

APPENDIX E: MULTI-TX AND ANTENNA SAR CONSIDERATIONS

E.1 Introduction

The following procedures adopted from FCC KDB Publication 447498 D04v01 are applicable to devices with built-in unlicensed transmitters such as 802.11 and Bluetooth devices which may simultaneously transmit.

E.2 Simultaneous Transmission Procedures

This device contains transmitters that may operate simultaneously. Therefore, simultaneous transmission analysis is required. Per FCC KDB Publication 447498 D04v01 4.3.2 and IEEE 1528-2013 Section 6.3.4.1.2, simultaneous transmission SAR test exclusion may be applied when the sum of the 1g SAR for all the simultaneous transmitting antennas in a specific physical test configuration is ≤ 1.6 W/kg. The different test positions in an exposure condition may be considered collectively to determine SAR test exclusion according to the sum of 1g or 10g SAR. Alternatively, simultaneous transmission SAR test exclusion may be evaluated using Total Exposure Ratio (TER).

Note:

This device is enabled with the manufacturer's time-averaged method of Tx power control for connectivity radios (WiFi, Bluetooth, NB U-NII and 802.15.4). Co-located connectivity antennas with significant overlap of RF exposure hotspots are grouped into a single cluster. There are three pre-defined antenna clusters (AC): AC0 (Ant WF5B), AC1 (Ant WF7, Ant WF9), and AC2 (Ant WF8).

When operating in the same antenna cluster, the compliance under dynamic transmission condition, including all supported simultaneous transmission scenarios, should be assessed and demonstrated in the TAS Report during algorithm validation. This applies to multiple antennas in the same antenna cluster or different modes transmitting simultaneously in the same antenna cluster. For the evaluation of simultaneous transmission analysis in this report, the highest SAR value across all modes in the same antenna cluster was considered for summation and most conservative to determine simultaneous SAR test exclusions.

*The SAR distributions for at least one of the antennas are spatially separated from the other antennas per FCC KDB Publication 248227 Section 6.1 procedures. Therefore, simultaneous transmission was treated independently for this configuration. See section E.5 for more information about the Spatial Separation Analysis.

E.3 Exposure Ratios

Exposure ratio (ER) for different transmitters is calculated as following:

$$ER_{SAR,n} = \frac{SAR_n}{SAR_{limit,n}}, \quad 10 \text{ MHz} < f_u \leq 6 \text{ GHz}$$

$$ER_{APD,n} = \frac{APD_v}{APD_{limit,v}}, \quad 6 \text{ GHz} < f_t \leq 10 \text{ GHz}$$

Where:

- SAR_n is the SAR value for the n -th transmitter/test frequency
- $SAR_{limit,n}$ is the basic restriction limit that is applicable to the n -th transmitter/test frequency
- APD_v is the APD value for the v -th transmitter/test frequency
- $APD_{limit,v}$ is the basic restriction limit that is applicable to the v -th transmitter/test frequency

FCC ID: BCGA3357	RF EXPOSURE REPORT	Approved by: Technical Manager
DUT Type: Tablet Device		APPENDIX E: Page 1 of 20

E.4 Body SAR Simultaneous Transmission Analysis

Table E-1

Simultaneous Transmission Scenario with 2.4 GHz WIFI MIMO, 5 GHz WIFI MIMO and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	5 GHz WIFI Ant WF8 ER	2.4 GHz WIFI Ant WF7 ER	5 GHz WIFI Ant WF5B ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.481	0.744	0.071	0.000	0.744*
	Top	0.368	0.153	0.341	0.000	0.000	0.709
	Bottom	0.029	0.017	0.019	0.076	0.000	0.124
	Right	0.348	0.739	0.001	0.624	0.000	0.740*
	Left	0.004	0.013	0.612	0.037	0.000	0.662

Table E-2

Simultaneous Transmission Scenario with 2.4 GHz WIFI MIMO, 6 GHz WIFI MIMO and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	6 GHz WIFI Ant WF8 ER	2.4 GHz WIFI Ant WF7 ER	6 GHz WIFI Ant WF5B ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.359	0.744	0.019	0.000	0.744*
	Top	0.368	0.043	0.341	0.001	0.000	0.710
	Bottom	0.029	0.006	0.019	0.020	0.000	0.068
	Right	0.348	0.223	0.001	0.185	0.000	0.534
	Left	0.004	0.003	0.612	0.000	0.000	0.616

Table E-3

Simultaneous Transmission Scenario with 2.4 GHz WIFI MIMO, 5 GHz WIFI MIMO and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	5 GHz WIFI Ant WF8 ER	2.4 GHz WIFI Ant WF7 ER	5 GHz WIFI Ant WF7 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.481	0.744	0.724	0.000	0.744*
	Top	0.368	0.153	0.341	0.266	0.000	0.709
	Bottom	0.029	0.017	0.019	0.019	0.000	0.048
	Right	0.348	0.739	0.001	0.003	0.000	0.742
	Left	0.004	0.013	0.612	0.139	0.000	0.625

Table E-4

Simultaneous Transmission Scenario with 2.4 GHz WIFI MIMO, 6 GHz WIFI MIMO and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	6 GHz WIFI Ant WF8 ER	2.4 GHz WIFI Ant WF7 ER	6 GHz WIFI Ant WF7 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.359	0.744	0.332	0.000	0.744*
	Top	0.368	0.043	0.341	0.105	0.000	0.709
	Bottom	0.029	0.006	0.019	0.008	0.000	0.048
	Right	0.348	0.223	0.001	0.000	0.000	0.349
	Left	0.004	0.003	0.612	0.052	0.000	0.616

Table E-5

Simultaneous Transmission Scenario with 2.4 GHz WIFI MIMO, 5 GHz WIFI MIMO and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	5 GHz WIFI Ant WF8 ER	2.4 GHz WIFI Ant WF9 ER	5 GHz WIFI Ant WF5B ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.481	0.746	0.071	0.000	0.746*
	Top	0.368	0.153	0.304	0.000	0.000	0.672
	Bottom	0.029	0.017	0.000	0.076	0.000	0.105
	Right	0.348	0.739	0.000	0.624	0.000	0.739*
	Left	0.004	0.013	0.025	0.037	0.000	0.075

FCC ID: BCGA3357	RF EXPOSURE REPORT	Approved by: Technical Manager
DUT Type: Tablet Device		APPENDIX E: Page 2 of 20

Table E-6

Simultaneous Transmission Scenario with 2.4 GHz WIFI MIMO, 6 GHz WIFI MIMO and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	6 GHz WIFI Ant WF8 ER	2.4 GHz WIFI Ant WF9 ER	6 GHz WIFI Ant WF5B ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.359	0.746	0.019	0.000	0.746*
	Top	0.368	0.043	0.304	0.001	0.000	0.673
	Bottom	0.029	0.006	0.000	0.020	0.000	0.049
	Right	0.348	0.223	0.000	0.185	0.000	0.533
	Left	0.004	0.003	0.025	0.000	0.000	0.029

Table E-7

Simultaneous Transmission Scenario with 2.4 GHz WIFI MIMO, 5 GHz WIFI MIMO and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	5 GHz WIFI Ant WF8 ER	2.4 GHz WIFI Ant WF9 ER	5 GHz WIFI Ant WF7 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.481	0.746	0.724	0.000	0.746*
	Top	0.368	0.153	0.304	0.266	0.000	0.672
	Bottom	0.029	0.017	0.000	0.019	0.000	0.048
	Right	0.348	0.739	0.000	0.003	0.000	0.742
	Left	0.004	0.013	0.025	0.139	0.000	0.152

