

5.7 Frequency Stability

5.7.1 Limits

- **NR n2/n25 (§ 24.235):**
The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.
- **NR n7/n12/n66/n77 (§ 27.54):**
The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.
- **NR n5 (§ 22.255):**
Except as otherwise provided in this part, the carrier frequency of each transmitter in the Public Mobile Services must be maintained within the tolerances given in Table C-1 of this section.

Table C-A: Frequency Tolerance For Transmitters In The Public Mobile Services

Frequency Range (MHz)	Base, Fixed (ppm)	Mobile > 3 watts (ppm)	Mobile ≤ 3 watts (ppm)
25 to 50	20.0	20.0	50.0
50 to 450	5.0	5.0	50.0
450 to 512	2.5	5.0	5.0
821 to 896	1.5	2.5	2.5
928 to 929	5.0	n/a	n/a
929 to 960	1.5	n/a	n/a
2110 to 2220	10.0	n/a	n/a

- **NR n14 (§ 90.539):**
 - (b) The frequency stability of base transmitters operating in the narrowband segment must be 100 parts per billion or better.
 - (d) The frequency stability of base transmitters operating in the wideband segment must be 1 part per million or better.

5.7.2 Test Procedure

- **Frequency Stability vs. Temperature:**
 - a) The EUT is placed in a temperature chamber, and the temperature is set to -30 °C. The test is performed after the chamber temperature has stabilized.
 - b) The DC power supply output voltage is set to the rated voltage of the EUT.
 - c) The EUT antenna port is connected to the RF port of the test system control unit via an RF cable.
 - d) The EUT is configured to operate in TM 1 and TM 2 modes as described in Section 4.2. The EUT test channels and modulation types are set as specified in Section 4.3.
 - e) Open the test software, load the LTE test script, and select the test items, test frequency bands, and other relevant test parameters.
 - f) The test script was executed, the measurement was performed. Save the test data.
 - g) Increase the temperature by 10 °C, allow it to stabilize and soak for a period of time, and then repeat the measurements. Repeat this process until +50 °C is reached.

- **Frequency Stability vs Voltage:**

- a) The EUT is placed in a temperature chamber, and the temperature is set to 25 °C. The test is performed after the chamber temperature has stabilized.
- b) The DC power supply output voltage is set to the rated voltage of the EUT.
- c) The EUT antenna port is connected to the RF port of the test system control unit via an RF cable.
- d) The EUT is configured to operate in TM 1 and TM 2 modes as described in Section 4.2. The EUT test channels and modulation types are set as specified in Section 4.3.
- e) Open the test software, load the LTE test script, and select the test items, test frequency bands, and other relevant test parameters.
- f) The test script was executed, the measurement was performed. Save the test data.
- g) Reduce the DC power supply output voltage to the minimum and maximum limit voltages of the EUT respectively, and then repeat the measurements.

5.7.3 Test Setup

See setup 2 in section 4.4.

5.7.4 Test Instruments

Refer to section 3.7.

5.7.5 Test Results

Pass.

5.7.6 Test Data

Frequency Band: NR n2, Middle Channel, Uplink (for NU)					
Frequency stability V.S. Temperature measurement					
Voltage (Vdc)	Temperature (°C)	Frequency Tolerance		Limit (ppm)	Results
		Hz	ppm		
48.0	-30	34.37	0.0183	Within the authorized frequency block	Pass
	-20	33.20	0.0177		
	-10	34.99	0.0186		
	0	30.82	0.0164		
	10	33.77	0.0180		
	20	32.25	0.0172		
	30	33.65	0.0179		
	40	34.15	0.0182		
	50	32.65	0.0174		
Frequency stability V.S. Voltage measurement					
Temperature (°C)	Voltage (Vdc)	Frequency Tolerance		Limit	Results
		Hz	ppm		
25.0	48.0	36.54	0.0194	Within the authorized frequency block	Pass
	43.2	33.40	0.0178		
	52.8	34.11	0.0181		
Frequency Band: NR n2, Middle Channel, Downlink (for CU)					
Frequency stability V.S. Temperature measurement					
Voltage (Vdc)	Temperature (°C)	Frequency Tolerance		Limit (ppm)	Results
		Hz	ppm		
48.0	-30	248.92	0.1270	Within the authorized frequency block	Pass
	-20	238.86	0.1219		
	-10	271.15	0.1383		
	0	246.45	0.1257		
	10	241.50	0.1232		
	20	251.07	0.1281		
	30	228.41	0.1165		
	40	258.35	0.1318		
	50	239.79	0.1223		
Frequency stability V.S. Voltage measurement					
Temperature (°C)	Voltage (Vdc)	Frequency Tolerance		Limit	Results
		Hz	ppm		
25.0	48.0	242.61	0.1238	Within the authorized frequency block	Pass
	43.2	238.87	0.1219		
	52.8	239.36	0.1221		

Frequency Band: NR n5, Middle Channel, Uplink (for NU)					
Frequency stability V.S. Temperature measurement					
Voltage (Vdc)	Temperature (°C)	Frequency Tolerance		Limit (ppm)	Results
		Hz	ppm		
48.0	-30	153.97	0.1841	± 1.5	Pass
	-20	153.03	0.1829		
	-10	155.36	0.1857		
	0	151.76	0.1814		
	10	154.87	0.1851		
	20	152.69	0.1825		
	30	152.23	0.1820		
	40	153.83	0.1839		
	50	156.89	0.1876		
Frequency stability V.S. Voltage measurement					
Temperature (°C)	Voltage (Vdc)	Frequency Tolerance		Limit	Results
		Hz	ppm		
25.0	48.0	157.60	0.1884	± 1.5	Pass
	43.2	154.14	0.1843		
	52.8	154.27	0.1844		
Frequency Band: NR n5, Middle Channel, Downlink (for CU)					
Frequency stability V.S. Temperature measurement					
Voltage (Vdc)	Temperature (°C)	Frequency Tolerance		Limit (ppm)	Results
		Hz	ppm		
48.0	-30	92.60	0.1050	± 1.5	Pass
	-20	92.52	0.1050		
	-10	91.33	0.1036		
	0	92.29	0.1047		
	10	91.83	0.1042		
	20	92.45	0.1049		
	30	92.61	0.1051		
	40	92.29	0.1047		
	50	92.02	0.1044		
Frequency stability V.S. Voltage measurement					
Temperature (°C)	Voltage (Vdc)	Frequency Tolerance		Limit	Results
		Hz	ppm		
25.0	48.0	91.53	0.1038	± 1.5	Pass
	43.2	93.15	0.1057		
	52.8	93.07	0.1056		

