



# **ANNEX A** Graph Results

## **GSM850 Head**

### **Exposure Conditions**

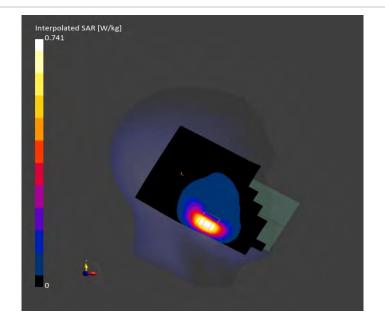
Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
LeftHead,	CHEEK,	GSM 850	1:2.67	848.800,	9.34	0.919	41.22

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date	
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31	
probe tilt) - 2114				

### Scan Setup

Scan Setup			ivieasurement kesu	ITS	
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	120.0 x 210.0	30.0 x 30.0 x 30.0	Date	2025-03-10	2025-03-10
[mm]			psSAR1g [W/kg]	0.603	0.668
Grid Steps [mm]	15.0 x 15.0	5.9 x 5.9 x 1.5	psSAR10g [W/kg]	0.356	0.352
Sensor Surface	3.0	1.4	Power Drift [dB]	-0.04	0.01
[mm]			Power Scaling	Disabled	Disabled
Graded Grid	N/A	Yes	Scaling Factor [dB]		
<b>Grading Ratio</b>	N/A	1.5	TSL Correction	No correction	No correction
MAIA	N/A	N/A	M2/M1 [%]		81.2
Surface	VMS + 6p	VMS + 6p	Dist 3dB Peak		7.5
Detection			[mm]		
Scan Method	Measured	Measured			







# **GSM850 Body**

# **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	EDGE LEFT,	GSM 850	1:2.67	848.800,	9.34	0.919	41.22
HSL	10.00			251			

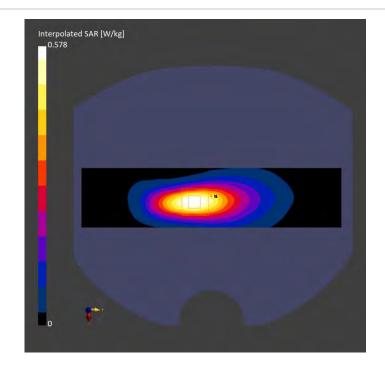
## **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date	
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31	
probe tilt) - 2114				

### **Scan Setup**

	Area Scan	Zoom Scan
Grid Extents	48.0 x 210.0	30.0 x 30.0 x 30.0
[mm]		
Grid Steps [mm]	8.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes
<b>Grading Ratio</b>	N/A	1.5
MAIA	N/A	N/A
Surface	All points	All points
Detection		
Scan Method	Measured	Measured

	Area Scan	Zoom Scan
Date	2025-03-10	2025-03-10
psSAR1g [W/kg]	0.487	0.503
psSAR10g [W/kg]	0.290	0.282
Power Drift [dB]	0.10	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		77.7
Dist 3dB Peak		9.7
[mm]		







# GSM1900 Body

# **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	EDGE	PCS 1900	1:8.3	1850.200,	7.79	1.467	40.548
HSL	воттом,			512			
	10.00						

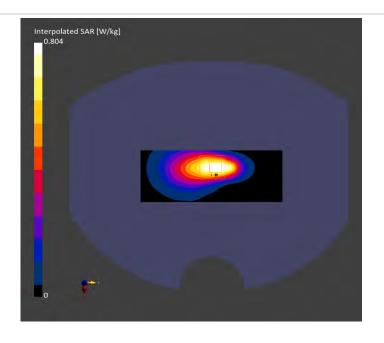
### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31

probe tilt) - 2114

### Scan Setup Measurement Results

ocan octup			measurement nesu.		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	48.0 x 120.0	30.0 x 30.0 x 30.0	Date	2025-03-16-	2025-03-16
[mm]			psSAR1g [W/kg]	0.650	0.690
Grid Steps [mm]	8.0 x 15.0	6.0 x 6.0 x 1.5	psSAR10g [W/kg]	0.340	0.356
Sensor Surface	3.0	1.4	Power Drift [dB]	0.01	0.02
[mm]			Power Scaling	Disabled	Disabled
<b>Graded Grid</b>	N/A	Yes	Scaling Factor [dB]		
<b>Grading Ratio</b>	N/A	1.5	TSL Correction	No correction	No correction
MAIA	N/A	N/A	M2/M1 [%]		81.2
Surface	VMS + 6p	VMS + 6p	Dist 3dB Peak		8.4
Detection			[mm]		
Scan Method	Measured	Measured			







### **GSM1900 Head**

## **Exposure Conditions**

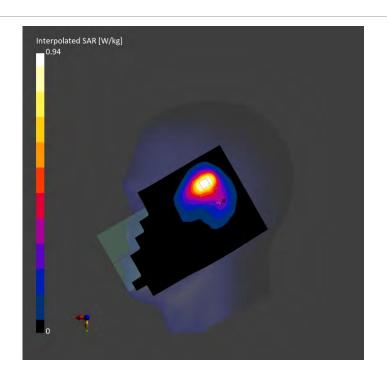
Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
RightHead,	CHEEK,	PCS 1900	1:2.67	1909.800,	7.48	1.359	38.729
HSL	0.00			810			

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

### Scan Setup

Scan Setup			Measurement Resul	ts	
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	120.0 x 210.0	30.0 x 30.0 x 30.0	Date	2025-03-22	2025-03-22
[mm]			psSAR1g [W/kg]	0.731	0.820
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5	psSAR10g [W/kg]	0.394	0.419
Sensor Surface	3.0	1.4	Power Drift [dB]	0.05	-0.01
[mm]			Power Scaling	Disabled	Disabled
Graded Grid	N/A	Yes	Scaling Factor [dB]		
<b>Grading Ratio</b>	N/A	1.5	TSL Correction	No correction	No correction
MAIA	N/A	N/A	M2/M1 [%]		81.8
Surface	VMS + 6p	VMS + 6p	Dist 3dB Peak		9.8
Detection			[mm]		
Scan Method	Measured	Measured			







# WCDMA 1900 Body

# **Exposure Conditions**

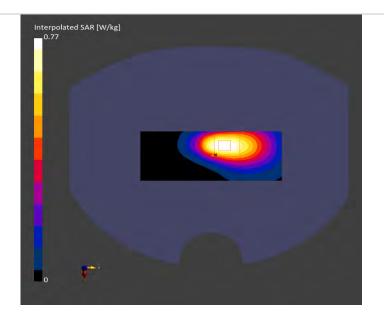
Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	EDGE	Band 2	1:1	1852.400,	7.79	1.461	40.458
HSL	воттом,			9262			
	16.00						

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

### Scan Setup

Scan Scrap			Wicasai Cilicite Nesa	163	
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	48.0 x 120.0	30.0 x 30.0 x 30.0	Date	2025-03-19	2025-03-19
[mm]			psSAR1g [W/kg]	0.635	0.645
Grid Steps [mm]	8.0 x 15.0	6.0 x 6.0 x 1.5	psSAR10g [W/kg]	0.358	0.370
Sensor Surface	3.0	1.4	Power Drift [dB]	0.01	-0.01
[mm]			Power Scaling	Disabled	Disabled
Graded Grid	N/A	Yes	Scaling Factor [dB]		
<b>Grading Ratio</b>	N/A	1.5	TSL Correction	No correction	No correction
MAIA	N/A	N/A	M2/M1 [%]		83.8
Surface	VMS + 6p	VMS + 6p	Dist 3dB Peak		11.9
Detection			[mm]		
Scan Method	Measured	Measured			







### WCDMA1900 Head

## **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
RightHead,	TILT,	Band 2	1:1	1852.400,	7.79	1.461	40.458
HSL	0.00			9262			

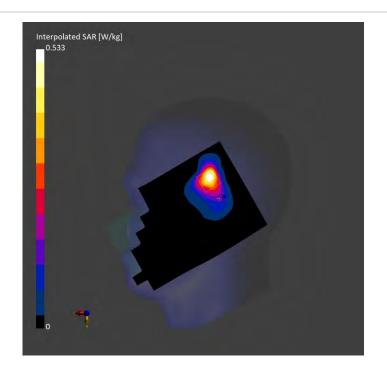
## **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

### **Scan Setup**

		Measurement Results
a Scan	Zoom Scan	

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	120.0 x 210.0	30.0 x 30.0 x 30.0	Date	2025-03-19	2025-03-19
[mm]			psSAR1g [W/kg]	0.399	0.455
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5	psSAR10g [W/kg]	0.198	0.206
Sensor Surface	3.0	1.4	Power Drift [dB]	-0.00	0.02
[mm]			Power Scaling	Disabled	Disabled
Graded Grid	N/A	Yes	Scaling Factor [dB]		
<b>Grading Ratio</b>	N/A	1.5	TSL Correction	No correction	No correction
MAIA	N/A	N/A	M2/M1 [%]		76.9
Surface	VMS + 6p	VMS + 6p	Dist 3dB Peak		7.7
Detection			[mm]		
Scan Method	Measured	Measured			







# WCDMA1700 Body

# **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	воттом,	Band 4	1:1	1712.400,	7.9	1.373	40.505
HSL	16.00			1312			

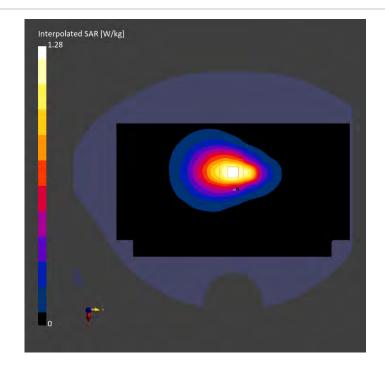
## **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

### **Scan Setup**

	Area Scan	Zoom Scan
Grid Extents	120.0 x 210.0	30.0 x 30.0 x 30.0
[mm]		
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes
<b>Grading Ratio</b>	N/A	1.5
MAIA	N/A	N/A
Surface	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

	Area Scan	Zoom Scan
Date	2025-03-19	2025-03-19
psSAR1g [W/kg]	1.04	1.09
psSAR10g [W/kg]	0.588	0.634
Power Drift [dB]	-0.03	-0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		82.6
Dist 3dB Peak		11.9
[mm]		







### WCDMA1700 Head

### **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
RightHead,	CHEEK,	Band 4	1:1	1732.400,	7.9	1.385	40.46
HSL	0.00			1412			

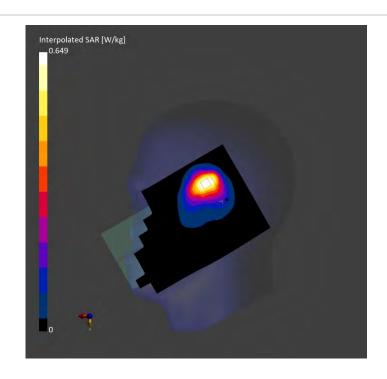
### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

### **Scan Setup**

	Area Scan	Zoom Scan
Grid Extents	120.0 x 210.0	30.0 x 30.0 x 30.0
[mm]		
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.5
MAIA	N/A	N/A
Surface	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

	Area Scan	Zoom Scan
Date	2025-03-19	2025-03-19
psSAR1g [W/kg]	0.519	0.567
psSAR10g [W/kg]	0.289	0.309
Power Drift [dB]	0.02	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		77.8
Dist 3dB Peak		9.5
[mm]		







### WCDMA850 Head

## **Exposure Conditions**

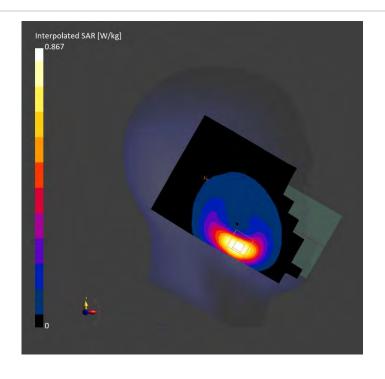
Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
LeftHead,	CHEEK,	Band 5	5 1:1	836.600,	9.34	0.931	41.27
HSL	0.00			4183			

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

### **Scan Setup**

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	120.0 x 210.0	30.0 x 30.0 x 30.0	Date	2025-03-13	2025-03-13
[mm]			psSAR1g [W/kg]	0.730	0.754
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5	psSAR10g [W/kg]	0.449	0.431
Sensor Surface	3.0	1.4	Power Drift [dB]	-0.01	-0.01
[mm]			Power Scaling	Disabled	Disable
Graded Grid	N/A	Yes	Scaling Factor [dB]		
Grading Ratio	N/A	1.5	TSL Correction	No correction	No correction
MAIA	N/A	N/A	M2/M1 [%]		77.4
Surface	VMS + 6p	VMS + 6p	Dist 3dB Peak		7.5
Detection			[mm]		
Scan Method	Measured	Measured			







# WCDMA850 Body

# **Exposure Conditions**

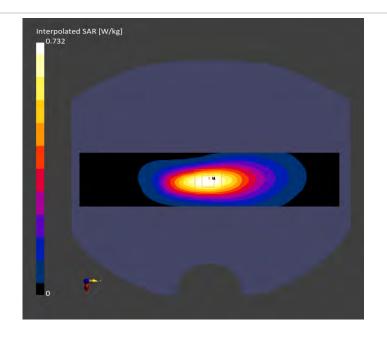
Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	EDGE LEFT,	Band 5	1:1	826.400,	9.34	0.926	41.27
HSL	10.00			4132			

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

### **Scan Setup**

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	48.0 x 210.0	30.0 x 30.0 x 30.0	Date	2025-03-13	2025-03-13
[mm]			psSAR1g [W/kg]	0.611	0.624
Grid Steps [mm]	8.0 x 15.0	6.0 x 6.0 x 1.5	psSAR10g [W/kg]	0.369	0.364
Sensor Surface	3.0	1.4	Power Drift [dB]	0.03	0.04
[mm]			Power Scaling	Disabled	Disabled
Graded Grid	N/A	Yes	Scaling Factor [dB]		
<b>Grading Ratio</b>	N/A	1.5	TSL Correction	No correction	No correction
MAIA	N/A	N/A	M2/M1 [%]		80.1
Surface	All points	All points	Dist 3dB Peak		9.7
Detection			[mm]		
Scan Method	Measured	Measured			







### LTE Band7 Head

### **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
				Number			
RightHead,	TILT,	Band 7	1:1	2510.000,	7.12	1.833	39.509

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

### **Scan Setup**

Scan Method

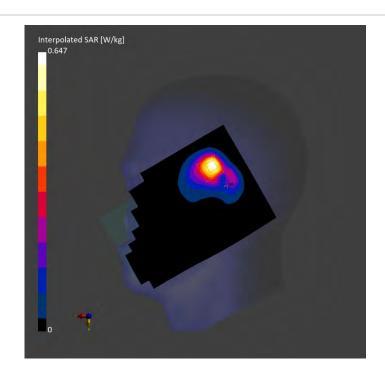
	Area Scan	Zoom Scan	
Grid Extents	120.0 x 200.0	30.0 x 30.0 x 30.0	Date
[mm]			psSAR1g

[mm]		
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes
<b>Grading Ratio</b>	N/A	1.5
MAIA	N/A	N/A
Surface	VMS + 6p	VMS + 6p
Detection		

Measured

### **Measurement Results**

	Area Scan	Zoom Scan
Date	2025-05-08	2025-05-08
psSAR1g [W/kg]	0.477	0.510
psSAR10g [W/kg]	0.226	0.234
Power Drift [dB]	-0.01	0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		80.7
Dist 3dB Peak		9.0
[mm]		



Measured





# LTE Band7 Body

# **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	васк,	Band 7	1:1	2510.000,	7.12	1.833	39.509
HSL	10.00			20850			

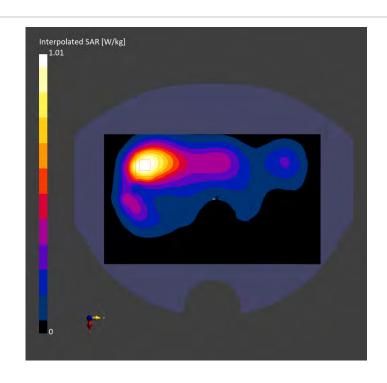
## **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

### **Scan Setup**

	Area Scan	Zoom Scan
Grid Extents	120.0 x 200.0	30.0 x 30.0 x 30.0
[mm]		
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes
<b>Grading Ratio</b>	N/A	1.5
MAIA	N/A	N/A
Surface	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

	Area Scan	Zoom Scan
Date	2025-05-08	2025-05-08
psSAR1g [W/kg]	0.822	0.844
psSAR10g [W/kg]	0.438	0.451
Power Drift [dB]	-0.07	-0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		79.7
Dist 3dB Peak		12.8
[mm]		







### LTE Band12 Head

## **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
LeftHead,	CHEEK,	Band 12	1:1	711.000,	9.34	0.837	41.561
HSL	0.00			23130			

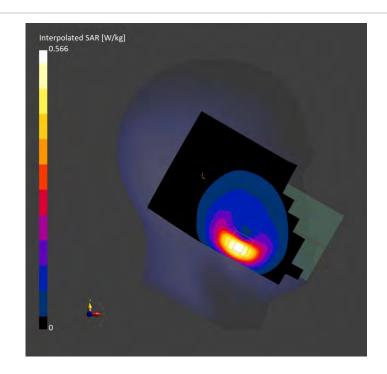
## **Hardware Setup**

Phantom TSL, Measured Date		Probe, Calibration Date	DAE, Calibration Date	
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31	
probe tilt) - 2114				

### **Scan Setup**

	Area Scan	Zoom Scan
Grid Extents	120.0 x 210.0	30.0 x 30.0 x 30.0
[mm]		
Grid Steps [mm]	15.0 x 15.0	5.0 x 5.0 x 1.4
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes
<b>Grading Ratio</b>	N/A	1.4
MAIA	N/A	N/A
Surface	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

	Area Scan	Zoom Scan
Date	2025-04-03	2025-04-03
psSAR1g [W/kg]	0.466	0.450
psSAR10g [W/kg]	0.282	0.256
Power Drift [dB]	-0.00	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		83.9
Dist 3dB Peak		6.5
[mm]		







# LTE Band12 Body

# **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	EDGE LEFT,	Band 12	1:1	711.000,	9.34	0.837	41.561
HSL	10.00			23130			

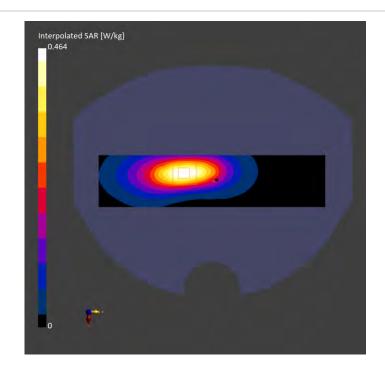
## **Hardware Setup**

Phantom TSL, Measured Date		Probe, Calibration Date	DAE, Calibration Date	
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31	
probe tilt) - 2114				

### **Scan Setup**

IVI	eas	ure	me	nτ	ĸes	uits

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	48.0 x 210.0	30.0 x 30.0 x 30.0	Date	2025-04-03	2025-04-03
[mm]			psSAR1g [W/kg]	0.393	0.392
Grid Steps [mm]	8.0 x 15.0	6.0 x 6.0 x 1.5	psSAR10g [W/kg]	0.244	0.245
Sensor Surface	3.0	1.4	Power Drift [dB]	-0.04	-0.03
[mm]			Power Scaling	Disabled	Disabled
Graded Grid	N/A	Yes	Scaling Factor [dB]		
<b>Grading Ratio</b>	N/A	1.5	TSL Correction	No correction	No correction
MAIA	N/A	N/A	M2/M1 [%]		88.0
Surface	All points	All points	Dist 3dB Peak		10.8
Detection			[mm]		
Scan Method	Measured	Measured			







### LTE Band13 Head

## **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
LeftHead,	CHEEK,	Band 13	1:1	782.000,	9.34	0.89	41.543
20.0000,	CITELIA,	Danu 13	1.1	702.000,	5.54	0.83	41.545

