



#### Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5300 MHz/Zoom Scan,

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

Reference Value = 80.15 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 28.9 W/kg

SAR(1 g) = 8.25 W/kg; SAR(10 g) = 2.35 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 69.1%

Maximum value of SAR (measured) = 19.1 W/kg

### Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5500 MHz/Zoom Scan,

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

Reference Value = 80.07 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 33.6 W/kg

SAR(1 g) = 8.80 W/kg; SAR(10 g) = 2.47 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 66.4%

Maximum value of SAR (measured) = 20.9 W/kg

## Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5600 MHz/Zoom Scan,

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

Reference Value = 80.82 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 30.8 W/kg

SAR(1 g) = 8.45 W/kg; SAR(10 g) = 2.40 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 67.5%

Maximum value of SAR (measured) = 19.9 W/kg

## Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5750 MHz/Zoom Scan,

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

Reference Value = 78.22 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 31.8 W/kg

SAR(1 g) = 8.18 W/kg; SAR(10 g) = 2.30 W/kg

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 65.8%

Maximum value of SAR (measured) = 19.5 W/kg

## Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5800 MHz/Zoom Scan,

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

Reference Value = 77.53 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 31.9 W/kg

SAR(1 g) = 8.19 W/kg; SAR(10 g) = 2.31 W/kg

Smallest distance from peaks to all points 3 dB below = 7.4 mm

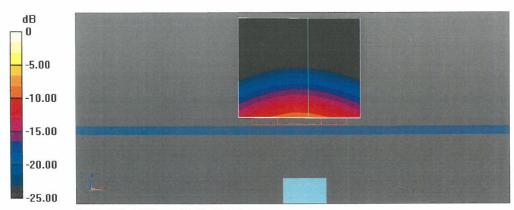
Ratio of SAR at M2 to SAR at M1 = 65.4%

Maximum value of SAR (measured) = 19.2 W/kg

Certificate No: D5GHzV2-1060\_Jun21 Page 10 of 13





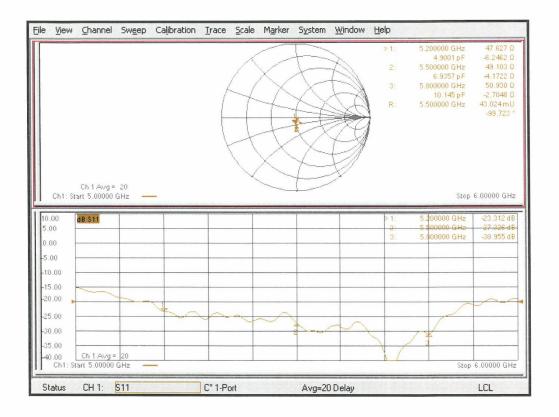


0 dB = 20.9 W/kg = 13.20 dBW/kg





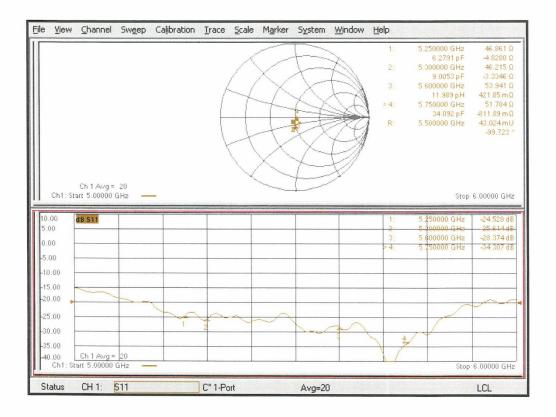
#### Impedance Measurement Plot for Head TSL (5200, 5500, 5800 MHz)







#### Impedance Measurement Plot for Head TSL (5250, 5300, 5600, 5750 MHz)



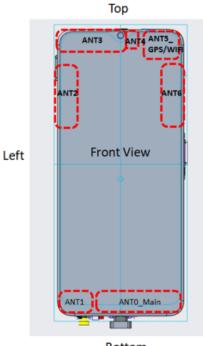




## **ANNEX I SAR Sensor Triggering Data Summary**

Right

#### SAR sensor trigger distance



Distance test (mm)	PHx	PH0	PH1	PH2	PH4
	CSx	CS0	CS2	CS4	CS7
	ANTx	ANTO	ANT1	ANT3	ANT5
Front		17	17	17	17
Back		16	16	16	16
Top		NA	NA	12	12
Bottom		16	15	NA	NA
Left		NA	20	20	NA
Right		14	NA	NA	14

