

11.4 NR Maximum Output Power

Only the Conducted Power measurement results of the maximum bandwidth, which is the SAR test condition of NR Bands according to FCC KDB 941225 D05, are included, and the measurement results of other bandwidths are listed in Appendix L.

11.4.1 NR FDD Band n2 Maximum Conducted Power

NR FDD Band n2 Conducted Power_ P_{max} , DSI = 1 (RCV)_ MAIN1 Antenna

NR FDD Band n2 _ 20 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						372000	376000	380000	
						1 860 MHz	1 880 MHz	1 900 MHz	
20 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	22.62	22.62	22.59	0
				1	53	22.63	22.66	22.58	0
				1	104	22.68	22.65	22.77	0
				50	0	22.07	22.10	22.02	0.5
				50	28	22.66	22.64	22.60	0
				50	56	22.07	22.06	22.08	0.5
				100	0	22.14	22.19	22.15	0.5
			QPSK	1	1	22.66	22.68	22.61	0
				1	53	22.70	22.63	22.62	0
				1	104	22.68	22.69	22.70	0
				50	0	21.57	21.45	21.55	1
				50	28	22.54	22.40	22.64	0
				50	56	21.61	21.56	21.64	1
				100	0	21.56	21.68	21.65	1
			16QAM	1	1	21.67	21.57	21.54	1
			64QAM	1	1	20.27	20.24	20.23	2.5
			256QAM	1	1	17.56	17.63	17.64	4.5
		CP	QPSK	1	1	21.25	21.32	21.28	1.5

NR FDD Band n2 Conducted Power_ DSI = 0 (free) _ MAIN1 Antenna

NR FDD Band n2 _ 20 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						372000	376000	380000	
						1 860 MHz	1 880 MHz	1 900 MHz	
20 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	19.29	19.31	19.25	0
				1	53	19.24	19.17	19.21	0
				1	104	19.32	19.30	19.34	0
				50	0	19.23	19.29	19.27	0
				50	28	19.21	19.19	19.24	0
				50	56	19.29	19.20	19.26	0
				100	0	19.31	19.33	19.27	0
			QPSK	1	1	19.30	19.23	19.37	0
				1	53	19.29	19.08	19.27	0
				1	104	19.21	19.22	19.35	0
				50	0	19.24	19.21	19.26	0
				50	28	19.21	19.13	19.22	0
				50	56	19.16	19.28	19.24	0
				100	0	19.35	19.29	19.32	0
			16QAM	1	1	19.30	19.17	19.37	0
			64QAM	1	1	19.45	19.31	19.48	0
			256QAM	1	1	17.63	17.65	17.71	0.5
		CP	QPSK	1	1	19.53	19.56	19.61	0

NR FDD Band n2 Conducted Power_ Pmax_ SUB2 Antenna

NR FDD Band n2 _ 20 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						372000	376000	380000	
						1 860 MHz	1 880 MHz	1 900 MHz	
20 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	22.51	22.51	22.49	0
				1	53	22.59	22.43	22.49	0
				1	104	22.55	22.45	22.55	0
				50	0	22.00	21.99	21.88	0.5
				50	28	22.63	22.60	22.38	0
				50	56	21.98	21.95	21.93	0.5
				100	0	22.12	22.09	21.86	0.5
			QPSK	1	1	22.62	22.50	22.51	0
				1	53	22.71	22.43	22.37	0
				1	104	22.55	22.47	22.41	0
				50	0	21.53	21.47	21.40	1
				50	28	22.65	22.46	22.38	0
				50	56	21.56	21.44	21.38	1
				100	0	21.60	21.61	21.30	1
			16QAM	1	1	21.53	21.53	21.51	1
			64QAM	1	1	20.22	20.13	20.07	2.5
			256QAM	1	1	17.52	17.53	17.46	4.5
		CP	QPSK	1	1	21.23	21.18	21.11	1.5

NR FDD Band n2 Conducted Power_ DSI = 0 (free) _ SUB2 Antenna

NR FDD Band n2 _ 20 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						372000	376000	380000	
						1 860 MHz	1 880 MHz	1 900 MHz	
20 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	18.95	18.98	18.91	0
				1	53	19.08	18.94	18.78	0
				1	104	19.04	18.91	18.86	0
				50	0	18.92	18.94	18.80	0
				50	28	19.11	19.06	18.92	0
				50	56	18.95	18.92	18.92	0
			QPSK	100	0	19.03	19.06	18.84	0
				1	1	18.94	19.04	18.92	0
				1	53	19.14	19.02	18.82	0
				1	104	18.94	18.94	18.87	0
				50	0	18.96	18.96	18.84	0
				50	28	19.08	19.07	18.79	0
				50	56	19.03	18.92	18.81	0
				100	0	19.12	19.08	18.90	0
			16QAM	1	1	18.98	19.03	19.01	0
			64QAM	1	1	19.25	19.12	19.07	0
			256QAM	1	1	17.59	17.53	17.43	0.5
		CP	QPSK	1	1	19.10	19.16	19.16	0

NR FDD Band n2 Conducted Power_ DSI = 1 (RCV) _ SUB2 Antenna

NR FDD Band n2 _ 20 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						372000	376000	380000	
						1 860 MHz	1 880 MHz	1 900 MHz	
20 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	15.34	15.42	15.43	0
				1	53	15.49	15.48	15.31	0
				1	104	15.33	15.44	15.49	0
				50	0	15.45	15.41	15.34	0
				50	28	15.53	15.42	15.45	0
				50	56	15.40	15.39	15.35	0
			QPSK	100	0	15.50	15.46	15.41	0
				1	1	15.42	15.47	15.44	0
				1	53	15.46	15.48	15.25	0
				1	104	15.50	15.47	15.39	0
				50	0	15.47	15.40	15.37	0
				50	28	15.53	15.52	15.43	0
				50	56	15.41	15.42	15.26	0
				100	0	15.43	15.37	15.48	0
			16QAM	1	1	15.31	15.42	15.44	0
			64QAM	1	1	15.43	15.51	15.59	0
			256QAM	1	1	14.75	14.75	14.84	0
		CP	QPSK	1	1	15.55	15.72	15.74	0

11.4.2 NR FDD Band n5 Maximum Conducted Power

NR FDD Band n5 Conducted Power_ P_{max} , DSI = 0 (free), DSI = 1 (RCV) _ MAIN1 Antenna

NR FDD Band n5_ 20 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]	MPR [dB]
						167300	
						836.5 MHz	
20 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	24.00	0
				1	53	23.81	0
				1	104	23.81	0
				50	0	23.47	0.5
				50	28	23.85	0
				50	56	23.23	0.5
				100	0	23.38	0.5
			QPSK	1	1	23.95	0
				1	53	23.94	0
				1	104	23.90	0
				50	0	22.83	1
				50	28	23.94	0
				50	56	22.77	1
				100	0	22.92	1
			16QAM	1	1	22.78	1
			64QAM	1	1	21.57	2.5
			256QAM	1	1	18.86	4.5
		CP	QPSK	1	1	22.52	1.5

NR FDD Band n5 Conducted Power_ P_{max} SUB1 Antenna

NR FDD Band n5_ 20 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]	MPR [dB]
						167300	
						836.5 MHz	
20 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	24.06	0
				1	53	23.94	0
				1	104	23.90	0
				50	0	23.53	0.5
				50	28	23.98	0
				50	56	23.34	0.5
				100	0	23.54	0.5
			QPSK	1	1	24.01	0
				1	53	23.94	0
				1	104	23.99	0
				50	0	22.98	1
				50	28	24.01	0
				50	56	22.84	1
				100	0	23.03	1
			16QAM	1	1	22.90	1
			64QAM	1	1	21.63	2.5
			256QAM	1	1	18.90	4.5
		CP	QPSK	1	1	22.66	1.5

NR FDD Band n5 Conducted Power_DSI = 0 (free),DSI = 1 (RCV)_ SUB1 Antenna

NR FDD Band n5_ 20 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]	MPR [dB]
						167300	
						836.5 MHz	
20 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	19.90	0
				1	53	19.66	0
				1	104	19.70	0
				50	0	19.73	0
				50	28	19.76	0
				50	56	19.69	0
				100	0	19.80	0
			QPSK	1	1	19.77	0
				1	53	19.74	0
				1	104	19.68	0
				50	0	19.75	0
				50	28	19.82	0
				50	56	19.63	0
				100	0	19.76	0
			16QAM	1	1	19.72	0
			64QAM	1	1	19.84	0
			256QAM	1	1	18.85	0.5
		CP	QPSK	1	1	19.97	0

11.4.3 NR FDD Band n25 Maximum Conducted Power

NR FDD Band n25 Conducted Power_ P_{max} , DSI = 1 (RCV) _ MAIN1 Antenna

NR FDD Band n25 _ 20 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						372000	376500	381000	
						1 860 MHz	1 882.5 MHz	1 905 MHz	
20 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	22.85	22.83	22.79	0
				1	53	22.82	22.76	22.73	0
				1	104	22.84	22.77	22.87	0
				50	0	22.27	22.25	22.21	0.5
				50	28	22.85	22.86	22.77	0
				50	56	22.29	22.27	22.30	0.5
				100	0	22.37	22.33	22.36	0.5
			QPSK	1	1	22.91	22.92	22.82	0
				1	53	22.91	22.76	22.80	0
				1	104	22.88	22.84	22.99	0
				50	0	21.85	21.74	21.66	1
				50	28	22.93	22.76	22.80	0
				50	56	21.77	21.77	21.78	1
				100	0	21.95	21.87	21.88	1
			16QAM	1	1	21.90	21.83	21.79	1
			64QAM	1	1	20.52	20.51	20.36	2.5
			256QAM	1	1	17.85	17.69	17.69	4.5
		CP	QPSK	1	1	21.59	21.62	21.37	1.5

NR FDD Band n25 Conducted Power_ DSI = 0 (free) _ MAIN1 Antenna

NR FDD Band n25 _ 20 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						372000	376500	381000	
						1 860 MHz	1 882.5 MHz	1 905 MHz	
20 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	19.39	19.34	19.28	0
				1	53	19.30	19.15	19.26	0
				1	104	19.36	19.36	19.57	0
				50	0	19.33	19.23	19.18	0
				50	28	19.44	19.29	19.27	0
				50	56	19.34	19.27	19.36	0
				100	0	19.45	19.34	19.37	0
			QPSK	1	1	19.46	19.37	19.24	0
				1	53	19.37	19.19	19.24	0
				1	104	19.32	19.38	19.41	0
				50	0	19.33	19.28	19.24	0
				50	28	19.45	19.21	19.24	0
				50	56	19.30	19.20	19.32	0
				100	0	19.32	19.35	19.36	0
			16QAM	1	1	19.42	19.32	19.27	0
			64QAM	1	1	19.53	19.41	19.46	0
			256QAM	1	1	17.73	17.60	17.66	0.5
		CP	QPSK	1	1	19.64	19.56	19.46	0

NR FDD Band n25 Conducted Power_ P_{max} SUB2 Antenna

NR FDD Band n25 _ 20 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						372000	376500	381000	
						1 860 MHz	1 882.5 MHz	1 905 MHz	
20 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	24.50	24.60	24.65	0
				1	53	24.66	24.78	24.29	0
				1	104	24.59	24.65	24.63	0
				50	0	23.99	24.12	24.07	0.5
				50	28	24.70	24.87	24.64	0
				50	56	23.98	24.09	23.98	0.5
			QPSK	100	0	23.99	24.08	24.21	0.5
				1	1	24.55	24.73	24.66	0
				1	53	24.61	24.73	24.66	0
				1	104	24.62	24.62	24.67	0
				50	0	23.52	23.62	23.56	1
				50	28	24.64	24.79	24.74	0
				50	56	23.55	23.59	23.57	1
				100	0	23.64	23.62	23.69	1
			16QAM	1	1	23.19	23.47	23.50	1
			64QAM	1	1	22.06	22.10	22.22	2.5
			256QAM	1	1	19.09	19.05	18.85	4.5
		CP	QPSK	1	1	23.07	22.98	23.11	1.5

NR FDD Band n25 Conducted Power_ DSI = 0 (free) _ SUB2 Antenna

NR FDD Band n25 _ 20 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						372000	376500	381000	
						1 860 MHz	1 882.5 MHz	1 905 MHz	
20 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	20.01	20.21	20.00	0
				1	53	20.13	20.09	19.95	0
				1	104	20.16	20.03	19.89	0
				50	0	19.97	20.23	20.19	0
				50	28	20.08	20.06	20.05	0
				50	56	19.87	19.94	20.08	0
			QPSK	100	0	20.05	20.10	20.25	0
				1	1	20.03	20.05	20.03	0
				1	53	20.12	20.15	19.96	0
				1	104	20.18	20.17	20.12	0
				50	0	19.98	20.05	20.01	0
				50	28	20.15	20.05	20.09	0
				50	56	19.89	20.11	19.88	0
				100	0	20.09	19.99	19.91	0
			16QAM	1	1	19.59	19.93	19.97	0
			64QAM	1	1	20.23	20.00	19.97	0
			256QAM	1	1	19.07	18.89	18.91	0.5
		CP	QPSK	1	1	20.22	20.16	20.16	0

NR FDD Band n25 Conducted Power_ DSI = 1 (RCV)_ SUB2 Antenna

NR FDD Band n25 _ 20 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]			MPR [dB]
						372000	376500	381000	
						1 860 MHz	1 882.5 MHz	1 905 MHz	
20 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	16.88	16.93	16.89	0
				1	53	16.92	16.92	16.80	0
				1	104	16.91	16.92	16.95	0
				50	0	17.05	17.07	16.87	0
				50	28	17.11	17.03	17.14	0
				50	56	16.93	16.93	17.07	0
			QPSK	100	0	17.01	17.08	16.89	0
				1	1	17.03	17.05	16.90	0
				1	53	16.97	17.05	16.85	0
				1	104	17.07	16.91	16.95	0
				50	0	17.02	17.04	16.63	0
				50	28	17.14	17.07	16.90	0
				50	56	17.05	16.92	16.97	0
				100	0	17.05	17.13	16.86	0
			16QAM	1	1	16.88	16.83	16.83	0
			64QAM	1	1	17.00	17.10	16.98	0
			256QAM	1	1	16.38	16.43	16.39	0
		CP	QPSK	1	1	17.21	17.24	17.19	0

11.4.4 NR TDD Band n41 Maximum Conducted Power

NR TDD Band n41 (PC3) Conducted Power_ P_{max} _ MAIN2 Antenna

NR TDD Band n41_100 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)				MPR [dB]
								518598		
								2592.99 MHz		
100 MHz	30	DFT-s	pi/2 BPSK	1	1			24.15		0
				1	137			24.12		0
				1	271			24.28		0
				135	0			23.60		0.5
				135	69			24.12		0
				135	138			23.67		0.5
				270	0			23.61		0.5
			QPSK	1	1			24.05		0
				1	137			23.99		0
				1	271			24.17		0
				135	0			23.09		1
				135	69			24.11		0
				135	138			22.96		1
				270	0			23.16		1
			16QAM	1	1			22.86		1
			64QAM	1	1			21.76		2.5
			256QAM	1	1			19.11		4.5
		CP	QPSK	1	1			22.90		1.5

NR TDD Band n41 (PC3) Conducted Power_ DSI = 0 (free)_ MAIN2 Antenna

NR TDD Band n41_100 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)				MPR [dB]
								518598		
								2592.99 MHz		
100 MHz	30	DFT-s	pi/2 BPSK	1	1			16.46		0
				1	137			16.42		0
				1	271			16.54		0
				135	0			16.40		0
				135	69			16.45		0
				135	138			16.16		0
				270	0			16.49		0
			QPSK	1	1			16.41		0
				1	137			16.38		0
				1	271			16.50		0
				135	0			16.37		0
				135	69			16.44		0
				135	138			16.49		0
				270	0			16.47		0
			16QAM	1	1			16.25		0
			64QAM	1	1			16.25		0
			256QAM	1	1			15.94		0
		CP	QPSK	1	1			16.74		0

NR TDD Band n41 (PC3) Conducted Power_ DSI = 1 (RCV) _ MAIN2 Antenna

NR TDD Band n41 _100 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)				MPR [dB]
								518598		
								2592.99 MHz		
100 MHz	30	DFT-s	pi/2 BPSK	1	1			17.24		0
				1	137			17.21		0
				1	271			17.25		0
				135	0			17.30		0
				135	69			17.33		0
				135	138			16.83		0
				270	0			17.29		0
			QPSK	1	1			17.29		0
				1	137			17.19		0
				1	271			17.32		0
				135	0			17.24		0
				135	69			17.14		0
				135	138			17.21		0
				270	0			17.32		0
			16QAM	1	1			17.02		0
			64QAM	1	1			17.19		0
			256QAM	1	1			16.98		0
		CP	QPSK	1	1			17.43		0

NR TDD Band n41 (PC3) Conducted Power_ Pmax_ SUB2 Antenna

NR TDD Band n41 _100 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)				MPR [dB]
								518598		
								2592.99 MHz		
100 MHz	30	DFT-s	pi/2 BPSK	1	1			24.20		0
				1	137			23.95		0
				1	271			23.84		0
				135	0			23.60		0.5
				135	69			24.09		0
				135	138			23.41		0.5
				270	0			23.58		0.5
			QPSK	1	1			24.23		0
				1	137			23.96		0
				1	271			23.80		0
				135	0			23.13		1
				135	69			24.14		0
				135	138			22.88		1
				270	0			23.09		1
			16QAM	1	1			23.07		1
			64QAM	1	1			21.82		2.5
			256QAM	1	1			19.31		4.5
		CP	QPSK	1	1			23.05		1.5

NR TDD Band n41 (PC3) Conducted Power_DSI = 0 (free),DSI = 1 (RCV) _ SUB2 Antenna

NR TDD Band n41 _100 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)				MPR [dB]
								518598		
								2592.99 MHz		
100 MHz	30	DFT-s	pi/2 BPSK	1	1			16.54		0
				1	137			16.37		0
				1	271			16.15		0
				135	0			16.45		0
				135	69			16.33		0
				135	138			16.33		0
				270	0			16.31		0
			QPSK	1	1			16.47		0
				1	137			16.31		0
				1	271			16.11		0
				135	0			16.47		0
				135	69			16.32		0
				135	138			16.24		0
				270	0			16.34		0
			16QAM	1	1			16.36		0
			64QAM	1	1			16.41		0
			256QAM	1	1			16.08		0
		CP	QPSK	1	1			16.72		0

11.4.5 NR FDD Band n66 Maximum Conducted Power

NR FDD Band n66 Conducted Power_ P_{max} , DSI = 1 (RCV)_ MAIN1 Antenna

NR FDD Band n66 _ 40 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]	MPR [dB]
						349000	
						1745 MHz	
40 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	23.36	0
				1	108	23.65	0
				1	214	23.54	0
				108	0	22.79	0.5
				108	54	23.41	0
				108	108	22.84	0.5
				216	0	22.76	0.5
			QPSK	1	1	23.43	0
				1	108	23.44	0
				1	214	23.56	0
				108	0	22.24	1
				108	54	23.37	0
				108	108	22.22	1
				216	0	22.55	1
			16QAM	1	1	22.22	1
			64QAM	1	1	20.96	2.5
			256QAM	1	1	18.25	4.5
		CP	QPSK	1	1	22.18	1.5

NR FDD Band n66 Conducted Power_ DSI = 0 (free)_ MAIN1 Antenna

NR FDD Band n66 _ 40 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]	MPR [dB]
						349000	
						1745 MHz	
40 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	19.40	0
				1	108	19.41	0
				1	214	19.36	0
				108	0	19.46	0
				108	54	19.47	0
				108	108	19.51	0
				216	0	19.60	0
			QPSK	1	1	19.38	0
				1	108	19.54	0
				1	214	19.40	0
				108	0	19.55	0
				108	54	19.46	0
				108	108	19.35	0
				216	0	19.42	0
			16QAM	1	1	19.35	0
			64QAM	1	1	19.44	0
			256QAM	1	1	18.47	0.5
		CP	QPSK	1	1	19.72	0

NR FDD Band n66 Conducted Power_ P_{max} SUB2 Antenna

NR FDD Band n66 _ 40 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]	MPR [dB]
						349000	
						1745 MHz	
40 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	22.86	0
				1	108	22.65	0
				1	214	22.65	0
				108	0	22.27	0.5
				108	54	22.75	0
				108	108	22.12	0.5
			QPSK	216	0	22.46	0.5
				1	1	22.72	0
				1	108	22.76	0
				1	214	22.62	0
				108	0	21.82	1
				108	54	22.73	0
				108	108	21.71	1
				216	0	21.98	1
			16QAM	1	1	21.67	1
			64QAM	1	1	20.21	2.5
			256QAM	1	1	17.83	4.5
		CP	QPSK	1	1	21.51	1.5

NR FDD Band n66 Conducted Power_ DSI = 0 (free) _ SUB2 Antenna

NR FDD Band n66 _ 40 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]	MPR [dB]
						349000	
						1745 MHz	
40 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	19.83	0
				1	108	19.53	0
				1	214	19.75	0
				108	0	19.57	0
				108	54	19.72	0
				108	108	19.58	0
			QPSK	216	0	19.65	0
				1	1	19.80	0
				1	108	19.69	0
				1	214	19.50	0
				108	0	19.61	0
				108	54	19.57	0
				108	108	19.51	0
				216	0	19.58	0
			16QAM	1	1	19.70	0
			64QAM	1	1	19.89	0
			256QAM	1	1	17.96	1.5
		CP	QPSK	1	1	20.02	0

NR FDD Band n66 Conducted Power_ DSI = 1 (RCV)_ SUB2 Antenna

NR FDD Band n66 _ 40 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power [dBm]	MPR [dB]
						349000	
						1745 MHz	
40 MHz	15	DFT-s OFDM	pi/2 BPSK	1	1	18.76	0
				1	108	18.61	0
				1	214	18.82	0
				108	0	18.65	0
				108	54	18.73	0
				108	108	18.69	0
			QPSK	216	0	18.69	0
				1	1	18.85	0
				1	108	18.59	0
				1	214	18.70	0
				108	0	18.67	0
				108	54	18.77	0
				108	108	18.65	0
				216	0	18.74	0
			16QAM	1	1	18.76	0
			64QAM	1	1	18.91	0
			256QAM	1	1	17.84	0.5
		CP	QPSK	1	1	19.10	0

11.4.6 NR TDD Band n77 Maximum Conducted Power

NR TDD Band n77 (PC3) Conducted Power_ P_{max} _ SUB2 Antenna

NR TDD Band n77_ 100 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
						650000				662000	
						3 750 MHz				3 930 MHz	
100 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	23.37				23.73	0
				1	137	23.32				23.48	0
				1	271	23.47				23.62	0
				135	0	22.80				23.15	0.5
				135	69	23.32				23.61	0
				135	138	22.91				23.05	0.5
			QPSK	270	0	22.85				23.09	0.5
				1	1	23.41				23.75	0
				1	137	23.20				23.52	0
				1	271	23.42				23.62	0
				135	0	22.30				22.65	1
				135	69	23.32				23.66	0
				135	138	22.39				22.60	1
				270	0	22.37				22.62	1
			16QAM	1	1	22.20				22.49	1
			64QAM	1	1	20.97				21.24	2.5
			256QAM	1	1	18.49				18.80	4.5
		CP	QPSK	1	1	22.17				22.45	1.5

NR TDD Band n77 (PC3) Conducted Power_ DSI = 0 (free)_ SUB2 Antenna

NR TDD Band n77_ 100 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
						650000				662000	
						3 750 MHz				3 930 MHz	
100 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	16.63				17.26	0
				1	137	16.88				17.44	0
				1	271	16.93				17.46	0
				135	0	16.59				17.18	0
				135	69	16.60				17.26	0
				135	138	16.83				17.29	0
			QPSK	270	0	16.79				17.23	0
				1	1	16.64				17.13	0
				1	137	16.40				17.11	0
				1	271	17.06				17.60	0
				135	0	16.90				17.11	0
				135	69	17.00				17.61	0
				135	138	16.61				17.54	0
				270	0	16.78				17.11	0
			16QAM	1	1	16.73				17.51	0
			64QAM	1	1	16.72				17.20	0
			256QAM	1	1	16.43				16.69	0
		CP	QPSK	1	1	16.82				17.33	0

NR TDD Band n77 (PC3) Conducted Power_ DSI = 1 (RCV) _ SUB2 Antenna

NR TDD Band n77_ 100 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
						650000				662000	
						3 750 MHz				3 930 MHz	
100 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	15.19				15.52	0
				1	137	15.03				15.39	0
				1	271	15.30				15.43	0
				135	0	15.12				15.45	0
				135	69	15.09				15.52	0
				135	138	15.18				15.51	0
				270	0	15.10				15.53	0
			QPSK	1	1	15.15				15.47	0
				1	137	15.05				15.39	0
				1	271	15.20				15.43	0
				135	0	15.13				15.44	0
				135	69	15.09				15.47	0
				135	138	15.16				15.48	0
				270	0	15.08				15.52	0
			16QAM	1	1	14.93				15.28	0
			64QAM	1	1	15.24				15.41	0
			256QAM	1	1	14.75				15.12	0
		CP	QPSK	1	1	15.33				15.74	0

11.4.7 NR TDD Band n77 DoD Maximum Conducted Power

NR TDD Band n77 DoD (PC3) Conducted Power_ Pmax_ SUB2 Antenna

NR TDD Band n77 DoD_100 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3 500.01 MHz		
100 MHz	30	DFT-s	pi/2 BPSK	1	1		23.70		0
				1	137		23.54		0
				1	271		23.94		0
				135	0		23.16		0.5
				135	69		23.70		0
				135	138		23.25		0.5
				270	0		23.25		0.5
			QPSK	1	1		23.65		0
				1	137		23.60		0
				1	271		23.97		0
				135	0		22.70		1
				135	69		23.74		0
				135	138		22.74		1
				270	0		22.76		1
			16QAM	1	1		22.38		1
			64QAM	1	1		21.20		2.5
			256QAM	1	1		18.71		4.5
		CP	QPSK	1	1		22.40		1.5

NR TDD Band n77 DoD (PC3) Conducted Power_ DSI = 0 (free) _ SUB2 Antenna

NR TDD Band n77 DoD_100 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)		MPR [dB]
						633334	3 500.01 MHz	
100 MHz	30	DFT-s	pi/2 BPSK	1	1	17.56		0
				1	137	17.44		0
				1	271	17.55		0
				135	0	17.21		0
				135	69	17.42		0
				135	138	17.41		0
				270	0	17.18		0
			QPSK	1	1	17.52		0
				1	137	17.21		0
				1	271	17.32		0
				135	0	17.27		0
				135	69	17.62		0
				135	138	17.06		0
				270	0	17.31		0
			16QAM	1	1	17.66		0
			64QAM	1	1	17.26		0
			256QAM	1	1	17.15		0
		CP	QPSK	1	1	17.56		0

NR TDD Band n77 DoD (PC3) Conducted Power_ DSI = 1 (RCV) _ SUB2 Antenna

NR TDD Band n77 DoD_100 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)		MPR [dB]
						633334	3 500.01 MHz	
100 MHz	30	DFT-s	pi/2 BPSK	1	1	14.98		0
				1	137	14.99		0
				1	271	15.31		0
				135	0	15.01		0
				135	69	15.06		0
				135	138	15.15		0
				270	0	15.15		0
			QPSK	1	1	14.88		0
				1	137	14.89		0
				1	271	15.31		0
				135	0	15.01		0
				135	69	15.04		0
				135	138	15.17		0
				270	0	15.10		0
			16QAM	1	1	14.75		0
			64QAM	1	1	15.05		0
			256QAM	1	1	14.52		0
		CP	QPSK	1	1	15.24		0

11.4.8 NR TDD Band n77 Maximum Conducted Power

NR TDD Band n77 (PC2) Conducted Power_ P_{max} _ SUB2 Antenna

NR TDD Band n77_ 100 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
						650000				662000	
						3 750 MHz				3 930 MHz	
100 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	24.83				25.27	0
				1	137	24.70				24.97	0
				1	271	24.84				24.95	0
				135	0	24.22				24.65	0.5
				135	69	24.75				25.12	0
				135	138	24.29				24.55	0.5
			QPSK	270	0	24.33				24.58	0.5
				1	1	24.75				25.26	0
				1	137	24.74				24.97	0
				1	271	24.91				24.99	0
				135	0	23.80				24.15	1
				135	69	24.82				25.14	0
				135	138	23.80				24.06	1
				270	0	23.89				24.16	1
			16QAM	1	1	23.56				24.04	1
			64QAM	1	1	22.31				22.75	2.5
			256QAM	1	1	19.85				20.32	4.5
		CP	QPSK	1	1	23.60				24.14	1.5

NR TDD Band n77 (PC2) Conducted Power_ DSI = 0 (free)_ SUB2 Antenna

NR TDD Band n77_ 100 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
						650000				662000	
						3 750 MHz				3 930 MHz	
100 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	16.63				17.26	0
				1	137	16.88				17.44	0
				1	271	16.93				17.46	0
				135	0	16.59				17.18	0
				135	69	16.60				17.26	0
				135	138	16.83				17.29	0
			QPSK	270	0	16.79				17.23	0
				1	1	16.64				17.13	0
				1	137	16.40				17.11	0
				1	271	17.06				17.60	0
				135	0	16.90				17.11	0
				135	69	17.00				17.61	0
				135	138	16.61				17.54	0
				270	0	16.78				17.11	0
			16QAM	1	1	16.73				17.51	0
			64QAM	1	1	16.72				17.20	0
			256QAM	1	1	16.43				16.69	0
		CP	QPSK	1	1	16.82				17.33	0

NR TDD Band n77 (PC2) Conducted Power_ DSI = 0 (free), DSI = 1 (RCV) _ SUB2 Antenna

NR TDD Band n77_ 100 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)					MPR [dB]
						650000				662000	
						3 750 MHz				3 930 MHz	
100 MHz	30	DFT-s OFDM	pi/2 BPSK	1	1	15.19				15.52	0
				1	137	15.03				15.39	0
				1	271	15.30				15.43	0
				135	0	15.12				15.45	0
				135	69	15.09				15.52	0
				135	138	15.18				15.51	0
				270	0	15.10				15.53	0
			QPSK	1	1	15.15				15.47	0
				1	137	15.05				15.39	0
				1	271	15.20				15.43	0
				135	0	15.13				15.44	0
				135	69	15.09				15.47	0
				135	138	15.16				15.48	0
				270	0	15.08				15.52	0
			16QAM	1	1	14.93				15.28	0
			64QAM	1	1	15.24				15.41	0
			256QAM	1	1	14.75				15.12	0
		CP	QPSK	1	1	15.33				15.74	0

11.4.9 NR TDD Band n77 DoD Maximum Conducted Power

NR TDD Band n77 DoD (PC2) Conducted Power_ Pmax_ SUB2 Antenna

NR TDD Band n77 DoD_100 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)			MPR [dB]
							633334		
							3 500.01 MHz		
100 MHz	30	DFT-s	pi/2 BPSK	1	1		25.62		0
				1	137		25.52		0
				1	271		25.88		0
				135	0		25.12		0.5
				135	69		25.57		0
				135	138		25.25		0.5
				270	0		25.12		0.5
			QPSK	1	1		25.53		0
				1	137		25.50		0
				1	271		25.87		0
				135	0		24.62		1
				135	69		25.58		0
				135	138		24.78		1
				270	0		24.60		1
			16QAM	1	1		24.33		1
			64QAM	1	1		23.11		2.5
			256QAM	1	1		20.62		4.5
		CP	QPSK	1	1		24.28		1.5

NR TDD Band n77 DoD (PC2) Conducted Power_ DSI = 0 (free) _ SUB2 Antenna

NR TDD Band n77 DoD_100 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)		MPR [dB]
						633334	3 500.01 MHz	
100 MHz	30	DFT-s	pi/2 BPSK	1	1	17.56		0
				1	137	17.44		0
				1	271	17.55		0
				135	0	17.21		0
				135	69	17.42		0
				135	138	17.41		0
				270	0	17.18		0
			QPSK	1	1	17.52		0
				1	137	17.21		0
				1	271	17.32		0
				135	0	17.27		0
				135	69	17.62		0
				135	138	17.06		0
				270	0	17.31		0
			16QAM	1	1	17.66		0
			64QAM	1	1	17.26		0
			256QAM	1	1	17.15		0
		CP	QPSK	1	1	17.56		0

NR TDD Band n77 DoD (PC2) Conducted Power_ DSI = 1 (RCV) _ SUB2 Antenna

NR TDD Band n77 DoD_100 MHz Bandwidth Conducted Power

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max. Average Power (dBm)		MPR [dB]
						633334	3 500.01 MHz	
100 MHz	30	DFT-s	pi/2 BPSK	1	1	14.98		0
				1	137	14.99		0
				1	271	15.31		0
				135	0	15.01		0
				135	69	15.06		0
				135	138	15.15		0
				270	0	15.15		0
			QPSK	1	1	14.88		0
				1	137	14.89		0
				1	271	15.31		0
				135	0	15.01		0
				135	69	15.04		0
				135	138	15.17		0
				270	0	15.10		0
			16QAM	1	1	14.75		0
			64QAM	1	1	15.05		0
			256QAM	1	1	14.52		0
		CP	QPSK	1	1	15.24		0

11.4.10 NR Band SRS Conducted Power

[NR TDD Band n41 (Power Class 3) Sub2 SRS Conducted Power]

NR TDD Band n41_ 100 MHz Bandwidth Conducted Power_ MAIN2 Antenna, SRS #2

	Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]	MPR [dB]
				518598	
				2 592.99 MHz	
<i>P_{max}</i>	100 MHz	30	CW	20.05	0
DSI = 0 (free), DSI = 1 (RCV)	100 MHz	30	CW	12.10	0

NR TDD Band n41_ 100 MHz Bandwidth Conducted Power_ SUB1 Antenna, SRS #3

	Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]	MPR [dB]
				518598	
				2 592.99 MHz	
<i>P_{max}</i>	100 MHz	30	CW	23.49	0
DSI = 0 (free), DSI = 1 (RCV)	100 MHz	30	CW	15.51	0

NR TDD Band n41_ 100 MHz Bandwidth Conducted Power_ MAIN4 Antenna, SRS #4

	Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]	MPR [dB]
				518598	
				2 592.99 MHz	
<i>P_{max}</i>	100 MHz	30	CW	19.73	0
DSI = 0 (free), DSI = 1 (RCV)	100 MHz	30	CW	11.65	0

[NR TDD Band n41 (Power Class 3) Main2 SRS Conducted Power]

NR TDD Band n41_ 100 MHz Bandwidth Conducted Power_ SUB2 Antenna, SRS #2

	Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]	MPR [dB]
				518598	
				2 592.99 MHz	
<i>P_{max}</i>	100 MHz	30	CW	23.20	0
DSI = 0 (free)	100 MHz	30	CW	15.20	0
DSI = 1 (RCV)	100 MHz	30	CW	15.75	0

NR TDD Band n41_ 100 MHz Bandwidth Conducted Power_ SUB1 Antenna, SRS #3

	Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]	MPR [dB]
				518598	
				2 592.99 MHz	
<i>P_{max}</i>	100 MHz	30	CW	22.75	0
DSI = 0 (free)	100 MHz	30	CW	16.10	0
DSI = 1 (RCV)	100 MHz	30	CW	17.21	0

NR TDD Band n41_ 100 MHz Bandwidth Conducted Power_ MAIN4 Antenna, SRS #4

	Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]	MPR [dB]
				518598	
				2 592.99 MHz	
<i>P_{max}</i>	100 MHz	30	CW	22.79	0
DSI = 0 (free)	100 MHz	30	CW	14.80	0
DSI = 1 (RCV)	100 MHz	30	CW	16.19	0

[NR TDD Band n77 (Power Class 3) SRS Conducted Power]

NR TDD Band n77_ 100 MHz Bandwidth Conducted Power_ MAIN3 Antenna, SRS #2

	Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]				MPR [dB]
				650000			662000	
				3 750 MHz			3 930 MHz	
<i>P_{max}</i>	100 MHz	30	CW	19.52			19.45	0
DSI = 0 (free)	100 MHz	30	CW	12.21			12.76	0
DSI = 1 (RCV)	100 MHz	30	CW	10.52			10.45	0

NR TDD Band n77_ 100 MHz Bandwidth Conducted Power_ SUB5 Antenna, SRS #3

	Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]				MPR [dB]
				650000			662000	
				3 750 MHz			3 930 MHz	
<i>P_{max}</i>	100 MHz	30	CW	22.48			22.88	0
DSI = 0 (free)	100 MHz	30	CW	15.16			15.77	0
DSI = 1 (RCV)	100 MHz	30	CW	13.46			13.85	0

NR TDD Band n77_ 100 MHz Bandwidth Conducted Power_ MAIN4 Antenna, SRS #4

	Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]				MPR [dB]
				650000			662000	
				3 750 MHz			3 930 MHz	
<i>P_{max}</i>	100 MHz	30	CW	19.72			19.68	0
DSI = 0 (free)	100 MHz	30	CW	12.28			12.36	0
DSI = 1 (RCV)	100 MHz	30	CW	10.68			10.71	0

[NR TDD Band n77 DoD (Power Class 3) SRS Conducted Power]

NR TDD Band n77 DoD_ 100 MHz Bandwidth Conducted Power_ MAIN3 Antenna, SRS #2

	Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]			MPR [dB]
					633334		
					3500.01 MHz		
<i>P_{max}</i>	100 MHz	30	CW		19.81		0
DSI = 0 (free)	100 MHz	30	CW		12.06		0
DSI = 1 (RCV)	100 MHz	30	CW		10.76		0

NR TDD Band n77 DoD_ 100 MHz Bandwidth Conducted Power_ SUB5 Antenna, SRS #3

	Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]			MPR [dB]
					633334		
					3500.01 MHz		
<i>P_{max}</i>	100 MHz	30	CW		21.80		0
DSI = 0 (free)	100 MHz	30	CW		14.33		0
DSI = 1 (RCV)	100 MHz	30	CW		12.71		0

NR TDD Band n77 DoD_ 100 MHz Bandwidth Conducted Power_ MAIN4 Antenna, SRS #4

	Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]			MPR [dB]
					633334		
					3500.01 MHz		
<i>P_{max}</i>	100 MHz	30	CW		19.21		0
DSI = 0 (free)	100 MHz	30	CW		12.20		0
DSI = 1 (RCV)	100 MHz	30	CW		10.18		0

[NR TDD Band n77 (Power Class 2) SRS Conducted Power]

NR TDD Band n77_ 100 MHz Bandwidth Conducted Power_ MAIN3 Antenna, SRS #2

	Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]				MPR [dB]
				650000			662000	
				3 750 MHz			3 930 MHz	
<i>P_{max}</i>	100 MHz	30	CW	20.97			20.91	0
DSI = 0 (free)	100 MHz	30	CW	12.21			12.76	0
DSI = 1 (RCV)	100 MHz	30	CW	10.52			10.45	0

NR TDD Band n77_ 100 MHz Bandwidth Conducted Power_ SUB5 Antenna, SRS #3

	Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]				MPR [dB]
				650000			662000	
				3 750 MHz			3 930 MHz	
<i>P_{max}</i>	100 MHz	30	CW	23.98			24.36	0
DSI = 0 (free)	100 MHz	30	CW	15.16			15.77	0
DSI = 1 (RCV)	100 MHz	30	CW	13.46			13.85	0

NR TDD Band n77_ 100 MHz Bandwidth Conducted Power_ MAIN4 Antenna, SRS #4

	Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]				MPR [dB]
				650000			662000	
				3 750 MHz			3 930 MHz	
<i>P_{max}</i>	100 MHz	30	CW	20.76			21.17	0
DSI = 0 (free)	100 MHz	30	CW	12.28			12.36	0
DSI = 1 (RCV)	100 MHz	30	CW	10.68			10.71	0

[NR TDD Band n77 DoD (Power Class 2) SRS Conducted Power]

NR TDD Band n77 DoD_ 100 MHz Bandwidth Conducted Power_ MAIN3 Antenna, SRS #2

	Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]		MPR [dB]
					633334	
					3500.01 MHz	
<i>P_{max}</i>	100 MHz	30	CW		21.31	0
DSI = 0 (free)	100 MHz	30	CW		12.06	0
DSI = 1 (RCV)	100 MHz	30	CW		10.76	0

NR TDD Band n77 DoD_ 100 MHz Bandwidth Conducted Power_ SUB5 Antenna, SRS #3

	Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]		MPR [dB]
					633334	
					3500.01 MHz	
<i>P_{max}</i>	100 MHz	30	CW		23.20	0
DSI = 0 (free)	100 MHz	30	CW		14.33	0
DSI = 1 (RCV)	100 MHz	30	CW		12.71	0

NR TDD Band n77 DoD_ 100 MHz Bandwidth Conducted Power_ MAIN4 Antenna, SRS #4

	Bandwidth	SCS(kHz)	Modulation	Max. Average Power [dBm]		MPR [dB]
					633334	
					3500.01 MHz	
<i>P_{max}</i>	100 MHz	30	CW		20.58	0
DSI = 0 (free)	100 MHz	30	CW		12.20	0
DSI = 1 (RCV)	100 MHz	30	CW		10.18	0

11.5 WIFI Conducted Power measurement method

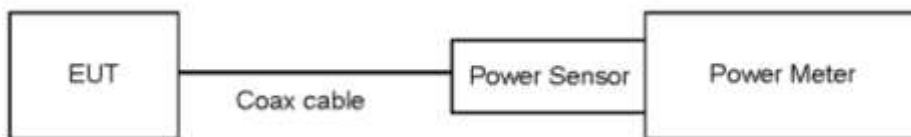
Un-Licensed Bands (DTS Band)

Test Description	Test Procedure Used
Conducted Output Power	- KDB 558074 v05 – Section 8.3.2.3 - ANSI 63.10-2013 – Section 11.9.2.3

Test Procedure

1. Measure the duty cycle.
2. Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.
3. Add $10 \log (1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times.

