

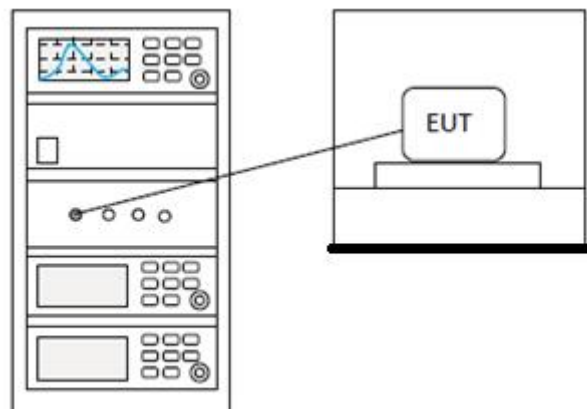
16 MAXIMUM CONDUCTED OUTPUT POWER

Test Standard	47 CFR Part 15, Subpart E 15.407
Test Method	KDB 789033 D02 II E
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Jozu
Temperature	25℃
Humidity	60%

16.1 LIMITS

Frequency band(MHz)	Limit
5150-5250	$\leq 1\text{W}(30\text{dBm})$ for master device
	$\leq 250\text{mW}(24\text{dBm})$ for client device
5250-5350	$\leq 250\text{mW}(24\text{dBm})$ for client device or $11\text{dBm}+10\log B^*$
5470-5725	$\leq 250\text{mW}(24\text{dBm})$ for client device or $11\text{dBm}+10\log B^*$
5725-5850	$\leq 1\text{W}(30\text{dBm})$
Remark:	* Where B is the 26dB emission bandwidth in MHz. The maximum conducted output power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage.

16.2 BLOCK DIAGRAM OF TEST SETUP



16.3 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

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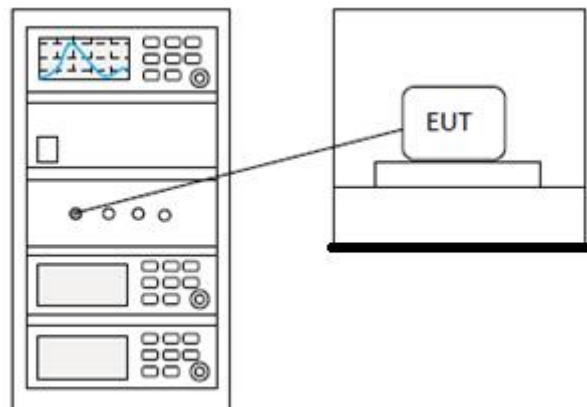
17 MINIMUM 6 DB BANDWIDTH (5.725-5.85 GHZ BAND)

Test Standard	47 CFR Part 15, Subpart E 15.407
Test Method	KDB 789033 D02 II C 2
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Jozu
Temperature	25℃
Humidity	60%

17.1 LIMITS

Limit:	≥ 500 kHz
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17.2 BLOCK DIAGRAM OF TEST SETUP



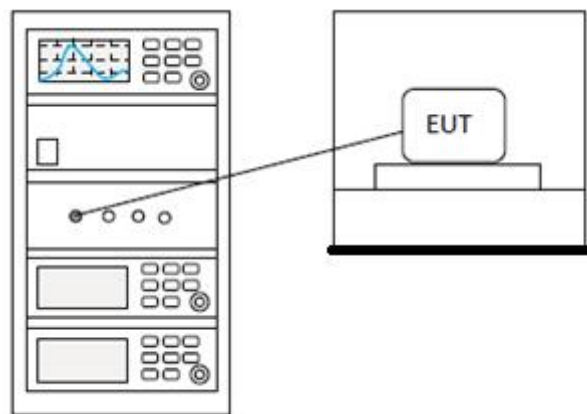
17.3 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

18 26DB EMISSION BANDWIDTH

Test Standard	47 CFR Part 15, Subpart E 15.407
Test Method	KDB 789033 D02 II C 1
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Jozu
Temperature	25℃
Humidity	60%

18.1 BLOCK DIAGRAM OF TEST SETUP



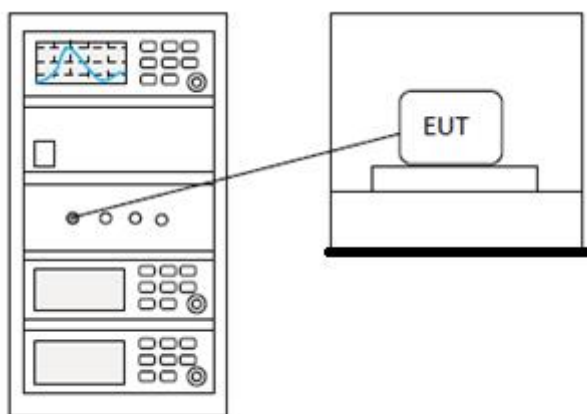
18.2 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

19 99% BANDWIDTH

Test Standard	47 CFR Part 15, Subpart E 15.407
Test Method	KDB 789033 II D
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Jozu
Temperature	25℃
Humidity	60%

19.1 BLOCK DIAGRAM OF TEST SETUP



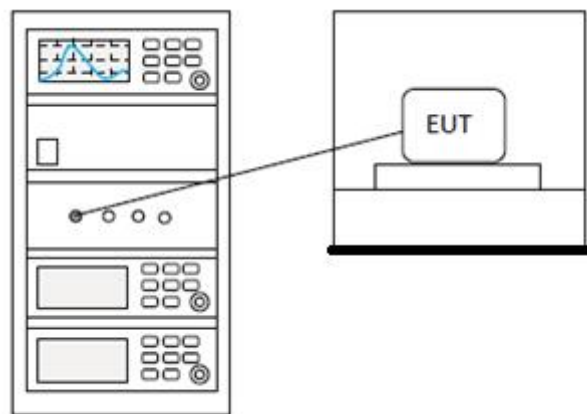
19.2 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