Frequency Band: NR n7, Middle Channel, Uplink (for NU)					
Frequency stability V.S. Temperature measurement					
Voltage (Vdc)	Temperature (°C)	Frequency Tolerance		Limit (ppm)	Results
		Hz	ppm		
48.0	-30	252.21	0.0995	Within the authorized frequency block	Pass
	-20	252.52	0.0996		
	-10	253.79	0.1001		
	0	254.40	0.1004		
	10	255.27	0.1007		
	20	253.92	0.1002		
	30	253.89	0.1002		
	40	254.00	0.1002		
	50	256.37	0.1011		
Frequency stability V.S. Voltage measurement					
Temperature (°C)	Voltage (Vdc)	Frequency Tolerance		Limit	Results
		Hz	ppm		
25.0	48.0	255.41	0.1008	Within the authorized frequency block	Pass
	43.2	254.93	0.1006		
	52.8	251.34	0.0991		
Frequency Band: NR n7, Middle Channel, Downlink (for CU)					
Frequency stability V.S. Temperature measurement					
Voltage (Vdc)	Temperature (°C)	Frequency Tolerance		Limit (ppm)	Results
		Hz	ppm		
48.0	-30	265.08	0.2299	Within the authorized frequency block	Pass
	-20	261.11	0.2266		
	-10	266.96	0.2312		
	0	257.32	0.2233		
	10	269.45	0.2342		
	20	262.82	0.2273		
	30	263.84	0.2287		
	40	265.48	0.2299		
	50	261.35	0.2267		
Frequency stability V.S. Voltage measurement					
Temperature (°C)	Voltage (Vdc)	Frequency Tolerance		Limit	Results
		Hz	ppm		
25.0	48.0	266.19	0.2313	Within the authorized frequency block	Pass
	43.2	257.90	0.2235		
	52.8	269.87	0.2340		

Frequency Band: NR n12, Middle Channel, Uplink (for NU)					
Frequency stability V.S. Temperature measurement					
Voltage (Vdc)	Temperature (°C)	Frequency Tolerance		Limit (ppm)	Results
		Hz	ppm		
48.0	-30	144.62	0.2044	Within the authorized frequency block	Pass
	-20	144.61	0.2044		
	-10	143.08	0.2022		
	0	141.25	0.1996		
	10	143.35	0.2026		
	20	140.68	0.1988		
	30	141.21	0.1996		
	40	141.63	0.2002		
	50	146.75	0.2074		
Frequency stability V.S. Voltage measurement					
Temperature (°C)	Voltage (Vdc)	Frequency Tolerance		Limit	Results
		Hz	ppm		
25.0	48.0	144.77	0.2046	Within the authorized frequency block	Pass
	43.2	142.62	0.2016		
	52.8	142.21	0.2010		
Frequency Band: LTE B12/17, NR n12, Middle Channel, Downlink (for CU)					
Frequency stability V.S. Temperature measurement					
Voltage (Vdc)	Temperature (°C)	Frequency Tolerance		Limit (ppm)	Results
		Hz	ppm		
48.0	-30	110.36	0.2382	Within the authorized frequency block	Pass
	-20	106.33	0.2115		
	-10	110.78	0.224		
	0	117.69	0.2168		
	10	103.66	0.2263		
	20	109.57	0.1983		
	30	106.44	0.2392		
	40	111.09	0.2143		
	50	97.58	0.219		
Frequency stability V.S. Voltage measurement					
Temperature (°C)	Voltage (Vdc)	Frequency Tolerance		Limit	Results
		Hz	ppm		
25.0	48.0	118.07	0.2128	Within the authorized frequency block	Pass
	43.2	97.24	0.2133		
	52.8	117.61	0.2127		

Frequency Band: NR n14, Middle Channel, Uplink (for NU)					
Frequency stability V.S. Temperature measurement					
Voltage (Vdc)	Temperature (°C)	Frequency Tolerance		Limit (ppm)	Results
		Hz	ppm		
48.0	-30	182.19	0.2297	± 1.0	Pass
	-20	182.12	0.2297		
	-10	185.99	0.2345		
	0	182.56	0.2302		
	10	185.18	0.2335		
	20	182.05	0.2296		
	30	182.53	0.2302		
	40	182.91	0.2307		
	50	182.25	0.2298		
Frequency stability V.S. Voltage measurement					
Temperature (°C)	Voltage (Vdc)	Frequency Tolerance		Limit	Results
		Hz	ppm		
25.0	48.0	181.99	0.2295	± 1.0	Pass
	43.2	183.46	0.2313		
	52.8	184.43	0.2326		
Frequency Band: NR n14, Middle Channel, Downlink (for CU)					
Frequency stability V.S. Temperature measurement					
Voltage (Vdc)	Temperature (°C)	Frequency Tolerance		Limit (ppm)	Results
		Hz	ppm		
48.0	-30	181.80	0.2383	± 1.0	Pass
	-20	176.14	0.2309		
	-10	175.63	0.2302		
	0	175.75	0.2303		
	10	187.13	0.2453		
	20	175.72	0.2303		
	30	176.07	0.2308		
	40	175.38	0.2299		
	50	161.81	0.2121		
Frequency stability V.S. Voltage measurement					
Temperature (°C)	Voltage (Vdc)	Frequency Tolerance		Limit	Results
		Hz	ppm		
25.0	48.0	184.48	0.2418	± 1.0	Pass
	43.2	158.12	0.2072		
	52.8	187.72	0.2460		

Frequency Band: NR n25, Middle Channel, Uplink (for NU)					
Frequency stability V.S. Temperature measurement					
Voltage (Vdc)	Temperature (°C)	Frequency Tolerance		Limit (ppm)	Results
		Hz	ppm		
48.0	-30	328.77	0.1746	Within the authorized frequency block	Pass
	-20	330.53	0.1756		
	-10	329.75	0.1752		
	0	328.68	0.1746		
	10	330.79	0.1757		
	20	329.59	0.1751		
	30	331.71	0.1762		
	40	329.08	0.1748		
	50	325.68	0.1730		
Frequency stability V.S. Voltage measurement					
Temperature (°C)	Voltage (Vdc)	Frequency Tolerance		Limit	Results
		Hz	ppm		
25.0	48.0	329.49	0.1750	Within the authorized frequency block	Pass
	43.2	327.17	0.1738		
	52.8	329.57	0.1751		
Frequency Band: NR n25, Middle Channel, Downlink (for CU)					
Frequency stability V.S. Temperature measurement					
Voltage (Vdc)	Temperature (°C)	Frequency Tolerance		Limit (ppm)	Results
		Hz	ppm		
48.0	-30	245.30	0.1250	Within the authorized frequency block	Pass
	-20	247.59	0.1262		
	-10	246.91	0.1258		
	0	241.64	0.1231		
	10	245.30	0.1250		
	20	245.56	0.1251		
	30	243.81	0.1242		
	40	242.59	0.1236		
	50	245.30	0.1250		
Frequency stability V.S. Voltage measurement					
Temperature (°C)	Voltage (Vdc)	Frequency Tolerance		Limit	Results
		Hz	ppm		
25.0	48.0	246.10	0.1254	Within the authorized frequency block	Pass
	43.2	242.12	0.1234		
	52.8	245.30	0.1250		