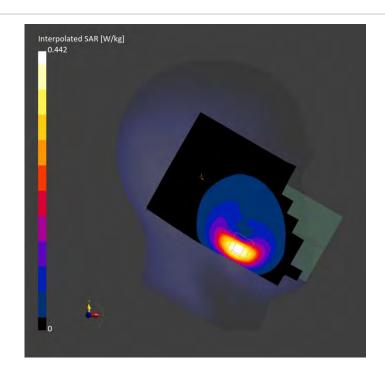
## **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

### **Scan Setup**

	Area Scan	Zoom Scan
Grid Extents	120.0 x 210.0	30.0 x 30.0 x 30.0
[mm]		
Grid Steps [mm]	15.0 x 15.0	5.4 x 5.4 x 1.5
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes
<b>Grading Ratio</b>	N/A	1.5
MAIA	N/A	N/A
Surface	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

	Area Scan	Zoom Scan
Date	2025-04-08	2025-04-08
psSAR1g [W/kg]	0.363	0.347
psSAR10g [W/kg]	0.218	0.199
Power Drift [dB]	-0.21	-0.06
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		84.6
Dist 3dB Peak		6.7
[mm]		







# LTE Band13 Body

# **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	EDGE LEFT,	Band 13	1:1	782.000,	9.34	0.89	41.543
HSL	10.00			23230			

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

### **Scan Setup**

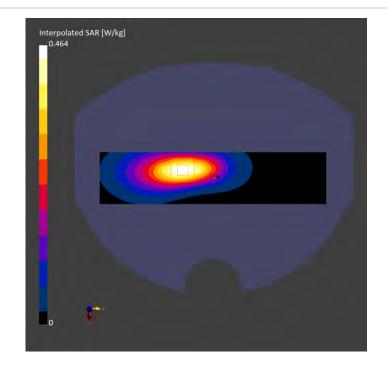
Scan Method

	Area Scan	Zoom Scan
Grid Extents	48.0 x 210.0	30.0 x 30.0 x 30.0
[mm]		
Grid Steps [mm]	8.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.5
MAIA	N/A	N/A
Surface	All points	All points
Detection		

Measured

### **Measurement Results**

	Area Scan	Zoom Scan
Date	2025-04-08	2025-04-08
psSAR1g [W/kg]	0.390	0.388
psSAR10g [W/kg]	0.240	0.238
Power Drift [dB]	-0.07	-0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		87.7
Dist 3dB Peak		10.8
[mm]		



Measured





### LTE Band14 Head

## **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
LeftHead,	CHEEK,	Band 14	1:1	793.000,	9.34	0.893	41.487
HSL	0.00			23330			

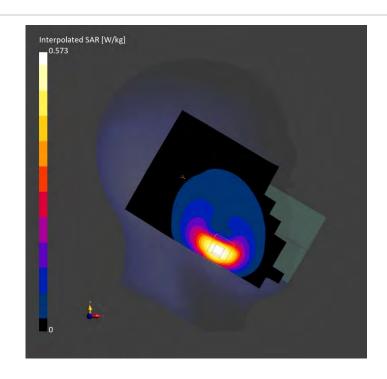
### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

### **Scan Setup**

	Area Scan	Zoom Scan
Grid Extents	120.0 x 210.0	30.0 x 30.0 x 30.0
[mm]		
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes
<b>Grading Ratio</b>	N/A	1.5
MAIA	N/A	N/A
Surface	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

	Area Scan	Zoom Scan
Date	2025-04-08	2025-04-08
psSAR1g [W/kg]	0.486	0.497
psSAR10g [W/kg]	0.301	0.279
Power Drift [dB]	0.02	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		85.1
Dist 3dB Peak		6.4
[mm]		







# LTE Band14 Body

# **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
- Flat	50.05 LEST	David 4.4	4.4	702.000	0.24	0.000	44 407
Flat,	EDGE LEFT,	Band 14	1:1	793.000,	9.34	0.893	41.487

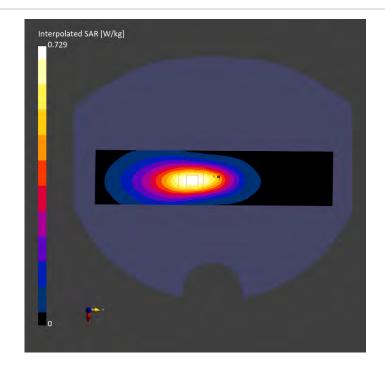
### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

### **Scan Setup**

	Area Scan	Zoom Scan
Grid Extents	48.0 x 210.0	30.0 x 30.0 x 30.0
[mm]		
Grid Steps [mm]	8.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes
<b>Grading Ratio</b>	N/A	1.5
MAIA	N/A	N/A
Surface	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

	Area Scan	Zoom Scan
Date	2025-04-08	2025-04-08
psSAR1g [W/kg]	0.615	0.634
psSAR10g [W/kg]	0.373	0.363
Power Drift [dB]	-0.01	0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		81.3
Dist 3dB Peak		10.8
[mm]		







# LTE Band25 Body

# **Exposure Conditions**

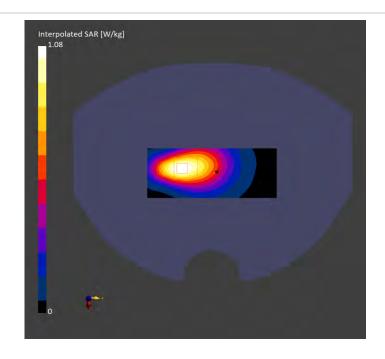
Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	EDGE	Band 25	1:1	1905.000,	7.48	1.368	38.835
HSL	воттом,			26590			
	16.00						

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

### Scan Setup

scan setup			weasurement kesu	its	
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	48.0 x 120.0	30.0 x 30.0 x 30.0	Date	2025-03-25	2025-03-25
[mm]			psSAR1g [W/kg]	0.881	0.910
Grid Steps [mm]	8.0 x 15.0	6.0 x 6.0 x 1.5	psSAR10g [W/kg]	0.499	0.539
Sensor Surface	3.0	1.4	Power Drift [dB]	0.03	0.08
[mm]			Power Scaling	Disabled	Disabled
Graded Grid	N/A	Yes	Scaling Factor [dB]		
<b>Grading Ratio</b>	N/A	1.5	TSL Correction	No correction	No correction
MAIA	N/A	N/A	M2/M1 [%]		86.2
Surface	All points	All points	Dist 3dB Peak		12.1
Detection			[mm]		
Scan Method	Measured	Measured			







### LTE Band25 Head

### **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
RightHead,	TILT,	Band 25	1:1	1860.000,	7.79	1.468	40.466

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

**Zoom Scan** 

### **Scan Setup**

**Grading Ratio** 

MAIA

Surface

Detection
Scan Method

Grid Extents	120.0 x 210.0	30.0 x 30.0 x 30.0
[mm]		
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes

N/A

N/A

VMS + 6p

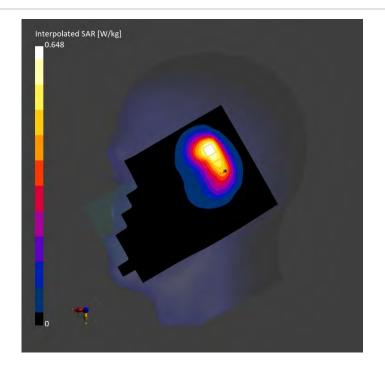
Measured

Area Scan

# Yes Si 1.5 T: N/A M

Measured

	Area Scan	Zoom Scan
Date	2025-03-19	2025-03-19
psSAR1g [W/kg]	0.507	0.492
psSAR10g [W/kg]	0.277	0.260
Power Drift [dB]	0.03	0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		81.0
Dist 3dB Peak		8.1
[mm]		







# LTE Band26 Body

# **Exposure Conditions**

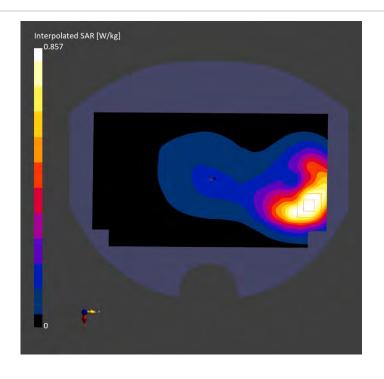
Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	васк,	Band 26	1:1	841.500,	9.34	0.933	41.274
HSL	10.00			26965			

## **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

**Scan Setup** 

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	120.0 x 210.0	30.0 x 30.0 x 30.0	Date	2025-03-13	2025-03-13
[mm]			psSAR1g [W/kg]	0.749	0.823
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5	psSAR10g [W/kg]	0.487	0.478
Sensor Surface	3.0	1.4	Power Drift [dB]	-0.01	0.01
[mm]			Power Scaling	Disabled	Disabled
Graded Grid	N/A	Yes	Scaling Factor [dB]		
<b>Grading Ratio</b>	N/A	1.5	TSL Correction	No correction	No correction
MAIA	N/A	N/A	M2/M1 [%]		79.1
Surface	VMS + 6p	VMS + 6p	Dist 3dB Peak		10.2
Detection			[mm]		
Scan Method	Measured	Measured			







### LTE Band26 Head

### **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
LeftHead,	CHEEK,	Band 26	1:1	831.500,	9.34	0.928	41.268
HSL	0.00			26865			

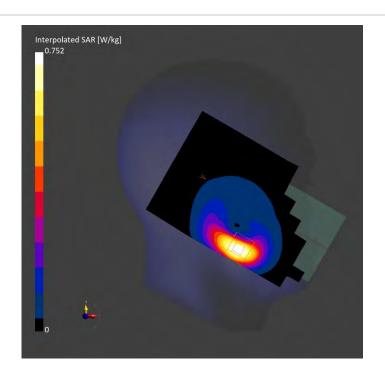
### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

### **Scan Setup**

	Area Scan	Zoom Scan
Grid Extents	120.0 x 210.0	30.0 x 30.0 x 30.0
[mm]		
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes
<b>Grading Ratio</b>	N/A	1.5
MAIA	N/A	N/A
Surface	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

	Area Scan	Zoom Scan
Date	2025-03-13	2025-03-13
psSAR1g [W/kg]	0.633	0.647
psSAR10g [W/kg]	0.388	0.361
Power Drift [dB]	-0.02	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		84.8
Dist 3dB Peak		6.5
[mm]		







### LTE Band41 Head

## **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
RightHead,	CHEEK,	Band 41	1:1.58	2636.500,	6.95	1.995	39.526

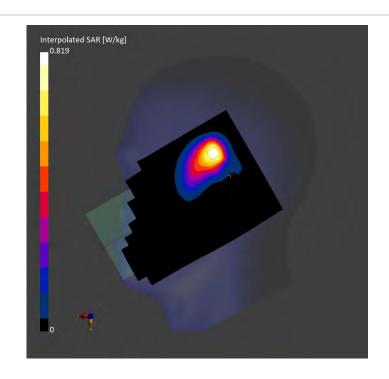
## **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

### **Scan Setup**

	Area Scan	Zoom Scan
Grid Extents	120.0 x 200.0	30.0 x 30.0 x 30.0
[mm]		
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.5
MAIA	N/A	N/A
Surface	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

0.619 0.305	2025-04-25 0.645
0.305	0.215
	0.315
0.11	0.06
isabled	Disabled
rection	No correction
	81.7
	9.1







# LTE Band41 Body

# **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	BACK,	Band 41	1:1.58	2593.000,	7.12	1.946	39.554
HSL	10.00			40620			

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

### **Scan Setup**

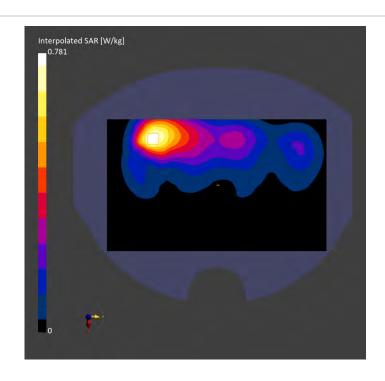
Scan Method

	Area Scan	Zoom Scan
Grid Extents	120.0 x 200.0	30.0 x 30.0 x 30.0
[mm]		
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes
<b>Grading Ratio</b>	N/A	1.5
MAIA	N/A	N/A
Surface	VMS + 6p	VMS + 6p
Detection		

Measured

### **Measurement Results**

	Area Scan	Zoom Scan
Date	2025-04-25	2025-04-25
psSAR1g [W/kg]	0.607	0.611
psSAR10g [W/kg]	0.317	0.326
Power Drift [dB]	0.04	-0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		79.6
Dist 3dB Peak		11.2
[mm]		



Measured





# LTE Band48 Body

# **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
- Flat							
Flat,	EDGE TOP,	Band 48	1:1.58	3560.000,	6.4	2.891	37.588

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

### **Scan Setup**

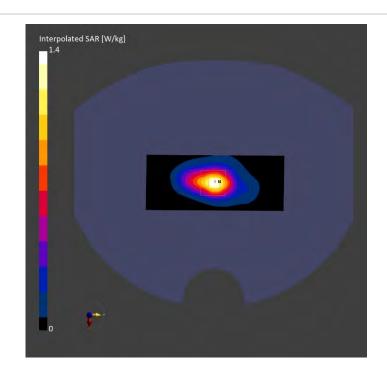
Detection
Scan Method

	Area Scan	Zoom Scan
Grid Extents	48.0 x 120.0	28.0 x 28.0 x 28.0
[mm]		
Grid Steps [mm]	8.0 x 10.0	5.0 x 5.0 x 1.4
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes
<b>Grading Ratio</b>	N/A	1.5
MAIA	N/A	N/A
Surface	VMS + 6p	VMS + 6p

Measured

### **Measurement Results**

	Area Scan	Zoom Scan
Date	2025-04-19	2025-04-19
psSAR1g [W/kg]	0.977	0.997
psSAR10g [W/kg]	0.394	0.400
Power Drift [dB]	-0.01	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		75.4
Dist 3dB Peak		9.0
[mm]		



Measured





### LTE Band48 Head

## **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
LeftHead,	CHEEK,	Band 48	1:1.58	3560.000,	6.4	2.891	37.588
HSL	0.00			55340			

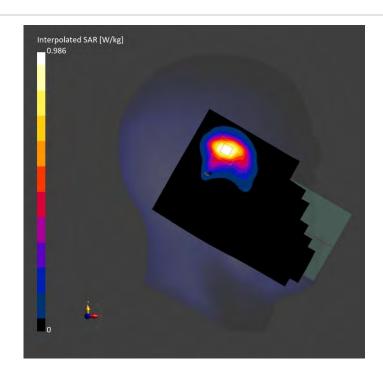
## **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

### **Scan Setup**

	Area Scan	Zoom Scan
Grid Extents	120.0 x 200.0	28.0 x 28.0 x 28.0
[mm]		
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.4
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.5
MAIA	N/A	N/A
Surface	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

	Area Scan	Zoom Scan
Date	2025-04-19	2025-04-19
psSAR1g [W/kg]	0.725	0.779
psSAR10g [W/kg]	0.320	0.328
Power Drift [dB]	0.05	0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		72.9
Dist 3dB Peak		8.3
[mm]		







### LTE Band66 Head

## **Exposure Conditions**

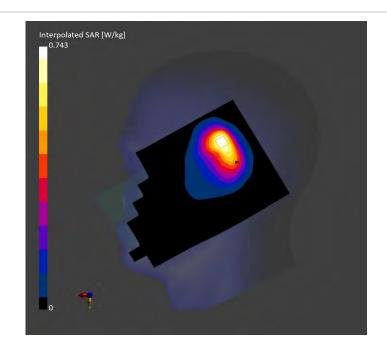
Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
RightHead,	TILT,	Band 66	1:1	1720.000,	7.9	1.379	40.479
HSL	0.00			132072			

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

**Scan Setup** 

Scall Setup			ivicasurement nesu	11.5	
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	120.0 x 210.0	30.0 x 30.0 x 30.0	Date	2025-03-19	2025-03-19
[mm]			psSAR1g [W/kg]	0.583	0.567
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5	psSAR10g [W/kg]	0.323	0.306
Sensor Surface	3.0	1.4	Power Drift [dB]	-0.03	0.04
[mm]			Power Scaling	Disabled	Disabled
Graded Grid	N/A	Yes	Scaling Factor [dB]		
<b>Grading Ratio</b>	N/A	1.5	TSL Correction	No correction	No correction
MAIA	N/A	N/A	M2/M1 [%]		81.1
Surface	VMS + 6p	VMS + 6p	Dist 3dB Peak		9.2
Detection			[mm]		
Scan Method	Measured	Measured			







# LTE Band66 Body

# **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	EDGE TOP,	Band 66	1:1	1745.000,	7.9	1.393	40.438
HSL	10.00			132322			

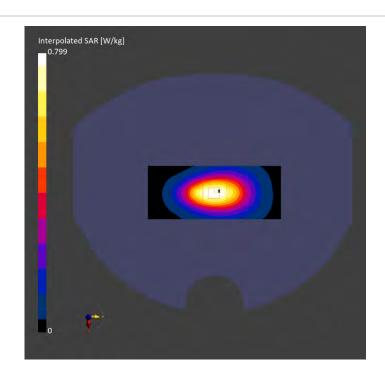
## **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

### **Scan Setup**

ivieasur	ement	Results

ocan occup			Micasar ciricite Mesar	-	
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	48.0 x 120.0	30.0 x 30.0 x 30.0	Date	2025-03-19	2025-03-19
[mm]			psSAR1g [W/kg]	0.652	0.664
Grid Steps [mm]	8.0 x 15.0	6.0 x 6.0 x 1.5	psSAR10g [W/kg]	0.368	0.382
Sensor Surface	3.0	1.4	Power Drift [dB]	-0.01	0.03
[mm]			Power Scaling	Disabled	Disabled
Graded Grid	N/A	Yes	Scaling Factor [dB]		
<b>Grading Ratio</b>	N/A	1.5	TSL Correction	No correction	No correction
MAIA	N/A	N/A	M2/M1 [%]		83.5
Surface	VMS + 6p	VMS + 6p	Dist 3dB Peak		13.0
Detection			[mm]		
Scan Method	Measured	Measured			







### LTE Band71 Head

## **Exposure Conditions**

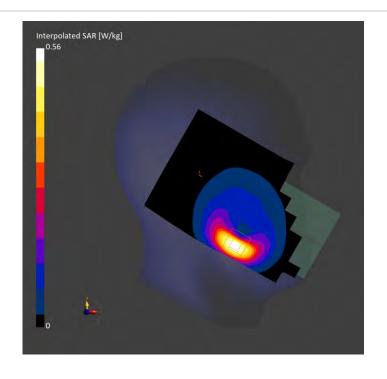
Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
LeftHead,	CHEEK,	Band 71	1:1	683.000,	9.34	0.853	41.837
HSL	0.00			133322			

## **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

### Scan Setup

Scan Setup			wiedsureinent kesui	11.5	
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	120.0 x 210.0	30.0 x 30.0 x 30.0	Date	2025-04-08	2025-04-08
[mm]			psSAR1g [W/kg]	0.462	0.437
Grid Steps [mm]	15.0 x 15.0	5.6 x 5.6 x 1.5	psSAR10g [W/kg]	0.281	0.249
Sensor Surface	3.0	1.4	Power Drift [dB]	-0.12	-0.12
[mm]			Power Scaling	Disabled	Disabled
Graded Grid	N/A	Yes	Scaling Factor [dB]		
<b>Grading Ratio</b>	N/A	1.5	TSL Correction	No correction	No correction
MAIA	N/A	N/A	M2/M1 [%]		82.7
Surface	VMS + 6p	VMS + 6p	Dist 3dB Peak		6.6
Detection			[mm]		
Scan Method	Measured	Measured			







# LTE Band71 Body

# **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	EDGE LEFT,	Band 71	1:1	683.000,	9.34	0.853	41.837
HSL	10.00			133322			

