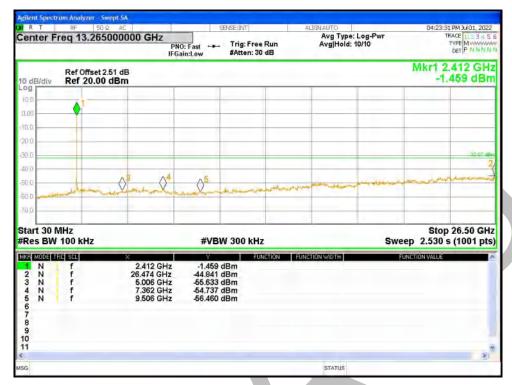


Tx. Spurious NVNT n20 2412MHz Ant1 Ref



Tx. Spurious NVNT n20 2412MHz Ant1 Emission



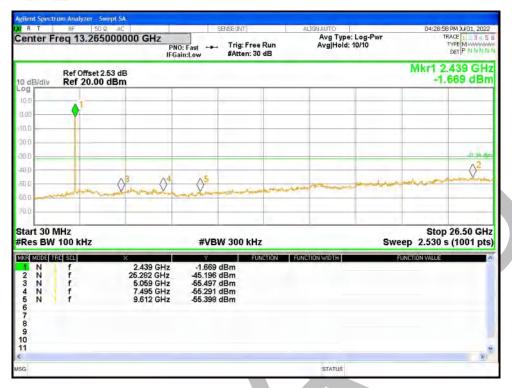


Tx. Spurious NVNT n20 2442MHz Ant1 Ref



Tx. Spurious NVNT n20 2442MHz Ant1 Emission



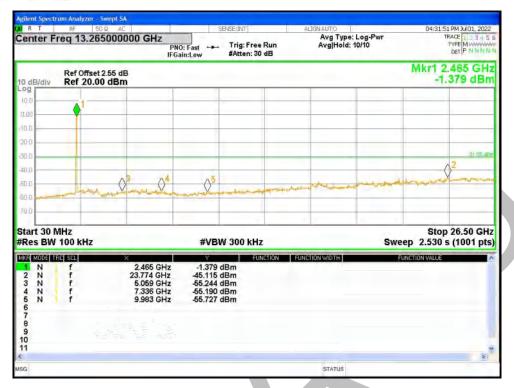


Tx. Spurious NVNT n20 2462MHz Ant1 Ref

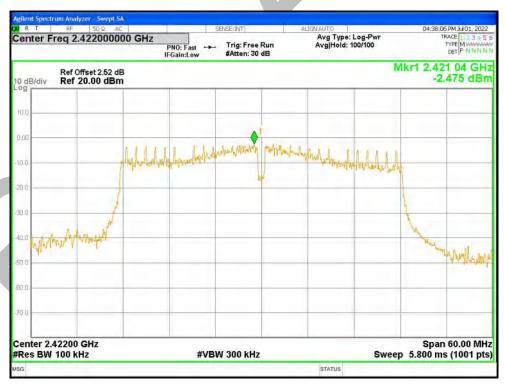


Tx. Spurious NVNT n20 2462MHz Ant1 Emission



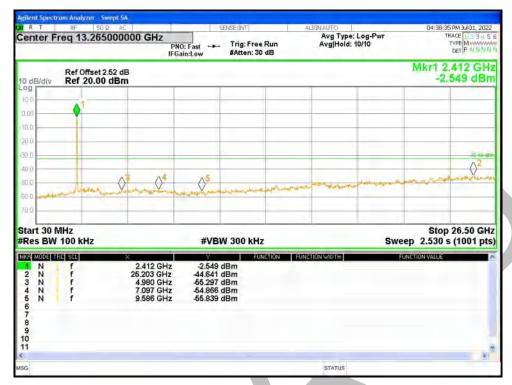


Tx. Spurious NVNT n40 2422MHz Ant1 Ref



Tx. Spurious NVNT n40 2422MHz Ant1 Emission



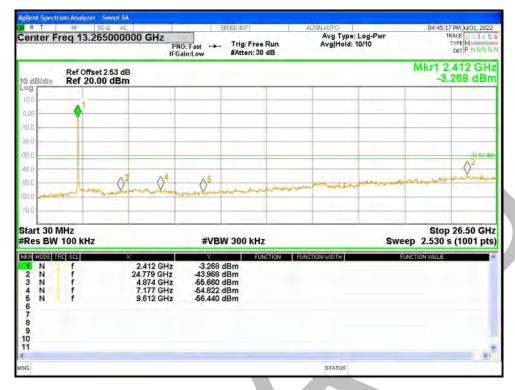


Tx. Spurious NVNT n40 2437MHz Ant1 Ref



Tx. Spurious NVNT n40 2437MHz Ant1 Emission



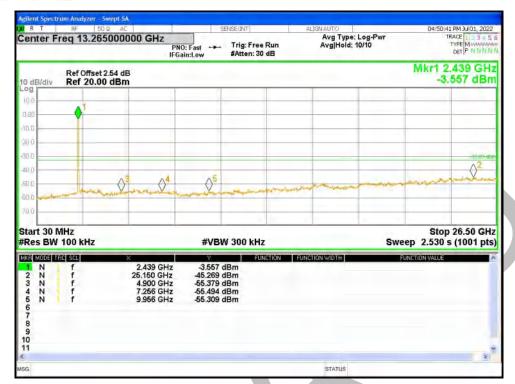


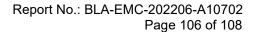
Tx. Spurious NVNT n40 2452MHz Ant1 Ref



Tx. Spurious NVNT n40 2452MHz Ant1 Emission



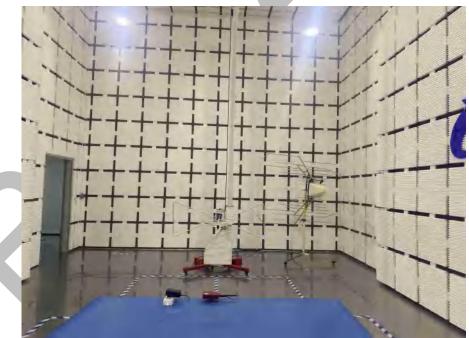




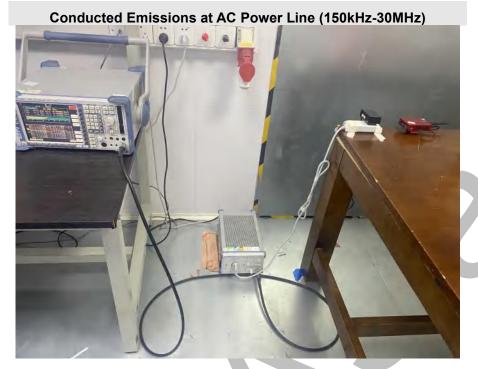


APPENDIX A: PHOTOGRAPHS OF TEST SETUP











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APPENDIX B: PHOTOGRAPHS OF EUT

Reference to the test report No. BLA-EMC-202206-A10701

----END OF REPORT----

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