

Frequency Stability

LTE

LTE Band 48 QPSK 10 MHz

Test Conditions		Frequency Deviation		Verdict
Power (VDC)	Temperature (°C)	MCH 3625 MHz		
		Value(Hz)	Limits (Hz)	
3.85	-10	-0.99	±9062.5	Pass
	0	-1.96		
	+10	-1.63		
	+20	-0.69		
	+25	-1.7		
	+30	-1.65		
	+40	-0.87		
	+50	-1.8		
4.4	+25	-0.84		
3.45	+25	-0.33		

LTE Band 48 16QAM 10 MHz

Test Conditions		Frequency Deviation		Verdict
Power (VDC)	Temperature (°C)	MCH 3625 MHz		
		Value(Hz)	Limits (Hz)	
3.85	-10	-1.57	±9062.5	Pass
	0	-1.13		
	+10	-0.19		
	+20	0.33		
	+25	-2.07		
	+30	-2.03		
	+40	-1.9		
	+50	-2.43		
4.4	+25	-0.66		
3.45	+25	-0.49		

NR

NR Band n48 QPSK 20 MHz

Test Conditions		Frequency Deviation		Verdict
Power (VDC)	Temperature (°C)	MCH 3624.99 MHz		
		Value(Hz)	Limits (Hz)	
3.85	-10	-12.51	±9062.47	Pass
	0	-8.8		
	+10	-8.81		
	+20	-12.17		
	+25	-15.44		
	+30	-8.43		
	+40	-10.91		
	+50	-11.18		
4.4	+25	-11.48	±9062.47	Pass
3.45	+25	-12.5		

NR Band n48 QPSK 40 MHz

Test Conditions		Frequency Deviation		Verdict
Power (VDC)	Temperature (°C)	MCH 3624.99 MHz		
		Value(Hz)	Limits (Hz)	
3.85	-10	-7.14	±9062.47	Pass
	0	-13.07		
	+10	-10.46		
	+20	-11.99		
	+25	-13.71		
	+30	-15.42		
	+40	-14.61		
	+50	-14.47		
4.4	+25	-16.67	±9062.47	Pass
3.45	+25	-14.18		

2. LTE_Band48

2.3 LTE Frequency Stability_Part96(-10 Degree)

UL Channel	Bandwidth (MHz)	UL Modulation	UL RB Number	UL RB Position	Lower Limit (Hz)	Upper Limit (Hz)	Measured (Hz)	Verdict
55990	10	QPSK	50	LOW	-9062.5	9062.5	-0.99	Pass
55990	10	Q16	50	LOW	-9062.5	9062.5	-1.57	Pass

2.4 LTE Frequency Stability_Part96(0 Degree)

UL Channel	Bandwidth (MHz)	UL Modulation	UL RB Number	UL RB Position	Lower Limit (Hz)	Upper Limit (Hz)	Measured (Hz)	Verdict
55990	10	QPSK	50	LOW	-9062.5	9062.5	-1.96	Pass
55990	10	Q16	50	LOW	-9062.5	9062.5	-1.13	Pass

2.5 LTE Frequency Stability_Part96(10 Degree)

UL Channel	Bandwidth (MHz)	UL Modulation	UL RB Number	UL RB Position	Lower Limit (Hz)	Upper Limit (Hz)	Measured (Hz)	Verdict
55990	10	QPSK	50	LOW	-9062.5	9062.5	-1.63	Pass
55990	10	Q16	50	LOW	-9062.5	9062.5	-0.19	Pass

2.6 LTE Frequency Stability_Part96(25 Degree)

UL Channel	Bandwidth (MHz)	UL Modulation	UL RB Number	UL RB Position	Lower Limit (Hz)	Upper Limit (Hz)	Measured (Hz)	Verdict
55990	10	QPSK	50	LOW	-9062.5	9062.5	-0.69	Pass
55990	10	Q16	50	LOW	-9062.5	9062.5	0.33	Pass