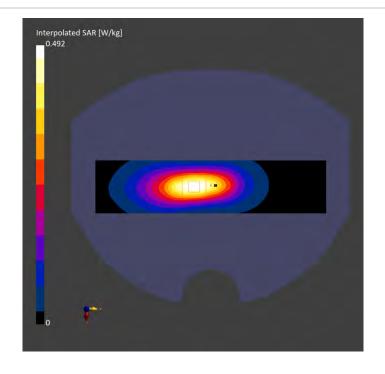
## **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

### **Scan Setup**

	Area Scan	Zoom Scan
Grid Extents	48.0 x 210.0	30.0 x 30.0 x 30.0
[mm]		
Grid Steps [mm]	8.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.5
MAIA	N/A	N/A
Surface	All points	All points
Detection		
Scan Method	Measured	Measured

Area Scan	Zoom Scan
2025-04-08	2025-04-08
0.416	0.415
0.260	0.261
0.01	-0.02
Disabled	Disabled
No correction	No correction
	88.0
	11.1
	2025-04-08 0.416 0.260 0.01 Disabled







# N7 Body

# **Exposure Conditions**

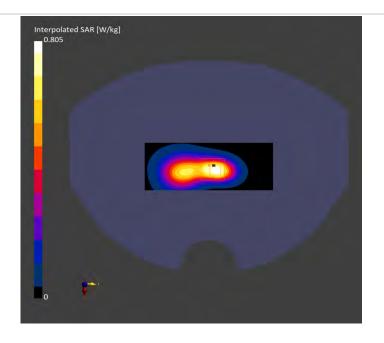
Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	EDGE	Band n7	1:1	2502.500,	7.12	1.821	39.54
HSL	воттом,			500500			
	10.00						

### **Hardware Setup**

Phantom	Phantom TSL, Measured Date		DAE, Calibration Date	
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31	
probe tilt) - 2114				

### Scan Setup

ocan octup			Wicasai Cilicite Nesa	163	
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	48.0 x 120.0	30.0 x 30.0 x 30.0	Date	2025-05-08	2025-05-08
[mm]			psSAR1g [W/kg]	0.610	0.631
Grid Steps [mm]	8.0 x 10.0	5.0 x 5.0 x 1.5	psSAR10g [W/kg]	0.288	0.292
Sensor Surface	3.0	1.4	Power Drift [dB]	-0.04	0.05
[mm]			Power Scaling	Disabled	Disabled
Graded Grid	N/A	Yes	Scaling Factor [dB]		
<b>Grading Ratio</b>	N/A	1.5	TSL Correction	No correction	No correction
MAIA	N/A	N/A	M2/M1 [%]		79.6
Surface	All points	All points	Dist 3dB Peak		9.0
Detection			[mm]		
Scan Method	Measured	Measured			







### N7 Head

## **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
RightHead,	CHEEK,	Band n7	1:1	2535.000,	7.12	1.859	39.486
HSL	0.00			507000			

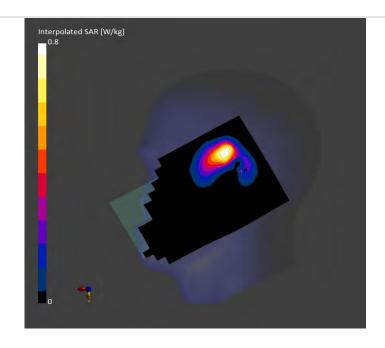
## **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

### **Scan Setup**

=		
	Area Scan	Zoom Scan
Grid Extents	120.0 x 200.0	30.0 x 30.0 x 30.0
[mm]		
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.5
MAIA	N/A	N/A
Surface	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

	Area Scan	Zoom Scan
Date	2025-05-08	2025-05-08
psSAR1g [W/kg]	0.605	0.649
psSAR10g [W/kg]	0.286	0.305
Power Drift [dB]	0.03	0.06
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		87.0
Dist 3dB Peak		9.2
[mm]		







# N25 Body

# **Exposure Conditions**

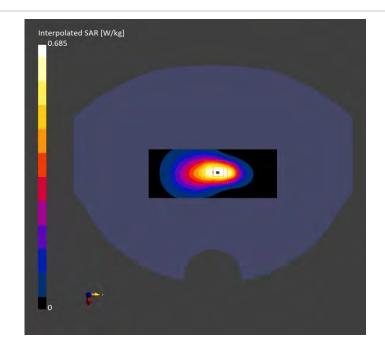
Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	EDGE	Band n25	1:1	1882.500,	7.79	1.348	38.914
HSL	воттом,			376500			
	10.00						

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

### Scan Setup

scan setup			ivieasurement kesui	its	
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	48.0 x 120.0	30.0 x 30.0 x 30.0	Date	2025-03-25	2025-03-25
[mm]			psSAR1g [W/kg]	0.542	0.578
Grid Steps [mm]	8.0 x 15.0	6.0 x 6.0 x 1.5	psSAR10g [W/kg]	0.283	0.302
Sensor Surface	3.0	1.4	Power Drift [dB]	-0.02	0.03
[mm]			Power Scaling	Disabled	Disabled
Graded Grid	N/A	Yes	Scaling Factor [dB]		
<b>Grading Ratio</b>	N/A	1.5	TSL Correction	No correction	No correction
MAIA	N/A	N/A	M2/M1 [%]		81.0
Surface	All points	All points	Dist 3dB Peak		8.5
Detection			[mm]		
Scan Method	Measured	Measured			







### N25 Head

## **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
LeftHead,	TILT,	Band n25	1:1	1882.500,	7.79	1.348	38.914
HSL	0.00			376500			

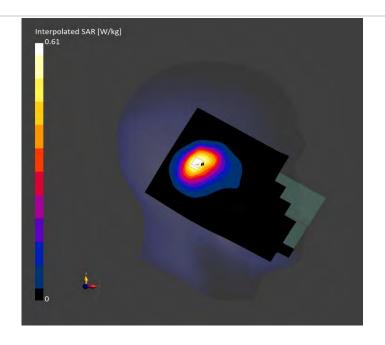
## **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

### **Scan Setup**

	Area Scan	Zoom Scan
Grid Extents	120.0 x 210.0	30.0 x 30.0 x 30.0
[mm]		
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes
<b>Grading Ratio</b>	N/A	1.5
MAIA	N/A	N/A
Surface	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

	Area Scan	Zoom Scan
Date	2025-03-25	2025-03-25
psSAR1g [W/kg]	0.487	0.502
psSAR10g [W/kg]	0.269	0.290
Power Drift [dB]	-0.09	0.13
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		85.1
Dist 3dB Peak		11.3
[mm]		







# N41 Body

# **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	васк,	Band n41	1:1	2501.010,	7.12	1.821	39.54
HSL	10.00			500202			

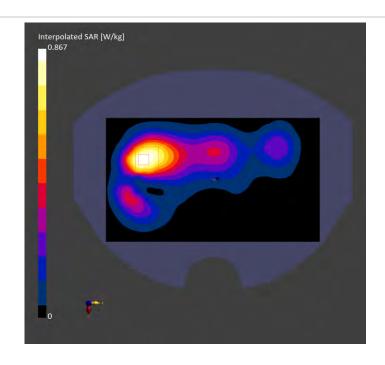
## **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

### **Scan Setup**

•		
	Area Scan	Zoom Scan
Grid Extents	120.0 x 200.0	30.0 x 30.0 x 30.0
[mm]		
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.5
MAIA	N/A	N/A
Surface	All points	All points
Detection		
Scan Method	Measured	Measured

	Area Scan	Zoom Scan
Date	2025-05-08	2025-05-08
psSAR1g [W/kg]	0.693	0.711
psSAR10g [W/kg]	0.380	0.400
Power Drift [dB]	-0.15	-0.09
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		79.7
Dist 3dB Peak		12.4
[mm]		







### N41 Head

## **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
LeftHead,	CHEEK,	Band n41	1:1	2592.990,	7.12	1.946	39.554
HSL	0.00			518598			

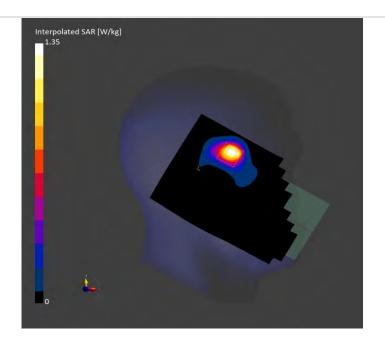
## **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

### **Scan Setup**

	Area Scan	Zoom Scan
Grid Extents	120.0 x 200.0	30.0 x 30.0 x 30.0
[mm]		
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes
<b>Grading Ratio</b>	N/A	1.5
MAIA	N/A	N/A
Surface	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

	Area Scan	Zoom Scan
Date	2025-05-08	2025-05-08
psSAR1g [W/kg]	1.01	1.06
psSAR10g [W/kg]	0.456	0.458
Power Drift [dB]	0.05	0.14
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		76.5
Dist 3dB Peak		9.1
[mm]		







## N48 Body

## **Exposure Conditions**

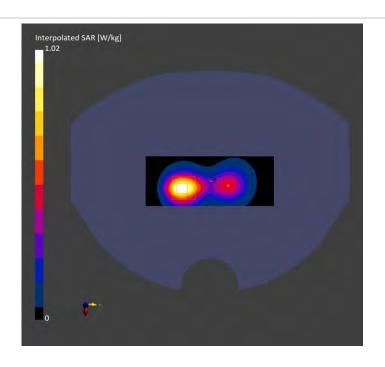
Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	EDGE TOP,	Band n48	1:1	3554.995,	6.4	2.887	37.589
HSL	10.00			637000			

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

#### **Scan Setup**

Scan Scrap			Wicasai Cilicite Nesai	163	
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	48.0 x 120.0	28.0 x 28.0 x 28.0	Date	2025-04-19	2025-04-19
[mm]			psSAR1g [W/kg]	0.742	0.749
Grid Steps [mm]	8.0 x 10.0	5.0 x 5.0 x 1.4	psSAR10g [W/kg]	0.318	0.321
Sensor Surface	3.0	1.4	Power Drift [dB]	-0.01	-0.12
[mm]			Power Scaling	Disabled	Disabled
Graded Grid	N/A	Yes	Scaling Factor [dB]		
<b>Grading Ratio</b>	N/A	1.5	TSL Correction	No correction	No correction
MAIA	N/A	N/A	M2/M1 [%]		76.0
Surface	All points	All points	Dist 3dB Peak		10.8
Detection			[mm]		
Scan Method	Measured	Measured			







### N48 Head

### **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
RightHead,	CHEEK,	Band n48	1:1	3624.985,	6.4	3.13	37.261
HSL	0.00			641666			

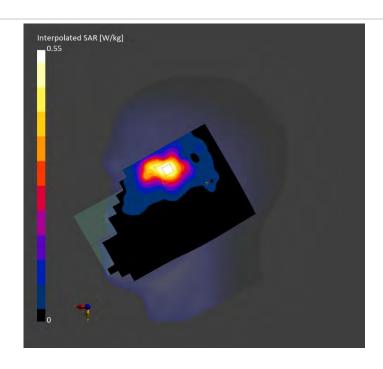
### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

#### **Scan Setup**

	Area Scan	Zoom Scan
Grid Extents	120.0 x 200.0	28.0 x 28.0 x 28.0
[mm]		
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.4
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes
<b>Grading Ratio</b>	N/A	1.5
MAIA	Υ	N/A
Surface	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

	Area Scan	Zoom Scan
Date	2025-04-20	2025-04-20
psSAR1g [W/kg]	0.414	0.466
psSAR10g [W/kg]	0.193	0.223
Power Drift [dB]	-0.01	0.05
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		79.8
Dist 3dB Peak		10.3
[mm]		







### N66 Head

### **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
RightHead,	TILT,	Band n66	1:1	1745.000,	7.9	1.393	40.438

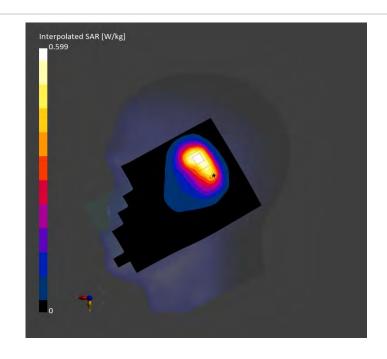
### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

#### **Scan Setup**

	Area Scan	Zoom Scan
Grid Extents	120.0 x 210.0	30.0 x 30.0 x 30.0
[mm]		
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes
<b>Grading Ratio</b>	N/A	1.5
MAIA	N/A	N/A
Surface	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

	Area Scan	Zoom Scan
Date	2025-03-19	2025-03-19
psSAR1g [W/kg]	0.478	0.533
psSAR10g [W/kg]	0.277	0.286
Power Drift [dB]	-0.01	0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		84.5
Dist 3dB Peak		9.7
[mm]		







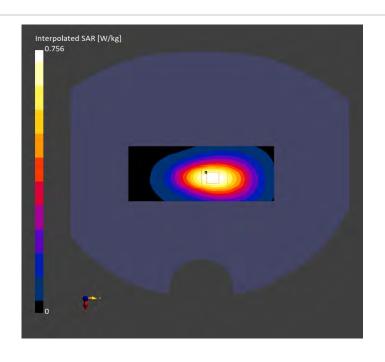
## N66 Body

## **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	EDGE TOP,	Band n66	1:1	1745.000,	7.9	1.393	40.438

### **Hardware Setup**

Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date		
Twin-SAM V8.0 (30deg probe tilt) - 2114	HBBL-600-10000				EX3DV4 - SN7825, 2024-11-1	DAE4ip Sn1832, 2024-12-5	
Scan Setup			Measurement Results				
	Area Scan	Zoom Scan		Area Scan	Zoom Scan		
Grid Extents	48.0 x 120.0	30.0 x 30.0 x 30.0	Date	2025-03-19	2025-03-19		
[mm]			psSAR1g [W/kg]	0.621	0.654		
Grid Steps [mm]	8.0 x 15.0	6.0 x 6.0 x 1.5	psSAR10g [W/kg]	0.350	0.372		
Sensor Surface	3.0	1.4	Power Drift [dB]	0.02	-0.08		
[mm]			Power Scaling	Disabled	Disabled		
Graded Grid	N/A	Yes	Scaling Factor [dB]				
<b>Grading Ratio</b>	N/A	1.5	TSL Correction	No correction	No correction		
MAIA	N/A	N/A	M2/M1 [%]		80.3		
Surface	VMS + 6p	VMS + 6p	Dist 3dB Peak		12.6		
Detection			[mm]				
Scan Method	Measured	Measured					







### N71 Head

### **Exposure Conditions**

Phantom	Position, Test	Band	Duty Cycle	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
LeftHead,	CHEEK,	Band n71	1; 1	680.500,	9.34	0.852	41.861

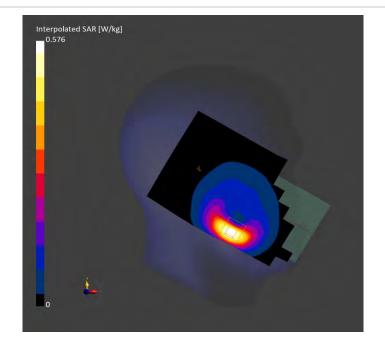
### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

#### **Scan Setup**

	Area Scan	Zoom Scan
<b>Grid Extents</b>	120.0 x 210.0	30.0 x 30.0 x 30.0
[mm]		
Grid Steps [mm]	15.0 x 15.0	5.2 x 5.2 x 1.5
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes
<b>Grading Ratio</b>	N/A	1.5
MAIA	N/A	N/A
Surface	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

	Area Scan	Zoom Scan
Date	2025-04-08	2025-04-08
psSAR1g [W/kg]	0.475	0.456
psSAR10g [W/kg]	0.289	0.259
Power Drift [dB]	-0.05	0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		82.2
Dist 3dB Peak		7.1
[mm]		







## N71 Body

## **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	EDGE LEFT,	Band n71	1:1	680.500,	9.34	0.852	41.861

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

#### **Scan Setup**

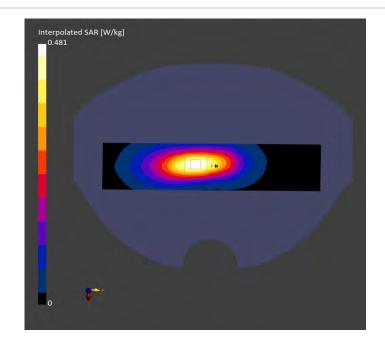
Scan Method

	Area Scan	Zoom Scan
Grid Extents	48.0 x 210.0	30.0 x 30.0 x 30.0
[mm]		
Grid Steps [mm]	8.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes
<b>Grading Ratio</b>	N/A	1.5
MAIA	N/A	N/A
Surface	All points	All points
Detection		

Measured

#### **Measurement Results**

	Area Scan	Zoom Scan
Date	2025-04-08	2025-04-08
psSAR1g [W/kg]	0.409	0.414
psSAR10g [W/kg]	0.256	0.259
Power Drift [dB]	-0.02	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		87.5
Dist 3dB Peak		11.9
[mm]		



Measured





## N78 Body

## **Exposure Conditions**

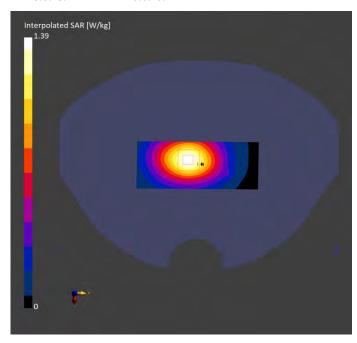
Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	EDGE TOP,	Band n78	1:1	3500.010,	6.57	2.8	37.661
HSL	24.00			633334			

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

Measur	ement	Results
--------	-------	---------

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	48.0 x 120.0	28.0 x 28.0 x 28.0	Date	2025-04-19	2025-04-19
[mm]			psSAR1g [W/kg]	1.08	1.13
Grid Steps [mm]	8.0 x 10.0	5.0 x 5.0 x 1.4	psSAR10g [W/kg]	0.540	0.580
Sensor Surface	3.0	1.4	Power Drift [dB]	-0.03	0.05
[mm]			Power Scaling	Disabled	Disabled
Graded Grid	N/A	Yes	Scaling Factor [dB]		
<b>Grading Ratio</b>	N/A	1.5	TSL Correction	No correction	No correction
MAIA	N/A	N/A	M2/M1 [%]		78.5
Surface	All points	All points	Dist 3dB Peak		22.0
Detection			[mm]		
Scan Method	Measured	Measured			







### N78 Head

### **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
RightHead,	CHEEK,	Band n78	1:1	3460.020,	6.57	2.787	37.722

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

Zoom Scan

VMS + 6p

Measured

#### **Scan Setup**

Surface

Detection
Scan Method

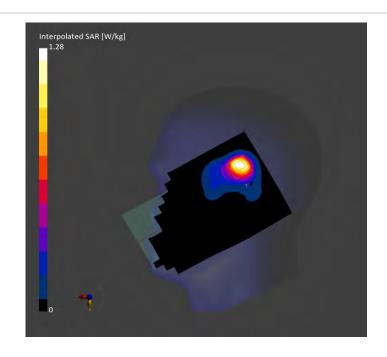
Grid Extents	120.0 x 200.0	28.0 x 28.0 x 28.0
[mm]		
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.4
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes
<b>Grading Ratio</b>	N/A	1.5
MAIA	N/A	N/A

VMS + 6p

Measured

Area Scan

	Area Scan	Zoom Scan
Date	2025-04-19	2025-04-19
psSAR1g [W/kg]	0.932	0.948
psSAR10g [W/kg]	0.402	0.415
Power Drift [dB]	0.06	0.17
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		78.0
Dist 3dB Peak		8.2
[mm]		







### WLAN2.4G Head

## **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
				Number			
LeftHead,	TILT,	WLAN	1:1	2437.000,	7.37	1.774	39.64

