11A_Ant1_5745

11A_Ant2_5745

11A_Ant1_5785

11A_Ant2_5785

11A_Ant1_5825

11A_Ant2_5825

11N20SISO_Ant1_5745

11N20SISO_Ant2_5745

11N20SISO_Ant1_5785

11N20SISO_Ant2_5785

11N20SISO_Ant1_5825

11N20SISO_Ant2_5825

11N40SISO_Ant1_5755

11N40SISO_Ant2_5755

11N40SISO_Ant1_5795

11N40SISO_Ant2_5795

11AC20SISO_Ant1_5745

11AC20SISO_Ant2_5745

11AC20SISO_Ant1_5785

11AC20SISO_Ant2_5785

11AC20SISO_Ant1_5825

11AC20SISO_Ant2_5825

11AC40SISO_Ant1_5755

11AC40SISO_Ant2_5755

11AC40SISO_Ant1_5795

11AC40SISO_Ant2_5795

11AC80SISO_Ant1_5775

11AC80SISO_Ant2_5775

4.5 Peak Power Density

4.5.1 Applied procedures / Limit

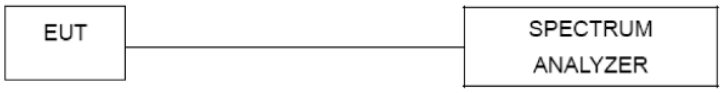
1.For the band 5.150-5.250 GHz, the peak power spectral density shall not exceed 11 dBm in any 1000KHz band.
2.For the band 5.725-5.850 GHz, the peak power spectral density shall not exceed 30 dBm in any 500KHz band. If transmitting antenna directional gain is greater than 6 dBi, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

4.5.2 Test procedure

1. The setting follows Method SA-1 of FCC KDB 789033 D02 General UNII Test Procedures New Rules v01 . For devices operating in the band, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, “provided that the measured power is integrated over the full reference bandwidth” to show the total power over the specified measurement bandwidth (*i.e.,* 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 KHz bandwidth, the following adjustments to the procedures apply:

   a) Set RBW ≥ 1/T, where T is defined in section II.B.I.a).
   b) Set VBW ≥ 3 RBW.
   c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add 10log(500kHz/RBW) to the measured result, whereas RBW (< 500 KHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
   d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add 10log(1MHz/RBW) to the measured result, whereas RBW (< 1 MHz) is the reduced resolution bandwidth of spectrum analyzer set during measurement.
   e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

4.5.3 TEST SETUP



4.5.4 Deviation from standard

No deviation.

4.5.5 Test results

TestMode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	4.69	≤11.00	PASS
	Ant2	5180	4.8	≤11.00	PASS
	Ant1	5220	4.77	≤11.00	PASS
	Ant2	5220	4.92	≤11.00	PASS
	Ant1	5240	4.68	≤11.00	PASS
	Ant2	5240	5.6	≤11.00	PASS
	Ant1	5745	-0.14	≤30.00	PASS
	Ant2	5745	-0.04	≤30.00	PASS
	Ant1	5785	-0.87	≤30.00	PASS
	Ant2	5785	-0.17	≤30.00	PASS
	Ant1	5825	-1.61	≤30.00	PASS
	Ant2	5825	-0.65	≤30.00	PASS
11N20SISO	Ant1	5180	4.79	≤11.00	PASS
	Ant2	5180	5.09	≤11.00	PASS
	Ant1	5220	4.25	≤11.00	PASS
	Ant2	5220	4.98	≤11.00	PASS
	Ant1	5240	4.47	≤11.00	PASS
	Ant2	5240	4.92	≤11.00	PASS
	Ant1	5745	-0.84	≤30.00	PASS
	Ant2	5745	0.01	≤30.00	PASS
	Ant1	5785	-1.02	≤30.00	PASS
	Ant2	5785	-0.09	≤30.00	PASS
	Ant1	5825	-1.85	≤30.00	PASS
	Ant2	5825	-0.88	≤30.00	PASS
11N40SISO	Ant1	5190	1.14	≤11.00	PASS
	Ant2	5190	1.75	≤11.00	PASS
	Ant1	5230	1.09	≤11.00	PASS
	Ant2	5230	1.72	≤11.00	PASS
	Ant1	5755	-3.63	≤30.00	PASS
	Ant2	5755	-3.62	≤30.00	PASS
	Ant1	5795	-4.35	≤30.00	PASS
	Ant2	5795	-3.2	≤30.00	PASS

11AC20SISO	Ant1	5180	4.49	≤11.00	PASS
	Ant2	5180	5.18	≤11.00	PASS
	Ant1	5220	4.07	≤11.00	PASS
	Ant2	5220	4.93	≤11.00	PASS
	Ant1	5240	4.3	≤11.00	PASS
	Ant2	5240	4.87	≤11.00	PASS
	Ant1	5745	-1.05	≤30.00	PASS
	Ant2	5745	-0.42	≤30.00	PASS
	Ant1	5785	2.79	≤30.00	PASS
	Ant2	5785	-0.17	≤30.00	PASS
	Ant1	5825	-2	≤30.00	PASS
	Ant2	5825	-0.7	≤30.00	PASS
11AC40SISO	Ant1	5190	1.05	≤11.00	PASS
	Ant2	5190	1.61	≤11.00	PASS
	Ant1	5230	1.05	≤11.00	PASS
	Ant2	5230	2.23	≤11.00	PASS
	Ant1	5755	-3.82	≤30.00	PASS
	Ant2	5755	-3.12	≤30.00	PASS
	Ant1	5795	-4.01	≤30.00	PASS
	Ant2	5795	-3.24	≤30.00	PASS
11AC80SISO	Ant1	5210	-1.37	≤11.00	PASS
	Ant2	5210	-0.6	≤11.00	PASS
	Ant1	5775	-6.4	≤30.00	PASS
	Ant2	5775	-5.69	≤30.00	PASS

Note：1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.
2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

11A_Ant1_5180

11A_Ant2_5180

11A_Ant1_5220

11A_Ant2_5220

11A_Ant1_5240

11A_Ant2_5240

11A_Ant1_5745

11A_Ant2_5745

11A_Ant1_5785

11A_Ant2_5785

11A_Ant1_5825

11A_Ant2_5825

11N20SISO_Ant1_5180

11N20SISO_Ant2_5180

11N20SISO_Ant1_5220

11N20SISO_Ant2_5220

11N20SISO_Ant1_5240

11N20SISO_Ant2_5240

11N20SISO_Ant1_5745

11N20SISO_Ant2_5745

11N20SISO_Ant1_5785

11N20SISO_Ant2_5785

11N20SISO_Ant1_5825

11N20SISO_Ant2_5825

11N40SISO_Ant1_5190

11N40SISO_Ant2_5190

11N40SISO_Ant1_5230

11N40SISO_Ant2_5230

11N40SISO_Ant1_5755

11N40SISO_Ant2_5755

11N40SISO_Ant1_5795

11N40SISO_Ant2_5795

11AC20SISO_Ant1_5180

11AC20SISO_Ant2_5180

11AC20SISO_Ant1_5220

11AC20SISO_Ant2_5220

11AC20SISO_Ant1_5240

11AC20SISO_Ant2_5240

11AC20SISO_Ant1_5745

11AC20SISO_Ant2_5745

11AC20SISO_Ant1_5785

11AC20SISO_Ant2_5785

11AC20SISO_Ant1_5825

11AC20SISO_Ant2_5825

11AC40SISO_Ant1_5190

11AC40SISO_Ant2_5190

11AC40SISO_Ant1_5230

11AC40SISO_Ant2_5230

11AC40SISO_Ant1_5755

11AC40SISO_Ant2_5755

11AC40SISO_Ant1_5795

11AC40SISO_Ant2_5795

11AC80SISO_Ant1_5210

11AC80SISO_Ant2_5210

11AC80SISO_Ant1_5775

11AC80SISO_Ant2_5775

4.6 Maximum Peak Output Power

4.6.1 Applied procedures / Limit

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

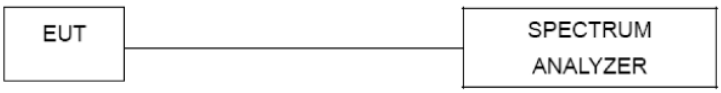
FCC Part15 (15.407) , Subpart E

Section	Test Item	Limit	Frequency Range (MHz)	Result
15.407(E) (ii)/(3)	Peak Output Power	0.25 watt or 23.9794dBm	5150-5250	PASS
		1 watt or 30dBm	5725-5850	PASS

4.6.2 Test procedure

KDB 789033 D02v01r01 - Section E) 3) b) Method PM-G
The EUT was directly connected to the spectrum .
Average power measurements were perform only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter. The trace was averaged over 100 traces to obtain the final measured average power.

