



## Appendix B. SAR Measurement Plots

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Place of testing: HUAWEI SAR/HAC Lab

## NEN-LX3 GSM850 190CH Right Cheek-Second Antenna

**DUT: NEN-LX3; Type: Smart Phone; Serial: SAR3**

Communication System: UID 0, HW-GSM\GPRS\EGPRS-1TS (0); Frequency: 836.6 MHz; Duty Cycle: 1:8.30042

Medium parameters used:  $f = 837$  MHz;  $\sigma = 0.936$  S/m;  $\epsilon_r = 41.533$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN7381; ConvF(10.1, 10.1, 10.1) @ 836.6 MHz; Calibrated: 2020-11-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1235; Calibrated: 2020-11-27
- Phantom: SAM1; Type: SAM; Serial: 1475
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Configuration/Body/Area Scan (9x15x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 0.138 W/kg

**Configuration/Body/Zoom Scan (7x6x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 8.128 V/m; Power Drift = -0.06 dB

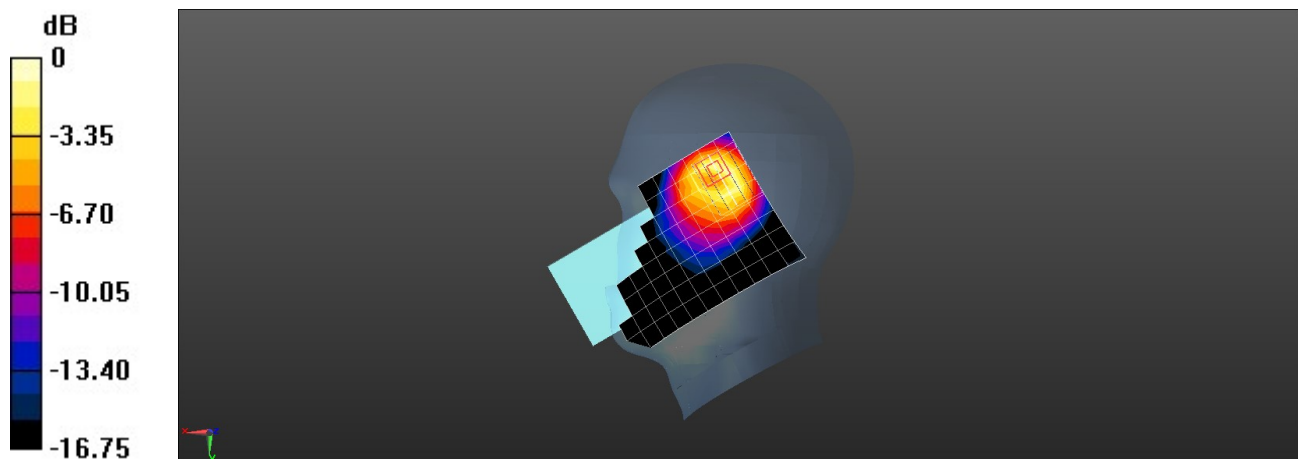
Peak SAR (extrapolated) = 0.205 W/kg

**SAR(1 g) = 0.094 W/kg; SAR(10 g) = 0.049 W/kg**

Smallest distance from peaks to all points 3 dB below = 5.8 mm

Ratio of SAR at M2 to SAR at M1 = 44.8%

Maximum value of SAR (measured) = 0.165 W/kg



0 dB = 0.165 W/kg = -7.83 dBW/kg

Place of testing: HUAWEI SAR/HAC Lab

### NEN-LX3 GSM850 190CH Left Cheek-Main Antenna

**DUT: NEN-LX3; Type: Smart Phone; Serial: SAR3**

Communication System: UID 0, HW-GSM\GPRS\EGPRS-1TS (0); Frequency: 836.6 MHz; Duty Cycle: 1:8.30042

Medium parameters used:  $f = 837$  MHz;  $\sigma = 0.936$  S/m;  $\epsilon_r = 41.533$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN7381; ConvF(10.1, 10.1, 10.1) @ 836.6 MHz; Calibrated: 2020-11-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1235; Calibrated: 2020-11-27
- Phantom: SAM1; Type: SAM; Serial: 1475
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Configuration/Body/Area Scan (9x15x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 0.121 W/kg

**Configuration/Body/Zoom Scan (6x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 4.030 V/m; Power Drift = -0.03 dB

