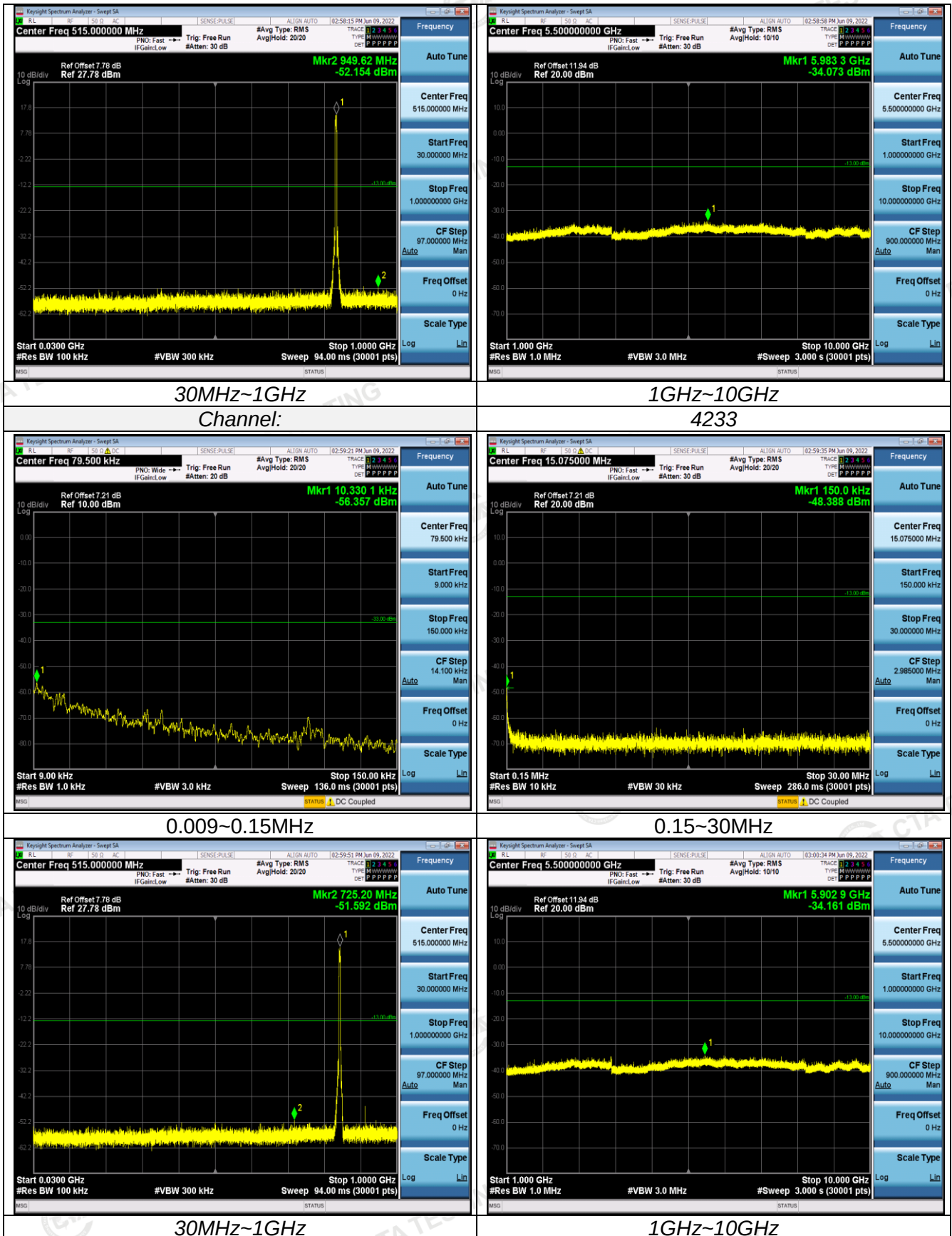




Radiated Measurement:**WCDMA Band II**

Channel	Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	Distance	G _a Antenna Gain(dB)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
9262	3704.80	-40.02	4.27	3	12.34	-31.95	-13	-18.95	H
	5557.20	-44.10	4.99	3	13.52	-35.57	-13	-22.57	H
	3704.80	-38.61	4.27	3	12.34	-30.54	-13	-17.54	V
	5557.20	-41.36	4.99	3	13.52	-32.83	-13	-19.83	V
9400	3760.00	-39.02	4.38	3	12.34	-31.06	-13	-18.06	H
	5640.00	-43.37	5.01	3	13.58	-34.80	-13	-21.80	H
	3760.00	-36.33	4.38	3	12.34	-28.37	-13	-15.37	V
	5640.00	-41.57	5.01	3	13.58	-33.00	-13	-20.00	V
9538	3815.20	-38.26	4.47	3	12.45	-30.28	-13	-17.28	H
	5722.80	-43.01	5.23	3	13.66	-34.58	-13	-21.58	H
	3815.20	-36.79	4.47	3	12.45	-28.81	-13	-15.81	V
	5722.80	-40.38	5.23	3	13.66	-31.95	-13	-18.95	V

WCDMA Band IV

Channel	Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	Distance	G _a Antenna Gain(dB)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1312	3424.80	-38.90	3.98	3	10.98	-31.90	-13	-18.90	H
	5137.20	-43.22	4.11	3	11.47	-35.86	-13	-22.86	H
	3424.80	-36.74	3.98	3	10.98	-29.74	-13	-16.74	V
	5137.20	-40.64	4.11	3	11.47	-33.28	-13	-20.28	V
