

Appendix A Verification Plots

Appendix A.1 Verification Plots for Verification 750MHz

Date/Time: 2025-06-25 10:51:01

Test Laboratory : SGS Korea (Gunpo Laboratory)
File Name: [Verification 750MHz 2025 06 25 da53:0](#)

Input Power: 100 mW

DUT: Dipole 750 MHz D750V3; Type: D750V3; Serial: D750V3 - SN:1085

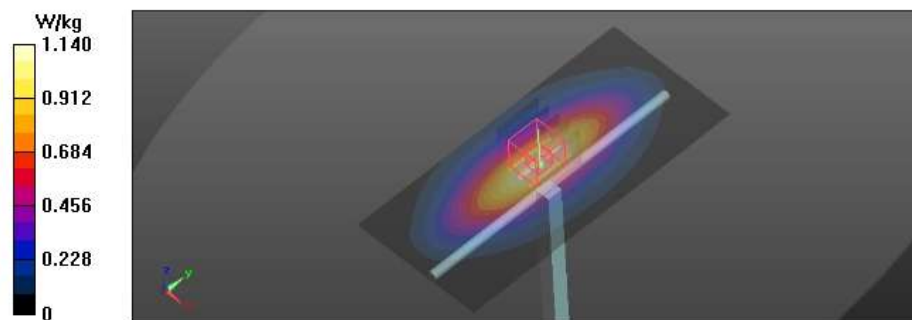
Communication System: UID 0, CW(0) (0); Frequency: 750 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 750$ MHz; $\sigma = 0.912$ S/m; $\epsilon_r = 42.166$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY52 Configuration:

- Probe: EX3DV4 - SN7412; ConvF(10.35, 9.68, 9.86) @ 750 MHz; Calibrated: 2025-03-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1595; Calibrated: 2025-01-21
- Phantom: ELI V8.0 (20deg probe tilt); Type: QD OVA 004 Ax; Serial: 2246
- DASY52 52.10.4(1527)SEMCAD X 14.6.14(7483)

Verification/750 MHz Verification/Area Scan (61x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.14 W/kg

Verification/750 MHz Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 36.66 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 1.30 W/kg
SAR(1 g) = 0.888 W/kg; SAR(10 g) = 0.590 W/kg
Smallest distance from peaks to all points 3 dB below = 17.6 mm
Ratio of SAR at M2 to SAR at M1 = 68%
Maximum value of SAR (measured) = 1.17 W/kg



Appendix A.2 Verification Plots for Verification 835MHz

Date/Time: 2025-06-26 10:03:07

Test Laboratory : SGS Korea (Gunpo Laboratory)
File Name: [Verification 835MHz 2025_06_26.da53:0](#)

Input Power: 100 mW

DUT: Dipole 835 MHz D835V2; Type: D835V2; Serial: D835V2 - SN4d138

Communication System: UID 0, CW(0) (0); Frequency: 835 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.934 \text{ S/m}$; $\epsilon_r = 42.584$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY52 Configuration:

- Probe: EX3DV4 - SN7412; ConvF(9.63, 9, 9.17) @ 835 MHz; Calibrated: 2025-03-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1595; Calibrated: 2025-01-21
- Phantom: ELI V8.0 (20deg probe tilt); Type: QD OVA 004 Ax; Serial: 2246
- DASY52 52.10.4(1527)SEMCAD X 14.6.14(7483)

Verification/835 MHz Verification/Area Scan (61x131x1); Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 1.29 W/kg

Verification/835 MHz Verification/Zoom Scan (5x5x7)/Cube 0; Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 41.26 V/m; Power Drift = 0.12 dB

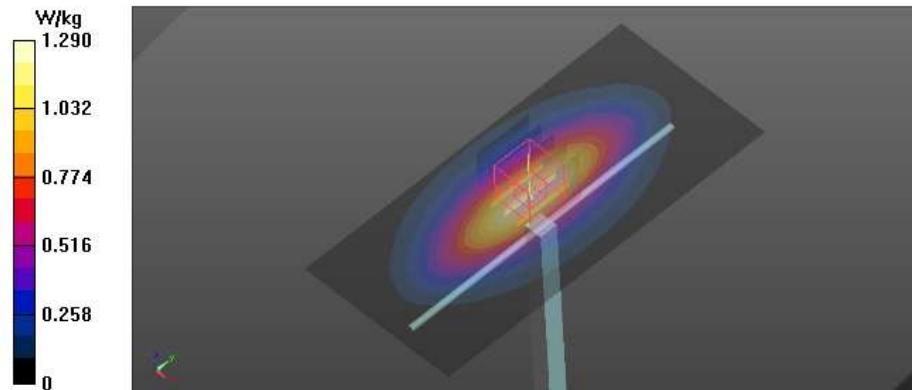
Peak SAR (extrapolated) = 1.45 W/kg

SAR(1 g) = 0.986 W/kg; SAR(10 g) = 0.649 W/kg

Smallest distance from peaks to all points 3 dB below = 17.6 mm

Ratio of SAR at M2 to SAR at M1 = 67.4%

Maximum value of SAR (measured) = 1.30 W/kg



Date/Time: 2025-06-27 08:53:44

Test Laboratory : SGS Korea (Gunpo Laboratory)
File Name: [Verification 835MHz 2025 06 27.da53:0](#)

Input Power: 100 mW

DUT: Dipole 835 MHz D835V2; Type: D835V2; Serial: D835V2 - SN4d138

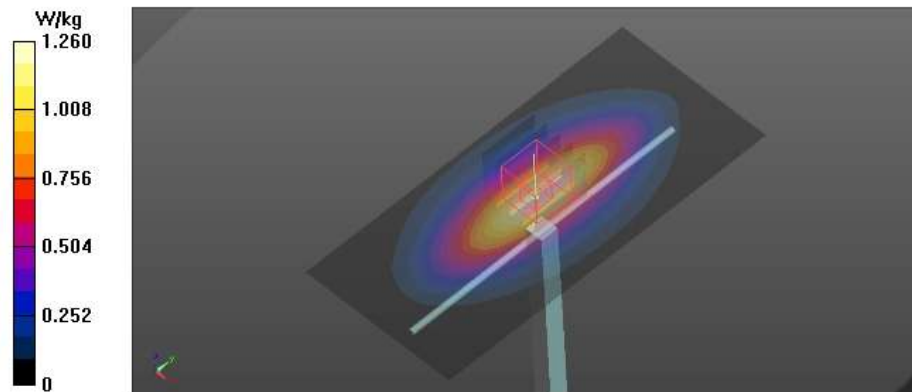
Communication System: UID 0, CW(0) (0); Frequency: 835 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.911 \text{ S/m}$; $\epsilon_r = 41.337$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY52 Configuration:

- Probe: EX3DV4 - SN7412; ConvF(9.63, 9, 9.17) @ 835 MHz; Calibrated: 2025-03-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1595; Calibrated: 2025-01-21
- Phantom: ELI V8.0 (20deg probe tilt); Type: QD OVA 004 Ax; Serial: 2246
- DASY52 52.10.4(1527)SEMCAD X 14.6.14(7483)

Verification/835 MHz Verification/Area Scan (61x131x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 1.26 W/kg

Verification/835 MHz Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
Reference Value = 38.81 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 1.35 W/kg
SAR(1 g) = 0.912 W/kg; SAR(10 g) = 0.601 W/kg
Smallest distance from peaks to all points 3 dB below = 17.9 mm
Ratio of SAR at M2 to SAR at M1 = 67.3%
Maximum value of SAR (measured) = 1.21 W/kg



Appendix A.3 Verification Plots for Verification 1800MHz

Date/Time: 2025-06-19 14:35:51

Test Laboratory : SGS Korea (Gunpo Laboratory)
 File Name: [Verification 1800MHz 2025 06 19.da53:0](#)

Input Power: 100 mW

DUT: Dipole 1800 MHz D1800V2; Type: D1800V2; Serial: D1800V2 - SN:2d193

Communication System: UID 0, CW(0) (0); Frequency: 1800 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 1800$ MHz; $\sigma = 1.451$ S/m; $\epsilon_r = 39.272$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY52 Configuration:

- Probe: EX3DV4 - SN7412; ConvF(8.39, 7.84, 7.99) @ 1800 MHz; Calibrated: 2025-03-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1595; Calibrated: 2025-01-21
- Phantom: ELI V8.0 (20deg probe tilt); Type: QD OVA 004 Ax; Serial: 2246
- DASY52 52.10.4(1527)SEMCAD X 14.6.14(7483)

Verification/1800 MHz Verification/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Maximum value of SAR (interpolated) = 6.23 W/kg

