

LTE Band 25						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26047	26365	26683
		Frequency (MHz)		1850.7	1882.5	1914.3
1.4M	QPSK	1	0	24.31	24.02	23.97
		1	2	24.63	24.71	24.36
		1	5	24.17	24.37	24.59
		3	0	23.48	23.63	23.67
		3	1	23.39	23.69	23.63
		3	3	23.71	23.64	23.52
		6	0	23.56	23.37	23.39
1.4M	16QAM	1	0	23.66	23.46	23.84
		1	2	23.74	23.55	23.59
		1	5	23.62	23.89	23.75
		3	0	22.48	22.65	22.71
		3	1	22.44	22.39	22.55
		3	3	22.19	22.72	22.58
		6	0	22.45	22.56	22.56
1.4M	64QAM	1	0	22.45	22.54	22.33
		1	2	22.78	22.65	23.03
		1	5	22.50	22.84	22.90
		3	0	21.14	21.70	21.34
		3	1	21.40	21.59	21.52
		3	3	21.76	21.61	21.62
		6	0	21.22	21.51	21.19

*EIRP = Conducted + antenna gain (1.80dBi)

4.2 Modulation Characteristics Measurement

4.2.1 Limits of Modulation Characteristics

N/A

4.2.2 Test Procedure

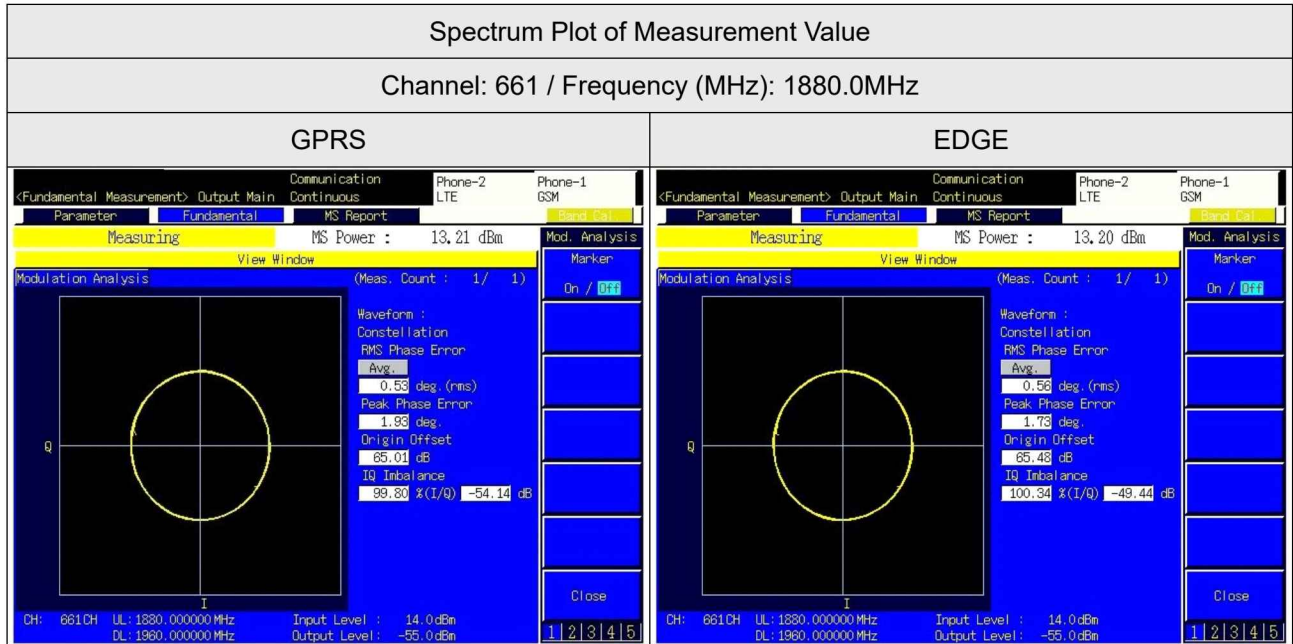
Connect the EUT to Communication Simulator via the antenna connector, The frequency band is set as EUT supported Modulation and Channels, the EUT output is matched with 50 ohm load, the waveform quality and constellation of the EUT was tested.