20 DUTY CYCLE

Test Standard	47 CFR Part 15, Subpart E 15.407
Test Method	KDB 789033 II B 1
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Jozu
Temperature	25℃
Humidity	60%

20.1 BLOCK DIAGRAM OF TEST SETUP



20.2 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

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

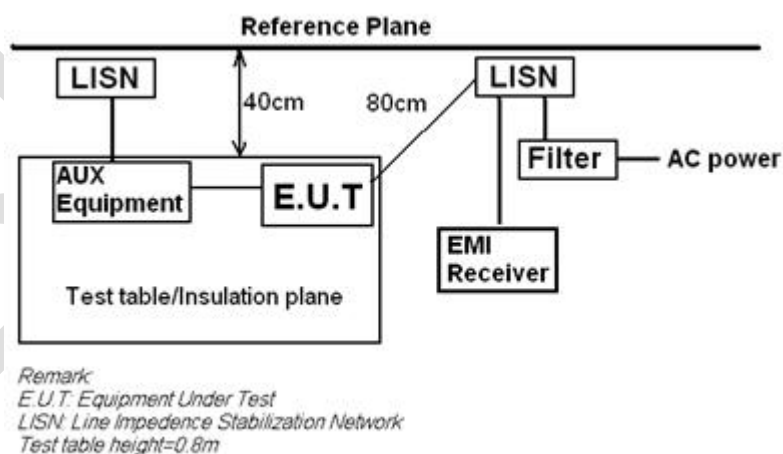
Test Standard	47 CFR Part 15, Subpart E 15.407
Test Method	ANSI C63.10 (2013) Section 6.2
Test Mode (Pre-Scan)	Transmitting mode
Test Mode (Final Test)	Transmitting mode
Tester	Jozu
Temperature	25℃
Humidity	60%

21.1 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.

