Appendix B. – SAR Test Plots

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.5 ℃
Liquid Temperature: 21.4 ℃
Test Date: 12/19/2024
Plot No.: A1
Band: GSM850 Head SAR
Measurement Report for Device, CHEEK, GSM 850, GPRS-FDD (TDMA, GMSK, TN 0-1-2-3), Channel 190 (836.600 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, Head Simulating Liquid	CHEEK, 0.00	GSM 850	GSM, 10028-DAC	836.600, 190	9.33	0.920	40.9

Hardware Setup

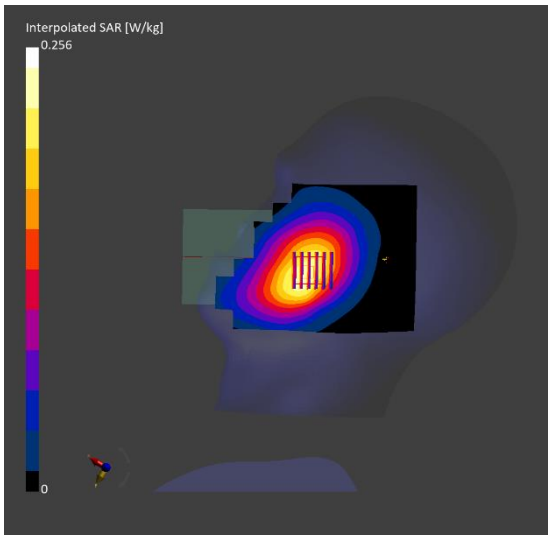
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.206	0.214
psSAR10g [W/Kg]	0.140	0.166
Power Drift [dB]	0.02	0.04
M2/M1 [%]		95.3
Dist 3dB Peak [mm]		> 15.0



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 22.4 ℃
Liquid Temperature: 22.3 ℃
Test Date: 12/20/2024
Plot No.: A2
Band: GSM1900 Head SAR
Measurement Report for Device, CHEEK, PCS 1900, GPRS-FDD (TDMA, GMSK, TN 0-1), Channel 661 (1880.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
LeftHead, Head Simulating Liquid	CHEEK, 0.00	PCS 1900	GSM, 10024-DAC	1880.000, 661	7.81	1.43	40.4

Hardware Setup

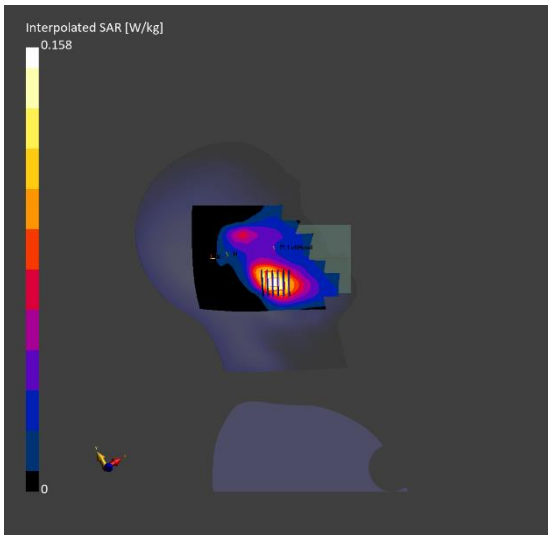
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.105	0.110
psSAR10g [W/Kg]	0.060	0.068
Power Drift [dB]	-0.06	-0.04
M2/M1 [%]		92.7
Dist 3dB Peak [mm]		12.7



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.4 ℃
Liquid Temperature: 21.3 ℃
Test Date: 12/13/2024
Plot No.: A2
Band: UMTS Band 5 Head SAR
Measurement Report for Device, CHEEK, Band 5, UMTS-FDD (WCDMA), Channel 4183 (836.6 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	CHEEK, 0.00	Band 5	WCDMA, 10011-CAC	836.6, 4183	9.33	0.928	41.0

Hardware Setup

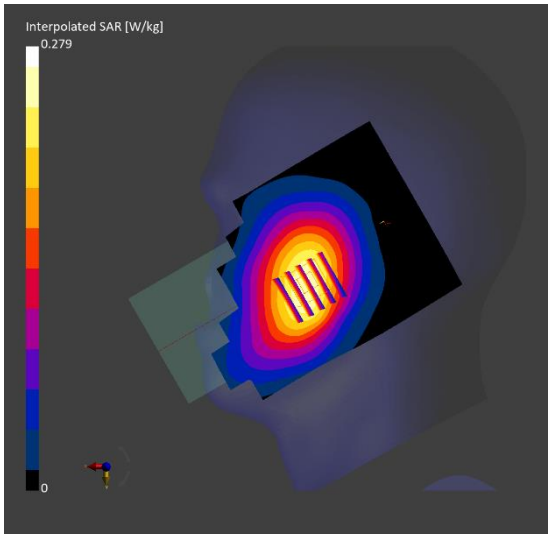
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.224	0.237
psSAR10g [W/Kg]	0.154	0.187
Power Drift [dB]	-0.11	-0.10
M2/M1 [%]		84.2
Dist 3dB Peak [mm]		> 16.0



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.5 ℃
Liquid Temperature: 21.4 ℃
Test Date: 12/12/2024
Plot No.: A4
Band: UMTS Band 4 Head SAR
Measurement Report for Device, CHEEK, Band 4, UMTS-FDD (WCDMA), Channel 1412 (1732.4 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
LeftHead, HSL	CHEEK, 0.00	Band 4	WCDMA, 10011-CAC	1732.4, 1412	8.05	1.32	41.5

Hardware Setup

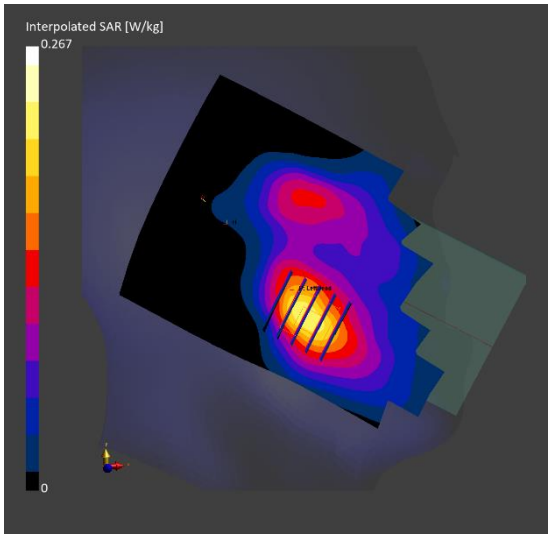
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.183	0.192
psSAR10g [W/Kg]	0.108	0.125
Power Drift [dB]	0.15	0.17
M2/M1 [%]		72.7
Dist 3dB Peak [mm]		13.1



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.3 ℃
Liquid Temperature: 21.2 ℃
Test Date: 12/11/2024
Plot No.: A5
Band: UMTS Band 2 Head SAR
Measurement Report for Device, CHEEK, Band 2, UMTS-FDD (WCDMA), Channel 9400 (1880.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
LeftHead, HSL	CHEEK, 0.00	Band 2	WCDMA, 10011-CAC	1880.0, 9400	7.81	1.43	40.3

Hardware Setup

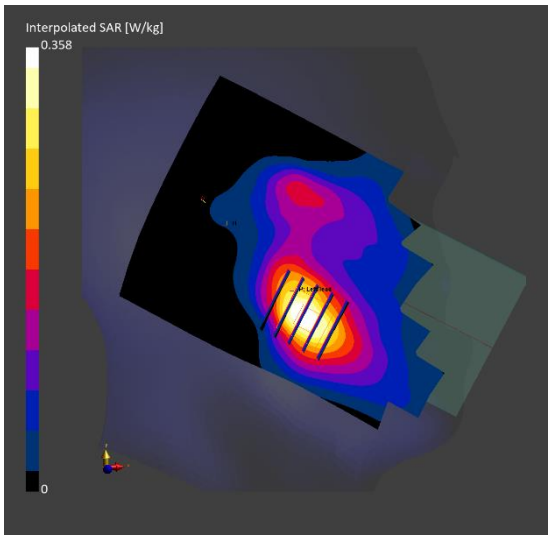
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.238	0.251
psSAR10g [W/Kg]	0.136	0.159
Power Drift [dB]	-0.09	-0.11
M2/M1 [%]		71.1
Dist 3dB Peak [mm]		12.7



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 20.9 ℃
Liquid Temperature: 20.8 ℃
Test Date: 01/09/2025
Plot No.: A6
Band: LTE FDD Band 2 Head SAR Ant.D
Measurement Report for Device, CHEEK, Band 2, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)
RBPosition:Mid AntennaCfg:SISO, Channel 19100 (1900.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, Head Simulating Liquid	CHEEK, 0.00	Band 2	LTE-FDD, 10169-CAF	1900.000, 19100	7.81	1.50	40.7

Hardware Setup

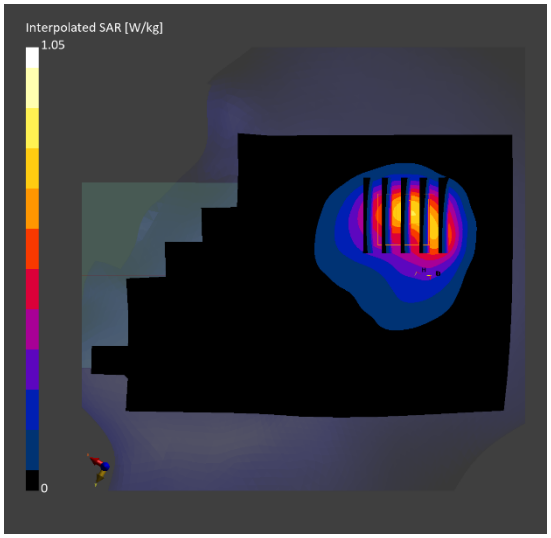
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.618	0.599
psSAR10g [W/Kg]	0.350	0.335
Power Drift [dB]	-0.00	0.02
M2/M1 [%]		52.1
Dist 3dB Peak [mm]		10.3



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.7 ℃
Liquid Temperature: 21.6 ℃
Test Date: 01/07/2025
Plot No.: A7
Band: LTE FDD Band 5 Head SAR

Measurement Report for Device, CHEEK, Band 5, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)
AntennaCfg:SISO, Channel 20525 (836.500 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, Head Simulating Liquid	CHEEK, 0.00	Band 5	LTE-FDD, 10175-CAH	836.500, 20525	9.33	0.922	41.2

Hardware Setup

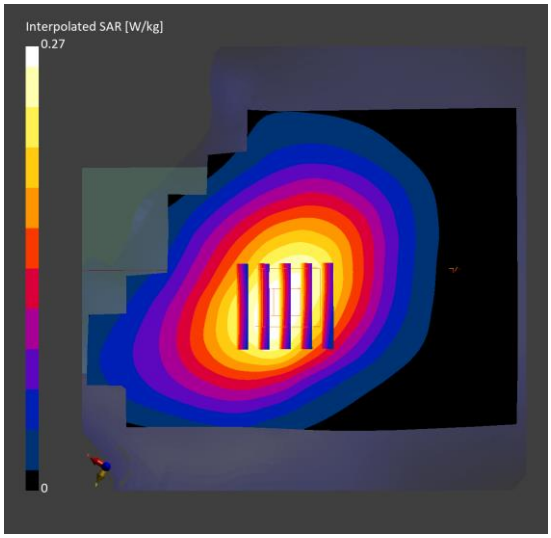
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.217	0.223
psSAR10g [W/Kg]	0.148	0.173
Power Drift [dB]	-0.04	-0.04
M2/M1 [%]		83.5
Dist 3dB Peak [mm]		> 16.0



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.9 ℃
Liquid Temperature: 21.8 ℃
Test Date: 12/16/2024
Plot No.: A8
Band: LTE FDD Band 12 Head SAR
Measurement Report for Device, CHEEK, Band 12, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)
RBPosition:Mid AntennaCfg:SISO, Channel 23095 (707.500 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, Head Simulating Liquid	CHEEK, 0.00	Band 12	LTE-FDD, 10175-CAH	707.500, 23095	9.59	0.895	41.9

Hardware Setup

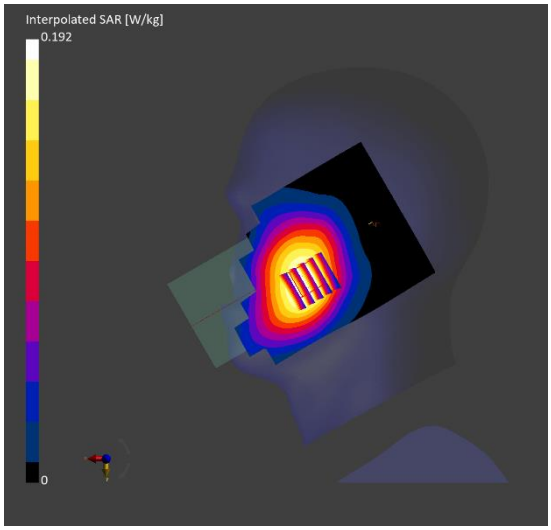
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.159	0.166
psSAR10g [W/Kg]	0.112	0.134
Power Drift [dB]	-0.18	0.11
M2/M1 [%]		87.5
Dist 3dB Peak [mm]		> 16.0



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.3 ℃
Liquid Temperature: 21.2 ℃
Test Date: 12/17/2024
Plot No.: A9
Band: LTE FDD Band 13 Head SAR

Measurement Report for Device, CHEEK, Band 13, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)
AntennaCfg:SISO, Channel 23230 (782.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, Head Simulating Liquid	CHEEK, 0.00	Band 13	LTE-FDD, 10175-CAH	782.000, 23230	9.59	0.930	41.7

Hardware Setup

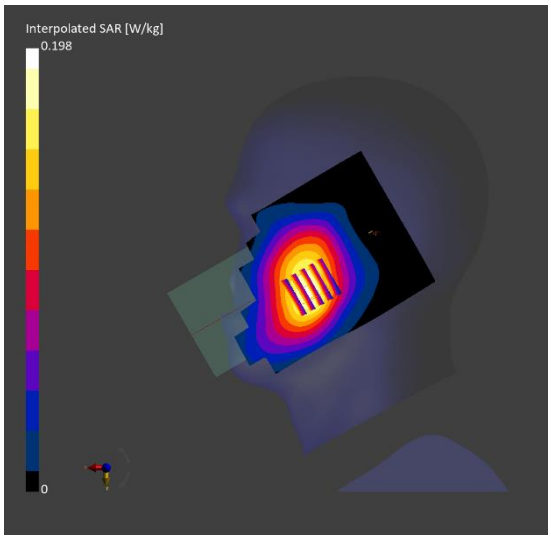
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.161	0.166
psSAR10g [W/Kg]	0.111	0.133
Power Drift [dB]	-0.12	-0.03
M2/M1 [%]		83.9
Dist 3dB Peak [mm]		> 16.0