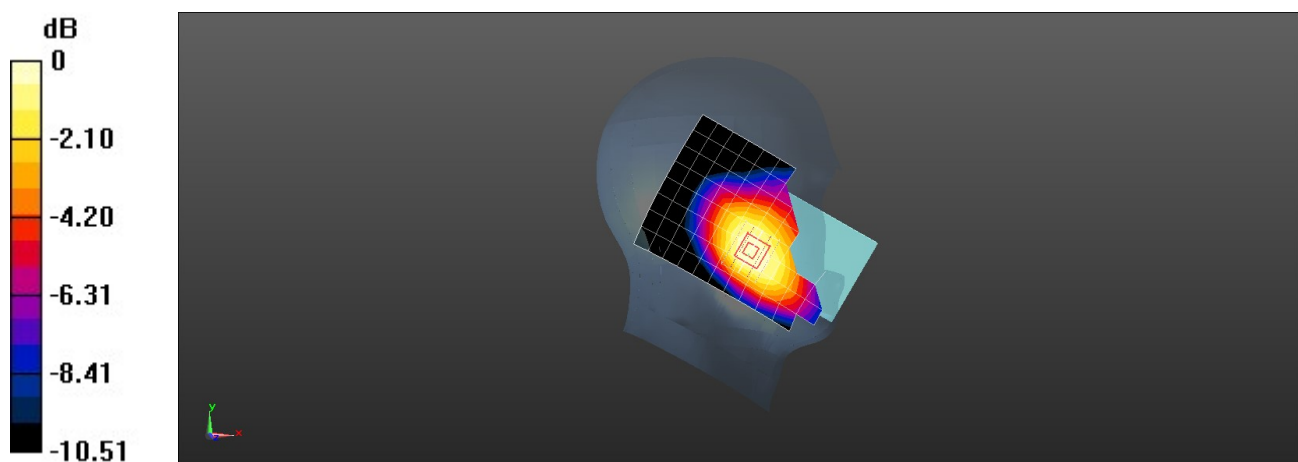
Peak SAR (extrapolated) = 0.128 W/kg

**SAR(1 g) = 0.099 W/kg; SAR(10 g) = 0.074 W/kg**

Smallest distance from peaks to all points 3 dB below = 21 mm

Ratio of SAR at M2 to SAR at M1 = 77.5%

Maximum value of SAR (measured) = 0.118 W/kg



0 dB = 0.118 W/kg = -9.28 dBW/kg

Place of testing: HUAWEI SAR/HAC Lab

## NEN-LX3 GSM850 190CH Back Side 15mm-Second Antenna

**DUT: NEN-LX3; Type: Smart Phone; Serial: SAR3**

Communication System: UID 0, HW-GSM\GPRS\EGPRS-1TS (0); Frequency: 836.6 MHz; Duty Cycle: 1:8.30042

Medium parameters used:  $f = 837$  MHz;  $\sigma = 0.936$  S/m;  $\epsilon_r = 41.533$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7381; ConvF(10.1, 10.1, 10.1) @ 836.6 MHz; Calibrated: 2020-11-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1235; Calibrated: 2020-11-27
- Phantom: SAM1; Type: SAM; Serial: 1475
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Configuration/Body/Area Scan (9x15x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm=  
Maximum value of SAR (measured) = 0.0452 W/kg

**Configuration/Body/Zoom Scan (6x6x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 4.666 V/m; Power Drift = -0.07 dB

