

Appendix H. – Power reduction verification

Per the May 2017 TCBC Workshop notes, demonstration of proper functioning of the power reduction mechanism is required to support the corresponding SAR Configurations.

A Base station simulator was used to establish a conducted RF connection and output power was monitored. The power measurements were confirmed to be within expected tolerance for all RSI. before and after a power reduction mechanism was triggered. For the combination cases, one mechanism was switched to a 'triggered' state at a time; powers were confirmed to be within tolerances after each additional mechanism was activated

1. Power Reduction Verification for Main ANT

This device utilizes a power reduction mechanism for some wireless modes under RSI(Radio SAR Index).

For this device RSI = 0, 3 is configured when the device cannot detect the use conditions, and RSI = 2, 4 is configured when Hotspot mode activated. RSI = 1 is configured when receiver mode on.

Table 1.1 Power Reduction Verification for Antenna I

Mechanism		Band	RSI		
1st	2nd		FREE	1st	2nd
RCV ON	Hotspot On	UMTS Band 4	0, 3	1	1
Hotspot On	RCV ON	UMTS Band 4	0, 3	2, 4	1
RCV ON	Hotspot On	UMTS Band 2	0, 3	1	1
Hotspot On	RCV ON	UMTS Band 2	0, 3	2, 4	1
RCV ON	Hotspot On	LTE Band 66	0, 3	1	1
Hotspot On	RCV ON	LTE Band 66	0, 3	2, 4	1
RCV ON	Hotspot On	LTE Band 4	0, 3	1	1
Hotspot On	RCV ON	LTE Band 4	0, 3	2, 4	1
RCV ON	Hotspot On	LTE Band 25	0, 3	1	1
Hotspot On	RCV ON	LTE Band 25	0, 3	2, 4	1
RCV ON	Hotspot On	LTE Band 2	0, 3	1	1
Hotspot On	RCV ON	LTE Band 2	0, 3	2, 4	1
RCV ON	Hotspot On	LTE Band 41 PC2	0, 3	1	1
Hotspot On	RCV ON	LTE Band 41 PC2	0, 3	2, 4	1
RCV ON	Hotspot On	LTE Band 41 PC3	0, 3	1	1
Hotspot On	RCV ON	LTE Band 41 PC3	0, 3	2, 4	1
RCV ON	Hotspot On	NR Band n66	0, 3	1	1
Hotspot On	RCV ON	NR Band n66	0, 3	2, 4	1
RCV ON	Hotspot On	NR Band n25	0, 3	1	1
Hotspot On	RCV ON	NR Band n25	0, 3	2, 4	1
RCV ON	Hotspot On	NR Band n2	0, 3	1	1
Hotspot On	RCV ON	NR Band n2	0, 3	2, 4	1
RCV ON	Hotspot On	NR Band n41 PC3	0, 3	1	1
Hotspot On	RCV ON	NR Band n41 PC3	0, 3	2, 4	1

Table 1.2 Power Reduction Verification for Antenna F

Mechanism		Band	RSI		
1st	2nd		FREE	1st	2nd
RCV ON	Hotspot On	NR Band n77	0, 3	1	1
Hotspot On	RCV ON	NR Band n77	0, 3	2, 4	1