Test setup



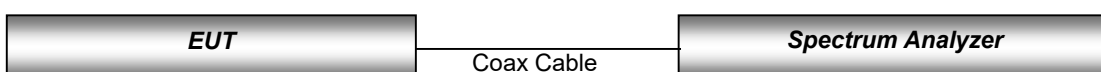
Un-Licensed Bands (NII Band)

Test Description	Test Procedure Used
Conducted Output Power	- KDB 789033 D02 v02r01 – Section E.3.a

Test Procedure

1. Measure the duty cycle.
2. Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.
3. Add $10 \log (1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times.

Test setup



11.5.1 IEEE 802.11 (2.4 GHz) Maximum and Reduced Conducted Power

Mode	Frequency [MHz]	Channel	Pmax, Plimit=0 (Body)		
			IEEE 802.11 (2.4 GHz) Average RF Conducted Power [dBm]		
			WIFI 1	WIFI 2	MIMO
802.11b	2 412	1	17.55	16.38	20.01
	2 437	6	17.18	17.43	20.32
	2 462	11	17.61	17.00	20.33

Mode	Frequency [MHz]	Channel	Plimit=1 (Head)		
			IEEE 802.11 (2.4 GHz) Average RF Conducted Power [dBm]		
			WIFI 1	WIFI 2	MIMO
802.11b	2 412	1	14.51	13.69	17.13
	2 437	6	13.92	13.86	16.90
	2 462	11	14.07	13.84	16.97

11.5.2 IEEE 802.11 (5 GHz) Maximum and Reduced Conducted Power

Frequency [MHz]	Channel	Pmax, Plimit=0 (Body)		
		IEEE 802.11 ac (80 MHz BW) Conducted Power [dBm]		
		Ant.1	Ant.2	MIMO
5 180	36	15.87	15.22	18.56
5 200	40	15.77	15.11	18.46
5 240	48	15.94	15.01	18.51
5 260	52	16.20	15.26	18.77
5 280	56	16.30	15.24	18.81
5 320	64	15.40	15.20	18.31
5 500	100	15.37	15.03	18.21
5 600	120	15.30	15.04	18.18
5 720	144	15.04	15.09	18.07
5 745	149	15.37	15.06	18.23
5 785	157	15.36	15.05	18.22
5 825	165	15.32	15.08	18.21
5 845	169	15.33	15.08	18.22
5 865	173	15.44	15.02	18.25
5 885	177	15.71	15.01	18.39

Frequency [MHz]	Channel	Plimit=1 (Head)		
		IEEE 802.11 ac (80 MHz BW) Conducted Power [dBm]		
		Ant.1	Ant.2	MIMO
5 210	42	12.07	11.43	14.78
5 290	58	12.34	11.73	15.06
5 530	106	11.72	12.09	14.92
5 610	122	11.84	12.06	14.97
5 690	138	11.61	12.34	15.00
5 775	155	11.94	12.41	15.19
5 855	171	12.09	12.37	15.25

11.5.3 IEEE 802.11 (6-7 GHz) Maximum and Reduced Conducted Power

Frequency [MHz]	Channel	Plimit=0(Body), 1(Head)		
		IEEE 802.11ax (160 MHz BW) Conducted Power [dBm]		
		Ant.1	Ant.2	MIMO
6025	15	9.64	10.30	12.99
6185	47	10.31	10.13	13.23
6345	79	9.22	9.74	12.50
6505	111	9.27	9.60	12.45
6665	143	9.51	10.00	12.77
6825	175	9.47	9.89	12.70
6985	207	8.79	9.67	12.26

Note:

For testing the WIFI 6 GHz of this DUT, the selection of test channels was based on FCC guidance, with five channels selected across the entire WIFI 6 GHz Bands.

Justification for test configurations for WLAN per KDB Publication 248227 D01v02r02:

- Power measurements were performed for the transmission mode configuration with the highest maximum output power specified for production units.
- For transmission mode with the same maximum output power specification, powers were measured for the largest channel Bandwidth, lowest order modulation and lowest data rate.
- For transmission modes with identical maximum specified output power, channel Bandwidth, modulation and data rates, power measurements were required for all identical configurations.
- For each transmission mode configuration, powers were measured for the highest and lowest channels; and at the mid-Band channel(s) when there were at least 3 channels supported. For configurations with multiple mid-Band channels, due to an even number of channels, both channels were measured.

Test Configuration



11.6 Bluetooth Maximum Conducted Power

11.6.1 Maximum Conducted Power

The Burst Averaged-conducted power

Mode	Channel	Max. Average Conducted Power [dBm]	
		Ant.1	Ant.2
DH5	0	17.75	16.03
	39	17.98	16.16
	78	16.69	15.40
2-DH5	0	13.72	12.32
	39	13.98	12.33
	78	12.98	11.67
3-DH5	0	13.71	12.32
	39	13.98	12.33
	78	12.97	11.69

The Burst Averaged-conducted power - Dual

Mode	Channel	Max. Average Conducted Power [dBm]		
		Ant.1	Ant.2	Dual
DH5	0	12.06	11.23	14.68
	39	11.78	11.66	14.73
	78	12.33	11.13	14.78
2-DH5	0	9.77	8.69	12.27
	39	9.98	9.16	12.60
	78	8.86	7.41	11.21
3-DH5	0	9.77	8.68	12.27
	39	9.98	9.16	12.60
	78	8.85	7.42	11.20

The Burst Averaged-conducted power – Dual Bluetooth LE

Mode	Channel	Max. Average Conducted Power [dBm]	
		Dual BLE	
1M 255 Packet	37	14.31	
	17	14.18	
	39	13.58	

11.6.2 Reduced Conducted Power – Receiver Active

The Burst Averaged-conducted power

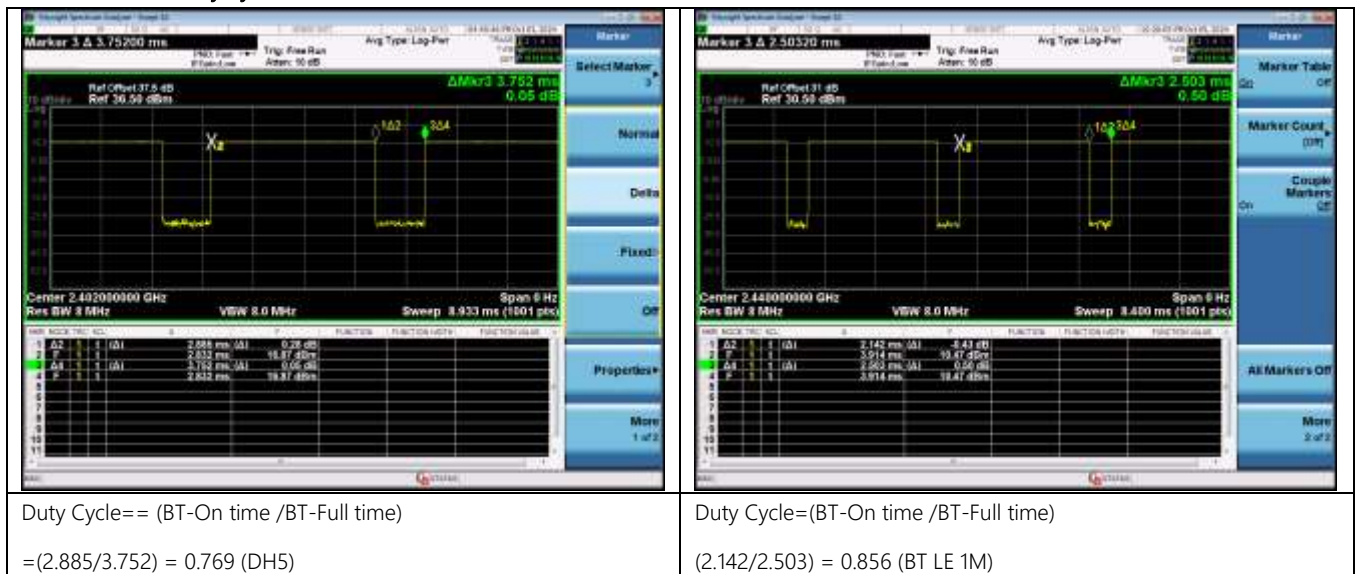
Mode	Channel	Max. Average Conducted Power [dBm]	
		Ant.1	Ant.2
DH5	0	10.92	11.25
	39	11.03	10.93
	78	10.73	9.54
2-DH5	0	10.34	10.05
	39	10.45	9.96
	78	9.59	9.45
3-DH5	0	10.30	10.04
	39	10.46	9.72
	78	9.59	9.41

Per October 2016 TCB Workshop Notes:

When call box and Bluetooth protocol are used for Bluetooth SAR measurement, time-domain plot is required to identify duty factor for supporting the test setup and result.

Bluetooth duty cycle was measured using Bluetooth tester equipment (CBT / R&S) with Bluetooth.

Bluetooth Duty cycle Measurement results



BT DH5 Maximum Duty Factor:

The maximum duty cycle defined by chipset manufacturer was 79 % In the worst case Duty Cycle, the test error tolerance [1%] of the test equipment was considered and applied to the measurement results. The duty cycle of DH5 measured by DUT was 76.9%, please refer to the technical description document.

BT LE (1M) Maximum Duty Factor:

The maximum duty cycle defined by chipset manufacturer was 87 % for BT LE 1MHz. The duty cycle of BT LE 1M measured by DUT was 85.6%, please refer to the technical description document.

12. System Verification

12.1 Tissue Verification

The head simulating material is calibrated by HCT using the DAKS 3.5 to determine the conductivity and permittivity.

Table for Head Tissue Verification									
Date of Tests	Tissue Temp. (°C)	Tissue Type	Freq. (MHz)	Measured Conductivity σ (S/m)	Measured Dielectric Constant, ϵ	Target Conductivity σ (S/m)	Target Dielectric Constant, ϵ	% dev σ	% dev ϵ
2024/10/03	22.3	13H	12	0.730	54.366	0.750	55.000	- 2.67	- 1.15
			13	0.735	54.507	0.750	55.000	- 2.00	- 0.90
			14	0.740	54.495	0.750	55.000	- 1.33	- 0.92
2024/09/05	21.6	750H	705	0.895	42.797	0.889	42.174	+ 0.67	+ 1.48
			710	0.897	42.782	0.890	42.148	+ 0.79	+ 1.50
			750	0.913	42.648	0.893	41.940	+ 2.24	+ 1.69
2024/09/12	22.9	750H	705	0.883	41.761	0.889	42.174	- 0.67	- 0.98
			710	0.885	41.747	0.890	42.148	- 0.56	- 0.95
			750	0.901	41.618	0.893	41.940	+ 0.90	- 0.77
2024/09/05	21.6	750H	750	0.870	42.139	0.893	41.940	- 2.58	+ 0.47
			785	0.909	41.466	0.896	41.758	+ 1.45	- 0.70
2024/09/12	22.9	750H	750	0.869	42.928	0.893	41.940	- 2.69	+ 2.36
			785	0.908	42.264	0.896	41.758	+ 1.34	+ 1.21
2024/09/10	22.6	835H	820	0.913	43.197	0.899	41.577	+ 1.56	+ 3.90
			835	0.918	43.142	0.900	41.500	+ 2.00	+ 3.96
			850	0.924	43.093	0.916	41.500	+ 0.87	+ 3.84
2024/09/14	22.8	835H	820	0.913	42.901	0.899	41.577	+ 1.56	+ 3.18
			835	0.918	42.846	0.900	41.500	+ 2.00	+ 3.24
			850	0.924	42.797	0.916	41.500	+ 0.87	+ 3.13
2024/09/10	22.6	835H	820	0.919	42.592	0.899	41.577	+ 2.22	+ 2.44
			835	0.925	42.538	0.900	41.500	+ 2.78	+ 2.50
			850	0.930	42.489	0.916	41.500	+ 1.53	+ 2.38
2024/09/11	22.6	835H	820	0.918	42.819	0.899	41.577	+ 2.11	+ 2.99
			835	0.923	42.765	0.900	41.500	+ 2.56	+ 3.05
			850	0.929	42.716	0.916	41.500	+ 1.42	+ 2.93
2024/09/06	22.1	835H	820	0.917	42.371	0.899	41.577	+ 2.00	+ 1.91
			835	0.923	42.316	0.900	41.500	+ 2.56	+ 1.97
			850	0.928	42.267	0.916	41.500	+ 1.31	+ 1.85
2024/09/08	21.8	835H	820	0.913	42.160	0.899	41.577	+ 1.56	+ 1.40
			835	0.918	42.104	0.900	41.500	+ 2.00	+ 1.46
			850	0.924	42.056	0.916	41.500	+ 0.87	+ 1.34

Table for Head Tissue Verification									
Date of Tests	Tissue Temp. (°C)	Tissue Type	Freq. (MHz)	Measured Conductivity σ (S/m)	Measured Dielectric Constant, ϵ	Target Conductivity σ (S/m)	Target Dielectric Constant, ϵ	% dev σ	% dev ϵ
2024/09/11	21.7	1800H	1 710	1.332	39.463	1.348	40.144	- 1.19	- 1.70
			1 750	1.375	39.310	1.371	40.080	+ 0.29	- 1.92
			1 800	1.429	39.069	1.400	40.000	+ 2.07	- 2.33
2024/09/07	19.5	1800H	1 710	1.32	40.5	1.348	40.144	- 2.08	+ 0.89
			1 750	1.37	40.4	1.371	40.080	- 0.07	+ 0.80
			1 800	1.42	40.1	1.400	40.000	+ 1.43	+ 0.25
2024/09/09	19.0	1800H	1 710	1.31	40.1	1.348	40.144	- 2.82	- 0.11
			1 750	1.36	40.0	1.371	40.080	- 0.80	- 0.20
			1 800	1.41	39.7	1.400	40.000	+ 0.71	- 0.75
2024/09/23	22.4	1900H	1 850	1.343	39.351	1.400	40.000	- 4.07	- 1.62
			1 900	1.391	39.159	1.400	40.000	- 0.64	- 2.10
			1 910	1.401	39.103	1.400	40.000	+ 0.07	- 2.24
2024/09/09	21.4	1900H	1 850	1.404	40.539	1.400	40.000	+ 0.29	+ 1.35
			1 900	1.432	40.404	1.400	40.000	+ 2.29	+ 1.01
			1 910	1.437	40.383	1.400	40.000	+ 2.64	+ 0.96
2024/09/06	19.5	1900H	1 850	1.37	40.1	1.400	40.000	- 2.14	+ 0.25
			1 900	1.40	40.0	1.400	40.000	+ 0.00	+ 0.00
			1 910	1.41	40.0	1.400	40.000	+ 0.71	+ 0.00
2024/09/08	19.5	1900H	1 850	1.37	40.2	1.400	40.000	- 2.14	+ 0.50
			1 900	1.40	40.1	1.400	40.000	+ 0.00	+ 0.25
			1 910	1.41	40.1	1.400	40.000	+ 0.71	+ 0.25
2024/10/03	19.0	2450H	2 400	1.80	39.1	1.756	39.290	+ 2.51	- 0.48
			2 450	1.84	39.1	1.800	39.200	+ 2.22	- 0.26
			2 500	1.88	39.3	1.855	39.140	+ 1.35	+ 0.41
2024/10/04	19.2	2450H	2 400	1.80	39.1	1.756	39.290	+ 2.51	- 0.48
			2 450	1.84	39.1	1.800	39.200	+ 2.22	- 0.26
			2 500	1.88	39.3	1.855	39.140	+ 1.35	+ 0.41
2024/09/05	20.5	2600H	2 500	1.854	39.272	1.855	39.140	- 0.05	+ 0.34
			2 600	1.980	39.159	1.964	39.010	+ 0.81	+ 0.38
			2 690	2.083	38.343	2.062	38.894	+ 1.02	- 1.42
2024/10/18	22.1	2600H	2 500	1.839	39.578	1.855	39.140	- 0.86	+ 1.12
			2 600	1.964	39.466	1.964	39.010	+ 0.00	+ 1.17
			2 690	2.067	38.649	2.062	38.894	+ 0.24	- 0.63
2024/09/12	22.0	2600H	2 500	1.860	39.626	1.855	39.140	+ 0.27	+ 1.24
			2 600	1.985	39.502	1.964	39.010	+ 1.07	+ 1.26
			2 690	2.089	38.689	2.062	38.894	+ 1.31	- 0.53
2024/09/26	22.3	5180H-5320H	5 180	4.654	35.894	4.635	36.010	+ 0.41	- 0.32
			5 250	4.743	35.661	4.706	35.930	+ 0.79	- 0.75
			5 280	4.788	35.594	4.737	35.894	+ 1.08	- 0.84
2024/09/29	21.9	5180H-5320H	5 320	4.846	35.560	4.778	35.846	+ 1.42	- 0.80
			5 180	4.658	35.902	4.635	36.010	+ 0.50	- 0.30
			5 250	4.746	35.657	4.706	35.930	+ 0.85	- 0.76
2024/09/26	22.3	5500H-5600H	5 280	4.790	35.611	4.737	35.894	+ 1.12	- 0.79
			5 320	4.846	35.557	4.778	35.846	+ 1.42	- 0.81
			5 500	5.036	35.921	4.963	35.640	+ 1.47	+ 0.79
2024/09/30	21.4	5500H-5600H	5 600	5.135	35.722	5.065	35.530	+ 1.38	+ 0.54
			5 750	5.355	35.585	5.219	35.360	+ 2.61	+ 0.64
			5 500	5.036	35.937	4.963	35.640	+ 1.47	+ 0.83
2024/09/30	21.4	5500H-5600H	5 600	5.139	35.731	5.065	35.530	+ 1.46	+ 0.57
			5 750	5.357	35.602	5.219	35.360	+ 2.64	+ 0.68

Table for Head Tissue Verification									
Date of Tests	Tissue Temp. (°C)	Tissue Type	Freq. (MHz)	Measured Conductivity σ (S/m)	Measured Dielectric Constant, ϵ	Target Conductivity σ (S/m)	Target Dielectric Constant, ϵ	% dev σ	% dev ϵ
2024/09/27	21.9	5750H-5825H	5 750	5.348	35.889	5.219	35.360	+ 2.47	+ 1.50
			5 800	5.285	35.893	5.270	35.300	+ 0.28	+ 1.68
			5 825	5.255	35.847	5.296	35.270	- 0.77	+ 1.64
2024/10/02	21.7	5750H-5825H	5 750	5.349	35.895	5.219	35.360	+ 2.49	+ 1.51
			5 800	5.288	35.895	5.270	35.300	+ 0.34	+ 1.69
			5 825	5.260	35.865	5.296	35.270	- 0.68	+ 1.69
2024/09/27	21.9	5800H-5885H	5 800	5.261	35.614	5.270	35.300	- 0.17	+ 0.89
			5 835	5.223	35.538	5.306	35.258	- 1.56	+ 0.79
			5 845	5.216	35.501	5.316	35.246	- 1.88	+ 0.72
			5 855	5.213	35.457	5.326	35.235	- 2.12	+ 0.63
			5 865	5.212	35.408	5.337	35.225	- 2.34	+ 0.52
			5 875	5.217	35.356	5.347	35.215	- 2.43	+ 0.40
			5 885	5.224	35.303	5.357	35.205	- 2.48	+ 0.28
2024/10/03	21.4	5800H-5885H	5 800	5.264	35.622	5.270	35.300	- 0.11	+ 0.91
			5 835	5.225	35.551	5.306	35.258	- 1.53	+ 0.83
			5 845	5.223	35.513	5.316	35.246	- 1.75	+ 0.76
			5 855	5.217	35.456	5.326	35.235	- 2.05	+ 0.63
			5 865	5.216	35.412	5.337	35.225	- 2.27	+ 0.53
			5 875	5.221	35.363	5.347	35.215	- 2.36	+ 0.42
			5 885	5.229	35.305	5.357	35.205	- 2.39	+ 0.28
2024/10/05	19.0	6.5 GHz	5 935	5.42	34.6	5.409	35.148	+ 0.20	- 1.56
			6 000	5.56	34.5	5.475	35.070	+ 1.55	- 1.63
			6 425	6.20	34.0	5.982	34.550	+ 3.64	- 1.59
			6 500	6.22	34.0	6.072	34.460	+ 2.44	- 1.33
			6 525	6.235	33.85	6.101	34.430	+ 2.20	- 1.68
			6 875	6.675	33.25	6.497	34.029	+ 2.74	- 2.29
			7 000	6.82	32.9	6.650	33.880	+ 2.56	- 2.89
2024/10/06	19.3	6.5 GHz	7 115	6.965	33.0	6.786	33.742	+ 2.64	- 2.20
			5 935	5.445	34.7	5.409	35.148	+ 0.67	- 1.27
			6 000	5.58	34.6	5.475	35.070	+ 1.92	- 1.34
			6 425	6.23	34.1	5.982	34.550	+ 4.15	- 1.30
			6 500	6.24	34.0	6.072	34.460	+ 2.77	- 1.33
			6 525	6.265	33.95	6.101	34.430	+ 2.69	- 1.39
			6 875	6.705	33.3	6.497	34.029	+ 3.20	- 2.14
			7 000	6.86	33.0	6.650	33.880	+ 3.16	- 2.60
			7 115	6.995	33.1	6.786	33.742	+ 3.08	- 1.90

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Table for Head Tissue Verification									
Date of Tests	Tissue Temp. (°C)	Tissue Type	Freq. (MHz)	Measured Conductivity σ (S/m)	Measured Dielectric Constant, ϵ	Target Conductivity σ (S/m)	Target Dielectric Constant, ϵ	% dev σ	% dev ϵ
2024/09/27	23.2	835H	820	0.929	42.257	0.899	41.577	+ 3.34	+ 1.64
			835	0.935	42.203	0.900	41.500	+ 3.89	+ 1.69
			850	0.940	42.155	0.916	41.500	+ 2.62	+ 1.58
2024/09/26	22.8	835H	820	0.929	41.557	0.899	41.577	+ 3.34	- 0.05
			835	0.935	41.503	0.900	41.500	+ 3.89	+ 0.01
			850	0.941	41.455	0.916	41.500	+ 2.73	- 0.11
2024/09/20	22.7	1800H	1710	1.329	39.424	1.348	40.000	- 1.41	- 1.44
			1750	1.373	39.270	1.371	40.000	+ 0.15	- 1.82
			1800	1.427	39.026	1.400	40.000	+ 1.93	- 2.43
2024/09/24	22.4	1800H	1710	1.328	39.413	1.348	40.000	- 1.48	- 1.47
			1750	1.372	39.252	1.371	40.000	+ 0.07	- 1.87
			1800	1.426	39.010	1.400	40.000	+ 1.86	- 2.48
2024/09/19	22.8	1900H	1850	1.344	39.357	1.400	40.000	- 4.00	- 1.61
			1900	1.390	39.161	1.400	40.000	- 0.71	- 2.10
			1910	1.401	39.105	1.400	40.000	+ 0.07	- 2.24
2024/09/23	22.4	1900H	1850	1.345	39.362	1.400	40.000	- 3.93	- 1.59
			1900	1.389	39.162	1.400	40.000	- 0.79	- 2.10
			1910	1.401	39.100	1.400	40.000	+ 0.07	- 2.25
2024/09/30	19.7	2 600H	2 500	1.89	39.3	1.855	39.140	+ 1.89	+ 0.41
			2 600	1.99	38.9	1.964	39.010	+ 1.32	- 0.28
			2 690	2.07	38.5	2.062	38.894	+ 0.39	- 1.01
2024/09/26	19.3	2 600H	2 500	1.89	39.3	1.855	39.140	+ 1.89	+ 0.41
			2 600	1.99	38.9	1.964	39.010	+ 1.32	- 0.28
			2 690	2.07	38.5	2.062	38.894	+ 0.39	- 1.01
2024/09/30	19.8	2 600H	2 500	1.90	39.3	1.855	39.140	+ 2.43	+ 0.41
			2 600	1.99	38.9	1.964	39.010	+ 1.32	- 0.28
			2 690	2.07	38.5	2.062	38.894	+ 0.39	- 1.01
2024/10/21	21.6	2 600H	2 500	1.839	39.579	1.855	39.140	- 0.86	+ 1.12
			2 600	1.964	39.467	1.964	39.010	+ 0.00	+ 1.17
			2 690	2.067	38.65	2.062	38.894	+ 0.24	- 0.63
2024/10/23	19.9	3500H	3 400	2.79	37.9	2.810	38.040	- 0.71	- 0.37
			3 500	2.97	38.0	2.913	37.930	+ 1.96	+ 0.18
			3 550	3.03	38.2	2.964	37.870	+ 2.23	+ 0.87
2024/09/24	19.3	3500H	3 400	2.79	38.2	2.810	38.040	- 0.71	+ 0.42
			3 500	2.96	38.2	2.913	37.930	+ 1.61	+ 0.71
			3 550	3.02	38.4	2.964	37.870	+ 1.89	+ 1.40
2024/10/24	19.7	3500H	3 400	2.80	37.2	2.810	38.040	- 0.36	- 2.21
			3 500	2.98	37.3	2.913	37.930	+ 2.30	- 1.66
			3 550	3.03	37.6	2.964	37.870	+ 2.23	- 0.71

Table for Head Tissue Verification									
Date of Tests	Tissue Temp. (°C)	Tissue Type	Freq. (MHz)	Measured Conductivity σ (S/m)	Measured Dielectric Constant, ϵ	Target Conductivity σ (S/m)	Target Dielectric Constant, ϵ	% dev σ	% dev ϵ
2024/10/23	19.9	3700H-3970	3 700	3.05	38.2	3.118	37.700	- 2.18	+ 1.33
			3 750	3.09	37.9	3.169	37.640	- 2.49	+ 0.69
			3 800	3.16	37.6	3.220	37.590	- 1.86	+ 0.03
			3 900	3.33	37.4	3.233	37.470	+ 3.00	- 0.19
			3 970	3.44	37.6	3.394	37.390	+ 1.36	+ 0.56
2024/09/24	19.3	3700H-3970	3 700	3.05	38.4	3.118	37.700	- 2.18	+ 1.86
			3 750	3.10	38.1	3.169	37.640	- 2.18	+ 1.22
			3 800	3.16	37.8	3.220	37.590	- 1.86	+ 0.56
			3 900	3.32	37.6	3.233	37.470	+ 2.69	+ 0.35
			3 970	3.43	37.8	3.394	37.390	+ 1.06	+ 1.10
2024/10/24	19.7	3700H-3970	3 700	3.06	37.6	3.118	37.700	- 1.86	- 0.27
			3 750	3.10	37.3	3.169	37.640	- 2.18	- 0.90
			3 800	3.17	37.0	3.220	37.590	- 1.55	- 1.57
			3 900	3.34	36.7	3.233	37.470	+ 3.31	- 2.05
			3 970	3.45	36.9	3.394	37.390	+ 1.65	- 1.31

12.2 System Verification

Input Power: 50 mW

Freq.	Date	Probe	Dipole	Liquid	Amb. Temp.	Liquid Temp.	1 W Target SAR _{lg} (SPEAG)	50mW Measured SAR _{lg}	1 W Normalized SAR _{lg}	Deviation	Limit
[MHz]		(S/N)	(S/N)		[°C]	[°C]	[W/kg]	[W/kg]	[W/kg]	[%]	[%]
750	2024/09/05	3768	1014	Head	21.7	21.6	8.50	0.425	8.50	+ 0.00	± 10
750	2024/09/12	3768		Head	23.0	22.9	8.50	0.423	8.46	- 0.47	± 10
750	2024/09/05	3768		Head	21.7	21.6	8.50	0.408	8.16	- 4.00	± 10
750	2024/09/12	3768		Head	23.0	22.9	8.50	0.409	8.18	- 3.76	± 10
835	2024/09/10	3768	441	Head	22.7	22.6	9.73	0.506	10.12	+ 4.01	± 10
835	2024/09/14	3768		Head	22.9	22.8	9.73	0.519	10.38	+ 6.68	± 10
835	2024/09/10	3768		Head	22.7	22.6	9.73	0.526	10.52	+ 8.12	± 10
835	2024/09/11	3768		Head	22.6	22.6	9.73	0.507	10.14	+ 4.21	± 10
835	2024/09/06	3768		Head	22.3	22.1	9.73	0.510	10.20	+ 4.83	± 10
835	2024/09/08	3768		Head	21.9	21.8	9.73	0.507	10.14	+ 4.21	± 10
1 800	2024/09/11	3076	2d007	Head	21.8	21.7	39.0	1.94	38.80	- 0.51	± 10
1 800	2024/09/07	7681		Head	19.6	19.5	39.0	1.81	36.20	- 7.18	± 10
1 800	2024/09/09	7681		Head	19.1	19.0	39.0	1.80	36.00	- 7.69	± 10
1 900	2024/09/23	7370	5d032	Head	22.5	22.4	40.2	2.08	41.60	+ 3.48	± 10
1 900	2024/09/09	3076		Head	21.4	21.4	40.2	2.02	40.40	+ 0.50	± 10
1 900	2024/09/06	7681		Head	19.5	19.5	40.2	1.90	38.00	- 5.47	± 10
1 900	2024/09/08	7681		Head	19.5	19.5	40.2	1.90	38.00	- 5.47	± 10
2 450	2024/10/03	7681	743	Head	19.0	19.0	51.8	2.64	52.80	+ 1.93	± 10
2 450	2024/10/04	7681		Head	19.3	19.2	51.8	2.67	53.40	+ 3.09	± 10
2 600	2024/09/05	3076	1015	Head	20.6	20.5	56.4	2.85	57.00	+ 1.06	± 10
2 600	2024/10/18	7370		Head	22.2	22.1	56.4	2.72	54.40	- 3.55	± 10
2 600	2024/09/12	3076		Head	22.1	22.0	56.4	2.86	57.20	+ 1.42	± 10
5 250	2024/09/26	7370	1107	Head	22.4	22.3	80.2	4.11	82.20	+ 2.49	± 10
5 250	2024/09/29	3903		Head	22.0	21.9	80.2	4.26	85.20	+ 6.23	± 10
5 600	2024/09/26	7370		Head	22.4	22.3	82.1	4.33	86.60	+ 5.48	± 10
5 600	2024/09/30	3903		Head	21.4	21.4	82.1	4.42	88.40	+ 7.67	± 10
5 750	2024/09/27	7370		Head	21.9	21.9	79.9	3.77	75.40	- 5.63	± 10
5 750	2024/10/02	3903		Head	21.7	21.7	79.9	4.13	82.60	+ 3.38	± 10
5 800	2024/09/27	7370		Head	21.9	21.9	79.3	3.72	74.40	- 6.18	± 10
5 800	2024/10/03	3903		Head	21.6	21.4	79.3	4.03	80.60	+ 1.64	± 10
6 500	2024/10/05	7681	1012	Head	19.1	19.0	297	14.0	280	- 5.72	± 10
6 500	2024/10/06	7681		Head	19.4	19.3	297	14.1	282	- 5.05	± 10

◆ 5G NR SUB 6

Input Power: 50 mW

Freq.	Date	Probe (S/N)	Dipole (S/N)	Liquid	Amb. Temp.	Liquid Temp.	1 W Target SAR _{lg} (SPEAG)	50mW Measured SAR _{lg}	1 W Normalized SAR _{lg}	Deviation	Limit
[MHz]					[°C]	[°C]	[W/kg]	[W/kg]	[W/kg]	[%]	[%]
835	2024/09/27	3882	441	Head	23.3	23.2	9.73	0.519	10.38	+ 6.68	± 10
835	2024/09/26	3882		Head	22.9	22.8	9.73	0.521	10.42	+ 7.09	± 10
1 800	2024/09/20	7370	2d007	Head	22.7	22.7	39.0	2.00	40.00	+ 2.56	± 10
1 800	2024/09/24	7370		Head	22.6	22.4	39.0	2.00	40.00	+ 2.56	± 10
1 900	2024/09/19	7370	5d032	Head	22.9	22.8	40.2	2.07	41.40	+ 2.99	± 10
1 900	2024/09/23	7370		Head	22.5	22.4	40.2	2.07	41.40	+ 2.99	± 10
2 600	2024/09/30	7681	1015	Head	19.8	19.7	56.4	2.91	58.20	+ 3.19	± 10
2 600	2024/09/26	7681		Head	19.3	19.3	56.4	2.92	58.40	+ 3.55	± 10
2 600	2024/10/21	7370		Head	21.7	21.6	56.4	2.71	54.20	- 3.90	± 10
2 600	2024/09/30	7681		Head	19.8	19.8	56.4	2.90	58.00	+ 2.84	± 10
3 500	2024/10/23	7681	1132	Head	19.9	19.9	65.1	3.36	67.20	+ 3.23	± 10
3 500	2024/09/24	7681		Head	19.4	19.3	65.1	3.36	67.20	+ 3.23	± 10
3 500	2024/10/24	7681		Head	19.7	19.7	65.1	3.37	67.40	+ 3.53	± 10
3 700	2024/10/23	7681	1105	Head	19.9	19.9	67.1	3.15	63.00	- 6.11	± 10
3 700	2024/09/24	7681		Head	19.4	19.3	67.1	3.14	62.80	- 6.41	± 10
3 700	2024/10/24	7681		Head	19.7	19.7	67.1	3.16	63.20	- 5.81	± 10
3 900	2024/10/23	7681	1086	Head	19.9	19.9	67.6	3.35	67.00	- 0.89	± 10
3 900	2024/09/24	7681		Head	19.4	19.3	67.6	3.35	67.00	- 0.89	± 10
3 900	2024/10/24	7681		Head	19.7	19.7	67.6	3.36	67.20	- 0.59	± 10

◆ System Verification Results – Extremity SAR

Input Power: 50 mW

Freq.	Date	Probe (S/N)	Dipole (S/N)	Liquid	Amb. Temp.	Liquid Temp.	1 W Target SAR _{10g} (SPEAG)	50mW Measured SAR _{10g}	1 W Normalized SAR _{10g}	Deviation	Limit
[MHz]					[°C]	[°C]	[W/kg]	[W/kg]	[W/kg]	[%]	[%]
13	2024/10/03	3076	1016	Head	22.4	22.3	0.343	0.018	0.36	+ 4.96	± 10
5 250	2024/09/26	7370	1107	Head	22.4	22.3	23.1	1.17	23.40	+ 1.30	± 10
5 250	2024/09/29	3903		Head	22.0	21.9	23.1	1.21	24.20	+ 4.76	± 10
5 600	2024/09/26	7370		Head	22.4	22.3	23.5	1.22	24.40	+ 3.83	± 10
5 600	2024/09/30	3903		Head	21.4	21.4	23.5	1.24	24.80	+ 5.53	± 10
5 800	2024/09/27	7370		Head	21.9	21.9	22.5	1.05	21.00	- 6.67	± 10
5 800	2024/10/03	3903		Head	21.6	21.4	22.5	1.14	22.80	+ 1.33	± 10
6 500	2024/10/05	7681	1012	Head	19.1	19.0	54.6	2.47	49.40	- 9.52	± 10
6 500	2024/10/06	7681		Head	19.4	19.3	54.6	2.49	49.80	- 8.79	± 10

12.3 SAR Test System Verification Procedure

SAR measurement was prior to assessment; the system is verified to the $\pm 10\%$ of the specifications at each frequency Band by using the system verification kit. (Graphic Plots Attached)

- Cabling the system, using the verification kit equipment.
- For all frequency band except 6GHz, Generate about 50 mW Input level from the signal generator to the Dipole Antenna. And Generate about 10 mW Input level from the signal generator to the Dipole Antenna for 6.5GHz.
- Dipole antenna was placed below the flat phantom.
- The measured one-gram SAR at the surface of the phantom above the dipole feed-point should be within 10 % of the target reference value.