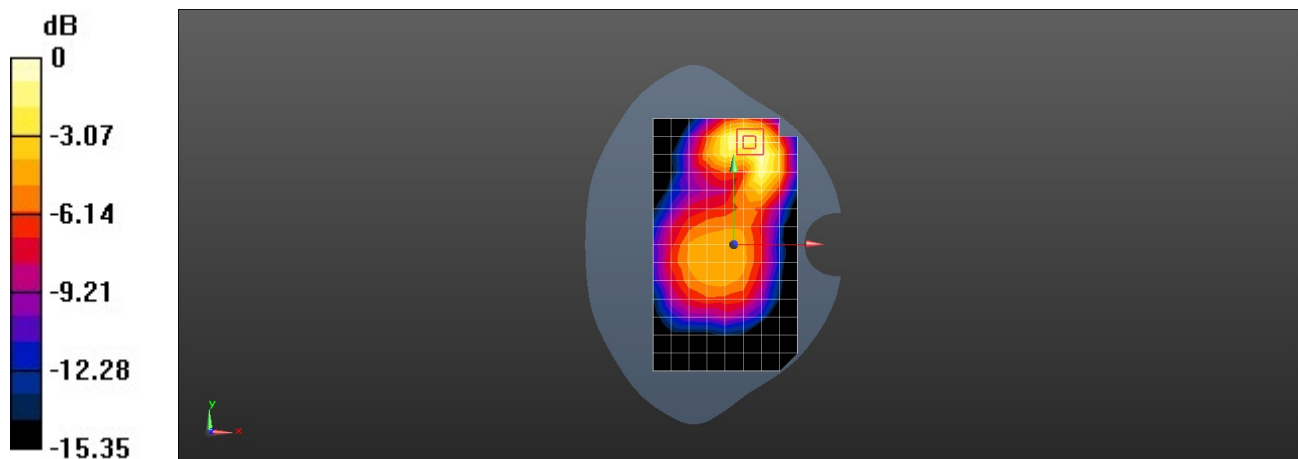
Peak SAR (extrapolated) = 0.0590 W/kg

**SAR(1 g) = 0.033 W/kg; SAR(10 g) = 0.01 W/kg**

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 54.8%

Maximum value of SAR (measured) = 0.0492 W/kg



0 dB = 0.0492 W/kg = -13.08 dBW/kg

Place of testing: HUAWEI SAR/HAC Lab

### NEN-LX3 GSM850 190CH Back Side 15mm-Main Antenna

**DUT: NEN-LX3; Type: Smart Phone; Serial: SAR3**

Communication System: UID 0, HW-GSM\GPRS\EGPRS-1TS (0); Frequency: 836.6 MHz; Duty Cycle: 1:8.30042

Medium parameters used:  $f = 837$  MHz;  $\sigma = 0.936$  S/m;  $\epsilon_r = 41.533$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7381; ConvF(10.1, 10.1, 10.1) @ 836.6 MHz; Calibrated: 2020-11-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1235; Calibrated: 2020-11-27
- Phantom: SAM1; Type: SAM; Serial: 1475
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Configuration/Body/Area Scan (8x14x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 0.255 W/kg

**Configuration/Body/Zoom Scan (6x6x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 13.19 V/m; Power Drift = 0.00 dB

