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Body TSL parameters at 5250 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	48.9	5.36 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	48.1 ± 6 %	5.40 mho/m ± 6 %
Body TSL temperature change during test	<1.0 °C	----	----

SAR result with Body TSL at 5250 MHz

SAR averaged over 1 cm^3 (1 g) of Body TSL	Condition	
SAR measured	100 mW input power	7.17 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	**71.5 W/kg ± 24.4 % (k=2)**
SAR averaged over 10 cm^3 (10 g) of Body TSL	Condition	
SAR measured	100 mW input power	2.04 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	**20.3 W/kg ± 24.2 % (k=2)**

Body TSL parameters at 5600 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	48.5	5.77 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	47.6 ± 6 %	5.70 mho/m ± 6 %
Body TSL temperature change during test	<1.0 °C	----	----

SAR result with Body TSL at 5600 MHz

SAR averaged over 1 cm^3 (1 g) of Body TSL	Condition	
SAR measured	100 mW input power	7.62 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	**75.9 W/kg ± 24.4 % (k=2)**
SAR averaged over 10 cm^3 (10 g) of Body TSL	Condition	
SAR measured	100 mW input power	2.18 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	**21.7 W/kg ± 24.2 % (k=2)**

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Body TSL parameters at 5750 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	48.3	5.94 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	47.5 ± 6 %	5.78 mho/m ± 6 %
Body TSL temperature change during test	<1.0 °C	----	----

SAR result with Body TSL at 5750 MHz

SAR averaged over 1 cm^3 (1 g) of Body TSL	Condition	
SAR measured	100 mW input power	7.39 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	**73.6 W/kg ± 24.4 % (k=2)**
SAR averaged over 10 cm^3 (10 g) of Body TSL	Condition	
SAR measured	100 mW input power	2.10 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	**20.9 W/kg ± 24.2 % (k=2)**

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Appendix (Additional assessments outside the scope of CNAS L0570)

Antenna Parameters with Head TSL at 5250 MHz

Impedance, transformed to feed point	48.8Ω - 4.65jΩ
Return Loss	- 26.2dB

Antenna Parameters with Head TSL at 5600 MHz

Impedance, transformed to feed point	49.2Ω + 0.58jΩ
Return Loss	- 40.0dB

Antenna Parameters with Head TSL at 5750 MHz

Impedance, transformed to feed point	50.3Ω + 1.08jΩ
Return Loss	- 39.0dB

Antenna Parameters with Body TSL at 5250 MHz

Impedance, transformed to feed point	48.8Ω - 2.02jΩ
Return Loss	- 32.5dB

Antenna Parameters with Body TSL at 5600 MHz

Impedance, transformed to feed point	51.3Ω + 3.94jΩ
Return Loss	- 27.8dB

Antenna Parameters with Body TSL at 5750 MHz

Impedance, transformed to feed point	52.2Ω + 4.77jΩ
Return Loss	- 25.8dB

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General Antenna Parameters and Design

Electrical Delay (one direction)	1.059 ns

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

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DASY5 Validation Report for Head TSL Date: 08.28.2019

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; σ = 4.692 S/m; ε_r = 35.71; ρ = 1000 kg/m3, Medium parameters used: f = 5600 MHz; σ = 4.992 S/m; ε_r = 35.42; ρ = 1000 kg/m3, Medium parameters used: f = 5750 MHz; σ = 5.096 S/m; ε_r = 35.13; ρ = 1000 kg/m3,

Phantom section: Center Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3617; ConvF(5.39, 5.39, 5.39) @ 5250 MHz; ConvF(5.06, 5.06, 5.06) @ 5600 MHz; ConvF(5.07, 5.07, 5.07) @ 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 = 69.41 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 32.8 W/kg
SAR(1 g) = 7.81 W/kg; SAR(10 g) = 2.23 W/kg
Maximum value of SAR (measured) = 18.7 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 = 70.02 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 35.7 W/kg
SAR(1 g) = 7.96 W/kg; SAR(10 g) = 2.27 W/kg
Maximum value of SAR (measured) = 19.2 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 = 68.55 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 36.5 W/kg
SAR(1 g) = 7.86 W/kg; SAR(10 g) = 2.23 W/kg
Maximum value of SAR (measured) = 18.9 W/kg

