7.3 BODY LIQUID MEASUREMENT

Frequency MHz	Relative permittivity (ε_r')		Conductivity (σ) S/m	
	required	measured	required	measured
5200	49.0 ±10 %	PASS	5.30 ±10 %	PASS
5300	48.9 ±10 %		5.42 ±10 %	
5400	48.7 ±10 %	PASS	5.53 ±10 %	PASS
5500	48.6 ±10 %		5.65 ±10 %	
5600	48.5 ±10 %	PASS	5.77 ±10 %	PASS
5800	48.2 ±10 %	PASS	6.00 ±10 %	PASS

7.4 SAR MEASUREMENT RESULT WITH BODY LIQUID

Software	OPENSAR V4
Phantom	SN 20/09 SAM71
Probe	SN 18/11 EPG122
Liquid	Body Liquid Values 5200 MHz: eps' :48.64 sigma : 5.51 Body Liquid Values 5400 MHz: eps' :46.52 sigma : 5.77 Body Liquid Values 5600 MHz: eps' :46.79 sigma : 5.77 Body Liquid Values 5800 MHz: eps' :47.04 sigma : 6.10
Distance between dipole waveguide and liquid	0 mm
Area scan resolution	dx=8mm/dy=8mm
Zoon Scan Resolution	dx=4mm/dy=4m/dz=2mm
Frequency	5200 MHz 5400 MHz 5600 MHz 5800 MHz
Input power	20 dBm
Liquid Temperature	21 °C
Lab Temperature	21 °C
Lab Humidity	45 %

Frequency (MHz)	1 g SAR (W/kg)	10 g SAR (W/kg)
	measured	measured
5200	159.09 (15.91)	56.13 (5.61)
5400	164.56 (16.46)	57.31 (5.73)
5600	172.25 (17.23)	59.72 (5.97)
5800	177.77 (17.78)	61.06 (6.11)

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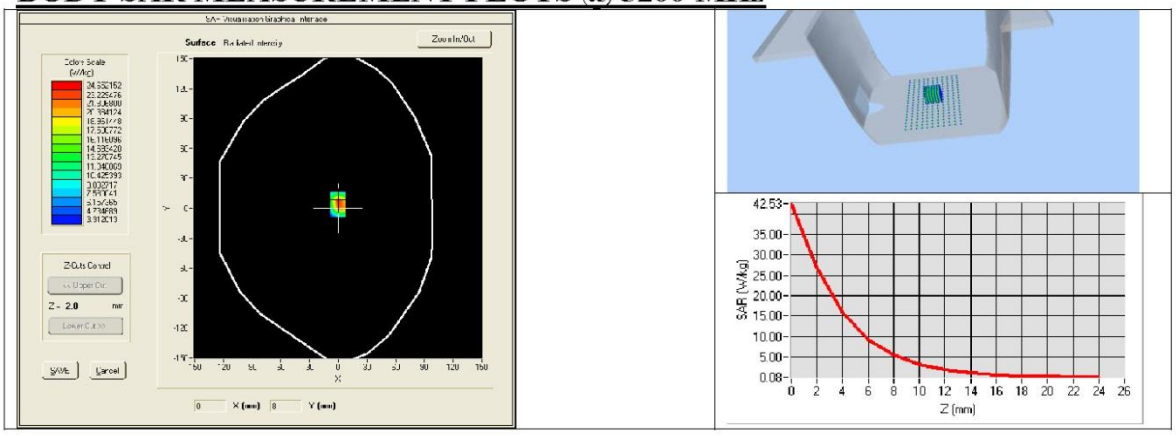
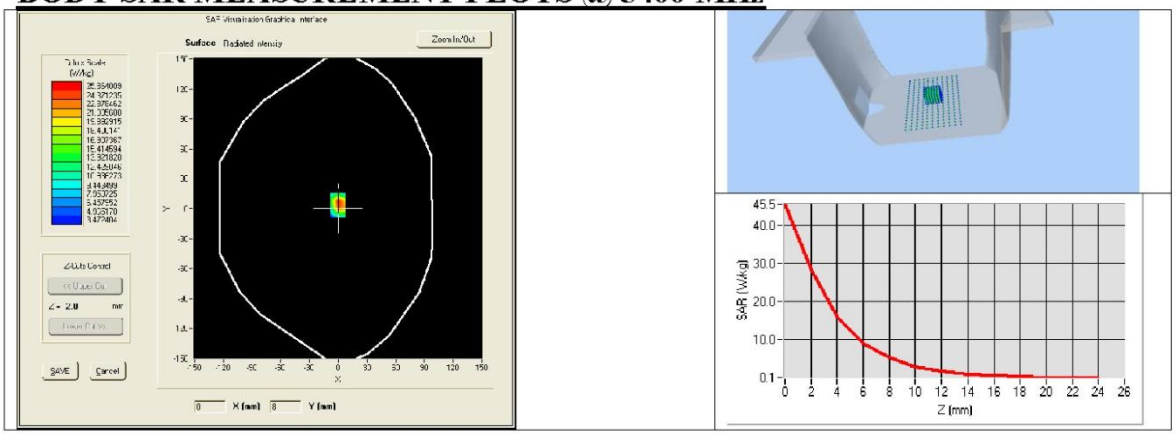
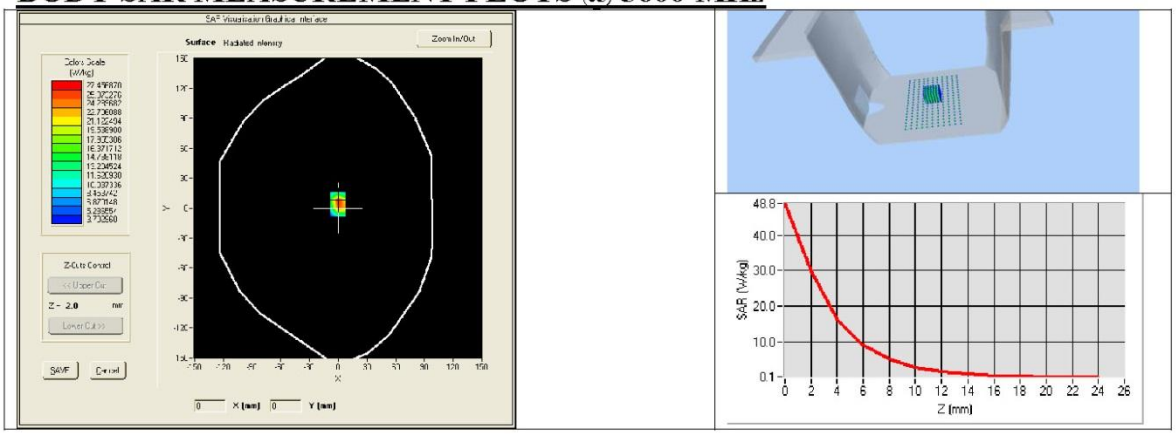
BODY SAR MEASUREMENT PLOTS @ 5200 MHz



BODY SAR MEASUREMENT PLOTS @ 5400 MHz



BODY SAR MEASUREMENT PLOTS @ 5600 MHz



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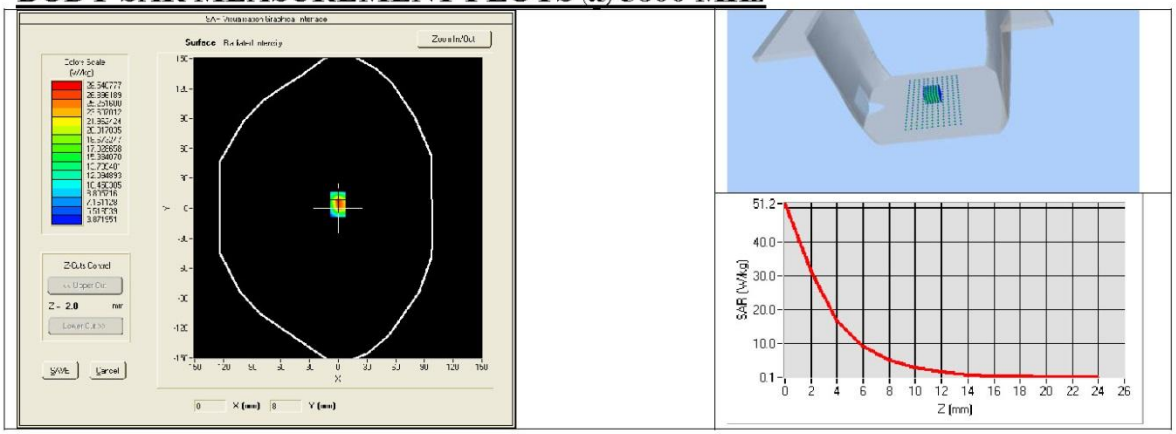
BODY SAR MEASUREMENT PLOTS @ 5800 MHz



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8 LIST OF EQUIPMENT

Equipment Summary Sheet				
Equipment Description	**Manufacturer / Model**	**Identification No.**	**Current Calibration Date**	**Next Calibration Date**
Flat Phantom	MVG	SN-20/09-SAM71	Validated. No cal required.	Validated. No cal required.
COMOSAR Test Bench	Version 3	NA	Validated. No cal required.	Validated. No cal required.
Network Analyzer	Rhode & Schwarz ZVA	SN100132	02/2016	02/2019
Calipers	Carrera	CALIPER-01	01/2017	01/2020
Reference Probe	MVG	EPG122 SN 18/11	10/2017	10/2018
Multimeter	Keithley 2000	1188656	01/2017	01/2020
Signal Generator	Agilent E4438C	MY49070581	01/2017	01/2020
Amplifier	Aethercomm	SN 046	Characterized prior to test. No cal required.	Characterized prior to test. No cal required.
Power Meter	HP E4418A	US38261498	01/2017	01/2020
Power Sensor	HP ECP-E26A	US37181460	01/2017	01/2020
Directional Coupler	Narda 4216-20	01386	Characterized prior to test. No cal required.	Characterized prior to test. No cal required.
Temperature and Humidity Sensor	Control Company	150798832	11/2017	11/2020