21.2 BLOCK DIAGRAM OF TEST SETUP



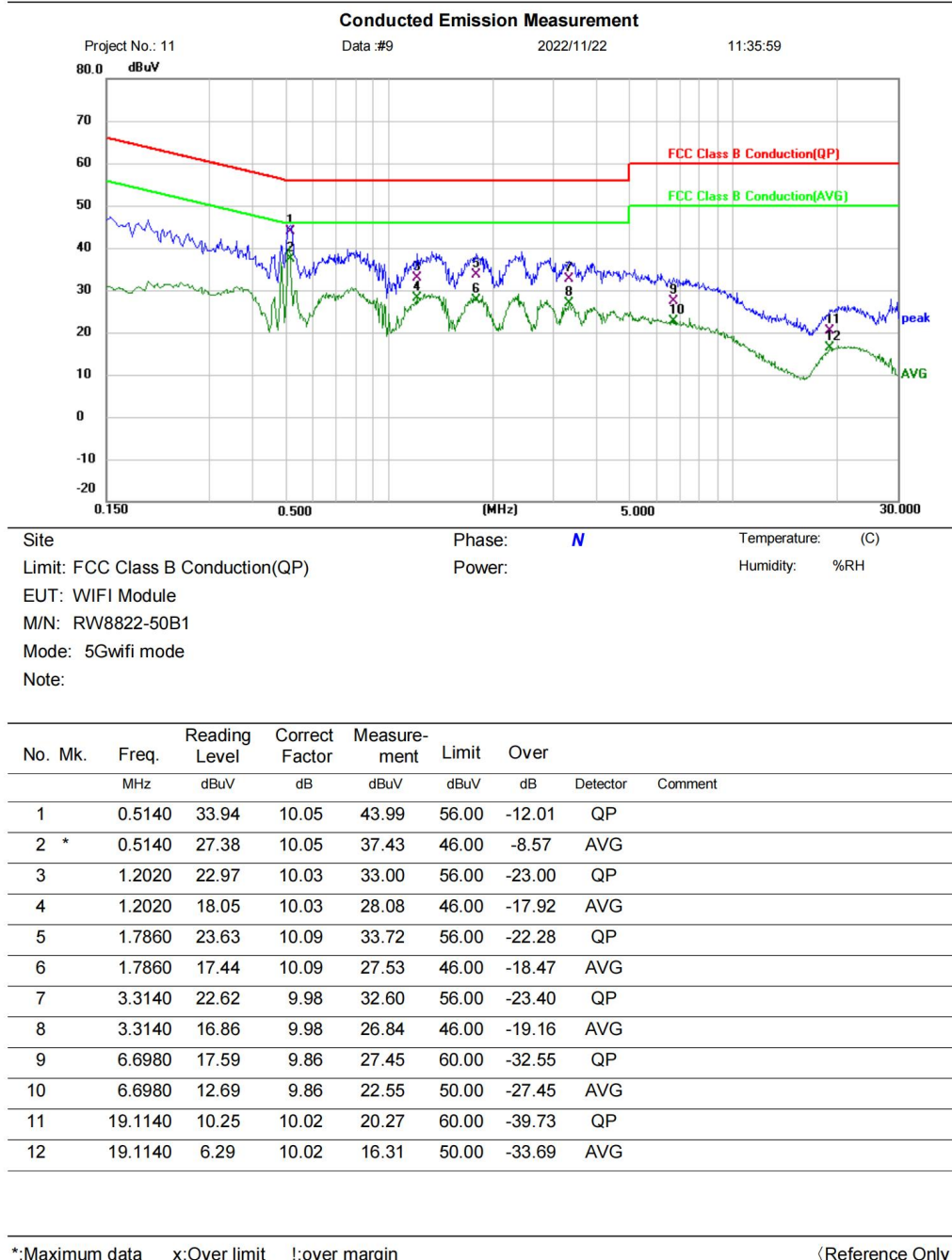
21.3 PROCEDURE

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

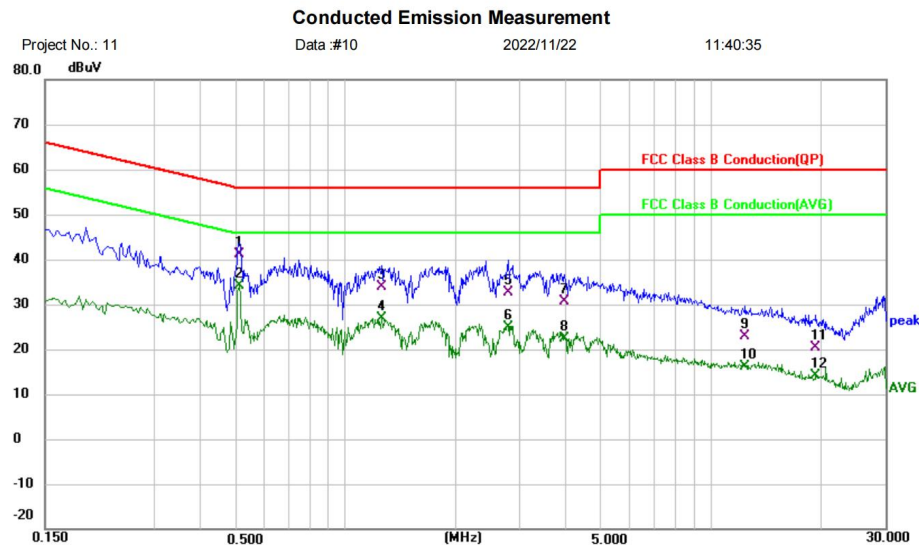
21.4 TEST DATA

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



Test Result: Pass

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



Site	Phase:	L1	Temperature:	(C)
Limit: FCC Class B Conduction(QP)	Power:		Humidity:	%RH
EUT: WIFI Module				
M/N: RW8822-50B1				
Mode: 5Gwifi mode				
Note:				

No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.5100	31.14	10.08	41.22	56.00	-14.78	QP	
2 *	0.5100	24.05	10.08	34.13	46.00	-11.87	AVG	
3	1.2620	23.60	10.16	33.76	56.00	-22.24	QP	
4	1.2620	16.65	10.16	26.81	46.00	-19.19	AVG	
5	2.7820	22.50	10.24	32.74	56.00	-23.26	QP	
6	2.7820	14.56	10.24	24.80	46.00	-21.20	AVG	
7	3.9740	20.42	10.10	30.52	56.00	-25.48	QP	
8	3.9740	12.27	10.10	22.37	46.00	-23.63	AVG	
9	12.4060	12.80	10.05	22.85	60.00	-37.15	QP	
10	12.4060	6.16	10.05	16.21	50.00	-33.79	AVG	
11	19.3860	10.27	10.00	20.27	60.00	-39.73	QP	
12	19.3860	4.01	10.00	14.01	50.00	-35.99	AVG	

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

Reference Only

Test Result: Pass

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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22 ANTENNA REQUIREMENT

