

LTE Band 25_20M Spectrum Plot



APPENDIX I - FREQUENCY STABILITY

Test Mode	PCS1900_CH661
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	1.01	0.000537234	±2.5
-20	2.16	0.001148936	
-10	8.99	0.004781915	
0	5.22	0.002776596	
10	2.34	0.001244681	
20	9.52	0.00506383	
30	4.51	0.002398936	
40	3.99	0.00212234	
50	4.29	0.002281915	
Max. Deviation (ppm)	9.52	0.00506383	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	8.68	0.004617021	±2.5
3.6	6.68	0.003553191	
2.0	2.68	0.001425532	
Max. Deviation (ppm)	8.68	0.004617021	

Test Mode	LTE Band 2_CH18900_1.4M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	-7.89	-0.004196809	±2.5
-20	1.54	0.000819149	
-10	9.18	0.004882979	
0	1.32	0.000702128	
10	-5.92	-0.003148936	
20	-2.05	-0.001090426	
30	-5.66	-0.003010638	
40	-3.60	-0.001914894	
50	-2.14	-0.001138298	
Max. Deviation (ppm)	9.18	0.004882979	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	2.71	0.001441489	±2.5
3.6	2.18	0.001159574	
2.0	7.37	0.003920213	
Max. Deviation (ppm)	7.37	0.003920213	

Test Mode	LTE Band 2_CH18900_3M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	-2.96	-0.001574468	±2.5
-20	-3.08	-0.001638298	
-10	3.81	0.002026596	
0	-0.93	-0.000494681	
10	-1.08	-0.000574468	
20	-1.97	-0.001047872	
30	-4.97	-0.002643617	
40	-2.66	-0.001414894	
50	1.07	0.000569149	
Max. Deviation (ppm)	-4.97	-0.002643617	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	-5.24	-0.002787234	±2.5
3.6	-4.28	-0.002276596	
2.0	-0.55	-0.000292553	
Max. Deviation (ppm)	-5.24	-0.002787234	

Test Mode	LTE Band 2_CH18900_5M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	-4.38	-0.002329787	±2.5
-20	4.09	0.002175532	
-10	-6.96	-0.003702128	
0	-1.30	-0.000691489	
10	3.81	0.002026596	
20	-2.17	-0.001154255	
30	-3.27	-0.001739362	
40	-8.47	-0.004505319	
50	2.72	0.001446809	
Max. Deviation (ppm)	-8.47	-0.004505319	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	4.11	0.00218617	±2.5
3.6	-2.81	-0.001494681	
2.0	-9.09	-0.004835106	
Max. Deviation (ppm)	-9.09	-0.004835106	

Test Mode	LTE Band 2_CH18900_10M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	8.36	0.004446809	±2.5
-20	0.71	0.00037766	
-10	6.11	0.00325	
0	2.44	0.001297872	
10	2.31	0.001228723	
20	-2.68	-0.001425532	
30	2.93	0.001558511	
40	6.10	0.003244681	
50	-4.64	-0.002468085	
Max. Deviation (ppm)	6.11	0.00325	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	9.28	0.00493617	±2.5
3.6	5.53	0.002941489	
2.0	3.64	0.00193617	
Max. Deviation (ppm)	9.28	0.00493617	

Test Mode	LTE Band 2_CH18900_15M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	-2.23	-0.00118617	±2.5
-20	-5.72	-0.003042553	
-10	2.82	0.0015	
0	-9.74	-0.005180851	
10	-1.73	-0.000920213	
20	-5.78	-0.003074468	
30	1.95	0.001037234	
40	6.65	0.003537234	
50	9.09	0.004835106	
Max. Deviation (ppm)	-9.74	-0.005180851	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	-9.60	-0.005106383	±2.5
3.6	0.36	0.000191489	
2.0	4.86	0.002585106	
Max. Deviation (ppm)	-9.6	-0.005106383	