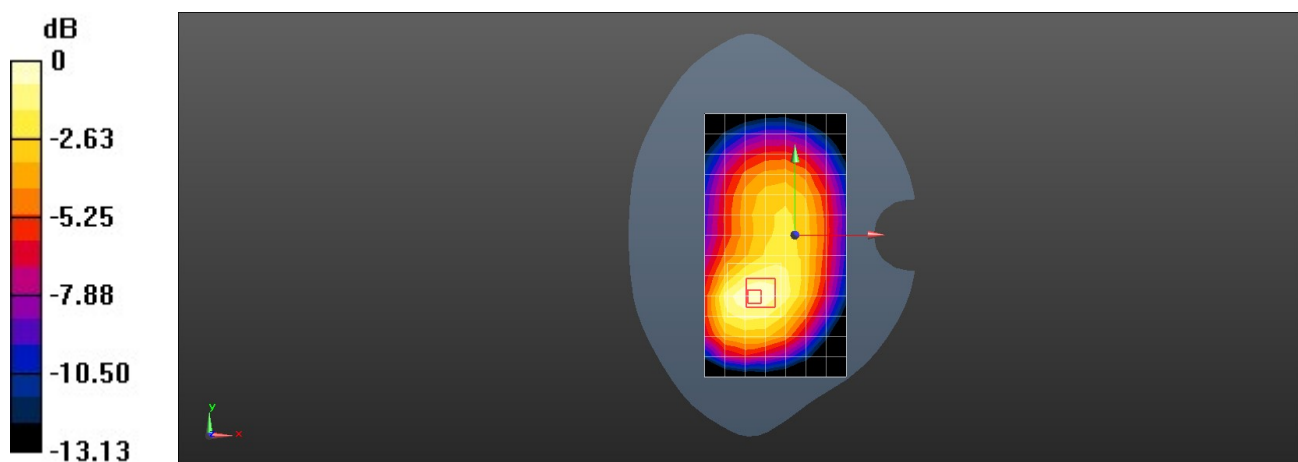
Peak SAR (extrapolated) = 0.291 W/kg

**SAR(1 g) = 0.192 W/kg; SAR(10 g) = 0.129 W/kg**

Smallest distance from peaks to all points 3 dB below = 23.8 mm

Ratio of SAR at M2 to SAR at M1 = 66.1%

Maximum value of SAR (measured) = 0.253 W/kg



0 dB = 0.253 W/kg = -5.97 dBW/kg

Place of testing: HUAWEI SAR/HAC Lab

## NEN-LX3 GSM850 GPRS 2TS 190CH Back Side 10mm-Second Antenna

**DUT: NEN-LX3; Type: Smart Phone; Serial: SAR3**

Communication System: UID 0, HW-GSM\GPRS\EGPRS-2TS (0); Frequency: 836.6 MHz; Duty Cycle: 1:4.10015

Medium parameters used:  $f = 837$  MHz;  $\sigma = 0.936$  S/m;  $\epsilon_r = 41.533$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7381; ConvF(10.1, 10.1, 10.1) @ 836.6 MHz; Calibrated: 2020-11-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1235; Calibrated: 2020-11-27
- Phantom: SAM1; Type: SAM; Serial: 1475
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Configuration/Body/Area Scan (8x14x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 0.120 W/kg

**Configuration/Body/Zoom Scan (6x6x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 5.440 V/m; Power Drift = -0.03 dB

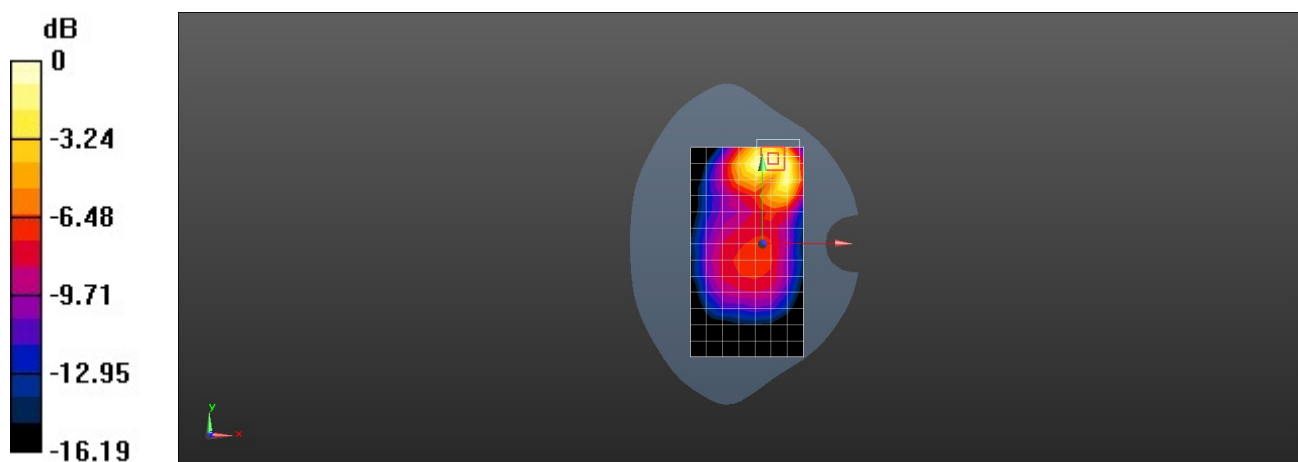
Peak SAR (extrapolated) = 0.169 W/kg

**SAR(1 g) = 0.085 W/kg; SAR(10 g) = 0.045 W/kg**

Smallest distance from peaks to all points 3 dB below = 9.7 mm

Ratio of SAR at M2 to SAR at M1 = 51.9%

Maximum value of SAR (measured) = 0.130 W/kg



0 dB = 0.130 W/kg = -8.86 dBW/kg

Place of testing: HUAWEI SAR/HAC Lab

### NEN-LX3 GSM850 GPRS 2TS 190CH Back Side 10mm-Main Antenna

**DUT: NEN-LX3; Type: Smart Phone; Serial: SAR3**

Communication System: UID 0, HW-GSM\GPRS\EGPRS-2TS (0); Frequency: 836.6 MHz; Duty Cycle: 1:4.10015

