

APPENDIX 1

SAR Measurement Data

ULTRATECH GROUP OF LABS

3000 Bristol Circle, Oakville, Ontario, Canada L6H 6G4
Tel. #: 905-829-1570, Fax. #: 905-829-8050, Email: vic@ultratech-labs.com, Website: <http://www.ultratech-labs.com>

File #: ICOM-383Q-SAR
Dec 1, 2014

- *All test results contained in this engineering test report are traceable to National Institute of Standards and Technology (NIST)*

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FILE NAME: BP-279 SC61UC 129MM 496.5MHZ.DA52:0	97
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EXHIBIT 1. HEAD SAR MEASUREMENT SUMMARY

Antenna	Power (dBm)		CH. Freq	HEAD SAR (W/Kg)		
				BP-279	BP-278	BP-280
			(MHz)	1485mAh	1130mA h	2280mA h
SC57US 450-470MHz Red Tip 140mm	36.23	Ch1	450			
	36.20	CH2	460			
	36.26	CH4	470	4.07	3.91	3.93
SC72U 470-520MHz Blue Tip 138mm	36.26	CH4	470	3.06	3.69	3.95
	36.19	CH7	491			
	36.10	CH10	512			
SC73US 450-490MHz Red Tip 60mm	36.23	CH1	450			
	36.26	CH4	470	4.01	4.48	4.21
	36.19	CH11	490			

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TEST LABORATORY: ULTRATECH GROUP OF LABS

FILE NAME: BP-278 SC57US 470MHz.da52:0

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 470 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 470 \text{ MHz}$; $\sigma = 0.94 \text{ S/m}$; $\epsilon_r = 56.429$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3208; ConvF(7.08, 7.08, 7.08); Calibrated: 3/13/2013;
- Sensor-Surface: 3.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 4.30 W/kg

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 67.09 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 5.36 W/kg
SAR(1 g) = 3.91 W/kg; SAR(10 g) = 2.88 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 4.12 W/kg

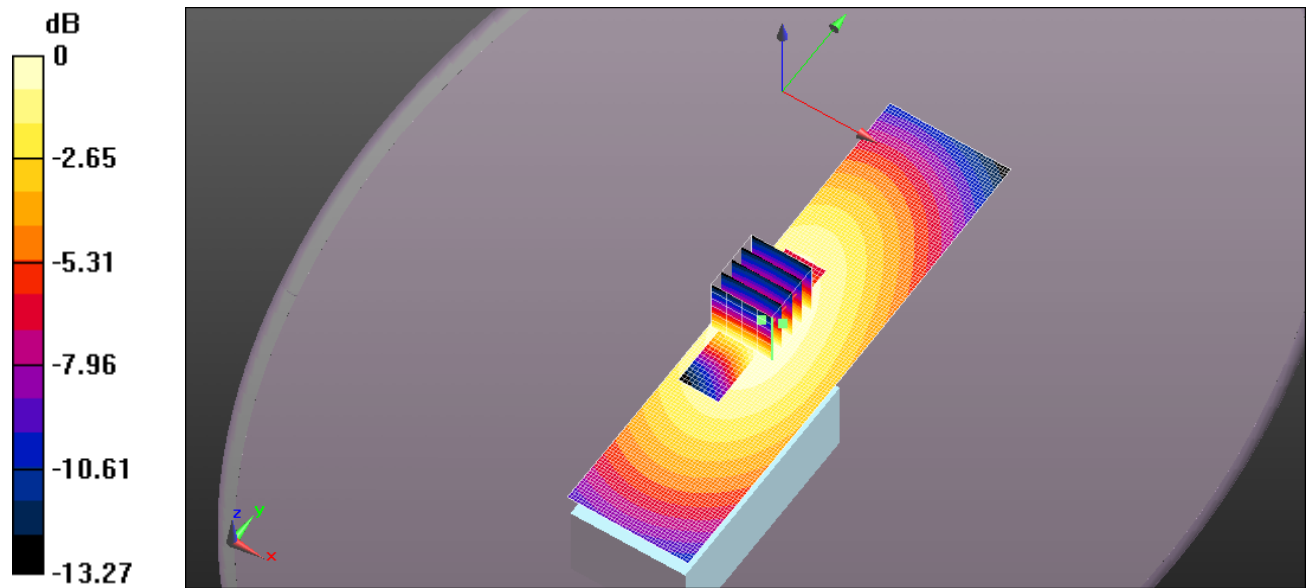
Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/FindMax (11x41x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 4.20 W/kg

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0 dB = 4.30 W/kg = 6.34 dBW/kg

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TEST LABORATORY: ULTRATECH GROUP OF LABS

FILE NAME: BP-278 SC72U 470MHz.da52:0

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 470 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 470 \text{ MHz}$; $\sigma = 0.94 \text{ S/m}$; $\epsilon_r = 56.429$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3208; ConvF(7.08, 7.08, 7.08); Calibrated: 3/13/2013;
- Sensor-Surface: 3.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 4.11 W/kg

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 66.27 V/m; Power Drift = -0.20 dB
Peak SAR (extrapolated) = 5.03 W/kg
SAR(1 g) = 3.69 W/kg; SAR(10 g) = 2.73 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 3.87 W/kg

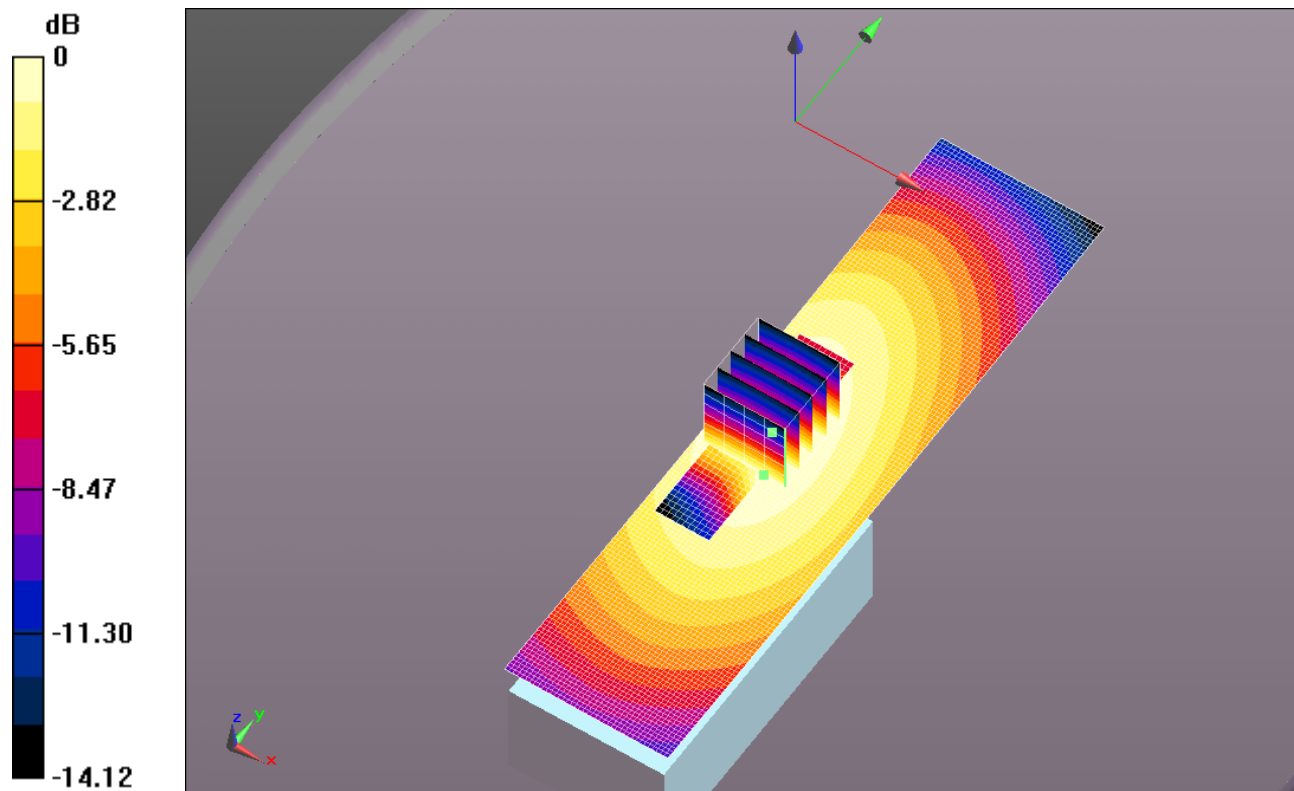
Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/FindMax (11x41x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 4.08 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: BP-278 SC73US 470MHz.da52:0

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 470 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 470 \text{ MHz}$; $\sigma = 0.94 \text{ S/m}$; $\epsilon_r = 56.429$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3208; ConvF(7.08, 7.08, 7.08); Calibrated: 3/13/2013;
- Sensor-Surface: 3.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 5.05 W/kg

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 72.38 V/m ; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 6.18 W/kg
SAR(1 g) = 4.48 W/kg ; SAR(10 g) = 3.28 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 4.70 W/kg

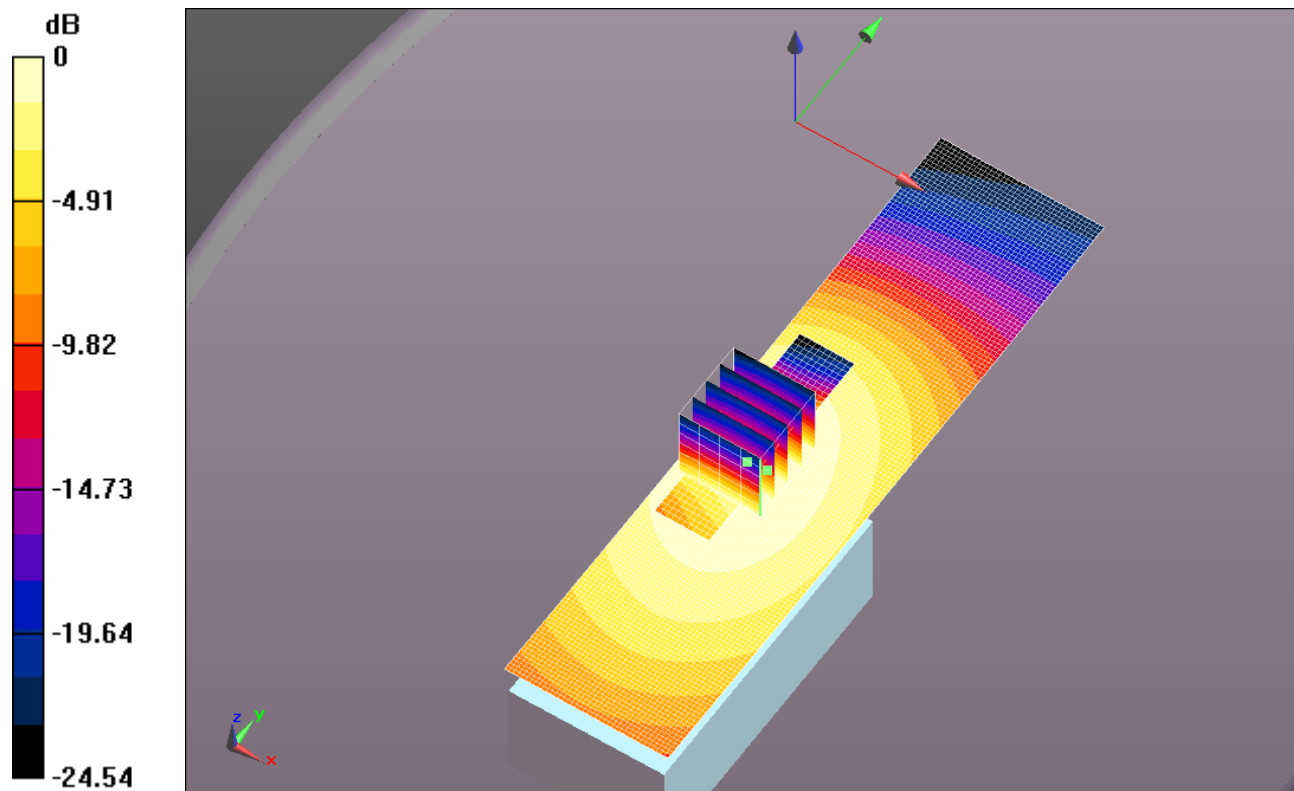
Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/FindMax (11x41x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 4.98 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: BP-279 SC57US 470MHz.da52:0

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 470 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 470 \text{ MHz}$; $\sigma = 0.94 \text{ S/m}$; $\epsilon_r = 56.429$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3208; ConvF(7.08, 7.08, 7.08); Calibrated: 3/13/2013;
- Sensor-Surface: 3.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 4.49 W/kg

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 68.29 V/m ; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 5.55 W/kg
SAR(1 g) = 4.07 W/kg ; SAR(10 g) = 3.01 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 4.27 W/kg

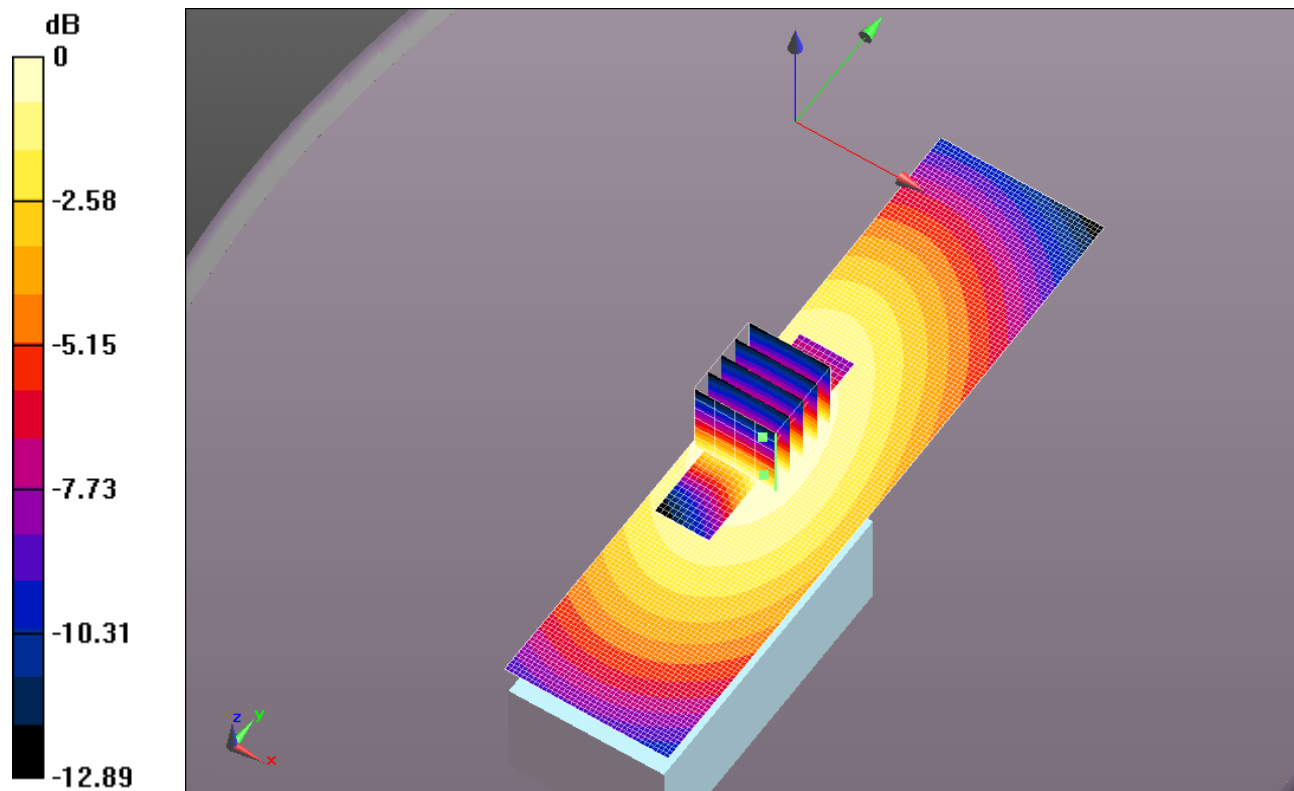
Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/FindMax (11x41x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 4.37 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: BP-279 SC72U 470MHz.da52:0

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 470 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 470 \text{ MHz}$; $\sigma = 0.94 \text{ S/m}$; $\epsilon_r = 56.429$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3208; ConvF(7.08, 7.08, 7.08); Calibrated: 3/13/2013;
- Sensor-Surface: 3.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 3.37 W/kg

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 60.60 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 4.17 W/kg
SAR(1 g) = 3.06 W/kg; SAR(10 g) = 2.26 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 3.21 W/kg

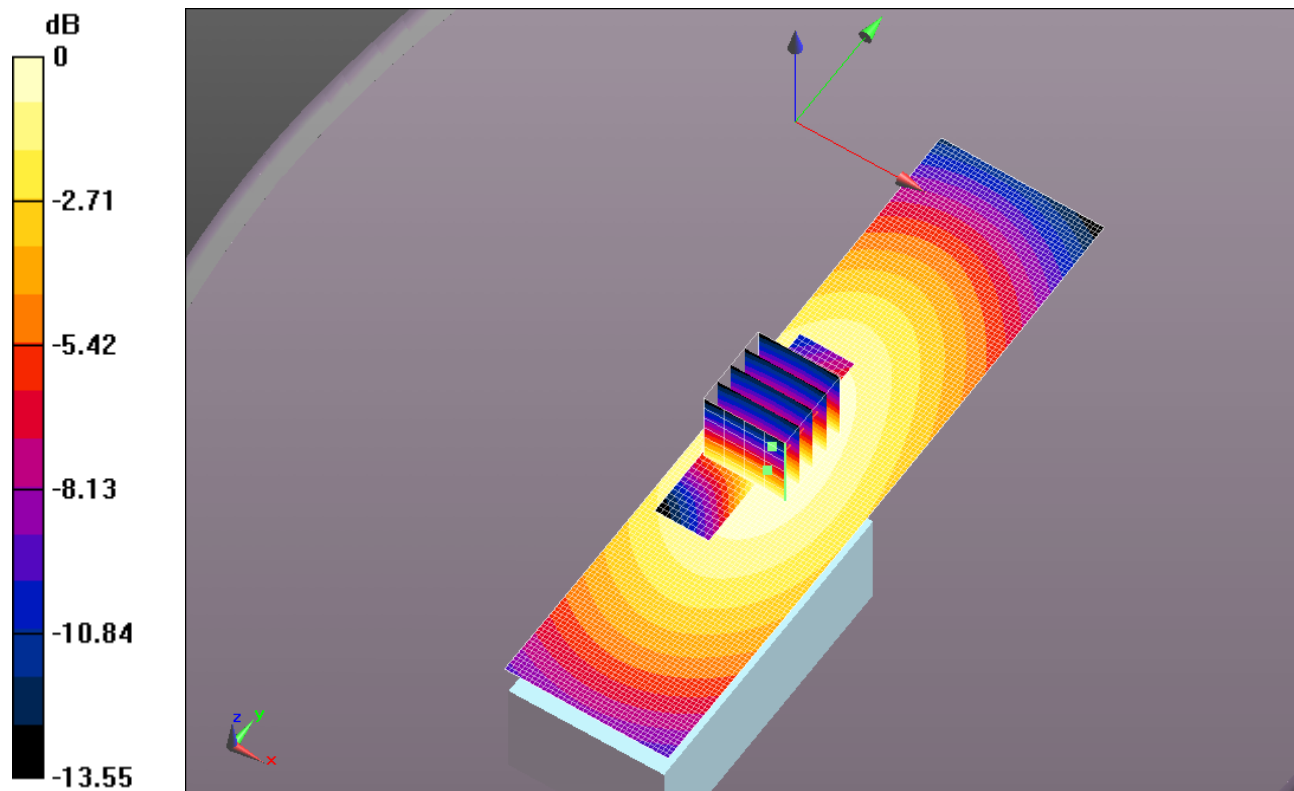
Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/FindMax (11x41x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 3.44 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: BP-279 SC73US 470MHz.da52:0

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 470 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 470 \text{ MHz}$; $\sigma = 0.94 \text{ S/m}$; $\epsilon_r = 56.429$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3208; ConvF(7.08, 7.08, 7.08); Calibrated: 3/13/2013;
- Sensor-Surface: 3.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 4.50 W/kg

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 69.58 V/m ; Power Drift = -0.21 dB
Peak SAR (extrapolated) = 5.52 W/kg
SAR(1 g) = 4.01 W/kg ; SAR(10 g) = 2.95 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 4.21 W/kg

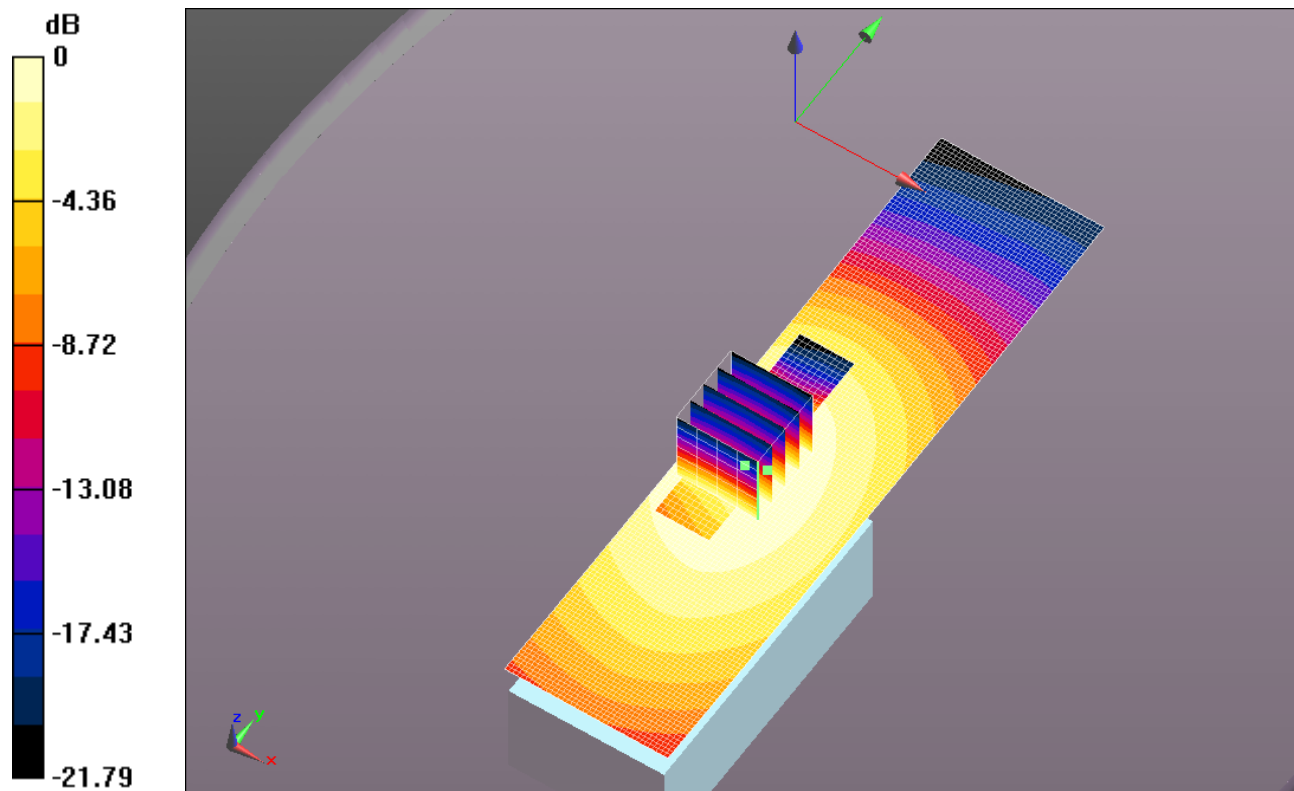
Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/FindMax (11x41x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 4.61 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: BP-280 SC57US 470MHz.da52:0