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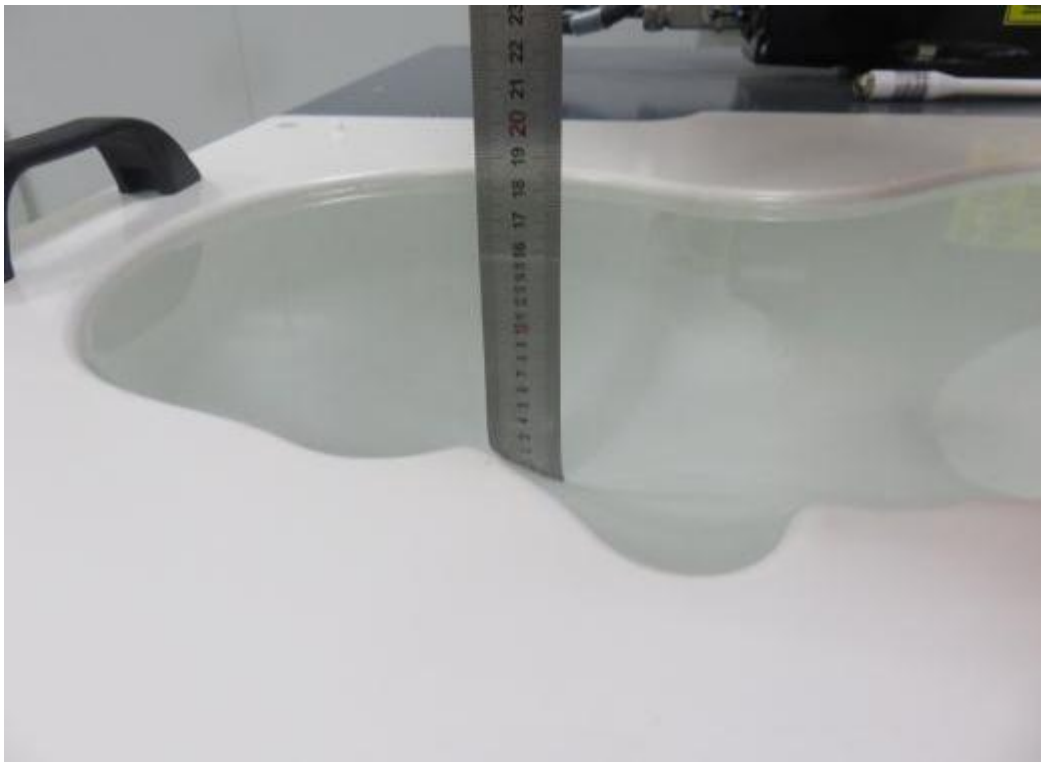
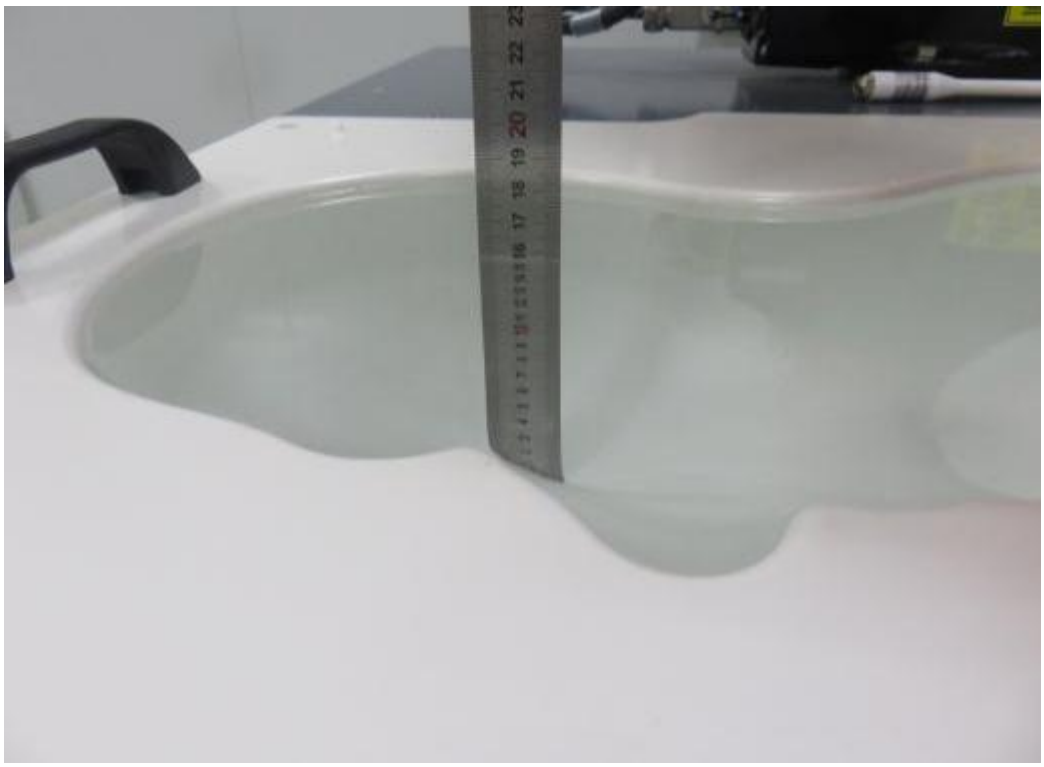
6. EUT TEST PHOTOGRAPHS