Medium parameters used:  $f = 837$  MHz;  $\sigma = 0.936$  S/m;  $\epsilon_r = 41.533$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7381; ConvF(10.1, 10.1, 10.1) @ 836.6 MHz; Calibrated: 2020-11-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1235; Calibrated: 2020-11-27
- Phantom: SAM1; Type: SAM; Serial: 1475
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Configuration/Body/Area Scan (8x14x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 0.196 W/kg

**Configuration/Body/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 9.805 V/m; Power Drift = -0.00 dB

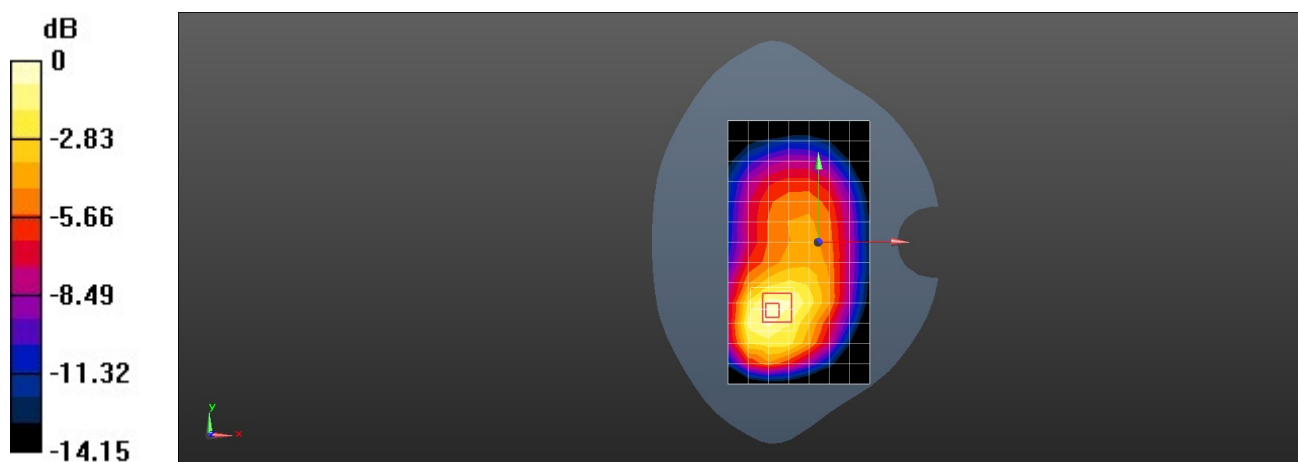
Peak SAR (extrapolated) = 0.261 W/kg

**SAR(1 g) = 0.158 W/kg; SAR(10 g) = 0.099 W/kg**

Smallest distance from peaks to all points 3 dB below = 18.1 mm

Ratio of SAR at M2 to SAR at M1 = 62.6%

Maximum value of SAR (measured) = 0.218 W/kg



0 dB = 0.218 W/kg = -6.62 dBW/kg

Place of testing: HUAWEI SAR/HAC Lab

## NEN-LX3 GSM1900 661CH Left Tilt-Second Antenna

**DUT: NEN-LX3; Type: Smart Phone; Serial: SAR5**

Communication System: UID 0, HW-GSM\GPRS\EGPRS-1TS (0); Frequency: 1880 MHz; Duty Cycle: 1:8.30042

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.449$  S/m;  $\epsilon_r = 38.141$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN7505; ConvF(8.03, 8.03, 8.03) @ 1880 MHz; Calibrated: 2020-04-29
- Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1492; Calibrated: 2020-07-29
- Phantom: SAM7; Type: SAM; Serial: 1594
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Configuration/Head/Area Scan (9x15x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 0.904 W/kg