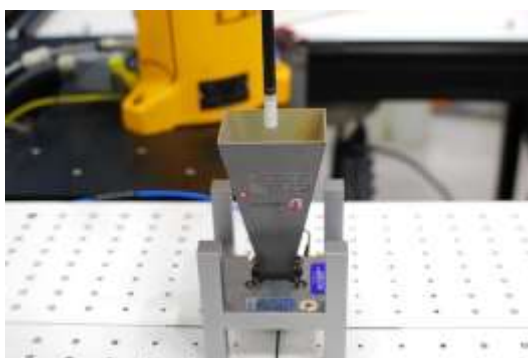
Note;

SAR Verification was performed according to the FCC KDB 865664 D01v01r04.

12.4 Power density System Verification

The system was verified to be within ± 0.66 dB of the power density targets on the calibration certificate according to the test system specification in the user's manual and calibration facility recommendation. The 0.66 dB deviation threshold represents the expanded uncertainty for system performance checks using SPEAG's mmWave verification sources. The same spatial resolution and measurement region used in the source calibration was applied during the system check.

The measured power density distribution of verification source was also confirmed through visual inspection to have no noticeable differences, both spatially (shape) and numerically (level) from the distribution provide by the manufacturer, per November 2017 TCBC Workshop Notes.



◆ 10 GHz Power Density System Verification Results

Input Power: 50 mW

Freq. [GHz]	Date	Probe (S/N)	Dipole (S/N)	Amb. Temp. [°C]	Normal psPD (W/m ² over 4 cm ²)			Deviation [dB]	Total psPD (W/m ² over 4 cm ²)			Deviation [dB]
					Measured	Normalized	Target		Measured	Normalized	Target	
10	2024/09/30	9528	1018	19.7	29.0	58.0	56.5	+ 0.58	29.5	59.0	57.1	+ 0.57
10	2024/10/01	9528	1018	19.5	28.7	57.4	56.5	+ 0.59	29.4	58.8	57.1	+ 0.58
10	2024/10/02	9528	1018	19.1	29.5	59.0	56.5	+ 0.56	29.7	59.4	57.1	+ 0.57

13. SAR Test Data Summary

13.1 SAR Measurement Results

13.1.1 Head SAR Measurement Results

GSM 850 Head SAR													
Frequency		Mode	Ant.	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dB)	(dB)	(dB)				(W/kg)		(W/kg)	
836.6	190	GSM Voice	MAIN1	34.0	32.30	0.08	Left Touch	1:8.3	1	0.096	1.479	0.142	-
836.6	190	GSM Voice	MAIN1	34.0	32.30	0.06	Left Tilt	1:8.3	1	0.062	1.479	0.092	-
836.6	190	GSM Voice	MAIN1	34.0	32.30	-0.13	Right Cheek	1:8.3	1	0.093	1.479	0.138	-
836.6	190	GSM Voice	MAIN1	34.0	32.30	0.17	Right Tilt	1:8.3	1	0.048	1.479	0.071	-
836.6	190	GPRS 2Tx	MAIN1	31.5	30.73	-0.13	Left Touch	1:4.15	1	0.079	1.194	0.094	-
836.6	190	GPRS 2Tx	MAIN1	31.5	30.73	0.13	Left Tilt	1:4.15	1	0.061	1.194	0.073	-
836.6	190	GPRS 2Tx	MAIN1	31.5	30.73	-0.14	Right Cheek	1:4.15	1	0.098	1.194	0.117	-
836.6	190	GPRS 2Tx	MAIN1	31.5	30.73	0.05	Right Tilt	1:4.15	1	0.058	1.194	0.069	-
836.6	190	GSM Voice	SUB1	30.2	29.15	-0.09	Left Touch	1:8.3	1	0.246	1.274	0.313	-
836.6	190	GSM Voice	SUB1	30.2	29.15	-0.18	Left Tilt	1:8.3	1	0.355	1.274	0.452	A1
836.6	190	GSM Voice	SUB1	30.2	29.15	-0.08	Right Cheek	1:8.3	1	0.333	1.274	0.424	-
836.6	190	GSM Voice	SUB1	30.2	29.15	0.16	Right Tilt	1:8.3	1	0.308	1.274	0.392	-
836.6	190	GPRS 4Tx	SUB1	24.2	23.38	0.07	Left Touch	1:2.07	1	0.254	1.208	0.307	-
836.6	190	GPRS 4Tx	SUB1	24.2	23.38	0.18	Left Tilt	1:2.07	1	0.247	1.208	0.298	-
836.6	190	GPRS 4Tx	SUB1	24.2	23.38	0.04	Right Cheek	1:2.07	1	0.283	1.208	0.342	-
836.6	190	GPRS 4Tx	SUB1	24.2	23.38	0.01	Right Tilt	1:2.07	1	0.260	1.208	0.314	-
ANSI/ IEEE C95.1 – 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram						

GSM 1900 Head SAR

Frequency		Mode	Ant.	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dB)	(dB)	(dB)				(W/kg)		(W/kg)	
1850.2	512	GSM Voice	MAIN1	31.0	30.28	-0.18	Left Touch	1:8.3	0	0.074	1.180	0.087	-
1850.2	512	GSM Voice	MAIN1	31.0	30.28	0.14	Left Tilt	1:8.3	0	0.041	1.180	0.048	-
1850.2	512	GSM Voice	MAIN1	31.0	30.28	-0.11	Right Touch	1:8.3	0	0.036	1.180	0.042	-
1850.2	512	GSM Voice	MAIN1	31.0	30.28	0.16	Right Tilt	1:8.3	0	0.037	1.180	0.044	-
1880.0	661	GPRS 3Tx	MAIN1	27.0	26.40	-0.14	Left Touch	1:2.77	0	0.092	1.148	0.106	A2
1880.0	661	GPRS 3Tx	MAIN1	27.0	26.40	0.15	Left Tilt	1:2.77	0	0.044	1.148	0.051	-
1880.0	661	GPRS 3Tx	MAIN1	27.0	26.40	0.05	Right Touch	1:2.77	0	0.053	1.148	0.061	-
1880.0	661	GPRS 3Tx	MAIN1	27.0	26.40	0.18	Right Tilt	1:2.77	0	0.042	1.148	0.048	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram						

UMTS Band 5 Head SAR

Frequency		Mode	Ant.	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dB)	(dB)	(dB)				(W/kg)		(W/kg)	
836.6	4183	RMC	MAIN1	25.5	24.09	-0.08	Left Touch	1:1	1	0.086	1.384	0.119	-
836.6	4183	RMC	MAIN1	25.5	24.09	0.16	Left Tilt	1:1	1	0.060	1.384	0.083	-
836.6	4183	RMC	MAIN1	25.5	24.09	0.10	Right Touch	1:1	1	0.110	1.384	0.152	-
836.6	4183	RMC	MAIN1	25.5	24.09	0.14	Right Tilt	1:1	1	0.063	1.384	0.087	-
836.6	4183	RMC	SUB1	21.0	19.89	-0.12	Left Touch	1:1	1	0.453	1.291	0.585	A3
836.6	4183	RMC	SUB1	21.0	19.89	0.19	Left Tilt	1:1	1	0.384	1.291	0.496	-
836.6	4183	RMC	SUB1	21.0	19.89	0.14	Right Touch	1:1	1	0.391	1.291	0.505	-
836.6	4183	RMC	SUB1	21.0	19.89	0.00	Right Tilt	1:1	1	0.342	1.291	0.442	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram						

UMTS Band 4 Head SAR

Frequency		Mode	Ant.	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dB)	(dB)	(dB)				(W/kg)		(W/kg)	
1 732.4	1412	RMC	MAIN1	24.0	23.20	-0.03	Left Touch	1:1	64	0.152	1.202	0.183	A4
1 732.4	1412	RMC	MAIN1	24.0	23.20	0.14	Left Tilt	1:1	64	0.078	1.202	0.094	-
1 732.4	1412	RMC	MAIN1	24.0	23.20	0.09	Right Touch	1:1	64	0.105	1.202	0.126	-
1 732.4	1412	RMC	MAIN1	24.0	23.20	0.09	Right Tilt	1:1	64	0.075	1.202	0.090	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram						

UMTS Band 2 Head SAR

Frequency		Mode	Ant.	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dB)	(dB)	(dB)				(W/kg)		(W/kg)	
1 880	9400	RMC	MAIN1	24.5	23.43	0.12	Left Touch	1:1	65	0.140	1.279	0.179	A5
1 880	9400	RMC	MAIN1	24.5	23.43	0.07	Left Tilt	1:1	65	0.078	1.279	0.100	-
1 880	9400	RMC	MAIN1	24.5	23.43	0.07	Right Touch	1:1	65	0.088	1.279	0.113	-
1 880	9400	RMC	MAIN1	24.5	23.43	0.08	Right Tilt	1:1	65	0.063	1.279	0.081	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram						

LTE FDD Band 12 Head SAR

Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
707.5	23095	QPSK	MAIN1	10	25.0	23.49	0.01	Left Touch	0	1	49	1:1	0	0.085	1.416	0.120	-
707.5	23095	QPSK	MAIN1	10	24.0	22.44	0.16	Left Touch	1	25	24	1:1	0	0.074	1.432	0.106	-
707.5	23095	QPSK	MAIN1	10	25.0	23.49	0.17	Left Tilt	0	1	49	1:1	0	0.051	1.416	0.072	-
707.5	23095	QPSK	MAIN1	10	24.0	22.44	0.19	Left Tilt	1	25	24	1:1	0	0.039	1.432	0.056	-
707.5	23095	QPSK	MAIN1	10	25.0	23.49	-0.13	Right Touch	0	1	49	1:1	0	0.096	1.416	0.136	-
707.5	23095	QPSK	MAIN1	10	24.0	22.44	0.06	Right Touch	1	25	24	1:1	0	0.077	1.432	0.110	-
707.5	23095	QPSK	MAIN1	10	25.0	23.49	0.19	Right Tilt	0	1	49	1:1	0	0.046	1.416	0.065	-
707.5	23095	QPSK	MAIN1	10	24.0	22.44	0.11	Right Tilt	1	25	24	1:1	0	0.034	1.432	0.049	-
707.5	23095	QPSK	SUB1	10	21.0	19.65	-0.15	Left Touch	0	1	0	1:1	0	0.467	1.365	0.637	-
707.5	23095	QPSK	SUB1	10	21.0	19.56	-0.08	Left Touch	0	25	24	1:1	0	0.423	1.393	0.589	-
707.5	23095	QPSK	SUB1	10	21.0	19.65	-0.12	Left Tilt	0	1	0	1:1	0	0.558	1.365	0.762	-
707.5	23095	QPSK	SUB1	10	21.0	19.56	0.00	Left Tilt	0	25	24	1:1	0	0.587	1.393	0.818	-
707.5	23095	QPSK	SUB1	10	21.0	19.51	-0.11	Left Tilt	0	50	0	1:1	0	0.605	1.409	0.852	A6
707.5	23095	QPSK	SUB1	10	21.0	19.65	0.00	Right Touch	0	1	0	1:1	0	0.502	1.365	0.685	-
707.5	23095	QPSK	SUB1	10	21.0	19.56	-0.10	Right Touch	0	25	24	1:1	0	0.539	1.393	0.751	-
707.5	23095	QPSK	SUB1	10	21.0	19.65	-0.06	Right Tilt	0	1	0	1:1	0	0.408	1.365	0.557	-
707.5	23095	QPSK	SUB1	10	21.0	19.56	0.09	Right Tilt	0	25	24	1:1	0	0.452	1.393	0.630	-
ANSI/ IEEE C95.1 - 2005- Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Head 1.6 W/kg Averaged over 1 gram									

LTE FDD Band 13 Head SAR

Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
782	23230	QPSK	MAIN1	10	25.0	23.83	0.18	Left Touch	0	1	24	1:1	1	0.075	1.309	0.098	-
782	23230	QPSK	MAIN1	10	24.0	22.83	0.17	Left Touch	1	25	0	1:1	1	0.060	1.309	0.079	-
782	23230	QPSK	MAIN1	10	25.0	23.83	0.11	Left Tilt	0	1	24	1:1	1	0.053	1.309	0.069	-
782	23230	QPSK	MAIN1	10	24.0	22.83	0.18	Left Tilt	1	25	0	1:1	1	0.040	1.309	0.052	-
782	23230	QPSK	MAIN1	10	25.0	23.83	0.17	Right Touch	0	1	24	1:1	1	0.076	1.309	0.099	-
782	23230	QPSK	MAIN1	10	24.0	22.83	0.14	Right Touch	1	25	0	1:1	1	0.058	1.309	0.076	-
782	23230	QPSK	MAIN1	10	25.0	23.83	0.13	Right Tilt	0	1	24	1:1	1	0.047	1.309	0.062	-
782	23230	QPSK	MAIN1	10	24.0	22.83	0.19	Right Tilt	1	25	0	1:1	1	0.035	1.309	0.046	-
782	23230	QPSK	SUB1	10	21.0	19.95	-0.19	Left Touch	0	1	24	1:1	0	0.390	1.274	0.497	-
782	23230	QPSK	SUB1	10	21.0	19.91	-0.17	Left Touch	0	25	0	1:1	0	0.371	1.285	0.477	-
782	23230	QPSK	SUB1	10	21.0	19.95	0.10	Left Tilt	0	1	24	1:1	0	0.319	1.274	0.406	-
782	23230	QPSK	SUB1	10	21.0	19.91	0.16	Left Tilt	0	25	0	1:1	0	0.470	1.285	0.604	A7
782	23230	QPSK	SUB1	10	21.0	19.95	0.06	Right Touch	0	1	24	1:1	0	0.426	1.274	0.543	-
782	23230	QPSK	SUB1	10	21.0	19.91	0.08	Right Touch	0	25	0	1:1	0	0.428	1.285	0.550	-
782	23230	QPSK	SUB1	10	21.0	19.95	0.00	Right Tilt	0	1	24	1:1	0	0.358	1.274	0.456	-
782	23230	QPSK	SUB1	10	21.0	19.91	-0.05	Right Tilt	0	25	0	1:1	0	0.348	1.285	0.447	-
ANSI/ IEEE C95.1 - 2005-- Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Head 1.6 W/kg Averaged over 1 gram									

LTE FDD Band 25 (PCS) Head SAR

Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
1 860	26140	QPSK	MAIN1	20	24.0	23.33	0.13	Left Touch	0	1	99	1:1	0	0.123	1.167	0.144	-
1 860	26140	QPSK	MAIN1	20	23.0	22.32	0.19	Left Touch	1	50	0	1:1	0	0.104	1.169	0.122	-
1 860	26140	QPSK	MAIN1	20	24.0	23.33	0.14	Left Tilt	0	1	99	1:1	0	0.058	1.167	0.068	-
1 860	26140	QPSK	MAIN1	20	23.0	22.32	0.18	Left Tilt	1	50	0	1:1	0	0.037	1.169	0.043	-
1 860	26140	QPSK	MAIN1	20	24.0	23.33	-0.16	Right Touch	0	1	99	1:1	0	0.083	1.167	0.097	-
1 860	26140	QPSK	MAIN1	20	23.0	22.32	-0.12	Right Touch	1	50	0	1:1	0	0.063	1.169	0.074	-
1 860	26140	QPSK	MAIN1	20	24.0	23.33	-0.14	Right Tilt	0	1	99	1:1	0	0.044	1.167	0.051	-
1 860	26140	QPSK	MAIN1	20	23.0	22.32	-0.14	Right Tilt	1	50	0	1:1	0	0.036	1.169	0.042	-
Continue to next Page																	

LTE FDD Band 25 (PCS) Head SAR

Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
1 905	26590	QPSK	SUB2	20	17.5	17.17	0.03	Left Touch	0	1	99	1:1	0	0.672	1.079	0.725	-
1 905	26590	QPSK	SUB2	20	17.5	17.10	0.00	Left Touch	0	50	49	1:1	0	0.684	1.096	0.750	-
1 905	26590	QPSK	SUB2	20	17.5	17.17	0.00	Left Tilt	0	1	99	1:1	0	0.782	1.079	0.844	-
1 860	26140	QPSK	SUB2	20	17.5	16.78	0.01	Left Tilt	0	1	49	1:1	0	0.801	1.180	0.945	-
1 882.5	26365	QPSK	SUB2	20	17.5	17.05	-0.02	Left Tilt	0	1	0	1:1	0	0.812	1.109	0.901	-
1 905	26590	QPSK	SUB2	20	17.5	17.10	-0.03	Left Tilt	0	50	49	1:1	0	0.787	1.096	0.863	-
1 882.5	26365	QPSK	SUB2	20	17.5	17.03	-0.02	Left Tilt	0	50	49	1:1	0	0.813	1.114	0.906	-
1 860	26140	QPSK	SUB2	20	17.5	16.88	-0.04	Left Tilt	0	50	25	1:1	0	0.751	1.153	0.866	-
1 882.5	26365	QPSK	SUB2	20	17.5	16.99	-0.05	Left Tilt	0	100	0	1:1	0	0.797	1.125	0.897	-
1 905	26590	QPSK	SUB2	20	17.5	17.17	-0.01	Right Touch	0	1	99	1:1	0	0.935	1.079	1.009	-
1 860	26140	QPSK	SUB2	20	17.5	16.78	0.06	Right Touch	0	1	49	1:1	0	0.823	1.180	0.971	-
1 882.5	26365	QPSK	SUB2	20	17.5	17.05	0.02	Right Touch	0	1	0	1:1	0	0.846	1.109	0.938	-
1 905	26590	QPSK	SUB2	20	17.5	17.10	0.05	Right Touch	0	50	49	1:1	0	0.987	1.096	1.082	A8
1 882.5	26365	QPSK	SUB2	20	17.5	17.03	0.01	Right Touch	0	50	49	1:1	0	0.900	1.114	1.003	-
1 860	26140	QPSK	SUB2	20	17.5	16.88	0.00	Right Touch	0	50	25	1:1	0	0.822	1.153	0.948	-
1 882.5	26365	QPSK	SUB2	20	17.5	16.99	-0.01	Right Touch	0	100	0	1:1	0	0.890	1.125	1.001	-
1 905	26590	QPSK	SUB2	20	17.5	17.17	0.00	Right Tilt	0	1	99	1:1	0	0.873	1.079	0.942	-
1 860	26140	QPSK	SUB2	20	17.5	16.78	0.00	Right Tilt	0	1	49	1:1	0	0.810	1.180	0.956	-
1 882.5	26365	QPSK	SUB2	20	17.5	17.05	0.08	Right Tilt	0	1	0	1:1	0	0.843	1.109	0.935	-
1 905	26590	QPSK	SUB2	20	17.5	17.10	-0.03	Right Tilt	0	50	49	1:1	0	0.832	1.096	0.912	-
1 882.5	26365	QPSK	SUB2	20	17.5	17.03	0.00	Right Tilt	0	50	49	1:1	0	0.853	1.114	0.950	-
1 860	26140	QPSK	SUB2	20	17.5	16.88	-0.06	Right Tilt	0	50	25	1:1	0	0.819	1.153	0.944	-
1 882.5	26365	QPSK	SUB2	20	17.5	16.99	0.01	Right Tilt	0	100	0	1:1	0	0.855	1.125	0.962	-
1 905	26590	QPSK	SUB2	20	17.5	17.10	0.02	Right Touch	0	50	49	1:1	0	0.952	1.096	1.043	•
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Head 1.6 W/kg Averaged over 1 gram									

- Measurement Validity

LTE FDD Band 26 (Cell) Head SAR

Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.			(Mhz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
831.5	26865	QPSK	MAIN1	15	25.0	23.98	0.02	Left Touch	0	1	74	1:1	0	0.113	1.265	0.143	-
831.5	26865	QPSK	MAIN1	15	24.0	22.69	0.15	Left Touch	1	36	0	1:1	0	0.089	1.352	0.120	-
831.5	26865	QPSK	MAIN1	15	25.0	23.98	0.05	Left Tilt	0	1	74	1:1	0	0.047	1.265	0.059	-
831.5	26865	QPSK	MAIN1	15	24.0	22.69	0.12	Left Tilt	1	36	0	1:1	0	0.053	1.352	0.072	-
831.5	26865	QPSK	MAIN1	15	25.0	23.98	-0.09	Right Touch	0	1	74	1:1	0	0.125	1.265	0.158	-
831.5	26865	QPSK	MAIN1	15	24.0	22.69	0.15	Right Touch	1	36	0	1:1	0	0.102	1.352	0.138	-
831.5	26865	QPSK	MAIN1	15	25.0	23.98	0.14	Right Tilt	0	1	74	1:1	0	0.069	1.265	0.087	-
831.5	26865	QPSK	MAIN1	15	24.0	22.69	0.12	Right Tilt	1	36	0	1:1	0	0.055	1.352	0.074	-
831.5	26865	QPSK	SUB1	15	20.0	18.51	-0.14	Left Touch	0	1	0	1:1	1	0.429	1.409	0.604	-
831.5	26865	QPSK	SUB1	15	20.0	18.47	-0.07	Left Touch	0	36	0	1:1	1	0.444	1.422	0.631	A9
831.5	26865	QPSK	SUB1	15	20.0	18.51	-0.09	Left Tilt	0	1	0	1:1	1	0.344	1.409	0.485	-
831.5	26865	QPSK	SUB1	15	20.0	18.47	-0.09	Left Tilt	0	36	0	1:1	1	0.355	1.422	0.505	-
831.5	26865	QPSK	SUB1	15	20.0	18.51	-0.16	Right Touch	0	1	0	1:1	1	0.286	1.409	0.403	-
831.5	26865	QPSK	SUB1	15	20.0	18.47	-0.02	Right Touch	0	36	0	1:1	1	0.297	1.422	0.422	-
831.5	26865	QPSK	SUB1	15	20.0	18.51	0.14	Right Tilt	0	1	0	1:1	1	0.234	1.409	0.330	-
831.5	26865	QPSK	SUB1	15	20.0	18.47	-0.04	Right Tilt	0	36	0	1:1	1	0.246	1.422	0.350	-
ANSI/ IEEE C95.1 - 2005-- Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Head 1.6 W/kg Averaged over 1 gram								

LTE TDD Band 41 (Power Class 3) Head SAR

Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.			(Mhz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
2 593	40620	QPSK	MAIN2	20	24.0	23.17	0.16	Left Touch	0	1	49	1:1.58	-	0.037	1.211	0.045	-
2 593	40620	QPSK	MAIN2	20	23.0	22.17	0.19	Left Touch	1	50	0	1:1.58	-	0.027	1.211	0.033	-
2 593	40620	QPSK	MAIN2	20	24.0	23.17	0.18	Left tilt	0	1	49	1:1.58	-	0.028	1.211	0.034	-
2 593	40620	QPSK	MAIN2	20	23.0	22.17	0.07	Left tilt	1	50	0	1:1.58	-	0.019	1.211	0.023	-
2 593	40620	QPSK	MAIN2	20	24.0	23.17	0.10	Right touch	0	1	49	1:1.58	-	0.028	1.211	0.034	-
2 593	40620	QPSK	MAIN2	20	23.0	22.17	-0.13	Right touch	1	50	0	1:1.58	-	0.020	1.211	0.024	-
2 593	40620	QPSK	MAIN2	20	24.0	23.17	0.15	Right Tilt	0	1	49	1:1.58	-	0.020	1.211	0.024	-
2 593	40620	QPSK	MAIN2	20	23.0	22.17	0.12	Right Tilt	1	50	0	1:1.58	-	0.014	1.211	0.017	-
2 593	40620	QPSK	MAIN2	20	26.0	24.78	0.19	Left Touch	0	1	49	1:2.31	-	0.026	1.324	0.034	••
Continue to next Page																	

LTE TDD Band 41 (Power Class 3) Head SAR

Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
2 506	39750	QPSK	SUB2	20	19.0	18.35	-0.16	Left Touch	0	1	0	1:1.58	-	0.239	1.161	0.277	-
2 506	39750	QPSK	SUB2	20	19.0	18.39	-0.10	Left Touch	0	50	0	1:1.58	-	0.252	1.151	0.290	-
2 506	39750	QPSK	SUB2	20	19.0	18.35	0.02	Left Tilt	0	1	0	1:1.58	-	0.376	1.161	0.437	-
2 506	39750	QPSK	SUB2	20	19.0	18.39	-0.10	Left Tilt	0	50	0	1:1.58	-	0.403	1.151	0.464	-
2 506	39750	QPSK	SUB2	20	19.0	18.35	-0.15	Right Touch	0	1	0	1:1.58	-	0.762	1.161	0.885	-
2 549.5	40185	QPSK	SUB2	20	19.0	18.03	-0.19	Right Touch	0	1	0	1:1.58	-	0.706	1.250	0.883	-
2 593	40620	QPSK	SUB2	20	19.0	18.29	0.00	Right Touch	0	1	0	1:1.58	-	0.570	1.178	0.671	-
2 636.5	41055	QPSK	SUB2	20	19.0	17.96	-0.11	Right Touch	0	1	49	1:1.58	-	0.476	1.271	0.605	-
2 680	41490	QPSK	SUB2	20	19.0	18.00	-0.06	Right Touch	0	1	0	1:1.58	-	0.436	1.259	0.549	-
2 506	39750	QPSK	SUB2	20	19.0	18.39	-0.10	Right Touch	0	50	0	1:1.58	-	0.777	1.151	0.894	-
2 549.5	40185	QPSK	SUB2	20	19.0	18.08	0.03	Right Touch	0	50	0	1:1.58	-	0.671	1.236	0.829	-
2 593	40620	QPSK	SUB2	20	19.0	18.30	-0.05	Right Touch	0	50	0	1:1.58	-	0.541	1.175	0.636	-
2 636.5	41055	QPSK	SUB2	20	19.0	17.98	-0.06	Right Touch	0	50	49	1:1.58	-	0.470	1.265	0.595	-
2 680	41490	QPSK	SUB2	20	19.0	17.97	-0.01	Right Touch	0	50	25	1:1.58	-	0.449	1.268	0.569	-
2 506	39750	QPSK	SUB2	20	19.0	18.27	-0.01	Right Touch	0	100	0	1:1.58	-	0.754	1.183	0.892	-
2 506	39750	QPSK	SUB2	20	19.0	18.35	-0.01	Right Tilt	0	1	0	1:1.58	-	0.746	1.161	0.866	-
2 549.5	40185	QPSK	SUB2	20	19.0	18.03	0.03	Right Tilt	0	1	0	1:1.58	-	0.754	1.250	0.943	-
2 593	40620	QPSK	SUB2	20	19.0	18.29	0.02	Right Tilt	0	1	0	1:1.58	-	0.635	1.178	0.748	-
2 636.5	41055	QPSK	SUB2	20	19.0	17.96	0.01	Right Tilt	0	1	49	1:1.58	-	0.565	1.271	0.718	-
2 680	41490	QPSK	SUB2	20	19.0	18.00	-0.02	Right Tilt	0	1	0	1:1.58	-	0.503	1.259	0.633	-
2 506	39750	QPSK	SUB2	20	19.0	18.39	-0.02	Right Tilt	0	50	0	1:1.58	-	0.852	1.151	0.981	-
2 549.5	40185	QPSK	SUB2	20	19.0	18.08	0.03	Right Tilt	0	50	0	1:1.58	-	0.758	1.236	0.937	-
2 593	40620	QPSK	SUB2	20	19.0	18.30	0.04	Right Tilt	0	50	0	1:1.58	-	0.649	1.175	0.763	-
2 636.5	41055	QPSK	SUB2	20	19.0	17.98	-0.03	Right Tilt	0	50	49	1:1.58	-	0.558	1.265	0.706	-
2 680	41490	QPSK	SUB2	20	19.0	17.97	-0.02	Right Tilt	0	50	25	1:1.58	-	0.511	1.268	0.648	-
2 506	39750	QPSK	SUB2	20	19.0	18.27	-0.05	Right Tilt	0	100	0	1:1.58	-	0.851	1.183	1.007	-
2 506	39750	QPSK	SUB2	20	21.0	20.27	-0.13	Right Tilt	0	100	0	1:2.31	-	0.847	1.153	1.002	••
2 506	39750	QPSK	SUB2	20	19.0	18.39	-0.02	Right Tilt	0	50	0	1:1.58	-	0.856	1.151	0.985	A10•
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population										Head 1.6 W/kg Averaged over 1 gram							

- Measurement Validity
- PC2 Measurement

LTE FDD Band 66 (AWS) Head SAR

Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
1 745	132322	QPSK	MAIN1	20	24.0	23.39	0.19	Left Touch	0	1	99	1:1	1	0.147	1.151	0.169	-
1 770	132572	QPSK	MAIN1	20	23.0	21.89	0.06	Left Touch	1	50	0	1:1	1	0.138	1.291	0.178	-
1 745	132322	QPSK	MAIN1	20	24.0	23.39	0.07	Left Tilt	0	1	99	1:1	1	0.062	1.151	0.071	-
1 770	132572	QPSK	MAIN1	20	23.0	21.89	0.09	Left Tilt	1	50	0	1:1	1	0.056	1.291	0.072	-
1 745	132322	QPSK	MAIN1	20	24.0	23.39	-0.15	Right Touch	0	1	99	1:1	1	0.089	1.151	0.102	-
1 770	132572	QPSK	MAIN1	20	23.0	21.89	-0.11	Right Touch	1	50	0	1:1	1	0.072	1.291	0.093	-
1 745	132322	QPSK	MAIN1	20	24.0	23.39	-0.15	Right Tilt	0	1	99	1:1	1	0.050	1.151	0.058	-
1 770	132572	QPSK	MAIN1	20	23.0	21.89	-0.12	Right Tilt	1	50	0	1:1	1	0.042	1.291	0.054	-
1 720	132072	QPSK	SUB2	20	17.5	16.45	-0.08	Left Touch	0	1	0	1:1	1	0.266	1.274	0.339	-
1 720	132072	QPSK	SUB2	20	17.5	16.42	-0.08	Left Touch	0	50	0	1:1	1	0.266	1.282	0.341	-
1 720	132072	QPSK	SUB2	20	17.5	16.45	-0.09	Left Tilt	0	1	0	1:1	1	0.374	1.274	0.476	-
1 720	132072	QPSK	SUB2	20	17.5	16.42	0.01	Left Tilt	0	50	0	1:1	1	0.366	1.282	0.469	-
1 720	132072	QPSK	SUB2	20	17.5	16.45	-0.13	Right Touch	0	1	0	1:1	1	0.400	1.274	0.510	-
1 720	132072	QPSK	SUB2	20	17.5	16.42	-0.15	Right Touch	0	50	0	1:1	1	0.393	1.282	0.504	-
1 720	132072	QPSK	SUB2	20	17.5	16.45	0.01	Right Tilt	0	1	0	1:1	1	0.450	1.274	0.573	A11
1 720	132072	QPSK	SUB2	20	17.5	16.42	0.02	Right Tilt	0	50	0	1:1	1	0.438	1.282	0.562	-
ANSI/ IEEE C95.1 - 2005- Safety Limit										Head							
Spatial Peak										1.6 W/kg							
Uncontrolled Exposure/ General Population										Averaged over 1 gram							

NR FDD Band n5 Head SAR

Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR (W/kg)	Scaling Factor	Scaled SAR (W/kg)	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)								
836.5	167300	DFT-s OFDM QPSK	MAIN1	20	25.0	23.95	0.00	Left Touch	0	1	1	1:1	5	0.081	1.274	0.103	-
836.5	167300	DFT-s OFDM QPSK	MAIN1	20	25.0	23.94	0.10	Left Touch	0	50	28	1:1	5	0.084	1.276	0.107	-
836.5	167300	DFT-s OFDM QPSK	MAIN1	20	25.0	23.95	0.14	Left Tilt	0	1	1	1:1	5	0.032	1.274	0.041	-
836.5	167300	DFT-s OFDM QPSK	MAIN1	20	25.0	23.94	0.15	Left Tilt	0	50	28	1:1	5	0.034	1.276	0.043	-
836.5	167300	DFT-s OFDM QPSK	MAIN1	20	25.0	23.95	-0.10	Right Touch	0	1	1	1:1	5	0.090	1.274	0.115	-
836.5	167300	DFT-s OFDM QPSK	MAIN1	20	25.0	23.94	0.14	Right Touch	0	50	28	1:1	5	0.082	1.276	0.105	-
836.5	167300	DFT-s OFDM QPSK	MAIN1	20	25.0	23.95	0.14	Right Tilt	0	1	1	1:1	5	0.050	1.274	0.064	-
836.5	167300	DFT-s OFDM QPSK	MAIN1	20	25.0	23.94	0.01	Right Tilt	0	50	28	1:1	5	0.047	1.276	0.060	-
836.5	167300	CP QPSK	MAIN1	20	23.5	22.52	0.12	Right Touch	1.5	1	1	1:1	5	0.064	1.253	0.080	-
836.5	167300	DFT-s OFDM QPSK	SUB1	20	21.0	19.77	-0.12	Left Touch	0	1	1	1:1	1	0.503	1.327	0.667	A12
836.5	167300	DFT-s OFDM QPSK	SUB1	20	21.0	19.82	-0.07	Left Touch	0	50	28	1:1	1	0.479	1.312	0.628	-
836.5	167300	DFT-s OFDM QPSK	SUB1	20	21.0	19.77	-0.11	Left Tilt	0	1	1	1:1	1	0.434	1.327	0.576	-
836.5	167300	DFT-s OFDM QPSK	SUB1	20	21.0	19.82	0.00	Left Tilt	0	50	28	1:1	1	0.414	1.312	0.543	-
836.5	167300	DFT-s OFDM QPSK	SUB1	20	21.0	19.77	-0.18	Right Touch	0	1	1	1:1	1	0.364	1.327	0.483	-
836.5	167300	DFT-s OFDM QPSK	SUB1	20	21.0	19.82	-0.17	Right Touch	0	50	28	1:1	1	0.362	1.312	0.475	-
836.5	167300	DFT-s OFDM QPSK	SUB1	20	21.0	19.77	-0.01	Right Tilt	0	1	1	1:1	1	0.313	1.327	0.415	-
836.5	167300	DFT-s OFDM QPSK	SUB1	20	21.0	19.82	0.08	Right Tilt	0	50	28	1:1	1	0.315	1.312	0.413	-
836.5	167300	CP QPSK	SUB1	20	21.0	19.97	0.03	Left Touch	0	1	1	1:1	1	0.495	1.268	0.628	-
ANSI/ IEEE C95.1 - 2005- Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Head 1.6 W/kg Averaged over 1 gram									

NR FDD Band n25 Head (PCS) SAR

Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
1 905	381000	DFT-s OFDM QPSK	MAIN1	20	24.5	22.99	-0.17	Left Touch	0	1	104	1:1	33	0.105	1.416	0.149	-
1 860	372000	DFT-s OFDM QPSK	MAIN1	20	24.5	22.93	0.10	Left Touch	0	50	28	1:1	33	0.164	1.435	0.235	-
1 905	381000	DFT-s OFDM QPSK	MAIN1	20	24.5	22.99	0.11	Left Tilt	0	1	104	1:1	33	0.052	1.416	0.074	-
1 860	372000	DFT-s OFDM QPSK	MAIN1	20	24.5	22.93	0.13	Left Tilt	0	50	28	1:1	33	0.053	1.435	0.076	-
1 905	381000	DFT-s OFDM QPSK	MAIN1	20	24.5	22.99	0.13	Right Touch	0	1	104	1:1	33	0.067	1.416	0.095	-
1 860	372000	DFT-s OFDM QPSK	MAIN1	20	24.5	22.93	-0.12	Right Touch	0	50	28	1:1	33	0.080	1.435	0.115	-
1 905	381000	DFT-s OFDM QPSK	MAIN1	20	24.5	22.99	0.12	Right Tilt	0	1	104	1:1	33	0.040	1.416	0.057	-
1 860	372000	DFT-s OFDM QPSK	MAIN1	20	24.5	22.93	-0.15	Right Tilt	0	50	28	1:1	33	0.055	1.435	0.079	-
1 882.5	376500	CP QPSK	MAIN1	20	23.0	21.62	-0.11	Left Touch	1.5	1	1	1:1	33	0.111	1.374	0.153	-
1 860	372000	DFT-s OFDM QPSK	SUB2	20	17.5	17.07	-0.11	Left Touch	0	1	104	1:1	0	0.332	1.104	0.367	-
1 860	372000	DFT-s OFDM QPSK	SUB2	20	17.5	17.14	-0.02	Left Touch	0	50	28	1:1	0	0.341	1.086	0.370	-
1 860	372000	DFT-s OFDM QPSK	SUB2	20	17.5	17.07	-0.13	Left Tilt	0	1	104	1:1	0	0.443	1.104	0.489	-
1 860	372000	DFT-s OFDM QPSK	SUB2	20	17.5	17.14	-0.06	Left Tilt	0	50	28	1:1	0	0.441	1.086	0.479	-
1 860	372000	DFT-s OFDM QPSK	SUB2	20	17.5	17.07	-0.17	Right Touch	0	1	104	1:1	0	0.551	1.104	0.608	-
1 860	372000	DFT-s OFDM QPSK	SUB2	20	17.5	17.14	0.02	Right Touch	0	50	28	1:1	0	0.565	1.086	0.614	-
1 860	372000	DFT-s OFDM QPSK	SUB2	20	17.5	17.07	-0.08	Right Tilt	0	1	104	1:1	0	0.579	1.104	0.639	-
1 860	372000	DFT-s OFDM QPSK	SUB2	20	17.5	17.14	0.05	Right Tilt	0	50	28	1:1	0	0.566	1.086	0.615	-
1 882.5	376500	CP QPSK	SUB2	20	17.5	17.24	0.00	Right Tilt	0	1	1	1:1	0	0.600	1.062	0.637	A13
ANSI/ IEEE C95.1 - 2005- Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Head 1.6 W/kg Averaged over 1 gram									

