

LTE Band 17

Conducted Power of LTE Band 17							
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					23755	23790	23825
5MHz	QPSK	1	0	24.00	23.86	23.76	23.77
			13	24.00	23.81	23.73	23.73
			24	24.00	23.94	23.72	23.79
		12	0	23.00	22.69	22.68	22.70
			6	23.00	22.66	22.68	22.66
			13	23.00	22.67	22.71	22.55
		25	0	23.00	22.70	22.72	22.65
	16QAM	1	0	23.50	22.56	23.04	22.82
			13	23.00	22.52	22.98	22.73
			24	23.00	22.63	22.99	22.80
		12	0	22.00	21.68	21.72	21.66
			6	22.00	21.68	21.70	21.62
			13	22.00	21.67	21.73	21.55
		25	0	22.00	21.71	21.71	21.65
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					23780	23790	23800
10MHz	QPSK	1	0	24.00	23.70	23.73	23.68
			25	24.00	23.74	23.68	23.71
			49	24.00	23.79	23.68	23.76
		25	0	23.00	22.73	22.70	22.70
			13	23.00	22.70	22.67	22.69
			25	23.00	22.77	22.70	22.65
		50	0	23.00	22.78	22.74	22.71
	16QAM	1	0	23.50	23.24	22.97	22.71
			25	23.50	23.27	22.87	22.75
			49	23.50	23.24	22.90	22.80
		25	0	22.00	21.75	21.73	21.78
			13	22.00	21.77	21.72	21.76
			25	22.00	21.83	21.72	21.73
		50	0	22.00	21.76	21.72	21.69

LTE Band 25

Conducted Power of LTE Band 25							
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					26047	26365	26683
1.4MHz	QPSK	1	0	24.50	24.09	24.21	24.08
			2	24.50	24.05	24.17	24.09
			5	24.50	24.09	24.21	24.07
		3	0	24.50	24.24	24.30	24.23
			2	24.50	24.23	24.27	24.27
			3	24.50	24.23	24.25	24.25
		6	0	23.50	23.33	23.33	23.15
	16QAM	1	0	24.00	23.39	23.50	23.21
			2	23.50	23.38	23.49	23.17
			5	23.50	23.39	23.49	23.22
		3	0	24.00	23.52	23.25	23.18
			2	24.00	23.55	23.22	23.16
			3	24.00	23.56	23.21	23.18
		6	0	22.50	22.34	22.49	22.24
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					26055	26365	26675
3MHz	QPSK	1	0	24.50	24.34	24.26	24.15
			7	24.50	24.26	24.22	24.13
			14	24.50	24.32	24.27	24.18
		8	0	23.50	23.34	23.35	23.32
			4	23.50	23.33	23.30	23.15
			7	23.50	23.33	23.29	23.13
		15	0	23.50	23.38	23.31	23.36
	16QAM	1	0	24.00	23.84	23.55	23.42
			7	24.00	23.81	23.48	23.28
			14	24.00	23.82	23.54	23.31
		8	0	23.00	22.60	22.45	22.44
			4	23.00	22.55	22.42	22.42
			7	23.00	22.55	22.42	22.40
		15	0	22.50	22.45	22.42	22.41

Conducted Power of LTE Band 25							
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					26065	26365	26665
5MHz	QPSK	1	0	25.00	24.69	24.46	24.47
			13	24.50	24.44	24.26	24.21
			24	25.00	24.72	24.54	24.46
		12	0	23.50	23.38	23.40	23.37
			6	23.50	23.35	23.31	23.33
			13	23.50	23.40	23.34	23.13
		25	0	23.50	23.41	23.36	23.28
	16QAM	1	0	24.00	23.32	23.86	23.52
			13	24.00	23.30	23.51	23.27
			24	24.00	23.38	23.83	23.52
		12	0	23.00	22.42	22.54	22.39
			6	22.50	22.40	22.49	22.37
			13	22.50	22.43	22.49	22.29
		25	0	23.00	22.46	22.50	22.35
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					26090	26365	26640
10MHz	QPSK	1	0	24.50	24.43	24.44	24.35
			25	24.50	24.31	24.27	24.22
			49	25.00	24.50	24.42	24.21
		25	0	23.50	23.38	23.35	23.37
			13	23.50	23.43	23.33	23.40
			25	23.50	23.45	23.36	23.36
		50	0	23.50	23.47	23.40	23.37
	16QAM	1	0	24.00	23.86	23.64	23.41
			25	24.00	23.85	23.49	23.26
			49	24.00	23.83	23.78	23.41
		25	0	23.00	22.46	22.54	22.48
			13	23.00	22.49	22.53	22.48
			25	23.00	22.53	22.55	22.44
		50	0	23.00	22.47	22.54	22.39

Conducted Power of LTE Band 25							
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					26115	26365	26615
15MHz	QPSK	1	0	24.50	24.19	24.24	24.12
			38	24.50	24.32	24.29	24.16
			74	24.50	24.21	24.19	24.11
		36	0	23.50	23.30	23.32	23.40
			18	23.50	23.39	23.28	23.35
			39	23.50	23.39	23.30	23.31
		75	0	23.50	23.38	23.32	23.35
	16QAM	1	0	24.00	23.80	23.47	23.54
			38	24.00	23.87	23.50	23.67
			74	24.00	23.76	23.46	23.39
		36	0	23.00	22.37	22.53	22.41
			18	22.50	22.41	22.46	22.37
			39	22.50	22.42	22.47	22.35
		75	0	22.50	22.41	22.48	22.38
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					26140	26365	26590
20MHz	QPSK	1	0	24.50	24.14	24.13	24.19
			50	24.50	24.16	24.29	24.20
			99	24.50	24.10	24.18	24.14
		50	0	23.50	23.38	23.40	23.44
			25	23.50	23.43	23.39	23.44
			50	23.50	23.43	23.42	23.44
		100	0	23.50	23.37	23.37	23.49
	16QAM	1	0	24.00	23.54	23.68	23.89
			50	24.00	23.57	23.51	23.97
			99	24.00	23.38	23.59	23.78
		50	0	23.00	22.33	22.54	22.58
			25	23.00	22.43	22.51	22.44
			50	23.00	22.41	22.53	22.43
		100	0	23.00	22.37	22.51	22.51

LTE Band 26

Conducted Power of LTE Band 26							
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					26697	26740	26783
1.4MHz	QPSK	1	0	24.00	23.52	23.60	23.59
			2	24.00	23.54	23.65	23.57
			5	24.00	23.51	23.57	23.65
		3	0	24.00	23.77	23.81	23.72
			2	24.00	23.71	23.74	23.83
			3	24.00	23.63	23.64	23.80
		6	0	23.00	22.61	22.69	22.78
	16QAM	1	0	23.00	22.69	22.75	22.86
			2	23.00	22.83	22.90	22.86
			5	23.00	22.74	22.78	22.92
		3	0	23.00	22.57	22.69	22.92
			2	23.00	22.86	22.64	22.68
			3	23.00	22.71	22.89	22.66
		6	0	22.00	21.72	21.65	21.77
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					26705	26740	26775
3MHz	QPSK	1	0	24.00	23.83	23.59	23.72
			7	24.00	23.60	23.85	23.56
			14	24.00	23.53	23.72	23.85
		8	0	23.00	22.65	22.77	22.74
			4	23.00	22.67	22.69	22.75
			7	23.00	22.73	22.71	22.70
		15	0	23.00	22.69	22.77	22.75
	16QAM	1	0	23.50	22.76	23.20	22.96
			7	23.50	22.87	22.78	23.22
			14	23.50	23.12	22.88	22.88
		8	0	22.00	21.79	21.97	21.75
			4	22.00	21.70	21.83	21.96
			7	22.00	21.92	21.74	21.83
		15	0	22.00	21.78	21.81	21.76

Conducted Power of LTE Band 26							
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					26715	26740	26765
5MHz	QPSK	1	0	24.00	23.92	23.63	23.85
			13	24.00	23.75	23.96	23.69
			24	24.50	23.70	23.84	24.03
		12	0	23.00	22.69	22.76	22.80
			6	23.00	22.73	22.70	22.76
			13	23.00	22.71	22.72	22.70
			0	23.00	22.74	22.75	22.78
	16QAM	1	0	23.00	22.80	22.60	22.96
			13	23.00	22.90	22.84	22.66
			24	23.00	22.68	23.00	22.94
		12	0	22.00	21.75	21.79	21.82
			6	22.00	21.78	21.76	21.79
			13	22.00	21.76	21.74	21.75
		25	0	22.00	21.79	21.83	21.81
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					26840	26915	26990
10MHz	QPSK	1	0	24.00	23.98	23.71	23.60
			25	24.00	23.90	23.63	23.63
			49	24.00	23.80	23.73	23.61
		25	0	23.00	22.83	22.74	22.73
			13	23.00	22.82	22.71	22.66
			25	23.00	22.81	22.64	22.58
		50	0	23.00	22.82	22.70	22.66
	16QAM	1	0	23.50	23.35	22.91	22.66
			25	23.50	23.38	23.14	22.69
			49	23.50	23.19	22.68	22.69
		25	0	22.00	21.89	21.79	21.82
			13	22.00	21.88	21.77	21.75
			25	22.00	21.89	21.73	21.69
		50	0	22.00	21.83	21.69	21.67
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					26765	26865	26965
15MHz	QPSK	1	0	24.00	23.85	23.72	23.59
			38	24.00	23.83	23.73	23.55
			74	24.00	23.87	23.58	23.48
		36	0	23.00	22.70	22.69	22.70
			18	23.00	22.73	22.70	22.68
			39	23.00	22.73	22.69	22.58
		75	0	23.00	22.74	22.67	22.65
	16QAM	1	0	23.50	23.16	22.99	22.99
			38	23.50	23.24	22.93	22.96
			74	23.50	23.23	22.82	22.90
		36	0	22.00	21.77	21.73	21.72
			18	22.00	21.78	21.74	21.66
			39	22.00	21.80	21.72	21.58
		75	0	22.00	21.77	21.73	21.64

LTE Band 38

Conducted Power of LTE Band 38							
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					37775	38000	38225
5MHz	QPSK	1	0	24.00	22.79	23.38	23.69
			13	24.00	22.88	23.41	23.78
			24	24.00	22.88	23.46	23.71
		12	0	23.00	21.82	22.30	22.75
			6	23.00	21.82	22.28	22.73
			13	23.00	21.82	22.35	22.75
		25	0	23.00	21.84	22.32	22.78
	16QAM	1	0	23.00	21.86	22.31	22.75
			13	23.00	22.11	22.36	22.83
			24	23.00	21.99	22.63	22.47
		12	0	22.00	20.78	21.34	21.80
			6	22.00	20.82	21.20	21.80
			13	22.00	20.88	21.26	21.75
		25	0	22.00	20.86	21.37	21.78
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					37800	38000	38200
10MHz	QPSK	1	0	24.00	22.88	23.32	23.64
			25	24.00	23.08	23.54	23.80
			49	24.00	23.07	23.45	23.83
		25	0	23.00	21.95	22.36	22.74
			13	23.00	21.96	22.40	22.81
			25	23.00	21.98	22.42	22.84
		50	0	23.00	22.00	22.42	22.83
	16QAM	1	0	23.00	21.94	22.20	22.63
			25	23.50	21.83	22.34	23.08
			49	23.50	22.08	22.32	23.09
		25	0	22.00	20.97	21.40	21.76
			13	22.00	21.02	21.45	21.84
			25	22.00	21.06	21.47	21.82
		50	0	22.00	20.97	21.37	21.76

Conducted Power of LTE Band 38							
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					37825	38000	38175
15MHz	QPSK	1	0	24.00	22.97	23.31	23.69
			38	24.00	23.10	23.53	23.69
			74	24.00	23.15	23.37	23.65
		36	0	23.00	21.96	22.31	22.63
			18	23.00	22.06	22.39	22.72
			39	23.00	22.07	22.43	22.77
		75	0	23.00	22.03	22.35	22.73
	16QAM	1	0	23.00	21.96	22.17	22.62
			38	23.50	21.90	22.27	23.07
			74	23.00	22.19	22.36	22.61
		36	0	22.00	20.98	21.27	21.66
			18	22.00	20.99	21.39	21.75
			39	22.00	21.07	21.46	21.80
		75	0	22.00	20.99	21.36	21.77
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					37850	38000	38150
20MHz	QPSK	1	0	23.50	22.92	23.25	23.44
			50	24.00	23.26	23.56	23.76
			99	24.00	23.29	23.59	23.73
		50	0	23.00	22.09	22.42	22.66
			25	23.00	22.19	22.44	22.74
			50	23.00	22.21	22.55	22.86
		100	0	23.00	22.16	22.46	22.75
	16QAM	1	0	22.50	21.95	22.05	22.07
			50	23.00	22.17	22.67	22.82
			99	23.00	22.28	22.61	22.43
		50	0	22.00	21.03	21.38	21.62
			25	22.00	21.16	21.50	21.71
			50	22.00	21.21	21.49	21.84
		100	0	22.00	21.11	21.41	21.72

LTE Band 41

Conducted Power of LTE Band 41							
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					39675	40620	41565
5MHz	QPSK	1	0	24.00	22.08	23.17	23.54
			13	23.50	22.05	23.21	23.48
			24	23.50	22.10	23.25	23.31
		12	0	22.50	20.96	22.16	22.33
			6	22.50	20.98	22.16	22.28
			13	22.50	20.99	22.18	22.25
		25	0	22.50	20.96	22.21	22.34
	16QAM	1	0	22.50	21.00	22.13	22.36
			13	22.50	20.96	22.17	22.37
			24	23.00	20.98	22.26	22.52
		12	0	21.50	19.91	21.21	21.31
			6	21.50	19.93	21.22	21.32
			13	21.50	19.90	21.20	21.26
		25	0	21.50	19.96	21.28	21.26
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					39700	40620	41540
10MHz	QPSK	1	0	23.50	22.07	23.12	23.37
			25	23.50	22.16	23.22	23.41
			49	23.50	22.02	23.30	23.19
		25	0	22.50	20.93	22.15	22.45
			13	22.50	20.99	22.23	22.43
			25	22.50	21.01	22.25	22.37
		50	0	22.50	20.99	22.27	22.37
	16QAM	1	0	22.50	21.05	22.01	22.41
			25	22.50	21.07	22.02	22.31
			49	22.50	20.99	22.18	22.26
		25	0	22.00	19.95	21.16	21.51
			13	21.50	20.01	21.24	21.45
			25	21.50	20.03	21.28	21.34
		50	0	21.50	19.96	21.21	21.48