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 470 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 470 \text{ MHz}$; $\sigma = 0.94 \text{ S/m}$; $\epsilon_r = 56.429$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3208; ConvF(7.08, 7.08, 7.08); Calibrated: 3/13/2013;
- Sensor-Surface: 3.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 4.47 W/kg

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 68.47 V/m ; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 5.39 W/kg
SAR(1 g) = 3.93 W/kg; SAR(10 g) = 2.89 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 4.13 W/kg

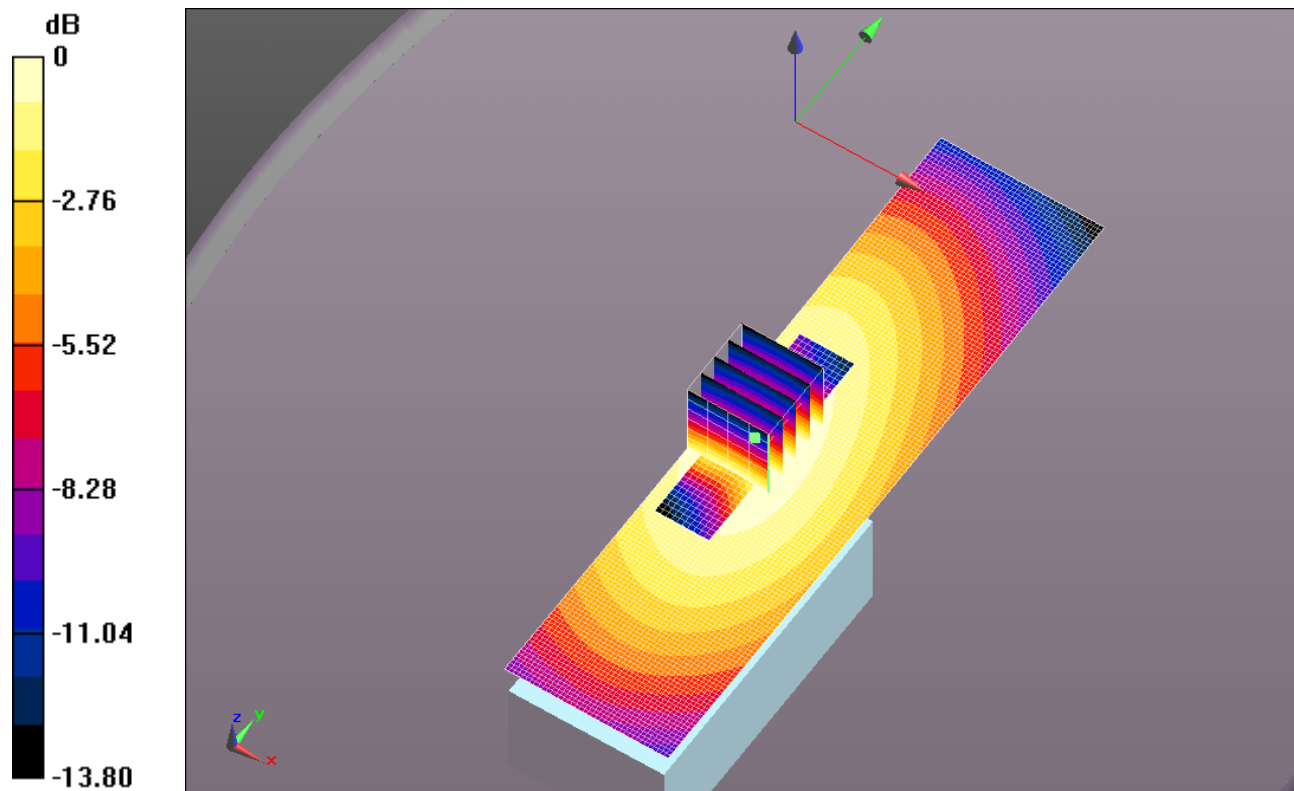
Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/FindMax (11x41x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 4.33 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: BP-280 SC72U 470MHz.da52:0

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 470 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 470 \text{ MHz}$; $\sigma = 0.94 \text{ S/m}$; $\epsilon_r = 56.429$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3208; ConvF(7.08, 7.08, 7.08); Calibrated: 3/13/2013;
- Sensor-Surface: 3.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 3.74 W/kg

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 63.99 V/m; Power Drift = -0.21 dB
Peak SAR (extrapolated) = 4.55 W/kg
SAR(1 g) = 3.34 W/kg; SAR(10 g) = 2.47 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 3.50 W/kg

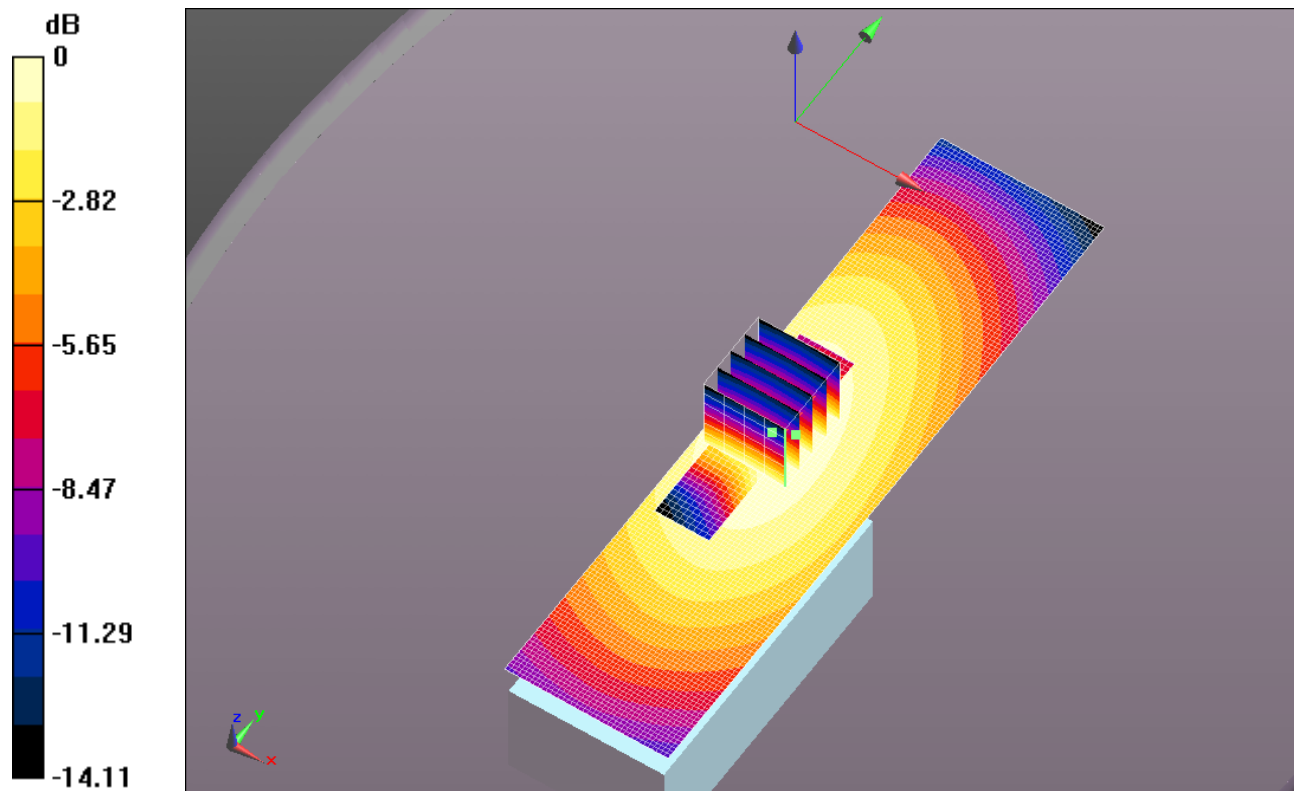
Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/FindMax (11x41x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 3.73 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: BP-280 SC73US 470MHz.da52:0

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 470 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 470 \text{ MHz}$; $\sigma = 0.94 \text{ S/m}$; $\epsilon_r = 56.429$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3208; ConvF(7.08, 7.08, 7.08); Calibrated: 3/13/2013;
- Sensor-Surface: 3.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 4.65 W/kg

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 70.55 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 5.77 W/kg
SAR(1 g) = 4.21 W/kg; SAR(10 g) = 3.1 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 4.42 W/kg

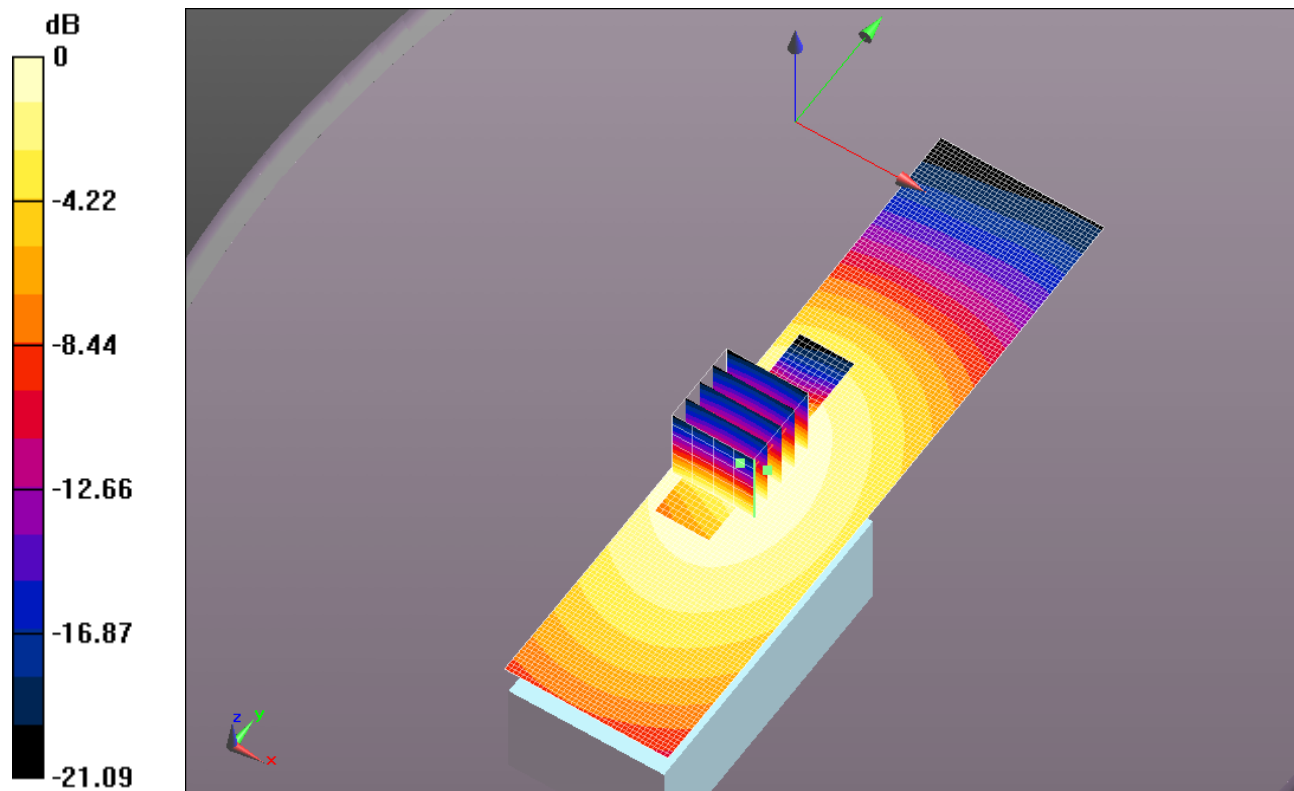
Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/FindMax (11x41x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 4.87 W/kg

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EXHIBIT 2. HEAD SAR – CUT ANTENNA MEASUREMENT SUMMARY

Antenna	Power (dBm)		CH. Freq	HEAD SAR (W/Kg)		
				BP-279	BP-278	BP-280
			(MHz)	1485mAh	1130mAh	2280mAh
SC61UC 460MHz 142mm White Tip	36.23	CH1	450			
	36.20	CH2	460			
	36.23	CH8	496.5	6.18	5.08	6.28
	36.10	CH10	512			
SC61UC 480MHz 136mm White Tip	36.23	CH1	450			
	36.25	CH3	465.5			
	36.30	CH5	480	4.1	4.8	4.94
	36.10	CH10	512			
SC61UC 500MHz 129mm White Tip	36.23	CH1	450			
	36.25	CH3	465.5	3.06	2.45	2.87
	36.23	CH8	496.5			
	36.10	CH10	512			

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Test Laboratory: Ultratech Group of Labs

FILE NAME: BP-278 SC61UC 142mm 496.5MHz.da52:0

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 496.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 496.5$ MHz; $\sigma = 0.961$ S/m; $\epsilon_r = 55.995$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3208; ConvF(7.08, 7.08, 7.08); Calibrated: 3/13/2013;
- Sensor-Surface: 3.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 6.11 W/kg

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 85.07 V/m; Power Drift = -0.20 dB
Peak SAR (extrapolated) = 6.95 W/kg
SAR(1 g) = 5.08 W/kg; SAR(10 g) = 3.74 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.33 W/kg

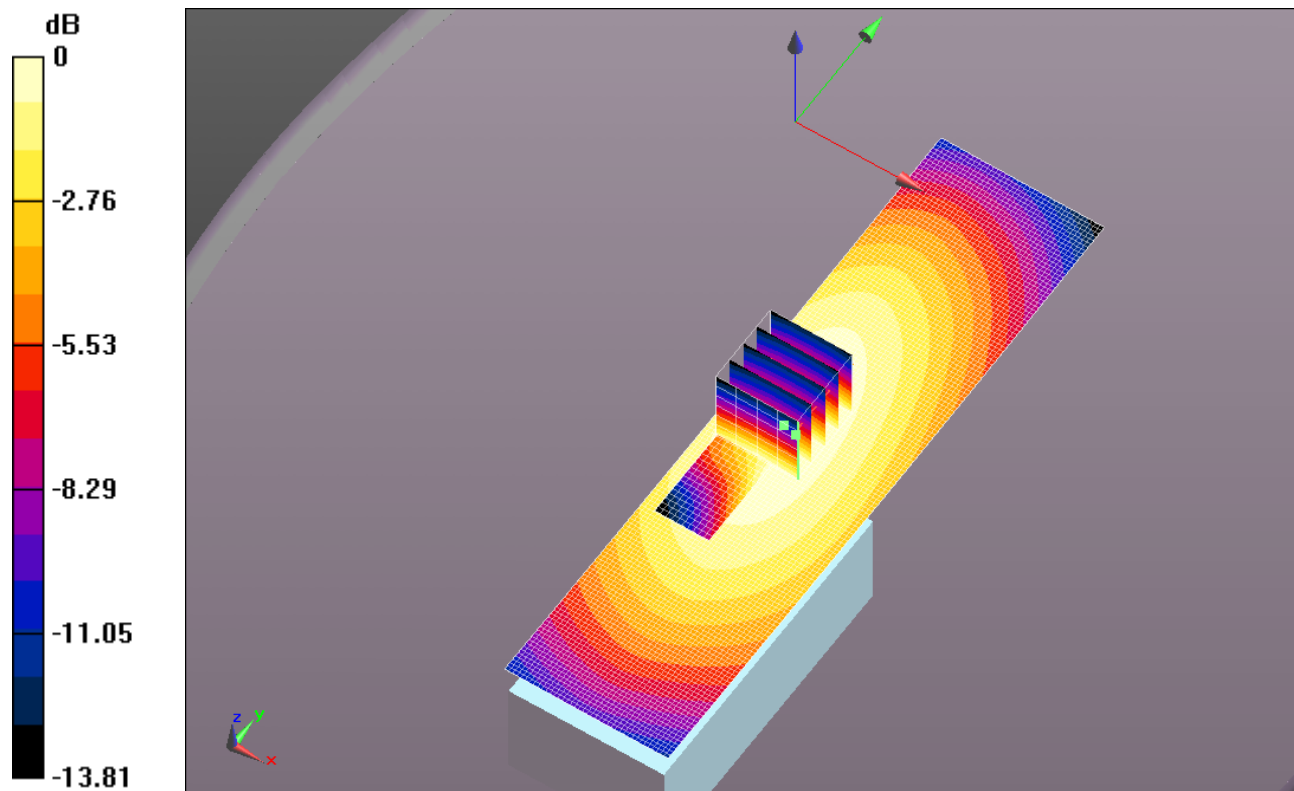
Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/FindMax (11x41x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 7.59 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: BP-278 SC61UC 136MM 480MHZ.DA52:0

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 480 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 480 \text{ MHz}$; $\sigma = 0.949 \text{ S/m}$; $\epsilon_r = 56.275$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3208; ConvF(7.08, 7.08, 7.08); Calibrated: 3/13/2013;
- Sensor-Surface: 3.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 5.22 W/kg

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 72.92 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 6.55 W/kg
SAR(1 g) = 4.75 W/kg; SAR(10 g) = 3.48 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 4.99 W/kg

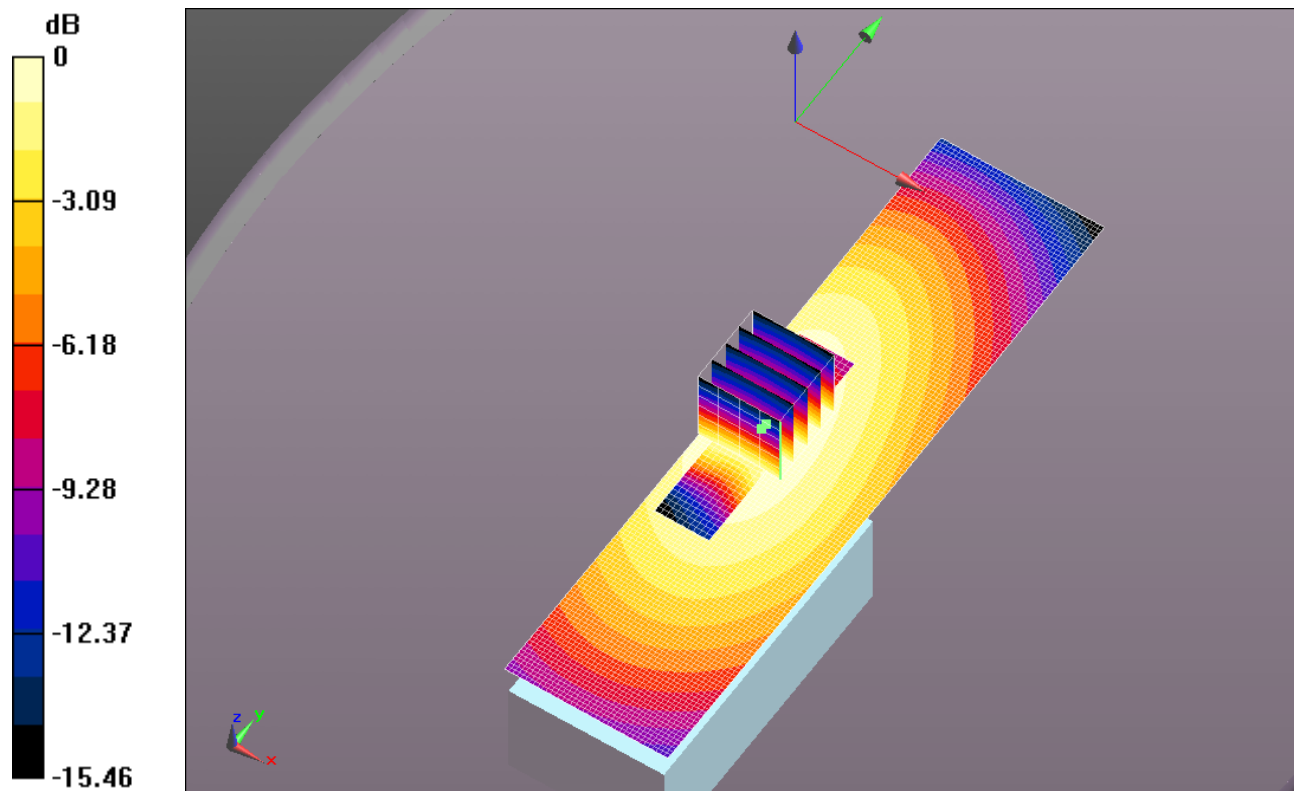
Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/FindMax (11x41x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 5.10 W/kg

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File #: ICOM-383Q-SAR
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Test Laboratory: Ultratech Group of Labs

FILE NAME: BP-278 SC61UC 129mm 465.5MHz.da52:0

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 465.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 465.5$ MHz; $\sigma = 0.936$ S/m; $\epsilon_r = 56.585$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3208; ConvF(7.08, 7.08, 7.08); Calibrated: 3/13/2013;
- Sensor-Surface: 3.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.67 W/kg

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 52.98 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 3.33 W/kg
SAR(1 g) = 2.45 W/kg; SAR(10 g) = 1.81 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 2.57 W/kg