**Bottom** 

Per FCC KDB Publication 616217 D04v01r02, this device was tested by the manufacturer to determine the proximity sensor triggering distances for the rear and bottom edge of the device. The measured output power within  $\pm 5$ mm of the triggering points (or until touching the phantom) is included for rear and each applicable edge.

To ensure all production units are compliant it is necessary to test SAR at a distance 1mm less than the smallest distance from the device and SAR phantom (determined from these triggering tests according to the KDB 616217 D04v01r02) with the device at maximum output power without power reduction. These SAR tests are included in addition to the SAR tests for the device touching the SAR phantom, with reduced power.

We tested the power and got the different proximity sensor triggering distances for front/rear /bottom/right edge for ANT0. The manufacturer has declared 17mm/16mm/16mm/14mm is the most conservative triggering distance for ANT0 with front/rear/bottom/right edge. So base on the most conservative triggering distance of 17mm/16mm/16mm/14mm, additional SAR measurements were required at 16mm/15mm/15mm/13mm from the highest SAR position between front/rear/bottom/right edge of ANT0.

We tested the power and got the different proximity sensor triggering distances for front/rear





/bottom/left edge for ANT1. The manufacturer has declared 17mm/16mm/15mm/20mm is the most conservative triggering distance for ANT1 with front/rear/bottom/left edge. So base on the most conservative triggering distance of 17mm/16mm/15mm/20mm, additional SAR measurements were required at 16mm/15mm/14mm/19mm from the highest SAR position between front/rear/bottom/left edge of ANT1.

We tested the power and got the different proximity sensor triggering distances for front/rear /top/left edge for ANT3. The manufacturer has declared 17mm/16mm/12mm/20mm is the most conservative triggering distance for ANT3 with front/rear/top/left edge. So base on the most conservative triggering distance of 17mm/16mm/12mm/20mm, additional SAR measurements were required at 16mm/15mm/11mm/19mm from the highest SAR position between front/rear/top/left edge of ANT3.

We tested the power and got the different proximity sensor triggering distances for front/rear /top/right edge for ANT5. The manufacturer has declared 17mm/16mm/12mm/14mm is the most conservative triggering distance for ANT5 with front/rear/top/right edge. So base on the most conservative triggering distance of 17mm/16mm/12mm/14mm, additional SAR measurements were required at 16mm/15mm/11mm/13mm from the highest SAR position between front/rear/top/right edge of ANT5.





#### ANT0:

#### **Front Edge**

Moving device toward the phantom:

		-	senso	r near or	far(KDB 6	516217 6.2	2.6)				
Distance [mm] 22 21 20 19 18 17 16 15 14 13 12											
Main antenna	Far	Far	Far	Far	Far	Near	Near	Near	Near	Near	Near

Moving device away from the phantom:

			senso	r near or	far(KDB	616217 6.2	2.6)				
Distance [mm] 12 13 14 15 16 17 18 19 20 21 22											
Main antenna											

#### Rear Edge

Moving device toward the phantom:

			senso	r near or	far(KDB 6	16217 6.2	2.6)				
Distance [mm] 21 20 19 18 17 16 15 14 13 12 11											
Main antenna											

Moving device away from the phantom:

			senso	r near or	far(KDB 6	16217 6.2	2.6)				
Distance [mm] 11 12 13 14 15 16 17 18 19 20 21											
Main antenna	Near	Near	Near	Near	Near	Near	Far	Far	Far	Far	Far

#### **Bottom Edge**

Moving device toward the phantom:

		. ш. т. р.									
			senso	r near or	far(KDB 6	316217 6.3	2.6)				
Distance [mm] 21 20 19 18 17 16 15 14 13 12 11											
Main antenna											