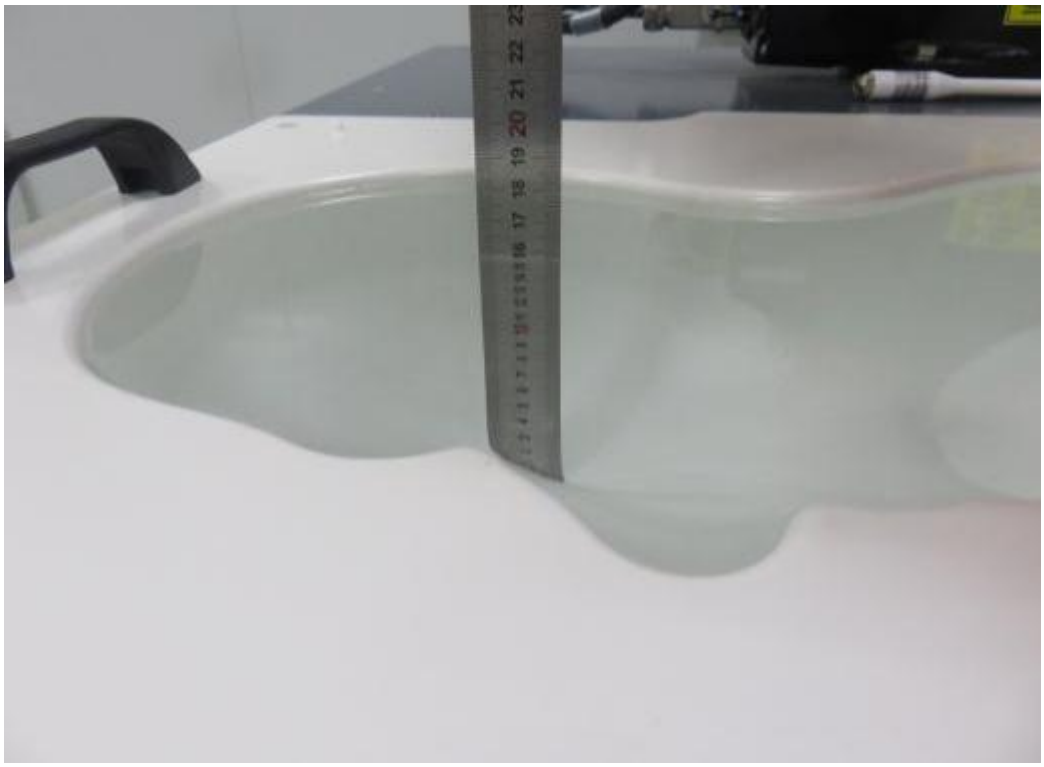
6.1 Photograph of liquid depth



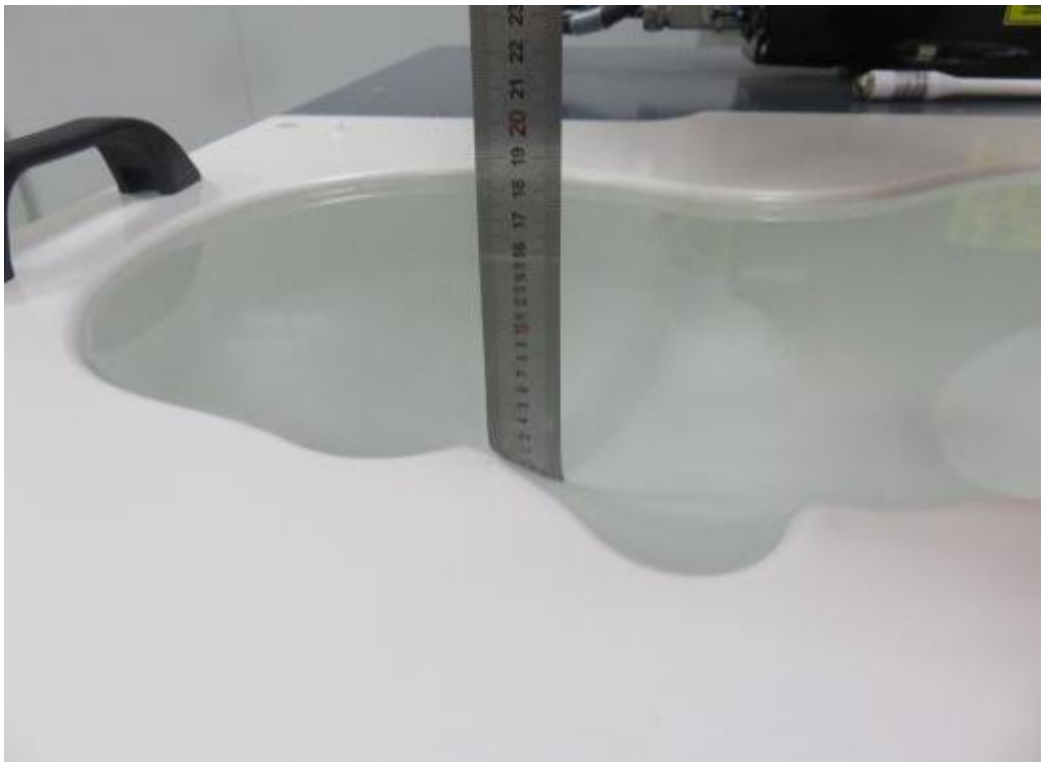
Photograph of the depth in the Head Phantom (750MHz, 15.3cm depth)



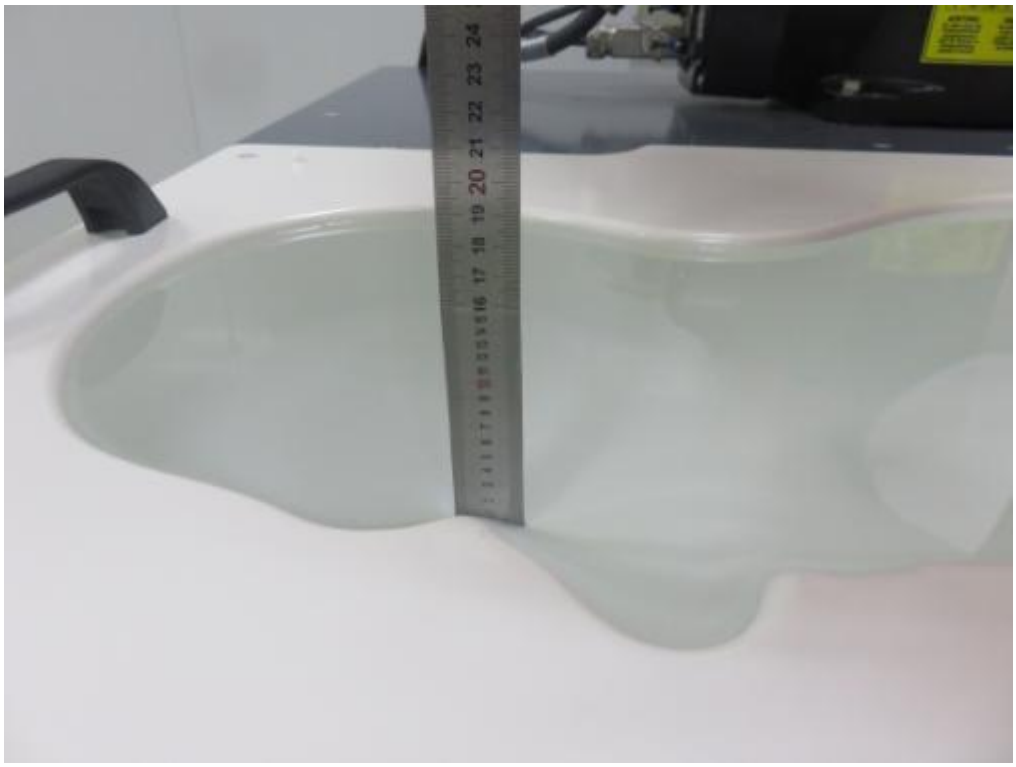
Photograph of the depth in the Head Phantom (835MHz, 15.4cm depth)



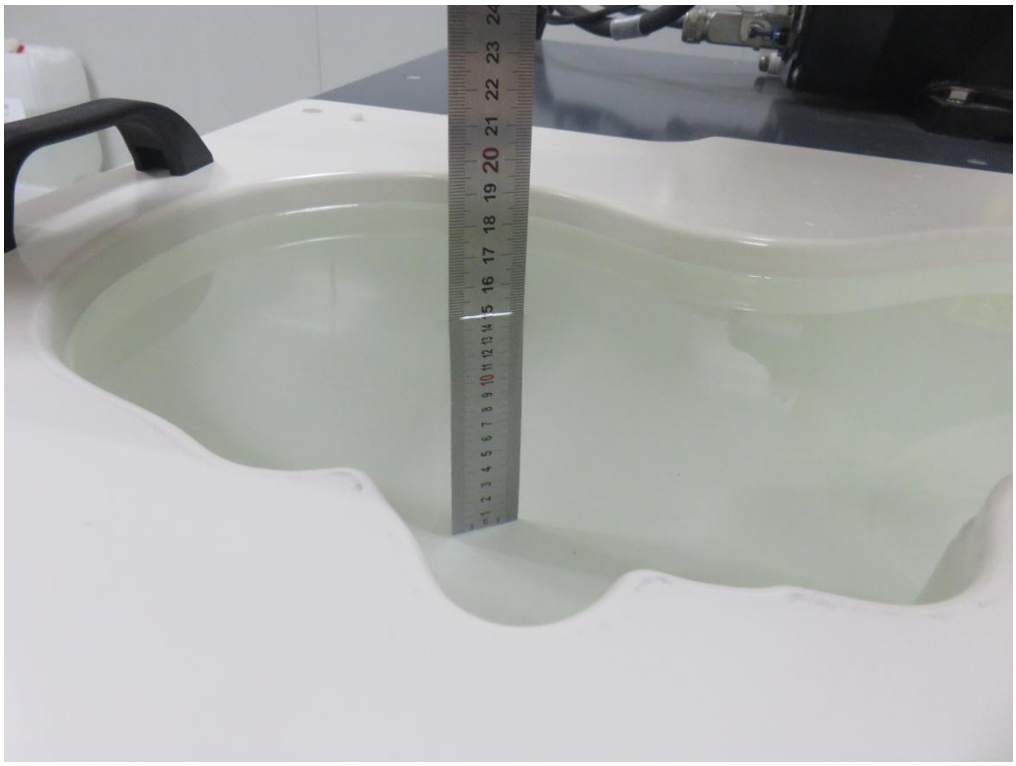
Photograph of the depth in the Head Phantom (1800MHz, 15.3cm depth)



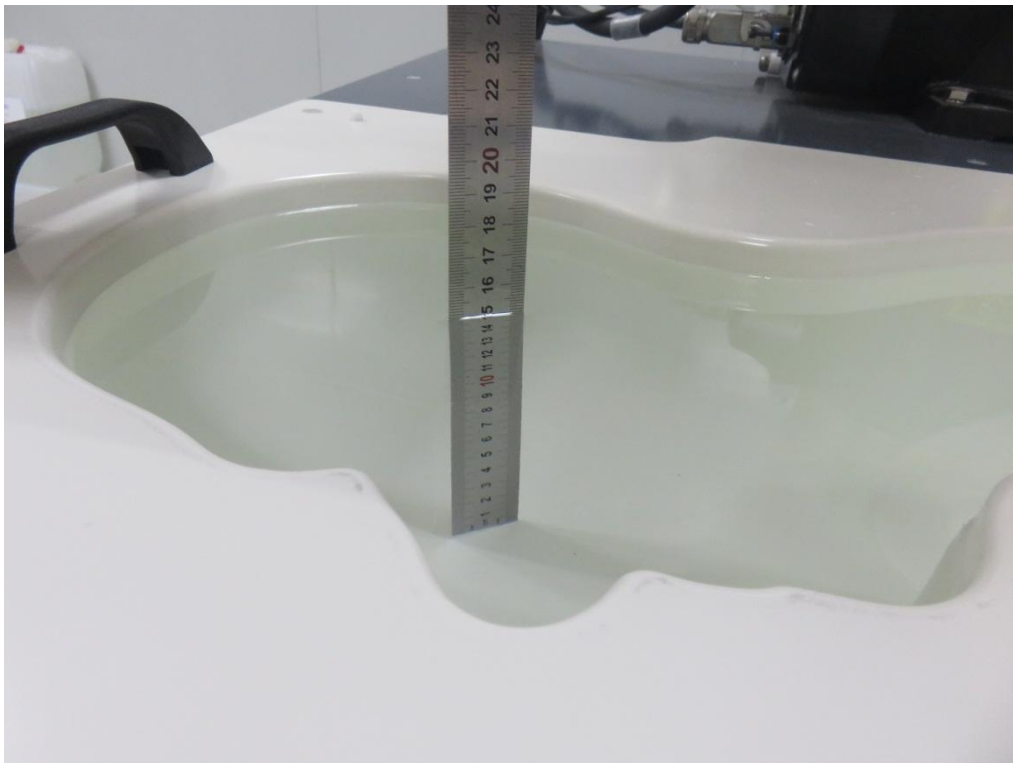
Photograph of the depth in the Head Phantom (1900MHz, 15.2cm depth)