1413	3465.20	-38.52	4.01	3	11.25	-31.28	-13	-18.28	H
	5197.80	-41.40	4.15	3	11.58	-33.97	-13	-20.97	H
	3465.20	-36.04	4.01	3	11.25	-28.80	-13	-15.80	V
	5197.80	-38.86	4.15	3	11.58	-31.43	-13	-18.43	V
1513	3505.20	-38.25	4.07	3	11.33	-30.99	-13	-17.99	H
	5275.80	-41.75	4.21	3	11.67	-34.29	-13	-21.29	H
	3505.20	-35.36	4.07	3	11.33	-28.10	-13	-15.10	V
	5275.80	-40.12	4.21	3	11.67	-32.66	-13	-19.66	V

WCDMA Band V

Channel	Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	Diatance	G _a Antenna Gain(dB)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
9262	1652.80	-35.93	3.02	3	9.58	-29.37	-13	-16.37	H
	2479.20	-40.74	3.51	3	10.72	-33.53	-13	-20.53	H
	1652.80	-34.34	3.02	3	9.68	-27.68	-13	-14.68	V
	2479.20	-38.84	3.51	3	10.72	-31.63	-13	-18.63	V
9400	1673.20	-36.15	3.14	3	9.61	-29.68	-13	-16.68	H
	2509.80	-40.95	3.59	3	10.77	-33.77	-13	-20.77	H
	1673.20	-34.77	3.14	3	9.61	-28.30	-13	-15.30	V
	2509.80	-38.88	3.59	3	10.77	-31.70	-13	-18.70	V
9538	1693.20	-36.00	3.24	3	9.77	-29.47	-13	-16.47	H
	2539.80	-40.03	3.65	3	10.89	-32.79	-13	-19.79	H
	1693.20	-34.53	3.24	3	9.77	-28.00	-13	-15.00	V
	2539.80	-37.39	3.65	3	10.89	-30.15	-13	-17.15	V

Remark:

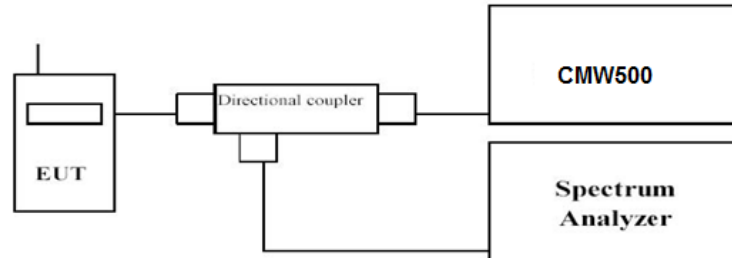
1. $EIRP = P_{Mea}(dBm) - P_{cl}(dB) + G_a(dBi)$
2. We were not recorded other points as values lower than limits.
3. $Margin = EIRP - Limit$

3.5 Peak-to-Average Ratio (PAR)

LIMIT

The Peak-to-Average Ratio (PAR) of the transmission may not exceed 13 dB.

TEST CONFIGURATION



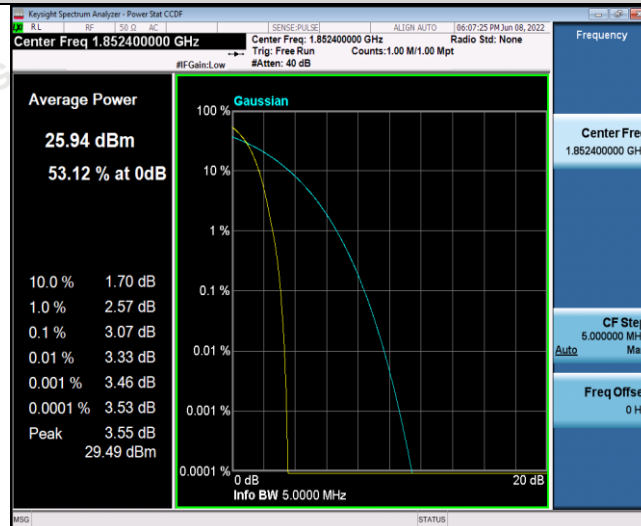
TEST PROCEDURE

1. Refer to instrument's analyzer instruction manual for details on how to use the power statistics/CCDF function;
2. Set resolution/measurement bandwidth $\geq$ signal's occupied bandwidth;
3. Set the number of counts to a value that stabilizes the measured CCDF curve;
4. Set the measurement interval as follows: 1). for continuous transmissions, set to 1 ms, 2). for burst transmissions, employ an external trigger that is synchronized with the EUT burst timing sequence, or use the internal burst trigger with a trigger level that allows the burst to stabilize and set the measurement interval to a time that is less than or equal to the burst duration.
5. Record the maximum PAPR level associated with a probability of 0.1%.

TEST RESULTS

Test mode	Channel	Frequency (MHz)	PAPR Value (dB)	Limits (dB)	Verdict
WCDMA Band II	9262	1852.4	3.07	13.0	Pass
	9400	1880.0	3.1	13.0	Pass
	9538	1907.6	2.83	13.0	Pass
WCDMA Band IV	1312	1712.4	8.4	13.0	Pass
	1413	1732.6	8.38	13.0	Pass
	1513	1752.6	8.42	13.0	Pass
WCDMA Band V	4132	826.4	3.21	13.0	Pass
	4183	836.6	3.05	13.0	Pass
	4233	846.6	2.93	13.0	Pass