Moving device away from the phantom:

			senso	r near or	far(KDB 6	16217 6.2	2.6)				
Distance [mm] 11 12 13 14 15 16 17 18 19 20 21											
Main antenna											

#### **Right Edge**

Moving device toward the phantom:

			senso	r near or	far(KDB 6	16217 6.2	2.6)				
Distance [mm]         19         18         17         16         15         14         13         12         11         10         9											
Main antenna	Far	Far	Far	Far	Far	Near	Near	Near	Near	Near	Near

			- p								
	·	·	senso	r near or	far(KDB 6	16217 6.2	2.6)		·		
Distance [mm] 9 10 11 12 13 14 15 16 17 18 19											
Main antenna											





# ANT1: Front Edge

Moving device toward the phantom:

			senso	r near or	far(KDB 6	16217 6.2	2.6)				
Distance [mm] 22 21 20 19 18 17 16 15 14 13 12											
Main antenna	Far	Far	Far	Far	Far	Near	Near	Near	Near	Near	Near

Moving device away from the phantom:

			senso	r near or	far(KDB	616217 6.2	2.6)				
Distance [mm] 12 13 14 15 16 17 18 19 20 21 22											
Main antenna	Near	Near	Near	Near	Near	Near	Far	Far	Far	Far	Far

#### Rear Edge

Moving device toward the phantom:

			senso	r near or	far(KDB 6	16217 6.2	2.6)				
Distance [mm] 21 20 19 18 17 16 15 14 13 12 11											
Main antenna											

Moving device away from the phantom:

			•								
			senso	r near or	far(KDB 6	16217 6.2	2.6)				
Distance [mm]	11	12	13	14	15	16	17	18	19	20	21
Main antenna	Near	Near	Near	Near	Near	Near	Far	Far	Far	Far	Far

#### **Bottom Edge**

Moving device toward the phantom:

		. ш. т. р.										
			senso	r near or	far(KDB 6	616217 6.2	2.6)					
Distance [mm]												
Main antenna	Far	Far	Far	Far	Far	Near	Near	Near	Near	Near	Near	

Moving device away from the phantom:

	sensor near or far(KDB 616217 6.2.6)           Distance [mm]         10         11         12         13         14         15         16         17         18         19         20										
Distance [mm]	10	11	12	13	14	15	16	17	18	19	20
Main antenna	Near	Near	Near	Near	Near	Near	Far	Far	Far	Far	Far

#### Left Edge

Moving device toward the phantom:

			senso	r near or	far(KDB 6	16217 6.2	2.6)					
Distance [mm]	Distance [mm] 25 24 23 22 21 20 19 18 17 16 15											
Main antenna	Far	Far	Far	Far	Far	Near	Near	Near	Near	Near	Near	

			-								
		·	senso	r near or	far(KDB 6	16217 6.2	2.6)		·	·	
Distance [mm]	15	16	17	18	19	20	21	22	23	24	25
Main antenna	Near	Near	Near	Near	Near	Near	Far	Far	Far	Far	Far





#### ANT3:

#### **Front Edge**

Moving device toward the phantom:

			senso	r near or	far(KDB 6	16217 6.2	2.6)				
Distance [mm]	22	21	20	19	18	17	16	15	14	13	12
Main antenna	Far	Far	Far	Far	Far	Near	Near	Near	Near	Near	Near

Moving device away from the phantom:

			senso	r near or	far(KDB	616217 6.2	2.6)				
Distance [mm]	12	13	14	15	16	17	18	19	20	21	22
Main antenna	Near	Near	Near	Near	Near	Near	Far	Far	Far	Far	Far

#### Rear Edge

Moving device toward the phantom:

			senso	r near or	far(KDB 6	16217 6.2	2.6)				
Distance [mm]											
Main antenna	Far	Far	Far	Far	Far	Near	Near	Near	Near	Near	Near

Moving device away from the phantom:

			senso	r near or	far(KDB 6	16217 6.2	2.6)				
Distance [mm]	11	12	13	14	15	16	17	18	19	20	21
Main antenna	Near	Near	Near	Near	Near	Near	Far	Far	Far	Far	Far

