## 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.

	Test Cases	Head Cell Table <sup>1</sup>	Body Cell Table <sup>1</sup>			
Cellular <sup>2</sup>	GSM 850 (2Slots)					
	GSM 1900 (2Slots)	28 dBm	20.75 dBm			
	CDMA					
	BC10					
	CDMA					
	BCO					
	CDMA	22.7 dBm	14.5 dBm			
	BC1					
	WCDMA					
	B5					
	WCDMA B4	22.7 dBm	15.5 dBm			
	54					

Table 1

	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	B30 22.7 dBm					21 dBm			
	LTE B7	22.25 dBm 24.25 dBm				17.25 dBm				
	LTE B41					19.5 dBm				
Wi-Fi 1x mode, rate, channel	Test Cases	Cell <b>On</b> Head		Cell <b>Off</b> Head		Cell <b>On</b> Body		Cell <b>Off</b> Body		
		Wi-Fi Table		Wi-Fi Table		Wi-Fi Table		Wi-Fi Table		
	2.4 GHz	E: 14.5		E: 19.0		E: 16.75		E: 19.75		
		M: 14.1		M: 18.7		M: 16.4		M: 19.50		
	5.0 GHz	E: 11.0		E: 17.0		E: 13.0		E: 16.75		
		M: 10.6		M: 16.6		M: 12.6		M: 16.3		
BT 1x rate, channel	Test Cases	Cell <b>On</b> 5GHz <b>On</b> Head	Cell <b>On</b> 5GHz <b>Off</b> Head	Cell <b>Off</b> 5GHz <b>On</b> Head	Cell <b>Off</b> 5GHz <b>Off</b> Head	Cell <b>On</b> 5GHz <b>On</b> Body	Cell <b>On</b> 5GHz <b>Off</b> Body	Cell <b>Off</b> 5GHz <b>On</b> Body	Cell <b>Off</b> 5GHz <b>Off</b> Body	
		BT Table	BT Table	BT Table	BT Table	BT Table	BT Table	BT Table	BT Table	
		P <sub>1</sub>	Po	P <sub>9</sub>	P <sub>9</sub>	P <sub>3</sub>	P <sub>4</sub>	P <sub>6</sub>	P <sub>8</sub>	
	Ch 39	E: 8.0	E: 14.0	E: 14.0	E: 14.5	E: 8.5	E: 14.5	E: 14.5	E: 14.5	
		M: 7.6	M:13.6	M:13.5	M:14.0	M:8.3	M:14.0	M:14.3	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