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.9 ℃
Liquid Temperature: 21.8 ℃
Test Date: 12/23/2024
Plot No.: A10
Band: LTE FDD Band 26 Head SAR
Measurement Report for Device, CHEEK, Band 26, LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK) AntennaCfg:SISO, Channel 26865 (831.500 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, Head Simulating Liquid	CHEEK, 0.00	Band 26	LTE-FDD, 10181-CAF	831.500, 26865	9.33	0.936	41.3

Hardware Setup

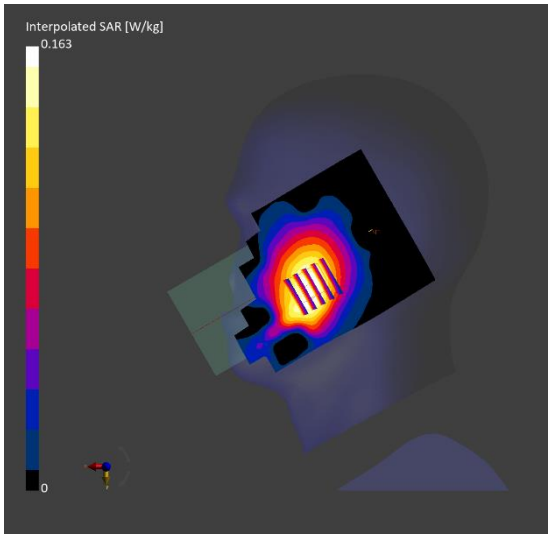
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.135	0.135
psSAR10g [W/Kg]	0.092	0.106
Power Drift [dB]	-0.08	-0.10
M2/M1 [%]		82.4
Dist 3dB Peak [mm]		> 16.0



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.0 °C
Liquid Temperature: 20.9 °C
Test Date: 12/20/2024
Plot No.: A11
Band: LTE FDD Band 41 Head SAR
Measurement Report for Device, CHEEK, Band 41, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)
RBPosition:Mid AntennaCfg:SISO, Channel 41055 (2636.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
LeftHead, HSL	CHEEK, 0.00	Band 41	LTE-TDD, 10172-CAH	2636.5, 41055	7.34	1.97	38.8

Hardware Setup

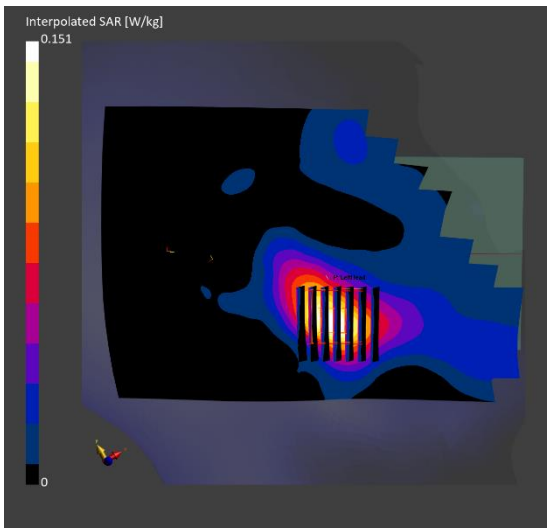
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN3797, 2024-01-23	DAE4 Sn1464, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 200.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.086	0.086
psSAR10g [W/Kg]	0.042	0.044
Power Drift [dB]	-0.10	0.12
M2/M1 [%]		83.9
Dist 3dB Peak [mm]		10.7



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 22.1 ℃
Liquid Temperature: 22.0 ℃
Test Date: 12/24/2024
Plot No.: A12
Band: LTE FDD Band 66 Head SAR
Measurement Report for Device, CHEEK, Band 66, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)
RBPosition:Mid AntennaCfg:SISO, Channel 132322 (1745.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
LeftHead, Head Simulating Liquid	CHEEK, 0.00	Band 66	LTE-FDD, 10169-CAF	1745.000, 132322	8.05	1.34	41.4

Hardware Setup

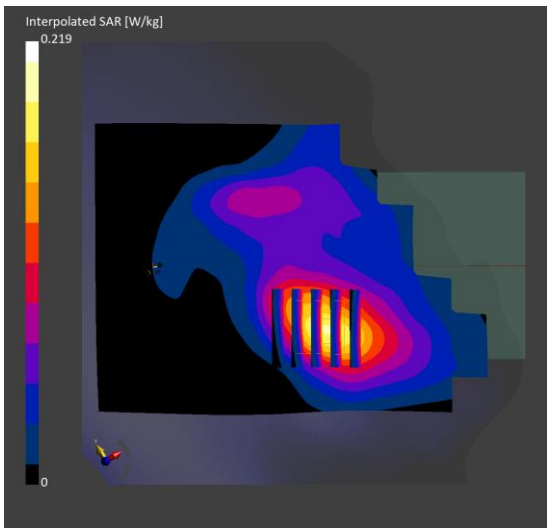
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.151	0.155
psSAR10g [W/Kg]	0.089	0.100
Power Drift [dB]	0.18	-0.04
M2/M1 [%]		71.1
Dist 3dB Peak [mm]		14.1



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 22.3 ℃
Liquid Temperature: 22.2 ℃
Test Date: 12/26/2024
Plot No.: A13
Band: NR FDD Band n5 Head SAR
Measurement Report for Device, CHEEK, Band n5, 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz) RBPosition:Mid AntennaCfg:SISO, Channel 167300 (836.500 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, Head Simulating Liquid	CHEEK, 0.00	Band n5	5G NR FR1 FDD, 10931-AAC	836.500, 167300	9.33	0.923	41.3

Hardware Setup

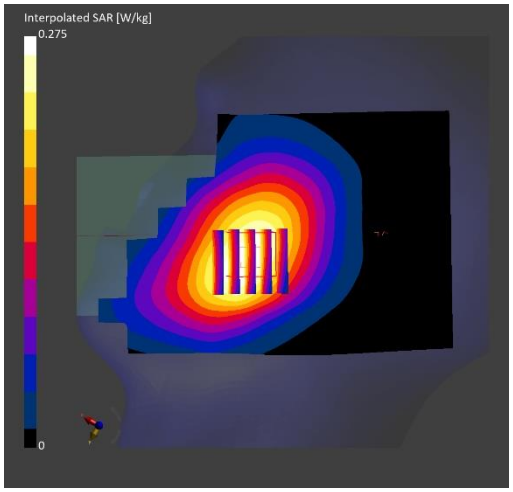
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.219	0.227
psSAR10g [W/Kg]	0.150	0.179
Power Drift [dB]	-0.14	-0.15
M2/M1 [%]		80.6
Dist 3dB Peak [mm]		> 16.0



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 22.7 ℃
Liquid Temperature: 22.6 ℃
Test Date: 12/30/2024
Plot No.: A14
Band: NR FDD Band n66 Head SAR
Measurement Report for Device, CHEEK, Band n66, 5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)
RBPosition:Mid AntennaCfg:SISO, Channel 349000 (1745.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, Head Simulating Liquid	CHEEK, 0.00	Band n66	5G NR FR1 FDD, 10934-AAC	1745.000, 349000	8.05	1.35	39.9

Hardware Setup

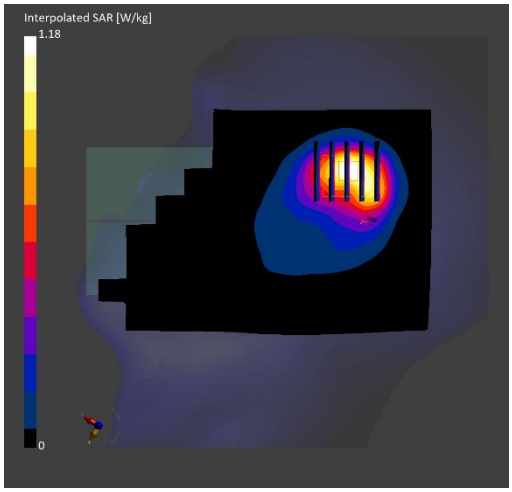
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.716	0.682
psSAR10g [W/Kg]	0.405	0.373
Power Drift [dB]	0.08	-0.02
M2/M1 [%]		56.2
Dist 3dB Peak [mm]		12.8



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 20.7 ℃
Liquid Temperature: 20.6 ℃
Test Date: 01/14/2025
Plot No.: A15
Band: 2.4 ㎓ WLAN Head SAR
Measurement Report for Device, CHEEK, WLAN 2.4GHz, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps), Channel 6 (2437.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, Head Simulating Liquid	CHEEK, 0.00	WLAN 2.4GHz	WLAN, 10012-CAB	2437.000, 6	7.47	1.74	38.5

Hardware Setup

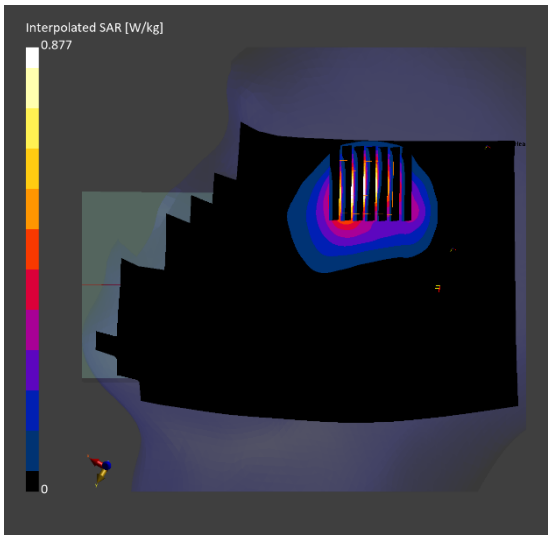
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 200.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.379	0.395
psSAR10g [W/Kg]	0.179	0.169
Power Drift [dB]	0.13	-0.10
M2/M1 [%]		80.1
Dist 3dB Peak [mm]		5.7



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 22.2 ℃
Liquid Temperature: 22.1 ℃
Test Date: 01/15/2025
Plot No.: A16
Band: 5 GHz WLAN Head SAR

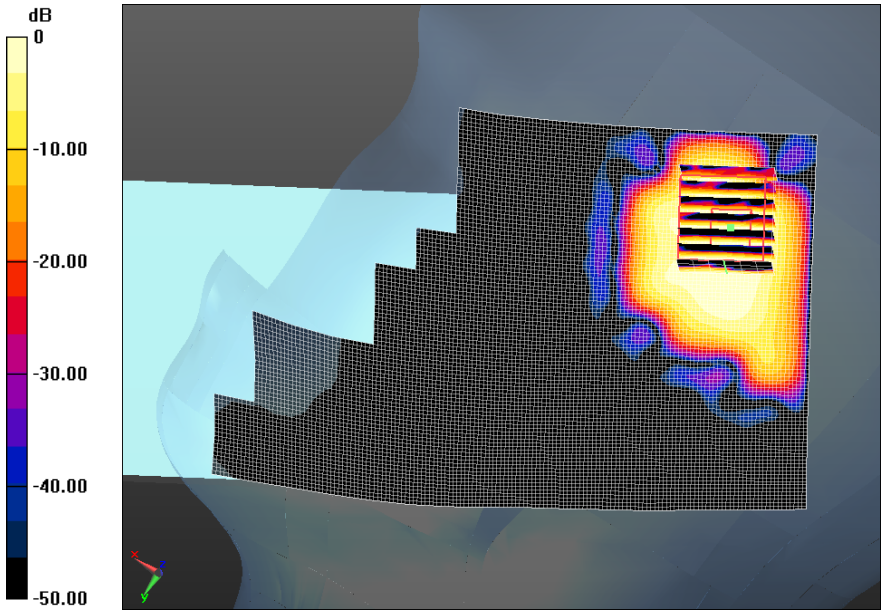
Communication System: UID 0, WIFI 5GHz (0); Frequency: 5690 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5690 MHz; σ = 5.149 S/m; ε_r = 34.395; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(5.35, 5.21, 5.63) @ 5690 MHz; Calibrated: 2024-05-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2024-02-16
- Phantom: SAM with CRP v5.0_Right; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

SM-A266M/802.11ac80 Head Right Touch MCS0 138ch/Area Scan (101x181x1): Interpolated grid:
dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.318 W/kg

SM-A266M/802.11ac80 Head Right Touch MCS0 138ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid:
dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 4.069 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.524 W/kg
SAR(1 g) = 0.112 W/kg; SAR(10 g) = 0.039 W/kg
Smallest distance from peaks to all points 3 dB below = 5.6 mm
Ratio of SAR at M2 to SAR at M1 = 62.4%
Maximum value of SAR (measured) = 0.282 W/kg



0 dB = 0.282 W/kg = -5.50 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 20.2 ℃
Liquid Temperature: 20.1 ℃
Test Date: 12/17/2024
Plot No.: A17
Band: Bluetooth Head SAR

Measurement Report for Device, CHEEK, ISM 2.4 GHz Band, IEEE 802.15.1 Bluetooth (GFSK, DH5), Channel 39 (2441.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
RightHead, HSL	CHEEK, 0.00	ISM 2.4 GHz Band	Bluetooth, 10032-CAA	2441.0, 39	7.41	1.79	39.6

Hardware Setup

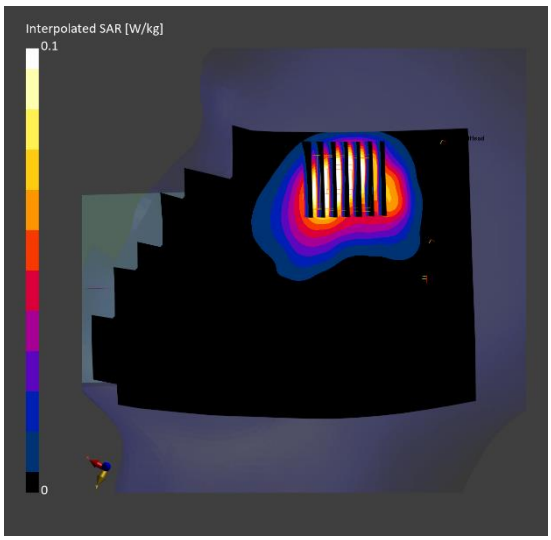
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN3797, 2024-01-23	DAE4 Sn1464, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 200.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.107	0.112
psSAR10g [W/Kg]	0.051	0.048
Power Drift [dB]	-0.10	0.14
M2/M1 [%]		78.4
Dist 3dB Peak [mm]		5.8



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.5 ℃
Liquid Temperature: 21.4 ℃
Test Date: 12/19/2024
Plot No.: B1
Band: GSM850 Body/Hotspot SAR
Measurement Report for Device, BACK, GSM 850, GPRS-FDD (TDMA, GMSK, TN 0-1), Channel 251 (848.800 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	BACK, 5.00	GSM 850	GSM, 10024-DAC	848.800, 251	9.33	0.925	40.8