Frequency Band: NR n66, Middle Channel, Uplink (for NU)					
Frequency stability V.S. Temperature measurement					
Voltage (Vdc)	Temperature (°C)	Frequency Tolerance		Limit (ppm)	Results
		Hz	ppm		
48.0	-30	258.99	0.1202	Within the authorized frequency block	Pass
	-20	258.61	0.1200		
	-10	259.92	0.1206		
	0	257.48	0.1195		
	10	258.79	0.1201		
	20	258.04	0.1197		
	30	257.13	0.1193		
	40	257.30	0.1194		
	50	258.01	0.1197		
Frequency stability V.S. Voltage measurement					
Temperature (°C)	Voltage (Vdc)	Frequency Tolerance		Limit	Results
		Hz	ppm		
25.0	3.45	256.33	0.1189	Within the authorized frequency block	Pass
	3.82	258.87	0.1201		
	4.53	257.87	0.1197		
Frequency Band: NR n66, Middle Channel, Downlink (for CU)					
Frequency stability V.S. Temperature measurement					
Voltage (Vdc)	Temperature (°C)	Frequency Tolerance		Limit (ppm)	Results
		Hz	ppm		
48.0	-30	205.26	0.095	Within the authorized frequency block	Pass
	-20	203.46	0.094		
	-10	204.43	0.095		
	0	204.06	0.095		
	10	204.07	0.095		
	20	205.04	0.095		
	30	203.47	0.094		
	40	203.11	0.094		
	50	203.74	0.095		
Frequency stability V.S. Voltage measurement					
Temperature (°C)	Voltage (Vdc)	Frequency Tolerance		Limit	Results
		Hz	ppm		
25.0	48.0	205.51	0.095	Within the authorized frequency block	Pass
	43.2	203.76	0.095		
	52.8	202.97	0.094		

Frequency Band: NR n77 (3450MHz ~ 3550MHz), Middle Channel, Uplink (for NU)					
Frequency stability V.S. Temperature measurement					
Voltage (Vdc)	Temperature (°C)	Frequency Tolerance		Limit (ppm)	Results
		Hz	ppm		
48.0	-30	380.17	0.1086	Within the authorized frequency block	Pass
	-20	378.09	0.1080		
	-10	380.39	0.1087		
	0	377.95	0.1080		
	10	380.43	0.1087		
	20	377.88	0.1080		
	30	377.47	0.1078		
	40	378.10	0.1080		
	50	377.27	0.1078		
Frequency stability V.S. Voltage measurement					
Temperature (°C)	Voltage (Vdc)	Frequency Tolerance		Limit	Results
		Hz	ppm		
25.0	48.0	379.21	0.1083	Within the authorized frequency block	Pass
	43.2	378.93	0.1083		
	52.8	378.57	0.1082		
Frequency Band: NR n77 (3450MHz ~ 3550MHz), Middle Channel, Downlink (for CU)					
Frequency stability V.S. Temperature measurement					
Voltage (Vdc)	Temperature (°C)	Frequency Tolerance		Limit (ppm)	Results
		Hz	ppm		
48.0	-30	380.17	0.1086	Within the authorized frequency block	Pass
	-20	378.09	0.1080		
	-10	377.27	0.1078		
	0	379.50	0.1084		
	10	379.11	0.1083		
	20	378.28	0.1081		
	30	378.02	0.1080		
	40	378.14	0.1080		
	50	378.35	0.1081		
Frequency stability V.S. Voltage measurement					
Temperature (°C)	Voltage (Vdc)	Frequency Tolerance		Limit	Results
		Hz	ppm		
25.0	48.0	380.66	0.1088	Within the authorized frequency block	Pass
	43.2	378.27	0.1081		
	52.8	377.56	0.1079		

Frequency Band: NR n77 (3700MHz ~ 3980MHz), Middle Channel, Uplink (for NU)					
Frequency stability V.S. Temperature measurement					
Voltage (Vdc)	Temperature (°C)	Frequency Tolerance		Limit (ppm)	Results
		Hz	ppm		
48.0	-30	379.63	0.0989	Within the authorized frequency block	Pass
	-20	378.12	0.0985		
	-10	378.46	0.0986		
	0	377.88	0.0984		
	10	377.43	0.0983		
	20	378.97	0.0987		
	30	378.18	0.0985		
	40	378.27	0.0985		
	50	377.82	0.0984		
Frequency stability V.S. Voltage measurement					
Temperature (°C)	Voltage (Vdc)	Frequency Tolerance		Limit	Results
		Hz	ppm		
25.0	48.0	378.96	0.0987	Within the authorized frequency block	Pass
	43.2	378.04	0.0984		
	52.8	378.52	0.0986		
Frequency Band: NR n77 (3700MHz ~ 3980MHz), Middle Channel, Downlink (for CU)					
Frequency stability V.S. Temperature measurement					
Voltage (Vdc)	Temperature (°C)	Frequency Tolerance		Limit (ppm)	Results
		Hz	ppm		
48.0	-30	380.35	0.0990	Within the authorized frequency block	Pass
	-20	378.19	0.0985		
	-10	376.97	0.0982		
	0	379.59	0.0989		
	10	379.56	0.0988		
	20	378.26	0.0985		
	30	378.50	0.0986		
	40	378.10	0.0985		
	50	378.71	0.0986		
Frequency stability V.S. Voltage measurement					
Temperature (°C)	Voltage (Vdc)	Frequency Tolerance		Limit	Results
		Hz	ppm		
25.0	48.0	378.37	0.0985	Within the authorized frequency block	Pass
	43.2	378.61	0.0986		
	52.8	377.97	0.0984		

