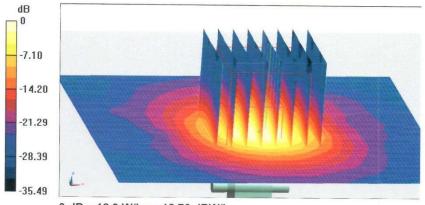




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0 dB = 18.9 W/kg = 12.76 dBW/kg

Certificate No: Z19-60293

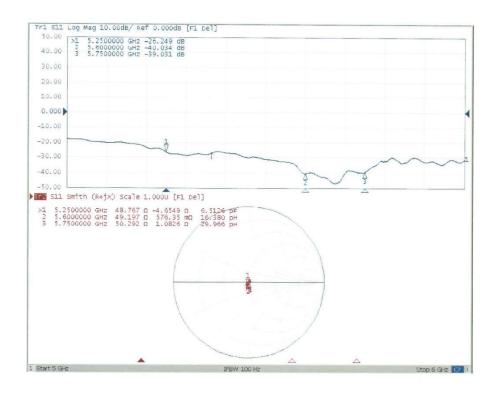
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### Impedance Measurement Plot for Head TSL



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#### DASY5 Validation Report for Body TSL

Date: 08.29.2019

Test Laboratory: CTTL, Beijing, China

DUT: Dipole 5GHz; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1238

Communication System: CW; Frequency: 5250 MHz, Frequency: 5600 MHz,

Frequency: 5750 MHz,

Medium parameters used: f = 5250 MHz;  $\sigma$  = 5.402 S/m;  $\epsilon_r$  = 48.05;  $\rho$  = 1000 kg/m3, Medium parameters used: f = 5600 MHz;  $\sigma$  = 5.703 S/m;  $\epsilon_r$  = 47.61;  $\rho$  = 1000 kg/m3, Medium parameters used: f = 5750 MHz;  $\sigma$  = 5.782 S/m;  $\epsilon_r$  = 47.49;  $\rho$  = 1000 kg/m3,

Phantom section: Right Section

#### DASY5 Configuration:

- Probe: EX3DV4 SN3617; ConvF(4.76, 4.76, 4.76) @ 5250 MHz; ConvF(4.23, 4.23, 4.23) @ 5600 MHz; ConvF(4.36, 4.36, 4.36) @ 5750 MHz; Calibrated: 1/31/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1555; Calibrated: 8/22/2019
- Phantom: MFP\_V5.1C; Type: QD 000 P51CA; Serial: 1062
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

## Dipole Calibration /Pin=100mW, d=10mm, f=5250 MHz/Zoom Scan,

dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 54.85 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 27.5 W/kg

SAR(1 g) = 7.17 W/kg; SAR(10 g) = 2.04 W/kg

Maximum value of SAR (measured) = 16.4 W/kg

### Dipole Calibration /Pin=100mW, d=10mm, f=5600 MHz/Zoom Scan,

dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 56.17 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 32.3 W/kg

SAR(1 g) = 7.62 W/kg; SAR(10 g) = 2.18 W/kg

Maximum value of SAR (measured) = 18.4 W/kg

### Dipole Calibration /Pin=100mW, d=10mm, f=5750 MHz/Zoom Scan,

dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 55.47 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 33.2 W/kg

SAR(1 g) = 7.39 W/kg; SAR(10 g) = 2.1 W/kg

Maximum value of SAR (measured) = 18.1 W/kg

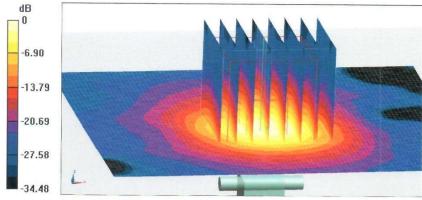
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0 dB = 18.1 W/kg = 12.58 dBW/kg