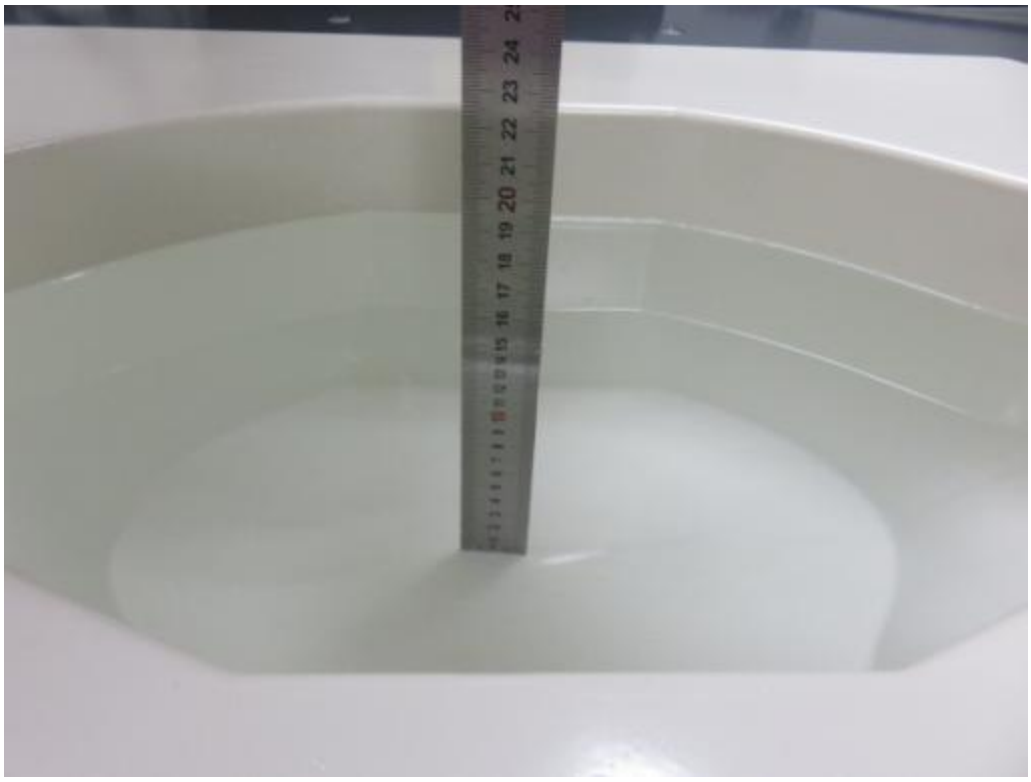
Photograph of the depth in the Head Phantom (2450MHz, 15.3cm depth)



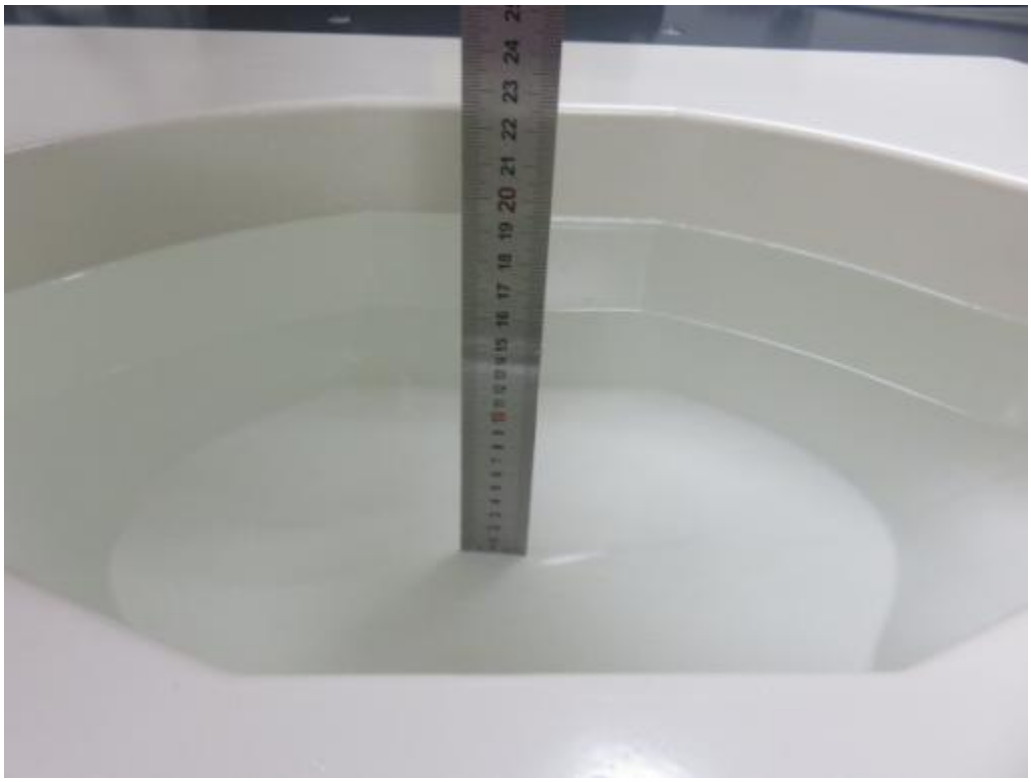
Photograph of the depth in the Head Phantom (2600MHz, 15.5cm depth)



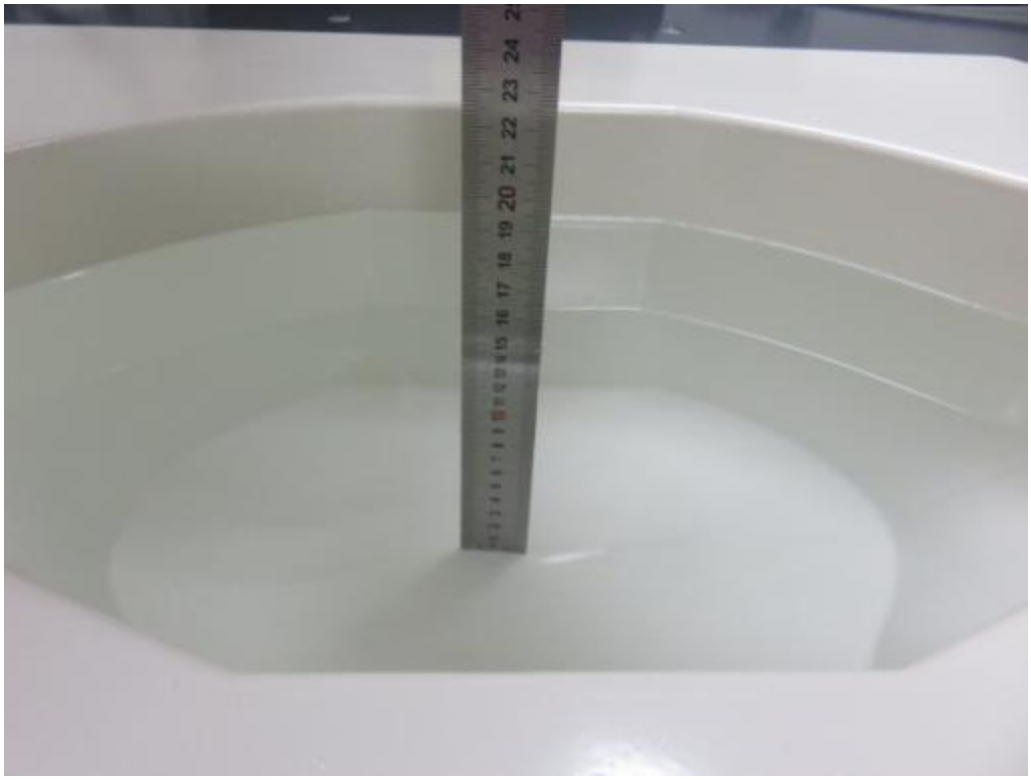
Photograph of the depth in the Head Phantom (5-6GHz, 15.5cm depth)



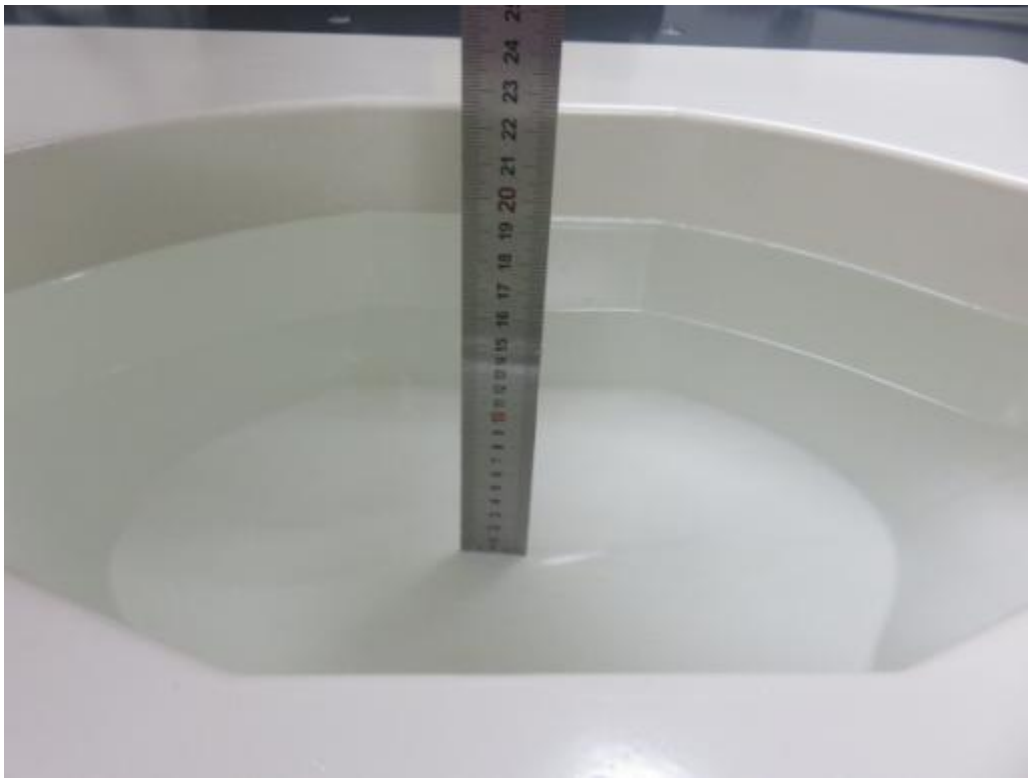
Photograph of the depth in the Body Phantom (750MHz, 15.4cm depth)