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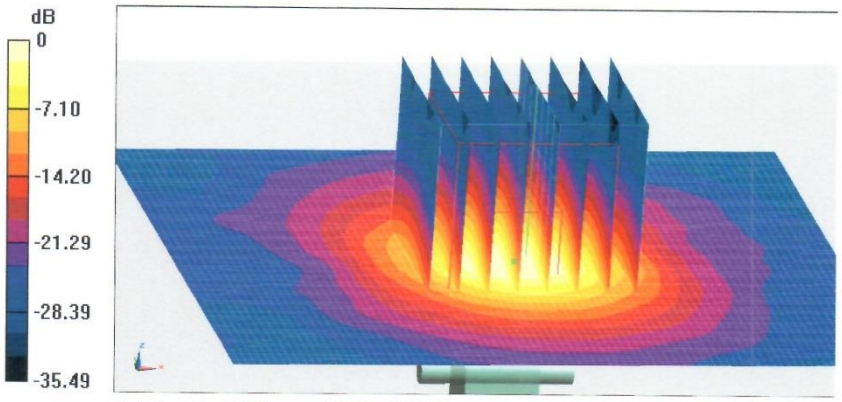

0 dB = 18.9 W/kg = 12.76 dBW/kg

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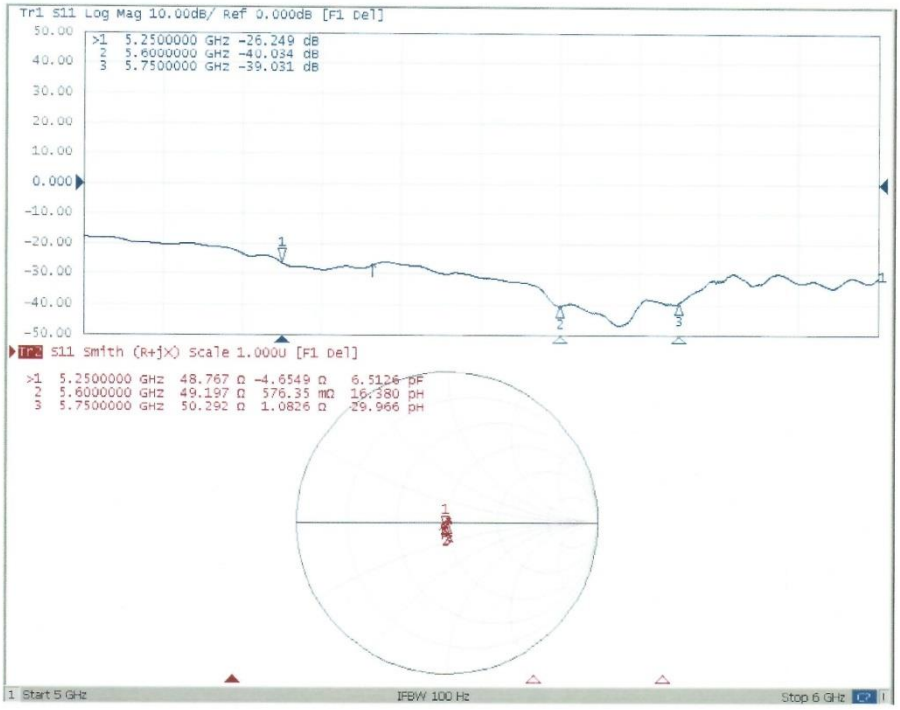
Impedance Measurement Plot for Head TSL