4.2.3 Test Setup



4.2.4 Test Results

GPRS, EDGE

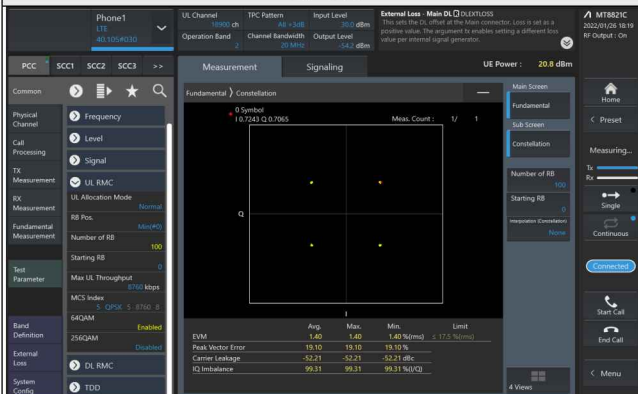


LTE Band 2

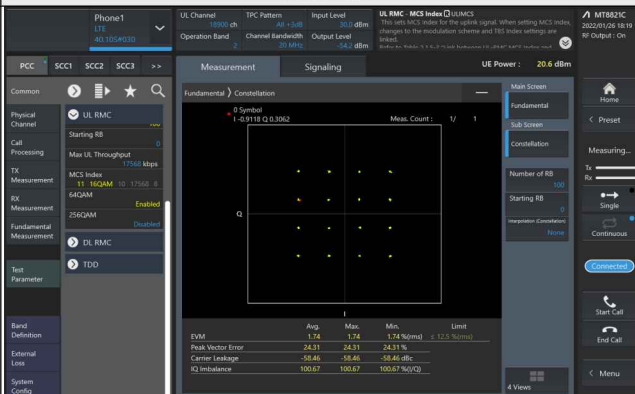
Spectrum Plot of Measurement Value

Channel: 18900 / Frequency (MHz): 1880.0MHz

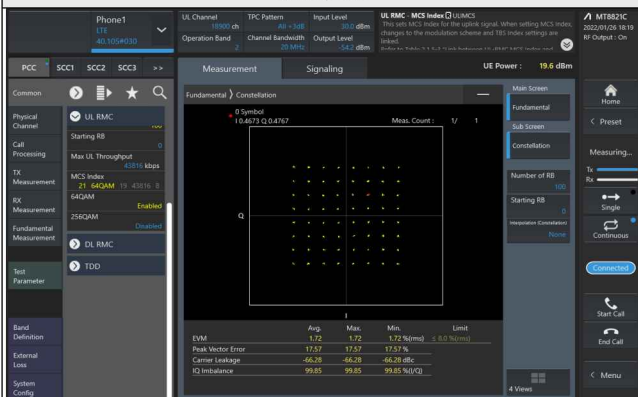
QPSK



16QAM



64QAM

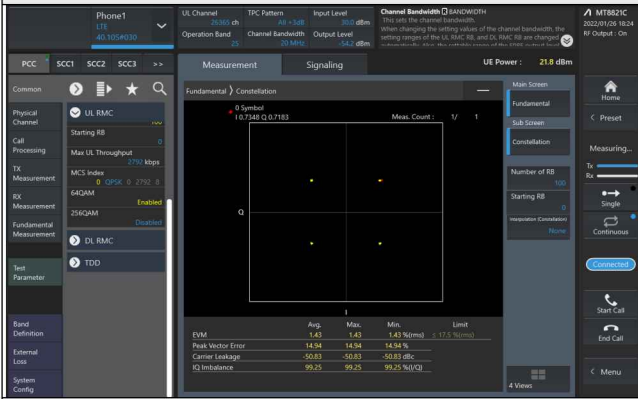


LTE Band 25

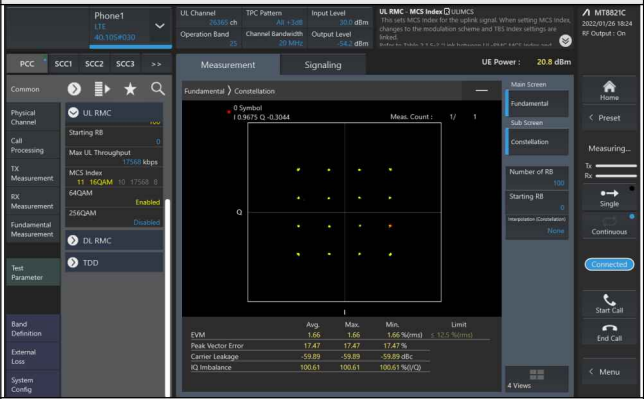
Spectrum Plot of Measurement Value

Channel: 26365 / Frequency (MHz): 1882.5MHz

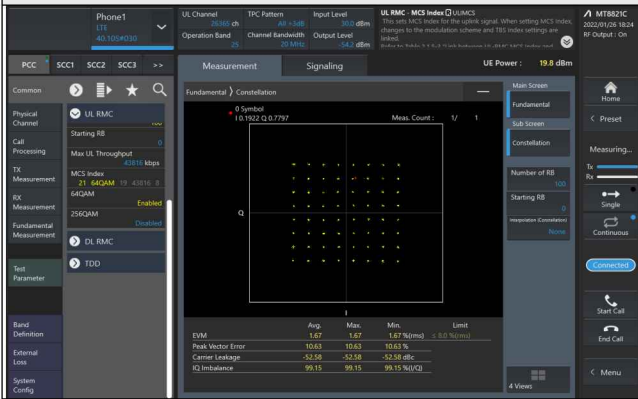
QPSK



16QAM



64QAM



4.3 Frequency Stability Measurement

4.3.1 Limits of Frequency Stability Measurement

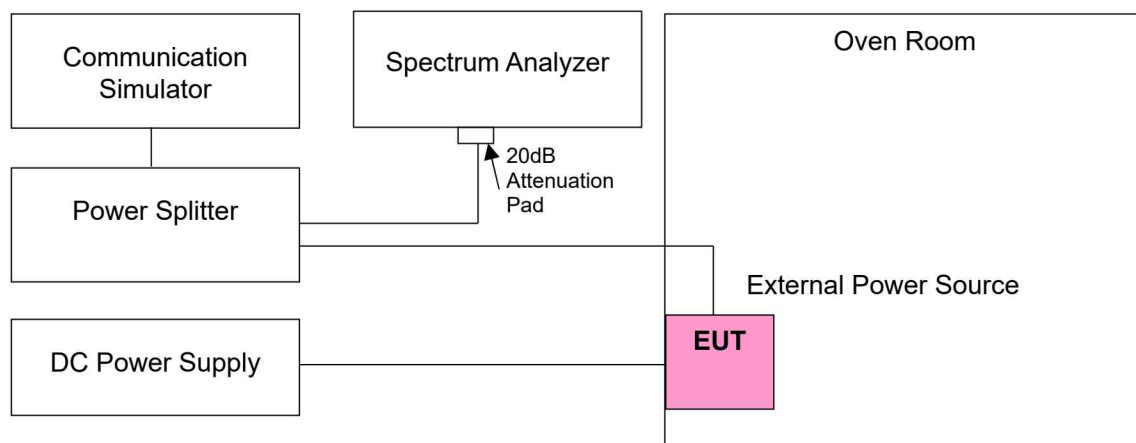
The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

4.3.2 Test Procedure

- Device is placed at the oven room. The oven room could control the temperatures and humidity. Power warm up is at least 15 min and power applied should perform before recording frequency error.
- EUT is connected the external power supply to control the DC input power. The test voltage range is from minimum to maximum working voltage. Each step shall be record the frequency error rate.
- The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the ± 0.5 °C during the measurement testing. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.

Note: The frequency error was recorded frequency error from the communication simulator.

4.3.3 Conducted Setup



4.3.4 Test Results

Frequency Error vs. Voltage

Voltage (Vdc)	GPRS			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.0	1850.200003	0.002	1909.800004	0.002
3.4	1850.200002	0.001	1909.800004	0.002
4.6	1850.200002	0.001	1909.800004	0.002

Note: The applicant defined the normal working voltage is from 3.4Vdc to 4.6Vdc.

