



Tune Up Procedure

Tune-up procedure

LTE TEST

Measurement Procedure:

LTE

- 1.Connect EUT with CMU200(E5515C)/CMW500, through RF cable. Make a call from CMU200(E5515C)/CMW500;
- 2.Measure the Output Power Average value;
- 3.Remarks: All Output Power are tested in Average Value specification.

Manufacturing tolerance

Conducted Power Measurement Results(LTE Band 41)

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Tune-up
Band41	5MHz	QPSK	39675	1RB#0	21.25	21.50
Band41	5MHz	16QAM	39675	1RB#0	20.63	21.00
Band41	5MHz	QPSK	39675	1RB#12	21.29	22.00
Band41	5MHz	16QAM	39675	1RB#12	20.63	21.00
Band41	5MHz	QPSK	39675	1RB#24	21.17	21.50
Band41	5MHz	16QAM	39675	1RB#24	20.62	21.00
Band41	5MHz	QPSK	39675	12RB#0	20.14	20.50
Band41	5MHz	16QAM	39675	12RB#0	19.43	20.00
Band41	5MHz	QPSK	39675	12RB#6	20.12	20.50
Band41	5MHz	16QAM	39675	12RB#6	19.37	20.00
Band41	5MHz	QPSK	39675	12RB#13	20.22	20.50
Band41	5MHz	16QAM	39675	12RB#13	19.44	20.00
Band41	5MHz	QPSK	39675	25RB#0	20.17	20.50
Band41	5MHz	16QAM	39675	25RB#0	19.42	20.00
Band41	5MHz	QPSK	40620	1RB#0	21.14	21.50
Band41	5MHz	16QAM	40620	1RB#0	20.51	21.00
Band41	5MHz	QPSK	40620	1RB#12	21.23	21.50
Band41	5MHz	16QAM	40620	1RB#12	20.63	21.00
Band41	5MHz	QPSK	40620	1RB#24	21.19	21.50
Band41	5MHz	16QAM	40620	1RB#24	20.62	21.00
Band41	5MHz	QPSK	40620	12RB#0	20.27	21.00
Band41	5MHz	16QAM	40620	12RB#0	19.39	20.00
Band41	5MHz	QPSK	40620	12RB#6	20.26	21.00
Band41	5MHz	16QAM	40620	12RB#6	19.38	20.00
Band41	5MHz	QPSK	40620	12RB#13	20.23	20.50
Band41	5MHz	16QAM	40620	12RB#13	19.33	20.00
Band41	5MHz	QPSK	40620	25RB#0	20.25	20.50
Band41	5MHz	16QAM	40620	25RB#0	19.37	20.00





Band41	5MHz	QPSK	41565	1RB#0	20.89	21.50
Band41	5MHz	16QAM	41565	1RB#0	20.26	21.00
Band41	5MHz	QPSK	41565	1RB#12	21.00	21.50
Band41	5MHz	16QAM	41565	1RB#12	20.40	21.00
Band41	5MHz	QPSK	41565	1RB#24	20.91	21.50
Band41	5MHz	16QAM	41565	1RB#24	20.39	21.00
Band41	5MHz	QPSK	41565	12RB#0	19.99	20.50
Band41	5MHz	16QAM	41565	12RB#0	19.09	19.50
Band41	5MHz	QPSK	41565	12RB#6	19.98	20.50
Band41	5MHz	16QAM	41565	12RB#6	19.14	19.50
Band41	5MHz	QPSK	41565	12RB#13	20.02	20.50
Band41	5MHz	16QAM	41565	12RB#13	19.11	19.50
Band41	5MHz	QPSK	41565	25RB#0	19.89	20.50
Band41	5MHz	16QAM	41565	25RB#0	19.22	19.50
Band41	10MHz	QPSK	39700	1RB#0	21.37	22.00
Band41	10MHz	16QAM	39700	1RB#0	20.74	21.00
Band41	10MHz	QPSK	39700	1RB#24	21.37	22.00
Band41	10MHz	16QAM	39700	1RB#24	20.75	21.00
Band41	10MHz	QPSK	39700	1RB#49	21.35	22.00
Band41	10MHz	16QAM	39700	1RB#49	20.80	21.50
Band41	10MHz	QPSK	39700	25RB#0	20.19	20.50
Band41	10MHz	16QAM	39700	25RB#0	19.39	20.00
Band41	10MHz	QPSK	39700	25RB#12	20.05	20.50
Band41	10MHz	16QAM	39700	25RB#12	19.40	20.00
Band41	10MHz	QPSK	39700	25RB#25	20.25	20.50
Band41	10MHz	16QAM	39700	25RB#25	19.33	20.00
Band41	10MHz	QPSK	39700	50RB#0	20.22	20.50
Band41	10MHz	16QAM	39700	50RB#0	19.34	20.00
Band41	10MHz	QPSK	40620	1RB#0	21.23	21.50
Band41	10MHz	16QAM	40620	1RB#0	20.72	21.00
Band41	10MHz	QPSK	40620	1RB#24	21.38	22.00
Band41	10MHz	16QAM	40620	1RB#24	20.81	21.50
Band41	10MHz	QPSK	40620	1RB#49	21.37	22.00
Band41	10MHz	16QAM	40620	1RB#49	20.82	21.50
Band41	10MHz	QPSK	40620	25RB#0	20.05	20.50
Band41	10MHz	16QAM	40620	25RB#0	19.29	20.00
Band41	10MHz	QPSK	40620	25RB#12	20.06	20.50
Band41	10MHz	16QAM	40620	25RB#12	19.30	20.00
Band41	10MHz	QPSK	40620	25RB#25	20.26	21.00
Band41	10MHz	16QAM	40620	25RB#25	19.35	20.00
Band41	10MHz	QPSK	40620	50RB#0	20.16	20.50





