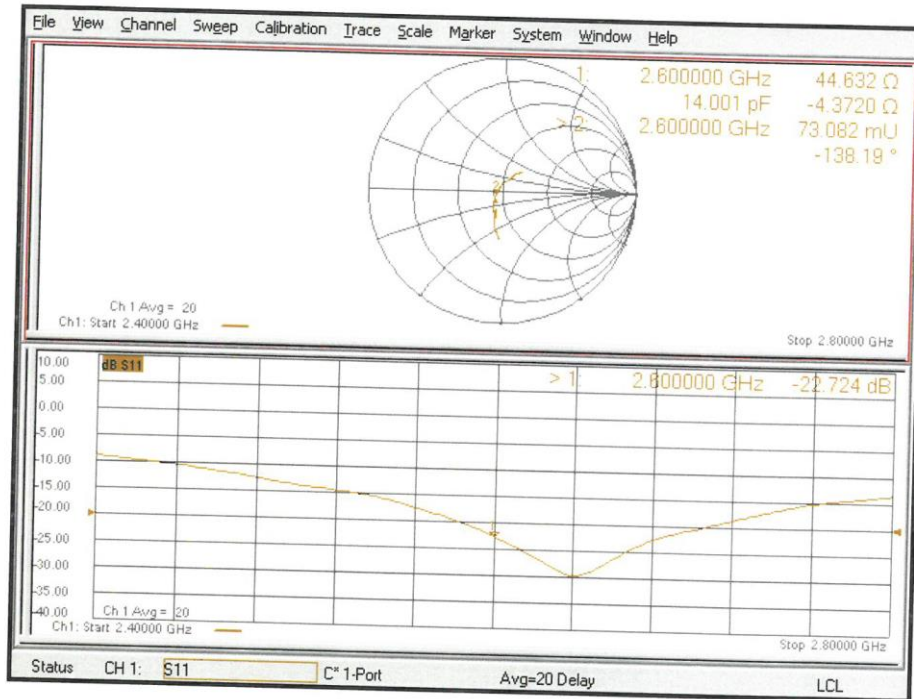


Impedance Measurement Plot for Body TSL



ANNEX I Variant Product Test

I.1 Dielectric Performance and System Validation

Table I.1-1: Dielectric Performance of Head Tissue Simulating Liquid

Measurement Date (yyyy-mm-dd)	Type	Frequency	Permittivity ϵ	Drift (%)	Conductivity σ (S/m)	Drift (%)
2021-3-14	Head	750 MHz	41.35	-1.41	0.888	-0.22
2021-3-15	Head	835 MHz	41.1	-0.96	0.892	-0.89
2021-3-16	Head	1750 MHz	40.82	1.85	1.377	0.51
2021-3-17	Head	1900 MHz	39.99	-0.02	1.428	2.00
2021-3-18	Head	2450 MHz	38.99	-0.54	1.78	-1.11
2021-3-19	Head	2600 MHz	39.06	0.13	1.925	-1.79

Table I.1-2: System Validation of Head

Measurement Date (yyyy-mm-dd)	Frequency	Target value (W/kg)		Measured value(W/kg)		Deviation	
		10 g Average	1 g Average	10 g Average	1 g Average	10 g Average	1 g Average
2021-3-14	750 MHz	5.53	8.47	5.64	8.52	1.99%	0.59%
2021-3-15	835 MHz	6.25	9.60	6.28	9.48	0.48%	-1.25%
2021-3-16	1750 MHz	19.1	36.5	19.12	36.56	0.10%	0.16%
2021-3-17	1900 MHz	20.6	39.6	20.92	39.6	1.55%	0.00%
2021-3-18	2450 MHz	24.5	52.5	24.8	51.6	1.22%	-1.71%
2021-3-19	2600 MHz	25.3	57.0	25.2	55.88	-0.40%	-1.96%

I.2 New frequency band

I.2.1 Conducted power of selected case

Table E.2.1-1: The tune up for LTE-Normal Power

Band	Tune up
LTE Band 2	23.5
LTE Band 5	23.5
LTE Band 7	23.5
LTE Band 13	23.5

Table E.2.1-2: The tune up for LTE-Low Power

Band	Tune up
LTE Band 2	20.5
LTE Band 7	20.5

Normal Power

Band 2					
Bandwidth (MHz)	RB allocation	Frequency (MHz)	Actual output power (dBm)		
	RB offset		QPSK	16QAM	
1.4 MHz	1RB_High	1909.3	22.18	21.08	
		1880	22.18	21.18	
		1850.7	22.24	20.79	
	1RB_Middle	1909.3	22.22	21.04	
		1880	22.23	21.23	
		1850.7	22.23	21.07	
	1RB_Low	1909.3	22.32	21.23	
		1880	22.19	21.08	
		1850.7	22.15	20.82	
	3RB_High	1909.3	22.19	21.24	
		1880	22.27	21.31	
		1850.7	22.26	21.20	
	3RB_Middle	1909.3	22.36	21.45	
		1880	22.33	21.00	
		1850.7	22.29	21.14	
	3RB_Low	1909.3	22.32	21.55	
		1880	22.31	21.09	
		1850.7	22.24	21.30	
	6RB	1909.3	21.33	20.24	
		1880	21.36	20.06	
		1850.7	21.24	19.98	
	3 MHz	1RB_High	1908.5	22.19	21.02
			1880	22.23	21.08
			1851.5	22.13	20.85
		1RB_Middle	1908.5	22.40	21.32
			1880	22.35	21.51
			1851.5	22.24	21.60
1RB_Low		1908.5	22.28	21.43	
		1880	22.25	21.44	
		1851.5	22.22	20.88	
8RB_High		1908.5	21.21	20.12	
		1880	21.35	20.50	
		1851.5	21.27	20.38	
8RB_Middle		1908.5	21.30	20.08	
		1880	21.38	20.53	
		1851.5	21.25	20.48	
8RB_Low		1908.5	21.38	20.07	
		1880	21.34	20.31	
		1851.5	21.16	20.19	
15RB	1908.5	21.33	20.16		

		1880	21.33	20.35
		1851.5	21.20	20.31
5 MHz	1RB_High	1907.5	22.12	20.83
		1880	22.46	20.89
		1852.5	22.08	20.95
	1RB_Middle	1907.5	22.46	21.13
		1880	22.60	20.96
		1852.5	21.94	20.80
	1RB_Low	1907.5	22.24	20.97
		1880	22.33	20.92
		1852.5	21.99	20.74
	12RB_High	1907.5	21.23	20.25
		1880	21.35	20.36
		1852.5	21.34	20.18
	12RB_Middle	1907.5	21.48	20.40
		1880	21.44	20.35
		1852.5	21.25	20.07
	12RB_Low	1907.5	21.42	20.39
		1880	21.41	20.41
		1852.5	21.22	20.07
25RB	1907.5	21.35	20.35	
	1880	21.41	20.54	
	1852.5	21.35	20.40	
10MHz	1RB_High	1905	22.40	21.40
		1880	22.29	21.26
		1855	22.56	21.45
	1RB_Middle	1905	22.71	21.82
		1880	22.46	21.87
		1855	22.35	21.36
	1RB_Low	1905	22.51	21.80
		1880	22.32	21.66
		1855	22.30	20.97
	25RB_High	1905	21.22	20.28
		1880	21.42	20.54
		1855	21.29	20.44
	25RB_Middle	1905	21.42	20.43
		1880	21.45	20.49
		1855	21.29	20.22
	25RB_Low	1905	21.45	20.37
		1880	21.47	20.41
		1855	21.17	20.17
50RB	1905	21.30	20.30	
	1880	21.44	20.42	
	1855	21.35	20.30	
15MHz	1RB_High	1902.5	22.31	21.36
		1880	22.02	21.61
		1857.5	22.12	21.86
	1RB_Middle	1902.5	22.62	21.87