Table E-8

Simultaneous Transmission Scenario with 2.4 GHz WIFI MIMO, 6 GHz WIFI MIMO and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	6 GHz WIFI Ant WF8 ER	2.4 GHz WIFI Ant WF9 ER	6 GHz WIFI Ant WF7 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.359	0.746	0.332	0.000	0.746*
	Top	0.368	0.043	0.304	0.105	0.000	0.672
	Bottom	0.029	0.006	0.000	0.008	0.000	0.037
	Right	0.348	0.223	0.000	0.000	0.000	0.348
	Left	0.004	0.003	0.025	0.052	0.000	0.056

Table E-9

Simultaneous Transmission Scenario with 2.4 GHz Bluetooth TXBF, NB U-NII TXBF and WPT

Simult Tx	Configuration	2.4 GHz Bluetooth Ant WF8 ER	NB U-NII Ant WF8 ER	2.4 GHz Bluetooth Ant WF7 ER	NB U-NII Ant WF5B ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.433	0.314	0.378	0.089	0.000	0.900
	Top	0.184	0.133	0.213	0.002	0.000	0.399
	Bottom	0.018	0.016	0.015	0.086	0.000	0.119
	Right	0.332	0.740	0.000	0.688	0.000	0.740*
	Left	0.000	0.000	0.224	0.021	0.000	0.245

Table E-10

Simultaneous Transmission Scenario with 2.4 GHz Bluetooth TXBF, NB U-NII TXBF and WPT

Simult Tx	Configuration	2.4 GHz Bluetooth Ant WF8 ER	NB U-NII Ant WF8 ER	2.4 GHz Bluetooth Ant WF7 ER	NB U-NII Ant WF7 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.433	0.314	0.378	0.745	0.000	0.745*
	Top	0.184	0.133	0.213	0.214	0.000	0.398
	Bottom	0.018	0.016	0.015	0.015	0.000	0.033
	Right	0.332	0.740	0.000	0.000	0.000	0.740
	Left	0.000	0.000	0.224	0.080	0.000	0.224

FCC ID: BCGA3357	RF EXPOSURE REPORT	Approved by: Technical Manager
DUT Type: Tablet Device		APPENDIX E: Page 3 of 20

Table E-11

Simultaneous Transmission Scenario with 2.4 GHz Bluetooth TXBF, NB U-NII TXBF and WPT

Simult Tx	Configuration	2.4 GHz Bluetooth Ant WF8 ER	NB U-NII Ant WF8 ER	2.4 GHz Bluetooth Ant WF9 ER	NB U-NII Ant WF5B ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.433	0.314	0.368	0.089	0.000	0.890
	Top	0.184	0.133	0.169	0.002	0.000	0.355
	Bottom	0.018	0.016	0.002	0.086	0.000	0.106
	Right	0.332	0.740	0.000	0.688	0.000	0.740*
	Left	0.000	0.000	0.016	0.021	0.000	0.037

Table E-12

Simultaneous Transmission Scenario with 2.4 GHz Bluetooth TXBF, NB U-NII TXBF and WPT

Simult Tx	Configuration	2.4 GHz Bluetooth Ant WF8 ER	NB U-NII Ant WF8 ER	2.4 GHz Bluetooth Ant WF9 ER	NB U-NII Ant WF7 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.433	0.314	0.368	0.745	0.000	0.745*
	Top	0.184	0.133	0.169	0.214	0.000	0.398
	Bottom	0.018	0.016	0.002	0.015	0.000	0.033
	Right	0.332	0.740	0.000	0.000	0.000	0.740
	Left	0.000	0.000	0.016	0.080	0.000	0.080

Table E-13

Simultaneous Transmission Scenario with 2.4 GHz WIFI MIMO, NB U-NII TXBF and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	NB U-NII Ant WF8 ER	2.4 GHz WIFI Ant WF7 ER	NB U-NII Ant WF5B ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.314	0.744	0.089	0.000	0.744*
	Top	0.368	0.133	0.341	0.002	0.000	0.711
	Bottom	0.029	0.016	0.019	0.086	0.000	0.134
	Right	0.348	0.740	0.001	0.688	0.000	0.741*
	Left	0.004	0.000	0.612	0.021	0.000	0.637

Table E-14

Simultaneous Transmission Scenario with 2.4 GHz WIFI MIMO, NB U-NII TXBF and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	NB U-NII Ant WF8 ER	2.4 GHz WIFI Ant WF7 ER	NB U-NII Ant WF7 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.314	0.744	0.745	0.000	0.745*
	Top	0.368	0.133	0.341	0.214	0.000	0.709
	Bottom	0.029	0.016	0.019	0.015	0.000	0.048
	Right	0.348	0.740	0.001	0.000	0.000	0.741
	Left	0.004	0.000	0.612	0.080	0.000	0.616

Table E-15

Simultaneous Transmission Scenario with 2.4 GHz WIFI MIMO, NB U-NII TXBF and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	NB U-NII Ant WF8 ER	2.4 GHz WIFI Ant WF9 ER	NB U-NII Ant WF5B ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.314	0.746	0.089	0.000	0.746*
	Top	0.368	0.133	0.304	0.002	0.000	0.674
	Bottom	0.029	0.016	0.000	0.086	0.000	0.115
	Right	0.348	0.740	0.000	0.688	0.000	0.740*
	Left	0.004	0.000	0.025	0.021	0.000	0.050

FCC ID: BCGA3357	RF EXPOSURE REPORT	Approved by: Technical Manager
DUT Type: Tablet Device		APPENDIX E: Page 4 of 20

Table E-16

Simultaneous Transmission Scenario with 2.4 GHz WIFI MIMO, NB U-NII TXBF and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	NB U-NII Ant WF8 ER	2.4 GHz WIFI Ant WF9 ER	NB U-NII Ant WF7 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.314	0.746	0.745	0.000	0.746*
	Top	0.368	0.133	0.304	0.214	0.000	0.672
	Bottom	0.029	0.016	0.000	0.015	0.000	0.044
	Right	0.348	0.740	0.000	0.000	0.000	0.740
	Left	0.004	0.000	0.025	0.080	0.000	0.084

Table E-17

Simultaneous Transmission Scenario with 5 GHz WIFI MIMO, 2.4 GHz Bluetooth TXBF and WPT

Simult Tx	Configuration	5 GHz WIFI Ant WF5B ER	5 GHz WIFI Ant WF8 ER	2.4 GHz Bluetooth Ant WF8 ER	2.4 GHz Bluetooth Ant WF7 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.071	0.481	0.433	0.378	0.000	0.930
	Top	0.000	0.153	0.184	0.213	0.000	0.397
	Bottom	0.076	0.017	0.018	0.015	0.000	0.109
	Right	0.624	0.739	0.332	0.000	0.000	0.739*
	Left	0.037	0.013	0.000	0.224	0.000	0.274

Table E-18

Simultaneous Transmission Scenario with 6 GHz WIFI MIMO, 2.4 GHz Bluetooth TXBF and WPT

Simult Tx	Configuration	6 GHz WIFI Ant WF5B ER	6 GHz WIFI Ant WF8 ER	2.4 GHz Bluetooth Ant WF8 ER	2.4 GHz Bluetooth Ant WF7 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.019	0.359	0.433	0.378	0.000	0.830
	Top	0.001	0.043	0.184	0.213	0.000	0.398
	Bottom	0.020	0.006	0.018	0.015	0.000	0.053
	Right	0.185	0.223	0.332	0.000	0.000	0.517
	Left	0.000	0.003	0.000	0.224	0.000	0.227