Hardware Setup

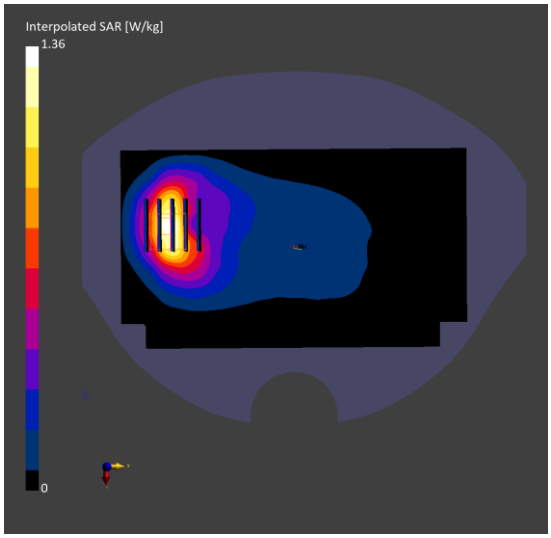
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.775	0.755
psSAR10g [W/Kg]	0.473	0.412
Power Drift [dB]	-0.05	-0.01
M2/M1 [%]		52.1
Dist 3dB Peak [mm]		8.0



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 22.4 ℃
Liquid Temperature: 22.3 ℃
Test Date: 12/20/2024
Plot No.: B2
Band: GSM1900 Body/Hotspot SAR
Measurement Report for Device, BACK, PCS 1900, GSM-FDD (TDMA, GMSK), Channel 661 (1880.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	BACK, 5.00	PCS 1900	GSM, 10021-DAC	1880.000, 661	7.81	1.43	40.4

Hardware Setup

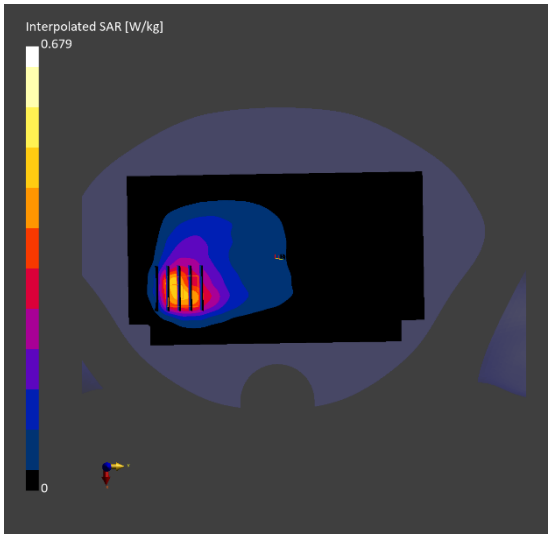
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.419	0.391
psSAR10g [W/Kg]	0.236	0.218
Power Drift [dB]	-0.10	-0.06
M2/M1 [%]		54.0
Dist 3dB Peak [mm]		10.2



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.4 ℃
Liquid Temperature: 21.3 ℃
Test Date: 12/13/2024
Plot No.: B3
Band: UMTS Band 5 Body/Hotspot SAR
Measurement Report for Device, BACK, Band 5, UMTS-FDD (WCDMA), Channel 4183 (836.600 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	BACK, 5.00	Band 5	WCDMA, 10011-CAC	836.600, 4183	9.33	0.928	41.0

Hardware Setup

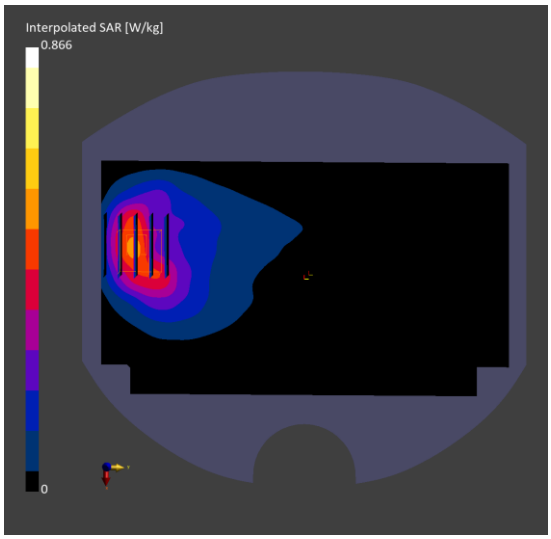
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.443	0.472
psSAR10g [W/Kg]	0.276	0.258
Power Drift [dB]	-0.17	-0.05
M2/M1 [%]		52.6
Dist 3dB Peak [mm]		10.2



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.5 ℃
Liquid Temperature: 21.4 ℃
Test Date: 12/12/2024
Plot No.: B4
Band: UMTS Band 4 Body/Hotspot SAR
Measurement Report for Device, EDGE BOTTOM, Band 4, UMTS-FDD (WCDMA), Channel 1513 (1752.600 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	EDGE BOTTOM, 5.00	Band 4	WCDMA, 10011-CAC	1752.600, 1513	8.05	1.35	41.4

Hardware Setup

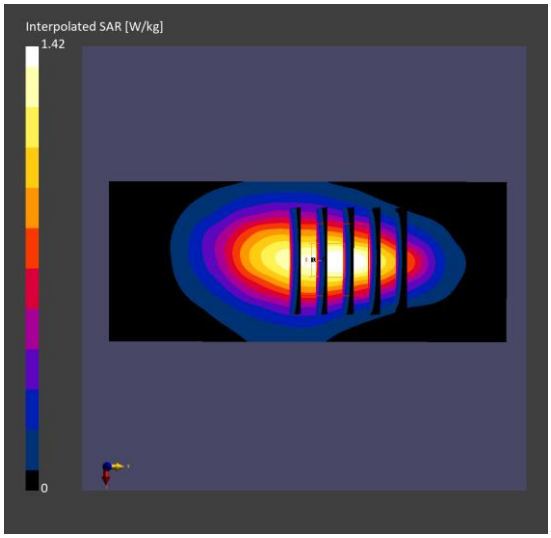
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	48.0 x 120.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	8.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.848	0.821
psSAR10g [W/Kg]	0.459	0.455
Power Drift [dB]	0.01	-0.01
M2/M1 [%]		56.4
Dist 3dB Peak [mm]		9.4



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.3 ℃
Liquid Temperature: 21.2 ℃
Test Date: 12/11/2024
Plot No.: B5
Band: UMTS Band 2 Body/Hotspot SAR
Measurement Report for Device, EDGE BOTTOM, Band 2, UMTS-FDD (WCDMA), Channel 9400 (1880.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE BOTTOM, 5.00	Band 2	WCDMA, 10011-CAC	1880.0, 9400	7.81	1.43	40.3

Hardware Setup

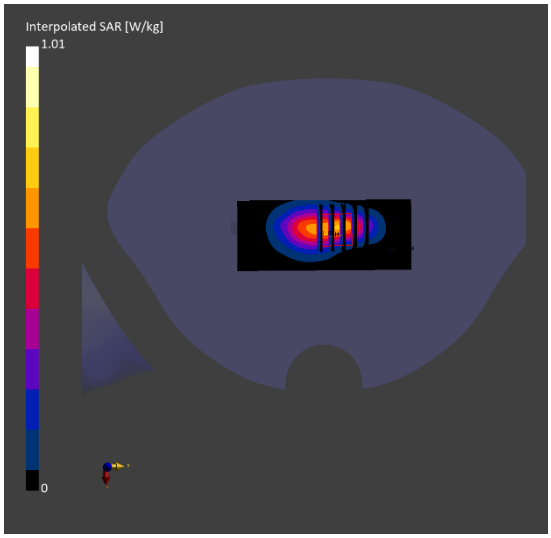
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	48.0 x 120.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	8.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.545	0.539
psSAR10g [W/Kg]	0.293	0.284
Power Drift [dB]	-0.00	-0.03
M2/M1 [%]		49.3
Dist 3dB Peak [mm]		6.4



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 20.9 ℃
Liquid Temperature: 20.8 ℃
Test Date: 01/09/2025
Plot No.: B6
Band: LTE FDD Band 2 Body/Hotspot SAR Ant.D
Measurement Report for Device, EDGE TOP, Band 2, LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK) AntennaCfg:SISO, Channel 19100 (1900.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	EDGE TOP, 5.00	Band 2	LTE-FDD, 10297-AAE	1900.000, 19100	7.81	1.41	40.8

Hardware Setup

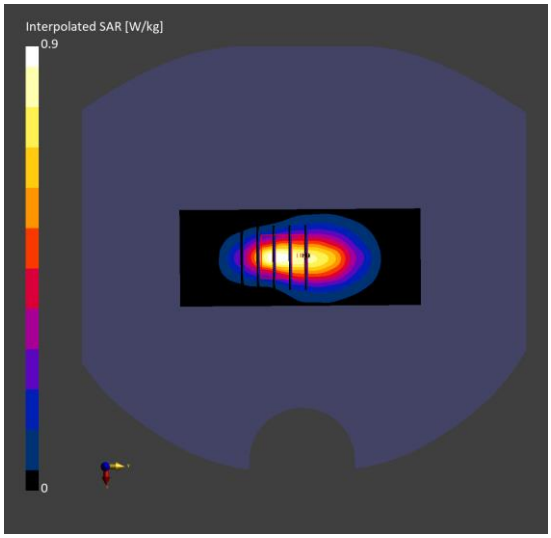
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	48.0 x 120.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	8.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.670	0.642
psSAR10g [W/Kg]	0.339	0.322
Power Drift [dB]	-0.02	-0.00
M2/M1 [%]		52.4
Dist 3dB Peak [mm]		6.4



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.9 ℃
Liquid Temperature: 21.8 ℃
Test Date: 12/16/2024
Plot No.: B7
Band: LTE FDD Band 12 Body/Hotspot SAR
Measurement Report for Device, BACK, Band 12, LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)
RBPosition:Mid AntennaCfg:SISO, Channel 23095 (707.500 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	BACK, 5.00	Band 12	LTE-FDD, 10154-CAH	707.500, 23095	9.59	0.895	41.9

Hardware Setup

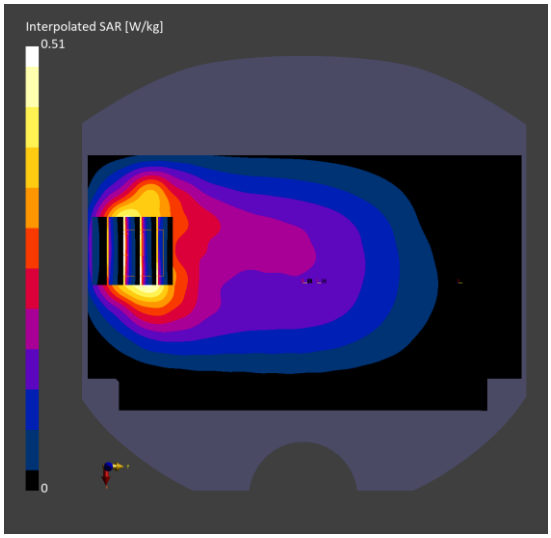
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.241	0.279
psSAR10g [W/Kg]	0.162	0.155
Power Drift [dB]	-0.00	-0.02
M2/M1 [%]		52.2
Dist 3dB Peak [mm]		9.6



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.3 ℃
Liquid Temperature: 21.2 ℃
Test Date: 12/17/2024
Plot No.: B8
Band: LTE FDD Band 13 Body/Hotspot SAR
Measurement Report for Device, BACK, Band 13, LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)
AntennaCfg:SISO, Channel 23230 (782.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	BACK, 5.00	Band 13	LTE-FDD, 10154-CAH	782.000, 23230	9.59	0.930	41.7

Hardware Setup

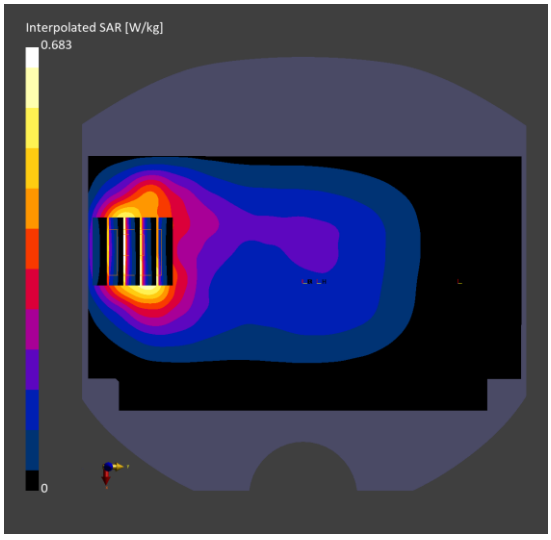
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.323	0.376
psSAR10g [W/Kg]	0.212	0.205
Power Drift [dB]	-0.01	-0.06
M2/M1 [%]		52.7
Dist 3dB Peak [mm]		9.6



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.9 °C
Liquid Temperature: 21.8 °C
Test Date: 12/23/2024
Plot No.: B9
Band: LTE FDD Band 26 Body/Hotspot SAR
Measurement Report for Device, BACK, Band 26, LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK) AntennaCfg:SISO, Channel 26865 (831.500 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	BACK, 5.00	Band 26	LTE-FDD, 10181-CAF	831.500, 26865	9.33	0.950	41.6

Hardware Setup

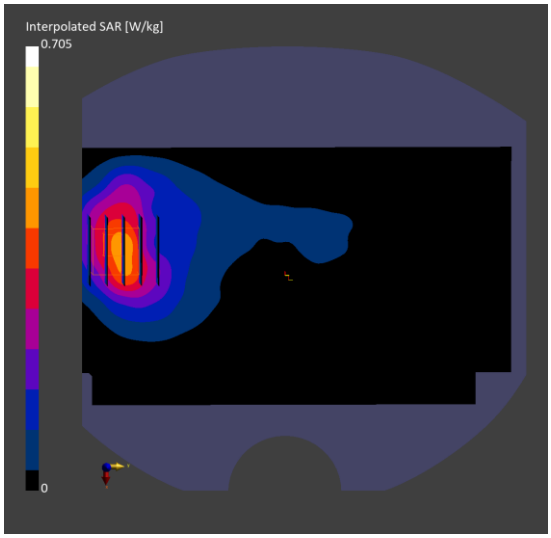
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.385	0.403
psSAR10g [W/Kg]	0.244	0.221
Power Drift [dB]	0.17	-0.01
M2/M1 [%]		54.4
Dist 3dB Peak [mm]		9.4



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.0 ℃
Liquid Temperature: 20.9 ℃
Test Date: 12/20/2024
Plot No.: B10
Band: LTE FDD Band 41 Body/Hotspot SAR
Measurement Report for Device, EDGE BOTTOM, Band 41, LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)
RBPosition:Mid AntennaCfg:SISO, Channel 41055 (2636.5 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE BOTTOM, 5.00	Band 41	LTE-TDD, 10151-CAH	2636.5, 41055	7.34	1.97	38.8