Conducted Power of LTE Band 41							
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					39725	40620	41515
15MHz	QPSK	1	0	23.50	22.00	23.02	23.35
			38	24.00	22.03	23.20	23.51
			74	23.50	21.97	23.21	23.13
		36	0	22.50	20.90	22.06	22.46
			18	22.50	20.93	22.17	22.36
			39	22.50	20.92	22.23	22.31
			75	22.50	20.91	22.17	22.38
	16QAM	1	0	23.00	20.82	21.91	22.73
			38	22.50	21.01	22.02	22.33
			74	22.50	21.04	22.17	22.00
		36	0	22.00	19.91	21.05	21.52
			18	21.50	19.94	21.13	21.48
			39	21.50	19.90	21.23	21.30
			75	21.50	19.93	21.16	21.38
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					39750	40620	41490
20MHz	QPSK	1	0	23.50	22.00	23.02	23.37
			50	23.50	22.07	23.17	23.38
			99	23.50	21.94	23.24	23.13
		50	0	23.00	20.92	22.12	22.57
			25	23.00	21.02	22.27	22.50
			50	22.50	21.00	22.29	22.32
			100	22.50	20.96	22.23	22.43
	16QAM	1	0	22.50	20.86	21.91	22.17
			50	23.00	20.97	22.00	22.63
			99	22.50	20.84	22.41	22.38
		50	0	21.50	19.87	21.17	20.85
			25	21.50	19.96	21.22	20.83
			50	21.50	19.94	21.33	20.67
			100	21.50	19.91	21.18	20.80

LTE Band 66

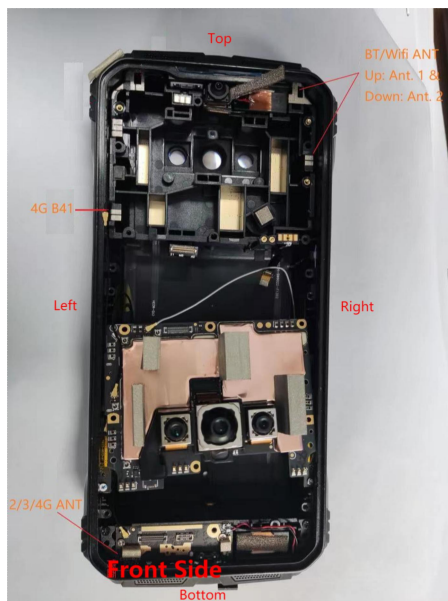
Conducted Power of LTE Band 66							
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					131979	132322	132665
1.4MHz	QPSK	1	0	23.00	22.92	22.95	22.92
			2	23.00	22.93	22.96	22.93
			5	23.00	22.89	22.92	22.94
		3	0	23.00	23.00	22.88	22.97
			2	23.50	22.99	22.88	23.02
			3	23.00	22.99	22.86	23.00
		6	0	22.00	21.98	21.81	21.94
	16QAM	1	0	22.50	22.04	21.88	22.20
			2	22.50	22.03	21.86	22.25
			5	22.50	22.02	21.87	22.22
		3	0	22.50	22.10	21.72	22.02
			2	22.50	22.09	21.72	22.01
			3	22.50	22.09	21.73	22.05
		6	0	21.50	21.07	20.85	21.01
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					131987	132322	132657
3MHz	QPSK	1	0	23.00	22.96	22.98	22.99
			7	23.00	22.94	22.97	22.96
			14	23.00	22.95	22.98	22.96
		8	0	22.00	21.99	21.84	21.97
			4	22.00	21.98	21.84	21.92
			7	22.00	21.98	21.81	21.93
		15	0	22.50	22.01	21.87	21.98
	16QAM	1	0	22.50	22.03	21.93	22.28
			7	22.50	22.03	21.88	22.27
			14	22.50	22.01	21.87	22.32
		8	0	21.50	20.98	20.79	21.02
			4	21.00	20.95	20.79	20.99
			7	21.00	20.98	20.78	20.97
		15	0	21.00	20.95	20.89	20.98

Conducted Power of LTE Band 66							
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					131997	132322	132647
5MHz	QPSK	1	0	23.50	23.20	22.96	23.08
			13	23.00	23.11	22.86	22.98
			24	23.50	23.14	22.91	23.07
		12	0	22.50	22.04	21.87	22.04
			6	22.50	22.04	21.86	21.95
			13	22.50	22.01	21.85	21.86
		25	0	22.50	22.03	21.88	21.97
	16QAM	1	0	22.50	22.19	22.38	21.99
			13	22.50	22.10	22.23	21.88
			24	22.50	22.17	22.28	21.98
		12	0	21.50	21.03	20.84	21.14
			6	21.50	21.04	20.85	21.00
			13	21.00	21.00	20.85	20.90
		25	0	21.50	21.00	20.87	21.06
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					132022	132322	132622
10MHz	QPSK	1	0	23.50	23.04	23.01	22.99
			25	23.50	23.07	23.03	23.02
			49	23.50	23.04	23.02	23.04
		25	0	22.00	21.99	21.81	21.94
			13	22.50	22.01	21.87	22.01
			25	22.50	22.02	21.93	21.89
		50	0	22.50	22.03	21.90	21.95
	16QAM	1	0	22.50	22.07	21.95	22.37
			25	22.50	22.02	21.92	22.39
			49	22.50	22.05	21.92	22.39
		25	0	21.50	21.05	20.84	20.97
			13	21.50	21.04	20.93	21.06
			25	21.50	21.06	20.97	20.93
		50	0	21.00	20.99	20.87	20.91

Conducted Power of LTE Band 66							
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					132047	132322	132597
15MHz	QPSK	1	0	23.00	22.99	22.98	22.89
			38	23.50	23.02	23.01	23.01
			74	23.00	22.87	22.90	22.97
		36	0	22.00	21.98	21.79	21.82
			18	22.00	21.97	21.87	21.93
			39	22.00	21.90	21.84	21.87
			75	22.00	21.96	21.85	21.90
	16QAM	1	0	22.50	22.03	21.88	21.81
			38	22.00	22.00	21.92	21.87
			74	22.00	21.86	21.83	21.82
		36	0	21.50	21.01	20.80	20.84
			18	21.00	20.99	20.87	20.96
			39	21.00	20.92	20.85	20.94
			75	21.00	20.95	20.84	20.92
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					132072	132322	132572
20MHz	QPSK	1	0	23.50	22.96	23.02	22.82
			50	23.00	22.99	22.93	22.94
			99	23.00	23.00	22.79	22.97
		50	0	22.50	22.07	21.75	21.82
			25	22.50	22.01	21.93	21.97
			50	22.00	21.88	21.84	21.91
			100	22.00	21.95	21.79	21.86
	16QAM	1	0	22.50	22.46	21.92	21.92
			50	22.50	22.39	21.85	21.93
			99	22.50	22.43	21.76	21.99
		50	0	21.50	21.04	20.71	20.78
			25	21.00	20.97	20.90	20.92
			50	21.00	20.85	20.81	20.89
			100	21.00	20.96	20.78	20.84

9. Exposure Position Consideration

9.1. Antenna information



WWAN Main Antenna	GSM/UMTS/LTE TX/RX
WLAN/BT Antenna	WLAN/BT TX/RX
Note: A) Per KDB648474 D04, 10-g extremity SAR is not required when Body-Worn mode 1-g reported SAR<1.2W/Kg. B) According to the KDB941225 D06 Hot Spot SAR v02, When the overall device length and width are ≥ 9cm*5cm, the test distance is 10mm, SAR must be measured for all sides and surfaces with a transmitting antenna located with 25mm from that surface or edge.	

Distance of The Antenna to the EUT surface and edge (mm)						
Antenna	Front Side (mm)	Back Side (mm)	Left Edge (mm)	Right Edge (mm)	Top Edge (mm)	Bottom Edge (mm)
WWAN	<5	<5	<5	85	185	<5
BT/Wifi ANT 1	<5	<5	84	<5	<5	180
Wifi ANT 2	<5	<5	87	<5	34	156
4G B41 ANT	<5	<5	<5	87	55	135

9.2. Test Position Consideration

Positions for SAR tests: Hotspot mode						
Antenna	Front Side (mm)	Back Side (mm)	Left Edge (mm)	Right Edge (mm)	Top Edge (mm)	Bottom Edge (mm)
WWAN	Yes	Yes	Yes	No	No	Yes
BT/Wifi ANT 1	Yes	Yes	No	Yes	Yes	No
Wifi ANT 2	Yes	Yes	No	Yes	No	No
4G B41 ANT	Yes	Yes	Yes	No	No	No

10. SAR Test Results Summary

10.1. Head 1g SAR Data

Band	Mode	Test Position with 0mm	CH.	Freq. (MHz)	Ave. Power (dBm)	Tune-Up Limit (dBm)	Power Drift (%)	Meas. SAR1g (W/kg)	Scaling Factor	Reported SAR1g (W/kg)	Limit (W/Kg)
GSM850	GPRS 4slots	Left-Cheek	190	836.6	28.57	29.00	1.050	0.110	1.104	0.121	1.60
		Left-Tilt	190	836.6	28.57	29.00	0.990	0.061	1.104	0.067	
		Right-Cheek	190	836.6	28.57	29.00	-1.820	0.071	1.104	0.078	
		Right-Tilt	190	836.6	28.57	29.00	-3.510	0.063	1.104	0.070	
GSM1900	GPRS 2slots	Left-Cheek	512	1850.2	29.88	30.00	-0.210	0.382	1.028	0.393	
		Left-Tilt	512	1850.2	29.88	30.00	2.680	0.186	1.028	0.191	
		Right-Cheek	512	1850.2	29.88	30.00	1.730	0.352	1.028	0.362	
		Right-Tilt	512	1850.2	29.88	30.00	-2.920	0.189	1.028	0.194	
WCDMA Band II	RMC	Left-Cheek	9262	1852.4	23.49	23.50	0.830	0.514	1.002	0.515	
		Left-Tilt	9262	1852.4	23.49	23.50	-1.201	0.297	1.002	0.298	
		Right-Cheek	9262	1852.4	23.49	23.50	2.663	0.455	1.002	0.456	
		Right-Tilt	9262	1852.4	23.49	23.50	1.503	0.281	1.002	0.282	
WCDMA Band IV	RMC	Left-Cheek	1312	1712.4	22.92	23.00	-0.670	0.415	1.019	0.423	
		Left-Tilt	1312	1712.4	22.92	23.00	-3.570	0.188	1.019	0.192	
		Right-Cheek	1312	1712.4	22.92	23.00	-2.390	0.402	1.019	0.410	
		Right-Tilt	1312	1712.4	22.92	23.00	4.670	0.171	1.019	0.174	
WCDMA Band V	RMC	Left-Cheek	4132	826.4	23.29	23.50	-1.450	0.226	1.050	0.237	
		Left-Tilt	4132	826.4	23.29	23.50	-1.020	0.141	1.050	0.148	
		Right-Cheek	4132	826.4	23.29	23.50	-1.700	0.209	1.050	0.219	
		Right-Tilt	4132	826.4	23.29	23.50	1.240	0.140	1.050	0.147	
BT	Classical	Left-Cheek	1	2402	9.02	9.50	-0.280	0.085	1.117	0.095	
		Left-Tilt	1	2402	9.02	9.50	-1.300	0.050	1.117	0.056	
		Right-Cheek	1	2402	9.02	9.50	2.730	0.082	1.117	0.092	
		Right-Tilt	1	2402	9.02	9.50	1.970	0.051	1.117	0.057	
2.4G -ANT 1	802.11b	Left-Cheek	6	2437	16.42	16.50	-1.880	0.251	1.019	0.256	
		Left-Tilt	6	2437	16.42	16.50	-3.570	0.230	1.019	0.234	
		Right-Cheek	6	2437	16.42	16.50	-2.390	0.299	1.019	0.305	
		Right-Tilt	6	2437	16.42	16.50	4.670	0.272	1.019	0.277	
2.4G -ANT 2	802.11b	Left-Cheek	11	2462	16.57	17.00	1.550	0.277	1.104	0.306	
		Left-Tilt	11	2462	16.57	17.00	0.390	0.240	1.104	0.265	
		Right-Cheek	11	2462	16.57	17.00	2.670	0.312	1.104	0.344	
		Right-Tilt	11	2462	16.57	17.00	-3.310	0.280	1.104	0.309	
2.4G -MIMO ANT 1 side	802.11n	Left-Cheek	6	2437	22.31	22.50	-1.205	0.123	1.045	0.129	
		Left-Tilt	6	2437	22.31	22.50	2.830	0.113	1.045	0.118	
		Right-Cheek	6	2437	22.31	22.50	1.201	0.149	1.045	0.156	
		Right-Tilt	6	2437	22.31	22.50	2.420	0.134	1.045	0.140	
2.4G -MIMO ANT 2 side	802.11n	Left-Cheek	6	2437	22.31	22.50	0.503	0.126	1.045	0.132	
		Left-Tilt	6	2437	22.31	22.50	0.880	0.115	1.045	0.120	
		Right-Cheek	6	2437	22.31	22.50	1.570	0.150	1.045	0.157	
		Right-Tilt	6	2437	22.31	22.50	-2.320	0.136	1.045	0.142	

Note:

1. The frame average of GPRS 850 (4Tx slots) & GPRS 1900 (2Tx slots) higher than GSM and sample can support VOIP function, tested at GPRS mode for head.