Test Standard	47 CFR Part 15, Subpart E 15.407
Test Method	N/A

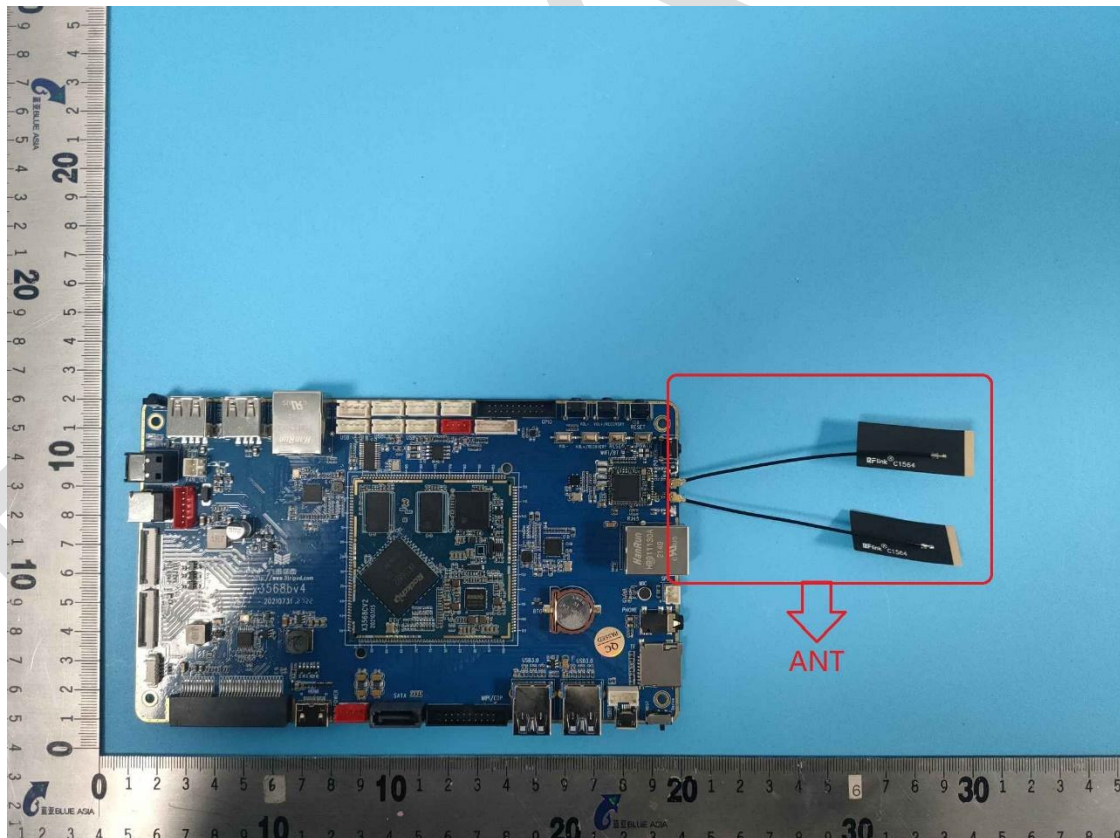
22.1 CONCLUSION

Standard 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 antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit permanently attached antenna or of an so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

EUT Antenna:

The best case gain of the antenna is 3.3dBi.



23 APPENDIX

23.1 MAXIMUM CONDUCTED OUTPUT POWER

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	18.004	24	Pass
NVNT	a	5200	Ant1	18.066	24	Pass
NVNT	a	5240	Ant1	18.097	24	Pass
NVNT	a	5260	Ant1	17.9	24	Pass
NVNT	a	5280	Ant1	17.98	24	Pass
NVNT	a	5320	Ant1	18.15	24	Pass
NVNT	a	5745	Ant1	19.204	30	Pass
NVNT	a	5785	Ant1	19.118	24	Pass
NVNT	a	5825	Ant1	19.043	30	Pass
NVNT	a	5180	Ant2	17.596	24	Pass
NVNT	a	5200	Ant2	17.678	24	Pass
NVNT	a	5240	Ant2	17.795	24	Pass
NVNT	a	5260	Ant2	17.632	24	Pass
NVNT	a	5280	Ant2	17.603	24	Pass
NVNT	a	5320	Ant2	18.012	24	Pass
NVNT	a	5745	Ant2	19.215	30	Pass
NVNT	a	5785	Ant2	18.681	30	Pass
NVNT	a	5825	Ant2	19.037	30	Pass
SISO						
NVNT	ac20	5180	Ant1	17.848	24	Pass
NVNT	ac20	5200	Ant1	17.857	24	Pass
NVNT	ac20	5240	Ant1	18.115	24	Pass
NVNT	ac20	5260	Ant1	18.349	24	Pass
NVNT	ac20	5280	Ant1	17.877	24	Pass
NVNT	ac20	5320	Ant1	17.923	24	Pass
NVNT	ac20	5745	Ant1	17.959	30	Pass
NVNT	ac20	5785	Ant1	18.032	30	Pass
NVNT	ac20	5825	Ant1	18.126	30	Pass
NVNT	ac20	5180	Ant2	18.072	24	Pass
NVNT	ac20	5200	Ant2	17.679	24	Pass
NVNT	ac20	5240	Ant2	17.923	24	Pass
NVNT	ac20	5260	Ant2	17.547	24	Pass
NVNT	ac20	5280	Ant2	17.767	24	Pass
NVNT	ac20	5320	Ant2	17.92	24	Pass
NVNT	ac20	5745	Ant2	18.107	30	Pass
NVNT	ac20	5785	Ant2	18.206	30	Pass
NVNT	ac20	5825	Ant2	18.373	30	Pass
MIMO						
NVNT	ac20	5180	Ant1	15.599	23.69	Pass
NVNT	ac20	5180	Ant2	13.118	23.69	Pass
NVNT	ac20	5180	Sum	17.544	23.69	Pass
NVNT	ac20	5200	Ant1	15.251	23.69	Pass