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

#### **Scan Setup**

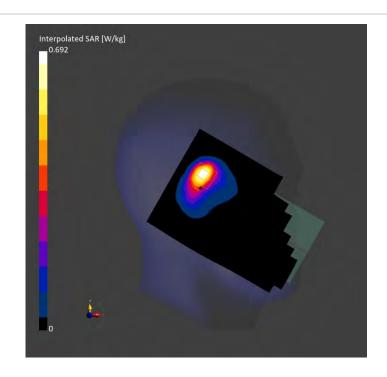
Scan Method

	Area Scan	Zoom Scan
Grid Extents	120.0 x 200.0	30.0 x 30.0 x 30.0
[mm]		
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes
<b>Grading Ratio</b>	N/A	1.5
MAIA	N/A	N/A
Surface	VMS + 6p	VMS + 6p
Detection		

Measured

#### **Measurement Results**

	Area Scan	Zoom Scan
Date	2025-05-08	2025-05-08
psSAR1g [W/kg]	0.525	0.559
psSAR10g [W/kg]	0.249	0.253
Power Drift [dB]	0.06	0.07
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		76.5
Dist 3dB Peak		7.7
[mm]		



Measured





## WLAN2.4G Body

## **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	EDGE RIGHT,	WLAN	1:1	2437.000,	7.37	1.774	39.64

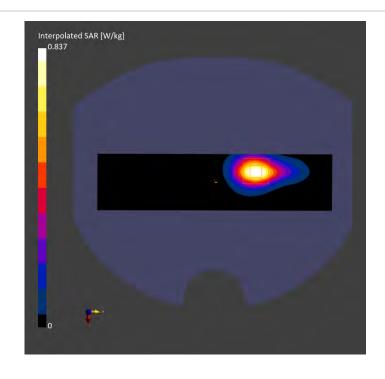
### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

#### **Scan Setup**

	Area Scan	Zoom Scan
Grid Extents	48.0 x 200.0	30.0 x 30.0 x 30.0
[mm]		
Grid Steps [mm]	8.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes
<b>Grading Ratio</b>	N/A	1.5
MAIA	N/A	N/A
Surface	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

	Area Scan	Zoom Scan
Date	2025-05-08	2025-05-08
psSAR1g [W/kg]	0.638	0.657
psSAR10g [W/kg]	0.296	0.309
Power Drift [dB]	0.01	0.05
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		79.7
Dist 3dB Peak		9.0
[mm]		







## **WLAN5G Body**

## **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	EDGE RIGHT,	WLAN	1:1	5570.000,	5.03	4.938	36.468

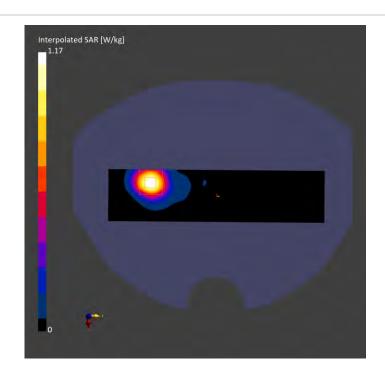
### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

#### **Scan Setup**

=		
	Area Scan	Zoom Scan
Grid Extents	48.0 x 200.0	22.0 x 22.0 x 22.0
[mm]		
Grid Steps [mm]	8.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.4
MAIA	Υ	N/A
Surface	All points	All points
Detection		
Scan Method	Measured	Measured

	Area Scan	Zoom Scan
Date	2025-05-17	2025-05-17
psSAR1g [W/kg]	0.846	0.853
psSAR10g [W/kg]	0.312	0.314
Power Drift [dB]	0.06	0.06
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		65.6
Dist 3dB Peak		10.9
[mm]		







### **WLAN5G Head**

### **Exposure Conditions**

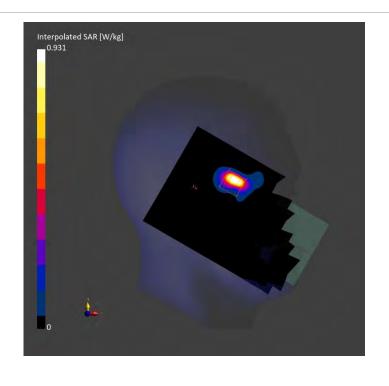
Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
LeftHead,	CHEEK,	WLAN	1:1	5775.000,	4.59	5.103	36.202

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

Measurement Results

Scan Setup			wiedsurement kesui	ıs		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan	
Grid Extents	120.0 x 200.0	22.0 x 22.0 x 22.0	Date	2025-05-19	2025-05-19	
[mm]			psSAR1g [W/kg]	0.616	0.598	
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4	psSAR10g [W/kg]	0.185	0.188	
Sensor Surface	3.0	1.4	Power Drift [dB]	0.09	0.17	
[mm]			Power Scaling	Disabled	Disabled	
Graded Grid	N/A	Yes	Scaling Factor [dB]			
<b>Grading Ratio</b>	N/A	1.4	TSL Correction	No correction	No correction	
MAIA	Υ	N/A	M2/M1 [%]		54.6	
Surface	All points	All points	Dist 3dB Peak		3.8	
Detection			[mm]			
Scan Method	Measured	Measured				







### **WLAN6E** Head

### **Exposure Conditions**

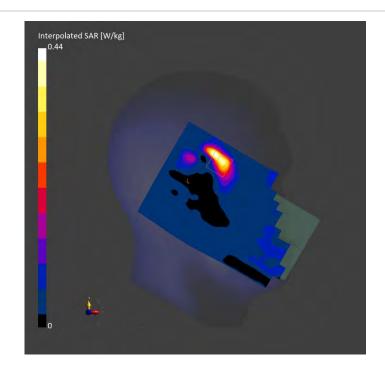
Phantom	Position, Test	Band	Duty Cycle	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
LeftHead,	CHEEK,	U-NII-5	1:1	6025.000,	4.59	5.281	36.459

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1834, 2024-11-25
probe tilt) - 2114			

#### **Scan Setup**

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	119.0 x 204.0	22.0 x 22.0 x 22.0	Date	2025-05-25	2025-05-25
[mm]			psSAR1g [W/kg]	0.275	0.280
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4	psSAR10g [W/kg]	0.097	0.087
Sensor Surface	3.0	1.4	Power Drift [dB]	-0.08	0.09
[mm]			Power Scaling	Disabled	Disable
Graded Grid	N/A	Yes	Scaling Factor [dB]		
Grading Ratio	N/A	1.4	TSL Correction	No correction	No correction
MAIA	Υ	Υ	M2/M1 [%]		55.2
Surface	VMS + 6p	VMS + 6p	Dist 3dB Peak		4.0
Detection			[mm]		
Scan Method	Measured	Measured			







## **WLAN6E Body**

## **Exposure Conditions**

Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	FRONT,	U-NII-5	1:1	5985.000,	4.59	5.225	36.542
HSL	19.00			7			

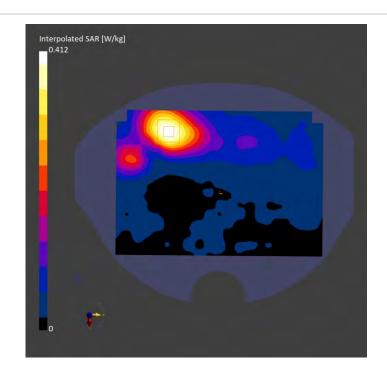
### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1834, 2024-11-25
probe tilt) - 2114			

#### **Scan Setup**

	Area Scan	Zoom Scan
Grid Extents	120.0 x 200.0	22.0 x 22.0 x 22.0
[mm]		
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.4
MAIA	Υ	Υ
Surface	All points	All points
Detection		
Scan Method	Measured	Measured

	Area Scan	Zoom Scan
Date	2025-05-25	2025-05-25
psSAR1g [W/kg]	0.322	0.341
psSAR10g [W/kg]	0.139	0.171
Power Drift [dB]	-0.11	0.15
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		60.1
Dist 3dB Peak		12.0
[mm]		







### **BT Head**

### **Exposure Conditions**

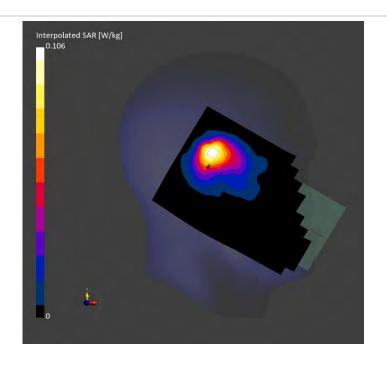
Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
LeftHead,	CHEEK,	ISM 2.4	1:1	2441.000,	7.37	1.777	39.635
HSL	0.00	GHz		39			
		Band					

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

### Scan Setup

•					
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	120.0 x 200.0	30.0 x 30.0 x 30.0	Date	2025-05-08	2025-05-08
[mm]			psSAR1g [W/kg]	0.084	0.086
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5	psSAR10g [W/kg]	0.042	0.045
Sensor Surface	3.0	1.4	Power Drift [dB]	-0.15	0.01
[mm]			Power Scaling	Disabled	Disabled
Graded Grid	N/A	Yes	Scaling Factor [dB]		
Grading Ratio	N/A	1.5	TSL Correction	No correction	No correction
MAIA	Υ	Υ	M2/M1 [%]		79.3
Surface	VMS + 6p	VMS + 6p	Dist 3dB Peak		9.0
Detection			[mm]		
Scan Method	Measured	Measured			







## **BT Body**

## **Exposure Conditions**

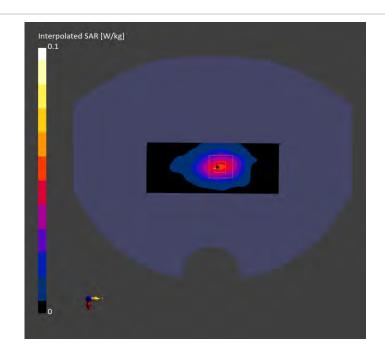
Phantom	Position, Test	t Band Duty	<b>Duty Cycle</b>	Duty Cycle Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	EDGE TOP,	ISM 2.4	1:1	2441.000,	7.37	1.777	39.635
HSL	10.00	GHz		39			
		Band					

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

### Scan Setup

•					
	Area Scan	Zoom Scan		Area Scan	Zoom Sca
Grid Extents	48.0 x 120.0	30.0 x 30.0 x 30.0	Date	2025-05-08	2025-05-0
[mm]			psSAR1g [W/kg]	0.041	0.04
Grid Steps [mm]	8.0 x 10.0	5.0 x 5.0 x 1.5	psSAR10g [W/kg]	0.021	0.02
Sensor Surface	3.0	1.4	Power Drift [dB]	0.01	-0.1
[mm]			Power Scaling	Disabled	Disable
Graded Grid	N/A	Yes	Scaling Factor [dB]		
Grading Ratio	N/A	1.5	TSL Correction	No correction	No correctio
MAIA	Υ	Υ	M2/M1 [%]		85.
Surface	All points	All points	Dist 3dB Peak		11.
Detection			[mm]		
Scan Method	Measured	Measured			





## **WLAN6E ANT7 PD front**

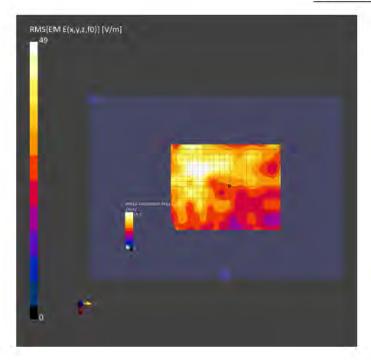
Measurement Report for Device, FRONT, U-NII-6, IEEE 802.11 ax (160MHz, MCS0, 90pc duty cycle), Channel 111 (6505.0 MHz)

Device	Indar 1	Fact D	ronar	tion

Model, Manufacturer		Dimensions [mm]		IMEI	DUT Type	
Device,		167.0 x 7	78.0 x 8.0	P	hone	
Exposure Condit	ions					
Phantom Section	Position, Test Dista	nce [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	FRONT, 2.00		U-NII-6	WLAN, 10743-AAC	6505.0, 111	1.0
Hardware Setup						
Phantom	Medium	Probe, Ca	libration Date		DAE, Calibrati	on Date
mmWave - xxxx	Air -	EUmmWV-	4 - SN9640 F1	-55GHz, 2025-01-10	DAE4 Sn549.	2024-10-30

cans Setup	
Scan Type	5G Scan
Grid Extents [mm]	25.0 x 25.0
Grid Steps [lambda]	0.04429156002095672 x 0.04429156002095672
Sensor Surface [mm]	2.0
MAIA	Y

Scan Type	5G Scan
Date	2025-05-22
Avg. Area [cm <sup>2</sup> ]	4.00
psPDn+ [W/m <sup>2</sup> ]	0.313
psPDtot+ [W/m <sup>2</sup> ]	1.75
psPDmod+ [W/m²]	2.61
E <sub>max</sub> [V/m]	49.0
Power Drift [dB]	0.01







14.9

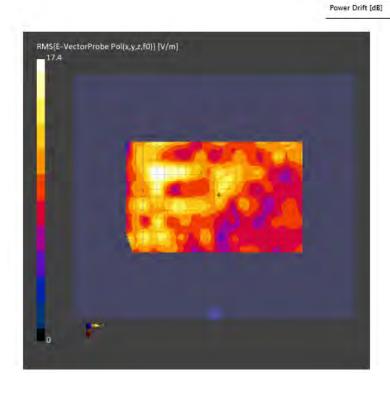
2.25

### **WLAN6E ANT9 PD front**

Measurement Report for Device, FRONT, U-NII-7, IEEE 802.11 ax (160MHz, MCS0, 90pc duty cycle), Channel 143 (6665.0 MHz)

Model, Manufacture	er		Dimensio	ins [mm]		IMEI	DUT Type	
Device,	167.0 x 78.0 x 8.0		78.0 x 8.0			Phone		
Exposure Condit	tions							
Phantom Section	Position, Test Distance	e [mm]	Band	Group, Ull	0	Frequency [MHz], Channel Number	Conversi	on Factor
5G	FRONT, 2.00		U-NII-7	WLAN, 10	743-AAC	6665.0, 143	1.0	
Hardware Setup								
Phantom	Medium	Medium Probe, Calibration Date			DAE, Calibration Date			
mmWave - xxxx	Air -	EUmmWV	4 - SN9640_F1	-55GHz, 202	25-01-10	DAE4 Sn54	9, 2024-10-30	
Scans Setup					Measu	rement Results		
Scan Type			.5	G Scan	Scan Ty	/pe		5G Scan
Grid Extents [mm]		25.0 x 25.0			Date			2025-05-22
Grid Steps [lambda]	0.04538097579	0.04538097579395488 x 0.04538097579395488			Avg. Ar	rea [cm²]		4.00
Sensor Surface [mm	ı			2.0	psPDn-	- [W/m <sup>2</sup> ]		0.152
MAIA				Y	psPDto	t+ [W/m <sup>2</sup> ]		0.230
					nsPDm	od+ (W/m²)		0.324

Emax [V/m]







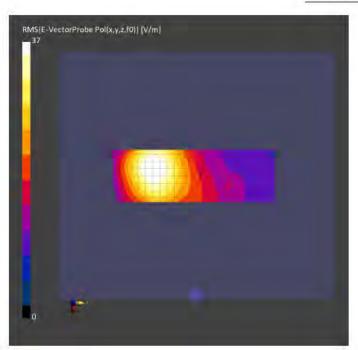
# **WLAN6E ANT7 PD Right**

Measurement Report for Device, EDGE RIGHT, U-NII-5, IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle), Channel 7 (5985.0 MHz)

Model, Manufacture			Dimensio	ons [mm]	IMEI	OUT Type
Device,		158.2 x 77.9 x 8.0		Phone		
Exposure Condit	ions					
Phantom Section	Position, Test Distanc	e [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	EDGE RIGHT, 36,00		U-NII-5	WLAN, 10456-AAD	5985.0, 7	1.0
Hardware Setup						
Phantom	Medium	Probe, Ca	libration Date		DAE, Calibrati	on Date
mmWave - xxxx	Air -	EUmmWV-	4 - SN9640 FI	-55GHz, 2025-01-10	DAE4 5n549.	2024-10-30

Scan Type	5G Scan
Grid Extents [mm]	25.0 x 25.0
Grid Steps [lambda]	0.125 x 0.125
Sensor Surface [mm]	36.0
MAIA	Ý

Scan Type	5G Scan
Date	2025-07-02
Avg. Area [cm <sup>2</sup> ]	4.00
psPDn+ [W/m <sup>2</sup> ]	5.14
psPDtot+ [W/m <sup>2</sup> ]	5.32
psPDmod+ [W/m²]	5.40
E <sub>max</sub> [V/m]	50.4
Power Drift [dB]	-0.11



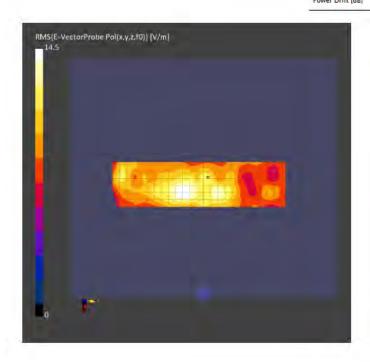




## **WLAN6E ANT9 PD Right**

Measurement Report for Device, EDGE RIGHT, U-NII-7, IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle), Channel 143 (6665.0 MHz)

Model, Manufacture	er	Dimensio	ns [mm]	IMEI	DUT Type		
Device,	180.0 x 90.0 x 8.0				Phone		
Exposure Condit	tions						
Phantom Section	Position, Test Distance [mm]	Band	Croup, UID	Frequency [MHz], Channel Number	Conversion Factor		
5G	EDGE RIGHT, 2.00	U-NII-7	WLAN, 10456-AAD	6665.0, 143	1.0		
Hardware Setup							
Phantom	Medium Probe, Ca	Medium Probe, Calibration Date			DAE, Calibration Date		
mmWave - xxxx	Air – EUmmWV	4 - SN9640_F1	-55CHz, 2025-01-10	DAE4 5n549, 2024-10-30			
Scans Setup			Mea	surement Results			
Scan Type		5	G Scan Scan	Туре	5G Scan		
Grid Extents [mm]		25.0	x 25.0 Date		2025-07-02		
Grid Steps [lambda]	0.04538097579395488 x 0.	045380975793	95488 Avg	Area [cm <sup>2</sup> ]	4.00		
Sensor Surface [mm	d		2.0 psP	On+ [W/m <sup>2</sup> ]	1,91		
MAIA			Y psP	Otot+ [W/m <sup>2</sup> ]	3.27		
			psP	Dmod+ [W/m <sup>2</sup> ]	6.46		
			Ema	, [V/m]	96.9		







# **ANNEX B** System Verification Results

## 750MHz

### **Exposure Conditions**

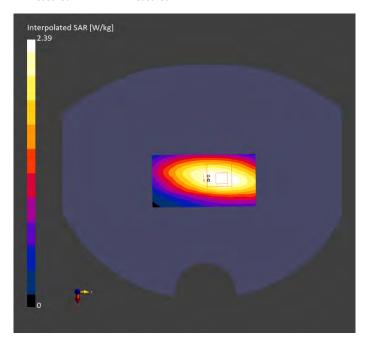
Phantom	Position, Test	Band	Group,	Frequency	Conversion	TSL	TSL
Section, TSL	Distance		UID	[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	EDGE TOP,	D750	CW,	Number 750.000,	9.34	0.856	41.41

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

#### **Scan Setup**

Scari Scrap			Wicasar Ciricit Mesar		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	48.0 x 90.0	30.0 x 30.0 x 30.0	Date	2025-04-03	2025-04-03
[mm]			psSAR1g [W/kg]	2.12	2.15
Grid Steps [mm]	8.0 x 15.0	6.0 x 6.0 x 1.5	psSAR10g [W/kg]	1.38	1.40
Sensor Surface	3.0	1.4	Power Drift [dB]	-0.05	0.02
[mm]			Power Scaling	Disabled	Disabled
Graded Grid	N/A	Yes	Scaling Factor [dB]		
<b>Grading Ratio</b>	N/A	1.5	TSL Correction	No correction	No correction
MAIA	N/A	N/A	M2/M1 [%]		83.1
Surface	VMS + 6p	VMS + 6p	Dist 3dB Peak [mm]		18.0
Detection					
Scan Method	Measured	Measured			