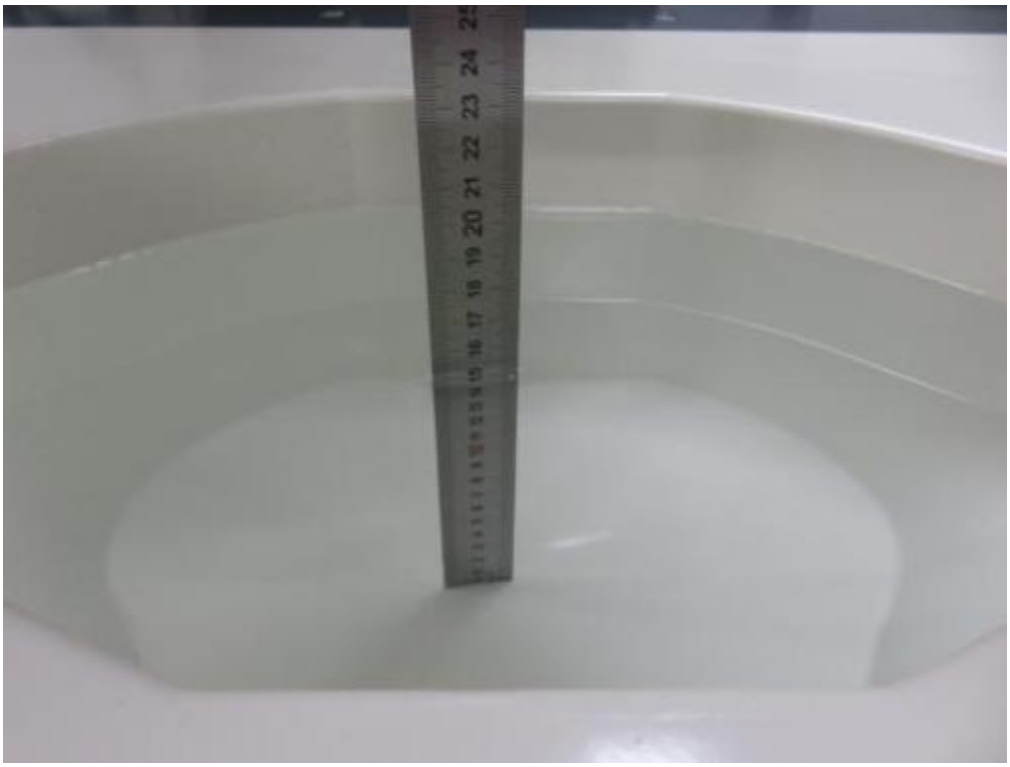
Photograph of the depth in the Body Phantom (835MHz, 15.2cm depth)



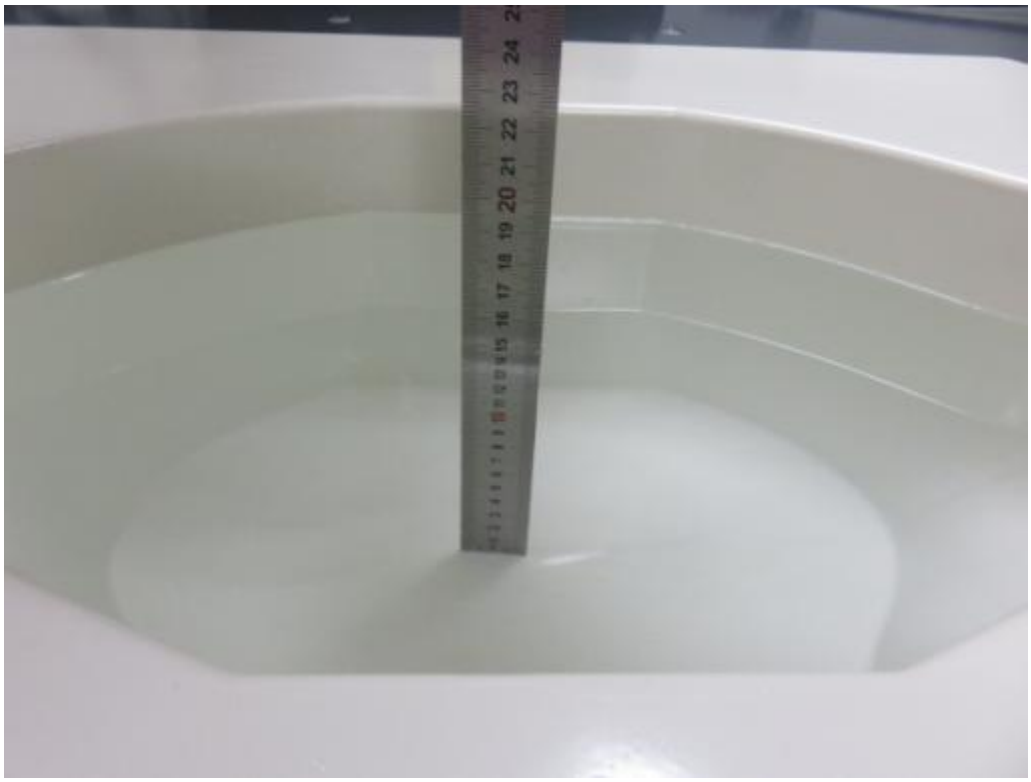
Photograph of the depth in the Body Phantom (1800MHz, 15.2cm depth)



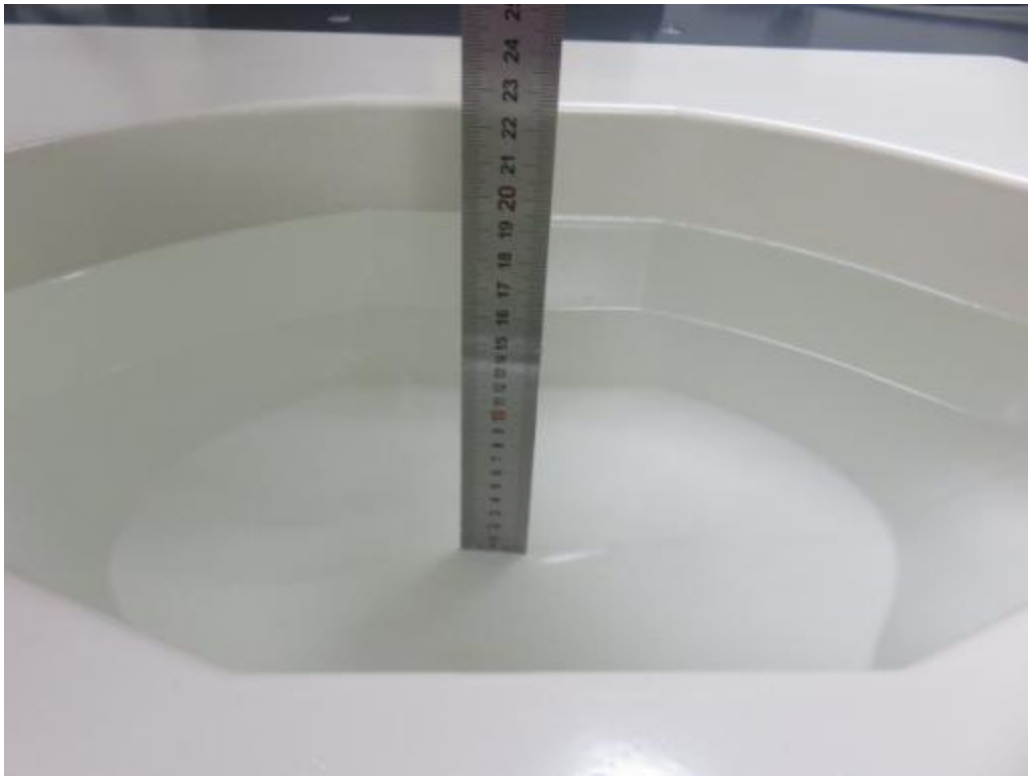
Photograph of the depth in the Body Phantom (1900MHz, 15.4 cm depth)



Photograph of the depth in the Body Phantom (2450MHz, 15.3cm depth)