Certificate No: Z19-60293

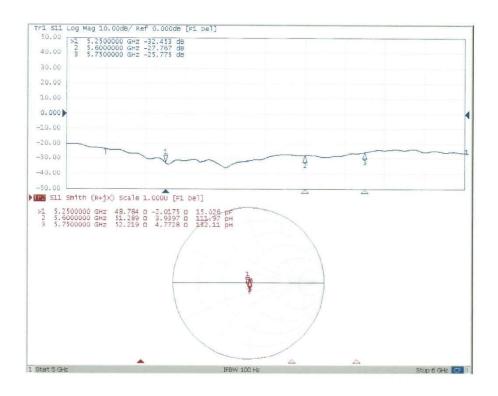
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## Impedance Measurement Plot for Body TSL





# **ANNEX J: Extended Calibration SAR Dipole**

Referring to KDB865664 D01, if dipoles are verified in return loss (<-20dBm, within 20% of prior calibration), and in impedance (within 5 ohm of prior calibration), the annual calibration is not necessary and the calibration interval can be extended.

Justification of Extended Calibration SAR Dipole D750V3- serial no.1163

Head								
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (johm)	Delta (johm)		
2019-09-03	-26.9	/	50.5	1	-4.53	1		
2020-09-01	-25.8	4.1	51.2	0.7	-4.29	0.24		
2021-08-30	-25.2	6.3	51.7	1.2	-4.16	0.37		

### Justification of Extended Calibration SAR Dipole D1750V2- serial no.1152

Head								
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (johm)	Delta (johm)		
2019-08-30	-38.1	/	49.1	1	-0.84	1		
2020-08-28	-36.5	4.2	50.2	1.1	-0.49	0.35		
2021-08-26	-35.7	6.3	50.8	1.7	-0.42	0.42		

## Justification of Extended Calibration SAR Dipole D2550V2- serial no.1010

Head								
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (johm)	Delta (johm)		
2021-05-21	-26.8	/	52.8	1	-3.80	1		
2022-05-20	-26.3	1.9	53.6	0.8	-3.64	0.16		



Justification of Extended Calibration SAR Dipole D5GHzV2- serial no.1238

Head									
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (johm)	Delta (johm)			
	5250MHz								
2019-08-29	-26.2	1	48.8	/	-4.65	1			
2020-08-28	-25.1	4.2	49.7	0.9	-4.26	0.39			
2021-08-26	-24.7	5.7	50.2	1.4	-4.01	0.64			
5600MHz									
2019-08-29	-40.0	/	49.2	1	0.58	/			
2020-08-28	-38.1	4.8	50.3	1.1	0.85	0.27			
2021-08-26	-37.7	5.7	50.8	1.6	0.92	0.34			
5750MHz									
2019-08-29	-39.0	/	50.3	/	1.08	/			
2020-08-28	-37.7	3.3	51.1	0.8	1.44	0.36			
2021-08-26	-37.2	4.6	51.6	1.3	1.53	0.45			

The Return-Loss is <-20dB, and within 20% of prior calibration; the impedance is within 5 ohm of prior calibration. Therefore the value result should support extended cabration.



# **ANNEX K: Spot Check Test**

As the test lab for T506A from TCL Communication Ltd., we, Shenzhen Academy of Information and Communications Technology, declare on our sole responsibility that, according to "Justification Letter" provided by applicant, only the Spot check test should be performed. The test results are as below.

## K.1. Internal Identification of EUT used during the spot check test

EUT ID*	IMEI	HW Version	SW Version	Receipt Date	
UT01aa	353380540012514	05	vVJ52	2023-02-22	

### K.2. Measurement results

### GSM850 SAR Values:

Frequency			Conducted Power	Max. tune-up	SAR(1g) (W/kg)					
Ch. MHz Test Position	Toot Position	Spot check data			Original					
	(dBm)	Power	Measured	Reported	data					
		(dbiii)	(dBm)	SAR	SAR	uala				
	GSM850 - Head									
251	848.8	Right Cheek	32.45	34.0	0.615	0.88	1.23			
GSM850 - Body										
128	824.2	Rear	28.70	29.5	0.128	0.15	0.16			



# K.3. Graph Results for Spot Check

### **GSM850 Head**

Date: 2023-2-24

Electronics: DAE4 Sn1527 Medium: Head 835MHz

Medium parameters used (interpolated): f = 848.8 MHz;  $\sigma = 0.926 \text{ S/m}$ ;  $\varepsilon_r = 40.282$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Communication System: UID 0, GSM (0) Frequency: 848.8 MHz Duty Cycle: 1:8.3