Verification/1800 MHz Verification/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 67.73 V/m; Power Drift = 0.00 dB

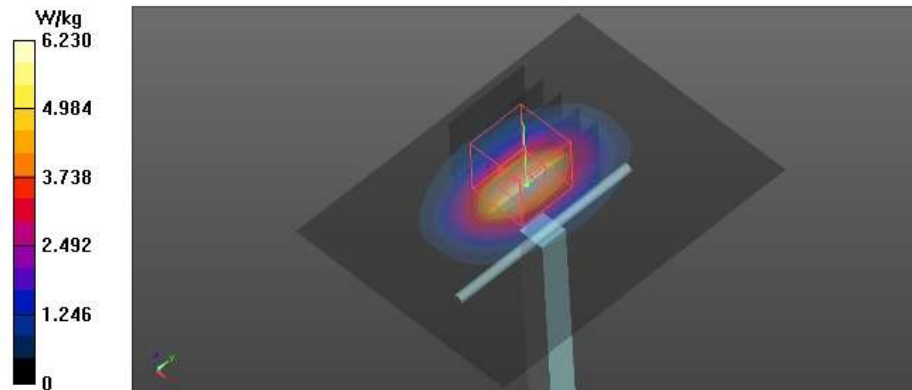
Peak SAR (extrapolated) = 6.73 W/kg

SAR(1 g) = 3.89 W/kg; SAR(10 g) = 2.08 W/kg

Smallest distance from peaks to all points 3 dB below = 10.1 mm

Ratio of SAR at M2 to SAR at M1 = 57.5%

Maximum value of SAR (measured) = 5.84 W/kg



Appendix A.4 Verification Plots for Verification 1900MHz

Date/Time: 2025-06-19 09:50:09

Test Laboratory : SGS Korea (Gunpo Laboratory)
 File Name: [Verification 1900MHz 2025-06-19.da53:0](#)

Input Power: 100 mW

DUT: Dipole 1900 MHz D1900V2; Type: D1900V2; Serial: D1900V2 - SN:5d158

Communication System: UID 0, CW(0) (0); Frequency: 1900 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.44$ S/m; $\epsilon_r = 39.687$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY52 Configuration:

- Probe: EX3DV4 - SN7412; ConvF(8.28, 7.74, 7.88) @ 1900 MHz; Calibrated: 2025-03-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1595; Calibrated: 2025-01-21
- Phantom: ELI V8.0 (20deg probe tilt); Type: QD OVA 004 Ax; Serial: 2246
- DASY52 52.10.4(1527)SEMCAD X 14.6.14(7483)

Verification/Verification 1900MHz/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Maximum value of SAR (interpolated) = 5.16 W/kg

Verification/Verification 1900MHz/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 71.50 V/m; Power Drift = -0.06 dB

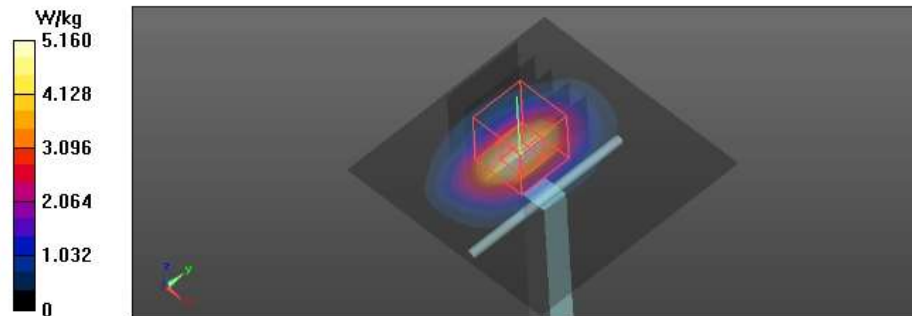
Peak SAR (extrapolated) = 7.56 W/kg

SAR(1 g) = 4.19 W/kg; SAR(10 g) = 2.18 W/kg

Smallest distance from peaks to all points 3 dB below = 10.7 mm

Ratio of SAR at M2 to SAR at M1 = 55.5%

Maximum value of SAR (measured) = 6.41 W/kg



Appendix A.5 Verification Plots for Verification 2600MHz

Date/Time: 2025-06-23 10:16:47

Test Laboratory : SGS Korea (Gunpo Laboratory)
 File Name: [Verification 2600MHz 2025 06 23.da53:0](#)

Input Power: 100 mW

DUT: Dipole 2600 MHz D2600V2; Type: D2600V2; Serial: D2600V2 - SN:1124

Communication System: UID 0, CW(0) (0); Frequency: 2600 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 2600$ MHz; $\sigma = 2.033$ S/m; $\epsilon_r = 38.968$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY52 Configuration:

- Probe: EX3DV4 - SN7412; ConvF(7.77, 7.26, 7.39) @ 2600 MHz; Calibrated: 2025-03-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1595; Calibrated: 2025-01-21
- Phantom: ELI V8.0 (20deg probe tilt); Type: QD OVA 004 Ax; Serial: 2246
- DASY52 52.10.4(1527)SEMCAD X 14.6.14(7483)

Verification/2600 MHz Verification/Area Scan (91x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
 Maximum value of SAR (interpolated) = 9.72 W/kg

Verification/2600 MHz Verification/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 68.19 V/m; Power Drift = 0.12 dB

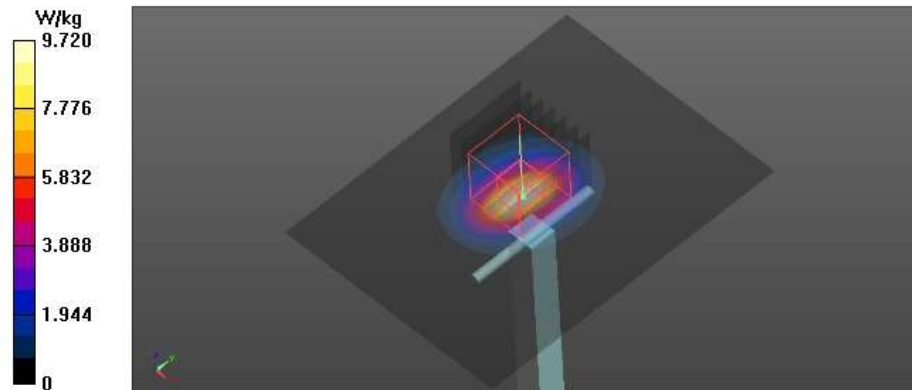
Peak SAR (extrapolated) = 12.1 W/kg

SAR(1 g) = 5.73 W/kg; SAR(10 g) = 2.54 W/kg

Smallest distance from peaks to all points 3 dB below = 8.5 mm

Ratio of SAR at M2 to SAR at M1 = 47.2%

Maximum value of SAR (measured) = 9.80 W/kg



Appendix B Test Plots

Appendix B.1 Test Plots for WCDMA2 Cellular Ant3

Date/Time: 2025-06-19 10:47:59

Test Laboratory : SGS Korea (Gunpo Laboratory)
 File Name: [WCDMA2 Cellular Ant3 Right Edge CH9400.da53:0](#)

DUT: TFBMEIBN3EU; Type: Telematics device; Serial: 503VIPAH25176

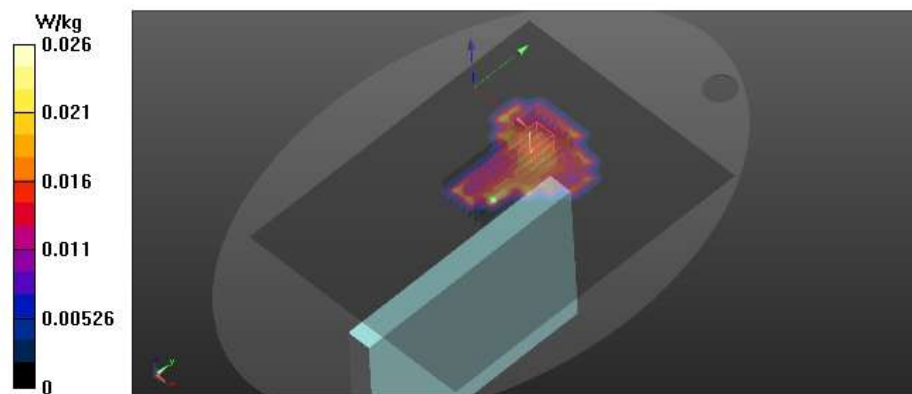
Communication System: UID 0, WCDMA (0); Frequency: 1880 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.422$ S/m; $\epsilon_r = 39.808$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY52 Configuration:

