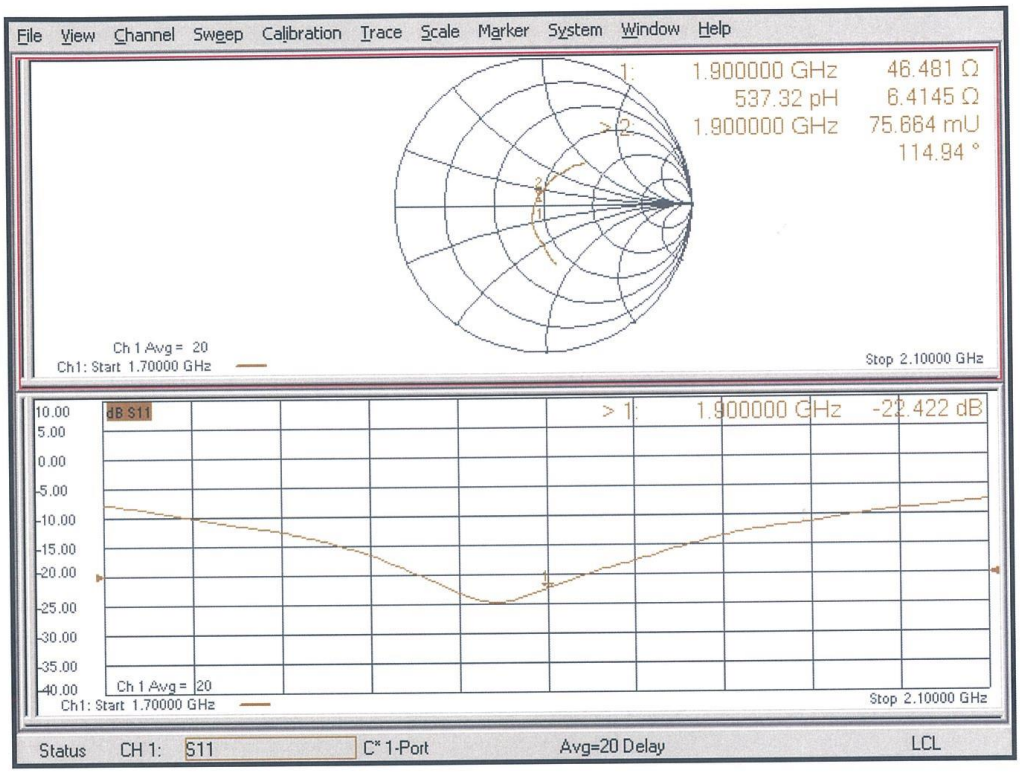
Impedance Measurement Plot for Body TSL



ANNEX L SAR Test Result

L.1 Tissue and Verification

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

Measurement Date (yyyy-mm-dd)	Type	Frequency	Permittivity ε	Drift (%)	Conductivity σ (S/m)	Drift (%)
2020/8/15	Head	750 MHz	41.96	0.05	0.896	0.67
2020/8/16	Head	1750 MHz	39.45	-1.57	1.37	0.00
2020/8/17	Head	1900 MHz	39.44	-1.40	1.397	-0.21
2020/8/18	Head	2600 MHz	38.63	-0.97	1.942	-0.92

Table L.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
2020/8/15	750 MHz	5.55	8.44	5.48	8.32	-1.26%	-1.42%
2020/8/16	1750 MHz	18.7	35.5	18.8	34.8	0.53%	-1.97%
2020/8/17	1900 MHz	20.8	40.1	21.16	40.24	1.73%	0.35%
2020/8/18	2600 MHz	25.3	57.2	25.4	56.52	0.40%	-1.19%

L.2 Measurement result for 5G NR

Table1: Summery of Receiver detection mechanism

Antenna	Receiver on (head scenario)	Receiver off + Hotspot on (Body/other scenario)	Receiver off (Body/other scenario)	Sensor ON (Body/other scenario)
Main antenna	Power Level A1	Power Level B1	Power Level C1	Power Level D1

Maximum Target Power for Production Unit – Level A1/C1

No.	Test Freq Description	5G-n2							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		n2
1	High	15	5	DFT-s-OFDM QPSK	Edge_1RB_Right (1@24)	1@24	1907.5	381500	23.8	22.56
2	Middle	15	5	DFT-s-OFDM QPSK	Inner_Full (12@6)	12@6	1880	376000	24.8	23.58
3	Low	15	5	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	1852.5	370500	23.8	22.43
4	High	15	20	DFT-s-OFDM QPSK	Edge_1RB_Right (1@105)	1@105	1900	380000	23.8	22.53
5	Middle	15	20	DFT-s-OFDM QPSK	Inner_Full (50@25)	50@25	1880	376000	24.8	23.59
6	Low	15	20	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	1860	372000	23.8	22.61

According to the table above, the maximum power configuration is selected as the default test configuration

No.	Test Freq Description	5G-n2							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		n2
1	default	15	20	DFT-s-OFDM 16QAM	Inner_Full (50@25)	50@25	1880	376000	23.8	22.58
2	default	15	20	DFT-s-OFDM 64QAM	Inner_Full (50@25)	50@25	1880	376000	22.3	21.05
3	default	15	20	DFT-s-OFDM 256QAM	Inner_Full (50@25)	50@25	1880	376000	20.3	19.05
4	default	15	20	CP-OFDM QPSK	Inner_Full (50@25)	50@25	1880	376000	23.3	22.09
5	default	15	20	CP-OFDM 16QAM	Inner_Full (50@25)	50@25	1880	376000	22.8	21.51
6	default	15	20	CP-OFDM 64QAM	Inner_Full (50@25)	50@25	1880	376000	21.3	20.02
7	default	15	20	CP-OFDM 256QAM	Inner_Full (50@25)	50@25	1880	376000	18.3	17.01
8	default	15	20	DFT-s-OFDM QPSK	Edge_Full_Right (2@104)	2@104	1880	376000	23.8	22.60
9	default	15	20	DFT-s-OFDM QPSK	Edge_Full_Left(2@0)	2@0	1880	376000	23.8	22.58
10	default	15	20	DFT-s-OFDM QPSK	Inner_1RB_Right (1@104)	1@104	1880	376000	24.8	23.62
11	default	15	20	DFT-s-OFDM QPSK	Inner_1RB_Left (1@1)	1@1	1880	376000	24.8	23.48
12	default	15	20	DFT-s-OFDM QPSK	Outer_Full (100@0)	100@0	1880	376000	23.8	22.49
13	default	15	10	DFT-s-OFDM QPSK	Inner_Full (25@12)	25@12	1880	376000	24.8	23.59
14	default	15	15	DFT-s-OFDM QPSK	Inner_Full (36@18)	36@19	1880	376000	24.8	23.55

Maximum Target Power for Production Unit – Level B1

No.	Test Freq Description	5G-n2							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		n2
1	High	15	5	DFT-s-OFDM QPSK	Edge_1RB_Right (1@24)	1@24	1907.5	381500	20.5	18.80
2	Middle	15	5	DFT-s-OFDM QPSK	Inner_Full (12@6)	12@6	1880	376000	20.5	19.83
3	Low	15	5	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	1852.5	370500	20.5	18.55
4	High	15	20	DFT-s-OFDM QPSK	Edge_1RB_Right (1@105)	1@105	1900	380000	20.5	19.38
5	Middle	15	20	DFT-s-OFDM QPSK	Inner_Full (50@25)	50@25	1880	376000	20.5	19.85
6	Low	15	20	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	1860	372000	20.5	19.32

According to the table above, the maximum power configuration is selected as the default test configuration

No.	Test Freq Description	5G-n2							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		n2
1	default	15	20	DFT-s-OFDM 16QAM	Inner_Full (50@25)	50@25	1880	376000	20.5	19.81
2	default	15	20	DFT-s-OFDM 64QAM	Inner_Full (50@25)	50@25	1880	376000	20.5	19.84
3	default	15	20	DFT-s-OFDM 256QAM	Inner_Full (50@25)	50@25	1880	376000	20.3	18.78
4	default	15	20	CP-OFDM QPSK	Inner_Full (53@26)	50@25	1880	376000	20.5	19.83
5	default	15	20	CP-OFDM 16QAM	Inner_Full (53@26)	50@25	1880	376000	20.5	19.82
6	default	15	20	CP-OFDM 64QAM	Inner_Full (53@26)	50@25	1880	376000	20.5	19.83
7	default	15	20	CP-OFDM 256QAM	Inner_Full (53@26)	50@25	1880	376000	18.3	16.87
8	default	15	20	DFT-s-OFDM QPSK	Edge_Full_Right (2@104)	2@104	1880	376000	20.5	19.52
9	default	15	20	DFT-s-OFDM QPSK	Edge_Full_Left(2@0)	2@0	1880	376000	20.5	19.45
10	default	15	20	DFT-s-OFDM QPSK	Inner_1RB_Right (1@104)	1@104	1880	376000	20.5	19.63
11	default	15	20	DFT-s-OFDM QPSK	Inner_1RB_Left (1@1)	1@1	1880	376000	20.5	19.55
12	default	15	20	DFT-s-OFDM QPSK	Outer_Full (100@0)	100@0	1880	376000	20.5	19.8
13	default	15	10	DFT-s-OFDM QPSK	Inner_Full (25@12)	25@12	1880	376000	20.5	19.77
14	default	15	15	DFT-s-OFDM QPSK	Inner_Full (36@18)	36@19	1880	376000	20.5	19.78

Maximum Target Power for Production Unit – Level D1

No.	Test Freq Description	5G-n2							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		n2
1	High	15	5	DFT-s-OFDM QPSK	Edge_1RB_Right (1@24)	1@24	1907.5	381500	22.3	22.08
2	Middle	15	5	DFT-s-OFDM QPSK	Inner_Full (12@6)	12@6	1880	376000	22.3	21.97
3	Low	15	5	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	1852.5	370500	22.3	21.93
4	High	15	20	DFT-s-OFDM QPSK	Edge_1RB_Right (1@105)	1@105	1900	380000	22.3	22.00
5	Middle	15	20	DFT-s-OFDM QPSK	Inner_Full (50@25)	50@25	1880	376000	22.3	22.03
6	Low	15	20	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	1860	372000	22.3	22.13

According to the table above, the maximum power configuration is selected as the default test configuration

No.	Test Freq Description	5G-n2							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		n2
1	default	15	20	DFT-s-OFDM 16QAM	Edge_1RB_Left (1@0)	1@0	1860	372000	22.3	21.61
2	default	15	20	DFT-s-OFDM 64QAM	Edge_1RB_Left (1@0)	1@0	1860	372000	22.3	20.88
3	default	15	20	DFT-s-OFDM 256QAM	Edge_1RB_Left (1@0)	1@0	1860	372000	20.3	18.89
4	default	15	20	CP-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	1860	372000	21.8	20.62
5	default	15	20	CP-OFDM 16QAM	Edge_1RB_Left (1@0)	1@0	1860	372000	21.8	20.78
6	default	15	20	CP-OFDM 64QAM	Edge_1RB_Left (1@0)	1@0	1860	372000	21.3	19.79
7	default	15	20	CP-OFDM 256QAM	Edge_1RB_Left (1@0)	1@0	1860	372000	18.3	16.55
8	default	15	20	DFT-s-OFDM QPSK	Edge_Full_Right (2@104)	2@104	1860	372000	22.3	22.06
9	default	15	20	DFT-s-OFDM QPSK	Edge_Full_Left(2@0)	2@0	1860	372000	22.3	21.95
10	default	15	20	DFT-s-OFDM QPSK	Inner_1RB_Right (1@104)	1@104	1860	372000	22.3	22.05
11	default	15	20	DFT-s-OFDM QPSK	Inner_1RB_Left (1@1)	1@1	1860	372000	22.3	22.11
12	default	15	20	DFT-s-OFDM QPSK	Outer_Full (100@0)	100@0	1860	372000	22.3	21.97
13	default	15	10	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	1855	371000	22.3	22
14	default	15	15	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	1857.5	371500	22.3	22.11

Maximum Target Power for Production Unit – Level A1/C1

No.	Test Freq Description	5G-n66							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		n66
1	High	15	5	DFT-s-OFDM QPSK	Edge_1RB_Right (1@24)	1@24	1777.5	355500	23.8	22.34
2	Middle	15	5	DFT-s-OFDM QPSK	Inner_Full (12@6)	12@6	1745	349000	24.8	23.34
3	Low	15	5	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	1712.5	342500	23.8	22.30
4	High	15	20	DFT-s-OFDM QPSK	Edge_1RB_Right (1@105)	1@105	1770	354000	23.8	22.36
5	Middle	15	20	DFT-s-OFDM QPSK	Inner_Full (50@25)	50@25	1745	349000	24.8	23.46
6	Low	15	20	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	1720	344000	23.8	22.45

According to the table above, the maximum power configuration is selected as the default test configuration

No.	Test Freq Description	5G-n66							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		n66
1	default	15	20	DFT-s-OFDM 16QAM	Inner_Full (50@25)	50@25	1745	349000	23.8	22.44
2	default	15	20	DFT-s-OFDM 64QAM	Inner_Full (50@25)	50@25	1745	349000	22.3	21.1
3	default	15	20	DFT-s-OFDM 256QAM	Inner_Full (50@25)	50@25	1745	349000	20.3	19.13
4	default	15	20	CP-OFDM QPSK	Inner_Full (53@26)	50@25	1745	349000	23.3	21.89
5	default	15	20	CP-OFDM 16QAM	Inner_Full (53@26)	50@25	1745	349000	22.8	21.41
6	default	15	20	CP-OFDM 64QAM	Inner_Full (53@26)	50@25	1745	349000	21.3	19.96
7	default	15	20	CP-OFDM 256QAM	Inner_Full (53@26)	50@25	1745	349000	18.3	16.94
8	default	15	20	DFT-s-OFDM QPSK	Edge_Full_Right (2@104)	2@104	1745	349000	23.8	22.41
9	default	15	20	DFT-s-OFDM QPSK	Edge_Full_Left(2@0)	2@0	1745	349000	23.8	22.47
10	default	15	20	DFT-s-OFDM QPSK	Inner_1RB_Right (1@104)	1@104	1745	349000	24.8	23.51
11	default	15	20	DFT-s-OFDM QPSK	Inner_1RB_Left (1@1)	1@1	1745	349000	24.8	23.58
12	default	15	20	DFT-s-OFDM QPSK	Outer_Full (100@0)	100@0	1745	349000	23.8	22.46
13	default	15	10	DFT-s-OFDM QPSK	Inner_Full (25@12)	25@12	1745	349000	24.8	23.38
14	default	15	15	DFT-s-OFDM QPSK	Inner_Full (36@18)	36@19	1745	349000	24.8	23.35