5.8 Radiated Spurious Emissions

5.8.1 Limits

- **NR n2/n25 (§ 24.238 (a)):**
Out of band emissions. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.
- **NR n66 (§ 27.53 (h)):**
(3) General protection levels. Except as otherwise specified below, for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ dB.
- **NR n5 (§ 22.917 (a)):**
Out of band emissions. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.
- **NR n7 (§ 27.53 (m)):**
(4) For digital base stations, the attenuation shall be not less than $43 + 10 \log(P)$ dB, unless a documented interference complaint is received from an adjacent channel licensee with an overlapping Geographic Service Area.
- **n12 (§ 27.53 (g)):**
For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log(P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.
- **NR n14 (§ 27.53 (e)):**
(2) On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than $76 + 10 \log(P)$ dB in a 6.25 kHz band segment, for base and fixed stations.
(4) On any frequency between 775-788 MHz, above 805 MHz, and below 758 MHz, by at least $43 + 10 \log(P)$ dB.
- **NR n77 (§ 27.53 (l)):**
(1) For base station operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz. Compliance with this paragraph (l)(1) is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

- **NR n77 (§ 27.53 (n)):**

(1) For base station operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz. Compliance with the provisions of this paragraph (n)(1) is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed, but limited to a maximum of 200 kHz. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power. Notwithstanding the channel edge requirement of -13 dBm per megahertz, for base station operations in the 3450-3550 MHz band, the conducted power of any emission below 3440 MHz or above 3560 MHz shall not exceed -25 dBm/MHz, and the conducted power of emissions below 3430 MHz or above 3570 MHz shall not exceed -40 dBm/MHz.

5.8.2 Test Procedure

- a) The EUT is placed on a non-conducting table of the 3m SAC turntable, 80 cm above the ground plane for measurement below 1GHz, 1.5 m above the ground plane for measurement above 1GHz. The measurement receiving antenna to EUT distance is 3 meters. The EUT was arranged in accordance with ANSI C63.26.
- b) Open the test software, load the radiated spurious emissions test script, or create a new radiated spurious emissions test script, and configure the test parameters, including the test frequency range, RBW = 100kHz (for below 1GHz) or 1MHz (for above 1GHz), VBW = 300kHz (for below 1GHz) or 3MHz (for above 1GHz), test standard, test antenna, spectrum analyzer, and other related settings.
- c) The test script was executed, the measurement was performed.
- d) The turntable rotates 360 degrees, and the test antenna is raised and lowered within a range of 1 to 4 meters.
- e) Use the spectrum analyzer's Max Hold function to record the maximum test trace. For frequencies below 1 GHz, mark the maximum Quasi-peak value. For frequencies above 1 GHz, mark the maximum Peak and Average values. Save the test data.
- f) Both vertical and horizontal polarizations of the test antenna need to be tested.
- g) Radiated power measurements were calculated according to Section 5.2.7 of the ANSI C63.26-2015 standard:
 - $EIRP\ (dBm) = E\ (dB\mu V/m) + 20\log(D) - 104.8$; where D is the measurement distance (in the far field region) in m.
 - Therefore, when the measurement distance is 3 meters:
 $EIRP\ (dBm) = E\ (dB\mu V/m) - 95.2$

5.8.3 Test Setup

See setup 3 in section 4.4.

5.8.4 Test Instruments

Refer to section 3.7.

5.8.5 Test Results

Pass.

5.8.6 Test Data

Frequency Band: n2(NU)						
Lowest channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
3705.00	-62.32	-0.46	-62.78	-13.00	49.78	Vertical
5557.50	-64.87	3.72	-61.15	-13.00	48.15	Vertical
7410.00	-64.75	5.46	-59.29	-13.00	46.29	Vertical
3705.00	-62.69	-0.26	-62.95	-13.00	49.95	Horizontal
5557.50	-64.40	3.64	-60.76	-13.00	47.76	Horizontal
7410.00	-66.18	5.02	-61.16	-13.00	48.16	Horizontal
Middle channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
3760.00	-61.85	-0.68	-62.53	-13.00	49.53	Vertical
5640.00	-64.30	3.57	-60.73	-13.00	47.73	Vertical
7520.00	-64.45	5.76	-58.69	-13.00	45.69	Vertical
3760.00	-63.23	-0.23	-63.46	-13.00	50.46	Horizontal
5640.00	-64.68	3.75	-60.93	-13.00	47.93	Horizontal
7520.00	-66.52	5.77	-60.75	-13.00	47.75	Horizontal
Highest channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
3815.00	-64.06	-0.12	-64.18	-13.00	51.18	Vertical
5722.50	-64.35	3.47	-60.88	-13.00	47.88	Vertical
7630.00	-66.49	6.43	-60.06	-13.00	47.06	Vertical
3815.00	-63.62	0.39	-63.23	-13.00	50.23	Horizontal
5722.50	-64.77	3.86	-60.91	-13.00	47.91	Horizontal
7630.00	-66.52	6.27	-60.25	-13.00	47.25	Horizontal
Remark: - The emission levels of below 1 GHz are lower than the limit 20dB, so not show in test report. - Test Frequency up to 20GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.						

Frequency Band: n2(CU)						
Lowest channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
3865.00	-62.07	0.80	-61.27	-13.00	48.27	Vertical
5797.50	-64.98	4.37	-60.61	-13.00	47.61	Vertical
7730.00	-66.80	6.71	-60.09	-13.00	47.09	Vertical
3865.00	-62.89	0.98	-61.91	-13.00	48.91	Horizontal
5797.50	-64.93	4.59	-60.34	-13.00	47.34	Horizontal
7730.00	-66.58	6.46	-60.12	-13.00	47.12	Horizontal
Middle channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
3920.00	-64.00	1.45	-62.55	-13.00	49.55	Vertical
5880.00	-64.93	4.34	-60.59	-13.00	47.59	Vertical
7840.00	-67.06	8.61	-58.45	-13.00	45.45	Vertical
3920.00	-64.09	1.62	-62.47	-13.00	49.47	Horizontal
5880.00	-65.05	4.61	-60.44	-13.00	47.44	Horizontal
7840.00	-66.88	8.39	-58.49	-13.00	45.49	Horizontal
Highest channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
3975.00	-63.87	1.63	-62.24	-13.00	49.24	Vertical
5962.50	-65.04	5.45	-59.59	-13.00	46.59	Vertical
7950.00	-67.19	8.86	-58.33	-13.00	45.33	Vertical
3975.00	-63.84	1.93	-61.91	-13.00	48.91	Horizontal
5962.50	-64.98	5.35	-59.63	-13.00	46.63	Horizontal
7950.00	-67.47	8.53	-58.94	-13.00	45.94	Horizontal
Remark: - The emission levels of below 1 GHz are lower than the limit 20dB, so not show in test report. - Test Frequency up to 20GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.						