- Probe: EX3DV4 - SN7412; ConvF(8.28, 7.74, 7.88) @ 1880 MHz; Calibrated: 2025-03-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1595; Calibrated: 2025-01-21
- Phantom: ELI V8.0 (20deg probe tilt); Type: QD OVA 004 Ax; Serial: 2246
- DASY52 52.10.4(1527)SEMCAD X 14.6.14(7483)

Body/WCDMA2 Cellular Ant3_Right Edge_CH9400/Area Scan (181x241x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Maximum value of SAR (interpolated) = 0.0263 W/kg

Body/WCDMA2 Cellular Ant3_Right Edge_CH9400/Zoom Scan (7x16x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
 Reference Value = 3.313 V/m; Power Drift = -0.01 dB
 Peak SAR (extrapolated) = 0.0310 W/kg
SAR(1 g) = 0.015 W/kg; SAR(10 g) = 0.00727 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 = 42.3%
 Maximum value of SAR (measured) = 0.0242 W/kg



Appendix B.2 Test Plots for WCDMA5 Cellular Ant3

Date/Time: 2025-06-26 15:15:08

Test Laboratory : SGS Korea (Gunpo Laboratory)

File Name: [WCDMA5 Cellular Ant3 Front CH4183.da53:0](#)

DUT: TFBMEIBN3EU; Type: Telematics device; Serial: 503VIPAH25176

Communication System: UID 0, WCDMA (0); Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 837$ MHz; $\sigma = 0.936$ S/m; $\epsilon_r = 42.555$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY52 Configuration:

- Probe: EX3DV4 - SN7412; ConvF(9.63, 9, 9.17) @ 836.6 MHz; Calibrated: 2025-03-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1595; Calibrated: 2025-01-21
- Phantom: ELI V8.0 (20deg probe tilt); Type: QD OVA 004 Ax; Serial: 2246
- DASY52 52.10.4(1527)SEMCAD X 14.6.14(7483)

Body/WCDMA5 Cellular Ant3_Front_CH4183/Area Scan (171x201x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.0256 W/kg

Body/WCDMA5 Cellular Ant3_Front_CH4183/Zoom Scan (6x9x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.217 V/m; Power Drift = -0.08 dB

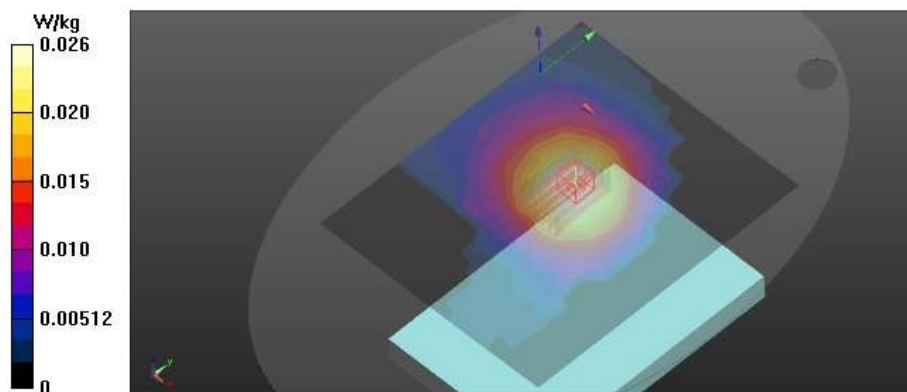
Peak SAR (extrapolated) = 0.0300 W/kg

SAR(1 g) = 0.021 W/kg; SAR(10 g) = 0.015 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 = 68.4%

Maximum value of SAR (measured) = 0.0267 W/kg



Appendix B.3 Test Plots for LTE7 Cellular Ant3

Date/Time: 2025-06-23 13:43:55

Test Laboratory : SGS Korea (Gunpo Laboratory)

File Name: [LTE7 Cellular Ant3 Right Edge 20MHz 1@50 QPSK CH21100.da53:0](#)

DUT: TFBMEIBN3EU; Type: Telematics device; Serial: 503VIPAH25176

Communication System: UID 0, LTE FDD (0); Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2535 \text{ MHz}$; $\sigma = 1.958 \text{ S/m}$; $\epsilon_r = 39.173$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY52 Configuration:

- Probe: EX3DV4 - SN7412; ConvF(7.77, 7.26, 7.39) @ 2535 MHz; Calibrated: 2025-03-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1595; Calibrated: 2025-01-21
- Phantom: ELI V8.0 (20deg probe tilt); Type: QD OVA 004 Ax; Serial: 2246
- DASY52 52.10.4(1527)SEMCAD X 14.6.14(7483)

Body/LTE7 Cellular Ant3 Right Edge 20MHz 1@50 QPSK CH21100/Area Scan (181x261x1):

Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.0388 W/kg

Body/LTE7 Cellular Ant3 Right Edge 20MHz 1@50 QPSK CH21100/Zoom Scan (13x15x7)/Cube

0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 3.185 V/m; Power Drift = 0.10 dB

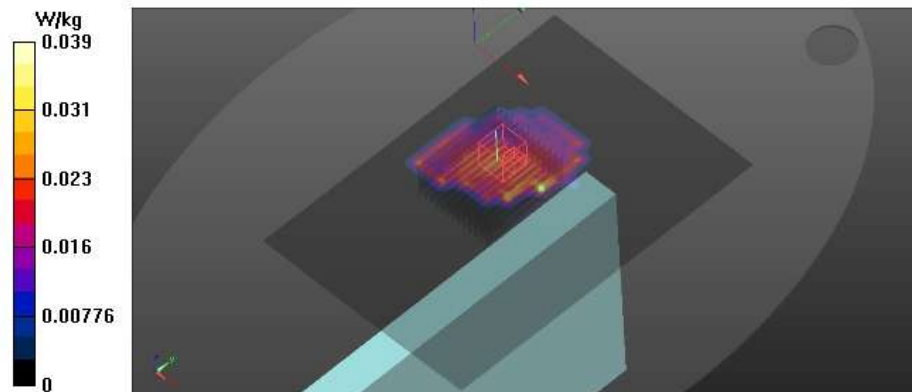
Peak SAR (extrapolated) = 0.0490 W/kg

SAR(1 g) = 0.013 W/kg; SAR(10 g) = 0.00562 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 = 32.1%

Maximum value of SAR (measured) = 0.0242 W/kg



Appendix B.4 Test Plots for LTE13 Cellular Ant3

Date/Time: 2025-06-27 10:35:22

Test Laboratory : SGS Korea (Gunpo Laboratory)

File Name: [LTE13 Cellular Ant3 Front 10MHz 1@49 QPSK CH23230.da53:0](#)

DUT: TFBMEIBN3EU; Type: Telematics device; Serial: 503VIPAH25176

Communication System: UID 0, LTE FDD (0); Frequency: 782 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 782 \text{ MHz}$; $\sigma = 0.859 \text{ S/m}$; $\epsilon_r = 42.075$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY52 Configuration:

- Probe: EX3DV4 - SN7412; ConvF(10.35, 9.68, 9.86) @ 782 MHz; Calibrated: 2025-03-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1595; Calibrated: 2025-01-21
- Phantom: ELI V8.0 (20deg probe tilt); Type: QD OVA 004 Ax; Serial: 2246
- DASY52 52.10.4(1527)SEMCAD X 14.6.14(7483)

Body/LTE13 Cellular Ant3 Front 10MHz 1@49 QPSK CH23230/Area Scan (171x201x1):

Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.0386 W/kg

Body/LTE13 Cellular Ant3 Front 10MHz 1@49 QPSK CH23230/Zoom Scan (8x11x7)/Cube 0:

Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 6.717 V/m ; Power Drift = 0.03 dB

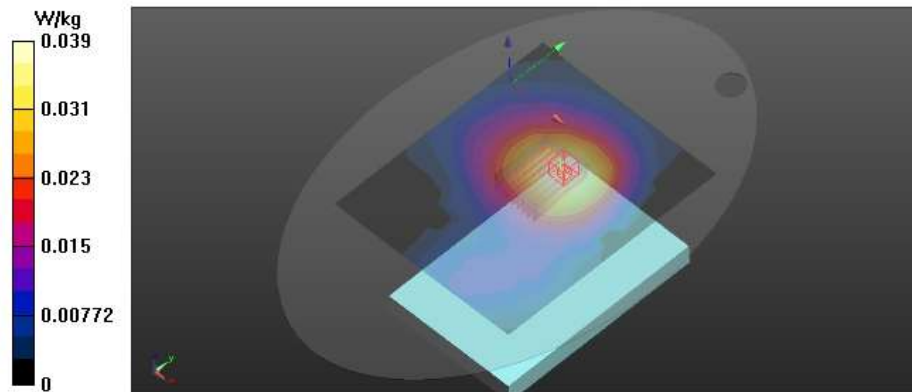
Peak SAR (extrapolated) = 0.0380 W/kg

SAR(1 g) = 0.028 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 = 72%

Maximum value of SAR (measured) = 0.0343 W/kg



Appendix B.5 Test Plots for LTE66 Cellular Ant3

Date/Time: 2025-06-19 16:29:12

Test Laboratory : SGS Korea (Gunpo Laboratory)

