

Band40(2305-2315) (QPSK) / 2310MHz / BW10M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	-1.58	-0.001	2.5ppm	PASS
40		1.80	0.001		
30		1.96	0.001		
20		1.96	0.001		
10		-2.03	-0.001		
0		-1.66	-0.001		
-10		-2.02	-0.001		
-20		-1.98	-0.001		
-30		-1.74	-0.001		
20	Maximum Voltage	-0.93	0.000	2.5ppm	PASS
20	BEP	2.64	0.001		

Band40(2305-2315) (16QAM) / 2310MHz / BW10M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	2.27	0.001	2.5ppm	PASS
40		2.57	0.001		
30		-2.15	-0.001		
20		3.20	0.001		
10		2.29	0.001		
0		-2.16	-0.001		
-10		2.68	0.001		
-20		-2.43	-0.001		
-30		-2.51	-0.001		
20	Maximum Voltage	-1.19	-0.001	2.5ppm	PASS
20	BEP	3.68	0.002		

LTE Band 41 (QPSK) / 2595MHz / BW20M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	-0.52	0.000	2.5ppm	PASS
40		-0.29	0.000		
30		0.12	0.000		
20		-1.04	0.000		
10		-0.42	0.000		
0		-0.30	0.000		
-10		-0.59	0.000		
-20		0.13	0.000		
-30		-0.24	0.000		
20	Maximum Voltage	-0.12	0.000	2.5ppm	PASS
20	BEP	-0.21	0.000		

LTE Band 41 (16QAM) / 2595MHz / BW20M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	0.15	0.000	2.5ppm	PASS
40		-0.01	0.000		
30		-0.38	0.000		
20		-1.89	-0.001		
10		0.14	0.000		
0		0.02	0.000		
-10		0.17	0.000		
-20		0.10	0.000		
-30		0.27	0.000		
20	Maximum Voltage	0.11	0.000	2.5ppm	PASS
20	BEP	-0.08	0.000		

LTE Band 66 (QPSK) / 1745MHz / BW20M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	-10.10	-0.006	2.5ppm	PASS
40		10.14	0.006		
30		-10.28	-0.006		
20		-22.06	-0.013		
10		10.32	0.006		
0		10.46	0.006		
-10		-9.91	-0.006		
-20		10.35	0.006		
-30		10.01	0.006		
20	Maximum Voltage	5.14	0.003	2.5ppm	PASS
20	BEP	5.17	0.003		

LTE Band 66 (16QAM) / 1745MHz / BW20M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	7.49	0.004	2.5ppm	PASS
40		7.24	0.004		
30		7.29	0.004		
20		-16.18	-0.009		
10		-7.06	-0.004		
0		-6.98	-0.004		
-10		-7.47	-0.004		
-20		-7.04	-0.004		
-30		7.49	0.004		
20	Maximum Voltage	-10.75	-0.006	2.5ppm	PASS
20	BEP	-11.03	-0.006		