Probe: EX3DV4 - SN7621 ConvF (11.12, 11.12, 11.12)

**Right Cheek High/Area Scan (61x71x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm Maximum value of SAR (interpolated) = 0.748 W/kg

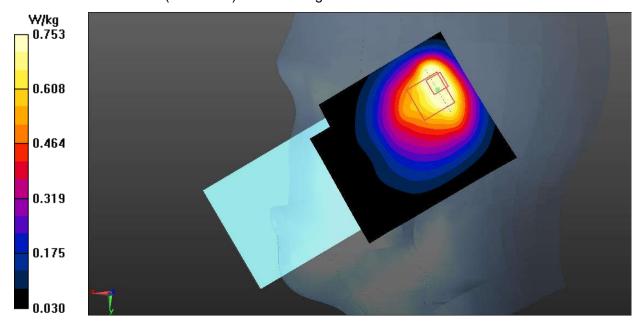
Right Cheek High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 24.94 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.981 W/kg

SAR(1 g) = 0.615 W/kg; SAR(10 g) = 0.425 W/kg

Maximum value of SAR (measured) = 0.753 W/kg





## GSM850 Body

Date: 2023-2-24

Electronics: DAE4 Sn1527 Medium: Head 835MHz

Medium parameters used (interpolated): f = 824.2 MHz;  $\sigma = 0.903 \text{ S/m}$ ;  $\varepsilon_r = 40.577$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Communication System: UID 0, 4 slot GPRS (0) Frequency: 824.2 MHz Duty Cycle: 1:2

Probe: EX3DV4 - SN7621 ConvF (11.12, 11.12, 11.12)

Rear Side Low/Area Scan (61x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Maximum value of SAR (interpolated) = 0.159 W/kg

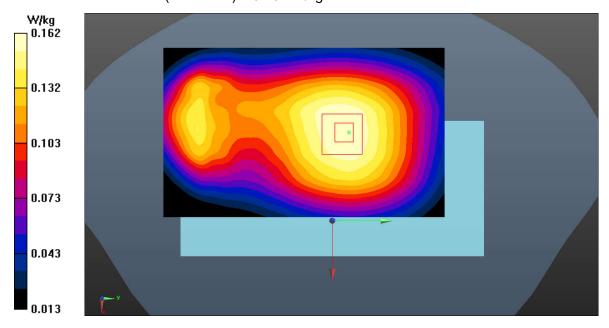
Rear Side Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.28 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.228 W/kg

SAR(1 g) = 0.128 W/kg; SAR(10 g) = 0.082 W/kg

Maximum value of SAR (measured) = 0.162 W/kg





## K.4. System Verification Results for Spot Check

### 835MHz

Date: 2023-2-24

Electronics: DAE4 Sn1527 Medium: Head 835MHz

Medium parameters used: f = 835 MHz;  $\sigma = 0.913 \text{ S/m}$ ;  $\epsilon r = 40.447$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Communication System: CW TMC Frequency: 835 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7621 ConvF (11.12, 11.12, 11.12)

System Validation/Area Scan (91x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 65.349 V/m; Power Drift = -0.03 dB

SAR(1 g) = 2.46 W/kg; SAR(10 g) = 1.59 W/kg

Maximum value of SAR (interpolated) = 3.33 W/kg

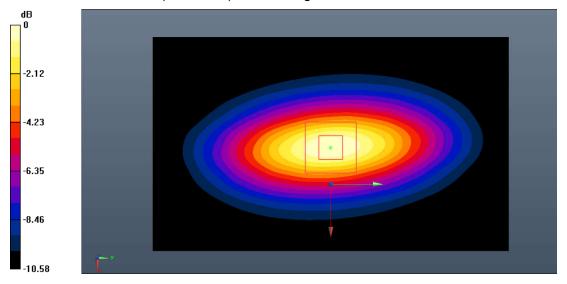
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 65.349 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 3.82 W/kg

SAR(1 g) = 2.44 W/kg; SAR(10 g) = 1.58 W/kg

Maximum value of SAR (measured) = 3.31 W/kg



0 dB = 3.31 W/kg = 5.20 dB W/kg

### \*\*\*END OF REPORT\*\*\*