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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; σ = 5.402 S/m; ε_r = 48.05; ρ = 1000 kg/m3, Medium parameters used: f = 5600 MHz; σ = 5.703 S/m; ε_r = 47.61; ρ = 1000 kg/m3, Medium parameters used: f = 5750 MHz; σ = 5.782 S/m; ε_r = 47.49; ρ = 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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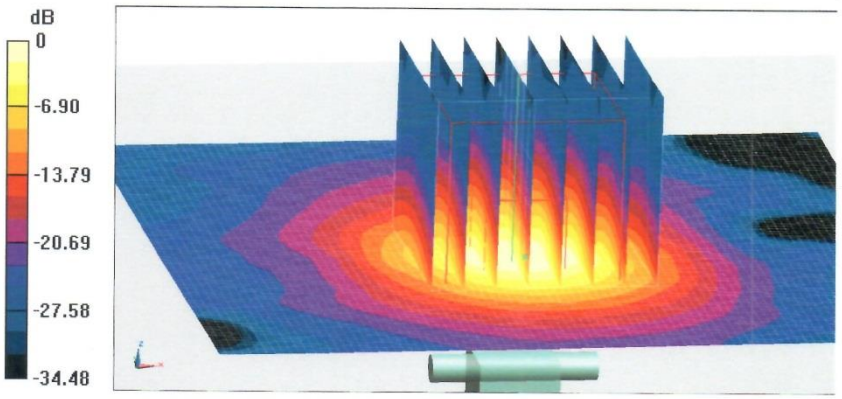

0 dB = 18.1 W/kg = 12.58 dBW/kg

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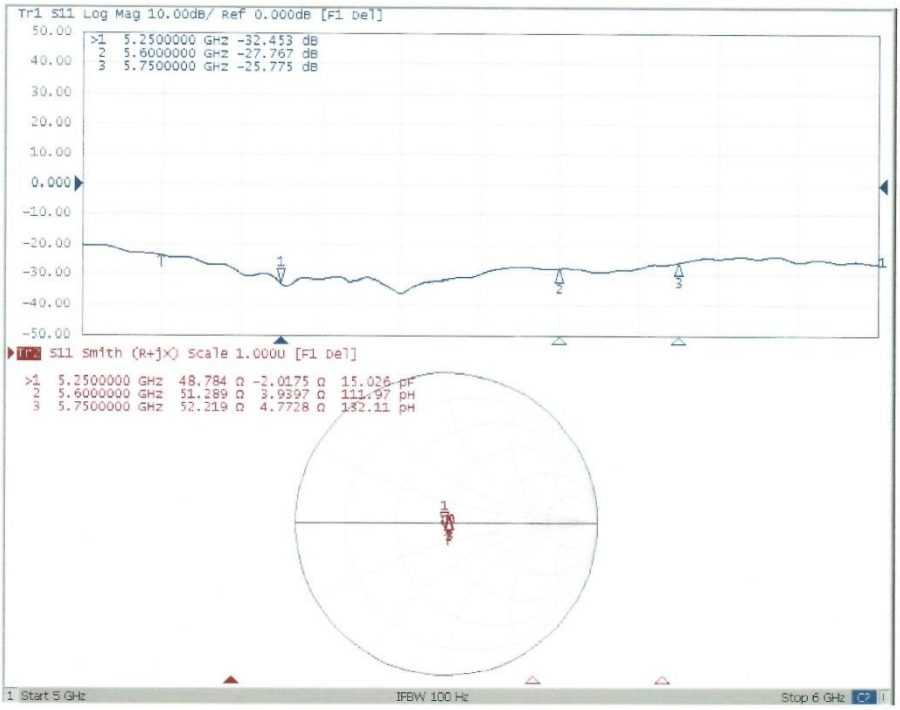
Impedance Measurement Plot for Body TSL



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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 D835V2– serial no.4d057

Head						
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (johm)	Delta (johm)
2018-10-09	-27.7	/	49.6	/	-4.08	/
2019-10-06	-26.9	2.9	50.1	0.5	-3.95	0.13

Justification of Extended Calibration SAR Dipole D1900V2– serial no. 5d088

Head						
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (johm)	Delta (johm)
2018-10-24	-23.2	/	52.7	/	6.63	/
2019-10-22	-22.9	1.3	53.5	0.8	6.86	0.23