		1880	22.36	21.00
		1857.5	22.42	21.81
		1902.5	22.44	21.47
	1RB_Low	1880	22.21	21.03
		1857.5	22.07	21.90
		1902.5	21.14	20.01
	36RB_High	1880	21.32	20.31
		1857.5	21.38	20.42
		1902.5	21.31	20.24
	36RB_Middle	1880	21.40	20.41
		1857.5	21.21	20.16
		1902.5	21.35	20.26
	36RB_Low	1880	21.34	20.46
		1857.5	21.15	20.09
		1902.5	21.18	20.26
75RB	1880	21.30	20.40	
	1857.5	21.27	20.25	
	1900	22.24	20.83	
20MHz	1RB_High	1880	21.86	21.03
		1860	21.94	21.16
		1900	22.81	21.35
	1RB_Middle	1880	22.67	21.31
		1860	22.33	21.07
		1900	22.20	20.94
	1RB_Low	1880	21.98	21.08
		1860	21.89	20.67
		1900	21.10	20.20
	50RB_High	1880	21.32	20.13
		1860	21.27	20.36
		1900	21.29	20.39
	50RB_Middle	1880	21.39	20.30
		1860	21.36	20.33
		1900	21.22	20.33
	50RB_Low	1880	21.30	20.27
		1860	21.11	20.08
		1900	21.21	20.16
	100RB	1880	21.26	20.28
		1860	21.24	20.23

Band 5				
Bandwidth (MHz)	RB allocation	Frequency (MHz)	QPSK	16QAM
	RB offset (Start RB)		Actual output power (dBm)	Actual output power (dBm)
1.4 MHz	1RB High (5)	848.3	22.22	21.22
		836.5	22.35	21.47
		824.7	22.08	21.06
	1RB Middle (3)	848.3	22.37	21.23
		836.5	22.50	21.36
		824.7	22.39	21.26
	1RB Low (0)	848.3	22.14	21.33
		836.5	22.44	21.35
		824.7	22.15	20.92
	3RB High (3)	848.3	22.17	21.46
		836.5	22.47	21.27
		824.7	22.16	21.12
	3RB Middle (1)	848.3	22.21	21.41
		836.5	22.50	21.41
		824.7	22.25	21.23
	3RB Low (0)	848.3	22.16	21.54
		836.5	22.44	21.26
		824.7	22.26	21.28
	6RB (0)	848.3	21.38	20.29
		836.5	21.49	20.69
		824.7	21.34	20.25
3 MHz	1RB High (14)	847.5	22.20	21.35
		836.5	22.19	21.73
		825.5	22.47	21.40
	1RB Middle (7)	847.5	22.35	21.56
		836.5	22.59	21.09
		825.5	22.31	21.29
	1RB Low (0)	847.5	22.27	21.25
		836.5	22.45	21.82
		825.5	22.38	21.11
	8RB High (7)	847.5	21.21	20.32
		836.5	21.45	20.57
		825.5	21.29	20.20
	8RB Middle (4)	847.5	21.22	20.24
		836.5	21.52	20.60
		825.5	21.15	20.15
	8RB Low (0)	847.5	21.23	20.25
		836.5	21.50	20.52
		825.5	21.34	20.20
	15RB (0)	847.5	21.28	20.13
		836.5	21.46	20.43

		825.5	21.32	20.30
5 MHz	1RB High (24)	846.5	22.19	20.67
		836.5	22.16	20.89
		826.5	22.22	21.07
		846.5	22.46	20.87
	1RB Middle (12)	836.5	22.67	21.50
		826.5	22.39	21.15
		846.5	22.39	20.81
	1RB Low (0)	836.5	22.09	20.75
		826.5	22.08	20.57
		846.5	21.21	20.27
	12RB High (13)	836.5	21.42	20.29
		826.5	21.42	20.41
		846.5	21.24	20.41
	12RB Middle (6)	836.5	21.47	20.54
		826.5	21.40	20.34
		846.5	21.19	20.31
	12RB Low (0)	836.5	21.42	20.50
		826.5	21.19	20.16
		846.5	21.15	20.34
	25RB (0)	836.5	21.46	20.46
		826.5	21.41	20.29
844		22.32	21.21	
10 MHz	1RB High (49)	836.5	22.41	21.37
		829	22.55	21.23
		844	22.73	21.84
	1RB Middle (24)	836.5	22.65	21.52
		829	22.64	21.50
		844	22.61	21.48
	1RB Low (0)	836.5	22.30	21.68
		829	22.18	21.10
		844	21.31	20.17
	25RB High (25)	836.5	21.48	20.55
		829	21.54	20.63
		844	21.45	20.34
	25RB Middle (12)	836.5	21.56	20.64
		829	21.41	20.58
		844	21.37	20.19
	25RB Low (0)	836.5	21.42	20.46
		829	21.34	20.40
		844	21.34	20.25
	50RB (0)	836.5	21.43	20.38
		829	21.44	20.38

Band 7					
Bandwidth (MHz)	RB allocation	Frequency (MHz)	QPSK	16QAM	
	RB offset (Start RB)		Actual output power (dBm)	Actual output power (dBm)	
5 MHz	1RB High (24)	2567.5	22.58	20.85	
		2535	22.13	21.06	
		2502.5	22.36	20.89	
	1RB Middle (12)	2567.5	22.73	21.14	
		2535	22.83	21.26	
		2502.5	22.69	21.55	
	1RB Low (0)	2567.5	22.42	20.99	
		2535	22.42	21.11	
		2502.5	22.34	21.13	
	12RB High (13)	2567.5	21.44	20.39	
		2535	21.48	20.32	
		2502.5	21.46	20.33	
	12RB Middle (6)	2567.5	21.55	20.39	
		2535	21.68	20.54	
		2502.5	21.61	20.40	
	12RB Low (0)	2567.5	21.50	20.55	
		2535	21.59	20.55	
		2502.5	21.67	20.37	
	25RB (0)	2567.5	21.47	20.59	
		2535	21.53	20.48	
		2502.5	21.52	20.33	
	10 MHz	1RB High (49)	2565	22.55	21.51
			2535	22.73	21.69
			2505	22.51	21.91
1RB Middle (24)		2565	22.76	21.91	
		2535	22.95	22.03	
		2505	22.62	22.04	
1RB Low (0)		2565	22.58	21.32	
		2535	22.77	21.72	
		2505	22.45	21.00	
25RB High (25)		2565	21.54	20.72	
		2535	21.65	20.56	
		2505	21.62	20.50	
25RB Middle (12)		2565	21.61	20.60	
		2535	21.70	20.64	
		2505	21.62	20.56	
25RB Low (0)		2565	21.48	20.54	
		2535	21.63	20.56	
		2505	21.61	20.64	
50RB (0)		2565	21.46	20.53	
		2535	21.51	20.53	
		2505	21.53	20.60	
15 MHz		1RB High (74)	2562.5	22.59	20.97
			2535	22.49	21.63

	1RB Middle (37)	2507.5	22.42	21.68
		2562.5	22.71	21.65
		2535	22.57	21.83
		2507.5	22.48	22.04
	1RB Low (0)	2562.5	22.79	21.70
		2535	22.45	21.94
		2507.5	22.52	22.15
	36RB High (38)	2562.5	21.55	20.39
		2535	21.51	20.59
		2507.5	21.61	20.57
	36RB Middle (19)	2562.5	21.57	20.59
		2535	21.64	20.68
		2507.5	21.60	20.59
	36RB Low (0)	2562.5	21.47	20.60
		2535	21.59	20.59
2507.5		21.53	20.41	
75RB (0)	2562.5	21.45	20.48	
	2535	21.53	20.47	
	2507.5	21.57	20.50	
20 MHz	1RB High (99)	2560	22.19	21.29
		2535	22.07	21.20
		2510	22.98	21.52
	1RB Middle (50)	2560	22.77	22.15
		2535	22.67	21.35
		2510	22.88	21.71
	1RB Low (0)	2560	22.37	21.09
		2535	22.11	21.19
		2510	22.39	21.15
	50RB High (50)	2560	21.60	20.58
		2535	21.54	20.62
		2510	21.51	20.60
	50RB Middle (25)	2560	21.64	20.59
		2535	21.70	20.79
		2510	21.51	20.62
	50RB Low (0)	2560	21.56	20.44
		2535	21.69	20.79
		2510	21.52	20.35
	100RB (0)	2560	21.53	20.46
		2535	21.60	20.58
		2510	21.63	20.53