Maximum Target Power for Production Unit – Level B1

No.	Test Freq Description	5G-n66							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		n66
1	High	15	5	DFT-s-OFDM QPSK	Edge_1RB_Right (1@24)	1@24	1777.5	355500	20.5	18.62
2	Middle	15	5	DFT-s-OFDM QPSK	Inner_Full (12@6)	12@6	1745	349000	20.5	19.67
3	Low	15	5	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	1712.5	342500	20.5	18.51
4	High	15	20	DFT-s-OFDM QPSK	Edge_1RB_Right (1@105)	1@105	1770	354000	20.5	19.15
5	Middle	15	20	DFT-s-OFDM QPSK	Inner_Full (50@25)	50@25	1745	349000	20.5	19.73
6	Low	15	20	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	1720	344000	20.5	19.24

According to the table above, the maximum power configuration is selected as the default test configuration

No.	Test Freq Description	5G-n66							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		n66
1	default	15	20	DFT-s-OFDM 16QAM	Inner_Full (50@25)	50@25	1745	349000	20.5	19.7
2	default	15	20	DFT-s-OFDM 64QAM	Inner_Full (50@25)	50@25	1745	349000	20.5	19.7
3	default	15	20	DFT-s-OFDM 256QAM	Inner_Full (50@25)	50@25	1745	349000	20.3	18.67
4	default	15	20	CP-OFDM QPSK	Inner_Full (53@26)	50@25	1745	349000	20.5	19.72
5	default	15	20	CP-OFDM 16QAM	Inner_Full (53@26)	50@25	1745	349000	20.5	19.71
6	default	15	20	CP-OFDM 64QAM	Inner_Full (53@26)	50@25	1745	349000	20.5	19.68
7	default	15	20	CP-OFDM 256QAM	Inner_Full (53@26)	50@25	1745	349000	18.3	16.8
8	default	15	20	DFT-s-OFDM QPSK	Edge_Full_Right (2@104)	2@104	1745	349000	20.5	19.4
9	default	15	20	DFT-s-OFDM QPSK	Edge_Full_Left(2@0)	2@0	1745	349000	20.5	19.44
10	default	15	20	DFT-s-OFDM QPSK	Inner_1RB_Right (1@104)	1@104	1745	349000	20.5	19.57
11	default	15	20	DFT-s-OFDM QPSK	Inner_1RB_Left (1@1)	1@1	1745	349000	20.5	19.6
12	default	15	20	DFT-s-OFDM QPSK	Outer_Full (100@0)	100@0	1745	349000	20.5	19.65
13	default	15	10	DFT-s-OFDM QPSK	Inner_Full (25@12)	25@12	1745	349000	20.5	19.68
14	default	15	15	DFT-s-OFDM QPSK	Inner_Full (36@18)	36@19	1745	349000	20.5	19.72

Maximum Target Power for Production Unit – Level A1

No.	Test Freq Description	5G-n71							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		n71
1	High	15	5	DFT-s-OFDM QPSK	Edge_1RB_Right (1@24)	1@24	695.5	139100	22.5	21.52
2	Middle	15	5	DFT-s-OFDM QPSK	Inner_Full (12@6)	12@6	680.5	136100	22.5	22.43
3	Low	15	5	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	665.5	133100	22.5	21.86
4	High	15	20	DFT-s-OFDM QPSK	Edge_1RB_Right (1@105)	1@105	688	137600	22.5	21.54
5	Middle	15	20	DFT-s-OFDM QPSK	Inner_Full (50@25)	50@25	680.5	136100	22.5	22.45
6	Low	15	20	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	673	134600	22.5	21.96

According to the table above, the maximum power configuration is selected as the default test configuration

No.	Test Freq Description	5G-n71							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		n71
1	default	15	20	DFT-s-OFDM 16QAM	Inner_Full (50@25)	50@25	680.5	136100	22.5	21.88
2	default	15	20	DFT-s-OFDM 64QAM	Inner_Full (50@25)	50@25	680.5	136100	21.3	20.47
3	default	15	20	DFT-s-OFDM 256QAM	Inner_Full (50@25)	50@25	680.5	136100	19.3	18.51
4	default	15	20	CP-OFDM QPSK	Inner_Full (53@26)	50@25	680.5	136100	22.3	21.44
5	default	15	20	CP-OFDM 16QAM	Inner_Full (53@26)	50@25	680.5	136100	21.8	20.95
6	default	15	20	CP-OFDM 64QAM	Inner_Full (53@26)	50@25	680.5	136100	20.3	19.40
7	default	15	20	CP-OFDM 256QAM	Inner_Full (53@26)	50@25	680.5	136100	17.3	16.42
8	default	15	20	DFT-s-OFDM QPSK	Edge_Full_Right (2@104)	2@104	680.5	136100	22.5	21.73
9	default	15	20	DFT-s-OFDM QPSK	Edge_Full_Left(2@0)	2@0	680.5	136100	22.5	21.85
10	default	15	20	DFT-s-OFDM QPSK	Inner_1RB_Right (1@104)	1@104	680.5	136100	22.5	22.25
11	default	15	20	DFT-s-OFDM QPSK	Inner_1RB_Left (1@1)	1@1	680.5	136100	22.5	22.33
12	default	15	20	DFT-s-OFDM QPSK	Outer_Full (100@0)	100@0	680.5	136100	22.5	21.95
13	default	15	10	DFT-s-OFDM QPSK	Inner_Full (25@12)	25@12	680.5	136100	22.5	22.40
14	default	15	15	DFT-s-OFDM QPSK	Inner_Full (36@18)	36@19	680.5	136100	22.5	22.43

Maximum Target Power for Production Unit – Level B1

No.	Test Freq Description	5G-n71							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		n71
1	High	15	5	DFT-s-OFDM QPSK	Edge_1RB_Right (1@24)	1@24	695.5	139100	20	19.02
2	Middle	15	5	DFT-s-OFDM QPSK	Inner_Full (12@6)	12@6	680.5	136100	20	19.32
3	Low	15	5	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	665.5	133100	20	18.40
4	High	15	20	DFT-s-OFDM QPSK	Edge_1RB_Right (1@105)	1@105	688	137600	20	18.85
5	Middle	15	20	DFT-s-OFDM QPSK	Inner_Full (50@25)	50@25	680.5	136100	20	19.36
6	Low	15	20	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	673	134600	20	19.27

According to the table above, the maximum power configuration is selected as the default test configuration

No.	Test Freq Description	5G-n71							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		n71
1	default	15	20	DFT-s-OFDM 16QAM	Inner_Full (50@25)	50@25	680.5	136100	20	19.29
2	default	15	20	DFT-s-OFDM 64QAM	Inner_Full (50@25)	50@25	680.5	136100	20	19.32
3	default	15	20	DFT-s-OFDM 256QAM	Inner_Full (50@25)	50@25	680.5	136100	19.3	17.79
4	default	15	20	CP-OFDM QPSK	Inner_Full (53@26)	50@25	680.5	136100	20	19.31
5	default	15	20	CP-OFDM 16QAM	Inner_Full (53@26)	50@25	680.5	136100	20	19.24
6	default	15	20	CP-OFDM 64QAM	Inner_Full (53@26)	50@25	680.5	136100	20	18.90
7	default	15	20	CP-OFDM 256QAM	Inner_Full (53@26)	50@25	680.5	136100	17.3	15.83
8	default	15	20	DFT-s-OFDM QPSK	Edge_Full_Right (2@104)	2@104	680.5	136100	20	19.03
9	default	15	20	DFT-s-OFDM QPSK	Edge_Full_Left(2@0)	2@0	680.5	136100	20	19.09
10	default	15	20	DFT-s-OFDM QPSK	Inner_1RB_Right (1@104)	1@104	680.5	136100	20	19.13
11	default	15	20	DFT-s-OFDM QPSK	Inner_1RB_Left (1@1)	1@1	680.5	136100	20	19.14
12	default	15	20	DFT-s-OFDM QPSK	Outer_Full (100@0)	100@0	680.5	136100	20	19.35
13	default	15	10	DFT-s-OFDM QPSK	Inner_Full (25@12)	25@12	680.5	136100	20	19.30
14	default	15	15	DFT-s-OFDM QPSK	Inner_Full (36@18)	36@19	680.5	136100	20	19.27

Maximum Target Power for Production Unit – Level C1

No.	Test Freq Description	5G-n71							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		n71
1	High	15	5	DFT-s-OFDM QPSK	Edge_1RB_Right (1@24)	1@24	695.5	139100	22.8	21.53
2	Middle	15	5	DFT-s-OFDM QPSK	Inner_Full (12@6)	12@6	680.5	136100	23.8	22.88
3	Low	15	5	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	665.5	133100	22.8	21.82
4	High	15	20	DFT-s-OFDM QPSK	Edge_1RB_Right (1@105)	1@105	688	137600	22.8	21.61
5	Middle	15	20	DFT-s-OFDM QPSK	Inner_Full (50@25)	50@25	680.5	136100	23.8	22.93
6	Low	15	20	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	673	134600	22.8	22.07

According to the table above, the maximum power configuration is selected as the default test configuration

No.	Test Freq Description	5G-n71							Tune up	Power Results (dBm)
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		n71
1	default	15	20	DFT-s-OFDM 16QAM	Inner_Full (50@25)	50@25	680.5	136100	22.8	21.89
2	default	15	20	DFT-s-OFDM 64QAM	Inner_Full (50@25)	50@25	680.5	136100	21.3	20.51
3	default	15	20	DFT-s-OFDM 256QAM	Inner_Full (50@25)	50@25	680.5	136100	19.3	18.49
4	default	15	20	CP-OFDM QPSK	Inner_Full (53@26)	50@25	680.5	136100	22.3	21.44
5	default	15	20	CP-OFDM 16QAM	Inner_Full (53@26)	50@25	680.5	136100	21.8	20.91
6	default	15	20	CP-OFDM 64QAM	Inner_Full (53@26)	50@25	680.5	136100	20.3	19.43
7	default	15	20	CP-OFDM 256QAM	Inner_Full (53@26)	50@25	680.5	136100	17.3	16.47
8	default	15	20	DFT-s-OFDM QPSK	Edge_Full_Right (2@104)	2@104	680.5	136100	22.8	21.71
9	default	15	20	DFT-s-OFDM QPSK	Edge_Full_Left(2@0)	2@0	680.5	136100	22.8	21.97
10	default	15	20	DFT-s-OFDM QPSK	Inner_1RB_Right (1@104)	1@104	680.5	136100	23.8	22.73
11	default	15	20	DFT-s-OFDM QPSK	Inner_1RB_Left (1@1)	1@1	680.5	136100	23.8	22.81
12	default	15	20	DFT-s-OFDM QPSK	Outer_Full (100@0)	100@0	680.5	136100	22.8	21.97
13	default	15	10	DFT-s-OFDM QPSK	Inner_Full (25@12)	25@12	680.5	136100	23.8	22.97
14	default	15	15	DFT-s-OFDM QPSK	Inner_Full (36@18)	36@19	680.5	136100	23.8	22.92

Maximum Target Power for Production Unit – Level A1

No.	Test Freq Description	5G-n41							Tune up	Power n41
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	High	30	20	DFT-s-OFDM QPSK	Edge_1RB_Right (1@50)	1@50	2679.99	535998	18.5	16.54
2	Middle-1	30	20	DFT-s-OFDM QPSK	Inner_Full (25@12)	25@12	2636.49	527298	18.5	16.93
3	Middle-2	30	20	DFT-s-OFDM QPSK	Inner_Full (25@12)	25@12	2592.99	518598	18.5	16.50
4	Middle-3	30	20	DFT-s-OFDM QPSK	Inner_Full (25@12)	25@12	2549.51	509902	18.5	16.70
5	Low	30	20	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	2506.02	501204	18.5	17.50
6	High	30	100	DFT-s-OFDM QPSK	Edge_1RB_Right (1@271)	1@272	2640	528000	18.5	16.52
7	Middle	30	100	DFT-s-OFDM QPSK	Inner_Full (135@67)	135@67	2616.51	523302	18.5	17.30
8	Middle	30	100	DFT-s-OFDM QPSK	Inner_Full (135@67)	135@67	2592.99	518598	18.5	17.01
9	Middle	30	100	DFT-s-OFDM QPSK	Inner_Full (135@67)	135@67	2569.5	513900	18.5	**17.28**
10	Low	30	100	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	2546.01	509202	18.5	18.19

According to the table above, the maximum power configuration is selected as the default test configuration

No.	Test Freq Description	5G-n41							Tune up	Power Results n41
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	Low	30	100	DFT-s-OFDM 16QAM	Edge_1RB_Left (1@0)	1@0	2546.01	509202	18.5	18.10
2	Low	30	100	DFT-s-OFDM 64QAM	Edge_1RB_Left (1@0)	1@0	2546.01	509202	18.5	18.02
3	Low	30	100	DFT-s-OFDM 256QAM	Edge_1RB_Left (1@0)	1@0	2546.01	509202	18.5	18.12
4	Low	30	100	CP-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	2546.01	509202	18.5	18.11
5	Low	30	100	CP-OFDM 16QAM	Edge_1RB_Left (1@0)	1@0	2546.01	509202	18.5	18.13
6	Low	30	100	CP-OFDM 64QAM	Edge_1RB_Left (1@0)	1@0	2546.01	509202	18.5	17.94
7	Low	30	100	CP-OFDM 256QAM	Edge_1RB_Left (1@0)	1@0	2546.01	509202	17.3	17.11
8	Low	30	100	DFT-s-OFDM QPSK	Edge_Full_Right	2@271	2546.01	509202	18.5	16.55
9	Low	30	100	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	2546.01	509202	18.5	18.12
10	Low	30	100	DFT-s-OFDM QPSK	Inner_1RB_Right	1@271	2546.01	509202	18.5	16.53
11	Low	30	100	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	2546.01	509202	18.5	18.15
12	Low	30	100	DFT-s-OFDM QPSK	Outer_Full	270@0	2546.01	509202	18.5	17.40
13	Low	30	40	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	2516.01	503202	18.5	18.46
14	Low	30	50	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	2521.02	504204	18.5	18.29
15	Low	30	60	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	2526	505200	18.5	18.17
16	Low	30	80	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	2536.02	507204	18.5	18.18
17	Low	30	90	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	2541	508200	18.5	18.21

Maximum Target Power for Production Unit – Level C1

No.	Test Freq Description	5G-n41							Tune up	Power n41
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	High	30	20	DFT-s-OFDM QPSK	Edge_1RB_Right (1@50)	1@50	2679.99	535998	22.8	21.14
2	Middle-1	30	20	DFT-s-OFDM QPSK	Inner_Full (25@12)	25@12	2636.49	527298	23.8	22.92
3	Middle-2	30	20	DFT-s-OFDM QPSK	Inner_Full (25@12)	25@12	2592.99	518598	23.8	22.45
4	Middle-3	30	20	DFT-s-OFDM QPSK	Inner_Full (25@12)	25@12	2549.51	509902	23.8	22.67
5	Low	30	20	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	2506.02	501204	22.8	22.60
6	High	30	100	DFT-s-OFDM QPSK	Edge_1RB_Right (1@271)	1@272	2640	528000	22.8	20.87
7	Middle	30	100	DFT-s-OFDM QPSK	Inner_Full (135@67)	135@67	2616.51	523302	23.8	22.68
8	Middle	30	100	DFT-s-OFDM QPSK	Inner_Full (135@67)	135@67	2592.99	518598	23.8	22.40
9	Middle	30	100	DFT-s-OFDM QPSK	Inner_Full (135@67)	135@67	2569.5	513900	23.8	**22.30**
10	Low	30	100	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	2546.01	509202	22.8	22.41