4.6.3 Test Setup



4.6.4 Deviation from standard

No deviation.

4.6.5 Test results

Test Mode	Antenna	Frequency[MHz]	Set Power	Channel Powert [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	---	14.02	97.22	0.12	14.14	≤23.98	PASS
	Ant2	5180	---	14.09	97.20	0.12	14.21	≤23.98	PASS
	Ant1	5220	---	13.87	96.53	0.15	14.02	≤23.98	PASS
	Ant2	5220	---	14.45	97.22	0.12	14.57	≤23.98	PASS
	Ant1	5240	---	14.33	97.22	0.12	14.45	≤23.98	PASS
	Ant2	5240	---	14.41	97.22	0.12	14.53	≤23.98	PASS
	Ant1	5745	---	11.37	97.22	0.12	11.49	≤30.00	PASS
	Ant2	5745	---	11.56	97.22	0.12	11.68	≤30.00	PASS
	Ant1	5785	---	11.02	97.20	0.12	11.14	≤30.00	PASS
	Ant2	5785	---	11.76	97.20	0.12	11.88	≤30.00	PASS
	Ant1	5825	---	10.16	97.22	0.12	10.28	≤30.00	PASS
	Ant2	5825	---	10.93	97.22	0.12	11.05	≤30.00	PASS
11N20SISO	Ant1	5180	---	14.23	97.01	0.13	14.36	≤23.98	PASS
	Ant2	5180	---	14.53	97.04	0.13	14.66	≤23.98	PASS
	MIMO	5180	---	---	---	---	17.52	≤23.98	PASS
	Ant1	5220	---	13.69	96.30	0.16	13.85	≤23.98	PASS
	Ant2	5220	---	14.41	97.01	0.13	14.54	≤23.98	PASS
	MIMO	5220	---	---	---	---	17.22	≤23.98	PASS
	Ant1	5240	---	14.22	96.30	0.16	14.38	≤23.98	PASS
	Ant2	5240	---	14.21	97.01	0.13	14.34	≤23.98	PASS
	MIMO	5240	---	---	---	---	17.37	≤23.98	PASS
	Ant1	5745	---	11.08	97.01	0.13	11.21	≤30.00	PASS
	Ant2	5745	---	11.51	97.01	0.13	11.64	≤30.00	PASS
	MIMO	5745	---	---	---	---	14.44	≤30.00	PASS
	Ant1	5785	---	10.88	96.30	0.16	11.04	≤30.00	PASS
	Ant2	5785	---	11.74	97.04	0.13	11.87	≤30.00	PASS
	MIMO	5785	---	---	---	---	14.49	≤30.00	PASS
	Ant1	5825	---	9.96	97.04	0.13	10.09	≤30.00	PASS
	Ant2	5825	---	11.01	97.04	0.13	11.14	≤30.00	PASS
	MIMO	5825	---	---	---	---	13.66	≤30.00	PASS
11N40SISO	Ant1	5190	---	13.41	94.20	0.26	13.67	≤23.98	PASS
	Ant2	5190	---	13.92	94.20	0.26	14.18	≤23.98	PASS

	MIMO	5190	---	---	---	---	16.94	≤23.98	PASS
	Ant1	5230	---	13.41	92.75	0.33	13.74	≤23.98	PASS
	Ant2	5230	---	13.83	94.20	0.26	14.09	≤23.98	PASS
	MIMO	5230	---	---	---	---	16.93	≤23.98	PASS
	Ant1	5755	---	11.03	94.20	0.26	11.29	≤30.00	PASS
	Ant2	5755	---	11.51	94.20	0.26	11.77	≤30.00	PASS
	MIMO	5755	---	---	---	---	14.55	≤30.00	PASS
	Ant1	5795	---	10.81	94.20	0.26	11.07	≤30.00	PASS
	Ant2	5795	---	11.70	94.20	0.26	11.96	≤30.00	PASS
	MIMO	5795	---	---	---	---	14.55	≤30.00	PASS
11AC20 SISO	Ant1	5180	---	14.15	97.06	0.13	14.28	≤23.98	PASS
	Ant2	5180	---	14.41	97.04	0.13	14.54	≤23.98	PASS
	MIMO	5180	---	---	---	---	17.42	≤23.98	PASS
	Ant1	5220	---	13.63	97.06	0.13	13.76	≤23.98	PASS
	Ant2	5220	---	14.42	96.32	0.16	14.58	≤23.98	PASS
	MIMO	5220	---	---	---	---	17.20	≤23.98	PASS
	Ant1	5240	---	14.19	97.04	0.13	14.32	≤23.98	PASS
	Ant2	5240	---	14.14	97.06	0.13	14.27	≤23.98	PASS
	MIMO	5240	---	---	---	---	17.31	≤23.98	PASS
	Ant1	5745	---	11.05	97.06	0.13	11.18	≤30.00	PASS
	Ant2	5745	---	11.42	97.06	0.13	11.55	≤30.00	PASS
	MIMO	5745	---	---	---	---	14.38	≤30.00	PASS
	Ant1	5785	---	11.08	97.06	0.13	11.21	≤30.00	PASS
	Ant2	5785	---	11.90	97.06	0.13	12.03	≤30.00	PASS
	MIMO	5785	---	---	---	---	14.65	≤30.00	PASS
	Ant1	5825	---	10.10	97.06	0.13	10.23	≤30.00	PASS
	Ant2	5825	---	11.10	96.32	0.16	11.26	≤30.00	PASS
	MIMO	5825	---	---	---	---	13.79	≤30.00	PASS
11AC40 SISO	Ant1	5190	---	13.33	92.86	0.32	13.65	≤23.98	PASS
	Ant2	5190	---	13.67	94.29	0.26	13.93	≤23.98	PASS
	MIMO	5190	---	---	---	---	16.80	≤23.98	PASS
	Ant1	5230	---	13.60	94.29	0.26	13.86	≤23.98	PASS
	Ant2	5230	---	14.19	94.29	0.26	14.45	≤23.98	PASS
	MIMO	5230	---	---	---	---	17.18	≤23.98	PASS
	Ant1	5755	---	11.22	94.29	0.26	11.48	≤30.00	PASS
	Ant2	5755	---	11.82	92.86	0.32	12.14	≤30.00	PASS
	MIMO	5755	---	---	---	---	14.83	≤30.00	PASS
	Ant1	5795	---	10.92	94.29	0.26	11.18	≤30.00	PASS

	Ant2	5795	---	11.91	92.86	0.32	12.23	≤30.00	PASS
	MIMO	5795	---	---	---	---	14.75	≤30.00	PASS
11AC80 SISO	Ant1	5210	---	13.29	89.19	0.50	13.79	≤23.98	PASS
	Ant2	5210	---	14.31	88.89	0.51	14.82	≤23.98	PASS
	MIMO	5210	---	---	---	---	17.35	≤23.98	PASS
	Ant1	5775	---	11.45	88.89	0.51	11.96	≤30.00	PASS
	Ant2	5775	---	12.02	88.89	0.51	12.53	≤30.00	PASS
	MIMO	5775	---	---	---	---	15.26	≤30.00	PASS

Note：The Duty Cycle Factor is compensated in the graph.

