

Tune Up Procedure

M1N 2.0

Tune-up procedure

WCDMA/LTE TEST

Measurement Procedure:

WCDMA/LTE

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

Manufacturing tolerance

UMTS

UMTS Band 2 HSPA			
Channel	Channel 9262	Channel 9400	Channel 9538
Target (dBm)	24.0	24.0	24.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0

UMTS Band 4 HSPA			
Channel	Channel 1312	Channel 1413	Channel 1513
Target (dBm)	24.0	24.0	24.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0

UMTS Band 5 HSPA			
Channel	Channel 4132	Channel 4182	Channel 4233
Target (dBm)	24.0	24.0	24.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0

LTE Band 2

1.4 MHz			
Channel	Channel 19100	Channel 18900	Channel 18700
Target (dBm)	24.0	23.0	23.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
3 MHz			
Channel	Channel 19100	Channel 18900	Channel 18700
Target (dBm)	23.0	23.0	23.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
5 MHz			
Channel	Channel 19100	Channel 18900	Channel 18700
Target (dBm)	24.0	23.0	23.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
10 MHz			
Channel	Channel 19100	Channel 18900	Channel 18700
Target (dBm)	24.0	23.0	23.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
15 MHz			
Channel	Channel 19100	Channel 18900	Channel 18700
Target (dBm)	23.0	23.0	23.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
20 MHz			
Channel	Channel 19100	Channel 18900	Channel 18700
Target (dBm)	24.0	23.0	23.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0

LTE Band 4

1.4 MHz			
Channel	Channel 19957	Channel 20175	Channel 20393
Target (dBm)	23.0	23.0	23.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
3 MHz			
Channel	Channel 19957	Channel 20175	Channel 20393
Target (dBm)	23.0	23.0	23.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
5 MHz			
Channel	Channel 19957	Channel 20175	Channel 20393
Target (dBm)	23.0	23.0	23.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
10 MHz			
Channel	Channel 19957	Channel 20175	Channel 20393
Target (dBm)	23.0	23.0	23.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
15 MHz			
Channel	Channel 19957	Channel 20175	Channel 20393
Target (dBm)	23.0	23.0	23.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
20 MHz			
Channel	Channel 19957	Channel 20175	Channel 20393
Target (dBm)	23.0	23.0	23.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0

LTE Band 5

1.4 MHz			
Channel	Channel 20450	Channel 20525	Channel 20600
Target (dBm)	24.0	24.0	24.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
3 MHz			
Channel	Channel 20450	Channel 20525	Channel 20600
Target (dBm)	23.0	23.0	24.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
5 MHz			
Channel	Channel 20450	Channel 20525	Channel 20600
Target (dBm)	24.0	24.0	24.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
10 MHz			
Channel	Channel 20450	Channel 20525	Channel 20600
Target (dBm)	24.0	24.0	24.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0

LTE Band 12

1.4 MHz			
Channel	Channel 23017	Channel 23095	Channel 23173
Target (dBm)	23.0	23.0	23.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
3 MHz			
Channel	Channel 23025	Channel 23095	Channel 23165
Target (dBm)	23.0	23.0	23.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
5 MHz			
Channel	Channel 23035	Channel 23095	Channel 23155
Target (dBm)	23.0	23.0	23.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
10 MHz			
Channel	Channel 23060	Channel 23095	Channel 23130
Target (dBm)	23.0	23.0	23.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0

LTE Band 13

5 MHz			
Channel	Channel 23205	Channel 23230	Channel 23255
Target (dBm)	23.0	22.0	23.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
10 MHz			
Channel	Channel 23230	Channel 23230	Channel 23230
Target (dBm)	23.0	23.0	23.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0

LTE Band 14

5 MHz			
Channel	Channel 23305	Channel 23330	Channel 23355
Target (dBm)	24.0	24.0	24.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
10 MHz			
Channel	Channel 23330	Channel 23330	Channel 23330
Target (dBm)	24.0	24.0	24.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0

LTE Band 66

1.4 MHz			
Channel	Channel 131979	Channel 132322	Channel 132665
Target (dBm)	23.0	23.0	23.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
3 MHz			
Channel	Channel 131987	Channel 132322	Channel 132657
Target (dBm)	23.0	23.0	23.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
5 MHz			
Channel	Channel 131997	Channel 132322	Channel 132647
Target (dBm)	23.0	23.0	23.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
10 MHz			
Channel	Channel 132022	Channel 132322	Channel 132622
Target (dBm)	23.0	23.0	23.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
15 MHz			
Channel	Channel 132047	Channel 132322	Channel 132597
Target (dBm)	23.0	23.0	23.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
20 MHz			
Channel	Channel 132072	Channel 132322	Channel 132572
Target (dBm)	23.0	23.0	23.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0

LTE Band 71

5 MHz			
Channel	Channel 133147	Channel 133297	Channel 133447
Target (dBm)	23.0	22.0	23.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
10 MHz			
Channel	Channel 133172	Channel 133297	Channel 133422
Target (dBm)	23.0	23.0	23.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
15 MHz			
Channel	Channel 133197	Channel 133297	Channel 133397
Target (dBm)	23.0	23.0	23.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
20 MHz			
Channel	Channel 133222	Channel 133297	Channel 133372
Target (dBm)	23.0	23.0	23.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0