Hardware Setup

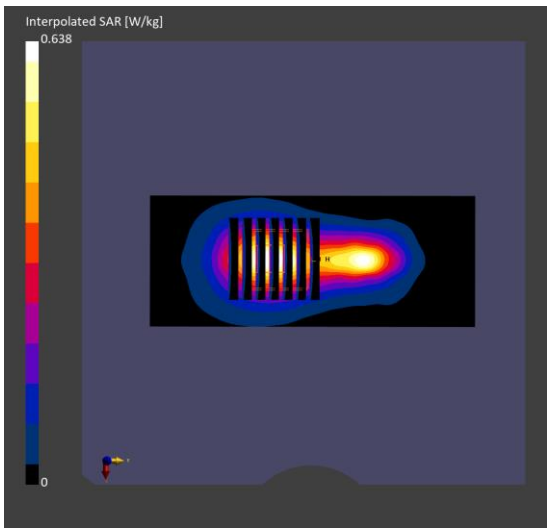
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN3797, 2024-01-23	DAE4 Sn1464, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	48.0 x 120.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	8.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.289	0.291
psSAR10g [W/Kg]	0.135	0.132
Power Drift [dB]	0.04	0.00
M2/M1 [%]		77.7
Dist 3dB Peak [mm]		9.3



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 22.1 ℃
Liquid Temperature: 22.0 ℃
Test Date: 12/24/2024
Plot No.: B11
Band: LTE FDD Band 66 Body/Hotspot SAR
Measurement Report for Device, EDGE BOTTOM, Band 66, LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK) RBPosition:Mid AntennaCfg:SISO, Channel 132322 (1745.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	EDGE BOTTOM, 5.00	Band 66	LTE-FDD, 10297-AAE	1745.000, 132322	8.05	1.34	41.4

Hardware Setup

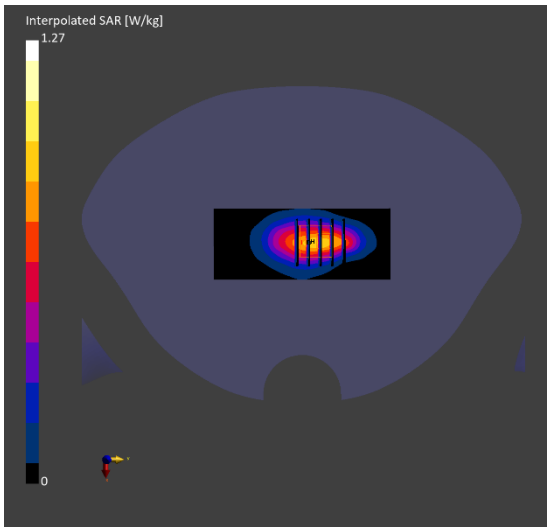
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	48.0 x 120.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	8.0 x 15.0	8.0 x 8.0 x 5.0

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.747	0.736
psSAR10g [W/Kg]	0.410	0.413
Power Drift [dB]	-0.01	-0.01
M2/M1 [%]		55.7
Dist 3dB Peak [mm]		8.0



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 22.3 ℃
Liquid Temperature: 22.2 ℃
Test Date: 12/26/2024
Plot No.: B12
Band: NR FDD Band n5 Body/Hotspot SAR
Measurement Report for Device, BACK, Band n5, 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)
RBPosition:Mid AntennaCfg:SISO, Channel 167300 (836.500 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	BACK, 5.00	Band n5	5G NR FR1 FDD, 10931-AAC	836.500, 167300	9.33	0.923	41.3

Hardware Setup

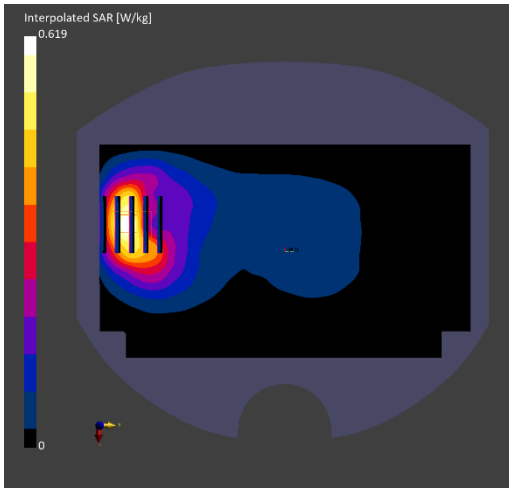
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.336	0.331
psSAR10g [W/Kg]	0.204	0.177
Power Drift [dB]	-0.02	-0.04
M2/M1 [%]		51.0
Dist 3dB Peak [mm]		8.0



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 21.9 °C
Liquid Temperature: 21.8 °C
Test Date: 12/27/2024
Plot No.: B13
Band: NR FDD Band n66 Body/Hotspot SAR
Measurement Report for Device, EDGE BOTTOM, Band n66, 5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz) RBPosition:Mid AntennaCfg:SISO, Channel 349000 (1745.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	EDGE BOTTOM, 5.00	Band n66	5G NR FR1 FDD, 10934-AAC	1745.000, 349000	8.05	1.34	40.8

Hardware Setup

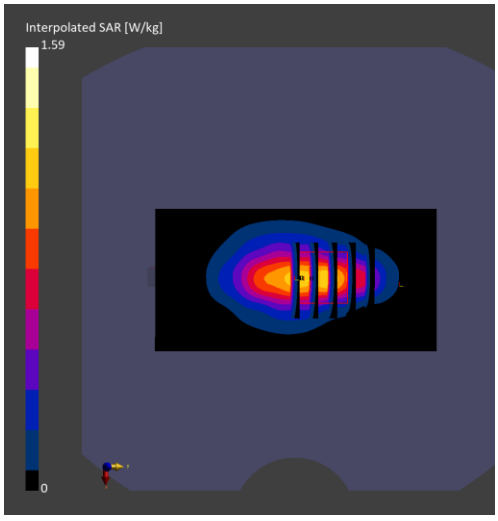
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	60.0 x 120.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.956	0.908
psSAR10g [W/Kg]	0.511	0.495
Power Drift [dB]	0.01	0.06
M2/M1 [%]		54.2
Dist 3dB Peak [mm]		7.2



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 20.5 ℃
Liquid Temperature: 20.4 ℃
Test Date: 01/13/2025
Plot No.: B14
Band: 2.4 ㎓ WLAN Body/Hotspot SAR
Measurement Report for Device, EDGE LEFT, WLAN 2.4GHz, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps), Channel 6 (2437.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	EDGE LEFT, 5.00	WLAN 2.4GHz	WLAN, 10012-CAB	2437.000, 6	7.0	1.74	38.7

Hardware Setup

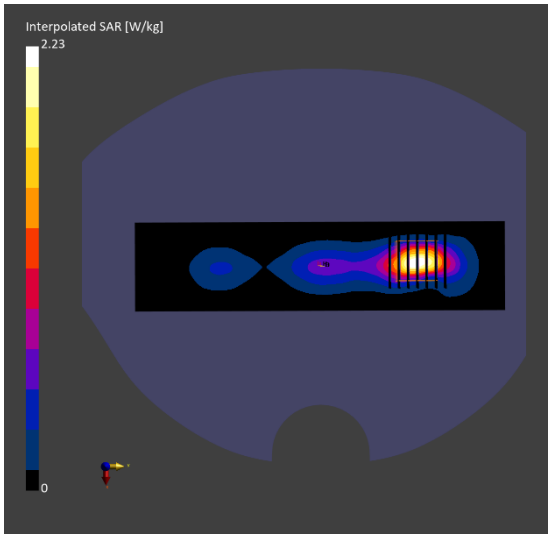
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7680, 2024-05-28	DAE4 Sn1464, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	48.0 x 200.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	8.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.910	0.923
psSAR10g [W/Kg]	0.378	0.364
Power Drift [dB]	-0.01	0.00
M2/M1 [%]		77.4
Dist 3dB Peak [mm]		6.4



Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 22.3 ℃
Liquid Temperature: 22.2 ℃
Test Date: 01/14/2025
Plot No.: B15
Band: 5 GHz WLAN Body/Hotspot SAR

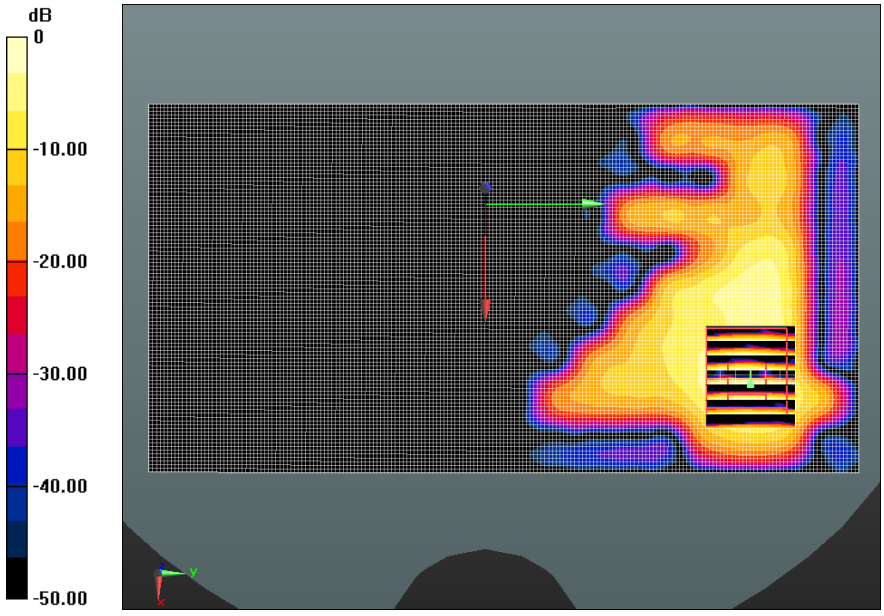
Communication System: UID 0, WIFI 5GHz (0); Frequency: 5785 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5785 MHz; σ = 5.204 S/m; ε_r = 34.738; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(5.32, 5.14, 5.59) @ 5785 MHz; Calibrated: 2024-05-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2024-02-16
- Phantom: SAM with CRP v5.0_Right; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

SM-A266M/802.11a Body Rear 6Mbps 157ch/Area Scan (101x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.15 W/kg

SM-A266M/802.11a Body Rear 6Mbps 157ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 0 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 2.13 W/kg
SAR(1 g) = 0.459 W/kg; SAR(10 g) = 0.122 W/kg
Smallest distance from peaks to all points 3 dB below = 6.8 mm
Ratio of SAR at M2 to SAR at M1 = 61.5%
Maximum value of SAR (measured) = 1.21 W/kg



0 dB = 1.21 W/kg = 0.83 dBW/kg

Test Laboratory: HCT CO., LTD
EUT Type: Mobile Phone
Ambient Temperature: 20.2 ℃
Liquid Temperature: 20.1 ℃
Test Date: 12/17/2024
Plot No.: B16
Band: Bluetooth Body/Hotspot SAR
Measurement Report for Device, EDGE LEFT, ISM 2.4 GHz Band, IEEE 802.15.1 Bluetooth (GFSK, DH5), Channel 39 (2441.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	EDGE LEFT, 5.00	ISM 2.4 GHz Band	Bluetooth, 10032-CAA	2441.0, 39	7.41	1.79	39.6

Hardware Setup

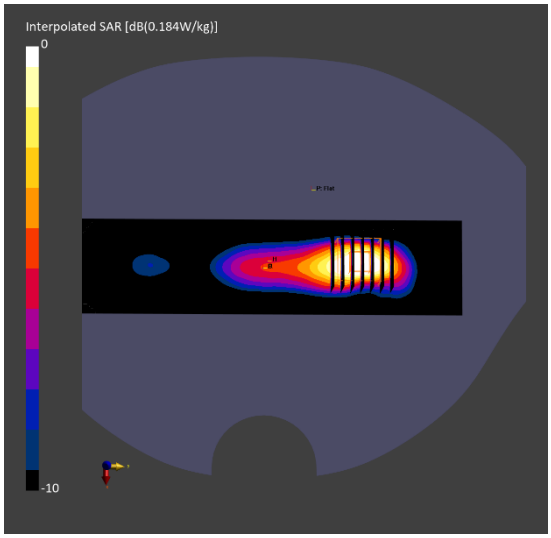
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN3797, 2024-01-23	DAE4 Sn1464, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	48.0 x 200.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	8.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.173	0.174
psSAR10g [W/Kg]	0.072	0.069
Power Drift [dB]	0.01	-0.01
M2/M1 [%]		75.6
Dist 3dB Peak [mm]		6.1



Test Laboratory:	**HCT CO., LTD**
EUT Type:	**Mobile Phone**
Ambient Temperature:	**22.5 °C**
Liquid Temperature:	**22.4 °C**
Test Date:	**01/10/2025**
Plot No.:	**C2**
Band:	**NFC Phablet SAR**

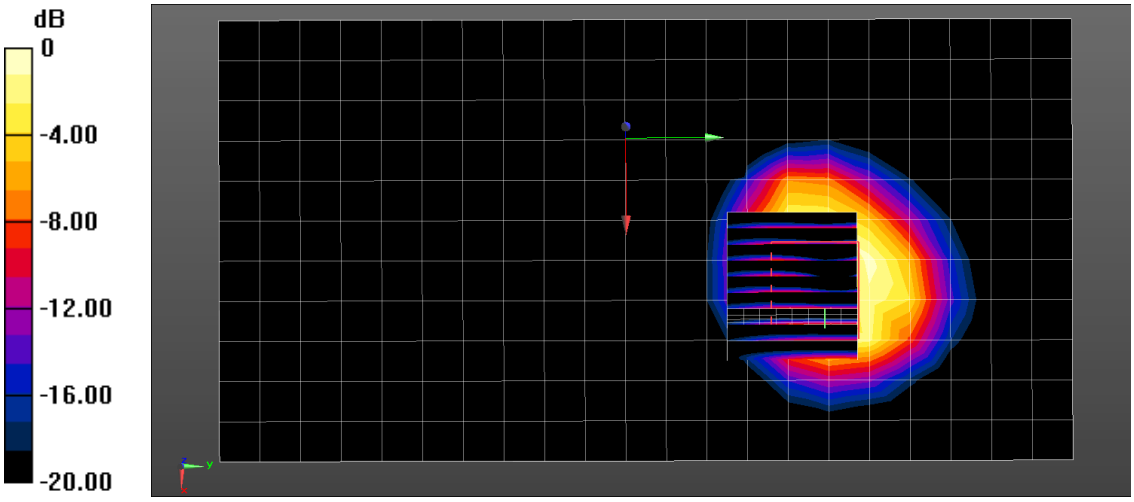
Communication System: UID 0, CW (0); Frequency: 13.56 MHz;Duty Cycle: 1:1
Medium parameters used: f = 14 MHz; σ = 0.74 S/m; ε_r = 54.495; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.39, 5.7, 6.16) @ 13.56 MHz; Calibrated: 2024-07-17
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: ELI V8.0 (20deg probe tilt); Type: QD OVA 004 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

SM-A266M/NFC Phablet Rear Type A106kbps/Area Scan (12x22x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.249 W/kg

SM-A266M/NFC Phablet Rear Type A106kbps/Zoom Scan (9x9x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 1.004 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 1.19 W/kg
SAR(1 g) = 0.202 W/kg; SAR(10 g) = 0.068 W/kg
Smallest distance from peaks to all points 3 dB below = 5.1 mm
Ratio of SAR at M2 to SAR at M1 = 61.7%
Maximum value of SAR (measured) = 0.264 W/kg



