

Appendix G: Power Reduction Verification

G.1. Procedures

According to May 2017 TCBC Workshop notes, demonstration of proper functioning of the power reduction mechanisms is required to support the corresponding SAR configurations. The verification process includes evaluation of device state index (DSI) for individual or multiple triggering mechanisms.

This device supports manufacturer's proprietary mechanism which configure the DSI with different time averaged power levels based on certain exposure scenarios. Details of this mechanism can be found in the Operational Description.

The power verification was performed using a base station simulator to establish a conducted RF connection for relevant modes and frequency bands. The DSI as displayed on the DUT was recorded before and after the mechanism was triggered.

G.2. Power Reduction Verification Result

Table G-1

DUT Configuration: Folder Closed		Free-Space/Body-worn/Hotspot/Phablet	Head
Band/Mode	TARGET DSI	1	3
	Antenna	Device State Index (DSI)	
Low	A+C	1	3
Low	E	1	3
Mid	B	1	3
Mid	G	1	3
High	B	1	3
High	G	1	3
UHB	C	1	3
UHB	F	1	3
2.4 GHz WLAN/BT	H	1	3
2.4 GHz WLAN/BT	F	1	3
5 GHz WLAN	F	1	3
5 GHz WLAN	E	1	3
6 GHz WLAN	F	1	3
6 GHz WLAN	E	1	3

Table G-2

DUT Configuration: Folder Open		Free-Space/Body-worn/Hotspot/Phablet	Head
Band/Mode	TARGET DSI	0	2
	Antenna	Device State Index (DSI)	
Low	A, A+C	0	2
Low	E	0	2
Mid	B	0	2
Mid	G	0	2
High	B	0	2
High	G	0	2
UHB	C	0	2
UHB	F	0	2
2.4 GHz WLAN/BT	H	0	2
2.4 GHz WLAN/BT	F	0	2
5 GHz WLAN	F	0	2
5 GHz WLAN	E	0	2
6 GHz WLAN	F	0	2
6 GHz WLAN	E	0	2

Note: Low band refers to GSM 850; UMTS B5; LTE B71/12/13/14/5/26 and NR n71/n12/n14/n5/n26. Mid band refers to GSM 1900; UMTS B4/2; LTE B66/4/25/2/30 and NR n70/n66/n25/n2/30. High band refers to LTE B7/38/41 and NR n7/n38/n41. Ultra high band refers to LTE B48 and NR n48/n77/n78. SRS antennas were not evaluated due to callbox restriction.

Table G-3

ANGLE PRV (PROTRACT Folder Closed → Folder Open)		
Angle (°)	Device State Index (DSI)	Angle (°) range per manufacturer
0	1	10
1	1	
2	1	
3	1	
4	1	
5	1	
6	1	
7	1	
8	1	
9	1	
10	1	
20	0	
30	0	
40	0	
50	0	
60	0	
70	0	
80	0	
90	0	
100	0	
110	0	
120	0	
130	0	
140	0	
150	0	
160	0	
170	0	
180	0	

Table G-4

ANGLE PRV (RETRACT Folder Open → Folder Closed)		
Angle (°)	Device State Index (DSI)	Angle (°) range per manufacturer
180	0	5
170	0	
160	0	
150	0	
140	0	
130	0	
120	0	
110	0	
100	0	
90	0	
80	0	
70	0	
60	0	
50	0	
40	0	
30	0	
20	0	
10	0	
9	0	
8	0	
7	0	
6	0	
5	1	
4	1	
3	1	
2	1	
1	1	
0	1	