Band41	10MHz	16QAM	40620	50RB#0	19.31	20.00
Band41	10MHz	QPSK	41540	1RB#0	21.16	21.50
Band41	10MHz	16QAM	41540	1RB#0	20.56	21.00
Band41	10MHz	QPSK	41540	1RB#24	20.99	21.50
Band41	10MHz	16QAM	41540	1RB#24	20.61	21.00
Band41	10MHz	QPSK	41540	1RB#49	21.20	21.50
Band41	10MHz	16QAM	41540	1RB#49	20.62	21.00
Band41	10MHz	QPSK	41540	25RB#0	20.05	20.50
Band41	10MHz	16QAM	41540	25RB#0	19.12	19.50
Band41	10MHz	QPSK	41540	25RB#12	20.03	20.50
Band41	10MHz	16QAM	41540	25RB#12	19.12	19.50
Band41	10MHz	QPSK	41540	25RB#25	19.86	20.50
Band41	10MHz	16QAM	41540	25RB#25	19.12	19.50
Band41	10MHz	QPSK	41540	50RB#0	19.96	20.50
Band41	10MHz	16QAM	41540	50RB#0	19.11	19.50
Band41	15MHz	QPSK	39725	1RB#0	21.25	21.50
Band41	15MHz	16QAM	39725	1RB#0	20.73	21.00
Band41	15MHz	QPSK	39725	1RB#38	21.26	22.00
Band41	15MHz	16QAM	39725	1RB#38	20.78	21.50
Band41	15MHz	QPSK	39725	1RB#74	21.44	22.00
Band41	15MHz	16QAM	39725	1RB#74	20.80	21.50
Band41	15MHz	QPSK	39725	38RB#0	20.18	20.50
Band41	15MHz	16QAM	39725	38RB#0	20.18	20.50
Band41	15MHz	QPSK	39725	38RB#18	20.18	20.50
Band41	15MHz	16QAM	39725	38RB#18	20.18	20.50
Band41	15MHz	QPSK	39725	38RB#37	20.19	20.50
Band41	15MHz	16QAM	39725	38RB#37	20.19	20.50
Band41	15MHz	QPSK	39725	75RB#0	20.19	20.50
Band41	15MHz	16QAM	39725	75RB#0	19.33	20.00
Band41	15MHz	QPSK	40620	1RB#0	21.11	21.50
Band41	15MHz	16QAM	40620	1RB#0	20.57	21.00
Band41	15MHz	QPSK	40620	1RB#38	21.19	21.50
Band41	15MHz	16QAM	40620	1RB#38	20.63	21.00
Band41	15MHz	QPSK	40620	1RB#74	21.39	22.00
Band41	15MHz	16QAM	40620	1RB#74	20.69	21.00
Band41	15MHz	QPSK	40620	38RB#0	20.26	21.00
Band41	15MHz	16QAM	40620	38RB#0	20.25	20.50
Band41	15MHz	QPSK	40620	38RB#18	20.24	20.50
Band41	15MHz	16QAM	40620	38RB#18	20.22	20.50
Band41	15MHz	QPSK	40620	38RB#37	20.21	20.50
Band41	15MHz	16QAM	40620	38RB#37	20.20	20.50





