

Appendix (Additional assessments outside the scope of SCS 0108)**Antenna Parameters with Head TSL**

Impedance, transformed to feed point	54.6 Ω + 4.9 j Ω
Return Loss	- 23.9 dB

Antenna Parameters with Body TSL

Impedance, transformed to feed point	49.9 Ω + 5.6 j Ω
Return Loss	- 25.0 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.162 ns
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After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
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DASY5 Validation Report for Head TSL

Date: 21.07.2020

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:853

Communication System: UID 0 - CW; Frequency: 2450 MHz

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.84$ S/m; $\epsilon_r = 38.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 - SN7349; ConvF(7.74, 7.74, 7.74) @ 2450 MHz; Calibrated: 29.06.2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 27.12.2019
- Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Dipole Calibration for Head Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 118.2 V/m; Power Drift = -0.05 dB

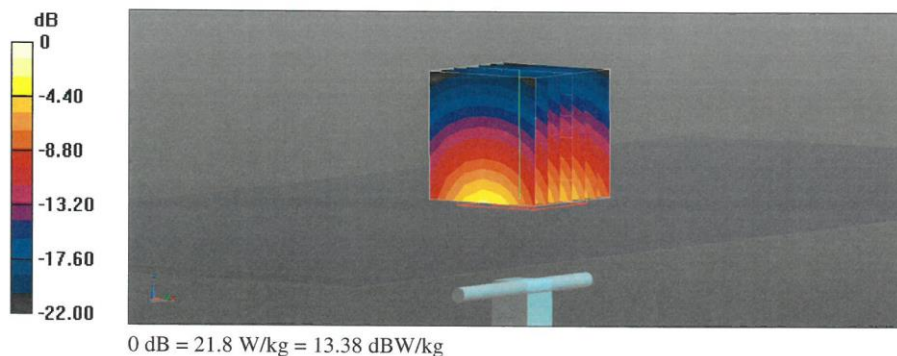
Peak SAR (extrapolated) = 26.2 W/kg

SAR(1 g) = 13.3 W/kg; SAR(10 g) = 6.17 W/kg

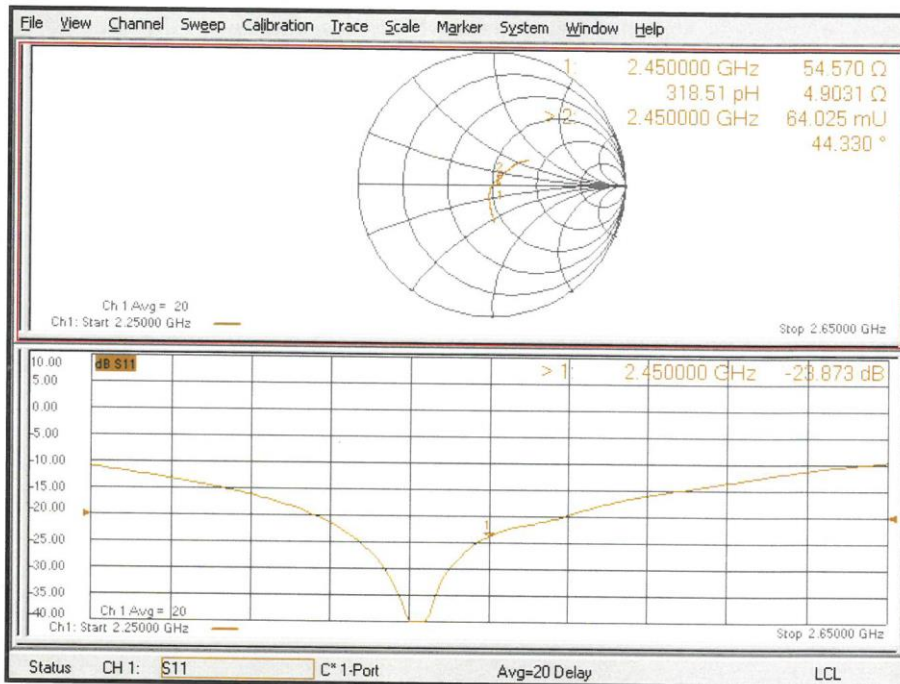
Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 51.1%