### **Exposure Conditions**

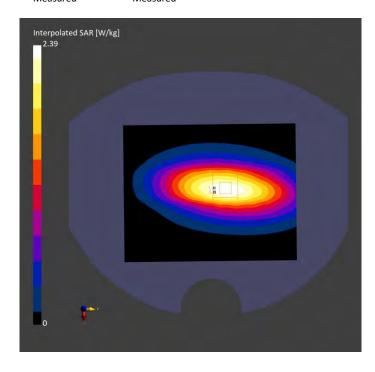
Phantom	Position, Test	Band	Group,	Frequency	Conversion	TSL	TSL
Section, TSL	Distance		UID	[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	васк,	D750	CW,	750.000,	9.34	0.882	41.576
HSL	5.00		0	50			

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

#### **Scan Setup**

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	120.0 x 150.0	30.0 x 30.0 x 30.0	Date	2025-04-08	2025-04-08
[mm]			psSAR1g [W/kg]	2.05	2.18
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5	psSAR10g [W/kg]	1.27	1.42
Sensor Surface	3.0	1.4	Power Drift [dB]	-0.02	0.03
[mm]			Power Scaling	Disabled	Disabled
Graded Grid	N/A	Yes	Scaling Factor [dB]		
<b>Grading Ratio</b>	N/A	1.5	TSL Correction	No correction	No correction
MAIA	N/A	N/A	M2/M1 [%]		83.7
Surface	VMS + 6p	VMS + 6p	Dist 3dB Peak		18.0
Detection			[mm]		
Scan Method	Measured	Measured			







### **Exposure Conditions**

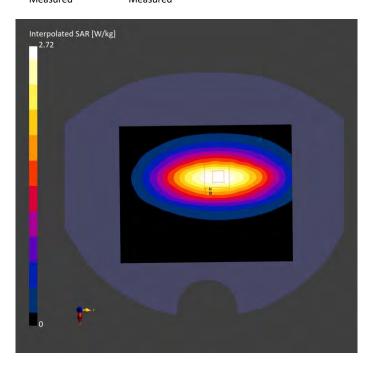
Phantom	Position, Test	Band	Group,	Frequency	Conversion	TSL	TSL
Section, TSL	Distance		UID	[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	васк,	D835	CW,	835.000,	9.34	0.912	41.211
HSL	5.00		0	50			

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

#### **Scan Setup**

				-	
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	120.0 x 150.0	30.0 x 30.0 x 30.0	Date	2025-03-10	2025-03-10
[mm]			psSAR1g [W/kg]	2.13	2.27
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5	psSAR10g [W/kg]	1.34	1.46
Sensor Surface	3.0	1.4	Power Drift [dB]	0.04	-0.02
[mm]			Power Scaling	Disabled	Disabled
<b>Graded Grid</b>	N/A	Yes	Scaling Factor [dB]		
<b>Grading Ratio</b>	N/A	1.5	TSL Correction	No correction	No correction
MAIA	N/A	N/A	M2/M1 [%]		84.1
Surface	VMS + 6p	VMS + 6p	Dist 3dB Peak		19.7
Detection			[mm]		
Scan Method	Measured	Measured			







### **Exposure Conditions**

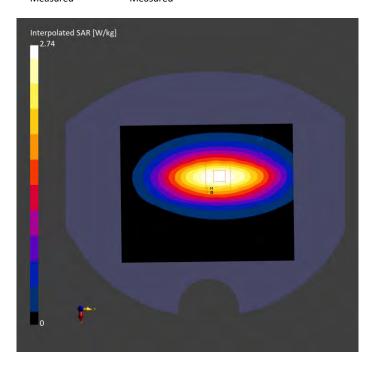
Phantom	Position, Test	Band	Group,	Frequency	Conversion	TSL	TSL
Section, TSL	Distance		UID	[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	васк,	D835	CW,	835.000,	9.34	0.931	41.27
HSL	5.00		0	50			

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

#### **Scan Setup**

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	120.0 x 150.0	30.0 x 30.0 x 30.0	Date	2025-03-13	2025-03-13
[mm]			psSAR1g [W/kg]	2.31	2.33
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5	psSAR10g [W/kg]	1.46	1.50
Sensor Surface	3.0	1.4	Power Drift [dB]	0.01	0.08
[mm]			Power Scaling	Disabled	Disabled
Graded Grid	N/A	Yes	Scaling Factor [dB]		
<b>Grading Ratio</b>	N/A	1.5	TSL Correction	No correction	No correction
MAIA	N/A	N/A	M2/M1 [%]		84.1
Surface	VMS + 6p	VMS + 6p	Dist 3dB Peak [mm]		19.6
Detection					
Scan Method	Measured	Measured			







### **Exposure Conditions**

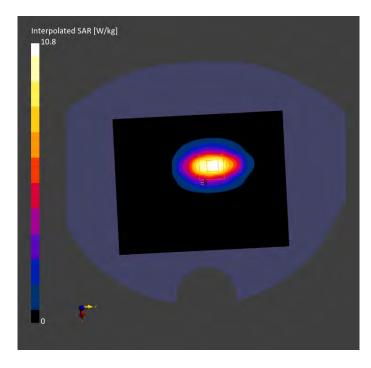
Phantom	Position, Test	Band	Group,	Frequency	Conversion	TSL	TSL
Section, TSL	Distance		UID	[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	васк,	D1800	CW,	1800.000,	7.79	1.43	40.512
HSL	5.00		0	50			

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

an Setup			Measurement Results
	Area Scan	Zoom Scan	

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	120.0 x 150.0	30.0 x 30.0 x 30.0	Date	2025-03-16	2025-03-16
[mm]			psSAR1g [W/kg]	9.25	9.33
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5	psSAR10g [W/kg]	4.89	4.93
Sensor Surface	3.0	1.4	Power Drift [dB]	-0.01	0.07
[mm]			Power Scaling	Disabled	Disabled
Graded Grid	N/A	Yes	Scaling Factor [dB]		
<b>Grading Ratio</b>	N/A	1.5	TSL Correction	No correction	No correction
MAIA	N/A	N/A	M2/M1 [%]		80.8
Surface	VMS + 6p	VMS + 6p	Dist 3dB Peak		9.6
Detection			[mm]		
Scan Method	Measured	Measured			







### **Exposure Conditions**

Phantom	Position, Test	Band	Group,	Frequency	Conversion	TSL	TSL
Section, TSL	Distance		UID	[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	васк,	D1800	CW,	1800.000,	7.79	1.424	40.422

### **Hardware Setup**

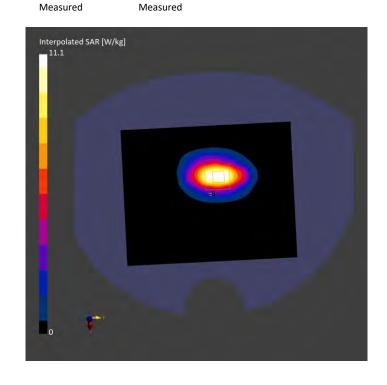
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

#### **Scan Setup**

Detection
Scan Method

	Area Scan	Zoom Scan
Grid Extents	120.0 x 150.0	30.0 x 30.0 x 30.0
[mm]		
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes
<b>Grading Ratio</b>	N/A	1.5
MAIA	N/A	N/A
Surface	VMS + 6p	VMS + 6p

	Area Scan	Zoom Scan
Date	2025-03-19	2025-03-19
psSAR1g [W/kg]	9.35	9.42
psSAR10g [W/kg]	4.77	4.97
Power Drift [dB]	-0.03	-0.11
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		81.2
Dist 3dB Peak [mm]		8.8







### **Exposure Conditions**

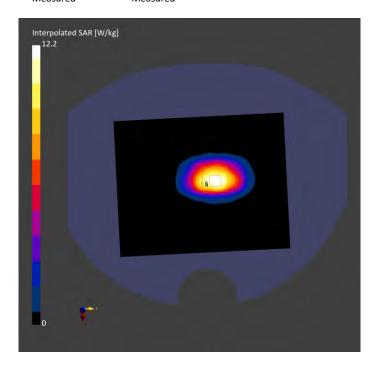
Phantom	Position, Test	Band	Group,	Frequency	Conversion	TSL	TSL
Section, TSL	Distance		UID	[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	васк,	D1900	CW,	Number 1900.000,	7.48	1.35	38.761

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

Me	easu	ıre	me	nt	Res	ults

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	120.0 x 150.0	30.0 x 30.0 x 30.0	Date	2025-03-22	2025-03-22
[mm]			psSAR1g [W/kg]	9.66	9.72
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5	psSAR10g [W/kg]	5.08	5.11
Sensor Surface	3.0	1.4	Power Drift [dB]	-0.04	0.05
[mm]			Power Scaling	Disabled	Disabled
Graded Grid	N/A	Yes	Scaling Factor [dB]		
Grading Ratio	N/A	1.5	TSL Correction	No correction	No correction
MAIA	N/A	N/A	M2/M1 [%]		81.0
Surface	VMS + 6p	VMS + 6p	Dist 3dB Peak		9.2
Detection			[mm]		
Scan Method	Measured	Measured			







### **Exposure Conditions**

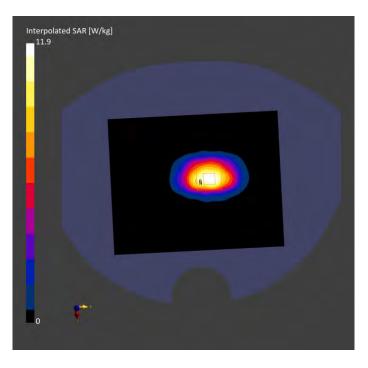
Phantom	Position, Test	Band	Group,	Frequency	Conversion	TSL	TSL
Section, TSL	Distance		UID	[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	васк,	D1900	CW,	Number 1900.000,	7.48	1.363	38.852

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

#### **Scan Setup**

•					
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	120.0 x 150.0	30.0 x 30.0 x 30.0	Date	2025-03-25	2025-03-25
[mm]			psSAR1g [W/kg]	9.79	9.88
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5	psSAR10g [W/kg]	5.17	5.21
Sensor Surface	3.0	1.4	Power Drift [dB]	-0.13	0.06
[mm]			Power Scaling	Disabled	Disabled
Graded Grid	N/A	Yes	Scaling Factor [dB]		
<b>Grading Ratio</b>	N/A	1.5	TSL Correction	No correction	No correction
MAIA	N/A	N/A	M2/M1 [%]		81.1
Surface	VMS + 6p	VMS + 6p	Dist 3dB Peak [mm]		9.2
Detection					
Scan Method	Measured	Measured			







### **Exposure Conditions**

Phantom	Position, Test	Band	Group,	Frequency	Conversion	TSL	TSL
Section, TSL	Distance		UID	[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				A1			
				Number			
Flat,	васк,	D2450	CW,	2450.000,	7.12	1.781	39.63

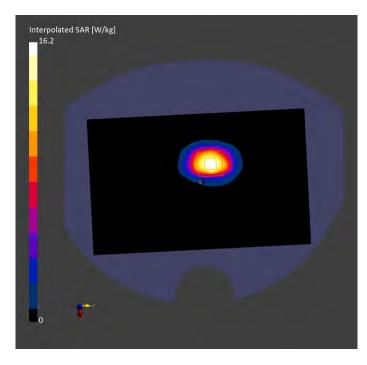
### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

#### **Scan Setup**

	Area Scan	Zoom Scan
Grid Extents	120.0 x 192.0	30.0 x 30.0 x 30.0
[mm]		
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 1.5
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes
<b>Grading Ratio</b>	N/A	1.5
MAIA	N/A	N/A
Surface	VMS + 6p	VMS + 6p
Detection		
Scan Method	Measured	Measured

	Area Scan	Zoom Scan
Date	2025-05-08	2025-05-08
psSAR1g [W/kg]	13.41	13.52
psSAR10g [W/kg]	6.22	6.37
Power Drift [dB]	0.09	0.04
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		79.6
Dist 3dB Peak		9.0
[mm]		
ţj		







### **Exposure Conditions**

Phantom	Position, Test	Band	Group,	Frequency	Conversion	TSL	TSL
Section, TSL	Distance		UID	[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	BACK,	D2600	CW,	2600.000,	6.95	1.95	39.53
HSL	5.00		0	50			

### **Hardware Setup**

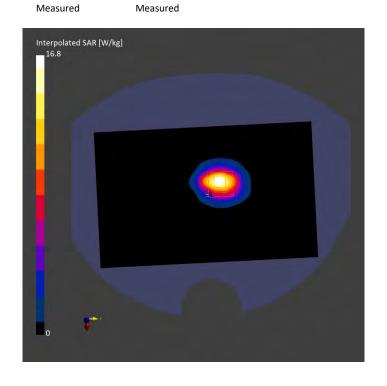
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

#### **Scan Setup**

Detection
Scan Method

	Area Scan	Zoom Scan
Grid Extents	120.0 x 192.0	30.0 x 30.0 x 30.0
[mm]		
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 1.5
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes
<b>Grading Ratio</b>	N/A	1.5
MAIA	N/A	N/A
Surface	VMS + 6p	VMS + 6p

	Area Scan	Zoom Scan
Date	2025-04-25	2025-04-25
psSAR1g [W/kg]	13.77	13.83
psSAR10g [W/kg]	6.13	6.25
Power Drift [dB]	-0.04	-0.05
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		78.6
Dist 3dB Peak [mm]		9.0







### **Exposure Conditions**

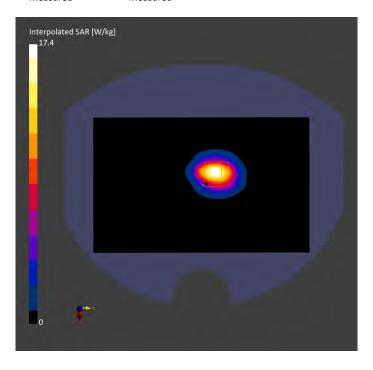
Phantom	Position, Test	Band	Group,	Frequency	Conversion	TSL	TSL
Section, TSL	Distance		UID	[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	васк,	D2600	CW,	Number 2600.000,	6.95	2.035	39.452

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

#### **Scan Setup**

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	120.0 x 192.0	30.0 x 30.0 x 30.0	Date	2025-04-27	2025-04-27
[mm]			psSAR1g [W/kg]	13.61	13.68
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 1.5	psSAR10g [W/kg]	6.13	6.17
Sensor Surface	3.0	1.4	Power Drift [dB]	0.07	-0.12
[mm]			Power Scaling	Disabled	Disabled
Graded Grid	N/A	Yes	Scaling Factor [dB]		
<b>Grading Ratio</b>	N/A	1.5	TSL Correction	No correction	No correction
MAIA	N/A	N/A	M2/M1 [%]		78.6
Surface	VMS + 6p	VMS + 6p	Dist 3dB Peak [mm]		9.0
Detection					
Scan Method	Measured	Measured			







### **Exposure Conditions**

Phantom	Position, Test	Band	Group,	Frequency	Conversion	TSL	TSL
Section, TSL	Distance		UID	[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
				Number			
Flat,	BACK,	D2600	CW,	2600.000 <i>,</i>	6.95	1.98	39.24

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

#### **Scan Setup**

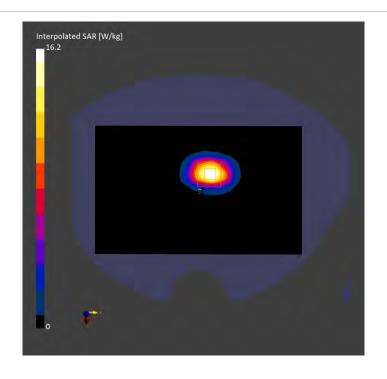
Detection
Scan Method

	Area Scan	Zoom Scan
Grid Extents	120.0 x 192.0	30.0 x 30.0 x 30.0
[mm]		
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 1.5
Sensor Surface	3.0	1.4
[mm]		
Graded Grid	N/A	Yes
<b>Grading Ratio</b>	N/A	1.5
MAIA	N/A	N/A
Surface	VMS + 6p	VMS + 6p

Measured

#### **Measurement Results**

	Area Scan	Zoom Scan
Date	2025-04-30	2025-04-30
psSAR1g [W/kg]	13.63	13.77
psSAR10g [W/kg]	6.16	6.23
Power Drift [dB]	-0.14	0.05
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		78.6
Dist 3dB Peak [mm]		9.0



Measured





### **Exposure Conditions**

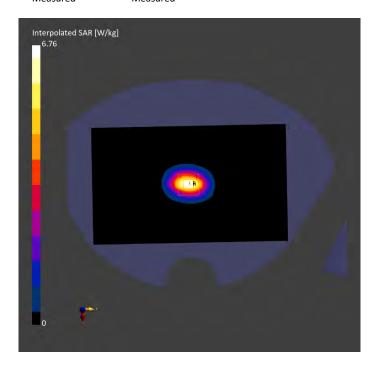
Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	васк,	D3500	CW,	3500.000,	6.4	2.81	37.661

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

#### **Scan Setup**

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	120.0 x 200.0	22.0 x 22.0 x 22.0	Date	2025-04-19	2025-04-19
[mm]			psSAR1g [W/kg]	6.55	6.57
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4	psSAR10g [W/kg]	2.41	2.48
Sensor Surface	3.0	1.4	Power Drift [dB]	-0.07	0.05
[mm]			Power Scaling	Disabled	Disabled
Graded Grid	N/A	Yes	Scaling Factor [dB]		
<b>Grading Ratio</b>	N/A	1.4	TSL Correction	No correction	No correction
MAIA	N/A	N/A	M2/M1 [%]		57
Surface	VMS + 6p	VMS + 6p	Dist 3dB Peak		4
Detection			[mm]		
Scan Method	Measured	Measured			







### **Exposure Conditions**

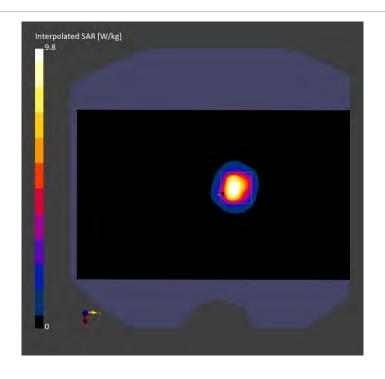
Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	васк,	D3500	CW,	3500.000,	6.4	2.845	37.665

### **Hardware Setup**

Phantom TSL, Measured Date		Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

Measurement	Results

Area Scan	Zoom Scan		Area Scan	Zoom Scan
120.0 x 200.0	22.0 x 22.0 x 22.0	Date	2025-04-20	2025-04-20
		psSAR1g [W/kg]	6.58	6.69
10.0 x 10.0	4.0 x 4.0 x 1.4	psSAR10g [W/kg]	2.45	2.53
3.0	1.4	Power Drift [dB]	0.07	0.05
		Power Scaling	Disabled	Disabled
N/A	Yes	Scaling Factor [dB]		
N/A	1.4	TSL Correction	No correction	No correction
N/A	N/A	M2/M1 [%]		57
VMS + 6p	VMS + 6p	Dist 3dB Peak		4
		[mm]		
Measured	Measured			
	120.0 x 200.0 10.0 x 10.0 3.0 N/A N/A N/A VMS + 6p	120.0 x 200.0 22.0 x 22.0 x 22.0 x 22.0  10.0 x 10.0 4.0 x 4.0 x 1.4  3.0 1.4  N/A Yes  N/A 1.4  N/A N/A  VMS + 6p VMS + 6p	120.0 x 200.0	120.0 x 200.0       22.0 x 22.0 x 22.0       Date       2025-04-20         psSAR1g [W/kg]       6.58         10.0 x 10.0       4.0 x 4.0 x 1.4       psSAR10g [W/kg]       2.45         3.0       1.4       Power Drift [dB]       0.07         Power Scaling       Disabled         N/A       Yes       Scaling Factor [dB]         N/A       1.4       TSL Correction       No correction         N/A       N/A       M2/M1 [%]         VMS + 6p       VMS + 6p       Dist 3dB Peak       [mm]







