

Note : Measurement setup for testing on Antenna connector

13.3 Test Result

Remark: All three channels of all modulations have been tested, but only the worst channel and the worst modulation show in this test item.

Chain 0

Test Frequency: 3655MHz QPSK 10MHz			
Temperature (°C)	Power Supply (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
-40	120	107	0.1279
-25		123	0.1470
-10		105	0.1255
0		114	0.1363
10		118	0.1410
20		108	0.1291
30		111	0.1327
40		121	0.1446
55		120	0.1434

Test Frequency: 3660MHz QPSK 20MHz			
Temperature (°C)	Power Supply (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
-40	120	115	0.1375
-25		106	0.1267
-10		108	0.1291
0		109	0.1303
10		114	0.1363
20		111	0.1327
30		106	0.1267
40		110	0.1315
55		107	0.1279

Chain 1

Test Frequency: 3655MHz QPSK 10MHz			
Temperature (°C)	Power Supply (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
-40	120	119	0.1422
-25		119	0.1422
-10		122	0.1458
0		121	0.1446
10		123	0.1470
20		113	0.1351
30		121	0.1446
40		119	0.1422
55		121	0.1446

Test Frequency: 3660MHz QPSK 20MHz			
Temperature (°C)	Power Supply (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
-40	120	97	0.1159
-25		112	0.1339
-10		96	0.1148
0		103	0.1231
10		101	0.1207
20		111	0.1327
30		99	0.1183
40		112	0.1339
55		110	0.1315

14 Frequency stability V.S. Voltage measurement

Test Requirement: FCC Part90.213(a) and RSS 197 section 5.3
 Test Method: FCC Part2.1055(a)(1)(b) and RSS Gen section 6.1.1
 Test Mode: Data communicating mode
 Limit: FCC:

Frequency range (MHz)	Fixed and base stations (±ppm)	Mobile stations (±ppm)	
		Over 2 watts output power	2 watts or less output power
Below 25	100	100	200
25-50	20	20	50
72-76	5		50
150-174	5	5	50
216-220	1.0		1.0
220-222	0.1	1.5	1.5
421-512	2.5	5	5
806-809	1.0	1.5	1.5
809-824	1.5	2.5	2.5
851-854	1.0	1.5	1.5
854-869	1.5	2.5	2.5
896-901	0.1	1.5	1.5
902-928	2.5	2.5	2.5
902-928	2.5	2.5	2.5
929-930	1.5		
935-940	0.1	1.5	1.5
1427-1435	300	300	300
Above 2450			

IC:

The transmitter frequency stability limit shall be determined as follows:

- The frequency offset shall be measured according to the procedure described in RSS-Gen and recorded;
- Using a resolution bandwidth of 1% of the occupied bandwidth, a reference point at the unwanted emission level specified in Section 5.7 on the emission mask of the lowest and highest channel shall be selected, and the frequency at these points shall be recorded as fL and fH respectively.

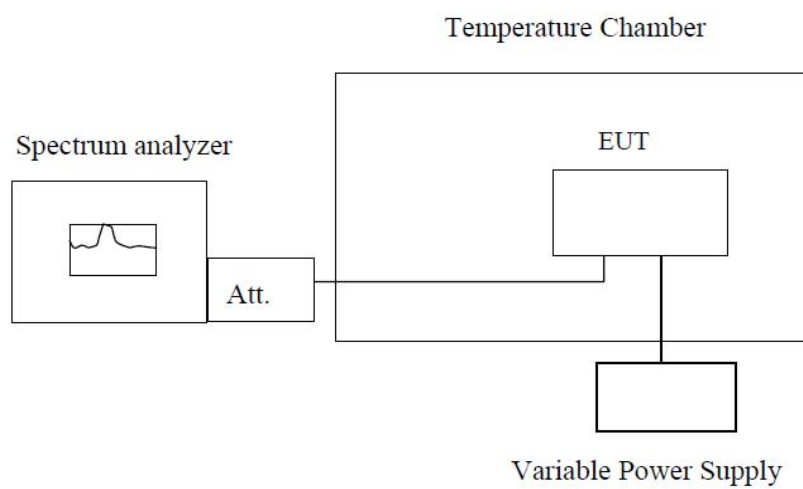
The applicant shall ensure frequency stability by showing that fL minus the frequency offset and fH plus the frequency offset shall be within the 3650-3700 MHz band.