According to the table above, the maximum power configuration is selected as the default test configuration

No.	Test Freq Description	5G-n41							Tune up	Power Results n41
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	Middle-1	30	20	DFT-s-OFDM 16QAM	Inner_Full (25@12)	25@12	2636.49	527298	22.8	21.24
2	Middle-1	30	20	DFT-s-OFDM 64QAM	Inner_Full (25@12)	25@12	2636.49	527298	21.3	20.09
3	Middle-1	30	20	DFT-s-OFDM 256QAM	Inner_Full (25@12)	25@12	2636.49	527298	19.3	18.44
4	Middle-1	30	20	CP-OFDM QPSK	Inner_Full (25@12)	25@12	2636.49	527298	22.3	20.90
5	Middle-1	30	20	CP-OFDM 16QAM	Inner_Full (25@12)	25@12	2636.49	527298	21.8	20.46
6	Middle-1	30	20	CP-OFDM 64QAM	Inner_Full (25@12)	25@12	2636.49	527298	20.3	19.33
7	Middle-1	30	20	CP-OFDM 256QAM	Inner_Full (25@12)	25@12	2636.49	527298	17.3	16.47
8	Middle-1	30	20	DFT-s-OFDM QPSK	Edge_Full_Right	2@49	2636.49	527298	22.8	21.97
9	Middle-1	30	20	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	2636.49	527298	22.8	21.88
10	Middle-1	30	20	DFT-s-OFDM QPSK	Inner_1RB_Right	1@49	2636.49	527298	23.8	22.10
11	Middle-1	30	20	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	2636.49	527298	23.8	22.26
12	Middle-1	30	20	DFT-s-OFDM QPSK	Outer_Full	50@0	2636.49	527298	22.8	21.40
13	Middle-1	30	40	DFT-s-OFDM QPSK	Inner_Full	50@25	2631.495	526299	23.8	22.80
14	Middle-1	30	50	DFT-s-OFDM QPSK	Inner_Full	64@32	2628.99	525798	23.8	22.81
15	Middle-1	30	60	DFT-s-OFDM QPSK	Inner_Full	81@40	2626.485	525297	23.8	22.65
16	Middle-1	30	80	DFT-s-OFDM QPSK	Inner_Full	108@54	2621.49	524298	23.8	22.75
17	Middle-1	30	90	DFT-s-OFDM QPSK	Inner_Full	120@60	2618.985	523797	23.8	22.68

Maximum Target Power for Production Unit – Level B1

No.	Test Freq Description	5G-n41							Tune up	Power n41
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	High	30	20	DFT-s-OFDM QPSK	Edge_1RB_Right (1@50)	1@50	2679.99	535998	22	21.50
2	Middle-1	30	20	DFT-s-OFDM QPSK	Inner_Full (25@12)	25@12	2636.49	527298	22	21.62
3	Middle-2	30	20	DFT-s-OFDM QPSK	Inner_Full (25@12)	25@12	2592.99	518598	22	21.72
4	Middle-3	30	20	DFT-s-OFDM QPSK	Inner_Full (25@12)	25@12	2549.51	509902	22	21.48
5	Low	30	20	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	2506.02	501204	22.3	21.93
6	High	30	100	DFT-s-OFDM QPSK	Edge_1RB_Right (1@271)	1@272	2640	528000	22	20.17
7	Middle	30	100	DFT-s-OFDM QPSK	Inner_Full (135@67)	135@67	2616.51	523302	22	21.63
8	Middle	30	100	DFT-s-OFDM QPSK	Inner_Full (135@67)	135@67	2592.99	518598	22	21.67
9	Middle	30	100	DFT-s-OFDM QPSK	Inner_Full (135@67)	135@67	2569.5	513900	22	**21.31**
10	Low	30	100	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	2546.01	509202	22.3	22.11
According to the table above, the maximum power configuration is selected as the default test configuration										

No.	Test Freq Description	5G-n41							Tune up	Power Results n41
		SCS (kHz)	NR BW (MHz)	Modulation	RB allocation		NR Test Freq. (MHz)	NR Test CH.		
1	Low	30	100	DFT-s-OFDM 16QAM	Edge_1RB_Left (1@0)	1@0	2546.01	509202	21.8	21.65
2	Low	30	100	DFT-s-OFDM 64QAM	Edge_1RB_Left (1@0)	1@0	2546.01	509202	21.3	20.78
3	Low	30	100	DFT-s-OFDM 256QAM	Edge_1RB_Left (1@0)	1@0	2546.01	509202	19.3	18.90
4	Low	30	100	CP-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	2546.01	509202	20.8	20.18
5	Low	30	100	CP-OFDM 16QAM	Edge_1RB_Left (1@0)	1@0	2546.01	509202	20.8	20.00
6	Low	30	100	CP-OFDM 64QAM	Edge_1RB_Left (1@0)	1@0	2546.01	509202	20.3	19.18
7	Low	30	100	CP-OFDM 256QAM	Edge_1RB_Left (1@0)	1@0	2546.01	509202	17.3	16.64
8	Low	30	100	DFT-s-OFDM QPSK	Edge_Full_Right	2@271	2546.01	509202	22	20.97
9	Low	30	100	DFT-s-OFDM QPSK	Edge_Full_Left	2@0	2546.01	509202	22.3	21.66
10	Low	30	100	DFT-s-OFDM QPSK	Inner_1RB_Right	1@271	2546.01	509202	22	20.97
11	Low	30	100	DFT-s-OFDM QPSK	Inner_1RB_Left	1@1	2546.01	509202	22.3	21.72
12	Low	30	100	DFT-s-OFDM QPSK	Outer_Full	270@0	2546.01	509202	22	21.32
13	Low	30	40	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	2516.01	503202	22.3	20.37
14	Low	30	50	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	2521.02	504204	22.3	20.32
15	Low	30	60	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	2526	505200	22.3	20.87
16	Low	30	80	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	2536.02	507204	22.3	21.71
17	Low	30	90	DFT-s-OFDM QPSK	Edge_1RB_Left (1@0)	1@0	2541	508200	22.3	21.68

L.3 SAR Test Result

B2: Battery of BLP745 Sunwoda Electronic India Private Limited

Table L.3-1: SAR Values (NR5G n2-Head)

Ambient Temperature: 22.2 ℃ Liquid Temperature: 22 ℃											
Frequency		Side	Test Position	Figure No./Note	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										
376000	1880	Left	Cheek	/	23.62	24.8	0.09	**0.12**	0.135	**0.18**	-0.03
376000	1880	Left	Tilt	/	23.62	24.8	0.05	**0.07**	0.077	**0.10**	0.08
376000	1880	Right	Cheek	Fig.1	23.62	24.8	0.117	**0.15**	0.181	**0.24**	-0.04
376000	1880	Right	Tilt	/	23.62	24.8	0.052	**0.07**	0.082	**0.11**	-0.13
376000	1880	Right	Cheek	CP-OFDM	22.09	23.3	0.105	**0.14**	0.174	**0.23**	0.08
376000	1880	Right	Cheek	B2	23.62	24.8	0.102	**0.13**	0.165	**0.22**	0.10

Table L.3-2: SAR Values (NR5G n2-Body)

Ambient Temperature: 22.2 ℃ Liquid Temperature: 22 ℃										
Frequency		Test Position	Figure No./ Note	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									
376000	1880	Front	/	19.85	20.5	0.175	**0.20**	0.294	**0.34**	-0.10
376000	1880	Rear	/	19.85	20.5	0.217	**0.25**	0.354	**0.41**	0.03
376000	1880	Left	/	19.85	20.5	0.072	**0.08**	0.126	**0.15**	0.09
376000	1880	Bottom	Fig.2	19.85	20.5	0.324	**0.38**	0.571	**0.66**	0.10
376000	1880	Bottom	CP-OFDM	19.83	20.5	0.283	**0.33**	0.496	**0.58**	0.07
376000	1880	Bottom	B2	19.85	20.5	0.298	**0.35**	0.523	**0.61**	-0.10
372000	1860	Bottom	Note1	22.13	22.3	1.79	**1.86**	4.01	**4.17**	0.13

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

Note1: The distance between the EUT and the phantom bottom is 0mm

Table L.3-3: SAR Values (NR5G n2-Body)

Ambient Temperature: 22.2 ℃ Liquid Temperature: 22 ℃										
Frequency		Test Position	Figure No./ Note	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									
376000	1880	Front	/	23.62	24.8	0.222	**0.29**	0.371	**0.49**	-0.03
376000	1880	Rear	Fig.3	23.62	24.8	0.271	**0.36**	0.451	**0.59**	-0.01
376000	1880	Rear	CP-OFDM	22.09	23.3	0.267	**0.35**	0.447	**0.59**	0.13

376000	1880	Rear	B2	23.62	24.8	0.263	**0.35**	0.440	**0.58**	0.11

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

Table L.3-4: SAR Values (NR5G n66-Head)

Ambient Temperature: 22.2 °C Liquid Temperature: 22 °C											
Frequency		Side	Test Position	Figure No./Note	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										
349000	1745	Left	Cheek	/	23.58	24.8	0.097	**0.13**	0.143	**0.19**	-0.07
349000	1745	Left	Tilt	/	23.58	24.8	0.058	**0.08**	0.084	**0.11**	0.04
349000	1745	Right	Cheek	Fig.4	23.58	24.8	0.131	**0.17**	0.198	**0.26**	0.01
349000	1745	Right	Tilt	/	23.58	24.8	0.052	**0.07**	0.070	**0.09**	0.13
349000	1745	Right	Cheek	CP-OFDM	21.89	23.3	0.119	**0.16**	0.189	**0.26**	-0.03
349000	1745	Right	Cheek	B2	23.58	24.8	0.118	**0.16**	0.187	**0.25**	-0.06

Table L.3-5: SAR Values (NR5G n66-Body)

Ambient Temperature: 22.2 °C Liquid Temperature: 22 °C										
Frequency		Test Position	Figure No./ Note	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									
349000	1745	Front	/	19.73	20.5	0.172	**0.21**	0.283	**0.34**	-0.01
349000	1745	Rear	/	19.73	20.5	0.192	**0.23**	0.314	**0.37**	0.10
349000	1745	Left	/	19.73	20.5	0.037	**0.04**	0.066	**0.08**	0.07
349000	1745	Bottom	Fig.5	19.73	20.5	0.259	**0.31**	0.452	**0.54**	0.01
349000	1745	Bottom	CP-OFDM	19.72	20.5	0.242	**0.29**	0.445	**0.53**	-0.01
349000	1745	Bottom	B2	19.73	20.5	0.225	**0.27**	0.407	**0.49**	0.10
349000	1745	Bottom	Note1	23.58	24.8	1.39	**1.84**	3.07	**4.07**	0.04

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

Note1: The distance between the EUT and the phantom bottom is 0mm

Table L.3-6: SAR Values (NR5G n66-Body)

Ambient Temperature: 22.2 °C Liquid Temperature: 22 °C										
Frequency		Test Position	Figure No./ Note	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									
349000	1745	Front	/	23.58	24.8	0.163	**0.22**	0.258	**0.34**	0.09
349000	1745	Rear	Fig.6	23.58	24.8	0.189	**0.25**	0.290	**0.38**	0.11

349000	1745	Bottom	CP-OFDM	21.89	23.3	0.175	**0.24**	0.271	**0.37**	0.05
349000	1745	Bottom	B2	23.58	24.8	0.180	**0.24**	0.283	**0.37**	-0.06

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

Table L.3-7: SAR Values (NR5G n71-Head)

Ambient Temperature: 22.2 °C Liquid Temperature: 22 °C										
Frequency		Side	Test Position	Figure No./Note	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										
136100	680.5	Left	Cheek	Fig.7	22.45	22.5	0.346	**0.35**	0.619	**0.63**	-0.04
136100	680.5	Left	Tilt	/	22.45	22.5	0.075	**0.08**	0.111	**0.11**	-0.05
136100	680.5	Right	Cheek	/	22.45	22.5	0.335	**0.34**	0.589	**0.60**	-0.13
136100	680.5	Right	Tilt	/	22.45	22.5	0.082	**0.08**	0.12	**0.12**	-0.02
136100	680.5	Left	Cheek	CP-OFDM	21.44	22.3	0.288	**0.35**	0.513	**0.63**	0.10
136100	680.5	Left	Cheek	B2	22.45	22.5	0.310	**0.31**	0.534	**0.54**	0.03

Table L.3-8: SAR Values (NR5G n71-Body)

Ambient Temperature: 22.2 °C Liquid Temperature: 22 °C										
Frequency		Test Position	Figure No./ Note	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									
136100	680.5	Front	/	19.36	20	0.074	**0.09**	0.110	**0.13**	0.00
136100	680.5	Rear	/	19.36	20	0.113	**0.13**	0.172	**0.20**	0.12
136100	680.5	Left	Fig.8	19.36	20	0.145	**0.17**	0.233	**0.27**	0.12
136100	680.5	Left	CP-OFDM	19.31	20	0.137	**0.16**	0.213	**0.25**	0.02
136100	680.5			19.36	20	0.122	**0.14**	0.202	**0.23**	0.10

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

Table L.3-9: SAR Values (NR5G n71-Body)

Ambient Temperature: 22.2 °C Liquid Temperature: 22 °C										
Frequency		Test Position	Figure No./ Note	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									
136100	680.5	Front	/	22.97	23.8	0.110	**0.13**	0.163	**0.20**	-0.01
136100	680.5	Rear	Fig.9	22.97	23.8	0.168	**0.20**	0.253	**0.31**	-0.09
136100	680.5	Rear	CP-OFDM	21.44	22.3	0.123	**0.15**	0.190	**0.23**	0.00
136100	680.5	Rear	B2	22.97	23.8	0.165	**0.20**	0.250	**0.30**	-0.12

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

Table L.3-10: SAR Values (NR5G n41-Head)

Ambient Temperature: 22.2 °C Liquid Temperature: 22 °C											
Frequency		Side	Test Position	Figure No./Note	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										
503202	2516.01	Left	Cheek	Fig.10	18.46	18.5	0.149	**0.15**	0.272	**0.27**	-0.13
503202	2516.01	Left	Tilt	/	18.46	18.5	0.03	**0.03**	0.048	**0.05**	0.04
503202	2516.01	Right	Cheek		18.46	18.5	0.118	**0.12**	0.212	**0.21**	0.03
503202	2516.01	Right	Tilt	/	18.46	18.5	0.026	**0.03**	0.042	**0.04**	-0.06
503202	2516.01	Left	Cheek	CP-OFDM	18.13	18.5	0.103	**0.11**	0.183	**0.20**	-0.10
503202	2516.01	Left	Cheek	B2	18.46	18.5	0.135	**0.14**	0.249	**0.25**	0.08