11A_Ant1_5180

11A_Ant2_5180

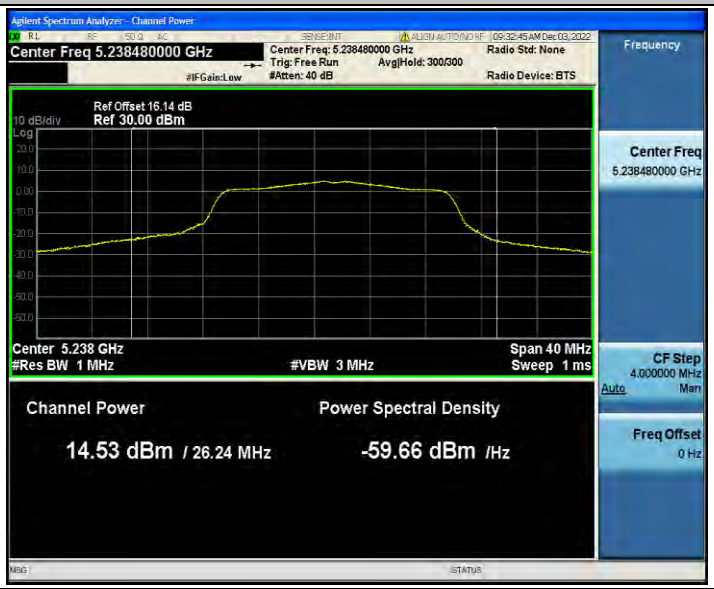
Agilent Spectrum Analyzer - Channel Power
Center Freq 5.179880000 GHz
Center Freq: 5.179880000 GHz
Trig: Free Run
Avg|Hold: 300/300
#Atten: 40 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 15.83 dB
10 dB/div
Ref 30.00 dBm
Center Freq
5.179880000 GHz
Center 5.18 GHz
#Res BW 1 MHz
#VBW 3 MHz
Span 40 MHz
Sweep 1 ms
CF Step
4.000000 MHz
Auto
Man
Channel Power
14.21 dBm / 20.8 MHz
Power Spectral Density
-58.97 dBm /Hz
Freq Offset
0 Hz