0 dB = 0.264 W/kg = -5.78 dBW/kg

Appendix C. – Dipole Verification Plots

■ Verification Data (750 ㎒ Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 21.8 ℃
Test Date: 12/16/2024
Band: LTE FDD Band 12
Measurement Report for Device, , , CW, Channel 0 (750.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	,		CW, 0--	750.000, 0	9.59	0.912	41.7

Hardware Setup

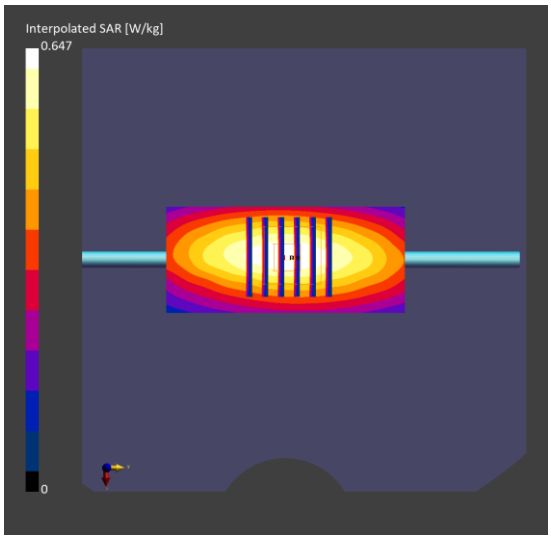
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 90.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.446	0.442
psSAR10g [W/Kg]	0.296	0.294
Power Drift [dB]	-0.01	0.01
M2/M1 [%]		89.5
Dist 3dB Peak [mm]		19.6



■ Verification Data (750 ㎒ Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 21.2 ℃
Test Date: 12/17/2024
Band: LTE FDD Band 13
Measurement Report for Device, , , CW, Channel 0 (750.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	,		CW, 0--	750.000, 0	9.59	0.917	41.9

Hardware Setup

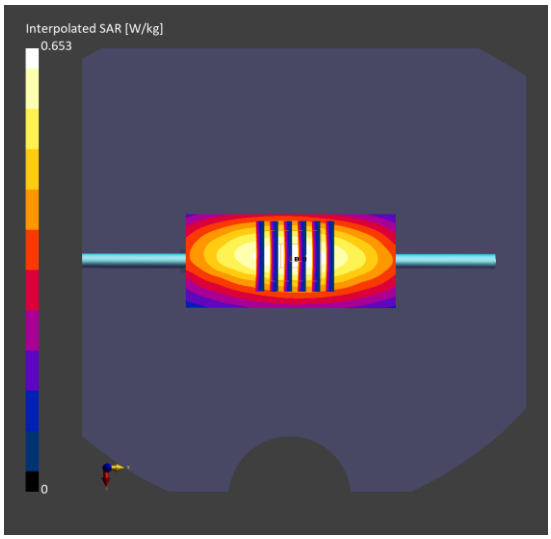
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 90.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.448	0.445
psSAR10g [W/Kg]	0.298	0.297
Power Drift [dB]	0.00	0.00
M2/M1 [%]		89.5
Dist 3dB Peak [mm]		19.0



■ Verification Data (835 ㎒ Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 21.4 ℃
Test Date: 12/19/2024
Band: GSM850
Measurement Report for Device, , , CW, Channel 0 (835.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	,		CW, 0--	835.000, 0	9.33	0.920	40.9

Hardware Setup

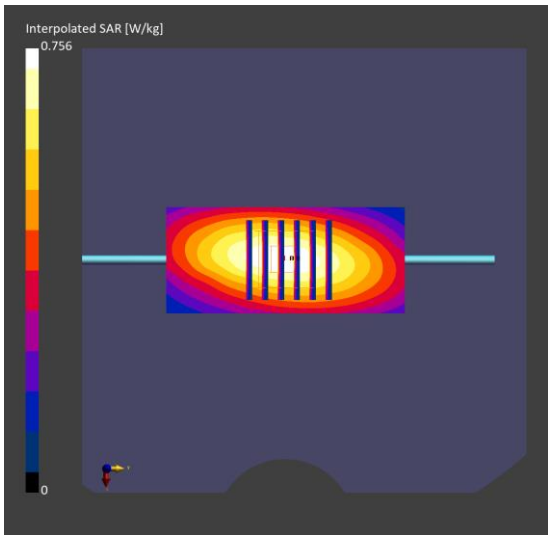
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 90.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.507	0.508
psSAR10g [W/Kg]	0.334	0.338
Power Drift [dB]	0.00	-0.01
M2/M1 [%]		88.8
Dist 3dB Peak [mm]		17.8



■ Verification Data (835 ㎒ Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 21.3 ℃
Test Date: 12/13/2024
Band: UMTS Band 5
Measurement Report for Device, , , CW, Channel 0 (835.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	,		CW, 0--	835.000, 0	9.33	0.927	41.0

Hardware Setup

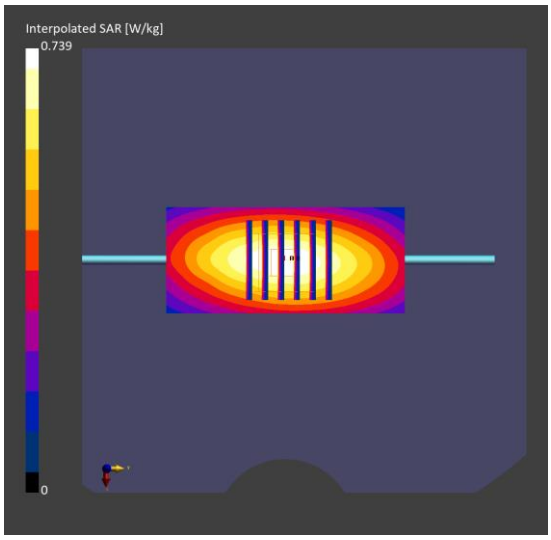
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 90.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.496	0.500
psSAR10g [W/Kg]	0.328	0.334
Power Drift [dB]	-0.00	-0.01
M2/M1 [%]		87.9
Dist 3dB Peak [mm]		17.2



■ Verification Data (835 ㎒ Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 21.6 ℃
Test Date: 01/07/2025
Band: LTE FDD Band 5
Measurement Report for Device, , , CW, Channel 0 (835.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	,		CW, 0--	835.000, 0	9.33	0.922	41.2

Hardware Setup

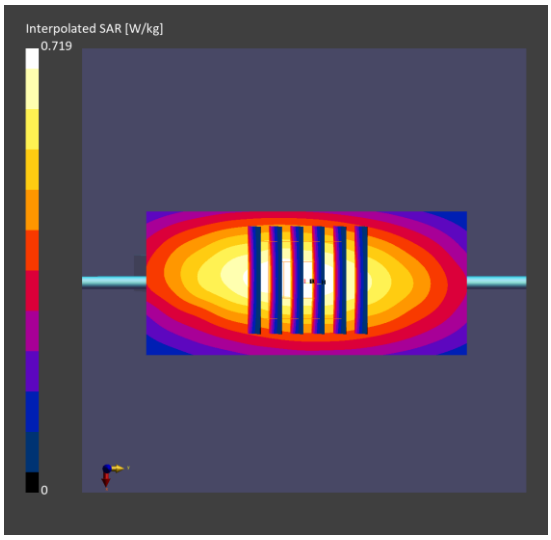
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 90.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.494	0.488
psSAR10g [W/Kg]	0.324	0.321
Power Drift [dB]	0.00	0.00
M2/M1 [%]		88.4
Dist 3dB Peak [mm]		17.8



■ Verification Data (835 ㎒ Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 21.8 ℃
Test Date: 12/23/2024
Band: LTE FDD Band 26
Measurement Report for Device, , , CW, Channel 0 (835.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	,		CW, 0--	835.000, 0	9.33	0.938	41.3

Hardware Setup

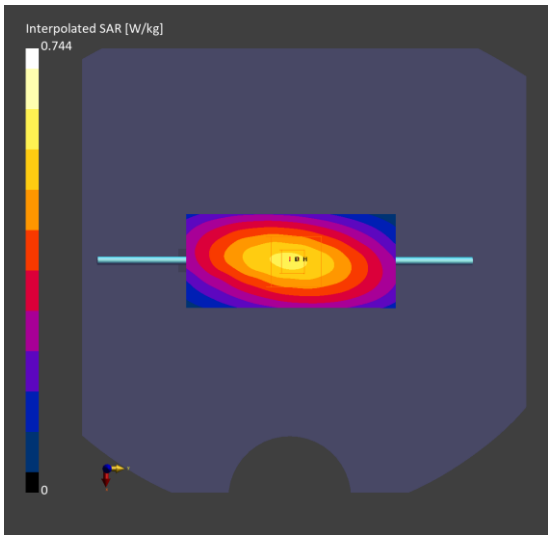
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 90.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.501	0.503
psSAR10g [W/Kg]	0.331	0.336
Power Drift [dB]	-0.00	0.00
M2/M1 [%]		89.0
Dist 3dB Peak [mm]		17.2



■ Verification Data (1800 ㎒ Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 21.4 ℃
Test Date: 12/12/2024
Band: UMTS Band 4
Measurement Report for Device, , , CW, Channel 0 (1800.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	,		CW, 0--	1800.000, 0	8.05	1.40	41.2

Hardware Setup

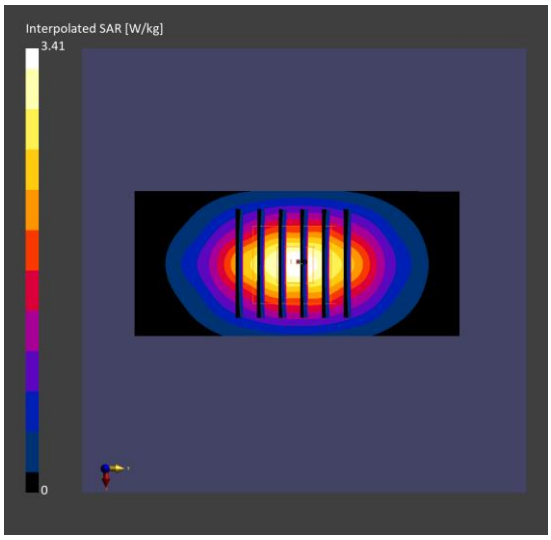
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 90.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	1.93	1.92
psSAR10g [W/Kg]	1.01	1.02
Power Drift [dB]	0.00	0.02
M2/M1 [%]		83.0
Dist 3dB Peak [mm]		9.6



■ Verification Data (1800 ㎒ Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 22.0 ℃
Test Date: 12/24/2024
Band: LTE FDD Band 66_Ant.B
Measurement Report for Device, , , CW, Channel 0 (1800.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	,		CW, 0--	1800.000, 0	8.05	1.40	41.2

Hardware Setup

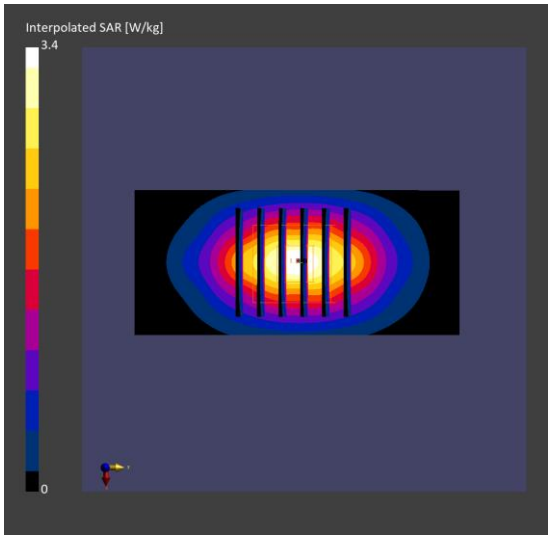
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	HBBL-600-10000 Charge:xxxx, 2024-12-31	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 90.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	1.94	1.93
psSAR10g [W/Kg]	1.02	1.02
Power Drift [dB]	0.01	-0.03
M2/M1 [%]		82.8
Dist 3dB Peak [mm]		9.6



■ Verification Data (1900 ㎒ Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 22.3 ℃
Test Date: 12/20/2024
Band: GSM1900
Measurement Report for Device, , , CW, Channel 0 (1900.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	,		CW, 0--	1900.000, 0	7.81	1.45	40.3

Hardware Setup

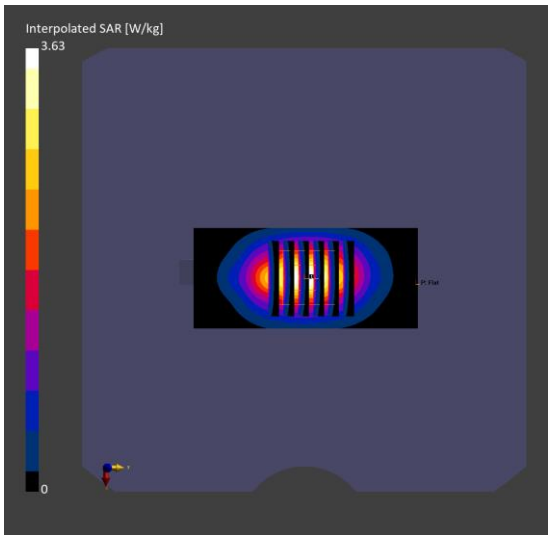
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 90.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	2.04	2.01
psSAR10g [W/Kg]	1.05	1.05
Power Drift [dB]	-0.00	-0.01
M2/M1 [%]		85.4
Dist 3dB Peak [mm]		9.6



■ Verification Data (1900 ㎒ Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 21.2 ℃
Test Date: 12/11/2024
Band: UMTS Band 2
Measurement Report for Device, , , CW, Channel 0 (1900.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	,		CW, 0--	1900.000, 0	7.81	1.45	40.2

Hardware Setup

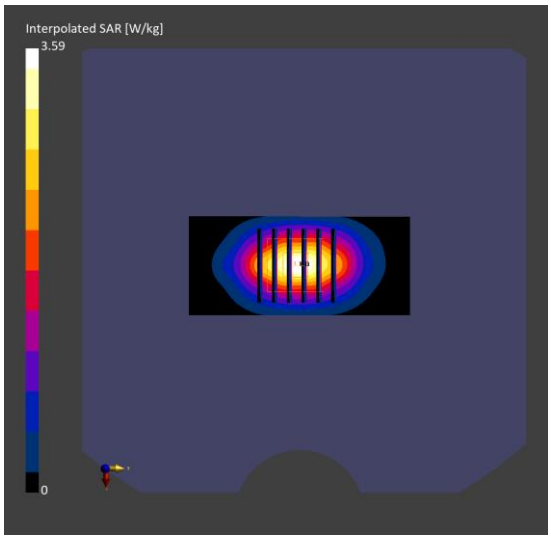
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 90.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	2.04	2.00
psSAR10g [W/Kg]	1.04	1.05
Power Drift [dB]	0.00	0.01
M2/M1 [%]		85.6
Dist 3dB Peak [mm]		9.6



