





















APPENDIX I - FREQUENCY STABILITY



Test Mode: PCS1900\_CH661

# Temperature vs. Frequency Stabiility

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-20	3.96	0.002106383	
-10	-4.17	-0.002218085	
0	5.36	0.002851064	
10	3.85	0.002047872	
20	5.02	0.002670213	$\pm 2.5$
30	5.94	0.003159574	
40	3.88	0.00206383	
50	3.48	0.001851064	
Max. Deviation (ppm)	5.94	0.003159574	

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
6.6	2.55	0.001356383	
7.2	3.97	0.002111702	±2.5
8.4	3.76	0.002	⊥2.5
Max. Deviation (ppm)	3.97	0.002111702	



Test Mode: WCDMA Band II\_CH9400

## Temperature vs. Frequency Stabiility

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-20	-4.43	0.002356383	
-10	2.66	0.001414894	
0	2.98	0.001585106	
10	3.13	0.001664894	
20	0.24	0.00012766	$\pm 2.5$
30	-3.41	0.00181383	
40	1.65	0.00087766	
50	-2.74	0.001457447	
Max. Deviation (ppm)	3.13	0.00181383	

### Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
6.6	4.31	0.002292553	
7.2	3.65	0.001941489	±2.5
8.4	0.78	0.000414894	⊥2.5
Max. Deviation (ppm)	4.62	0.002292553	

Test Mode: LTE Band 2\_CH18900\_1.4M

### Temperature vs. Frequency Stabiility

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-20	-4.31	-0.002292553	
-10	5.41	0.00287766	
0	3.54	0.001882979	
10	4.11	0.00218617	
20	-3.26	-0.001734043	±2.5
30	5.11	0.002718085	
40	6.40	0.003404255	
50	-5.43	-0.002888298	
Max. Deviation (ppm)	6.4	0.003404255	

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
6.6	1.97	0.001047872	
7.2	-3.11	-0.001654255	±2.5
8.4	-0.62	-0.000329787	⊥2.5
Max. Deviation (ppm)	-3.11	-0.001654255	



Test Mode: LTE Band 2\_CH18900\_3M

### Temperature vs. Frequency Stabiility

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-20	3.48	0.001851064	
-10	4.26	0.002265957	
0	2.84	0.001510638	
10	-6.51	-0.003462766	
20	4.65	0.002473404	±2.5
30	2.33	0.001239362	
40	5.66	0.003010638	
50	-5.61	-0.002984043	
Max. Deviation (ppm)	-6.51	-0.003462766	

### Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
6.6	3.88	0.00206383	
7.2	-4.12	-0.002191489	±2.5
8.4	-2.63	-0.001398936	⊥2.5
Max. Deviation (ppm)	-4.12	-0.002191489	

Test Mode: LTE Band 2\_CH18900\_5M

### Temperature vs. Frequency Stabiility

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-20	2.68	0.001425532	
-10	5.12	0.002723404	
0	-3.51	-0.001867021	
10	3.90	0.002074468	
20	2.35	0.00125	$\pm 2.5$
30	-2.90	-0.001542553	
40	4.17	0.002218085	
50	5.61	0.002984043	
Max. Deviation (ppm)	5.61	0.002984043	

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
6.6	1.73	0.000920213	
7.2	2.65	0.001409574	±2.5
8.4	-2.44	-0.001297872	⊥2.5
Max. Deviation (ppm)	2.65	0.001409574	



Test Mode: LTE Band 2\_CH18900\_10M

## Temperature vs. Frequency Stabiility

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-20	4.51	0.002398936	
-10	-5.45	-0.002898936	
0	3.64	0.00193617	
10	-4.86	-0.002585106	
20	2.48	0.001319149	$\pm 2.5$
30	7.25	0.003856383	
40	2.86	0.001521277	
50	-5.68	-0.003021277	
Max. Deviation (ppm)	7.25	0.003856383	

#### Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
6.6	3.07	0.001632979	
7.2	-0.99	-0.000526596	±2.5
8.4	7.10	0.003776596	⊥2.5
Max. Deviation (ppm)	7.10	0.003776596	

Test Mode: LTE Band 2\_CH18900\_15M

### Temperature vs. Frequency Stabiility

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-20	3.65	0.001941489	
-10	-5.42	-0.002882979	
0	1.90	0.001010638	
10	2.44	0.001297872	
20	-5.57	-0.002962766	±2.5
30	5.81	0.003090426	
40	-4.14	-0.002202128	
50	5.02	0.002670213	
Max. Deviation (ppm)	5.81	0.003090426	

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
6.6	3.11	0.001654255	
7.2	-1.52	-0.000808511	±2.5
8.4	5.31	0.002824468	⊥2.5
Max. Deviation (ppm)	5.31	0.002824468	





Test Mode: LTE Band 2\_CH18900\_20M

# Temperature vs. Frequency Stabiility

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-20	4.16	0.002212766	
-10	-4.32	-0.002297872	
0	5.34	0.002840426	
10	-2.83	-0.001505319	
20	3.38	0.001797872	$\pm 2.5$
30	-4.59	-0.002441489	
40	2.57	0.001367021	
50	-5.46	-0.002904255	
Max. Deviation (ppm)	-5.46	-0.002904255	

### Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
6.6	5.90	0.003138298	
7.2	-3.64	-0.00193617	±2.5
8.4	3.72	0.001978723	⊥2.5
Max. Deviation (ppm)	5.9	0.003138298	

**End of Test Report**