Justification of Extended Calibration SAR Dipole D2450V2– serial no. 873

Head						
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (johm)	Delta (johm)
2018-10-26	-28.0	/	53.5	/	2.11	/
2019-10-22	-27.3	2.5	54.4	0.9	2.29	0.18

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)
2018-08-24	-25.7	/	54.9	/	-2.30	/
2019-08-22	-24.8	3.5	55.8	0.9	-2.22	0.08

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: Proximity sensor Power reduction information

In this section, the following list is used to prepare an inquiry seeking SAR test guidance for proximity sensor power reduction. The procedure in KDB 616217 is applied for SAR testing.

K.1. General proximity sensor implementation description

This device uses a proximity sensor that uses the SAR antenna to facilitate triggering in typical user interactivity with the device. Due to the operating configurations and exposure conditions required by the device, the proximity sensor is used to indicate when the phone is held close to a user's body exposure condition. It utilizes the proximity sensor to reduce the output power in specific wireless and operating modes to ensure SAR compliance for the following scenarios: To reduce the output power of main antennas during body close to phone.

K.2. Antennas and sensor placement details

K2.1. Antenna-to-antenna/user separation distances

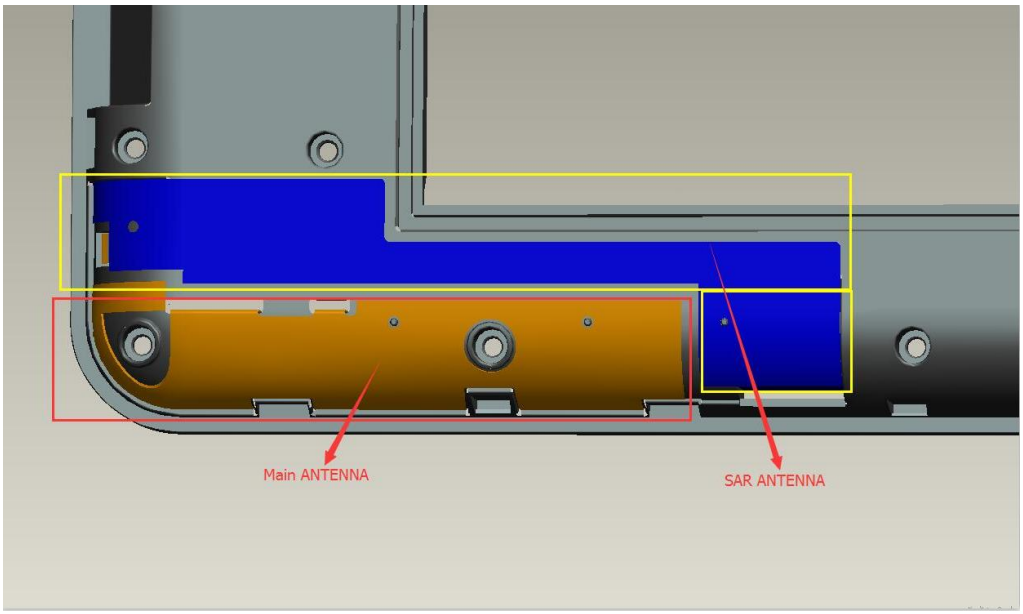

Figure K.1: The location of the antennas and proximity sensor

Note: The Div Antenna and GPS Antenna does not have the transmit function.
The proximity sensor and SAR antenna use same metallic electrode, the SAR antenna is separated from the main antenna.