File Name: [LTE66 Cellular Ant3 Right Edge 20MHz 1@99 QPSK CH132322.da53:0](#)

DUT: TFBMEIBN3EU; Type: Telematics device; Serial: 503VIPAH25176

Communication System: UID 0, LTE FDD (0); Frequency: 1745 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1745$ MHz; $\sigma = 1.39$ S/m; $\epsilon_r = 39.554$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY52 Configuration:

- Probe: EX3DV4 - SN7412; ConvF(8.39, 7.84, 7.99) @ 1745 MHz; Calibrated: 2025-03-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1595; Calibrated: 2025-01-21
- Phantom: ELI V8.0 (20deg probe tilt); Type: QD OVA 004 Ax; Serial: 2246
- DASY52 52.10.4(1527)SEMCAD X 14.6.14(7483)

Body/LTE66 Cellular Ant3 Right Edge 20MHz 1@99 QPSK CH132322/Area Scan (181x201x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.0485 W/kg

Body/LTE66 Cellular Ant3 Right Edge 20MHz 1@99 QPSK CH132322/Zoom Scan (6x8x7)/Cube

0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.113 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.0570 W/kg

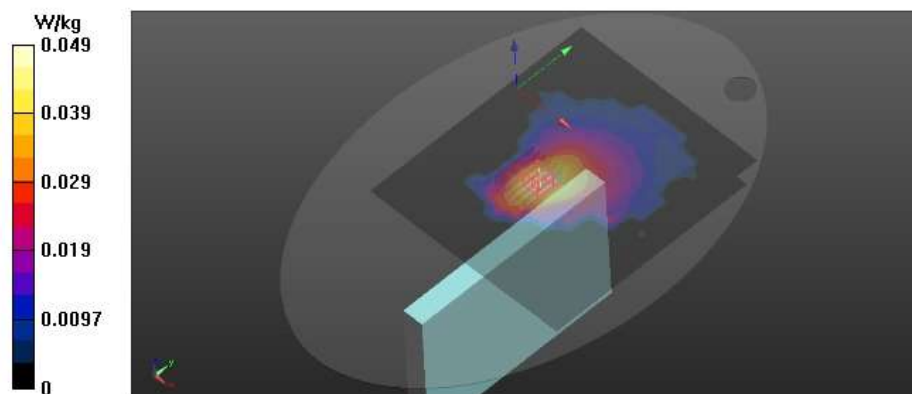
SAR(1 g) = 0.034 W/kg; SAR(10 g) = 0.021 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 59.5%

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.0477 W/kg



Appendix B.6 Test Plots for 5GNRn7 Cellular Ant3

Date/Time: 2025-06-23 21:13:23

Test Laboratory : SGS Korea (Gunpo Laboratory)

File Name: 5GNRn7 Cellular Ant3 Right Edge 20MHz 50@25 BPSK CH507000.da53:0

DUT: TFBMEIBN3EU; Type: Telematics device; Serial: 503VIPAH25176

Communication System: UID 0, 5G NR FDD (0); Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2535$ MHz; $\sigma = 1.958$ S/m; $\epsilon_r = 39.173$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY52 Configuration:

- Probe: EX3DV4 - SN7412; ConvF(7.77, 7.26, 7.39) @ 2535 MHz; Calibrated: 2025-03-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1595; Calibrated: 2025-01-21
- Phantom: ELI V8.0 (20deg probe tilt); Type: QD OVA 004 Ax; Serial: 2246
- DASY52 52.10.4(1527)SEMCAD X 14.6.14(7483)

Body/NRn7 Cellular Ant3 Right Edge 20MHz 50@25 BPSK CH502000/Area Scan (181x201x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.0828 W/kg

Body/NRn7 Cellular Ant3 Right Edge 20MHz 50@25 BPSK CH502000/Zoom Scan

(13x14x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.812 V/m; Power Drift = -0.20 dB

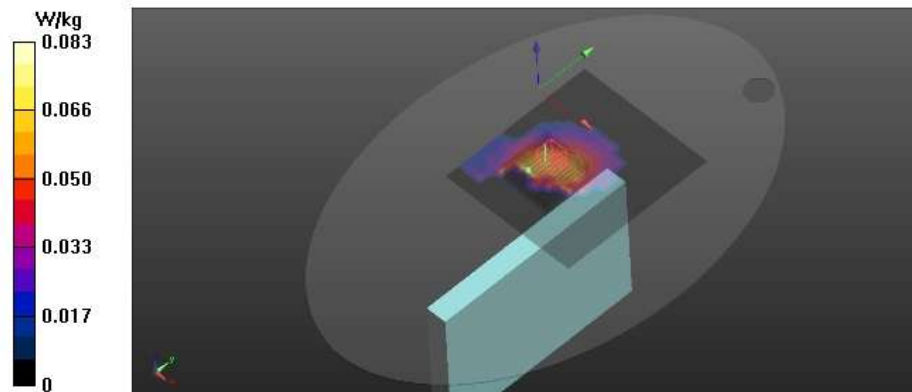
Peak SAR (extrapolated) = 0.0920 W/kg

SAR(1 g) = 0.037 W/kg; SAR(10 g) = 0.017 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 = 31.8%

Maximum value of SAR (measured) = 0.0705 W/kg



Appendix B.7 Test Plots for 5GNRn66 Cellular Ant3

Date/Time: 2025-06-19 19:59:10

Test Laboratory : SGS Korea (Gunpo Laboratory)

File Name: 5GNRn66 Cellular Ant3 Right Edge 15KHz 40MHz 108@54 QPSK CH349000.da53:0

DUT: TFBMEIBN3EU; Type: Telematics device; Serial: 503VIPAH25176

Communication System: UID 0, 5G NR FDD (0); Frequency: 1745 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1745$ MHz; $\sigma = 1.39$ S/m; $\epsilon_r = 39.554$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY52 Configuration:

- Probe: EX3DV4 - SN7412; ConvF(8.39, 7.84, 7.99) @ 1745 MHz; Calibrated: 2025-03-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1595; Calibrated: 2025-01-21
- Phantom: ELI V8.0 (20deg probe tilt); Type: QD OVA 004 Ax; Serial: 2246
- DASY52 52.10.4(1527)SEMCAD X 14.6.14(7483)

Body/5GNRn66 Cellular Ant3 Right Edge 15KHz 40MHz 108@54 QPSK CH349000/Area Scan (181x201x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.0645 W/kg

Body/5GNRn66 Cellular Ant3 Right Edge 15KHz 40MHz 108@54 QPSK CH349000/Zoom Scan (6x9x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.241 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.0750 W/kg

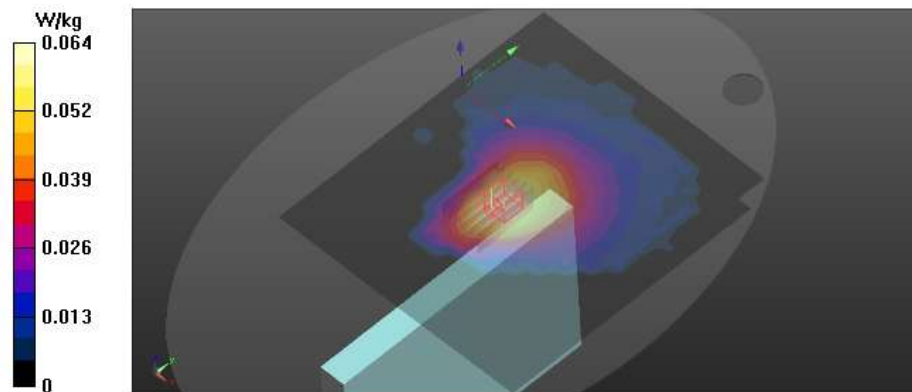
SAR(1 g) = 0.046 W/kg; SAR(10 g) = 0.030 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 61.4%