Frequency Band: n5(NU)						
Lowest channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
1653.00	-54.98	-11.13	-66.11	-13.00	53.11	Vertical
2479.50	-57.13	-8.94	-66.07	-13.00	53.07	Vertical
3306.00	-62.19	-3.25	-65.44	-13.00	52.44	Vertical
1653.00	-53.14	-10.51	-63.65	-13.00	50.65	Horizontal
2479.50	-60.11	-9.33	-69.44	-13.00	56.44	Horizontal
3306.00	-60.32	-3.36	-63.68	-13.00	50.68	Horizontal
Middle channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
1673.00	-56.74	-10.40	-67.14	-13.00	54.14	Vertical
2509.50	-61.41	-8.93	-70.34	-13.00	57.34	Vertical
3346.00	-63.16	-2.88	-66.04	-13.00	53.04	Vertical
1673.00	-58.45	-9.97	-68.42	-13.00	55.42	Horizontal
2509.50	-60.77	-8.99	-69.76	-13.00	56.76	Horizontal
3346.00	-63.08	-2.97	-66.05	-13.00	53.05	Horizontal
Highest channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
1693.00	-56.12	-9.58	-65.70	-13.00	52.70	Vertical
2539.50	-60.55	-8.61	-69.16	-13.00	56.16	Vertical
3386.00	-62.76	-2.36	-65.12	-13.00	52.12	Vertical
1693.00	-58.36	-9.36	-67.72	-13.00	54.72	Horizontal
2539.50	-60.09	-8.35	-68.44	-13.00	55.44	Horizontal
3386.00	-62.95	-2.43	-65.38	-13.00	52.38	Horizontal
Remark: - The emission levels of below 1 GHz are lower than the limit 20dB, so not show in test report. - Test Frequency up to 10GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.						

Frequency Band: n5(CU)						
Lowest channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
1743.00	-48.36	-9.97	-58.33	-13.00	45.33	Vertical
2614.50	-60.22	-6.76	-66.98	-13.00	53.98	Vertical
3486.00	-56.68	-2.25	-58.93	-13.00	45.93	Vertical
1743.00	-57.17	-10.32	-67.49	-13.00	54.49	Horizontal
2614.50	-60.58	-6.80	-67.38	-13.00	54.38	Horizontal
3486.00	-63.28	-2.16	-65.44	-13.00	52.44	Horizontal
Middle channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
1763.00	-50.69	-10.25	-60.94	-13.00	47.94	Vertical
2644.50	-59.62	-6.95	-66.57	-13.00	53.57	Vertical
3526.00	-62.75	-2.47	-65.22	-13.00	52.22	Vertical
1763.00	-58.04	-10.86	-68.90	-13.00	55.90	Horizontal
2644.50	-60.80	-6.92	-67.72	-13.00	54.72	Horizontal
3526.00	-62.02	-2.30	-64.32	-13.00	51.32	Horizontal
Highest channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
1783.00	-56.61	-10.94	-67.55	-13.00	54.55	Vertical
2674.50	-61.01	-7.13	-68.14	-13.00	55.14	Vertical
3566.00	-61.72	-2.15	-63.87	-13.00	50.87	Vertical
1783.00	-59.28	-11.42	-70.70	-13.00	57.70	Horizontal
2674.50	-60.66	-7.03	-67.69	-13.00	54.69	Horizontal
3566.00	-63.45	-2.15	-65.60	-13.00	52.60	Horizontal
Remark: - The emission levels of below 1 GHz are lower than the limit 20dB, so not show in test report. - Test Frequency up to 10GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.						

Frequency Band: n7(NU)						
Lowest channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
5005.00	-62.46	4.06	-58.40	-13.00	45.40	Vertical
7507.50	-66.68	5.79	-60.89	-13.00	47.89	Vertical
10010.00	-68.13	9.76	-58.37	-13.00	45.37	Vertical
5005.00	-64.29	4.38	-59.91	-13.00	46.91	Horizontal
7507.50	-66.28	5.78	-60.50	-13.00	47.50	Horizontal
10010.00	-67.97	9.12	-58.85	-13.00	45.85	Horizontal
Middle channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
5070.00	-64.90	4.65	-60.25	-13.00	47.25	Vertical
7605.00	-66.13	6.12	-60.01	-13.00	47.01	Vertical
10140.00	-68.61	10.00	-58.61	-13.00	45.61	Vertical
5070.00	-64.92	3.93	-60.99	-13.00	47.99	Horizontal
7605.00	-66.87	6.01	-60.86	-13.00	47.86	Horizontal
10140.00	-68.52	9.74	-58.78	-13.00	45.78	Horizontal
Highest channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
5135.00	-64.34	4.26	-60.08	-13.00	47.08	Vertical
7702.50	-66.41	6.23	-60.18	-13.00	47.18	Vertical
10270.00	-68.16	10.97	-57.19	-13.00	44.19	Vertical
5135.00	-65.13	4.31	-60.82	-13.00	47.82	Horizontal
7702.50	-66.35	5.98	-60.37	-13.00	47.37	Horizontal
10270.00	-67.60	10.49	-57.11	-13.00	44.11	Horizontal
Remark: - The emission levels of below 1 GHz are lower than the limit 20dB, so not show in test report. - Test Frequency up to 30GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.						

Frequency Band: n7(CU)						
Lowest channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
5245.00	-65.08	3.79	-61.29	-13.00	48.29	Vertical
7867.50	-66.95	8.66	-58.29	-13.00	45.29	Vertical
10490.00	-67.98	11.46	-56.52	-13.00	43.52	Vertical
5245.00	-65.09	4.03	-61.06	-13.00	48.06	Horizontal
7867.50	-66.53	8.37	-58.16	-13.00	45.16	Horizontal
10490.00	-67.87	10.87	-57.00	-13.00	44.00	Horizontal
Middle channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
5310.00	-65.10	4.42	-60.68	-13.00	47.68	Vertical
7965.00	-67.02	8.57	-58.45	-13.00	45.45	Vertical
10620.00	-68.09	12.21	-55.88	-13.00	42.88	Vertical
5310.00	-65.57	4.57	-61.00	-13.00	48.00	Horizontal
7965.00	-66.95	8.41	-58.54	-13.00	45.54	Horizontal
10620.00	-68.07	11.75	-56.32	-13.00	43.32	Horizontal
Highest channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
5375.00	-65.10	4.60	-60.50	-13.00	47.50	Vertical
8062.50	-67.52	8.19	-59.33	-13.00	46.33	Vertical
10750.00	-68.05	11.50	-56.55	-13.00	43.55	Vertical
5375.00	-65.29	4.59	-60.70	-13.00	47.70	Horizontal
8062.50	-67.39	8.90	-58.49	-13.00	45.49	Horizontal
10750.00	-68.04	10.92	-57.12	-13.00	44.12	Horizontal
Remark: - The emission levels of below 1 GHz are lower than the limit 20dB, so not show in test report. - Test Frequency up to 30GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.						