Table L.3-11: SAR Values (NR5G n41-Body)

Ambient Temperature: 22.2 °C Liquid Temperature: 22 °C										
Frequency		Test Position	Figure No./ Note	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									
509202	2546.01	Front	/	22.11	22.3	0.097	**0.10**	0.176	**0.18**	-0.19
509202	2546.01	Rear	/	22.11	22.3	0.149	**0.16**	0.268	**0.28**	-0.10
509202	2546.01	Left	Fig.11	22.11	22.3	0.252	**0.26**	0.483	**0.50**	0.07
509202	2546.01	Top	/	22.11	22.3	0.015	**0.02**	0.009	**0.01**	0.13
509202	2546.01	Left	CP-OFDM	20.18	20.8	0.213	**0.25**	0.402	**0.46**	0.01
509202	2546.01	Left	B2	22.11	22.3	0.167	**0.17**	0.333	**0.35**	-0.10

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

Table L.3-12: SAR Values (NR5G n41-Body)

Ambient Temperature: 22.2 °C Liquid Temperature: 22 °C										
Frequency		Test Position	Figure No./ Note	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									
527298	2636.49	Front	/	22.92	23.8	0.077	**0.09**	0.142	**0.17**	-0.19
527298	2636.49	Rear	Fig.12	22.92	23.8	0.117	**0.14**	0.217	**0.27**	-0.16
527298	2636.49	Rear	CP-OFDM	20.9	22.3	0.085	**0.12**	0.160	**0.22**	0.18
527298	2636.49	Rear	B2	22.92	23.8	0.093	**0.11**	0.203	**0.25**	0.19

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

L.4 Evaluation of Simultaneous

Table L.4-1: The sum of reported SAR values

	Position	N71	WIFI 2.4G	BT	Sum
Highest reported SAR value for Head	Left head, Check	0.63	0.55	0.12	**1.30**

Table L.4-2: The sum of reported SAR values

	Position	N2	WIFI 2.4G	BT	Sum
Highest reported SAR value for Body	Rear 15mm	0.59	0.65	0.02	**1.08**

Table L.4-3: The sum of reported SAR values

	Position	N71	WIFI 5G	BT	Sum
Highest reported SAR value for Head	Left head, Check	0.63	0.42	0.12	**1.17**

Table L.4-4: The sum of reported SAR values

	Position	N2	WIFI 5G	BT	Sum
Highest reported SAR value for Body	Rear 15mm	0.59	0.65	0.02	**1.26**

L.5 List of Main Instruments

No.	Name	Type	Serial Number	Calibration Date	Valid Period
01	Network analyzer	E5071C	MY46110673	February 10, 2020	One year
02	Power meter	NRP2	106277	September 4, 2019	One year
03	Power sensor	NRP8S	104291		
04	Signal Generator	E4438C	MY49070393	May 14, 2020	One Year
05	Amplifier	60S1G4	0331848	No Calibration Requested	
06	Directional Coupler	778D	MY48220584	No Calibration Requested	
07	Directional Coupler	772D	MY46151265	No Calibration Requested	
08	BTS	CMW500	129942	February 10, 2019	One year
09	E-field Probe	SPEAG EX3DV4	3617	January 30, 2020	One year
10	DAE	SPEAG DAE4	777	January 8, 2020	One year
11	Dipole Validation Kit	SPEAG D750V3	1078	June 18,2020	One year
12	Dipole Validation Kit	SPEAG D1750V2	1111	April 29,2020	One year
13	Dipole Validation Kit	SPEAG D1900V2	5d142	June 24,2020	One year
14	Dipole Validation Kit	SPEAG D2600V2	1058	June 29,2020	One year

L.6 Graph Results

n2_CH376000 Right Cheek

Date: 8/17/2020

Electronics: DAE4 Sn777

Medium: head 1900 MHz

Medium parameters used: f = 1880 MHz; σ = 1.378 mho/m; εr = 39.46; ρ = 1000 kg/m^3

Ambient Temperature: 22.5ºC, Liquid Temperature: 22.3ºC

Communication System:n2 1880 MHz Duty Cycle: 1：1

Probe: EX3DV4 – SN3617 ConvF(8.14,8.14,8.14)

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

Maximum value of SAR (interpolated) = 0.247 W/kg

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

Reference Value = 4.604 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.269 W/kg

SAR(1 g) = 0.181 W/kg; SAR(10 g) = 0.117 W/kg

Maximum value of SAR (measured) = 0.236 W/kg

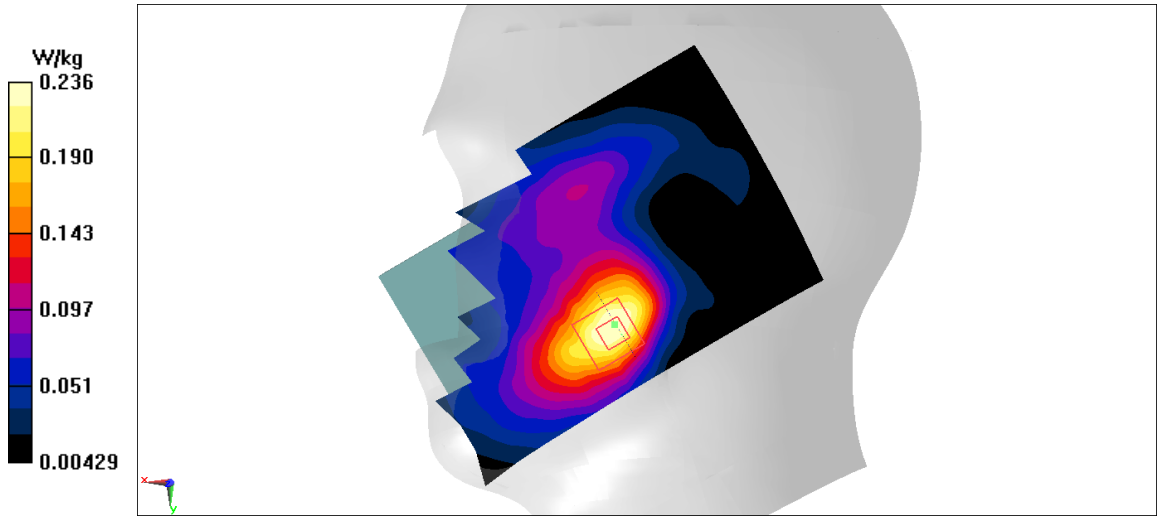


Fig A.1

n2_CH376000 Bottom
Date: 8/17/2020
Electronics: DAE4 Sn777
Medium: head 1900 MHz
Medium parameters used: f = 1880 MHz; σ = 1.378 mho/m; εr = 39.46; ρ = 1000 kg/m^3
Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C
Communication System: n2 1880 MHz Duty Cycle: 1：1
Probe: EX3DV4 – SN3617 ConvF(8.14,8.14,8.14)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.889 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 23.4 V/m; Power Drift = 0.1 dB
Peak SAR (extrapolated) = 1 W/kg
SAR(1 g) = 0.571 W/kg; SAR(10 g) = 0.324 W/kg
Maximum value of SAR (measured) = 0.846 W/kg

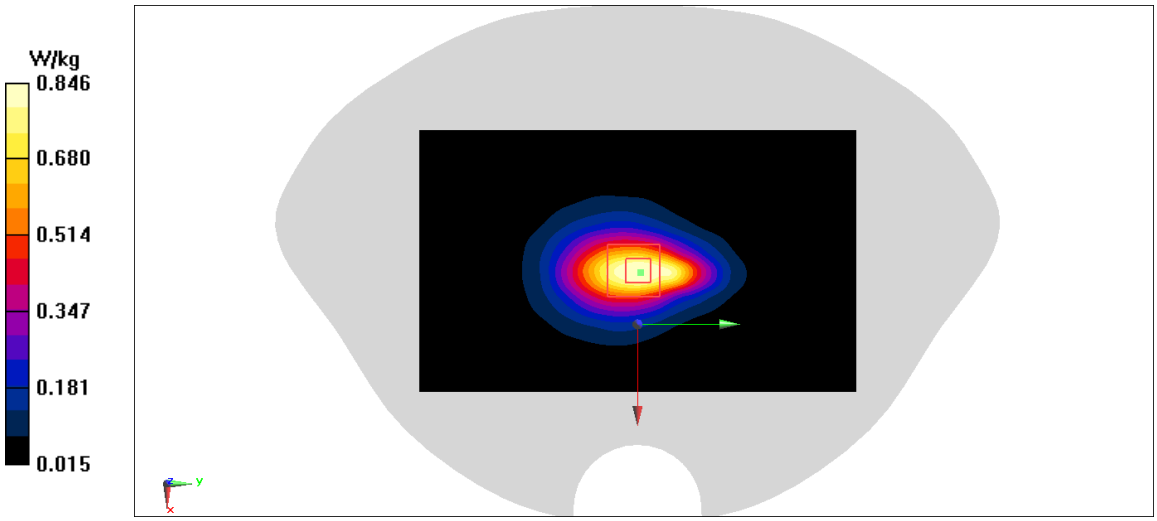


Fig A.2

n2_CH376000 Rear
Date: 8/17/2020
Electronics: DAE4 Sn777
Medium: head 1900 MHz
Medium parameters used: f = 1880 MHz; σ = 1.378 mho/m; εr = 39.46; ρ = 1000 kg/m^3
Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C
Communication System: n2 1880 MHz Duty Cycle: 1：1
Probe: EX3DV4 – SN3617 ConvF(8.14,8.14,8.14)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.672 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.07 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.777 W/kg
SAR(1 g) = 0.451 W/kg; SAR(10 g) = 0.271 W/kg
Maximum value of SAR (measured) = 0.641 W/kg

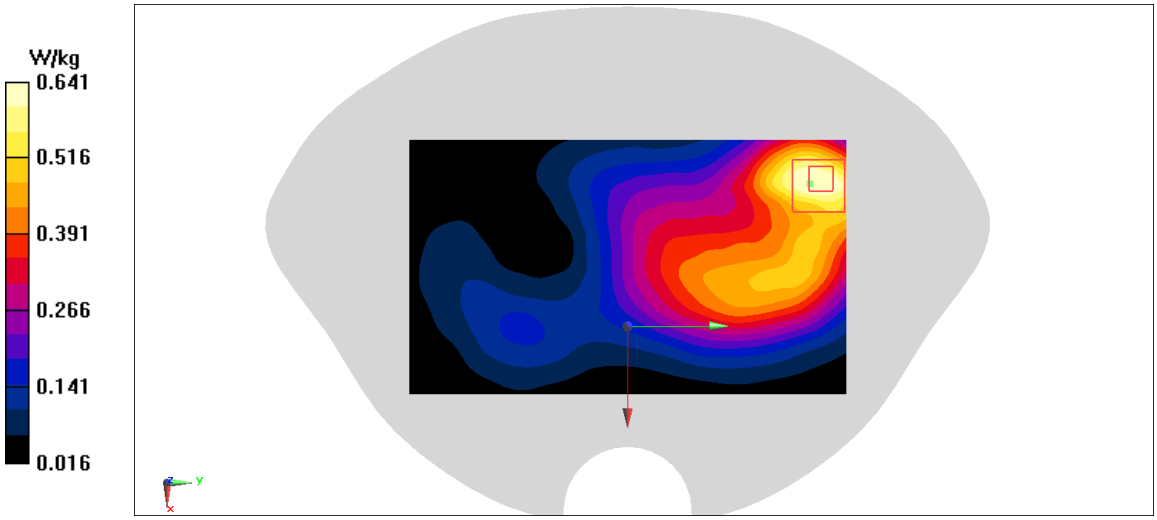


Fig A.3

n41_CH503202 Left Cheek
Date: 8/18/2020
Electronics: DAE4 Sn777
Medium: head 2600 MHz
Medium parameters used: f = 2516.01; σ = 1.862 mho/m; εr =39 ; ρ = 1000 kg/m^3
Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C
Communication System: n41 2516.01 Duty Cycle: 1：1
Probe: EX3DV4 – SN3617 ConvF(7.52,7.52,7.52)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.415 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.078 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 0.553 W/kg
SAR(1 g) = 0.272 W/kg; SAR(10 g) = 0.149 W/kg
Maximum value of SAR (measured) = 0.423 W/kg

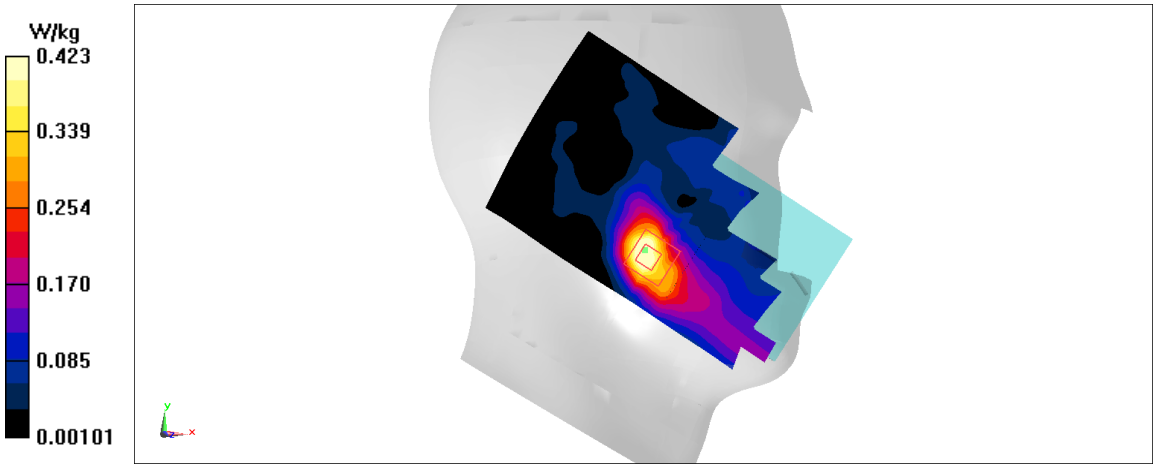


Fig A.4

n41_CH509202 Left
Date: 8/18/2020
Electronics: DAE4 Sn777
Medium: head 2600 MHz
Medium parameters used: f = 2546.01; σ =1.895 mho/m; εr =38.85 ; ρ = 1000 kg/m^3
Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C
Communication System: n41 2546.01 Duty Cycle: 1：1
Probe: EX3DV4 – SN3617 ConvF(7.52,7.52,7.52)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.747 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.2 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.931 W/kg
SAR(1 g) = 0.483 W/kg; SAR(10 g) = 0.252 W/kg
Maximum value of SAR (measured) = 0.752 W/kg