Frequency Error vs. Temperature

Temp. (°C)	GPRS			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	1850.200004	0.002	1909.800001	0.001
-30	1850.200004	0.002	1909.800002	0.001
-20	1850.200001	0.001	1909.800001	0.001
-10	1850.200004	0.002	1909.800001	0.001
0	1850.200003	0.002	1909.800004	0.002
10	1850.200002	0.001	1909.800001	0.001
20	1850.199996	-0.002	1909.799997	-0.002
30	1850.199999	-0.001	1909.799998	-0.001
40	1850.199997	-0.002	1909.799999	-0.001
50	1850.199996	-0.002	1909.799996	-0.002
60	1850.199996	-0.002	1909.799997	-0.002
70	1850.199996	-0.002	1909.799998	-0.001
80	1850.199998	-0.001	1909.799996	-0.002
85	1850.199996	-0.002	1909.799996	-0.002

Frequency Error vs. Voltage

Voltage (Vdc)	EDGE			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.0	1850.200004	0.002	1909.800001	0.001
3.4	1850.200004	0.002	1909.800004	0.002
4.6	1850.200003	0.002	1909.800001	0.001

Note: The applicant defined the normal working voltage is from 3.4Vdc to 4.6Vdc.

Frequency Error vs. Temperature

Temp. (°C)	EDGE			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	1850.200002	0.001	1909.800003	0.002
-30	1850.200002	0.001	1909.800002	0.001
-20	1850.200003	0.002	1909.800002	0.001
-10	1850.200002	0.001	1909.800002	0.001
0	1850.200003	0.002	1909.800003	0.002
10	1850.200001	0.001	1909.800001	0.001
20	1850.199999	-0.001	1909.799996	-0.002
30	1850.199997	-0.002	1909.799997	-0.002
40	1850.199996	-0.002	1909.799998	-0.001
50	1850.199996	-0.002	1909.799999	-0.001
60	1850.199996	-0.002	1909.799999	-0.001
70	1850.199997	-0.002	1909.799999	-0.001
80	1850.199998	-0.001	1909.799996	-0.002
85	1850.199998	-0.001	1909.799998	-0.001

Frequency Error vs. Voltage

Voltage (Vdc)	LTE Band 2			
	Channel Bandwidth 1.4 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.0	1850.700002	0.001	1909.300000	0.002
3.4	1850.700002	0.001	1909.300001	0.001
4.6	1850.700001	0.001	1909.300002	0.001

Note: The applicant defined the normal working voltage is from 3.4Vdc to 4.6Vdc.

Frequency Error vs. Temperature

Temp. (°C)	LTE Band 2			
	Channel Bandwidth 1.4 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	1850.700002	0.001	1909.300004	0.002
-30	1850.700004	0.002	1909.300003	0.002
-20	1850.700003	0.002	1909.300004	0.002
-10	1850.700003	0.002	1909.300001	0.001
0	1850.700002	0.001	1909.300003	0.002
10	1850.700001	0.001	1909.300003	0.002
20	1850.699997	-0.002	1909.299998	-0.001
30	1850.699998	-0.001	1909.299997	-0.002
40	1850.699996	-0.002	1909.299996	-0.002
50	1850.699996	-0.002	1909.299998	-0.001
60	1850.699996	-0.002	1909.299998	-0.001
70	1850.699998	-0.001	1909.299998	-0.001
80	1850.699999	-0.001	1909.299996	-0.002
85	1850.699996	-0.002	1909.299999	-0.001

Frequency Error vs. Voltage

Voltage (Vdc)	LTE Band 2			
	Channel Bandwidth 3MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.0	1851.500003	0.002	1908.500004	0.002
3.4	1851.500002	0.001	1908.500002	0.001
4.6	1851.500003	0.002	1908.500004	0.002

Note: The applicant defined the normal working voltage is from 3.4Vdc to 4.6Vdc.

Frequency Error vs. Temperature

Temp. (°C)	LTE Band 2			
	Channel Bandwidth 3MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	1851.500002	0.001	1908.500001	0.001
-30	1851.500001	0.001	1908.500004	0.002
-20	1851.500002	0.001	1908.500004	0.002
-10	1851.500003	0.002	1908.500002	0.001
0	1851.500002	0.001	1908.500004	0.002
10	1851.500003	0.002	1908.500004	0.002
20	1851.499998	-0.001	1908.499996	-0.002
30	1851.499996	-0.002	1908.499999	-0.001
40	1851.499999	-0.001	1908.499996	-0.002
50	1851.499997	-0.002	1908.499998	-0.001
60	1851.499999	-0.001	1908.499999	-0.001
70	1851.499998	-0.001	1908.499996	-0.002
80	1851.499997	-0.002	1908.499997	-0.002
85	1851.499996	-0.002	1908.499999	-0.001

Frequency Error vs. Voltage

Voltage (Vdc)	LTE Band 2			
	Channel Bandwidth 5 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.0	1852.500003	0.002	1907.500004	0.002
3.4	1852.500002	0.001	1907.500004	0.002
4.6	1852.500004	0.002	1907.500001	0.001

Note: The applicant defined the normal working voltage is from 3.4Vdc to 4.6Vdc.