14.1 EUT Operation

Operating Environment :
 Temperature: 22.9 °C
 Humidity: 52.0 % RH
 Atmospheric Pressure: 101.3kPa

14.2 Test Procedure

- Set chamber temperature to 25°C. Use a variable 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 (+/- 15%) and endpoint, record the maximum frequency change.



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14.3 Test Result

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Chain 0

Test Frequency: 3655MHz QPSK 10MHz			
Temperature (°C)	Power Supply (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
25	105	107	0.1279
	120	96	0.1148
	144	97	0.1159

Test Frequency: 3660MHz QPSK 20MHz			
Temperature (°C)	Power Supply (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
25	105	96	0.1148
	120	99	0.1183
	144	108	0.1291

Chain 1

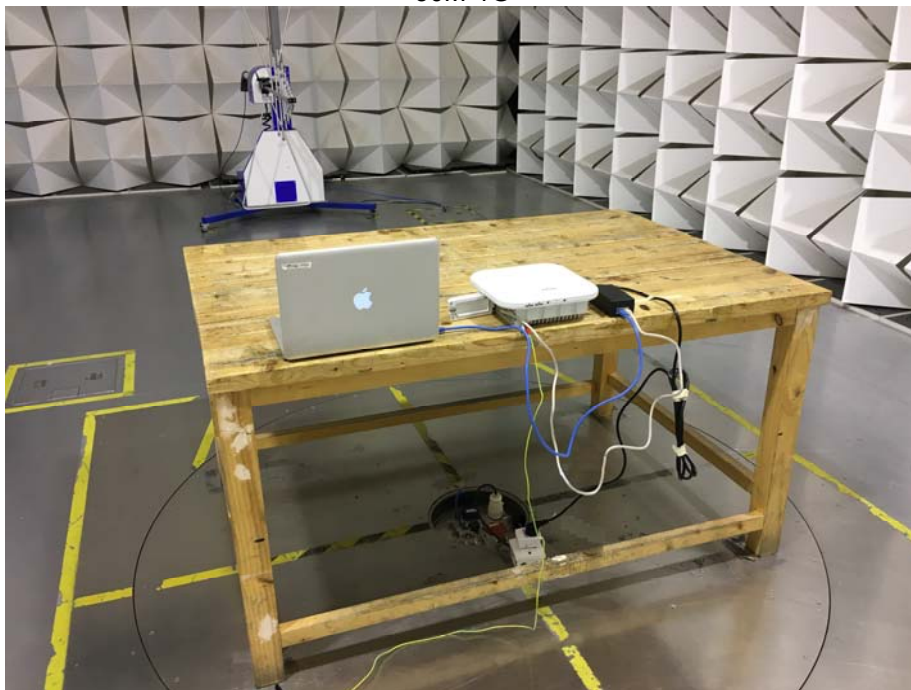
Test Frequency: 3655MHz QPSK 10MHz			
Temperature (°C)	Power Supply (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
25	105	97	0.1159
	120	94	0.1124
	144	101	0.1207

Test Frequency: 3660MHz QPSK 20MHz			
Temperature (°C)	Power Supply (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
25	105	105	0.1255
	120	102	0.1219
	144	110	0.1315