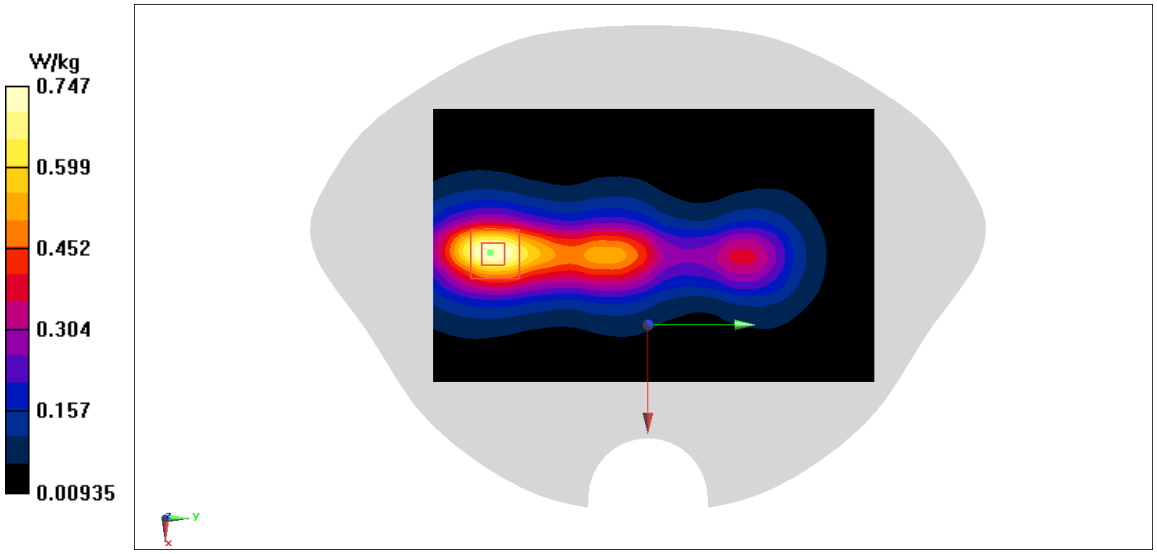


Fig A.5

n41_CH527298 Rear
Date: 8/18/2020
Electronics: DAE4 Sn777
Medium: head 2600 MHz
Medium parameters used: f = 2636.49; σ =1.978 mho/m; εr = 38.6; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC, Liquid Temperature: 22.3ºC
Communication System: n41 2636.49 Duty Cycle: 1：1
Probe: EX3DV4 – SN3617 ConvF(7.52,7.52,7.52)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.333 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.283 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 0.418 W/kg
SAR(1 g) = 0.217 W/kg; SAR(10 g) = 0.117 W/kg
Maximum value of SAR (measured) = 0.335 W/kg

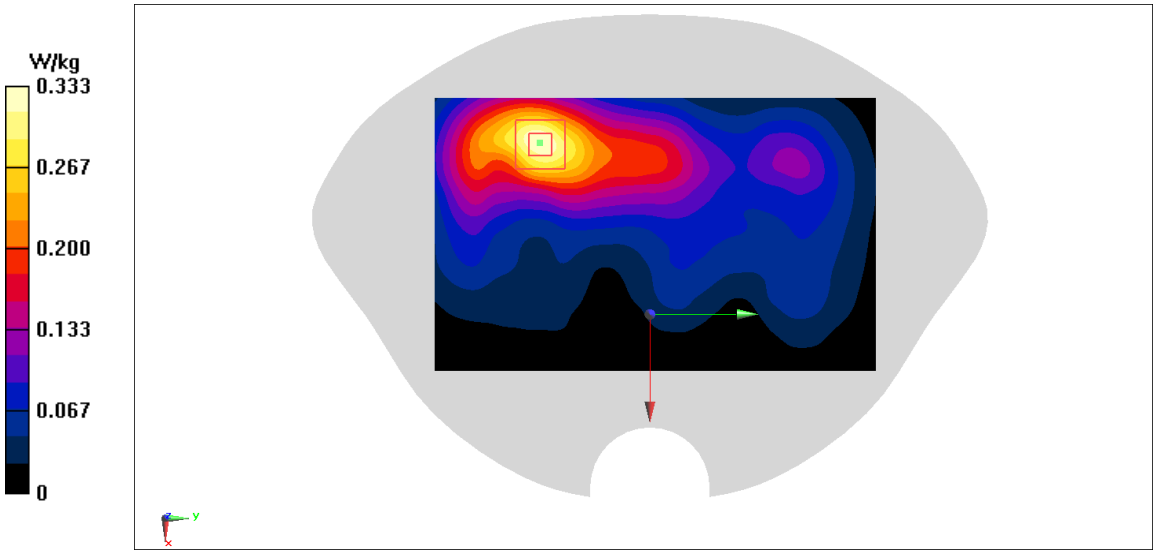


Fig A.6

n66_CH349000 Right Cheek
Date: 8/16/2020
Electronics: DAE4 Sn777
Medium: head 1750 MHz
Medium parameters used: f =1745; σ = 1.37 mho/m; εr = 39.45; ρ = 1000 kg/m^3
Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C
Communication System: n66 1745 Duty Cycle: 1：1
Probe: EX3DV4 – SN3617 ConvF(8.41,8.41,8.41)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.267 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.911 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.288 W/kg
SAR(1 g) = 0.198 W/kg; SAR(10 g) = 0.131 W/kg
Maximum value of SAR (measured) = 0.257 W/kg

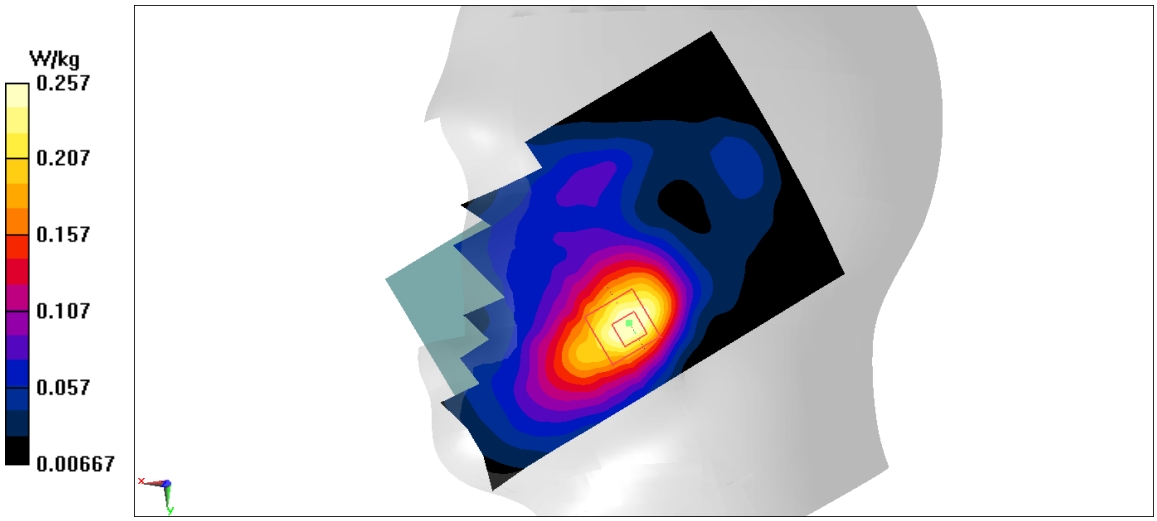


Fig A.7

n66_CH349000 Bottom
Date: 8/16/2020
Electronics: DAE4 Sn777
Medium: head 1750 MHz
Medium parameters used: f = 1745; σ = 1.37 mho/m; εr =39.45; ρ = 1000 kg/m^3
Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C
Communication System: n66 1745 Duty Cycle: 1：1
Probe: EX3DV4 – SN3617 ConvF(8.41,8.41,8.41)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.703 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.36 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.779 W/kg
SAR(1 g) = 0.452 W/kg; SAR(10 g) = 0.259 W/kg
Maximum value of SAR (measured) = 0.66 W/kg

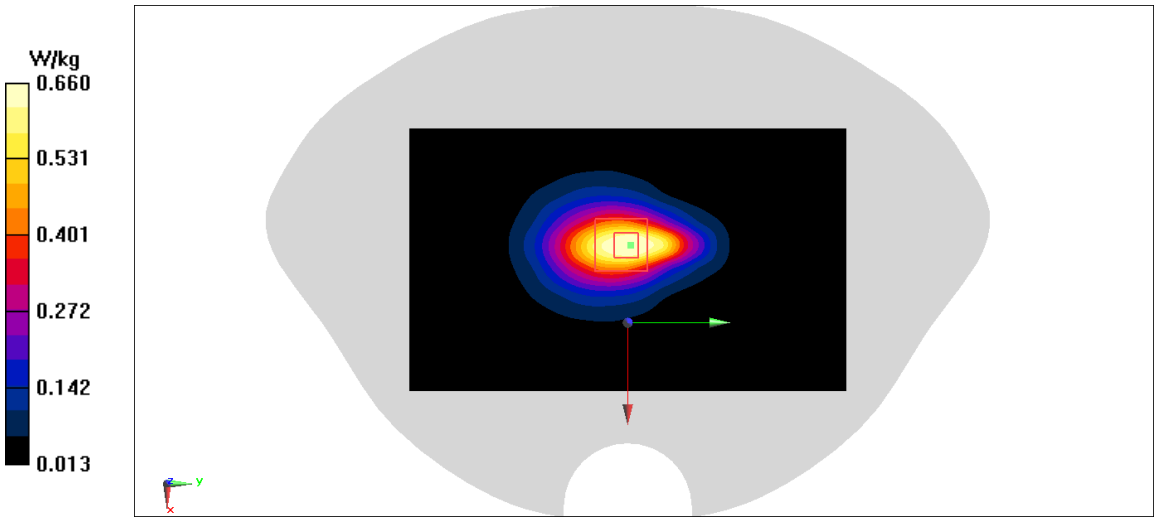


Fig A.8

n66_CH349000 Rear
Date: 8/16/2020
Electronics: DAE4 Sn777
Medium: head 1750 MHz
Medium parameters used: f = 1745; σ = 1.37 mho/m; εr =39.45; ρ = 1000 kg/m^3
Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C
Communication System: n66 1745 Duty Cycle: 1：1
Probe: EX3DV4 – SN3617 ConvF(8.41,8.41,8.41)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.401 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.211 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 0.451 W/kg
SAR(1 g) = 0.29 W/kg; SAR(10 g) = 0.189 W/kg
Maximum value of SAR (measured) = 0.391 W/kg

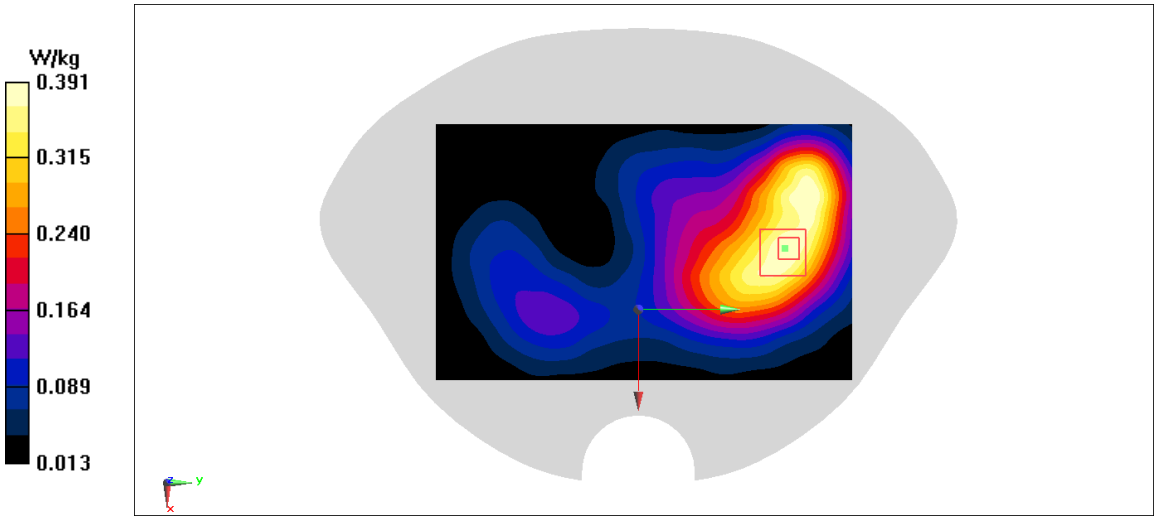


Fig A.9

n71_CH136100 Left Cheek
Date: 8/15/2020
Electronics: DAE4 Sn777
Medium: head 750 MHz
Medium parameters used: f = 680.5; σ = 0.896 mho/m; εr = 42.324; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC, Liquid Temperature: 22.3ºC
Communication System:n71 680.5 Duty Cycle: 1：1
Probe: EX3DV4 – SN3617 ConvF(10.07,10.07,10.07)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.747 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.552 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 1.23 W/kg
SAR(1 g) = 0.619 W/kg; SAR(10 g) = 0.346 W/kg
Maximum value of SAR (measured) = 0.863 W/kg

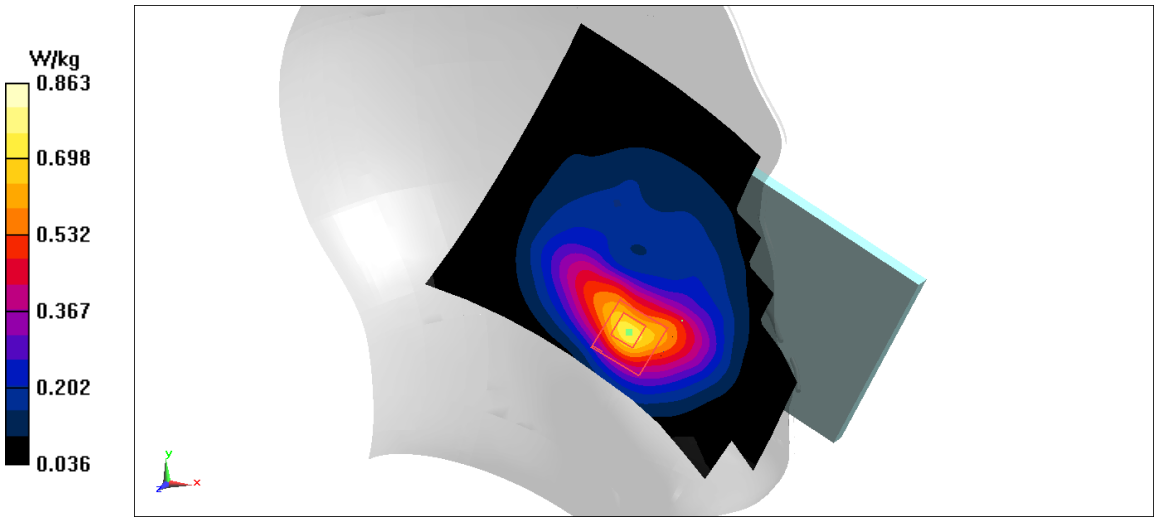


Fig A.10

n71_CH136100 Left
Date: 8/15/2020
Electronics: DAE4 Sn777
Medium: head 750 MHz
Medium parameters used: f = 680.5; σ = 0.896 mho/m; εr = 42.324; ρ = 1000 kg/m^3
Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C
Communication System: n71 680.5 Duty Cycle: 1：1
Probe: EX3DV4 – SN3617 ConvF(10.07,10.07,10.07)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.342 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 19.08 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.383 W/kg
SAR(1 g) = 0.233 W/kg; SAR(10 g) = 0.145 W/kg
Maximum value of SAR (measured) = 0.327 W/kg