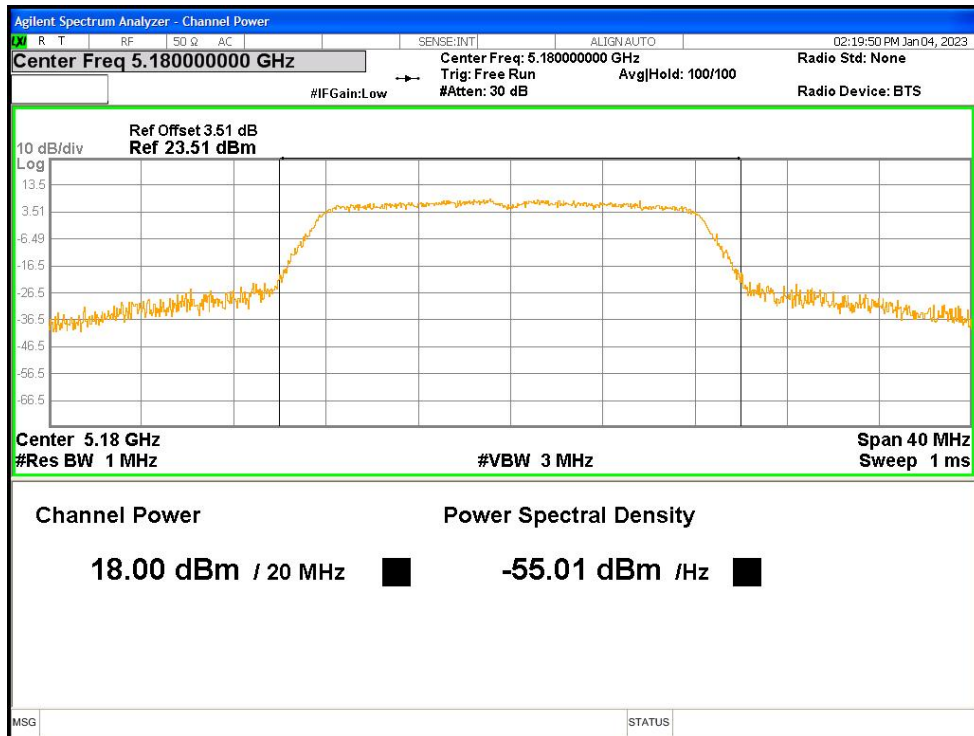
NVNT	ac20	5200	Ant2	13.456	23.69	Pass
NVNT	ac20	5200	Sum	17.456	23.69	Pass
NVNT	ac20	5240	Ant1	15.466	23.69	Pass
NVNT	ac20	5240	Ant2	13.87	23.69	Pass
NVNT	ac20	5240	Sum	17.751	23.69	Pass
NVNT	ac20	5260	Ant1	15.075	23.69	Pass
NVNT	ac20	5260	Ant2	14.007	23.69	Pass
NVNT	ac20	5260	Sum	17.584	23.69	Pass
NVNT	ac20	5280	Ant1	14.914	23.69	Pass
NVNT	ac20	5280	Ant2	13.684	23.69	Pass
NVNT	ac20	5280	Sum	17.353	23.69	Pass
NVNT	ac20	5320	Ant1	14.773	23.69	Pass
NVNT	ac20	5320	Ant2	14.697	23.69	Pass
NVNT	ac20	5320	Sum	17.745	23.69	Pass
NVNT	ac20	5745	Ant1	13.463	29.69	Pass
NVNT	ac20	5745	Ant2	15.973	29.69	Pass
NVNT	ac20	5745	Sum	17.907	29.69	Pass
NVNT	ac20	5785	Ant1	14.196	23.69	Pass
NVNT	ac20	5785	Ant2	15.719	23.69	Pass
NVNT	ac20	5785	Sum	18.034	23.69	Pass
NVNT	ac20	5825	Ant1	13.39	29.69	Pass
NVNT	ac20	5825	Ant2	16.91	29.69	Pass
NVNT	ac20	5825	Sum	18.508	29.69	Pass
SISO						
NVNT	ac40	5190	Ant1	18.023	24	Pass
NVNT	ac40	5230	Ant1	18.554	24	Pass
NVNT	ac40	5270	Ant1	18.269	24	Pass
NVNT	ac40	5310	Ant1	18.055	24	Pass
NVNT	ac40	5755	Ant1	18.165	30	Pass
NVNT	ac40	5795	Ant1	17.974	30	Pass
NVNT	ac40	5190	Ant2	17.759	24	Pass
NVNT	ac40	5230	Ant2	18.066	24	Pass
NVNT	ac40	5270	Ant2	18.449	24	Pass
NVNT	ac40	5310	Ant2	18.219	24	Pass
NVNT	ac40	5755	Ant2	17.882	30	Pass
NVNT	ac40	5795	Ant2	17.953	30	Pass
MIMO						
NVNT	ac40	5190	Ant1	15.493	23.69	Pass
NVNT	ac40	5190	Ant2	15.042	23.69	Pass
NVNT	ac40	5190	Sum	18.284	23.69	Pass
NVNT	ac40	5230	Ant1	15.352	23.69	Pass
NVNT	ac40	5230	Ant2	15.904	23.69	Pass
NVNT	ac40	5230	Sum	18.647	23.69	Pass
NVNT	ac40	5270	Ant1	15.769	23.69	Pass
NVNT	ac40	5270	Ant2	14.574	23.69	Pass
NVNT	ac40	5270	Sum	18.223	23.69	Pass
NVNT	ac40	5310	Ant1	15.955	23.69	Pass

NVNT	ac40	5310	Ant2	14.97	23.69	Pass
NVNT	ac40	5310	Sum	18.501	23.69	Pass
NVNT	ac40	5755	Ant1	15.508	29.69	Pass
NVNT	ac40	5755	Ant2	14.263	29.69	Pass
NVNT	ac40	5755	Sum	17.94	29.69	Pass
NVNT	ac40	5795	Ant1	14.971	29.69	Pass
NVNT	ac40	5795	Ant2	15.547	29.69	Pass
NVNT	ac40	5795	Sum	18.279	29.69	Pass
SISO						
NVNT	ac80	5210	Ant1	16.505	30	Pass
NVNT	ac80	5290	Ant1	16.813	30	Pass
NVNT	ac80	5775	Ant1	16.282	30	Pass
NVNT	ac80	5210	Ant2	16.215	30	Pass
NVNT	ac80	5290	Ant2	16.835	30	Pass
NVNT	ac80	5775	Ant2	16.832	30	Pass
MIMO						
NVNT	ac80	5210	Ant1	14.672	24	Pass
NVNT	ac80	5210	Ant2	12.514	24	Pass
NVNT	ac80	5210	Sum	16.736	24	Pass
NVNT	ac80	5290	Ant1	14.162	24	Pass
NVNT	ac80	5290	Ant2	12.876	24	Pass
NVNT	ac80	5290	Sum	16.577	24	Pass
NVNT	ac80	5775	Ant1	12.689	30	Pass
NVNT	ac80	5775	Ant2	13.942	30	Pass
NVNT	ac80	5775	Sum	16.371	30	Pass
SISO						
NVNT	n20	5180	Ant1	18.138	24	Pass
NVNT	n20	5200	Ant1	18.315	24	Pass
NVNT	n20	5240	Ant1	18.388	24	Pass
NVNT	n20	5260	Ant1	18.088	24	Pass
NVNT	n20	5280	Ant1	18.029	24	Pass
NVNT	n20	5320	Ant1	18.213	24	Pass
NVNT	n20	5745	Ant1	17.968	30	Pass
NVNT	n20	5785	Ant1	18.067	30	Pass
NVNT	n20	5825	Ant1	18.414	30	Pass
NVNT	n20	5180	Ant2	17.795	24	Pass
NVNT	n20	5200	Ant2	17.693	24	Pass
NVNT	n20	5240	Ant2	18.153	24	Pass
NVNT	n20	5260	Ant2	17.985	24	Pass
NVNT	n20	5280	Ant2	17.837	24	Pass
NVNT	n20	5320	Ant2	17.993	24	Pass
NVNT	n20	5745	Ant2	18.29	30	Pass
NVNT	n20	5785	Ant2	17.965	30	Pass
NVNT	n20	5825	Ant2	17.905	30	Pass
MIMO						
NVNT	n20	5180	Ant1	15.158	23.69	Pass
NVNT	n20	5180	Ant2	13.687	23.69	Pass