■ Verification Data (1900 ㎒ Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 22.1 ℃
Test Date: 12/18/2024
Band: LTE FDD Band 2_Ant.B
Measurement Report for Device, , , CW, Channel 0 (1900.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	,		CW, 0--	1900.000, 0	7.81	1.45	40.3

Hardware Setup

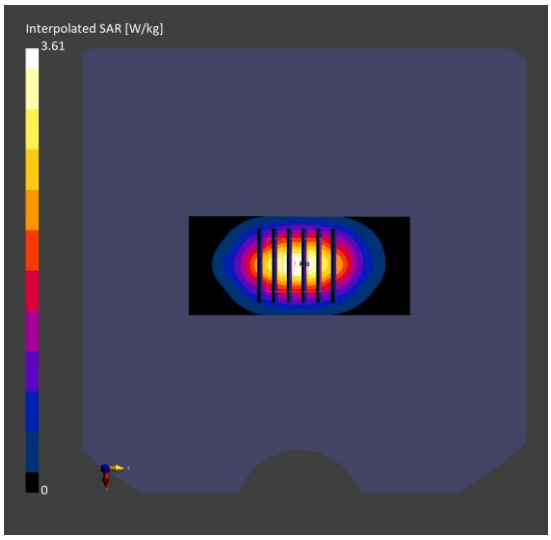
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 90.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	2.04	2.01
psSAR10g [W/Kg]	1.04	1.05
Power Drift [dB]	0.00	0.02
M2/M1 [%]		85.6
Dist 3dB Peak [mm]		9.6



■ Verification Data (1900 ㎒ Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 20.8 ℃
Test Date: 01/09/2025
Band: LTE FDD Band 2_Ant.D
Measurement Report for Device, , , CW, Channel 0 (1900.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	,		CW, 0--	1900.000, 0	7.81	1.41	40.8

Hardware Setup

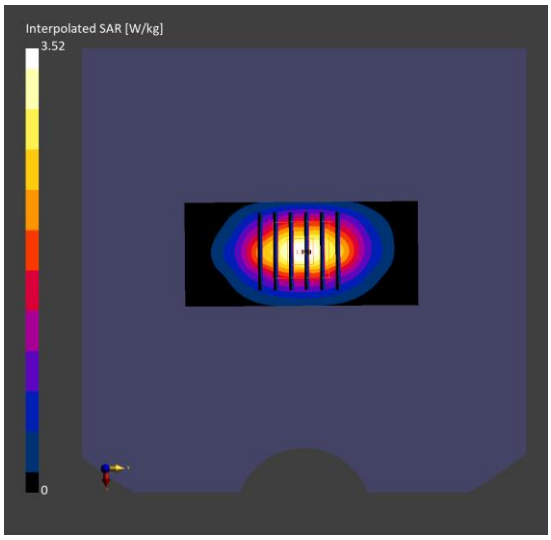
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 90.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	2.00	1.96
psSAR10g [W/Kg]	1.03	1.02
Power Drift [dB]	0.02	-0.00
M2/M1 [%]		85.3
Dist 3dB Peak [mm]		9.6



■ Verification Data (2450 ㎒ Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 20.4 ℃
Test Date: 01/13/2025
Band: WLAN 2.4GHz Body

Measurement Report for Device, , , CW, Channel 0 (2450.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	,		CW, 0--	2450.000, 0	7.0	1.75	38.6

Hardware Setup

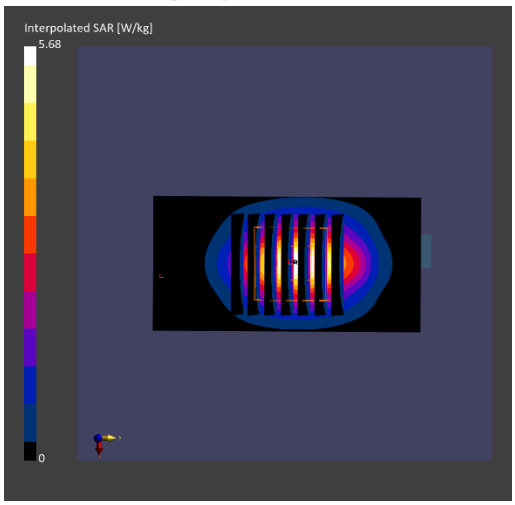
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7680, 2024-05-28	DAE4 Sn1464, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	2.65	2.65
psSAR10g [W/Kg]	1.21	1.21
Power Drift [dB]	0.01	0.01
M2/M1 [%]		78.9
Dist 3dB Peak [mm]		8.6



■ Verification Data (2450 ㎒ Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 20.6 ℃
Test Date: 01/14/2025
Band: WLAN 2.4GHz Head
Measurement Report for Device, , , CW, Channel 0 (2450.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	,		CW, 0--	2450.000, 0	7.47	1.75	38.5

Hardware Setup

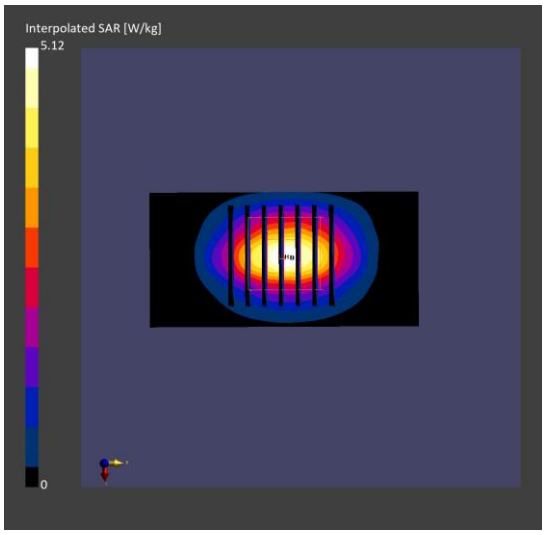
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	2.58	2.54
psSAR10g [W/Kg]	1.18	1.18
Power Drift [dB]	0.03	0.01
M2/M1 [%]		81.2
Dist 3dB Peak [mm]		9.0



■ Verification Data (2450 ㎒ Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 20.1 ℃
Test Date: 12/17/2024
Band: Bluetooth
Measurement Report for Device, , , CW, Channel 0 (2450.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	,		CW, 0--	2450.0, 0	7.41	1.80	39.6

Hardware Setup

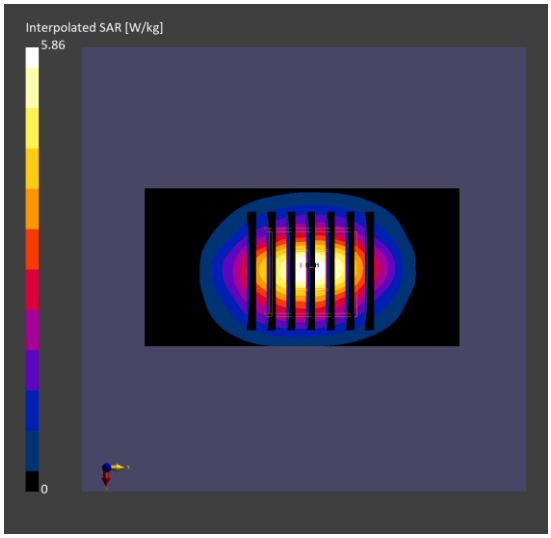
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN3797, 2024-01-23	DAE4 Sn1464, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	2.65	2.66
psSAR10g [W/Kg]	1.21	1.21
Power Drift [dB]	0.00	0.02
M2/M1 [%]		77.6
Dist 3dB Peak [mm]		9.0



■ Verification Data (2600 MHz Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 20.9 ℃
Test Date: 12/20/2024
Band: LTE TDD Band 41
Measurement Report for Device, , , CW, Channel 0 (2600.0 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	,		CW, 0--	2600.0, 0	7.34	1.92	38.9

Hardware Setup

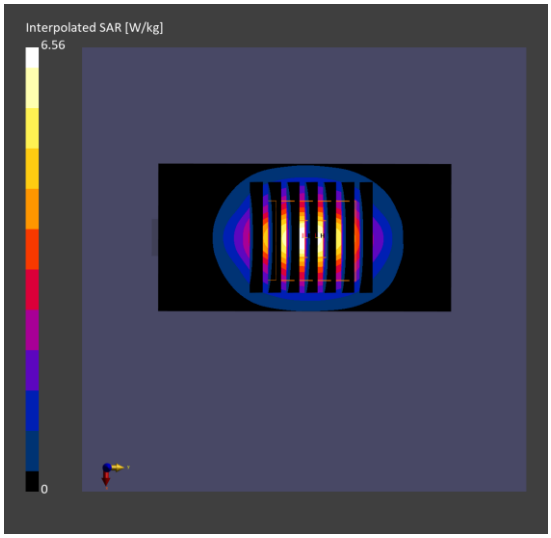
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN3797, 2024-01-23	DAE4 Sn1464, 2024-06-19

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 80.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	2.89	2.81
psSAR10g [W/Kg]	1.28	1.21
Power Drift [dB]	-0.18	-0.01
M2/M1 [%]		76.1
Dist 3dB Peak [mm]		8.0



■ Verification Data (5250 ㎒ Head)

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**22.2 ℃**
Test Date:	**01/14/2025**
Band:	**WLAN 5GHz UNII2A Body**

Communication System: UID 0, CW (0); Frequency: 5250 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5250 MHz; σ = 4.682 S/m; ε_r = 35.262; ρ = 1000 kg/m^3
Phantom section: Flat Section

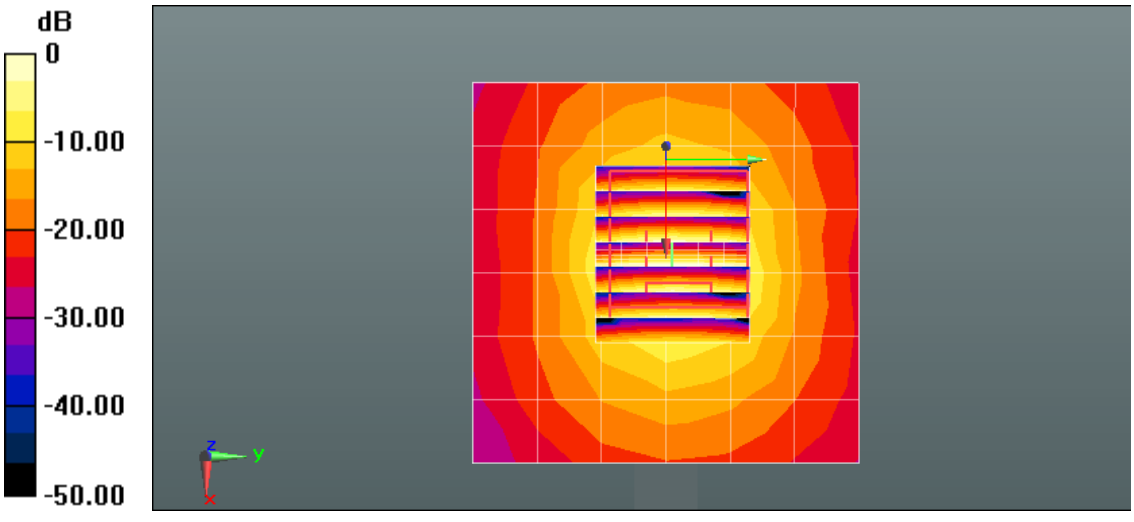
DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(6.07, 5.99, 6.46) @ 5250 MHz; Calibrated: 2024-05-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2024-02-16
- Phantom: SAM with CRP v5.0_Right; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/5250MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 9.95 W/kg

Dipole/5250MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 49.99 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 18.0 W/kg
SAR(1 g) = 4.15 W/kg; SAR(10 g) = 1.15 W/kg
Smallest distance from peaks to all points 3 dB below = 6.8 mm
Ratio of SAR at M2 to SAR at M1 = 62.8%

Maximum value of SAR (measured) = 10.6 W/kg



0 dB = 10.6 W/kg = 10.25 dBW/kg

■ Verification Data (5250 ㎒ Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 22.1 ℃
Test Date: 01/15/2025
Band: WLAN 5GHz UNII2A Head

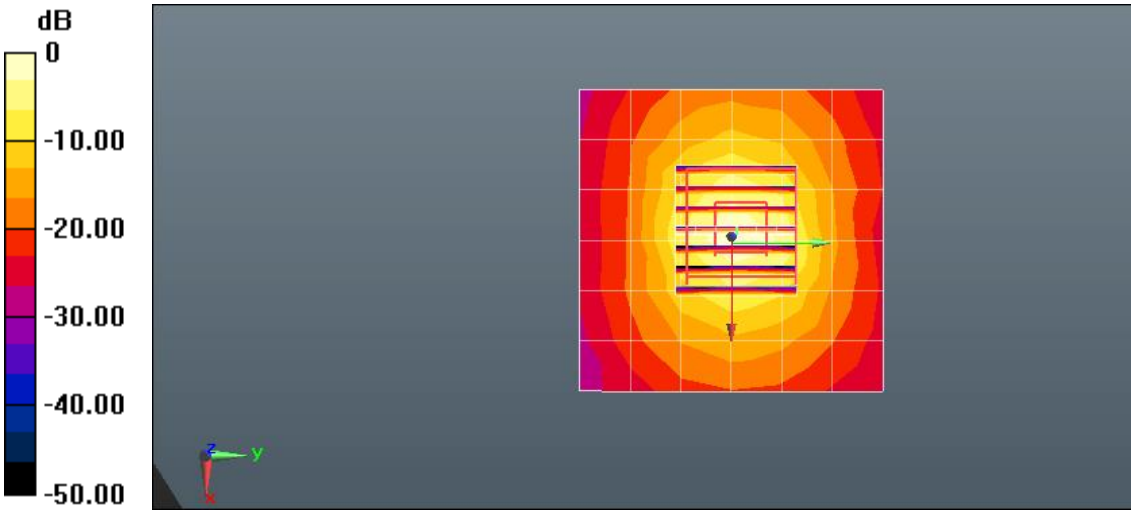
Communication System: UID 0, CW (0); Frequency: 5250 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5250 MHz; σ = 4.607 S/m; ε_r = 34.994; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(6.07, 5.99, 6.46) @ 5250 MHz; Calibrated: 2024-05-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2024-02-16
- Phantom: SAM with CRP v5.0_Right; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/5250MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 9.89 W/kg

Dipole/5250MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 50.61 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 17.4 W/kg
SAR(1 g) = 4.06 W/kg; SAR(10 g) = 1.13 W/kg
Smallest distance from peaks to all points 3 dB below = 6.8 mm
Ratio of SAR at M2 to SAR at M1 = 63.1%
Maximum value of SAR (measured) = 10.3 W/kg



0 dB = 10.3 W/kg = 10.13 dBW/kg

■ Verification Data (5600 ㎒ Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 22.2 ℃
Test Date: 01/14/2025
Band: WLAN 5GHz UNII2C Body