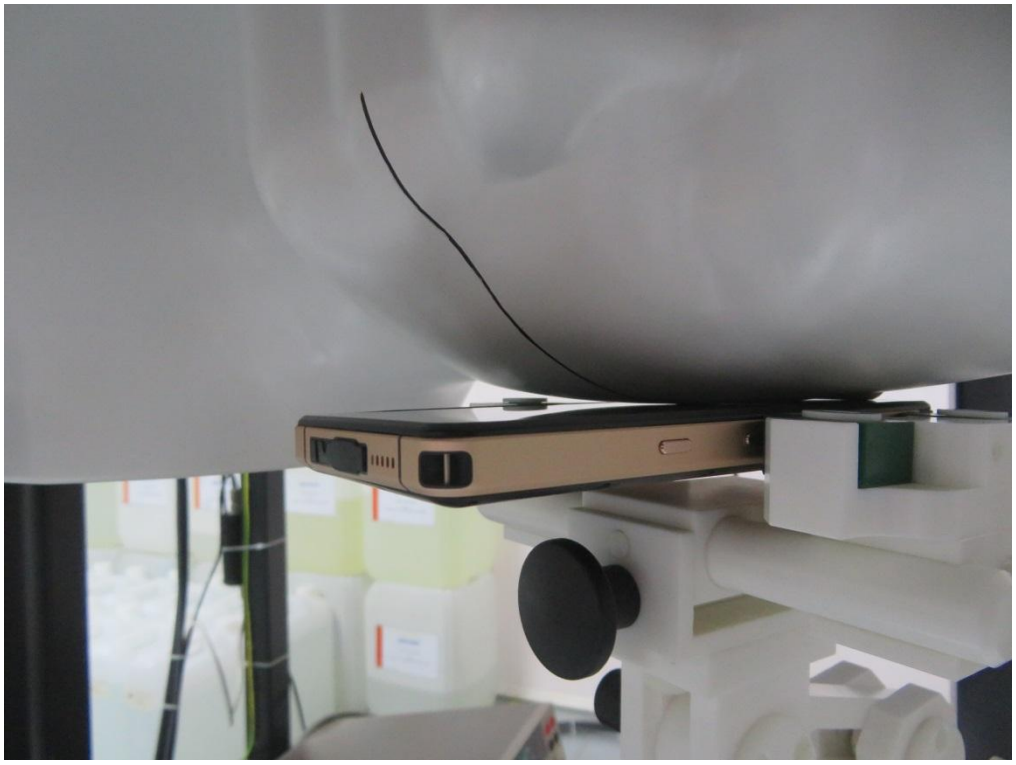
Photograph of the depth in the Body Phantom (2600MHz, 15.2cm depth)



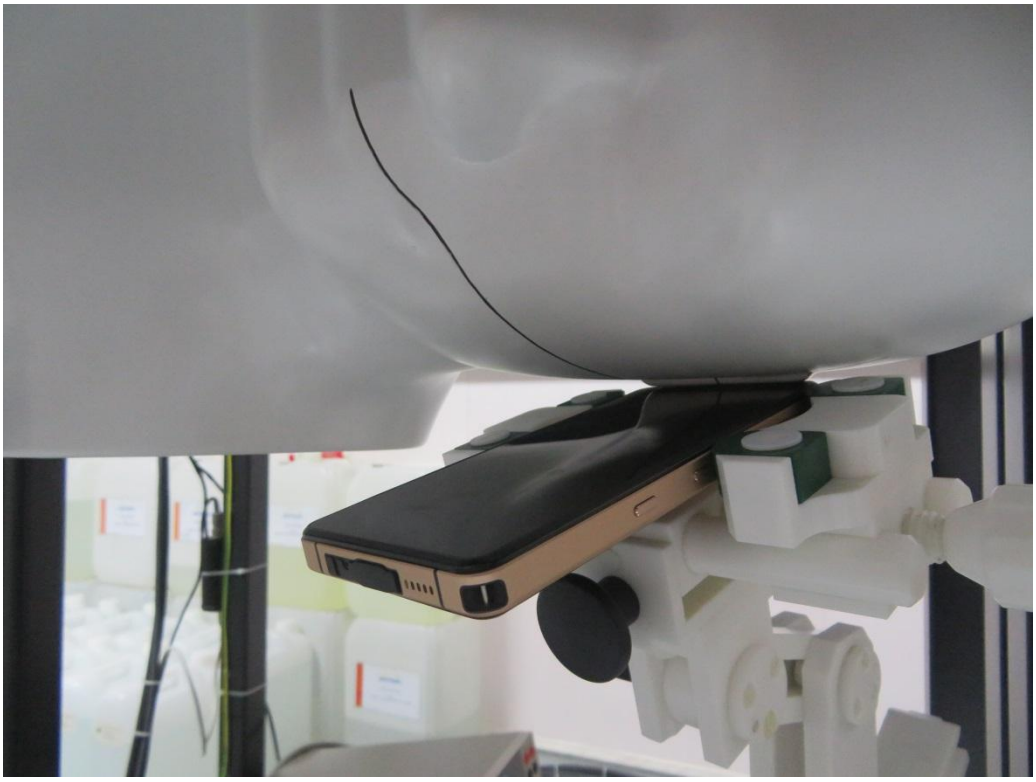
Photograph of the depth in the Body Phantom (5-6GHz, 15.2cm depth)

6.2 Photograph of the Test

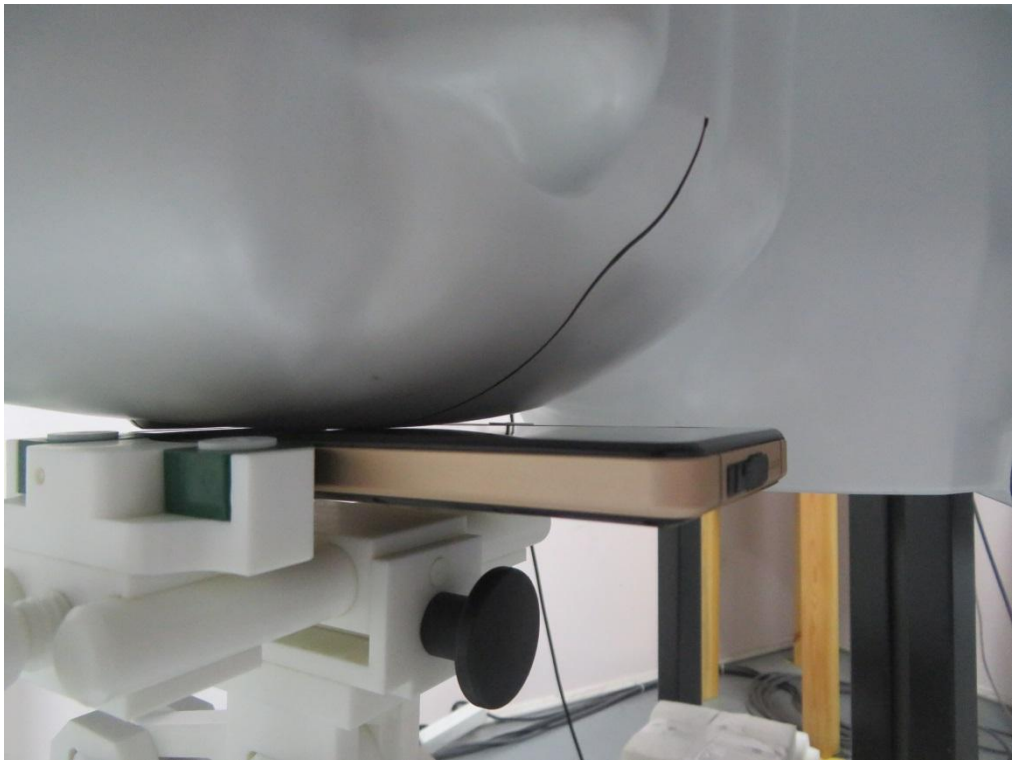
Head Setup Photo (Left Cheek)



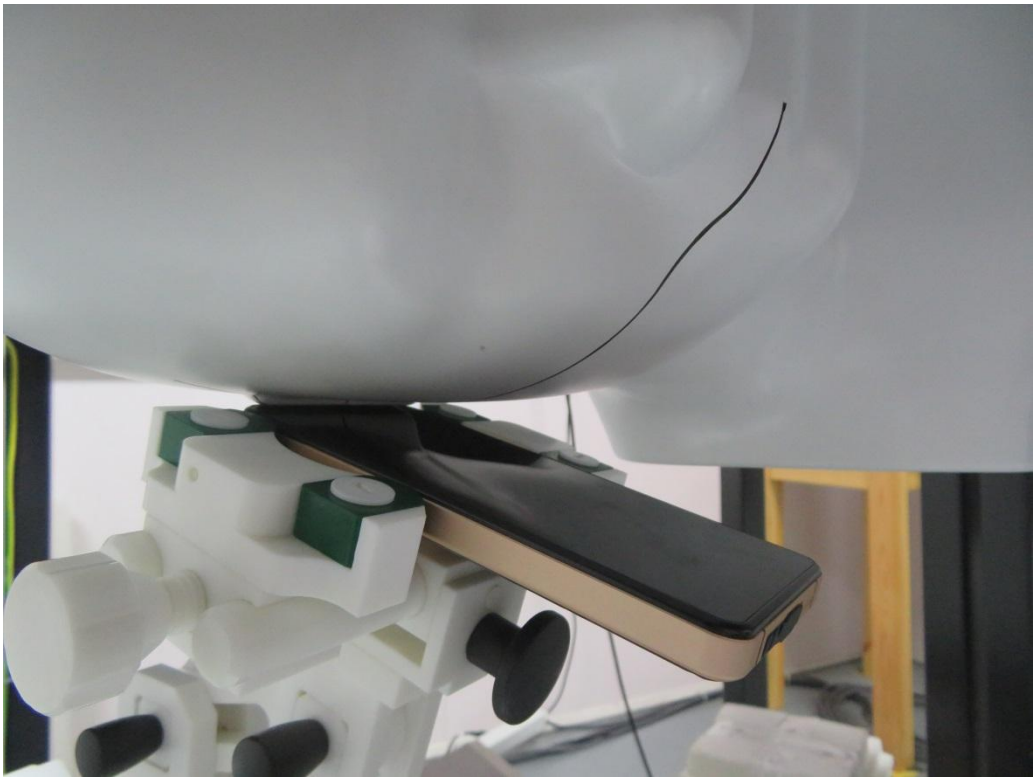
Head Setup Photo (Left Tilt)



