

Appendix F. Power reduction mechanism verification

1. Power verification introduction

- This device supports the manufacturer's proprietary power reduction mechanisms for cellular and Wi-Fi transmitters. Further details of the specific mechanisms for the power reduction mechanism can be found in the Operational Description
- Demonstration of proper functioning of the detection and triggering mechanisms to support the corresponding RF exposure conditions, the verification plan consists of measuring the power levels of the cellular and Wi-Fi transmitters at each wireless technology under different operating conditions related to the power reduction mechanisms.
- For testing purposes, the device was measured against each Index supported for the cellular and Wi-Fi technologies. The target power level and measured power levels are detailed in the following table and clearly shows that each power reduction mechanism operates as expected.

2. Power verification procedure

- The verification is through a base station simulator is used to establish a conducted RF connection and record output power under different operating conditions related to the power reduction mechanisms.
- Verification of power reduction levels for Wi-Fi is performed with cellular transmitters on and off, for cellular is performed with Wi-Fi transmitters on and off.
- Verification of RCV mechanism is via establish voice call and audio routed through the earpiece to record output power under head power states.

3. Test setup for conducted power measurement



Figure 1

4. Verification output Power Results

Head exposure conditions

Close Mode		Output Power for Voice Call			
Ear acoustic output Status:		ON		OFF	
Power state		Head (Non DBS/HBS)		Body (Non DBS/HBS)	
Wireless technology	Antenna	Measured (dBm)	Max. Tune-up (dBm)	Measured (dBm)	Max. Tune-up (dBm)
WiFi 802.11b CH1	(Ant6+7)Ant 6	18.08	19.00	19.22	20.00
	(Ant6+7)Ant 7	18.01	19.00	19.25	20.00
WiFi 802.11a 6Mbps CH149	(Ant6+7)Ant 6	16.94	17.50	18.06	20.00
	(Ant6+7)Ant 7	16.46	17.50	18.84	20.00