Peak-to-Average Ratio

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Result (dB)	high Limit (dB)	Verdict
Band2	1.4	18607	1	#0	QPSK	5.89	13	PASS
Band2	1.4	18607	1	#0	16QAM	6.20	13	PASS
Band2	1.4	18900	1	#0	QPSK	5.79	13	PASS
Band2	1.4	18900	1	#0	16QAM	6.72	13	PASS
Band2	1.4	19193	1	#0	QPSK	5.68	13	PASS
Band2	1.4	19193	1	#0	16QAM	6.24	13	PASS
Band2	3	18615	1	#0	QPSK	5.49	13	PASS
Band2	3	18615	1	#0	16QAM	6.35	13	PASS
Band2	3	18900	1	#0	QPSK	5.69	13	PASS
Band2	3	18900	1	#0	16QAM	6.41	13	PASS
Band2	3	19185	1	#0	QPSK	5.81	13	PASS
Band2	3	19185	1	#0	16QAM	6.13	13	PASS
Band2	5	18625	1	#0	QPSK	5.94	13	PASS
Band2	5	18625	1	#0	16QAM	6.02	13	PASS
Band2	5	18900	1	#0	QPSK	5.54	13	PASS
Band2	5	18900	1	#0	16QAM	5.83	13	PASS
Band2	5	19175	1	#0	QPSK	5.76	13	PASS
Band2	5	19175	1	#0	16QAM	6.42	13	PASS
Band2	10	18650	1	#0	QPSK	5.53	13	PASS
Band2	10	18650	1	#0	16QAM	6.36	13	PASS
Band2	10	18900	1	#0	QPSK	5.44	13	PASS
Band2	10	18900	1	#0	16QAM	6.48	13	PASS
Band2	10	19150	1	#0	QPSK	5.54	13	PASS
Band2	10	19150	1	#0	16QAM	5.95	13	PASS
Band2	15	18675	1	#0	QPSK	5.48	13	PASS
Band2	15	18675	1	#0	16QAM	6.47	13	PASS
Band2	15	18900	1	#0	QPSK	5.57	13	PASS
Band2	15	18900	1	#0	16QAM	6.41	13	PASS
Band2	15	19125	1	#0	QPSK	5.64	13	PASS
Band2	15	19125	1	#0	16QAM	6.40	13	PASS
Band2	20	18700	1	#0	QPSK	5.40	13	PASS
Band2	20	18700	1	#0	16QAM	5.79	13	PASS
Band2	20	18900	1	#0	QPSK	5.56	13	PASS
Band2	20	18900	1	#0	16QAM	6.12	13	PASS
Band2	20	19100	1	#0	QPSK	6.06	13	PASS
Band2	20	19100	1	#0	16QAM	7.13	13	PASS
Band4	1.4	19957	1	#0	QPSK	5.67	13	PASS
Band4	1.4	19957	1	#0	16QAM	6.32	13	PASS
Band4	1.4	20175	1	#0	QPSK	5.68	13	PASS
Band4	1.4	20175	1	#0	16QAM	6.46	13	PASS
Band4	1.4	20393	1	#0	QPSK	5.56	13	PASS
Band4	1.4	20393	1	#0	16QAM	5.95	13	PASS
Band4	3	19965	1	#0	QPSK	5.54	13	PASS
Band4	3	19965	1	#0	16QAM	6.52	13	PASS
Band4	3	20175	1	#0	QPSK	5.64	13	PASS
Band4	3	20175	1	#0	16QAM	6.38	13	PASS
Band4	3	20385	1	#0	QPSK	5.50	13	PASS
Band4	3	20385	1	#0	16QAM	5.89	13	PASS
Band4	5	19975	1	#0	QPSK	6.10	13	PASS
Band4	5	19975	1	#0	16QAM	6.20	13	PASS
Band4	5	20175	1	#0	QPSK	5.37	13	PASS
Band4	5	20175	1	#0	16QAM	5.78	13	PASS
Band4	5	20375	1	#0	QPSK	5.53	13	PASS
Band4	5	20375	1	#0	16QAM	6.18	13	PASS
Band4	10	20000	1	#0	QPSK	5.69	13	PASS
Band4	10	20000	1	#0	16QAM	6.49	13	PASS
Band4	10	20175	1	#0	QPSK	5.43	13	PASS
Band4	10	20175	1	#0	16QAM	6.21	13	PASS
Band4	10	20350	1	#0	QPSK	5.22	13	PASS
Band4	10	20350	1	#0	16QAM	5.68	13	PASS
Band4	15	20025	1	#0	QPSK	5.67	13	PASS
Band4	15	20025	1	#0	16QAM	6.46	13	PASS
Band4	15	20175	1	#0	QPSK	5.47	13	PASS
Band4	15	20175	1	#0	16QAM	6.35	13	PASS
Band4	15	20325	1	#0	QPSK	5.79	13	PASS
Band4	15	20325	1	#0	16QAM	6.19	13	PASS
Band4	20	20050	1	#0	QPSK	5.46	13	PASS
Band4	20	20050	1	#0	16QAM	5.78	13	PASS
Band4	20	20175	1	#0	QPSK	5.82	13	PASS
Band4	20	20175	1	#0	16QAM	6.37	13	PASS
Band4	20	20300	1	#0	QPSK	5.54	13	PASS
Band4	20	20300	1	#0	16QAM	6.37	13	PASS
Band5	1.4	20407	1	#0	QPSK	5.69	13	PASS
Band5	1.4	20407	1	#0	16QAM	5.96	13	PASS
Band5	1.4	20525	1	#0	QPSK	5.76	13	PASS
Band5	1.4	20525	1	#0	16QAM	6.70	13	PASS
Band5	1.4	20643	1	#0	QPSK	4.52	13	PASS
Band5	1.4	20643	1	#0	16QAM	5.22	13	PASS
Band5	3	20415	1	#0	QPSK	5.63	13	PASS
Band5	3	20415	1	#0	16QAM	6.32	13	PASS
Band5	3	20525	1	#0	QPSK	5.75	13	PASS
Band5	3	20525	1	#0	16QAM	5.97	13	PASS
Band5	3	20635	1	#0	QPSK	4.93	13	PASS
Band5	3	20635	1	#0	16QAM	5.48	13	PASS
Band5	5	20425	1	#0	QPSK	5.78	13	PASS
Band5	5	20425	1	#0	16QAM	6.30	13	PASS
Band5	5	20525	1	#0	QPSK	5.50	13	PASS
Band5	5	20525	1	#0	16QAM	5.89	13	PASS
Band5	5	20625	1	#0	QPSK	5.09	13	PASS
Band5	5	20625	1	#0	16QAM	5.43	13	PASS
Band5	10	20450	1	#0	QPSK	5.61	13	PASS
Band5	10	20450	1	#0	16QAM	6.23	13	PASS