Table E-19

Simultaneous Transmission Scenario with 5 GHz WIFI MIMO, 2.4 GHz Bluetooth TXBF and WPT

Simult Tx	Configuration	5 GHz WIFI Ant WF5B ER	5 GHz WIFI Ant WF8 ER	2.4 GHz Bluetooth Ant WF8 ER	2.4 GHz Bluetooth Ant WF9 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.071	0.481	0.433	0.368	0.000	0.920
	Top	0.000	0.153	0.184	0.169	0.000	0.353
	Bottom	0.076	0.017	0.018	0.002	0.000	0.096
	Right	0.624	0.739	0.332	0.000	0.000	0.739*
	Left	0.037	0.013	0.000	0.016	0.000	0.066

Table E-20

Simultaneous Transmission Scenario with 6 GHz WIFI MIMO, 2.4 GHz Bluetooth TXBF and WPT

Simult Tx	Configuration	6 GHz WIFI Ant WF5B ER	6 GHz WIFI Ant WF8 ER	2.4 GHz Bluetooth Ant WF8 ER	2.4 GHz Bluetooth Ant WF9 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.019	0.359	0.433	0.368	0.000	0.820
	Top	0.001	0.043	0.184	0.169	0.000	0.354
	Bottom	0.020	0.006	0.018	0.002	0.000	0.040
	Right	0.185	0.223	0.332	0.000	0.000	0.517
	Left	0.000	0.003	0.000	0.016	0.000	0.019

FCC ID: BCGA3357	RF EXPOSURE REPORT	Approved by: Technical Manager
DUT Type: Tablet Device		APPENDIX E: Page 5 of 20

Table E-21

Simultaneous Transmission Scenario with 5 GHz WIFI MIMO, 2.4 GHz Bluetooth TXBF and WPT

Simult Tx	Configuration	5 GHz WIFI Ant WF7 ER	2.4 GHz Bluetooth Ant WF7 ER	5 GHz WIFI Ant WF8 ER	2.4 GHz Bluetooth Ant WF8 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.724	0.378	0.481	0.433	0.000	0.724*
	Top	0.266	0.213	0.153	0.184	0.000	0.450
	Bottom	0.019	0.015	0.017	0.018	0.000	0.037
	Right	0.003	0.000	0.739	0.332	0.000	0.742
	Left	0.139	0.224	0.013	0.000	0.000	0.237

Table E-22

Simultaneous Transmission Scenario with 6 GHz WIFI MIMO, 2.4 GHz Bluetooth TXBF and WPT

Simult Tx	Configuration	6 GHz WIFI Ant WF7 ER	2.4 GHz Bluetooth Ant WF7 ER	6 GHz WIFI Ant WF8 ER	2.4 GHz Bluetooth Ant WF8 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.332	0.378	0.359	0.433	0.000	0.811
	Top	0.105	0.213	0.043	0.184	0.000	0.397
	Bottom	0.008	0.015	0.006	0.018	0.000	0.033
	Right	0.000	0.000	0.223	0.332	0.000	0.332
	Left	0.052	0.224	0.003	0.000	0.000	0.227

Table E-23

Simultaneous Transmission Scenario with 5 GHz WIFI MIMO, 2.4 GHz Bluetooth TXBF and WPT

Simult Tx	Configuration	5 GHz WIFI Ant WF7 ER	2.4 GHz Bluetooth Ant WF9 ER	5 GHz WIFI Ant WF8 ER	2.4 GHz Bluetooth Ant WF8 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.724	0.368	0.481	0.433	0.000	0.724*
	Top	0.266	0.169	0.153	0.184	0.000	0.450
	Bottom	0.019	0.002	0.017	0.018	0.000	0.037
	Right	0.003	0.000	0.739	0.332	0.000	0.742
	Left	0.139	0.016	0.013	0.000	0.000	0.152

Table E-24

Simultaneous Transmission Scenario with 6 GHz WIFI MIMO, 2.4 GHz Bluetooth TXBF and WPT

Simult Tx	Configuration	6 GHz WIFI Ant WF7 ER	2.4 GHz Bluetooth Ant WF9 ER	6 GHz WIFI Ant WF8 ER	2.4 GHz Bluetooth Ant WF8 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.332	0.368	0.359	0.433	0.000	0.801
	Top	0.105	0.169	0.043	0.184	0.000	0.353
	Bottom	0.008	0.002	0.006	0.018	0.000	0.026
	Right	0.000	0.000	0.223	0.332	0.000	0.332
	Left	0.052	0.016	0.003	0.000	0.000	0.055

Table E-25

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 5 GHz WIFI MIMO, 2.4 GHz Bluetooth and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF7 ER	5 GHz WIFI Ant WF5B ER	5 GHz WIFI Ant WF8 ER	2.4 GHz Bluetooth Ant WF8 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.744	0.071	0.481	0.433	0.000	0.744*
	Top	0.341	0.000	0.153	0.184	0.000	0.525
	Bottom	0.019	0.076	0.017	0.018	0.000	0.113
	Right	0.001	0.624	0.739	0.332	0.000	0.740*
	Left	0.612	0.037	0.013	0.000	0.000	0.662

FCC ID: BCGA3357	RF EXPOSURE REPORT	Approved by: Technical Manager
DUT Type: Tablet Device		APPENDIX E: Page 6 of 20

Table E-26

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 6 GHz WIFI MIMO, 2.4 GHz Bluetooth and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF7 ER	6 GHz WIFI Ant WF5B ER	6 GHz WIFI Ant WF8 ER	2.4 GHz Bluetooth Ant WF8 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.744	0.019	0.359	0.433	0.000	0.744*
	Top	0.341	0.001	0.043	0.184	0.000	0.526
	Bottom	0.019	0.020	0.006	0.018	0.000	0.057
	Right	0.001	0.185	0.223	0.332	0.000	0.518
	Left	0.612	0.000	0.003	0.000	0.000	0.615

Table E-27

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 5 GHz WIFI MIMO, 2.4 GHz Bluetooth and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF7 ER	5 GHz WIFI Ant WF7 ER	5 GHz WIFI Ant WF8 ER	2.4 GHz Bluetooth Ant WF8 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.744	0.724	0.481	0.433	0.000	0.744*
	Top	0.341	0.266	0.153	0.184	0.000	0.525
	Bottom	0.019	0.019	0.017	0.018	0.000	0.037
	Right	0.001	0.003	0.739	0.332	0.000	0.742
	Left	0.612	0.139	0.013	0.000	0.000	0.625

Table E-28

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 6 GHz WIFI MIMO, 2.4 GHz Bluetooth and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF7 ER	6 GHz WIFI Ant WF7 ER	6 GHz WIFI Ant WF8 ER	2.4 GHz Bluetooth Ant WF8 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.744	0.332	0.359	0.433	0.000	0.744*
	Top	0.341	0.105	0.043	0.184	0.000	0.525
	Bottom	0.019	0.008	0.006	0.018	0.000	0.037
	Right	0.001	0.000	0.223	0.332	0.000	0.333
	Left	0.612	0.052	0.003	0.000	0.000	0.615