NR TDD Band n41 (Power Class 3) Head SAR

Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
2 592.99	518598	DFT-s OFDM QPSK	Sub2	100	17.0	16.47	0.02	Left Touch	0	1	1	1:1	-	0.449	1.130	0.507	-
2 592.99	518598	DFT-s OFDM QPSK	Sub2	100	17.0	16.47	-0.05	Left Touch	0	135	0	1:1	-	0.382	1.130	0.432	-
2 592.99	518598	DFT-s OFDM QPSK	Sub2	100	17.0	16.47	0.00	Left Tilt	0	1	1	1:1	-	0.529	1.130	0.598	-
2 592.99	518598	DFT-s OFDM QPSK	Sub2	100	17.0	16.47	0.06	Left Tilt	0	135	0	1:1	-	0.443	1.130	0.501	-
2 592.99	518598	DFT-s OFDM QPSK	Sub2	100	17.0	16.47	-0.06	Right Touch	0	1	1	1:1	-	0.752	1.130	0.850	-
2 592.99	518598	DFT-s OFDM QPSK	Sub2	100	17.0	16.47	-0.08	Right Touch	0	135	0	1:1	-	0.639	1.130	0.722	-
2 592.99	518598	DFT-s OFDM QPSK	Sub2	100	17.0	16.34	-0.10	Right Touch	0	270	0	1:1	-	0.629	1.164	0.732	-
2 592.99	518598	DFT-s OFDM QPSK	Sub2	100	17.0	16.47	0.00	Right Tilt	0	1	1	1:1	-	0.967	1.130	1.093	A14
2 592.99	518598	DFT-s OFDM QPSK	Sub2	100	17.0	16.47	0.09	Right Tilt	0	135	0	1:1	-	0.722	1.130	0.816	-
2 592.99	518598	DFT-s OFDM QPSK	Sub2	100	17.0	16.34	-0.01	Right Tilt	0	270	0	1:1	-	0.741	1.164	0.863	-
2 592.99	518598	CP OFDM QPSK	Sub2	100	17.0	16.72	-0.07	Right Tilt	0	1	1	1:1	-	0.838	1.067	0.894	-
2 592.99	518598	DFT-s OFDM QPSK	Sub2	100	17.0	16.47	0.09	Right Tilt	0	1	1	1:1	-	0.967	1.130	1.093	•
2 592.99	518598	DFT-s QPSK	MAIN2	100	18.0	17.32	0.19	Left Touch	0	1	271	1:1	-	0.015	1.169	0.018	-
2 592.99	518598	DFT-s QPSK	MAIN2	100	18.0	17.24	-0.07	Left Touch	0	135	0	1:1	-	0.020	1.191	0.024	-
2 592.99	518598	DFT-s QPSK	MAIN2	100	18.0	17.32	0.18	Left Tilt	0	1	271	1:1	-	0.004	1.169	0.005	-
2 592.99	518598	DFT-s QPSK	MAIN2	100	18.0	17.24	-0.10	Left Tilt	0	135	0	1:1	-	0.005	1.191	0.006	-
2 592.99	518598	DFT-s QPSK	MAIN2	100	18.0	17.32	0.08	Right Touch	0	1	271	1:1	-	0.014	1.169	0.016	-
2 592.99	518598	DFT-s QPSK	MAIN2	100	18.0	17.24	-0.18	Right Touch	0	135	0	1:1	-	0.018	1.191	0.021	-
2 592.99	518598	DFT-s QPSK	MAIN2	100	18.0	17.32	0.18	Right Tilt	0	1	271	1:1	-	0.008	1.169	0.009	-
2 592.99	518598	DFT-s QPSK	MAIN2	100	18.0	17.24	-0.06	Right Tilt	0	135	0	1:1	-	0.009	1.191	0.011	-
2 592.99	518598	CP QPSK	MAIN2	100	18.0	17.43	-0.12	Left Touch	0	1	1	1:1	-	0.023	1.140	0.026	-
2 592.99	518598	CW SRS #3	SUB1	100	17.5	17.21	-0.02	Left Touch	0	-	-	1:1	-	0.924	1.069	0.988	-
2 592.99	518598	CW SRS #3	SUB1	100	17.5	17.21	0.08	Left Tilt	0	-	-	1:1	-	0.747	1.069	0.799	-
2 592.99	518598	CW SRS #3	SUB1	100	17.5	17.21	0.12	Right Touch	0	-	-	1:1	-	0.401	1.069	0.429	-
2 592.99	518598	CW SRS #3	SUB1	100	17.5	17.21	0.07	Right Tilt	0	-	-	1:1	-	0.380	1.069	0.406	-
2 592.99	518598	CW SRS #3	SUB1	100	17.5	17.21	0.09	Left Touch	0	-	-	1:1	-	0.879	1.069	0.940	•
2 592.99	518598	CW SRS #4	MAIN4	100	17.0	16.19	0.12	Left Touch	0	-	-	1:1	-	0	1.205	0.000	-
2 592.99	518598	CW SRS #4	MAIN4	100	17.0	16.19	-0.13	Left Tilt	0	-	-	1:1	-	0	1.205	0.000	-
2 592.99	518598	CW SRS #4	MAIN4	100	17.0	16.19	-0.16	Right Touch	0	-	-	1:1	-	0	1.205	0.000	-
2 592.99	518598	CW SRS #4	MAIN4	100	17.0	16.19	0.00	Right Tilt	0	-	-	1:1	-	0	1.205	0.000	-
ANSI/ IEEE C95.1 - 2005- Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Head 1.6 W/kg Averaged over 1 gram									

- Measurement Validity

NR FDD Band n66 Head SAR																	
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	24.5	23.56	0.03	Left Touch	0	1	214	1:1	65	0.165	1.242	0.205	-
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	24.5	23.37	0.12	Left Touch	0	108	54	1:1	65	0.126	1.297	0.163	-
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	24.5	23.56	-0.13	Left Tilt	0	1	214	1:1	65	0.059	1.242	0.073	-
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	24.5	23.37	0.19	Left Tilt	0	108	54	1:1	65	0.040	1.297	0.052	-
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	24.5	23.56	0.16	Right Touch	0	1	214	1:1	65	0.090	1.242	0.112	-
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	24.5	23.37	0.12	Right Touch	0	108	54	1:1	65	0.070	1.297	0.091	-
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	24.5	23.56	-0.13	Right Tilt	0	1	214	1:1	65	0.062	1.242	0.077	-
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	24.5	23.37	0.19	Right Tilt	0	108	54	1:1	65	0.048	1.297	0.062	-
1 745	349000	CP QPSK	MAIN1	40	23.0	22.18	0.17	Left Touch	1.5	1	1	1:1	65	0.118	1.208	0.143	-
1 745	349000	DFT-s OFDM QPSK	SUB2	40	20.0	18.85	-0.15	Left Touch	0	1	1	1:1	1	0.375	1.303	0.489	-
1 745	349000	DFT-s OFDM QPSK	SUB2	40	20.0	18.77	-0.03	Left Touch	0	108	54	1:1	1	0.363	1.327	0.482	-
1 745	349000	DFT-s OFDM QPSK	SUB2	40	20.0	18.85	-0.07	Left Tilt	0	1	1	1:1	1	0.553	1.303	0.721	-
1 745	349000	DFT-s OFDM QPSK	SUB2	40	20.0	18.77	-0.07	Left Tilt	0	108	54	1:1	1	0.52	1.327	0.690	-
1 745	349000	DFT-s OFDM QPSK	SUB2	40	20.0	18.85	0.14	Right Touch	0	1	1	1:1	1	0.621	1.303	0.809	-
1 745	349000	DFT-s OFDM QPSK	SUB2	40	20.0	18.77	-0.12	Right Touch	0	108	54	1:1	1	0.589	1.327	0.782	-
1 745	349000	DFT-s OFDM QPSK	SUB2	40	20.0	18.74	0.01	Right Touch	0	216	0	1:1	1	0.589	1.337	0.787	-
1 745	349000	DFT-s OFDM QPSK	SUB2	40	20.0	18.85	0.08	Right Tilt	0	1	1	1:1	1	0.696	1.303	0.907	A15
1 745	349000	DFT-s OFDM QPSK	SUB2	40	20.0	18.77	0.01	Right Tilt	0	108	54	1:1	1	0.661	1.327	0.877	-
1 745	349000	DFT-s OFDM QPSK	SUB2	40	20.0	18.74	0.06	Right Tilt	0	216	0	1:1	1	0.662	1.337	0.885	-
1 745	349000	CP QPSK	SUB2	40	20.0	19.10	0.16	Right Tilt	0	1	1	1:1	1	0.667	1.230	0.820	-
ANSI/ IEEE C95.1 - 2005- Safety Limit								Head									
Spatial Peak								1.6 W/kg									
Uncontrolled Exposure/ General Population								Averaged over 1 gram									

NR TDD Band n77 (Power Class 2) Head SAR

Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(W/kg)		(W/kg)	
3 930.00	662000	DFT-s QPSK	F	100	16.0	15.47	0.18	Left Touch	0	1	1	1:1	-	0.223	1.130	0.252	-
3 930.00	662000	DFT-s QPSK	F	100	16.0	15.48	0.11	Left Touch	0	135	138	1:1	-	0.241	1.127	0.272	-
3 930.00	662000	DFT-s QPSK	F	100	16.0	15.47	0.14	Left Tilt	0	1	1	1:1	-	0.286	1.130	0.323	-
3 930.00	662000	DFT-s QPSK	F	100	16.0	15.48	0.17	Left Tilt	0	135	138	1:1	-	0.284	1.127	0.320	-
3 930.00	662000	DFT-s QPSK	F	100	16.0	15.47	-0.11	Right Touch	0	1	1	1:1	-	0.521	1.130	0.589	-
3 750.00	650000	DFT-s QPSK	F	100	16.0	15.20	-0.10	Right Touch	0	1	271	1:1	-	0.651	1.202	0.783	-
3 930.00	662000	DFT-s QPSK	F	100	16.0	15.48	-0.17	Right Touch	0	135	138	1:1	-	0.386	1.127	0.435	-
3 750.00	650000	DFT-s QPSK	F	100	16.0	15.16	-0.01	Right Touch	0	135	138	1:1	-	0.601	1.213	0.729	-
3 930.00	662000	DFT-s QPSK	F	100	16.0	15.52	-0.10	Right Touch	0	270	0	1:1	-	0.371	1.117	0.414	-
3 930.00	662000	DFT-s QPSK	F	100	16.0	15.47	-0.19	Right Tilt	0	1	1	1:1	-	0.583	1.130	0.659	-
3 750.00	650000	DFT-s QPSK	F	100	16.0	15.20	0.07	Right Tilt	0	1	271	1:1	-	0.646	1.202	0.776	-
3 930.00	662000	DFT-s QPSK	F	100	16.0	15.48	0.18	Right Tilt	0	135	138	1:1	-	0.386	1.127	0.435	-
3 750.00	650000	DFT-s QPSK	F	100	16.0	15.16	0.02	Right Tilt	0	135	138	1:1	-	0.863	1.213	1.047	-
3 930.00	662000	DFT-s QPSK	F	100	16.0	15.52	-0.15	Right Tilt	0	270	0	1:1	-	0.445	1.117	0.497	-
3 930.00	662000	CP QPSK	F	100	16.0	15.74	-0.12	Right Tilt	0	1	1	1:1	-	0.608	1.062	0.646	-
3 750.00	650000	CP QPSK	F	100	16.0	15.33	0.03	Right Tilt	0	1	1	1:1	-	0.69	1.167	0.805	-
3 500.01	633334	DFT-s QPSK	F	100	16.0	15.31	-0.01	Right Tilt	0	1	271	1:1	-	0.826	1.172	0.968	-
3 500.01	633334	DFT-s QPSK	F	100	16.0	15.17	0.17	Right Tilt	0	135	138	1:1	-	0.683	1.211	0.827	-
3 500.01	633334	DFT-s QPSK	F	100	16.0	15.10	0.13	Right Tilt	0	270	0	1:1	-	0.737	1.230	0.907	-
3 750.00	650000	DFT-s QPSK	F	100	16.0	15.16	0.01	Right Tilt	0	135	138	1:1	-	0.911	1.213	1.105	A16•
3 750.00	650000	CW SRS #2	MAIN3	100	11.5	10.52	N/A	Left Touch	0	-	-	1:1	-	0	1.253	0.000	-
3 750.00	650000	CW SRS #2	MAIN3	100	11.5	10.52	N/A	Left Tilt	0	-	-	1:1	-	0	1.253	0.000	-
3 750.00	650000	CW SRS #2	MAIN3	100	11.5	10.52	N/A	Right Touch	0	-	-	1:1	-	0	1.253	0.000	-
3 750.00	650000	CW SRS #2	MAIN3	100	11.5	10.52	N/A	Right Tilt	0	-	-	1:1	-	0	1.253	0.000	-
3 500.01	633334	CW SRS #2	MAIN3	100	11.5	10.52	N/A	Right Tilt	0	-	-	1:1	-	0	1.186	0.000	-

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- Measurement Validity

NR TDD Band n77 (Power Class 2) Head SAR

NR TDD Band n77 (Power Class 2) Head SAR																	
Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)	(W/kg)	(W/kg)						
3 930.00	662000	CW SRS #3	SUB5	100	14.0	13.85	0.18	Left Touch	0	-	-	1:1	-	0.200	1.035	0.207	-
3 930.00	662000	CW SRS #3	SUB5	100	14.0	13.85	0.08	Left Tilt	0	-	-	1:1	-	0.015	1.035	0.016	-
3 930.00	662000	CW SRS #3	SUB5	100	14.0	13.85	0.19	Right Touch	0	-	-	1:1	-	0.471	1.035	0.487	-
3 750.00	650000	CW SRS #3	SUB5	100	14.0	13.46	-0.18	Right Touch	0	-	-	1:1	-	0.332	1.132	0.376	-
3 930.00	662000	CW SRS #3	SUB5	100	14.0	13.85	0.13	Right Tilt	0	-	-	1:1	-	0.022	1.035	0.023	-
3 500.01	633334	CW SRS #3	SUB5	100	14.0	12.71	-0.01	Right Touch	0	-	-	1:1	-	0.323	1.346	0.435	-
3 930.00	662000	CW SRS #4	MAIN4	100	11.5	10.71	N/A	Left Touch	0	-	-	1:1	-	0	1.199	0.000	-
3 930.00	662000	CW SRS #4	MAIN4	100	11.5	10.71	N/A	Left Tilt	0	-	-	1:1	-	0	1.199	0.000	-
3 930.00	662000	CW SRS #4	MAIN4	100	11.5	10.71	N/A	Right Touch	0	-	-	1:1	-	0	1.199	0.000	-
3 930.00	662000	CW SRS #4	MAIN4	100	11.5	10.71	N/A	Right Tilt	0	-	-	1:1	-	0	1.199	0.000	-
3 500.01	633334	CW SRS #4	MAIN4	100	11.5	10.18	N/A	Right Touch	0	-	-	1:1	-	0	1.355	0.000	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak								Head 1.6 W/kg									
Uncontrolled Exposure/ General Population								Averaged over 1 gram									

DTS Head SAR – RCV ON

Frequency		Mode	Ant.	Band width (MHz)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	Duty Cycle	Area Scan Peak SAR (W/kg)	Meas. SAR (W/kg)	Scaling Factor	Scaling Factor (Duty)	Scaled SAR (W/kg)	Plot No.
MHz	Ch.															
2 412	1	802.11b	SUB4	20	1	15.0	14.51	-0.13	Left Touch	98.7	0.162	0.134	1.119	1.013	0.152	-
2 412	1	802.11b	SUB4	20	1	15.0	14.51	0.11	Left Tilt	98.7	0.157	0.123	1.119	1.013	0.139	-
2 412	1	802.11b	SUB4	20	1	15.0	14.51	-0.19	Right Touch	98.7	1.02	0.811	1.119	1.013	0.919	-
2 462	11	802.11b	SUB4	20	1	15.0	14.07	0.10	Right Touch	98.7	0.806	0.658	1.239	1.013	0.826	-
2 412	1	802.11b	SUB4	20	1	15.0	14.51	-0.16	Right Tilt	98.7	0.458	0.328	1.119	1.013	0.372	-
2 437	6	802.11b	SUB6	20	1	15.0	13.86	0.13	Left Touch	98.7	0.794	0.604	1.300	1.013	0.796	-
2 437	6	802.11b	SUB6	20	1	15.0	13.86	0.02	Left Tilt	98.7	0.084	0.073	1.300	1.013	0.096	-
2 437	6	802.11b	SUB6	20	1	15.0	13.86	-0.14	Right Touch	98.7	0.481	0.320	1.300	1.013	0.421	-
2 437	6	802.11b	SUB6	20	1	15.0	13.86	-0.12	Right Tilt	98.7	0.059	0.046	1.300	1.013	0.061	-
2 412	1	802.11b	SUB4+6	20	1	15.0	13.69	0.10	Left Touch	98.7	0.929	0.741	1.352	1.013	1.015	-
2 462	11	802.11b	SUB4+6	20	1	15.0	13.84	-0.17	Left Touch	98.7	1.05	0.839	1.306	1.013	1.110	-
2 412	1	802.11b	SUB4+6	20	1	15.0	13.69	0.11	Left Tilt	98.7	0.116	0.088	1.352	1.013	0.121	-
2 412	1	802.11b	SUB4+6	20	1	15.0	13.69	-0.18	Right Touch	98.7	0.743	0.608	1.352	1.013	0.833	-
2 462	11	802.11b	SUB4+6	20	1	15.0	13.84	-0.15	Right Touch	98.7	0.648	0.530	1.306	1.013	0.701	-
2 412	1	802.11b	SUB4+6	20	1	15.0	13.69	-0.11	Right Tilt	98.7	0.392	0.292	1.352	1.013	0.400	-
2 462	11	802.11b	SUB4+6	20	1	15.0	13.84	0.18	Left Touch	98.7	1.08	0.846	1.306	1.013	1.119	A17•
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population											Head 1.6 W/kg Averaged over 1 gram					

- Measurement Validity

NII Head SAR – RCV-ON

Frequency		Mode	Ant.	Band width (MHz)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	Duty Cycle	Area Scan	Meas. SAR	Scaling Factor	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.										Peak SAR (W/kg)	(W/kg)		(Duty)	(W/kg)	
5 290	58	802.11ac	SUB4	80	MCS0	13.0	12.34	0.13	Left Touch	86.2	0.344	0.098	1.164	1.160	0.132	-
5 290	58	802.11ac	SUB4	80	MCS0	13.0	12.34	0.18	Left Tilt	86.2	0.237	0.097	1.164	1.160	0.131	-
5 290	58	802.11ac	SUB4	80	MCS0	13.0	12.34	-0.18	Right Touch	86.2	0.876	0.306	1.164	1.160	0.413	A18
5 290	58	802.11ac	SUB4	80	MCS0	13.0	12.34	0.17	Right Tilt	86.2	0.556	0.212	1.164	1.160	0.286	-
5 610	122	802.11ac	SUB4	80	MCS0	13.0	11.84	-0.13	Left Touch	86.2	0.363	0.094	1.306	1.160	0.142	-
5 610	122	802.11ac	SUB4	80	MCS0	13.0	11.84	0.16	Left Tilt	86.2	0.218	0.091	1.306	1.160	0.138	-
5 610	122	802.11ac	SUB4	80	MCS0	13.0	11.84	-0.10	Right Touch	86.2	0.699	0.232	1.306	1.160	0.351	-
5 610	122	802.11ac	SUB4	80	MCS0	13.0	11.84	0.17	Right Tilt	86.2	0.658	0.202	1.306	1.160	0.306	-
5 775	155	802.11ac	SUB4	80	MCS0	13.0	11.94	-0.14	Left Touch	86.2	0.262	0.043	1.276	1.160	0.064	-
5 775	155	802.11ac	SUB4	80	MCS0	13.0	11.94	0.10	Left Tilt	86.2	0.218	0.043	1.276	1.160	0.064	-
5 775	155	802.11ac	SUB4	80	MCS0	13.0	11.94	-0.12	Right Touch	86.2	0.888	0.239	1.276	1.160	0.354	-
5 775	155	802.11ac	SUB4	80	MCS0	13.0	11.94	0.16	Right Tilt	86.2	0.303	0.081	1.276	1.160	0.120	-
5 855	171	802.11ac	SUB4	80	MCS0	13.0	12.09	0.00	Left Touch	86.2	0.0687	0.016	1.233	1.160	0.023	-
5 855	171	802.11ac	SUB4	80	MCS0	13.0	12.09	0.00	Left Tilt	86.2	0.0618	0.021	1.233	1.160	0.030	-
5 855	171	802.11ac	SUB4	80	MCS0	13.0	12.09	0.12	Right Touch	86.2	0.557	0.223	1.233	1.160	0.319	-
5 855	171	802.11ac	SUB4	80	MCS0	13.0	12.09	0.12	Right Tilt	86.2	0.224	0.068	1.233	1.160	0.097	-
5 290	58	802.11ac	SUB1	80	MCS0	13.0	11.73	-0.11	Left Touch	86.2	0.302	0.057	1.340	1.160	0.089	-
5 290	58	802.11ac	SUB1	80	MCS0	13.0	11.73	0.10	Left Tilt	86.2	0.302	0.049	1.340	1.160	0.076	-
5 290	58	802.11ac	SUB1	80	MCS0	13.0	11.73	0.03	Right Touch	86.2	0.069	0.020	1.340	1.160	0.031	-
5 290	58	802.11ac	SUB1	80	MCS0	13.0	11.73	0.11	Right Tilt	86.2	0.164	0.025	1.340	1.160	0.039	-
5 690	138	802.11ac	SUB1	80	MCS0	13.0	12.34	-0.17	Left Touch	86.2	0.724	0.145	1.164	1.160	0.196	-
5 690	138	802.11ac	SUB1	80	MCS0	13.0	12.34	0.07	Left Tilt	86.2	0.332	0.099	1.164	1.160	0.134	-
5 690	138	802.11ac	SUB1	80	MCS0	13.0	12.34	-0.11	Right Touch	86.2	0.0872	0.029	1.164	1.160	0.039	-
5 690	138	802.11ac	SUB1	80	MCS0	13.0	12.34	0.19	Right Tilt	86.2	0.179	0.023	1.164	1.160	0.031	-
5 775	155	802.11ac	SUB1	80	MCS0	13.0	12.41	0.00	Left Touch	86.2	0.32	0.103	1.146	1.160	0.137	-
5 775	155	802.11ac	SUB1	80	MCS0	13.0	12.41	-0.14	Left Tilt	86.2	0.395	0.091	1.146	1.160	0.121	-
5 775	155	802.11ac	SUB1	80	MCS0	13.0	12.41	-0.17	Right Touch	86.2	0.0897	0.026	1.146	1.160	0.035	-
5 775	155	802.11ac	SUB1	80	MCS0	13.0	12.41	0.13	Right Tilt	86.2	0.068	0.020	1.146	1.160	0.027	-
5 855	171	802.11ac	SUB1	80	MCS0	13.0	12.37	-0.18	Left Touch	86.2	0.543	0.122	1.156	1.160	0.164	-
5 855	171	802.11ac	SUB1	80	MCS0	13.0	12.37	-0.16	Left Tilt	86.2	0.341	0.092	1.156	1.160	0.123	-
5 855	171	802.11ac	SUB1	80	MCS0	13.0	12.37	0.12	Right Touch	86.2	0.160	0.019	1.156	1.160	0.025	-
5 855	171	802.11ac	SUB1	80	MCS0	13.0	12.37	0.17	Right Tilt	86.2	0.203	0.035	1.156	1.160	0.047	-

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NII Head SAR – RCV-ON

Frequency		Mode	Ant.	Band width (MHz)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	Duty Cycle	Area Scan Peak SAR (W/kg)	Meas. SAR (W/kg)	Scaling Factor	Scaling Factor (Duty)	Scaled SAR (W/kg)	Plot No.
MHz	Ch.															
5 290	58	802.11ac	Sub4+1	80	MCS0	13.0	11.73	-0.15	Left Touch	86.2	0.275	0.104	1.340	1.160	0.162	-
5 290	58	802.11ac	Sub4+1	80	MCS0	13.0	11.73	0.10	Left Tilt	86.2	0.238	0.105	1.340	1.160	0.163	-
5 290	58	802.11ac	Sub4+1	80	MCS0	13.0	11.73	-0.19	Right Touch	86.2	1.04	0.279	1.340	1.160	0.434	-
5 290	58	802.11ac	Sub4+1	80	MCS0	13.0	11.73	0.12	Right Tilt	86.2	0.589	0.223	1.340	1.160	0.347	-
5 690	138	802.11ac	Sub4+1	80	MCS0	13.0	11.61	0.10	Left Touch	86.2	0.25	0.109	1.377	1.160	0.174	-
5 690	138	802.11ac	Sub4+1	80	MCS0	13.0	11.61	-0.07	Left Tilt	86.2	0.315	0.094	1.377	1.160	0.150	-
5 690	138	802.11ac	Sub4+1	80	MCS0	13.0	11.61	0.19	Right Touch	86.2	0.906	0.244	1.377	1.160	0.390	-
5 690	138	802.11ac	Sub4+1	80	MCS0	13.0	11.61	-0.06	Right Tilt	86.2	0.356	0.121	1.377	1.160	0.193	-
5 775	155	802.11ac	Sub4+1	80	MCS0	13.0	11.94	0.11	Left Touch	86.2	0.144	0.061	1.276	1.160	0.090	-
5 775	155	802.11ac	Sub4+1	80	MCS0	13.0	11.94	-0.05	Left Tilt	86.2	0.386	0.072	1.276	1.160	0.107	-
5 775	155	802.11ac	Sub4+1	80	MCS0	13.0	11.94	0.05	Right Touch	86.2	0.442	0.195	1.276	1.160	0.289	-
5 775	155	802.11ac	Sub4+1	80	MCS0	13.0	11.94	0.08	Right Tilt	86.2	0.191	0.077	1.276	1.160	0.114	-
5 855	171	802.11ac	Sub4+1	80	MCS0	13.0	12.09	-0.17	Left Touch	86.2	0.173	0.046	1.233	1.160	0.066	-
5 855	171	802.11ac	Sub4+1	80	MCS0	13.0	12.09	0.09	Left Tilt	86.2	0.264	0.049	1.233	1.160	0.070	-
5 855	171	802.11ac	Sub4+1	80	MCS0	13.0	12.09	0.07	Right Touch	86.2	0.976	0.207	1.233	1.160	0.296	-
5 855	171	802.11ac	Sub4+1	80	MCS0	13.0	12.09	-0.16	Right Tilt	86.2	0.195	0.058	1.233	1.160	0.083	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Head 1.6 W/kg Averaged over 1 gram							

6 GHz WLAN Head SAR															
Frequency		Mode	Ant.	Band width	Data Rate	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Meas. SAR	Scaling Factor	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.										(W/kg)				
6 185	47	802.11ax	Sub4	160	MCS0	10.5	10.31	0.11	Left Touch	100	0.025	1.045	1.000	0.026	-
6 185	47	802.11ax	Sub4	160	MCS0	10.5	10.31	0.10	Left Tilt	100	0.013	1.045	1.000	0.014	-
6 185	47	802.11ax	Sub4	160	MCS0	10.5	10.31	-0.18	Right Touch	100	0.180	1.045	1.000	0.188	-
6 185	47	802.11ax	Sub4	160	MCS0	10.5	10.31	0.11	Right Tilt	100	0.070	1.045	1.000	0.073	-
6 025	15	802.11ax	Sub4	160	MCS0	10.5	9.64	-0.16	Right Touch	100	0.141	1.219	1.000	0.172	-
6 505	111	802.11ax	Sub4	160	MCS0	10.5	9.27	0.12	Right Touch	100	0.209	1.327	1.000	0.277	-
6 665	143	802.11ax	Sub4	160	MCS0	10.5	9.51	0.12	Right Touch	100	0.227	1.256	1.000	0.285	-
6 985	207	802.11ax	Sub4	160	MCS0	10.5	8.79	0.12	Right Touch	100	0.131	1.483	1.000	0.194	-
6 025	15	802.11ax	Sub1	160	MCS0	10.5	10.30	-0.16	Left Touch	100	0.042	1.047	1.000	0.044	-
6 025	15	802.11ax	Sub1	160	MCS0	10.5	10.30	-0.06	Left Tilt	100	0.047	1.047	1.000	0.049	-
6 025	15	802.11ax	Sub1	160	MCS0	10.5	10.30	0.19	Right Touch	100	0.017	1.047	1.000	0.018	-
6 025	15	802.11ax	Sub1	160	MCS0	10.5	10.30	-0.19	Right Tilt	100	0.024	1.047	1.000	0.025	-
6 185	47	802.11ax	Sub1	160	MCS0	10.5	10.13	-0.15	Left Tilt	100	0.024	1.089	1.000	0.026	-
6 505	111	802.11ax	Sub1	160	MCS0	10.5	9.60	0.19	Left Tilt	100	0.040	1.230	1.000	0.049	-
6 665	143	802.11ax	Sub1	160	MCS0	10.5	10.00	-0.02	Left Tilt	100	0.083	1.122	1.000	0.093	-
6 985	207	802.11ax	Sub1	160	MCS0	10.5	9.67	-0.11	Left Tilt	100	0.054	1.211	1.000	0.065	-
6 185	47	802.11ax	Sub4+1	160	MCS0	10.5	10.13	-0.12	Left Touch	100	0.035	1.089	1.000	0.038	-
6 185	47	802.11ax	Sub4+1	160	MCS0	10.5	10.13	0.19	Left Tilt	100	0.031	1.089	1.000	0.034	-
6 185	47	802.11ax	Sub4+1	160	MCS0	10.5	10.13	-0.02	Right Touch	100	0.184	1.089	1.000	0.200	-
6 185	47	802.11ax	Sub4+1	160	MCS0	10.5	10.13	-0.07	Right Tilt	100	0.067	1.089	1.000	0.073	-
6 025	15	802.11ax	Sub4+1	160	MCS0	10.5	9.64	0.13	Right Touch	100	0.169	1.219	1.000	0.206	-
6 505	111	802.11ax	Sub4+1	160	MCS0	10.5	9.27	-0.05	Right Touch	100	0.248	1.327	1.000	0.329	A19
6 665	143	802.11ax	Sub4+1	160	MCS0	10.5	9.51	-0.12	Right Touch	100	0.204	1.256	1.000	0.256	-
6 985	207	802.11ax	Sub4+1	160	MCS0	10.5	8.79	-0.17	Right Touch	100	0.134	1.483	1.000	0.199	-
ANSI/ IEEE C95.1 - 2005- Safety Limit									Head						
Spatial Peak									1.6 W/kg						
Uncontrolled Exposure/ General Population									Averaged over 1 gram						

DSS Head SAR – RCV ON

Frequency		Mode	Ant.	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Meas. SAR	Scaling Factor	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dBm)	(dBm)	(dB)		(W/kg)			(Duty)	(W/kg)
2 441.00	39	Bluetooth DH5	SUB4	12.0	11.03	-0.11	Left Touch	0.057	1.250	1.027	0.073	-
2 441.00	39	Bluetooth DH5	SUB4	12.0	11.03	0.17	Left Tilt	0.041	1.250	1.027	0.053	-
2 441.00	39	Bluetooth DH5	SUB4	12.0	11.03	0.19	Right Touch	0.260	1.250	1.027	0.334	-
2 441.00	39	Bluetooth DH5	SUB4	12.0	11.03	0.19	Right Tilt	0.161	1.250	1.027	0.207	-
2 402.00	0	Bluetooth DH5	SUB6	12.0	11.25	-0.14	Left Touch	0.302	1.189	1.027	0.369	A20
2 402.00	0	Bluetooth DH5	SUB6	12.0	11.25	-0.08	Left Tilt	0.030	1.189	1.027	0.037	-
2 402.00	0	Bluetooth DH5	SUB6	12.0	11.25	-0.12	Right Touch	0.119	1.189	1.027	0.145	-
2 402.00	0	Bluetooth DH5	SUB6	12.0	11.25	-0.19	Right Tilt	0.014	1.189	1.027	0.017	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population							Head 1.6 W/kg Averaged over 1 gram					

13.1.2 BodyWorn/Hotspot SAR Measurement Results

GSM 850 BodyWorn/Hotspot SAR														
Frequency		Mode	Ant.	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Distance	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dB)	(dB)	(dB)			(mm)		(W/kg)		(W/kg)	
836.6	190	Voice	MAIN1	34.0	32.30	0.06	Rear	1:8.3	10	1	0.162	1.479	0.240	-
836.6	190	Voice	MAIN1	34.0	32.30	-0.13	Front	1:8.3	10	1	0.158	1.479	0.234	-
836.6	190	GPRS 2Tx	MAIN1	31.5	30.73	-0.05	Rear	1:4.15	10	1	0.217	1.194	0.259	-
836.6	190	GPRS 2Tx	MAIN1	31.5	30.73	0.16	Front	1:4.15	10	1	0.215	1.194	0.257	-
836.6	190	GPRS 2Tx	MAIN1	31.5	30.73	0.01	Left	1:4.15	10	1	0.237	1.194	0.283	-
836.6	190	GPRS 2Tx	MAIN1	31.5	30.73	0.19	Right	1:4.15	10	1	0.259	1.194	0.309	B1
836.6	190	GPRS 2Tx	MAIN1	31.5	30.73	0.16	Bottom	1:4.15	10	1	0.052	1.194	0.062	-
836.6	190	Voice	SUB1	30.2	29.15	0.06	Rear	1:8.3	10	1	0.205	1.274	0.261	-
836.6	190	Voice	SUB1	30.2	29.15	-0.00	Front	1:8.3	10	1	0.162	1.274	0.206	-
836.6	190	GPRS 4Tx	SUB1	24.2	23.38	-0.04	Rear	1:2.07	10	1	0.180	1.208	0.217	-
836.6	190	GPRS 4Tx	SUB1	24.2	23.38	0.00	Front	1:2.07	10	1	0.111	1.208	0.134	-
836.6	190	GPRS 4Tx	SUB1	24.2	23.38	-0.05	Right	1:2.07	10	1	0.169	1.208	0.204	-
836.6	190	GPRS 4Tx	SUB1	24.2	23.38	-0.10	Top	1:2.07	10	1	0.145	1.208	0.175	-
ANSI/ IEEE C95.1 - 2005- Safety Limit							Body							
Spatial Peak							1.6 W/kg							
Uncontrolled Exposure/ General Population							Averaged over 1 gram							

GSM 1900 BodyWorn/Hotspot SAR														
Frequency		Mode	Ant.	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Distance	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dB)	(dB)	(dB)			(mm)		(W/kg)		(W/kg)	
1 880.0	661	Voice	MAIN1	30.2	29.12	-0.11	Rear	1:8.3	10	0	0.482	1.282	0.618	
1 880.0	661	Voice	MAIN1	30.2	29.12	0.11	Front	1:8.3	10	0	0.399	1.282	0.512	
1 880.0	661	GPRS 4Tx	MAIN1	24.2	23.29	-0.15	Rear	1:2.07	10	0	0.457	1.233	0.563	-
1 880.0	661	GPRS 4Tx	MAIN1	24.2	23.29	0.04	Front	1:2.07	10	0	0.372	1.233	0.459	-
1 880.0	661	GPRS 4Tx	MAIN1	24.2	23.29	0.17	Left	1:2.07	10	0	0.092	1.233	0.113	-
1 880.0	661	GPRS 4Tx	MAIN1	24.2	23.29	0.17	Right	1:2.07	10	0	0.062	1.233	0.076	-
1 880.0	661	GPRS 4Tx	MAIN1	24.2	23.29	-0.02	Bottom	1:2.07	10	0	0.821	1.233	1.012	-
1 850.2	512	GPRS 4Tx	MAIN1	24.2	23.20	-0.01	Bottom	1:2.07	10	0	0.788	1.259	0.992	-
1 909.8	810	GPRS 4Tx	MAIN1	24.2	23.14	0.07	Bottom	1:2.07	10	0	0.819	1.276	1.045	-
1 880.0	661	GPRS 4Tx	MAIN1	24.2	23.29	-0.08	Bottom	1:2.07	10	0	0.825	1.233	1.017	B2
ANSI/ IEEE C95.1 - 2005- Safety Limit							Body							
Spatial Peak							1.6 W/kg							
Uncontrolled Exposure/ General Population							Averaged over 1 gram							

- Measurement Validity

UMTS Band 5 BodyWorn/Hotspot SAR

Frequency		Mode	Ant.	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Distance (mm)	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dB)	(dB)	(dB)					(W/kg)		(W/kg)	
836.6	4183	RMC	MAIN1	25.5	24.09	0.01	Rear	1:1	10	0	0.275	1.384	0.381	-
836.6	4183	RMC	MAIN1	25.5	24.09	0.11	Front	1:1	10	0	0.239	1.384	0.331	-
836.6	4183	RMC	MAIN1	25.5	24.09	0.05	Left	1:1	10	0	0.266	1.384	0.368	-
836.6	4183	RMC	MAIN1	25.5	24.09	-0.01	Right	1:1	10	0	0.313	1.384	0.433	B3
836.6	4183	RMC	MAIN1	25.5	24.09	0.17	Bottom	1:1	10	0	0.049	1.384	0.068	-
836.6	4183	RMC	SUB1	21.0	19.89	0.03	Rear	1:1	10	0	0.207	1.291	0.267	-
836.6	4183	RMC	SUB1	21.0	19.89	0.05	Front	1:1	10	0	0.170	1.291	0.219	-
836.6	4183	RMC	SUB1	21.0	19.89	-0.10	Right	1:1	10	0	0.057	1.291	0.074	-
836.6	4183	RMC	SUB1	21.0	19.89	0.14	Top	1:1	10	0	0.161	1.291	0.208	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Body 1.6 W/kg Averaged over 1 gram					