Frequency Error vs. Temperature

Temp. (°C)	LTE Band 2			
	Channel Bandwidth 5 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	1852.500003	0.002	1907.500003	0.002
-30	1852.500004	0.002	1907.500004	0.002
-20	1852.500003	0.002	1907.500004	0.002
-10	1852.500002	0.001	1907.500002	0.001
0	1852.500001	0.001	1907.500001	0.001
10	1852.500001	0.001	1907.500002	0.001
20	1852.499998	-0.001	1907.499998	-0.001
30	1852.499999	-0.001	1907.499999	-0.001
40	1852.499998	-0.001	1907.499998	-0.001
50	1852.499999	-0.001	1907.499996	-0.002
60	1852.499999	-0.001	1907.499999	-0.001
70	1852.499998	-0.001	1907.499996	-0.002
80	1852.499998	-0.001	1907.499998	-0.001
85	1852.499996	-0.002	1907.499997	-0.002

Frequency Error vs. Voltage

Voltage (Vdc)	LTE Band 2			
	Channel Bandwidth 10 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.0	1855.000004	0.002	1905.000001	0.001
3.4	1855.000003	0.002	1905.000004	0.002
4.6	1855.000002	0.001	1905.000004	0.002

Note: The applicant defined the normal working voltage is from 3.4Vdc to 4.6Vdc.

Frequency Error vs. Temperature

Temp. (°C)	LTE Band 2			
	Channel Bandwidth 10 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	1855.000001	0.001	1905.000004	0.002
-30	1855.000004	0.002	1905.000001	0.001
-20	1855.000003	0.002	1905.000001	0.001
-10	1855.000004	0.002	1905.000004	0.002
0	1855.000001	0.001	1905.000002	0.001
10	1855.000004	0.002	1905.000004	0.002
20	1854.999996	-0.002	1904.999999	-0.001
30	1854.999997	-0.002	1904.999998	-0.001
40	1854.999998	-0.001	1904.999997	-0.002
50	1854.999996	-0.002	1904.999999	-0.001
60	1854.999999	-0.001	1904.999998	-0.001
70	1854.999998	-0.001	1904.999998	-0.001
80	1854.999999	-0.001	1904.999999	-0.001
85	1854.999998	-0.001	1904.999997	-0.002

Frequency Error vs. Voltage

Voltage (Vdc)	LTE Band 2			
	Channel Bandwidth 15 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.0	1857.500003	0.002	1902.500003	0.002
3.4	1857.500004	0.002	1902.500002	0.001
4.6	1857.500001	0.001	1902.500003	0.002

Note: The applicant defined the normal working voltage is from 3.4Vdc to 4.6Vdc.

Frequency Error vs. Temperature

Temp. (°C)	LTE Band 2			
	Channel Bandwidth 15 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	1857.500001	0.001	1902.500001	0.001
-30	1857.500001	0.001	1902.500003	0.002
-20	1857.500001	0.001	1902.500001	0.001
-10	1857.500003	0.002	1902.500001	0.001
0	1857.500002	0.001	1902.500002	0.001
10	1857.500003	0.002	1902.500003	0.002
20	1857.499997	-0.002	1902.499996	-0.002
30	1857.499996	-0.002	1902.499997	-0.002
40	1857.499997	-0.002	1902.499996	-0.002
50	1857.499999	-0.001	1902.499999	-0.001
60	1857.499999	-0.001	1902.499997	-0.002
70	1857.499996	-0.002	1902.499997	-0.002
80	1857.499998	-0.001	1902.499999	-0.001
85	1857.499999	-0.001	1902.499999	-0.001

Frequency Error vs. Voltage

Voltage (Vdc)	LTE Band 2			
	Channel Bandwidth 20 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.0	1860.000004	0.002	1900.000002	0.001
3.4	1860.000004	0.002	1900.000002	0.001
4.6	1860.000002	0.001	1900.000001	0.001

Note: The applicant defined the normal working voltage is from 3.4Vdc to 4.6Vdc.