Maximum value of SAR (measured) = 21.8 W/kg



Impedance Measurement Plot for Head TSL



DASY5 Validation Report for Body TSL

Date: 21.07.2020

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:853

Communication System: UID 0 - CW; Frequency: 2450 MHz

Medium parameters used: $f = 2450$ MHz; $\sigma = 2.02$ S/m; $\epsilon_r = 51.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 - SN7349; ConvF(7.82, 7.82, 7.82) @ 2450 MHz; Calibrated: 29.06.2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 27.12.2019
- Phantom: Flat Phantom 5.0 (back); Type: QD 000 P50 AA; Serial: 1002
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Dipole Calibration for Body Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 111.1 V/m; Power Drift = -0.09 dB

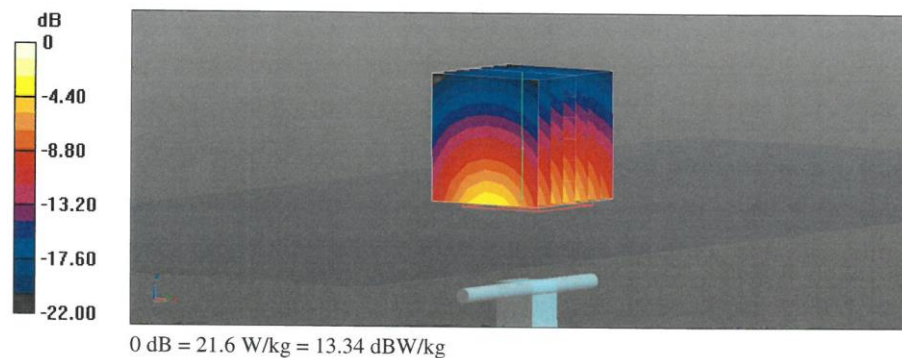
Peak SAR (extrapolated) = 25.7 W/kg

SAR(1 g) = 13.4 W/kg; SAR(10 g) = 6.22 W/kg

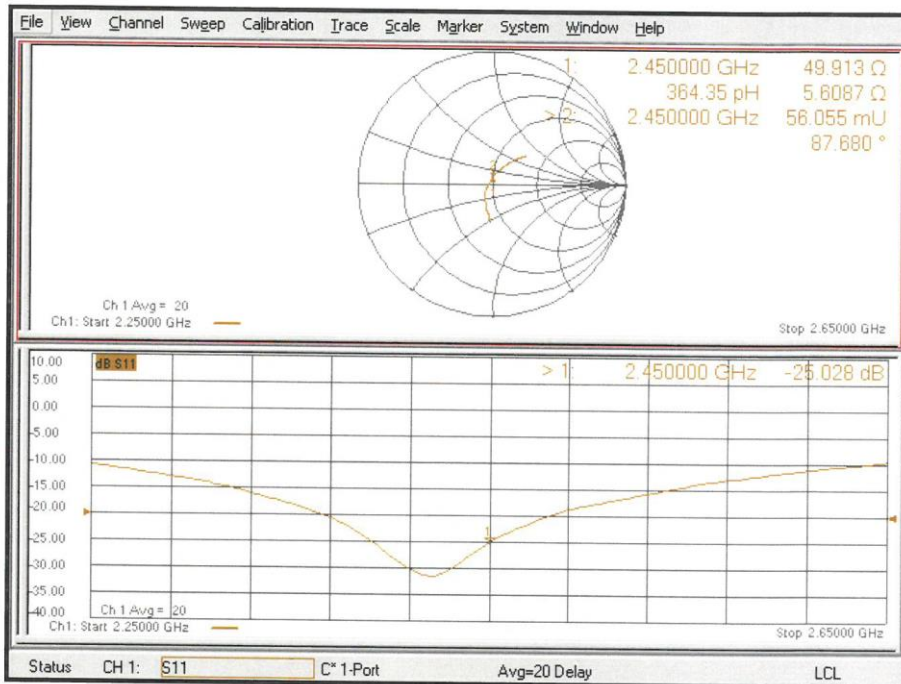
Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 52.9%