Band2-9262



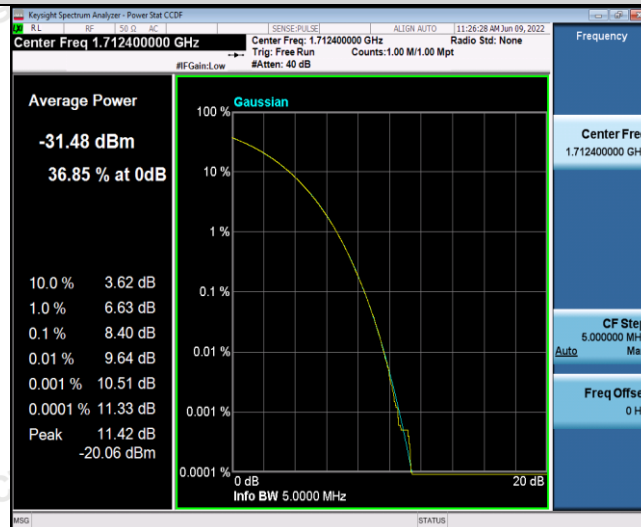
Band2-9400



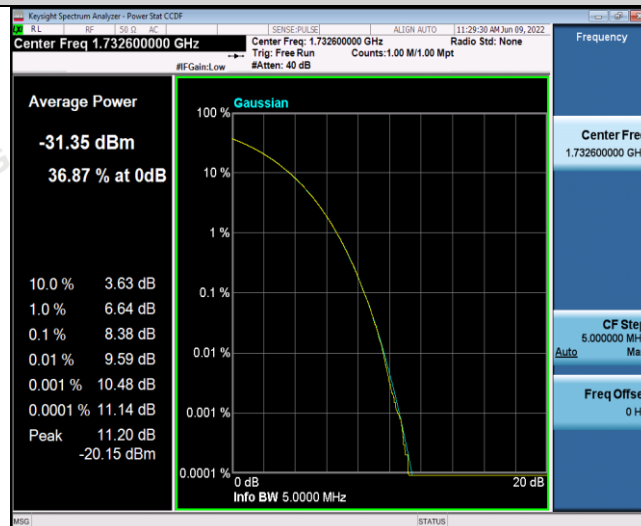
Band2-9538



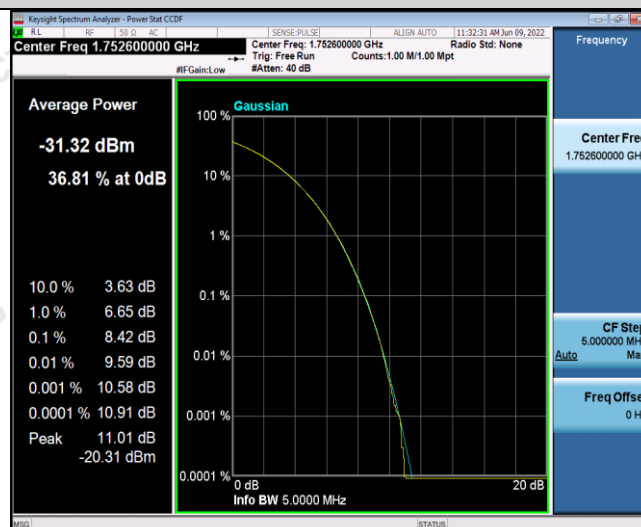
Band4-1312



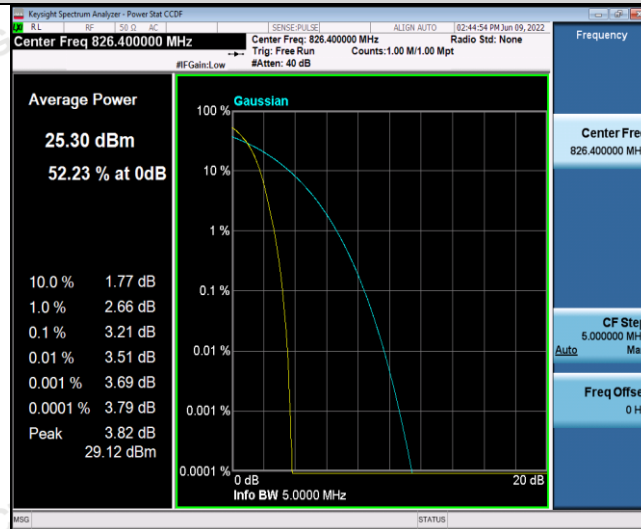
Band4-1413



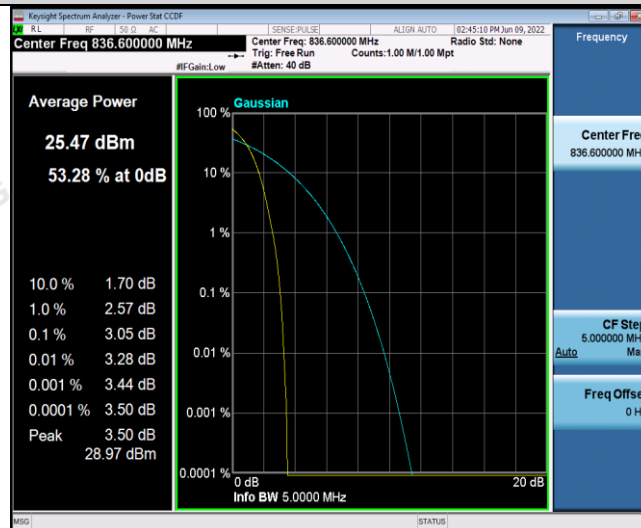
Band4-1513



Band5-4132



Band5-4183



Band5-4233

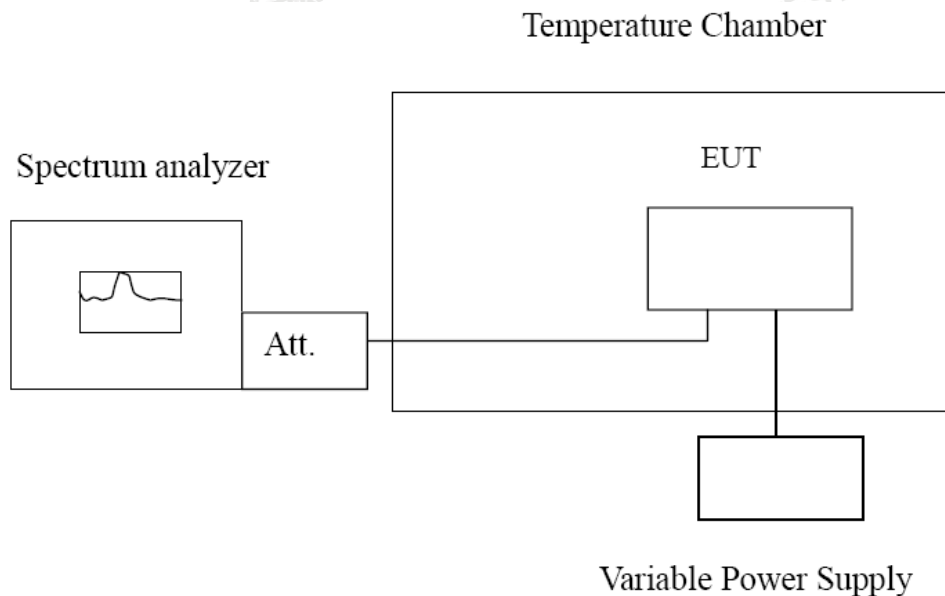


3.6 Frequency Stability under Temperature & Voltage Variations

LIMIT

Cellular Band: ± 2.5 ppm PCS Band: Within the authorized frequency block

TEST CONFIGURATION



TEST PROCEDURE

The EUT was setup according to EIA/TIA 603C

Frequency Stability under Temperature Variations:

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 20°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to -30°C. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached.

Frequency Stability under Voltage Variations:

Set chamber temperature to 20°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.

Reduce the input voltage to specify extreme voltage variation ($\pm 15\%$) and endpoint, record the maximum frequency change.