**Configuration/Head/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 13.46 V/m; Power Drift = 0.00 dB

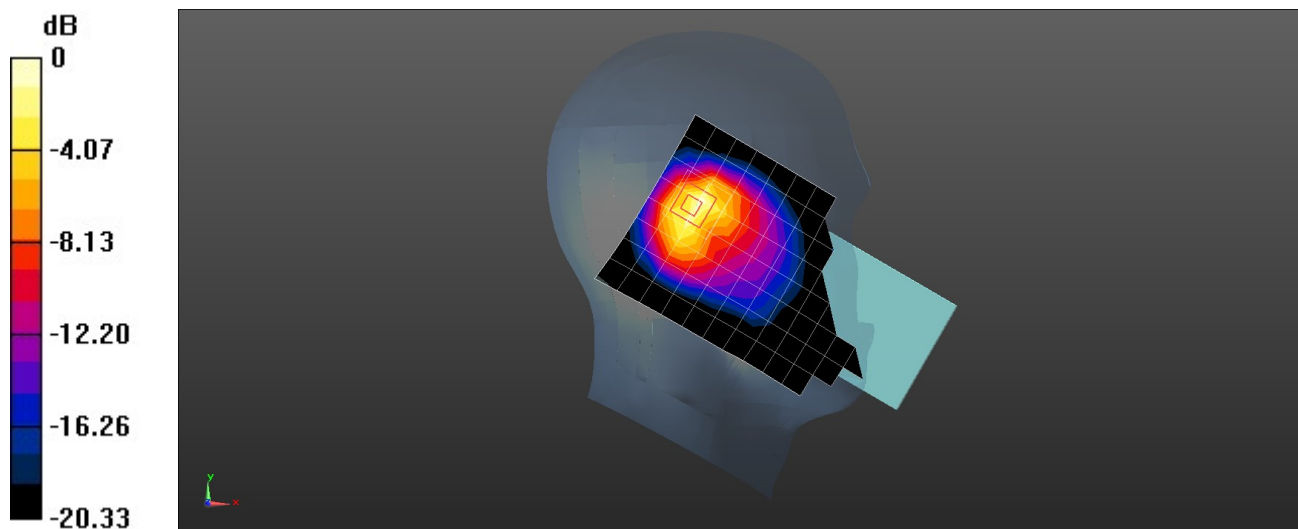
Peak SAR (extrapolated) = 1.22 W/kg

**SAR(1 g) = 0.616 W/kg; SAR(10 g) = 0.305 W/kg**

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

Ratio of SAR at M2 to SAR at M1 = 50.6%

Maximum value of SAR (measured) = 1.00 W/kg



0 dB = 1.00 W/kg = 0.00 dBW/kg



Place of testing: HUAWEI SAR/HAC Lab

## NEN-LX3 GSM1900 661CH Right Cheek-Main Antenna

**DUT: NEN-LX3; Type: Smart Phone; Serial: SAR5**

Communication System: UID 0, HW-GSM\GPRS\EGPRS-1TS (0); Frequency: 1880 MHz; Duty Cycle: 1:8.30042

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.449$  S/m;  $\epsilon_r = 38.141$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN7505; ConvF(8.03, 8.03, 8.03) @ 1880 MHz; Calibrated: 2020-04-29
- Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1492; Calibrated: 2020-07-29
- Phantom: SAM7; Type: SAM; Serial: 1594
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Configuration/Head/Area Scan (9x15x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm=  
Maximum value of SAR (measured) = 0.0396 W/kg

**Configuration/Head/Zoom Scan (6x6x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 1.940 V/m; Power Drift = -0.0 dB