### **Exposure Conditions**

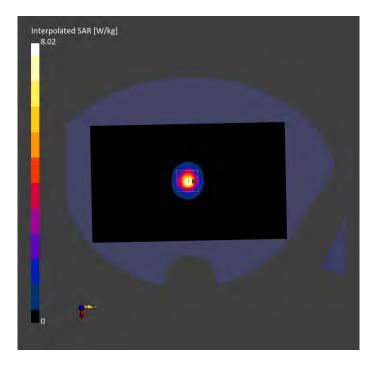
Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
El. I				2700 000		2.006	27.254
Flat,	BACK,	D3700	CW,	3700.000,	6.03	2.996	37.251

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

an Setup			Measurement Results
	Area Scan	Zoom Scan	

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	120.0 x 200.0	22.0 x 22.0 x 22.0	Date	2025-04-19	2025-04-19
[mm]			psSAR1g [W/kg]	6.67	6.71
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4	psSAR10g [W/kg]	2.36	2.42
Sensor Surface	3.0	1.4	Power Drift [dB]	-0.05	0.01
[mm]			Power Scaling	Disabled	Disabled
Graded Grid	N/A	Yes	Scaling Factor [dB]		
<b>Grading Ratio</b>	N/A	1.4	TSL Correction	No correction	No correction
MAIA	N/A	N/A	M2/M1 [%]		70
Surface	VMS + 6p	VMS + 6p	Dist 3dB Peak		9
Detection			[mm]		
Scan Method	Measured	Measured			







## **Exposure Conditions**

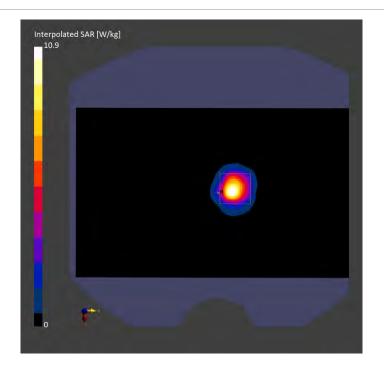
Phantom	Position, Test	Band	<b>Duty Cycle</b>	Frequency	Conversion	TSL	TSL
Section, TSL	Distance			[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	BACK,	D3700	CW,	3700.000,	6.03	3.19	37.215

### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

Measu	rement	Results
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	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	120.0 x 200.0	22.0 x 22.0 x 22.0	Date	2025-04-20	2025-04-20
[mm]			psSAR1g [W/kg]	6.68	6.81
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4	psSAR10g [W/kg]	2.35	2.47
Sensor Surface	3.0	1.4	Power Drift [dB]	0.03	0.12
[mm]			Power Scaling	Disabled	Disabled
Graded Grid	N/A	Yes	Scaling Factor [dB]		
<b>Grading Ratio</b>	N/A	1.4	TSL Correction	No correction	No correction
MAIA	N/A	N/A	M2/M1 [%]		70
Surface	VMS + 6p	VMS + 6p	Dist 3dB Peak		9
Detection			[mm]		
Scan Method	Measured	Measured			







#### **Exposure Conditions**

Phantom	Position, Test	Band	Group,	Frequency	Conversion	TSL	TSL
Section, TSL	Distance		UID	[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	васк,	D5GHz	CW,	Number 5250.000,	5.03	4.73	36.91

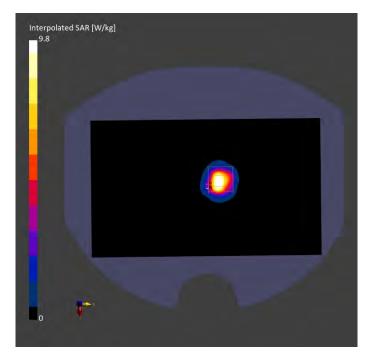
#### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

#### **Scan Setup**

#### **Measurement Results**

Area Scan	Zoom Scan		Area Scan	Zoom Scan
120.0 x 200.0	22.0 x 22.0 x 22.0	Date	2025-05-15	2025-05-15
		psSAR1g [W/kg]	7.82	7.9
10.0 x 10.0	4.0 x 4.0 x 1.4	psSAR10g [W/kg]	2.23	2.26
3.0	1.4	Power Drift [dB]	-0.03	0.01
		Power Scaling	Disabled	Disabled
N/A	Yes	Scaling Factor		
N/A	1.4	[dB]		
N/A	N/A	TSL Correction	No correction	No correction
VMS + 6p	VMS + 6p	M2/M1 [%]		65.3
		Dist 3dB Peak		6.5
Measured	Measured	[mm]		
	120.0 x 200.0 10.0 x 10.0 3.0 N/A N/A N/A VMS + 6p	120.0 x 200.0 22.0 x 22.0 x 22.0 10.0 x 10.0 4.0 x 4.0 x 1.4 3.0 1.4 N/A Yes N/A 1.4 N/A N/A VMS + 6p VMS + 6p	120.0 x 200.0	120.0 x 200.0       22.0 x 22.0 x 22.0       Date       2025-05-15         psSAR1g [W/kg]       7.82         10.0 x 10.0       4.0 x 4.0 x 1.4       psSAR10g [W/kg]       2.23         3.0       1.4       Power Drift [dB]       -0.03         Power Scaling       Disabled         N/A       Yes       Scaling Factor         N/A       1.4       [dB]         N/A       N/A       TSL Correction       No correction         VMS + 6p       VMS + 6p       M2/M1 [%]       Dist 3dB Peak







#### **Exposure Conditions**

Phantom	Position, Test	Band	Group,	Frequency	Conversion	TSL	TSL
Section, TSL	Distance		UID	[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	BACK,	D5GHz	CW,	5600.000,	4.42	4.96	36.474

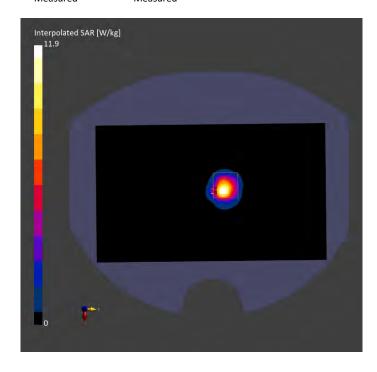
#### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date	
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31	
probe tilt) - 2114				

#### **Scan Setup**

#### **Measurement Results**

	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	120.0 x 200.0	22.0 x 22.0 x 22.0	Date	2025-05-17	2025-05-17
[mm]			psSAR1g [W/kg]	8.22	8.29
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4	psSAR10g [W/kg]	2.27	2.36
Sensor Surface	3.0	1.4	Power Drift [dB]	-0.11	0.09
[mm]			Power Scaling	Disabled	Disabled
Graded Grid	N/A	Yes	Scaling Factor [dB]		
Grading Ratio	N/A	1.4	TSL Correction	No correction	No correction
MAIA	N/A	N/A	M2/M1 [%]		62.3
Surface	VMS + 6p	VMS + 6p	Dist 3dB Peak [mm]		6.5
Detection					
Scan Method	Measured	Measured			







#### **Exposure Conditions**

Phantom	Position, Test	Band	Group,	Frequency	Conversion	TSL	TSL
Section, TSL	Distance		UID	[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	васк,	D5GHz	CW,	5750.000,	4.59	5.072	36.221

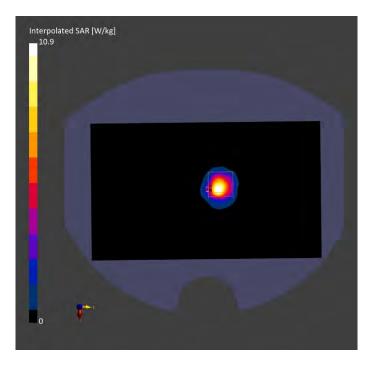
#### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 - SN7825, 2024-11-11	DAE4ip Sn1832, 2024-12-31
probe tilt) - 2114			

#### **Scan Setup**

Measui	ement	Resul	ts
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-					
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	120.0 x 200.0	22.0 x 22.0 x 22.0	Date	2025-05-19	2025-05-19
[mm]			psSAR1g [W/kg]	7.74	7.86
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4	psSAR10g [W/kg]	2.18	2.25
Sensor Surface	3.0	1.4	Power Drift [dB]	0.07	0.02
[mm]			Power Scaling	Disabled	Disabled
Graded Grid	N/A	Yes	Scaling Factor [dB]		
Grading Ratio	N/A	1.4	TSL Correction	No correction	No correction
MAIA	N/A	N/A	M2/M1 [%]		61.5
Surface	VMS + 6p	VMS + 6p	Dist 3dB Peak [mm]		6.6
Detection					
Scan Method	Measured	Measured			







#### **Exposure Conditions**

Phantom	Position, Test	Band	Group,	Frequency	Conversion	TSL	TSL
Section, TSL	Distance		UID	[MHz],	Factor	Conductivity	Permittivity
	[mm]			Channel		[S/m]	
				Number			
Flat,	васк,	D6GHz	CW,	Number 6500	5.21	5.884	35.57

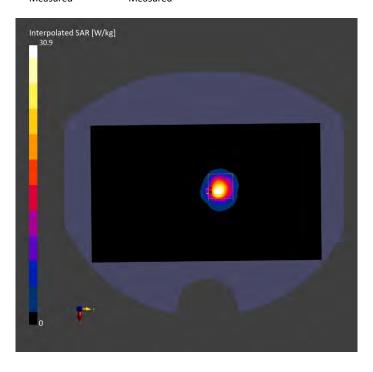
#### **Hardware Setup**

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg	HBBL-600-10000	EX3DV4 – SN7464, 2025-01-28	DAE4ip Sn1834, 2024-11-25
probe tilt) - 2114			

#### **Scan Setup**

#### **Measurement Results**

				~	
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents	120.0 x 200.0	22.0 x 22.0 x 22.0	Date	2025-05-25	2025-05-25
[mm]			psSAR1g [W/kg]	28.6	29.5
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4	psSAR10g [W/kg]	5.27	5.39
Sensor Surface	3.0	1.4	Power Drift [dB]	-0.04	0.15
[mm]			Power Scaling	Disabled	Disabled
Graded Grid	N/A	Yes	Scaling Factor [dB]		
<b>Grading Ratio</b>	N/A	1.4	TSL Correction	No correction	No correction
MAIA	N/A	N/A	M2/M1 [%]		61.5
Surface	VMS + 6p	VMS + 6p	Dist 3dB Peak [mm]		6.6
Detection					
Scan Method	Measured	Measured			







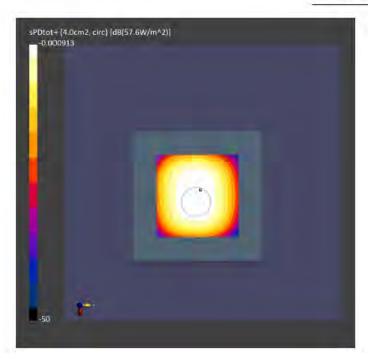
### 10GHz

Measurement Report for Device, FRONT, Validation band, CW, Channel 10000 (10000.0 MHz)

Model, Manufacturer Device,		Dir	mensions [mm]		IMEI	DUT Type
		10	0.0 x 100.0 x 100.	0	Phone	
Exposure Condit	ions					
Phantom Section	Position, Test Distar	nce [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	FRONT, 2.00		Validation band	CW, 0	10000.0, 10000	1.0
Hardware Setup						
Phantom	Medium	Probe, Calibrat	Probe, Calibration Date		DAE, Calibration Date	
mmWave - xxxx	Air -	EUmmWV4 - SN9640_F1-55GHz, 2025-01-10		DAE4 Sn549, 2024-10-30		

Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.06808848581238543 x 0.06808848581238543
Sensor Surface [mm]	2.0
MAIA	N/A

Scan Type	5 G Scan
Date	2025-05-22
Avg. Area [cm <sup>2</sup> ]	4.00
psPDn+ [W/m <sup>2</sup> ]	55.2
psPDtot+ [W/m <sup>2</sup> ]	55.5
psPDmod+ [W/m²]	55.9
E <sub>max</sub> [V/m]	153
Power Drift [dB]	0.07







### 10GHz

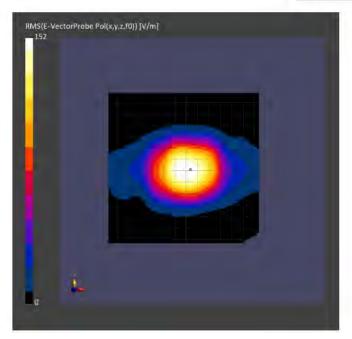
Measurement Report for Device, FRONT, Validation band, CW, Channel 10000 (10000.0 MHz)

Model, Manufacturer  Device,		Dimensions [mm]		IMEI	DUT Type Phone	
		100.0 x 100.0 x 170.	0			
Ex posure Condit	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	

hantom	Medium	Probe, Calibration Date	DAE, Calibration Date
nmWave - xxxx	Air -	EUmmWV4 - SN9640_F1-55GHz, 2025-01-10	DAE4 Sn549, 2024-10-30

Scan Type	5G Scan
Grid Extents [mm]	25.0 x 25.0
Grid Steps [lambda]	0.06808848581238543 x 0.06808848581238543
Sensor Surface [mm]	2.0
MAIA	Y

Measurement Results	
Scan Type	5G Scan
Date	2025-07-02
Avg. Area [cm <sup>2</sup> ]	4.00
psPDn+ [W/m <sup>2</sup> ]	53.1
psPDtot+ [W/m <sup>2</sup> ]	53.4
psPDmod+ [W/m <sup>2</sup> ]	53.7
E <sub>max</sub> [V/m]	148
Power Drift [dB]	-0.00



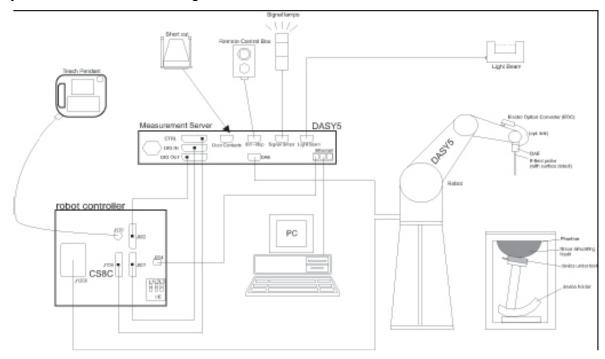




# ANNEX C SAR Measurement Setup

#### **C.1 Measurement Set-up**

The Dasy5 or DASY8 system for performing compliance tests is illustrated above graphically. This system consists of the following items:



Picture C.1 SAR Lab Test Measurement Set-up

- A standard high precision 6-axis robot (Stäubli TX=RX family) with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals
  for the digital communication to the DAE. To use optical surface detection, a special version of
  the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running Win10 and the DASY5 or DASY8 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as
- warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.





#### C.2 DASY5 or DASY8 E-field Probe System

The SAR measurements were conducted with the dosimetric probe designed in the classical triangular configuration and optimized for dosimetric evaluation. The probe is constructed using the thick film technique; with printed resistive lines on ceramic substrates. The probe is equipped with an optical multifiber line ending at the front of the probe tip. It is connected to the EOC box on the robot arm and provides an automatic detection of the phantom surface. Half of the fibers are connected to a pulsed infrared transmitter, the other half to a synchronized receiver. As the probe approaches the surface, the reflection from the surface produces a coupling from the transmitting to the receiving fibers. This reflection increases first during the approach, reaches maximum and then decreases. If the probe is flatly touching the surface, the coupling is zero. The distance of the coupling maximum to the surface is independent of the surface reflectivity and largely independent of the surface to probe angle. The DASY5 or DASY8 software reads the reflection during a software approach and looks for the maximum using 2<sup>nd</sup> curve fitting. The approach is stopped at reaching the maximum.

#### **Probe Specifications:**

Model: EX3DV4

Frequency 10MHz — 6.0GHz(EX3DV4)

Range:

Calibration: In head and body simulating tissue at

Frequencies from 835 up to 5800MHz

Linearity: ± 0.2 dB(30 MHz to 6 GHz) for EX3DV4

Dynamic Range: 10 mW/kg — 100W/kg

Probe Length: 330 mm

**Probe Tip** 

Length: 20 mm
Body Diameter: 12 mm
Tip Diameter: 2.5 mm
Tip-Center: 1 mm

Application: SAR Dosimetry Testing

Compliance tests of mobile phones

Dosimetry in strong gradient fields



Picture C.2 Near-field Probe



Picture C.3 E-field Probe





#### C.3 E-field Probe Calibration

Each E-Probe/Probe Amplifier combination has unique calibration parameters. A TEM cell calibration procedure is conducted to determine the proper amplifier settings to enter in the probe parameters. The amplifier settings are determined for a given frequency by subjecting the probe to a known E-field density (1 mW/cm²) using an RF Signal generator, TEM cell, and RF Power Meter.

The free space E-field from amplified probe outputs is determined in a test chamber. This calibration can be performed in a TEM cell if the frequency is below 1 GHz and inn a waveguide or other methodologies above 1 GHz for free space. For the free space calibration, the probe is placed in the volumetric center of the cavity and at the proper orientation with the field. The probe is then rotated 360 degrees until the three channels show the maximum reading. The power density readings equates to 1 mW/cm<sup>2</sup>.

E-field temperature correlation calibration is performed in a flat phantom filled with the appropriate simulated brain tissue. The E-field in the medium correlates with the temperature rise in the dielectric medium. For temperature correlation calibration a RF transparent thermistor-based temperature probe is used in conjunction with the E-field probe.

$$SAR = C \frac{\Delta T}{\Delta t}$$

Where:

 $\Delta t$  = Exposure time (30 seconds),

C = Heat capacity of tissue (brain or muscle),

 $\Delta T$  = Temperature increase due to RF exposure.

$$SAR = \frac{\left|E\right|^2 \cdot \sigma}{\rho}$$

Where:

 $\sigma$  = Simulated tissue conductivity,

 $\rho$  = Tissue density (kg/m<sup>3</sup>).





#### C.4 Other Test Equipment

#### C.4.1 Data Acquisition Electronics(DAE)

The data acquisition electronics consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through an optical downlink for data and status information, as well as an optical uplink for commands and the clock.

The mechanical probe mounting device includes two different sensor systems for frontal and sideways probe contacts. They are used for mechanical surface detection and probe collision detection.

The input impedance of the DAE is 200 MOhm; the inputs are symmetrical and floating. Common mode rejection is above 80 dB.



Picture C.4: DAE

#### C.4.2 Robot

The SPEAG DASY system uses the high precision robots (DASY5: RX160L; DASY8: TX2-90XL spe) type from Stäubli SA (France). For the 6-axis controller system, the robot controller version from Stäubli is used. The Stäubli robot series have many features that are important for our application:

- ➤ High precision (repeatability 0.02mm)
- High reliability (industrial design)
- Low maintenance costs (virtually maintenance free due to direct drive gears; no belt drives)
- Jerk-free straight movements (brushless synchron motors; no stepper motors)
- Low ELF interference (motor control fields shielded via the closed metallic construction shields)







Picture C.5 DASY 5

Picture C.6 DASY 8

#### C.4.3 Measurement Server

The Measurement server is based on a PC/104 CPU broad with CPU (DASY5/DASY8: 400 MHz, Intel Celeron), chipdisk (DASY5/DASY8: 128MB), RAM (DASY5/DASY8: 128MB). The necessary circuits for communication with the DAE electronic box, as well as the 16 bit AD converter system for optical detection and digital I/O interface are contained on the DASY I/O broad, which is directly connected to the PC/104 bus of the CPU broad.

The measurement server performs all real-time data evaluation of field measurements and surface detection, controls robot movements and handles safety operation. The PC operating system cannot interfere with these time critical processes. All connections are supervised by a watchdog, and disconnection of any of the cables to the measurement server will automatically disarm the robot and disable all program-controlled robot movements. Furthermore, the measurement server is equipped with an expansion port which is reserved for future applications. Please note that this expansion port does not have a standardized pinout, and therefore only devices provided by SPEAG can be connected. Devices from any other supplier could seriously damage the measurement server.