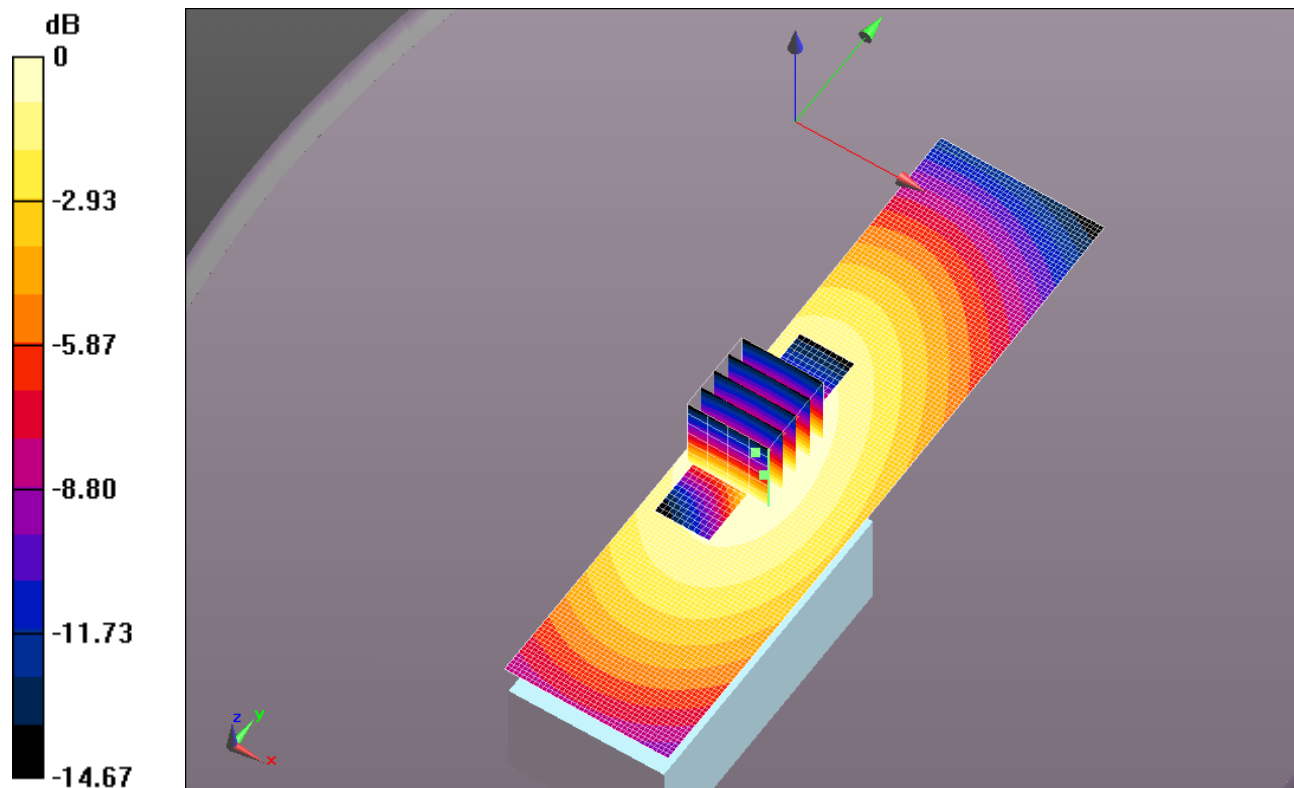
Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/FindMax (11x41x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 2.68 W/kg

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0 dB = 2.67 W/kg = 4.26 dBW/kg

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File #: ICOM-383Q-SAR
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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-279 SC61UC 142MM 496.5MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 496.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 496.5$ MHz; $\sigma = 0.961$ S/m; $\epsilon_r = 55.995$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3208; ConvF(7.08, 7.08, 7.08); Calibrated: 3/13/2013;
- Sensor-Surface: 3.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 7.34 W/kg

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 88.25 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 8.48 W/kg
SAR(1 g) = 6.18 W/kg; SAR(10 g) = 4.55 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 6.49 W/kg

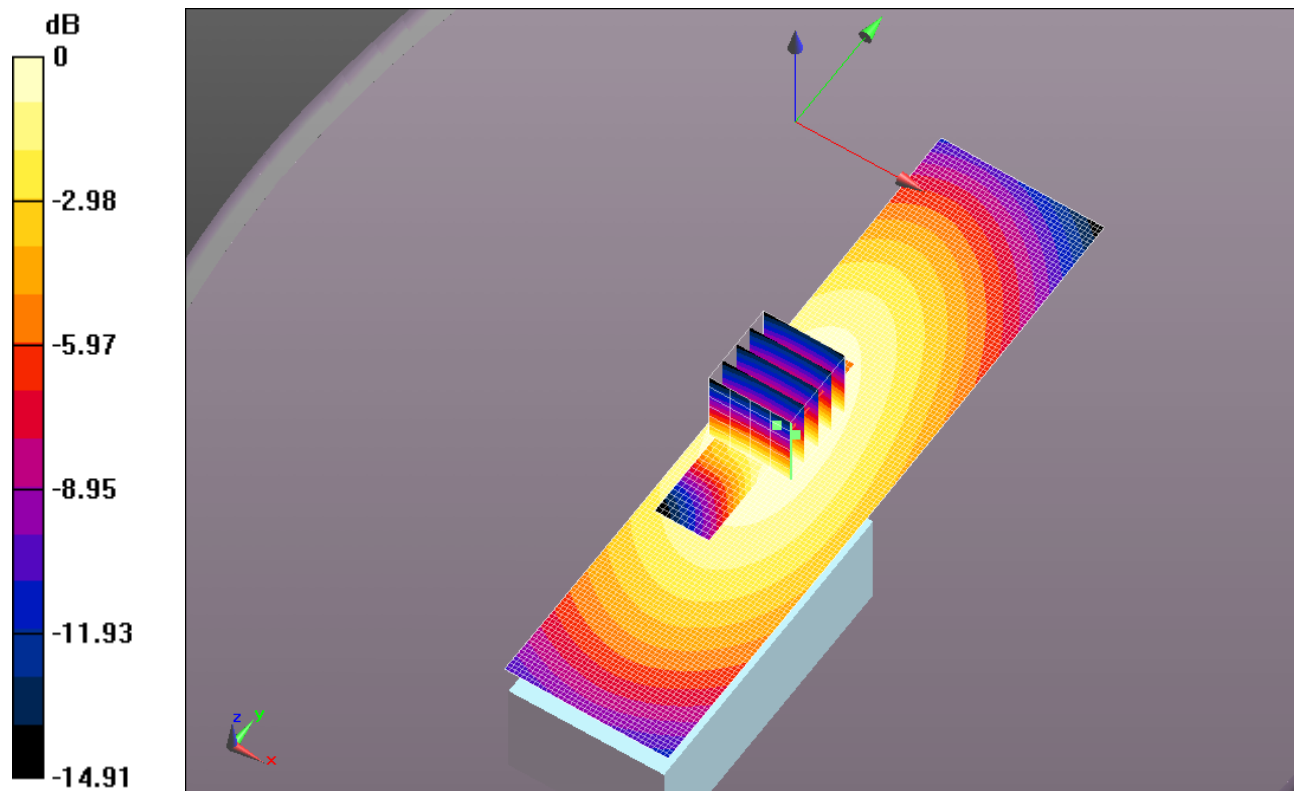
Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/FindMax (11x41x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 7.49 W/kg

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File #: ICOM-383Q-SAR
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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-279 SC61UC 136MM 480MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 480 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 480 \text{ MHz}$; $\sigma = 0.949 \text{ S/m}$; $\epsilon_r = 56.275$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3208; ConvF(7.08, 7.08, 7.08); Calibrated: 3/13/2013;
- Sensor-Surface: 3.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 4.51 W/kg

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 67.72 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 5.61 W/kg
SAR(1 g) = 4.1 W/kg; SAR(10 g) = 3.01 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 4.31 W/kg

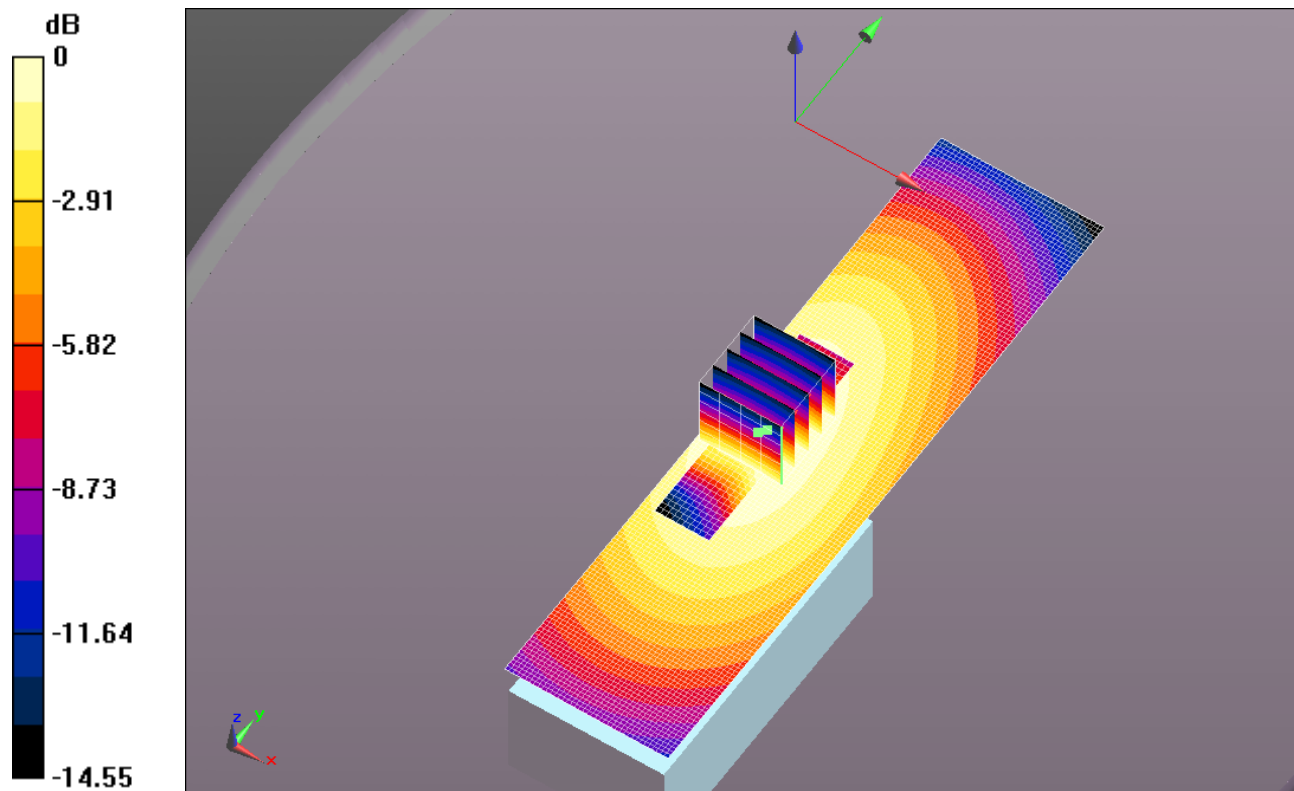
Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/FindMax (11x41x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 4.20 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-279 SC61UC 129MM 465.5MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 465.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 465.5$ MHz; $\sigma = 0.936$ S/m; $\epsilon_r = 56.585$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3208; ConvF(7.08, 7.08, 7.08); Calibrated: 3/13/2013;
- Sensor-Surface: 3.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 3.38 W/kg

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 59.58 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 4.17 W/kg
SAR(1 g) = 3.06 W/kg; SAR(10 g) = 2.26 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 3.20 W/kg

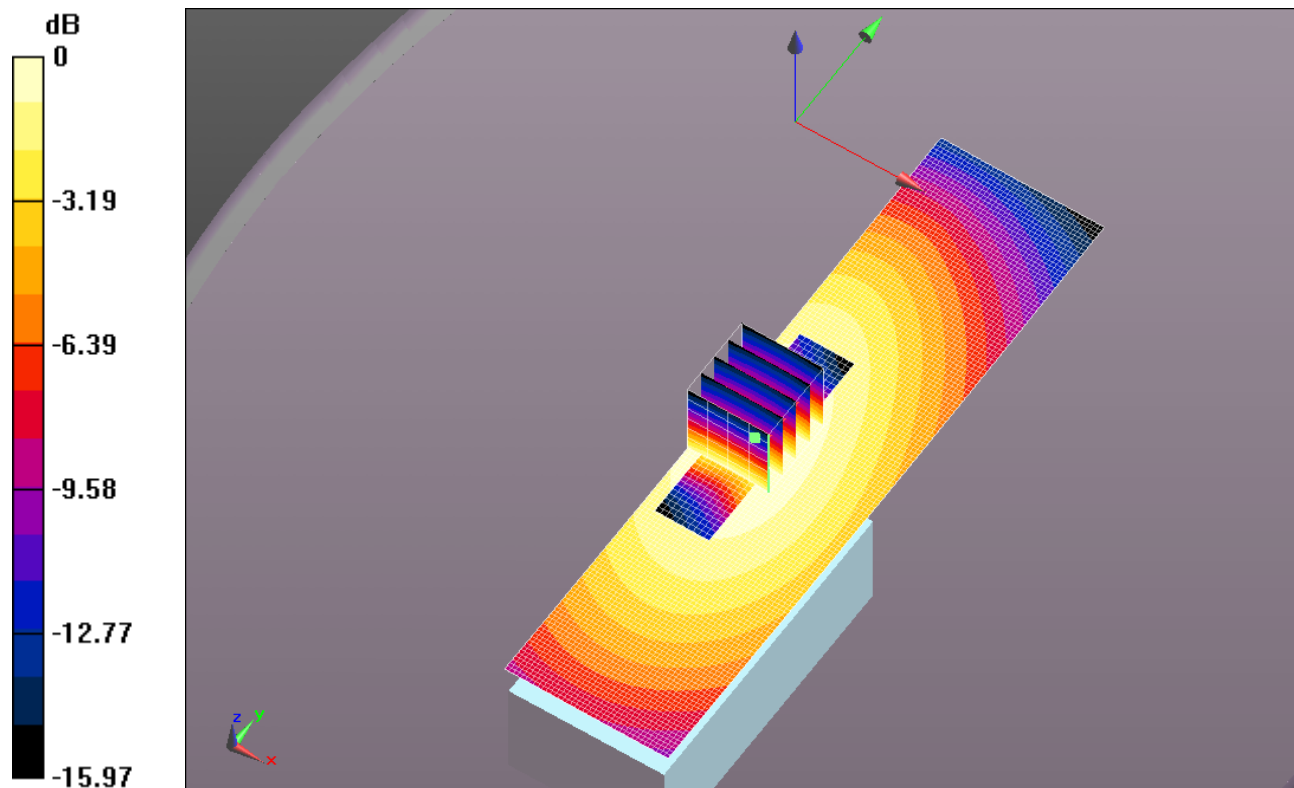
Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/FindMax (11x41x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 3.34 W/kg

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0 dB = 3.38 W/kg = 5.29 dBW/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-280 SC61UC 142MM 496.5MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 496.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 496.5$ MHz; $\sigma = 0.961$ S/m; $\epsilon_r = 55.995$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3208; ConvF(7.08, 7.08, 7.08); Calibrated: 3/13/2013;
- Sensor-Surface: 3.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 7.27 W/kg

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 90.80 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 8.71 W/kg
SAR(1 g) = 6.28 W/kg; SAR(10 g) = 4.58 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 6.61 W/kg

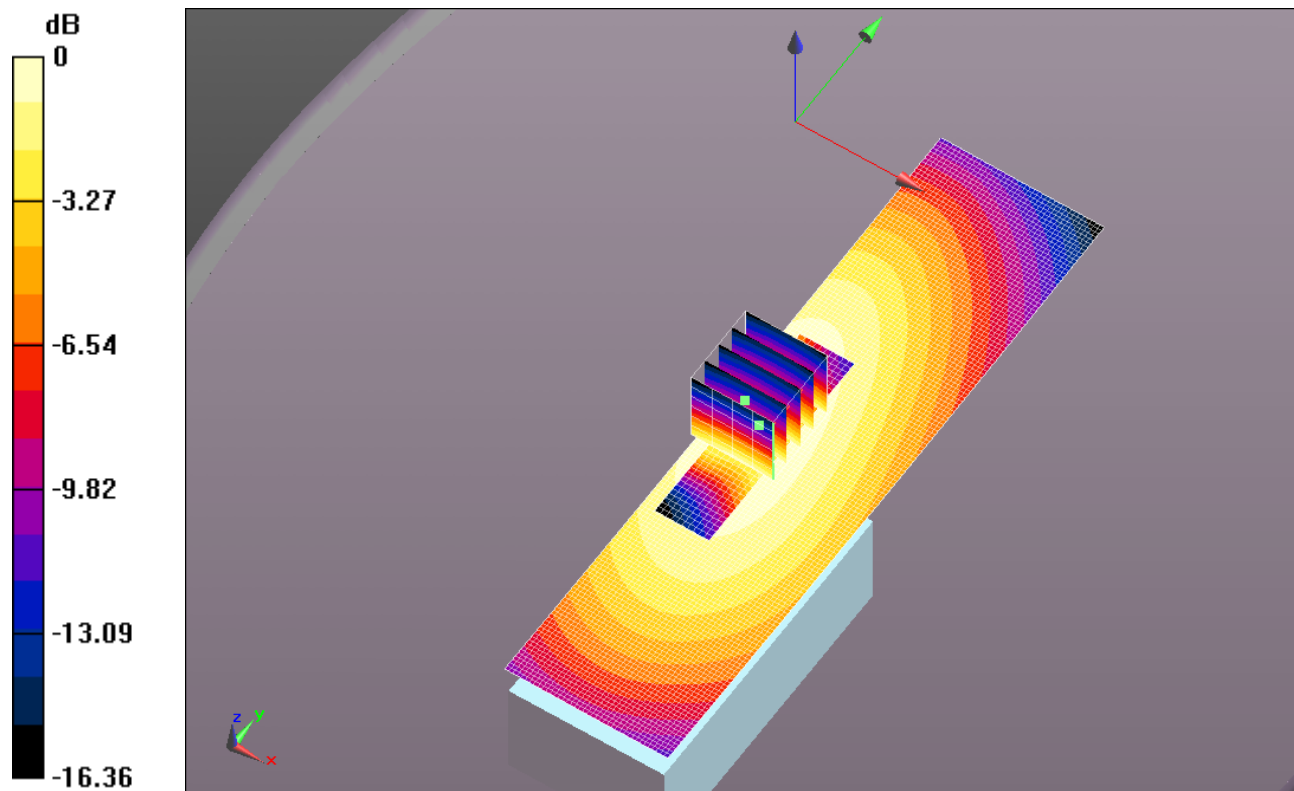
Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/FindMax (11x41x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 9.11 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-280 SC61UC 136MM 480MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 480 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 480 \text{ MHz}$; $\sigma = 0.949 \text{ S/m}$; $\epsilon_r = 56.275$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3208; ConvF(7.08, 7.08, 7.08); Calibrated: 3/13/2013;
- Sensor-Surface: 3.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 5.36 W/kg

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 73.70 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 6.75 W/kg
SAR(1 g) = 4.94 W/kg; SAR(10 g) = 3.63 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.18 W/kg

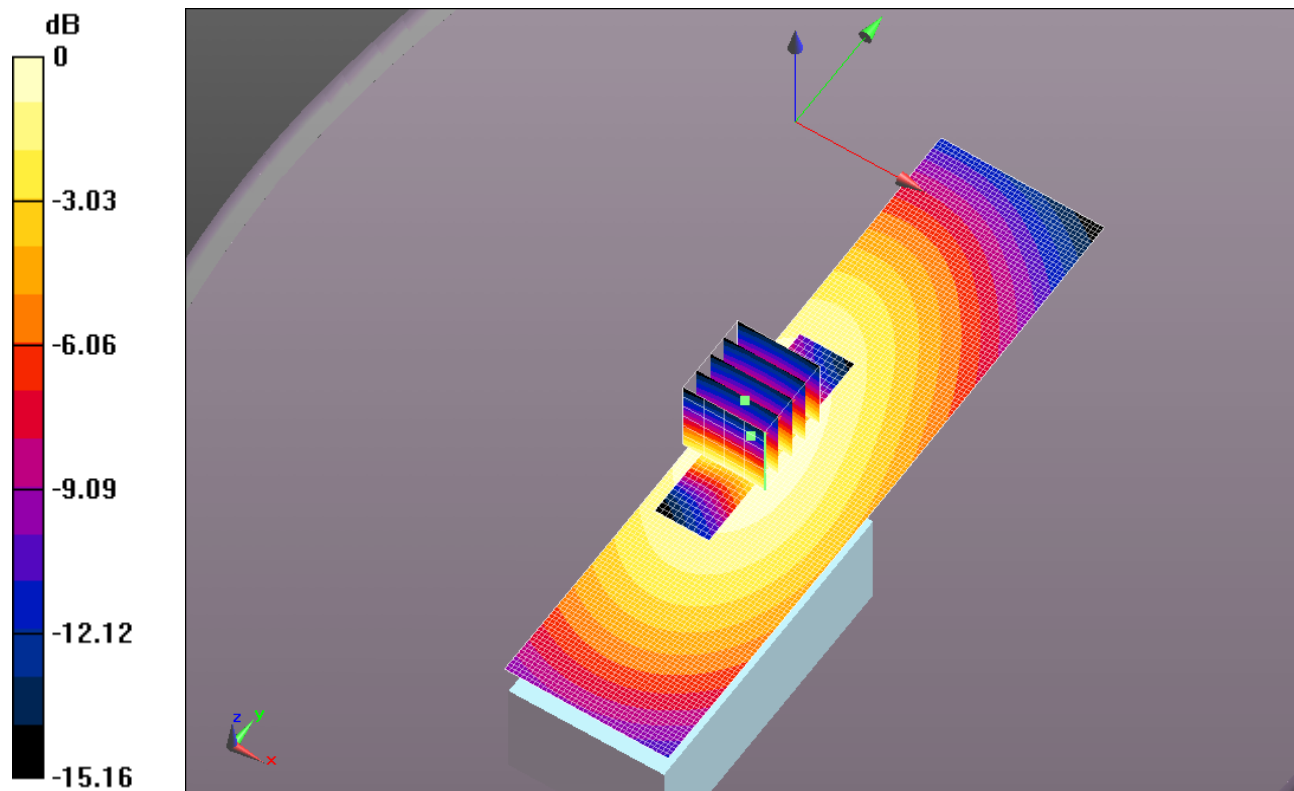
Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/FindMax (11x41x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 5.06 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-280 SC61UC 129MM 465.5MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 465.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 465.5$ MHz; $\sigma = 0.936$ S/m; $\epsilon_r = 56.585$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3208; ConvF(7.08, 7.08, 7.08); Calibrated: 3/13/2013;
- Sensor-Surface: 3.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 3.15 W/kg

Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 56.98 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 3.90 W/kg
SAR(1 g) = 2.87 W/kg; SAR(10 g) = 2.14 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 3.01 W/kg

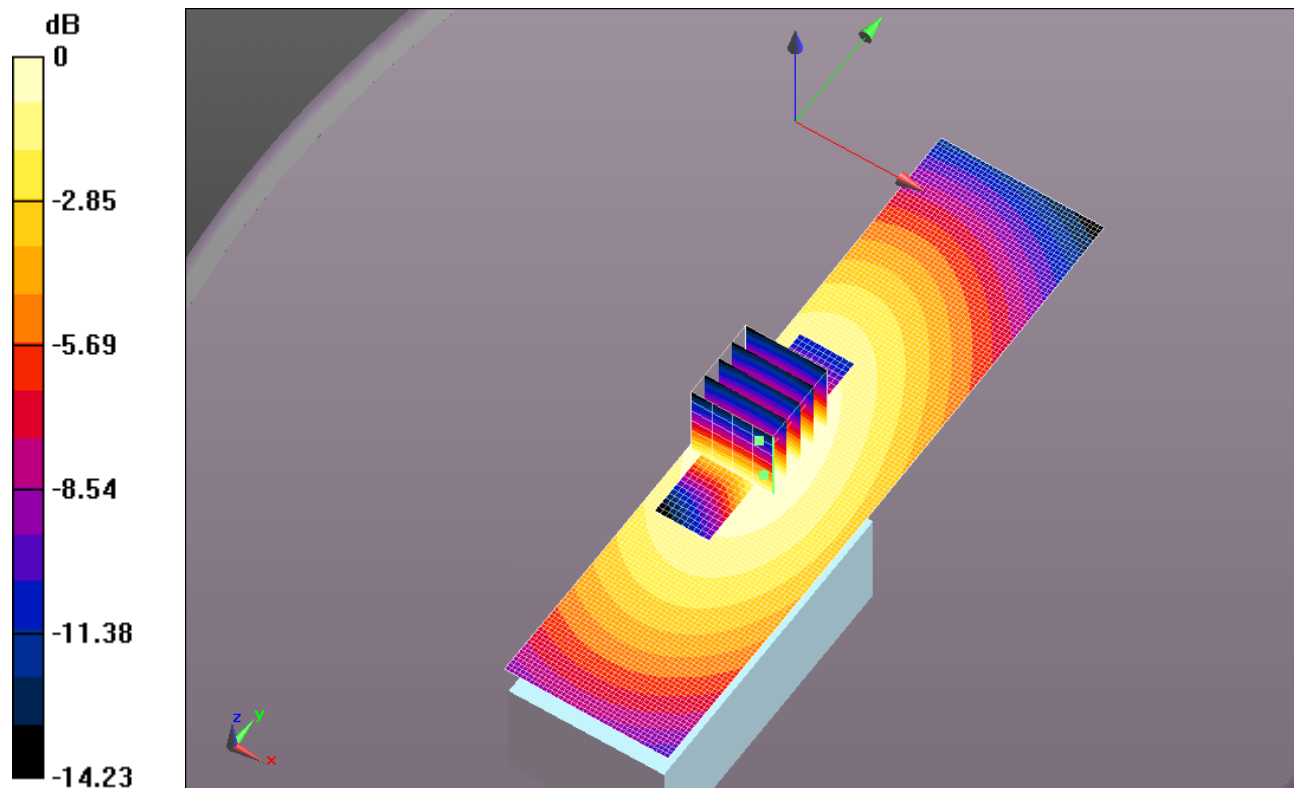
Front to Phantom 450-512 MHz Head/Head - Front Facing, d=25mm, Pin=4W (ES-Probe)/FindMax (11x41x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 2.97 W/kg

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0 dB = 3.15 W/kg = 4.98 dBW/kg

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EXHIBIT 3. BODY SAR MEASUREMENT SUMMARY

Antenna	Power (W)		CH. Freq	BODY SAR (W/Kg)		
				BP-279	BP-278	BP-280
			(MHz)	1485mAh	1130mAh	2280mAh
SC57US 450-470MHz Red Tip 140mm	36.23	Ch1	450			
	36.20	CH2	460		7.21	
	36.26	CH4	470		7.71	
SC72U 470-520MHz Blue Tip 138mm	36.26	CH4	470	6.51	8.13	6.64
	36.19	CH7	491	10.2	9.85	10.6
	36.10	CH10	512	9.12	8.73	10.4
SC73US 450-490MHz Red Tip 60mm	36.23	CH1	450			
	36.26	CH4	470		5.63	
	36.19	CH11	490			

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-278 SC57US 140MM 460MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 460 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 460 \text{ MHz}$; $\sigma = 0.906 \text{ S/m}$; $\epsilon_r = 55.564$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 9.12 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (6x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 100.2 V/m ; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 10.4 W/kg
SAR(1 g) = 7.21 W/kg ; SAR(10 g) = 5.27 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 9.19 W/kg

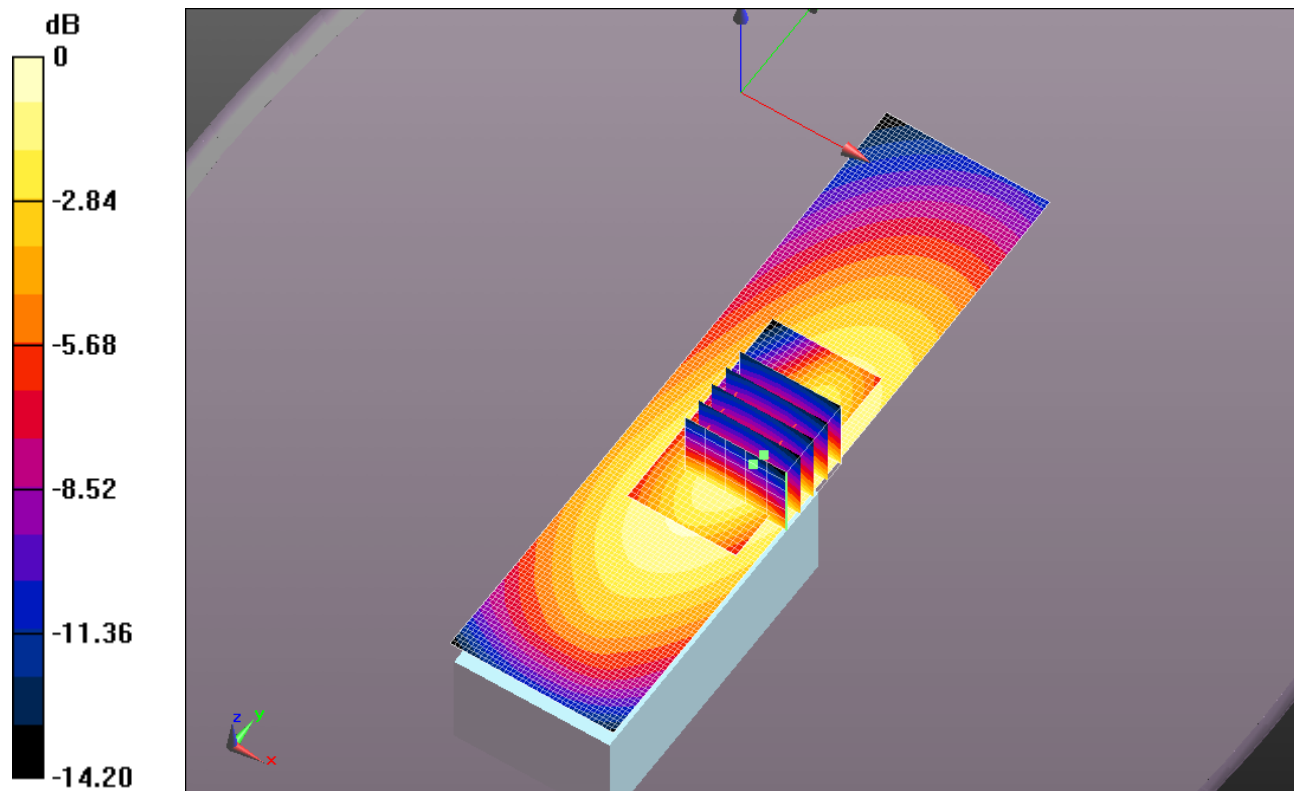
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (21x41x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 7.77 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-278 SC57US 140MM 470MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 470 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 470 \text{ MHz}$; $\sigma = 0.914 \text{ S/m}$; $\epsilon_r = 55.413$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 9.86 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (6x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 104.8 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 11.2 W/kg
SAR(1 g) = 7.71 W/kg; SAR(10 g) = 5.61 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 9.84 W/kg

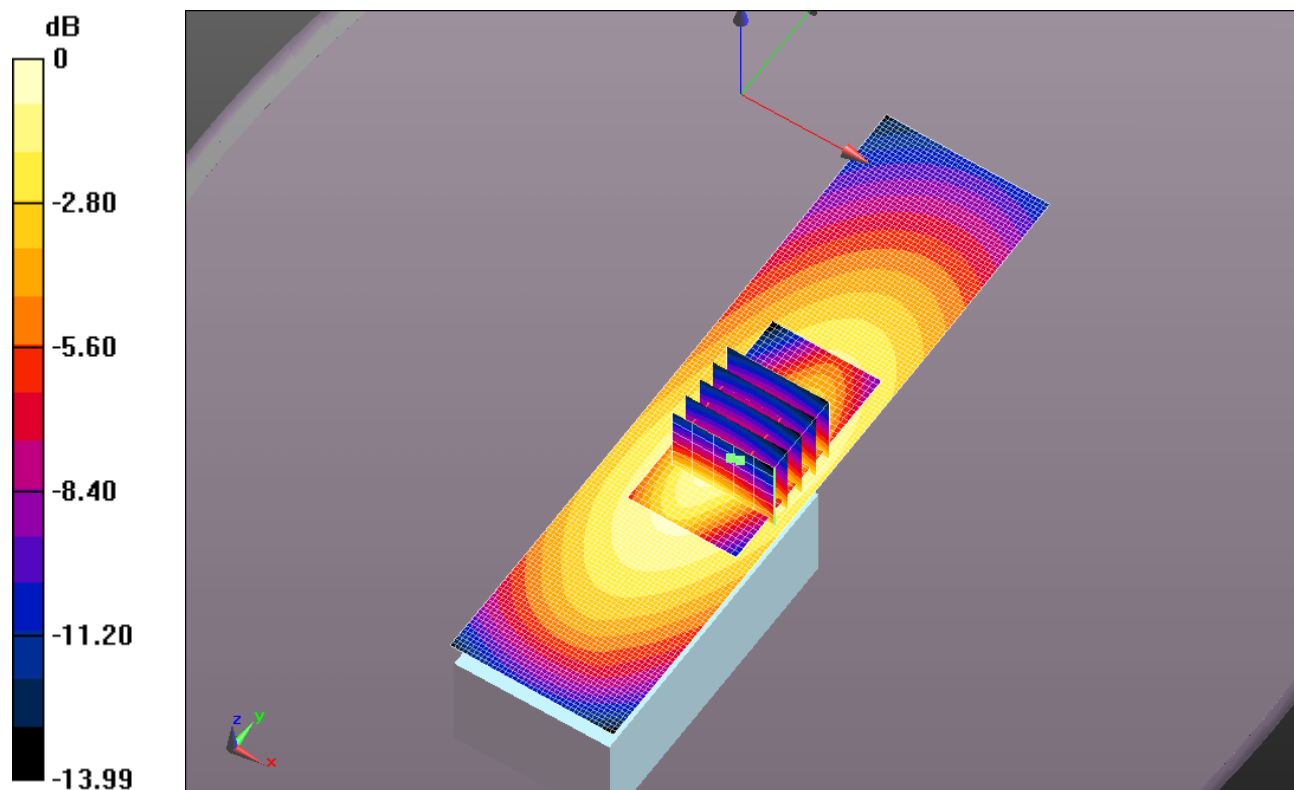
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (21x41x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 7.95 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-278 SC72US 138MM 470MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 470 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 470 \text{ MHz}$; $\sigma = 0.914 \text{ S/m}$; $\epsilon_r = 55.413$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 10.5 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (6x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 107.8 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 11.8 W/kg
SAR(1 g) = 8.13 W/kg; SAR(10 g) = 5.9 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 10.4 W/kg

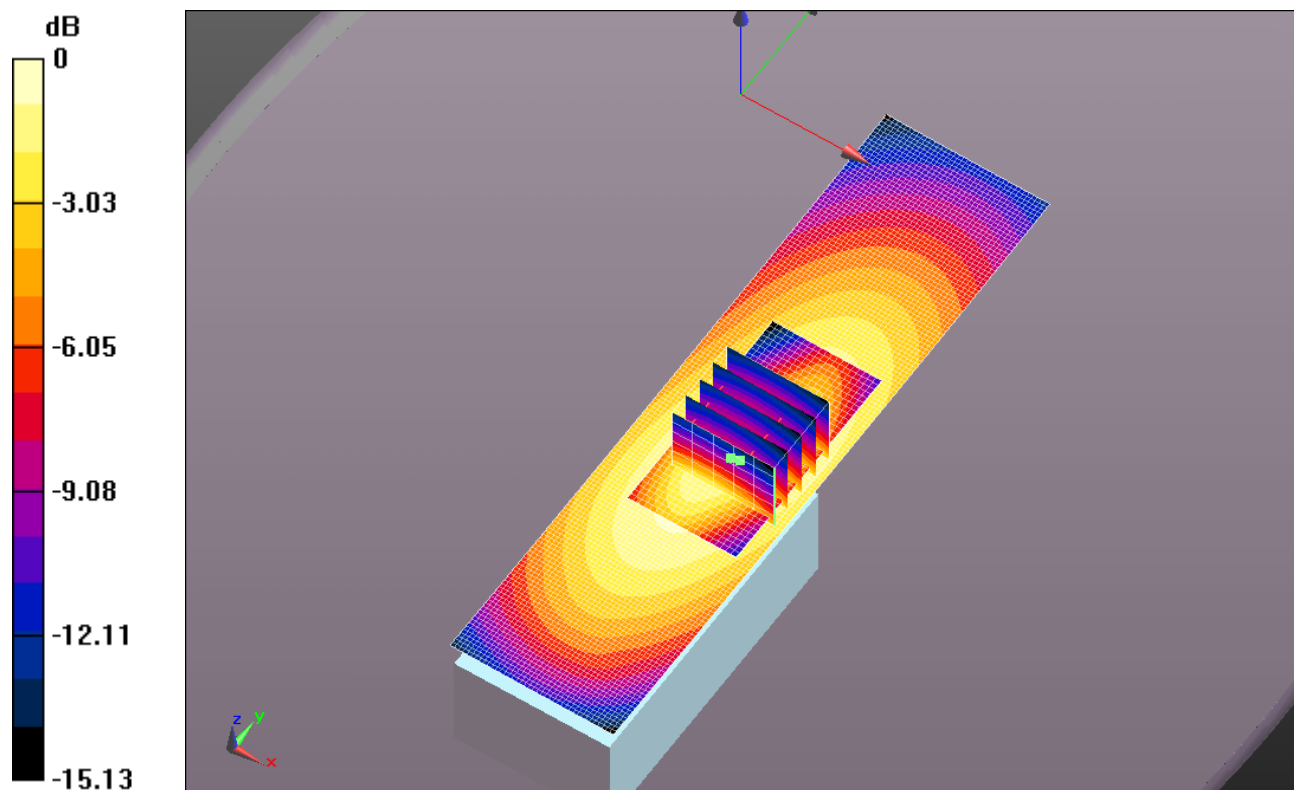
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (21x41x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 8.74 W/kg

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File #: ICOM-383Q-SAR
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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-278 SC72US 138MM 491MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 491 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 491 \text{ MHz}$; $\sigma = 0.931 \text{ S/m}$; $\epsilon_r = 54.981$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 12.8 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (6x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 118.6 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 14.2 W/kg
SAR(1 g) = 9.85 W/kg; SAR(10 g) = 7.16 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 12.5 W/kg

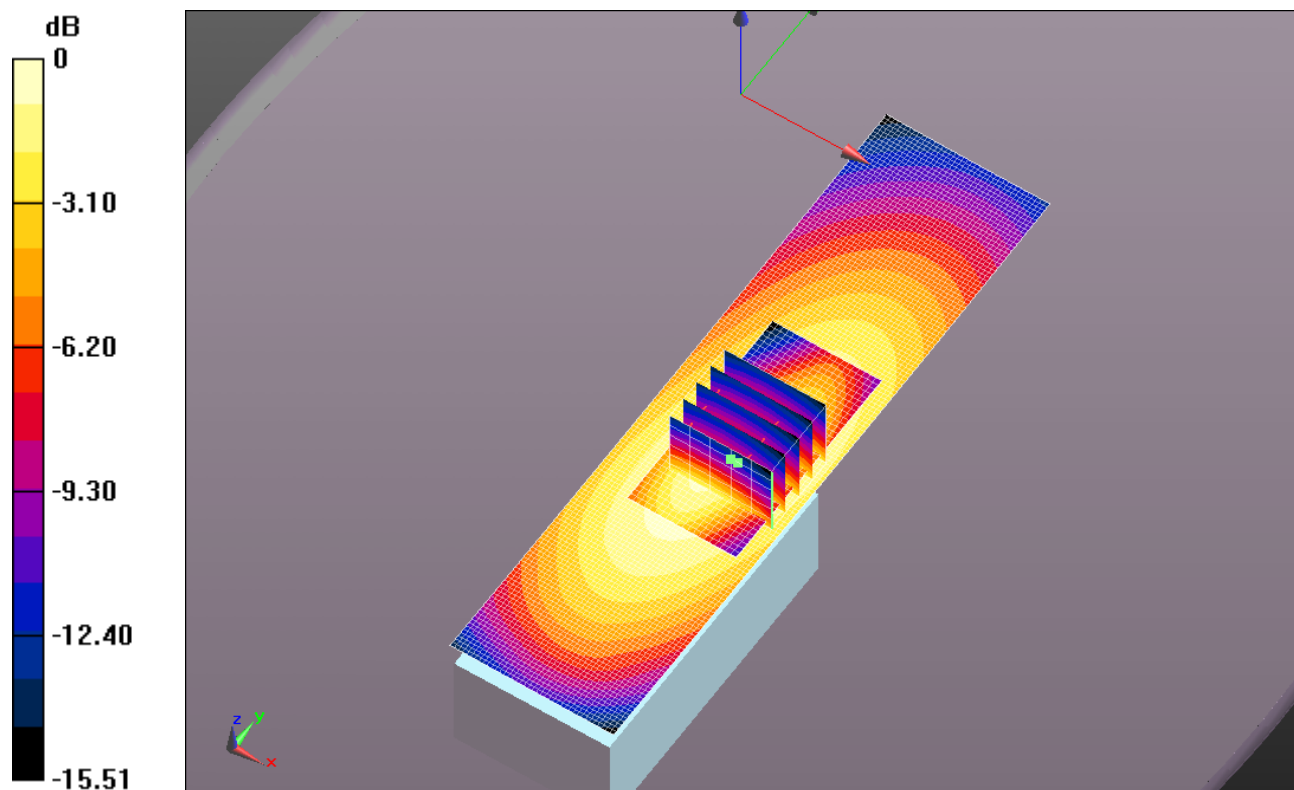
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (21x41x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 11.0 W/kg

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0 dB = 12.8 W/kg = 11.07 dBW/kg

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File #: ICOM-383Q-SAR
Dec 1, 2014

- All test results contained in this engineering test report are traceable to National Institute of Standards and Technology (NIST)

Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-278 SC72US 138MM 512MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 512 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 512$ MHz; $\sigma = 0.948$ S/m; $\epsilon_r = 54.705$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 10.0 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 110.0 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 12.7 W/kg
SAR(1 g) = 8.73 W/kg; SAR(10 g) = 6.36 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 11.2 W/kg

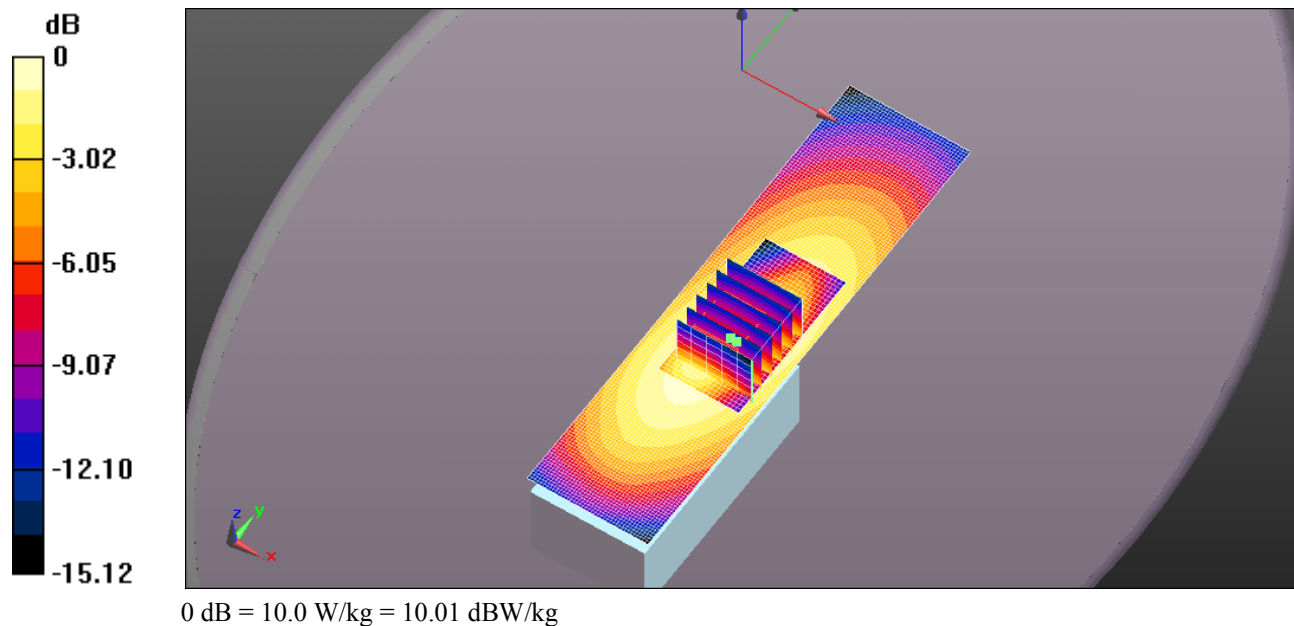
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (21x41x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 9.85 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-278 SC73US 140MM 470MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 470 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 470 \text{ MHz}$; $\sigma = 0.914 \text{ S/m}$; $\epsilon_r = 55.413$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 7.99 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (6x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 93.50 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 8.15 W/kg
SAR(1 g) = 5.63 W/kg; SAR(10 g) = 4.09 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 7.17 W/kg