2.7 LTE Frequency Stability_Part96(20 Degree)

UL Channel	Bandwidth (MHz)	UL Modulation	UL RB Number	UL RB Position	Lower Limit (Hz)	Upper Limit (Hz)	Measured (Hz)	Verdict
55990	10	QPSK	50	LOW	-9062.5	9062.5	-1.7	Pass
55990	10	Q16	50	LOW	-9062.5	9062.5	-2.07	Pass

2.8 LTE Frequency Stability_Part96(30 Degree)

UL Channel	Bandwidth (MHz)	UL Modulation	UL RB Number	UL RB Position	Lower Limit (Hz)	Upper Limit (Hz)	Measured (Hz)	Verdict
55990	10	QPSK	50	LOW	-9062.5	9062.5	-1.65	Pass
55990	10	Q16	50	LOW	-9062.5	9062.5	-2.03	Pass

2.9 LTE Frequency Stability_Part96(40 Degree)

UL Channel	Bandwidth (MHz)	UL Modulation	UL RB Number	UL RB Position	Lower Limit (Hz)	Upper Limit (Hz)	Measured (Hz)	Verdict
55990	10	QPSK	50	LOW	-9062.5	9062.5	-0.87	Pass
55990	10	Q16	50	LOW	-9062.5	9062.5	-1.9	Pass

2.10 LTE Frequency Stability_Part96(50 Degree)

UL Channel	Bandwidth (MHz)	UL Modulation	UL RB Number	UL RB Position	Lower Limit (Hz)	Upper Limit (Hz)	Measured (Hz)	Verdict
55990	10	QPSK	50	LOW	-9062.5	9062.5	-1.8	Pass
55990	10	Q16	50	LOW	-9062.5	9062.5	-2.43	Pass

2.11 LTE Frequency Stability_Part96(NTHV)

UL Channel	Bandwidth (MHz)	UL Modulation	UL RB Number	UL RB Position	Lower Limit (Hz)	Upper Limit (Hz)	Measured (Hz)	Verdict
55990	10	QPSK	50	LOW	-9062.5	9062.5	-0.84	Pass
55990	10	Q16	50	LOW	-9062.5	9062.5	-0.66	Pass

2.12 LTE Frequency Stability_Part96(NTLV)

UL Channel	Bandwidth (MHz)	UL Modulation	UL RB Number	UL RB Position	Lower Limit (Hz)	Upper Limit (Hz)	Measured (Hz)	Verdict
55990	10	QPSK	50	LOW	-9062.5	9062.5	-0.33	Pass
55990	10	Q16	50	LOW	-9062.5	9062.5	-0.49	Pass

1. n48 30kHz

1.3 Frequency Error for SA_Part96(-10 Degree)

UL Channel	Bandwidth (MHz)	SCS (kHz)	UL OFDM	UL RB Number	UL RB Position	Modulation	Measured (Hz)	Lower Limit (Hz)	Upper Limit (Hz)	Verdict
641666	20	30	DFT-s-OFDM	50	0	QPSK	-12.51	-9062.47	9062.47	Pass
641666	40	30	DFT-s-OFDM	100	0	QPSK	-7.14	-9062.47	9062.47	Pass

1.4 Frequency Error for SA_Part96(0 Degree)

UL Channel	Bandwidth (MHz)	SCS (kHz)	UL OFDM	UL RB Number	UL RB Position	Modulation	Measured (Hz)	Lower Limit (Hz)	Upper Limit (Hz)	Verdict
641666	20	30	DFT-s-OFDM	50	0	QPSK	-8.8	-9062.47	9062.47	Pass
641666	40	30	DFT-s-OFDM	100	0	QPSK	-13.07	-9062.47	9062.47	Pass

1.5 Frequency Error for SA_Part96(10 Degree)

UL Channel	Bandwidth (MHz)	SCS (kHz)	UL OFDM	UL RB Number	UL RB Position	Modulation	Measured (Hz)	Lower Limit (Hz)	Upper Limit (Hz)	Verdict
641666	20	30	DFT-s-OFDM	50	0	QPSK	-8.81	-9062.47	9062.47	Pass
641666	40	30	DFT-s-OFDM	100	0	QPSK	-10.46	-9062.47	9062.47	Pass