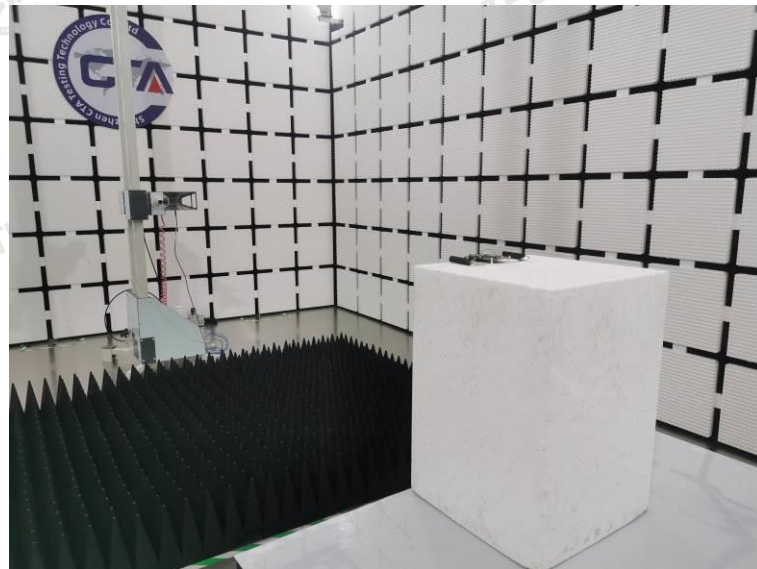
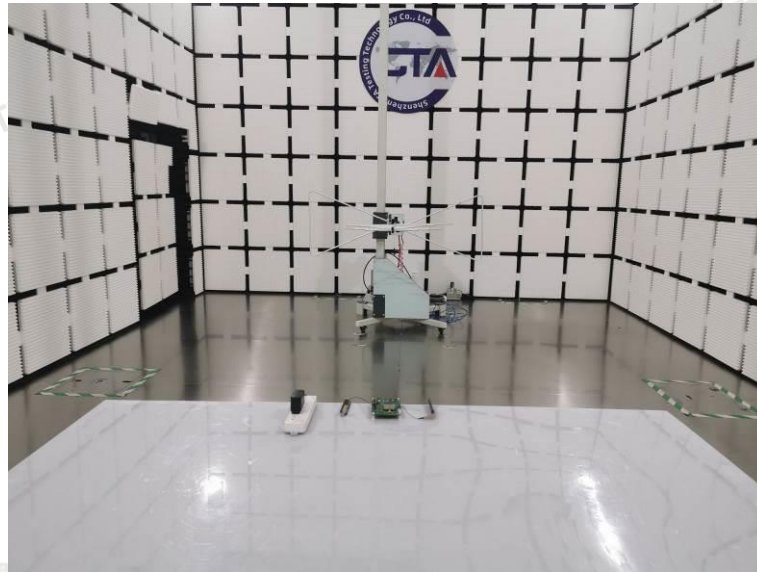
TEST RESULTS

Reference Frequency: WCDMA Band II Middle channel=9400 channel=1880MHz					
Voltage (V)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	-10.54	-0.005690	± 2.5	Pass
	-20	-13.19	-0.007120		
	-10	-13.02	-0.007029		
	0	-11.82	-0.006287		
	10	-9.38	-0.004989		
	20	-11.29	-0.006005		
	30	-10.76	-0.005641		
	40	-9.61	-0.005038		
	50	-10.71	-0.005614		
4.26	25	-10.54	-0.005690	± 2.5	Pass
End point 3.15	25	-13.19	-0.007120		