Table E-29

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 5 GHz WIFI MIMO, 2.4 GHz Bluetooth and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	5 GHz WIFI Ant WF8 ER	5 GHz WIFI Ant WF5B ER	2.4 GHz Bluetooth Ant WF7 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.481	0.071	0.378	0.000	0.741*
	Top	0.368	0.153	0.000	0.213	0.000	0.581
	Bottom	0.029	0.017	0.076	0.015	0.000	0.120
	Right	0.348	0.739	0.624	0.000	0.000	0.739*
	Left	0.004	0.013	0.037	0.224	0.000	0.274

Table E-30

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 6 GHz WIFI MIMO, 2.4 GHz Bluetooth and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	6 GHz WIFI Ant WF8 ER	6 GHz WIFI Ant WF5B ER	2.4 GHz Bluetooth Ant WF7 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.359	0.019	0.378	0.000	0.741*
	Top	0.368	0.043	0.001	0.213	0.000	0.582
	Bottom	0.029	0.006	0.020	0.015	0.000	0.064
	Right	0.348	0.223	0.185	0.000	0.000	0.533
	Left	0.004	0.003	0.000	0.224	0.000	0.228

FCC ID: BCGA3357	RF EXPOSURE REPORT	Approved by: Technical Manager
DUT Type: Tablet Device		APPENDIX E: Page 7 of 20

Table E-31

Simultaneous Transmission Scenario with 2.4 GHz WIFI 5 GHz WIFI MIMO, 2.4 GHz Bluetooth and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	5 GHz WIFI Ant WF8 ER	5 GHz WIFI Ant WF5B ER	2.4 GHz Bluetooth Ant WF9 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.481	0.071	0.368	0.000	0.741*
	Top	0.368	0.153	0.000	0.169	0.000	0.537
	Bottom	0.029	0.017	0.076	0.002	0.000	0.107
	Right	0.348	0.739	0.624	0.000	0.000	0.739*
	Left	0.004	0.013	0.037	0.016	0.000	0.066

Table E-32

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 6 GHz WIFI MIMO, 2.4 GHz Bluetooth and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	6 GHz WIFI Ant WF8 ER	6 GHz WIFI Ant WF5B ER	2.4 GHz Bluetooth Ant WF9 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.359	0.019	0.368	0.000	0.741*
	Top	0.368	0.043	0.001	0.169	0.000	0.538
	Bottom	0.029	0.006	0.020	0.002	0.000	0.051
	Right	0.348	0.223	0.185	0.000	0.000	0.533
	Left	0.004	0.003	0.000	0.016	0.000	0.020

Table E-33

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 5 GHz WIFI MIMO, 2.4 GHz Bluetooth and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	5 GHz WIFI Ant WF8 ER	5 GHz WIFI Ant WF7 ER	2.4 GHz Bluetooth Ant WF7 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.481	0.724	0.378	0.000	0.741*
	Top	0.368	0.153	0.266	0.213	0.000	0.634
	Bottom	0.029	0.017	0.019	0.015	0.000	0.048
	Right	0.348	0.739	0.003	0.000	0.000	0.742
	Left	0.004	0.013	0.139	0.224	0.000	0.237

Table E-34

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 6 GHz WIFI MIMO, 2.4 GHz Bluetooth and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	6 GHz WIFI Ant WF8 ER	6 GHz WIFI Ant WF7 ER	2.4 GHz Bluetooth Ant WF7 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.359	0.332	0.378	0.000	0.741*
	Top	0.368	0.043	0.105	0.213	0.000	0.581
	Bottom	0.029	0.006	0.008	0.015	0.000	0.044
	Right	0.348	0.223	0.000	0.000	0.000	0.348
	Left	0.004	0.003	0.052	0.224	0.000	0.228

Table E-35

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 5 GHz WIFI MIMO, 2.4 GHz Bluetooth and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	5 GHz WIFI Ant WF8 ER	5 GHz WIFI Ant WF7 ER	2.4 GHz Bluetooth Ant WF9 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.481	0.724	0.368	0.000	0.741*
	Top	0.368	0.153	0.266	0.169	0.000	0.634
	Bottom	0.029	0.017	0.019	0.002	0.000	0.048
	Right	0.348	0.739	0.003	0.000	0.000	0.742
	Left	0.004	0.013	0.139	0.016	0.000	0.152

FCC ID: BCGA3357	RF EXPOSURE REPORT	Approved by: Technical Manager
DUT Type: Tablet Device		APPENDIX E: Page 8 of 20

Table E-36

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 6 GHz WIFI MIMO, 2.4 GHz Bluetooth and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	6 GHz WIFI Ant WF8 ER	6 GHz WIFI Ant WF7 ER	2.4 GHz Bluetooth Ant WF9 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.359	0.332	0.368	0.000	0.741*
	Top	0.368	0.043	0.105	0.169	0.000	0.537
	Bottom	0.029	0.006	0.008	0.002	0.000	0.037
	Right	0.348	0.223	0.000	0.000	0.000	0.348
	Left	0.004	0.003	0.052	0.016	0.000	0.056

Table E-37

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 5 GHz WIFI MIMO, 2.4 GHz Bluetooth and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF9 ER	5 GHz WIFI Ant WF5B ER	5 GHz WIFI Ant WF8 ER	2.4 GHz Bluetooth Ant WF8 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.746	0.071	0.481	0.433	0.000	0.746*
	Top	0.304	0.000	0.153	0.184	0.000	0.488
	Bottom	0.000	0.076	0.017	0.018	0.000	0.094
	Right	0.000	0.624	0.739	0.332	0.000	0.739*
	Left	0.025	0.037	0.013	0.000	0.000	0.075

Table E-38

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 6 GHz WIFI MIMO, 2.4 GHz Bluetooth and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF9 ER	6 GHz WIFI Ant WF5B ER	6 GHz WIFI Ant WF8 ER	2.4 GHz Bluetooth Ant WF8 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.746	0.019	0.359	0.433	0.000	0.746*
	Top	0.304	0.001	0.043	0.184	0.000	0.489
	Bottom	0.000	0.020	0.006	0.018	0.000	0.038
	Right	0.000	0.185	0.223	0.332	0.000	0.517
	Left	0.025	0.000	0.003	0.000	0.000	0.028

Table E-39

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 5 GHz WIFI MIMO, 2.4 GHz Bluetooth and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF9 ER	5 GHz WIFI Ant WF7 ER	5 GHz WIFI Ant WF8 ER	2.4 GHz Bluetooth Ant WF8 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.746	0.724	0.481	0.433	0.000	0.746*
	Top	0.304	0.266	0.153	0.184	0.000	0.488
	Bottom	0.000	0.019	0.017	0.018	0.000	0.037
	Right	0.000	0.003	0.739	0.332	0.000	0.742
	Left	0.025	0.139	0.013	0.000	0.000	0.152

Table E-40

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 6 GHz WIFI MIMO, 2.4 GHz Bluetooth and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF9 ER	6 GHz WIFI Ant WF7 ER	6 GHz WIFI Ant WF8 ER	2.4 GHz Bluetooth Ant WF8 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.746	0.332	0.359	0.433	0.000	0.746*
	Top	0.304	0.105	0.043	0.184	0.000	0.488
	Bottom	0.000	0.008	0.006	0.018	0.000	0.026
	Right	0.000	0.000	0.223	0.332	0.000	0.332
	Left	0.025	0.052	0.003	0.000	0.000	0.055

FCC ID: BCGA3357	RF EXPOSURE REPORT	Approved by: Technical Manager
DUT Type: Tablet Device		APPENDIX E: Page 9 of 20