Maximum value of SAR (measured) = 21.6 W/kg



Impedance Measurement Plot for Body TSL





2600 MHz Dipole Calibration Certificate

Calibration Laboratory of Schmid & Partner Engineering AG



S Schweizerischer Kalibrierdienst
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S 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-BJ (Auden)

Certificate No: D2600V2-1012_Jul20

CALIBRATION CERTIFICATE
Object: D2600V2 - SN:1012
Calibration procedure(s): QA CAL-05.v11
Calibration date: July 21, 2020
This calibration certificate documents the traceability to national standards...
All calibrations have been conducted in the closed laboratory facility...
Calibration Equipment used (M&TE critical for calibration)
Primary Standards table with columns: Primary Standards, ID #, Cal Date (Certificate No.), Scheduled Calibration
Secondary Standards table with columns: Secondary Standards, ID #, Check Date (in house), Scheduled Check
Calibrated by: Jeffrey Katzman, Laboratory Technician
Approved by: Katja Pokovic, Technical Manager
Issued: July 23, 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
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)

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Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Glossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM x,y,z
N/A	not applicable or not measured

Calibration is Performed According to the Following Standards:

- 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
- 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
- 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
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation:

- DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- Measurement Conditions:** Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL:** The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- Feed Point Impedance and Return Loss:** These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- Electrical Delay:** One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- SAR measured:** SAR measured at the stated antenna input power.
- SAR normalized:** SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters:** The measured TSL parameters are used to calculate the nominal SAR result.

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%.

Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY5	V52.10.4
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	2600 MHz \pm 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	39.0	1.96 mho/m
Measured Head TSL parameters	(22.0 \pm 0.2) °C	37.9 \pm 6 %	2.01 mho/m \pm 6 %
Head TSL temperature change during test	< 0.5 °C	----	----

SAR result with Head TSL

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	14.5 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	57.0 W/kg \pm 17.0 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	250 mW input power	6.40 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	25.3 W/kg \pm 16.5 % (k=2)

Body TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	52.5	2.16 mho/m
Measured Body TSL parameters	(22.0 \pm 0.2) °C	51.0 \pm 6 %	2.20 mho/m \pm 6 %
Body TSL temperature change during test	< 0.5 °C	----	----

SAR result with Body TSL

SAR averaged over 1 cm ³ (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	14.0 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	55.1 W/kg \pm 17.0 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Body TSL	condition	
SAR measured	250 mW input power	6.20 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	24.6 W/kg \pm 16.5 % (k=2)

Appendix (Additional assessments outside the scope of SCS 0108)**Antenna Parameters with Head TSL**

Impedance, transformed to feed point	47.0 Ω - 5.6 j Ω
Return Loss	- 23.7 dB

Antenna Parameters with Body TSL

Impedance, transformed to feed point	44.6 Ω - 4.4 j Ω
Return Loss	- 22.7 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.152 ns
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After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
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DASY5 Validation Report for Head TSL

Date: 21.07.2020

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN:1012

Communication System: UID 0 - CW; Frequency: 2600 MHz

Medium parameters used: $f = 2600$ MHz; $\sigma = 2.01$ S/m; $\epsilon_r = 37.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 - SN7349; ConvF(7.54, 7.54, 7.54) @ 2600 MHz; Calibrated: 29.06.2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 27.12.2019
- Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Dipole Calibration for Head Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 121.2 V/m; Power Drift = -0.04 dB