Band 13					
Bandwidth (MHz)	RB allocation	Frequency (MHz)	QPSK	16QAM	
	RB offset (Start RB)		Actual output power (dBm)	Actual output power (dBm)	
5 MHz	1RB High (24)	784.4	22.27	20.91	
		782	22.27	20.97	
		799.5	22.28	21.06	
	1RB Middle (12)	784.4	22.70	20.92	
		782	22.47	21.00	
		799.5	22.44	21.47	
	1RB Low (0)	784.4	22.42	20.90	
		782	21.97	21.02	
		799.5	22.17	21.09	
	12RB High (13)	784.4	21.53	20.42	
		782	21.48	20.28	
		799.5	21.52	20.55	
	12RB Middle (6)	784.4	21.45	20.45	
		782	21.45	20.24	
		799.5	21.46	20.38	
	12RB Low (0)	784.4	21.34	20.35	
		782	21.40	20.20	
		799.5	21.52	20.29	
	25RB (0)	784.4	21.47	20.56	
		782	21.49	20.42	
		799.5	21.56	20.42	
	10 MHz	1RB High (49)	782	22.53	21.48
		1RB Middle (24)	782	22.46	21.90
		1RB Low (0)	782	22.52	21.48
25RB High (25)		782	21.52	20.29	
25RB Middle (12)		782	21.44	20.39	
25RB Low (0)		782	21.39	20.34	
50RB (0)		782	21.44	20.43	

Low Power

Band 2				
Bandwidth (MHz)	RB allocation	Frequency (MHz)	Actual output power (dBm)	
	RB offset		QPSK	16QAM
1.4 MHz	1RB_High	1909.3	19.24	19.27
		1880	19.20	19.46
		1850.7	19.06	18.67
	1RB_Middle	1909.3	19.12	19.29
		1880	19.32	19.35
		1850.7	19.24	18.51
	1RB_Low	1909.3	19.20	19.16
		1880	19.21	19.22
		1850.7	18.99	18.65
	3RB_High	1909.3	18.97	19.48
		1880	19.05	19.27
		1850.7	19.11	18.80
	3RB_Middle	1909.3	19.22	19.41
		1880	19.20	19.30
		1850.7	18.97	19.13
	3RB_Low	1909.3	19.27	19.39
		1880	19.32	19.26
		1850.7	18.98	19.13
	6RB	1909.3	19.16	19.23
		1880	19.28	19.57
		1850.7	19.01	18.91
3 MHz	1RB_High	1908.5	19.33	19.10
		1880	19.28	19.34
		1851.5	19.11	18.66
	1RB_Middle	1908.5	19.44	19.29
		1880	19.28	19.41
		1851.5	19.34	19.00
	1RB_Low	1908.5	19.42	19.34
		1880	19.43	19.49
		1851.5	18.95	19.32
	8RB_High	1908.5	19.23	19.09
		1880	19.35	19.56
		1851.5	19.05	19.28
	8RB_Middle	1908.5	19.33	19.10
		1880	19.37	19.52
		1851.5	19.04	19.32
8RB_Low	1908.5	19.41	19.21	
	1880	19.33	19.39	
	1851.5	19.07	19.32	

	15RB	1908.5	19.27	19.11	
		1880	19.32	19.32	
		1851.5	19.08	19.14	
5 MHz	1RB_High	1907.5	19.16	18.69	
		1880	19.26	18.83	
		1852.5	19.04	18.87	
	1RB_Middle	1907.5	19.67	19.10	
		1880	19.50	18.93	
		1852.5	19.23	18.99	
	1RB_Low	1907.5	19.26	18.73	
		1880	19.28	18.85	
		1852.5	19.08	18.83	
	12RB_High	1907.5	19.20	19.30	
		1880	19.33	19.26	
		1852.5	19.10	18.94	
	12RB_Middle	1907.5	19.35	19.58	
		1880	19.38	19.47	
		1852.5	19.07	18.98	
	12RB_Low	1907.5	19.40	19.39	
		1880	19.37	19.45	
		1852.5	19.16	18.96	
	25RB	1907.5	19.26	19.45	
		1880	19.33	19.43	
		1852.5	19.14	19.19	
	10MHz	1RB_High	1905	19.38	19.35
			1880	19.28	19.44
			1855	19.24	18.91
		1RB_Middle	1905	19.73	19.66
			1880	19.45	19.72
			1855	19.02	19.57
1RB_Low		1905	19.49	19.38	
		1880	19.32	19.49	
		1855	18.95	19.49	
25RB_High		1905	19.20	19.39	
		1880	19.38	19.59	
		1855	19.21	19.45	
25RB_Middle		1905	19.43	19.68	
		1880	19.40	19.55	
		1855	19.07	19.12	
25RB_Low		1905	19.43	19.69	
		1880	19.28	19.36	
		1855	19.05	19.19	
50RB		1905	19.28	19.26	
		1880	19.36	19.49	
		1855	19.10	19.21	
15MHz		1RB_High	1902.5	19.35	19.40
			1880	19.09	18.82
			1857.5	19.43	19.84

	1RB_Middle	1902.5	19.68	19.78	
		1880	19.37	18.93	
		1857.5	19.45	19.80	
	1RB_Low	1902.5	19.48	19.47	
		1880	19.29	18.71	
		1857.5	19.27	19.12	
	36RB_High	1902.5	19.23	19.10	
		1880	19.35	19.45	
		1857.5	19.25	19.32	
	36RB_Middle	1902.5	19.38	19.49	
		1880	19.45	19.49	
		1857.5	19.25	19.34	
	36RB_Low	1902.5	19.43	19.45	
		1880	19.38	19.41	
		1857.5	19.04	19.01	
	75RB	1902.5	19.30	19.23	
		1880	19.33	19.33	
		1857.5	19.23	19.23	
	20MHz	1RB_High	1900	19.07	18.85
			1880	19.10	19.06
			1860	19.28	18.92
1RB_Middle		1900	19.54	19.26	
		1880	19.53	19.43	
		1860	19.14	19.31	
1RB_Low		1900	19.18	18.85	
		1880	19.03	18.61	
		1860	18.79	18.58	
50RB_High		1900	19.16	19.19	
		1880	19.32	19.30	
		1860	19.30	19.48	
50RB_Middle		1900	19.37	19.43	
		1880	19.38	19.38	
		1860	19.26	19.32	
50RB_Low		1900	19.20	19.19	
		1880	19.28	19.36	
		1860	19.00	18.96	
100RB		1900	19.25	19.24	
		1880	19.33	19.34	
		1860	19.24	19.21	

Band 7					
Bandwidth (MHz)	RB allocation	Frequency (MHz)	QPSK	16QAM	
	RB offset (Start RB)		Actual output power (dBm)	Actual output power (dBm)	
5 MHz	1RB High (24)	2567.5	19.27	18.72	
		2535	19.31	19.02	
		2502.5	19.36	18.52	
	1RB Middle (12)	2567.5	19.70	19.18	
		2535	19.74	19.20	
		2502.5	19.99	19.08	
	1RB Low (0)	2567.5	19.62	18.90	
		2535	19.35	18.97	
		2502.5	19.85	18.96	
	12RB High (13)	2567.5	19.37	19.23	
		2535	19.51	19.39	
		2502.5	19.32	19.43	
	12RB Middle (6)	2567.5	19.49	19.48	
		2535	19.61	19.57	
		2502.5	19.48	19.58	
	12RB Low (0)	2567.5	19.45	19.25	
		2535	19.59	19.47	
		2502.5	19.41	19.54	
	25RB (0)	2567.5	19.40	19.57	
		2535	19.51	19.38	
		2502.5	19.36	19.35	
	10 MHz	1RB High (49)	2565	19.61	19.53
			2535	19.43	18.80
			2505	19.42	19.03
1RB Middle (24)		2565	19.83	19.72	
		2535	19.83	19.94	
		2505	19.62	19.82	
1RB Low (0)		2565	19.62	19.27	
		2535	19.52	19.46	
		2505	19.52	19.43	
25RB High (25)		2565	19.48	19.43	
		2535	19.46	19.63	
		2505	19.45	19.53	
25RB Middle (12)		2565	19.54	19.52	
		2535	19.64	19.61	
		2505	19.59	19.57	
25RB Low (0)		2565	19.48	19.42	
		2535	19.53	19.62	
		2505	19.51	19.57	
50RB (0)		2565	19.45	19.25	
		2535	19.48	19.54	
		2505	19.37	19.38	
15 MHz		1RB High (74)	2562.5	19.63	19.48
			2535	19.35	19.42