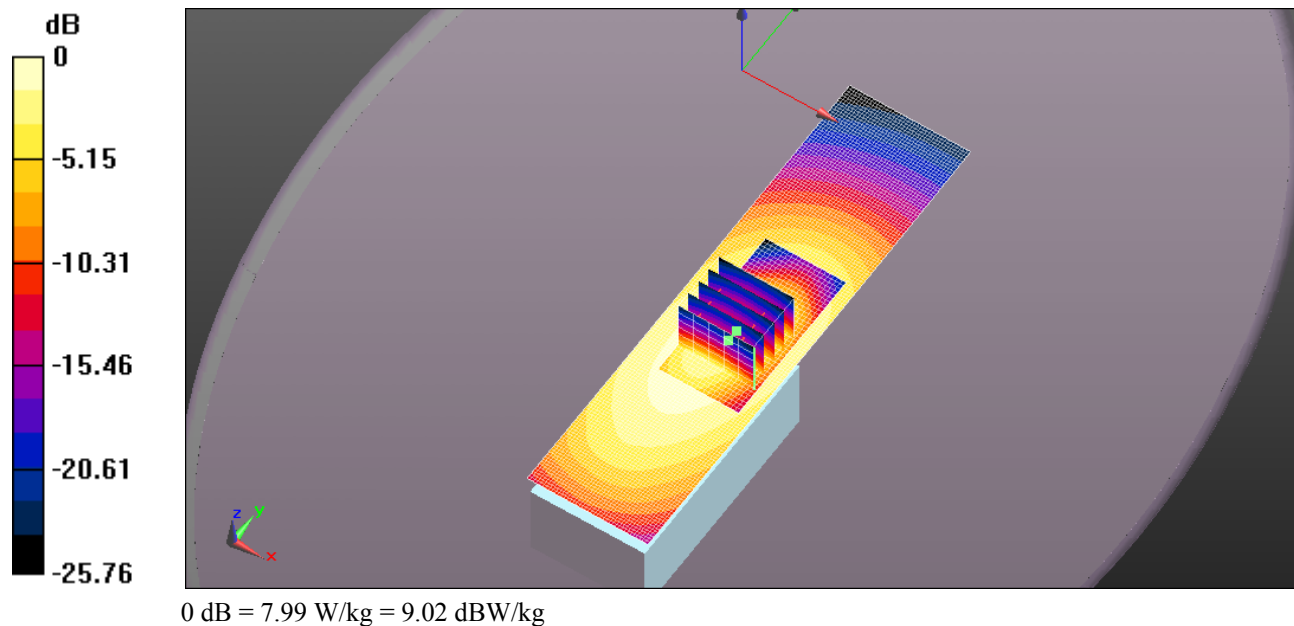
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (21x41x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 6.63 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-279 SC72US 138MM 470MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 470 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 470 \text{ MHz}$; $\sigma = 0.914 \text{ S/m}$; $\epsilon_r = 55.413$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 8.27 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (6x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 96.10 V/m ; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 9.45 W/kg
SAR(1 g) = 6.51 W/kg; SAR(10 g) = 4.73 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 8.34 W/kg

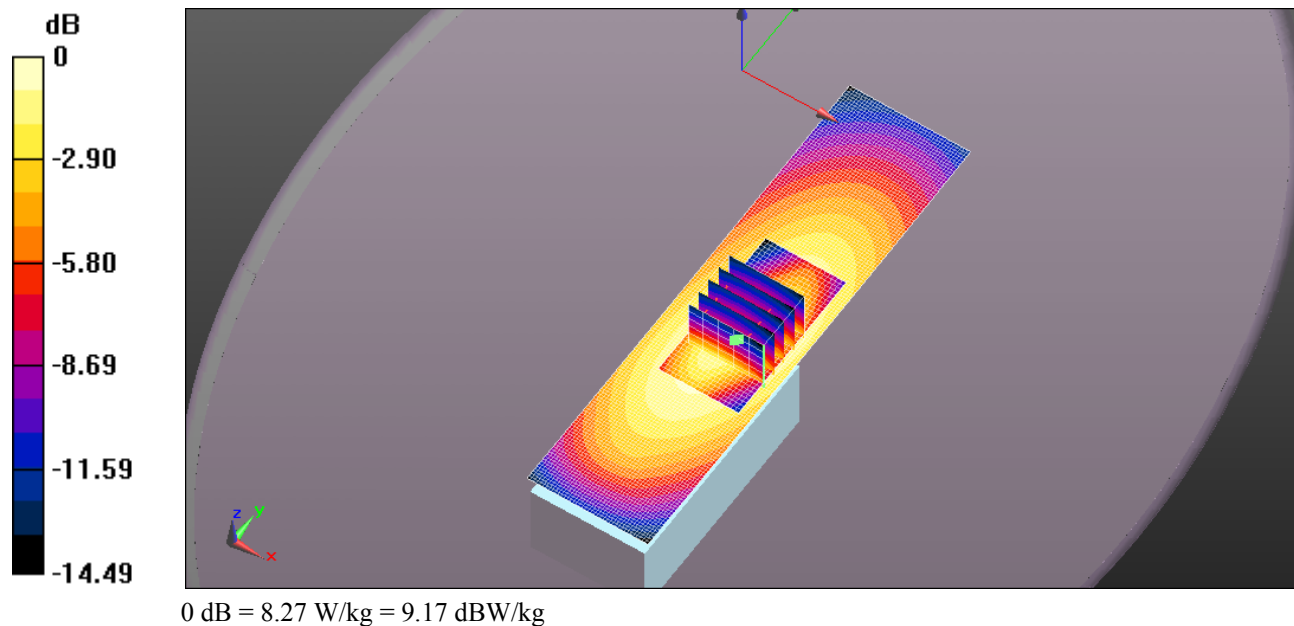
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (21x41x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 7.07 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-279 SC72US 138MM 491MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 491 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 491 \text{ MHz}$; $\sigma = 0.931 \text{ S/m}$; $\epsilon_r = 54.981$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 13.1 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (6x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 121.5 V/m; Power Drift = -0.20 dB
Peak SAR (extrapolated) = 14.7 W/kg
SAR(1 g) = 10.2 W/kg; SAR(10 g) = 7.4 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 13.0 W/kg

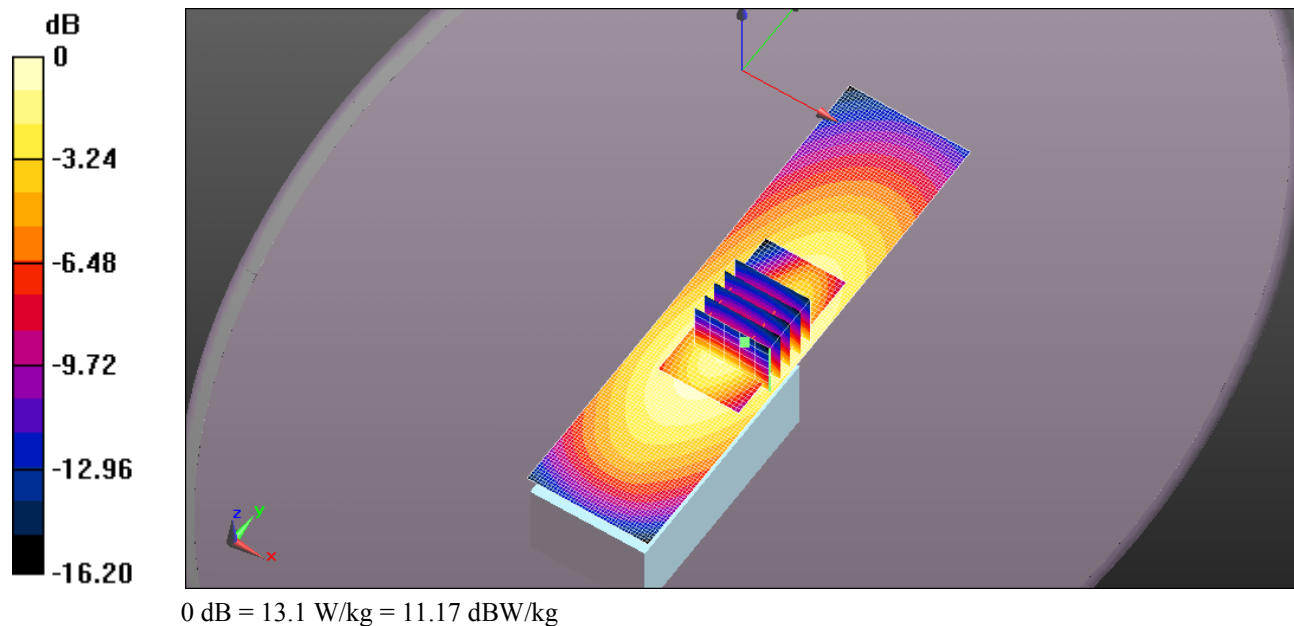
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (21x41x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 11.2 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-279 SC72US 138MM 512MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 512 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 512 \text{ MHz}$; $\sigma = 0.948 \text{ S/m}$; $\epsilon_r = 54.705$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 11.3 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (6x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 112.9 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 13.1 W/kg
SAR(1 g) = 9.12 W/kg; SAR(10 g) = 6.64 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 11.6 W/kg

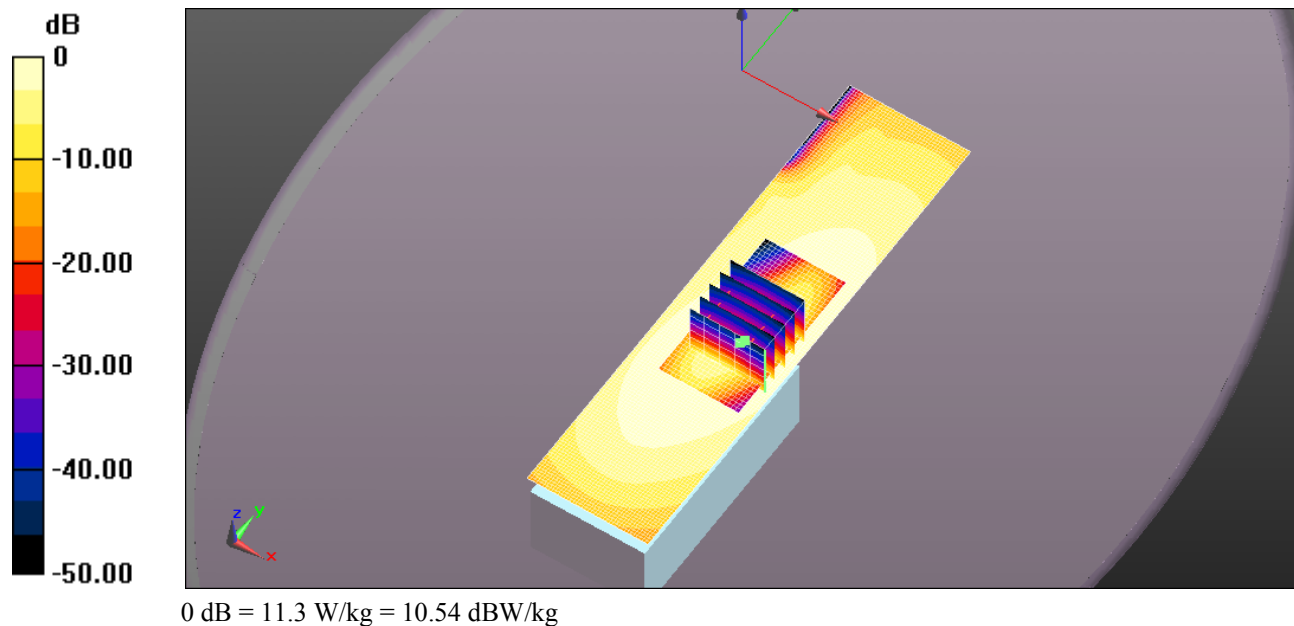
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (21x41x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 10.2 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-280 SC72US 138MM 470MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 470 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 470 \text{ MHz}$; $\sigma = 0.914 \text{ S/m}$; $\epsilon_r = 55.413$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 8.43 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (6x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 94.14 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 9.61 W/kg
SAR(1 g) = 6.64 W/kg; SAR(10 g) = 4.85 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 8.47 W/kg

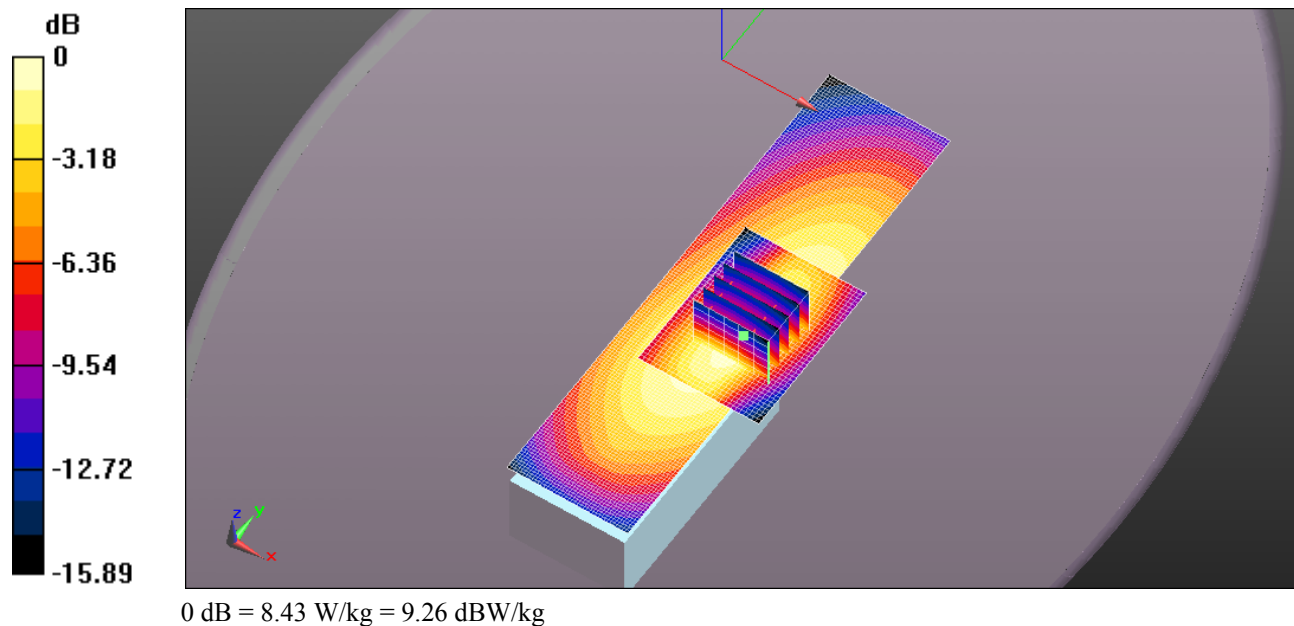
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (31x41x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 7.36 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-280 SC72US 138MM 491MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 491 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 491 \text{ MHz}$; $\sigma = 0.931 \text{ S/m}$; $\epsilon_r = 54.981$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 13.5 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (6x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 122.3 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 15.3 W/kg
SAR(1 g) = 10.6 W/kg; SAR(10 g) = 7.72 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 13.5 W/kg

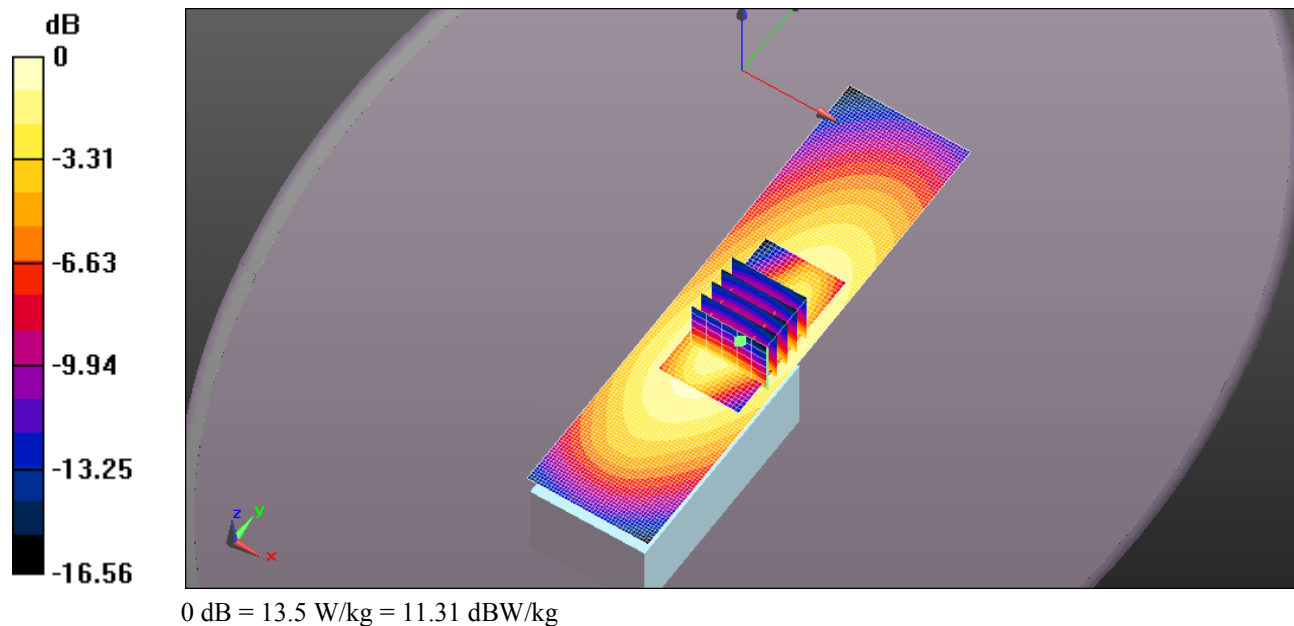
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (21x41x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 11.0 W/kg

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FILE NAME: [BP-280 SC72US 138MM 512MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 512 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 512 \text{ MHz}$; $\sigma = 0.948 \text{ S/m}$; $\epsilon_r = 54.705$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 12.3 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (7x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 119.6 V/m ; Power Drift = -0.19 dB
Peak SAR (extrapolated) = 15.3 W/kg
SAR(1 g) = 10.4 W/kg; SAR(10 g) = 7.58 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 13.4 W/kg

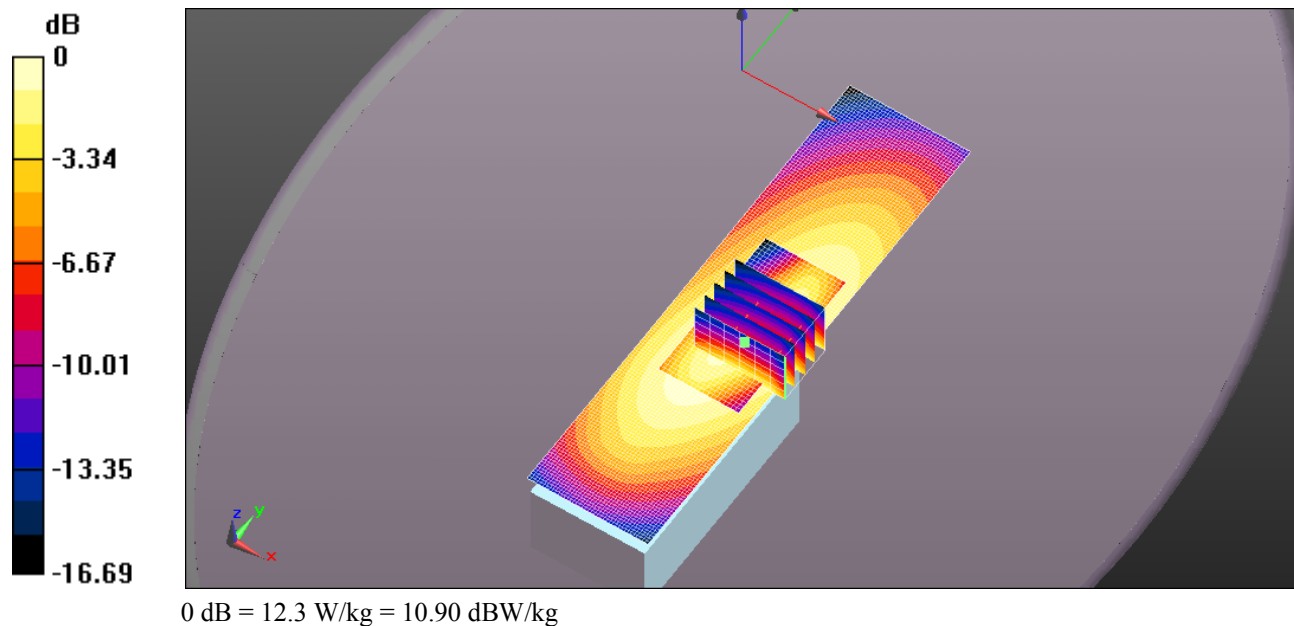
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (21x41x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 11.6 W/kg

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EXHIBIT 4. BODY SAR MEASUREMENT – CUT ANTENNA SUMMARY

Antenna	Power (W)		CH. Freq	BODY SAR (W/Kg)		
				BP-279	BP-278	BP-280
			(MHz)	1485mAh	1130mAh	2280mAh
SC61UC 460MHz 142mm White Tip	36.23	CH1	450	6.92	6.52	7.02
	36.20	CH2	460	6.96	6.96	7.74
	36.23	CH8	496.5	6.66	6.7	8.14
	36.10	CH10	512	*	5.74	*
SC61UC 480MHz 136mm White Tip	36.23	CH1	450			
	36.25	CH3	465.5		5.62	6.99
	36.30	CH5	480	9.75	9.09	10.4
	36.10	CH10	512	*	6.32	*
SC61UC 500MHz 129mm White Tip	36.23	CH1	450			
	36.25	CH3	465.5	5.27	4.18	4.66
	36.23	CH8	496.5	10.4	9.58	11.1
	36.10	CH10	512	*	7.64	*

* The Radio would shut off after 2 minutes when placed near phantom and could not be made to transmit longer than 30 seconds thereafter. Consultation with manufacturer revealed that the radio monitors VSWR and shuts off transmitter when reflected power is excessively high. This was observed to only occur at 512MHz with the Cut Antenna.