	Antenna/Sensor-to- DUT sides separation distances					
Tx Antenna	**Front side**	**Back side**	**Left side**	**Right side**	**Top side**	**Bottom side**
Main 2G&3G&4G Antenna	N/A	15mm	15mm	N/A	N/A	5mm
2.4G WiFi Antenna	N/A	N/A	N/A	N/A	N/A	N/A
Diversity antenna and GPS antenna	Only receive signal, so it was not figured out in the following pictures					

K.3. Proximity sensor clarification

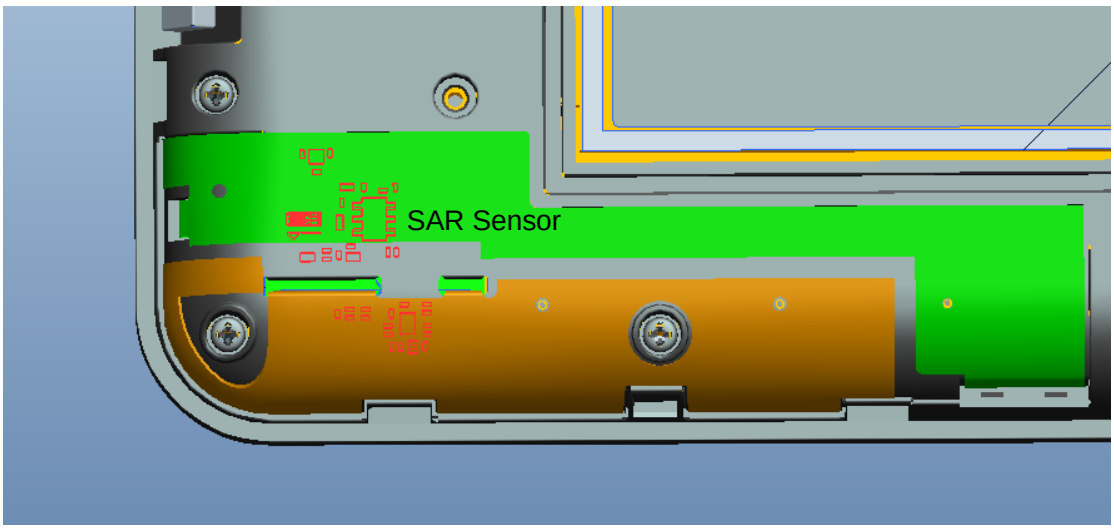

Figure K.2: The picture of the SAR sensor

K.3.1. Description of proximity sensor Techniques

The proximity sensor is triggered by capacitance changes due to objects in the vicinity of the sensing element.

Capacitive proximity sensor share metallic electrode with the SAR antenna testing. The metallic electrode and SAR sensor chip works as a sensor. As is shown in Figure K.2.

The proximity sensor or the power reduction cannot be intentionally or unintentionally turned-off by the user.

The expected capacitance trigger values are programmed in each device for each power back-off stage. Capacitance trigger value is C1. When a certain object or human body approaches the DUT, if the measured capacitance is lower than C1, proximity sensor is not triggered. If the measured capacitance is equal to C1 or higher than C1, the power back-off is triggered.

There is a failure protection gear. If the SAR sensor fail, the detection of the SAR sensor signal is interrupted, it will jump to the failure protection gear to reduce power by a fixed maximum power reduction amplitude to ensure SAR compliance.

K.3.2. Power Reduction operation table

The phone use MTK platform, which have some special NVs for SAR related max power back off, These NVs are used to set a new max power limit based proximity information and call configuration. When human body is in proximity and is detected by sensor, a new max power limit is set using the values stored in the NV. If Base station requests the higher output power above the limit, the power control algorithm inside modem chip will limit the power up to the preset power limit. If base station requests a lower output power less than the limit, the out power is controlled by base station.