	1RB Middle (37)	2507.5	19.39	19.82
		2562.5	19.96	19.99
		2535	19.59	19.29
		2507.5	19.58	19.87
	1RB Low (0)	2562.5	19.84	19.59
		2535	19.48	19.57
		2507.5	19.36	19.95
	36RB High (38)	2562.5	19.60	19.37
		2535	19.49	19.45
		2507.5	19.44	19.31
	36RB Middle (19)	2562.5	19.62	19.44
		2535	19.64	19.47
		2507.5	19.43	19.30
	36RB Low (0)	2562.5	19.49	19.27
		2535	19.56	19.45
2507.5		19.31	19.39	
75RB (0)	2562.5	19.49	19.39	
	2535	19.48	19.46	
	2507.5	19.35	19.37	
20 MHz	1RB High (99)	2560	19.38	19.41
		2535	19.41	19.48
		2510	19.06	19.03
	1RB Middle (50)	2560	19.85	19.51
		2535	19.59	19.49
		2510	19.44	18.94
	1RB Low (0)	2560	19.72	19.09
		2535	19.23	19.34
		2510	18.91	18.79
	50RB High (50)	2560	19.58	19.55
		2535	19.43	19.23
		2510	19.40	19.46
	50RB Middle (25)	2560	19.59	19.61
		2535	19.61	19.36
		2510	19.36	19.52
	50RB Low (0)	2560	19.50	19.43
		2535	19.44	19.31
		2510	19.39	19.37
	100RB (0)	2560	19.41	19.34
		2535	19.35	19.36
		2510	19.42	19.45

I.2.2 SAR Test Result
Table I.2.2-1: SAR Values (LTE Band2 - Head)

Frequency		Ambient Temperature: 22.9 °C					Liquid Temperature: 22.5°C					
Ch.	MHz	Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
19100	1900	1RB_Mid	Left	Touch	Fig.1	22.81	23.50	0.379	0.44	0.617	0.72	-0.08
19100	1900	1RB_Mid	Left	Tilt	/	22.81	23.50	0.129	0.15	0.185	0.22	-0.03
19100	1900	1RB_Mid	Right	Touch	/	22.81	23.50	0.174	0.20	0.333	0.39	0.01
19100	1900	1RB_Mid	Right	Tilt	/	22.81	23.50	0.129	0.15	0.189	0.22	0.04
18900	1880	50RB_Mid	Left	Touch	/	21.39	22.50	0.289	0.37	0.450	0.58	-0.07
18900	1880	50RB_Mid	Left	Tilt	/	21.39	22.50	0.051	0.07	0.068	0.09	0.13
18900	1880	50RB_Mid	Right	Touch	/	21.39	22.50	0.106	0.14	0.170	0.22	0.03
18900	1880	50RB_Mid	Right	Tilt	/	21.39	22.50	0.053	0.07	0.071	0.09	-0.01

Note1: The LTE mode is QPSK_20MHz.

Table I.2.2-2: SAR Values (LTE Band2 - Body)

Frequency		Ambient Temperature: 22.9 °C					Liquid Temperature: 22.5°C					
Ch.	MHz	Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)	
19100	1900	1RB_Mid	Front	/	19.54	20.50	0.169	0.21	0.266	0.33	-0.03	
19100	1900	1RB_Mid	Rear	/	19.54	20.50	0.470	0.59	0.830	1.04	-0.01	
18900	1880	1RB_Mid	Rear	/	19.53	20.50	0.497	0.62	0.878	1.10	0.11	
18700	1860	1RB_High	Rear	Fig.2	19.28	20.50	0.509	0.67	0.890	1.18	0.05	
19100	1900	1RB_Mid	Rear unfold	/	19.54	20.50	0.491	0.61	0.856	1.07	-0.02	
18900	1880	1RB_Mid	Rear unfold	/	19.53	20.50	0.480	0.60	0.830	1.04	-0.06	
18700	1860	1RB_High	Rear unfold	/	19.28	20.50	0.463	0.61	0.816	1.08	-0.01	
19100	1900	1RB_Mid	Left	/	19.54	20.50	0.194	0.24	0.339	0.42	-0.07	
19100	1900	1RB_Mid	Right	/	19.54	20.50	0.142	0.18	0.275	0.34	0.01	
19100	1900	1RB_Mid	Bottom	/	19.54	20.50	0.073	0.09	0.111	0.14	0.12	
19100	1900	50RB_Mid	Front	/	19.38	20.50	0.180	0.23	0.281	0.36	-0.02	
19100	1900	50RB_Mid	Rear	/	19.37	20.50	0.458	0.59	0.807	1.05	-0.13	
18900	1880	50RB_Mid	Rear	/	19.38	20.50	0.442	0.57	0.767	0.99	-0.11	
18700	1860	50RB_High	Rear	/	19.30	20.50	0.482	0.64	0.850	1.12	0.13	
19100	1900	50RB_Mid	Rear unfold	/	19.37	20.50	0.463	0.60	0.795	1.03	0.10	
18900	1880	50RB_Mid	Rear unfold	/	19.38	20.50	0.469	0.61	0.801	1.04	-0.02	
18700	1860	50RB_High	Rear unfold	/	19.30	20.50	0.477	0.63	0.827	1.09	0.04	
19100	1900	50RB_Mid	Left	/	19.38	20.50	0.273	0.35	0.457	0.59	0.12	
19100	1900	50RB_Mid	Right	/	19.38	20.50	0.166	0.21	0.320	0.41	-0.03	

19100	1900	50RB_Mid	Bottom	/	19.38	20.50	0.074	0.10	0.119	0.15	0.03
18900	1880	100RB	Rear	/	19.33	20.50	0.451	0.59	0.773	1.01	0.06
18900	1880	100RB	Rear unfold	/	19.33	20.50	0.464	0.61	0.802	1.05	0.08

Note1: The distance between the EUT and the phantom bottom is 10mm

Note2: The LTE mode is QPSK_20MHz.

Table I.2.2-3: SAR Values (LTE Band2 - Body)

Frequency		Mode	Test Position	Figure No.	Ambient Temperature: 22.9 °C		Liquid Temperature: 22.5 °C		Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz				Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)			
19100	1900	1RB_Mid	Front	/	22.81	23.50	0.206	0.24	0.322	0.38	-0.07
19100	1900	1RB_Mid	Rear	/	22.81	23.50	0.477	0.56	0.798	0.94	0.02
18900	1880	1RB_Mid	Rear	/	22.67	23.50	0.572	0.69	0.972	1.18	0.02
18700	1860	1RB_Mid	Rear	Fig.3	22.33	23.50	0.572	0.75	0.973	1.27	0.09
19100	1900	1RB_Mid	Rear unfold	/	22.81	23.50	0.472	0.55	0.755	0.89	-0.05
18900	1880	1RB_Mid	Rear unfold	/	22.67	23.50	0.571	0.69	0.963	1.17	0.14
18700	1860	1RB_Mid	Rear unfold	/	22.33	23.50	0.569	0.74	0.963	1.26	0.09
18900	1880	50RB_Mid	Front	/	21.39	22.50	0.168	0.22	0.261	0.34	-0.07
19100	1900	50RB_Mid	Rear	/	21.29	22.50	0.425	0.56	0.772	1.02	0.02
18900	1880	50RB_Mid	Rear	/	21.39	22.50	0.386	0.50	0.643	0.83	0.07
18700	1860	50RB_Mid	Rear	/	21.36	22.50	0.432	0.56	0.721	0.94	0.13
18900	1880	50RB_Mid	Rear unfold	/	21.39	22.50	0.370	0.48	0.589	0.76	0.07
18900	1880	100RB	Rear	/	21.26	22.50	0.450	0.60	0.762	1.01	0.02
18900	1880	100RB	Rear unfold	/	21.26	22.50	0.384	0.51	0.632	0.84	0.09

Note1: The distance between the EUT and the phantom bottom is 15mm

Note2: The LTE mode is QPSK_20MHz.