Picture C.7 Server for DASY 5

Picture C.8 Server for DASY 8





#### C.4.4 Device Holder for Phantom

The SAR in the phantom is approximately inversely proportional to the square of the distance between the source and the liquid surface. For a source at 5mm distance, a positioning uncertainty of  $\pm 0.5$ mm would produce a SAR uncertainty of  $\pm 20\%$ . Accurate device positioning is therefore crucial for accurate and repeatable measurements. The positions in which the devices must be measured are defined by the standards.

The DASY device holder is designed to cope with the different positions given in the standard. It has two scales for device rotation (with respect to the body axis) and device inclination (with respect to the line between the ear reference points). The rotation centers for both scales are the ear reference point (ERP). Thus the device needs no repositioning when changing the angles.

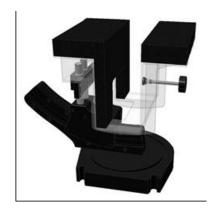
The DASY device holder is constructed of low-loss POM material having the following dielectric parameters: relative permittivity  $\mathcal{E}=3$  and loss tangent  $\mathcal{S}=0.02$ . The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence of the clamp on the test results could thus be lowered.

#### <Laptop Extension Kit>

The extension is lightweight and made of POM, acrylic glass and foam. It fits easily on the upper part of the Mounting Device in place of the phone positioner. The extension is fully compatible with the Twin-SAM and ELI phantoms.



Picture C.9: Device Holder



Picture C.10: Laptop Extension Kit





#### C.4.5 Phantom

The SAM Twin Phantom V4.0 is constructed of a fiberglass shell integrated in a table. The shape of the shell is based on data from an anatomical study designed to

Represent the 90<sup>th</sup> percentile of the population. The phantom enables the dissymmetric evaluation of SAR for both left and right handed handset usage, as well as body-worn usage using the flat phantom region. Reference markings on the Phantom allow the complete setup of all predefined phantom positions and measurement grids by manually teaching three points in the robot. The shell phantom has a 2mm shell thickness (except the ear region where shell thickness increases to 6 mm).

Shell Thickness: 2±0.2 mm

Filling Volume: Approx. 25 liters

Dimensions: 810 x 1000 x 500 mm (H x L x W)

Available: Special



**Picture C.11 SAM Twin Phantom** 

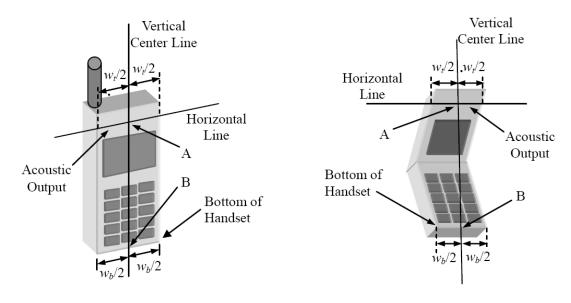




# ANNEX D Position of the wireless device in relation to the phantom

#### **D.1 General considerations**

This standard specifies two handset test positions against the head phantom – the "cheek" position and the "tilt" position.



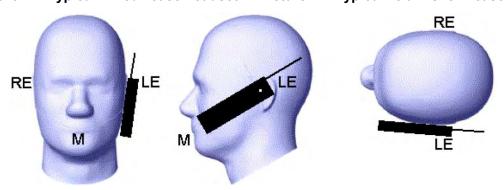
 $W_t$  Width of the handset at the level of the acoustic

 $W_b$  Width of the bottom of the handset

A Midpoint of the width  $W_t$  of the handset at the level of the acoustic output

B Midpoint of the width  $W_b$  of the bottom of the handset

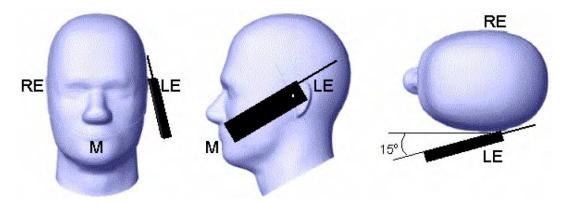
Picture D.1 Typical "fixed" case headset 
Picture D.2 Typical "clam-shell" case headset



Picture D.3 Cheek position of the wireless device on the left side of SAM



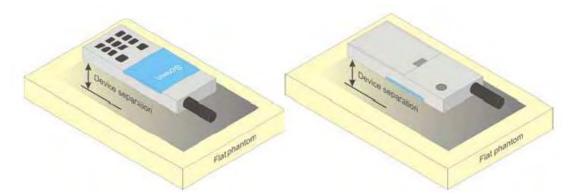




Picture D.4 Tilt position of the wireless device on the left side of SAM

# D.2 Body-worn device

A typical example of a body-worn device is a mobile phone, wireless enabled PDA or other battery operated wireless device with the ability to transmit while mounted on a person's body using a carry accessory approved by the wireless device manufacturer.



Picture D.5 Test positions for body-worn devices

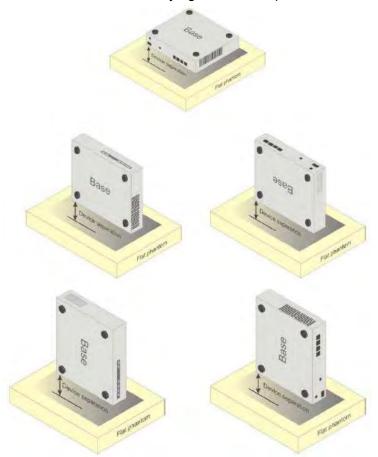




### D.3 Desktop device

A typical example of a desktop device is a wireless enabled desktop computer placed on a table or desk when used.

The DUT shall be positioned at the distance and in the orientation to the phantom that corresponds to the intended use as specified by the manufacturer in the user instructions. For devices that employ an external antenna with variable positions, tests shall be performed for all antenna positions specified. Picture 8.5 show positions for desktop device SAR tests. If the intended use is not specified, the device shall be tested directly against the flat phantom.

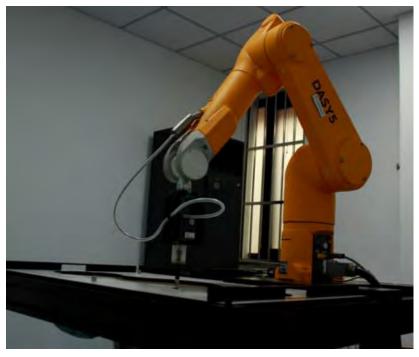


Picture D.6 Test positions for desktop devices





# **D.4 DUT Setup Photos**



Picture D.7





# **ANNEX E** Equivalent Media Recipes

The liquid used for the frequency range of 800-3000 MHz consisted of water, sugar, salt, preventol, glycol monobutyl and Cellulose. The liquid has been previously proven to be suited for worst-case. The Table E.1 shows the detail solution. It's satisfying the latest tissue dielectric parameters requirements proposed by the IEEE Std 1528 and BS EN IEC/IEEE 62209-1528:2021.

**Table E.1: Composition of the Tissue Equivalent Matter** 

Frequency	835Hea	835Bod	1900	1900	2450	2450	5800	5800
(MHz)	d	у	Head	Body	Head	Body	Head	Body
Ingredients (% by	weight)							
Water	41.45	52.5	55.242	69.91	58.79	72.60	65.53	65.53
Sugar	56.0	45.0	\	\	\	/	\	\
Salt	1.45	1.4	0.306	0.13	0.06	0.18	\	/
Preventol	0.1	0.1	\	\	\	/	\	/
Cellulose	1.0	1.0	\	\	\	\	\	\
Glycol	\	,	44.452	29.96	41.15	27.22	\	\
Monobutyl	1	\	44.432	29.90	41.13	21.22	١	1
Diethylenglycol								
monohexylethe	\	\	\	\	\	\	17.24	17.24
r								
Triton X-100	\	\	\	/	\	\	17.24	17.24
Dielectric	ε=41.5	ε=55.2	ε=40.0	ε=53.3	ε=39.2	ε=52.7	ε=35.3	ε=48.2
Parameters	ε=41.5 σ=0.90	σ=0.97	σ=1.4	σ=1.5	σ=1.8	σ=1.9	σ=5.2	σ=6.0
Target Value	0-0.90	0-0.97	0	2	0	5	7	0

Note: There are a little adjustment respectively for 750, 1750, 2600, 5200, 5300 and 5600 based on the recipe of closest frequency in table E.1.





# **ANNEX F** System Validation

The SAR system must be validated against its performance specifications before it is deployed. When SAR probes, system components or software are changed, upgraded or recalibrated, these must be validated with the SAR system(s) that operates with such components.

Table F.1: System Validation for 7825

Probe SN.	Liquid name	Validation date	Frequency point	Status (OK or Not)
7825	H650-7000M	September 18,2024	750 MHz	OK
7825	H650-7000M	September 18,2024	900 MHz	OK
7825	H650-7000M	September 18,2024	1450 MHz	OK
7825	H650-7000M	September 18,2024	1640 MHz	OK
7825	H650-7000M	September 19,2024	1750 MHz	OK
7825	H650-7000M	September 19,2024	1900 MHz	OK
7825	H650-7000M	September 19,2024	2000 MHz	OK
7825	H650-7000M	September 19,2024	2100 MHz	OK
7825	H650-7000M	September 21,2024	2300 MHz	OK
7825	H650-7000M	September 21,2024	2450 MHz	OK
7825	H650-7000M	September 21,2024	2600 MHz	OK
7825	H650-7000M	September 22,2024	3500 MHz	OK
7825	H650-7000M	September 22,2024	3700 MHz	OK
7825	H650-7000M	September 22,2024	3900 MHz	OK
7825	H650-7000M	September 23,2024	5250 MHz	OK
7825	H650-7000M	September 23,2024	5600 MHz	OK
7825	H650-7000M	September 23,2024	5800 MHz	OK





Table F.2: System Validation for 7464

Probe SN.	Liquid name	Validation date	Frequency point	Status (OK or Not)
7464	Head 13MHz	February 26,2025	13MHz	OK
7464	Head 64MHz	February 26,2025	64MHz	OK
7464	Head 150MHz	February 26,2025	150MHz	OK
7464	Head 300MHz	February 26,2025	300MHz	OK
7464	Head 450MHz	February 26,2025	450MHz	OK
7464	Head 750MHz	February 26,2025	750MHz	OK
7464	Head 835MHz	February 26,2025	835MHz	OK
7464	Head 900MHz	February 26,2025	900MHz	OK
7464	Head 1450MHz	February 26,2025	1450MHz	OK
7464	Head 1640MHz	February 26,2025	1640MHz	OK
7464	Head 1750MHz	February 26,2025	1750MHz	OK
7464	Head 1810MHz	February 26,2025	1810MHz	OK
7464	Head 1900MHz	February 26,2025	1900MHz	OK
7464	Head 2000MHz	February 27,2025	2000MHz	OK
7464	Head 2100MHz	February 27,2025	2100MHz	OK
7464	Head 2300MHz	February 27,2025	2300MHz	OK
7464	Head 2450MHz	February 27,2025	2450MHz	OK
7464	Head 2600MHz	February 27,2025	2600MHz	OK
7464	Head 3300MHz	February 28,2025	3300MHz	OK
7464	Head 3500MHz	February 28,2025	3500MHz	OK
7464	Head 3700MHz	February 28,2025	3700MHz	OK
7464	Head 3900MHz	February 28,2025	3900MHz	OK
7464	Head 4100MHz	February 28,2025	4100MHz	OK
7464	Head 4200MHz	February 28,2025	4200MHz	OK
7464	Head 4400MHz	February 28,2025	4400MHz	OK
7464	Head 4600MHz	February 28,2025	4600MHz	OK
7464	Head 4800MHz	February 28,2025	4800MHz	OK
7464	Head 4950MHz	February 28,2025	4950MHz	OK
7464	Head 5200MHz	March 01,2025	5200MHz	OK
7464	Head 5250MHz	March 01,2025	5250MHz	OK
7464	Head 5300MHz	March 01,2025	5300MHz	OK
7464	Head 5500MHz	March 01,2025	5500MHz	OK
7464	Head 5600MHz	March 01,2025	5600MHz	OK
7464	Head 5750MHz	March 01,2025	5750MHz	OK
7464	Head 5800MHz	March 01,2025	5800MHz	OK
7464	Head 6500MHz	March 02,2025	6500MHz	OK
7464	Head 7000MHz	March 02,2025	7000MHz	OK





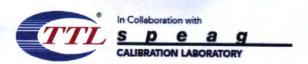
#### ANNEX G Probe Calibration Certificate

#### **Probe 7825 Calibration Certificate**











Glossary:

TSL tissue simulating liquid
NORMx,y,z sensitivity in free space
ConvF sensitivity in TSL / NORMx,y,z
DCP diode compression point

CF crest factor (1/duty\_cycle) of the RF signal A,B,C,D modulation dependent linearization parameters

Polarization Φ rotation around probe axis

Polarization θ θ rotation around an axis that is in the plane normal to probe axis (at measurement center), i

 $\theta$ =0 is normal to probe axis

Connector Angle information used in DASY system to align probe sensor X to the robot coordinate system Calibration is Performed According to the Following Standards:

a) 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

b) 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

c) 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

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

#### Methods Applied and Interpretation of Parameters:

- NORMx,y,z: Assessed for E-field polarization θ=0 (f≤900MHz in TEM-cell; f>1800MHz: waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not effect the E²-field uncertainty inside TSL (see below ConvF).
- NORM(f)x,y,z = NORMx,y,z\* frequency\_response (see Frequency Response Chart). This
  linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the
  frequency response is included in the stated uncertainty of ConvF.
- DCPx,y,z: DCP are numerical linearization parameters assessed based on the data of power sweep (no uncertainty required). DCP does not depend on frequency nor media.
- PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics.
- Ax,y,z; Bx,y,z; Cx,y,z;VRx,y,z:A,B,C are numerical linearization parameters assessed based on the
  data of power sweep for specific modulation signal. The parameters do not depend on frequency nor
  media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for f≤800MHz) and inside waveguide using analytical field distributions based on power measurements for f >800MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty valued are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx,y,z\* ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from±50MHz to±100MHz.
- Spherical isotropy (3D deviation from isotropy): in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset: The sensor offset corresponds to the offset of virtual measurement center from the
  probe tip (on probe axis). No tolerance required.
- Connector Angle: The angle is assessed using the information gained by determining the NORMx (no uncertainty required).

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#### DASY/EASY - Parameters of Probe: EX3DV4 - SN: 7825

#### **Basic Calibration Parameters**

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm(µV/(V/m)²) A	0.68	0.67	0.68	±10.0%
DCP(mV) <sup>B</sup>	108.2	109.5	112.3	

Calibration Results for Modulation Response

UID	Communication System Name		A dB	B dBõV	С	dB	VR mV	Max Dev.	Max Unc <sup>E</sup> (k=2)
0	cw	X	0.0	0.0	1.0	0.00	216.7	±2.2%	±4.7%
		Y	0.0	0.0	1.0		216.0		
		Z	0.0	0.0	1.0		220.9		
10352-AAA	Pulse Waveform (200Hz, 10%)	X	1.67	61.09	6.17		60	±3.2%	±9.6%
		Y	1.63	61.05	6.18	10.00	60		
		Z	1.79	61.93	6.98		60		
10353-AAA	Pulse Waveform (200Hz, 20%)	X	0.92	60.00	4.00		80	±2.5%	±9.6%
		Y	0.91	60.00	4.25	6.99	80		
		Z	0.85	60.00	4.97		80		
10354-AAA	Pulse Waveform (200Hz, 40%)	X	0.00	140.90	0.09	3.98	95	±2.0%	±9.6%
		Y	0.23	155.47	3.75		95		
		Z	8.00	70.00	7.00		95		
10355-AAA	Pulse Waveform (200Hz, 60%)	X	0.00	147.00	75.65	2.22	120	±1.6%	±9.6%
		Y	0.00	152.28	59.73		120		
		Z	15.16	137.45	2.02		120		
10387-AAA	QPSK Waveform, 1 MHz	X	2.57	92.28	24.65		150	±3.3%	±9.6%
		Y	1.00	73.96	17.36	1.00	150		
		Z	0.44	60.00	9.13		150		
10388-AAA	QPSK Waveform, 10 MHz	X	2.06	74.68	18.11		150	±1.3%	±9.6%
		Y	1.75	70.80	16.57	0.00	150	1111111	
		Z	1.17	63.55	11.73		150		
10396-AAA	64-QAM Waveform, 100 kHz	X	1.83	67.65	18.89		150	±0.9%	±9.6%
	The state of the s	Y	1.87	67.47	18.46	3.01	150		
		Z	1.74	64.25	15.56		150		
10414-AAA	WLAN CCDF, 64-QAM, 40MHz	X	3.96	67.76	16.34		150	±3.1%	±9.6%
		Y	4.04	67.20	16.07	0.00	150		1
		Z	3.71	65.65	14.65		150		

Note: For details on UID parameters see Appendix

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%.

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A The uncertainties of Norm X, Y, Z do not affect the E2-field uncertainty inside TSL (see Page 5).

<sup>&</sup>lt;sup>B</sup> Numerical linearization parameter: uncertainty not required.

E Uncertainly is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.









# DASY/EASY - Parameters of Probe: EX3DV4 - SN: 7825

#### **Sensor Model Parameters**

	C1 fF	C2 fF	α V-1	T1 ms.V <sup>-2</sup>	T2 ms.V <sup>-1</sup>	T3 ms	T4 V-2	T5 V-1	Т6
X	8.70	60.92	34.01	0.92	0.00	4.90	0.23	0.00	1.01
Υ	10.49	73.19	33.70	2.89	0.00	4.90	0.36	0.00	1.01
Z	9.08	62.71	32.53	4.42	0.00	4.90	0.47	0.00	1.01

#### **Other Probe Parameters**

Sensor Arrangement	Triangular
Connector Angle (°)	103.9
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disable
Probe Overall Length	337mm
Probe Body Diameter	10mm
Tip Length	9mm
Tip Diameter	2.5mm
Probe Tip to Sensor X Calibration Point	1mm
Probe Tip to Sensor Y Calibration Point	1mm
Probe Tip to Sensor Z Calibration Point	1mm
Recommended Measurement Distance from Surface	1.4mm

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### DASY/EASY - Parameters of Probe: EX3DV4 - SN:7825

#### Calibration Parameter Determined in Head Tissue Simulating Media

f [MHz] <sup>C</sup>	Relative Permittivity F	Conductivity (S/m) F	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Unct. (k=2)
750	41.9	0.89	9.34	9.34	9.34	0.17	1.14	±12.7%
900	41.5	0.97	8.90	8.90	8.90	0.18	1.21	±12.7%
1450	40.5	1.20	8.07	8.07	8.07	0.16	1.08	±12.7%
1640	40.3	1.29	7.90	7.90	7.90	0.22	0.93	±12.7%
1750	40.1	1.37	7.79	7.79	7.79	0.20	1.08	±12.7%
1900	40.0	1.40	7.48	7.48	7.48	0.22	1.17	±12.7%
2000	40.0	1.40	7.50	7.50	7.50	0.21	1.09	±12.7%
2300	39.5	1.67	7.37	7.37	7.37	0.56	0.69	±12.7%
2450	39.2	1.80	7.12	7.12	7.12	0.54	0.71	±12.7%
2600	39.0	1.96	6.95	6.95	6.95	0.62	0.66	±12.7%
3300	38.2	2.71	6.57	6.57	6.57	0.41	0.99	±13.9%
3500	37.9	2.91	6.40	6.40	6.40	0.42	0.97	±13.9%
3700	37.7	3.12	6.03	6.03	6.03	0.30	1.45	±13.9%
3900	37.5	3.32	6.10	6.10	6.10	0.35	1.45	±13.9%
4100	37.2	3.53	6.13	6.13	6.13	0.40	1.15	±13.9%
4200	37.1	3.63	6.01	6.01	6.01	0.30	1.52	±13.9%
4400	36.9	3.84	5.92	5.92	5.92	0.30	1.50	±13.9%
4600	36.7	4.04	5.87	5.87	5.87	0.45	1.20	±13.9%
4800	36.4	4.25	5.80	5.80	5.80	0.40	1.40	±13.9%
4950	36.3	4.40	5.60	5.60	5.60	0.40	1.35	±13.9%
5250	35.9	4.71	5.03	5.03	5.03	0.45	1.40	±13.9%
5600	35.5	5.07	4.42	4.42	4.42	0.50	1.34	±13.9%
5750	35.4	5.22	4.59	4.59	4.59	0.50	1.32	±13.9%

<sup>&</sup>lt;sup>c</sup> Frequency validity above 300 MHz of ±100MHz only applies for DASY v4.4 and higher (Page 2), else it is restricted to ±50MHz. The uncertainty is the RSS of ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.