UMTS Band 4 BodyWorn/Hotspot SAR

Frequency		Mode	Ant.	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Distance (mm)	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dB)	(dB)	(dB)					(W/kg)		(W/kg)	
1 732.4	1412	RMC	MAIN1	22.0	20.34	0.11	Rear	1:1	10	32	0.456	1.466	0.668	-
1 732.4	1412	RMC	MAIN1	22.0	20.34	0.12	Front	1:1	10	32	0.374	1.466	0.548	-
1 732.4	1412	RMC	MAIN1	22.0	20.34	-0.12	Left	1:1	10	32	0.116	1.466	0.170	-
1 732.4	1412	RMC	MAIN1	22.0	20.34	0.12	Right	1:1	10	32	0.035	1.466	0.051	-
1 732.4	1412	RMC	MAIN1	22.0	20.34	-0.15	Bottom	1:1	10	32	0.606	1.466	0.888	-
1 712.4	1312	RMC	MAIN1	22.0	20.35	-0.18	Bottom	1:1	10	32	0.581	1.462	0.849	-
1 752.6	1513	RMC	MAIN1	22.0	20.38	-0.09	Bottom	1:1	10	32	0.654	1.452	0.950	B4
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Body 1.6 W/kg Averaged over 1 gram					

UMTS Band 2 BodyWorn/Hotspot SAR

Frequency		Mode	Ant.	Tune- Up Limit	Meas. Power	Power Drift	Test Position	Duty Cycle	Distance (mm)	Ant. State	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dB)	(dB)	(dB)					(W/kg)		(W/kg)	
1 880.0	9400	RMC	MAIN1	20.5	19.11	0.03	Rear	1:1	10	0	0.253	1.377	0.348	-
1 880.0	9400	RMC	MAIN1	20.5	19.11	0.17	Front	1:1	10	0	0.193	1.377	0.266	-
1 880.0	9400	RMC	MAIN1	20.5	19.11	0.17	Left	1:1	10	0	0.066	1.377	0.091	-
1 880.0	9400	RMC	MAIN1	20.5	19.11	-0.17	Right	1:1	10	0	0.019	1.377	0.026	-
1 880.0	9400	RMC	MAIN1	20.5	19.11	-0.19	Bottom	1:1	10	0	0.806	1.377	1.110	B5
1 852.4	9262	RMC	MAIN1	20.5	19.48	-0.04	Bottom	1:1	10	0	0.816	1.265	1.032	-
1 907.6	9538	RMC	MAIN1	20.5	19.08	-0.02	Bottom	1:1	10	0	0.784	1.387	1.087	-
1 852.4	9262	RMC	MAIN1	20.5	19.48	-0.15	Bottom	1:1	10	0	0.819	1.265	1.036	•
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Body 1.6 W/kg Averaged over 1 gram						

- Measurement Validity

LTE FDD Band 12 BodyWorn/Hotspot SAR

Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
707.5	23095	QPSK	MAIN1	10	25.0	23.49	0.00	Rear	0	1	49	1:1	0	10	0.317	1.416	0.449	B6
707.5	23095	QPSK	MAIN1	10	24.0	22.44	0.19	Rear	1	25	24	1:1	0	10	0.261	1.432	0.374	-
707.5	23095	QPSK	MAIN1	10	25.0	23.49	0.00	Front	0	1	49	1:1	0	10	0.190	1.416	0.269	-
707.5	23095	QPSK	MAIN1	10	24.0	22.44	0.04	Front	1	25	24	1:1	0	10	0.150	1.432	0.215	-
707.5	23095	QPSK	MAIN1	10	25.0	23.49	-0.02	Left	0	1	49	1:1	0	10	0.163	1.416	0.231	-
707.5	23095	QPSK	MAIN1	10	24.0	22.44	-0.17	Left	1	25	24	1:1	0	10	0.124	1.432	0.178	-
707.5	23095	QPSK	MAIN1	10	25.0	23.49	-0.06	Right	0	1	49	1:1	0	10	0.081	1.416	0.115	-
707.5	23095	QPSK	MAIN1	10	24.0	22.44	0.00	Right	1	25	24	1:1	0	10	0.060	1.432	0.086	-
707.5	23095	QPSK	MAIN1	10	25.0	23.49	0.06	Bottom	0	1	49	1:1	0	10	0.092	1.416	0.130	-
707.5	23095	QPSK	MAIN1	10	24.0	22.44	0.13	Bottom	1	25	24	1:1	0	10	0.075	1.432	0.107	-
707.5	23095	QPSK	SUB1	10	21.0	19.65	-0.11	Rear	0	1	0	1:1	0	10	0.213	1.365	0.291	-
707.5	23095	QPSK	SUB1	10	21.0	19.56	0.03	Rear	0	25	24	1:1	0	10	0.234	1.393	0.326	-
707.5	23095	QPSK	SUB1	10	21.0	19.65	-0.01	Front	0	1	0	1:1	0	10	0.165	1.365	0.225	-
707.5	23095	QPSK	SUB1	10	21.0	19.56	0.00	Front	0	25	24	1:1	0	10	0.180	1.393	0.251	-
707.5	23095	QPSK	SUB1	10	21.0	19.65	0.00	Right	0	1	0	1:1	0	10	0.112	1.365	0.153	-
707.5	23095	QPSK	SUB1	10	21.0	19.56	-0.03	Right	0	25	24	1:1	0	10	0.120	1.393	0.167	-
707.5	23095	QPSK	SUB1	10	21.0	19.65	0.07	Top	0	1	0	1:1	0	10	0.163	1.365	0.222	-
707.5	23095	QPSK	SUB1	10	21.0	19.56	0.17	Top	0	25	24	1:1	0	10	0.182	1.393	0.254	-
ANSI/ IEEE C95.1 - 2005- Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Body 1.6 W/kg Averaged over 1 gram									

LTE FDD Band 13 BodyWorn/Hotspot SAR

Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
782	23230	QPSK	MAIN1	25.0	23.83	-0.07	25.0	Rear	0	1	24	1:1	4	10	0.193	1.309	0.253	-
782	23230	QPSK	MAIN1	24.0	22.83	0.10	24.0	Rear	1	25	0	1:1	4	10	0.148	1.309	0.194	-
782	23230	QPSK	MAIN1	25.0	23.83	0.02	25.0	Front	0	1	24	1:1	4	10	0.128	1.309	0.168	-
782	23230	QPSK	MAIN1	24.0	22.83	0.00	24.0	Front	1	25	0	1:1	4	10	0.100	1.309	0.131	-
782	23230	QPSK	MAIN1	25.0	23.83	0.01	25.0	Left	0	1	24	1:1	4	10	0.250	1.309	0.327	B7
782	23230	QPSK	MAIN1	24.0	22.83	-0.03	24.0	Left	1	25	0	1:1	4	10	0.191	1.309	0.250	-
782	23230	QPSK	MAIN1	25.0	23.83	0.03	25.0	Right	0	1	24	1:1	4	10	0.130	1.309	0.170	-
782	23230	QPSK	MAIN1	24.0	22.83	0.01	24.0	Right	1	25	0	1:1	4	10	0.100	1.309	0.131	-
782	23230	QPSK	MAIN1	25.0	23.83	0.07	25.0	Bottom	0	1	24	1:1	4	10	0.056	1.309	0.073	-
782	23230	QPSK	MAIN1	24.0	22.83	-0.15	24.0	Bottom	1	25	0	1:1	4	10	0.044	1.309	0.058	-
782	23230	QPSK	SUB1	10	21.0	19.95	0.00	Rear	0	1	24	1:1	0	10	0.173	1.274	0.220	-
782	23230	QPSK	SUB1	10	21.0	19.91	0.01	Rear	0	25	0	1:1	0	10	0.171	1.285	0.220	-
782	23230	QPSK	SUB1	10	21.0	19.95	-0.10	Front	0	1	24	1:1	0	10	0.121	1.274	0.154	-
782	23230	QPSK	SUB1	10	21.0	19.91	-0.02	Front	0	25	0	1:1	0	10	0.116	1.285	0.149	-
782	23230	QPSK	SUB1	10	21.0	19.95	-0.04	Right	0	1	24	1:1	0	10	0.129	1.274	0.164	-
782	23230	QPSK	SUB1	10	21.0	19.91	-0.02	Right	0	25	0	1:1	0	10	0.129	1.285	0.166	-
782	23230	QPSK	SUB1	10	21.0	19.95	0.09	Top	0	1	24	1:1	0	10	0.140	1.274	0.178	-
782	23230	QPSK	SUB1	10	21.0	19.91	0.11	Top	0	25	0	1:1	0	10	0.134	1.285	0.172	-
ANSI/ IEEE C95.1 - 2005- Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Body 1.6 W/kg Averaged over 1 gram									

LTE FDD Band 25 (PCS) BodyWorn/Hotspot SAR

Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.			(Mhz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
1860	26140	QPSK	MAIN1	20	20.5	20.15	-0.02	Rear	0	1	99	1:1	33	10	0.499	1.084	0.541	-
1860	26140	QPSK	MAIN1	20	20.5	20.07	-0.18	Rear	0	50	0	1:1	33	10	0.510	1.104	0.563	-
1860	26140	QPSK	MAIN1	20	20.5	20.15	-0.16	Front	0	1	99	1:1	33	10	0.384	1.084	0.416	-
1860	26140	QPSK	MAIN1	20	20.5	20.07	0.07	Front	0	50	0	1:1	33	10	0.392	1.104	0.433	-
1860	26140	QPSK	MAIN1	20	20.5	20.15	-0.04	Left	0	1	99	1:1	33	10	0.102	1.084	0.111	-
1860	26140	QPSK	MAIN1	20	20.5	20.07	-0.04	Left	0	50	0	1:1	33	10	0.098	1.104	0.108	-
1860	26140	QPSK	MAIN1	20	20.5	20.15	0.03	Right	0	1	99	1:1	33	10	0.064	1.084	0.069	-
1860	26140	QPSK	MAIN1	20	20.5	20.07	-0.02	Right	0	50	0	1:1	33	10	0.062	1.104	0.068	-
1860	26140	QPSK	MAIN1	20	20.5	20.15	0.09	Bottom	0	1	99	1:1	33	10	0.977	1.084	1.059	-
1882.5	26365	QPSK	MAIN1	20	20.5	20.00	-0.06	Bottom	0	1	0	1:1	33	10	0.992	1.122	1.113	B8
1905	26590	QPSK	MAIN1	20	20.5	19.89	-0.06	Bottom	0	1	99	1:1	33	10	0.986	1.151	1.135	-
1860	26140	QPSK	MAIN1	20	20.5	20.07	0.01	Bottom	0	50	0	1:1	33	10	0.909	1.104	1.004	-
1882.5	26365	QPSK	MAIN1	20	20.5	19.94	0.01	Bottom	0	50	0	1:1	33	10	0.931	1.138	1.059	-
1905	26590	QPSK	MAIN1	20	20.5	19.86	0.01	Bottom	0	50	25	1:1	33	10	0.940	1.159	1.089	-
1860	26140	QPSK	MAIN1	20	20.5	19.97	0.01	Bottom	0	100	0	1:1	33	10	0.902	1.130	1.019	-
1882.5	26365	QPSK	MAIN1	20	20.5	20.00	0.09	Bottom	0	1	0	1:1	33	10	0.954	1.122	1.070	•
1905	26590	QPSK	SUB2	20	17.5	17.17	-0.06	Rear	0	1	99	1:1	0	10	0.217	1.079	0.234	-
1905	26590	QPSK	SUB2	20	17.5	17.10	0.17	Rear	0	50	49	1:1	0	10	0.209	1.096	0.229	-
1905	26590	QPSK	SUB2	20	17.5	17.17	0.10	Front	0	1	99	1:1	0	10	0.185	1.079	0.200	-
1905	26590	QPSK	SUB2	20	17.5	17.10	0.12	Front	0	50	49	1:1	0	10	0.181	1.096	0.198	-
1905	26590	QPSK	SUB2	20	17.5	17.17	-0.09	Left	0	1	99	1:1	0	10	0.087	1.079	0.094	-
1905	26590	QPSK	SUB2	20	17.5	17.10	0.05	Left	0	50	49	1:1	0	10	0.080	1.096	0.088	-
1905	26590	QPSK	SUB2	20	17.5	17.17	0.00	Top	0	1	99	1:1	0	10	0.398	1.079	0.429	-
1905	26590	QPSK	SUB2	20	17.5	17.10	0.02	Top	0	50	49	1:1	0	10	0.405	1.096	0.444	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Body 1.6 W/kg Averaged over 1 gram									

- Measurement Validity

LTE FDD Band 26 (Cell) BodyWorn/Hotspot SAR

Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
831.5	26865	QPSK	MAIN1	15	25.0	23.98	0.08	Rear	0	1	0	1:1	0	10	0.431	1.265	0.545	B9
831.5	26865	QPSK	MAIN1	15	24.0	22.69	0.06	Rear	1	36	0	1:1	0	10	0.312	1.352	0.422	-
831.5	26865	QPSK	MAIN1	15	25.0	23.98	-0.01	Front	0	1	0	1:1	0	10	0.308	1.265	0.390	-
831.5	26865	QPSK	MAIN1	15	24.0	22.69	0.07	Front	1	36	0	1:1	0	10	0.235	1.352	0.318	-
831.5	26865	QPSK	MAIN1	15	25.0	23.98	0.04	Left	0	1	0	1:1	0	10	0.236	1.265	0.299	-
831.5	26865	QPSK	MAIN1	15	24.0	22.69	0.03	Left	1	36	0	1:1	0	10	0.195	1.352	0.264	-
831.5	26865	QPSK	MAIN1	15	25.0	23.98	0.04	Right	0	1	0	1:1	0	10	0.173	1.265	0.219	-
831.5	26865	QPSK	MAIN1	15	24.0	22.69	0.01	Right	1	36	0	1:1	0	10	0.147	1.352	0.199	-
831.5	26865	QPSK	MAIN1	15	25.0	23.98	0.03	Bottom	0	1	0	1:1	0	10	0.053	1.265	0.067	-
831.5	26865	QPSK	MAIN1	15	24.0	22.69	0.18	Bottom	1	36	0	1:1	0	10	0.037	1.352	0.050	-
831.5	26865	QPSK	SUB1	15	20.0	18.51	-0.17	Rear	0	1	0	1:1	1	10	0.149	1.409	0.210	-
831.5	26865	QPSK	SUB1	15	20.0	18.47	-0.13	Rear	0	36	0	1:1	1	10	0.158	1.422	0.225	-
831.5	26865	QPSK	SUB1	15	20.0	18.51	0.09	Front	0	1	0	1:1	1	10	0.096	1.409	0.135	-
831.5	26865	QPSK	SUB1	15	20.0	18.47	-0.12	Front	0	36	0	1:1	1	10	0.101	1.422	0.144	-
831.5	26865	QPSK	SUB1	15	20.0	18.51	0.11	Right	0	1	0	1:1	1	10	0.129	1.409	0.182	-
831.5	26865	QPSK	SUB1	15	20.0	18.47	0.05	Right	0	36	0	1:1	1	10	0.126	1.422	0.179	-
831.5	26865	QPSK	SUB1	15	20.0	18.51	0.11	Top	0	1	0	1:1	1	10	0.117	1.409	0.165	-
831.5	26865	QPSK	SUB1	15	20.0	18.47	0.09	Top	0	36	0	1:1	1	10	0.102	1.422	0.145	-
ANSI/ IEEE C95.1 - 2005- Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Body 1.6 W/kg Averaged over 1 gram									

LTE TDD Band 41 (Power Class 3) BodyWorn/Hotspot SAR

Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
2 593	40620	QPSK	MAIN2	20	23.0	22.35	0.11	Rear	0	1	49	1:1.58	-	10	0.345	1.161	0.401	-
2 593	40620	QPSK	MAIN2	20	23.0	22.33	0.15	Rear	0	50	0	1:1.58	-	10	0.345	1.167	0.403	-
2 593	40620	QPSK	MAIN2	20	23.0	22.35	0.15	Front	0	1	49	1:1.58	-	10	0.223	1.161	0.259	-
2 593	40620	QPSK	MAIN2	20	23.0	22.33	0.02	Front	0	50	0	1:1.58	-	10	0.218	1.167	0.254	-
2 593	40620	QPSK	MAIN2	20	23.0	22.35	0.13	Left	0	1	49	1:1.58	-	10	0.180	1.161	0.209	-
2 593	40620	QPSK	MAIN2	20	23.0	22.33	-0.01	Left	0	50	0	1:1.58	-	10	0.173	1.167	0.202	-
2 593	40620	QPSK	MAIN2	20	23.0	22.35	-0.19	Bottom	0	1	49	1:1.58	-	10	0.214	1.161	0.248	-
2 593	40620	QPSK	MAIN2	20	23.0	22.33	-0.14	Bottom	0	50	0	1:1.58	-	10	0.217	1.167	0.253	-
2 593	40620	QPSK	MAIN2	20	25.0	23.91	-0.11	Rear	0	50	0	1:2.31	-	10	0.191	1.285	0.245	••
2 680	41490	QPSK	SUB2	20	21.5	21.23	0.17	Rear	0	1	49	1:1.58	-	10	0.253	1.064	0.269	-
2 680	41490	QPSK	SUB2	20	21.5	21.26	0.13	Rear	0	50	0	1:1.58	-	10	0.240	1.057	0.254	-
2 680	41490	QPSK	SUB2	20	21.5	21.23	0.09	Front	0	1	49	1:1.58	-	10	0.210	1.064	0.223	-
2 680	41490	QPSK	SUB2	20	21.5	21.26	0.14	Front	0	50	0	1:1.58	-	10	0.200	1.057	0.211	-
2 680	41490	QPSK	SUB2	20	21.5	21.23	0.18	Left	0	1	49	1:1.58	-	10	0.035	1.064	0.037	-
2 680	41490	QPSK	SUB2	20	21.5	21.26	0.03	Left	0	50	0	1:1.58	-	10	0.032	1.057	0.034	-
2 680	41490	QPSK	SUB2	20	21.5	21.23	0.11	Top	0	1	49	1:1.58	-	10	0.365	1.064	0.388	B10
2 680	41490	QPSK	SUB2	20	21.5	21.26	0.07	Top	0	50	0	1:1.58	-	10	0.365	1.057	0.386	-
2 680	41490	QPSK	SUB2	20	23.5	23.10	-0.19	Top	0	1	49	1:2.31	-	10	0.325	1.096	0.356	••
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population												Body 1.6 W/kg Averaged over 1 gram						

•• PC2 Measurement

LTE FDD Band 66 (AWS) BodyWorn/Hotspot SAR

Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
1 720	132072	QPSK	MAIN1	20	19.0	17.76	-0.09	Rear	0	1	49	1:1	1	10	0.304	1.330	0.404	-
1 770	132572	QPSK	MAIN1	20	19.0	17.78	-0.03	Rear	0	50	0	1:1	1	10	0.329	1.324	0.436	-
1 720	132072	QPSK	MAIN1	20	19.0	17.76	-0.05	Front	0	1	49	1:1	1	10	0.224	1.330	0.298	-
1 770	132572	QPSK	MAIN1	20	19.0	17.78	-0.09	Front	0	50	0	1:1	1	10	0.252	1.324	0.334	-
1 720	132072	QPSK	MAIN1	20	19.0	17.76	0.07	Left	0	1	49	1:1	1	10	0.086	1.330	0.114	-
1 770	132572	QPSK	MAIN1	20	19.0	17.78	0.13	Left	0	50	0	1:1	1	10	0.086	1.324	0.114	-
1 720	132072	QPSK	MAIN1	20	19.0	17.76	0.09	Right	0	1	49	1:1	1	10	0.036	1.330	0.048	-
1 770	132572	QPSK	MAIN1	20	19.0	17.78	0.10	Right	0	50	0	1:1	1	10	0.037	1.324	0.049	-
1 720	132072	QPSK	MAIN1	20	19.0	17.76	0.00	Bottom	0	1	49	1:1	1	10	0.528	1.330	0.702	B11
1 770	132572	QPSK	MAIN1	20	19.0	17.78	0.03	Bottom	0	50	0	1:1	1	10	0.523	1.324	0.692	-
1 720	132072	QPSK	SUB2	20	17.5	16.45	0.14	Rear	0	1	0	1:1	1	10	0.120	1.274	0.153	-
1 720	132072	QPSK	SUB2	20	17.5	16.42	-0.15	Rear	0	50	0	1:1	1	10	0.094	1.282	0.121	-
1 720	132072	QPSK	SUB2	20	17.5	16.45	0.05	Front	0	1	0	1:1	1	10	0.097	1.274	0.124	-
1 720	132072	QPSK	SUB2	20	17.5	16.42	0.06	Front	0	50	0	1:1	1	10	0.097	1.282	0.124	-
1 720	132072	QPSK	SUB2	20	17.5	16.45	-0.11	Left	0	1	0	1:1	1	10	0.046	1.274	0.059	-
1 720	132072	QPSK	SUB2	20	17.5	16.42	-0.10	Left	0	50	0	1:1	1	10	0.046	1.282	0.059	-
1 720	132072	QPSK	SUB2	20	17.5	16.45	0.03	Top	0	1	0	1:1	1	10	0.204	1.274	0.260	-
1 720	132072	QPSK	SUB2	20	17.5	16.42	-0.04	Top	0	50	0	1:1	1	10	0.201	1.282	0.258	-
ANSI/ IEEE C95.1 - 2005-- Safety Limit											Body							
Spatial Peak											1.6 W/kg							
Uncontrolled Exposure/ General Population											Averaged over 1 gram							

NR FDD Band n5 BodyWorn/Hotspot SAR

Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
836.5	167300	DFT-s OFDM QPSK	MAIN1	20	25.0	23.95	-0.03	Rear	0	1	1	1:1	5	10	0.153	1.274	0.195	-
836.5	167300	DFT-s OFDM QPSK	MAIN1	20	25.0	23.94	0.07	Rear	0	50	28	1:1	5	10	0.161	1.276	0.205	-
836.5	167300	DFT-s OFDM QPSK	MAIN1	20	25.0	23.95	-0.04	Front	0	1	1	1:1	5	10	0.149	1.274	0.190	-
836.5	167300	DFT-s OFDM QPSK	MAIN1	20	25.0	23.94	-0.12	Front	0	50	28	1:1	5	10	0.147	1.276	0.188	-
836.5	167300	DFT-s OFDM QPSK	MAIN1	20	25.0	23.95	0.18	Left	0	1	1	1:1	5	10	0.146	1.274	0.186	-
836.5	167300	DFT-s OFDM QPSK	MAIN1	20	25.0	23.94	0.11	Left	0	50	28	1:1	5	10	0.155	1.276	0.198	-
836.5	167300	DFT-s OFDM QPSK	MAIN1	20	25.0	23.95	0.06	Right	0	1	1	1:1	5	10	0.152	1.274	0.194	-
836.5	167300	DFT-s OFDM QPSK	MAIN1	20	25.0	23.94	0.03	Right	0	50	28	1:1	5	10	0.144	1.276	0.184	-
836.5	167300	DFT-s OFDM QPSK	MAIN1	20	25.0	23.95	0.15	Bottom	0	1	1	1:1	5	10	0.031	1.274	0.039	-
836.5	167300	DFT-s OFDM QPSK	MAIN1	20	25.0	23.94	0.09	Bottom	0	50	28	1:1	5	10	0.034	1.276	0.043	-
836.5	167300	CP QPSK	MAIN1	20	23.5	22.52	0.01	Rear	1.5	1	1	1:1	5	10	0.127	1.253	0.159	-
836.5	167300	DFT-s OFDM QPSK	SUB1	20	21.0	19.77	0.05	Rear	0	1	1	1:1	1	10	0.182	1.327	0.242	-
836.5	167300	DFT-s OFDM QPSK	SUB1	20	21.0	19.82	-0.13	Rear	0	50	28	1:1	1	10	0.176	1.312	0.231	-
836.5	167300	DFT-s OFDM QPSK	SUB1	20	21.0	19.77	-0.16	Front	0	1	1	1:1	1	10	0.137	1.327	0.182	-
836.5	167300	DFT-s OFDM QPSK	SUB1	20	21.0	19.82	-0.08	Front	0	50	28	1:1	1	10	0.133	1.312	0.174	-
836.5	167300	DFT-s OFDM QPSK	SUB1	20	21.0	19.77	-0.06	Right	0	1	1	1:1	1	10	0.185	1.327	0.245	-
836.5	167300	DFT-s OFDM QPSK	SUB1	20	21.0	19.82	0.02	Right	0	50	28	1:1	1	10	0.197	1.312	0.258	B12
836.5	167300	DFT-s OFDM QPSK	SUB1	20	21.0	19.77	0.11	Top	0	1	1	1:1	1	10	0.155	1.327	0.206	-
836.5	167300	DFT-s OFDM QPSK	SUB1	20	21.0	19.82	0.09	Top	0	50	28	1:1	1	10	0.152	1.312	0.199	-
836.5	167300	CP QPSK	SUB1	20	21.0	19.97	0.04	Right	0	1	1	1:1	1	10	0.192	1.268	0.243	-
ANSI/ IEEE C95.1 - 2005- Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Body 1.6 W/kg Averaged over 1 gram									

NR FDD Band n25 BodyWorn/Hotspot SAR

Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
Mhz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
1 860	372000	DFT-s OFDM QPSK	MAIN1	20	20.5	19.46	0.12	Rear	0	1	1	0	32	10	0.441	1.271	0.561	-
1 860	372000	DFT-s OFDM QPSK	MAIN1	20	20.5	19.45	0.05	Rear	0	50	28	0	32	10	0.439	1.274	0.559	-
1 860	372000	DFT-s OFDM QPSK	MAIN1	20	20.5	19.46	-0.12	Front	0	1	1	0	32	10	0.408	1.271	0.519	-
1 860	372000	DFT-s OFDM QPSK	MAIN1	20	20.5	19.45	-0.12	Front	0	50	28	0	32	10	0.417	1.274	0.531	-
1 860	372000	DFT-s OFDM QPSK	MAIN1	20	20.5	19.46	-0.17	Left	0	1	1	0	32	10	0.094	1.271	0.119	-
1 860	372000	DFT-s OFDM QPSK	MAIN1	20	20.5	19.45	-0.14	Left	0	50	28	0	32	10	0.096	1.274	0.122	-
1 860	372000	DFT-s OFDM QPSK	MAIN1	20	20.5	19.46	0.11	Right	0	1	1	0	32	10	0.060	1.271	0.076	-
1 860	372000	DFT-s OFDM QPSK	MAIN1	20	20.5	19.45	0.01	Right	0	50	28	0	32	10	0.061	1.274	0.078	-
1 860	372000	DFT-s OFDM QPSK	MAIN1	20	20.5	19.46	-0.09	Bottom	0	1	1	0	32	10	0.827	1.271	1.051	-
1 882.5	376500	DFT-s OFDM QPSK	MAIN1	20	20.5	19.38	-0.09	Bottom	0	1	104	0	32	10	0.818	1.294	1.058	-
1 905	381000	DFT-s OFDM QPSK	MAIN1	20	20.5	19.61	0.01	Bottom	0	1	104	0	32	10	0.775	1.227	0.951	-
1 860	372000	DFT-s OFDM QPSK	MAIN1	20	20.5	19.45	-0.11	Bottom	0	50	28	0	32	10	0.867	1.274	1.105	-
1 882.5	376500	DFT-s OFDM QPSK	MAIN1	20	20.5	19.28	-0.05	Bottom	0	50	0	0	32	10	0.845	1.324	1.119	-
1 905	381000	DFT-s OFDM QPSK	MAIN1	20	20.5	19.32	-0.04	Bottom	0	50	56	0	32	10	0.787	1.312	1.033	-
1 905	381000	DFT-s OFDM QPSK	MAIN1	20	20.5	19.36	-0.06	Bottom	0	100	0	0	32	10	0.789	1.300	1.026	-
1 860	372000	CP QPSK	MAIN1	20	20.5	19.64	-0.04	Bottom	0	1	1	0	32	10	0.844	1.219	1.029	-
1 882.5	376500	CP QPSK	MAIN1	20	20.5	19.56	-0.06	Bottom	0	1	1	0	32	10	0.869	1.242	1.079	B13
1 905	381000	CP QPSK	MAIN1	20	20.5	19.46	-0.09	Bottom	0	1	1	0	32	10	0.823	1.271	1.046	-
1 882.5	376500	CP QPSK	MAIN1	20	20.5	19.56	-0.15	Bottom	0	1	1	0	32	10	0.865	1.242	1.074	•
1 860	372000	DFT-s OFDM QPSK	SUB2	20	21.0	20.18	0.14	Rear	0	1	104	1:1	0	10	0.229	1.208	0.277	-
1 860	372000	DFT-s OFDM QPSK	SUB2	20	21.0	20.15	0.10	Rear	0	50	28	1:1	0	10	0.231	1.216	0.281	-
1 860	372000	DFT-s OFDM QPSK	SUB2	20	21.0	20.18	-0.12	Front	0	1	104	1:1	0	10	0.120	1.208	0.145	-
1 860	372000	DFT-s OFDM QPSK	SUB2	20	21.0	20.15	-0.04	Front	0	50	28	1:1	0	10	0.122	1.216	0.148	-
1 860	372000	DFT-s OFDM QPSK	SUB2	20	21.0	20.18	0.13	Left	0	1	104	1:1	0	10	0.054	1.208	0.065	-
1 860	372000	DFT-s OFDM QPSK	SUB2	20	21.0	20.15	-0.12	Left	0	50	28	1:1	0	10	0.045	1.216	0.055	-
1 860	372000	DFT-s OFDM QPSK	SUB2	20	21.0	20.18	-0.13	Top	0	1	104	1:1	0	10	0.368	1.208	0.445	-
1 860	372000	DFT-s OFDM QPSK	SUB2	20	21.0	20.15	-0.17	Top	0	50	28	1:1	0	10	0.393	1.216	0.478	-
1 860	372000	CP QPSK	SUB2	20	21.0	20.22	-0.14	Top	0	1	1	1:1	0	10	0.383	1.197	0.458	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Body 1.6 W/kg Averaged over 1 gram									

•Measurement Validity

NR TDD Band n41 (Power Class 3) BodyWorn/Hotspot SAR

Frequency		Mode	Ant	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
2 592.99	518598	DFT-s OFDM QPSK	SUB2	100	17.0	16.47	-0.15	Rear	0	1	1	1:1	-	10	0.191	1.130	0.216	-
2 592.99	518598	DFT-s OFDM QPSK	SUB2	100	17.0	16.47	-0.11	Rear	0	135	0	1:1	-	10	0.140	1.130	0.158	-
2 592.99	518598	DFT-s OFDM QPSK	SUB2	100	17.0	16.47	0.01	Front	0	1	1	1:1	-	10	0.148	1.130	0.167	-
2 592.99	518598	DFT-s OFDM QPSK	SUB2	100	17.0	16.47	-0.02	Front	0	135	0	1:1	-	10	0.135	1.130	0.153	-
2 592.99	518598	DFT-s OFDM QPSK	SUB2	100	17.0	16.47	0.15	Left	0	1	1	1:1	-	10	0.032	1.130	0.036	-
2 592.99	518598	DFT-s OFDM QPSK	SUB2	100	17.0	16.47	-0.14	Left	0	135	0	1:1	-	10	0.028	1.130	0.032	-
2 592.99	518598	DFT-s OFDM QPSK	SUB2	100	17.0	16.47	-0.02	Top	0	1	1	1:1	-	10	0.237	1.130	0.268	-
2 592.99	518598	DFT-s OFDM QPSK	SUB2	100	17.0	16.47	-0.01	Top	0	135	0	1:1	-	10	0.224	1.130	0.253	-
2 592.99	518598	CP QPSK	SUB2	100	17.0	16.72	0.02	Rear	0	1	1	1:1	-	10	0.278	1.067	0.297	B14
2 592.99	518598	DFT-s OFDM QPSK	MAIN2	100	17.0	16.50	0.10	Rear	0	1	271	1:1	-	10	0.073	1.122	0.082	-
2 592.99	518598	DFT-s OFDM QPSK	MAIN2	100	17.0	16.49	0.13	Rear	0	135	138	1:1	-	10	0.079	1.125	0.089	-
2 592.99	518598	DFT-s OFDM QPSK	MAIN2	100	17.0	16.50	0.01	Front	0	1	271	1:1	-	10	0.049	1.122	0.055	-
2 592.99	518598	DFT-s OFDM QPSK	MAIN2	100	17.0	16.49	0.15	Front	0	135	138	1:1	-	10	0.067	1.125	0.075	-
2 592.99	518598	DFT-s OFDM QPSK	MAIN2	100	17.0	16.50	-0.19	Left	0	1	271	1:1	-	10	0.085	1.122	0.095	-
2 592.99	518598	DFT-s OFDM QPSK	MAIN2	100	17.0	16.49	-0.15	Left	0	135	138	1:1	-	10	0.093	1.125	0.105	-
2 592.99	518598	DFT-s OFDM QPSK	MAIN2	100	17.0	16.50	0.01	Bottom	0	1	271	1:1	-	10	0.112	1.122	0.126	-
2 592.99	518598	DFT-s OFDM QPSK	MAIN2	100	17.0	16.49	0.07	Bottom	0	135	138	1:1	-	10	0.133	1.125	0.150	-
2 592.99	518598	CP QPSK	MAIN2	100	17.0	16.74	0.09	Bottom	0	1	1	1:1	-	10	0.194	1.062	0.206	-
2 592.99	518598	CW SRS #3	SUB1	100	16.5	16.10	0.00	Rear	0	-	-	1:1	-	10	0.065	1.096	0.071	-
2 592.99	518598	CW SRS #3	SUB1	100	16.5	16.10	0.08	Front	0	-	-	1:1	-	10	0.071	1.096	0.078	-
2 592.99	518598	CW SRS #3	SUB1	100	16.5	16.10	0.11	Right	0	-	-	1:1	-	10	0.047	1.096	0.052	-
2 592.99	518598	CW SRS #3	SUB1	100	16.5	16.10	0.11	Top	0	-	-	1:1	-	10	0.087	1.096	0.095	-
2 592.99	518598	CW SRS #4	MAIN4	100	16.0	14.80	0.16	Rear	0	-	-	1:1	-	10	0.144	1.318	0.190	-
2 592.99	518598	CW SRS #4	MAIN4	100	16.0	14.80	0.14	Front	0	-	-	1:1	-	10	0.019	1.318	0.025	-
2 592.99	518598	CW SRS #4	MAIN4	100	16.0	14.80	0.13	Right	0	-	-	1:1	-	10	0.003	1.318	0.004	-
2 592.99	518598	CW SRS #4	MAIN4	100	16.0	14.80	-0.17	Bottom	0	-	-	1:1	-	10	0.068	1.318	0.090	-
ANSI/ IEEE C95.1 - 2005- Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Body 1.6 W/kg Averaged over 1 gram									

NR FDD Band n66 Body BodyWorn/ Hotspot SAR

Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	20.5	19.54	0.03	Rear	0	1	108	1:1	32	10	0.457	1.247	0.570	-
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	20.5	19.55	0.13	Rear	0	108	0	1:1	32	10	0.463	1.245	0.576	-
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	20.5	19.54	0.16	Front	0	1	108	1:1	32	10	0.419	1.247	0.522	-
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	20.5	19.55	-0.12	Front	0	108	0	1:1	32	10	0.421	1.245	0.524	-
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	20.5	19.54	-0.01	Left	0	1	108	1:1	32	10	0.121	1.247	0.151	-
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	20.5	19.55	-0.10	Left	0	108	0	1:1	32	10	0.125	1.245	0.156	-
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	20.5	19.54	0.11	Right	0	1	108	1:1	32	10	0.052	1.247	0.065	-
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	20.5	19.55	-0.13	Right	0	108	0	1:1	32	10	0.055	1.245	0.068	-
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	20.5	19.54	-0.01	Bottom	0	1	108	1:1	32	10	0.702	1.247	0.875	-
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	20.5	19.55	0.00	Bottom	0	108	0	1:1	32	10	0.709	1.245	0.883	-
1 745	349000	DFT-s OFDM QPSK	MAIN1	40	20.5	19.42	0.06	Bottom	0	216	0	1:1	32	10	0.716	1.282	0.918	B15
1 745	349000	CP OFDM QPSK	MAIN1	40	20.5	19.72	-0.04	Bottom	0	1	1	1:1	32	10	0.679	1.197	0.813	-
1 745	349000	DFT-s OFDM QPSK	SUB2	40	21.0	19.80	0.10	Rear	0	1	1	1:1	1	10	0.221	1.318	0.291	-
1 745	349000	DFT-s OFDM QPSK	SUB2	40	21.0	19.61	-0.08	Rear	0	108	0	1:1	1	10	0.200	1.377	0.275	-
1 745	349000	DFT-s OFDM QPSK	SUB2	40	21.0	19.80	0.10	Front	0	1	1	1:1	1	10	0.141	1.318	0.186	-
1 745	349000	DFT-s OFDM QPSK	SUB2	40	21.0	19.61	0.11	Front	0	108	0	1:1	1	10	0.129	1.377	0.178	-
1 745	349000	DFT-s OFDM QPSK	SUB2	40	21.0	19.80	0.05	Left	0	1	1	1:1	1	10	0.099	1.318	0.130	-
1 745	349000	DFT-s OFDM QPSK	SUB2	40	21.0	19.61	0.01	Left	0	108	0	1:1	1	10	0.095	1.377	0.131	-
1 745	349000	DFT-s OFDM QPSK	SUB2	40	21.0	19.80	-0.10	Top	0	1	1	1:1	1	10	0.338	1.318	0.445	-
1 745	349000	DFT-s OFDM QPSK	SUB2	40	21.0	19.61	-0.16	Top	0	108	0	1:1	1	10	0.327	1.377	0.450	-
1 745	349000	CP OFDM QPSK	SUB2	40	21.0	20.02	-0.04	Top	0	1	1	1:1	1	10	0.341	1.253	0.427	-
ANSI/ IEEE C95.1 - 2005- Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Body 1.6 W/kg Averaged over 1 gram									