Table I.2.2-4: SAR Values (LTE Band5 - Head)

Ambient Temperature: 22.9°C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
20600	844	1RB_Mid	Left	Touch		22.73	23.50	0.354	0.42	0.577	0.69	-0.03
20600	844	1RB_Mid	Left	Tilt	/	22.73	23.50	0.292	0.35	0.413	0.49	-0.03
20600	844	1RB_Mid	Right	Touch	Fig.4	22.73	23.50	0.426	0.51	0.694	0.83	0.06
20525	836.5	1RB_Mid	Right	Touch	/	22.65	23.50	0.328	0.40	0.537	0.65	-0.13
20450	829	1RB_Mid	Right	Touch	/	22.64	23.50	0.304	0.37	0.499	0.61	0.06
20600	844	1RB_Mid	Right	Tilt	/	22.73	23.50	0.330	0.39	0.479	0.57	-0.01
20525	836.5	25RB_Mid	Left	Touch	/	21.56	22.50	0.276	0.34	0.455	0.56	-0.12
20525	836.5	25RB_Mid	Left	Tilt	/	21.56	22.50	0.231	0.29	0.327	0.41	0.12
20525	836.5	25RB_Mid	Right	Touch	/	21.56	22.50	0.330	0.41	0.542	0.67	0.02
20525	836.5	25RB_Mid	Right	Tilt	/	21.56	22.50	0.242	0.30	0.350	0.43	0.10
20450	829	50RB	Right	Touch	/	21.44	22.50	0.293	0.37	0.484	0.62	-0.06

Note1: The LTE mode is QPSK_10MHz.

Table I.2.2-5: SAR Values (LTE Band5 - Body)

Ambient Temperature: 22.9°C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
20600	844	1RB_Mid	Front	/	22.73	23.50	0.289	0.34	0.398	0.48	-0.03
20600	844	1RB_Mid	Rear	/	22.73	23.50	0.636	0.76	0.91	1.09	0.11
20525	836.5	1RB_Mid	Rear	/	22.65	23.50	0.659	0.80	0.93	1.13	-0.09
20450	829	1RB_Mid	Rear	Fig.5	22.64	23.50	0.686	0.84	0.97	1.18	0.12
20600	844	1RB_Mid	Rear unfold	/	22.73	23.50	0.406	0.48	0.591	0.71	0.1
20600	844	1RB_Mid	Left	/	22.73	23.50	0.362	0.43	0.529	0.63	0.03
20600	844	1RB_Mid	Right	/	22.73	23.50	0.432	0.52	0.635	0.76	0.07
20600	844	1RB_Mid	Bottom	/	22.73	23.50	0.075	0.09	0.118	0.14	-0.01
20525	836.5	25RB_Mid	Front	/	21.56	22.50	0.253	0.31	0.348	0.43	-0.02
20600	844	25RB_Mid	Rear	/	21.45	22.50	0.518	0.66	0.739	0.94	-0.03
20525	836.5	25RB_Mid	Rear	/	21.56	22.50	0.533	0.66	0.756	0.94	-0.09
20450	829	25RB_Mid	Rear	/	21.54	22.50	0.535	0.67	0.757	0.94	-0.07
20525	836.5	25RB_Mid	Rear unfold	/	21.56	22.50	0.322	0.40	0.467	0.58	0.09
20525	836.5	25RB_Mid	Left	/	21.56	22.50	0.287	0.36	0.418	0.52	0.05
20525	836.5	25RB_Mid	Right	/	21.56	22.50	0.343	0.43	0.502	0.62	0.02
20525	836.5	25RB_Mid	Bottom	/	21.56	22.50	0.073	0.09	0.124	0.15	-0.12
20450	829	100RB	Rear	/	21.44	22.50	0.558	0.71	0.788	1.01	-0.02

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK_10MHz.

Table I.2.2-6: SAR Values (LTE Band7 - Head)

Ambient Temperature: 22.9°C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
20850	2510	1RB_High	Left	Touch	Fig.6	22.98	23.50	0.323	0.36	0.622	0.70	0.07
20850	2510	1RB_High	Left	Tilt	/	22.98	23.50	0.123	0.14	0.196	0.22	-0.07
20850	2510	1RB_High	Right	Touch	/	22.98	23.50	0.149	0.17	0.272	0.31	0.08
20850	2510	1RB_High	Right	Tilt	/	22.98	23.50	0.053	0.06	0.088	0.10	-0.12
21100	2535	50RB_Mid	Left	Touch	/	21.70	22.50	0.311	0.37	0.586	0.70	0.09
21100	2535	50RB_Mid	Left	Tilt	/	21.70	22.50	0.102	0.12	0.179	0.22	-0.13
21100	2535	50RB_Mid	Right	Touch	/	21.70	22.50	0.115	0.14	0.199	0.24	-0.12
21100	2535	50RB_Mid	Right	Tilt	/	21.70	22.50	0.040	0.05	0.077	0.09	0.08

Note1: The LTE mode is QPSK_20MHz.

Table I.2.2-7: SAR Values (LTE Band7 - Body)

Ambient Temperature: 22.9°C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
21350	2560	1RB_Mid	Front	/	19.85	20.50	0.081	0.09	0.142	0.16	0.12
21350	2560	1RB_Mid	Rear	/	19.85	20.50	0.217	0.25	0.400	0.46	-0.05
21350	2560	1RB_Mid	Rear unfold	/	19.85	20.50	0.247	0.29	0.460	0.53	-0.07
21350	2560	1RB_Mid	Left	/	19.85	20.50	0.155	0.18	0.289	0.34	-0.03
21350	2560	1RB_Mid	Right	/	19.85	20.50	0.061	0.07	0.111	0.13	-0.04
21350	2560	1RB_Mid	Bottom	/	19.85	20.50	0.060	0.07	0.106	0.12	-0.10
21100	2535	50RB_Mid	Front	/	19.61	20.50	0.069	0.08	0.123	0.15	0.04
21100	2535	50RB_Mid	Rear	/	19.61	20.50	0.250	0.31	0.451	0.55	0.02
21100	2535	50RB_Mid	Rear unfold	Fig.7	19.61	20.50	0.285	0.35	0.530	0.65	-0.10
21100	2535	50RB_Mid	Left	/	19.61	20.50	0.171	0.21	0.313	0.38	-0.11
21100	2535	50RB_Mid	Right	/	19.61	20.50	0.063	0.08	0.118	0.14	-0.10
21100	2535	50RB_Mid	Bottom	/	19.61	20.50	0.064	0.08	0.114	0.14	0.08

Note1: The distance between the EUT and the phantom bottom is 10mm

Note2: The LTE mode is QPSK_20MHz.

Table I.2.2-8: SAR Values (LTE Band7 - Body)

Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C											
20850	2510	1RB_High	Front	/	22.98	23.50	0.101	0.11	0.182	0.21	0.03
20850	2510	1RB_High	Rear	/	22.98	23.50	0.304	0.34	0.557	0.63	-0.07
20850	2510	1RB_High	Rear unfold	Fig.8	22.98	23.50	0.349	0.39	0.638	0.72	-0.05
21100	2535	50RB_Mid	Front	/	21.70	22.50	0.091	0.11	0.163	0.20	-0.04
21100	2535	50RB_Mid	Rear	/	21.70	22.50	0.263	0.32	0.479	0.58	-0.07
21100	2535	50RB_Mid	Rear unfold	/	21.70	22.50	0.318	0.38	0.579	0.70	-0.02

Note1: The distance between the EUT and the phantom bottom is 15mm

Note2: The LTE mode is QPSK_20MHz.