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.0638 W/kg



Appendix B.8 Test Plots for 5GNRn71 Cellular Ant3

Date/Time: 2025-06-25 17:00:21

Test Laboratory : SGS Korea (Gunpo Laboratory)

File Name: [5GNRn71 Cellular Ant3 Front 20MHz 50@25 QPSK CH136100.da53:0](#)

DUT: TFBMEIBN3EU; Type: Telematics device; Serial: 503VIPAH25176

Communication System: UID 0, 5G NR FDD (0); Frequency: 680.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 680.5$ MHz; $\sigma = 0.848$ S/m; $\epsilon_r = 43.147$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY52 Configuration:

- Probe: EX3DV4 - SN7412; ConvF(10.35, 9.68, 9.86) @ 680.5 MHz; Calibrated: 2025-03-19
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1595; Calibrated: 2025-01-21
- Phantom: ELI V8.0 (20deg probe tilt); Type: QD OVA 004 Ax; Serial: 2246
- DASY52 52.10.4(1527)SEMCAD X 14.6.14(7483)

Body/NRn71 Cellular Ant3 Front 20MHz 50@25 QPSK CH136100/Area Scan (171x201x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.0145 W/kg

Body/NRn71 Cellular Ant3 Front 20MHz 50@25 QPSK CH136100/Zoom Scan (6x9x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.790 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.0160 W/kg

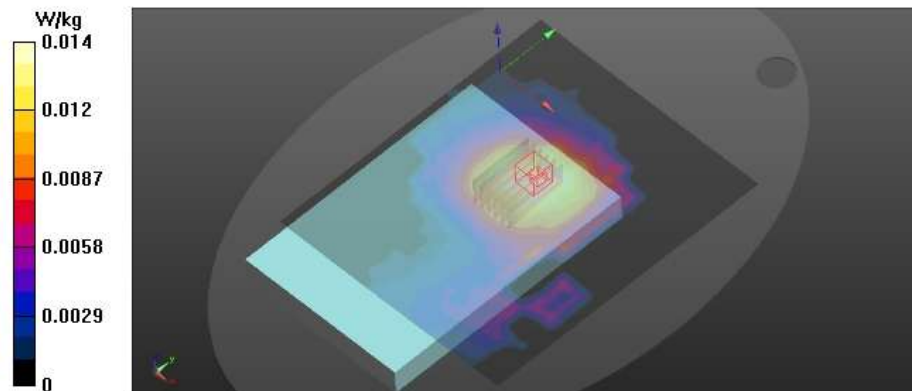
SAR(1 g) = 0.011 W/kg; SAR(10 g) = 0.00853 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 70.9%