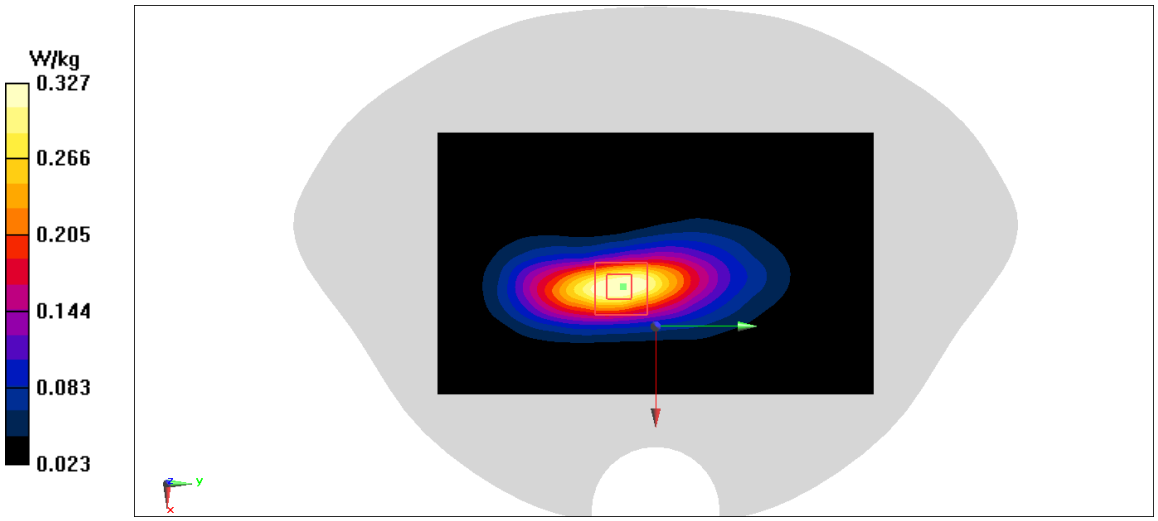


Fig A.11

n71_CH136100 Rear
Date: 8/15/2020
Electronics: DAE4 Sn777
Medium: head 750 MHz
Medium parameters used: f = 680.5; σ = 0.896 mho/m; εr = 42.324; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC, Liquid Temperature: 22.3ºC
Communication System: n71 680.5 Duty Cycle: 1：1
Probe: EX3DV4 – SN3617 ConvF(10.07,10.07,10.07)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.344 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.86 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 0.388 W/kg
SAR(1 g) = 0.253 W/kg; SAR(10 g) = 0.168 W/kg
Maximum value of SAR (measured) = 0.335 W/kg

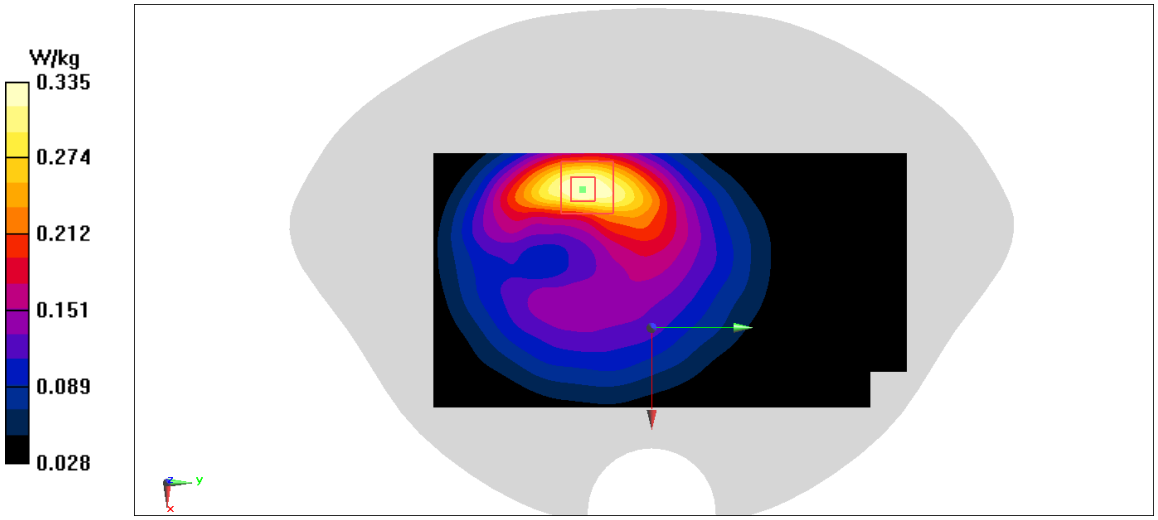


Fig A.12

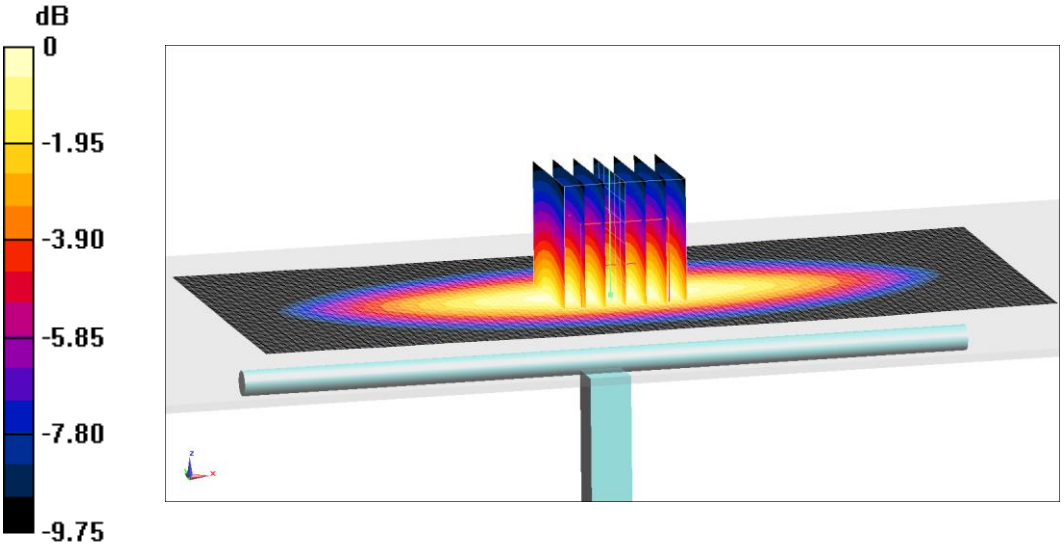
L.7 System Verification Results

750 MHz

Date: 8/15/2020
Electronics: DAE4 Sn777
Medium: Head 750 MHz
Medium parameters used: f = 750 MHz; σ =0.896 mho/m; ε_r = 41.96; ρ = 1000 kg/m^3
Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C
Communication System: CW Frequency: 750 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN3617 ConvF(10.07,10.07,10.07)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value = 54.52 V/m; Power Drift = -0.05
Fast SAR: SAR(1 g) = 2.07 W/kg; SAR(10 g) = 1.38 W/kg
Maximum value of SAR (interpolated) = 2.84 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =54.52 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 3.48 W/kg
SAR(1 g) = 2.08 W/kg; SAR(10 g) = 1.37 W/kg
Maximum value of SAR (measured) = 2.83 W/kg



0 dB = 2.83 W/kg = 4.52 dB W/kg

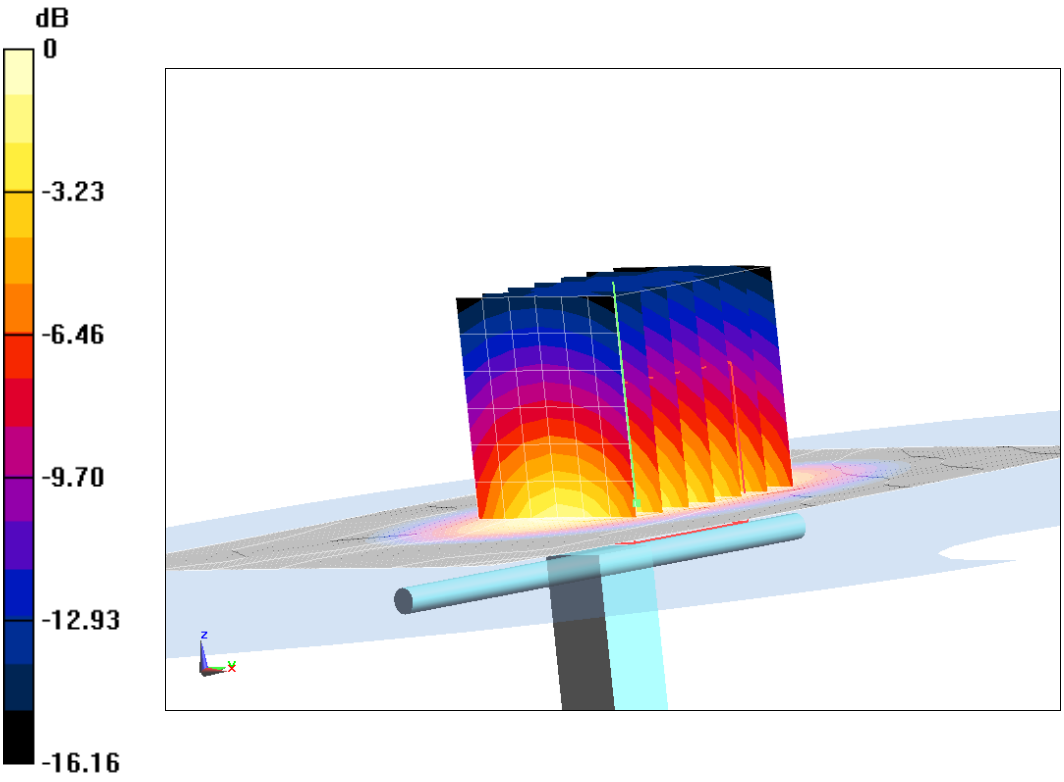
Fig.B.1 validation 750 MHz 250mW

1750 MHz

Date: 8/16/2020
Electronics: DAE4 Sn777
Medium: Head 1750 MHz
Medium parameters used: f = 1750 MHz; σ =1.37 mho/m; ε_r = 39.45; ρ = 1000 kg/m^3
Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C
Communication System: CW Frequency: 1750 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN3617 ConvF(8.41,8.41,8.41)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value = 93.58 V/m; Power Drift = 0.02
Fast SAR: SAR(1 g) = 8.72 W/kg; SAR(10 g) = 4.64 W/kg
Maximum value of SAR (interpolated) = 13.85 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =93.58 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 16.28 W/kg
SAR(1 g) = 8.7 W/kg; SAR(10 g) = 4.7 W/kg
Maximum value of SAR (measured) = 13.88 W/kg



0 dB = 13.88 W/kg = 11.42 dB W/kg

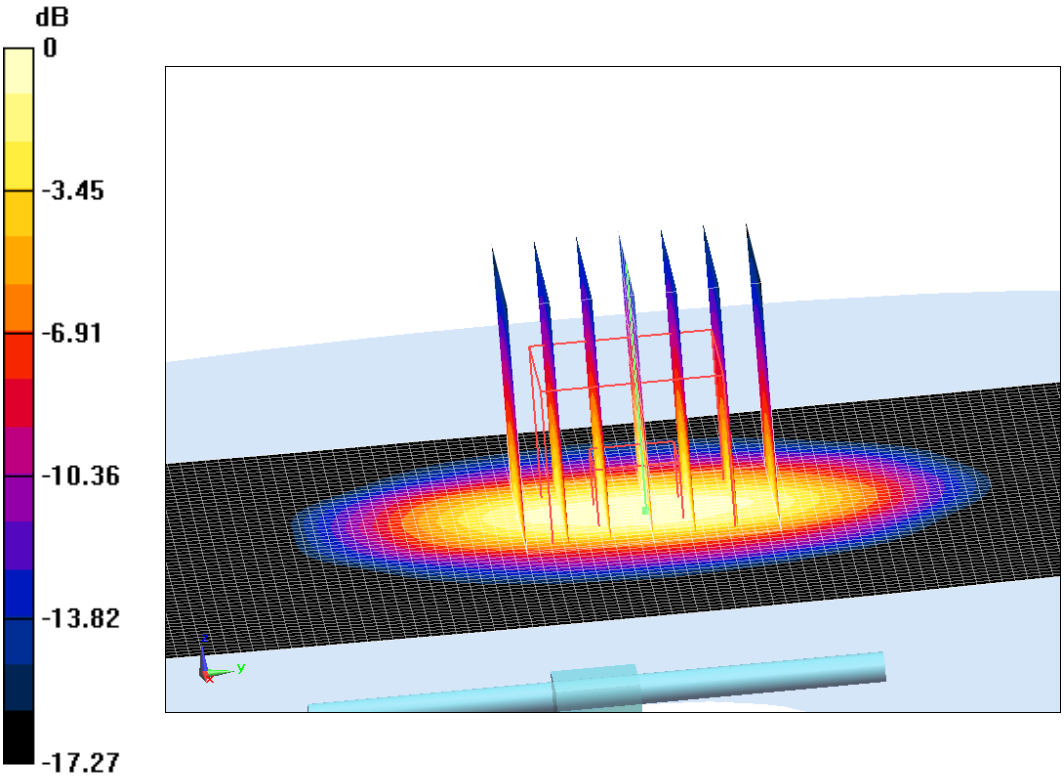
Fig.B.2 validation 1750 MHz 250mW

1900 MHz

Date: 8/17/2020
Electronics: DAE4 Sn777
Medium: Head 1900 MHz
Medium parameters used: f = 1900 MHz; σ =1.397 mho/m; ε_r = 39.44; ρ = 1000 kg/m^3
Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C
Communication System: CW Frequency: 1900 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN3617 ConvF(8.14,8.14,8.14)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value = 110.36 V/m; Power Drift = -0.08
Fast SAR: SAR(1 g) = 10.02 W/kg; SAR(10 g) = 5.16 W/kg
Maximum value of SAR (interpolated) = 15.45 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =110.36 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 18.53 W/kg
SAR(1 g) = 10.06 W/kg; SAR(10 g) = 5.29 W/kg
Maximum value of SAR (measured) = 15.47 W/kg