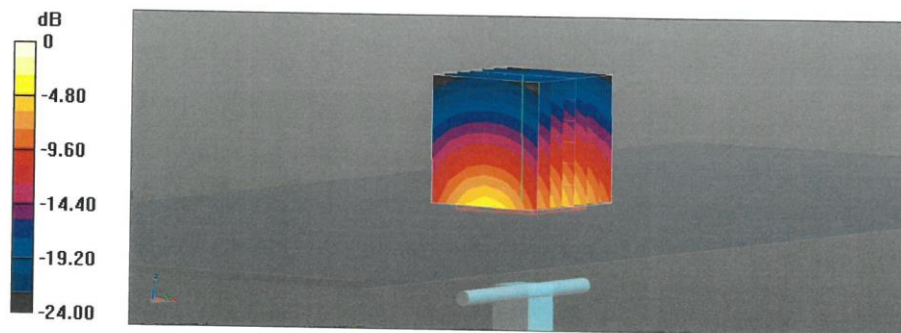
Peak SAR (extrapolated) = 29.3 W/kg

SAR(1 g) = 14.5 W/kg; SAR(10 g) = 6.40 W/kg

Smallest distance from peaks to all points 3 dB below = 8.9 mm

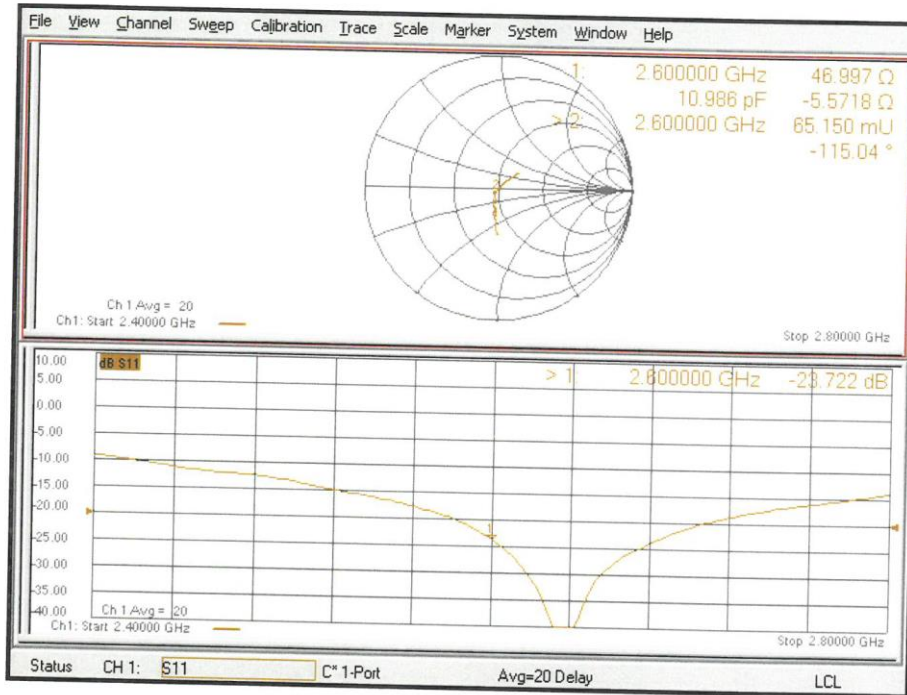
Ratio of SAR at M2 to SAR at M1 = 49.4%

Maximum value of SAR (measured) = 24.4 W/kg



0 dB = 24.4 W/kg = 13.87 dBW/kg

Impedance Measurement Plot for Head TSL



DASY5 Validation Report for Body TSL

Date: 21.07.2020

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN:1012

Communication System: UID 0 - CW; Frequency: 2600 MHz

Medium parameters used: $f = 2600$ MHz; $\sigma = 2.20$ S/m; $\epsilon_r = 51.0$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 - SN7349; ConvF(7.68, 7.68, 7.68) @ 2600 MHz; Calibrated: 29.06.2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 27.12.2019
- Phantom: Flat Phantom 5.0 (back); Type: QD 000 P50 AA; Serial: 1002
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Dipole Calibration for Body Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 110.5 V/m; Power Drift = -0.09 dB