K.4. Proximity sensor coverage, distance and angle

Band	Test position	Sensor Trigger Distance range(DUT to Phantom)	Power reduction amount(dB)	Target Power level（dBm）
GSM850	Extremity SAR (Bottom/Back/Left)	held by hand 0mm	4	GPRS
				1 Txslot:28.5
				2 Txslot:27.5
				3 Txslot:26
				4 Txslot:25
				EGPRS
				1 Txslot:23.5
				2 Txslot:22
				3 Txslot:20
				4 Txslot:18.5
	Top side	ALL	0	GPRS
				1 Txslot:32.5
				2 Txslot:31.5
				3 Txslot:30
				4 Txslot:29
				EGPRS
				1 Txslot:27.5
				2 Txslot:26
				3 Txslot:24
				4 Txslot:22.5
	Back side	0<distance≤15mm	4	GPRS
				1 Txslot:28.5
				2 Txslot:27.5
				3 Txslot:26
				4 Txslot:25
				EGPRS
				1 Txslot:23.5
				2 Txslot:22
				3 Txslot:20
				4 Txslot:18.5
		15mm<distance	0	GPRS
				1 Txslot:32.5
				2 Txslot:31.5
				3 Txslot:30
				4 Txslot:29
				EGPRS

				1 Txslot:27.5
				2 Txslot:26
				3 Txslot:24
				4 Txslot:22.5
	Left side	0<distance≤15mm	4	GPRS
				1 Txslot:28.5
				2 Txslot:27.5
				3 Txslot:26
				4 Txslot:25
				EGPRS
				1 Txslot:23.5
				2 Txslot:22
				3 Txslot:20
				4 Txslot:18.5
		15mm<distance	0	GPRS
				1 Txslot:32.5
				2 Txslot:31.5
				3 Txslot:30
				4 Txslot:29
				EGPRS
				1 Txslot:27.5
				2 Txslot:26
				3 Txslot:24
				4 Txslot:22.5
	Bottom side	0<distance≤5mm	4	GPRS
				1 Txslot:28.5
				2 Txslot:27.5
				3 Txslot:26
				4 Txslot:25
				EGPRS
				1 Txslot:23.5
				2 Txslot:22
				3 Txslot:20
				4 Txslot:18.5
		5mm<distance	0	GPRS
				1 Txslot:32.5
				2 Txslot:31.5
				3 Txslot:30
				4 Txslot:29
				EGPRS
				1 Txslot:27.5
				2 Txslot:26

				3 Txslot:24
				4 Txslot:22.5
	Right side	ALL	0	GPRS
				1 Txslot:32.5
				2 Txslot:31.5
				3 Txslot:30
				4 Txslot:29
				EGPS
				1 Txslot:27.5
				2 Txslot:26
				3 Txslot:24
				4 Txslot:22.5
	Front side	ALL	0	GPRS
				1 Txslot:32.5
				2 Txslot:31.5
				3 Txslot:30
				4 Txslot:29
				EGPS
				1 Txslot:27.5
				2 Txslot:26
				3 Txslot:24
				4 Txslot:22.5
PCS1900	Extremity SAR(Bottom/Back/Left)	held by hand 0mm	7	GPRS
				1 Txslot:23
				2 Txslot:22
				3 Txslot:20.5
				4 Txslot:19.5
				EGPS
				1 Txslot:19.5
				2 Txslot:18.5
				3 Txslot:16.5
				4 Txslot:15.5
	Top side	ALL	0	GPRS
				1 Txslot:30
				2 Txslot:29
				3 Txslot:27.5
				4 Txslot:26.5
				EGPS
				1 Txslot:26.5
				2 Txslot:25.5
				3 Txslot:23.5
				4 Txslot:22.5

	Back side	0<distance≤15mm	7	GPRS
				1 Txslot:23
				2 Txslot:22
				3 Txslot:20.5
				4 Txslot:19.5
				EGPS
				1 Txslot:19.5
				2 Txslot:18.5
				3 Txslot:16.5
				4 Txslot:15.5
		15mm<distance	0	GPRS
				1 Txslot:30
				2 Txslot:29
				3 Txslot:27.5
				4 Txslot:26.5
				EGPS
				1 Txslot:26.5
				2 Txslot:25.5
				3 Txslot:23.5
				4 Txslot:22.5
	Left side	0<distance≤15mm	7	GPRS
				1 Txslot:23
				2 Txslot:22
				3 Txslot:20.5
				4 Txslot:19.5
				EGPS
				1 Txslot:19.5
				2 Txslot:18.5
				3 Txslot:16.5
				4 Txslot:15.5
		15mm<distance	0	GPRS
				1 Txslot:30
				2 Txslot:29
				3 Txslot:27.5
				4 Txslot:26.5
				EGPS
				1 Txslot:26.5
				2 Txslot:25.5
				3 Txslot:23.5
				4 Txslot:22.5
	Bottom side	0<distance≤5mm	7	GPRS
				1 Txslot:23