Band5	10	20525	1	#0	QPSK	5.24	13	PASS
Band5	10	20525	1	#0	16QAM	5.67	13	PASS
Band5	10	20600	1	#0	QPSK	5.26	13	PASS
Band5	10	20600	1	#0	16QAM	5.82	13	PASS
Band7	5	20775	1	#0	QPSK	6.38	13	PASS
Band7	5	20775	1	#0	16QAM	6.24	13	PASS
Band7	5	21100	1	#0	QPSK	5.28	13	PASS
Band7	5	21100	1	#0	16QAM	5.78	13	PASS
Band7	5	21425	1	#0	QPSK	5.78	13	PASS
Band7	5	21425	1	#0	16QAM	6.32	13	PASS
Band7	10	20800	1	#0	QPSK	5.90	13	PASS
Band7	10	20800	1	#0	16QAM	6.71	13	PASS
Band7	10	21100	1	#0	QPSK	5.65	13	PASS
Band7	10	21100	1	#0	16QAM	6.51	13	PASS
Band7	10	21400	1	#0	QPSK	5.71	13	PASS
Band7	10	21400	1	#0	16QAM	6.06	13	PASS
Band7	15	20825	1	#0	QPSK	5.74	13	PASS
Band7	15	20825	1	#0	16QAM	6.74	13	PASS
Band7	15	21100	1	#0	QPSK	5.61	13	PASS
Band7	15	21100	1	#0	16QAM	6.63	13	PASS
Band7	15	21375	1	#0	QPSK	5.83	13	PASS
Band7	15	21375	1	#0	16QAM	6.30	13	PASS
Band7	20	20850	1	#0	QPSK	5.57	13	PASS
Band7	20	20850	1	#0	16QAM	6.06	13	PASS
Band7	20	21100	1	#0	QPSK	5.89	13	PASS
Band7	20	21100	1	#0	16QAM	6.28	13	PASS
Band7	20	21350	1	#0	QPSK	6.10	13	PASS
Band7	20	21350	1	#0	16QAM	7.04	13	PASS
Band12	1.4	23017	1	#0	QPSK	4.73	13	PASS
Band12	1.4	23017	1	#0	16QAM	5.43	13	PASS
Band12	1.4	23095	1	#0	QPSK	5.62	13	PASS
Band12	1.4	23095	1	#0	16QAM	6.33	13	PASS
Band12	1.4	23173	1	#0	QPSK	5.05	13	PASS
Band12	1.4	23173	1	#0	16QAM	5.90	13	PASS
Band12	3	23025	1	#0	QPSK	4.64	13	PASS
Band12	3	23025	1	#0	16QAM	5.55	13	PASS
Band12	3	23095	1	#0	QPSK	5.49	13	PASS
Band12	3	23095	1	#0	16QAM	6.06	13	PASS
Band12	3	23165	1	#0	QPSK	4.81	13	PASS
Band12	3	23165	1	#0	16QAM	5.67	13	PASS
Band12	5	23035	1	#0	QPSK	4.66	13	PASS
Band12	5	23035	1	#0	16QAM	5.66	13	PASS
Band12	5	23095	1	#0	QPSK	5.16	13	PASS
Band12	5	23095	1	#0	16QAM	5.83	13	PASS
Band12	5	23155	1	#0	QPSK	4.51	13	PASS
Band12	5	23155	1	#0	16QAM	5.40	13	PASS
Band12	10	23060	1	#0	QPSK	4.54	13	PASS
Band12	10	23060	1	#0	16QAM	5.49	13	PASS
Band12	10	23095	1	#0	QPSK	4.21	13	PASS
Band12	10	23095	1	#0	16QAM	5.13	13	PASS
Band12	10	23130	1	#0	QPSK	5.30	13	PASS