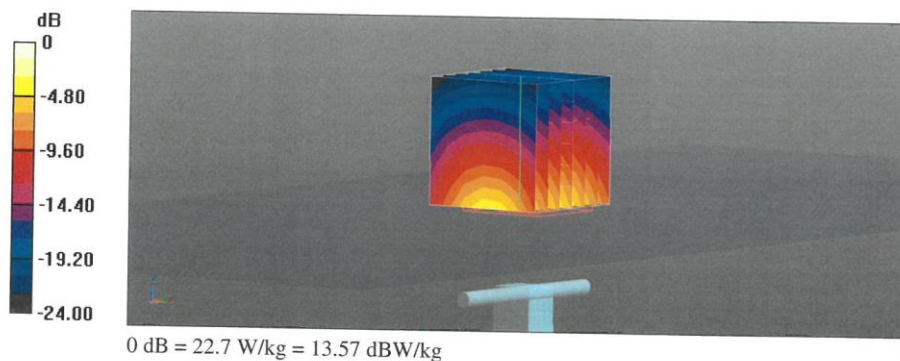
Peak SAR (extrapolated) = 28.0 W/kg

SAR(1 g) = 14.0 W/kg; SAR(10 g) = 6.20 W/kg

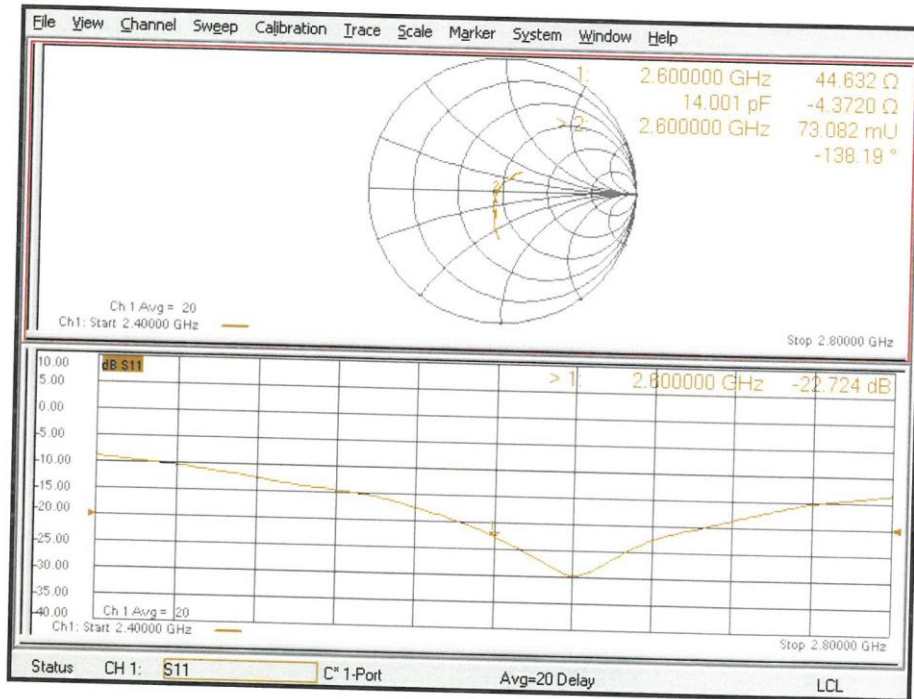
Smallest distance from peaks to all points 3 dB below = 8 mm

Ratio of SAR at M2 to SAR at M1 = 50.8%

Maximum value of SAR (measured) = 22.7 W/kg



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
	1RB_Low	1902.5	22.44	21.47
		1880	22.21	21.03
		1857.5	22.07	21.90
	36RB_High	1902.5	21.14	20.01
		1880	21.32	20.31
		1857.5	21.38	20.42
	36RB_Middle	1902.5	21.31	20.24
		1880	21.40	20.41
		1857.5	21.21	20.16
	36RB_Low	1902.5	21.35	20.26
		1880	21.34	20.46
		1857.5	21.15	20.09
	75RB	1902.5	21.18	20.26
		1880	21.30	20.40
		1857.5	21.27	20.25
	20MHz	1RB_High	1900	22.24
1880			21.86	21.03
1860			21.94	21.16
1RB_Middle		1900	22.81	21.35
		1880	22.67	21.31
		1860	22.33	21.07
1RB_Low		1900	22.20	20.94
		1880	21.98	21.08
		1860	21.89	20.67
50RB_High		1900	21.10	20.20
		1880	21.32	20.13
		1860	21.27	20.36
50RB_Middle		1900	21.29	20.39
		1880	21.39	20.30
		1860	21.36	20.33
50RB_Low		1900	21.22	20.33
		1880	21.30	20.27
		1860	21.11	20.08
100RB		1900	21.21	20.16
		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 RB offset (Start RB)	Frequency (MHz)	QPSK	16QAM	
			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 RB offset (Start RB)	Frequency (MHz)	QPSK	16QAM
			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		Mode	Side	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	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		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	/	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.