Table I.2.2-9: SAR Values (LTE Band13 - Head)

Frequency		Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C												
23230	782	1RB_High	Left	Touch	Fig.9	22.53	23.50	0.221	0.28	0.345	0.43	-0.09
23230	782	1RB_High	Left	Tilt	/	22.53	23.50	0.091	0.11	0.115	0.14	-0.03
23230	782	1RB_High	Right	Touch	/	22.53	23.50	0.218	0.27	0.324	0.41	-0.12
23230	782	1RB_High	Right	Tilt	/	22.53	23.50	0.218	0.27	0.324	0.41	-0.06
23230	782	25RB_High	Left	Touch	/	21.52	22.50	0.179	0.22	0.280	0.35	0.06
23230	782	25RB_High	Left	Tilt	/	21.52	22.50	0.068	0.09	0.085	0.11	0.00
23230	782	25RB_High	Right	Touch	/	21.52	22.50	0.176	0.22	0.262	0.33	-0.07
23230	782	25RB_High	Right	Tilt	/	21.52	22.50	0.132	0.17	0.173	0.22	0.03

Note1: The LTE mode is QPSK_10MHz.

Table I.2.2-10: SAR Values (LTE Band13 - Body)

Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g)(W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C											
23230	782	1RB_High	Front	/	22.53	23.50	0.276	0.35	0.362	0.45	0.01
23230	782	1RB_High	Rear	Fig.10	22.53	23.50	0.729	0.91	1.01	1.26	-0.09
23230	782	1RB_High	Rear unfold	/	22.53	23.50	0.314	0.39	0.437	0.55	-0.05
23230	782	1RB_High	Left	/	22.53	23.50	0.335	0.42	0.465	0.58	-0.13
23230	782	1RB_High	Right	/	22.53	23.50	0.461	0.58	0.659	0.82	0.05
23230	782	1RB_High	Bottom	/	22.53	23.50	0.066	0.08	0.116	0.15	-0.11
23230	782	25RB_High	Front	/	21.52	22.50	0.188	0.24	0.269	0.34	-0.12
23230	782	25RB_High	Rear	/	21.52	22.50	0.603	0.76	0.839	1.05	0.11
23230	782	25RB_High	Rear unfold	/	21.52	22.50	0.253	0.32	0.352	0.44	0.11
23230	782	25RB_High	Left	/	21.52	22.50	0.257	0.32	0.356	0.45	-0.1
23230	782	25RB_High	Right	/	21.52	22.50	0.373	0.47	0.533	0.67	0.11
23230	782	25RB_High	Bottom	/	21.52	22.50	0.054	0.07	0.096	0.12	-0.06
23230	782	100RB	Rear	/	21.44	22.50	0.602	0.77	0.823	1.05	-0.06

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK_10MHz.

I.3 Spot Check

I.3.1 Conducted power of selected case

Table I.3.1-1: The conducted power measurement results for GSM850/1900

GSM 850MHZ	Measured Power (dBm)		
	251	190	128
Speech	/	31.86	/
GPRS(1Tx)	31.93	/	/
GSM1900MHZ	Measured Power (dBm)		
	810	661	512
Speech	/	28.82	/
GPRS(3Tx)	/	/	24.35

Table I.3.1-2: The conducted Power for WCDMA-Normal Power

Item	band	FDDV result		
	ARFCN	4132 (826.4MHz)	4182 (836.4MHz)	4233 (846.6MHz)
WCDMA	\	22.28	/	22.32
Item	band	FDDIV result		
	ARFCN	1312 (1712.4MHz)	1412 (1732.4MHz)	1513 (1752.6MHz)
WCDMA	\	22.10	/	/
Item	band	FDDII result		
	ARFCN	9262 (1852.4MHz)	9400 (1880MHz)	9538 (1907.6MHz)
WCDMA	\	21.81	21.90	/

Table I.3.1-3: The conducted Power for WCDMA-Low Power

Item	band	FDDIV result		
	ARFCN	1312 (1712.4MHz)	1412 (1732.4MHz)	1513 (1752.6MHz)
WCDMA	\	19.27	/	/
Item	band	FDDII result		
	ARFCN	9262 (1852.4MHz)	9400 (1880MHz)	9538 (1907.6MHz)
WCDMA	\	19.03	/	/

Table I.3.1-4: The conducted Power for LTE -Normal power

Test Band	RB offset	Channel	Conducted Power (dBm)
LTE Band12	25RB- Middle	23130	20.53
LTE Band12	1RB- Middle	23060	22.30
LTE Band66	1RB-Middle	132572	22.11
LTE Band66	1RB-Low	132072	21.92

Table I.3.1-5: The conducted Power for LTE -Low power

Test Band	RB offset	Channel	Conducted Power (dBm)
LTE Band66	50RB-High	132072	19.23

Table I.3.1-6: The conducted Power for WLAN

Mode / data rate	Channel	Measured Power (dBm)
2.4G-11b	11	19.09

I.3.2 Measurement results

Test Band	Channel	Frequency	Tune-Up	Measured Power	Test Position	Measured 10g SAR	Measured 1g SAR	Reported 10g SAR	Reported 1g SAR	Power Drift
GSM850	190	836.6	33	31.86	Left Cheek	0.162	0.236	0.21	0.31	0.11
GSM850	251	848.8	33	31.93	Rear	0.334	0.467	0.43	0.60	0.09
PCS1900	661	1880	30.5	28.82	Left Cheek	0.0228	0.0374	0.03	0.06	0.09
PCS1900	512	1850.2	26	24.35	Rear unfold	0.493	0.829	0.72	1.21	-0.03
WCDMA1900-BII	9400	1880	23	21.9	Left Cheek	0.306	0.494	0.39	0.64	-0.12
WCDMA1900-BII	9262	1852.4	20	19.03	Rear	0.452	0.788	0.57	0.99	0.03
WCDMA1900-BII	9262	1852.4	23	21.81	Rear	0.44	0.747	0.58	0.98	-0.04
WCDMA1700-BIV	1312	1712.4	24	22.1	Left Cheek	0.192	0.296	0.30	0.46	0.07
WCDMA1700-BIV	1312	1712.4	20	19.27	Rear	0.539	0.954	0.64	1.13	-0.07
WCDMA1700-BIV	1312	1712.4	24	22.1	Rear	0.407	0.713	0.63	1.10	0.03
WCDMA850-BV	4233	846.6	24	22.32	Right Cheek	0.208	0.342	0.31	0.50	0.15
WCDMA850-BV	4132	826.4	24	22.28	Rear	0.29	0.409	0.43	0.61	0.02
LTE700-FDD12	23130	711 MHz	22.5	20.53	Right Cheek	0.0849	0.129	0.13	0.20	0.06
LTE700-FDD12	23060	704 MHz	23.5	22.3	Rear unfold	0.234	0.321	0.31	0.42	-0.14
LTE1700-FDD66	132572	1770 MHz	23.5	22.11	Left Cheek	0.165	0.267	0.23	0.37	-0.17
LTE1700-FDD66	132072	1720 MHz	20.5	19.23	Rear	0.457	0.815	0.61	1.09	-0.08
LTE1700-FDD66	132072	1720 MHz	23.5	21.92	Rear	0.386	0.659	0.56	0.95	-0.16
WLAN2450	11	2462	19.5	19.09	Right Cheek	0.168	0.307	0.18	0.34	0.06
WLAN2450	11	2462	19.5	19.09	Rear unfold	0.06	0.111	0.07	0.12	-0.07

I.3.3 Reported SAR Comparison

Table I.3.3-1: Highest Reported SAR (1g)

Exposure Configuration	Technology Band	Reported SAR 1g(W/kg) Original	Reported SAR 1g(W/kg) Spot check	Equipment Class
Head (Separation Distance 0mm)	GSM 850	0.54	0.31	PCE
	PCS 1900	0.29	0.06	
	UMTS FDD 2	0.61	0.64	
	UMTS FDD 4	0.61	0.46	
	UMTS FDD 5	0.78	0.50	
	LTE Band 12	0.61	0.20	
	LTE Band 66	0.44	0.37	
	WLAN 2.4 GHz	0.64	0.34	DTS
Hotspot (Separation Distance 10mm)	GSM 850	0.75	0.60	PCE
	PCS 1900	1.24	1.21	
	UMTS FDD 2	1.13	0.99	
	UMTS FDD 4	1.23	1.13	
	UMTS FDD 5	0.97	0.61	
	LTE Band 12	0.77	0.42	
	LTE Band 66	1.13	1.09	

	WLAN 2.4 GHz	0.23	0.12	DTS
Body-worn (Separation Distance)	UMTS FDD 2	1.25	0.98	PCE
	UMTS FDD 4	1.27	1.10	
	LTE Band 66	1.07	0.95	

Note: The spot check results marked by blue are larger than the original result. So they replace the original result and others are shared.