0 dB = 15.47 W/kg = 11.89 dB W/kg

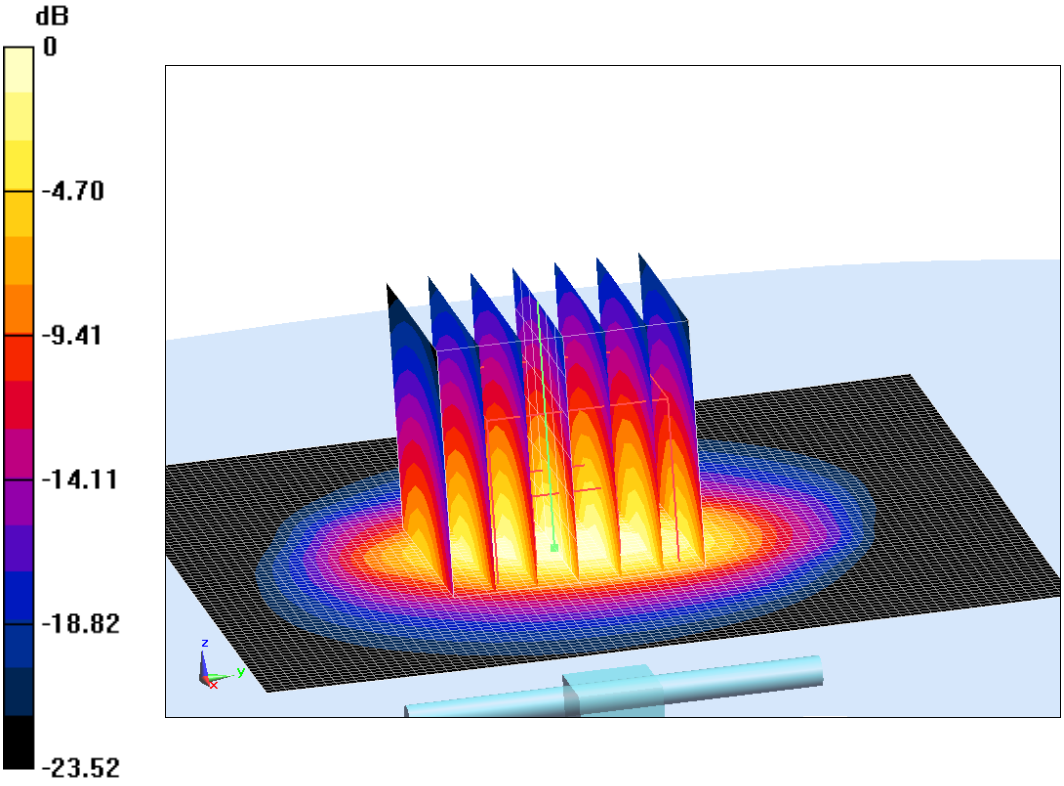
Fig.B.3 validation 1900 MHz 250mW

2600 MHz

Date: 8/18/2020
Electronics: DAE4 Sn777
Medium: Head 2600 MHz
Medium parameters used: f = 2600 MHz; σ =1.942 mho/m; ε_r = 38.63; ρ = 1000 kg/m^3
Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C
Communication System: CW Frequency: 2600 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN3617 ConvF(7.52,7.52,7.52)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value = 99.01 V/m; Power Drift = 0.06
Fast SAR: SAR(1 g) = 14.16 W/kg; SAR(10 g) = 6.21 W/kg
Maximum value of SAR (interpolated) = 24.61 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =99.01 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 30.97 W/kg
SAR(1 g) = 14.13 W/kg; SAR(10 g) = 6.35 W/kg
Maximum value of SAR (measured) = 25.22 W/kg



0 dB = 25.22 W/kg = 14.02 dB W/kg

Fig.B.4 validation 2600 MHz 250mW

L.8 Probe Calibration Certificate

Probe 3617 Calibration Certificate

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 0108

Client CTTL (Auden)

Certificate No: EX3-3617_Jan20/2

CALIBRATION CERTIFICATE (Replacement of No: EX3-3617_Jan20)

Object	EX3DV4 - SN:3617
Calibration procedure(s)	QA CAL-01.v9, QA CAL-12.v9, QA CAL-14.v5, QA CAL-23.v5, QA CAL-25.v7 Calibration procedure for dosimetric E-field probes
Calibration date:	January 30, 2020

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	03-Apr-19 (No. 217-02892/02893)	Apr-20
Power sensor NRP-Z91	SN: 103244	03-Apr-19 (No. 217-02892)	Apr-20
Power sensor NRP-Z91	SN: 103245	03-Apr-19 (No. 217-02893)	Apr-20
Reference 20 dB Attenuator	SN: S5277 (20x)	04-Apr-19 (No. 217-02894)	Apr-20
DAE4	SN: 660	27-Dec-19 (No. DAE4-660_Dec19)	Dec-20
Reference Probe ES3DV2	SN: 3013	31-Dec-19 (No. ES3-3013_Dec19)	Dec-20
Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-18)	In house check: Jun-20
Network Analyzer E8358A	SN: US41080477	31-Mar-14 (in house check Oct-19)	In house check: Oct-20

	Name	Function	Signature
Calibrated by:	Claudio Leubler	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: April 7, 2020

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 0108

Glossary:

TSL	tissue simulating liquid
NORMx,y,z	sensitivity in free space
ConvF	sensitivity in TSL / NORMx,y,z
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A, B, C, D	modulation dependent linearization parameters
Polarization φ	φ rotation around probe axis
Polarization ϑ	ϑ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., ϑ = 0 is normal to probe axis
Connector Angle	information used in DASY system to align probe sensor X to the robot coordinate system

Calibration is Performed According to the Following Standards:

a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
b) IEC 62209-1, ", "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Methods Applied and Interpretation of Parameters:

- *NORMx,y,z:* Assessed for E-field polarization ϑ = 0 (f ≤ 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not affect the E^2-field uncertainty inside TSL (see below *ConvF*).
- *NORM(f)x,y,z = NORMx,y,z * frequency_response* (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of *ConvF*.
- *DCPx,y,z:* DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- *PAR:* PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- *Ax,y,z; Bx,y,z; Cx,y,z; Dx,y,z; VRx,y,z*: *A, B, C, D* are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. *VR* is the maximum calibration range expressed in RMS voltage across the diode.
- *ConvF and Boundary Effect Parameters:* Assessed in flat phantom using E-field (or Temperature Transfer Standard for f ≤ 800 MHz) and inside waveguide using analytical field distributions based on power measurements for f > 800 MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to *NORMx,y,z * ConvF* whereby the uncertainty corresponds to that given for *ConvF*. A frequency dependent *ConvF* is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- *Spherical isotropy (3D deviation from isotropy)*: in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- *Sensor Offset*: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- *Connector Angle*: The angle is assessed using the information gained by determining the *NORMx* (no uncertainty required).

DASY/EASY - Parameters of Probe: EX3DV4 - SN:3617

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm ($\mu V/(V/m)^2$)[A]	0.35	0.21	0.32	± 10.1 %
DCP (mV)[B]	104.3	93.8	97.1	

Calibration Results for Modulation Response

UID	Communication System Name		A dB	B dB√μV	C	D dB	VR mV	Max dev.	Max Unc[E] (k=2)
0	CW	X	0.00	0.00	1.00	0.00	130.5	± 3.5 %	± 4.7 %
		Y	0.00	0.00	1.00		137.4		
		Z	0.00	0.00	1.00		129.2		
10352-AAA	Pulse Waveform (200Hz, 10%)	X	5.74	74.31	15.16	10.00	60.0	± 2.6 %	± 9.6 %
		Y	20.00	84.63	18.23		60.0		
		Z	20.00	90.64	20.98		60.0		
10353-AAA	Pulse Waveform (200Hz, 20%)	X	11.18	82.57	16.62	6.99	80.0	± 1.6 %	± 9.6 %
		Y	11.60	81.13	15.97		80.0		
		Z	20.00	91.54	20.06		80.0		
10354-AAA	Pulse Waveform (200Hz, 40%)	X	20.00	88.75	16.93	3.98	95.0	± 1.0 %	± 9.6 %
		Y	1.22	64.13	8.17		95.0		
		Z	20.00	94.77	20.04		95.0		
10355-AAA	Pulse Waveform (200Hz, 60%)	X	20.00	90.94	16.71	2.22	120.0	± 1.3 %	± 9.6 %
		Y	0.41	60.00	4.32		120.0		
		Z	20.00	99.77	20.92		120.0		
10387-AAA	QPSK Waveform, 1 MHz	X	0.73	63.23	9.65	0.00	150.0	± 4.1 %	± 9.6 %
		Y	0.47	60.00	5.82		150.0		
		Z	0.73	63.00	9.63		150.0		
10388-AAA	QPSK Waveform, 10 MHz	X	2.46	70.66	17.17	0.00	150.0	± 1.7 %	± 9.6 %
		Y	2.10	68.37	15.67		150.0		
		Z	2.45	70.34	17.05		150.0		
10396-AAA	64-QAM Waveform, 100 kHz	X	3.34	72.82	19.20	3.01	150.0	± 1.6 %	± 9.6 %
		Y	3.57	72.45	19.52		150.0		
		Z	3.45	73.00	19.94		150.0		
10399-AAA	64-QAM Waveform, 40 MHz	X	3.61	68.21	16.41	0.00	150.0	± 3.8 %	± 9.6 %
		Y	3.40	67.13	15.82		150.0		
		Z	3.62	68.06	16.39		150.0		
10414-AAA	WLAN CCDF, 64-QAM, 40MHz	X	4.88	66.26	15.89	0.00	150.0	± 6.6 %	± 9.6 %
		Y	4.57	64.95	15.35		150.0		
		Z	4.92	66.18	15.92		150.0		

Note: For details on UID parameters see Appendix

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

[A] The uncertainties of Norm X,Y,Z do not affect the E^2-field uncertainty inside TSL (see Pages 5 and 6).
[B] Numerical linearization parameter: uncertainty not required.
[E] Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

DASY/EASY - Parameters of Probe: EX3DV4 - SN:3617

Sensor Model Parameters

	C1 fF	C2 fF	α V^{-1}	T1 $ms.V^{-2}$	T2 $ms.V^{-1}$	T3 ms	T4 V^{-2}	T5 V^{-1}	T6
X	41.2	299.64	34.06	12.13	0.82	5.00	1.88	0.20	1.00
Y	42.0	334.64	39.96	9.91	1.46	5.06	0.00	0.82	1.01
Z	42.8	318.14	35.45	11.95	0.73	5.04	1.02	0.40	1.01

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	13
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	9 mm
Tip Diameter	2.5 mm
Probe Tip to Sensor X Calibration Point	1 mm
Probe Tip to Sensor Y Calibration Point	1 mm
Probe Tip to Sensor Z Calibration Point	1 mm
Recommended Measurement Distance from Surface	1.4 mm

DASY/EASY - Parameters of Probe: EX3DV4 - SN:3617

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) [C]	Relative Permittivity [F]	Conductivity (S/m) [F]	ConvF X	ConvF Y	ConvF Z	Alpha [G]	Depth [G] (mm)	Unc (k=2)
64	54.2	0.75	12.37	12.37	12.37	0.00	1.00	± 13.3 %
150	52.3	0.76	11.63	11.63	11.63	0.00	1.00	± 13.3 %
300	45.3	0.87	11.41	11.41	11.41	0.08	1.20	± 13.3 %
450	43.5	0.87	10.84	10.84	10.84	0.12	1.40	± 13.3 %
750	41.9	0.89	10.07	10.07	10.07	0.61	0.80	± 12.0 %
835	41.5	0.90	9.66	9.66	9.66	0.54	0.84	± 12.0 %
900	41.5	0.97	9.56	9.56	9.56	0.54	0.80	± 12.0 %
1450	40.5	1.20	8.72	8.72	8.72	0.45	0.80	± 12.0 %
1640	40.2	1.31	8.50	8.50	8.50	0.25	0.80	± 12.0 %
1750	40.1	1.37	8.41	8.41	8.41	0.30	0.80	± 12.0 %
1810	40.0	1.40	8.20	8.20	8.20	0.15	1.26	± 12.0 %
1900	40.0	1.40	8.14	8.14	8.14	0.31	0.80	± 12.0 %
2000	40.0	1.40	8.25	8.25	8.25	0.40	0.81	± 12.0 %
2100	39.8	1.49	8.16	8.16	8.16	0.28	0.80	± 12.0 %
2300	39.5	1.67	7.95	7.95	7.95	0.35	0.86	± 12.0 %
2450	39.2	1.80	7.65	7.65	7.65	0.33	0.90	± 12.0 %
2600	39.0	1.96	7.52	7.52	7.52	0.38	0.90	± 12.0 %
3300	38.2	2.71	7.07	7.07	7.07	0.30	1.20	± 13.1 %
3500	37.9	2.91	7.02	7.02	7.02	0.35	1.30	± 13.1 %
3700	37.7	3.12	6.77	6.77	6.77	0.35	1.30	± 13.1 %
3900	37.5	3.32	6.62	6.62	6.62	0.40	1.60	± 13.1 %
4100	37.2	3.53	6.60	6.60	6.60	0.40	1.60	± 13.1 %
4200	37.1	3.63	6.50	6.50	6.50	0.40	1.60	± 13.1 %
4400	36.9	3.84	6.35	6.35	6.35	0.40	1.60	± 13.1 %
4600	36.7	4.04	6.30	6.30	6.30	0.40	1.60	± 13.1 %
4800	36.4	4.25	6.25	6.25	6.25	0.40	1.80	± 13.1 %
4950	36.3	4.40	6.10	6.10	6.10	0.40	1.80	± 13.1 %
5200	36.0	4.66	5.49	5.49	5.49	0.40	1.80	± 13.1 %
5250	35.9	4.71	5.39	5.39	5.39	0.40	1.80	± 13.1 %
5300	35.9	4.76	5.29	5.29	5.29	0.40	1.80	± 13.1 %
5500	35.6	4.96	5.14	5.14	5.14	0.40	1.80	± 13.1 %
5600	35.5	5.07	4.99	4.99	4.99	0.40	1.80	± 13.1 %
5750	35.4	5.22	5.10	5.10	5.10	0.40	1.80	± 13.1 %
5800	35.3	5.27	5.00	5.00	5.00	0.40	1.80	± 13.1 %

[C] Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Validity of ConvF assessed at 6 MHz is 4-9 MHz, and ConvF assessed at 13 MHz is 9-19 MHz. Above 5 GHz frequency validity can be extended to ± 110 MHz.