Frequency Band: n12(NU)						
Lowest channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
1403.00	-52.73	-11.60	-64.33	-13.00	51.33	Vertical
2104.50	-50.16	-9.63	-59.79	-13.00	46.79	Vertical
2806.00	-61.18	-6.68	-67.86	-13.00	54.86	Vertical
1403.00	-58.62	-11.34	-69.96	-13.00	56.96	Horizontal
2104.50	-58.42	-9.10	-67.52	-13.00	54.52	Horizontal
2806.00	-60.98	-6.20	-67.18	-13.00	54.18	Horizontal
Middle channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
1415.00	-54.36	-11.72	-66.08	-13.00	53.08	Vertical
2122.50	-58.47	-9.40	-67.87	-13.00	54.87	Vertical
2830.00	-59.30	-6.15	-65.45	-13.00	52.45	Vertical
1415.00	-57.79	-11.40	-69.19	-13.00	56.19	Horizontal
2122.50	-59.91	-8.70	-68.61	-13.00	55.61	Horizontal
2830.00	-61.50	-5.64	-67.14	-13.00	54.14	Horizontal
Highest channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
1427.00	-53.28	-11.85	-65.13	-13.00	52.13	Vertical
2140.50	-59.67	-9.37	-69.04	-13.00	56.04	Vertical
2854.00	-61.17	-5.47	-66.64	-13.00	53.64	Vertical
1427.00	-58.55	-11.56	-70.11	-13.00	57.11	Horizontal
2140.50	-57.52	-8.92	-66.44	-13.00	53.44	Horizontal
2854.00	-61.49	-5.27	-66.76	-13.00	53.76	Horizontal
Remark: - The emission levels of below 1 GHz are lower than the limit 20dB, so not show in test report. - Test Frequency up to 10GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.						

Frequency Band: n12(CU)						
Lowest channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
1463.00	-53.72	-12.38	-66.10	-13.00	53.10	Vertical
2194.50	-52.40	-9.26	-61.66	-13.00	48.66	Vertical
2926.00	-62.12	-4.38	-66.50	-13.00	53.50	Vertical
1463.00	-57.41	-12.32	-69.73	-13.00	56.73	Horizontal
2194.50	-58.47	-9.58	-68.05	-13.00	55.05	Horizontal
2926.00	-62.05	-4.61	-66.66	-13.00	53.66	Horizontal
Middle channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
1475.00	-47.09	-12.57	-59.66	-13.00	46.66	Vertical
2212.50	-56.48	-9.23	-65.71	-13.00	52.71	Vertical
2950.00	-61.01	-4.55	-65.56	-13.00	52.56	Vertical
1475.00	-55.76	-12.59	-68.35	-13.00	55.35	Horizontal
2212.50	-58.60	-9.61	-68.21	-13.00	55.21	Horizontal
2950.00	-61.48	-4.77	-66.25	-13.00	53.25	Horizontal
Highest channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
1487.00	-51.34	-12.76	-64.10	-13.00	51.10	Vertical
2230.50	-56.31	-9.17	-65.48	-13.00	52.48	Vertical
2974.00	-62.32	-4.87	-67.19	-13.00	54.19	Vertical
1487.00	-51.90	-12.86	-64.76	-13.00	51.76	Horizontal
2230.50	-59.22	-9.63	-68.85	-13.00	55.85	Horizontal
2974.00	-60.51	-4.95	-65.46	-13.00	52.46	Horizontal
Remark: - The emission levels of below 1 GHz are lower than the limit 20dB, so not show in test report. - Test Frequency up to 10GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.						

Frequency Band: n14(NU)						
Lowest channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
1581.00	-51.30	-11.77	-63.07	-13.00	50.07	Vertical
2371.50	-60.34	-9.21	-69.55	-13.00	56.55	Vertical
3162.00	-62.26	-2.11	-64.37	-13.00	51.37	Vertical
1581.00	-52.29	-11.93	-64.22	-13.00	51.22	Horizontal
2371.50	-60.24	-9.25	-69.49	-13.00	56.49	Horizontal
3162.00	-62.07	-2.90	-64.97	-13.00	51.97	Horizontal
Middle channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
1586.00	-53.99	-11.80	-65.79	-13.00	52.79	Vertical
2379.00	-58.31	-9.18	-67.49	-13.00	54.49	Vertical
3172.00	-59.02	-2.03	-61.05	-13.00	48.05	Vertical
1586.00	-57.48	-11.87	-69.35	-13.00	56.35	Horizontal
2379.00	-60.53	-9.24	-69.77	-13.00	56.77	Horizontal
3172.00	-60.54	-2.87	-63.41	-13.00	50.41	Horizontal
Highest channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
1591.00	-55.42	-11.85	-67.27	-13.00	54.27	Vertical
2386.50	-59.27	-9.14	-68.41	-13.00	55.41	Vertical
3182.00	-56.17	-2.13	-58.30	-13.00	45.30	Vertical
1591.00	-58.67	-11.78	-70.45	-13.00	57.45	Horizontal
2386.50	-59.53	-9.24	-68.77	-13.00	55.77	Horizontal
3182.00	-62.00	-2.80	-64.80	-13.00	51.80	Horizontal
Remark: - The emission levels of below 1 GHz are lower than the limit 20dB, so not show in test report. - Test Frequency up to 10GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.						