11A_Ant1_5220

11A_Ant2_5220

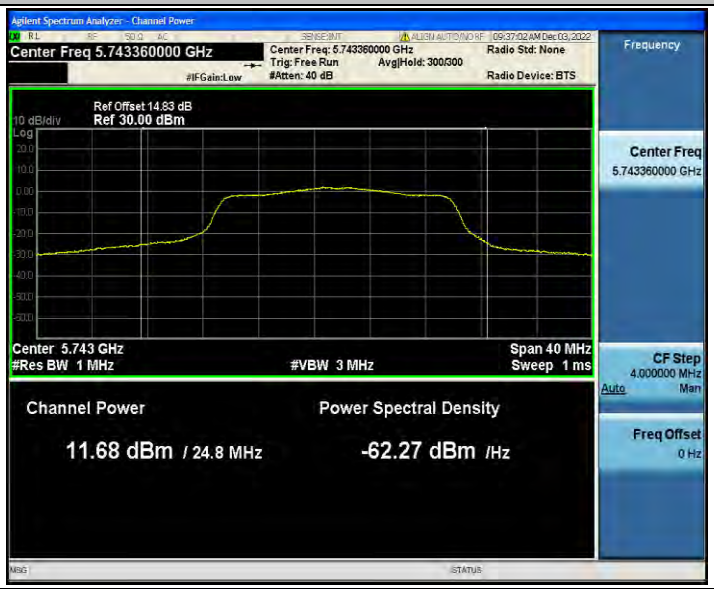
11A_Ant1_5240

11A_Ant2_5240



11A_Ant1_5745

11A_Ant2_5745

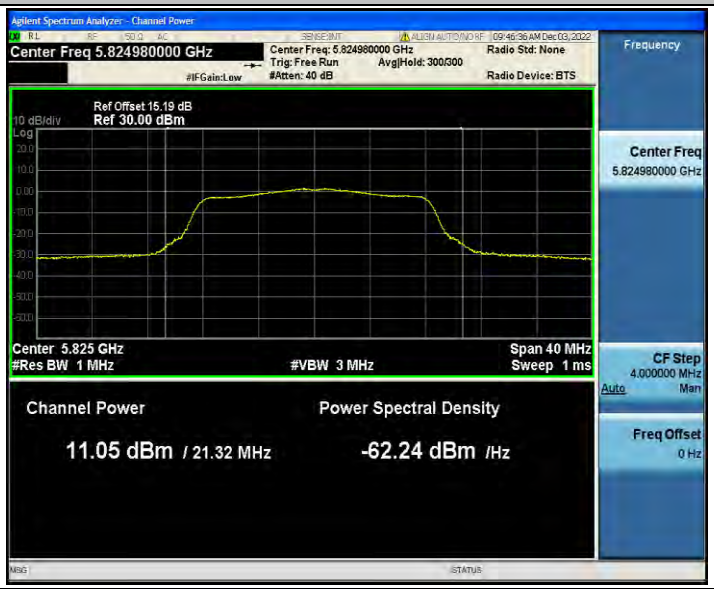


11A_Ant1_5785

11A_Ant2_5785

11A_Ant1_5825

11A_Ant2_5825

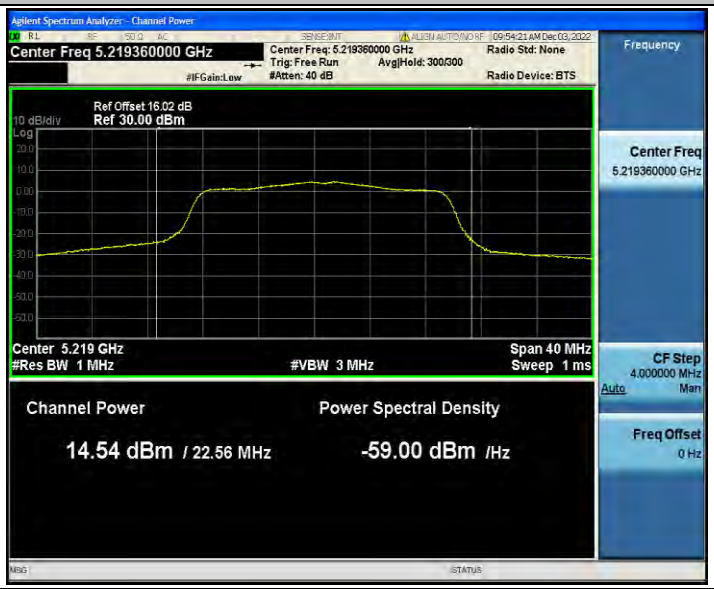


11N20SISO_Ant1_5180

11N20SISO_Ant2_5180

11N20SISO_Ant1_5220

11N20SISO_Ant2_5220

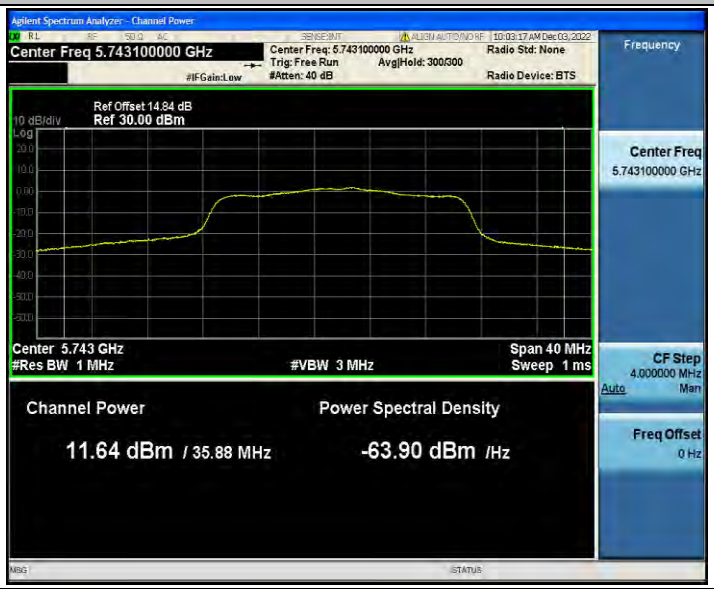


11N20SISO_Ant1_5240

11N20SISO_Ant2_5240

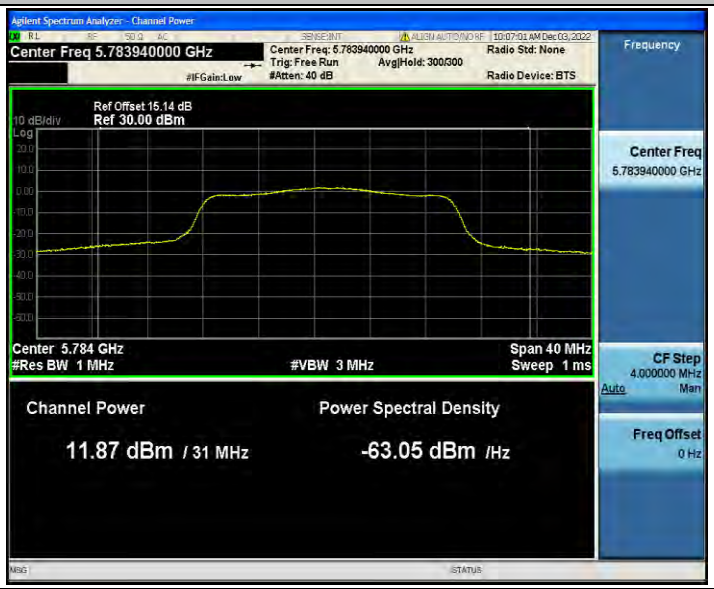
11N20SISO_Ant1_5745

11N20SISO_Ant2_5745

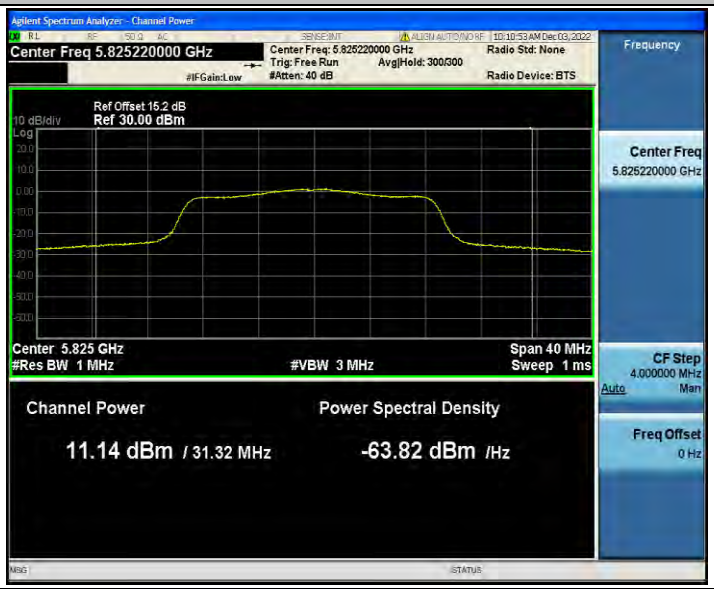


11N20SISO_Ant1_5785

11N20SISO_Ant2_5785

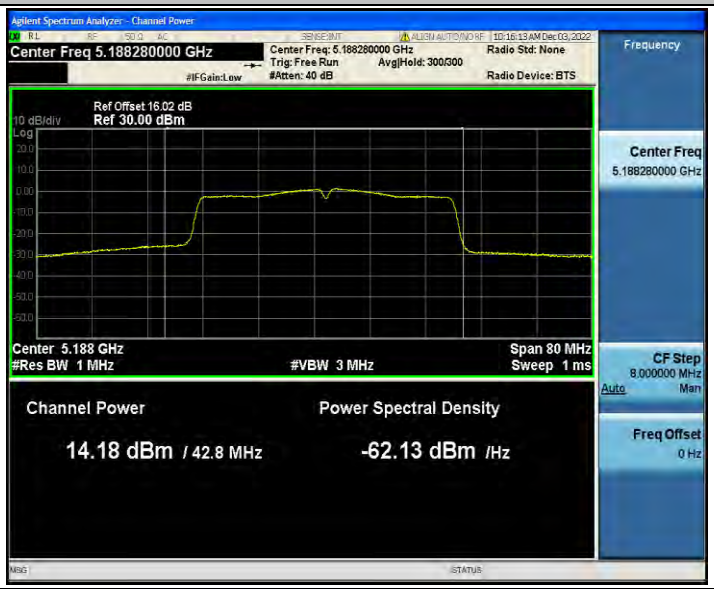


11N20SISO_Ant1_5825

11N20SISO_Ant2_5825


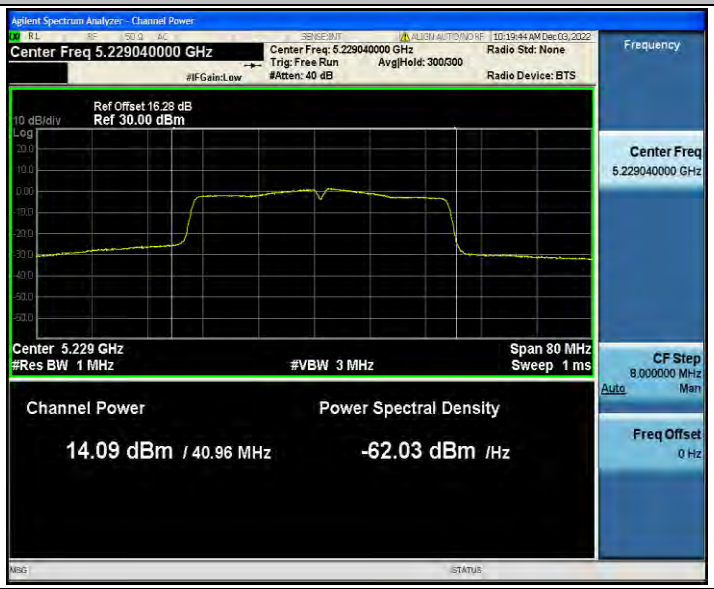
11N40SISO_Ant1_5190

11N40SISO_Ant2_5190



11N40SISO_Ant1_5230

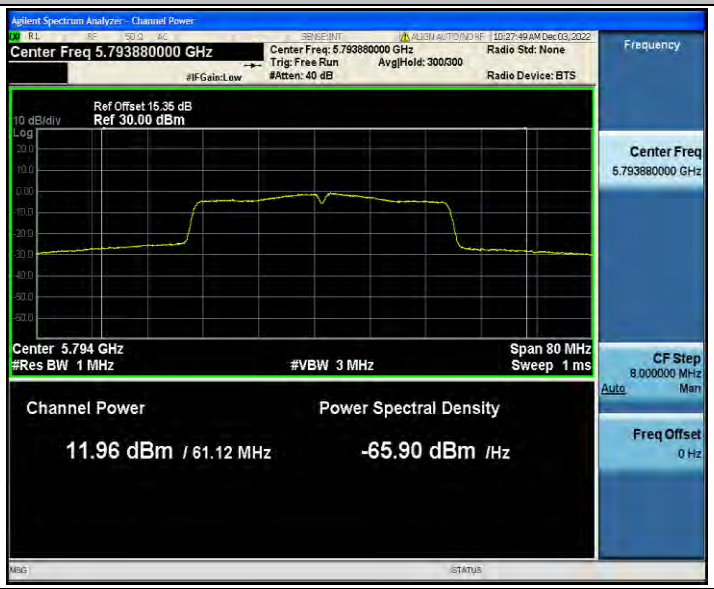
11N40SISO_Ant2_5230



11N40SISO_Ant1_5755

11N40SISO_Ant2_5755

11N40SISO_Ant1_5795

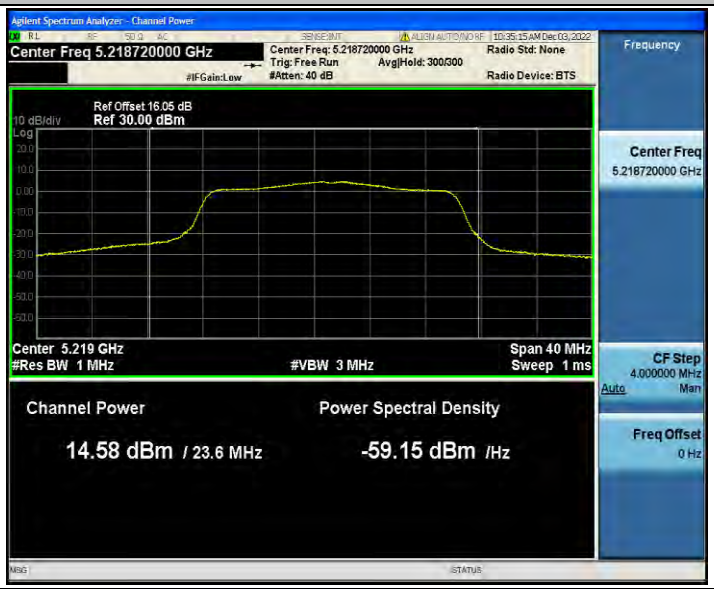