Band41	15MHz	QPSK	40620	75RB#0	20.20	20.50
Band41	15MHz	16QAM	40620	75RB#0	19.34	20.00
Band41	15MHz	QPSK	41515	1RB#0	21.15	21.50
Band41	15MHz	16QAM	41515	1RB#0	20.57	21.00
Band41	15MHz	QPSK	41515	1RB#38	21.11	21.50
Band41	15MHz	16QAM	41515	1RB#38	20.50	21.00
Band41	15MHz	QPSK	41515	1RB#74	21.15	21.50
Band41	15MHz	16QAM	41515	1RB#74	20.49	21.00
Band41	15MHz	QPSK	41515	38RB#0	20.04	20.50
Band41	15MHz	16QAM	41515	38RB#0	19.98	20.50
Band41	15MHz	QPSK	41515	38RB#18	20.03	20.50
Band41	15MHz	16QAM	41515	38RB#18	20.03	20.50
Band41	15MHz	QPSK	41515	38RB#37	20.02	20.50
Band41	15MHz	16QAM	41515	38RB#37	20.01	20.50
Band41	15MHz	QPSK	41515	75RB#0	20.00	20.50
Band41	15MHz	16QAM	41515	75RB#0	19.15	19.50
Band41	20MHz	QPSK	39750	1RB#0	21.00	21.50
Band41	20MHz	16QAM	39750	1RB#0	19.92	20.50
Band41	20MHz	QPSK	39750	1RB#49	21.07	21.50
Band41	20MHz	16QAM	39750	1RB#49	19.81	20.50
Band41	20MHz	QPSK	39750	1RB#99	21.35	22.00
Band41	20MHz	16QAM	39750	1RB#99	19.87	20.50
Band41	20MHz	QPSK	39750	50RB#0	20.24	20.50
Band41	20MHz	16QAM	39750	50RB#0	19.35	20.00
Band41	20MHz	QPSK	39750	50RB#25	20.09	20.50
Band41	20MHz	16QAM	39750	50RB#25	19.33	20.00
Band41	20MHz	QPSK	39750	50RB#50	20.29	21.00
Band41	20MHz	16QAM	39750	50RB#50	19.52	20.00
Band41	20MHz	QPSK	39750	100RB#0	20.23	20.50
Band41	20MHz	16QAM	39750	100RB#0	19.35	20.00
Band41	20MHz	QPSK	40620	1RB#0	21.03	21.50
Band41	20MHz	16QAM	40620	1RB#0	20.33	21.00
Band41	20MHz	QPSK	40620	1RB#49	20.92	21.50
Band41	20MHz	16QAM	40620	1RB#49	20.31	21.00
Band41	20MHz	QPSK	40620	1RB#99	21.14	21.50
Band41	20MHz	16QAM	40620	1RB#99	20.48	21.00
Band41	20MHz	QPSK	40620	50RB#0	20.03	20.50
Band41	20MHz	16QAM	40620	50RB#0	19.48	20.00
Band41	20MHz	QPSK	40620	50RB#25	20.18	20.50
Band41	20MHz	16QAM	40620	50RB#25	19.48	20.00
Band41	20MHz	QPSK	40620	50RB#50	20.25	20.50





Band41	20MHz	16QAM	40620	50RB#50	19.54	20.00
Band41	20MHz	QPSK	40620	100RB#0	20.10	20.50
Band41	20MHz	16QAM	40620	100RB#0	19.31	20.00
Band41	20MHz	QPSK	41490	1RB#0	21.02	21.50
Band41	20MHz	16QAM	41490	1RB#0	20.64	21.00
Band41	20MHz	QPSK	41490	1RB#49	20.91	21.50
Band41	20MHz	16QAM	41490	1RB#49	20.52	21.00
Band41	20MHz	QPSK	41490	1RB#99	20.85	21.50
Band41	20MHz	16QAM	41490	1RB#99	20.48	21.00
Band41	20MHz	QPSK	41490	50RB#0	20.00	20.50
Band41	20MHz	16QAM	41490	50RB#0	19.26	20.00
Band41	20MHz	QPSK	41490	50RB#25	20.01	20.50
Band41	20MHz	16QAM	41490	50RB#25	19.41	20.00
Band41	20MHz	QPSK	41490	50RB#50	19.97	20.50
Band41	20MHz	16QAM	41490	50RB#50	19.23	19.50
Band41	20MHz	QPSK	41490	100RB#0	19.98	20.50
Band41	20MHz	16QAM	41490	100RB#0	19.16	19.50

Tune Up Procedure

1. RX Gain Calibration
 - a. Put DUT in test mode
 - b. Put DUT in BCH mode
 - c. Put DUT in selected channel band
 - d. Total gain chain calibration at center ARFCN
 - e. Frequency Ripple calibration
 - f. Complete RX_AGC Gain table
2. TX Power Calibration
 - a. Put DUT in test mode
 - b. Put DUT in BCH mode
 - c. Put DUT in selected channel band
 - d. Total gain chain calibration at center ARFCN
 - e. Frequency Ripple calibration
 - f. Complete TX_APC Gain table
3. AFC Calibration
 - a. Put DUT in test mode
 - b. Put DUT in selected channel mode
 - c. Calibration AFC at center ARFCN
 - d. Complete AFC result table



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