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File #: ICOM-383Q-SAR
Dec 1, 2014

- All test results contained in this engineering test report are traceable to National Institute of Standards and Technology (NIST)

Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-278 SC61UC 142MM 450MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 460 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 460 \text{ MHz}$; $\sigma = 0.906 \text{ S/m}$; $\epsilon_r = 55.564$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 3.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 7.07 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 88.30 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 8.57 W/kg
SAR(1 g) = 6.52 W/kg; SAR(10 g) = 4.83 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 6.87 W/kg

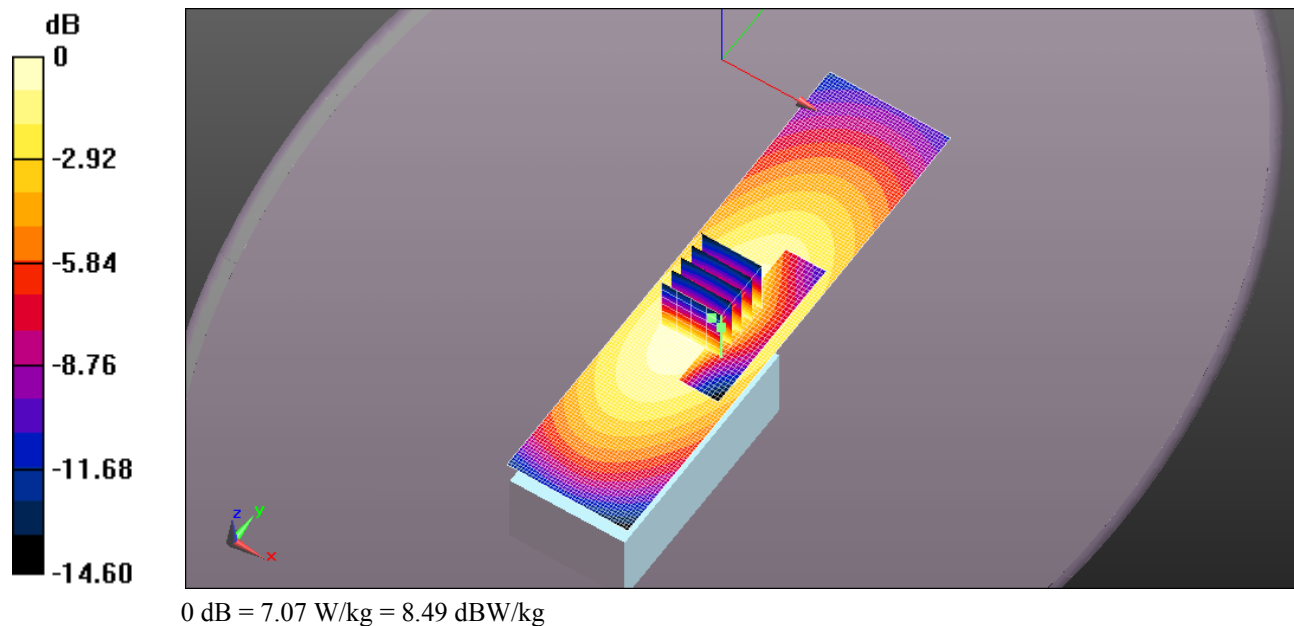
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (11x41x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 7.11 W/kg

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File #: ICOM-383Q-SAR
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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-278 SC61UC 142MM 460MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 460 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 460 \text{ MHz}$; $\sigma = 0.906 \text{ S/m}$; $\epsilon_r = 55.564$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 3.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 7.56 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 91.43 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 9.18 W/kg
SAR(1 g) = 6.96 W/kg; SAR(10 g) = 5.13 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 7.34 W/kg

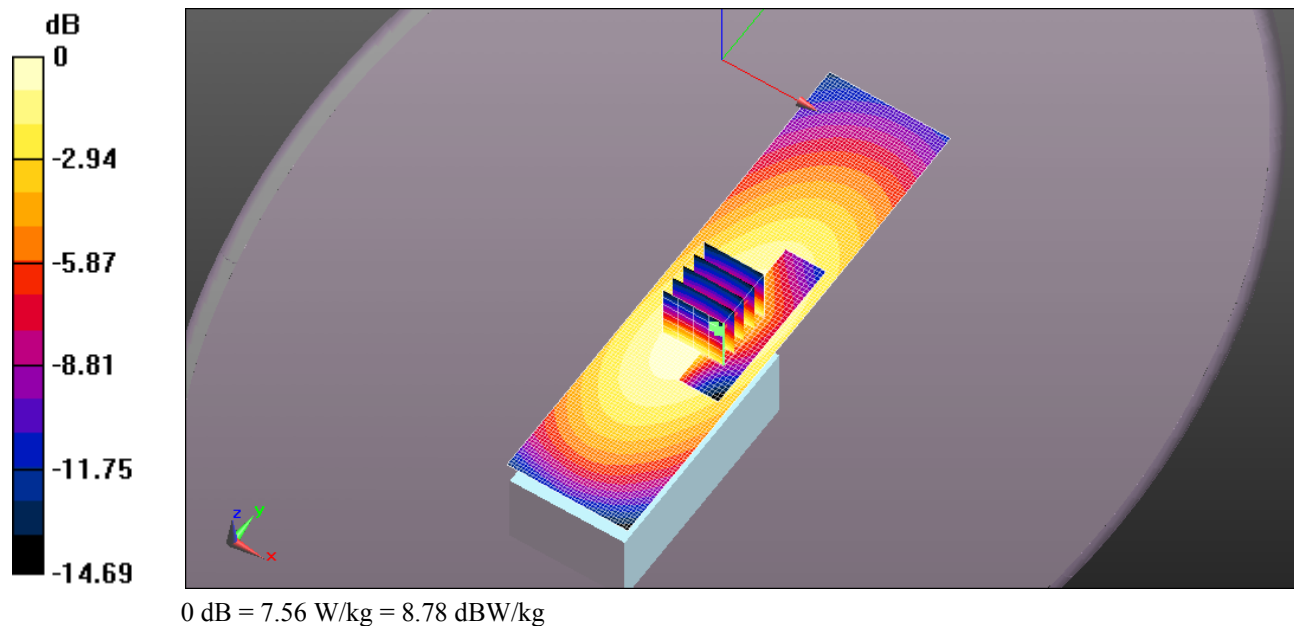
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (11x41x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 7.72 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-278 SC61UC 142MM 496.5MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 496.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 496.5$ MHz; $\sigma = 0.934$ S/m; $\epsilon_r = 54.872$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 3.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 8.21 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 96.87 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 8.84 W/kg
SAR(1 g) = 6.7 W/kg; SAR(10 g) = 4.93 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 7.07 W/kg

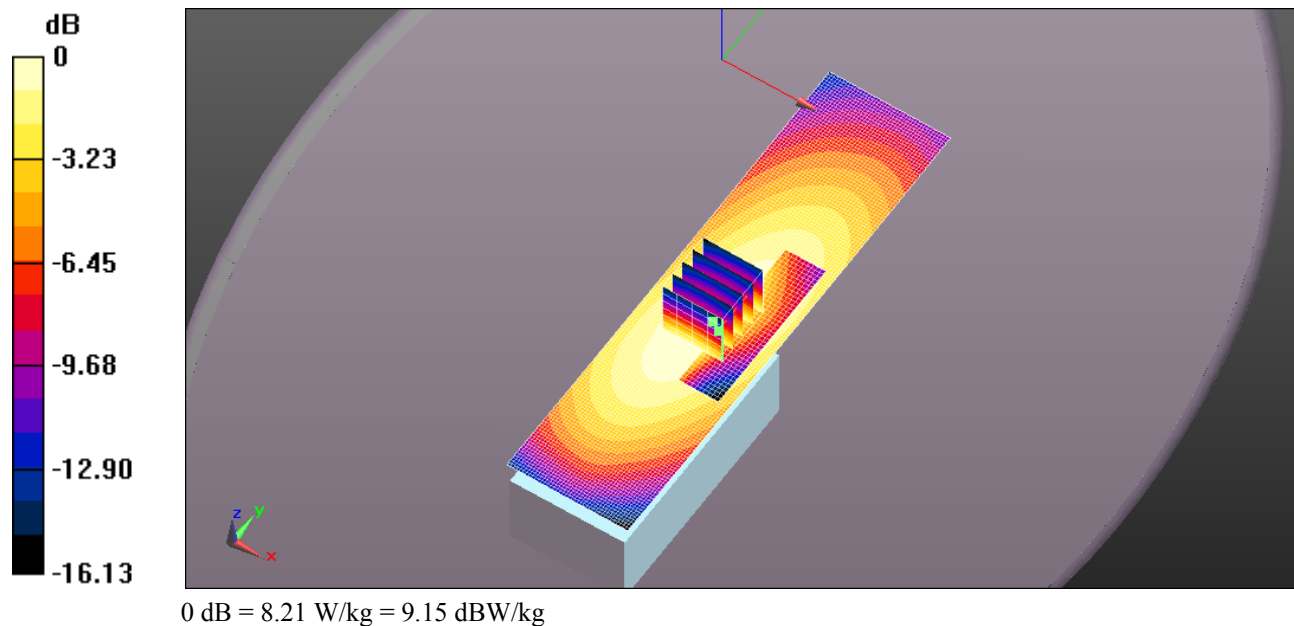
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (11x41x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 8.69 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-278 SC61UC 142MM 512MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 512 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 512$ MHz; $\sigma = 0.948$ S/m; $\epsilon_r = 54.705$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 3.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 7.12 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 91.83 V/m; Power Drift = -0.22 dB
Peak SAR (extrapolated) = 7.60 W/kg
SAR(1 g) = 5.74 W/kg; SAR(10 g) = 4.2 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 6.07 W/kg

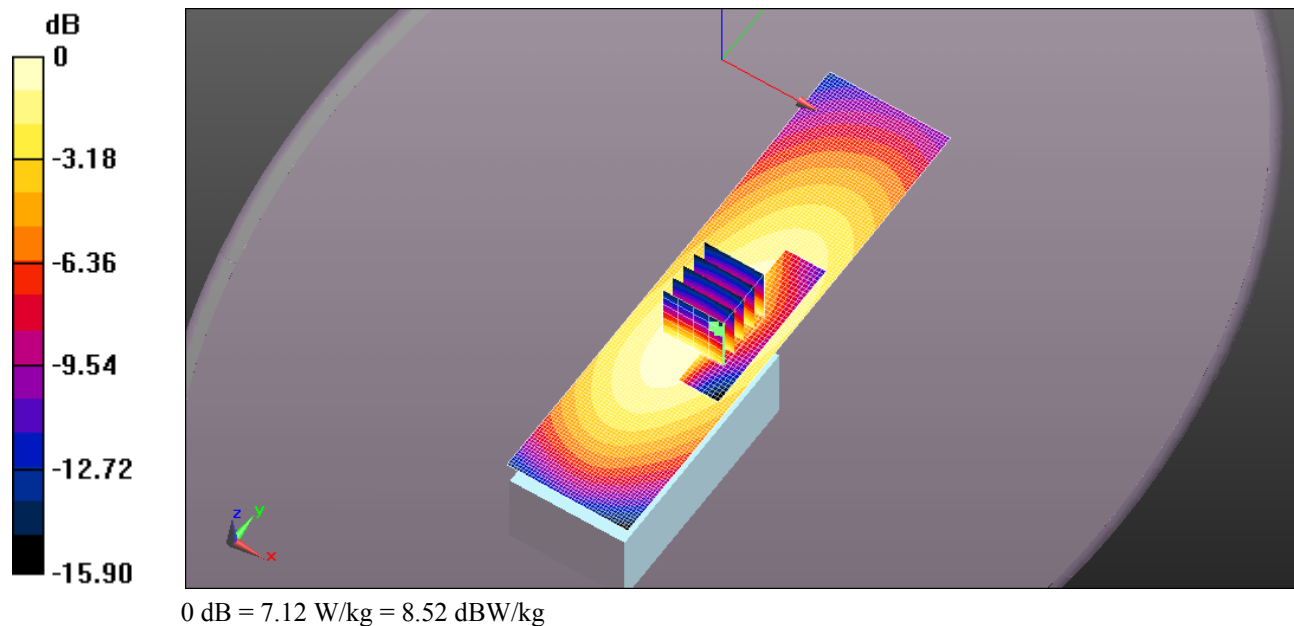
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (11x41x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 8.14 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-278 SC61UC 136MM 465.5MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 465.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 465.5$ MHz; $\sigma = 0.911$ S/m; $\epsilon_r = 55.523$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 7.14 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (6x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 89.73 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 8.11 W/kg
SAR(1 g) = 5.62 W/kg; SAR(10 g) = 4.09 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 7.18 W/kg

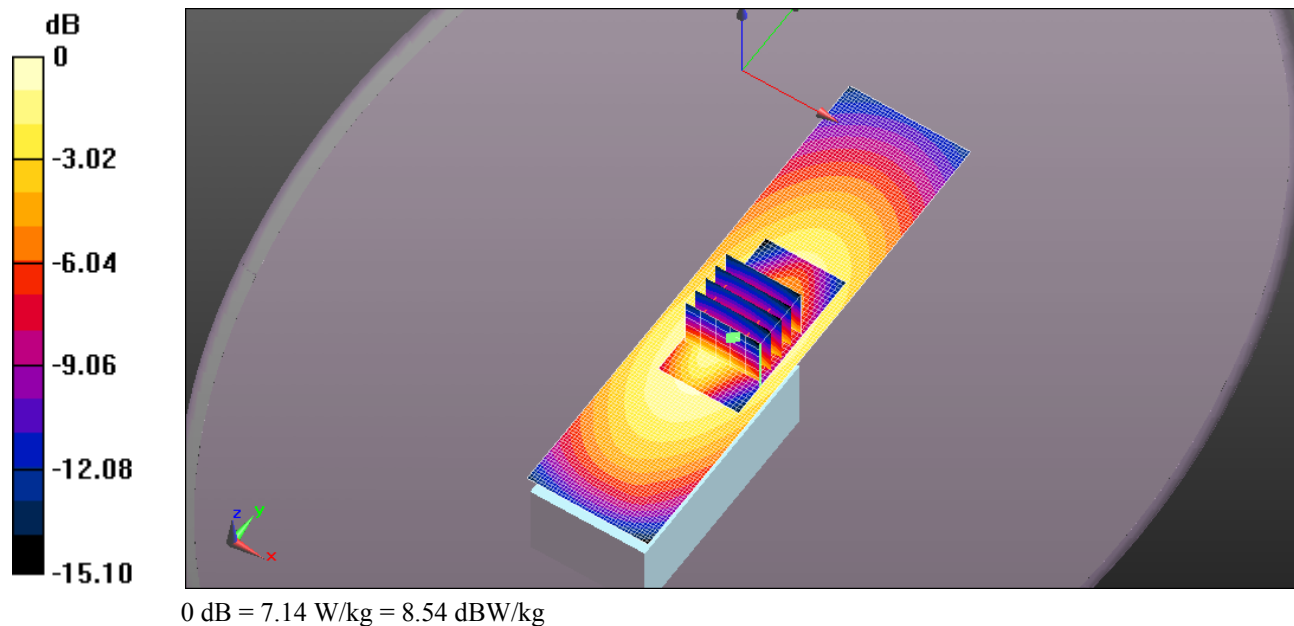
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (21x41x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 6.24 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-278 SC61UC 136MM 4802MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 480 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 480 \text{ MHz}$; $\sigma = 0.925 \text{ S/m}$; $\epsilon_r = 55.237$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 11.6 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (6x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 112.7 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 13.1 W/kg
SAR(1 g) = 9.09 W/kg; SAR(10 g) = 6.61 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 11.6 W/kg

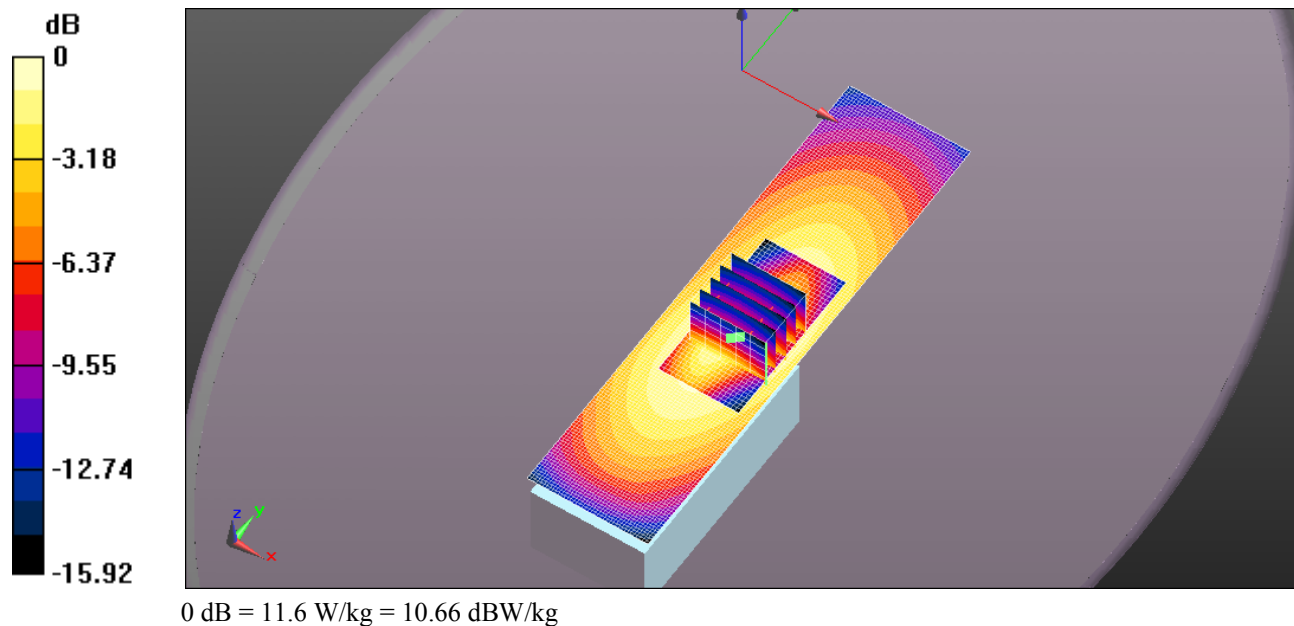
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (21x41x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 9.49 W/kg

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Test Laboratory: Ultratech Group of Labs

File Name: [BP-278 SC61UC 136mm 512MHz.da52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 512 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 512 \text{ MHz}$; $\sigma = 0.948 \text{ S/m}$; $\epsilon_r = 54.705$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 9.33 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (6x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 103.5 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 9.19 W/kg
SAR(1 g) = 6.32 W/kg; SAR(10 g) = 4.58 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 8.10 W/kg

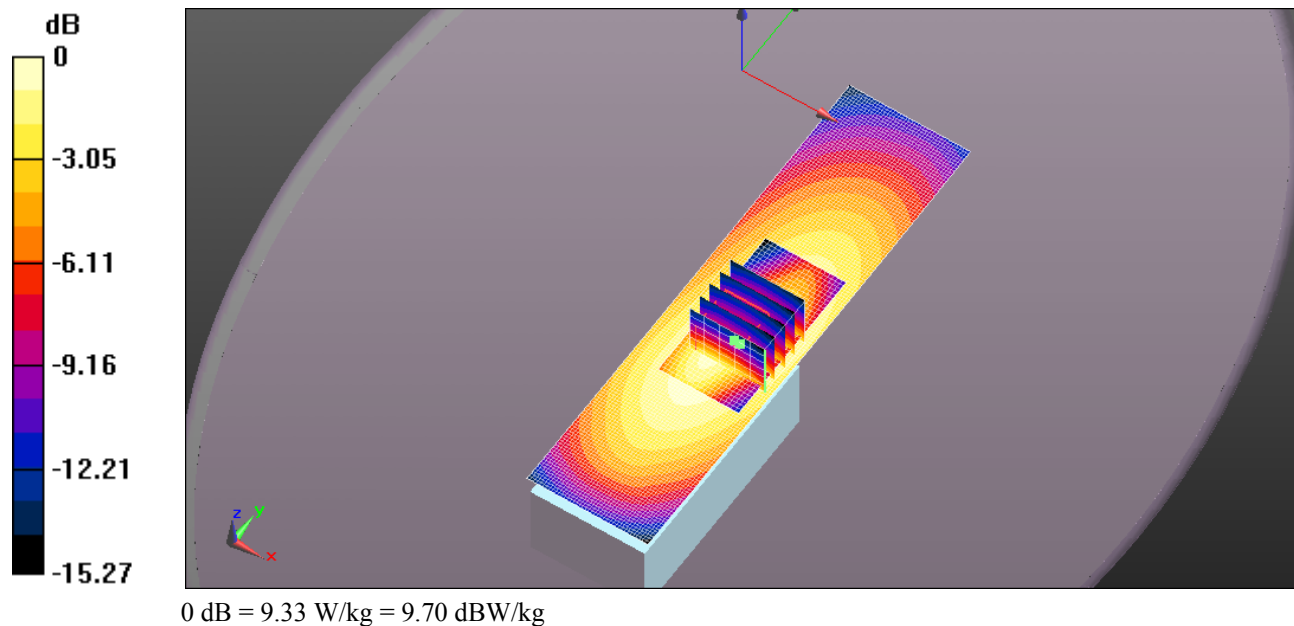
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (21x41x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 8.35 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-278 SC61UC 129MM 465.5MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 465.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 465.5$ MHz; $\sigma = 0.911$ S/m; $\epsilon_r = 55.523$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 3.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 4.54 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (6x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 71.06 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 5.52 W/kg
SAR(1 g) = 4.18 W/kg; SAR(10 g) = 3.07 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 4.41 W/kg