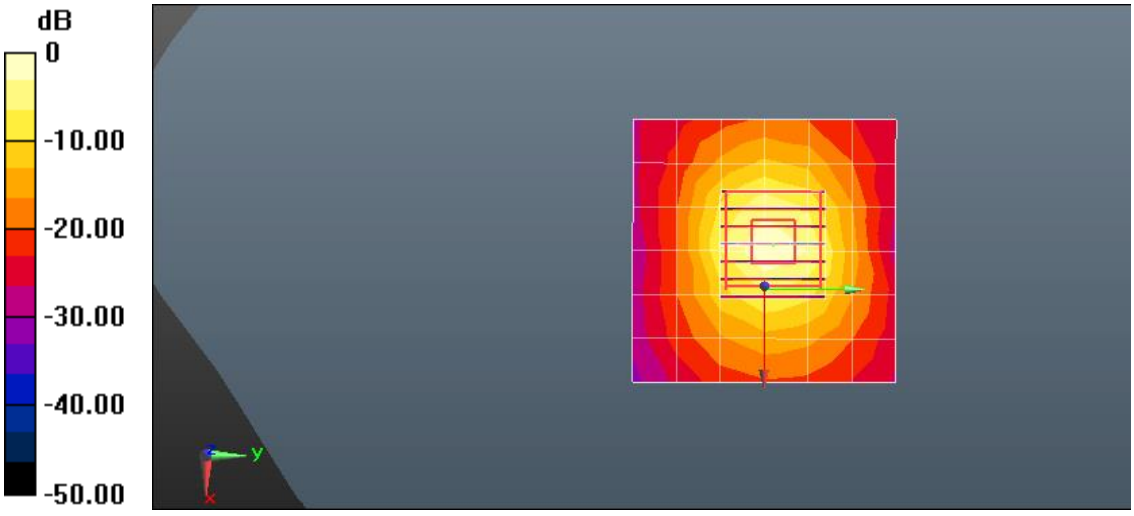
Communication System: UID 0, CW (0); Frequency: 5600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5600 MHz; σ = 5.051 S/m; ε_r = 34.801; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(5.33, 5.18, 5.62) @ 5600 MHz; Calibrated: 2024-05-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2024-02-16
- Phantom: SAM with CRP v5.0_Right; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/5600MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 10.4 W/kg

Dipole/5600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 49.99 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 19.2 W/kg
SAR(1 g) = 4.27 W/kg; SAR(10 g) = 1.18 W/kg
Smallest distance from peaks to all points 3 dB below = 7.2 mm
Ratio of SAR at M2 to SAR at M1 = 61.5%
Maximum value of SAR (measured) = 11.0 W/kg



0 dB = 11.0 W/kg = 10.41 dBW/kg

■ Verification Data (5600 ㎒ Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 22.1 ℃
Test Date: 01/15/2025
Band: WLAN 5GHz UNII2C Head

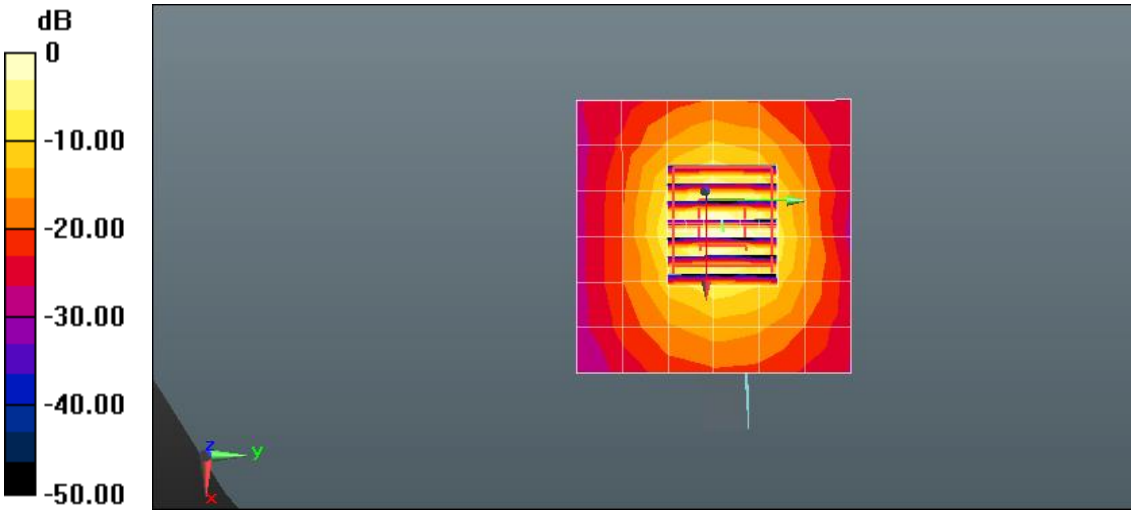
Communication System: UID 0, CW (0); Frequency: 5600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5600 MHz; σ = 4.96 S/m; ε_r = 34.537; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(5.33, 5.18, 5.62) @ 5600 MHz; Calibrated: 2024-05-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2024-02-16
- Phantom: SAM with CRP v5.0_Right; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/5600MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 10.7 W/kg

Dipole/5600MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 51.16 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 19.7 W/kg
SAR(1 g) = 4.34 W/kg; SAR(10 g) = 1.19 W/kg
Smallest distance from peaks to all points 3 dB below = 6.8 mm
Ratio of SAR at M2 to SAR at M1 = 61.2%
Maximum value of SAR (measured) = 11.3 W/kg



0 dB = 11.3 W/kg = 10.53 dBW/kg

■ Verification Data (5750 ㎒ Head)

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**22.2 ℃**
Test Date:	**01/14/2025**
Band:	**WLAN 5GHz UNII3 Body**

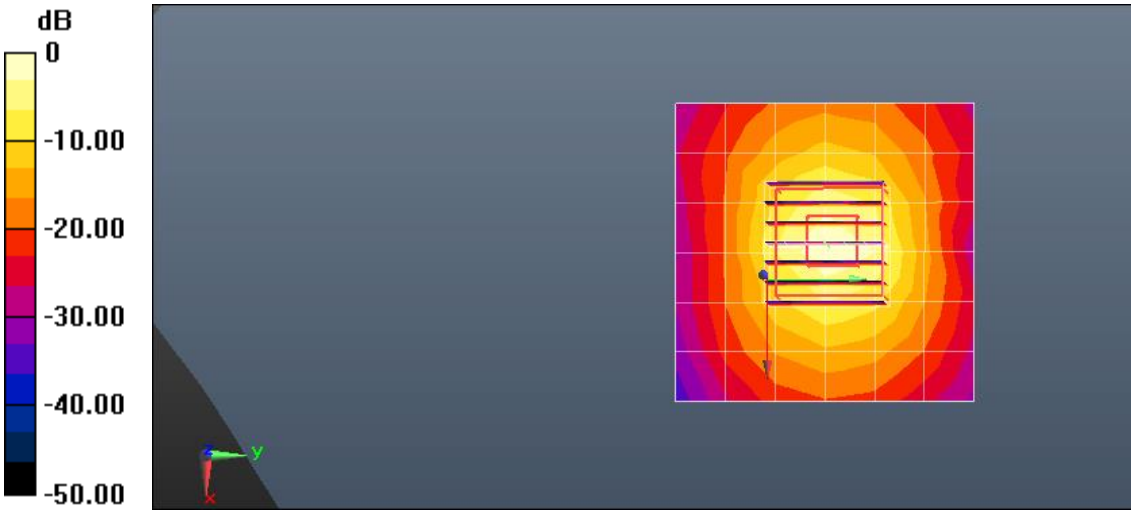
Communication System: UID 0, CW (0); Frequency: 5750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5750 MHz; σ = 5.252 S/m; ε_r = 34.718; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(5.35, 5.21, 5.63) @ 5750 MHz; Calibrated: 2024-05-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2024-02-16
- Phantom: SAM with CRP v5.0_Right; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/5750MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 9.32 W/kg

Dipole/5750MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 46.40 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 17.6 W/kg
SAR(1 g) = 3.7 W/kg; SAR(10 g) = 1.03 W/kg
Smallest distance from peaks to all points 3 dB below = 6.8 mm
Ratio of SAR at M2 to SAR at M1 = 59.8%
Maximum value of SAR (measured) = 9.77 W/kg



0 dB = 9.77 W/kg = 9.90 dBW/kg

■ Verification Data (5750 ㎒ Head)

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**22.1 ℃**
Test Date:	**01/15/2025**
Band:	**WLAN 5GHz UNII3 Head**

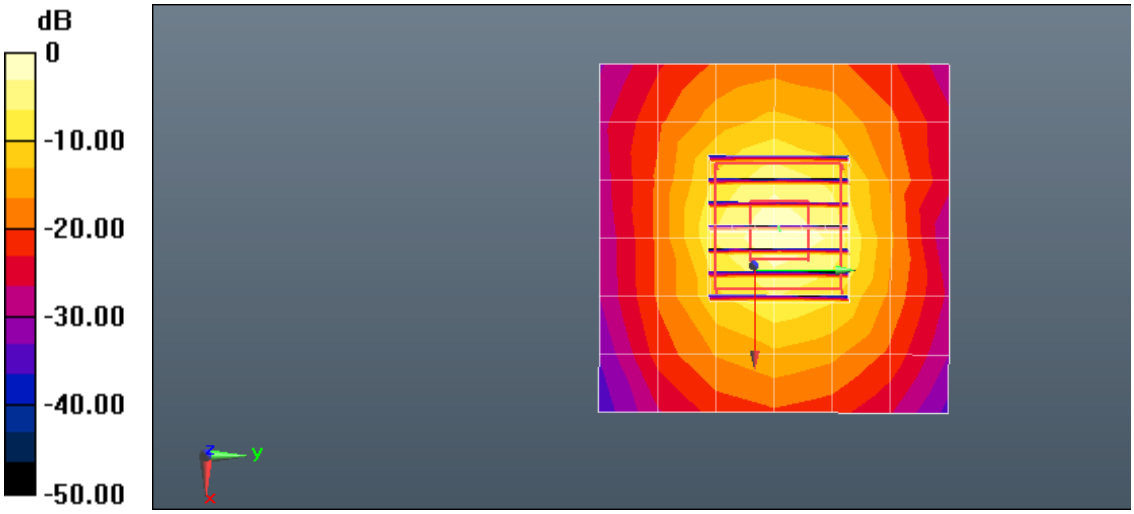
Communication System: UID 0, CW (0); Frequency: 5750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5750 MHz; σ = 5.176 S/m; ε_r = 34.431; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(5.35, 5.21, 5.63) @ 5750 MHz; Calibrated: 2024-05-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2024-02-16
- Phantom: SAM with CRP v5.0_Right; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/5750MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 9.45 W/kg

Dipole/5750MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 47.54 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 17.6 W/kg
SAR(1 g) = 3.74 W/kg; SAR(10 g) = 1.03 W/kg
Smallest distance from peaks to all points 3 dB below = 6.8 mm
Ratio of SAR at M2 to SAR at M1 = 60.1%
Maximum value of SAR (measured) = 9.89 W/kg



0 dB = 9.89 W/kg = 9.95 dBW/kg

■ Verification Data (5800 ㎒ Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 22.2 ℃
Test Date: 01/14/2025
Band: WLAN 5GHz UNII4 Body

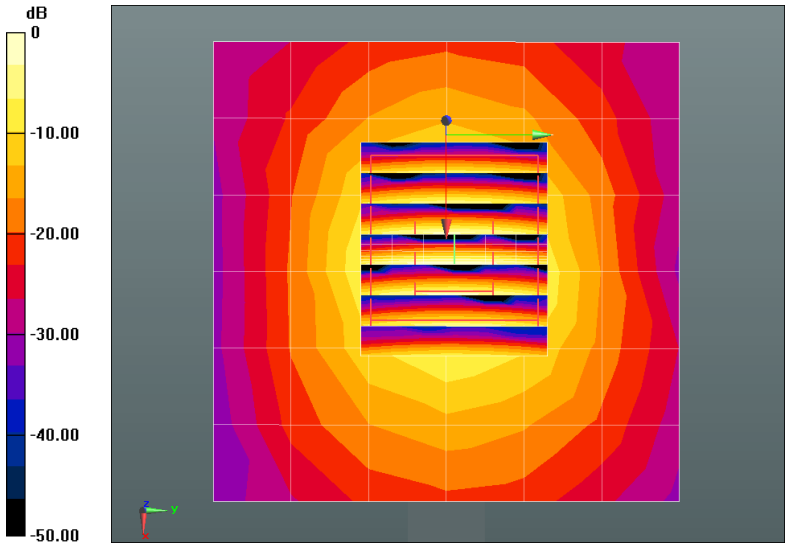
Communication System: UID 0, CW (0); Frequency: 5800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5800 MHz; σ = 5.177 S/m; ε_r = 34.732; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(5.32, 5.14, 5.59) @ 5800 MHz; Calibrated: 2024-05-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2024-02-16
- Phantom: SAM with CRP v5.0_Right; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/5800MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 10.8 W/kg

Dipole/5800MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 50.36 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 19.7 W/kg
SAR(1 g) = 4.07 W/kg; SAR(10 g) = 1.1 W/kg
Smallest distance from peaks to all points 3 dB below = 6.6 mm
Ratio of SAR at M2 to SAR at M1 = 59.3%
Maximum value of SAR (measured) = 10.9 W/kg



0 dB = 10.9 W/kg = 10.37 dBW/kg

■ Verification Data (5800 ㎒ Head)

Test Laboratory:	**HCT CO., LTD**
Input Power	**0.05 W**
Liquid Temp:	**22.1 ℃**
Test Date:	**01/15/2025**
Band:	**WLAN 5GHz UNII4 Head**

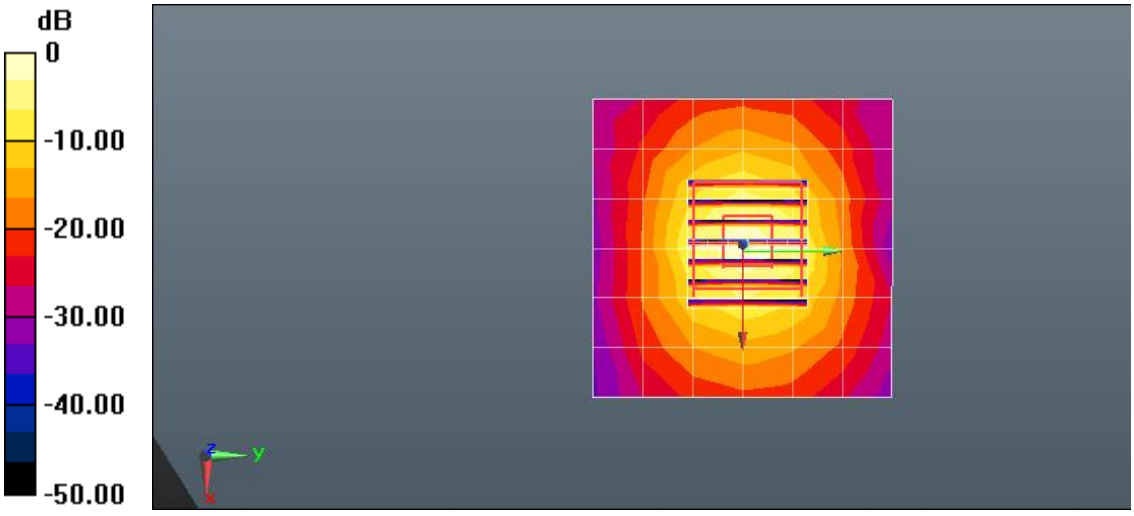
Communication System: UID 0, CW (0); Frequency: 5800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5800 MHz; σ = 5.109 S/m; ε_r = 34.437; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7654; ConvF(5.32, 5.14, 5.59) @ 5800 MHz; Calibrated: 2024-05-22
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1417; Calibrated: 2024-02-16
- Phantom: SAM with CRP v5.0_Right; Type: QD000P40CD; Serial: TP:xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/5800MHz Head Verification/Area Scan (7x7x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 10.6 W/kg