Table E-41

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 2.4 GHz Bluetooth, NB U-NII TXBF and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	NB U-NII Ant WF8 ER	2.4 GHz Bluetooth Ant WF9 ER	NB U-NII Ant WF5B ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.314	0.368	0.089	0.000	0.741*
	Top	0.368	0.133	0.169	0.002	0.000	0.539
	Bottom	0.029	0.016	0.002	0.086	0.000	0.117
	Right	0.348	0.740	0.000	0.688	0.000	0.740*
	Left	0.004	0.000	0.016	0.021	0.000	0.041

Table E-42

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 2.4 GHz Bluetooth, NB U-NII TXBF and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	NB U-NII Ant WF8 ER	2.4 GHz Bluetooth Ant WF9 ER	NB U-NII Ant WF7 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.314	0.368	0.745	0.000	0.745*
	Top	0.368	0.133	0.169	0.214	0.000	0.582
	Bottom	0.029	0.016	0.002	0.015	0.000	0.044
	Right	0.348	0.740	0.000	0.000	0.000	0.740
	Left	0.004	0.000	0.016	0.080	0.000	0.084

Table E-43

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 2.4 GHz Bluetooth, NB U-NII TXBF and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	NB U-NII Ant WF8 ER	2.4 GHz Bluetooth Ant WF7 ER	NB U-NII Ant WF5B ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.314	0.378	0.089	0.000	0.741*
	Top	0.368	0.133	0.213	0.002	0.000	0.583
	Bottom	0.029	0.016	0.015	0.086	0.000	0.130
	Right	0.348	0.740	0.000	0.688	0.000	0.740*
	Left	0.004	0.000	0.224	0.021	0.000	0.249

Table E-44

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 2.4 GHz Bluetooth, NB U-NII TXBF and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	NB U-NII Ant WF8 ER	2.4 GHz Bluetooth Ant WF7 ER	NB U-NII Ant WF7 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.314	0.378	0.745	0.000	0.745*
	Top	0.368	0.133	0.213	0.214	0.000	0.582
	Bottom	0.029	0.016	0.015	0.015	0.000	0.044
	Right	0.348	0.740	0.000	0.000	0.000	0.740
	Left	0.004	0.000	0.224	0.080	0.000	0.228

Table E-45

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 2.4 GHz Bluetooth, NB U-NII TXBF and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF7 ER	2.4 GHz Bluetooth Ant WF8 ER	NB U-NII Ant WF8 ER	NB U-NII Ant WF5B ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.744	0.433	0.314	0.089	0.000	0.744*
	Top	0.341	0.184	0.133	0.002	0.000	0.527
	Bottom	0.019	0.018	0.016	0.086	0.000	0.123
	Right	0.001	0.332	0.740	0.688	0.000	0.741*
	Left	0.612	0.000	0.000	0.021	0.000	0.633

FCC ID: BCGA3357	RF EXPOSURE REPORT	Approved by: Technical Manager
DUT Type: Tablet Device		APPENDIX E: Page 10 of 20

Table E-46

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 2.4 GHz Bluetooth, NB U-NII TXBF and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF7 ER	NB U-NII Ant WF7 ER	2.4 GHz Bluetooth Ant WF8 ER	NB U-NII Ant WF8 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.744	0.745	0.433	0.314	0.000	0.745*
	Top	0.341	0.214	0.184	0.133	0.000	0.525
	Bottom	0.019	0.015	0.018	0.016	0.000	0.037
	Right	0.001	0.000	0.332	0.740	0.000	0.741
	Left	0.612	0.080	0.000	0.000	0.000	0.612

Table E-47

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 2.4 GHz Bluetooth, NB U-NII TXBF and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF9 ER	2.4 GHz Bluetooth Ant WF8 ER	NB U-NII Ant WF8 ER	NB U-NII Ant WF5B ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.746	0.433	0.314	0.089	0.000	0.746*
	Top	0.304	0.184	0.133	0.002	0.000	0.490
	Bottom	0.000	0.018	0.016	0.086	0.000	0.104
	Right	0.000	0.332	0.740	0.688	0.000	0.740*
	Left	0.025	0.000	0.000	0.021	0.000	0.046

Table E-48

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 2.4 GHz Bluetooth, NB U-NII TXBF and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF9 ER	NB U-NII Ant WF7 ER	2.4 GHz Bluetooth Ant WF8 ER	NB U-NII Ant WF8 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.746	0.745	0.433	0.314	0.000	0.746*
	Top	0.304	0.214	0.184	0.133	0.000	0.488
	Bottom	0.000	0.015	0.018	0.016	0.000	0.033
	Right	0.000	0.000	0.332	0.740	0.000	0.740
	Left	0.025	0.080	0.000	0.000	0.000	0.080

Table E-49

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 5 GHz WIFI MIMO, 802.15.4 and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	5 GHz WIFI Ant WF8 ER	5 GHz WIFI Ant WF5B ER	802.15.4 Ant WF7 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.481	0.071	0.578	0.000	0.741*
	Top	0.368	0.153	0.000	0.308	0.000	0.676
	Bottom	0.029	0.017	0.076	0.022	0.000	0.127
	Right	0.348	0.739	0.624	0.003	0.000	0.742*
	Left	0.004	0.013	0.037	0.522	0.000	0.572

Table E-50

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 6 GHz WIFI MIMO, 802.15.4 and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	6 GHz WIFI Ant WF8 ER	6 GHz WIFI Ant WF5B ER	802.15.4 Ant WF7 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.359	0.019	0.578	0.000	0.741*
	Top	0.368	0.043	0.001	0.308	0.000	0.677
	Bottom	0.029	0.006	0.020	0.022	0.000	0.071
	Right	0.348	0.223	0.185	0.003	0.000	0.536
	Left	0.004	0.003	0.000	0.522	0.000	0.526

FCC ID: BCGA3357	RF EXPOSURE REPORT	Approved by: Technical Manager
DUT Type: Tablet Device		APPENDIX E: Page 11 of 20

Table E-51

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 5 GHz WIFI MIMO, 802.15.4 and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	5 GHz WIFI Ant WF8 ER	5 GHz WIFI Ant WF5B ER	802.15.4 Ant WF9 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.481	0.071	0.383	0.000	0.741*
	Top	0.368	0.153	0.000	0.212	0.000	0.580
	Bottom	0.029	0.017	0.076	0.008	0.000	0.113
	Right	0.348	0.739	0.624	0.000	0.000	0.739*
	Left	0.004	0.013	0.037	0.013	0.000	0.063

Table E-52

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 6 GHz WIFI MIMO, 802.15.4 and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	6 GHz WIFI Ant WF8 ER	6 GHz WIFI Ant WF5B ER	802.15.4 Ant WF9 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.359	0.019	0.383	0.000	0.741*
	Top	0.368	0.043	0.001	0.212	0.000	0.581
	Bottom	0.029	0.006	0.020	0.008	0.000	0.057
	Right	0.348	0.223	0.185	0.000	0.000	0.533
	Left	0.004	0.003	0.000	0.013	0.000	0.017

Table E-53

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 5 GHz WIFI MIMO, 802.15.4 and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	5 GHz WIFI Ant WF8 ER	5 GHz WIFI Ant WF7 ER	802.15.4 Ant WF7 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.481	0.724	0.578	0.000	0.741*
	Top	0.368	0.153	0.266	0.308	0.000	0.676
	Bottom	0.029	0.017	0.019	0.022	0.000	0.051
	Right	0.348	0.739	0.003	0.003	0.000	0.742
	Left	0.004	0.013	0.139	0.522	0.000	0.535