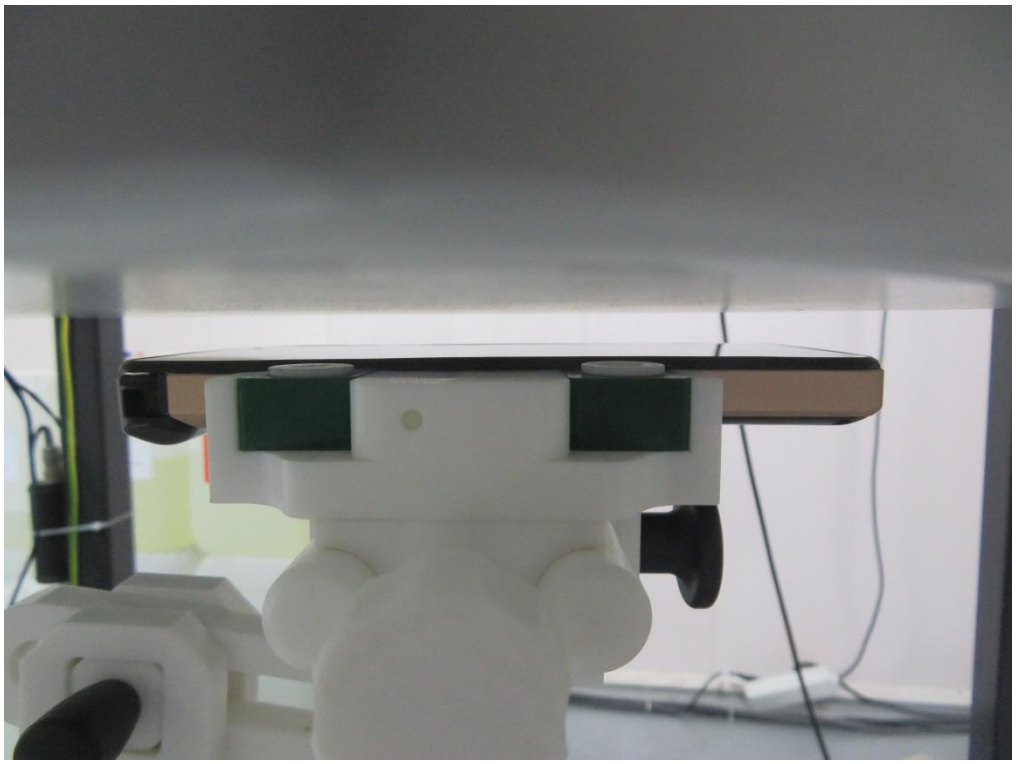
Head Setup Photo (Right Cheek)



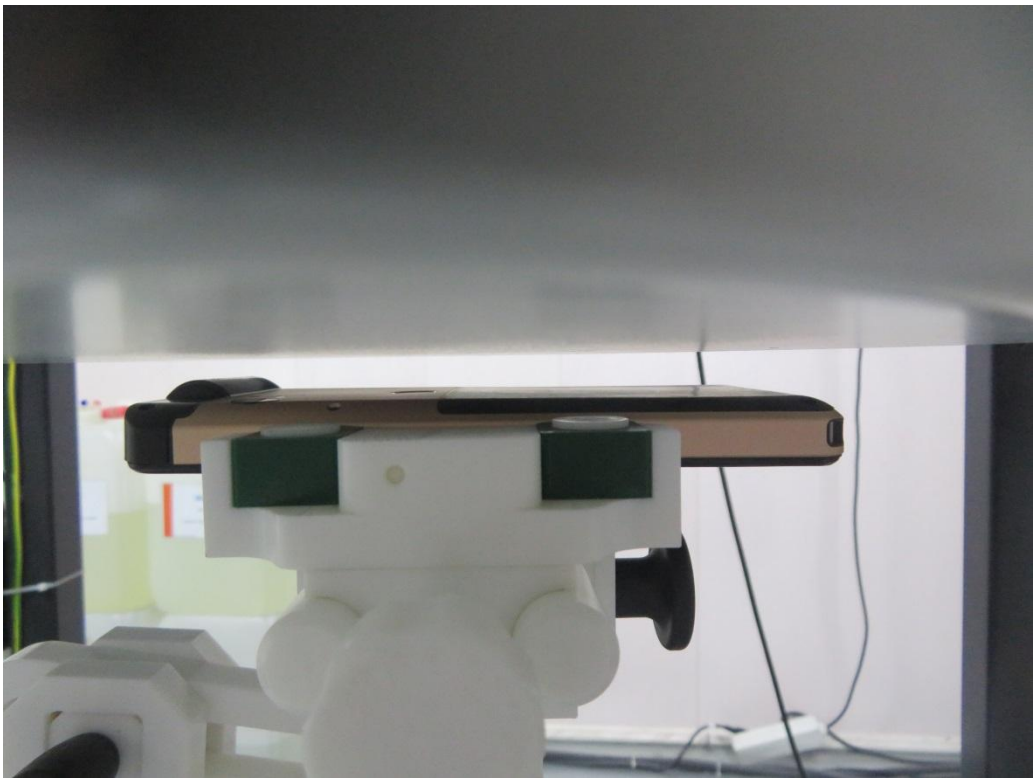
Head Setup Photo (Right Tilt)



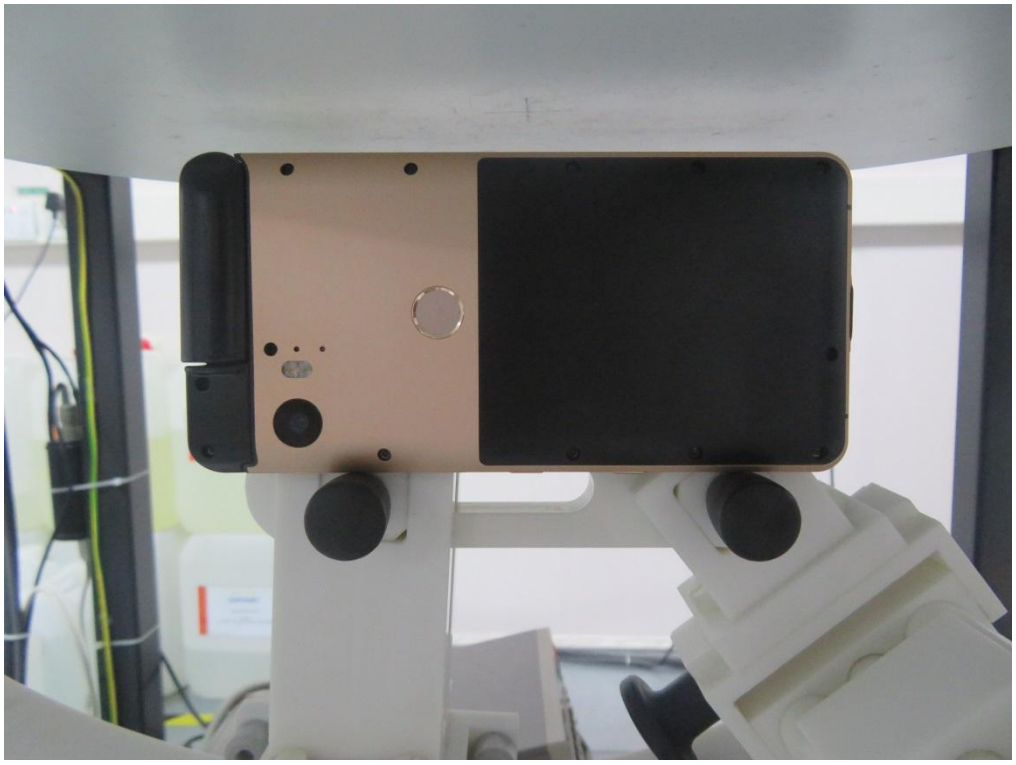
10mm body-worn Back Side Setup Photo (hotspot)



10mm body-worn Front Side Setup Photo (hotspot)

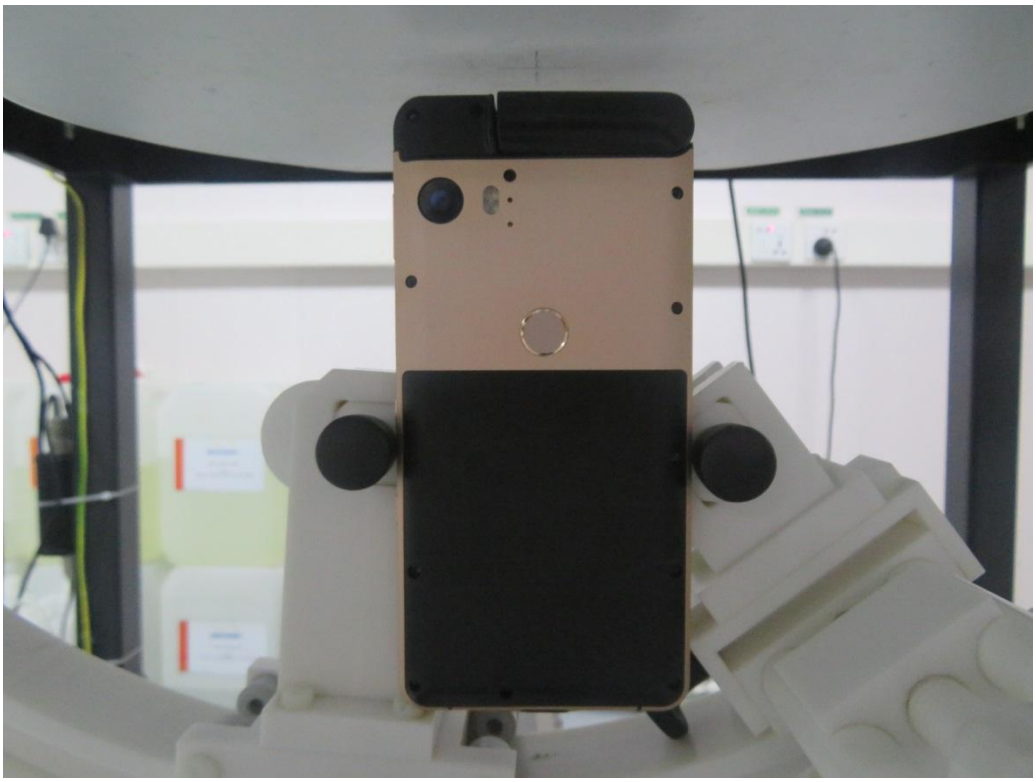


10mm body-worn Left Side Setup Photo (hotspot)

