



Tune Up Procedure

Tune-up procedure

For WIFI/BT

- 1: Connect to Power meter (NRVD) through RF cable and let the EUT Continuously transmit
- 2: Measure the Output Power Average value

Manufacturing tolerance

WiFi 2.4G

802.11b (Average)			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	15.0	16.0	16.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
802.11g (Average)			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	15.0	15.0	15.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
802.11n HT20 (Average)			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	14.0	14.0	14.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
802.11n HT40 (Average)			
Channel	Channel 3	Channel 6	Channel 9
Target (dBm)	13.0	13.0	13.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0

Bluetooth V5.0

BLE-1M(Average)			
Channel	Channel 0	Channel 19	Channel 39
Target (dBm)	-2.0	-2.0	-2.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
GFSK (Average)			
Channel	Channel 0	Channel 39	Channel 78
Target (dBm)	0.0	0.0	0.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
π /4DQPSK (Average)			
Channel	Channel 0	Channel 39	Channel 78
Target (dBm)	0.0	0.0	0.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
8PSK (Average)			
Channel	Channel 0	Channel 39	Channel 78





Target (dBm)	0.0	0.0	0.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0

WiFi 5.2G

802.11a (Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	13.0	13.0	11.0
Tolerance ±(dB)	1.0	1.0	1.0
802.11n HT20 (Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	13.0	13.0	11.0
Tolerance ±(dB)	1.0	1.0	1.0
802.11n HT40 (Average)			
Channel	Channel 38		Channel 46
Target (dBm)	13.0		11.0
Tolerance ±(dB)	1.0		1.0
802.11ac HT20 (Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	13.0	13.0	11.0
Tolerance ±(dB)	1.0	1.0	1.0
802.11ac HT40 (Average)			
Channel	Channel 38		Channel 46
Target (dBm)	13.0		12.0
Tolerance ±(dB)	1.0		1.0
802.11ac HT80 (Average)			
Channel	Channel 42		
Target (dBm)	12.0		
Tolerance ±(dB)	1.0		

WiFi 5.8G

802.11a (Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	13.0	13.0	12.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
802.11n HT20 (Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	13.0	13.0	12.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
802.11n HT40 (Average)			
Channel	Channel 151	Channel 159	
Target (dBm)	12.0	11.0	





Tolerance $\pm$ (dB)	1.0	1.0
802.11ac HT20 (Average)		
Channel	Channel 149	Channel 157
Target (dBm)	12.0	13.0
Tolerance $\pm$ (dB)	1.0	1.0
802.11ac HT40 (Average)		
Channel	Channel 151	Channel 159
Target (dBm)	12.0	11.0
Tolerance $\pm$ (dB)	1.0	1.0
802.11ac HT80 (Average)		
Channel	Channel 155	
Target (dBm)	11.0	
Tolerance $\pm$ (dB)	1.0	

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