Band	Mode	Test Position with 0mm	CH.	Freq. (MHz)	Ave. Power (dBm)	Tune-Up Limit (dBm)	Power Drift (%)	Meas. SAR1g (W/kg)	Scaling Factor	Reported SAR1g (W/kg)	Limit (W/Kg)
5.2G -ANT 1	802.11ac (VTH80)	Left-Cheek	42	5210	8.98	9.00	1.255	0.146	1.005	0.147	1.60
		Left-Tilt	42	5210	8.98	9.00	0.700	0.047	1.005	0.047	
		Right-Cheek	42	5210	8.98	9.00	-1.050	0.165	1.005	0.166	
		Right-Tilt	42	5210	8.98	9.00	2.851	0.067	1.005	0.067	
5.2G -ANT 2	802.11ac (VTH80)	Left-Cheek	42	5210	9.35	9.50	1.002	0.163	1.035	0.169	
		Left-Tilt	42	5210	9.35	9.50	-1.541	0.062	1.035	0.064	
		Right-Cheek	42	5210	9.35	9.50	-2.980	0.177	1.035	0.183	
		Right-Tilt	42	5210	9.35	9.50	1.122	0.080	1.035	0.083	
5.2G -MIMO ANT 1 side	802.11ac (VTH80)	Left-Cheek	42	5210	12.18	12.50	-2.420	0.025	1.076	0.027	
		Left-Tilt	42	5210	12.18	12.50	0.583	0.014	1.076	0.015	
		Right-Cheek	42	5210	12.18	12.50	2.818	0.071	1.076	0.076	
		Right-Tilt	42	5210	12.18	12.50	-3.194	0.023	1.076	0.025	
5.2G -MIMO ANT 2 side	802.11ac (VTH80)	Left-Cheek	42	5210	12.18	12.50	-1.130	0.062	1.076	0.067	
		Left-Tilt	42	5210	12.18	12.50	2.927	0.013	1.076	0.014	
		Right-Cheek	42	5210	12.18	12.50	1.275	0.059	1.076	0.063	
		Right-Tilt	42	5210	12.18	12.50	2.478	0.017	1.076	0.018	
5.8G -ANT 1	802.11n (HT40)	Left-Cheek	151	5755	9.38	9.50	-0.950	0.186	1.028	0.191	
		Left-Tilt	151	5755	9.38	9.50	-1.334	0.088	1.028	0.090	
		Right-Cheek	151	5755	9.38	9.50	-0.945	0.206	1.028	0.212	
		Right-Tilt	151	5755	9.38	9.50	-1.603	0.108	1.028	0.111	
5.8G -ANT 2	802.11a	Left-Cheek	165	5825	10.47	10.50	1.314	0.204	1.007	0.205	
		Left-Tilt	165	5825	10.47	10.50	1.638	0.103	1.007	0.104	
		Right-Cheek	165	5825	10.47	10.50	-1.228	0.218	1.007	0.220	
		Right-Tilt	165	5825	10.47	10.50	2.043	0.121	1.007	0.122	
5.8G -MIMO ANT 1 side	802.11n (HT40)	Left-Cheek	159	5795	12.75	13.00	-1.729	0.066	1.059	0.070	
		Left-Tilt	159	5795	12.75	13.00	-3.382	0.055	1.059	0.058	
		Right-Cheek	159	5795	12.75	13.00	-2.254	0.112	1.059	0.119	
		Right-Tilt	159	5795	12.75	13.00	4.793	0.064	1.059	0.068	
5.8G -MIMO ANT 2 side	802.11n (HT40)	Left-Cheek	159	5795	12.75	13.00	1.700	0.103	1.059	0.109	
		Left-Tilt	159	5795	12.75	13.00	0.575	0.054	1.059	0.057	
		Right-Cheek	159	5795	12.75	13.00	0.975	0.100	1.059	0.106	
		Right-Tilt	159	5795	12.75	13.00	-2.100	0.058	1.059	0.061	

Band	Mode	Test Position with 0mm	CH.	Freq. (MHz)	RB allocation	RB offset	Ave. Power (dBm)	Tune-Up Limit (dBm)	Power Drift (%)	Meas. SAR1g (W/kg)	Scaling Factor	Reported SAR1g (W/kg)	Limit (W/Kg)
LTE Band 2	QPSK (20MHz)	Left-Check	19100	1900.0	1	0	24.30	24.50	-1.160	0.141	1.047	0.148	1.60
					50	0	23.71	24.00	0.556	0.135	1.069	0.144	
		Left-Tilt	19100	1900.0	1	0	24.30	24.50	0.980	0.120	1.047	0.126	
					50	0	23.71	24.00	-0.850	0.114	1.069	0.122	
		Right-Check	19100	1900.0	1	0	24.30	24.50	-1.160	0.142	1.047	0.149	
					50	0	23.71	24.00	1.500	0.138	1.069	0.148	
		Right-Tilt	19100	1900.0	1	0	24.30	24.50	2.503	0.122	1.047	0.128	
					50	0	23.71	24.00	2.001	0.118	1.069	0.126	
		Left-Check	20050	1720.0	1	99	24.17	24.50	-1.160	0.205	1.079	0.221	
					50	0	23.10	23.50	-1.100	0.200	1.096	0.219	
LTE Band 4	QPSK (20MHz)	Left-Tilt	20050	1720.0	1	99	24.17	24.50	0.980	0.151	1.079	0.163	
					50	0	23.10	23.50	1.500	0.148	1.096	0.162	
		Right-Check	20050	1720.0	1	99	24.17	24.50	4.100	0.237	1.079	0.256	
					50	0	23.10	23.50	-0.150	0.220	1.096	0.241	
		Right-Tilt	20050	1720.0	1	99	24.17	24.50	2.503	0.135	1.079	0.146	
					50	0	23.10	23.50	2.008	0.122	1.096	0.134	
LTE Band 5	QPSK (10MHz)	Left-Check	20525	836.5	1	0	24.22	24.50	-1.160	0.119	1.067	0.127	
					25	0	23.10	23.50	-1.300	0.112	1.096	0.123	
		Left-Tilt	20525	836.5	1	0	24.22	24.50	0.980	0.099	1.067	0.106	
					25	0	23.10	23.50	2.050	0.095	1.096	0.104	
		Right-Check	20525	836.5	1	0	24.22	24.50	-1.331	0.115	1.067	0.123	
					25	0	23.10	23.50	3.160	0.111	1.096	0.122	
		Right-Tilt	20525	836.5	1	0	24.22	24.50	2.503	0.097	1.067	0.103	
					25	0	23.10	23.50	-1.056	0.094	1.096	0.103	
LTE Band 7	QPSK (20MHz)	Left-Check	21350	2560	1	99	24.08	24.50	-2.000	0.121	1.102	0.133	
					50	0	23.23	23.50	1.980	0.120	1.064	0.128	
		Left-Tilt	21350	2560	1	99	24.08	24.50	0.980	0.066	1.102	0.073	
					50	0	23.23	23.50	-0.622	0.065	1.064	0.069	
		Right-Check	21350	2560	1	99	24.08	24.50	-1.331	0.111	1.102	0.122	
					50	0	23.23	23.50	1.400	0.109	1.064	0.116	
		Right-Tilt	21350	2560	1	99	24.08	24.50	2.503	0.064	1.102	0.071	
					50	0	23.23	23.50	-3.065	0.062	1.064	0.066	
LTE Band 12	QPSK (10MHz)	Left-Check	23060	704.0	1	49	23.80	24.00	-1.160	0.188	1.047	0.197	
					25	25	22.71	23.00	-1.360	0.185	1.069	0.198	
		Left-Tilt	23060	704.0	1	49	23.80	24.00	0.980	0.131	1.047	0.137	
					25	25	22.71	23.00	-2.411	0.127	1.069	0.136	
		Right-Check	23060	704.0	1	49	23.80	24.00	1.370	0.192	1.047	0.201	
					25	25	22.71	23.00	1.236	0.186	1.069	0.199	
		Right-Tilt	23060	704.0	1	49	23.80	24.00	2.503	0.136	1.047	0.142	
					25	25	22.71	23.00	-1.002	0.130	1.069	0.139	
LTE Band 17	QPSK (10MHz)	Left-Check	23780	709.0	1	49	23.79	24.00	-1.160	0.180	1.050	0.189	
					25	25	22.77	23.00	-0.260	0.178	1.054	0.188	
		Left-Tilt	23780	709.0	1	49	23.79	24.00	0.980	0.113	1.050	0.119	
					25	25	22.77	23.00	0.166	0.109	1.054	0.115	
		Right-Check	23780	709.0	1	49	23.79	24.00	-1.580	0.183	1.050	0.192	
					25	25	22.77	23.00	-1.506	0.180	1.054	0.190	
		Right-Tilt	23780	709.0	1	49	23.79	24.00	2.503	0.114	1.050	0.120	
					25	25	22.77	23.00	-2.001	0.112	1.054	0.118	

Band	Mode	Test Position with 0mm	CH.	Freq. (MHz)	RB allocation	RB offset	Ave. Power (dBm)	Tune-Up Limit (dBm)	Power Drift (%)	Meas. SAR1g (W/kg)	Scaling Factor	Reported SAR1g (W/kg)	Limit (W/Kg)
LTE Band 25	QPSK (20MHz)	Left-Cheek	26365	1882.5	1	50	24.29	24.50	-0.310	0.236	1.050	0.248	1.60
					50	50	23.42	23.50	-1.022	0.227	1.019	0.231	
		Left-Tilt	26365	1882.5	1	50	24.29	24.50	2.503	0.115	1.050	0.121	
					50	50	23.42	23.50	4.015	0.111	1.019	0.113	
		Right-Cheek	26365	1882.5	1	50	24.29	24.50	-1.160	0.205	1.050	0.215	
					50	50	23.42	23.50	-0.205	0.193	1.019	0.197	
		Right-Tilt	26365	1882.5	1	50	24.29	24.50	0.980	0.121	1.050	0.127	
					50	50	23.42	23.50	2.011	0.117	1.019	0.119	
		Left-Cheek	26765	821.5	1	74	23.87	24.00	1.580	0.100	1.030	0.103	
					36	18	22.73	23.00	2.033	0.091	1.064	0.097	
LTE Band 26	QPSK (15MHz)	Left-Tilt	26765	821.5	1	74	23.87	24.00	2.503	0.055	1.030	0.057	
					36	18	22.73	23.00	-1.025	0.054	1.064	0.057	
		Right-Cheek	26765	821.5	1	74	23.87	24.00	-1.160	0.098	1.030	0.101	
					36	18	22.73	23.00	3.026	0.096	1.064	0.102	
		Right-Tilt	26765	821.5	1	74	23.87	24.00	0.980	0.057	1.030	0.059	
					36	18	22.73	23.00	4.015	0.056	1.064	0.060	
LTE Band 38	QPSK (20MHz)	Left-Cheek	38150	2610.0	1	50	23.76	24.00	1.580	0.085	1.057	0.090	
					50	50	22.86	23.00	2.650	0.084	1.033	0.087	
		Left-Tilt	38150	2610.0	1	50	23.76	24.00	0.980	0.053	1.057	0.056	
					50	50	22.86	23.00	0.365	0.052	1.033	0.054	
		Right-Cheek	38150	2610.0	1	50	23.76	24.00	-1.331	0.084	1.057	0.089	
					50	50	22.86	23.00	1.422	0.082	1.033	0.085	
		Right-Tilt	38150	2610.0	1	50	23.76	24.00	2.503	0.051	1.057	0.054	
					50	50	22.86	23.00	2.060	0.050	1.033	0.052	
LTE Band 41	QPSK (20MHz)	Left-Cheek	41490	2680.0	1	50	23.38	23.50	-2.000	0.165	1.028	0.170	
					50	0	22.57	23.00	0.650	0.152	1.104	0.168	
		Left-Tilt	41490	2680.0	1	50	23.38	23.50	0.980	0.101	1.028	0.104	
					50	0	22.57	23.00	-1.455	0.099	1.104	0.109	
		Right-Cheek	41490	2680.0	1	50	23.38	23.50	-1.331	0.159	1.028	0.163	
					50	0	22.57	23.00	3.065	0.149	1.104	0.164	
		Right-Tilt	41490	2680.0	1	50	23.38	23.50	2.503	0.1	1.028	0.103	
					50	0	22.57	23.00	-2.011	0.097	1.104	0.107	
LTE Band 66	QPSK (20MHz)	Left-Cheek	132322	1745.0	1	0	23.02	23.50	-3.180	0.331	1.117	0.370	
					50	25	21.93	22.00	1.112	0.273	1.016	0.277	
		Left-Tilt	132322	1745.0	1	0	23.02	23.50	-0.890	0.229	1.117	0.256	
					50	25	21.93	22.00	1.230	0.170	1.016	0.173	
		Right-Cheek	132322	1745.0	1	0	23.02	23.50	1.460	0.354	1.117	0.395	
					50	25	21.93	22.00	2.150	0.297	1.016	0.302	
		Right-Tilt	132322	1745.0	1	0	23.02	23.50	-0.510	0.256	1.117	0.286	
					50	25	21.93	22.00	-1.620	0.200	1.016	0.203	

10.2. Hotspot/Body-worn 1g SAR Data

Band	Mode	Test Position with 10 mm	CH.	Freq. (MHz)	Ave. Power (dBm)	Tune-Up Limit (dBm)	Power Drift (%)	Meas. SAR1g (W/kg)	Scaling Factor	Reported SAR1g (W/kg)	Limit (W/Kg)
GSM 850	GPRS 4slots	Front	190	836.6	28.57	29.00	-1.200	0.274	1.104	0.302	1.60
		Back	190	836.6	28.57	29.00	-3.250	0.487	1.104	0.538	
		Left	190	836.6	28.57	29.00	-0.220	0.298	1.104	0.329	
		Bottom	190	836.6	28.57	29.00	3.500	0.312	1.104	0.344	
GSM 1900	GPRS 2slots	Front	512	1850.2	29.88	30.00	-0.120	0.655	1.028	0.673	
		Back	512	1850.2	29.88	30.00	-0.880	0.666	1.028	0.685	
		Left	512	1850.2	29.88	30.00	1.511	0.461	1.028	0.474	
		Bottom	512	1850.2	29.88	30.00	0.115	0.512	1.028	0.526	
WCDMA Band II	RMC	Front	9262	1852.4	23.49	23.50	-0.220	0.701	1.002	0.702	
		Back	9262	1852.4	23.49	23.50	0.270	0.716	1.002	0.717	
		Left	9262	1852.4	23.49	23.50	3.225	0.498	1.002	0.499	
		Bottom	9262	1852.4	23.49	23.50	1.098	0.622	1.002	0.623	
WCDMA Band IV	RMC	Front	1312	1712.4	22.92	23.00	-0.710	0.747	1.019	0.761	
		Back	1312	1712.4	22.92	23.00	-0.510	0.960	1.019	0.978	
		Back	1413	1732.6	22.85	23.00	-0.260	0.942	1.035	0.975	
		Back	1513	1752.6	22.67	23.00	1.200	0.905	1.079	0.976	
		Left	1312	1712.4	22.92	23.00	-0.254	0.710	1.019	0.723	
WCDMA Band V	RMC	Bottom	1312	1712.4	22.92	23.00	0.222	0.780	1.019	0.795	
		Front	4132	826.4	23.29	23.50	-1.660	0.139	1.050	0.146	
		Back	4132	826.4	23.29	23.50	-1.300	0.289	1.050	0.303	
		Left	4132	826.4	23.29	23.50	0.121	0.115	1.050	0.121	
2.4G -ANT 1	802.11b	Bottom	4132	826.4	23.29	23.50	-0.102	0.143	1.050	0.150	
		Front	6	2437	16.42	16.50	-3.570	0.188	1.019	0.192	
		Back	6	2437	16.42	16.50	-1.880	0.151	1.019	0.154	
		Right	6	2437	16.42	16.50	-2.390	0.136	1.019	0.139	
2.4G -ANT 2	802.11b	Top	6	2437	16.42	16.50	4.670	0.123	1.019	0.125	
		Front	11	2462	16.57	17.00	-3.030	0.193	1.104	0.213	
		Back	11	2462	16.57	17.00	-1.880	0.150	1.104	0.166	
		Right	11	2462	16.57	17.00	-2.390	0.148	1.104	0.163	
2.4G -MIMO ANT 1 side	802.11n	Front	6	2437	22.31	22.50	2.830	0.097	1.045	0.101	
		Back	6	2437	22.31	22.50	-1.205	0.075	1.045	0.078	
		Right	6	2437	22.31	22.50	1.201	0.074	1.045	0.077	
		Top	6	2437	22.31	22.50	2.420	0.058	1.045	0.061	
2.4G -MIMO ANT 2 side	802.11n	Front	6	2437	22.31	22.50	0.880	0.095	1.045	0.099	
		Back	6	2437	22.31	22.50	0.503	0.072	1.045	0.075	
		Right	6	2437	22.31	22.50	1.570	0.073	1.045	0.076	

