

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