Table E-54

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 6 GHz WIFI MIMO, 802.15.4 and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	6 GHz WIFI Ant WF8 ER	6 GHz WIFI Ant WF7 ER	802.15.4 Ant WF7 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.359	0.332	0.578	0.000	0.741*
	Top	0.368	0.043	0.105	0.308	0.000	0.676
	Bottom	0.029	0.006	0.008	0.022	0.000	0.051
	Right	0.348	0.223	0.000	0.003	0.000	0.351
	Left	0.004	0.003	0.052	0.522	0.000	0.526

Table E-55

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 5 GHz WIFI MIMO, 802.15.4 and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	5 GHz WIFI Ant WF8 ER	5 GHz WIFI Ant WF7 ER	802.15.4 Ant WF9 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.481	0.724	0.383	0.000	0.741*
	Top	0.368	0.153	0.266	0.212	0.000	0.634
	Bottom	0.029	0.017	0.019	0.008	0.000	0.048
	Right	0.348	0.739	0.003	0.000	0.000	0.742
	Left	0.004	0.013	0.139	0.013	0.000	0.152

FCC ID: BCGA3357	RF EXPOSURE REPORT	Approved by: Technical Manager
DUT Type: Tablet Device		APPENDIX E: Page 12 of 20

Table E-56

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 6 GHz WIFI MIMO, 802.15.4 and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	6 GHz WIFI Ant WF8 ER	6 GHz WIFI Ant WF7 ER	802.15.4 Ant WF9 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.359	0.332	0.383	0.000	0.741*
	Top	0.368	0.043	0.105	0.212	0.000	0.580
	Bottom	0.029	0.006	0.008	0.008	0.000	0.037
	Right	0.348	0.223	0.000	0.000	0.000	0.348
	Left	0.004	0.003	0.052	0.013	0.000	0.056

Table E-57

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 5 GHz WIFI MIMO, 802.15.4 and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF7 ER	5 GHz WIFI Ant WF5B ER	5 GHz WIFI Ant WF8 ER	802.15.4 Ant WF8 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.744	0.071	0.481	0.664	0.000	0.744*
	Top	0.341	0.000	0.153	0.371	0.000	0.712
	Bottom	0.019	0.076	0.017	0.023	0.000	0.118
	Right	0.001	0.624	0.739	0.526	0.000	0.740*
	Left	0.612	0.037	0.013	0.004	0.000	0.662

Table E-58

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 6 GHz WIFI MIMO, 802.15.4 and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF7 ER	6 GHz WIFI Ant WF5B ER	6 GHz WIFI Ant WF8 ER	802.15.4 Ant WF8 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.744	0.019	0.359	0.664	0.000	0.744*
	Top	0.341	0.001	0.043	0.371	0.000	0.713
	Bottom	0.019	0.020	0.006	0.023	0.000	0.062
	Right	0.001	0.185	0.223	0.526	0.000	0.712
	Left	0.612	0.000	0.003	0.004	0.000	0.616

Table E-59

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 5 GHz WIFI MIMO, 802.15.4 and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF7 ER	5 GHz WIFI Ant WF7 ER	5 GHz WIFI Ant WF8 ER	802.15.4 Ant WF8 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.744	0.724	0.481	0.664	0.000	0.744*
	Top	0.341	0.266	0.153	0.371	0.000	0.712
	Bottom	0.019	0.019	0.017	0.023	0.000	0.042
	Right	0.001	0.003	0.739	0.526	0.000	0.742
	Left	0.612	0.139	0.013	0.004	0.000	0.625

Table E-60

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 6 GHz WIFI MIMO, 802.15.4 and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF7 ER	6 GHz WIFI Ant WF7 ER	6 GHz WIFI Ant WF8 ER	802.15.4 Ant WF8 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.744	0.332	0.359	0.664	0.000	0.744*
	Top	0.341	0.105	0.043	0.371	0.000	0.712
	Bottom	0.019	0.008	0.006	0.023	0.000	0.042
	Right	0.001	0.000	0.223	0.526	0.000	0.527
	Left	0.612	0.052	0.003	0.004	0.000	0.616

FCC ID: BCGA3357	RF EXPOSURE REPORT	Approved by: Technical Manager
DUT Type: Tablet Device		APPENDIX E: Page 13 of 20

Table E-61

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 5 GHz WIFI MIMO, 802.15.4 and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF9 ER	5 GHz WIFI Ant WF5B ER	5 GHz WIFI Ant WF8 ER	802.15.4 Ant WF8 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.746	0.071	0.481	0.664	0.000	0.746*
	Top	0.304	0.000	0.153	0.371	0.000	0.675
	Bottom	0.000	0.076	0.017	0.023	0.000	0.099
	Right	0.000	0.624	0.739	0.526	0.000	0.739*
	Left	0.025	0.037	0.013	0.004	0.000	0.075

Table E-62

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 6 GHz WIFI MIMO, 802.15.4 and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF9 ER	6 GHz WIFI Ant WF5B ER	6 GHz WIFI Ant WF8 ER	802.15.4 Ant WF8 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.746	0.019	0.359	0.664	0.000	0.746*
	Top	0.304	0.001	0.043	0.371	0.000	0.676
	Bottom	0.000	0.020	0.006	0.023	0.000	0.043
	Right	0.000	0.185	0.223	0.526	0.000	0.711
	Left	0.025	0.000	0.003	0.004	0.000	0.029

Table E-63

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 5 GHz WIFI MIMO, 802.15.4 and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF9 ER	5 GHz WIFI Ant WF7 ER	5 GHz WIFI Ant WF8 ER	802.15.4 Ant WF8 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.746	0.724	0.481	0.664	0.000	0.746*
	Top	0.304	0.266	0.153	0.371	0.000	0.675
	Bottom	0.000	0.019	0.017	0.023	0.000	0.042
	Right	0.000	0.003	0.739	0.526	0.000	0.742
	Left	0.025	0.139	0.013	0.004	0.000	0.152

Table E-64

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 6 GHz WIFI MIMO, 802.15.4 and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF9 ER	6 GHz WIFI Ant WF7 ER	6 GHz WIFI Ant WF8 ER	802.15.4 Ant WF8 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.746	0.332	0.359	0.664	0.000	0.746*
	Top	0.304	0.105	0.043	0.371	0.000	0.675
	Bottom	0.000	0.008	0.006	0.023	0.000	0.031
	Right	0.000	0.000	0.223	0.526	0.000	0.526
	Left	0.025	0.052	0.003	0.004	0.000	0.056

Table E-65

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 802.15.4, NB U-NII TXBF and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	NB U-NII Ant WF8 ER	802.15.4 Ant WF7 ER	NB U-NII Ant WF5B ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.314	0.578	0.089	0.000	0.741*
	Top	0.368	0.133	0.308	0.002	0.000	0.678
	Bottom	0.029	0.016	0.022	0.086	0.000	0.137
	Right	0.348	0.740	0.003	0.688	0.000	0.743*
	Left	0.004	0.000	0.522	0.021	0.000	0.547

FCC ID: BCGA3357	RF EXPOSURE REPORT	Approved by: Technical Manager
DUT Type: Tablet Device		APPENDIX E: Page 14 of 20