Band	Mode	Test Position with 10 mm	CH.	Freq. (MHz)	Ave. Power (dBm)	Tune-Up Limit (dBm)	Power Drift (%)	Meas. SAR1g (W/kg)	Scaling Factor	Reported SAR1g (W/kg)	Limit (W/Kg)
5.2G -ANT 1	802.11ac (VTH80)	Front	42	5210	8.98	9.00	0.700	0.135	1.005	0.243	1.60
		Back	42	5210	8.98	9.00	-2.420	0.058	1.005	0.099	
		Right	42	5210	8.98	9.00	-1.050	0.060	1.005	0.102	
		Top	42	5210	8.98	9.00	2.851	0.070	1.005	0.112	
5.2G -ANT 2	802.11ac (VTH80)	Front	42	5210	9.35	9.50	-4.920	0.146	1.035	0.259	
		Back	42	5210	9.35	9.50	1.639	0.061	1.035	0.106	
		Right	42	5210	9.35	9.50	-3.420	0.063	1.035	0.108	
		Top	42	5210	9.35	9.50	1.639	0.061	1.035	0.106	
5.2G -MIMO ANT 1 side	802.11ac (VTH80)	Front	42	5210	12.18	12.50	0.583	0.083	1.076	0.133	
		Back	42	5210	12.18	12.50	4.818	0.019	1.076	0.054	
		Right	42	5210	12.18	12.50	2.818	0.021	1.076	0.054	
		Top	42	5210	12.18	12.50	-3.194	0.015	1.076	0.060	
5.2G -MIMO ANT 2 side	802.11ac (VTH80)	Front	42	5210	12.18	12.50	2.927	0.084	1.076	0.135	
		Back	42	5210	12.18	12.50	-1.130	0.018	1.076	0.055	
		Right	42	5210	12.18	12.50	1.275	0.018	1.076	0.056	
		Top	42	5210	12.18	12.50	1.275	0.018	1.076	0.056	
5.8G -ANT 1	802.11n (HT40)	Front	151	5755	9.38	9.50	-1.334	0.247	1.028	0.254	
		Back	151	5755	9.38	9.50	-0.950	0.104	1.028	0.107	
		Right	151	5755	9.38	9.50	-0.945	0.106	1.028	0.109	
		Top	151	5755	9.38	9.50	-1.603	0.116	1.028	0.119	
5.8G -ANT 2	802.11a	Front	165	5825	10.47	10.50	1.638	0.255	1.007	0.257	
		Back	165	5825	10.47	10.50	1.314	0.107	1.007	0.108	
		Right	165	5825	10.47	10.50	-1.228	0.109	1.007	0.110	
		Top	165	5825	10.47	10.50	-1.228	0.109	1.007	0.110	
5.8G -MIMO ANT 1 side	802.11n (HT40)	Front	159	5795	12.75	13.00	-3.382	0.129	1.059	0.137	
		Back	159	5795	12.75	13.00	-1.729	0.055	1.059	0.058	
		Right	159	5795	12.75	13.00	-2.254	0.055	1.059	0.058	
		Top	159	5795	12.75	13.00	4.793	0.061	1.059	0.065	
5.8G -MIMO ANT 2 side	802.11n (HT40)	Front	159	5795	12.75	13.00	0.575	0.130	1.059	0.138	
		Back	159	5795	12.75	13.00	1.700	0.056	1.059	0.059	
		Right	159	5795	12.75	13.00	0.975	0.057	1.059	0.060	
		Top	159	5795	12.75	13.00	0.975	0.057	1.059	0.060	

Band	Mode	Test Position with 10 mm	CH.	Freq. (MHz)	RB allocation	RB offset	Ave. Power (dBm)	Tune-Up Limit (dBm)	Power Drift (%)	Meas. SAR1g (W/kg)	Scaling Factor	Reported SAR1g (W/kg)	Limit (W/Kg)
LTE Band 2	QPSK (20MHz)	Front	19100	1900.0	1	0	24.30	24.50	-1.160	0.430	1.047	0.450	1.60
					50	0	23.71	24.00	-1.200	0.410	1.069	0.438	
		Back	19100	1900.0	1	0	24.30	24.50	-0.950	0.511	1.047	0.535	
					50	0	23.71	24.00	0.800	0.484	1.069	0.517	
		Left	19100	1900.0	1	0	24.30	24.50	-1.331	0.195	1.047	0.204	
					50	0	23.71	24.00	1.660	0.177	1.069	0.189	
		Bottom	19100	1900.0	1	0	24.30	24.50	2.503	0.135	1.047	0.141	
					50	0	23.71	24.00	-2.015	0.126	1.069	0.135	
LTE Band 4	QPSK (20MHz)	Front	20050	1720.0	1	99	24.17	24.50	-1.160	0.365	1.079	0.394	
					50	0	23.10	23.50	0.520	0.355	1.096	0.389	
		Back	20050	1720.0	1	99	24.17	24.50	-4.350	0.587	1.079	0.633	
					50	0	23.10	23.50	1.260	0.576	1.096	0.631	
		Left	20050	1720.0	1	99	24.17	24.50	-1.331	0.201	1.079	0.217	
					50	0	23.10	23.50	-3.600	0.195	1.096	0.214	
		Bottom	20050	1720.0	1	99	24.17	24.50	2.503	0.135	1.079	0.146	
					50	0	23.10	23.50	-2.120	0.122	1.096	0.134	
LTE Band 5	QPSK (10MHz)	Front	20525	836.5	1	0	24.22	24.50	-1.160	0.161	1.067	0.172	
					25	0	23.10	23.50	-1.200	0.155	1.096	0.170	
		Back	20525	836.5	1	0	24.22	24.50	-2.240	0.205	1.067	0.219	
					25	0	23.10	23.50	1.003	0.189	1.096	0.207	
		Left	20525	836.5	1	0	24.22	24.50	-1.331	0.160	1.067	0.171	
					25	0	23.10	23.50	2.360	0.153	1.096	0.168	
		Bottom	20525	836.5	1	0	24.22	24.50	2.503	0.105	1.067	0.112	
					25	0	23.10	23.50	-3.066	0.098	1.096	0.107	
LTE Band 7	QPSK (20MHz)	Front	21350	2560.0	1	99	24.08	24.50	-1.160	0.365	1.102	0.402	
					50	0	23.23	23.50	2.600	0.350	1.064	0.372	
		Back	21350	2560.0	1	99	24.08	24.50	3.910	0.480	1.102	0.529	
					50	0	23.23	23.50	-2.066	0.477	1.064	0.508	
		Left	21350	2560.0	1	99	24.08	24.50	-1.331	0.301	1.102	0.332	
					50	0	23.23	23.50	-1.230	0.295	1.064	0.314	
		Bottom	21350	2560.0	1	99	24.08	24.50	2.503	0.235	1.102	0.259	
					50	0	23.23	23.50	-2.200	0.222	1.064	0.236	
LTE Band 12	QPSK (10MHz)	Front	23060	704.0	1	49	23.80	24.00	-1.160	0.310	1.047	0.325	
					25	25	22.71	23.00	-1.100	0.304	1.069	0.325	
		Back	23060	704.0	1	49	23.80	24.00	-3.970	0.417	1.047	0.437	
					25	25	22.71	23.00	-0.553	0.408	1.069	0.436	
		Left	23060	704.0	1	49	23.80	24.00	-1.331	0.295	1.047	0.309	
					25	25	22.71	23.00	1.360	0.287	1.069	0.307	
		Bottom	23060	704.0	1	49	23.80	24.00	2.503	0.216	1.047	0.226	
					25	25	22.71	23.00	2.044	0.209	1.069	0.223	
LTE Band 17	QPSK (10MHz)	Front	23780	709.0	1	49	23.79	24.00	-1.160	0.288	1.050	0.302	
					25	25	22.77	23.00	-1.230	0.285	1.054	0.300	
		Back	23780	709.0	1	49	23.79	24.00	-3.480	0.400	1.050	0.420	
					25	25	22.77	23.00	-3.500	0.394	1.054	0.415	
		Left	23780	709.0	1	49	23.79	24.00	-1.331	0.251	1.050	0.264	
					25	25	22.77	23.00	1.800	0.244	1.054	0.257	
		Bottom	23780	709.0	1	49	23.79	24.00	2.503	0.185	1.050	0.194	
					25	25	22.77	23.00	-2.411	0.179	1.054	0.189	
LTE Band 25	QPSK (20MHz)	Front	26365	1882.5	1	50	24.29	24.50	-1.160	0.684	1.050	0.718	
					50	50	23.42	23.50	-1.204	0.681	1.019	0.694	
		Back	26365	1882.5	1	50	24.29	24.50	3.500	0.714	1.050	0.750	
					50	50	23.42	23.50	0.566	0.710	1.019	0.723	
		Left	26365	1882.5	1	50	24.29	24.50	-1.331	0.559	1.050	0.587	
					50	50	23.42	23.50	-1.266	0.554	1.019	0.565	
		Bottom	26365	1882.5	1	50	24.29	24.50	2.503	0.435	1.050	0.457	
					50	50	23.42	23.50	2.100	0.431	1.019	0.439	

Band	Mode	Test Position with 10 mm	CH.	Freq. (MHz)	RB allocation	RB offset	Ave. Power (dBm)	Tune-Up Limit (dBm)	Power Drift (%)	Meas. SAR1g (W/kg)	Scaling Factor	Reported SAR1g (W/kg)	Limit (W/Kg)
LTE Band 26	QPSK (15MHz)	Front	26765	821.5	1	74	23.87	24.00	-1.160	0.272	1.030	0.280	1.60
					36	18	22.73	23.00	1.366	0.266	1.064	0.283	
		Back	26765	821.5	1	74	23.87	24.00	-2.450	0.288	1.030	0.297	
					36	18	22.73	23.00	-0.855	0.271	1.064	0.288	
		Left	26765	821.5	1	74	23.87	24.00	-1.331	0.102	1.030	0.105	
					36	18	22.73	23.00	1.105	0.097	1.064	0.103	
		Bottom	26765	821.5	1	74	23.87	24.00	2.503	0.185	1.030	0.191	
					36	18	22.73	23.00	-2.060	0.177	1.064	0.188	
		Front	38150	2610.0	1	50	23.76	24.00	-1.160	0.165	1.057	0.174	
					50	50	22.86	23.00	2.041	0.159	1.033	0.164	
LTE Band 38	QPSK (20MHz)	Back	38150	2610.0	1	50	23.76	24.00	0.980	0.208	1.057	0.220	
					50	50	22.86	23.00	2.700	0.200	1.033	0.207	
		Left	38150	2610.0	1	50	23.76	24.00	-1.331	0.192	1.057	0.203	
					50	50	22.86	23.00	1.560	0.186	1.033	0.192	
		Bottom	38150	2610.0	1	50	23.76	24.00	2.503	0.125	1.057	0.132	
					50	50	22.86	23.00	-1.800	0.121	1.033	0.125	
LTE Band 41	QPSK (20MHz)	Front	41490	2680.0	1	50	23.38	23.50	-1.160	0.465	1.028	0.478	
					50	0	22.57	23.00	1.209	0.450	1.104	0.497	
		Back	41490	2680.0	1	50	23.38	23.50	-1.470	0.528	1.028	0.543	
					50	0	22.57	23.00	1.025	0.480	1.104	0.530	
		Left	41490	2680.0	1	50	23.38	23.50	-1.331	0.301	1.028	0.309	
					50	0	22.57	23.00	1.266	0.296	1.104	0.327	
LTE Band 66	QPSK (20MHz)	Front	132322	1745.0	1	0	23.02	23.50	-2.050	0.619	1.117	0.691	
					50	25	21.93	22.00	1.054	0.561	1.016	0.570	
		Back	132322	1745.0	1	0	23.02	23.50	-1.370	0.673	1.117	0.752	
					50	25	21.93	22.00	0.221	0.614	1.016	0.624	
		Left	132322	1745.0	1	0	23.02	23.50	-1.003	0.317	1.117	0.354	
					50	25	21.93	22.00	1.326	0.260	1.016	0.264	
		Bottom	132322	1745.0	1	0	23.02	23.50	2.006	0.293	1.117	0.327	
					50	25	21.93	22.00	-0.955	0.236	1.016	0.240	

Note:

- Per KDB 447498 D01 v06, for each exposure position, if the highest output power channel Reported SAR $\leq 0.8\text{W/kg}$, other channels SAR testing is not necessary.
- Per KDB 447498 D01 v06, head/body-worn use is evaluated with the device positioned at 0mm/10 mm from a head/flat phantom respectively filled with body tissue-equivalent medium.
- Per KDB Publication 941225 D06 where SAR test considerations for handsets ($L \times W \geq 9 \text{ cm} \times 5 \text{ cm}$) are based on a composite test separation distance of 10 mm from the front, back and edges of the device with antennas 2.5 cm or closer to the edge of the device, determined from general mixed use conditions for this type of devices. Since the hotspot SAR results may overlap with the body-worn accessory SAR requirements, the more conservative configurations can be considered, thus excluding some body-worn accessory SAR tests.
- Per KDB 447498 D01 v06, the report SAR is measured SAR value adjusted for maximum tune-up tolerance. Scaling Factor = $10^{[(\text{tune-up limit power(dBm)} - \text{Ave.power power (dBm)})/10]}$, where tune-up limit is the maximum rated power among all production units.
Reported SAR(W/kg)=Measured SAR (W/kg)*Scaling Factor.
- Per KDB865664D01 v01r04 perform a second repeated measurement only the ratio of largest to smallest SAR for the original and first repeated measurement is >1.20 or when the original or repeated measurement is $\geq 1.45\text{W/kg}$.
- Perform a second measurement only if the original, first and second repeated measurement is $\geq 1.5\text{w/kg}$ and the ratio of largest to smallest SAR for the original, first and second repeated measurement is >1.20 .
- When the separation distance required for body-worn accessory testing is larger than or equal to that tested for hotspot mode, in the same wireless mode and for the same surface of the phone, the hotspot mode SAR data may be used to support body-worn accessory SAR compliance for that particular configuration (surface).