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.0142 W/kg

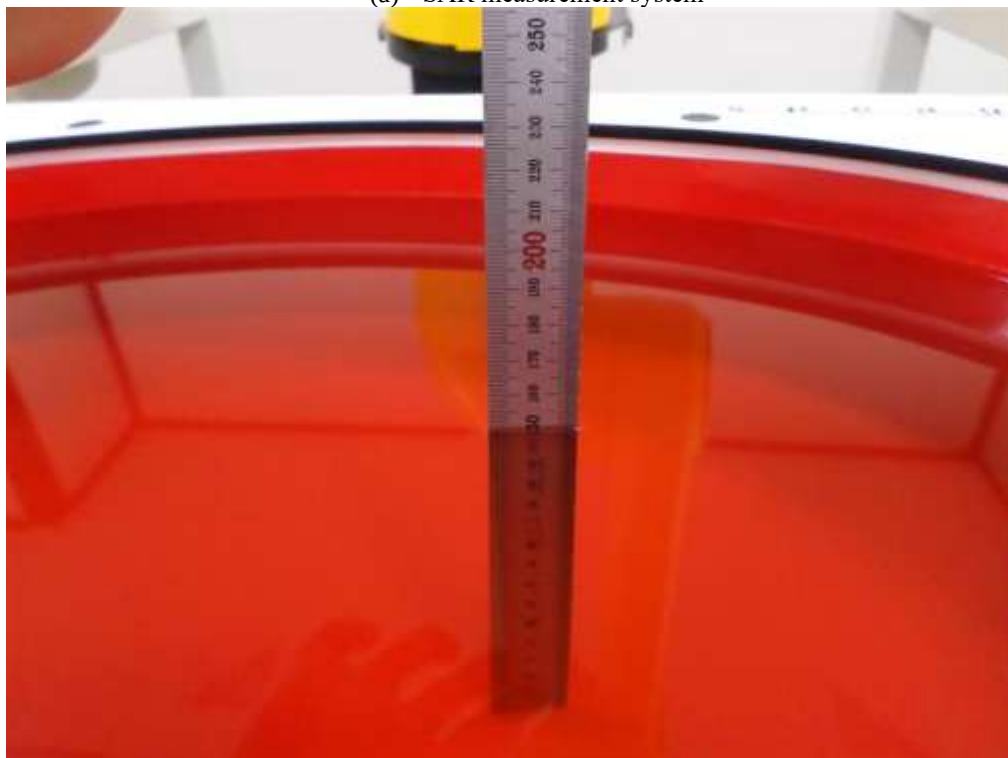


Appendix C Photograph

Appendix C.1 Photographs of the SAR measurement system



(a) SAR measurement system

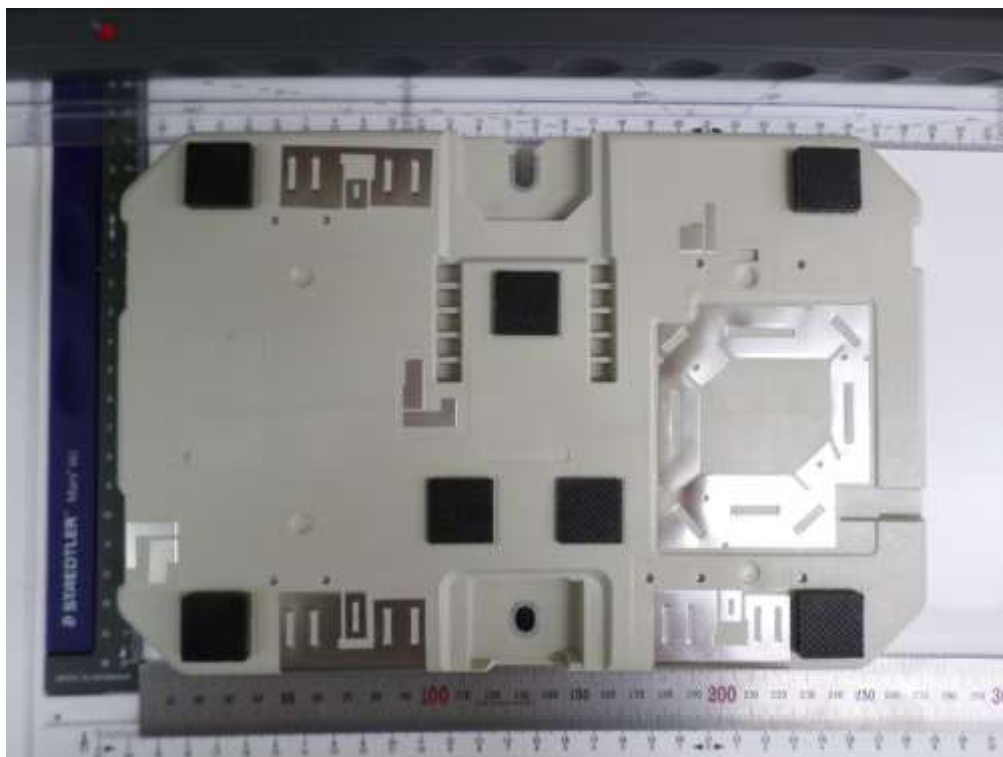


(b) Liquid Depth

Appendix C.2 Photographs of the EUT



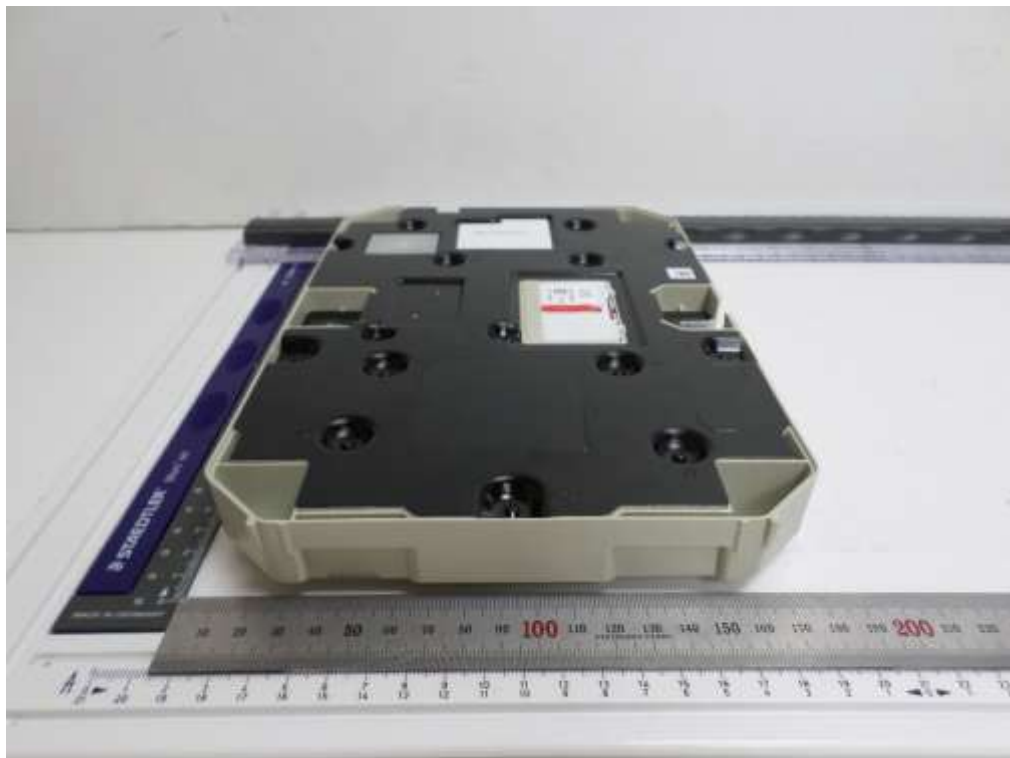
(a) Front



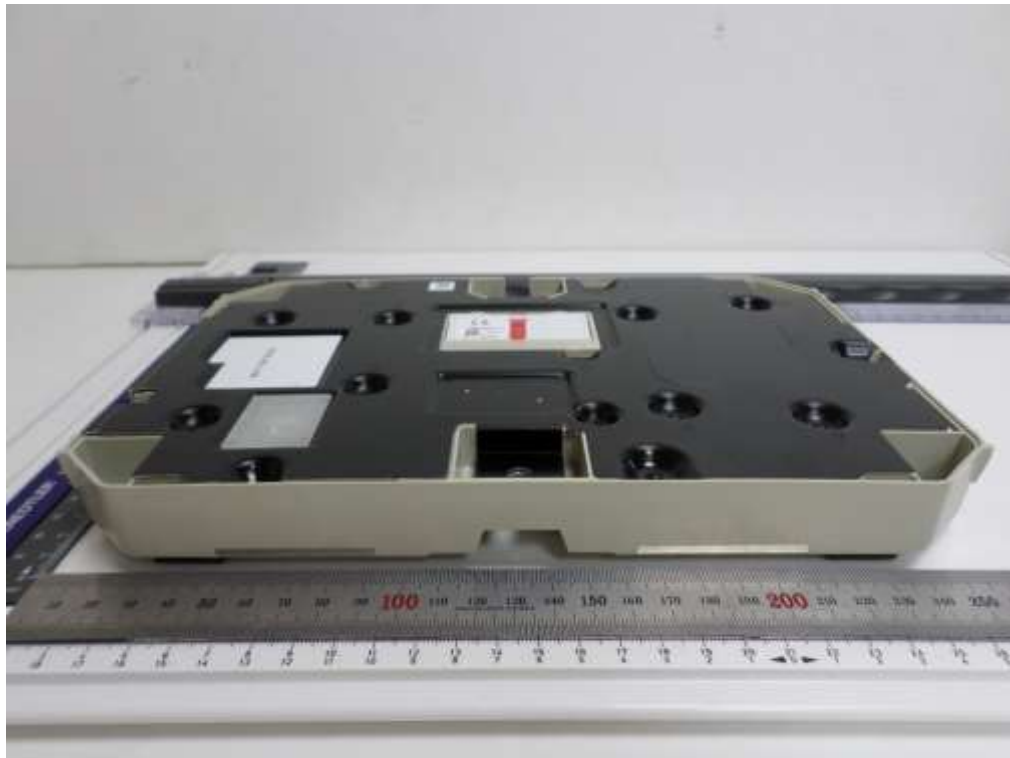
(b) Rear



(c) Bottom



(d) Top

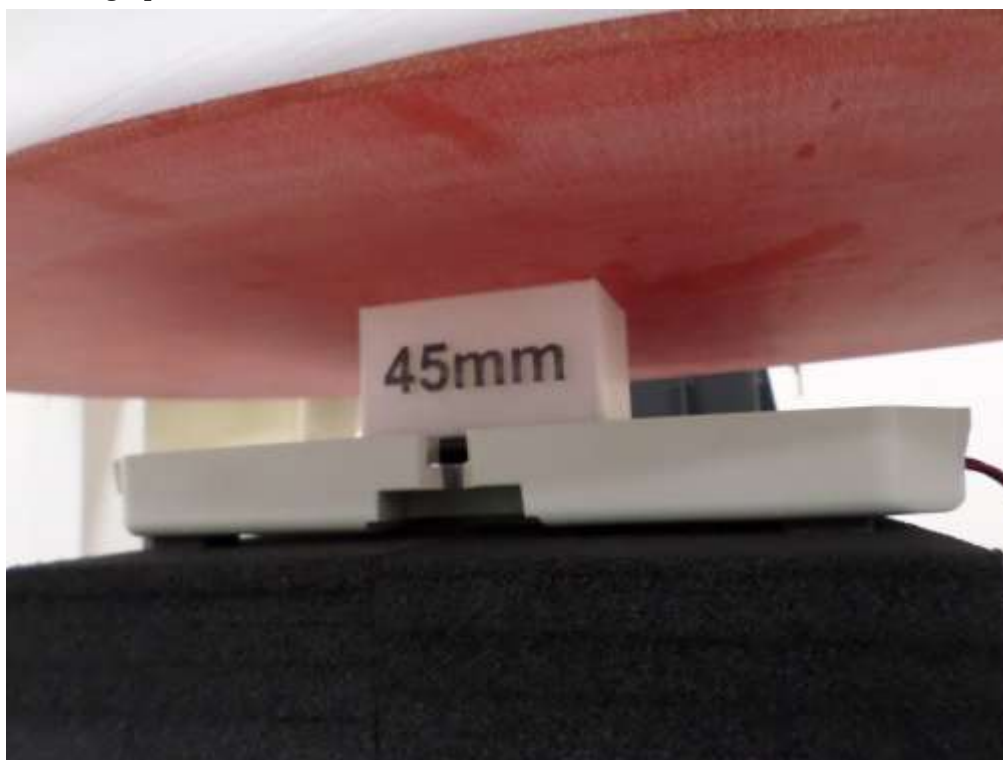


(e) Right Edge

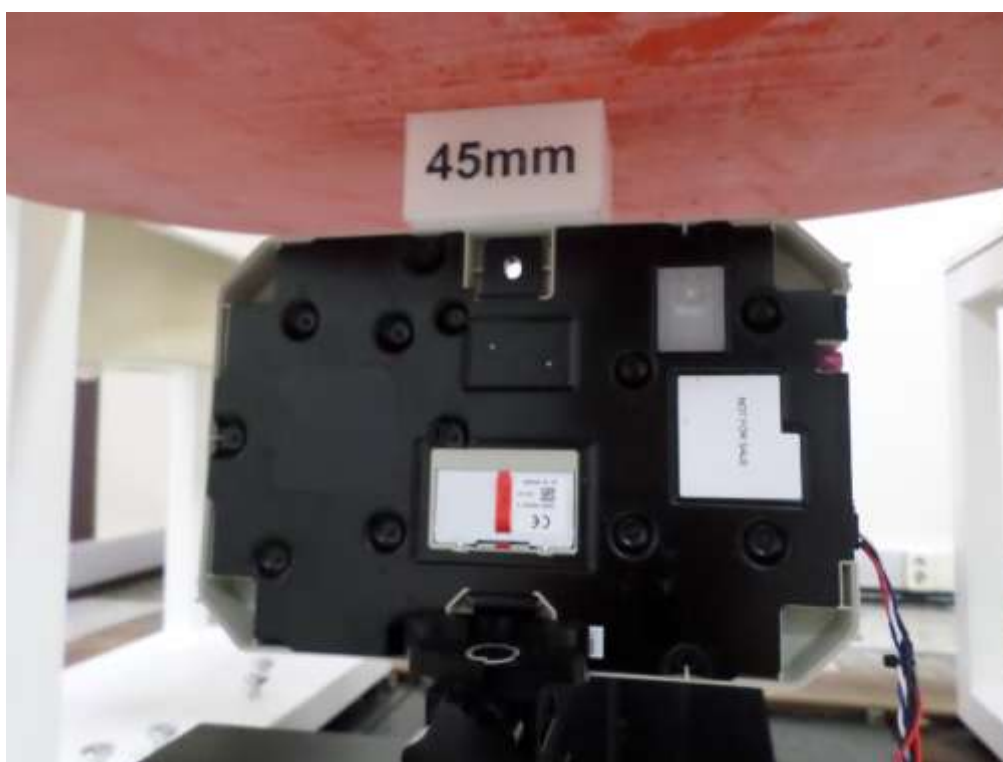


(f) Left Edge

Appendix C.3 Photographs of the Test Position



(a) Front 45mm



(b) Right Edge 45mm



Appendix D Probe, DAE and Dipole Calibration Certificates

Appendix D.1 Calibration certificate for Probe_SN7412

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 0108

Client: SGS
Gyeonggi-do, Republic of Korea

Certificate No.: EX-7412_Mar25

CALIBRATION CERTIFICATE

Object: EX3DV4 - SN:7412

Calibration procedure(s): QA CAL-01.v10, QA CAL-12.v10, QA CAL-14.v7, QA CAL-23.v6,
QA CAL-25.v8
Calibration procedure for dosimetric E-field probes

Calibration date: March 19, 2025

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.
All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3) °C and humidity < 70%.
Calibration Equipment used (M&E critical for calibration):

Primary Standards	ID	Calibration Date (Certificate No.)	Sched. Cal.
Power Sensor N&S NRP-33T	SN: 100807	28-Mar-24 (No. 217-24038)	Mar-25
Short [S8019] + Attenuator [S9020]	SN: L11119	28-Mar-24 (No. 217-24048)	Mar-25
DCP DAK-12	SN: 1016	24-Sep-24 (No. DCP-DAK12-1016_Sep24)	Sep-25
DCP DAK-3.5	SN: 1249	23-Sep-24 (No. DCP-DAK3.5-1249_Sep24)	Sep-25
Reference Probe EX3DV4	SN: 7349	10-Jan-25 (No. EX3-7349_Jan25)	Jan-26
DAE4	SN: 1301	07-Nov-24 (No. DAE4-1301_Nov24)	Nov-25

Secondary Standards	ID	Check Date (in house)	Sched. Check
ACAP 2025 Calibration Box	SN: L1406	30-Sep-24 (No. Report_ACAP2025-Calve_20240930e)	Sep-25

Calibrated by: Krešimir Frančić, Laboratory Technician

Approved by: Sven Kühn, Technical Manager

Issued: March 19, 2025

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Certificate No: EX-7412_Mar25

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Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland



S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 0108

Glossary

TSL	tissue simulating liquid
NORM _{x,y,z}	sensitivity in free space
ConvF	sensitivity in TSL / NORM _{x,y,z}
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A, B, C, D	modulation dependent linearization parameters
Polarization φ	φ rotation around probe axis
Polarization θ	θ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\theta = 0$ is normal to probe axis
Connector Angle	information used in DASY system to align probe sensor X to the robot coordinate system

Calibration is Performed According to the Following Standards:

- IEC/IEEE 62209-1528, "Measurement Procedure For The Assessment Of Specific Absorption Rate Of Human Exposure To Radio Frequency Fields From Hand-Held And Body-Worn Wireless Communication Devices – Part 1528: Human Models, Instrumentation And Procedures (Frequency Range of 4 MHz to 10 GHz)", October 2020.
- KDS 865654, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Methods Applied and Interpretation of Parameters:

- NORM_{x,y,z}: Assessed for E-field polarization $\theta = 0$ ($f \leq 900$ MHz in TEM-cell; $f > 1800$ MHz: R22 waveguide). NORM_{x,y,z} are only intermediate values, i.e., the uncertainties of NORM_{x,y,z} does not affect the E²-field uncertainty inside TSL (see below ConvF).
- NORM_{x,y,z} = NORM_{x,y,z} * frequency_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- DCP_{x,y,z}: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal. DCP does not depend on frequency nor media.
- PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- A_{x,y,z}; B_{x,y,z}; C_{x,y,z}; D_{x,y,z}; VR_{x,y,z}: A, B, C, D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for $f \leq 800$ MHz) and inside waveguide using analytical field distributions based on power measurements for $f > 800$ MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORM_{x,y,z} * ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- Spherical isotropy (3D deviation from isotropy): in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle: The angle is assessed using the information gained by determining the NORM_x (no uncertainty required).

EX3DV4 - SN:7412

March 19, 2025

Parameters of Probe: EX3DV4 - SN:7412

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k = 2)
Norm ($\mu V/(V/m)^2$) ^A	0.42	0.38	0.44	$\pm 10.1\%$
DCP (mV) ^B	100.8	101.5	101.6	$\pm 4.7\%$

Calibration Results for Modulation Response

UID	Communication System Name	A dB	B dB $\sqrt{\mu V}$	C	D dB	V _m mV	Max dev.	Max Unc ^C k = 2
0	CW	X 0.00 Y 0.00 Z 0.00	0.00 0.00 0.00	1.00 1.00 1.00	0.00	199.1 197.5 142.6	$\pm 1.7\%$	$\pm 4.7\%$
10352	Pulse Waveform (200Hz, 10%)	X 13.82 Y 12.22 Z 20.00	83.49 82.68 90.88	17.10 17.23 20.46	10.00	60.0 60.0 60.0	$\pm 2.7\%$	$\pm 9.6\%$
10353	Pulse Waveform (200Hz, 20%)	X 20.00 Y 20.00 Z 20.00	88.45 89.83 93.55	17.64 18.19 20.70	6.99	60.0 60.0 60.0	$\pm 1.6\%$	$\pm 9.6\%$
10354	Pulse Waveform (200Hz, 40%)	X 20.00 Y 20.00 Z 20.00	93.01 93.76 109.37	18.61 18.43 22.68	3.98	95.0 95.0 95.0	$\pm 1.2\%$	$\pm 9.6\%$
10355	Pulse Waveform (200Hz, 60%)	X 20.00 Y 20.00 Z 20.00	102.83 101.81 109.91	22.06 20.72 25.80	2.22	120.0 120.0 120.0	$\pm 1.1\%$	$\pm 9.6\%$
10387	QPSK Waveform, 1 MHz	X 1.72 Y 1.70 Z 1.70	87.48 88.75 86.43	15.66 15.69 15.20	1.00	150.0 150.0 150.0	$\pm 2.0\%$	$\pm 9.6\%$
10388	QPSK Waveform, 10 MHz	X 2.25 Y 2.19 Z 2.25	68.55 68.81 68.15	16.21 16.32 15.90	0.00	150.0 150.0 150.0	$\pm 1.0\%$	$\pm 9.6\%$
10395	64-QAM Waveform, 100 KHz	X 2.64 Y 2.14 Z 2.67	69.94 65.58 69.24	18.78 17.07 18.28	3.01	150.0 150.0 150.0	$\pm 0.7\%$	$\pm 9.6\%$
10399	64-QAM Waveform, 40 MHz	X 3.54 Y 3.37 Z 3.56	67.39 65.62 67.27	16.01 15.81 15.90	0.00	150.0 150.0 150.0	$\pm 0.8\%$	$\pm 9.6\%$
10414	WLAN CCDF, 64-QAM, 40 MHz	X 4.84 Y 4.61 Z 4.73	65.89 65.49 65.14	15.71 15.54 15.32	0.00	150.0 150.0 150.0	$\pm 2.0\%$	$\pm 9.6\%$

Note: For details on UID parameters see Appendix

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor $k=2$, which for a normal distribution corresponds to a coverage probability of approximately 95%.

^A The uncertainties of Norm X,Y,Z do not affect the E²-field uncertainty inside TSL (see Page 5).^B Linearization parameter uncertainty for maximum specified field strength.^C Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.