Frequency Error vs. Temperature

Temp. (°C)	LTE Band 2			
	Channel Bandwidth 20 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	1860.000001	0.001	1900.000004	0.002
-30	1860.000001	0.001	1900.000001	0.001
-20	1860.000004	0.002	1900.000001	0.001
-10	1860.000001	0.001	1900.000001	0.001
0	1860.000004	0.002	1900.000004	0.002
10	1860.000003	0.002	1900.000004	0.002
20	1859.999999	-0.001	1899.999998	-0.001
30	1859.999999	-0.001	1899.999996	-0.002
40	1859.999997	-0.002	1899.999996	-0.002
50	1859.999996	-0.002	1899.999998	-0.001
60	1859.999996	-0.002	1899.999999	-0.001
70	1859.999998	-0.001	1899.999998	-0.001
80	1859.999997	-0.002	1899.999997	-0.002
85	1859.999997	-0.002	1899.999996	-0.002

Frequency Error vs. Voltage

Voltage (Vdc)	LTE Band 25			
	Channel Bandwidth 1.4 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.0	1850.700004	0.002	1914.300002	0.001
3.4	1850.700001	0.001	1914.300001	0.001
4.6	1850.700004	0.002	1914.300002	0.001

Note: The applicant defined the normal working voltage is from 3.4Vdc to 4.6Vdc.

Frequency Error vs. Temperature

Temp. (°C)	LTE Band 25			
	Channel Bandwidth 1.4 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	1850.700001	0.001	1914.300001	0.001
-30	1850.700001	0.001	1914.300004	0.002
-20	1850.700002	0.001	1914.300004	0.002
-10	1850.700002	0.001	1914.300001	0.001
0	1850.700002	0.001	1914.300003	0.002
10	1850.700001	0.001	1914.300001	0.001
20	1850.699999	-0.001	1914.299996	-0.002
30	1850.699996	-0.002	1914.299997	-0.002
40	1850.699996	-0.002	1914.299998	-0.001
50	1850.699997	-0.002	1914.299998	-0.001
60	1850.699996	-0.002	1914.299997	-0.002
70	1850.699997	-0.002	1914.299996	-0.002
80	1850.699998	-0.001	1914.299998	-0.001
85	1850.699996	-0.002	1914.299997	-0.002

Frequency Error vs. Voltage

Voltage (Vdc)	LTE Band 25			
	Channel Bandwidth 3MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.0	1851.500003	0.002	1913.500003	0.002
3.4	1851.500002	0.001	1913.500001	0.001
4.6	1851.500004	0.002	1913.500004	0.002

Note: The applicant defined the normal working voltage is from 3.4Vdc to 4.6Vdc.

Frequency Error vs. Temperature

Temp. (°C)	LTE Band 25			
	Channel Bandwidth 3MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	1851.500002	0.001	1913.500004	0.002
-30	1851.500004	0.002	1913.500004	0.002
-20	1851.500002	0.001	1913.500002	0.001
-10	1851.500002	0.001	1913.500003	0.002
0	1851.500004	0.002	1913.500002	0.001
10	1851.500001	0.001	1913.500003	0.002
20	1851.499998	-0.001	1913.499996	-0.002
30	1851.499999	-0.001	1913.499997	-0.002
40	1851.499998	-0.001	1913.499997	-0.002
50	1851.499996	-0.002	1913.499999	-0.001
60	1851.499999	-0.001	1913.499997	-0.002
70	1851.499998	-0.001	1913.499997	-0.002
80	1851.499999	-0.001	1913.499999	-0.001
85	1851.499999	-0.001	1913.499997	-0.002

Frequency Error vs. Voltage

Voltage (Vdc)	LTE Band 25			
	Channel Bandwidth 5 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.0	1852.500001	0.001	1912.500001	0.001
3.4	1852.500003	0.002	1912.500001	0.001
4.6	1852.500002	0.001	1912.500003	0.002

Note: The applicant defined the normal working voltage is from 3.4Vdc to 4.6Vdc.