10.3. Simultaneous Transmission Conclusion

Multi-Band Simultaneous Transmission Considerations

According to FCC KDB Publication 447498 D01v05r02, transmitters are considered to be transmitting simultaneously when there is overlapping transmission, with the exception of transmissions during network hand-offs with maximum hand-off duration less than 30 seconds. Possible transmission paths for the EUT are shown in below Figure and are color-coded to indicate communication modes which share the same path. Modes which share the same transmission path cannot transmit simultaneously with one another.



Simultaneous Transmission Procedures

This device contains transmitters that may operate simultaneously. Therefore simultaneous transmission analysis is required. Per FCC KDB 447498 D01v05r02, simultaneous transmission SAR test exclusion may be applied when the sum of the 1-g SAR for all the simultaneous transmitting antennas in a specific a physical test configuration is ≤ 1.6 W/kg. When standalone SAR is not required to be measured, per FCC KDB 447498 D01v05r02 4.3.2.2), the following equation must be used to estimate the standalone 1g SAR and 10g extremity SAR for simultaneous transmission assessment involving that transmitter.

$$\text{Estimated SAR} = \frac{\sqrt{f(\text{GHz})}}{7.5(18.75)} \cdot \frac{\text{Max. power of channel, mW}}{\text{Min. Separation Distance, mm}}$$

Mode	Max. tune-up Power (dBm)	Exposure Position	Head	Body-worn
		Test Distance (mm)	5	10
BT	9.50	Estimated SAR (W/kg)	/	0.184

Note:

- When the minimum *test separation distance* is < 5 mm, a distance of 5 mm according is applied to determine estimated SAR.
- (max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] $\cdot [\sqrt{f(\text{GHz})}/x]$ W/kg for test separation distances ≤ 50 mm; where $x = 7.5$ for 1-g SAR, and $x = 18.75$ for 10-g SAR.
- Per KDB 648474 D04 require when the separation distance required for body-worn accessory testing is larger than or equal to that tested for hotspot mode, using the same wireless mode test configuration for voice and data, such as UMTS, LTE and Wi-Fi, and for the same surface of the phone, the hotspot mode SAR data may be used to support body-worn accessory SAR compliance for that particular configuration.

Simultaneous Transmission Possibilities

The Simultaneous Transmission Possibilities of this device are as below:

NO.	Configuration	Head	Body-worn
1	WWAN+WIFI(2.4g)	Yes	Yes
2	WWAN+WIFI(5g)	Yes	Yes
3	WWAN+BT	Yes	Yes

Head

Band	Test Position	Scaled SAR				Σ max SAR (W/kg) WWAN + WIFI 2.4G	Σ max SAR (W/kg) WWAN + WIFI 5G	Σ max SAR (W/kg) WWAN + BT	SPLSR	Remark
		WWAN	WIFI 2.4G	WIFI 5G	BT					
GSM850 (GPRS 4slots)	Left-Cheek	0.121	0.306	0.205	0.095	0.427	0.326	0.216	N/A	N/A
	Left-Tilt	0.067	0.265	0.104	0.056	0.332	0.171	0.123	N/A	N/A
	Right-Cheek	0.078	0.344	0.220	0.092	0.422	0.298	0.170	N/A	N/A
	Right-Tilt	0.070	0.309	0.122	0.057	0.379	0.192	0.127	N/A	N/A
GSM1900 (GPRS 2slots)	Left-Cheek	0.393	0.306	0.205	0.095	0.699	0.598	0.488	N/A	N/A
	Left-Tilt	0.191	0.265	0.104	0.056	0.456	0.295	0.247	N/A	N/A
	Right-Cheek	0.362	0.344	0.220	0.092	0.706	0.582	0.454	N/A	N/A
	Right-Tilt	0.194	0.309	0.122	0.057	0.503	0.316	0.251	N/A	N/A
WCDMA Band II	Left-Cheek	0.515	0.306	0.205	0.095	0.821	0.720	0.610	N/A	N/A
	Left-Tilt	0.298	0.265	0.104	0.056	0.563	0.402	0.354	N/A	N/A
	Right-Cheek	0.456	0.344	0.220	0.092	0.800	0.676	0.548	N/A	N/A
	Right-Tilt	0.282	0.309	0.122	0.057	0.591	0.404	0.339	N/A	N/A
WCDMA Band IV	Left-Cheek	0.423	0.306	0.205	0.095	0.729	0.628	0.518	N/A	N/A
	Left-Tilt	0.192	0.265	0.104	0.056	0.457	0.296	0.248	N/A	N/A
	Right-Cheek	0.410	0.344	0.220	0.092	0.754	0.630	0.502	N/A	N/A
	Right-Tilt	0.174	0.309	0.122	0.057	0.483	0.296	0.231	N/A	N/A
WCDMA Band V	Left-Cheek	0.237	0.306	0.205	0.095	0.543	0.442	0.332	N/A	N/A
	Left-Tilt	0.148	0.265	0.104	0.056	0.413	0.252	0.204	N/A	N/A
	Right-Cheek	0.219	0.344	0.220	0.092	0.563	0.439	0.311	N/A	N/A
	Right-Tilt	0.147	0.309	0.122	0.057	0.456	0.269	0.204	N/A	N/A

Band	Test Position	RB allocation	Scaled				Σ SAR (W/kg) WWAN + WIFI 2.4G	Σ SAR (W/kg) WWAN + WIFI 5G	Σ SAR (W/kg) WWAN + BT	SPLSR	Remark
			WWAN	WIFI 2.4G	WIFI 5G	Bluetooth					
LTE Band 2 QPSK (20MHz)	Left-Cheek	1	0.148	0.306	0.205	0.095	0.454	0.353	0.243	N/A	N/A
		50	0.144	0.306	0.104	0.095	0.450	0.248	0.239	N/A	N/A
	Left-Tilt	1	0.126	0.265	0.22	0.056	0.391	0.346	0.182	N/A	N/A
		50	0.122	0.265	0.122	0.056	0.387	0.244	0.178	N/A	N/A
	Right-Cheek	1	0.149	0.344	0.205	0.092	0.493	0.354	0.241	N/A	N/A
		50	0.148	0.344	0.104	0.092	0.492	0.252	0.240	N/A	N/A
	Right-Tilt	1	0.128	0.309	0.22	0.057	0.437	0.348	0.185	N/A	N/A
		50	0.126	0.309	0.122	0.057	0.435	0.248	0.183	N/A	N/A
	Left-Cheek	1	0.221	0.306	0.205	0.095	0.527	0.426	0.316	N/A	N/A
		50	0.219	0.306	0.104	0.095	0.525	0.323	0.314	N/A	N/A
LTE Band 4 QPSK (20MHz)	Left-Tilt	1	0.163	0.265	0.22	0.056	0.428	0.383	0.219	N/A	N/A
		50	0.162	0.265	0.122	0.056	0.427	0.284	0.218	N/A	N/A
	Right-Cheek	1	0.256	0.344	0.205	0.092	0.600	0.461	0.348	N/A	N/A
		50	0.241	0.344	0.104	0.092	0.585	0.345	0.333	N/A	N/A
	Right-Tilt	1	0.146	0.309	0.22	0.057	0.455	0.366	0.203	N/A	N/A
		50	0.134	0.309	0.122	0.057	0.443	0.256	0.191	N/A	N/A
LTE Band 5 QPSK (10MHz)	Left-Cheek	1	0.127	0.306	0.205	0.095	0.433	0.332	0.222	N/A	N/A
		25	0.123	0.306	0.104	0.095	0.429	0.227	0.218	N/A	N/A
	Left-Tilt	1	0.106	0.265	0.22	0.056	0.371	0.326	0.162	N/A	N/A
		25	0.104	0.265	0.122	0.056	0.369	0.226	0.160	N/A	N/A
	Right-Cheek	1	0.123	0.344	0.205	0.092	0.467	0.328	0.215	N/A	N/A
		25	0.122	0.344	0.104	0.092	0.466	0.226	0.214	N/A	N/A
	Right-Tilt	1	0.103	0.309	0.22	0.057	0.412	0.323	0.160	N/A	N/A
		25	0.103	0.309	0.122	0.057	0.412	0.225	0.160	N/A	N/A
LTE Band 7 QPSK (20MHz)	Left-Cheek	1	0.133	0.306	0.205	0.095	0.439	0.338	0.228	N/A	N/A
		50	0.128	0.306	0.104	0.095	0.434	0.232	0.223	N/A	N/A
	Left-Tilt	1	0.073	0.265	0.22	0.056	0.338	0.293	0.129	N/A	N/A
		50	0.069	0.265	0.122	0.056	0.334	0.191	0.125	N/A	N/A
	Right-Cheek	1	0.122	0.344	0.205	0.092	0.466	0.327	0.214	N/A	N/A
		50	0.116	0.344	0.104	0.092	0.460	0.220	0.208	N/A	N/A
	Right-Tilt	1	0.071	0.309	0.22	0.057	0.380	0.291	0.128	N/A	N/A
		50	0.066	0.309	0.122	0.057	0.375	0.188	0.123	N/A	N/A

Band	Test Position	RB allocation	Scaled				Σ SAR (W/kg) WWAN + WIFI 2.4G	Σ SAR (W/kg) WWAN + WIFI 5G	Σ SAR (W/kg) WWAN + BT	SPLSR	Remark
			WWAN	WIFI 2.4G	WIFI 5G	Bluetooth					
LTE Band 12 QPSK (10MHz)	Left-Cheek	1	0.197	0.306	0.205	0.095	0.503	0.402	0.292	N/A	N/A
		25	0.198	0.306	0.104	0.095	0.504	0.302	0.293	N/A	N/A
	Left-Tilt	1	0.137	0.265	0.220	0.056	0.402	0.357	0.193	N/A	N/A
		25	0.136	0.265	0.122	0.056	0.401	0.258	0.192	N/A	N/A
	Right-Cheek	1	0.201	0.344	0.205	0.092	0.545	0.406	0.293	N/A	N/A
		25	0.199	0.344	0.104	0.092	0.543	0.303	0.291	N/A	N/A
	Right-Tilt	1	0.142	0.309	0.220	0.057	0.451	0.362	0.199	N/A	N/A
		25	0.139	0.309	0.122	0.057	0.448	0.261	0.196	N/A	N/A
LTE Band 17 QPSK (10MHz)	Left-Cheek	1	0.189	0.306	0.205	0.095	0.495	0.394	0.284	N/A	N/A
		25	0.188	0.306	0.104	0.095	0.494	0.292	0.283	N/A	N/A
	Left-Tilt	1	0.119	0.265	0.220	0.056	0.384	0.339	0.175	N/A	N/A
		25	0.115	0.265	0.122	0.056	0.380	0.237	0.171	N/A	N/A
	Right-Cheek	1	0.192	0.344	0.205	0.092	0.536	0.397	0.284	N/A	N/A
		25	0.190	0.344	0.104	0.092	0.534	0.294	0.282	N/A	N/A
	Right-Tilt	1	0.120	0.309	0.220	0.057	0.429	0.340	0.177	N/A	N/A
		25	0.118	0.309	0.122	0.057	0.427	0.240	0.175	N/A	N/A
LTE Band 25 QPSK (20MHz)	Left-Cheek	1	0.248	0.306	0.205	0.095	0.554	0.453	0.343	N/A	N/A
		50	0.231	0.306	0.104	0.095	0.537	0.335	0.326	N/A	N/A
	Left-Tilt	1	0.121	0.265	0.220	0.056	0.386	0.341	0.177	N/A	N/A
		50	0.113	0.265	0.122	0.056	0.378	0.235	0.169	N/A	N/A
	Right-Cheek	1	0.215	0.344	0.205	0.092	0.559	0.420	0.307	N/A	N/A
		50	0.197	0.344	0.104	0.092	0.541	0.301	0.289	N/A	N/A
	Right-Tilt	1	0.127	0.309	0.220	0.057	0.436	0.347	0.184	N/A	N/A
		50	0.119	0.309	0.122	0.057	0.428	0.241	0.176	N/A	N/A
LTE Band 26 QPSK (15MHz)	Left-Cheek	1	0.103	0.306	0.205	0.095	0.409	0.308	0.198	N/A	N/A
		36	0.097	0.306	0.104	0.095	0.403	0.201	0.192	N/A	N/A
	Left-Tilt	1	0.057	0.265	0.220	0.056	0.322	0.277	0.113	N/A	N/A
		36	0.057	0.265	0.122	0.056	0.322	0.179	0.113	N/A	N/A
	Right-Cheek	1	0.101	0.344	0.205	0.092	0.445	0.306	0.193	N/A	N/A
		36	0.102	0.344	0.104	0.092	0.446	0.206	0.194	N/A	N/A
	Right-Tilt	1	0.059	0.309	0.220	0.057	0.368	0.279	0.116	N/A	N/A
		36	0.060	0.309	0.122	0.057	0.369	0.182	0.117	N/A	N/A
LTE Band 38 QPSK (20MHz)	Left-Cheek	1	0.090	0.306	0.205	0.095	0.396	0.295	0.185	N/A	N/A
		50	0.087	0.306	0.104	0.095	0.393	0.191	0.182	N/A	N/A
	Left-Tilt	1	0.056	0.265	0.220	0.056	0.321	0.276	0.112	N/A	N/A
		50	0.054	0.265	0.122	0.056	0.319	0.176	0.110	N/A	N/A
	Right-Cheek	1	0.089	0.344	0.205	0.092	0.433	0.294	0.181	N/A	N/A
		50	0.085	0.344	0.104	0.092	0.429	0.189	0.177	N/A	N/A
	Right-Tilt	1	0.054	0.309	0.220	0.057	0.363	0.274	0.111	N/A	N/A
		50	0.052	0.309	0.122	0.057	0.361	0.174	0.109	N/A	N/A

Band	Test Position	RB allocation	Scaled				Σ SAR (W/kg) WWAN + WIFI 2.4G	Σ SAR (W/kg) WWAN + WIFI 5G	Σ SAR (W/kg) WWAN + BT	SPLSR	Remark
			WWAN	WIFI 2.4G	WIFI 5G	Bluetooth					
LTE Band 41 QPSK (20MHz)	Left-Cheek	1	0.170	0.306	0.205	0.095	0.476	0.375	0.265	N/A	N/A
		50	0.168	0.306	0.104	0.095	0.474	0.272	0.263	N/A	N/A
	Left-Tilt	1	0.104	0.265	0.220	0.056	0.369	0.324	0.160	N/A	N/A
		50	0.109	0.265	0.122	0.056	0.374	0.231	0.165	N/A	N/A
	Right-Cheek	1	0.163	0.344	0.205	0.092	0.507	0.368	0.255	N/A	N/A
		50	0.164	0.344	0.104	0.092	0.508	0.268	0.256	N/A	N/A
	Right-Tilt	1	0.103	0.309	0.220	0.057	0.412	0.323	0.160	N/A	N/A
		50	0.107	0.309	0.122	0.057	0.416	0.229	0.164	N/A	N/A
LTE Band 66 QPSK (20MHz)	Left-Cheek	1	0.370	0.306	0.205	0.095	0.676	0.575	0.465	N/A	N/A
		50	0.277	0.306	0.104	0.095	0.583	0.381	0.372	N/A	N/A
	Left-Tilt	1	0.256	0.265	0.220	0.056	0.521	0.476	0.312	N/A	N/A
		50	0.173	0.265	0.122	0.056	0.438	0.295	0.229	N/A	N/A
	Right-Cheek	1	0.395	0.344	0.205	0.092	0.739	0.600	0.487	N/A	N/A
		50	0.302	0.344	0.104	0.092	0.646	0.406	0.394	N/A	N/A
	Right-Tilt	1	0.286	0.309	0.220	0.057	0.595	0.506	0.343	N/A	N/A
		50	0.203	0.309	0.122	0.057	0.512	0.325	0.260	N/A	N/A