[F] At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ε and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

[G] Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

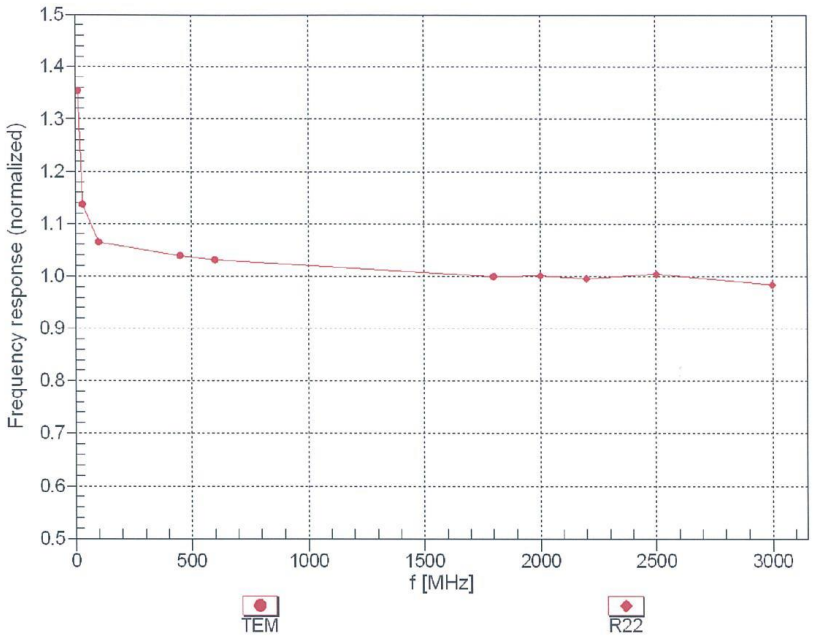
DASY/EASY - Parameters of Probe: EX3DV4 - SN:3617

Calibration Parameter Determined in Body Tissue Simulating Media

f (MHz) [C]	Relative Permittivity [F]	Conductivity (S/m) [F]	ConvF X	ConvF Y	ConvF Z	Alpha [G]	Depth [G] (mm)	Unc (k=2)
750	55.5	0.96	9.80	9.80	9.80	0.50	0.80	± 12.0 %
835	55.2	0.97	9.53	9.53	9.53	0.43	0.80	± 12.0 %
900	55.0	1.05	9.49	9.49	9.49	0.42	0.80	± 12.0 %
1450	54.0	1.30	8.56	8.56	8.56	0.25	0.80	± 12.0 %
1640	53.7	1.42	8.44	8.44	8.44	0.32	0.80	± 12.0 %
1750	53.4	1.49	8.09	8.09	8.09	0.48	0.80	± 12.0 %
1810	53.3	1.52	8.05	8.05	8.05	0.44	0.80	± 12.0 %
1900	53.3	1.52	7.94	7.94	7.94	0.39	0.80	± 12.0 %
2000	53.3	1.52	7.92	7.92	7.92	0.37	0.86	± 12.0 %
2100	53.2	1.62	7.89	7.89	7.89	0.35	0.89	± 12.0 %
2300	52.9	1.81	7.78	7.78	7.78	0.39	0.85	± 12.0 %
2450	52.7	1.95	7.76	7.76	7.76	0.41	0.80	± 12.0 %
2600	52.5	2.16	7.45	7.45	7.45	0.32	0.80	± 12.0 %
3300	51.6	3.08	6.44	6.44	6.44	0.40	1.70	± 13.1 %
3500	51.3	3.31	6.30	6.30	6.30	0.40	1.70	± 13.1 %
3700	51.0	3.55	6.27	6.27	6.27	0.40	1.70	± 13.1 %
3900	51.2	3.78	6.24	6.24	6.24	0.40	1.70	± 13.1 %
4100	50.5	4.01	6.21	6.21	6.21	0.40	1.70	± 13.1 %
4200	50.4	4.13	6.20	6.20	6.20	0.40	1.70	± 13.1 %
4400	50.1	4.37	5.97	5.97	5.97	0.40	1.70	± 13.1 %
4600	49.8	4.60	5.83	5.83	5.83	0.40	1.70	± 13.1 %
4800	49.6	4.83	5.72	5.72	5.72	0.50	1.80	± 13.1 %
4950	49.4	5.01	5.41	5.41	5.41	0.50	1.90	± 13.1 %
5200	49.0	5.30	4.80	4.80	4.80	0.50	1.90	± 13.1 %
5250	48.9	5.36	4.70	4.70	4.70	0.50	1.90	± 13.1 %
5300	48.9	5.42	4.61	4.61	4.61	0.50	1.90	± 13.1 %
5500	48.6	5.65	4.32	4.32	4.32	0.50	1.90	± 13.1 %
5600	48.5	5.77	4.23	4.23	4.23	0.50	1.90	± 13.1 %
5750	48.3	5.94	4.36	4.36	4.36	0.50	1.90	± 13.1 %
5800	48.2	6.00	4.22	4.22	4.22	0.50	1.90	± 13.1 %

[C] Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Validity of ConvF assessed at 6 MHz is 4-9 MHz, and ConvF assessed at 13 MHz is 9-19 MHz. Above 5 GHz frequency validity can be extended to ± 110 MHz.
[F] At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ε and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.
[G] Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

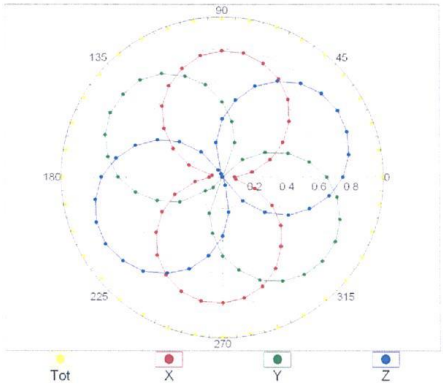
Frequency Response of E-Field
(TEM-Cell:ifi110 EXX, Waveguide: R22)



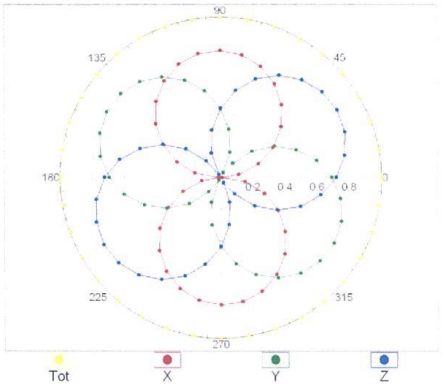
Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)

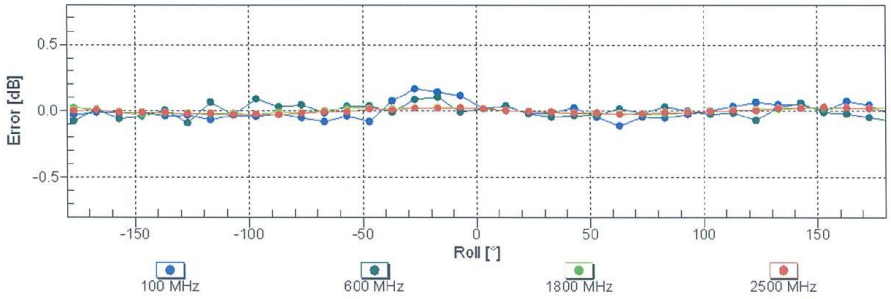
Receiving Pattern (ϕ), ϑ = 0°

f=600 MHz,TEM



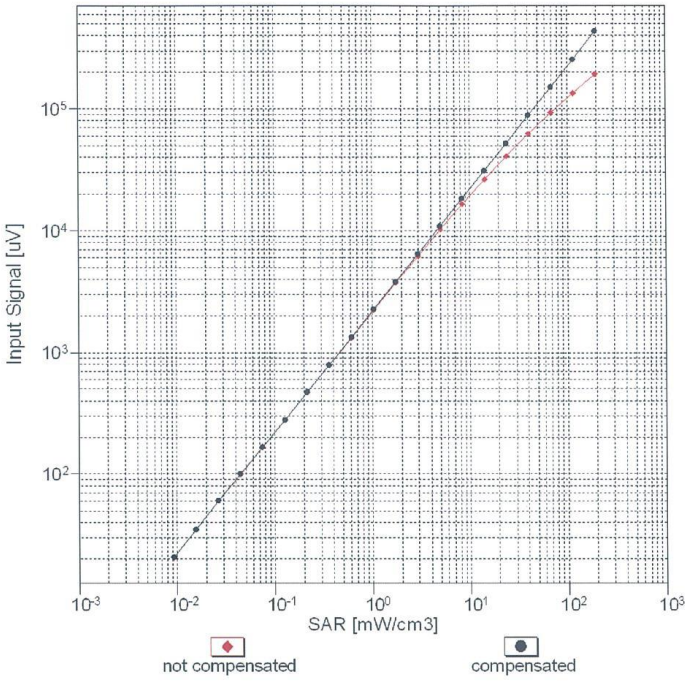
f=1800 MHz,R22

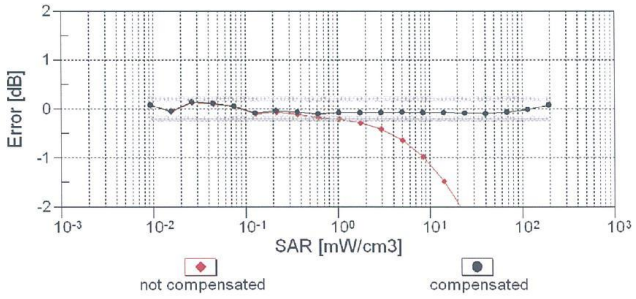




Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

Dynamic Range f(SAR$_{head}$)
(TEM cell , f_{eval}= 1900 MHz)





Uncertainty of Linearity Assessment: ± 0.6% (k=2)

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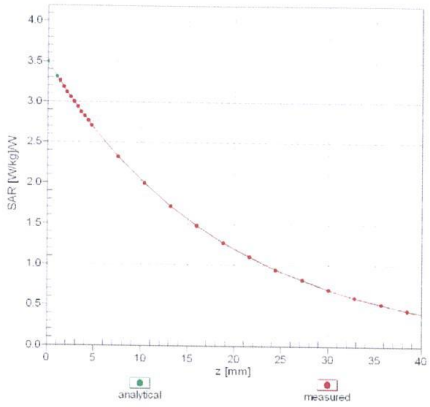
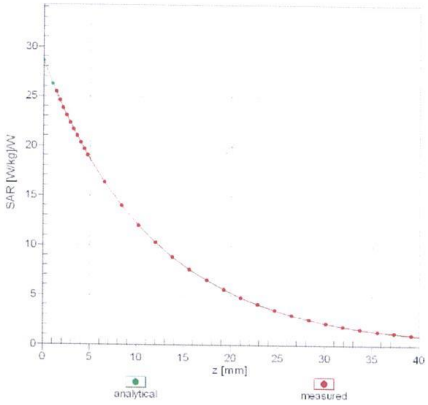
Conversion Factor Assessment

f = 835 MHz,WGLS R9 (H_convF)

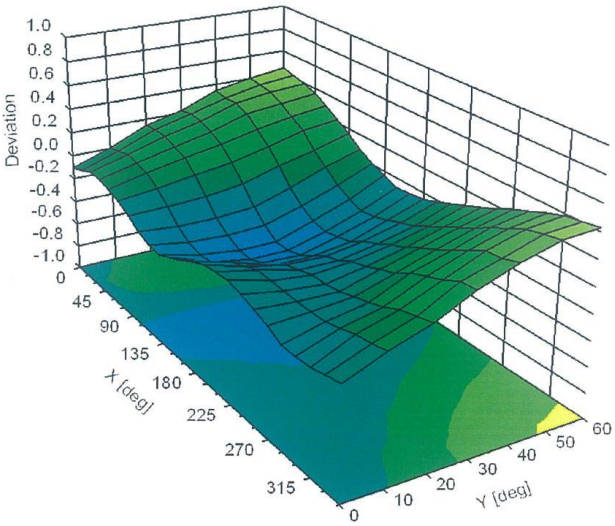


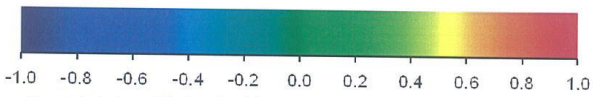
f = 1900 MHz,WGLS R22 (H_convF)



Deviation from Isotropy in Liquid

Error (ϕ, ϑ), f = 900 MHz





Uncertainty of Spherical Isotropy Assessment: ± 2.6% (k=2)

Appendix: Modulation Calibration Parameters

UID	Rev	Communication System Name	Group	PAR (dB)	Unc^{E} (k=2)
0		CW	CW	0.00	± 4.7 %
10010	CAA	SAR Validation (Square, 100ms, 10ms)	Test	10.00	± 9.6 %
10011	CAB	UMTS-FDD (WCDMA)	WCDMA	2.91	± 9.6 %
10012	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	WLAN	1.87	± 9.6 %
10013	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)	WLAN	9.46	± 9.6 %
10021	DAC	GSM-FDD (TDMA, GMSK)	GSM	9.39	± 9.6 %
10023	DAC	GPRS-FDD (TDMA, GMSK, TN 0)	GSM	9.57	± 9.6 %
10024	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	GSM	6.56	± 9.6 %
10025	DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	GSM	12.62	± 9.6 %
10026	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	GSM	9.55	± 9.6 %
10027	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	GSM	4.80	± 9.6 %
10028	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	GSM	3.55	± 9.6 %
10029	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	GSM	7.78	± 9.6 %
10030	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Bluetooth	5.30	± 9.6 %
10031	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	Bluetooth	1.87	± 9.6 %
10032	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	Bluetooth	1.16	± 9.6 %
10033	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	Bluetooth	7.74	± 9.6 %
10034	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	Bluetooth	4.53	± 9.6 %
10035	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	Bluetooth	3.83	± 9.6 %
10036	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	Bluetooth	8.01	± 9.6 %
10037	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	Bluetooth	4.77	± 9.6 %
10038	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	Bluetooth	4.10	± 9.6 %
10039	CAB	CDMA2000 (1xRTT, RC1)	CDMA2000	4.57	± 9.6 %
10042	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate)	AMPS	7.78	± 9.6 %
10044	CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	AMPS	0.00	± 9.6 %
10048	CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	DECT	13.80	± 9.6 %
10049	CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	DECT	10.79	± 9.6 %
10056	CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	TD-SCDMA	11.01	± 9.6 %
10058	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	GSM	6.52	± 9.6 %
10059	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	WLAN	2.12	± 9.6 %
10060	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	WLAN	2.83	± 9.6 %
10061	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	WLAN	3.60	± 9.6 %
10062	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	WLAN	8.68	± 9.6 %
10063	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	WLAN	8.63	± 9.6 %
10064	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	WLAN	9.09	± 9.6 %
10065	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	WLAN	9.00	± 9.6 %
10066	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	WLAN	9.38	± 9.6 %
10067	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	WLAN	10.12	± 9.6 %
10068	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	WLAN	10.24	± 9.6 %
10069	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	WLAN	10.56	± 9.6 %
10071	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	WLAN	9.83	± 9.6 %
10072	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	WLAN	9.62	± 9.6 %
10073	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	WLAN	9.94	± 9.6 %
10074	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	WLAN	10.30	± 9.6 %
10075	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	WLAN	10.77	± 9.6 %
10076	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	WLAN	10.94	± 9.6 %
10077	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	WLAN	11.00	± 9.6 %
10081	CAB	CDMA2000 (1xRTT, RC3)	CDMA2000	3.97	± 9.6 %
10082	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate)	AMPS	4.77	± 9.6 %
10090	DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	GSM	6.56	± 9.6 %
10097	CAB	UMTS-FDD (HSDPA)	WCDMA	3.98	± 9.6 %
10098	CAB	UMTS-FDD (HSUPA, Subtest 2)	WCDMA	3.98	± 9.6 %
10099	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	GSM	9.55	± 9.6 %
10100	CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-FDD	5.67	± 9.6 %
10101	CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	± 9.6 %
10102	CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6 %
10103	CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-TDD	9.29	± 9.6 %
10104	CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-TDD	9.97	± 9.6 %
10105	CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-TDD	10.01	± 9.6 %
10108	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-FDD	5.80	± 9.6 %