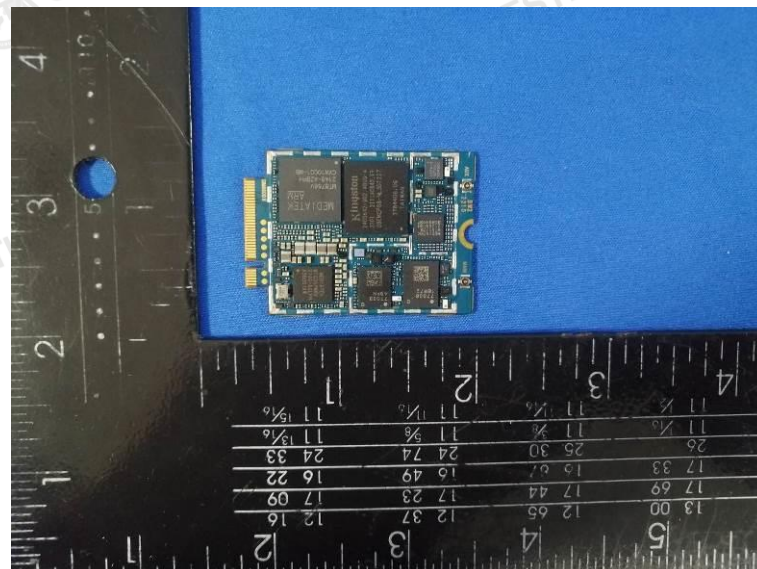
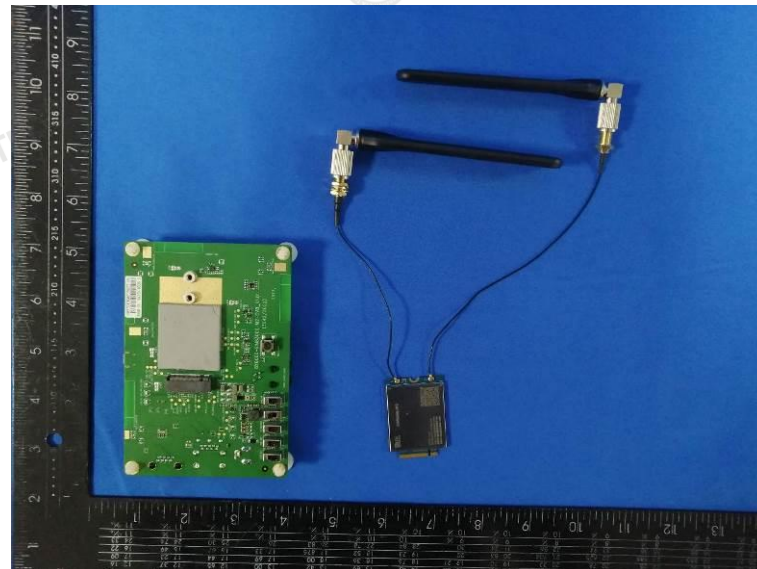
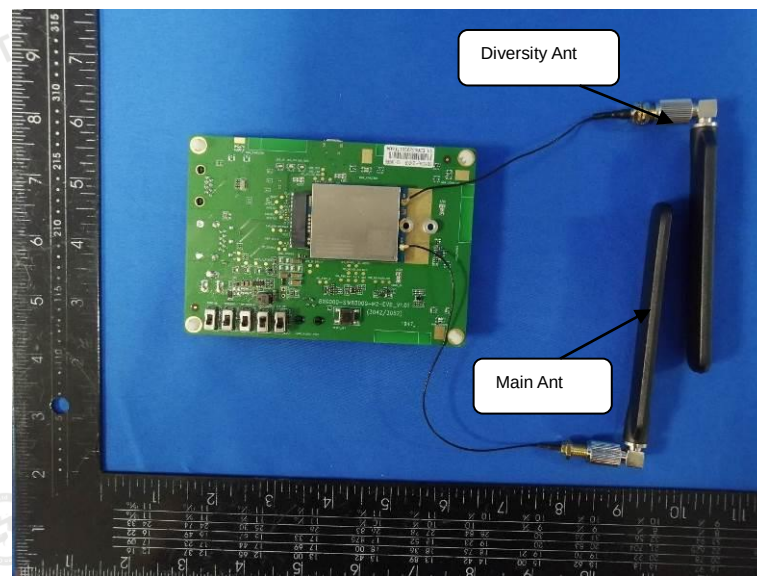
Reference Frequency: WCDMA Band IV Middle channel=1413 channel=1732.6MHz					
Voltage (V)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	-17.09	-0.009980	± 2.5	Pass
	-20	-14.07	-0.008217		
	-10	-14.05	-0.008205		
	0	-14.45	-0.008340		
	10	-15.52	-0.008958		
	20	-13.90	-0.008023		
	30	-10.71	-0.006111		
	40	-10.82	-0.006174		
	50	-9.51	-0.005426		
4.26	25	-17.09	-0.009980	± 2.5	Pass
End point 3.15	25	-14.07	-0.008217		