Hotspot/body-worn

Band	Test Position	Scaled SAR				Σ SAR (W/kg) WWAN + WIFI 2.4G	Σ SAR (W/kg) WWAN + WIFI 5G	Σ SAR (W/kg) WWAN + BT	SPLSR	Remark
		WWAN	WIFI 2.4G	WIFI 5G	BT					
GSM850 (GPRS 4slots)	Front	0.302	0.213	0.259	0.184	0.515	0.561	0.486	N/A	N/A
	Back	0.538	0.166	0.108	0.184	0.704	0.646	0.722	N/A	N/A
	Left	0.329	/	/	/	0.329	0.329	0.329	N/A	N/A
	Right	/	0.163	0.110	0.184	0.163	0.110	0.184	N/A	N/A
	Top	/	0.125	0.119	0.184	0.125	0.119	0.184	N/A	N/A
	Bottom	0.344	/	/	/	0.344	0.344	0.344	N/A	N/A
GSM1900 (GPRS 2slots)	Front	0.673	0.213	0.259	0.184	0.886	0.932	0.857	N/A	N/A
	Back	0.685	0.166	0.108	0.184	0.851	0.793	0.869	N/A	N/A
	Left	0.474	/	/	/	0.474	0.474	0.474	N/A	N/A
	Right	/	0.163	0.110	0.184	0.163	0.110	0.184	N/A	N/A
	Top	/	0.125	0.119	0.184	0.125	0.119	0.184	N/A	N/A
	Bottom	0.526	/	/	/	0.526	0.526	0.526	N/A	N/A
WCDMA Band II	Front	0.702	0.213	0.259	0.184	0.915	0.961	0.886	N/A	N/A
	Back	0.717	0.166	0.108	0.184	0.883	0.825	0.901	N/A	N/A
	Left	0.499	/	/	/	0.499	0.499	0.499	N/A	N/A
	Right	/	0.163	0.110	0.184	0.163	0.110	0.184	N/A	N/A
	Top	/	0.125	0.119	0.184	0.125	0.119	0.184	N/A	N/A
	Bottom	0.623	/	/	/	0.623	0.623	0.623	N/A	N/A
WCDMA Band IV	Front	0.761	0.213	0.259	0.184	0.974	1.020	0.945	N/A	N/A
	Back	0.978	0.166	0.108	0.184	1.144	1.086	1.162	N/A	N/A
	Left	0.723	/	/	/	0.723	0.723	0.723	N/A	N/A
	Right	/	0.163	0.110	0.184	0.163	0.110	0.184	N/A	N/A
	Top	/	0.125	0.119	0.184	0.125	0.119	0.184	N/A	N/A
	Bottom	0.795	/	/	/	0.795	0.795	0.795	N/A	N/A
WCDMA Band V	Front	0.146	0.213	0.259	0.184	0.359	0.405	0.330	N/A	N/A
	Back	0.303	0.166	0.108	0.184	0.469	0.411	0.487	N/A	N/A
	Left	0.121	/	/	/	0.121	0.121	0.121	N/A	N/A
	Right	/	0.163	0.110	0.184	0.163	0.110	0.184	N/A	N/A
	Top	/	0.125	0.119	0.184	0.125	0.119	0.184	N/A	N/A
	Bottom	0.150	/	/	/	0.150	0.150	0.150	N/A	N/A

Band	Test Position	RB allocation	Scaled				Σ SAR (W/kg) WWAN + WIFI 2.4G	Σ SAR (W/kg) WWAN + WIFI 5G	Σ SAR (W/kg) WWAN + BT	SPLSR	Remark
			WWAN	WIFI 2.4G	WIFI 5G	Bluetooth					
LTE Band 2 QPSK (20MHz)	Front	1	0.450	0.213	0.259	0.184	0.663	0.709	0.634	N/A	N/A
		50	0.438	0.213	0.259	0.184	0.651	0.697	0.622	N/A	N/A
	Back	1	0.535	0.166	0.108	0.184	0.701	0.643	0.719	N/A	N/A
		50	0.517	0.166	0.108	0.184	0.683	0.625	0.701	N/A	N/A
	Left	1	0.204	/	/	/	0.204	0.204	0.204	N/A	N/A
		50	0.189	/	/	/	0.189	0.189	0.189	N/A	N/A
	Right	1	/	0.163	0.110	0.184	0.163	0.110	0.184	N/A	N/A
		50	/	0.163	0.110	0.184	0.163	0.110	0.184	N/A	N/A
	Top	1	/	0.125	0.119	0.184	0.125	0.119	0.184	N/A	N/A
		50	/	0.125	0.119	0.184	0.125	0.119	0.184	N/A	N/A
	Bottom	1	0.141	/	/	/	0.141	0.141	0.141	N/A	N/A
		50	0.135	/	/	/	0.135	0.135	0.135	N/A	N/A
LTE Band 4 QPSK (20MHz)	Front	1	0.394	0.213	0.259	0.184	0.607	0.653	0.578	N/A	N/A
		50	0.389	0.213	0.259	0.184	0.602	0.648	0.573	N/A	N/A
	Back	1	0.633	0.166	0.108	0.184	0.799	0.741	0.817	N/A	N/A
		50	0.631	0.166	0.108	0.184	0.797	0.739	0.815	N/A	N/A
	Left	1	0.217	/	/	/	0.217	0.217	0.217	N/A	N/A
		50	0.214	/	/	/	0.214	0.214	0.214	N/A	N/A
	Right	1	/	0.163	0.110	0.184	0.163	0.110	0.184	N/A	N/A
		50	/	0.163	0.110	0.184	0.163	0.110	0.184	N/A	N/A
	Top	1	/	0.125	0.119	0.184	0.125	0.119	0.184	N/A	N/A
		50	/	0.125	0.119	0.184	0.125	0.119	0.184	N/A	N/A
	Bottom	1	0.146	/	/	/	0.146	0.146	0.146	N/A	N/A
		50	0.134	/	/	/	0.134	0.134	0.134	N/A	N/A
LTE Band 5 QPSK (10MHz)	Front	1	0.172	0.213	0.259	0.184	0.385	0.431	0.356	N/A	N/A
		25	0.170	0.213	0.259	0.184	0.383	0.429	0.354	N/A	N/A
	Back	1	0.219	0.166	0.108	0.184	0.385	0.327	0.403	N/A	N/A
		25	0.207	0.166	0.108	0.184	0.373	0.315	0.391	N/A	N/A
	Left	1	0.171	/	/	/	0.171	0.171	0.171	N/A	N/A
		25	0.168	/	/	/	0.168	0.168	0.168	N/A	N/A
	Right	1	/	0.163	0.110	0.184	0.163	0.110	0.184	N/A	N/A
		25	/	0.163	0.110	0.184	0.163	0.110	0.184	N/A	N/A
	Top	1	/	0.125	0.119	0.184	0.125	0.119	0.184	N/A	N/A
		25	/	0.125	0.119	0.184	0.125	0.119	0.184	N/A	N/A
	Bottom	1	0.112	/	/	/	0.112	0.112	0.112	N/A	N/A
		25	0.107	/	/	/	0.107	0.107	0.107	N/A	N/A
LTE Band 7 QPSK (20MHz)	Front	1	0.402	0.213	0.259	0.184	0.615	0.661	0.586	N/A	N/A
		50	0.372	0.213	0.259	0.184	0.585	0.631	0.556	N/A	N/A
	Back	1	0.529	0.166	0.108	0.184	0.695	0.637	0.713	N/A	N/A
		50	0.508	0.166	0.108	0.184	0.674	0.616	0.692	N/A	N/A
	Left	1	0.332	/	/	/	0.332	0.332	0.332	N/A	N/A
		50	0.314	/	/	/	0.314	0.314	0.314	N/A	N/A
	Right	1	/	0.163	0.110	0.184	0.163	0.110	0.184	N/A	N/A
		50	/	0.163	0.110	0.184	0.163	0.110	0.184	N/A	N/A
	Top	1	/	0.125	0.119	0.184	0.125	0.119	0.184	N/A	N/A
		50	/	0.125	0.119	0.184	0.125	0.119	0.184	N/A	N/A
	Bottom	1	0.259	/	/	/	0.259	0.259	0.259	N/A	N/A
		50	0.236	/	/	/	0.236	0.236	0.236	N/A	N/A

Band	Test Position	RB allocation	Scaled				Σ SAR (W/kg) WWAN + WIFI 2.4G	Σ SAR (W/kg) WWAN + WIFI 5G	Σ SAR (W/kg) WWAN + BT	SPLSR	Remark
			WWAN	WIFI 2.4G	WIFI 5G	Bluetooth					
LTE Band 12 QPSK (10MHz)	Front	1	0.325	0.213	0.259	0.184	0.538	0.584	0.509	N/A	N/A
		25	0.325	0.213	0.259	0.184	0.538	0.584	0.509	N/A	N/A
	Back	1	0.437	0.166	0.108	0.184	0.603	0.545	0.621	N/A	N/A
		25	0.436	0.166	0.108	0.184	0.602	0.544	0.620	N/A	N/A
	Left	1	0.309	/	/	/	0.309	0.309	0.309	N/A	N/A
		25	0.307	/	/	/	0.307	0.307	0.307	N/A	N/A
	Right	1	/	0.163	0.110	0.184	0.163	0.110	0.184	N/A	N/A
		25	/	0.163	0.110	0.184	0.163	0.110	0.184	N/A	N/A
	Top	1	/	0.125	0.119	0.184	0.125	0.119	0.184	N/A	N/A
		25	/	0.125	0.119	0.184	0.125	0.119	0.184	N/A	N/A
	Bottom	1	0.226	/	/	/	0.226	0.226	0.226	N/A	N/A
		25	0.223	/	/	/	0.223	0.223	0.223	N/A	N/A
LTE Band 17 QPSK (10MHz)	Front	1	0.302	0.213	0.259	0.184	0.515	0.561	0.486	N/A	N/A
		25	0.300	0.213	0.259	0.184	0.513	0.559	0.484	N/A	N/A
	Back	1	0.420	0.166	0.108	0.184	0.586	0.528	0.604	N/A	N/A
		25	0.415	0.166	0.108	0.184	0.581	0.523	0.599	N/A	N/A
	Left	1	0.264	/	/	/	0.264	0.264	0.264	N/A	N/A
		25	0.257	/	/	/	0.257	0.257	0.257	N/A	N/A
	Right	1	/	0.163	0.110	0.184	0.163	0.110	0.184	N/A	N/A
		25	/	0.163	0.110	0.184	0.163	0.110	0.184	N/A	N/A
	Top	1	/	0.125	0.119	0.184	0.125	0.119	0.184	N/A	N/A
		25	/	0.125	0.119	0.184	0.125	0.119	0.184	N/A	N/A
	Bottom	1	0.194	/	/	/	0.194	0.194	0.194	N/A	N/A
		25	0.189	/	/	/	0.189	0.189	0.189	N/A	N/A
LTE Band 25 QPSK (20MHz)	Front	1	0.718	0.213	0.259	0.184	0.931	0.977	0.902	N/A	N/A
		50	0.694	0.213	0.259	0.184	0.907	0.953	0.878	N/A	N/A
	Back	1	0.750	0.166	0.108	0.184	0.916	0.858	0.934	N/A	N/A
		50	0.723	0.166	0.108	0.184	0.889	0.831	0.907	N/A	N/A
	Left	1	0.587	/	/	/	0.587	0.587	0.587	N/A	N/A
		50	0.565	/	/	/	0.565	0.565	0.565	N/A	N/A
	Right	1	/	0.163	0.110	0.184	0.163	0.110	0.184	N/A	N/A
		50	/	0.163	0.110	0.184	0.163	0.110	0.184	N/A	N/A
	Top	1	/	0.125	0.119	0.184	0.125	0.119	0.184	N/A	N/A
		50	/	0.125	0.119	0.184	0.125	0.119	0.184	N/A	N/A
	Bottom	1	0.457	/	/	/	0.457	0.457	0.457	N/A	N/A
		50	0.439	/	/	/	0.439	0.439	0.439	N/A	N/A
LTE Band 26 QPSK (15MHz)	Front	1	0.28	0.213	0.259	0.184	0.493	0.539	0.464	N/A	N/A
		36	0.283	0.213	0.259	0.184	0.496	0.542	0.467	N/A	N/A
	Back	1	0.297	0.166	0.108	0.184	0.463	0.405	0.481	N/A	N/A
		36	0.288	0.166	0.108	0.184	0.454	0.396	0.472	N/A	N/A
	Left	1	0.105	/	/	/	0.105	0.105	0.105	N/A	N/A
		36	0.103	/	/	/	0.103	0.103	0.103	N/A	N/A
	Right	1	/	0.163	0.110	0.184	0.163	0.110	0.184	N/A	N/A
		36	/	0.163	0.110	0.184	0.163	0.110	0.184	N/A	N/A
	Top	1	/	0.125	0.119	0.184	0.125	0.119	0.184	N/A	N/A
		36	/	0.125	0.119	0.086	0.125	0.119	0.184	N/A	N/A
	Bottom	1	0.191	/	/	/	0.191	0.191	0.191	N/A	N/A
		36	0.188	/	/	/	0.188	0.188	0.188	N/A	N/A