#### **Top Edge**

Moving device toward the phantom:

		ч ч. т.										
			senso	r near or	far(KDB 6	616217 6.2	2.6)					
Distance [mm]	sensor near or far(KDB 616217 6.2.6) tance [mm]											
Main antenna	Far	Far	Far	Far	Far	Near	Near	Near	Near	Near	Near	

Moving device away from the phantom:

	sensor near or far(KDB 616217 6.2.6)           Distance [mm]         7         8         9         10         11         12         13         14         15         16         17										
Distance [mm]	7	8	9	10	11	12	13	14	15	16	17
Main antenna	Near	Near	Near	Near	Near	Near	Far	Far	Far	Far	Far

#### Left Edge

Moving device toward the phantom:

			senso	r near or	far(KDB 6	16217 6.2	2.6)					
Distance [mm]	Stance [mm] 25 24 23 22 21 20 19 18 17 16 15											
Main antenna	Far	Far	Far	Far	Far	Near	Near	Near	Near	Near	Near	

			-										
sensor near or far(KDB 616217 6.2.6)													
Distance [mm] 15 16 17 18 19 20 21 22 23 24 25													
Main antenna	Near	Near	Near	Near	Near	Near	Far	Far	Far	Far	Far		





#### ANT4/ANT5:

#### **Front Edge**

Moving device toward the phantom:

sensor near or far(KDB 616217 6.2.6)													
Distance [mm] 22 21 20 19 18 17 16 15 14 13 12													
Main antenna	Far	Far	Far	Far	Far	Near	Near	Near	Near	Near	Near		

Moving device away from the phantom:

sensor near or far(KDB 616217 6.2.6)													
Distance [mm] 12 13 14 15 16 17 18 19 20 21 22													
Main antenna Near Near Near Near Near Far Far Far Far Far													

#### Rear Edge

Moving device toward the phantom:

	sensor near or far(KDB 616217 6.2.6)													
Distance [mm] 21 20 19 18 17 16 15 14 13 12 11														
Main antenna Far Far Far Far Near Near Near Near Near Near Near Ne														

Moving device away from the phantom:

	sensor near or far(KDB 616217 6.2.6)													
Distance [mm] 11 12 13 14 15 16 17 18 19 20 21														
Main antenna Near Near Near Near Near Far Far Far Far														

#### Top Edge

Moving device toward the phantom:

sensor near or far(KDB 616217 6.2.6)													
Distance [mm] 17 16 15 14 13 12 11 10 9 8 7													
Main antenna Far Far Far Far Near Near Near Near Near Near Near													

Moving device away from the phantom:

sensor near or far(KDB 616217 6.2.6)													
Distance [mm] 7 8 9 10 11 12 13 14 15 16 17													
Main antenna Near Near Near Near Near Far Far Far Far Far													

#### **Right Edge**

Moving device toward the phantom:

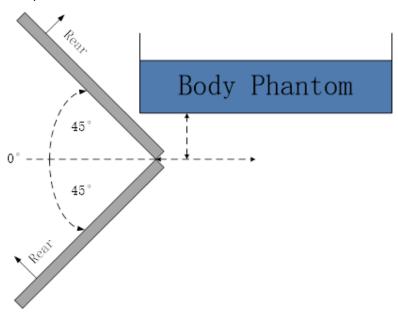
sensor near or far(KDB 616217 6.2.6)													
Distance [mm]         19         18         17         16         15         14         13         12         11         10         9													
Main antenna	Far	Far	Far	Far	Far	Near	Near	Near	Near	Near	Near		

sensor near or far(KDB 616217 6.2.6)														
Distance [mm] 9 10 11 12 13 14 15 16 17 18 19														
Main antenna Near Near Near Near Near Far Far Far Far Far														

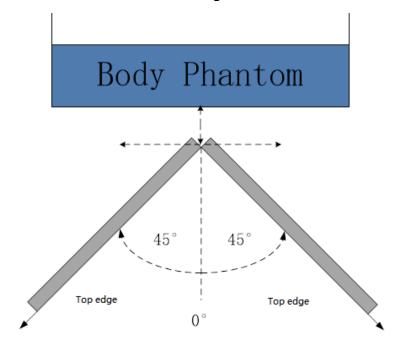




Per FCC KDB Publication 616217 D04v01r02, the influence of table tilt angles to proximity sensor triggering is determined by positioning each edge that contains a transmitting antenna, perpendicular to the flat phantom, at the smallest sensor triggering test distanceby rotating the device around the edge next to the phantom in  $\leq 10^{\circ}$  increments until the tablet is  $\pm 45^{\circ}$  or more from the vertical position at  $0^{\circ}$ .