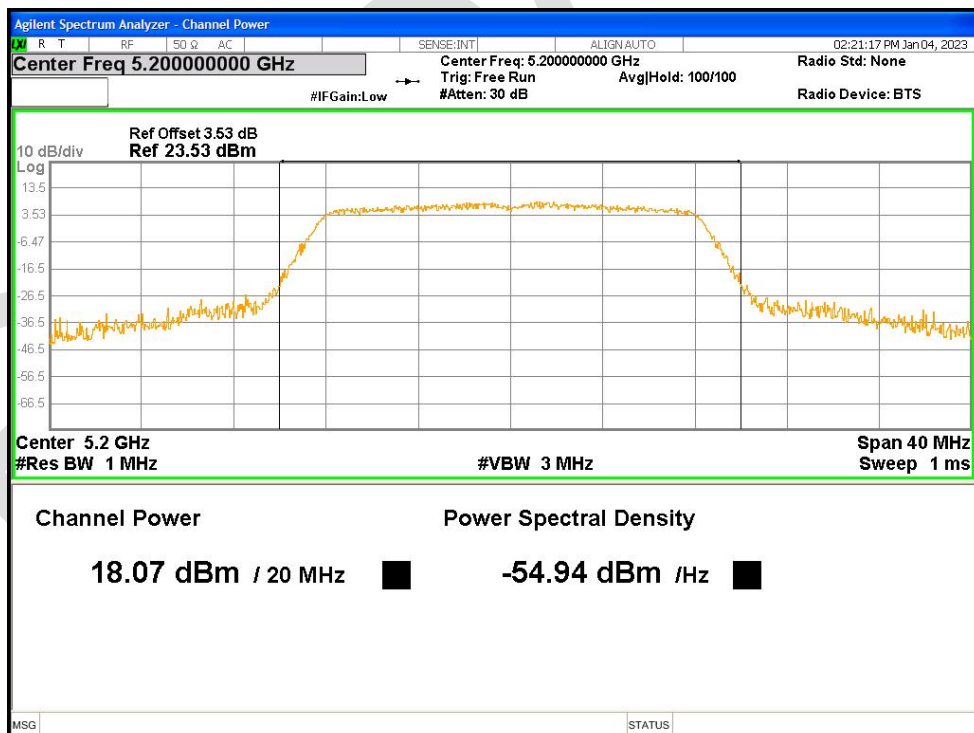
NVNT	n20	5180	Sum	17.495	23.69	Pass
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NVNT	n20	5200	Ant2	13.598	23.69	Pass
NVNT	n20	5200	Sum	17.556	23.69	Pass
NVNT	n20	5240	Ant1	15.879	23.69	Pass
NVNT	n20	5240	Ant2	13.461	23.69	Pass
NVNT	n20	5240	Sum	17.846	23.69	Pass
NVNT	n20	5260	Ant1	15.045	23.69	Pass
NVNT	n20	5260	Ant2	13.7	23.69	Pass
NVNT	n20	5260	Sum	17.435	23.69	Pass
NVNT	n20	5280	Ant1	15.198	23.69	Pass
NVNT	n20	5280	Ant2	14.41	23.69	Pass
NVNT	n20	5280	Sum	17.832	23.69	Pass
NVNT	n20	5320	Ant1	14.571	23.69	Pass
NVNT	n20	5320	Ant2	14.981	23.69	Pass
NVNT	n20	5320	Sum	17.791	23.69	Pass
NVNT	n20	5745	Ant1	14.732	29.69	Pass
NVNT	n20	5745	Ant2	15.873	29.69	Pass
NVNT	n20	5745	Sum	18.35	29.69	Pass
NVNT	n20	5785	Ant1	14.279	23.69	Pass
NVNT	n20	5785	Ant2	15.674	23.69	Pass
NVNT	n20	5785	Sum	18.043	23.69	Pass
NVNT	n20	5825	Ant1	13.755	29.69	Pass
NVNT	n20	5825	Ant2	16.716	29.69	Pass
NVNT	n20	5825	Sum	18.493	29.69	Pass
SISO						
NVNT	n40	5190	Ant1	18.327	24	Pass
NVNT	n40	5230	Ant1	18.069	24	Pass
NVNT	n40	5270	Ant1	18.298	24	Pass
NVNT	n40	5310	Ant1	17.923	24	Pass
NVNT	n40	5755	Ant1	18.101	30	Pass
NVNT	n40	5795	Ant1	18.171	30	Pass
NVNT	n40	5190	Ant2	18.226	24	Pass
NVNT	n40	5230	Ant2	18.076	24	Pass
NVNT	n40	5270	Ant2	18.256	24	Pass
NVNT	n40	5310	Ant2	18.367	24	Pass
NVNT	n40	5755	Ant2	18.03	30	Pass
NVNT	n40	5795	Ant2	17.853	30	Pass
MIMO						
NVNT	n40	5190	Ant1	14.418	23.69	Pass
NVNT	n40	5190	Ant2	16.427	23.69	Pass
NVNT	n40	5190	Sum	18.548	23.69	Pass
NVNT	n40	5230	Ant1	14.922	23.69	Pass
NVNT	n40	5230	Ant2	15.022	23.69	Pass
NVNT	n40	5230	Sum	17.983	23.69	Pass
NVNT	n40	5270	Ant1	15.264	23.69	Pass
NVNT	n40	5270	Ant2	15.382	23.69	Pass