				2 Txslot:22
				3 Txslot:20.5
				4 Txslot:19.5
				EGPS
				1 Txslot:19.5
				2 Txslot:18.5
				3 Txslot:16.5
				4 Txslot:15.5
		5mm<distance	0	GPRS
				1 Txslot:30
				2 Txslot:29
				3 Txslot:27.5
				4 Txslot:26.5
				EGPS
				1 Txslot:26.5
				2 Txslot:25.5
				3 Txslot:23.5
				4 Txslot:22.5
	Right side	ALL	0	GPRS
				1 Txslot:30
				2 Txslot:29
				3 Txslot:27.5
				4 Txslot:26.5
				EGPS
				1 Txslot:26.5
				2 Txslot:25.5
				3 Txslot:23.5
				4 Txslot:22.5
	Front side	ALL	0	GPRS
				1 Txslot:30
				2 Txslot:29
				3 Txslot:27.5
				4 Txslot:26.5
				EGPS
				1 Txslot:26.5
				2 Txslot:25.5
				3 Txslot:23.5
				4 Txslot:22.5
WCDMA B2	Extremity SAR(Bottom/Back/Left)	held by hand 0mm	7	16
	Top side	ALL	0	23
	Back side	0<distance≤15mm	7	16

		15mm<distance	0	23
	Left side	0<distance≤15mm	7	16
		15mm<distance	0	23
	Bottom side	0<distance≤5mm	7	16
		5mm<distance	0	23
	Right side	ALL	0	23
	Front side	ALL	0	23
WCDMA B5	Extremity SAR(Bottom/Back/Left)	held by hand 0mm	1	21.5
	Top side	ALL	0	22.5
	Back side	0<distance≤15mm	1	21.5
		15mm<distance	0	22.5
	Left side	0<distance≤15mm	1	21.5
		15mm<distance	0	22.5
	Bottom side	0<distance≤5mm	1	21.5
		5mm<distance	0	22.5
	Right side	ALL	0	22.5
	Front side	ALL	0	22.5
LTE B2	Extremity SAR(Bottom/Back/Left)	held by hand 0mm	7.5	15.5
	Top side	ALL	0	23
	Back side	0<distance≤15mm	7.5	15.5
		15mm<distance	0	23
	Left side	0<distance≤15mm	7.5	15.5
		15mm<distance	0	23
	Bottom side	0<distance≤5mm	7.5	15.5
		5mm<distance	0	23
	Right side	ALL	0	23
	Front side	ALL	0	23
LTE B4	Extremity SAR(Bottom/Back/Left)	held by hand 0mm	7.5	15.5
	Top side	ALL	0	23
	Back side	0<distance≤15mm	7.5	15.5
		15mm<distance	0	23
	Left side	0<distance≤15mm	7.5	15.5
		15mm<distance	0	23
	Bottom side	0<distance≤5mm	7.5	15.5
		5mm<distance	0	23
	Right side	ALL	0	23
	Front side	ALL	0	23
LTE B5	Extremity SAR(Bottom/Back/Left)	held by hand 0mm	1	22