Table E-66

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 802.15.4, NB U-NII TXBF and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	NB U-NII Ant WF8 ER	802.15.4 Ant WF7 ER	NB U-NII Ant WF7 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.314	0.578	0.745	0.000	0.745*
	Top	0.368	0.133	0.308	0.214	0.000	0.676
	Bottom	0.029	0.016	0.022	0.015	0.000	0.051
	Right	0.348	0.740	0.003	0.000	0.000	0.743
	Left	0.004	0.000	0.522	0.080	0.000	0.526

Table E-67

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 802.15.4, NB U-NII TXBF and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	NB U-NII Ant WF8 ER	802.15.4 Ant WF9 ER	NB U-NII Ant WF5B ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.314	0.383	0.089	0.000	0.741*
	Top	0.368	0.133	0.212	0.002	0.000	0.582
	Bottom	0.029	0.016	0.008	0.086	0.000	0.123
	Right	0.348	0.740	0.000	0.688	0.000	0.740*
	Left	0.004	0.000	0.013	0.021	0.000	0.038

Table E-68

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 802.15.4, NB U-NII TXBF and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF8 ER	NB U-NII Ant WF8 ER	802.15.4 Ant WF9 ER	NB U-NII Ant WF7 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.741	0.314	0.383	0.745	0.000	0.745*
	Top	0.368	0.133	0.212	0.214	0.000	0.582
	Bottom	0.029	0.016	0.008	0.015	0.000	0.044
	Right	0.348	0.740	0.000	0.000	0.000	0.740
	Left	0.004	0.000	0.013	0.080	0.000	0.084

Table E-69

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 802.15.4, NB U-NII TXBF and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF7 ER	802.15.4 Ant WF8 ER	NB U-NII Ant WF8 ER	NB U-NII Ant WF5B ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.744	0.664	0.314	0.089	0.000	0.744*
	Top	0.341	0.371	0.133	0.002	0.000	0.714
	Bottom	0.019	0.023	0.016	0.086	0.000	0.128
	Right	0.001	0.526	0.740	0.688	0.000	0.741*
	Left	0.612	0.004	0.000	0.021	0.000	0.637

Table E-70

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 802.15.4, NB U-NII TXBF and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF7 ER	NB U-NII Ant WF7 ER	802.15.4 Ant WF8 ER	NB U-NII Ant WF8 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.744	0.745	0.664	0.314	0.000	0.745*
	Top	0.341	0.214	0.371	0.133	0.000	0.712
	Bottom	0.019	0.015	0.023	0.016	0.000	0.042
	Right	0.001	0.000	0.526	0.740	0.000	0.741
	Left	0.612	0.080	0.004	0.000	0.000	0.616

FCC ID: BCGA3357	RF EXPOSURE REPORT	Approved by: Technical Manager
DUT Type: Tablet Device		APPENDIX E: Page 15 of 20

Table E-71

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 802.15.4, NB U-NII TXBF and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF9 ER	802.15.4 Ant WF8 ER	NB U-NII Ant WF8 ER	NB U-NII Ant WF5B ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.746	0.664	0.314	0.089	0.000	0.746*
	Top	0.304	0.371	0.133	0.002	0.000	0.677
	Bottom	0.000	0.023	0.016	0.086	0.000	0.109
	Right	0.000	0.526	0.740	0.688	0.000	0.740*
	Left	0.025	0.004	0.000	0.021	0.000	0.050

Table E-72

Simultaneous Transmission Scenario with 2.4 GHz WIFI, 802.15.4, NB U-NII TXBF and WPT

Simult Tx	Configuration	2.4 GHz WIFI Ant WF9 ER	NB U-NII Ant WF7 ER	802.15.4 Ant WF8 ER	NB U-NII Ant WF8 ER	WPT ER	Σ ER
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.746	0.745	0.664	0.314	0.000	0.746*
	Top	0.304	0.214	0.371	0.133	0.000	0.675
	Bottom	0.000	0.015	0.023	0.016	0.000	0.038
	Right	0.000	0.000	0.526	0.740	0.000	0.740
	Left	0.025	0.080	0.004	0.000	0.000	0.084

FCC ID: BCGA3357	RF EXPOSURE REPORT	Approved by: Technical Manager
DUT Type: Tablet Device		APPENDIX E: Page 16 of 20

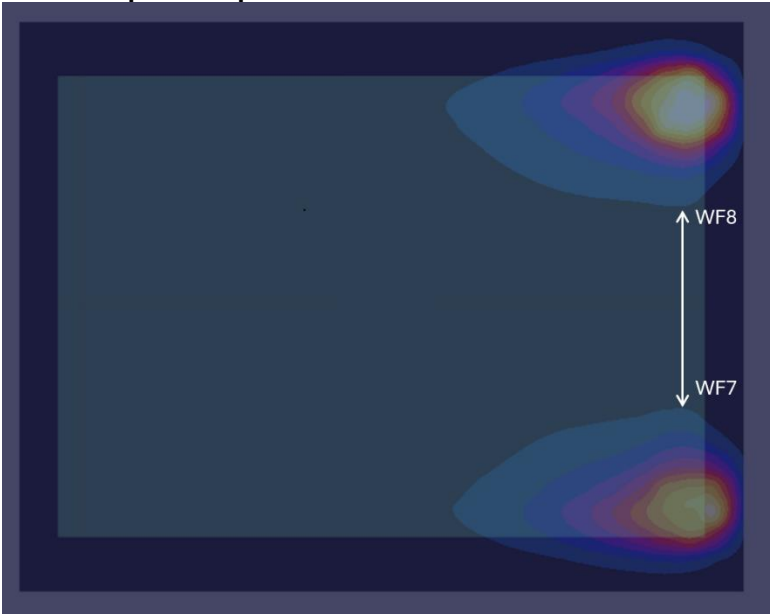
E.5 Spatial Separation Analysis

Per FCC KDB Publication 248227, antennas may be considered spatially separated when the aggregate SAR from multiple antennas at any location in the combined SAR distribution is either $\leq 1.2\text{ W/kg}$ where at least 90% of the SAR is attributed to a single SAR distribution or $\leq 0.4\text{ W/kg}$ where no more than one SAR distribution is contributing $> 0.1\text{ W/kg}$.

Spatial separation was determined by inspection of the area scan SAR distributions to confirm that at all locations, SAR was $< 1.2\text{ W/kg}$, where at least 90% of the SAR is attributed to a single SAR distribution. See below for illustrations of the spatial separated antennas considered.

E.5.1 Back Side Spatial Separation Analysis

Figure E-1
Back Side Spatial Separation for Antenna WF8 and Antenna WF7



FCC ID: BCGA3357	RF EXPOSURE REPORT	Approved by: Technical Manager
DUT Type: Tablet Device		APPENDIX E: Page 17 of 20