Frequency Error vs. Temperature

Temp. (°C)	LTE Band 25			
	Channel Bandwidth 5 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	1852.500003	0.002	1912.500002	0.001
-30	1852.500002	0.001	1912.500002	0.001
-20	1852.500003	0.002	1912.500003	0.002
-10	1852.500001	0.001	1912.500001	0.001
0	1852.500001	0.001	1912.500004	0.002
10	1852.500001	0.001	1912.500003	0.002
20	1852.499999	-0.001	1912.499996	-0.002
30	1852.499996	-0.002	1912.499999	-0.001
40	1852.499999	-0.001	1912.499999	-0.001
50	1852.499998	-0.001	1912.499996	-0.002
60	1852.499997	-0.002	1912.499999	-0.001
70	1852.499997	-0.002	1912.499998	-0.001
80	1852.499997	-0.002	1912.499996	-0.002
85	1852.499997	-0.002	1912.499999	-0.001

Frequency Error vs. Voltage

Voltage (Vdc)	LTE Band 25			
	Channel Bandwidth 10 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.0	1855.000002	0.001	1910.000003	0.002
3.4	1855.000002	0.001	1910.000004	0.002
4.6	1855.000003	0.002	1910.000004	0.002

Note: The applicant defined the normal working voltage is from 3.4Vdc to 4.6Vdc.

Frequency Error vs. Temperature

Temp. (°C)	LTE Band 25			
	Channel Bandwidth 10 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	1855.000002	0.001	1910.000004	0.002
-30	1855.000001	0.001	1910.000003	0.002
-20	1855.000003	0.002	1910.000002	0.001
-10	1855.000002	0.001	1910.000003	0.002
0	1855.000002	0.001	1910.000002	0.001
10	1855.000003	0.002	1910.000001	0.001
20	1854.999998	-0.001	1909.999999	-0.001
30	1854.999998	-0.001	1909.999997	-0.002
40	1854.999999	-0.001	1909.999997	-0.002
50	1854.999997	-0.002	1909.999996	-0.002
60	1854.999999	-0.001	1909.999996	-0.002
70	1854.999999	-0.001	1909.999997	-0.002
80	1854.999997	-0.002	1909.999996	-0.002
85	1854.999998	-0.001	1909.999998	-0.001

Frequency Error vs. Voltage

Voltage (Vdc)	LTE Band 25			
	Channel Bandwidth 15 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.0	1857.500003	0.002	1907.500003	0.002
3.4	1857.500002	0.001	1907.500002	0.001
4.6	1857.500004	0.002	1907.500003	0.002

Note: The applicant defined the normal working voltage is from 3.4Vdc to 4.6Vdc.

Frequency Error vs. Temperature

Temp. (°C)	LTE Band 25			
	Channel Bandwidth 15 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	1857.500001	0.001	1907.500002	0.001
-30	1857.500004	0.002	1907.500004	0.002
-20	1857.500001	0.001	1907.500004	0.002
-10	1857.500003	0.002	1907.500002	0.001
0	1857.500002	0.001	1907.500003	0.002
10	1857.500002	0.001	1907.500004	0.002
20	1857.499999	-0.001	1907.499997	-0.002
30	1857.499997	-0.002	1907.499998	-0.001
40	1857.499999	-0.001	1907.499999	-0.001
50	1857.499997	-0.002	1907.499997	-0.002
60	1857.499999	-0.001	1907.499997	-0.002
70	1857.499996	-0.002	1907.499996	-0.002
80	1857.499997	-0.002	1907.499997	-0.002
85	1857.499996	-0.002	1907.499996	-0.002

Frequency Error vs. Voltage

Voltage (Vdc)	LTE Band 25			
	Channel Bandwidth 20 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.0	1860.000003	0.002	1905.000003	0.002
3.4	1860.000004	0.002	1905.000001	0.001
4.6	1860.000003	0.002	1905.000004	0.002

Note: The applicant defined the normal working voltage is from 3.4Vdc to 4.6Vdc.

Frequency Error vs. Temperature

Temp. (°C)	LTE Band 25			
	Channel Bandwidth 20 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	1860.000001	0.001	1905.000001	0.001
-30	1860.000001	0.001	1905.000001	0.001
-20	1860.000001	0.001	1905.000002	0.001
-10	1860.000001	0.001	1905.000002	0.001
0	1860.000003	0.002	1905.000002	0.001
10	1860.000003	0.002	1905.000003	0.002
20	1859.999996	-0.002	1904.999997	-0.002
30	1859.999998	-0.001	1904.999996	-0.002
40	1859.999997	-0.002	1904.999998	-0.001
50	1859.999996	-0.002	1904.999996	-0.002
60	1859.999997	-0.002	1904.999996	-0.002
70	1859.999996	-0.002	1904.999997	-0.002
80	1859.999998	-0.001	1904.999999	-0.001
85	1859.999999	-0.001	1904.999998	-0.001