11N40SISO_Ant2_5795


11AC20SISO_Ant1_5180

11AC20SISO_Ant2_5180

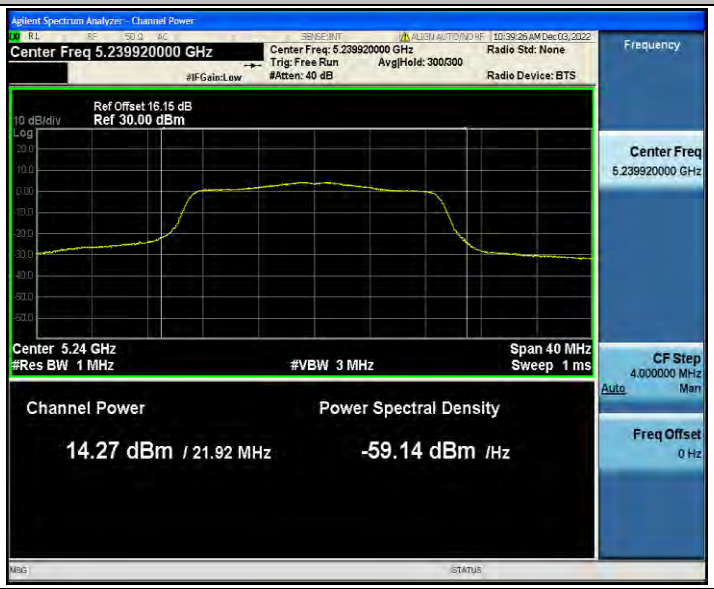
11AC20SISO_Ant1_5220

11AC20SISO_Ant2_5220



11AC20SISO_Ant1_5240

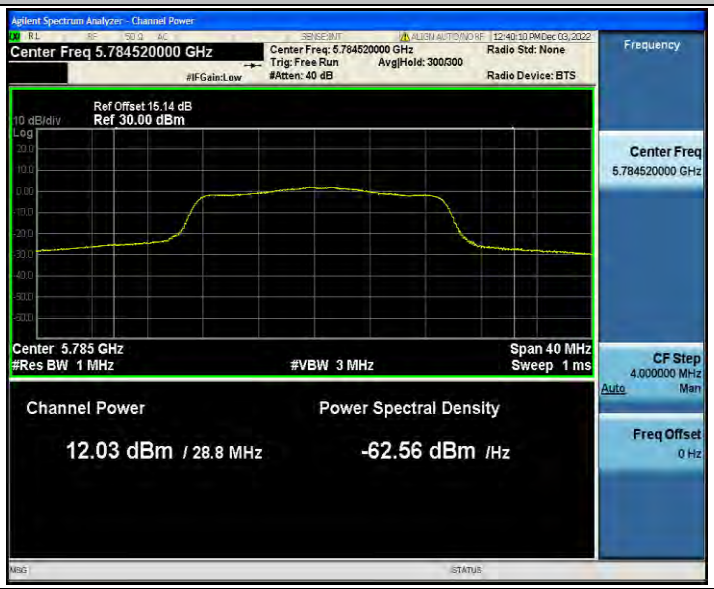
11AC20SISO_Ant2_5240



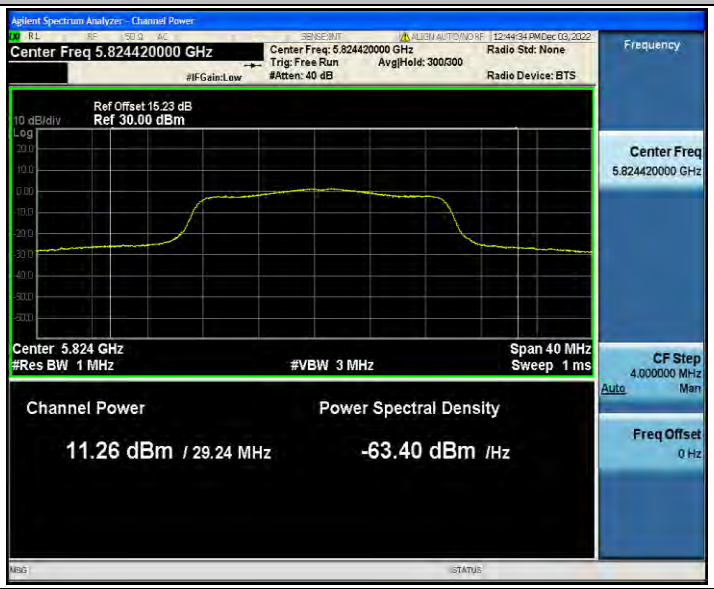
11AC20SISO_Ant1_5745

11AC20SISO_Ant2_5745

11AC20SISO_Ant1_5785

11AC20SISO_Ant2_5785


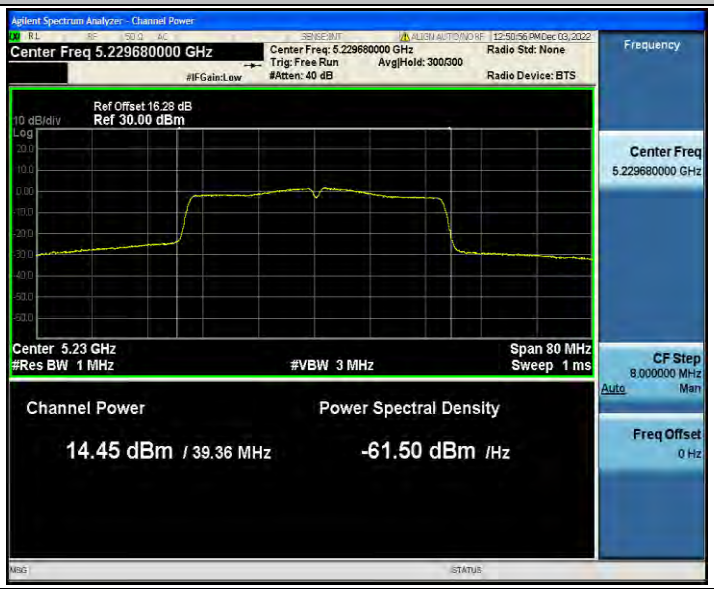
11AC20SISO_Ant1_5825

11AC20SISO_Ant2_5825


11AC40SISO_Ant1_5190

11AC40SISO_Ant2_5190

11AC40SISO_Ant1_5230

11AC40SISO_Ant2_5230


11AC40SISO_Ant1_5755

11AC40SISO_Ant2_5755

11AC40SISO_Ant1_5795

11AC40SISO_Ant2_5795

11AC80SISO_Ant1_5210

11AC80SISO_Ant2_5210

11AC80SISO_Ant1_5775

11AC80SISO_Ant2_5775

4.7 FREQUENCY STABILITY MEASUREMENT

4.7.1 Applied procedures / Limit

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an Emission is maintained within the band of operation under all conditions of normal operation as specified in the user‟s manual.