Figure E-2
Back Side Spatial Separation for Antenna WF8 and Antenna WF9

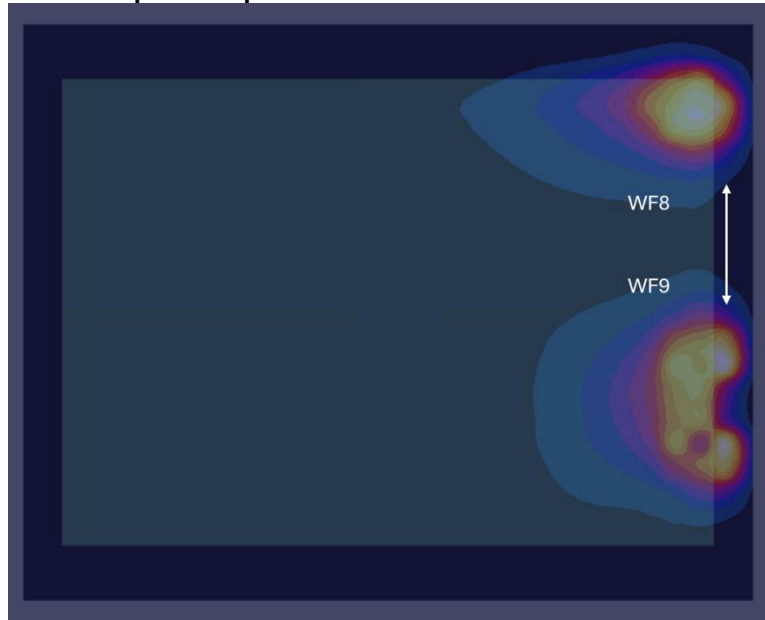
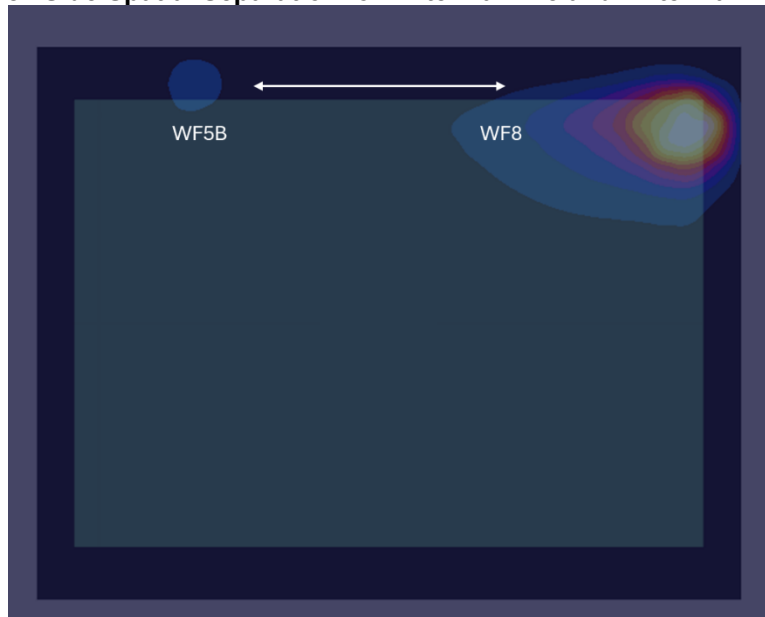


Figure E-3
Back Side Spatial Separation for Antenna WF8 and Antenna WF5B



FCC ID: BCGA3357	RF EXPOSURE REPORT	Approved by: Technical Manager
DUT Type: Tablet Device		APPENDIX E: Page 18 of 20

Figure E-4
Back Side Spatial Separation for Antenna WF5B and Antenna WF7

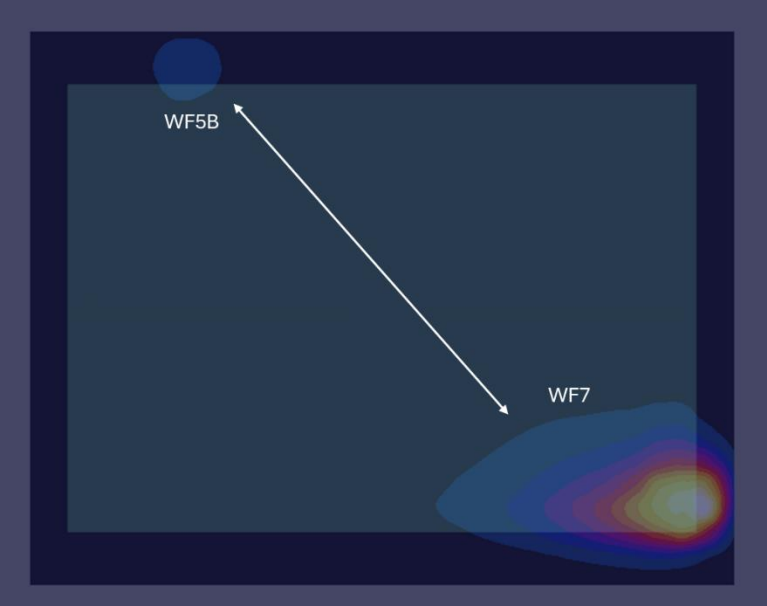
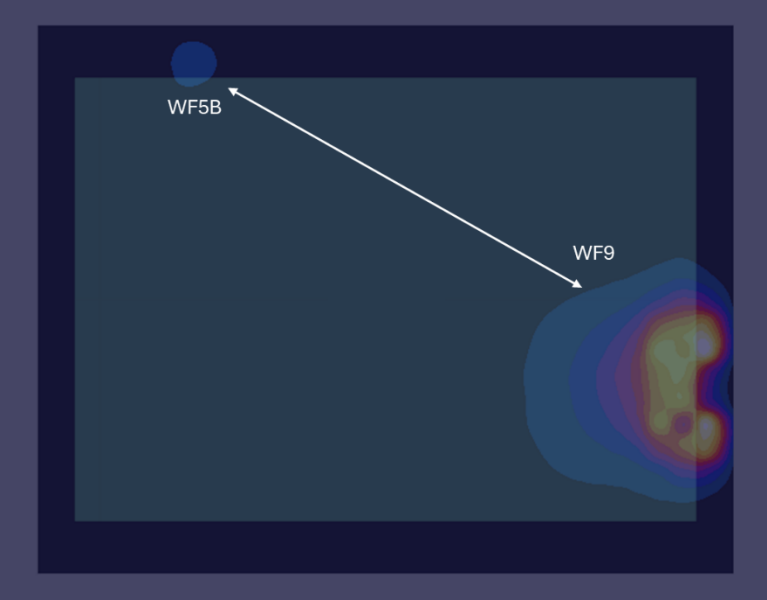


Figure E-5
Back Side Spatial Separation for Antenna WF5B and Antenna WF9



FCC ID: BCGA3357	RF EXPOSURE REPORT	Approved by: Technical Manager
DUT Type: Tablet Device		APPENDIX E: Page 19 of 20

E.5.2 Right Edge Spatial Separation Analysis

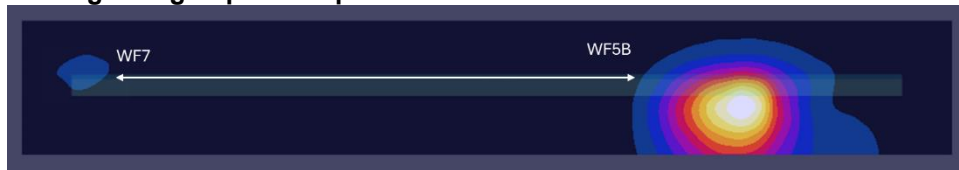
Figure E-6

Right Edge Spatial Separation for Antenna WF8 and Antenna WF5B



Figure E-7

Right Edge Spatial Separation for Antenna WF7 and Antenna WF5B



E.6 Simultaneous Transmission Conclusion

The above numerical summed TER results for all the worst-case simultaneous transmission conditions were below the TER limit. Therefore, the above analysis is sufficient to determine that simultaneous transmission cases will not exceed the SAR limit and therefore no measured volumetric simultaneous SAR summation is required per FCC KDB Publication 447498 D04v01.

FCC ID: BCGA3357	RF EXPOSURE REPORT	Approved by: Technical Manager
DUT Type: Tablet Device		APPENDIX E: Page 20 of 20