I.4 List of Main Instruments

Table E.4-1: List of Main Instruments

No.	Name	Type	Serial Number	Calibration Date	Valid Period
01	Network analyzer	E5071C	MY46110673	January 14, 2021	One year
02	Power meter	NRP2	101919	May 12, 2020	One year
03	Power sensor	NRP-Z91	101547		
04	Signal Generator	E4438C	MY49070393	May 14, 2020	One Year
05	Amplifier	60S1G4	0331848	No Calibration Requested	
06	BTS	CMW500	159890	January 25 2021	One year
07	E-field Probe	SPEAG EX3DV4	7307	May 29, 2020	One year
08	DAE	SPEAG DAE4	536	November 6, 2020	One year
09	Dipole Validation Kit	SPEAG D750V3	1017	July 24,2020	One year
10	Dipole Validation Kit	SPEAG D835V2	4d069	July 24,,2020	One year
11	Dipole Validation Kit	SPEAG D1750V2	1003	July 24, 2020	One year
12	Dipole Validation Kit	SPEAG D1900V2	5d101	July 28,2020	One year
13	Dipole Validation Kit	SPEAG D2450V2	853	July 21,2020	One year
14	Dipole Validation Kit	SPEAG D2600V2	1012	July 21,2020	One year

I.5 GRAPH RESULTS

GSM850_CH190 Left Cheek

Date: 3/15/2021

Electronics: DAE4 Sn536

Medium: head 835 MHz

Medium parameters used: $f = 836.6$; $\sigma = 0.894$ mho/m; $\epsilon_r = 41.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: GSM850 836.6 Duty Cycle: 1: 8.3

Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.301 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.891 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.364 W/kg

SAR(1 g) = 0.236 W/kg; SAR(10 g) = 0.162 W/kg

Maximum value of SAR (measured) = 0.307 W/kg

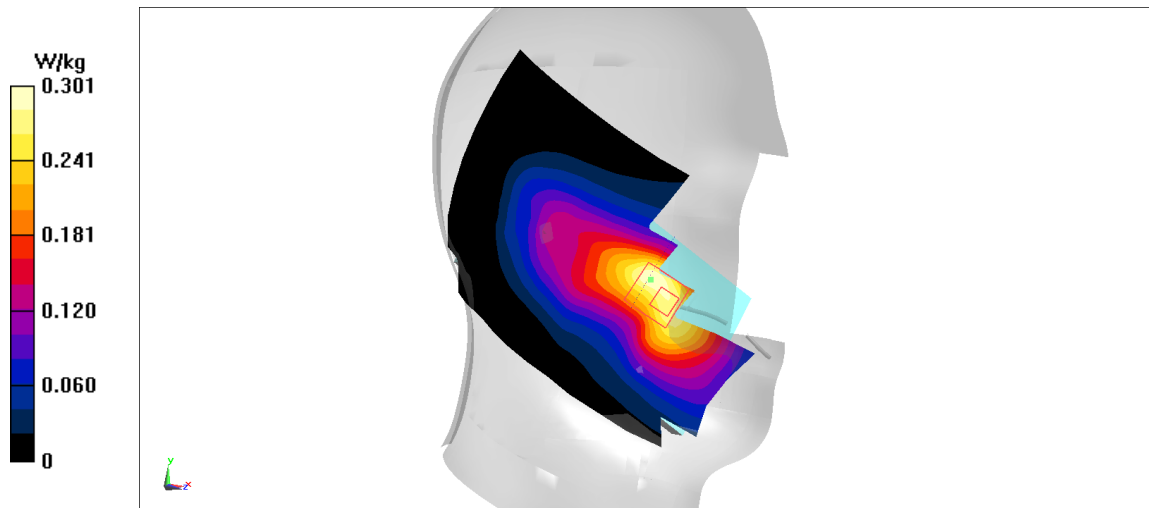


Fig A.1

GSM850_CH251 Rear

Date: 3/15/2021

Electronics: DAE4 Sn536

Medium: head 835 MHz

Medium parameters used: $f = 848.8$; $\sigma = 0.905$ mho/m; $\epsilon_r = 41.08$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: GSM850 848.8 Duty Cycle: 1: 8.3

Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.571 W/kg

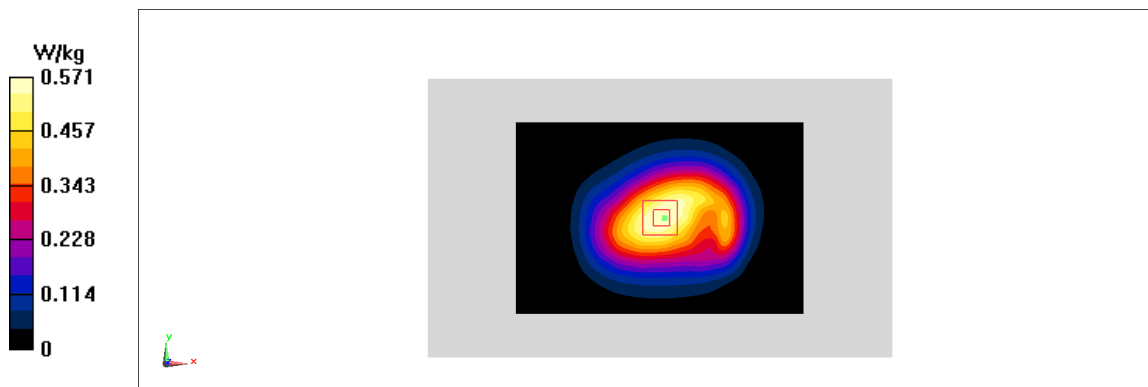
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.14 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.638 W/kg

SAR(1 g) = 0.467 W/kg; SAR(10 g) = 0.334 W/kg

Maximum value of SAR (measured) = 0.576 W/kg

**Fig A.2**

PCS1900_CH661 Left Cheek

Date: 3/17/2021

Electronics: DAE4 Sn536

Medium: head 1900 MHz

Medium parameters used: $f = 1880$; $\sigma = 1.409$ mho/m; $\epsilon_r = 40.01$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: PCS1900 1880 Duty Cycle: 1: 8.3

Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.0501 W/kg

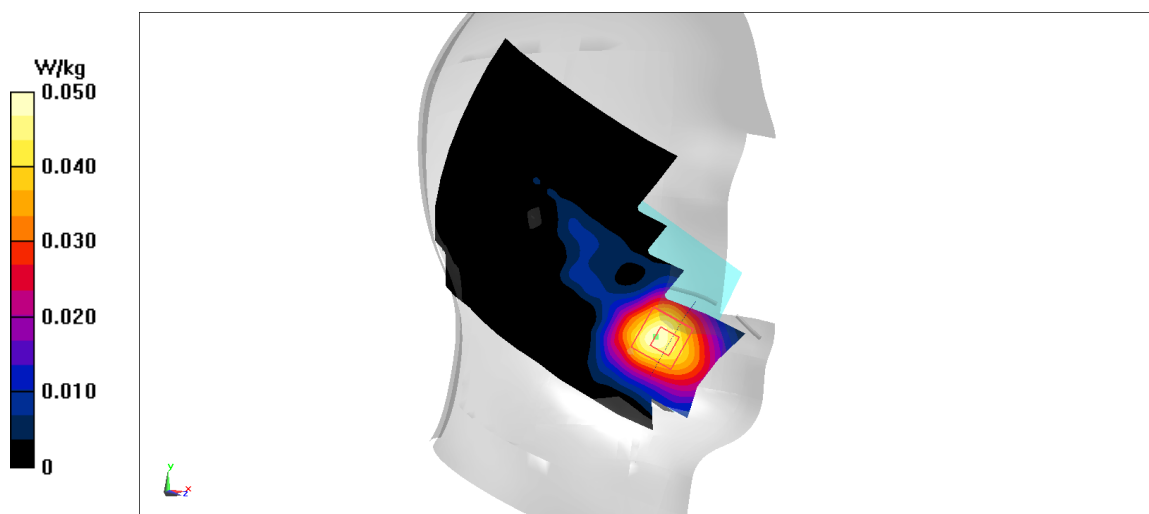
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.061 W/kg

SAR(1 g) = 0.0374 W/kg; SAR(10 g) = 0.0228 W/kg

Maximum value of SAR (measured) = 0.052 W/kg

**Fig A.3**

PCS1900_CH512 Rear unfold

Date: 3/17/2021

Electronics: DAE4 Sn536

Medium: head 1900 MHz

Medium parameters used: $f = 1850.2$; $\sigma = 1.38$ mho/m; $\epsilon_r = 40.05$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: PCS1900 1850.2 Duty Cycle: 1: 2.67

Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.24 W/kg

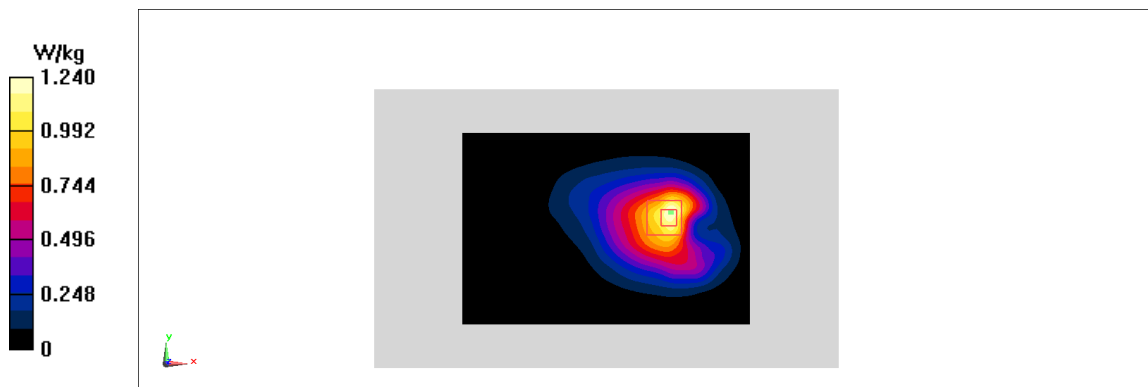
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.85 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.36 W/kg

SAR(1 g) = 0.829 W/kg; SAR(10 g) = 0.493 W/kg

Maximum value of SAR (measured) = 1.14 W/kg

**Fig A.4**

WCDMA1900-BII_CH9400 Left Cheek

Date: 3/17/2021

Electronics: DAE4 Sn536

Medium: head 1900 MHz

Medium parameters used: $f = 1880$; $\sigma = 1.409$ mho/m; $\epsilon_r = 40.01$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: WCDMA1900-BII 1880 Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.624 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.8 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.757 W/kg

SAR(1 g) = 0.494 W/kg; SAR(10 g) = 0.306 W/kg

Maximum value of SAR (measured) = 0.669 W/kg

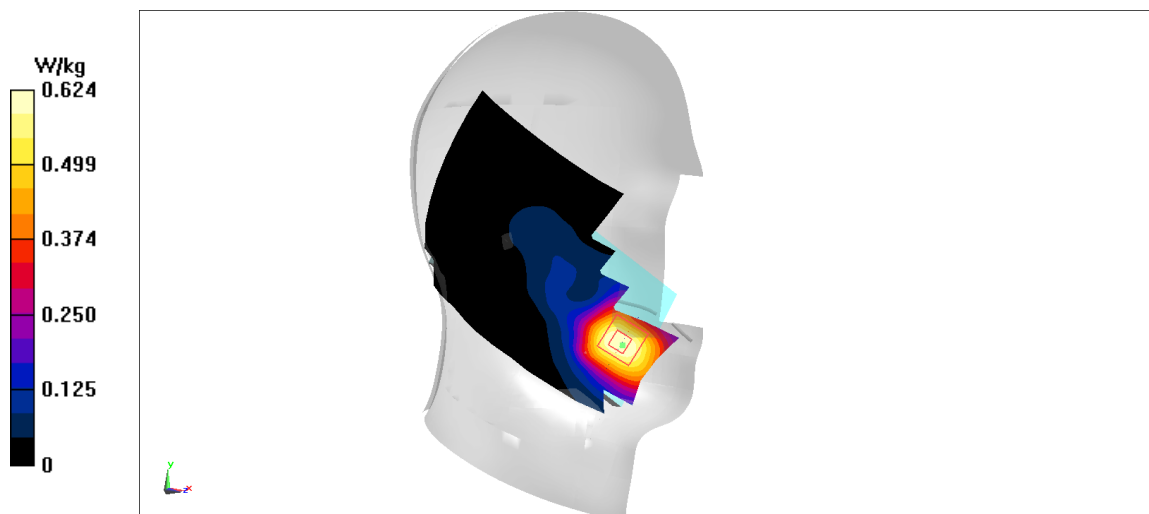


Fig A.5

WCDMA1900-BII_CH9262 Rear

Date: 3/17/2021

Electronics: DAE4 Sn536

Medium: head 1900 MHz

Medium parameters used: $f = 1852.4$; $\sigma = 1.382$ mho/m; $\epsilon_r = 40.05$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: WCDMA1900-BII 1852.4 Duty Cycle: 1: 1

Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.07 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.38 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.29 W/kg

SAR(1 g) = 0.788 W/kg; SAR(10 g) = 0.452 W/kg

Maximum value of SAR (measured) = 1.1 W/kg

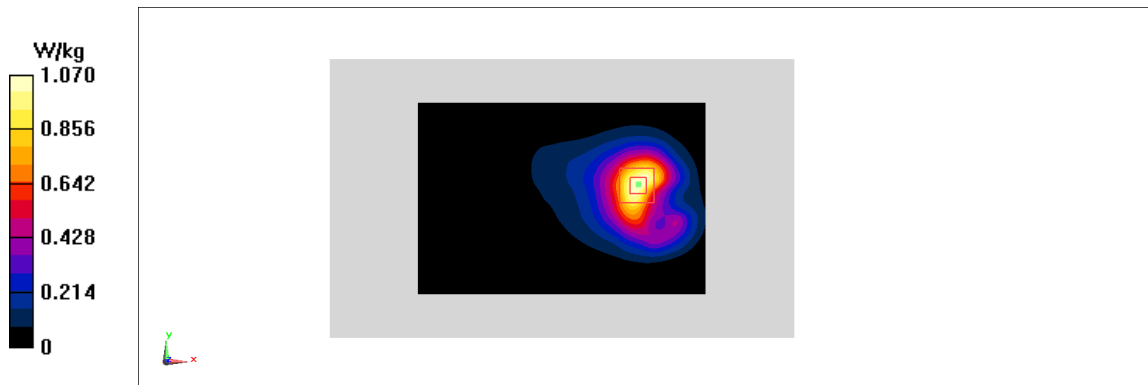


Fig A.6