Frequency Band: n14(CU)						
Lowest channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
1521.00	-54.95	-12.29	-67.24	-13.00	54.24	Vertical
2281.50	-60.16	-9.18	-69.34	-13.00	56.34	Vertical
3042.00	-60.18	-4.72	-64.90	-13.00	51.90	Vertical
1521.00	-58.52	-12.65	-71.17	-13.00	58.17	Horizontal
2281.50	-60.15	-9.52	-69.67	-13.00	56.67	Horizontal
3042.00	-61.59	-4.36	-65.95	-13.00	52.95	Horizontal
Middle channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
1526.00	-51.25	-12.20	-63.45	-13.00	50.45	Vertical
2289.00	-58.14	-9.22	-67.36	-13.00	54.36	Vertical
3052.00	-61.67	-4.41	-66.08	-13.00	53.08	Vertical
1526.00	-56.35	-12.59	-68.94	-13.00	55.94	Horizontal
2289.00	-59.88	-9.47	-69.35	-13.00	56.35	Horizontal
3052.00	-62.00	-4.11	-66.11	-13.00	53.11	Horizontal
Highest channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
1531.00	-53.59	-12.13	-65.72	-13.00	52.72	Vertical
2296.50	-54.95	-9.25	-64.20	-13.00	51.20	Vertical
3062.00	-61.51	-4.11	-65.62	-13.00	52.62	Vertical
1531.00	-56.19	-12.55	-68.74	-13.00	55.74	Horizontal
2296.50	-59.46	-9.41	-68.87	-13.00	55.87	Horizontal
3062.00	-61.86	-3.87	-65.73	-13.00	52.73	Horizontal
Remark: - The emission levels of below 1 GHz are lower than the limit 20dB, so not show in test report. - Test Frequency up to 10GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.						

Frequency Band: n25(NU)						
Lowest channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
3705.00	-63.25	-0.46	-63.71	-13.00	50.71	Vertical
5557.50	-64.65	3.72	-60.93	-13.00	47.93	Vertical
7410.00	-64.17	5.46	-58.71	-13.00	45.71	Vertical
3705.00	-60.34	-0.26	-60.60	-13.00	47.60	Horizontal
5557.50	-64.90	3.64	-61.26	-13.00	48.26	Horizontal
7410.00	-66.12	5.02	-61.10	-13.00	48.10	Horizontal
Middle channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
3765.00	-62.83	-0.66	-63.49	-13.00	50.49	Vertical
5647.50	-64.52	3.52	-61.00	-13.00	48.00	Vertical
7530.00	-65.44	5.75	-59.69	-13.00	46.69	Vertical
3765.00	-63.24	-0.19	-63.43	-13.00	50.43	Horizontal
5647.50	-64.00	3.74	-60.26	-13.00	47.26	Horizontal
7530.00	-66.07	5.75	-60.32	-13.00	47.32	Horizontal
Highest channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
3825.00	-62.67	0.05	-62.62	-13.00	49.62	Vertical
5737.50	-64.43	3.61	-60.82	-13.00	47.82	Vertical
7650.00	-65.46	6.65	-58.81	-13.00	45.81	Vertical
3825.00	-63.93	0.50	-63.43	-13.00	50.43	Horizontal
5737.50	-64.96	3.97	-60.99	-13.00	47.99	Horizontal
7650.00	-66.60	6.45	-60.15	-13.00	47.15	Horizontal
Remark: - The emission levels of below 1 GHz are lower than the limit 20dB, so not show in test report. - Test Frequency up to 20GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.						

Frequency Band: n25(CU)						
Lowest channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
3865.00	-64.05	0.80	-63.25	-13.00	50.25	Vertical
5797.50	-65.04	4.37	-60.67	-13.00	47.67	Vertical
7730.00	-66.20	6.71	-59.49	-13.00	46.49	Vertical
3865.00	-64.05	0.98	-63.07	-13.00	50.07	Horizontal
5797.50	-65.05	4.59	-60.46	-13.00	47.46	Horizontal
7730.00	-66.87	6.46	-60.41	-13.00	47.41	Horizontal
Middle channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
3925.00	-64.15	1.47	-62.68	-13.00	49.68	Vertical
5887.50	-65.12	4.30	-60.82	-13.00	47.82	Vertical
7850.00	-66.38	8.60	-57.78	-13.00	44.78	Vertical
3925.00	-64.29	1.64	-62.65	-13.00	49.65	Horizontal
5887.50	-64.85	4.58	-60.27	-13.00	47.27	Horizontal
7850.00	-66.13	8.36	-57.77	-13.00	44.77	Horizontal
Highest channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
3985.00	-62.88	1.67	-61.21	-13.00	48.21	Vertical
5977.50	-65.18	5.49	-59.69	-13.00	46.69	Vertical
7970.00	-65.96	8.47	-57.49	-13.00	44.49	Vertical
3985.00	-64.56	2.00	-62.56	-13.00	49.56	Horizontal
5977.50	-65.55	5.41	-60.14	-13.00	47.14	Horizontal
7970.00	-66.84	8.38	-58.46	-13.00	45.46	Horizontal
Remark: - The emission levels of below 1 GHz are lower than the limit 20dB, so not show in test report. - Test Frequency up to 20GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.						

Frequency Band: n66(NU)						
Lowest channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
3425.00	-63.11	-2.16	-65.27	-13.00	52.27	Vertical
5137.50	-64.81	4.25	-60.56	-13.00	47.56	Vertical
6850.00	-64.49	5.64	-58.85	-13.00	45.85	Vertical
3425.00	-59.74	-2.23	-61.97	-13.00	48.97	Horizontal
5137.50	-65.15	4.30	-60.85	-13.00	47.85	Horizontal
6850.00	-65.47	5.84	-59.63	-13.00	46.63	Horizontal
Middle channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
3510.00	-62.37	-3.34	-65.71	-13.00	52.71	Vertical
5265.00	-65.29	3.79	-61.50	-13.00	48.50	Vertical
7020.00	-63.66	5.31	-58.35	-13.00	45.35	Vertical
3510.00	-62.72	-3.16	-65.88	-13.00	52.88	Horizontal
5265.00	-65.55	4.15	-61.40	-13.00	48.40	Horizontal
7020.00	-65.57	5.38	-60.19	-13.00	47.19	Horizontal
Highest channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
3555.00	-63.76	-2.43	-66.19	-13.00	53.19	Vertical
5332.50	-65.67	4.67	-61.00	-13.00	48.00	Vertical
7110.00	-65.77	5.59	-60.18	-13.00	47.18	Vertical
3555.00	-59.95	-2.38	-62.33	-13.00	49.33	Horizontal
5332.50	-65.45	4.68	-60.77	-13.00	47.77	Horizontal
7110.00	-65.38	5.41	-59.97	-13.00	46.97	Horizontal
Remark: - The emission levels of below 1 GHz are lower than the limit 20dB, so not show in test report. - Test Frequency up to 25GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.						