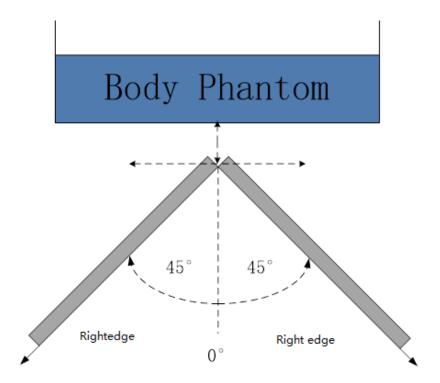
The front/rear edge evaluation



The bottom/top edge evaluation







The left/right edge evaluation

Based on the above evaluation, we come to the conclusion that the sensor triggering is not released and normal maximum output power is not restored within the  $\pm 45^{\circ}$  range at the smallest sensor triggering test distance declared by manufacturer.



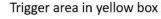


## **ANNEX J P-Sensor Triggering Data Summary**

#### P-Sensor Trigger region

#### Receiver &P-sensor for Head SAR

- 1. The receiver <u>works</u> and the P-Sensor detects the object approaching (50mm)
- 2. The AP monitors the status changes of the handset and P-Sensor, and then performs interrupt processing with the defined keyValue
- 3. The upper layer according to the <u>KeyValue</u>, to execute (send AT instruction) to reduce/restore the antenna power.





Per FCC KDB Publication 616217 D04v01r02, this device was tested by the manufacturer to determine the proximity sensor triggering distances for the rear and bottom edge of the device. The measured output power within  $\pm 5$ mm of the triggering points (or until touching the phantom) is included for rear and each applicable edge.

To ensure all production units are compliant it is necessary to test SAR at a distance 1mm less than the smallest distance from the device and SAR phantom (determined from these triggering tests according to the KDB 616217 D04v01r02) with the device at maximum output power without power reduction. These SAR tests are included in addition to the SAR tests for the device touching the SAR phantom, with reduced power.





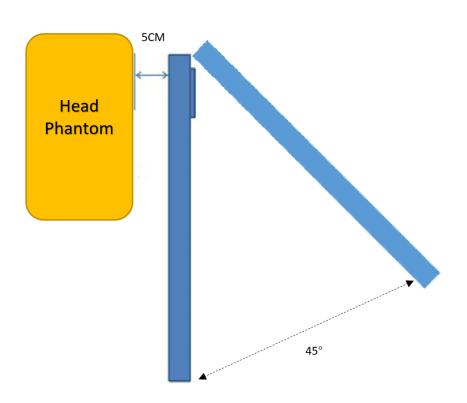
Front Edge

Moving device toward the phantom:

sensor near or far(KDB 616217 6.2.6)													
Distance [mm] 55 54 53 52 51 50 49 48 47 48 47													
Main antenna Far Far Far Far Near Near Near Near Near Near Near													

Moving device away from the phantom:

sensor near or far(KDB 616217 6.2.6)													
Distance [mm] 45 46 47 48 49 50 51 52 53 54 55													
Main antenna Near Near Near Near Near Far Far Far Far													



The front edge evaluation





#### **ANNEX K Accreditation Certificate**

United States Department of Commerce National Institute of Standards and Technology



## Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 600118-0

#### **Telecommunication Technology Labs, CAICT**

Beijing China

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

#### **Electromagnetic Compatibility & Telecommunications**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2021-09-29 through 2022-09-30

Effective Dates

STATE OF COMPANY OF CO

For the National Voluntary Laboratory Accreditation Program