Band12	10	23130	1	#0	16QAM	6.06	13	PASS
Band17	5	23755	1	#0	QPSK	5.03	13	PASS
Band17	5	23755	1	#0	16QAM	5.51	13	PASS
Band17	5	23790	1	#0	QPSK	5.40	13	PASS
Band17	5	23790	1	#0	16QAM	5.96	13	PASS
Band17	5	23825	1	#0	QPSK	4.58	13	PASS
Band17	5	23825	1	#0	16QAM	5.18	13	PASS
Band17	10	23780	1	#0	QPSK	4.93	13	PASS
Band17	10	23780	1	#0	16QAM	5.67	13	PASS
Band17	10	23790	1	#0	QPSK	5.33	13	PASS
Band17	10	23790	1	#0	16QAM	6.27	13	PASS
Band17	10	23800	1	#0	QPSK	5.38	13	PASS
Band17	10	23800	1	#0	16QAM	6.05	13	PASS
Band40(2305-2315)	5	38725	1	#0	QPSK	9.27	13	PASS
Band40(2305-2315)	5	38725	1	#0	16QAM	10.00	13	PASS
Band40(2305-2315)	5	38750	1	#0	QPSK	9.29	13	PASS
Band40(2305-2315)	5	38750	1	#0	16QAM	10.14	13	PASS
Band40(2305-2315)	5	38775	1	#0	QPSK	9.42	13	PASS
Band40(2305-2315)	5	38775	1	#0	16QAM	9.59	13	PASS
Band40(2305-2315)	10	38750	1	#0	QPSK	9.26	13	PASS
Band40(2305-2315)	10	38750	1	#0	16QAM	9.59	13	PASS
Band40(2350-2360)	5	39175	1	#0	QPSK	9.44	13	PASS
Band40(2350-2360)	5	39175	1	#0	16QAM	9.84	13	PASS
Band40(2350-2360)	5	39200	1	#0	QPSK	9.67	13	PASS
Band40(2350-2360)	5	39200	1	#0	16QAM	9.97	13	PASS
Band40(2350-2360)	5	39225	1	#0	QPSK	9.72	13	PASS
Band40(2350-2360)	5	39225	1	#0	16QAM	9.72	13	PASS
Band40(2350-2360)	10	39200	1	#0	QPSK	9.10	13	PASS
Band40(2350-2360)	10	39200	1	#0	16QAM	9.84	13	PASS
Band41(2535-2655)	5	40065	1	#0	QPSK	7.82	13	PASS
Band41(2535-2655)	5	40065	1	#0	16QAM	9.84	13	PASS
Band41(2535-2655)	5	40640	1	#0	QPSK	9.22	13	PASS
Band41(2535-2655)	5	40640	1	#0	16QAM	9.35	13	PASS
Band41(2535-2655)	5	41215	1	#0	QPSK	9.47	13	PASS
Band41(2535-2655)	5	41215	1	#0	16QAM	7.93	13	PASS
Band41(2535-2655)	10	40090	1	#0	QPSK	7.83	13	PASS
Band41(2535-2655)	10	40090	1	#0	16QAM	9.56	13	PASS
Band41(2535-2655)	10	40640	1	#0	QPSK	9.30	13	PASS
Band41(2535-2655)	10	40640	1	#0	16QAM	9.74	13	PASS
Band41(2535-2655)	10	41190	1	#0	QPSK	7.18	13	PASS
Band41(2535-2655)	10	41190	1	#0	16QAM	9.32	13	PASS
Band41(2535-2655)	15	40115	1	#0	QPSK	7.93	13	PASS
Band41(2535-2655)	15	40115	1	#0	16QAM	10.91	13	PASS