Band	Test Position	RB allocation	Scaled				Σ SAR (W/kg) WWAN + WIFI 2.4G	Σ SAR (W/kg) WWAN + WIFI 5G	Σ SAR (W/kg) WWAN + BT	SPLSR	Remark
			WWAN	WIFI 2.4G	WIFI 5G	Bluetooth					
LTE Band 38 QPSK (20MHz)	Front	1	0.174	0.213	0.259	0.184	0.387	0.433	0.358	N/A	N/A
		50	0.164	0.213	0.259	0.184	0.377	0.423	0.348	N/A	N/A
	Back	1	0.220	0.166	0.108	0.184	0.386	0.328	0.404	N/A	N/A
		50	0.207	0.166	0.108	0.184	0.373	0.315	0.391	N/A	N/A
	Left	1	0.203	/	/	/	0.203	0.203	0.203	N/A	N/A
		50	0.192	/	/	/	0.192	0.192	0.192	N/A	N/A
	Right	1	/	0.163	0.110	0.184	0.163	0.110	0.184	N/A	N/A
		50	/	0.163	0.110	0.184	0.163	0.110	0.184	N/A	N/A
	Top	1	/	0.125	0.119	0.184	0.125	0.119	0.184	N/A	N/A
		50	/	0.125	0.119	0.086	0.125	0.119	0.184	N/A	N/A
	Bottom	1	0.132	/	/	/	0.132	0.132	0.132	N/A	N/A
		50	0.125	/	/	/	0.125	0.125	0.125	N/A	N/A
LTE Band 41 QPSK (20MHz)	Front	1	0.478	0.213	0.259	0.184	0.691	0.737	0.662	N/A	N/A
		50	0.497	0.213	0.259	0.184	0.710	0.756	0.681	N/A	N/A
	Back	1	0.543	0.166	0.108	0.184	0.709	0.651	0.727	N/A	N/A
		50	0.530	0.166	0.108	0.184	0.696	0.638	0.714	N/A	N/A
	Left	1	0.309	/	/	/	0.309	0.309	0.309	N/A	N/A
		50	0.327	/	/	/	0.327	0.327	0.327	N/A	N/A
	Right	1	/	0.163	0.110	0.184	0.163	0.110	0.184	N/A	N/A
		50	/	0.163	0.110	0.184	0.163	0.110	0.184	N/A	N/A
	Top	1	/	0.125	0.119	0.184	0.125	0.119	0.184	N/A	N/A
		50	/	0.125	0.119	0.086	0.125	0.119	0.184	N/A	N/A
	Bottom	1	/	/	/	/	/	/	/	N/A	N/A
		50	/	/	/	/	/	/	/	N/A	N/A
LTE Band 66 QPSK (20MHz)	Front	1	0.691	0.213	0.259	0.184	0.904	0.950	0.875	N/A	N/A
		50	0.570	0.213	0.259	0.184	0.783	0.829	0.754	N/A	N/A
	Back	1	0.752	0.166	0.108	0.184	0.918	0.860	0.936	N/A	N/A
		50	0.624	0.166	0.108	0.184	0.790	0.732	0.808	N/A	N/A
	Left	1	0.354	/	/	/	0.354	0.354	0.354	N/A	N/A
		50	0.264	/	/	/	0.264	0.264	0.264	N/A	N/A
	Right	1	/	0.163	0.110	0.184	0.163	0.110	0.184	N/A	N/A
		50	/	0.163	0.110	0.184	0.163	0.110	0.184	N/A	N/A
	Top	1	/	0.125	0.119	0.184	0.125	0.119	0.184	N/A	N/A
		50	/	0.125	0.119	0.086	0.125	0.119	0.184	N/A	N/A
	Bottom	1	0.327	/	/	/	0.327	0.327	0.327	N/A	N/A
		50	0.240	/	/	/	0.240	0.240	0.240	N/A	N/A

Simultaneous Transmission Conclusion

The above numerical summed SAR results for all the case simultaneous transmission conditions were below the SAR limit. Therefore, the above analysis is sufficient to determine that simultaneous transmission cases will not exceed the SAR limit and therefore measured volumetric simultaneous SAR summation is not required per FCC KDB Publication 447498 D01v05r02.

10.4. Measurement Uncertainty (450MHz-3GHz)

UNCERTAINTY EVALUATION FOR HEADSET SAR

Uncertainty Component	Description	Uncertainty Value(%)	Probably Distribution	Div.	(Ci) 1g	(Ci) 10g	Std. Unc. 1g(%)	Std. Unc. 10g(%)	v
Measurement system									
Probe calibration	7.2.1	5.8	N	1	1	1	5.8	5.8	∞
Axial isotropy	7.2.1.1	3.5	R	$\sqrt{3}$	$(1-C_p)^{1/2}$	$(1-C_p)^{1/2}$	1.43	1.43	∞
Hemispherical isotropy	7.2.1.1	5.9	R	$\sqrt{3}$	$\sqrt{C_p}$	$\sqrt{C_p}$	2.41	2.41	∞
Boundary Effects	7.2.1.4	1.00	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Linearity	7.2.1.2	4.70	R	$\sqrt{3}$	1	1	2.71	2.71	∞
System detection limits	7.2.1.2	1	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Modulation Response	7.2.1.3	3	N	1	1	1	3.00	3.00	∞
Readout Electronics	7.2.1.5	0.5	N	1	1	1	0.50	0.50	∞
Response Time	7.2.1.6	0	R	$\sqrt{3}$	1	1	0.00	0.00	∞
Integration Time	7.2.1.7	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
RF Ambient Conditions-Noise	7.2.3.7	3	R	$\sqrt{3}$	1	1	1.73	1.73	∞
RF Ambient Conditions-Reflection	7.2.3.7	3	R	$\sqrt{3}$	1	1	1.73	1.73	∞
Probe positioned mechanical Tolerance	7.2.2.1	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
Probe positioning with respect to phantom shell	7.2.2.3	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
Extrapolation interpolation and integration algorithms for Max.SAR evaluation	7.2.4	2.3	R	1	1	1	1.33	1.33	∞
Test sample related									
Test sample positioning	7.2.2.4.4	2.6	N	1	1	1	2.60	2.60	∞
Device holder uncertainty	7.2.2.4.2 7.2.2.4.3	3	N	1	1	1	3.00	3.00	∞
output power variation-SAR drift measurement	7.2.3.6	5	R	$\sqrt{3}$	1	1	2.89	2.89	∞
SAR scaling	7.2.5	2	R	$\sqrt{3}$	1	1	1.15	1.15	∞
Phantom and tissue parameters									
Phantom uncertainty (shape and thickness tolerances)	7.2.2.2	4	R	$\sqrt{3}$	1	1	2.31	2.31	∞
uncertainty in SAR correction for deviation (in permittivity and conductivity)	7.2.6	2	N	1	1	0.84	2.00	1.68	∞
Liquid conductivity (temperature uncertainty)	7.2.3.5	2.5	N	1	0.78	0.71	1.95	1.78	∞
Liquid conductivity -measurement uncertainty	7.2.3.3	4	N	1	0.23	0.26	0.92	1.04	∞
Liquid permittivity (temperature uncertainty)	7.2.3.5	2.5	N	1	0.78	0.71	1.95	1.78	∞
Liquid permittivity measurement uncertainty	7.2.3.4	5	N	1	0.23	0.26	1.15	1.30	∞
Combined standard uncertainty			RSS				10.83	10.54	
Expanded uncertainty (95%CONFIDENCEINTERVAL)			k				21.26	21.08	

UNCERTAINTY FOR PERFORMANCE CHECK

Uncertainty Component	Description	Uncertainty Value(%)	Probably Distribution	Div.	(Ci) 1g	(Ci) 10g	Std. Unc. 1g(%)	Std. Unc. 10g(%)	v
Measurement system									
Probe calibration	7.2.1	5.8	N	1	1	1	5.8	5.8	∞
Axial isotropy	7.2.1.1	3.5	R	$\sqrt{3}$	$(1-C_p)^{1/2}$	$(1-C_p)^{1/2}$	1.43	1.43	∞
Hemispherical isotropy	7.2.1.1	5.9	R	$\sqrt{3}$	$\sqrt{C_p}$	$\sqrt{C_p}$	2.41	2.41	∞
Boundary Effects	7.2.1.4	1.00	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Linearity	7.2.1.2	4.70	R	$\sqrt{3}$	1	1	2.71	2.71	∞
System detection limits	7.2.1.2	1	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Modulation Response	7.2.1.3	3	N	1	1	1	0.00	0.00	∞
Readout Electronics	7.2.1.5	0.5	N	1	1	1	0.50	0.50	∞
Response Time	7.2.1.6	0	R	$\sqrt{3}$	1	1	0.00	0.00	∞
Integration Time	7.2.1.7	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
RF Ambient Conditions-Noise	7.2.3.7	3	R	$\sqrt{3}$	1	1	1.73	1.73	∞
RF Ambient Conditions-Reflection	7.2.3.7	3	R	$\sqrt{3}$	1	1	1.73	1.73	∞
Probe positioned mechanical Tolerance	7.2.2.1	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
Probe positioning with respect to phantom shell	7.2.2.3	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
Extrapolation interpolation and integration algorithms for Max.SAR evaluation	7.2.4	2.3	R	1	1	1	1.33	1.33	∞
Dipole									
Deviation of experimental source from numerical source		4	N	1	1	1	4.00	4.00	∞
Input power and SAR drift measurement	7.2.3.6	5	R	$\sqrt{3}$	1	1	2.89	2.89	∞
Dipole axis to liquid distance		2	R	$\sqrt{3}$	1	1			∞
Phantom and tissue parameters									
Phantom uncertainty (shape and thickness tolerances)	7.2.2.2	4	R	$\sqrt{3}$	1	1	2.31	2.31	∞
uncertainty in SAR correction for deviation (in permittivity and conductivity)	7.2.6	2	N	1	1	0.84	2.00	1.68	∞
Liquid conductivity (temperature uncertainty)	7.2.3.5	2.5	N	1	0.78	0.71	1.95	1.78	∞
Liquid conductivity -measurement uncertainty	7.2.3.3	4	N	1	0.23	0.26	0.92	1.04	∞
Liquid permittivity (temperature uncertainty)	7.2.3.5	2.5	N	1	0.78	0.71	1.95	1.78	∞
Liquid permittivity measurement uncertainty	7.2.3.4	5	N	1	0.23	0.26	1.15	1.30	∞
Combined standard uncertainty			RSS				10.15	10.05	
Expanded uncertainty (95%CONFIDENCEINTERVAL)			k				20.29	20.10	

10.5. Test Equipment List

Test Equipment	Manufacturer	Model	Serial Number	Calibration	
				Calibration Date (D.M.Y)	Calibration Due (D.M.Y)
PC	Lenovo	H3050	N/A	N/A	N/A
Signal Generator	Agilent	N5182A	MY47070282	Jun. 08, 2022	Jun. 07, 2023
Multimeter	Keithley	Multimeter 2000	4078275	Jun. 08, 2022	Jun. 07, 2023
Network Analyzer	Agilent	8753E	US38432457	Jun. 08, 2022	Jun. 07, 2023
Wireless Communication Test Set	R & S	CMU200	111382	Jun. 08, 2022	Jun. 07, 2023
Wideband Radio Communication Tester	R&S	CMW500	114220	Jun. 08, 2022	Jun. 07, 2023
Power Meter	Agilent	E4418B	GB43312526	Jun. 08, 2022	Jun. 07, 2023
Power Meter	Agilent	E4416A	MY45101555	Jun. 08, 2022	Jun. 07, 2023
Power Meter	Agilent	N1912A	MY50001018	Jun. 08, 2022	Jun. 07, 2023
Power Sensor	Agilent	E9301A	MY41497725	Jun. 08, 2022	Jun. 07, 2023
Power Sensor	Agilent	E9327A	MY44421198	Jun. 08, 2022	Jun. 07, 2023
Power Sensor	Agilent	E9323A	MY53070005	Jun. 08, 2022	Jun. 07, 2023
Power Amplifier	PE	PE15A4019	112342	N/A	N/A
Directional Coupler	Agilent	722D	MY52180104	N/A	N/A
Attenuator	Chensheng	FF779	134251	N/A	N/A
E-Field PROBE	MVG	SSE2	SN 36/20 EPGO346	Oct. 08, 2022	Oct. 07, 2023
DIPOLE 750	MVG	SID750	SN 16/15 DIP 0G750-368	Jun. 05, 2021	Jun. 04, 2024
DIPOLE 835	MVG	SID835	SN 16/15 DIP 0G835-369	Jun. 05, 2022	Jun. 04, 2023
DIPOLE 1800	MVG	SID 1800	SN 16/15 DIP 1G800-371	Jun. 05, 2022	Jun. 04, 2023
DIPOLE 1900	MVG	SID1900	SN 16/15 DIP 1G900-372	Jun. 05, 2022	Jun. 04, 2023
DIPOLE 2450	MVG	SID 2450	SN 16/15 DIP 2G450-374	Jun. 05, 2022	Jun. 04, 2023
DIPOLE 2600	MVG	SID 2600	SN 16/15 DIP 2G600-375	Jun. 05, 2022	Jun. 04, 2023
DIPOLE 5200-5800	MVG	SID 5000	SN 13/14 WGA32	May 15, 2022	May 14, 2023
Limesar Dielectric Probe	MVG	SCLMP	SN 19/15 OCPG71	Jun. 05, 2022	Jun. 04, 2023
Communication Antenna	MVG	ANTA59	SN 39/14 ANTA59	N/A	N/A
Mobile Phone Position Device	MVG	MSH101	SN 19/15 MSH101	N/A	N/A
Dummy Probe	MVG	DP66	SN 13/15 DP66	N/A	N/A
SAM PHANTOM	MVG	SAM120	SN 19/15 SAM120	N/A	N/A
PHANTOM TABLE	MVG	TABP101	SN 19/15 TABP101	N/A	N/A
Robot TABLE	MVG	TABP61	SN 19/15 TABP61	N/A	N/A
6 AXIS ROBOT	KUKA	KR6-R900	501822	N/A	N/A

Note: 1. N/A means this equipment no need to calibrate

2. Each Time means this device need to calibrate every use time

3. The dipole was not damaged properly repaired.

4. The measured SAR deviates from the calibrated SAR value by less than 10%

5. The most recent return-loss result meets the required 20 dB minimum return-loss requirement

6. The most recent measurement of the real or imaginary parts of the impedance deviates by less than 5 Ω from the previous measurement.