NVNT	n40	5270	Sum	18.334	23.69	Pass
NVNT	n40	5310	Ant1	15.427	23.69	Pass
NVNT	n40	5310	Ant2	15.513	23.69	Pass
NVNT	n40	5310	Sum	18.481	23.69	Pass
NVNT	n40	5755	Ant1	14.815	29.69	Pass
NVNT	n40	5755	Ant2	15.348	29.69	Pass
NVNT	n40	5755	Sum	18.1	29.69	Pass
NVNT	n40	5795	Ant1	15.358	29.69	Pass
NVNT	n40	5795	Ant2	15.021	29.69	Pass
NVNT	n40	5795	Sum	18.203	29.69	Pass

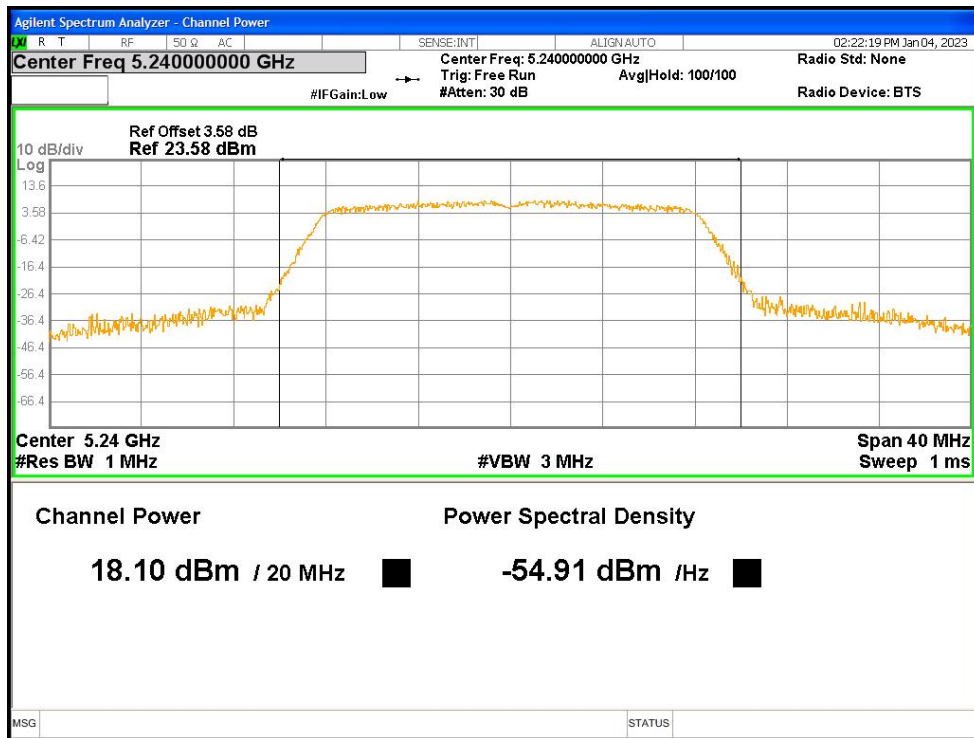
Power NVNT a 5180MHz Ant1



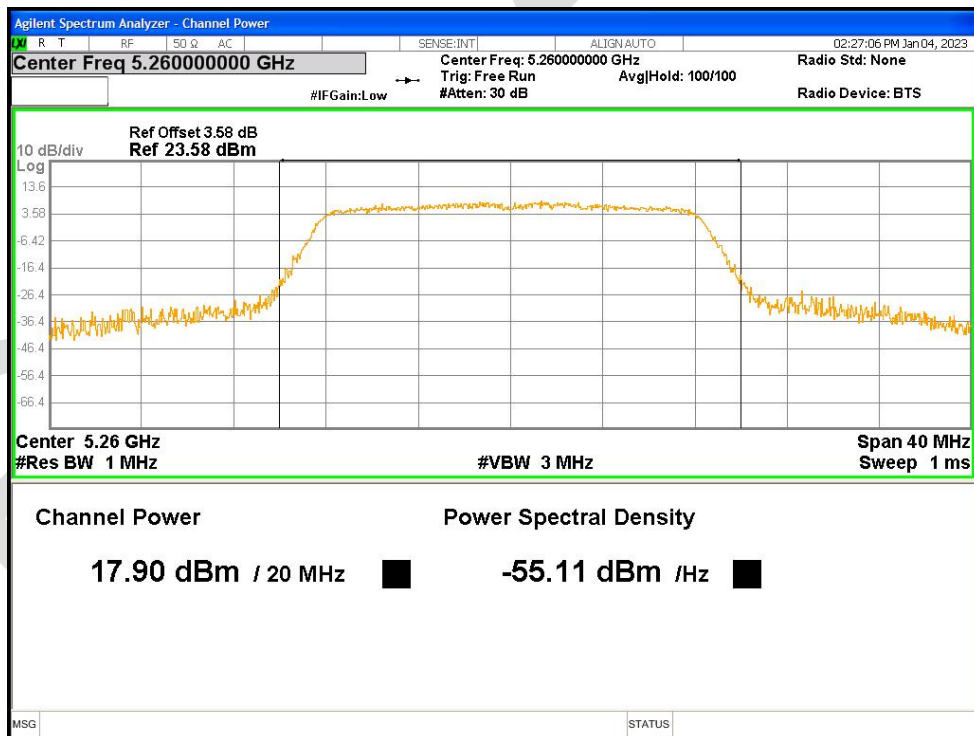
Power NVNT a 5200MHz Ant1



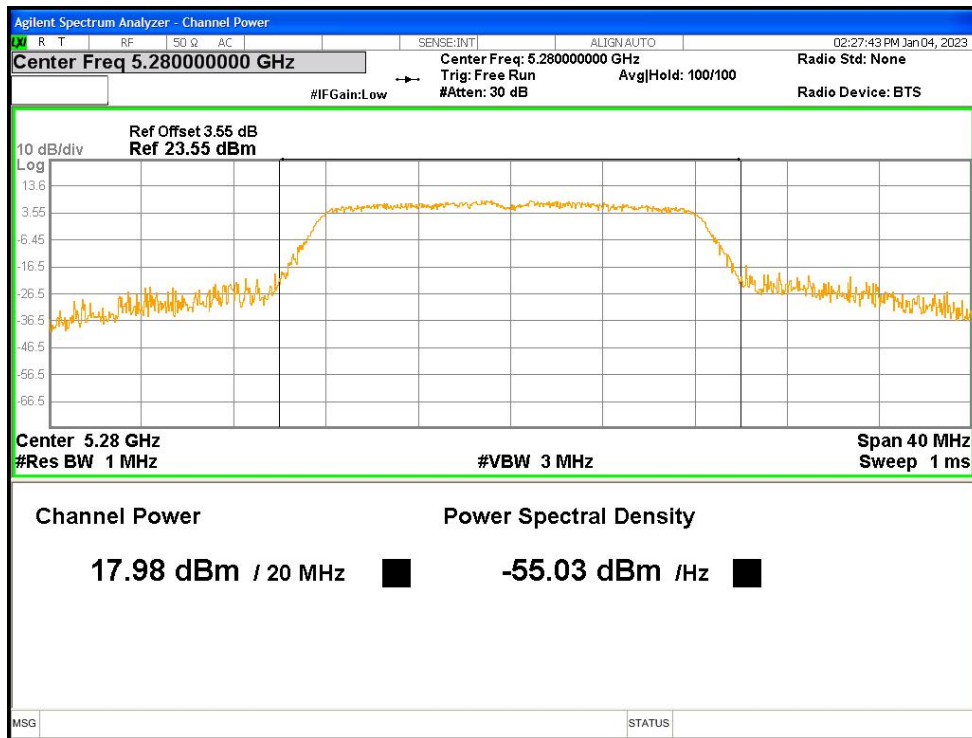
Power NVNT a 5240MHz Ant1



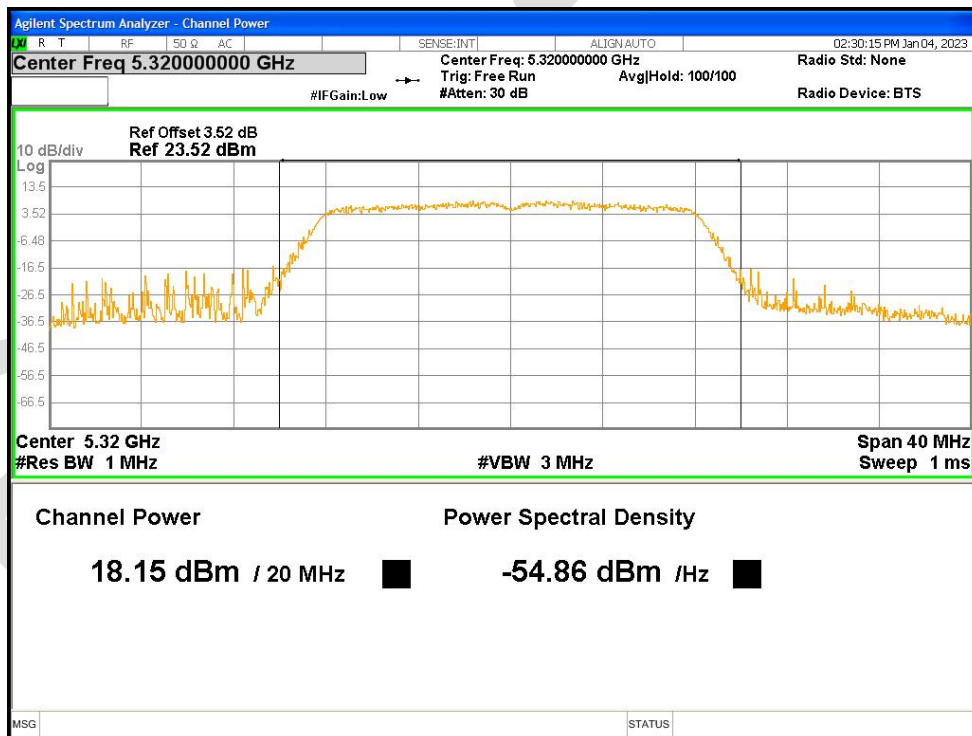
Power NVNT a 5260MHz Ant1



Power NVNT a 5280MHz Ant1



Power NVNT a 5320MHz Ant1



Power NVNT a 5745MHz Ant1