

APPENDIX H: POWER REDUCTION VERIFICATION PROCEDURE

This device supports manufacturer’s proprietary power reduction mechanism called, ‘Detect mode’ for the Main Cellular Antenna. Details of this mechanism can be found in the Operational Description.

The verification plan consists of two parts.

- Verification of the detect mechanism
- Verification of the power reduction levels

The verification plan for the overall power setting is proposed to follow the Table 1 below.

A. Verification of the detect mechanism

Body detect verification will be done with following test cases.

- In-hand
- On-lap with little or no voluntary movement
- On a stationary object

B. Verification of power reduction levels

Table 1 lists the test plan. Since the reduction mechanism is antenna agnostic all tests will be conducted by locking transmission to one antenna and then verifying power.

Table 1

Cellular ²	Test Cases	Head Cell Table ¹	Body Cell Table ¹
	GSM 850 (2Slots)		
	GSM 1900 (2Slots)	28 dBm	20.75 dBm
	CDMA BC10		
	CDMA BC0		
	CDMA BC1	22.7 dBm	14.5 dBm
	WCDMA B5		
	WCDMA B4	22.7 dBm	15.5 dBm

	WCDMA B2	22.7 dBm				14.5 dBm			
	LTE B12								
	LTE B13								
	LTE B14								
	LTE B71								
	LTE B5								
	LTE B26								
	LTE B25	22.7 dBm				14.5 dBm			
	LTE B30	22.7 dBm				21 dBm			
	LTE B7	22.25 dBm				17.25 dBm			
	LTE B41	24.25 dBm				19.5 dBm			
Wi-Fi 1x mode, rate, channel	Test Cases	Cell On Head Wi-Fi Table		Cell Off Head Wi-Fi Table		Cell On Body Wi-Fi Table		Cell Off Body Wi-Fi Table	
	2.4 GHz	E: 14.5 M: 14.1		E: 19.0 M: 18.7		E: 16.75 M: 16.4		E: 19.75 M: 19.50	
	5.0 GHz	E: 11.0 M: 10.6		E: 17.0 M: 16.6		E: 13.0 M: 12.6		E: 16.75 M: 16.3	
BT 1x rate, channel	Test Cases	Cell On 5GHz On Head BT Table P ₁	Cell On 5GHz Off Head BT Table P ₀	Cell Off 5GHz On Head BT Table P ₉	Cell Off 5GHz Off Head BT Table P ₉	Cell On 5GHz On Body BT Table P ₃	Cell On 5GHz Off Body BT Table P ₄	Cell Off 5GHz On Body BT Table P ₆	Cell Off 5GHz Off Body BT Table P ₈
	Ch 39	E: 8.0 M: 7.6	E: 14.0 M:13.6	E: 14.0 M:13.5	E: 14.5 M:14.0	E: 8.5 M:8.3	E: 14.5 M:14.0	E: 14.5 M:14.3	E: 14.5 M:14.2

Notes:

1. Head test cases will be done with the device resting on table and body test cases will be done with the device in hand.
2. When there is no delta between the head cell table and body cell table within a test case, we will exclude that test case