Band41(2535-2655)	15	40640	1	#0	QPSK	9.69	13	PASS
Band41(2535-2655)	15	40640	1	#0	16QAM	9.23	13	PASS
Band41(2535-2655)	15	41165	1	#0	QPSK	8.78	13	PASS
Band41(2535-2655)	15	41165	1	#0	16QAM	8.24	13	PASS
Band41(2535-2655)	20	40140	1	#0	QPSK	8.88	13	PASS
Band41(2535-2655)	20	40140	1	#0	16QAM	9.30	13	PASS
Band41(2535-2655)	20	40640	1	#0	QPSK	9.24	13	PASS
Band41(2535-2655)	20	40640	1	#0	16QAM	10.73	13	PASS
Band41(2535-2655)	20	41140	1	#0	QPSK	8.48	13	PASS
Band41(2535-2655)	20	41140	1	#0	16QAM	9.15	13	PASS
Band66	1.4	131979	1	#0	QPSK	5.78	13	PASS
Band66	1.4	131979	1	#0	16QAM	5.03	13	PASS
Band66	1.4	132322	1	#0	QPSK	5.78	13	PASS
Band66	1.4	132322	1	#0	16QAM	5.40	13	PASS
Band66	1.4	132665	1	#0	QPSK	5.31	13	PASS
Band66	1.4	132665	1	#0	16QAM	5.59	13	PASS
Band66	3	131987	1	#0	QPSK	5.79	13	PASS
Band66	3	131987	1	#0	16QAM	4.90	13	PASS
Band66	3	132322	1	#0	QPSK	5.64	13	PASS
Band66	3	132322	1	#0	16QAM	5.41	13	PASS
Band66	3	132657	1	#0	QPSK	5.45	13	PASS
Band66	3	132657	1	#0	16QAM	5.73	13	PASS
Band66	5	131997	1	#0	QPSK	6.23	13	PASS
Band66	5	131997	1	#0	16QAM	4.99	13	PASS
Band66	5	132322	1	#0	QPSK	5.60	13	PASS
Band66	5	132322	1	#0	16QAM	4.98	13	PASS
Band66	5	132647	1	#0	QPSK	5.80	13	PASS
Band66	5	132647	1	#0	16QAM	5.76	13	PASS
Band66	10	132022	1	#0	QPSK	5.69	13	PASS
Band66	10	132022	1	#0	16QAM	5.07	13	PASS
Band66	10	132322	1	#0	QPSK	5.76	13	PASS
Band66	10	132322	1	#0	16QAM	5.28	13	PASS
Band66	10	132622	1	#0	QPSK	5.41	13	PASS
Band66	10	132622	1	#0	16QAM	4.93	13	PASS
Band66	15	132047	1	#0	QPSK	5.77	13	PASS
Band66	15	132047	1	#0	16QAM	5.22	13	PASS
Band66	15	132322	1	#0	QPSK	5.72	13	PASS
Band66	15	132322	1	#0	16QAM	5.12	13	PASS
Band66	15	132597	1	#0	QPSK	5.71	13	PASS
Band66	15	132597	1	#0	16QAM	4.98	13	PASS
Band66	20	132072	1	#0	QPSK	5.63	13	PASS
Band66	20	132072	1	#0	16QAM	4.98	13	PASS
Band66	20	132322	1	#0	QPSK	6.17	13	PASS
Band66	20	132322	1	#0	16QAM	4.94	13	PASS
Band66	20	132572	1	#0	QPSK	5.91	13	PASS
Band66	20	132572	1	#0	16QAM	5.94	13	PASS

























































