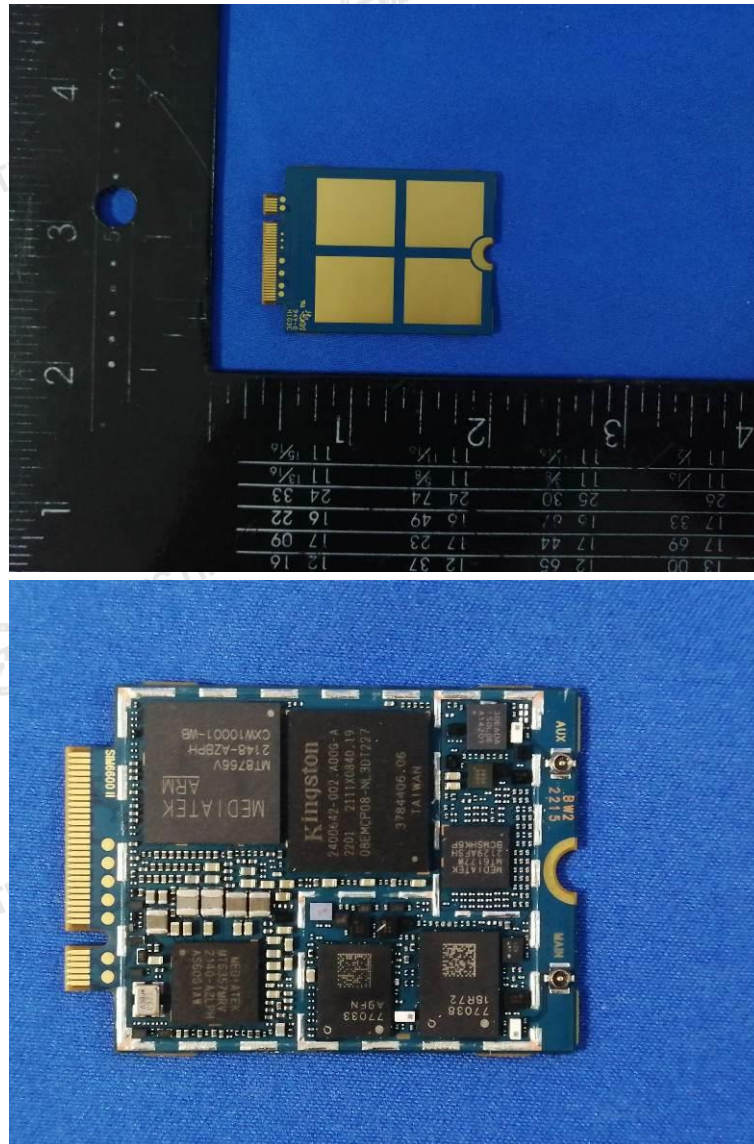
Reference Frequency: WCDMA Band V Middle channel=4182 channel=836.6MHz					
Voltage (V)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	-9.97	-0.012064	± 2.5	Pass
	-20	-10.69	-0.012936		
	-10	-10.43	-0.012621		
	0	-9.56	-0.011427		
	10	-11.03	-0.013184		
	20	-7.91	-0.009455		
	30	-7.02	-0.008292		
	40	-8.09	-0.009556		
	50	-5.19	-0.006130		
4.26	25	-9.97	-0.012064	± 2.5	Pass
End point 3.15	25	-10.69	-0.012936		

4 Test Setup Photos of the EUT



5 External and Internal Photos of the EUT





***** End of Report *****