Frequency Band: n66(CU)						
Lowest channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
4225.00	-64.03	0.06	-63.97	-13.00	50.97	Vertical
6337.50	-65.24	3.92	-61.32	-13.00	48.32	Vertical
8450.00	-68.09	8.66	-59.43	-13.00	46.43	Vertical
4225.00	-63.90	-0.24	-64.14	-13.00	51.14	Horizontal
6337.50	-65.36	3.85	-61.51	-13.00	48.51	Horizontal
8450.00	-68.23	8.25	-59.98	-13.00	46.98	Horizontal
Middle channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
4310.00	-63.37	1.71	-61.66	-13.00	48.66	Vertical
6465.00	-65.02	4.87	-60.15	-13.00	47.15	Vertical
8620.00	-67.10	8.42	-58.68	-13.00	45.68	Vertical
4310.00	-60.79	1.71	-59.08	-13.00	46.08	Horizontal
6465.00	-65.11	4.73	-60.38	-13.00	47.38	Horizontal
8620.00	-67.24	8.12	-59.12	-13.00	46.12	Horizontal
Highest channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
4355.00	-61.94	1.71	-60.23	-13.00	47.23	Vertical
6532.50	-65.73	6.22	-59.51	-13.00	46.51	Vertical
8710.00	-67.31	8.58	-58.73	-13.00	45.73	Vertical
4355.00	-62.83	1.59	-61.24	-13.00	48.24	Horizontal
6532.50	-65.03	5.81	-59.22	-13.00	46.22	Horizontal
8710.00	-67.17	8.77	-58.40	-13.00	45.40	Horizontal
Remark: - The emission levels of below 1 GHz are lower than the limit 20dB, so not show in test report. - Test Frequency up to 25GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.						

Frequency Band: n77(3450~3550) (NU) (100MHz)						
Middle channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
6999.99	-64.83	5.74	-59.09	-13.00	46.09	Vertical
10499.99	-68.26	11.81	-56.45	-13.00	43.45	Vertical
13999.98	-70.94	13.15	-57.79	-13.00	44.79	Vertical
6999.99	-65.89	5.76	-60.13	-13.00	47.13	Horizontal
10499.99	-68.41	11.21	-57.20	-13.00	44.20	Horizontal
13999.98	-71.52	13.43	-58.09	-13.00	45.09	Horizontal
Remark: - The emission levels of below 1 GHz are lower than the limit 20dB, so not show in test report. - Test Frequency up to 40GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.						

Frequency Band: n77(3450~3550) (CU) (100MHz)						
Middle channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
6999.99	-65.17	5.74	-59.43	-13.00	46.43	Vertical
10499.99	-68.6	11.81	-56.79	-13.00	43.79	Vertical
13999.98	-71.22	13.15	-58.07	-13.00	45.07	Vertical
6999.99	-65.72	5.76	-59.96	-13.00	46.96	Horizontal
10499.99	-68.65	11.21	-57.44	-13.00	44.44	Horizontal
13999.98	-70.95	13.43	-57.52	-13.00	44.52	Horizontal
Remark: - The emission levels of below 1 GHz are lower than the limit 20dB, so not show in test report. - Test Frequency up to 40GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.						

Frequency Band: n77(3700~3980) (NU) (100MHz)						
Lowest channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
7500.00	-64.72	5.37	-59.35	-13.00	46.35	Vertical
11250.00	-69.38	12.62	-56.76	-13.00	43.76	Vertical
15000.00	-73.04	13.51	-59.53	-13.00	46.53	Vertical
7500.00	-65.84	5.28	-60.56	-13.00	47.56	Horizontal
11250.00	-69.28	12.45	-56.83	-13.00	43.83	Horizontal
15000.00	-72.64	15.27	-57.37	-13.00	44.37	Horizontal
Middle channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
7680.00	-66.53	7.31	-59.22	-13.00	46.22	Vertical
11520.00	-68.53	11.49	-57.04	-13.00	44.04	Vertical
15360.00	-63.38	14.85	-48.53	-13.00	35.53	Vertical
7680.00	-66.79	7.08	-59.71	-13.00	46.71	Horizontal
11520.00	-68.60	11.24	-57.36	-13.00	44.36	Horizontal
15360.00	-72.76	16.35	-56.41	-13.00	43.41	Horizontal
Highest channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
7860.00	-66.00	8.08	-57.92	-13.00	44.92	Vertical
11790.00	-68.72	11.85	-56.87	-13.00	43.87	Vertical
15720.00	-71.34	13.89	-57.45	-13.00	44.45	Vertical
7860.00	-65.31	7.83	-57.48	-13.00	44.48	Horizontal
11790.00	-69.52	11.73	-57.79	-13.00	44.79	Horizontal
15720.00	-71.85	16.85	-55.00	-13.00	42.00	Horizontal
Remark: - The emission levels of below 1 GHz are lower than the limit 20dB, so not show in test report. - Test Frequency up to 40GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.						

Frequency Band: n77(3700~3980) (CU) (100MHz)						
Lowest channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
7500.00	-64.48	5.37	-59.11	-13.00	46.11	Vertical
11250.00	-69.42	12.62	-56.80	-13.00	43.80	Vertical
15000.00	-72.29	13.51	-58.78	-13.00	45.78	Vertical
7500.00	-66.14	5.28	-60.86	-13.00	47.86	Horizontal
11250.00	-69.67	12.45	-57.22	-13.00	44.22	Horizontal
15000.00	-72.98	15.27	-57.71	-13.00	44.71	Horizontal
Middle channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
7680.00	-66.58	7.31	-59.27	-13.00	46.27	Vertical
11520.00	-68.74	11.49	-57.25	-13.00	44.25	Vertical
15360.00	-63.34	14.85	-48.49	-13.00	35.49	Vertical
7680.00	-66.22	7.08	-59.14	-13.00	46.14	Horizontal
11520.00	-68.48	11.24	-57.24	-13.00	44.24	Horizontal
15360.00	-72.45	16.35	-56.10	-13.00	43.10	Horizontal
Highest channel						
Frequency (MHz)	Spurious Emission level (dBm)	Factor (dB)	Level at antenna terminals (dBm)	Limit (dBm)	Margin (dB)	Polarization
7860.00	-66.45	8.08	-58.37	-13.00	45.37	Vertical
11790.00	-69.30	11.85	-57.45	-13.00	44.45	Vertical
15720.00	-73.74	13.89	-59.85	-13.00	46.85	Vertical
7860.00	-66.49	7.83	-58.66	-13.00	45.66	Horizontal
11790.00	-69.09	11.73	-57.36	-13.00	44.36	Horizontal
15720.00	-73.50	16.85	-56.65	-13.00	43.65	Horizontal
Remark: - The emission levels of below 1 GHz are lower than the limit 20dB, so not show in test report. - Test Frequency up to 40GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.						

6 Test Setup Photos

Please refer to test report No. ACT-RF-260500302

7 EUT Constructional Details

Please refer to test report No. ACT-RF-260500301

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