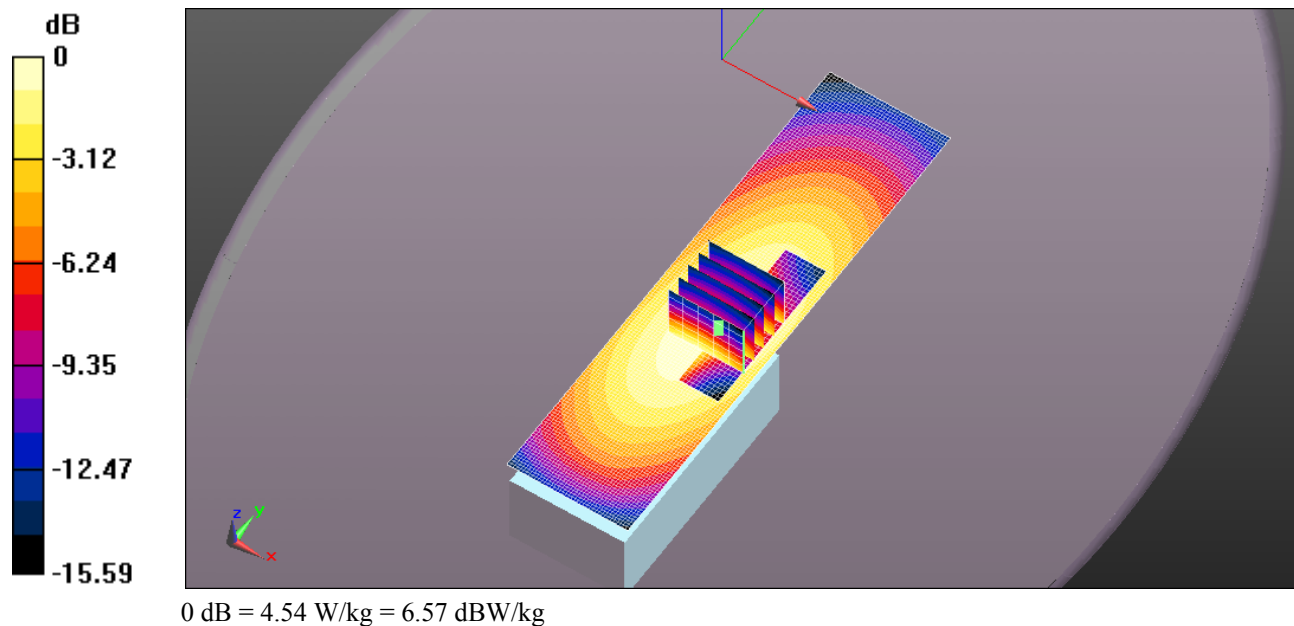
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (11x41x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 4.71 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-278 SC61UC 129MM 496.5MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 496.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 496.5$ MHz; $\sigma = 0.934$ S/m; $\epsilon_r = 54.872$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 3.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 10.6 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (6x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 105.5 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 12.6 W/kg
SAR(1 g) = 9.58 W/kg; SAR(10 g) = 7.06 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 10.1 W/kg

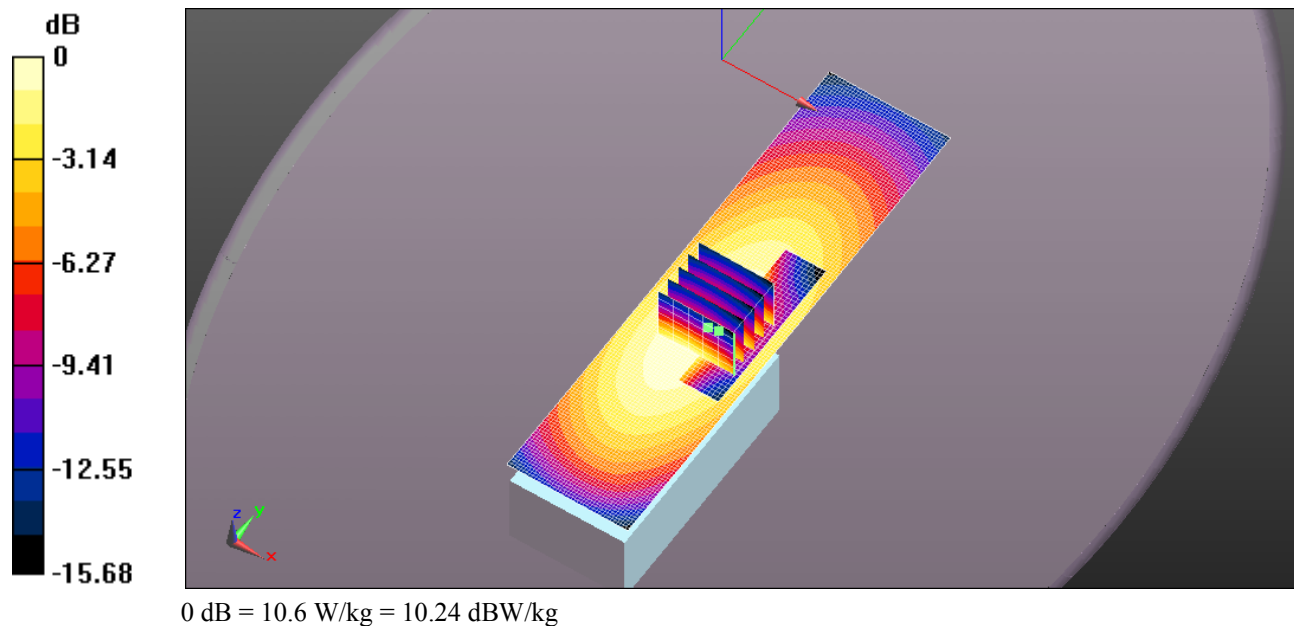
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (11x41x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 10.7 W/kg

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File #: ICOM-383Q-SAR
Dec 1, 2014

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-278 SC61UC 129MM 512MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 512 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 512$ MHz; $\sigma = 0.948$ S/m; $\epsilon_r = 54.705$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 3.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 9.82 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (6x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 107.2 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 10.1 W/kg
SAR(1 g) = 7.64 W/kg; SAR(10 g) = 5.62 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 8.06 W/kg

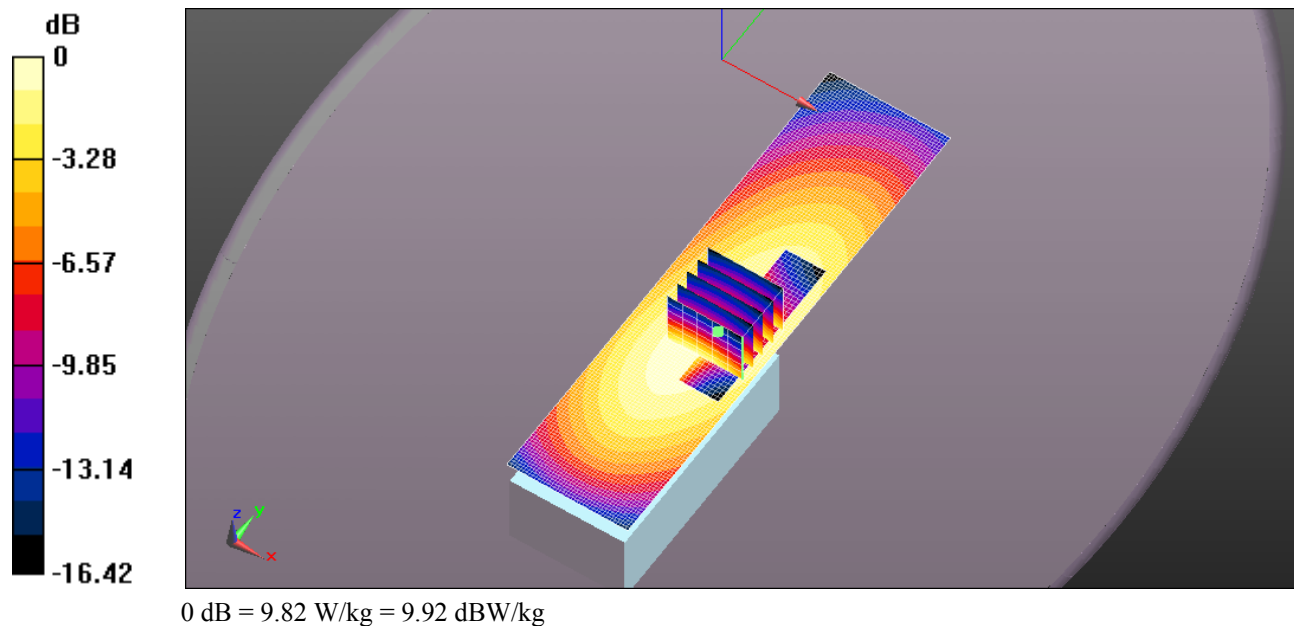
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (11x41x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 11.6 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-279 SC61UC 142MM 450MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 450 \text{ MHz}$; $\sigma = 0.9 \text{ S/m}$; $\epsilon_r = 55.686$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 3.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 7.25 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 88.32 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 8.81 W/kg
SAR(1 g) = 6.92 W/kg; SAR(10 g) = 5.11 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 7.06 W/kg

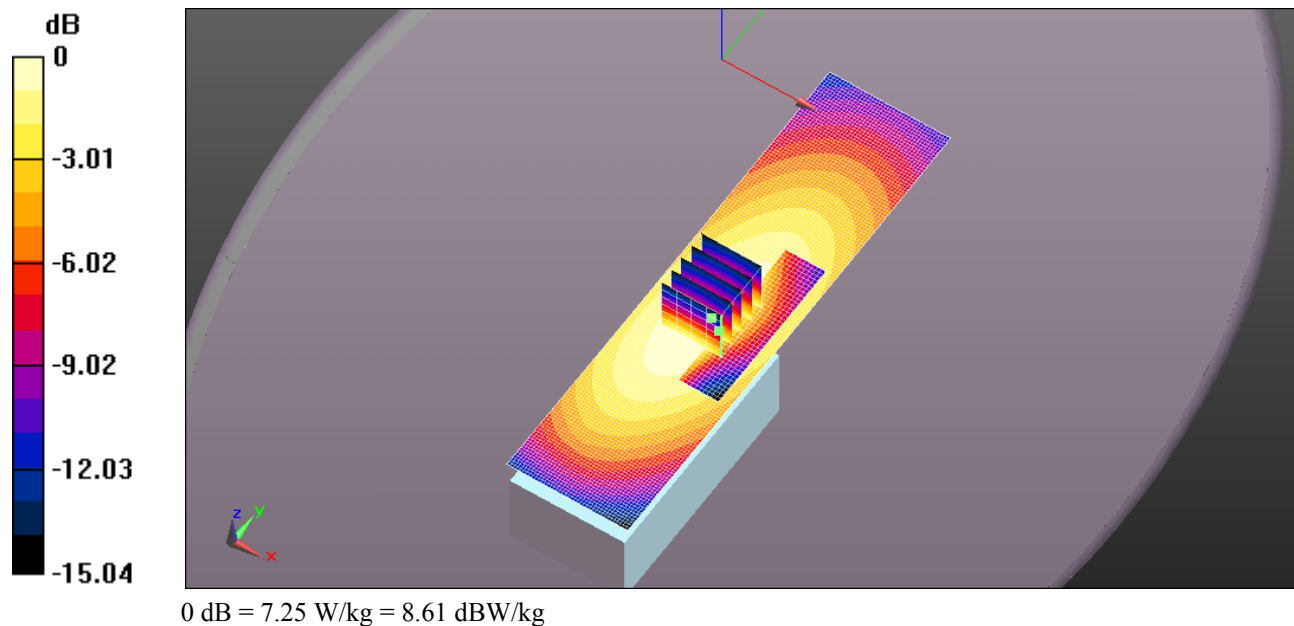
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (11x41x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 6.90 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: **BP-279 SC61UC 142MM 496.5MHZ.DA52:0**

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 496.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 496.5 \text{ MHz}$; $\sigma = 0.934 \text{ S/m}$; $\epsilon_r = 54.872$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 3.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 8.32 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 98.15 V/m ; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 8.81 W/kg
SAR(1 g) = 6.66 W/kg; SAR(10 g) = 4.89 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 7.03 W/kg

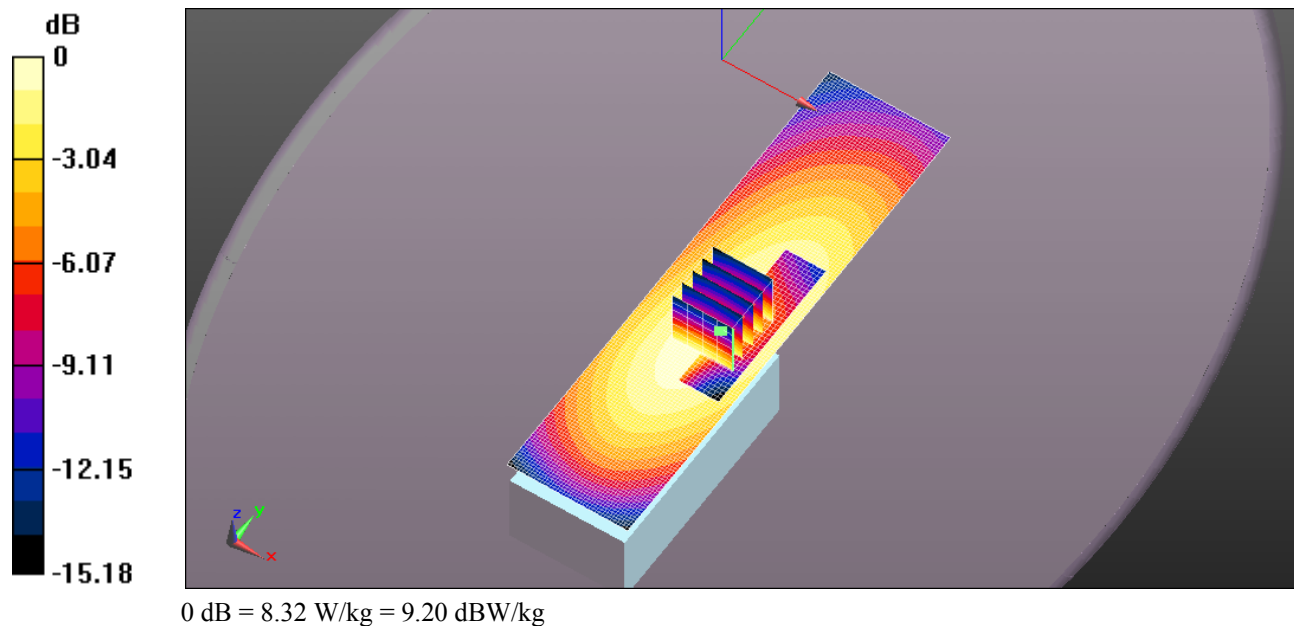
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (11x41x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 9.18 W/kg

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Test Laboratory: Ultratech Group of Labs

File Name: [BP-279 SC61UC 136mm 480MHz.da52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 480 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 480 \text{ MHz}$; $\sigma = 0.925 \text{ S/m}$; $\epsilon_r = 55.237$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 12.5 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (6x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 117.9 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 14.1 W/kg
SAR(1 g) = 9.75 W/kg; SAR(10 g) = 7.07 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 12.5 W/kg

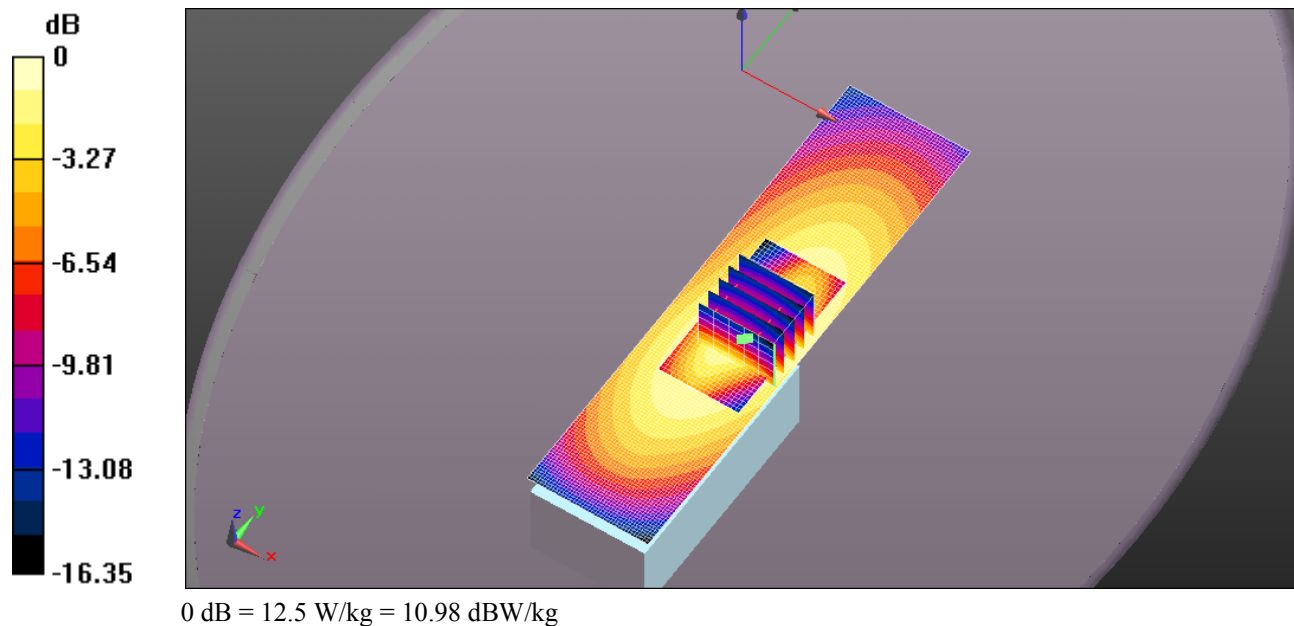
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (21x41x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 10.1 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-279 SC61UC 129MM 465.5MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 465.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 465.5$ MHz; $\sigma = 0.911$ S/m; $\epsilon_r = 55.523$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 3.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 5.74 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (6x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 79.58 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 6.93 W/kg
SAR(1 g) = 5.27 W/kg; SAR(10 g) = 3.89 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.56 W/kg

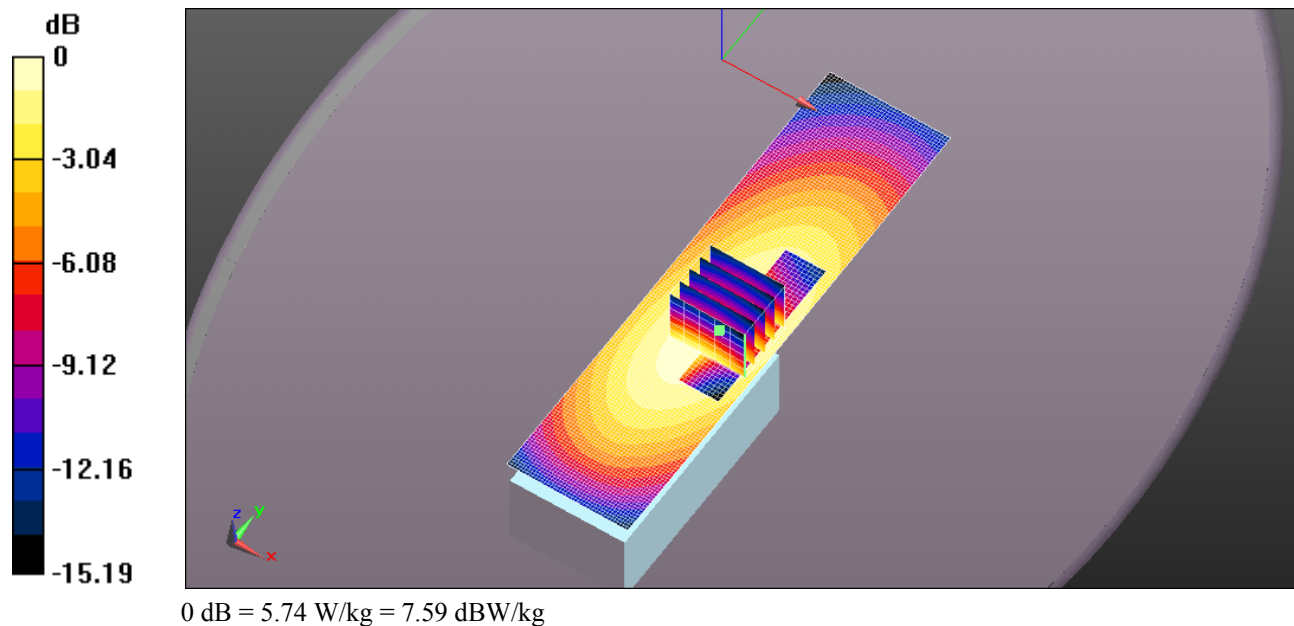
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (11x41x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 6.02 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-279 SC61UC 129MM 496.5MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 496.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 496.5$ MHz; $\sigma = 0.934$ S/m; $\epsilon_r = 54.872$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 3.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 11.5 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (6x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 110.3 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 13.7 W/kg
SAR(1 g) = 10.4 W/kg; SAR(10 g) = 7.69 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 11.0 W/kg

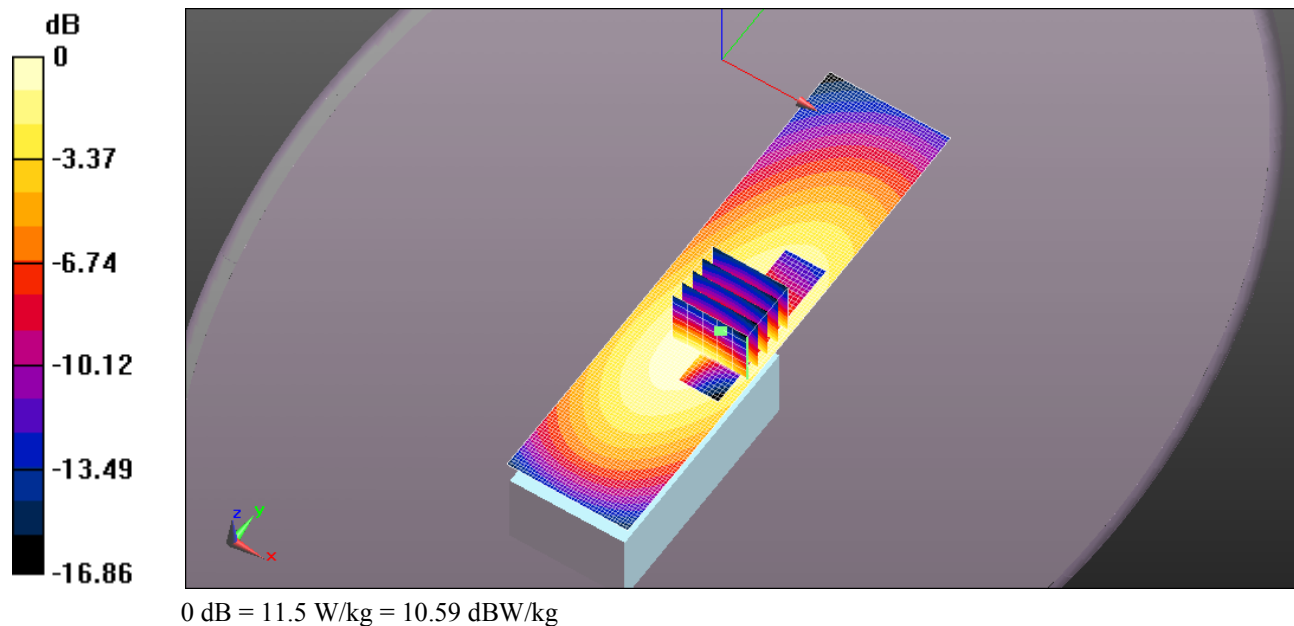
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (11x41x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 11.9 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-280 SC61UC 142MM 450MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 450 \text{ MHz}$; $\sigma = 0.9 \text{ S/m}$; $\epsilon_r = 55.686$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 8.59 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (6x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 99.96 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 9.79 W/kg
SAR(1 g) = 7.02 W/kg; SAR(10 g) = 5.13 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 8.66 W/kg