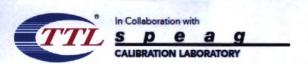
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F At frequency up to 6 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ±10% if liquid compensation formula is applied to measured SAR values. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

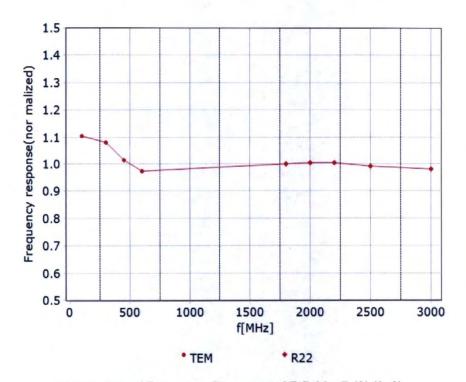
 $<sup>^{\</sup>rm G}$  Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than  $\pm$  1% for frequencies below 3 GHz and below  $\pm$  2% for the frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.







# Frequency Response of E-Field (TEM-Cell: ifi110 EXX, Waveguide: R22)



Uncertainty of Frequency Response of E-field: ±7.4% (k=2)

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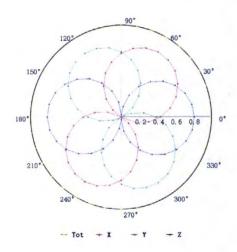


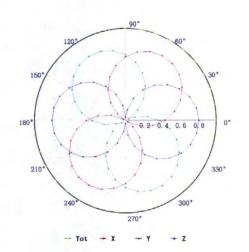


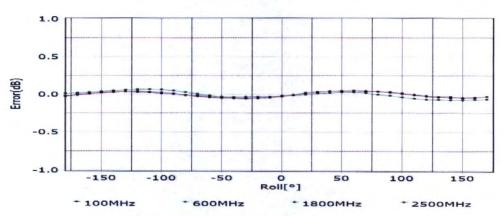
# Receiving Pattern (Φ), θ=0°

# f=600 MHz, TEM

# f=1800 MHz, R22







Uncertainty of Axial Isotropy Assessment: ±1.2% (k=2)

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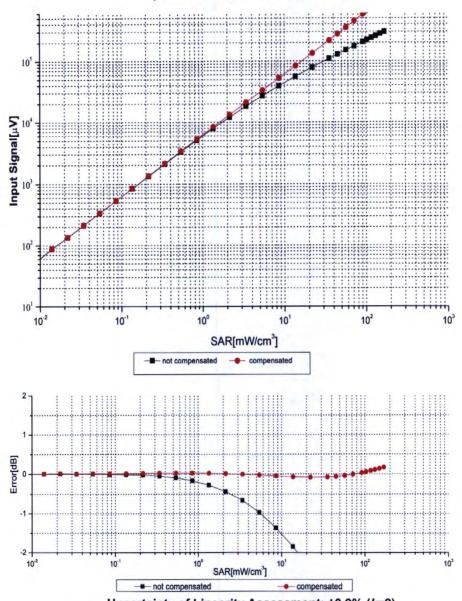
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# Dynamic Range f(SAR<sub>head</sub>) (TEM cell, f = 900 MHz)



Uncertainty of Linearity Assessment: ±0.9% (k=2)

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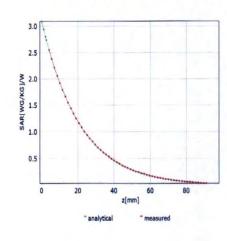


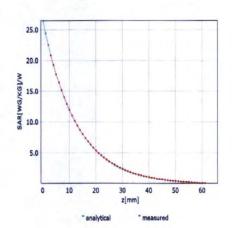


# **Conversion Factor Assessment**

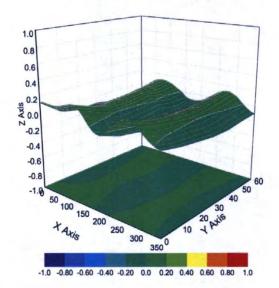
f=750 MHz,WGLS R9(H\_convF)

f=1750 MHz,WGLS R22(H\_convF)





# **Deviation from Isotropy in Liquid**



Uncertainty of Spherical Isotropy Assessment: ±3.2% (k=2)

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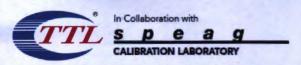
#### **Appendix: Modulation Calibration Parameters**

UID	Rev	Communication System Name	Group	PAR (dB)	UncE (k=2)
0		CW	CW	0.00	± 4.7 %
10010	CAA	SAR Validation (Square, 100ms, 10ms)	Test	10.00	± 9.6 %
10011	CAB	UMTS-FDD (WCDMA)	WCDMA	2.91	± 9.6 %
10012	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	WLAN	1.87	± 9.6 %
10013	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)	WLAN	9.46	± 9.6 %
10021	DAC	GSM-FDD (TDMA, GMSK)	GSM	9.39	± 9.6 %
10023	DAC	GPRS-FDD (TDMA, GMSK, TN 0)	GSM	9.57	± 9.6 %
10024	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	GSM	6.56	± 9.6 %
10025	DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	GSM	12.62	± 9.6 %
10026	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	GSM	9.55	± 9.6 %
10027	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	GSM	4.80	± 9.6 %
10028	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	GSM	3.55	± 9.6 %
10029	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	GSM	7.78	± 9.6 %
10030	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Bluetooth	5.30	± 9.6 %
10031	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	Bluetooth	1.87	± 9.6 %
10032	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	Bluetooth	1.16	± 9.6 %
10033	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	Bluetooth	7.74	± 9.6 %
10034	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	Bluetooth	4.53	± 9.6 %
10035	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	Bluetooth	3.83	± 9.6 %
10036	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	Bluetooth	8.01	± 9.6 %
10037	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	Bluetooth	4.77	± 9.6 %
10038	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	Bluetooth	4.10	± 9.6 %
10039	CAB	CDMA2000 (1xRTT, RC1)	CDMA2000	4.57	± 9.6 %
10033	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate)	AMPS	7.78	± 9.6 %
10044	CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	AMPS	0.00	± 9.6 %
10044	CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	DECT	13.80	± 9.6 %
10048	CAA	DECT (TDD, TDMA/FDM, GFSK, Pull Slot, 24)	DECT	10.79	± 9.6 %
10049	CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	TD-SCDMA	11.01	± 9.6 %
10058	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	GSM	6.52	± 9.6 %
10059	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	WLAN	2.12	± 9.6 %
10060	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	WLAN	2.83	± 9.6 %
10061	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1.5 Mbps)	WLAN	3.60	± 9.6 %
10062	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	WLAN	8.68	± 9.6 %
10063	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	WLAN	8.63	± 9.6 %
10064	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	WLAN	9.09	± 9.6 %
10065	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	WLAN	9.00	± 9.6 %
10066	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 16 Mbps)	WLAN	9.38	± 9.6 %
10067	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	WLAN	10.12	± 9.6 %
10067	CAD		WLAN	10.12	± 9.6 %
10069	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	WLAN		
10009		IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)		10.56	± 9.6 %
10071	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	WLAN WLAN	9.83	± 9.6 %
		IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)		9.62	± 9.6 %
10073	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	WLAN	9.94	± 9.6 %
		IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	WLAN	10.30	± 9.6 %
10075 10076	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	WLAN	10.77	± 9.6 %
		IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)		10.94	± 9.6 %
10077	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	WLAN	11.00	± 9.6 %
10081	CAB	CDMA2000 (1xRTT, RC3)	CDMA2000	3.97	± 9.6 %
10082	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate)	AMPS	4.77	± 9.6 %
10090	DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	GSM	6.56	± 9.6 %
10097	CAC	UMTS-FDD (HSDPA)	WCDMA	3.98	± 9.6 %
10098	DAC	UMTS-FDD (HSUPA, Subtest 2)	WCDMA	3.98	± 9.6 %
10099	CAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	GSM	9.55	± 9.6 %
10100	CAC	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-FDD	5.67	± 9.6 %
10101	CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	± 9.6 %

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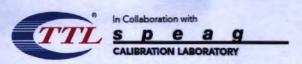


10102	CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6 %
10103	DAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-TDD	9.29	± 9.6 %
10104	CAE	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-TDD	9.97	± 9.6 %
10105	CAE	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-TDD	10.01	± 9.6 %
10108	CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-FDD	5.80	±9.6 %
10109	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	± 9.6 %
10110	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-FDD	5.75	± 9.6 %
10111	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-FDD	6.44	± 9.6 %
10112	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-FDD	6.59	± 9.6 %
10113	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-FDD	6.62	± 9.6 %
10114	CAG	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	WLAN	8.10	± 9.6 %
10115	CAG	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	WLAN	8.46	± 9.6 %
10116	CAG	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	WLAN	8.15	± 9.6 %
10117	CAG	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	WLAN	8.07	± 9.6 %
10118	CAD	IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	WLAN	8.59	± 9.6 %
10119	CAD	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	WLAN	8.13	± 9.6 %
10140	CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-FDD	6.49	± 9.6 %
10141	CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-FDD	6.53	± 9.6 %
10142	CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10143	CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-FDD	6.35	± 9.6 %
10144	CAC	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-FDD	6.65	± 9.6 %
10145	CAC	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-FDD	5.76	± 9.6 %
10146	CAC	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.41	± 9.6 %
10147	CAC	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.72	± 9.6 %
10147	CAE	LTE-FDD (SC-FDMA, 100 % RB, 1.4 WH12, 04-QAM)	LTE-FDD	6.42	± 9.6 %
10150	CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6 %
10150	CAE	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-TDD	9.28	± 9.6 %
10151	CAE	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-TDD	9.92	± 9.6 %
	CAE	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 10-QAM)	LTE-TDD	10.05	± 9.6 %
10153	CAF	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-FDD	5.75	± 9.6 %
10155	CAF	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	± 9.6 %
10156	CAF	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-FDD	5.79	± 9.6 %
10157	CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-FDD	6.49	± 9.6 %
10158	CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-FDD	6.62	± 9.6 %
10159	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-FDD	6.56	± 9.6 %
10160	CAG	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-FDD	5.82	± 9.6 %
10161	CAG	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-FDD	6.43	± 9.6 %
10162	CAG	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-FDD	6.58	± 9.6 %
10166	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-FDD	5.46	± 9.6 %
10167	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.21	± 9.6 %
10168	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.79	± 9.6 %
10169	CAG	LTE-FDD (SC-FDMA, 30% RB, 1.4 MH2, 04-QAM)	LTE-FDD	5.73	± 9.6 %
10170	CAG	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10170	CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-FDD	6.49	± 9.6 %
10171	CAE	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10172	CAE	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10173	CAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-TDD	10.25	± 9.6 %
	CAF				
10175 10176	CAF	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-FDD	5.72	± 9.6 %
10176	CAF	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM) LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-FDD	6.52	± 9.6 %
	_		LTE-FDD	5.73	± 9.6 %
10178	CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10179	AAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10180	CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10181	CAG	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-FDD	5.72	± 9.6 %
10182	CAG	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10183	CAG	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10184	CAG	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10185 10186	CAI	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-FDD	6.51	± 9.6 %
	CAG	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %

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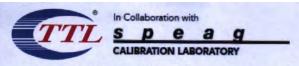
10187	CAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10188	CAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10189	CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10193	CAE	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	WLAN	8.09	± 9.6 %
10194	AAD	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	WLAN	8.12	± 9.6 %
10195	CAE	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	WLAN	8.21	± 9.6 %
10196	CAE	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	WLAN	8.10	± 9.6 %
10197	AAE	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	WLAN	8.13	± 9.6 %
10198	CAF	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	WLAN	8.27	± 9.6 %
10219	CAF	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	WLAN	8.03	± 9.6 %
10220	AAF	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	WLAN	8.13	± 9.6 %
10221	CAC	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	WLAN	8.27	± 9.6 %
10222	CAC	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	WLAN	8.06	± 9.6 %
10223	CAD	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	WLAN	8.48	± 9.6 %
10224	CAD	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	WLAN	8.08	± 9.6 %
10225	CAD	UMTS-FDD (HSPA+)	WCDMA	5.97	± 9.6 %
10226	CAD	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.49	± 9.6 %
10227	CAD	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.26	± 9.6 %
10228	CAD	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-TDD	9.22	± 9.6 %
10229	DAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10230	CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
			LTE-TDD	9.19	± 9.6 %
10231	CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-TDD	9.48	± 9.6 %
10232	CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)		10.25	± 9.6 %
10233	CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-TDD		
10234	CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10235	CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10236	CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10237	CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10238	CAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10239	CAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10240	CAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10241	CAB	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.82	± 9.6 %
10242	CAD	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-TDD	9.86	± 9.6 %
10243	CAD	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-TDD	9.46	± 9.6 %
10244	CAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-TDD	10.06	± 9.6 %
10245	CAG	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-TDD	10.06	± 9.6 %
10246	CAG		LTE-TDD	9.30	± 9.6 %
10247	CAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-TDD	9.91	± 9.6 %
10248	CAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-TDD	10.09	± 9.6 %
10249	CAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-TDD	9.29	± 9.6 %
10250	CAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-TDD	9.81	± 9.6 %
10251	CAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-TDD	10.17	± 9.6 %
10252	CAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-TDD	9.24	± 9.6 %
10253	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-TDD	9.90	± 9.6 %
10254	CAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-TDD	10.14	± 9.6 %
10255	CAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-TDD	9.20	± 9.6 %
10256	CAB	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.96	± 9.6 %
10257	CAD	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.08	± 9.6 %
10258	CAD	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-TDD	9.34	± 9.6 %
10259	CAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-TDD	9.98	± 9.6 9
10260	CAG	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-TDD	9.97	± 9.6 %
10261	CAG		LTE-TDD	9.24	± 9.6 9
10262	CAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-TDD	9.83	± 9.6 %
10263	CAG		LTE-TDD	10.16	± 9.6
10264	CAG		LTE-TDD	9.23	± 9.6
10265	CAG		LTE-TDD	9.92	± 9.6 9
10266	CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-TDD	10.07	± 9.6 %
10267	CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-TDD	9.30	± 9.6 9
10268	CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-TDD	10.06	± 9.6 %

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0269	CAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-TDD	10.13	± 9.6 %
0270	CAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-TDD	9.58	± 9.6 %
0274	CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	WCDMA	4.87	± 9.6 %
0275	CAD	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	WCDMA	3.96	± 9.6 %
0277	CAD	PHS (QPSK)	PHS	11.81	± 9.6 %
0278	CAD	PHS (QPSK, BW 884MHz, Rolloff 0.5)	PHS	11.81	± 9.6 %
0279	CAG	PHS (QPSK, BW 884MHz, Rolloff 0.38)	PHS	12.18	± 9.6 %
0290	CAG	CDMA2000, RC1, SO55, Full Rate	CDMA2000	3.91	± 9.6 %
0291	CAG	CDMA2000, RC3, SO55, Full Rate	CDMA2000	3.46	± 9.6 %
0292	CAG	CDMA2000, RC3, SO32, Full Rate	CDMA2000	3.39	± 9.6 %
0293	CAG	CDMA2000, RC3, SO3, Full Rate	CDMA2000	3.50	± 9.6 %
0295	CAG	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	CDMA2000	12.49	± 9.6 9
0297	CAF	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-FDD	5.81	± 9.6 9
0298	CAF	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-FDD	5.72	± 9.6
0299	CAF	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-FDD	6.39	± 9.6 9
0300	CAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6
0301	CAC	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	WiMAX	12.03	± 9.6
0302	CAB	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3CTRL)	WiMAX	12.57	± 9.6
0303	CAB	IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	WiMAX	12.52	± 9.6
0304	CAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	WiMAX	11.86	± 9.6
0305	CAA	IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC)	WiMAX	15.24	± 9.6
0306	CAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC)	WiMAX	14.67	± 9.6
0307	AAB	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC)	WiMAX	14.49	± 9.6
0308	AAB	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	WiMAX	14.46	± 9.6
0309	AAB	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM,AMC 2x3)	WiMAX	14.58	± 9.6
0310	AAB	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3	WiMAX	14.57	± 9.6
0311	AAB	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-FDD	6.06	± 9.6
0313	AAD	iDEN 1:3	IDEN	10.51	± 9.6
0314	AAD	IDEN 1:6	IDEN	13.48	± 9.6
0315	AAD	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc dc)	WLAN	1.71	± 9.6
0316	AAD	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc dc)	WLAN	8.36	± 9.6
0317	AAA	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc dc)	WLAN	8.36	± 9.6
0352	AAA	Pulse Waveform (200Hz, 10%)	Generic	10.00	± 9.6
0353	AAA	Pulse Waveform (200Hz, 20%)	Generic	6.99	± 9.6
0354	AAA	Pulse Waveform (200Hz, 40%)	Generic	3.98	± 9.6
0355	AAA	Pulse Waveform (200Hz, 60%)	Generic	2.22	± 9.6
0356	AAA	Pulse Waveform (200Hz, 80%)	Generic	0.97	± 9.6
0387	AAA	QPSK Waveform, 1 MHz	Generic	5.10	± 9.6
0388	AAA	QPSK Waveform, 10 MHz	Generic	5.10	± 9.6
			Generic	6.27	± 9.6
0396	AAA	64-QAM Waveform, 100 kHz			
0399	AAA	64-QAM Waveform, 40 MHz	Generic WLAN	6.27 8.37	±9.6
0400	AAD	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc dc)	WLAN	8.60	± 9.6
0401	AAA	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc dc)	WLAN		± 9.6
0402	AAA	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc dc)	CDMA2000	8.53	± 9.6
0403	AAB	CDMA2000 (1xEV-DO, Rev. 0)	CDMA2000 CDMA2000	3.76	± 9.6
	AAB	CDMA2000 (1xEV-DO, Rev. A)		3.77	± 9.6
0406	AAD	CDMA2000, RC3, SO32, SCH0, Full Rate	CDMA2000	5.22	± 9.6
0410	AAA	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Sub=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6
0444	AAA	WLAN CCDF, 64-QAM, 40MHz	Generic	8.54	± 9.6
	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc dc)	WLAN	1.54	± 9.6
0415	AAA	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc dc)	WLAN	8.23	± 9.6
0415 0416	AAA	IEEE 902 44 c/b Wiei E CH- (OEDM CARE CO- 45)			
0415 0416 0417	AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc dc)	WLAN	8.23	
0415 0416 0417 0418	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc, Long)	WLAN	8.14	± 9.6
0414 0415 0416 0417 0418 0419	AAA AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc, Long) IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc, Short)	WLAN WLAN	8.14 8.19	± 9.6 °
0415 0416 0417 0418 0419 0422	AAA AAA AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc, Long) IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc, Short) IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	WLAN WLAN WLAN	8.14 8.19 8.32	± 9.6 ° ± 9.6 °
0415 0416 0417 0418 0419 0422 0423	AAA AAA AAA AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc, Long) IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc, Short) IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK) IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	WLAN WLAN WLAN WLAN	8.14 8.19 8.32 8.47	± 9.6 ° ± 9.6 ° ± 9.6 °
0415 0416 0417 0418 0419	AAA AAA AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc, Long) IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc, Short) IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	WLAN WLAN WLAN	8.14 8.19 8.32	± 9.6 ° ± 9.6 ° ± 9.6 ° ± 9.6 ° ± 9.6 ° • ± 9.

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