	Top side	ALL	0	23
	Back side	0<distance≤15mm	1	22
		15mm<distance	0	23
	Left side	0<distance≤15mm	1	22
		15mm<distance	0	23
	Bottom side	0<distance≤5mm	1	22
		5mm<distance	0	23
	Right side	ALL	0	23
	Front side	ALL	0	23
LTE B7	Extremity SAR(Bottom/Back/Left)	held by hand 0mm	7.5	16.5
	Top side	ALL	0	24
	Back side	0<distance≤15mm	7.5	16.5
		15mm<distance	0	24
	Left side	0<distance≤15mm	7.5	16.5
		15mm<distance	0	24
	Bottom side	0<distance≤5mm	7.5	16.5
		5mm<distance	0	24
	Right side	ALL	0	24
	Front side	ALL	0	24
LTE B38	Extremity SAR(Bottom/Back/Left)	held by hand 0mm	7	16
	Top side	ALL	0	23
	Back side	0<distance≤15mm	7	16
		15mm<distance	0	23
	Left side	0<distance≤15mm	7	16
		15mm<distance	0	23
	Bottom side	0<distance≤5mm	7	16
		5mm<distance	0	23
	Right side	ALL	0	23
	Front side	ALL	0	23

ANNEX L: Sensor Triggering Data Summary

Per FCC KDB Publication 616217 D04, this device was tested by the manufacturer to determine the proximity sensor triggering distances for all applicable sides and edges of the device. The measured output power at distances within ± 5 mm of the triggering points (or until touching the phantom) is included for back side and each applicable edge per Step i) in Section 6.2 of the KDB. The technical descriptions in the filing contain the complete set of triggering data required by Section 6 of FCC KDB Publication 616217 D04.

To ensure all production units are compliant, it is necessary to test SAR at a distance 1 mm less than the smallest distance between the device and SAR phantom with the device at the maximum output power (without power reduction). These SAR tests are included in addition to the SAR tests for the device touching the SAR phantom (at the reduced output power level).

We tested the power and got the different proximity sensor triggering distances for rear, left and bottom side. The manufacturer has declared 15mm is the most conservative triggering distance for main antenna with rear side, 15mm distance for left side and 5mm distance for bottom side.

The operational description contains information explaining how this device remains compliant in the event of a sensor malfunction.

Main Antenna

Rear Side

Moving device toward the phantom:

Distance(mm)	20	19	18	17	16	15	14	13	12	11	10
Main Antenna	/	/	/	/	/	20.97	20.98	20.99	21.00	20.98	21.01

Moving device away from the phantom:

Distance(mm)	20	19	18	17	16	15	14	13	12	11	10
Main Antenna	23.94	24.00	23.99	23.98	23.96	/	/	/	/	/	/

Based on the most conservative measured triggering distance of 15 mm, additional SAR measurements were required at 14 mm from the Rear side for the above modes.

Left Side

Moving device toward the phantom:

Distance(mm)	20	19	18	17	16	15	14	13	12	11	10
Main Antenna	/	/	/	/	/	20.95	20.99	21.00	21.01	20.98	21.00

Moving device away from the phantom:

Distance(mm)	20	19	18	17	16	15	14	13	12	11	10
Main Antenna	23.96	24.00	23.97	23.98	23.95	/	/	/	/	/	/

Based on the most conservative measured triggering distance of 15 mm, additional SAR measurements were required at 14 mm from the left side for the above modes.

Bottom Side

Moving device toward the phantom:

Distance(mm)	10	9	8	7	6	5	4	3	2	1	0
Main Antenna	/	/	/	/	/	20.99	20.96	21.00	20.98	20.95	20.99

Moving device away from the phantom:

Distance(mm)	10	9	8	7	6	5	4	3	2	1	0
Main Antenna	24.00	20.96	23.97	23.99	24.00	/	/	/	/	/	/

Based on the most conservative measured triggering distance of 5 mm, additional SAR measurements were required at 4 mm from the bottom side for the above modes.

ANNEX M: Accreditation Certificate

Accredited Laboratory

A2LA has accredited

SHENZHEN ACADEMY OF INFORMATION AND COMMUNICATIONS TECHNOLOGY

Shenzhen, People's Republic of China

for technical competence in the field of

Electrical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (*refer to joint ISO-ILAC-IAF Communiqué dated April 2017*).

Presented this 30th day of October 2019.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 4353.01
Valid to November 30, 2021

For the tests to which this accreditation applies, please refer to the laboratory's Electrical Scope of Accreditation.

*****END OF REPORT*****