1.6 Frequency Error for SA_Part96(20 Degree)

UL Channel	Bandwidth (MHz)	SCS (kHz)	UL OFDM	UL RB Number	UL RB Position	Modulation	Measured (Hz)	Lower Limit (Hz)	Upper Limit (Hz)	Verdict
641666	20	30	DFT-s-OFDM	50	0	QPSK	-12.17	-9062.47	9062.47	Pass
641666	40	30	DFT-s-OFDM	100	0	QPSK	-11.99	-9062.47	9062.47	Pass

1.7 Frequency Error for SA_Part96(25 Degree)

UL Channel	Bandwidth (MHz)	SCS (kHz)	UL OFDM	UL RB Number	UL RB Position	Modulation	Measured (Hz)	Lower Limit (Hz)	Upper Limit (Hz)	Verdict
641666	20	30	DFT-s-OFDM	50	0	QPSK	-15.44	-9062.47	9062.47	Pass
641666	40	30	DFT-s-OFDM	100	0	QPSK	-13.71	-9062.47	9062.47	Pass

1.8 Frequency Error for SA_Part96(30 Degree)

UL Channel	Bandwidth (MHz)	SCS (kHz)	UL OFDM	UL RB Number	UL RB Position	Modulation	Measured (Hz)	Lower Limit (Hz)	Upper Limit (Hz)	Verdict
641666	20	30	DFT-s-OFDM	50	0	QPSK	-8.43	-9062.47	9062.47	Pass
641666	40	30	DFT-s-OFDM	100	0	QPSK	-15.42	-9062.47	9062.47	Pass

1.9 Frequency Error for SA_Part96(40 Degree)

UL Channel	Bandwidth (MHz)	SCS (kHz)	UL OFDM	UL RB Number	UL RB Position	Modulation	Measured (Hz)	Lower Limit (Hz)	Upper Limit (Hz)	Verdict
641666	20	30	DFT-s-OFDM	50	0	QPSK	-10.91	-9062.47	9062.47	Pass
641666	40	30	DFT-s-OFDM	100	0	QPSK	-14.61	-9062.47	9062.47	Pass

1.10 Frequency Error for SA_Part96(50 Degree)

UL Channel	Bandwidth (MHz)	SCS (kHz)	UL OFDM	UL RB Number	UL RB Position	Modulation	Measured (Hz)	Lower Limit (Hz)	Upper Limit (Hz)	Verdict
641666	20	30	DFT-s-OFDM	50	0	QPSK	-11.18	-9062.47	9062.47	Pass
641666	40	30	DFT-s-OFDM	100	0	QPSK	-14.47	-9062.47	9062.47	Pass

1.11 Frequency Error for SA_Part96(NTHV)

UL Channel	Bandwidth (MHz)	SCS (kHz)	UL OFDM	UL RB Number	UL RB Position	Modulation	Measured (Hz)	Lower Limit (Hz)	Upper Limit (Hz)	Verdict
641666	20	30	DFT-s-OFDM	50	0	QPSK	-11.48	-9062.47	9062.47	Pass
641666	40	30	DFT-s-OFDM	100	0	QPSK	-16.67	-9062.47	9062.47	Pass

1.12 Frequency Error for SA_Part96(NTLV)

UL Channel	Bandwidth (MHz)	SCS (kHz)	UL OFDM	UL RB Number	UL RB Position	Modulation	Measured (Hz)	Lower Limit (Hz)	Upper Limit (Hz)	Verdict
641666	20	30	DFT-s-OFDM	50	0	QPSK	-12.5	-9062.47	9062.47	Pass
641666	40	30	DFT-s-OFDM	100	0	QPSK	-14.18	-9062.47	9062.47	Pass