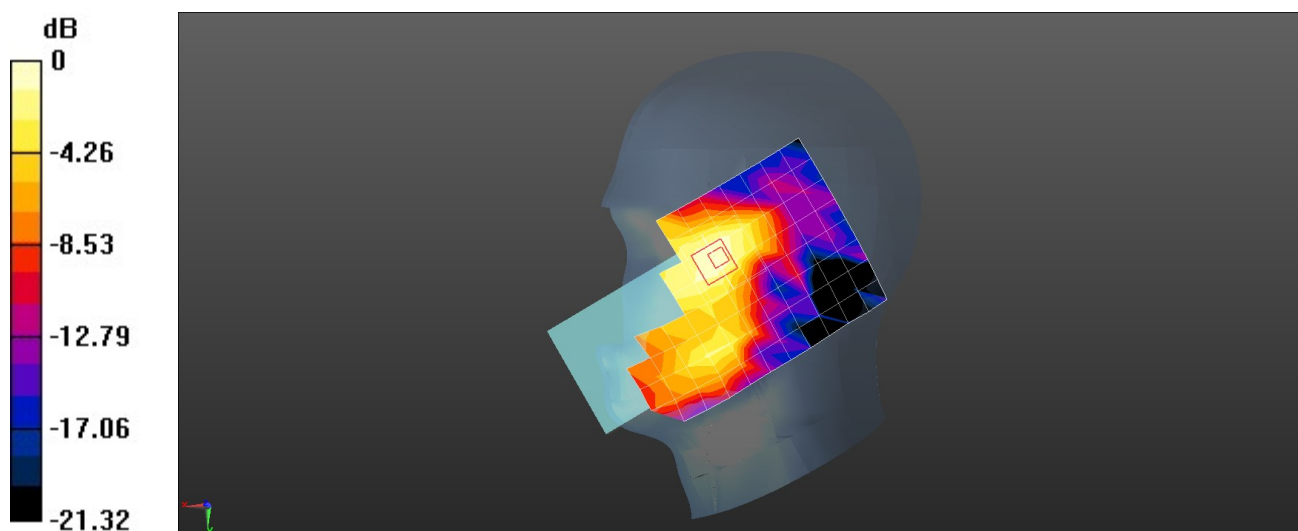
Peak SAR (extrapolated) = 0.0530 W/kg

**SAR(1 g) = 0.034 W/kg; SAR(10 g) = 0.021 W/kg**

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 66.6%

Maximum value of SAR (measured) = 0.0459 W/kg



0 dB = 0.0459 W/kg = -13.38 dBW/kg

Place of testing: HUAWEI SAR/HAC Lab

## NEN-LX3 GSM1900 661CH Back Side 15mm-Second Antenna

**DUT: NEN-LX3; Type: Smart Phone; Serial: SAR5**

Communication System: UID 0, HW-GSM\GPRS\EGPRS-1TS (0); Frequency: 1880 MHz; Duty Cycle: 1:8.30042

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.449$  S/m;  $\epsilon_r = 38.141$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7505; ConvF(8.03, 8.03, 8.03) @ 1880 MHz; Calibrated: 2020-04-29
- Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1492; Calibrated: 2020-07-29
- Phantom: SAM7; Type: SAM; Serial: 1594
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Configuration/Body/Area Scan (9x15x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 0.249 W/kg