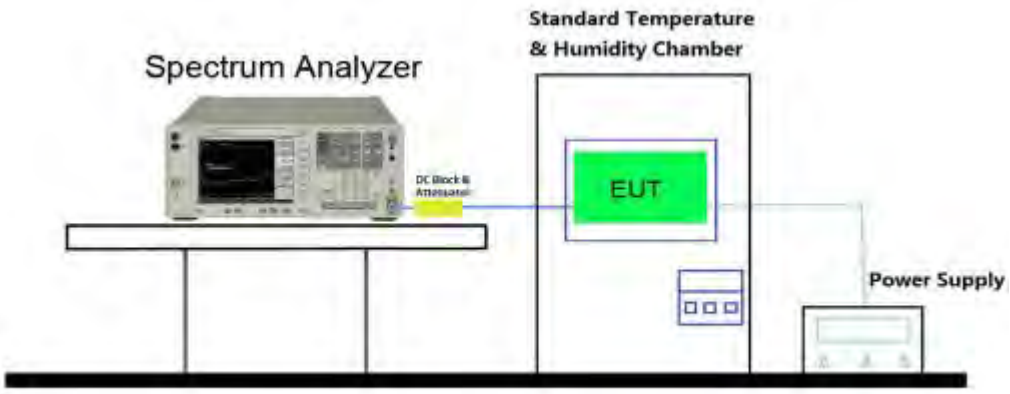
4.7.2 Test procedure

1. The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20oC operating frequency as reference frequency. Turn EUT off and set the chamber temperature to –20℃. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10℃ increased per stage until the highest temperature of +50℃ reached.

4.7.3 Deviation from standard

No deviation.

4.7.4 Test setup



4.7.5 Test results

Voltage								
TestMode	Antenna	Frequency [MHz]	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5180	NV	NT	-23000.00	-4.440154	20	PASS
			LV	NT	-26000.00	-5.019305	20	PASS
			HV	NT	-28000.00	-5.405405	20	PASS
	Ant2	5180	NV	NT	-22000.00	-4.247104	20	PASS
			LV	NT	-23000.00	-4.440154	20	PASS
			HV	NT	-24000.00	-4.633205	20	PASS
	Ant1	5220	NV	NT	-27000.00	-5.172414	20	PASS
	Ant2	5220	NV	NT	-32000.00	-6.130268	20	PASS
			LV	NT	-32000.00	-6.130268	20	PASS
			HV	NT	-32000.00	-6.130268	20	PASS
	Ant1	5240	NV	NT	-33000.00	-6.297710	20	PASS
			LV	NT	-33000.00	-6.297710	20	PASS
			HV	NT	-33000.00	-6.297710	20	PASS
	Ant2	5240	NV	NT	-33000.00	-6.297710	20	PASS
			LV	NT	-32000.00	-6.106870	20	PASS
			HV	NT	-32000.00	-6.106870	20	PASS
	Ant1	5745	NV	NT	-35000.00	-6.092254	20	PASS
			LV	NT	-35000.00	-6.092254	20	PASS
			HV	NT	-35000.00	-6.092254	20	PASS
	Ant2	5745	NV	NT	-35000.00	-6.092254	20	PASS

			LV	NT	-35000.00	-6.092254	20	PASS
			HV	NT	-35000.00	-6.092254	20	PASS
	Ant1	5785	NV	NT	-35000.00	-6.050130	20	PASS
			LV	NT	-34000.00	-5.877269	20	PASS
			HV	NT	-34000.00	-5.877269	20	PASS
	Ant2	5785	NV	NT	-34000.00	-5.877269	20	PASS
			LV	NT	-33000.00	-5.704408	20	PASS
			HV	NT	-33000.00	-5.704408	20	PASS
	Ant1	5825	NV	NT	-35000.00	-6.008584	20	PASS
			LV	NT	-34000.00	-5.836910	20	PASS
			HV	NT	-34000.00	-5.836910	20	PASS
	Ant2	5825	NV	NT	-35000.00	-6.008584	20	PASS
			LV	NT	-34000.00	-5.836910	20	PASS
			HV	NT	-34000.00	-5.836910	20	PASS
11N40SISO	Ant1	5190	NV	NT	-17000.00	-3.275530	20	PASS
			LV	NT	-18000.00	-3.468208	20	PASS
			HV	NT	-20000.00	-3.853565	20	PASS
	Ant2	5190	NV	NT	-33000.00	-6.358382	20	PASS
			LV	NT	-32000.00	-6.165703	20	PASS
			HV	NT	-32000.00	-6.165703	20	PASS
	Ant1	5230	NV	NT	-32000.00	-6.118547	20	PASS
			LV	NT	-32000.00	-6.118547	20	PASS
			HV	NT	-32000.00	-6.118547	20	PASS
	Ant2	5230	NV	NT	-33000.00	-6.309751	20	PASS
			LV	NT	-32000.00	-6.118547	20	PASS
			HV	NT	-32000.00	-6.118547	20	PASS
	Ant1	5755	NV	NT	-35000.00	-6.081668	20	PASS
			LV	NT	-35000.00	-6.081668	20	PASS
			HV	NT	-35000.00	-6.081668	20	PASS
	Ant2	5755	NV	NT	-35000.00	-6.081668	20	PASS
			LV	NT	-34000.00	-5.907906	20	PASS
			HV	NT	-33000.00	-5.734144	20	PASS
	Ant1	5795	NV	NT	-35000.00	-6.039689	20	PASS
			LV	NT	-34000.00	-5.867127	20	PASS
			HV	NT	-34000.00	-5.867127	20	PASS
	Ant2	5795	NV	NT	-33000.00	-5.694564	20	PASS
			LV	NT	-33000.00	-5.694564	20	PASS
			HV	NT	-33000.00	-5.694564	20	PASS

11AC80SISO	Ant1	5210	NV	NT	-32000.00	-6.142035	20	PASS
			LV	NT	-33000.00	-6.333973	20	PASS
			HV	NT	-32000.00	-6.142035	20	PASS
	Ant2	5210	NV	NT	-33000.00	-6.333973	20	PASS
			LV	NT	-32000.00	-6.142035	20	PASS
			HV	NT	-32000.00	-6.142035	20	PASS
	Ant1	5775	NV	NT	-35000.00	-6.060606	20	PASS
			LV	NT	-35000.00	-6.060606	20	PASS
			HV	NT	-35000.00	-6.060606	20	PASS
	Ant2	5775	NV	NT	-34000.00	-5.887446	20	PASS
			LV	NT	-34000.00	-5.887446	20	PASS
			HV	NT	-34000.00	-5.887446	20	PASS

Temperature								
TestMode	Antenna	Frequency [MHz]	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5180	NV	-30	-28000.00	-5.405405	20	PASS
			NV	-20	-29000.00	-5.598456	20	PASS
			NV	-10	-29000.00	-5.598456	20	PASS
			NV	0	-30000.00	-5.791506	20	PASS
			NV	10	-30000.00	-5.791506	20	PASS
			NV	20	-30000.00	-5.791506	20	PASS
			NV	30	-30000.00	-5.791506	20	PASS
			NV	40	-30000.00	-5.791506	20	PASS
			NV	50	-30000.00	-5.791506	20	PASS
	Ant2	5180	NV	-30	-24000.00	-4.633205	20	PASS
			NV	-20	-24000.00	-4.633205	20	PASS
			NV	-10	-25000.00	-4.826255	20	PASS
			NV	0	-25000.00	-4.826255	20	PASS
			NV	10	-25000.00	-4.826255	20	PASS
			NV	20	-25000.00	-4.826255	20	PASS
			NV	30	-25000.00	-4.826255	20	PASS
			NV	40	-25000.00	-4.826255	20	PASS
			NV	50	-26000.00	-5.019305	20	PASS
		5220	NV	-30	-32000.00	-6.130268	20	PASS
			NV	-20	-32000.00	-6.130268	20	PASS
			NV	-10	-32000.00	-6.130268	20	PASS
			NV	0	-32000.00	-6.130268	20	PASS