NR TDD Band n77 (Power Class 2) BodyWorn/Hotspot SAR

Frequency		Mode	Ant.	Band width	Tune-Up Limit	Meas. Power	Power Drift	Test Position	MPR	RB Size	RB Offset	Duty Cycle	Ant. State	Distance	Meas. SAR	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(MHz)	(dBm)	(dBm)	(dB)		(dB)					(mm)	(W/kg)		(W/kg)	
3 930.00	662000	DFT-s OFDM QPSK	SUB2	100	18.0	17.60	-0.14	Rear	0	1	271	1:1	-	10	0.527	1.096	0.578	-
3 750.00	650000	DFT-s OFDM QPSK	SUB2	100	18.0	17.06	-0.17	Rear	0	1	271	1:1	-	10	0.584	1.242	0.725	-
3 930.00	662000	DFT-s OFDM QPSK	SUB2	100	18.0	17.61	-0.15	Rear	0	135	69	1:1	-	10	0.553	1.094	0.605	-
3 750.00	650000	DFT-s OFDM QPSK	SUB2	100	18.0	17.00	-0.14	Rear	0	135	69	1:1	-	10	0.479	1.259	0.603	-
3 930.00	662000	DFT-s OFDM QPSK	SUB2	100	18.0	17.11	-0.16	Rear	0	270	0	1:1	-	10	0.540	1.227	0.663	-
3 930.00	662000	DFT-s QPSK	SUB2	100	18.0	17.60	0.00	Front	0	1	271	1:1	-	10	0.076	1.096	0.083	-
3 930.00	662000	DFT-s QPSK	SUB2	100	18.0	17.61	0.11	Front	0	135	138	1:1	-	10	0.091	1.094	0.100	-
3 930.00	662000	DFT-s QPSK	SUB2	100	18.0	17.60	0.12	Left	0	1	271	1:1	-	10	0.061	1.096	0.067	-
3 930.00	662000	DFT-s QPSK	SUB2	100	18.0	17.61	0.17	Left	0	135	138	1:1	-	10	0.071	1.094	0.078	-
3 930.00	662000	DFT-s QPSK	SUB2	100	18.0	17.60	0.05	Top	0	1	271	1:1	-	10	0.101	1.096	0.111	-
3 930.00	662000	DFT-s QPSK	SUB2	100	18.0	17.61	-0.03	Top	0	135	138	1:1	-	10	0.118	1.094	0.129	-
3 930.00	662000	CP QPSK	SUB2	100	18.0	17.33	0.13	Rear	0	1	1	1:1	-	10	0.613	1.167	0.715	B16
3 750.00	650000	CP QPSK	SUB2	100	18.0	16.82	-0.11	Rear	0	1	1	1:1	-	10	0.390	1.312	0.512	-
3 500.01	633334	DFT-s OFDM QPSK	SUB2	100	18.0	17.62	0.00	Rear	0	135	69	1:1	-	10	0.286	1.091	0.312	-
3 930.00	662000	CW SRS #2	MAIN3	100	13.0	12.76	0.00	Rear	0	-	-	1:1	-	10	0.009	1.057	0.010	-
3 930.00	662000	CW SRS #2	MAIN3	100	13.0	12.76	-0.13	Front	0	-	-	1:1	-	10	0.011	1.057	0.012	-
3 930.00	662000	CW SRS #2	MAIN3	100	13.0	12.76	-0.09	Left	0	-	-	1:1	-	10	0.022	1.057	0.023	-
3 930.00	662000	CW SRS #2	MAIN3	100	13.0	12.76	0.00	Bottom	0	-	-	1:1	-	10	0.004	1.057	0.004	-
3 500.01	633334	CW SRS #2	MAIN3	100	13.0	12.06	0.12	Left	0	-	-	1:1	-	10	0.024	1.242	0.030	-
3 930.00	662000	CW SRS #3	SUB5	100	16.0	15.77	-0.08	Rear	0	-	-	1:1	-	10	0.031	1.054	0.033	-
3 930.00	662000	CW SRS #3	SUB5	100	16.0	15.77	-0.14	Front	0	-	-	1:1	-	10	0.052	1.054	0.055	-
3 930.00	662000	CW SRS #3	SUB5	100	16.0	15.77	0.19	Left	0	-	-	1:1	-	10	0.024	1.054	0.025	-
3 500.01	633334	CW SRS #3	SUB5	100	16.0	14.33	0.00	Front	0	-	-	1:1	-	10	0.048	1.469	0.071	-
3 930.00	662000	CW SRS #4	MAIN4	100	13.0	12.36	0.19	Rear	0	-	-	1:1	-	10	0.076	1.159	0.088	-
3 930.00	662000	CW SRS #4	MAIN4	100	13.0	12.36	0.00	Front	0	-	-	1:1	-	10	0	1.159	0.000	-
3 930.00	662000	CW SRS #4	MAIN4	100	13.0	12.36	-0.14	Right	0	-	-	1:1	-	10	0.003	1.159	0.003	-
3 930.00	662000	CW SRS #4	MAIN4	100	13.0	12.36	0.00	Bottom	0	-	-	1:1	-	10	0.004	1.159	0.005	-
3 500.01	633334	CW SRS #4	MAIN4	100	13.0	12.20	0.14	Rear	0	-	-	1:1	-	10	0.064	1.202	0.077	-
ANSI/ IEEE C95.1 - 2005- Safety Limit Spatial Peak Uncontrolled Exposure/ General Population									Body 1.6 W/kg Averaged over 1 gram									

DTS Body Worn/Hotspot SAR																	
Frequency		Mode	Ant.	Band width (MHz)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	Duty Cycle	Distance (mm)	Area Scan Peak SAR (W/kg)	Meas. SAR (W/kg)	Scaling Factor	Scaling Factor (Duty)	Reported SAR (W/kg)	Plot No.
MHz	Ch.																
2 462	11	802.11b	SUB4	20	1	18.0	17.61	-0.11	Rear	98.7	10	0.239	0.204	1.094	1.013	0.226	-
2 462	11	802.11b	SUB4	20	1	18.0	17.61	0.00	Front	98.7	10	0.208	0.169	1.094	1.013	0.187	-
2 462	11	802.11b	SUB4	20	1	18.0	17.61	-0.10	Left	98.7	10	0.381	0.296	1.094	1.013	0.328	-
2 462	11	802.11b	SUB4	20	1	18.0	17.61	-0.09	Top	98.7	10	0.185	0.145	1.094	1.013	0.161	-
2 437	6	802.11b	SUB6	20	1	18.0	17.43	0.02	Rear	98.7	10	0.657	0.551	1.140	1.013	0.636	B17
2 437	6	802.11b	SUB6	20	1	18.0	17.43	-0.11	Front	98.7	10	0.213	0.174	1.140	1.013	0.201	-
2 437	6	802.11b	SUB6	20	1	18.0	17.43	0.02	Right	98.7	10	0.088	0.060	1.140	1.013	0.069	-
2 437	6	802.11b	SUB6	20	1	18.0	17.43	0.18	Top	98.7	10	0.009	0.007	1.140	1.013	0.008	-
2 462	11	802.11b	SUB4+6	20	1	18.0	17.00	-0.11	Rear	98.7	10	0.474	0.387	1.259	1.013	0.494	-
2 462	11	802.11b	SUB4+6	20	1	18.0	17.00	-0.05	Front	98.7	10	0.297	0.239	1.259	1.013	0.305	-
2 462	11	802.11b	SUB4+6	20	1	18.0	17.00	-0.03	Left	98.7	10	0.417	0.331	1.259	1.013	0.422	-
2 462	11	802.11b	SUB4+6	20	1	18.0	17.00	0.04	Right	98.7	10	0.105	0.083	1.259	1.013	0.106	-
2 462	11	802.11b	SUB4+6	20	1	18.0	17.00	-0.13	Top	98.7	10	0.156	0.122	1.259	1.013	0.156	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population										Body 1.6 W/kg Averaged over 1 gram							

5 GHz WLAN BodyWorn/Hotspot SAR

Frequency		Mode	Ant.	Band width (MHz)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	Duty Cycle	Distance (mm)	Area Scan Peak SAR (W/kg)	Meas. SAR (W/kg)	Scaling Factor	Scaling Factor (Duty)	Reported SAR (W/kg)	Plot No.
MHz	Ch.																
5 280	56	802.11a	SUB4	20	6	17.0	16.30	0.00	Rear	93.7	10	0.822	0.394	1.175	1.067	0.494	-
5 280	56	802.11a	SUB4	20	6	17.0	16.30	0.00	Front	93.7	10	0.331	0.157	1.175	1.067	0.197	-
5 500	100	802.11a	SUB4	20	6	17.0	15.37	0.00	Rear	93.7	10	0.612	0.261	1.455	1.067	0.405	-
5 500	100	802.11a	SUB4	20	6	17.0	15.37	0.00	Front	93.7	10	0.266	0.107	1.455	1.067	0.166	-
5 745	149	802.11a	SUB4	20	6	17.0	15.37	0.00	Rear	93.7	10	0.767	0.314	1.455	1.067	0.488	-
5 745	149	802.11a	SUB4	20	6	17.0	15.37	0.00	Front	93.7	10	0.251	0.109	1.455	1.067	0.169	-
5 745	149	802.11a	SUB4	20	6	17.0	15.37	0.17	Left	93.7	10	0.835	0.351	1.455	1.067	0.545	-
5 745	149	802.11a	SUB4	20	6	17.0	15.37	0.19	Top	93.7	10	0.268	0.091	1.455	1.067	0.141	-
5 885	177	802.11a	SUB4	20	6	17.0	15.71	0.00	Rear	93.7	10	0.842	0.355	1.346	1.067	0.510	-
5 885	177	802.11a	SUB4	20	6	17.0	15.71	0.00	Front	93.7	10	0.264	0.085	1.346	1.067	0.122	-
5 260	52	802.11a	SUB1	20	6	17.0	15.26	0.00	Rear	93.7	10	0.638	0.272	1.493	1.067	0.433	-
5 260	52	802.11a	SUB1	20	6	17.0	15.26	0.00	Front	93.7	10	0.135	0.036	1.493	1.067	0.057	-
5 720	144	802.11a	SUB1	20	6	17.0	15.09	0.00	Rear	93.7	10	0.533	0.222	1.552	1.067	0.368	-
5 720	144	802.11a	SUB1	20	6	17.0	15.09	0.00	Front	93.7	10	0.0956	0.043	1.552	1.067	0.071	-
5 825	165	802.11a	SUB1	20	6	17.0	15.08	0.00	Rear	93.7	10	0.583	0.229	1.556	1.067	0.380	-
5 825	165	802.11a	SUB1	20	6	17.0	15.08	0.00	Front	93.7	10	0.153	0.038	1.556	1.067	0.063	-
5 825	165	802.11a	SUB1	20	6	17.0	15.08	0.17	Right	93.7	10	0.0762	0.031	1.556	1.067	0.051	-
5 825	165	802.11a	SUB1	20	6	17.0	15.08	0.13	Top	93.7	10	0.221	0.092	1.556	1.067	0.153	-
5 845	169	802.11a	SUB1	20	6	17.0	15.08	0.00	Rear	93.7	10	0.618	0.244	1.556	1.067	0.405	-
5 845	169	802.11a	SUB1	20	6	17.0	15.08	0.00	Front	93.7	10	0.093	0.040	1.556	1.067	0.066	-
5 280	56	802.11a	SUB4+1	20	6	17.0	15.24	0.00	Rear	93.7	10	0.837	0.358	1.500	1.067	0.573	-
5 280	56	802.11a	SUB4+1	20	6	17.0	15.24	0.00	Front	93.7	10	0.379	0.166	1.500	1.067	0.266	-
5 500	100	802.11a	SUB4+1	20	6	17.0	15.03	0.00	Rear	93.7	10	0.938	0.39	1.574	1.067	0.655	-
5 500	100	802.11a	SUB4+1	20	6	17.0	15.03	0.00	Front	93.7	10	0.238	0.112	1.574	1.067	0.188	-
5 745	149	802.11a	SUB4+1	20	6	17.0	15.06	0.00	Rear	93.7	10	1	0.414	1.563	1.067	0.691	B18
5 745	149	802.11a	SUB4+1	20	6	17.0	15.06	0.00	Front	93.7	10	0.254	0.119	1.563	1.067	0.199	-
5 745	149	802.11a	SUB4+1	20	6	17.0	15.06	0.08	Left	93.7	10	0.838	0.339	1.563	1.067	0.565	-
5 745	149	802.11a	SUB4+1	20	6	17.0	15.06	0.15	Right	93.7	10	0.0742	0.037	1.563	1.067	0.062	-
5 745	149	802.11a	SUB4+1	20	6	17.0	15.06	0.16	Top	93.7	10	0.388	0.147	1.563	1.067	0.245	-
5 885	177	802.11a	SUB4+1	20	6	17.0	15.01	0.16	Rear	93.7	10	1.03	0.410	1.581	1.067	0.692	-
5 885	177	802.11a	SUB4+1	20	6	17.0	15.01	0.00	Front	93.7	10	0.212	0.093	1.581	1.067	0.157	-
ANSI/ IEEE C95.1 - 2005- Safety Limit										Body							
Spatial Peak										1.6 W/kg							
Uncontrolled Exposure/ General Population										Averaged over 1 gram							

6 GHz WLAN BodyWorn/Hotspot SAR																
Frequency		Mode	Ant.	Band width (MHz)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	Duty Cycle	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaling Factor (Duty)	Reported SAR (W/kg)	Plot No.
MHz	Ch.															
6 185	47	802.11ax	SUB4	160	MCS0	10.5	10.31	-0.15	Rear	100	10	0.050	1.045	1.000	0.052	-
6 185	47	802.11ax	SUB4	160	MCS0	10.5	10.31	0.11	Front	100	10	0.024	1.045	1.000	0.025	-
6 185	47	802.11ax	SUB4	160	MCS0	10.5	10.31	0.04	Left	100	10	0.101	1.045	1.000	0.106	-
6 185	47	802.11ax	SUB4	160	MCS0	10.5	10.31	0.06	Top	100	10	0.013	1.045	1.000	0.014	-
6 025	15	802.11ax	SUB4	160	MCS0	10.5	9.64	-0.05	Left	100	10	0.065	1.219	1.000	0.079	-
6 665	143	802.11ax	SUB4	160	MCS0	10.5	9.51	0.11	Left	100	10	0.126	1.256	1.000	0.158	B19
6 505	111	802.11ax	SUB4	160	MCS0	10.5	9.27	0.16	Rear	100	10	0.031	1.327	1.000	0.041	
6 505	111	802.11ax	SUB4	160	MCS0	10.5	9.27	0.19	Front	100	10	0.023	1.327	1.000	0.031	
6 025	15	802.11ax	SUB1	160	MCS0	10.5	10.30	-0.14	Rear	100	10	0.078	1.047	1.000	0.082	-
6 025	15	802.11ax	SUB1	160	MCS0	10.5	10.30	0.11	Front	100	10	0	1.047	1.000	0.000	-
6 025	15	802.11ax	SUB1	160	MCS0	10.5	10.30	0.00	Right	100	10	0	1.047	1.000	0.000	-
6 025	15	802.11ax	SUB1	160	MCS0	10.5	10.30	0.13	Top	100	10	0.028	1.047	1.000	0.029	-
6 185	47	802.11ax	SUB1	160	MCS0	10.5	10.13	0.15	Rear	100	10	0.070	1.089	1.000	0.076	-
6 665	143	802.11ax	SUB1	160	MCS0	10.5	10.00	0.17	Rear	100	10	0.008	1.122	1.000	0.009	-
6 985	207	802.11ax	SUB1	160	MCS0	10.5	9.67	0.14	Rear	100	10	0.004	1.211	1.000	0.005	-
6 985	207	802.11ax	SUB1	160	MCS0	10.5	9.67	0.19	Front	100	10	0.002	1.211	1.000	0.002	-
6 185	47	802.11ax	SUB4+1	160	MCS0	10.5	10.13	0.01	Rear	100	10	0.086	1.089	1.000	0.094	-
6 185	47	802.11ax	SUB4+1	160	MCS0	10.5	10.13	-0.05	Front	100	10	0.031	1.089	1.000	0.034	-
6 185	47	802.11ax	SUB4+1	160	MCS0	10.5	10.13	0.09	Left	100	10	0.073	1.089	1.000	0.079	-
6 185	47	802.11ax	SUB4+1	160	MCS0	10.5	10.13	0.15	Right	100	10	0.002	1.089	1.000	0.002	-
6 185	47	802.11ax	SUB4+1	160	MCS0	10.5	10.13	-0.15	Top	100	10	0.032	1.089	1.000	0.035	-
6 025	15	802.11ax	SUB4+1	160	MCS0	10.5	9.64	-0.17	Rear	100	10	0.070	1.219	1.000	0.085	-
6 665	143	802.11ax	SUB4+1	160	MCS0	10.5	9.51	0.18	Rear	100	10	0.052	1.256	1.000	0.065	-
6 505	111	802.11ax	SUB4+1	160	MCS0	10.5	9.27	-0.14	Rear	100	10	0.056	1.327	1.000	0.074	
6 505	111	802.11ax	SUB4+1	160	MCS0	10.5	9.27	0.11	Front	100	10	0.005	1.327	1.000	0.007	
ANSI/ IEEE C95.1 - 2005- Safety Limit Spatial Peak Uncontrolled Exposure/ General Population										Body 1.6 W/kg Averaged over 1 gram						

DSS Tethering SAR													
Frequency		Mode	Ant.	Tune-Up Limit	Meas. Power	Power Drift	Test Position	Distance	Meas. SAR	Scaling Factor	Scaling Factor	Scaled SAR	Plot No.
MHz	Ch.			(dBm)	(dBm)	(dB)		(mm)	(W/kg)		(Duty)	(W/kg)	
2 441	39	Bluetooth DH5	SUB4	18.0	17.98	-0.01	Rear	10	0.198	1.005	1.027	0.204	-
2 441	39	Bluetooth DH5	SUB4	18.0	17.98	-0.06	Front	10	0.188	1.005	1.027	0.194	-
2 441	39	Bluetooth DH5	SUB4	18.0	17.98	0.03	Left	10	0.326	1.005	1.027	0.336	B21
2 441	39	Bluetooth DH5	SUB4	18.0	17.98	-0.01	Top	10	0.140	1.005	1.027	0.144	-
2 441	39	Bluetooth DH5	SUB6	17.0	16.16	-0.12	Rear	10	0.288	1.213	1.027	0.296	-
2 441	39	Bluetooth DH5	SUB6	17.0	16.16	-0.12	Front	10	0.141	1.213	1.027	0.145	-
2 441	39	Bluetooth DH5	SUB6	17.0	16.16	-0.17	Right	10	0.040	1.213	1.027	0.041	-
2 441	39	Bluetooth DH5	SUB6	17.0	16.16	-0.18	Top	10	0.003	1.213	1.027	0.003	-
2 440	17	Bluetooth LE 1M(255k)	SUB4	18.0	17.07	-0.16	Rear	10	0.208	1.239	1.016	0.262	-
2 440	17	Bluetooth LE 1M(255k)	SUB4	18.0	17.07	0.17	Front	10	0.197	1.239	1.016	0.248	-
2 440	17	Bluetooth LE 1M(255k)	SUB4	18.0	17.07	-0.04	Left	10	0.311	1.239	1.016	0.391	-
2 440	17	Bluetooth LE 1M(255k)	SUB4	18.0	17.07	0.03	Top	10	0.118	1.239	1.016	0.149	-
2 402	37	Bluetooth LE 1M(255k)	SUB6	17.0	15.42	-0.11	Rear	10	0.254	1.439	1.016	0.371	-
2 402	37	Bluetooth LE 1M(255k)	SUB6	17.0	15.42	0.04	Front	10	0.088	1.439	1.016	0.129	-
2 402	37	Bluetooth LE 1M(255k)	SUB6	17.0	15.42	-0.08	Right	10	0.029	1.439	1.016	0.042	-
2 402	37	Bluetooth LE 1M(255k)	SUB6	17.0	15.42	-0.11	Top	10	0.002	1.439	1.016	0.003	-
ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population								Body 1.6 W/kg Averaged over 1 gram					

13.1.3 Phablet SAR Measurement Considerations

Per FCC KDB 648474 D04v01r03, this device is considered a "Phablet" since the diagonal dimension is greater than 160 mm and less than 200 mm. Therefore, extremity SAR tests are required when wireless router mode does not apply or if wireless router 1g SAR > 1.2 W/kg. When hotspot mode applies, 10g SAR required only for the surfaces and edges with hotspot mode scaled to the maximum output power (including tolerance) is 1g SAR > 1.2 W/kg.

13.1.4 Phablet SAR Measurement Results

5 GHz WLAN Phablet SAR_10g																	
Frequency		Mode	Ant.	Band width (MHz)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	Duty Cycle	Distance (mm)	Area Scan Peak SAR (W/kg)	Meas. SAR (W/kg)	Scaling Factor	Scaling Factor (Duty)	Scaled SAR (W/kg)	Plot No.
MHz	Ch.																
5 280	56	802.11a	SUB4	20	6	17.0	16.30	0.00	Rear	93.7	0	3.900	0.589	1.175	1.067	0.739	-
5 280	56	802.11a	SUB4	20	6	17.0	16.30	0.00	Front	93.7	0	8.110	0.648	1.175	1.067	0.813	-
5 280	56	802.11a	SUB4	20	6	17.0	16.30	-0.05	Left	93.7	0	19.400	1.280	1.175	1.067	1.605	-
5 280	56	802.11a	SUB4	20	6	17.0	16.30	-0.08	Top	93.7	0	4.830	0.387	1.175	1.067	0.485	-
5 500	100	802.11a	SUB4	20	6	17.0	15.37	0.00	Rear	93.7	0	6.96	0.569	1.455	1.067	0.884	-
5 500	100	802.11a	SUB4	20	6	17.0	15.37	0.00	Front	93.7	0	2.74	0.362	1.455	1.067	0.562	-
5 500	100	802.11a	SUB4	20	6	17.0	15.37	0.12	Left	93.7	0	23.8	1.44	1.455	1.067	2.236	-
5 600	120	802.11a	SUB4	20	6	17.0	15.30	0.11	Left	93.7	0	25.3	1.56	1.479	1.067	2.462	-
5 500	100	802.11a	SUB4	20	6	17.0	15.37	0.18	Top	93.7	0	2.74	0.181	1.455	1.067	0.281	-
5 885	177	802.11a	SUB4	20	6	17.0	15.71	0.00	Rear	93.7	0	5.5	0.654	1.346	1.067	0.939	-
5 885	177	802.11a	SUB4	20	6	17.0	15.71	0.00	Front	93.7	0	6.9	0.439	1.346	1.067	0.631	-
5 885	177	802.11a	SUB4	20	6	17.0	15.71	0.14	Left	93.7	0	18.7	1.21	1.346	1.067	1.738	-
5 885	177	802.11a	SUB4	20	6	17.0	15.71	0.00	Top	93.7	0	2.55	0.192	1.346	1.067	0.276	-
5 260	52	802.11a	SUB1	20	6	17.0	15.26	0.00	Rear	93.7	0	3.850	0.521	1.493	1.067	0.830	-
5 260	52	802.11a	SUB1	20	6	17.0	15.26	0.00	Front	93.7	0	1.180	0.133	1.493	1.067	0.212	-
5 260	52	802.11a	SUB1	20	6	17.0	15.26	0.00	Right	93.7	0	0.514	0.046	1.493	1.067	0.073	-
5 260	52	802.11a	SUB1	20	6	17.0	15.26	0.05	Top	93.7	0	0.988	0.113	1.493	1.067	0.180	-
5 720	144	802.11a	SUB1	20	6	17.0	15.09	0.00	Rear	93.7	0	4	0.512	1.552	1.067	0.848	-
5 720	144	802.11a	SUB1	20	6	17.0	15.09	0.00	Front	93.7	0	1.48	0.172	1.552	1.067	0.285	-
5 720	144	802.11a	SUB1	20	6	17.0	15.09	0.00	Right	93.7	0	1.33	0.113	1.552	1.067	0.187	-
5 720	144	802.11a	SUB1	20	6	17.0	15.09	-0.01	Top	93.7	0	2.57	0.187	1.552	1.067	0.310	-
5 855	171	802.11a	SUB1	20	6	17.0	15.08	0.00	Rear	93.7	0	7.08	0.675	1.556	1.067	1.121	-
5 855	171	802.11a	SUB1	20	6	17.0	15.08	0.00	Front	93.7	0	1.18	0.144	1.556	1.067	0.239	-
5 855	171	802.11a	SUB1	20	6	17.0	15.08	0.00	Right	93.7	0	0.875	0.082	1.556	1.067	0.136	-
5 855	171	802.11a	SUB1	20	6	17.0	15.08	0.12	Top	93.7	0	3.11	0.174	1.556	1.067	0.289	-
5 280	56	802.11a	SUB4+1	20	6	17.0	15.24	0.00	Rear	93.7	0	5.320	0.622	1.500	1.067	0.996	-
5 280	56	802.11a	SUB4+1	20	6	17.0	15.24	0.00	Front	93.7	0	7.820	0.695	1.500	1.067	1.113	-
5 280	56	802.11a	SUB4+1	20	6	17.0	15.24	0.16	Left	93.7	0	14.500	1.230	1.500	1.067	1.969	-
5 280	56	802.11a	SUB4+1	20	6	17.0	15.24	-0.18	Right	93.7	0	0.526	0.059	1.500	1.067	0.094	-
5 280	56	802.11a	SUB4+1	20	6	17.0	15.24	-0.11	Top	93.7	0	2.720	0.429	1.500	1.067	0.687	-
5 500	100	802.11a	SUB4+1	20	6	17.0	15.03	0.00	Rear	93.7	0	4.46	0.468	1.574	1.067	0.786	-
5 500	100	802.11a	SUB4+1	20	6	17.0	15.03	0.00	Front	93.7	0	3.84	0.338	1.574	1.067	0.568	-
5 500	100	802.11a	SUB4+1	20	6	17.0	15.03	-0.19	Left	93.7	0	23.0	1.44	1.574	1.067	2.419	-
5 600	120	802.11a	SUB4+1	20	6	17.0	15.04	0.13	Left	93.7	0	23.0	1.55	1.570	1.067	2.597	C1
5 500	100	802.11a	SUB4+1	20	6	17.0	15.03	0.00	Right	93.7	0	1.23	0.102	1.574	1.067	0.171	-
5 500	100	802.11a	SUB4+1	20	6	17.0	15.03	0.18	Top	93.7	0	2.53	0.174	1.574	1.067	0.292	-
5 885	177	802.11a	SUB4+1	20	6	17.0	15.01	0.00	Rear	93.7	0	5.25	0.581	1.581	1.067	0.980	-
5 885	177	802.11a	SUB4+1	20	6	17.0	15.01	0.00	Front	93.7	0	6.04	0.385	1.581	1.067	0.650	-
5 885	177	802.11a	SUB4+1	20	6	17.0	15.01	0.18	Left	93.7	0	19.2	1.16	1.581	1.067	1.957	-
5 885	177	802.11a	SUB4+1	20	6	17.0	15.01	0.14	Right	93.7	0	0.841	0.078	1.581	1.067	0.132	-
5 885	177	802.11a	SUB4+1	20	6	17.0	15.01	-0.16	Top	93.7	0	2.57	0.205	1.581	1.067	0.346	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population										Hand 4.0 W/kg Averaged over 10 gram							

6 GHz WLAN Phablet SAR _10g																
Frequency		Mode	Ant.	Band width (MHz)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	Duty Cycle	Distance (mm)	Meas. SAR (W/kg)	Scaling Factor	Scaling Factor (Duty)	Scaled SAR (W/kg)	Plot No.
Mhz	Ch.															
6 505	111	802.11ax	SUB4	160	MCS0	10.5	9.27	0.04	Rear	100	0	0.145	1.327	1.000	0.192	-
6 505	111	802.11ax	SUB4	160	MCS0	10.5	9.27	0.07	Front	100	0	0.173	1.327	1.000	0.230	-
6 505	111	802.11ax	SUB4	160	MCS0	10.5	9.27	-0.05	Left	100	0	0.372	1.327	1.000	0.494	-
6 505	111	802.11ax	SUB4	160	MCS0	10.5	9.27	0.09	Top	100	0	0.049	1.327	1.000	0.065	-
6 985	207	802.11ax	SUB4	160	MCS0	10.5	8.79	-0.11	Left	100	0	0.244	1.483	1.000	0.362	-
6 985	207	802.11ax	SUB1	160	MCS0	10.5	9.67	0.16	Rear	100	0	0.071	1.211	1.000	0.086	-
6 985	207	802.11ax	SUB1	160	MCS0	10.5	9.67	-0.15	Front	100	0	0.038	1.211	1.000	0.046	-
6 985	207	802.11ax	SUB1	160	MCS0	10.5	9.67	0.00	Right	100	0	0	1.211	1.000	0.000	-
6 985	207	802.11ax	SUB1	160	MCS0	10.5	9.67	0.00	Top	100	0	0.003	1.211	1.000	0.004	-
6 505	111	802.11ax	SUB1	160	MCS0	10.5	9.60	0.11	Rear	100	0	0.079	1.230	1.000	0.097	-
6 505	111	802.11ax	SUB4+1	160	MCS0	10.5	9.27	-0.04	Rear	100	0	0.142	1.327	1.000	0.188	
6 505	111	802.11ax	SUB4+1	160	MCS0	10.5	9.27	0.14	Front	100	0	0.075	1.327	1.000	0.100	
6 505	111	802.11ax	SUB4+1	160	MCS0	10.5	9.27	0.19	Left	100	0	0.396	1.327	1.000	0.525	C2
6 505	111	802.11ax	SUB4+1	160	MCS0	10.5	9.27	-0.19	Right	100	0	0.006	1.327	1.000	0.008	
6 505	111	802.11ax	SUB4+1	160	MCS0	10.5	9.27	0.15	Top	100	0	0.064	1.327	1.000	0.085	
6 985	207	802.11ax	SUB4+1	160	MCS0	10.5	8.79	0.13	Left	100	0	0.268	1.483	1.000	0.397	
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population										Hand 4.0 W/kg Averaged over 10 gram						

NFC Phablet SAR _10g							
Frequency	Mode	Data Rate	Power Drift	Test Position	Distance	Meas. SAR	Plot No.
Mhz		(Kbps)	(dB)		(mm)	(W/kg)	
13.56	NFC (Type A)	106	0.17	Rear	0	0.016	-
13.56	NFC (Type B)	106	0.17	Rear	0	0.018	C3
13.56	NFC (Type F)	106	-0.13	Rear	0	0.000	-
13.56	NFC (Type B)	106	-0.14	Front	0	0.000	-
13.56	NFC (Type B)	106	0.00	Left	0	0.000	-
13.56	NFC (Type B)	106	0.00	Right	0	0.000	-
13.56	NFC (Type B)	106	0.15	Top	0	0.000	-
ANSI/ IEEE C95.1 - 2005 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population			Hand 4.0 W/kg Averaged over 10 gram				

13.2 Absorbed Power Density Results

13.2.1 Head Absorbed Power Density Results

6 GHz WLAN Absorbed Power Density											
Frequency		Mode	Ant. No.	Band width (MHz)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	Meas. APD 4 cm ² (mW/cm ²)	Plot No.
MHz	Ch.										
6 185	47	802.11ax	SUB4	160	MCS0	10.5	10.31	0.11	Left Cheek	0.0158	-
6 185	47	802.11ax	SUB4	160	MCS0	10.5	10.31	0.10	Left Tilt	0.0088	-
6 185	47	802.11ax	SUB4	160	MCS0	10.5	10.31	-0.18	Right Cheek	0.0935	-
6 185	47	802.11ax	SUB4	160	MCS0	10.5	10.31	0.11	Right Tilt	0.0503	-
6 025	15	802.11ax	SUB4	160	MCS0	10.5	9.64	-0.16	Right Cheek	0.0736	-
6 505	111	802.11ax	SUB4	160	MCS0	10.5	9.27	0.12	Right Cheek	0.114	-
6 665	143	802.11ax	SUB4	160	MCS0	10.5	9.51	0.12	Right Cheek	0.125	-
6 985	207	802.11ax	SUB4	160	MCS0	10.5	8.79	0.12	Right Cheek	0.0771	-
6 025	15	802.11ax	SUB1	160	MCS0	10.5	10.30	-0.16	Left Cheek	0.0226	-
6 025	15	802.11ax	SUB1	160	MCS0	10.5	10.30	-0.06	Left Tilt	0.0256	-
6 025	15	802.11ax	SUB1	160	MCS0	10.5	10.30	0.19	Right Cheek	0.0092	-
6 025	15	802.11ax	SUB1	160	MCS0	10.5	10.30	-0.19	Right Tilt	0.0171	-
6 185	47	802.11ax	SUB1	160	MCS0	10.5	10.13	-0.15	Left Tilt	0.0113	-
6 505	111	802.11ax	SUB1	160	MCS0	10.5	9.60	0.19	Left Tilt	0.0159	-
6 665	143	802.11ax	SUB1	160	MCS0	10.5	10.00	-0.02	Left Tilt	0.0424	-
6 985	207	802.11ax	SUB1	160	MCS0	10.5	9.67	-0.11	Left Tilt	0.0237	-
6 185	47	802.11ax	SUB4+1	160	MCS0	10.5	10.13	-0.12	Left Cheek	0.0229	
6 185	47	802.11ax	SUB4+1	160	MCS0	10.5	10.13	0.19	Left Tilt	0.028	
6 185	47	802.11ax	SUB4+1	160	MCS0	10.5	10.13	-0.02	Right Cheek	0.094	
6 185	47	802.11ax	SUB4+1	160	MCS0	10.5	10.13	-0.07	Right Tilt	0.0472	
6 025	15	802.11ax	SUB4+1	160	MCS0	10.5	9.64	0.13	Right Cheek	0.0907	
6 505	111	802.11ax	SUB4+1	160	MCS0	10.5	9.27	-0.05	Right Cheek	0.137	A19
6 665	143	802.11ax	SUB4+1	160	MCS0	10.5	9.51	-0.12	Right Cheek	0.134	
6 985	207	802.11ax	SUB4+1	160	MCS0	10.5	8.79	0.09	Right Cheek	0.0837	

13.2.2 BodyWorn/Hotspot Absorbed Power Density Results

6 GHz WLAN BodyWorn/Hotspot Absorbed Power Density												
Frequency		Mode	Ant. No.	Band width (MHz)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	Distance (mm)	Meas. APD 4 cm ² (mW/cm ²)	Plot No.
MHz	Ch.											
6 185	47	802.11ax	SUB4	160	MCS0	10.5	10.31	-0.15	Rear	10	0.040	-
6 185	47	802.11ax	SUB4	160	MCS0	10.5	10.31	0.11	Front	10	0.0179	-
6 185	47	802.11ax	SUB4	160	MCS0	10.5	10.31	0.04	Left	10	0.074	-
6 185	47	802.11ax	SUB4	160	MCS0	10.5	10.31	0.06	Top	10	0.0117	-
6 025	15	802.11ax	SUB4	160	MCS0	10.5	9.64	-0.05	Left	10	0.0503	-
6 665	143	802.11ax	SUB4	160	MCS0	10.5	9.51	0.11	Left	10	0.0959	B19
6 505	111	802.11ax	SUB4	160	MCS0	10.5	9.27	0.16	Rear	10	0.0223	-
6 505	111	802.11ax	SUB4	160	MCS0	10.5	9.27	0.19	Front	10	0.0182	-
6 025	15	802.11ax	SUB1	160	MCS0	10.5	10.30	-0.14	Rear	10	0.0612	-
6 025	15	802.11ax	SUB1	160	MCS0	10.5	10.30	0.11	Front	10	0.0002	-
6 025	15	802.11ax	SUB1	160	MCS0	10.5	10.30	0.00	Right	10	0.0013	-
6 025	15	802.11ax	SUB1	160	MCS0	10.5	10.30	0.13	Top	10	0.0222	-
6 185	47	802.11ax	SUB1	160	MCS0	10.5	10.13	0.15	Rear	10	0.0551	-
6 665	143	802.11ax	SUB1	160	MCS0	10.5	10.00	0.17	Rear	10	0.0038	-
6 985	207	802.11ax	SUB1	160	MCS0	10.5	9.67	0.14	Rear	10	0.0029	-
6 985	207	802.11ax	SUB1	160	MCS0	10.5	9.67	0.19	Front	10	0.0015	-
6 185	47	802.11ax	SUB4+1	160	MCS0	10.5	10.13	0.01	Rear	10	0.0672	-
6 185	47	802.11ax	SUB4+1	160	MCS0	10.5	10.13	-0.05	Front	10	0.0215	-
6 185	47	802.11ax	SUB4+1	160	MCS0	10.5	10.13	0.09	Left	10	0.0573	-
6 185	47	802.11ax	SUB4+1	160	MCS0	10.5	10.13	0.15	Right	10	0.0013	-
6 185	47	802.11ax	SUB4+1	160	MCS0	10.5	10.13	-0.15	Top	10	0.0268	-
6 025	15	802.11ax	SUB4+1	160	MCS0	10.5	9.64	-0.17	Rear	10	0.0580	-
6 665	143	802.11ax	SUB4+1	160	MCS0	10.5	9.51	0.18	Rear	10	0.0405	-
6 505	111	802.11ax	SUB4+1	160	MCS0	10.5	9.27	-0.14	Rear	10	0.0433	-
6 505	111	802.11ax	SUB4+1	160	MCS0	10.5	9.27	0.11	Front	10	0.0045	-

13.2.3 Phablet Absorbed Power Density Results

6 GHz WLAN Absorbed Power Density Phablet												
Frequency		Mode	Ant. No.	Band width (MHz)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Test Position	Distance (mm)	Meas. APD 4 cm ² (mW/cm ²)	Plot No.
MHz	Ch.											
6 505	111	802.11ax	SUB4	160	MCS0	10.5	9.27	0.04	Rear	0	0.345	-
6 505	111	802.11ax	SUB4	160	MCS0	10.5	9.27	0.07	Front	0	0.417	-
6 505	111	802.11ax	SUB4	160	MCS0	10.5	9.27	-0.05	Left	0	0.905	-
6 505	111	802.11ax	SUB4	160	MCS0	10.5	9.27	0.09	Top	0	0.118	-
6 985	207	802.11ax	SUB4	160	MCS0	10.5	8.79	-0.11	Left	0	0.597	-
6 985	207	802.11ax	SUB1	160	MCS0	10.5	9.67	0.16	Rear	0	0.170	-
6 985	207	802.11ax	SUB1	160	MCS0	10.5	9.67	-0.15	Front	0	0.0941	-
6 985	207	802.11ax	SUB1	160	MCS0	10.5	9.67	0.00	Right	0	0.0022	-
6 985	207	802.11ax	SUB1	160	MCS0	10.5	9.67	0.00	Top	0	0.0079	-
6 505	111	802.11ax	SUB1	160	MCS0	10.5	9.60	0.11	Rear	0	0.190	-
6 505	111	802.11ax	SUB4+1	160	MCS0	10.5	9.27	-0.04	Rear	0	0.334	-
6 505	111	802.11ax	SUB4+1	160	MCS0	10.5	9.27	0.14	Front	0	0.175	-
6 505	111	802.11ax	SUB4+1	160	MCS0	10.5	9.27	0.19	Left	0	0.968	C2
6 505	111	802.11ax	SUB4+1	160	MCS0	10.5	9.27	-0.19	Right	0	0.0139	-
6 505	111	802.11ax	SUB4+1	160	MCS0	10.5	9.27	0.15	Top	0	0.151	-
6 985	207	802.11ax	SUB4+1	160	MCS0	10.5	8.79	0.13	Left	0	0.663	-

13.3 SAR Test Notes

General Notes:

1. The test data reported are the worst-case SAR values according to test procedures specified in IEEE 1528-2013, FCC KDB Procedure.
2. Batteries are fully charged at the beginning of the SAR measurements. A standard battery was used for all SAR measurements.
3. Liquid tissue depth was at least 15.0 cm for all frequencies.
4. The manufacturer has confirmed that the device(s) tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units.
5. SAR results were scaled to the maximum allowed power to demonstrate compliance per FCC KDB 447498 D01v06.
6. Device was tested using a fixed spacing for body-worn accessory testing. A separation distance of 10 mm was considered because the manufacturer has determined that there will be body-worn accessories available in the marketplace for users to support this separation distance.
7. Per FCC KDB 648474 D04v01r03, SAR was evaluated without a headset connected to the device. Since the standalone reported SAR was 1.2 W/kg, no additional SAR evaluation using a headset cable were required.
8. Per KDB 648474 D04v01r03, this device is considered a "Phablet" since the diagonal dimension is > 160 mm and < 200 mm. When hotspot mode applies, extremity SAR is required only for the surfaces and edges with hotspot mode scaled to the maximum output power (with tolerance) is 1 g SAR > 1.2 W/kg.
9. Per FCC KDB 865664 D01v01r04, variability SAR measurement were performed when the measured SAR results for a frequency Band were greater than or equal to 0.8 W/kg for 1g SAR and >2 for 10g SAR Please see Section 15 for variability analysis.
10. This device utilizes power reduction for some wireless mode and technologies, as outlined in sec. 4 The maximum output power allowed for each transmitter and exposure condition was evaluated for SAR compliance based on expected use conditions and simultaneous scenarios.
11. During SAR testing for the Hotspot conditions per KDB 941225 D06v02r01, the actual portable hotspot operation (with actual simultaneous transmission of a transmitter with WiFi) was not activated.
12. Per FCC guidance SAR was performed using 6.5 GHz SAR probe calibration factors. Per October 2020 TCBC Workshop notes, 5 channels were tested. Absorbed power density(APD) using a 4 cm² averaging area is reported based on SAR measurements.