**Configuration/Body/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 5.722 V/m; Power Drift = -0.07 dB

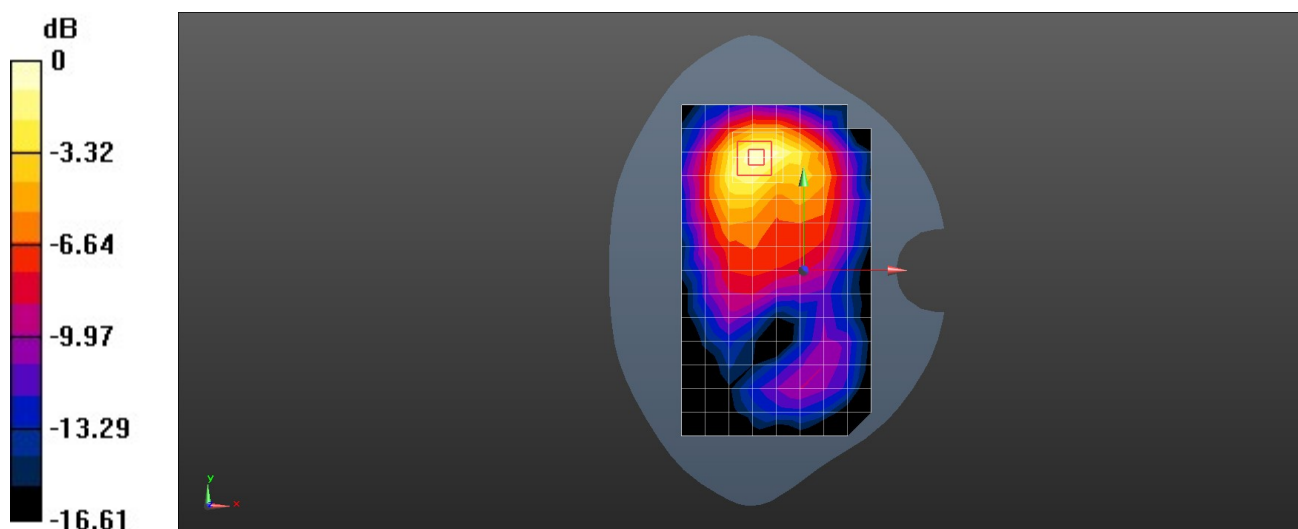
Peak SAR (extrapolated) = 0.307 W/kg

**SAR(1 g) = 0.185 W/kg; SAR(10 g) = 0.108 W/kg**

Smallest distance from peaks to all points 3 dB below = 13.7 mm

Ratio of SAR at M2 to SAR at M1 = 60.9%

Maximum value of SAR (measured) = 0.266 W/kg



0 dB = 0.266 W/kg = -5.75 dBW/kg

Place of testing: HUAWEI SAR/HAC Lab

## **NEN-LX3 GSM1900 661CH Back Side 15mm-Main Antenna**

**DUT: NEN-LX3; Type: Smart Phone; Serial: SAR5**

Communication System: UID 0, HW-GSM\GPRS\EGPRS-1TS (0); Frequency: 1880 MHz; Duty Cycle: 1:8.30042

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.449$  S/m;  $\epsilon_r = 38.141$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7505; ConvF(8.03, 8.03, 8.03) @ 1880 MHz; Calibrated: 2020-04-29
- Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 31.0$
- Electronics: DAE4 Sn1492; Calibrated: 2020-07-29
- Phantom: SAM7; Type: SAM; Serial: 1594
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

**Configuration/Body/Area Scan (9x15x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 0.117 W/kg

**Configuration/Body/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 4.212 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.135 W/kg

**SAR(1 g) = 0.083 W/kg; SAR(10 g) = 0.050 W/kg**

Smallest distance from peaks to all points 3 dB below = 14.8 mm

Ratio of SAR at M2 to SAR at M1 = 60.4%

Maximum value of SAR (measured) = 0.114 W/kg

**Configuration/Body/Zoom Scan (5x5x7)/Cube 1:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 4.212 V/m; Power Drift = -0.05 dB

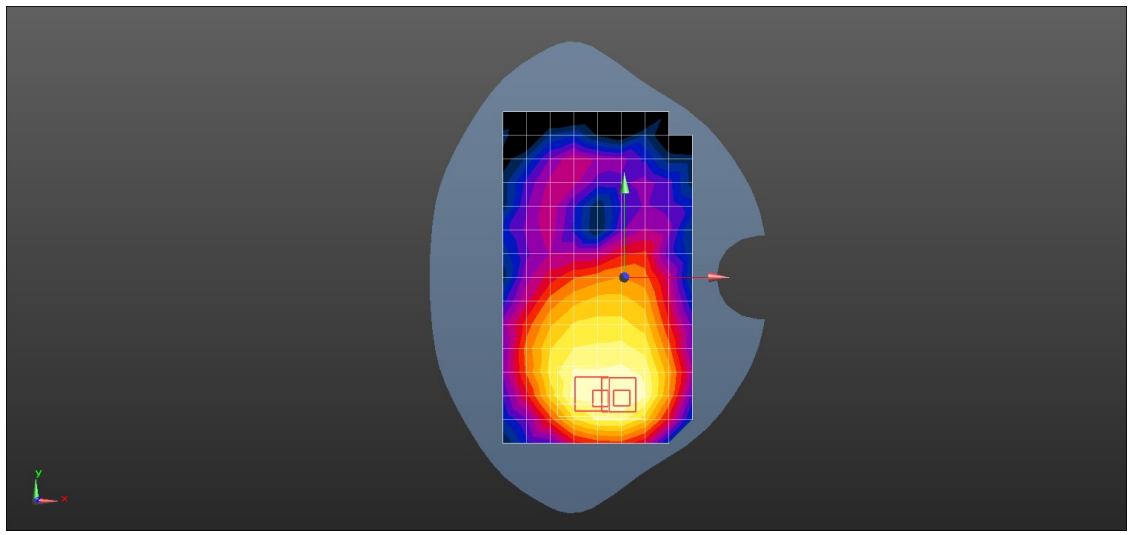
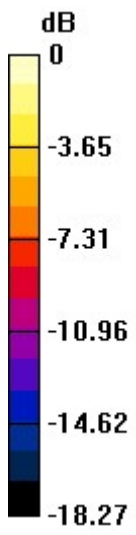
Peak SAR (extrapolated) = 0.128 W/kg

**SAR(1 g) = 0.074 W/kg; SAR(10 g) = 0.045 W/kg**

Smallest distance from peaks to all points 3 dB below = 21.5 mm

Ratio of SAR at M2 to SAR at M1 = 59.1%

Maximum value of SAR (measured) = 0.108 W/kg



0 dB = 0.108 W/kg = -9.67 dBW/kg