			NV	10	-32000.00	-6.130268	20	PASS
			NV	20	-32000.00	-6.130268	20	PASS
			NV	30	-32000.00	-6.130268	20	PASS
			NV	40	-32000.00	-6.130268	20	PASS
			NV	50	-32000.00	-6.130268	20	PASS
	Ant1	5240	NV	-30	-33000.00	-6.297710	20	PASS
			NV	-20	-33000.00	-6.297710	20	PASS
			NV	-10	-32000.00	-6.106870	20	PASS
			NV	0	-33000.00	-6.297710	20	PASS
			NV	10	-32000.00	-6.106870	20	PASS
			NV	20	-32000.00	-6.106870	20	PASS
			NV	30	-33000.00	-6.297710	20	PASS
			NV	40	-33000.00	-6.297710	20	PASS
			NV	50	-33000.00	-6.297710	20	PASS
	Ant2	5240	NV	-30	-32000.00	-6.106870	20	PASS
			NV	-20	-32000.00	-6.106870	20	PASS
			NV	-10	-32000.00	-6.106870	20	PASS
			NV	0	-32000.00	-6.106870	20	PASS
			NV	10	-32000.00	-6.106870	20	PASS
			NV	20	-32000.00	-6.106870	20	PASS
			NV	30	-32000.00	-6.106870	20	PASS
			NV	40	-32000.00	-6.106870	20	PASS
			NV	50	-32000.00	-6.106870	20	PASS
	Ant1	5745	NV	-30	-35000.00	-6.092254	20	PASS
			NV	-20	-35000.00	-6.092254	20	PASS
			NV	-10	-35000.00	-6.092254	20	PASS
			NV	0	-34000.00	-5.918190	20	PASS
			NV	10	-34000.00	-5.918190	20	PASS
			NV	20	-34000.00	-5.918190	20	PASS
			NV	30	-34000.00	-5.918190	20	PASS
			NV	40	-34000.00	-5.918190	20	PASS
			NV	50	-34000.00	-5.918190	20	PASS
	Ant2	5745	NV	-30	-34000.00	-5.918190	20	PASS
			NV	-20	-34000.00	-5.918190	20	PASS
			NV	-10	-34000.00	-5.918190	20	PASS
			NV	0	-34000.00	-5.918190	20	PASS
			NV	10	-34000.00	-5.918190	20	PASS
			NV	20	-34000.00	-5.918190	20	PASS

			NV	30	-34000.00	-5.918190	20	PASS
			NV	40	-33000.00	-5.744125	20	PASS
			NV	50	-33000.00	-5.744125	20	PASS
	Ant1	5785	NV	-30	-33000.00	-5.704408	20	PASS
			NV	-20	-33000.00	-5.704408	20	PASS
			NV	-10	-33000.00	-5.704408	20	PASS
			NV	0	-32000.00	-5.531547	20	PASS
			NV	10	-32000.00	-5.531547	20	PASS
			NV	20	-32000.00	-5.531547	20	PASS
			NV	30	-32000.00	-5.531547	20	PASS
			NV	40	-32000.00	-5.531547	20	PASS
			NV	50	-32000.00	-5.531547	20	PASS
	Ant2	5785	NV	-30	-32000.00	-5.531547	20	PASS
			NV	-20	-32000.00	-5.531547	20	PASS
			NV	-10	-32000.00	-5.531547	20	PASS
			NV	0	-32000.00	-5.531547	20	PASS
			NV	10	-32000.00	-5.531547	20	PASS
			NV	20	-32000.00	-5.531547	20	PASS
			NV	30	-31000.00	-5.358686	20	PASS
			NV	40	-31000.00	-5.358686	20	PASS
			NV	50	-31000.00	-5.358686	20	PASS
	Ant1	5825	NV	-30	-34000.00	-5.836910	20	PASS
			NV	-20	-33000.00	-5.665236	20	PASS
			NV	-10	-33000.00	-5.665236	20	PASS
			NV	0	-33000.00	-5.665236	20	PASS
			NV	10	-33000.00	-5.665236	20	PASS
			NV	20	-33000.00	-5.665236	20	PASS
			NV	30	-33000.00	-5.665236	20	PASS
			NV	40	-33000.00	-5.665236	20	PASS
			NV	50	-33000.00	-5.665236	20	PASS
	Ant2	5825	NV	-30	-34000.00	-5.836910	20	PASS
			NV	-20	-33000.00	-5.665236	20	PASS
			NV	-10	-33000.00	-5.665236	20	PASS
			NV	0	-33000.00	-5.665236	20	PASS
			NV	10	-33000.00	-5.665236	20	PASS
			NV	20	-33000.00	-5.665236	20	PASS
			NV	30	-33000.00	-5.665236	20	PASS
			NV	40	-33000.00	-5.665236	20	PASS

			NV	50	-33000.00	-5.665236	20	PASS
11N40SISO	Ant1	5190	NV	-30	-21000.00	-4.046243	20	PASS
			NV	-20	-21000.00	-4.046243	20	PASS
			NV	-10	-23000.00	-4.431599	20	PASS
			NV	0	-23000.00	-4.431599	20	PASS
			NV	10	-23000.00	-4.431599	20	PASS
			NV	20	-23000.00	-4.431599	20	PASS
			NV	30	-23000.00	-4.431599	20	PASS
			NV	40	-24000.00	-4.624277	20	PASS
			NV	50	-24000.00	-4.624277	20	PASS
	Ant2	5190	NV	-30	-32000.00	-6.165703	20	PASS
			NV	-20	-32000.00	-6.165703	20	PASS
			NV	-10	-32000.00	-6.165703	20	PASS
			NV	0	-31000.00	-5.973025	20	PASS
			NV	10	-31000.00	-5.973025	20	PASS
			NV	20	-31000.00	-5.973025	20	PASS
			NV	30	-31000.00	-5.973025	20	PASS
			NV	40	-31000.00	-5.973025	20	PASS
			NV	50	-31000.00	-5.973025	20	PASS
	Ant1	5230	NV	-30	-32000.00	-6.118547	20	PASS
			NV	-20	-32000.00	-6.118547	20	PASS
			NV	-10	-32000.00	-6.118547	20	PASS
			NV	0	-32000.00	-6.118547	20	PASS
			NV	10	-32000.00	-6.118547	20	PASS
			NV	20	-32000.00	-6.118547	20	PASS
			NV	30	-32000.00	-6.118547	20	PASS
			NV	40	-32000.00	-6.118547	20	PASS
			NV	50	-32000.00	-6.118547	20	PASS
	Ant2	5230	NV	-30	-32000.00	-6.118547	20	PASS
			NV	-20	-32000.00	-6.118547	20	PASS
			NV	-10	-32000.00	-6.118547	20	PASS
			NV	0	-32000.00	-6.118547	20	PASS
			NV	10	-32000.00	-6.118547	20	PASS
			NV	20	-32000.00	-6.118547	20	PASS
			NV	30	-32000.00	-6.118547	20	PASS
			NV	40	-32000.00	-6.118547	20	PASS
			NV	50	-31000.00	-5.927342	20	PASS
	Ant1	5755	NV	-30	-35000.00	-6.081668	20	PASS