GSM/GPRS Test Notes:

1. This EUT'S GSM and GPRS device class is B.
2. This device supports GPRS VOIP in the head and the body-worn configurations therefore GPRS was additionally evaluated for head and body-worn compliance.
3. Justification for reduced test configurations per KDB 941225 D01v03r01: The source-based time-averaged output power was evaluated for all multi-slot operations. The multi-slot configuration with the highest frame averaged output power including tolerance was evaluated for SAR.
4. Per FCC KDB 447498 D04v01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is 0.8 W/kg then testing at the other channels is not required for such test configuration(s). When the maximum output power variation across the required test channels is 1/2 dB, instead of the middle channel, the highest output power channel must be used.

UMTS Notes:

1. The 12.2 kbps RMC mode is the primary mode per KDB 941225 D01v03r01.
2. UMTS SAR was tested under RMC 12.2 kbps with HSPA inactive per KDB publication 941225 D01v03r01. AMR and HSPA SAR was not required per the 3G Test Reduction Procedure in KDB Publication 941225 D01v03r01.
3. Per FCC KDB 447498 D01v06, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is 0.8 W/kg then testing at the other channels is not required for such test configuration(s). When the maximum output power variation across the channel highest output power channel was used.

LTE Notes:

1. LTE Considerations: LTE test configurations are determined according to SAR Evaluation Consideration for LTE Devices in FCC KDB 941225 D05v02r05.
2. According to FCC KDB 941225 D05v02r05:
When the reported SAR is 0.8 W/kg, testing of the 100% RB allocation and required test channels is not required. Otherwise, SAR is required for the remaining required test channels using the 1RB, 50%RB and 100%RB allocation with highest output power for that channel.
Only one channel, and as reported SAR values for 1RB allocation and 50%RB allocation were less than 1.45W/Kg only the highest power RB offset for each allocation was required.
3. MPR is permanently implemented for this device by the manufacturer. The specific manufacturer target MPR is indicated alongside the SAR results. MPR is enabled for this device, according to target MPR is indicated alongside the SAR results.
4. When Power reduction is applied, MPR is 0 for some modes.
5. A-MPR was disabled for all SAR tests by setting NS=01 on the base station simulator.
6. Per FCC KDB Publication 447498 D01v06, if the reported (scaled) LTE TDD Band 41 SAR measured at the highest output power channel for each test configuration is 0.6 W/kg then testing at the other channels is not required for such test configurations.
7. TDD LTE (Power Class 3) was tested using UL-DL configuration 0 with 6 UL sub frames and 2S sub frames using extended cyclic prefix only and special sub frame configuration 6. SAR tests were performed at maximum output power and worst-case transmission duty factor in extended cyclic prefix. Per 3GPP 36.211 Sec. 4, the duty factor using extended cyclic prefix is 0.633(cf=1.58).
8. Per KDB 941225 D05Av01r02, SAR for LTE Carrier Aggregation operations was not needed because the maximum average output power in LTE CA mode was not > 0.25 dB higher than the maximum output power when downlink CA was not activated.
9. This device supports Power Class 2 and Power Class 3 operations for LTE Band 41. The Highest available duty cycle for Power Class 2 operations is 43.3% using UL-DL configuration 1. Per May TCB Workshop notes, all SAR tests were performed using Power Class 3. SAR with power class 2 at the available duty factor was additionally performed for the power class 3 configuration with the highest SAR configuration for each exposure conditions.
10. SAR test reduction is applied using the following criteria:
Start with the largest channel Bandwidth and measure SAR for QPSK with 1 RB, and 50 % RB allocation, using the RB offset and required test channel combination with the highest maximum output power among RB offsets at the upper edge, middle and lower edge of each required test channel. When the reported SAR is >0.8 W/kg, testing for other Channels is performed at the highest output power level for 1RB, and 50 % RB configuration for that channel. Testing for 100% RB configuration is performed at the highest output power level for 100% RB configuration across the Low, Mid and High Channel when the highest reported SAR for 1 RB and 50% RB are >0.8 W/kg, testing for the remaining required channels is not needed because the reported SAR for 100% RB Allocation <1.45 W/kg. Testing for 16-QAM modulation is not required because the reported SAR for QPSK is <1.45 W/kg and its output power is not more than 0.5 dB higher than that a QPSK. Testing for the other channel Bandwidths is not required because the reported SAR for the highest

channel Bandwidth is <1.45 W/kg and its output power is not more than 0.5 dB higher than that of the highest channel Bandwidth.

NR Notes:

1. This device supports SA and NSA mode for NR implementation. In EN-DC Mode, NR operate with the LTE Bands shown in the NR FR1 checklist acting as anchor Bands.
2. Due to Limitations of the SAR measurement equipment, SAR testing for NR Bands was performed separately using test mode (FTM) software.
3. More detailed specifications of the NR Bands are contained in the technical description document.
4. This device additionally supports some EN-DC conditions where additional LTE carriers are added on the downlink only.
5. For NR modulations and RB Sizes/Offsets were selected for testing such that configurations with the highest output power was evaluated for SAR tests.

WLAN Notes:

1. For held-to-ear and hotspot operations, the initial test position procedures were applied. For initial test position, the highest extrapolated peak SAR will be used. When reported SAR for the initial test position is ≤ 0.4 W/kg for 1g SAR and ≤ 1.0 W/kg for 10g SAR, no additional testing for the remaining test positions was required. Otherwise, SAR is evaluated at the subsequent highest peak SAR positions until the reported SAR results is ≤ 0.8 W/kg for 1g SAR and ≤ 2.0 W/kg for 10 g SAR or all test position are measured.
2. Per KDB 2482227 D01v02r02 justification for test configurations of 2.4 GHz WiFi Single transmission chain operations, the highest measured maximum output power channel for DSSS was selected for SAR measurement.
3. Per KDB 2482227 D01v02r02 justification for test configurations of 5 GHz WiFi Single transmission chain operations, the initial test configuration was selected according to the transmission mode with the highest maximum allowed powers. Other transmission mode was not investigated since the highest reported SAR for initial test configuration adjusted by the ration of maximum output powers is less than 1.2 W/kg for 1 g SAR and less than 3.0 W/kg for 10 g SAR.
4. When the maximum reported 1g averaged SAR is ≤ 0.8 W/kg, SAR testing on additional channels was not required. Otherwise, SAR for the next highest output power channel was required until the reported SAR result was ≤ 1.20 W/kg or all test channels were measured.
5. The device was configured to transmit continuously at the required data rated, channel Bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools. The reported SAR was scaled to the 100% transmission duty factor to determine compliance. Procedures used to measure the duty factor are identical to that in the associated WLAN test reports.
6. WIFI 6 GHz operations are supported by SISO and MIMO both. WLAN Per KDB Publication 248227 D01v02r02, the simultaneous SAR provisions in KDB Publication 447498 D01v06 should be applied to determine simultaneous transmission SAR test exclusion for WIFI MIMO. If the sum of 1g single transmission chain SAR measurements is <1.6 W/kg, no additional SAR measurements for MIMO are required.
7. For testing the WIFI 6 GHz of this DUT, the selection of test channels was based on FCC guidance, with five channels selected across the entire WIFI 6 GHz Bands.
8. The device was configured to transmit continuously at the required data rated, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools. The reported SAR was scaled to the 100% transmission duty factor to determine compliance. Procedures used to measure the duty factor are identical to that in the associated WLAN test reports.

9. For testing the WIFI 6 GHz of this DUT, the selection of test channels was based on FCC guidance, with five channels selected across the entire WIFI 6 GHz Bands.

Bluetooth Notes:

1. Bluetooth SAR was measured with the device connected to a call box with hopping disabled with DH5 operation and Tx Tests mode type. the duty cycle was compensated by applying maximum duty cycle 79% for BDR and 87% for LE. Please see sec.11 for the time-domain plot and calculation for duty factor of the device.
2. Head and Bluetooth tethering SAR were evaluated for BT BDR tethering applications.

13.4 6GHz WLAN Power Density Results

6 GHz WLAN Power Density																		
Frequency		Mode	Ant.	Bandwidth (MHz)	Data Rate (Mbps)	Tune-Up Limit (dBm)	Meas. Power (dBm)	Power Drift (dB)	Distance (mm)	Test Position	Duty Cycle	Grid Step (λ)	Scaling Factor for Measurement Uncertainty per IEC 62479	Normal psPD (mW/m²)	Scaled Normal psPD (mW/m²)	Total psPD (mW/m²)	Reported 4 m² psPD (mW/m²)	Plot No.
MHz	Ch.																	
6 185	47	802.11ax	Sub4	160	MCS0	10.5	10.31	-0.14	2	Rear	100	0.042	1.116	0.147	0.164	0.288	0.321	-
6 185	47	802.11ax	Sub4	160	MCS0	10.5	10.31	-0.10	2	Front	100	0.042	1.116	0.0848	0.095	0.179	0.200	-
6 185	47	802.11ax	Sub4	160	MCS0	10.5	10.31	-0.02	2	Left	100	0.042	1.116	0.271	0.302	0.509	0.568	-
6 185	47	802.11ax	Sub4	160	MCS0	10.5	10.31	0.02	2	Top	100	0.042	1.116	0.048	0.054	0.0923	0.103	-
6 025	15	802.11ax	Sub4	160	MCS0	10.5	9.64	0.02	2	Left	100	0.041	1.116	0.325	0.363	0.681	0.760	-
6 505	111	802.11ax	Sub4	160	MCS0	10.5	9.27	-0.13	2	Left	100	0.044	1.116	0.346	0.386	0.689	0.769	D1
6 825	175	802.11ax	Sub4	160	MCS0	10.5	9.51	-0.17	2	Left	100	0.045	1.116	0.377	0.421	0.656	0.732	-
6 985	207	802.11ax	Sub4	160	MCS0	10.5	8.79	0.13	2	Left	100	0.047	1.116	0.245	0.273	0.499	0.557	-
6 025	15	802.11ax	Sub1	160	MCS0	10.5	10.30	-0.06	2	Rear	100	0.041	1.116	0.236	0.263	0.387	0.432	-
6 025	15	802.11ax	Sub1	160	MCS0	10.5	10.30	0.19	2	Front	100	0.041	1.116	0.0454	0.051	0.103	0.115	-
6 025	15	802.11ax	Sub1	160	MCS0	10.5	10.30	0.19	2	Right	100	0.041	1.116	0.0329	0.037	0.0746	0.083	-
6 025	15	802.11ax	Sub1	160	MCS0	10.5	10.30	0.07	2	Top	100	0.041	1.116	0.161	0.180	0.255	0.285	-
6 185	47	802.11ax	Sub1	160	MCS0	10.5	10.13	-0.02	2	Rear	100	0.042	1.116	0.319	0.356	0.629	0.702	-
6 505	111	802.11ax	Sub1	160	MCS0	10.5	9.60	-0.01	2	Rear	100	0.044	1.116	0.072	0.081	0.169	0.189	-
6 825	175	802.11ax	Sub1	160	MCS0	10.5	10.00	-0.17	2	Rear	100	0.045	1.116	0.082	0.091	0.196	0.219	-
6 985	207	802.11ax	Sub1	160	MCS0	10.5	9.67	-0.05	2	Rear	100	0.047	1.116	0.058	0.065	0.128	0.143	-
6 185	47	802.11ax	Sub4+1	160	MCS0	10.5	10.13	0.10	2	Rear	100	0.042	1.116	0.317	0.354	0.598	0.667	-
6 185	47	802.11ax	Sub4+1	160	MCS0	10.5	10.13	0.15	2	Front	100	0.042	1.116	0.109	0.122	0.238	0.266	-
6 185	47	802.11ax	Sub4+1	160	MCS0	10.5	10.13	-0.17	2	Left	100	0.042	1.116	0.296	0.330	0.618	0.690	-
6 185	47	802.11ax	Sub4+1	160	MCS0	10.5	10.13	-0.15	2	Right	100	0.042	1.116	0.031	0.035	0.0444	0.050	-
6 185	47	802.11ax	Sub4+1	160	MCS0	10.5	10.13	-0.14	2	Top	100	0.042	1.116	0.141	0.157	0.262	0.292	-
6 025	15	802.11ax	Sub4+1	160	MCS0	10.5	9.64	-0.11	2	Left	100	0.041	1.116	0.305	0.340	0.607	0.677	-
6 505	111	802.11ax	Sub4+1	160	MCS0	10.5	9.27	-0.10	2	Left	100	0.044	1.116	0.308	0.344	0.569	0.635	-
6 825	175	802.11ax	Sub4+1	160	MCS0	10.5	9.51	-0.15	2	Left	100	0.045	1.116	0.319	0.356	0.630	0.703	-
6 985	207	802.11ax	Sub4+1	160	MCS0	10.5	8.79	0.18	2	Left	100	0.047	1.116	0.254	0.283	0.498	0.556	-
47 CFR §1.1310 – Safety Limit Spatial Average Uncontrolled Exposure/ General Population															Power Density 1mW/cm² Averaged over 4 cm²			

Power Density General Notes:

1. manufacturer has confirmed that the device tested have the same The physical, mechanical and thermal characteristics and are within operational tolerances expected for production units.
2. Batteries are fully charged at the beginning of the measurements. The DUT was connected to a wall charger for some measurements due to the test duration. It was confirmed that the charger plugged into this DUT did not impact the near-field PD test results
3. DASY6 Module mmWave is optimized for incident Power Density (PD) evaluations EUT at distances as close as 2mm for frequencies in the 6–110 GHz range.
4. The software Module mmWave V3.0+ features the novel Equivalent Source Reconstruction (ESR)method:
This new method will greatly simplify compliance testing for distances as close as $\lambda/25$ (2mm at 6 GHz) from any surface and improve the overall flexibility and precision. With this method, the reconstruction uncertainty (REC) is below 0.6 dB For $d \geq \lambda/25$, corresponding to a test distance of 2mm at 6 GHz. The above-mentioned REC value is valid if the following conditions on the grid resolution (ℓ_{grid}) and grid extent (v_{grid}) are met:

$$\ell_{\text{grid}} = \begin{cases} 1.25a & \text{for } a < \lambda/10 \\ \lambda/8 & \text{for } a > \lambda/10 \end{cases}$$

$$v_{\text{grid}} \geq 2\lambda$$

Power density was calculated by repeated E-field measurements on two measurement planes separated by $\lambda/4$.

5. 5. The device was configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools.
6. 6. Per FCC guidance and equipment manufacturer guidance, power density results were scaled according to IEC 62479:2010 for the portion of the measurement uncertainty >30%. Total expanded uncertainty of 1.51 dB(41.6%) was used to determine the psPD measurement scaling factor.

14. Simultaneous SAR Analysis

This device is containing transmitters that may operate simultaneously. Therefore, simultaneous transmission analysis is required. Per KDB Publication 447498 D04v01 4.3.2, simultaneous transmission SAR test exclusion may be applied when the sum of 1g SAR and 10g SAR for all the simultaneous transmitting antennas in a specific a physical test configuration is ≤ 1.6 W/kg for 1g SAR and ≤ 4 W/kg for 10g SAR. The different test positions in an exposure condition may be considered collectively to determine SAR exclusion according to the sum of 1g or 10g SAR.

This device is enabled with Qualcomm® Smart Transmit Gen2 with pre-defined antenna groups (AG0 and AG1). Simultaneous transmission analysis is performed per antenna groups. Below analysis demonstrates the mutually exclusive operation of AG0 and AG1, and the compliance between each antenna group with non-Smart Transmit Radios. For this model, WWAN/WLAN/BT Radios are managed under Smart Transmit. The validation of the time-averaging algorithm and compliance under the Tx varying transmission scenario for 5G WWAN/WLAN/BT technologies are reported in Part 2 Report. Non-Smart Transmit Radios include NFC. The model operates in two modes: "cellular mode", a normal usage mode controlled by WWAN including WLAN/BT Smart transmit algorithm.

This device supports two AGs: AG0 and AG1, with AG0 having 4 antennas (Main1, Main 2, Main 3, Main 4) and AG1 having 5 antennas (sub 1, sub 2, sub 4, sub 5, sub 6) for DSI=1 and 0 conditions

AG0, AG1 are described in the table below.

AG0	
Main 1	GSM850, GSM1900, WCDMA 2/4/5, LTE 12/13/25/26/66 NR n5/n25/n66
Main 2	LTE 41, NR n41 SRS #2
Main 3	NR 77 SRS #2
Main 4	NR n41 SRS #4, NR n77 SRS #4

AG1	
Sub 1	GSM850, WCDMA 5, LTE 12/13/26, NR n5, NR n41 SRS #3, WLAN 5 GHz/6 GHz Ant 2
Sub 2	LTE 25/41/66 NR n25/n66/n77
Sub 4	WLAN 2.4 GHz/5 GHz/6 GHz, Bluetooth Ant 1
Sub 5	NR 77 SRS #3
Sub 6	WLAN 2.4 GHz, Bluetooth Ant 2

14. 2 Head SAR Simultaneous Transmission Analysis

AG0					
Position	Main 1	Main 2	Main 3	Main 4	Max
Left Touch	0.235	0.045	0.000	0.000	0.235
Left Tilt	0.100	0.034	0.000	0.000	0.100
Right Touch	0.158	0.034	0.000	0.000	0.158
Right Tilt	0.090	0.024	0.000	0.000	0.090

AG1						
Position	Sub 1	Sub 2	Sub 3	Sub 4	Sub 5	Max
Left Touch	0.988	0.750	1.119	0.207	0.796	1.119
Left Tilt	0.852	0.945	0.163	0.016	0.096	0.945
Right Touch	0.751	1.082	0.919	0.487	0.421	1.082
Right Tilt	0.630	1.105	0.400	0.376	0.061	1.105

AG0 + AG1 Simultaneous SAR Results			
Position	AG0 Max	AG1 Max	Σ AG0+AG1
Left Touch	0.235	1.119	1.354
Left Tilt	0.100	0.945	1.045
Right Touch	0.158	1.082	1.240
Right Tilt	0.090	1.105	1.195

14. 3 BodyWorn SAR Simultaneous Transmission Analysis

AG0					
Position	Main 1	Main 2	Main 3	Main 4	Max
Rear	0.668	0.403	0.010	0.190	0.668
Front	0.548	0.259	0.012	0.025	0.548

AG1						
Position	Sub 1	Sub 2	Sub 3	Sub 4	Sub 5	Max
Rear	0.692	0.725	0.692	0.033	0.636	0.725
Front	0.265	0.281	0.305	0.055	0.305	0.305

AG0 + AG1 Simultaneous SAR Results			
Position	AG0 Max	AG1 Max	Σ AG0+AG1
Rear	0.668	0.725	1.393
Front	0.548	0.305	0.853

14. 4 Hotspot SAR Simultaneous Transmission Analysis

AG0					
Position	Main 1	Main 2	Main 3	Main 4	Max
Rear	0.668	0.403	0.010	0.190	0.668
Front	0.548	0.259	0.012	0.025	0.548
Left	0.368	0.209	0.030		0.368
Right	0.433			0.004	0.433
Top					0.000
Bottom	1.135	0.253	0.004	0.090	1.135

AG1						
Position	Sub 1	Sub 2	Sub 3	Sub 4	Sub 5	Max
Rear	0.691	0.725	0.691	0.033	0.636	0.725
Front	0.251	0.281	0.305	0.055	0.305	0.305
Left		0.131	0.565			0.565
Right	0.284			0.025	0.106	0.284
Top	0.254	0.489	0.245	0.071	0.156	0.489
Bottom						0.000

AG0 + AG1 Simultaneous SAR Results			
Position	AG0 Max	AG1 Max	Σ AG0+AG1
Rear	0.668	0.725	1.393
Front	0.548	0.305	0.853
Left	0.368	0.565	0.933
Right	0.433	0.284	0.717
Top	0.000	0.489	0.489
Bottom	1.135	0.000	1.135

14. 5 Phablet SAR Simultaneous Transmission Analysis

AG0					
Position	Main 1	Main 2	Main 3	Main 4	Max
Rear	0	0	0	0	0.000
Front	0	0	0	0	0.000
Left	0	0	0		0.000
Right	0			0	0.000
Top					0.000
Bottom	0	0	0	0	0.000

AG1						
Position	Sub 1	Sub 2	Sub 3	Sub 4	Sub 5	Max
Rear	1.121	0	0.991	0	0	1.121
Front	1.107	0	1.107	0	0	1.107
Left		0	2.597			2.597
Right	0.187			0	0	0.187
Top	0.684	0	0.684	0	0	0.684
Bottom						0

AG0 + AG1 Simultaneous SAR Results				
Position	AG0 Max	AG1 Max	ER	Σ AG0+AG1+ER
Rear	0.000	1.121	0.018	1.139
Front	0.000	1.107	0	1.107
Left	0.000	2.597	0	2.597
Right	0.000	0.187	0	0.187
Top	0.000	0.684	0	0.684
Bottom	0.000	0	0	0.000

The TER evaluation between antenna groups for this model of the Smart Transmit GEN 2 sub 6 was performed in accordance with Qualcomm Guidance 80-W2112-4 Appendix K in compliance with 447498 D01v06 and IEEE 1528- 2013 Section 6.3.4.1 and TER evaluation is included in Appendices L.

14.3.7 Conclusion

The above numerical summed SAR results is sufficient to show 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 D01V06 and IEEE 1528-2013 Section 6.3.4.1

15. SAR Measurement Variability and Uncertainty

In accordance with KDB procedure 865664 D01v01r04 SAR measurement 100 MHz to 6 GHz, SAR additional measurements are repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency Band. The test device should be returned to ambient conditions (normal room temperature) with the battery fully charged before it is re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

SAR Measurement variability was assessed using the following procedures for each frequency Band:

- 1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg for 1g SAR or < 2.0 W/kg for 10g SAR; steps 2) through 4) do not apply.
- 2) When the original highest measured 1g SAR is ≥ 0.80 W/kg or 10g SAR ≥ 2.0 W/kg, repeat that measurement once.
- 3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 W/kg for 1g SAR or ≥ 3.625 W/kg for 10g SAR (~ 10% from the 1-g SAR limit).
- 4) Perform a third repeated measurement only if the original, first or second repeated measurement is ≥ 1.5 W/kg for 1g SAR or ≥ 3.75 W/kg for 10g SAR and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

Head SAR measurement variability Results

Frequency		Mode/Band	Configuration	Measured SAR (W/kg)	Repeated SAR (W/kg)	SAR Ratio
MHz	Channel					
1 905	26590	LTE FDD Band 25 (SUB2 Ant.)	Right Touch	0.987	0.952	1.04
2 506	39750	LTE TDD Band 41 (SUB2 Ant.)	Right Tilt	0.852	0.856	1.00
2 592.99	518598	NR TDD Band n41 (SUB2 Ant.)	Right Tilt	0.967	0.967	1.00
2 592.99	518598	NR n41 SRS #3 (SUB1 Ant.)	Right Tilt	0.924	0.879	1.05
3 750.00	650000	NR TDD Band n77 (SUB2 Ant.)	Right Tilt	0.863	0.911	1.06
2 462	11	802.11b MIMO (SUB4+6 Ant.)	Left Touch	0.839	0.846	1.01

Head SAR measurement variability Results

Frequency		Mode/Band	Configuration	Measured SAR (W/kg)	Repeated SAR (W/kg)	SAR Ratio
MHz	Channel					
1 880	661	GSM1900 (MAIN1 Ant.)	Bottom	0.821	0.825	1.00
1 852.4	9262	UMTS Band 2 (MAIN1 Ant.)	Bottom	0.816	0.819	1.00
1 882.5	26365	LTE FDD Band 25 (SUB2 Ant.)	Bottom	0.992	0.954	1.04
1 882.5	376500	NR FDD Band n25 (MAIN1 Ant.)	Bottom	0.869	0.865	1.00

16. Antenna Impedance tuner testing

Per April 2019 TCB Workshop Notes, the following test procedures were followed to demonstrate that the SAR results in Section 11 represented the appropriate SAR test conditions. For bands with dynamic tuning implemented, SAR was measured according to the required FCC SAR test procedures with the dynamic tuner active to allow the device to automatically tune to the antenna state for the respective RF exposure test configurations. Per FCC Guidance, during NR testing the device was configured with the tuner state selected by the device in LTE mode with auto-tune active at the same frequency. Additional single point SAR time-sweep measurements were evaluated for other tuner states to determine that the other tuner configurations would result in equivalent or lower SAR values. The additional tuner hardware has no influence on the antenna characteristics, other than impedance matching.

To evaluate all the tuner states, the 144 tuner states were divided among the aggregate band, mode and exposure combinations. Single point time-sweep measurements were performed at the peak SAR location determined by the zoom scan of the configuration with the highest reported SAR for each combination. The tuner state was able to be established remotely so that the device was not moved for the entire series of single point SAR for the tuner states in each combination. The SAR probe remained stationary at the same position throughout the entire series of single point measurements for each combination. When the single point SAR or 1g SAR was $> 1.2 \text{ W/kg}$ for a

particular band/mode/exposure condition, point SAR measurements were made for all 144 states.

The operational description contains more information about the design and implementation of the dynamic antenna tuning.

16.1 Head SAR Configuration (Lower Antenna: AG 0)

GSM850		GSM1900	
GMSK GPRS 2Tx		GMSK GPRS 3Tx	
Test Position	Right Cheek	Test Position	Left Cheek
Frequency(MHz)	836.6	Frequency (MHz)	1880
Channel	190	Channel	661
Measured 1g SAR(W/kg)	0.098	Measured 1g SAR(W/kg)	0.092
Average Value of Time Sweep(W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 1)	0.174	Auto-tune (State 0)	0.095
Default (State 0)	0.160	Default (State 0)	0.095
State 2	0.162	State 3	0.08
State 16	0.132	State 17	0.09
State 30	0	State 31	0.029
State 44	0.093	State 45	0.072
State 58	0.065	State 59	0
State 72	0.123	State 73	0.091
State 86	0.1	State 87	0
State 100	0.135	State 101	0
State 114	0.101	State 115	0
State 128	0.157	State 129	0.093

UMTS B5		UMTS B4		UMTS B2	
RMC		RMC		RMC	
Test Position	Right Cheek	Test Position	Left Cheek	Test Position	Left Cheek
Frequency (MHz)	836.6	Frequency (MHz)	1732.4	Frequency (MHz)	1880
Channel	4183	Channel	1412	Channel	9400
Measured 1g SAR(W/kg)	0.110	Measured 1g SAR(W/kg)	0.152	Measured 1g SAR(W/kg)	0.140
Average Value of Time Sweep(W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep(W/kg)	
Auto-tune (State 1)	0.217	Auto-tune (State 64)	0.163	Auto-tune (State 65)	0.102
Default (State 0)	0.210	Default (State 0)	0.130	Default (State 0)	0.087
State 4	0.211	State 5	0.121	State 6	0.08
State 18	0.165	State 19	0.140	State 20	0.089
State 32	0.099	State 33	0.150	State 34	0.094
State 46	0.046	State 47	0.041	State 48	0
State 60	0	State 61	0	State 62	0
State 74	0.168	State 75	0.133	State 76	0.075
State 88	0.106	State 89	0	State 90	0
State 102	0.183	State 103	0	State 104	0
State 116	0.146	State 117	0	State 118	0
State 130	0.094	State 131	0	State 132	0.084

LTE B5		LTE B12		LTE B13	
QPSK, 10 MHz , 1 RB, 49 offset		QPSK, 10 MHz, 1 RB, 49 Offset		QPSK, 10 MHz, 1 RB, 24Offset	
Test Position	Right Cheek	Test Position	Right Cheek	Test Position	Right Cheek
Frequency (MHz)	836.5	Frequency (MHz)	707.5	Frequency (MHz)	782
Channel	20525	Channel	23095	Channel	23230
Measured 1g SAR(W/kg)	0.094	Measured 1g SAR(W/kg)	0.096	Measured 1g SAR(W/kg)	0.076
Average Value of Time Sweep(W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep(W/kg)	
Auto-tune (State 1)	0.198	Auto-tune (State 0)	0.1	Auto-tune (State 1)	0.138
Default (State 0)	0.192	Default (State 0)	0.1	Default (State 0)	0.125
State 7	0.192	State 8	0.083	State 9	0.133
State 21	0.148	State 22	0.083	State 23	0.099
State 35	0.111	State 36	0.074	State 37	0.079
State 49	0.106	State 50	0.074	State 51	0.109
State 63	0	State 64	0.044	State 65	0.064
State 77	0	State 78	0	State 79	0
State 91	0	State 92	0	State 93	0
State 105	0.153	State 106	0.062	State 107	0.113
State 119	0.126	State 120	0.076	State 121	0.085
State 133	0.138	State 134	0.079	State 135	0.058

LTE B25		LTE B26		LTE B66	
QPSK, 20 MHz, 1 RB, 99 Offset		QPSK, 15 MHz , 1 RB, 74Offset		QPSK, 20 MHz, 1 RB, 99Offset	
Test Position	Left Cheek	Test Position	Right Cheek	Test Position	Left Cheek
Frequency (MHz)	1860	Frequency (MHz)	831.5	Frequency (MHz)	1745
Channel	26140	Channel	26865	Channel	132322
Measured 1g SAR(W/kg)	0.123	Measured 1g SAR(W/kg)	0.125	Measured 1g SAR(W/kg)	0.147
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 0)	0.158	Auto-tune (State 0)	0.182	Auto-tune (State 1)	0.182
Default (State 0)	0.158	Default (State 0)	0.182	Default (State 0)	0.159
State 10	0.130	State 11	0.149	State 12	0.089
State 24	0.141	State 25	0.134	State 26	0.156
State 38	0.151	State 39	0.119	State 40	0.155
State 52	0	State 53	0.097	State 54	0
State 66	0.153	State 67	0.088	State 68	0.177
State 80	0	State 81	0.152	State 82	0
State 94	0	State 95	0	State 96	0.034
State 108	0	State 109	0.083	State 110	0
State 122	0	State 123	0.082	State 124	0
State 136	0.149	State 137	0.127	State 138	0.176

NR Band n5		NR Band n25		NR Band n66	
DFT-s QPSK, 20 MHz, 1 RB, 10Offset		DFT-s QPSK, 20 MHz, 50 RB, 28Offset		QPSK, 40 MHz, 1RB, 214Offset	
Test Position	Right Cheek	Test Position	Left Cheek	Test Position	Left Cheek
Frequency (MHz)	836.5	Frequency (MHz)	1860	Frequency (MHz)	1745
Channel	167300	Channel	372000	Channel	349000
Measured 1g SAR(W/kg)	0.09	Measured 1g SAR(W/kg)	0.164	Measured 1g SAR(W/kg)	0.165
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 5)	0.160	Auto-tune (State 33)	0.127	Auto-tune (State 65)	0.156
Default (State 0)	0.141	Default (State 0)	0.117	Default (State 0)	0.147
State 13	0.094	State 14	0.049	State 15	0
State 27	0.071	State 28	0.084	State 29	0.069
State 41	0.100	State 42	0.11	State 43	0.122
State 55	0.098	State 56	0	State 57	0
State 69	0.074	State 70	0.117	State 71	0.146
State 83	0.118	State 84	0	State 85	0
State 97	0.125	State 98	0	State 99	0.027
State 111	0	State 112	0	State 113	0.029
State 125	0	State 126	0	State 127	0
State 139	0.094	State 140	0.111	State 141	0

16.2 Body SAR Configuration (Lower Antenna: AG 0)

GSM850		GSM1900	
GMSK GPRS 2Tx		GMSK GPRS 4Tx	
Test Position	Right	Test Position	Right
Frequency (MHz)	836.6	Frequency (MHz)	836.6
Channel	190	Channel	190
Measured 1g SAR (W/kg)	0.259	Measured 1g SAR (W/kg)	0.259
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 1)	0.236	Auto-tune (State 1)	0.236
Default (State 0)	0.204	Default (State 0)	0.204
State 2	0.223	State 2	0.223
State 16	0.143	State 16	0.143
State 30	0	State 30	0
State 44	0.134	State 44	0.134
State 58	0.064	State 58	0.064
State 72	0.124	State 72	0.124
State 86	0.103	State 86	0.103
State 100	0.168	State 100	0.168
State 114	0.122	State 114	0.122
State 128	0.201	State 128	0.201

UMTS B5		UMTS B4		UMTS B2	
RMC		RMC		RMC	
Test Position	Right	Test Position	Bottom	Test Position	Bottom
Frequency (MHz)	836.6	Frequency (MHz)	1752.6	Frequency (MHz)	1852.4
Channel	4183	Channel	1513	Channel	9262
Measured 1g SAR (W/kg)	0.313	Measured 1g SAR (W/kg)	0.654	Measured 1g SAR(W/kg)	0.819
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep(W/kg)	
Auto-tune (State 0)	0.196	Auto-tune (State 32)	0.992	Auto-tune (State 0)	0.727
Default (State 0)	0.196	Default (State 0)	0.923	Default (State 0)	0.727
State 4	0.179	State 5	0.839	State 6	0.671
State 18	0.145	State 19	0.976	State 20	0.714
State 32	0.086	State 33	0.982	State 34	0.718
State 46	0.044	State 47	0.338	State 48	0.053
State 60	0	State 61	0	State 62	0
State 74	0.155	State 75	0.967	State 76	0.626
State 88	0.126	State 89	0.097	State 90	0.058
State 102	0.162	State 103	0.116	State 104	0.07
State 116	0.128	State 117	0.149	State 118	0.083
State 130	0.086	State 131	0.083	State 132	0.674

LTE B5		LTE B12		LTE B13	
QPSK, 10 MHz , 1 RB, 49 offset		QPSK, 10 MHz, 1 RB, 49 Offset		QPSK, 10 MHz, 1 RB, 24Offset	
Test Position	Rear	Test Position	Rear	Test Position	Left
Frequency (MHz)	836.5	Frequency (MHz)	707.5	Frequency (MHz)	782
Channel	20525	Channel	23095	Channel	23230
Measured 1g SAR(W/kg)	0.255	Measured 1g SAR(W/kg)	0.317	Measured 1g SAR(W/kg)	0.250
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 0)	0.328	Auto-tune (State 0)	0.39	Auto-tune (State 4)	0.342
Default (State 0)	0.328	Default (State 0)	0.39	Default (State 0)	0.299
State 7	0.330	State 8	0.312	State 9	0.321
State 21	0.263	State 22	0.321	State 23	0.245
State 35	0.201	State 36	0.304	State 37	0.213
State 49	0.178	State 50	0.279	State 51	0.252
State 63	0	State 64	0.172	State 65	0.163
State 77	0.064	State 78	0	State 79	0
State 91	0.066	State 92	0	State 93	0
State 105	0.254	State 106	0.216	State 107	0.22
State 119	0.225	State 120	0.281	State 121	0.218
State 133	0.240	State 134	0.343	State 135	0.155
State 142	0.186	State 143	0		