15 Photographs of test setup and EUT.

15.1 Test Setup

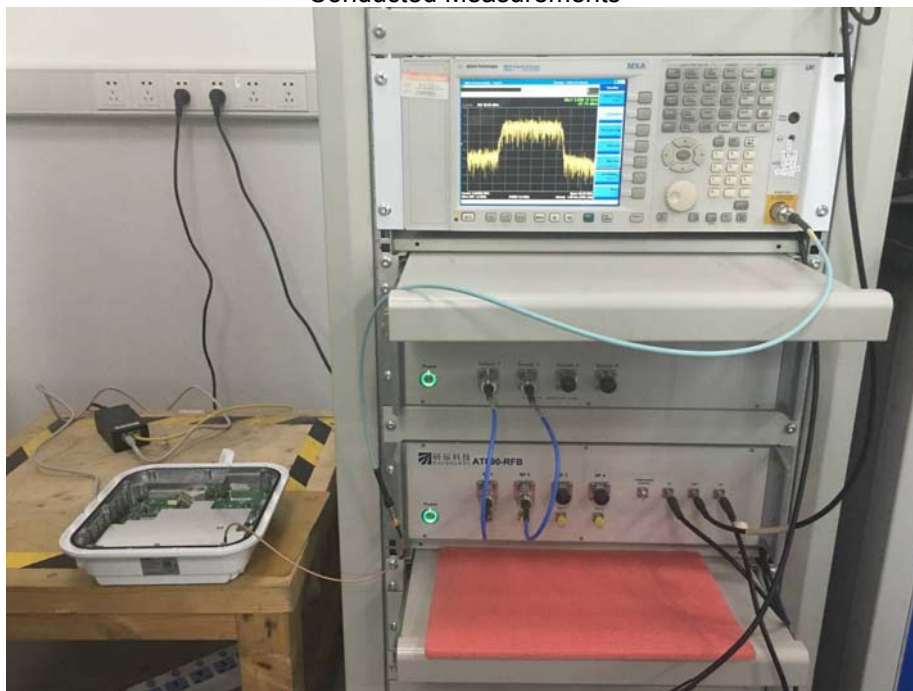
Radiated Spurious Emission
30M-1G



1G-18G



Conducted Measurements