			NV	-20	-35000.00	-6.081668	20	PASS
			NV	-10	-35000.00	-6.081668	20	PASS
			NV	0	-35000.00	-6.081668	20	PASS
			NV	10	-34000.00	-5.907906	20	PASS
			NV	20	-34000.00	-5.907906	20	PASS
			NV	30	-34000.00	-5.907906	20	PASS
			NV	40	-34000.00	-5.907906	20	PASS
			NV	50	-34000.00	-5.907906	20	PASS
	Ant2	5755	NV	-30	-33000.00	-5.734144	20	PASS
			NV	-20	-33000.00	-5.734144	20	PASS
			NV	-10	-33000.00	-5.734144	20	PASS
			NV	0	-33000.00	-5.734144	20	PASS
			NV	10	-32000.00	-5.560382	20	PASS
			NV	20	-32000.00	-5.560382	20	PASS
			NV	30	-33000.00	-5.734144	20	PASS
			NV	40	-32000.00	-5.560382	20	PASS
			NV	50	-33000.00	-5.734144	20	PASS
	Ant1	5795	NV	-30	-33000.00	-5.694564	20	PASS
			NV	-20	-33000.00	-5.694564	20	PASS
			NV	-10	-33000.00	-5.694564	20	PASS
			NV	0	-33000.00	-5.694564	20	PASS
			NV	10	-33000.00	-5.694564	20	PASS
			NV	20	-32000.00	-5.522002	20	PASS
			NV	30	-32000.00	-5.522002	20	PASS
			NV	40	-32000.00	-5.522002	20	PASS
			NV	50	-32000.00	-5.522002	20	PASS
	Ant2	5795	NV	-30	-32000.00	-5.522002	20	PASS
			NV	-20	-32000.00	-5.522002	20	PASS
			NV	-10	-32000.00	-5.522002	20	PASS
			NV	0	-31000.00	-5.349439	20	PASS
			NV	10	-31000.00	-5.349439	20	PASS
			NV	20	-31000.00	-5.349439	20	PASS
			NV	30	-31000.00	-5.349439	20	PASS
			NV	40	-31000.00	-5.349439	20	PASS
			NV	50	-31000.00	-5.349439	20	PASS
11AC80SISO	Ant1	5210	NV	-30	-33000.00	-6.333973	20	PASS
			NV	-20	-33000.00	-6.333973	20	PASS
			NV	-10	-33000.00	-6.333973	20	PASS

			NV	0	-33000.00	-6.333973	20	PASS
			NV	10	-33000.00	-6.333973	20	PASS
			NV	20	-33000.00	-6.333973	20	PASS
			NV	30	-33000.00	-6.333973	20	PASS
			NV	40	-33000.00	-6.333973	20	PASS
			NV	50	-33000.00	-6.333973	20	PASS
	Ant2	5210	NV	-30	-32000.00	-6.142035	20	PASS
			NV	-20	-32000.00	-6.142035	20	PASS
			NV	-10	-32000.00	-6.142035	20	PASS
			NV	0	-32000.00	-6.142035	20	PASS
			NV	10	-32000.00	-6.142035	20	PASS
			NV	20	-32000.00	-6.142035	20	PASS
			NV	30	-32000.00	-6.142035	20	PASS
			NV	40	-32000.00	-6.142035	20	PASS
			NV	50	-32000.00	-6.142035	20	PASS
	Ant1	5775	NV	-30	-35000.00	-6.060606	20	PASS
			NV	-20	-34000.00	-5.887446	20	PASS
			NV	-10	-34000.00	-5.887446	20	PASS
			NV	0	-34000.00	-5.887446	20	PASS
			NV	10	-34000.00	-5.887446	20	PASS
			NV	20	-34000.00	-5.887446	20	PASS
			NV	30	-34000.00	-5.887446	20	PASS
			NV	40	-34000.00	-5.887446	20	PASS
			NV	50	-33000.00	-5.714286	20	PASS
	Ant2	5775	NV	-30	-33000.00	-5.714286	20	PASS
			NV	-20	-33000.00	-5.714286	20	PASS
			NV	-10	-33000.00	-5.714286	20	PASS
			NV	0	-33000.00	-5.714286	20	PASS
			NV	10	-33000.00	-5.714286	20	PASS
			NV	20	-33000.00	-5.714286	20	PASS
			NV	30	-32000.00	-5.541126	20	PASS
			NV	40	-33000.00	-5.714286	20	PASS
			NV	50	-32000.00	-5.541126	20	PASS

4.8 AUTOMATICALLY DISCONTINUE TRANSMISSION

4.8.1 LIMIT OF AUTOMATICALLY DISCONTINUE TRANSMISSION

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization to describe how this requirement is met.

4.8.2 TEST RESULT OF AUTOMATICALLY DISCONTINUE TRANSMISSION

During no any information transmission, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission

4.9 ANTENNA REQUIREMENT

4.9.1 STANDARD REQUIREMENT

15.203 requirement: For intentional device, according to 15.203: 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.

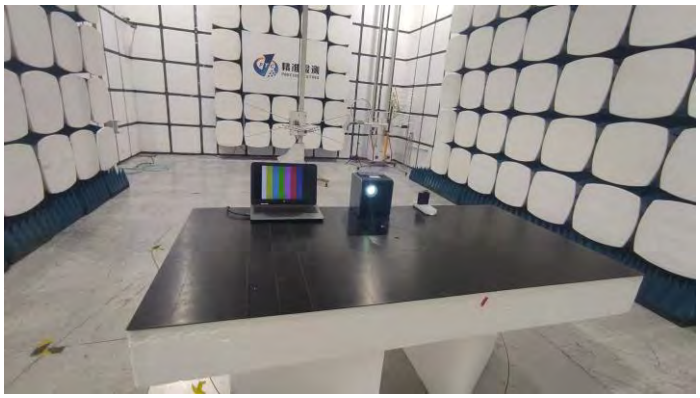
4.9.2 EUT ANTENNA

The EUT'S antenna, permanent attached antenna, is Fpcb Antenna. The antenna's gain is 1.61dBi and meets the requirement.

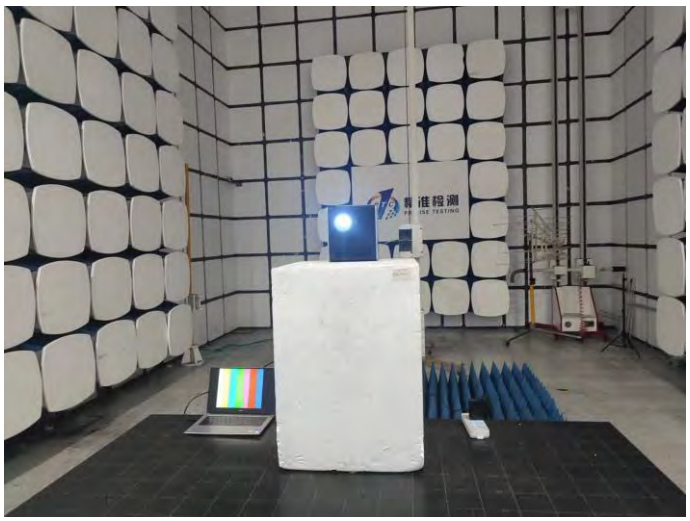
5 Photographs

5.1 Radiated Emission Test Setup

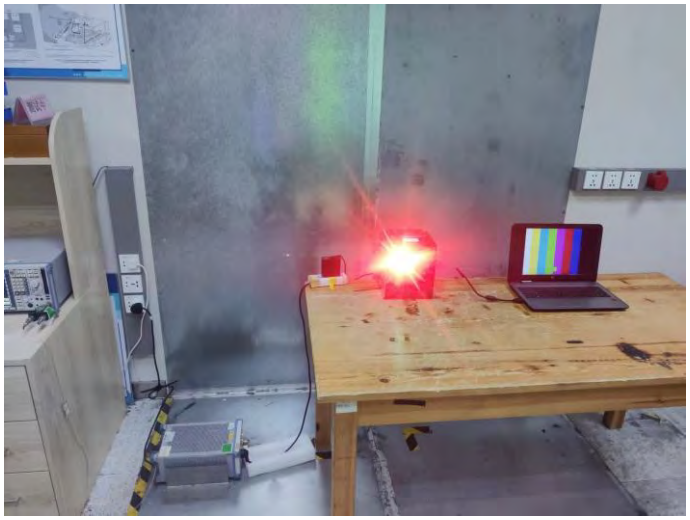
Below 1G



Above 1G



5.2 Conduction Emission Test Setup



5.3 EUT Constructional Details

Reference file "EUT photo"

****End of report****