Test Mode	LTE Band 2_CH18900_20M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	-9.41	-0.005005319	±2.5
-20	-7.29	-0.00387766	
-10	9.90	0.005265957	
0	-0.90	-0.000478723	
10	5.16	0.002744681	
20	-9.46	-0.005031915	
30	8.30	0.004414894	
40	-3.53	-0.00187766	
50	4.41	0.002345745	
Max. Deviation (ppm)	9.9	0.005265957	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	0.86	0.000457447	±2.5
3.6	-1.47	-0.000781915	
2.0	-6.48	-0.003446809	
Max. Deviation (ppm)	-6.48	-0.003446809	

Test Mode	LTE Band 25_CH26365_1.4M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	9.63	0.005115538	±2.5
-20	5.77	0.003065073	
-10	7.89	0.004191235	
0	-8.32	-0.004419655	
10	7.92	0.004207171	
20	-4.43	-0.002353254	
30	6.82	0.003622842	
40	9.31	0.004945551	
50	-2.20	-0.001168659	
Max. Deviation (ppm)	9.31	0.004945551	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	-7.88	-0.004185923	±2.5
3.6	-3.83	-0.002034529	
2.0	1.73	0.000918991	
Max. Deviation (ppm)	-7.88	-0.004185923	

Test Mode	LTE Band 25_CH26365_3M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	-4.62	-0.002454183	±2.5
-20	-6.51	-0.003458167	
-10	-4.24	-0.002252324	
0	-6.10	-0.003240372	
10	-7.25	-0.003851262	
20	-6.27	-0.003330677	
30	-1.98	-0.001051793	
40	-2.17	-0.001152722	
50	4.05	0.002151394	
Max. Deviation (ppm)	-7.25	-0.003851262	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	6.10	0.003240372	±2.5
3.6	-9.57	-0.005083665	
2.0	4.43	0.002353254	
Max. Deviation (ppm)	-9.57	-0.005083665	

Test Mode	LTE Band 25_CH26365_5M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	8.38	0.004451527	±2.5
-20	7.35	0.003904382	
-10	4.27	0.00226826	
0	7.39	0.003925631	
10	-5.63	-0.002990704	
20	4.48	0.002379814	
30	4.41	0.002342629	
40	-4.50	-0.002390438	
50	-9.04	-0.004802125	
Max. Deviation (ppm)	-9.04	-0.004802125	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	7.93	0.004212483	±2.5
3.6	-4.37	-0.002321381	
2.0	-2.20	-0.001168659	
Max. Deviation (ppm)	7.93	0.004212483	

Test Mode	LTE Band 25_CH26365_10M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	-8.21	-0.004361222	± 2.5
-20	0.31	0.000164675	
-10	-4.82	-0.002560425	
0	-9.38	-0.004982736	
10	1.16	0.000616202	
20	-5.54	-0.002942895	
30	8.73	0.00463745	
40	-3.29	-0.001747676	
50	-6.01	-0.003192563	
Max. Deviation (ppm)	-9.38	-0.004982736	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	7.12	0.003782205	± 2.5
3.6	-1.20	-0.00063745	
2.0	-1.58	-0.000839309	
Max. Deviation (ppm)	7.12	0.003782205	

Test Mode	LTE Band 25_CH26365_15M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	-7.46	-0.003962815	±2.5
-20	6.64	0.003527224	
-10	2.75	0.001460823	
0	6.68	0.003548473	
10	5.01	0.002661355	
20	4.36	0.002316069	
30	-4.26	-0.002262948	
40	-9.79	-0.005200531	
50	5.79	0.003075697	
Max. Deviation (ppm)	-9.79	-0.005200531	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	-7.15	-0.003798141	±2.5
3.6	4.86	0.002581673	
2.0	1.90	0.001009296	
Max. Deviation (ppm)	-7.15	-0.003798141	

Test Mode	LTE Band 25_CH26365_20M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	-6.86	-0.00364409	±2.5
-20	6.47	0.003436919	
-10	-9.49	-0.005041169	
0	8.62	0.004579017	
10	3.39	0.001800797	
20	7.56	0.004015936	
30	-0.46	-0.000244356	
40	-9.24	-0.004908367	
50	8.20	0.00435591	
Max. Deviation (ppm)	-9.49	-0.005041169	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	-9.64	-0.00512085	±2.5
3.6	-8.72	-0.004632138	
2.0	-1.37	-0.000727756	
Max. Deviation (ppm)	-9.64	-0.00512085	

End of Test Report