15.2 EUT - External View



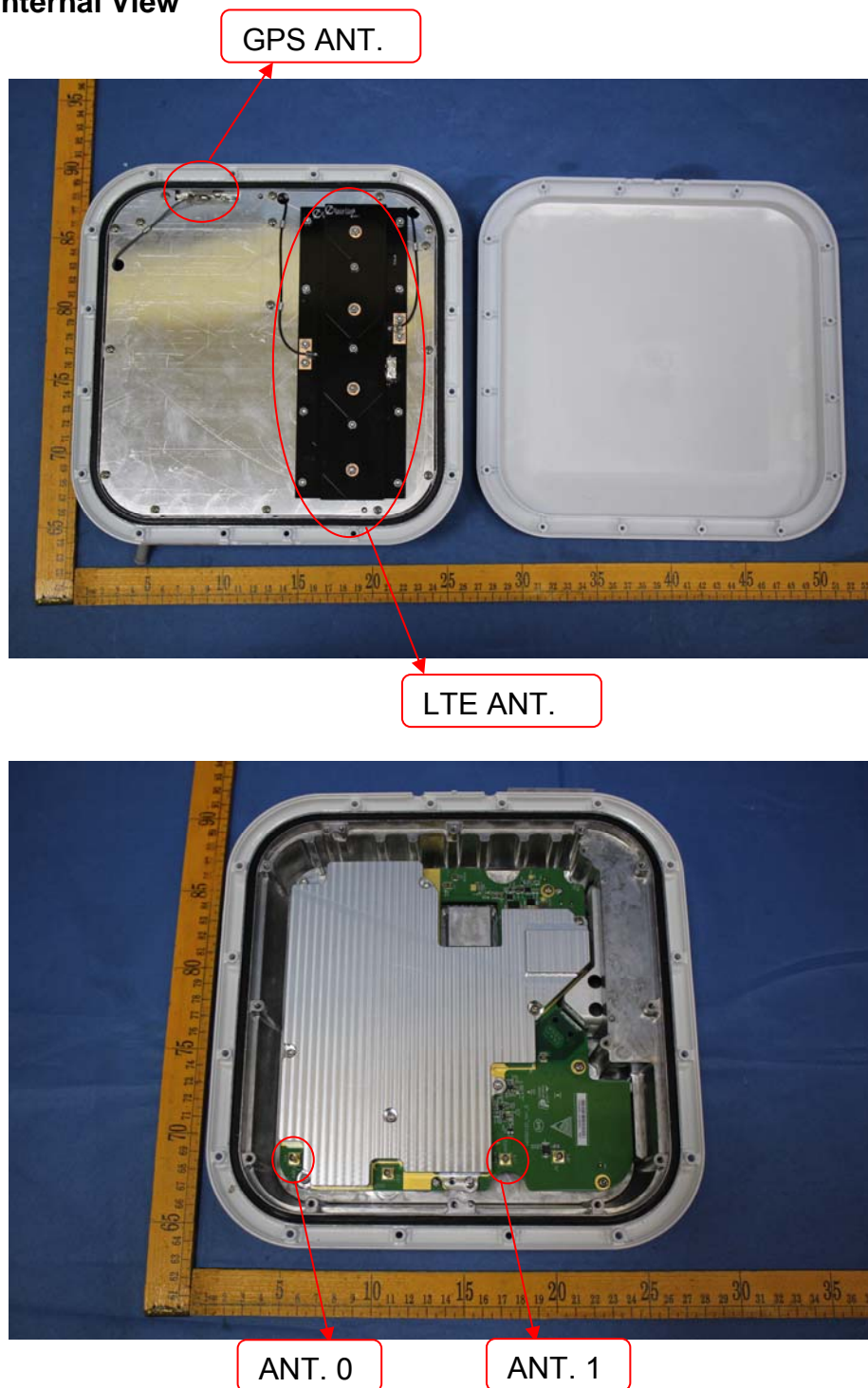


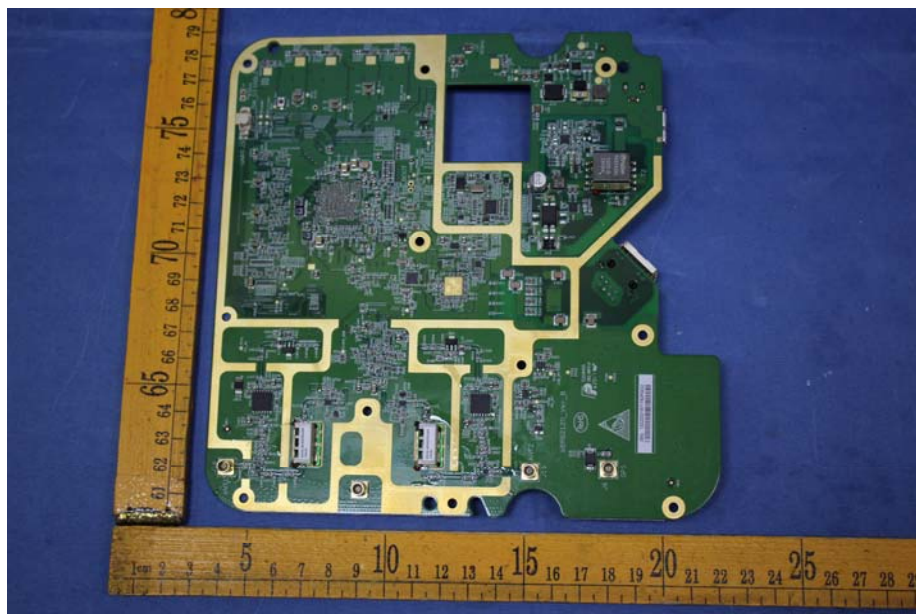






15.3 EUT - Internal View





===== End of Report =====