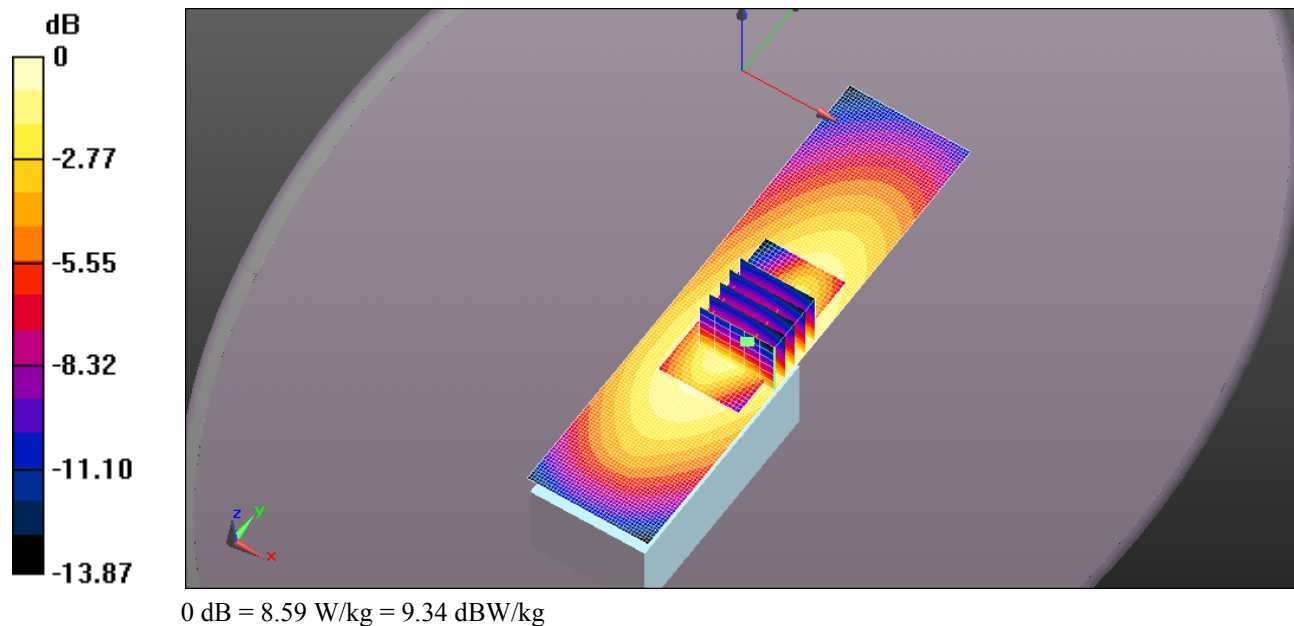
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (21x41x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 7.43 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-280 SC61UC 142MM 460MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 460 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 460 \text{ MHz}$; $\sigma = 0.906 \text{ S/m}$; $\epsilon_r = 55.564$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 3.4mm (Mechanical Surface Detection), Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 8.09 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (6x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 93.39 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 11.2 W/kg
SAR(1 g) = 7.74 W/kg; SAR(10 g) = 5.66 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 9.86 W/kg

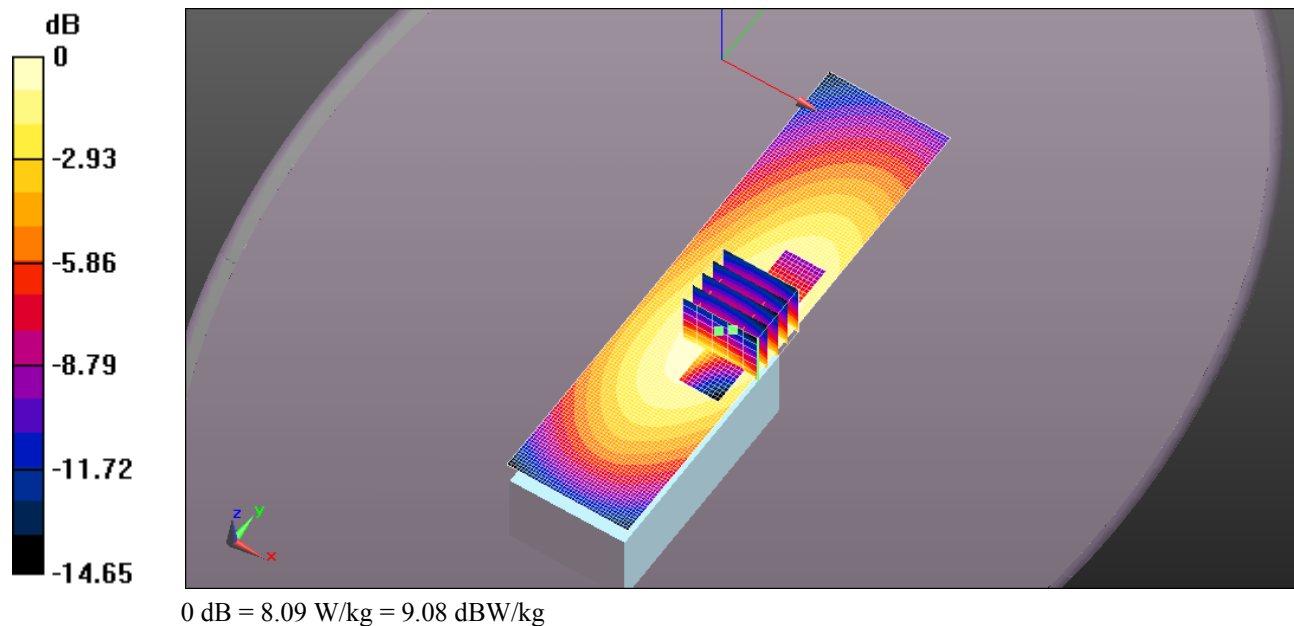
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (11x41x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 7.91 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-280 SC61UC 142MM 496.5MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 496.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 496.5$ MHz; $\sigma = 0.934$ S/m; $\epsilon_r = 54.872$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 3.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 9.56 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 104.7 V/m; Power Drift = -0.22 dB
Peak SAR (extrapolated) = 10.7 W/kg
SAR(1 g) = 8.14 W/kg; SAR(10 g) = 6 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 8.59 W/kg

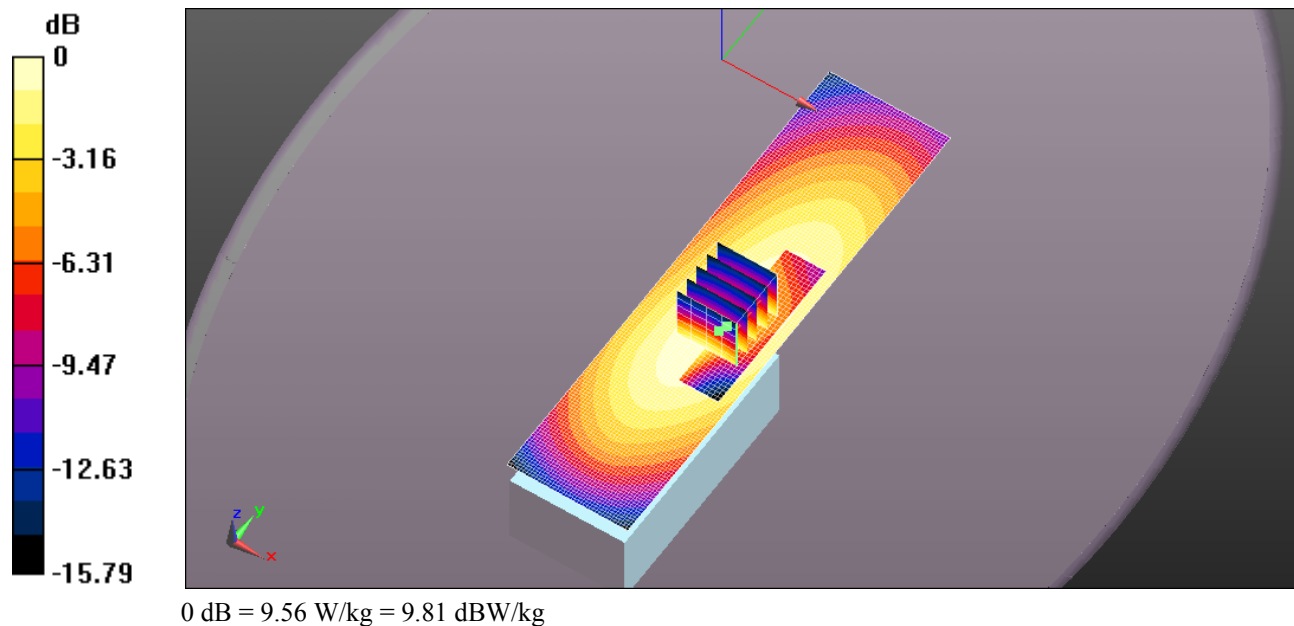
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (11x41x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 10.5 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-280 SC61UC 136MM 465.5MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 465.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 465.5$ MHz; $\sigma = 0.911$ S/m; $\epsilon_r = 55.523$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 8.78 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (6x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 100.2 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 10.1 W/kg
SAR(1 g) = 6.99 W/kg; SAR(10 g) = 5.1 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 8.91 W/kg

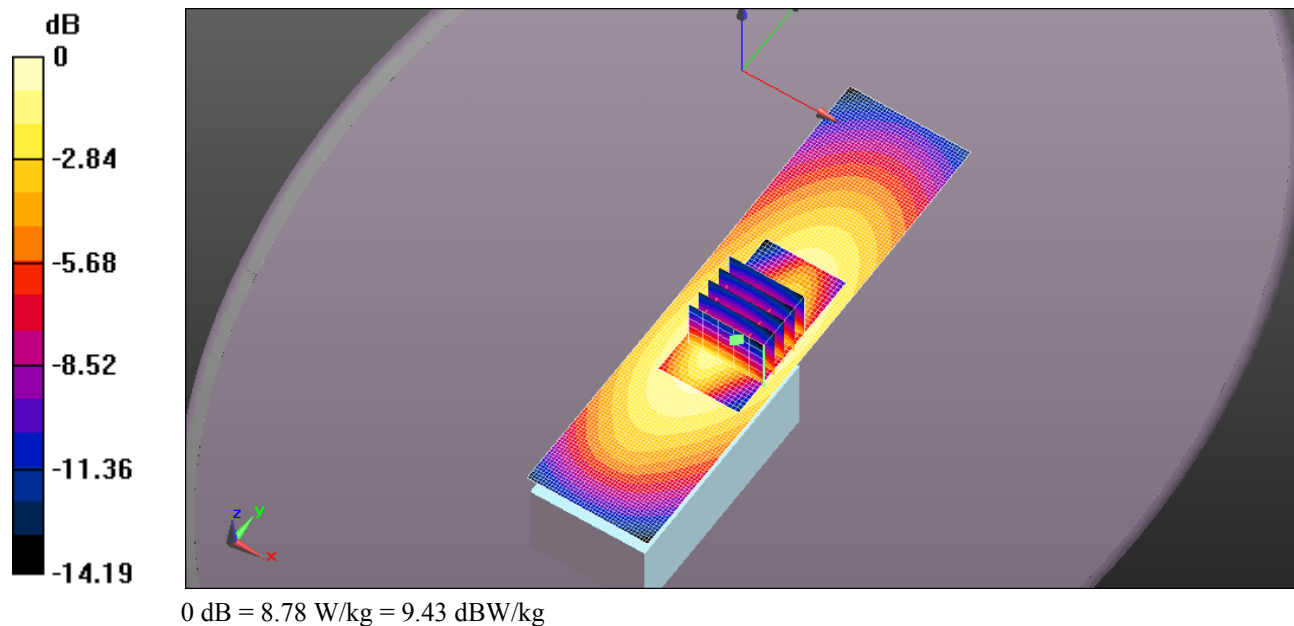
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (21x41x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 7.57 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-280 SC61UC 136MM 480MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 480 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 480 \text{ MHz}$; $\sigma = 0.925 \text{ S/m}$; $\epsilon_r = 55.237$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 13.1 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (6x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 121.7 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 15.1 W/kg
SAR(1 g) = 10.4 W/kg; SAR(10 g) = 7.53 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 13.3 W/kg

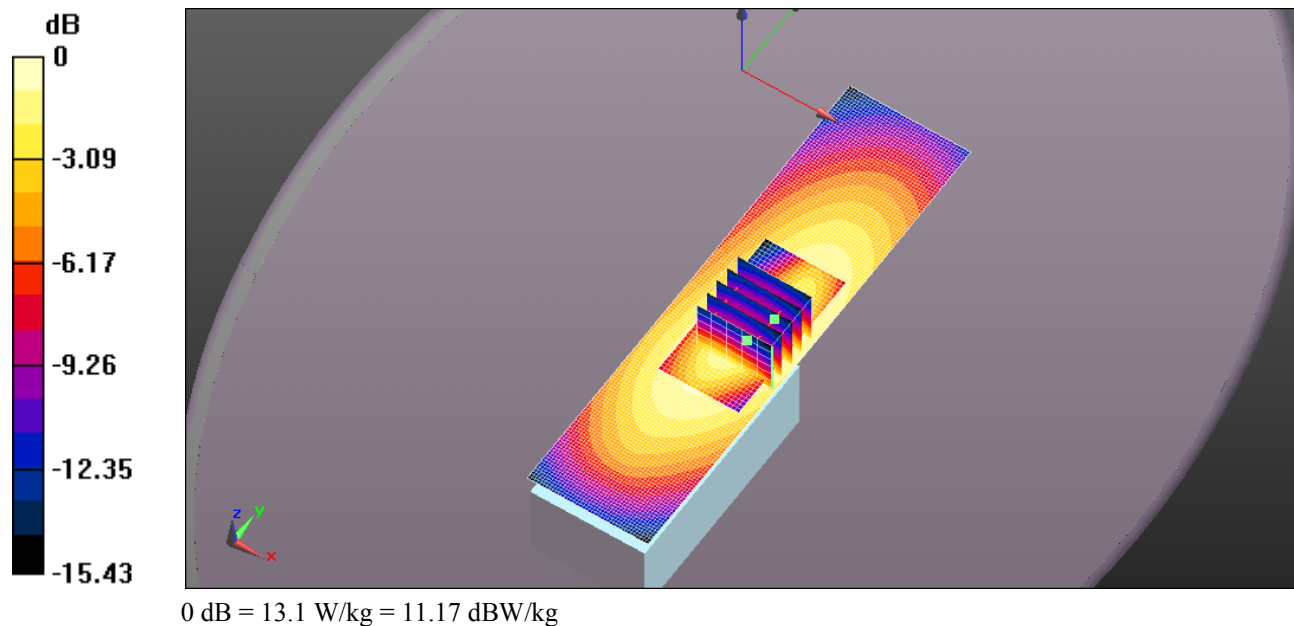
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (21x41x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 11.3 W/kg

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Test Laboratory: Ultratech Group of Labs

File Name: [BP-280 SC61UC 129mm 465.5MHz.da52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 465.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 465.5 \text{ MHz}$; $\sigma = 0.911 \text{ S/m}$; $\epsilon_r = 55.523$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 5.96 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (6x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$
Reference Value = 81.86 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 6.75 W/kg
SAR(1 g) = 4.66 W/kg; SAR(10 g) = 3.4 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 5.95 W/kg

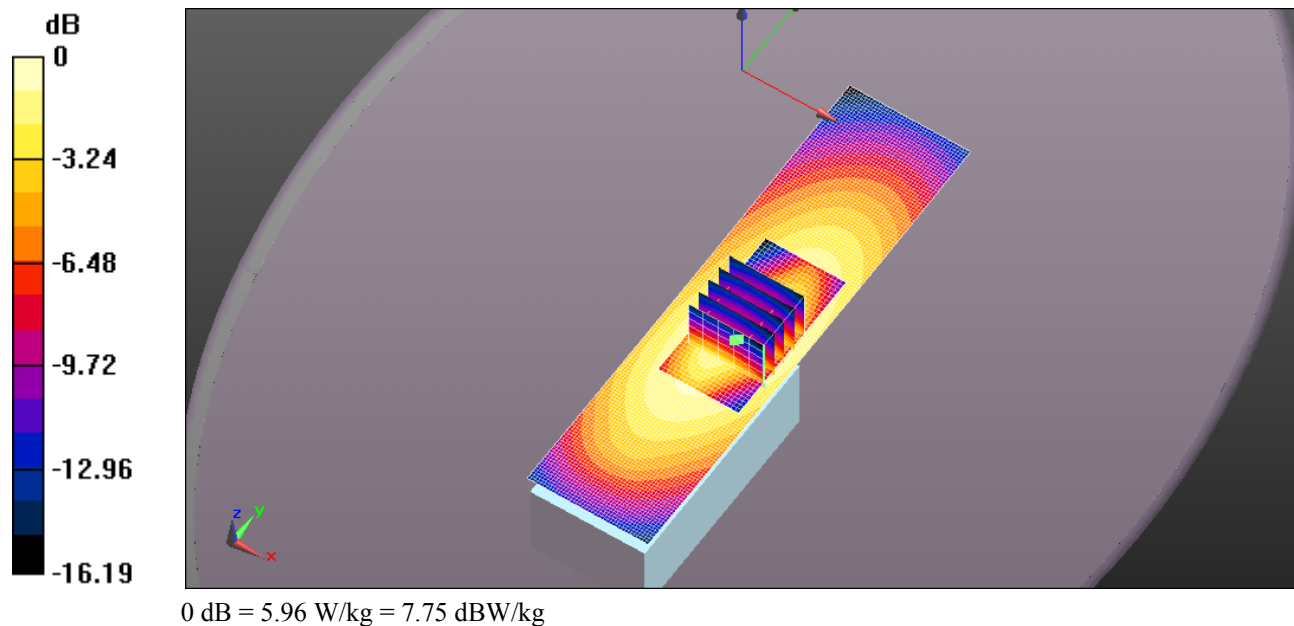
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (21x41x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 4.82 W/kg

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Test Laboratory: Ultratech Group of Labs

FILE NAME: [BP-280 SC61UC 129MM 496.5MHZ.DA52:0](#)

DUT: DUT Sample Brick w. Antenna; Type: Sample; Serial: IMEI Number
Program Name: System Performance Check at 450 MHz

Communication System: UID 10000, CW; Frequency: 496.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 496.5$ MHz; $\sigma = 0.934$ S/m; $\epsilon_r = 54.872$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3673; ConvF(9.11, 9.11, 9.11); Calibrated: 10/17/2014;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 3/24/2014
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- ; SEMCAD X Version 14.6.10 (7331)

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Area Scan (41x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 14.1 W/kg

450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/Zoom Scan (5x5x7) (6x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 123.9 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 16.0 W/kg
SAR(1 g) = 11.1 W/kg; SAR(10 g) = 8.08 W/kg (SAR corrected for target medium)
Maximum value of SAR (measured) = 14.1 W/kg

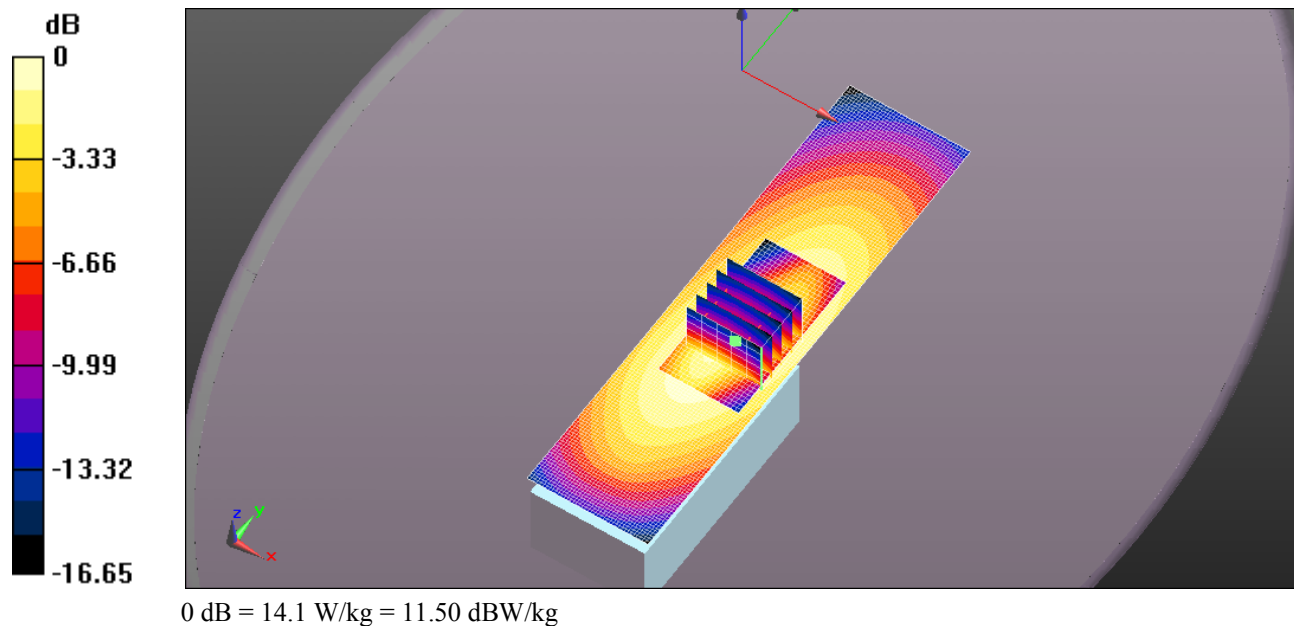
450-512 MHz Body/Body - Belt Clip Touching, d=0mm, Pin=4W (ES-Probe)/FindMax (21x41x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 11.6 W/kg

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