11. System Check Results

Date of measurement: 01/09/2023 Test mode: 750 (Body)

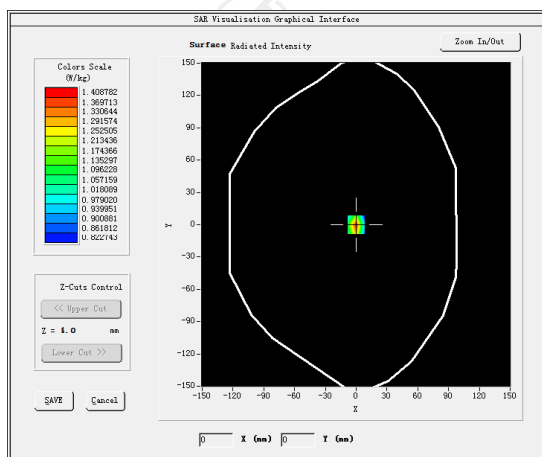
Product Description: Validation

Dipole Model: SID750

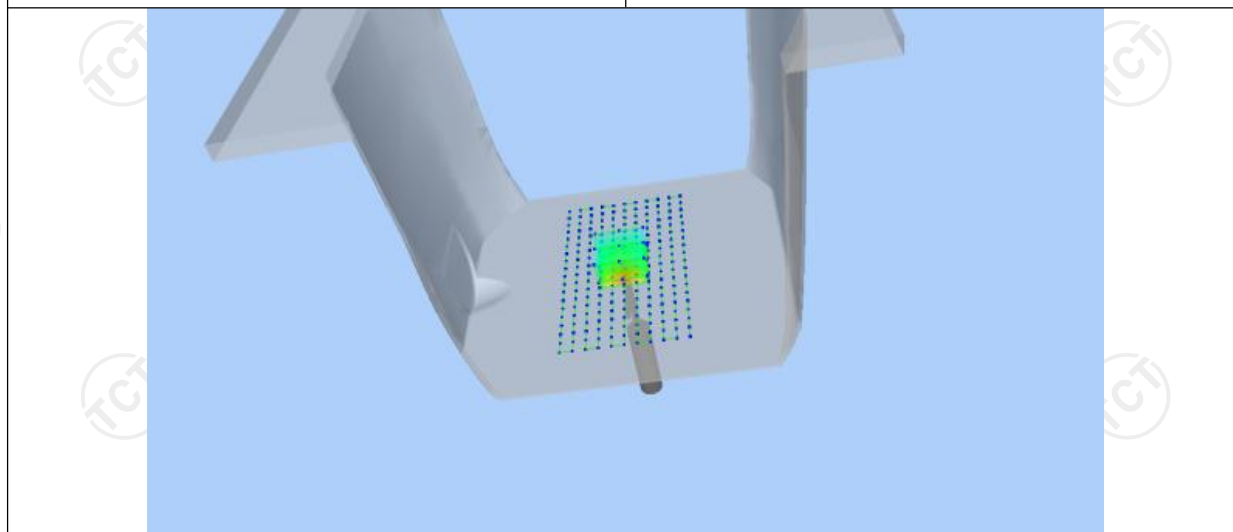
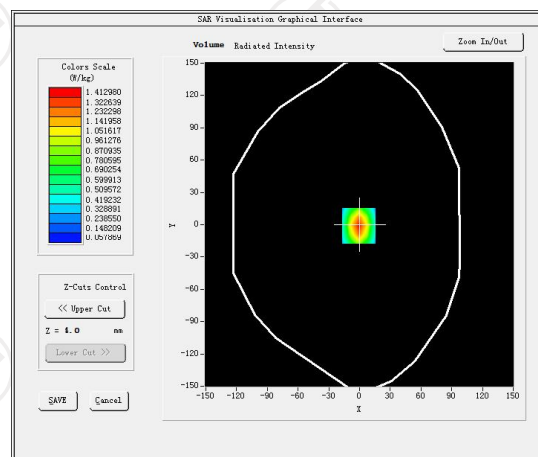
E-Field Probe: SSE2 (SN 36/20 EPGO346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	1.78
Frequency (MHz)	750.000000
Relative permittivity (real part)	56.121166
Relative permittivity (imaginary part)	20.148160
Conductivity (S/m)	0.921243
Variation (%)	-0.150000
SAR 10g (W/Kg)	0.602014
SAR 1g (W/Kg)	0.872441

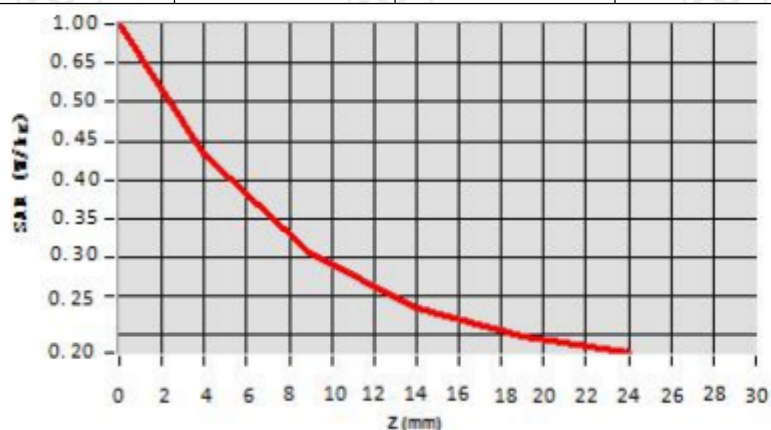
SURFACE SAR



VOLUME SAR



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.014	0.4420	0.3029	0.2419	0.2240



Hot spot position



Date of measurement: 01/09/2023 Test mode: 835 (Body)

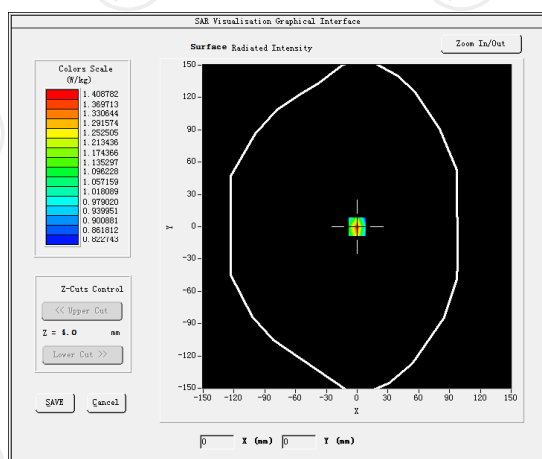
Product Description: Validation

Dipole Model: SID835

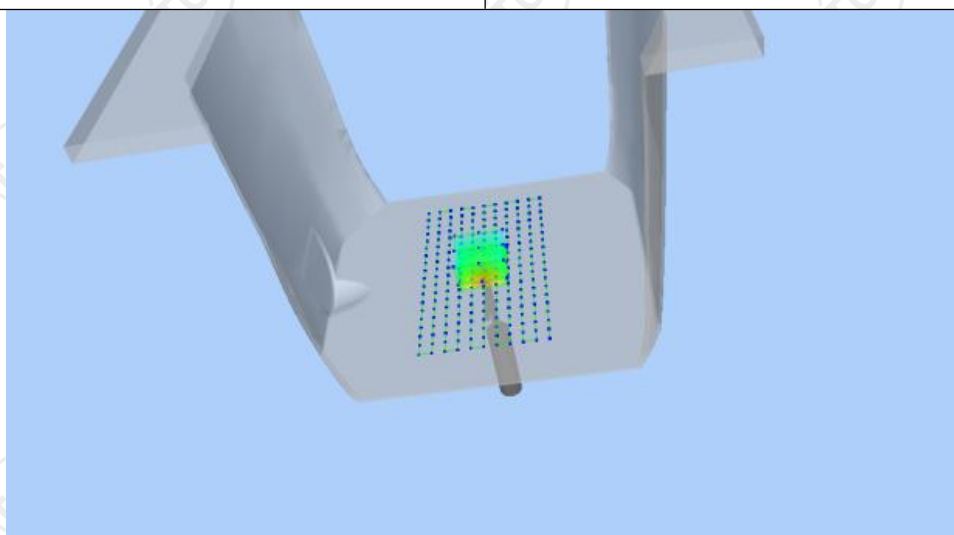
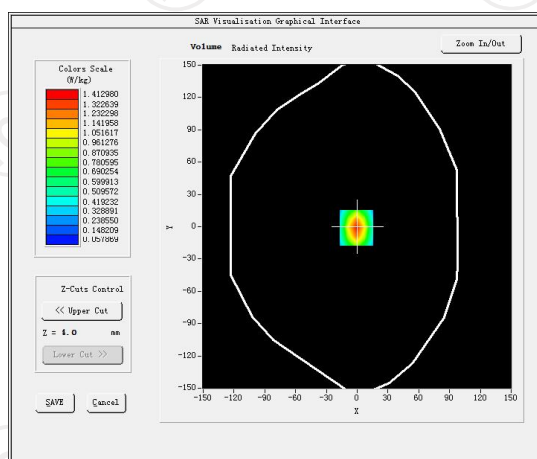
E-Field Probe: SSE2 (SN 36/20 EPGO346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	8.0
Probe Conversion factor	1.86
Frequency (MHz)	835.000000
Relative permittivity (real part)	55.242077
Relative permittivity (imaginary part)	21.378187
Conductivity (S/m)	0.938883
Variation (%)	-0.150000
SAR 10g (W/Kg)	0.633123
SAR 1g (W/Kg)	0.949446

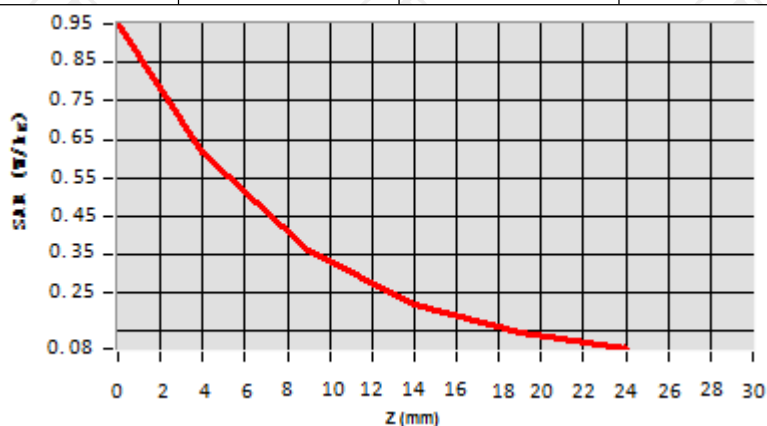
SURFACE SAR



VOLUME SAR



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.9625	0.6022	0.3594	0.2202	0.0725



Hot spot position



Date of measurement: 01/10/2023 Test mode: 1800MHz (Body)

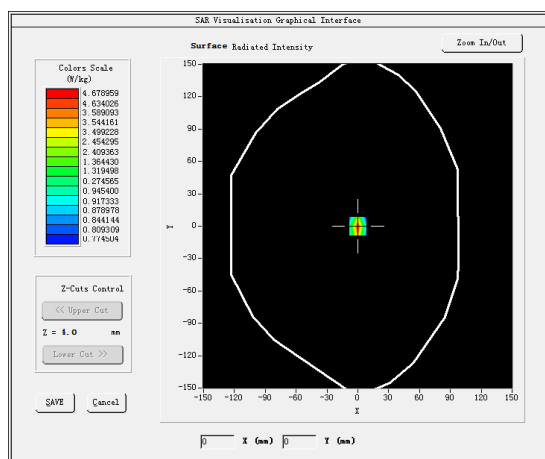
Product Description: Validation

Dipole Model: SID1800

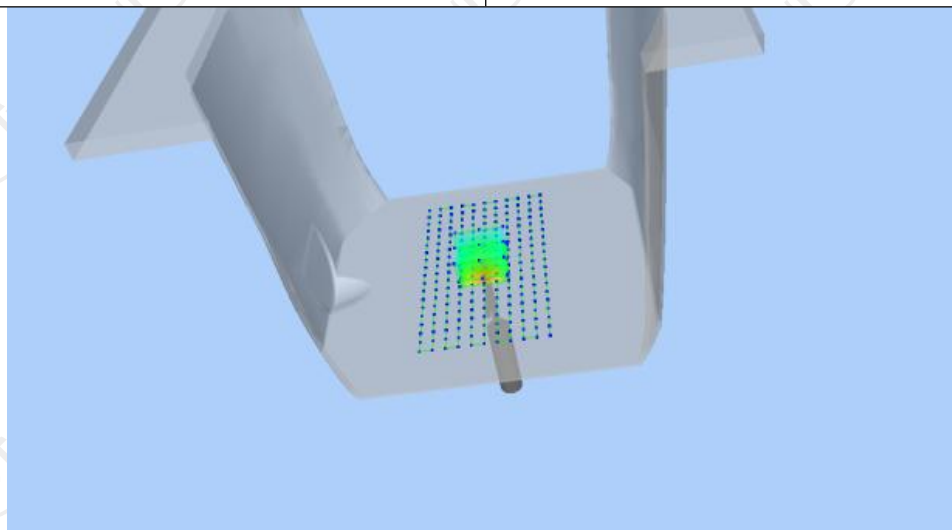
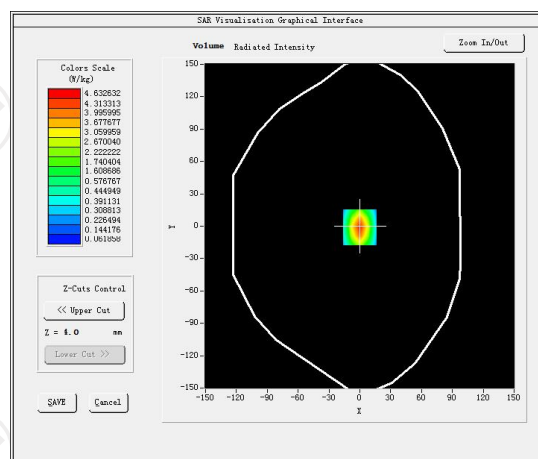
E-Field Probe: SSE2 (SN 36/20 EPG0346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	2.16
Frequency (MHz)	1800.000000
Relative permittivity (real part)	53.292699
Relative permittivity (imaginary part)	15.200000
Conductivity (S/m)	1.530000
Variation (%)	3.050000
SAR 10g (W/Kg)	2.053687
SAR 1g (W/Kg)	3.782547

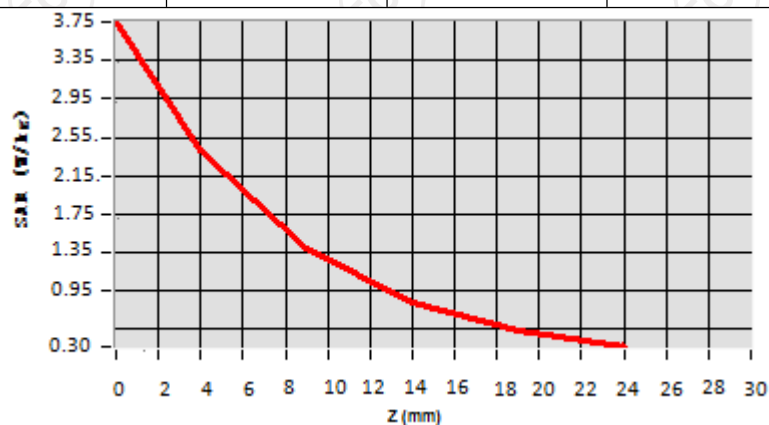
SURFACE SAR



VOLUME SAR



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	3.7545	2.4524	1.3520	0.8214	0.5525



Hot spot position