Dipole/5800MHz Head Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 50.27 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 19.4 W/kg
SAR(1 g) = 4 W/kg; SAR(10 g) = 1.08 W/kg
Smallest distance from peaks to all points 3 dB below = 6.8 mm
Ratio of SAR at M2 to SAR at M1 = 59.5%
Maximum value of SAR (measured) = 10.7 W/kg



0 dB = 10.7 W/kg = 10.29 dBW/kg

◆ 5G NR SUB 6

■ Verification Data (835 ㎒ Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 22.2 ℃
Test Date: 12/26/2024
Band: NR FDD Band n5
Measurement Report for Device, , , CW, Channel 0 (835.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	,		CW, 0--	835.000, 0	9.33	0.923	41.3

Hardware Setup

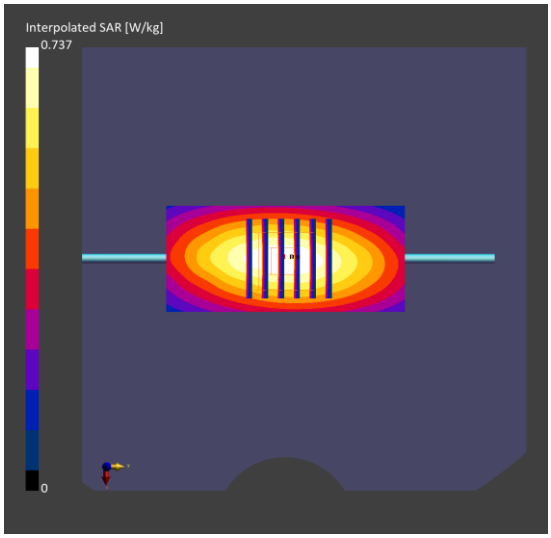
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 90.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	0.493	0.497
psSAR10g [W/Kg]	0.326	0.332
Power Drift [dB]	0.00	-0.00
M2/M1 [%]		87.9
Dist 3dB Peak [mm]		17.2



■ Verification Data (1800 MHz Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 21.8 ℃
Test Date: 12/27/2024
Band: NR FDD Band n66_Ant.B
Measurement Report for Device, , , CW, Channel 0 (1800.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	,		CW, 0--	1800.000, 0	8.05	1.38	40.8

Hardware Setup

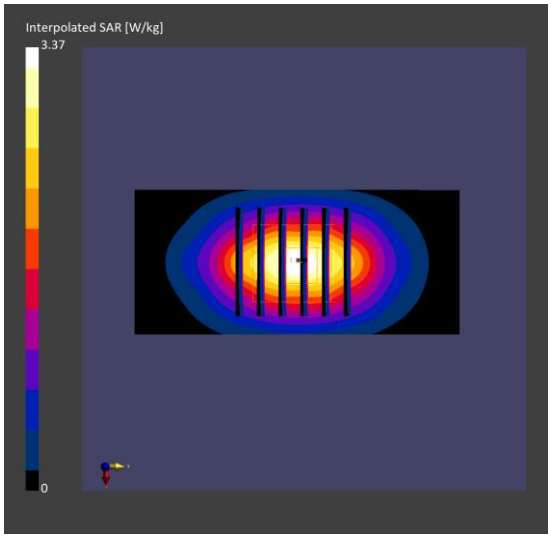
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 90.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	1.94	1.90
psSAR10g [W/Kg]	1.01	1.01
Power Drift [dB]	-0.07	-0.00
M2/M1 [%]		82.9
Dist 3dB Peak [mm]		9.6



■ Verification Data (1 800 ㎒ Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 22.6 ℃
Test Date: 12/30/2024
Band: NR FDD Band n66_Ant.D
Measurement Report for Device, , , CW, Channel 0 (1800.000 MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, Head Simulating Liquid	,		CW, 0--	1800.000, 0	8.05	1.39	39.8

Hardware Setup

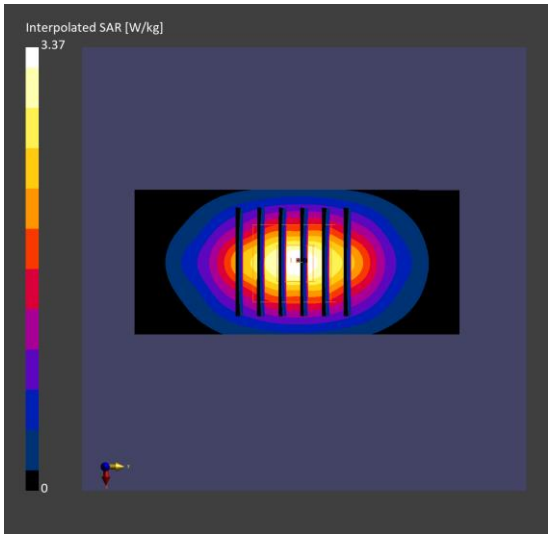
Phantom	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - xxxx	EX3DV4 - SN7681, 2024-11-22	DAE4 Sn1687, 2024-07-12

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	40.0 x 90.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 15.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR1g [W/Kg]	1.92	1.90
psSAR10g [W/Kg]	1.01	1.01
Power Drift [dB]	0.01	0.01
M2/M1 [%]		83.1
Dist 3dB Peak [mm]		9.6



◆ Extremity SAR

■ Verification Data (13 MHz Head)

Test Laboratory: HCT CO., LTD
Input Power 0.05 W
Liquid Temp: 22.4
Test Date: 01/10/2024
Band: NFC

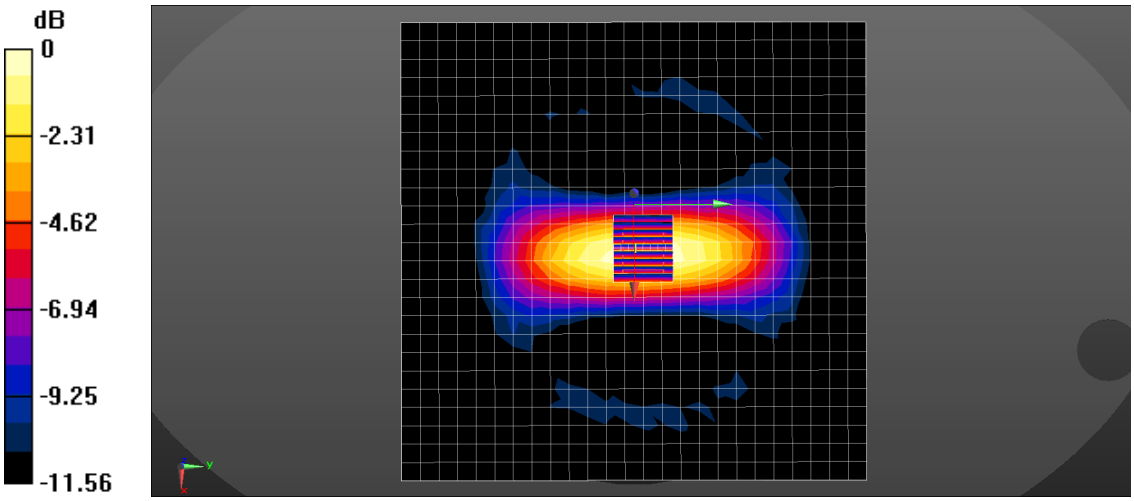
Communication System: UID 0, CW (0); Frequency: 13 MHz;Duty Cycle: 1:1
Medium parameters used: f = 13 MHz; σ = 0.735 S/m; ε_r = 54.493; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3076; ConvF(5.39, 5.7, 6.16) @ 13 MHz; Calibrated: 2024-07-17
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn869; Calibrated: 2024-03-15
- Phantom: ELI V8.0 (20deg probe tilt); Type: QD OVA 004 Ax; Serial: xxxx
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Dipole/13MHz Head Verification/Area Scan (26x26x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.0316 W/kg

Dipole/13MHz Head Verification/Zoom Scan (9x9x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 7.262 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 0.0580 W/kg
SAR(1 g) = 0.028 W/kg; SAR(10 g) = 0.018 W/kg
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (> 16 mm)
Ratio of SAR at M2 to SAR at M1 = 82.3%
Maximum value of SAR (measured) = 0.0332 W/kg



0 dB = 0.0332 W/kg = -14.79 dBW/kg

Appendix D. – SAR Tissue Characterization

The brain and muscle mixtures consist of a viscous gel using hydrox-ethyl cellulose (HEC) gelling agent and saline solution (see Table 3.1). Preservation with a bacteriacide is added and visual inspection is made to make sure air bubbles are not trapped during the mixing process. The mixture is calibrated to obtain proper dielectric constant (permittivity) and conductivity of the desired tissue. The mixture characterizations used for the brain and muscle tissue simulating liquids are according to the data by C. Gabriel and G. Harts grove.

Ingredients (% by weight)	Frequency (MHz)									
	750		835		1 900		2 450 – 2 700		3500 - 5 800	
Tissue Type	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body
Water	41.1	51.7	40.45	53.06	54.9	70.17	71.88	73.2	65.52	78.66
Salt (NaCl)	1.4	0.9	1.45	0.94	0.18	0.39	0.16	0.1	0.0	0.0
Sugar	57.0	47.2	57.0	44.9	0.0	0	0.0	0.0	0.0	0.0
HEC	0.2	0	1.0	1.0	0.0	0	0.0	0.0	0.0	0.0
Bactericide	0.2	0.1	0.1	0.1	0.0	0	0.0	0.0	0.0	0.0
Triton X-100	0.0	0.0	0.0	0.0	0.0	0.0	19.97	0.0	17.24	10.67
DGBE	0.0	0.0	0.0	0.0	44.92	29.44	7.99	26.7	0.0	0.0
Diethylene glycol hexyl ether	-	-	-	-	-	-	-	-	-	-

Salt:	99 % Pure Sodium Chloride	Sugar:	98 % Pure Sucrose
Water:	De-ionized, 16M resistivity	HEC:	Hydroxyethyl Cellulose
DGBE:	99 % Di (ethylene glycol) butyl ether, [2-(2-butoxyethoxy) ethanol]		
Triton X-100(ultra-pure):	Polyethylene glycol mono [4-(1,1,3,3-tetramethylbutyl) phenyl] ether		

Composition of the Tissue Equivalent Matter

Appendix E. – SAR System Validation

Per FCC KDB 865664 D02v01r02, SAR system validation status should be document to confirm measurement accuracy. The SAR systems (including SAR probes, system components and software versions) used for this device were validated against its performance specifications prior to the SAR measurements. Reference dipoles were used with the required tissue- equivalent media for system validation, according to the procedures outlined in IEEE 1528-2013 and FCC KDB 865664 D01v01r04. Since SAR probe calibrations are frequency dependent, each probe calibration point was validated at a frequency within the valid frequency range of the probe calibration point, using the system that normally operates with the probe for routine SAR measurements and according to the required tissue-equivalent media.

A tabulated summary of the system validation status including the validation date(s), measurement frequencies, SAR probes and tissue dielectric parameters has been included.

SAR System No.	Probe	Probe Type	Probe Calibration Point		Dipole	Date	Dielectric Parameters		CW Validation			Modulation Validation		
							Measured Permittivity	Measured Conductivity	Sensitivity	Probe Linearity	Probe Isotropy	MOD. Type	Duty Factor	PAR
13	7681	EX3DV4	Head	750	1014	2024-12-04	42.1	0.88	PASS	PASS	PASS	N/A	N/A	N/A
13	7681	EX3DV4	Head	835	441	2024-12-04	41.6	0.89	PASS	PASS	PASS	N/A	N/A	N/A
13	7681	EX3DV4	Head	835	441	2024-12-04	41.6	0.89	PASS	PASS	PASS	GMSK	PASS	N/A
13	7681	EX3DV4	Head	1750	2d007	2024-12-04	40.2	1.38	PASS	PASS	PASS	N/A	N/A	N/A
13	7681	EX3DV4	Head	1900	5d032	2024-12-04	40.1	1.42	PASS	PASS	PASS	N/A	N/A	N/A
13	7681	EX3DV4	Head	1900	5d032	2024-12-04	40.1	1.42	PASS	PASS	PASS	GMSK	PASS	N/A
2	3797	EX3DV4	Head	2450	743	2024-03-18	39.3	1.83	PASS	PASS	PASS	OFDM	N/A	PASS
13	7681	EX3DV4	Head	2450	743	2024-12-04	39.3	1.81	PASS	PASS	PASS	OFDM	N/A	PASS
12	7680	EX3DV4	Head	2450	743	2024-06-14	39.3	1.81	PASS	PASS	PASS	OFDM	N/A	PASS
2	3797	EX3DV4	Head	2600	1015	2024-05-07	39.1	1.94	PASS	PASS	PASS	TDD	PASS	N/A
8	7654	EX3DV4	Head	5250	1107	2024-05-31	36.1	4.67	PASS	PASS	PASS	OFDM	N/A	PASS
8	7654	EX3DV4	Head	5600	1107	2024-05-31	35.7	5.12	PASS	PASS	PASS	OFDM	N/A	PASS
8	7654	EX3DV4	Head	5750	1107	2024-05-31	35.4	5.22	PASS	PASS	PASS	OFDM	N/A	PASS
8	7654	EX3DV4	Head	5800	1107	2024-05-31	35.3	5.25	PASS	PASS	PASS	OFDM	N/A	PASS

SAR System Validation Summary 1g

SAR System No.	Probe	Probe Type	Probe Calibration Point		Dipole	Date	Dielectric Parameters		CW Validation			Modulation Validation		
							Measured Permittivity	Measured Conductivity	Sensitivity	Probe Linearity	Probe Isotropy	MOD. Type	Duty Factor	PAR
5	3076	ES3DV3	Head	13	1016	2024-11-27	55.2	0.76	PASS	PASS	PASS	N/A	N/A	N/A

SAR System Validation Summary 10g

Note;

All measurements were performed using probes calibrated for CW signal only. Modulations in the table above represent test configurations for which the measurement system has been validated per FCC KDB Publication 865664 D01v01r04. SAR system were validated for modulated signals with a periodic duty cycle, such as GMSK, or with a high peak to average ratio (>5 dB), such as OFDM according to KDB 865664 D01v01r04.