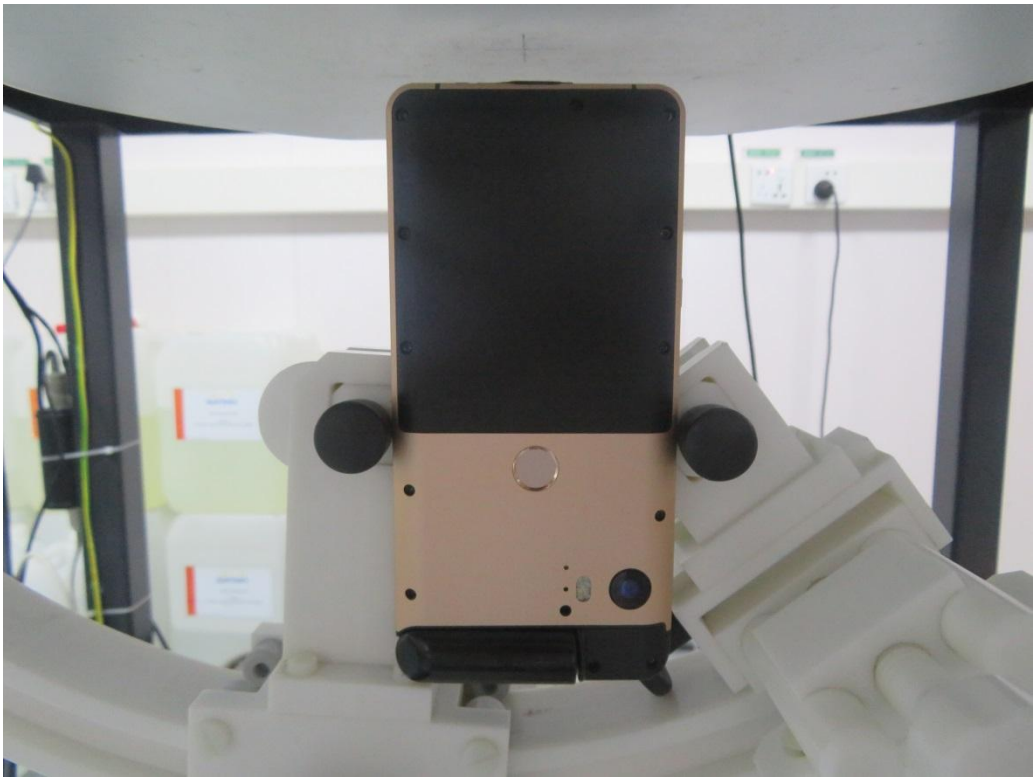


10mm body-worn Right Side Setup Photo (hotspot)

10mm body-worn Top Side Setup Photo (hotspot)



10mm body-worn Bottom Side Setup Photo (hotspot)



7. EUT Photographs

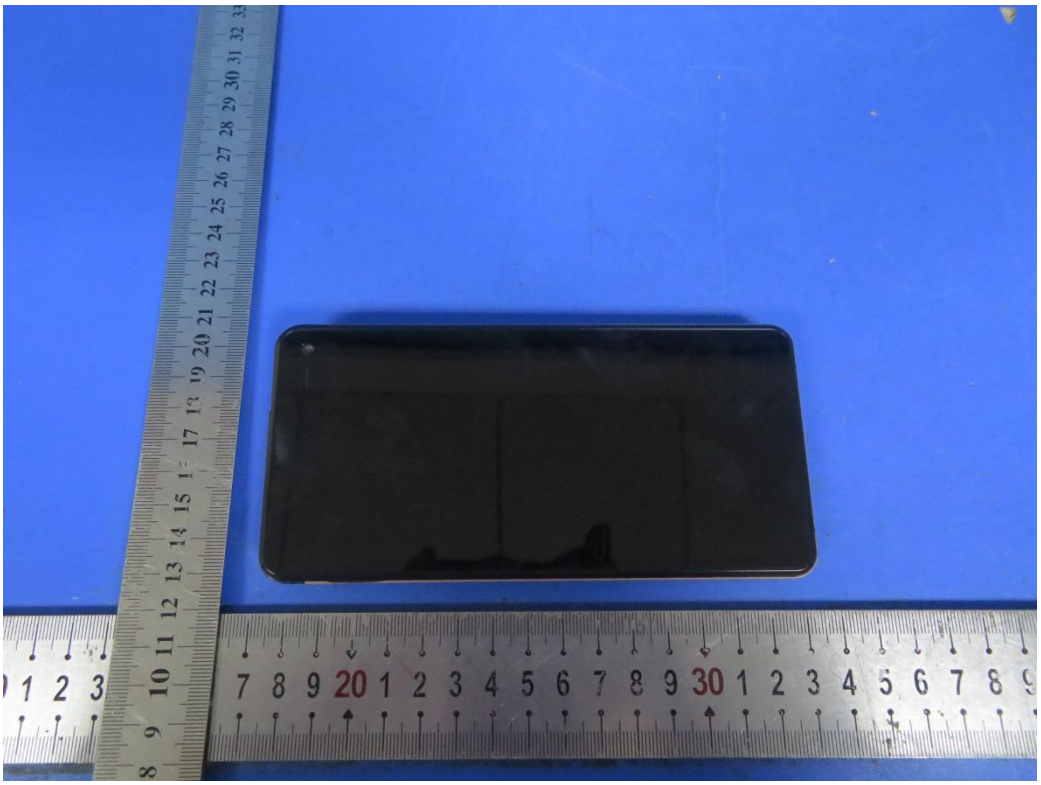


Fig.1

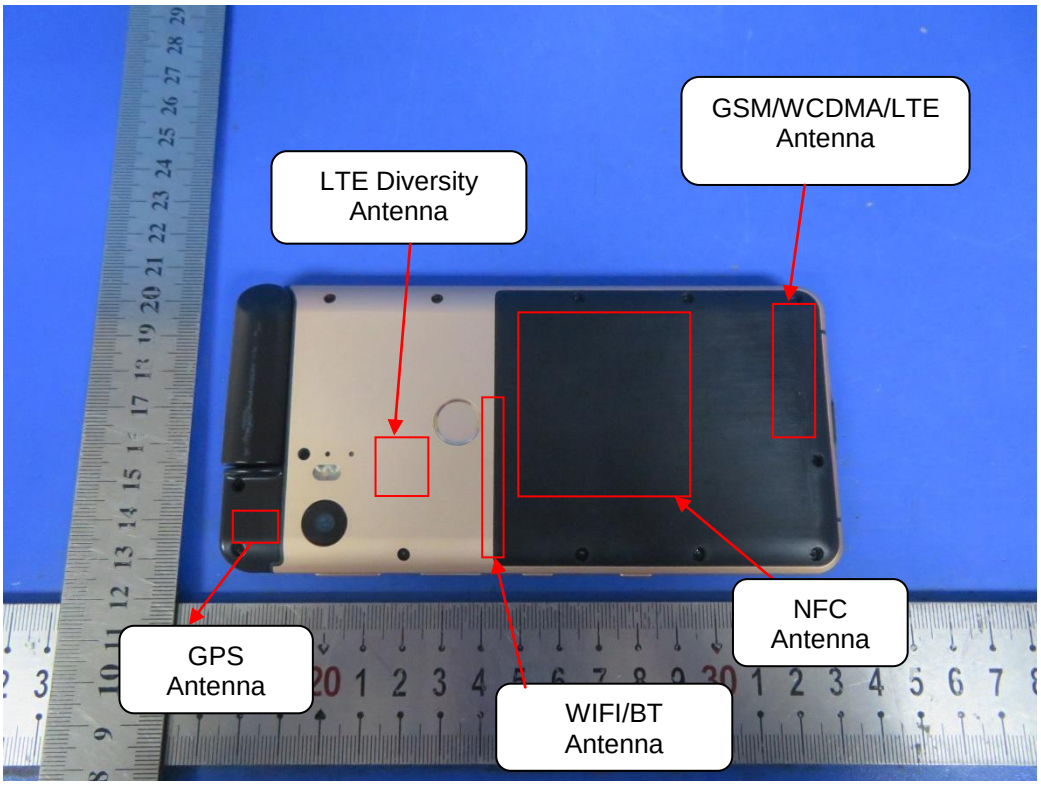


Fig.2

.....The End of Test Report.....