LTE B25		LTE B26		LTE B66	
QPSK, 20 MHz, 1 RB, 0 Offset		QPSK, 15 MHz , 1 RB, 74Offset		QPSK, 20 MHz, 1 RB, 49Offset	
Test Position	Bottom	Test Position	Rear	Test Position	Bottom
Frequency (MHz)	1882.5	Frequency (MHz)	831.5	Frequency (MHz)	1720
Channel	26365	Channel	26865	Channel	132072
Measured 1g SAR(W/kg)	0.992	Measured 1g SAR(W/kg)	0.431	Measured 1g SAR(W/kg)	0.528
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 33.)	0.895	Auto-tune (State 0)	0.282	Auto-tune (State 1)	0.551
Default (State 0)	0.883	Default (State 0)	0.282	Default (State 0)	0.492
State 10	0.75	State 11	0.254	State 12	0.328
State 24	0.865	State 25	0.176	State 26	0.512
State 38	0.860	State 39	0.168	State 40	0.517
State 52	0.067	State 53	0.201	State 54	0.048
State 66	0.878	State 67	0.115	State 68	0.528
State 80	0.065	State 81	0.216	State 82	0.058
State 94	0	State 95	0	State 96	0.072
State 108	0.047	State 109	0.129	State 110	0.045
0.State 122	0.095	State 123	0.110	State 124	0.049
State 136	0.838	State 137	0.157	State 138	0.567
State 142	0.186	State 143	0		

NR Band n5		NR Band n25		NR Band n66	
DFT-s QPSK, 20 MHz, 50 RB, 28Offset		CP QPSK, 20 MHz, 1 RB, 1Offset		QPSK, 40 MHz, 216RB, 0Offset	
Test Position	Rear	Test Position	Bottom	Test Position	Bottom
Frequency (MHz)	836.5	Frequency (MHz)	1882.5	Frequency (MHz)	1745
Channel	167300	Channel	376500	Channel	349000
Measured 1g SAR(W/kg)	0.161	Measured 1g SAR(W/kg)	0.869	Measured 1g SAR(W/kg)	0.716
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 5)	0.241	Auto-tune (State 32)	0.806	Auto-tune (State 32)	0.826
Default (State 0)	0.23	Default (State 0)	0.803	Default (State 0)	0.743
State 13	0.123	State 14	0.411	State 15	0.210
State 27	0.129	State 28	0.650	State 29	0.489
State 41	0.157	State 42	0.738	State 43	0.630
State 55	0.125	State 56	0.06	State 57	0.051
State 69	0.123	State 70	0.797	State 71	0.801
State 83	0.182	State 84	0.076	State 85	0.079
State 97	0.197	State 98	0.091	State 99	0.096
State 111	0.043	State 112	0.089	State 113	0.121
State 125	0.05	State 126	0.042	State 127	0
State 139	0.132	State 140	0.771	State 141	0.076
State 142	0.186	State 143	0		

16.3 Head SAR Configuration (Upper Antenna: AG 1)

GSM850		UMTS B5	
Voice		RMC	
Test Position	Left Tilt	Test Position	Left Cheek
Frequency (MHz)	836.6	Frequency (MHz)	836.6
Channel	190	Channel	4183
Measured 1g SAR (W/kg)	0.355	Measured 1g SAR(W/kg)	0.453
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 1)	0.520	Auto-tune (State 1)	0.695
Default (State 0)	0.520	Default (State 0)	0.68
State 2	0.492	State 4	0.688
State 16	0.517	State 18	0.683
State 30	0.492	State 32	0.684
State 44	0.5	State 46	0.684
State 58	0.499	State 60	0.685
State 72	0.510	State 74	0.680
State 86	0.518	State 880.68	0.688
State 100	0.498	State 102	0.681
State 114	0.511	State 116	0.682
State 128	0.520	State 130	0.678

LTE B5		LTE B12		LTE B13	
QPSK, 10 MHz , 25 RB, 24 offset		QPSK, 10 MHz, 50 RB, 0 Offset		QPSK, 10 MHz, 25 RB, 0Offset	
Test Position	Left Cheek	Test Position	Left Tilt	Test Position	Left Tilt
Frequency (MHz)	836.5	Frequency (MHz)	707.5	Frequency (MHz)	782
Channel	20525	Channel	23095	Channel	23230
Measured 1g SAR(W/kg)	0.556	Measured 1g SAR(W/kg)	0.605	Measured 1g SAR(W/kg)	0.47
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 1)	0.438	Auto-tune (State 0)	0.348	Auto-tune (State 0)	0.532
Default (State 0)	0.413	Default (State 0)	0.348	Default (State 0)	0.532
State 7	0.431	State 8	0.341	State 9	0.52
State 21	0.434	State 22	0.325	State 23	0.524
State 35	0.431	State 36	0.327	State 37	0.521
State 49	0.430	State 50	0.327	State 51	0.518
State 63	0.433	State 64	0.319	State 65	0.518
State 77	0.428	State 78	0.318	State 79	0.515
State 91	0.430	State 92	0.322	State 93	0.524
State 105	0.433	State 106	0.320	State 107	0.528
State 119	0.431	State 120	0.318	State 121	0.527
State 133	0.430	State 134	0.315	State 135	0.521

LTE B25		LTE B26		LTE B66	
QPSK, 20 MHz, 50 RB, 49 Offset		QPSK, 15 MHz , 36 RB, 0Offset		QPSK, 20 MHz, 1 RB, 0Offset	
Test Position	Right Cheek	Test Position	Left Cheek	Test Position	Right Tilt
Frequency (MHz)	1905	Frequency (MHz)	831.5	Frequency (MHz)	1720
Channel	26590	Channel	26865	Channel	132072
Measured 1g SAR(W/kg)	0.987	Measured 1g SAR(W/kg)	0.444	Measured 1g SAR(W/kg)	0.450
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 0)	0.422	Auto-tune (State 1)	0.351	Auto-tune (State 1)	0.661
Default (State 0)	0.422	Default (State 0)	0.345	Default (State 0)	0.63
State 10	0.408	State 11	0.348	State 12	0.614
State 24	0.417	State 25	0.333	State 26	0.646
State 38	0.412	State 39	0.309	State 40	0.633
State 52	0.415	State 53	0.330	State 54	0.625
State 66	0.410	State 67	0.342	State 68	0.634
State 80	0.42	State 81	0.345	State 82	0.647
State 94	0.405	State 95	0.342	State 96	0.642
State 108	0.411	State 109	0.345	State 110	0.623
State 122	0.415	State 123	0.339	State 124	0.620
State 136	0.414	State 137	0.345	State 138	0.654

NR Band n5		NR Band n25		NR Band n66	
DFT-s QPSK, 20 MHz, 1 RB, 1Offset		CP QPSK, 20 MHz, 1 RB, 1Offset		QPSK, 40 MHz, 1RB, 1Offset	
Test Position	Left Cheek	Test Position	Right Tilt	Test Position	Right Tilt
Frequency (MHz)	836.5	Frequency (MHz)	1882.5	Frequency (MHz)	1745
Channel	167300	Channel	376500	Channel	349000
Measured 1g SAR(W/kg)	0.503	Measured 1g SAR(W/kg)	0.600	Measured 1g SAR(W/kg)	0.696
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 1)	0.390	Auto-tune (State 0)	0.423	Auto-tune (State 1)	0.953
Default (State 0)	0.286	Default (State 0)	0.409	Default (State 0)	0.950
State 13	0.185	State 14	0.4	State 15	0.926
State 27	0.277	State 28	0.399	State 29	0.933
State 41	0.288	State 42	0.411	State 43	0.938
State 55	0.327	State 56	0.402	State 57	0.936
State 69	0.319	State 70	0.412	State 71	0.938
State 83	0.318	State 84	0.404	State 85	0.937
State 97	0.322	State 98	0.405	State 99	0.940
State 111	0.384	State 112	0.404	State 113	0.941
State 125	0.325	State 126	0.409	State 127	0.928
State 139	0.375	State 140	0.413	State 141	0.948

16.4 Body SAR Configuration (Upper Antenna: AG 1)

GSM850		UMTS B5	
Voice		RMC	
Test Position	Rear	Test Position	Rear
Frequency (MHz)	836.6	Frequency (MHz)	836.6
Channel	190	Channel	4183
Measured 1g SAR(W/kg)	0.205	Measured 1g SAR(W/kg)	0.207
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 1)	0.158	Auto-tune (State 0)	0.251
Default (State 0)	0.158	Default (State 0)	0.239
State 2	0.151	State 4	0.242
State 16	0.151	State 18	0.243
State 30	0.150	State 32	0.240
State 44	0.144	State 46	0.243
State 58	0.153	State 60	0.241
State 72	0.151	State 74	0.242
State 86	0.152	State 88	0.240
State 100	0.149	State 102	0.244
State 114	0.150	State 116	0.239
State 128	0.148	State 130	0.242

LTE B5		LTE B12		LTE B13	
QPSK, 10 MHz , 25 RB, 24 offset		QPSK, 10 MHz, 25 RB, 24 Offset		QPSK, 10 MHz, 1 RB, 24Offset	
Test Position	Rear	Test Position	Rear	Test Position	Rear
Frequency (MHz)	836.5	Frequency (MHz)	707.5	Frequency (MHz)	782
Channel	20525	Channel	23095	Channel	23230
Measured 1g SAR(W/kg)	0.214	Measured 1g SAR(W/kg)	0.234	Measured 1g SAR(W/kg)	0.173
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 1)	0.106	Auto-tune (State 0)	0.156	Auto-tune (State 0)	0.225
Default (State 0)	0.095	Default (State 0)	0.156	Default (State 0)	0.225
State 7	0.095	State 8	0.153	State 9	0.218
State 21	0.093	State 22	0.153	State 23	0.217
State 35	0.093	State 36	0.149	State 37	0.219
State 49	0.094	State 50	0.152	State 51	0.216
State 63	0.095	State 64	0.143	State 65	0.219
State 77	0.095	State 78	0.151	State 79	0.220
State 91	0.094	State 92	0.152	State 93	0.221
State 105	0.094	State 106	0.141	State 107	0.218
State 119	0.093	State 120	0.143	State 121	0.210
State 133	0.093	State 134	0.144	State 135	0.217

LTE B25		LTE B26		LTE B66	
QPSK, 20 MHz, 50 RB, 49 Offset		QPSK, 15 MHz , 36 RB, 0Offset		QPSK, 20 MHz, 1 RB, 0Offset	
Test Position	Top	Test Position	Rear	Test Position	Top
Frequency (MHz)	1905	Frequency (MHz)	831.5	Frequency (MHz)	1720
Channel	26590	Channel	26865	Channel	132072
Measured 1g SAR (W/kg)	0.405	Measured 1g SAR (W/kg)	0.158	Measured 1g SAR (W/kg)	0.204
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 0)	0.193	Auto-tune (State 1)	0.101	Auto-tune (State 1)	0.241
Default (State 0)	0.193	Default (State 0)	0.072	Default (State 0)	0.233
State 10	0.185	State 11	0.072	State 12	0.230
State 24	0.184	State 25	0.073	State 26	0.231
State 38	0.185	State 39	0.07	State 40	0.229
State 52	0.182	State 53	0.073	State 54	0.231
State 66	0.184	State 67	0.071	State 68	0.231
State 80	0.181	State 81	0.072	State 82	0.233
State 94	0.184	State 95	0.07	State 96	0.230
State 108	0.181	State 109	0.072	State 110	0.225
State 122	0.182	State 123	0.071	State 124	0.228
State 136	0.187	State 137	0.071	State 138	0.228

NR Band n5		NR Band n25		NR Band n66	
DFT-s QPSK, 20 MHz, 50 RB, 28Offset		dft QPSK, 20 MHz, 50 RB, 28Offset		QPSK, 40 MHz, 1RB, 1Offset	
Test Position	Right	Test Position	Top	Test Position	Top
Frequency (MHz)	836.5	Frequency (MHz)	1860	Frequency (MHz)	1745
Channel	167300	Channel	372000	Channel	349000
Measured 1g SAR (W/kg)	0.197	Measured 1g SAR (W/kg)	0.393	Measured 1g SAR (W/kg)	0.338
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 1)	0.169/0.5	Auto-tune (State 0)	0.319	Auto-tune (State 1)	0.453
Default (State 0)	0.131/0.5	Default (State 0)	0.317	Default (State 0)	0.444
State 13	0.13/0.5	State 14	0.313	State 15	0.425
State 27	0.136	State 28	0.317	State 29	0.433
State 41	0.152	State 42	0.315	State 43	0.435
State 55	0.135	State 56	0.304	State 57	0.433
State 69	0.147	State 70	0.317	State 71	0.435
State 83	0.13	State 84	0.306	State 85	0.420
State 97	0.136	State 98	0.306	State 99	0.449
State 111	0.130	State 112	0.307	State 113	0.450
State 125	0.137	State 126	0.312	State 127	0.445
State 139	0.148	State 140	0.316	State 141	0.443
State 142	0.135	State 143	0.312		

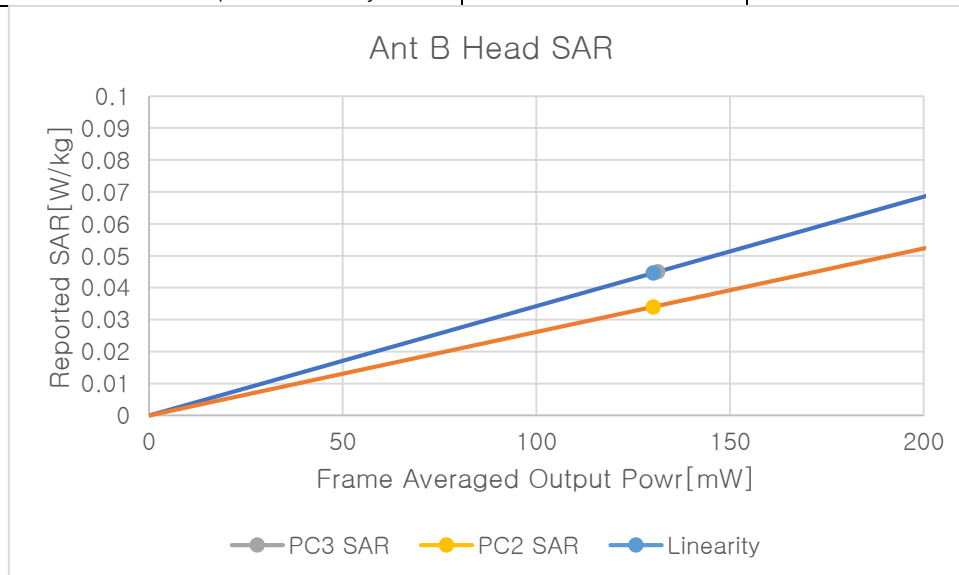
17. LTE TDD Band 41 Power Class 2 and Power class 3 Linearity

This Device Supports Power Class 2 and Power Class 3 operations for LTE Band 41. The Highest available duty cycle for Power Class 2 operations is 43.3 % using UL-DL Configuration 1. Per May 2017 TCB Workshop Notes based on the device behavior, all SAR tests were performed using Power class 3. SAR with power class 2 at the highest power and available duty factor was additionally performed for the power class 2 configuration with the Highest SAR for each exposure condition.

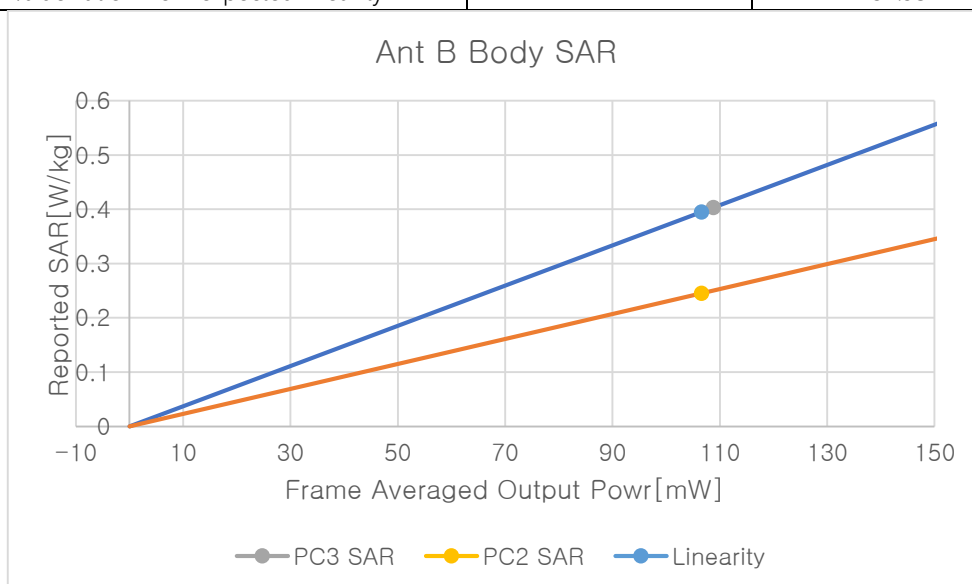
The linearity between the power class 3 and Power class 2 SAR Results and the respective frame averaged powers was calculated to determine the results were linear.

Per May 2017 TCB Workshop, no additional SAR measurements were required since the linearity between power classes as less than 10 % and all reported SAR values were < 1.4 W/kg.

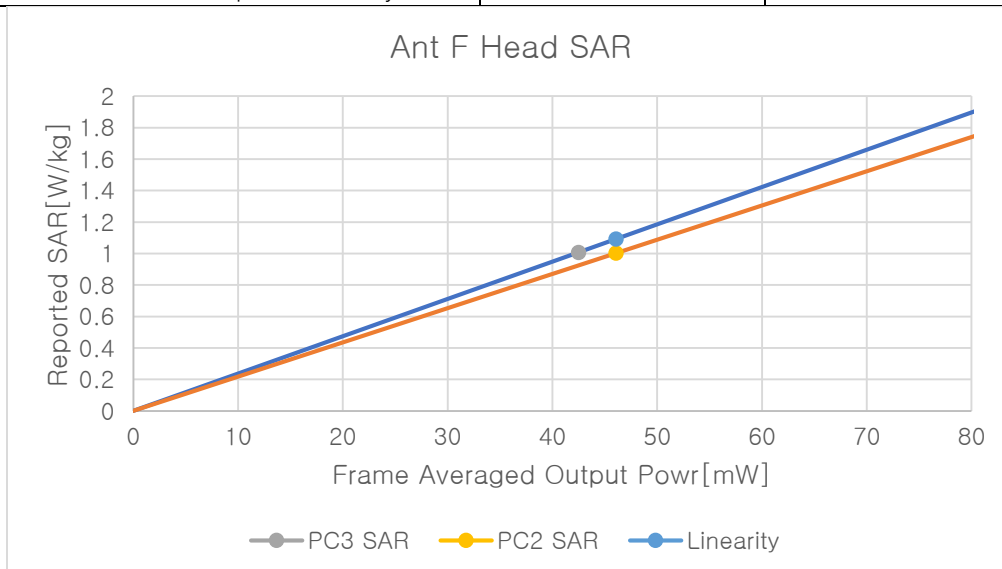
Ant B Head SAR		
LTE TDD Band 41 Linearity Data Table		
	LTE Band41 PC3	LTE Band41 PC2
Maximum Allowed Output Power[dBm]	24	26
Measured Output Power[dBm]	23.17	24.78
Reported SAR[W/kg]	0.045	0.034
Measured Power[mW]	207.49	300.61
Duty Cycle	63.30%	43.30%
Frame Averaged Output Power[mW]	131.34	130.16
% deviation from expected linearity		-23.76



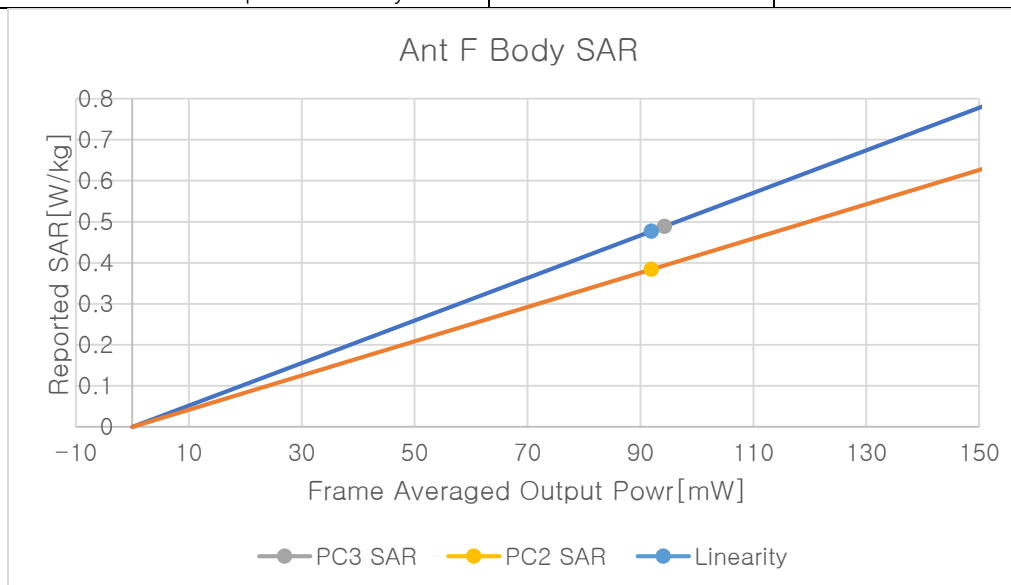
Ant B Body SAR		
LTE TDD Band 41 Linearity Data Table		
	LTE Band41 PC3	LTE Band41 PC2
Maximum Allowed Output Power[dBm]	23	25
Measured Output Power[dBm]	22.35	23.91
Reported SAR[W/kg]	0.403	0.245
Measured Power[mW]	171.79	246.04
Duty Cycle	63.30%	43.30%
Frame Averaged Output Power[mW]	108.74	106.54
% deviation from expected linearity		-37.95



Ant F Head SAR		
LTE TDD Band 41 Linearity Data Table		
	LTE Band41 PC3	LTE Band41 PC2
Maximum Allowed Output Power[dBm]	19	21
Measured Output Power[dBm]	18.27	20.27
Reported SAR[W/kg]	1.007	1.002
Measured Power[mW]	67.14	106.41
Duty Cycle	63.30%	43.30%
Frame Averaged Output Power[mW]	42.5	46.08
% deviation from expected linearity		-8.23



Ant F Body SAR		
LTE TDD Band 41 Linearity Data Table		
	LTE Band41 PC3	LTE Band41 PC2
Maximum Allowed Output Power[dBm]	23	24
Measured Output Power[dBm]	21.73	23.27
Reported SAR[W/kg]	0.489	0.384
Measured Power[mW]	148.94	212.32
Duty Cycle	63.30%	43.30%
Frame Averaged Output Power[mW]	94.28	91.93
% deviation from expected linearity		-19.46



18. Measurement Uncertainty

The measured SAR was <1.5 W/Kg for 1g SAR and <3.75 W/Kg, for 10g SAR for all frequency Bands. Therefore, per KDB Publication 865664 D01v01r04, the extended measurement uncertainty analysis per IEEE1528-2013 was not required.

For SAR Measurement Uncertainty for Frequencies Above 6GHz

Measurement Uncertainty for handset SAR test									
According to IEEE 1528 and IEC 62209-1528 (6 - 10 GHz range)									
a	b	c	d	e	f	g	h = c x f / e	i = c x g / e	k
Source of uncertainty	Symbol	Uncertainty ± %	Probability distribution	Div.	ci	ci	Standard Uncertainty	Standard Uncertainty	vi or veff
Description					(1 g)	(10 g)	± % (1 g)	± % (10 g)	
Measurement system									
Probe calibration	CF	18.60	N	2	1	1	9.30	9.30	∞
Probe Calibration Drift	CFdrift	1.70	N	1	1	1	1.00	1.00	∞
Probe Linearity	LIN	4.70	R	1.73	1.00	1.00	2.71	2.71	∞
Broadband Signal	BBS	3.00	R	1.73	1.00	1.00	1.73	1.73	∞
Probe Isotropy	ISO	7.60	R	1.73	1	1	4.39	4.39	∞
Data Acquisition	DAE	2.40	N	1	1	1	2.40	2.40	∞
RF Ambient	AMB	1.80	N	1	1	1	1.80	1.80	∞
Probe Positioning	Δsys	0.20	N	1	0.33	0.33	0.07	0.07	∞
Data Processing	DAT	3.50	N	1	1	1	3.50	3.50	∞
Phantom and Device Errors									
Conductivity (meas.)DAK	LIQ(σ)	2.50	N	1	0.78	0.71	1.95	1.78	∞
Conductivity (temp.)BB	LIQ(Tσ)	3.40	R	1.73	0.78	0.71	1.53	1.39	∞
Phantom Permittivity	EPS	14.00	R	1.73	0.25	0.25	2.02	2.02	∞
Distance DUT - TSL	DAS	2.00	N	1	2	2	4.00	4.00	∞
Device Holder	H	3.60	N	1	1	1	3.60	3.60	∞
DUT Modulation	MOD	2.40	R	1.73	1	1	1.39	1.39	∞
DUT drift	RFdrift	2.50	N	1	1	1	2.50	2.50	∞
Deviation to Target	C(ε, σ)	1.90	N	1	1	0.84	1.90	1.60	∞
SAR scaling	C(R)	0.00	R	1.73	1	1	0.00	0.00	∞
Combined standard uncertainty	u(ΔSAR)		RSS				13.72	13.65	
Expanded uncertainty (95% confidence interval)	U		k = 2				27.44	27.30	

For Power Density Measurements Uncertainty for Frequencies Above 6GHz

DASY6 Uncertainty Budget for PD (avg $\geq 1\text{cm}^2$)						
Evaluation Distances to the Antennas $\geq \lambda/25$ in Compliance with IEC/IEEE 63195						
Source of uncertainty Description	Uncertainty ($\pm\text{dB}$)	Probability distribution	Div.	c/	Standard Uncertainty ($\pm\text{dB}$)	(vi) veff
Uncertainty terms dependent on the measurement system						
Calibration	0.49	N	1	1	0.49	∞
Probe correction	0.00	R	1.73	1	0.00	∞
Frequency response (BW $\leq 1\text{GHz}$)	0.20	R	1.73	1	0.12	∞
Sensor cross coupling	0.00	R	1.73	1	0.00	∞
Isotropy	0.50	R	1.73	1	0.29	∞
Linearity	0.20	R	1.73	1	0.12	∞
Probe scattering	0.00	R	1.73	1	0.00	∞
Probe positioning offset	0.30	R	1.73	1	0.17	∞
Probe positioning repeatability	0.04	N	1	1	0.04	∞
Sensor mechanical offset	0.00	N	1	1	0.00	∞
Probe spatial resolution	0.00	N	1	1	0.00	∞
Field impedance dependence	0.00	N	1	1	0.00	∞
Measurement drift	0.05	N	1	1	0.05	∞
Amplitude and phase noise	0.04	N	1	1	0.04	∞
Measurement area truncation	0.00	N	1	1	0.00	∞
Data acquisition	0.03	N	1	1	0.03	∞
Sampling	0.00	N	1	1	0.00	∞
Field reconstruction	0.60	N	1	1	0.60	∞
Signal-to-Noise Ratio	0.00	N	1	1	0.00	∞
Spatial averaging	0.10	N	1	1	0.10	∞
Uncertainty terms dependent on the DUT and environmental factors						
Probe coupling with DUT	0.00	R	1.73	1	0.00	∞
Modulation response	0.40	R	1.73	1	0.23	∞
Integration time	0.00	R	1.73	1	0.00	∞
Response time	0.00	N	1.73	1	0.00	∞
Device holder influence	0.10	R	1.73	1	0.06	∞
DUT alignment	0.00	R	1.73	1	0.00	∞
RF ambient conditions	0.04	R	1.73	1	0.02	∞
Laboratory Temperature	0.05	R	1.73	1	0.03	∞
Laboratory Reflections	0.04	R	1.73	1	0.02	∞
Immunity / secondary reception	0.00	R	1.73	1	0.00	∞
Drift of the DUT	-	R	1.73	1	-	∞
Combined uncertainty ($k = 1$)					0.75	∞
Expanded uncertainty($k = 2$)					1.51	

19. SAR Test Equipment

Manufacturer	Type / Model	S/N	Calib. Date	Calib.Interval	Calib.Due
SPEAG	SAM Phantom	-	N/A	N/A	N/A
SPEAG	cDASY6 5G Module Phantom	-	N/A	N/A	N/A
HP	SAR System Control PC	-	N/A	N/A	N/A
Staubli	CS8Cspeag-TX90	F11/ 5K3RA1/ C/ 01	N/A	N/A	N/A
Staubli	TX90 XLspeag	F11/ 5K3RA1/ A/ 01	N/A	N/A	N/A
Staubli	Teach Pendant (Joystick)	S-1203 0309	N/A	N/A	N/A
TESTO	608-H1 / Thermometer	40331936309	12/26/2023	Annual	12/26/2024
Staubli	CS8Cspeag-TX90	F13/ 5R4XF1/ C/ 01	N/A	N/A	N/A
Staubli	TX90 XLspeag	F13/ 5R4XF1/ A/ 01	N/A	N/A	N/A
Staubli	Teach Pendant (Joystick)	S-1338 1332	N/A	N/A	N/A
TESTO	175-H1 / Thermometer	40331953309	01/18/2024	Annual	01/18/2025
Staubli	CS8Cspeag-TX90	F/24/0058554/C/002	N/A	N/A	N/A
Staubli	TX90 XLspeag	F/24/0058554/A/002	N/A	N/A	N/A
Staubli	Teach Pendant (Joystick)	D21144508	N/A	N/A	N/A
TESTO	175-H1 / Thermometer	40332651310	12/26/2023	Annual	12/26/2025
Staubli	CS8Cspeag-TX60	F/20/0018446/C/001	N/A	N/A	N/A
Staubli	TX60 Lspeag	F/20/0018446/A/001	N/A	N/A	N/A
Staubli	Teach Pendant (Joystick)	020885	N/A	N/A	N/A
TESTO	175-H1 / Thermometer	44606611906	03/20/2024	Annual	03/20/2025
Staubli	CS8Cspeag-TX90	F13/ 5SD0A1/ C/ 01	N/A	N/A	N/A
Staubli	TX90 XLspeag	F13/ 5SD0A1/ A/ 01	N/A	N/A	N/A
Staubli	Teach Pendant (Joystick)	001729	N/A	N/A	N/A
TESTO	608-H1 / Thermometer	83348029	03/20/2024	Annual	03/20/2025
Staubli	CS8Cspeag-TX90	F07/55B8A1/C/01	N/A	N/A	N/A
Staubli	TX90 XLspeag	F07/55B8A1/A/01	N/A	N/A	N/A
Staubli	Teach Pendant (Joystick)	S-0306	N/A	N/A	N/A
TESTO	608-H1 / Thermometer	83348021	03/20/2024	Annual	03/20/2025
Staubli	CS8Cspeag-TX90	F07/56W9A1/C/01	N/A	N/A	N/A
Staubli	TX90 XLspeag	F07/56W9A1/A/01	N/A	N/A	N/A
Staubli	Teach Pendant (Joystick)	S-0602	N/A	N/A	N/A
TESTO	608-H1 / Thermometer	83406789	06/26/2024	Annual	06/26/2025
SPEAG	DAE4	1720	04/19/2024	Annual	04/19/2025
SPEAG	DAE4	1629	08/16/2024	Annual	08/16/2025
SPEAG	DAE4	869	03/15/2024	Annual	03/15/2025
SPEAG	DAE4	780	06/19/2024	Annual	06/19/2025
SPEAG	DAE4	648	04/19/2024	Annual	04/19/2025
SPEAG	DAE4	446	11/16/2023	Annual	11/16/2024
SPEAG	E-Field Probe EX3DV4	3768	08/19/2024	Annual	08/19/2025
SPEAG	E-Field Probe EX3DV4	7370	08/22/2024	Annual	08/22/2025
SPEAG	E-Field Probe ES3DV3	3076	07/17/2024	Annual	07/17/2025
SPEAG	E-Field Probe EX3DV4	7681	11/27/2024	Annual	11/27/2025
SPEAG	E-Field Probe EX3DV4	3882	11/21/2023	Annual	11/21/2024
SPEAG	E-Field Probe EX3DV4	3903	07/31/2024	Annual	07/31/2025
SPEAG	E-Field Probe EUmmWV4	9528	05/17/2024	Annual	05/17/2025

Manufacturer	Type / Model	S/N	Calib. Date	Calib.Interval	Calib.Due
SPEAG	CLA13	1016	09/21/2023	Biennial	09/21/2025
SPEAG	Dipole D750V3	1014	05/20/2024	Annual	05/20/2025
SPEAG	Dipole D835V2	441	04/18/2024	Annual	04/18/2025
SPEAG	Dipole D1800V2	2d007	04/15/2024	Annual	04/15/2025
SPEAG	Dipole D1900V2	5d032	01/18/2024	Annual	01/18/2025
SPEAG	Dipole D2450V2	743	03/14/2024	Annual	03/14/2025
SPEAG	Dipole D2600V2	1015	04/22/2024	Annual	04/22/2025
SPEAG	Dipole D3500V2	1132	01/23/2024	Annual	01/23/2025
SPEAG	Dipole D3700V2	1105	11/20/2023	Annual	11/20/2024
SPEAG	Dipole D3900V2	1086	05/21/2024	Annual	05/21/2025
SPEAG	Dipole D5 GHz V2	1107	04/19/2024	Annual	04/19/2025
SPEAG	Dipole D6.5GHzV2	1012	09/17/2024	Annual	09/17/2025
SPEAG	5G Verification source 10GHz	1018	04/17/2024	Annual	04/17/2025
Agilent	Power Meter E4419B	MY41291386	09/21/2023	Annual	09/21/2024
Agilent	Power Meter E4419B	MY41291386	09/11/2024	Annual	09/11/2025
Agilent	Power Meter N1911A	MY45101406	05/21/2024	Annual	05/21/2025
Agilent	Power Sensor 8481A	SG1091286	09/21/2023	Annual	09/21/2024
Agilent	Power Sensor 8481A	SG1091286	09/12/2024	Annual	09/12/2025
H.P	Power Sensor 8481A	MY41090675	09/21/2023	Annual	09/21/2024
H.P	Power Sensor 8481A	MY41090675	09/12/2024	Annual	09/12/2025
Agilent	Power Sensor 8481A	MY41090873	01/17/2024	Annual	01/17/2025
Agilent	Wideband Power Sensor N1921A	MY55220026	07/30/2024	Annual	07/30/2025
Agilent	11636B/Power Divider	58698	01/15/2024	Annual	01/15/2025
SPEAG	DAKS 3.5	1038	01/22/2024	Annual	01/22/2025
SPEAG	DAKS_VNA R140	0141013	01/11/2024	Annual	01/11/2025
SPEAG	MXA Signal Analyzer	MY49100108	01/09/2024	Annual	01/09/2025
Agilent	MXA Signal Analyzer N9020A	MY50510407	06/04/2024	Annual	06/04/2025
Agilent	Signal Generator N5182A	MY47070230	03/19/2024	Annual	03/19/2025
Agilent	Signal Generator E4433B	US40052109	01/16/2024	Annual	01/16/2025
EMPOWER	RF Power Amplifier	1084	05/21/2024	Annual	05/21/2025
EMPOWER	RF Power Amplifier	1011	09/21/2023	Annual	09/21/2024
EMPOWER	RF Power Amplifier	1011	09/11/2024	Annual	09/11/2025
MICRO LAB	LP Filter / LA-15N	10453	09/21/2023	Annual	09/21/2024
MICRO LAB	LP Filter / LA-15N	10453	09/11/2024	Annual	09/11/2025
MICRO LAB	LP Filter / LA-30N	-	09/21/2023	Annual	09/21/2024
MICRO LAB	LP Filter / LA-30N	-	09/11/2024	Annual	09/11/2025
MICRO LAB	LP Filter / LA-60N	32011	09/21/2023	Annual	09/21/2024
MICRO LAB	LP Filter / LA-60N	32011	09/11/2024	Annual	09/11/2025
HP	Attenuator (3dB) 33340A	MY39260298	08/20/2024	Annual	08/20/2025
HP	Attenuator (20dB) 8493C	09271	08/21/2024	Annual	08/21/2025
HP	Attenuator (30dB) 8491A	52151	05/21/2024	Annual	05/21/2025
Agilent	Directional Bridge 86205A	3140A04581	04/22/2024	Annual	04/22/2025
HP	Directional Coupler	2090710	06/25/2024	Annual	06/25/2025
Agilent	WIRELESS Communication E5515C	MY48361100	09/11/2024	Annual	09/11/2025
Anritsu	Radio Communication Tester MT8000A	6261987928	01/18/2024	Annual	01/18/2025
Anritsu	Radio Communication Tester MT8000A	6261967108	04/22/2024	Annual	04/22/2025
Anritsu	Radio Communication Tester MT8820C	6201074225	01/17/2024	Annual	01/17/2025
Anritsu	Radio Communication Tester MT8820C	6200695605	03/19/2024	Annual	03/19/2025
Anritsu	Radio Communication Tester MT8821C	6262044720	11/28/2023	Annual	11/28/2024
ROHDE&SCHWARZ	Radio Communication Tester CMW 500	127521	04/23/2024	Annual	04/23/2025
ROHDE&SCHWARZ	Bluetooth Tester CBT	100272	01/16/2024	Annual	01/16/2025

* The E-field probe was calibrated by SPEAG, by the waveguide technique procedure. Dipole Verification measurement is performed by HCT Lab. before each test. The brain/body simulating material is calibrated by HCT using the DAKS 3.5 to determine the conductivity and permittivity (dielectric constant) of the brain/body-equivalent material.

20. Conclusion

The SAR and RF Exposure measurement indicates that the EUT complies with the RF radiation exposure limits of the ANSI/ IEEE C95.1 - 2005.

These measurements were taken to simulate the RF effects exposure under worst-case conditions. Precise laboratory measures were taken to assure repeatability of the tests. The results and statements relate only to the item(s) tested.

Please note that the absorption and distribution of electromagnetic energy in the body are very complex phenomena that depend on the mass, shape, and size of the body, the orientation of the body with respect to the field vectors, and the electrical properties of both the body and the environment. Other variables that may play a substantial role in possible biological effects are those that characterize the environment (e.g. ambient temperature, air velocity, relative humidity, and body insulation) and those that characterize the individual (e.g. age, gender, activity level, debilitation, or disease). Because various factors may interact with one another to vary the specific biological outcome of an exposure to electromagnetic fields, any protection guide should consider maximal amplification of biological effects as a result of field-body interactions, environmental conditions, and physiological variables.

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Appendix A. DUT Ant. Information & SETUP PHOTO

Please refer to test DUT Ant. Information & setup photo file no. as follows:

Report No.
HCT-SR-2410-FC011-P