EX3DV4 - SN:7412

March 19, 2025

Parameters of Probe: EX3DV4 - SN:7412

Sensor Model Parameters

	C1 FF	C2 FF	α V ⁻¹	T1 ms V ⁻²	T2 ms V ⁻¹	T3 ms	T4 V ⁻²	T5 V ⁻¹	T6
x	38.8	258.58	34.63	10.90	0.00	5.02	1.37	0.09	1.01
y	32.3	240.49	35.37	4.22	0.28	5.02	0.20	0.21	1.00
z	44.0	328.84	35.55	12.88	0.00	5.07	1.01	0.21	1.01

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle	-61.6°
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	9 mm
Tip Diameter	2.5 mm
Probe Tip to Sensor X Calibration Point	1 mm
Probe Tip to Sensor Y Calibration Point	1 mm
Probe Tip to Sensor Z Calibration Point	1 mm
Recommended Measurement Distance from Surface	1.4 mm

Note: Measurement distance from surface can be increased to 3-4 mm for an Area Scan job.

EX3DV4 - SN:7412

March 19, 2025

Parameters of Probe: EX3DV4 - SN:7412

Calibration Parameter Determined in HSL

f (MHz) ^C	Relative Permittivity ^F	Conductivity ^F (S/m)	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^H (mm)	Unc ^H (k = 2)
300	45.3	0.87	11.47	11.47	11.47	0.09	1.00	±13.3%
450	43.5	0.87	10.72	10.72	10.72	0.15	1.30	±13.3%
600	42.7	0.88	10.11	10.11	10.11	0.10	1.25	±13.3%
750	41.9	0.89	10.35	9.68	9.85	0.39	1.27	±11.0%
835	41.5	0.90	9.63	9.00	9.17	0.39	1.27	±11.0%
900	41.5	0.97	9.72	9.09	9.26	0.39	1.27	±11.0%
1450	40.5	1.20	8.55	7.99	8.14	0.38	1.27	±11.0%
1640	40.2	1.31	8.24	7.70	7.84	0.38	1.27	±11.0%
1750	40.1	1.37	8.39	7.84	7.99	0.38	1.27	±11.0%
1900	40.0	1.40	8.28	7.74	7.88	0.38	1.27	±11.0%
2300	39.5	1.67	7.97	7.45	7.59	0.37	1.27	±11.0%
2450	39.2	1.80	7.76	7.25	7.39	0.37	1.27	±11.0%
2600	39.0	1.96	7.77	7.26	7.39	0.37	1.27	±11.0%
3300	38.2	2.71	7.17	6.70	6.82	0.36	1.27	±13.1%
3500	37.9	2.91	7.19	6.72	6.85	0.36	1.27	±13.1%
3700	37.7	3.12	7.00	6.54	6.66	0.35	1.27	±13.1%
3900	37.5	3.32	7.05	6.59	6.72	0.35	1.27	±13.1%
4100	37.2	3.53	6.99	6.54	6.66	0.35	1.27	±13.1%
5200	36.0	4.66	6.05	5.65	5.76	0.31	1.27	±13.1%
5900	35.9	4.76	5.85	5.47	5.58	0.30	1.27	±13.1%
5500	35.6	4.96	5.15	4.82	4.91	0.29	1.27	±13.1%
5600	35.5	5.07	5.20	4.85	4.95	0.28	1.27	±13.1%
5800	35.3	5.27	5.26	4.93	5.03	0.26	1.27	±13.1%

^C Frequency validity above 300 MHz of ±100 MHz only applies for DASV v4.4 and higher (see Page 2), else it is restricted to ±50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ±10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 190 and 250 MHz respectively. Validity of ConvF assessed at 6 MHz is 4-8 MHz, and ConvF assessed at 10 MHz is 9-19 MHz. Above 5 GHz frequency validity can be extended to ±10 MHz.

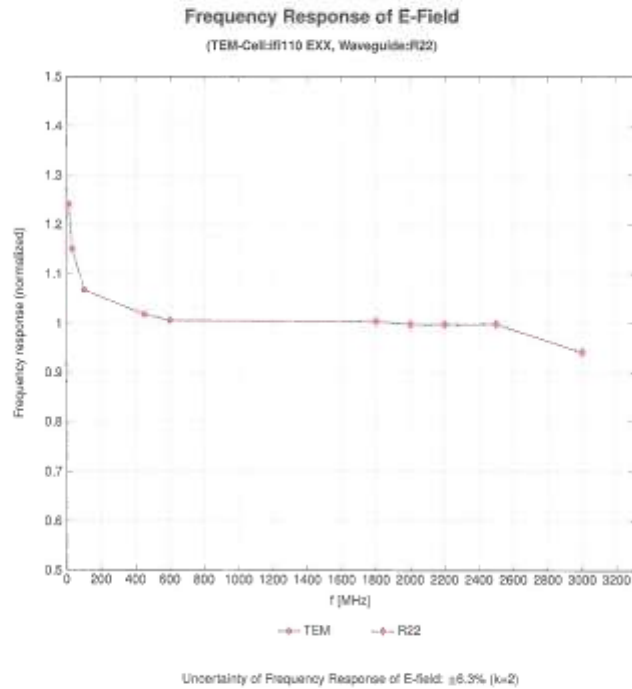
^F The probes are calibrated using tissue simulating liquids (TSL) that deviate for ϵ' and σ by less than ±5% from the target values (typically better than ±3%) and are valid for TSL with deviations of up to ±10% if SAR correction is applied.

^G Alpha/Depth are determined during calibration. SPICAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ±1% for frequencies below 3 GHz and below ±2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

^H The stated uncertainty is the total calibration uncertainty (k = 2) of Norm-ConvF. This is equivalent to the uncertainty component with the symbol CF in Table 9 of IEC/IEEE 62209-1:2020.

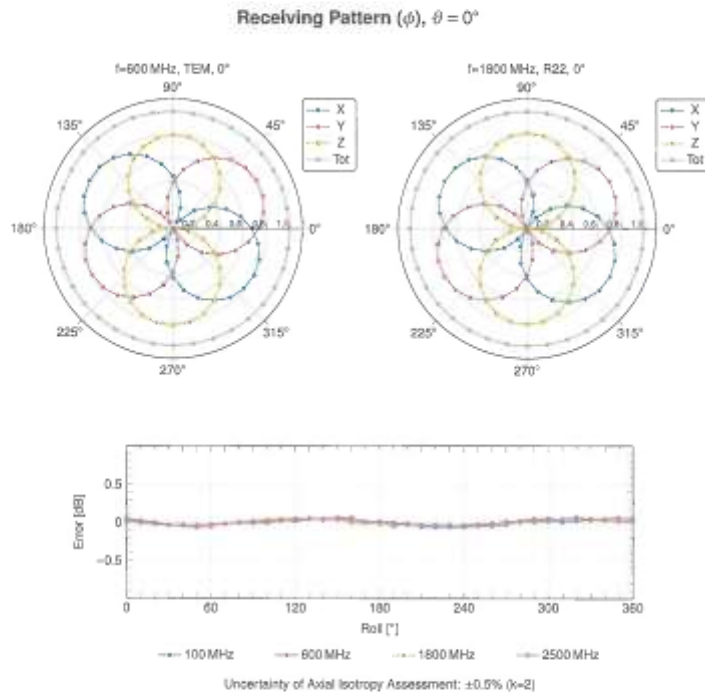
EX3DV4 - SN:7412

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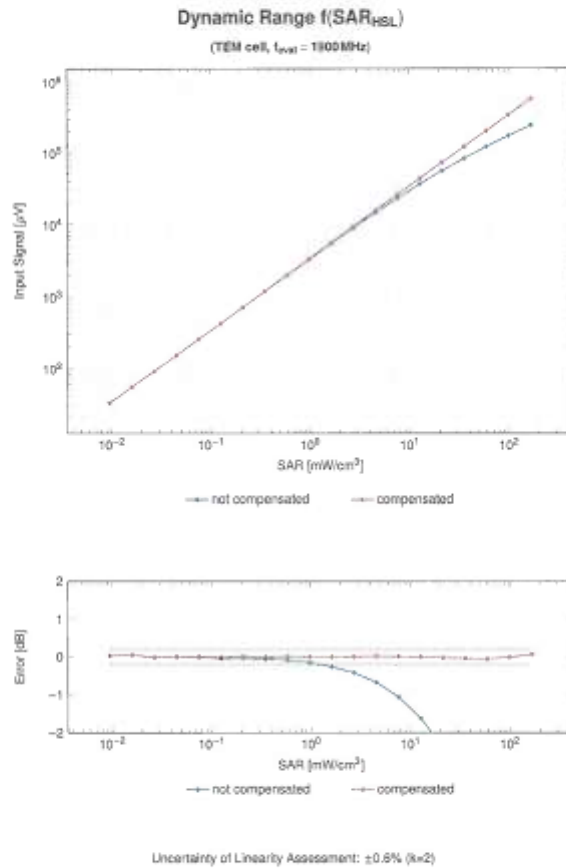


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March 19, 2025



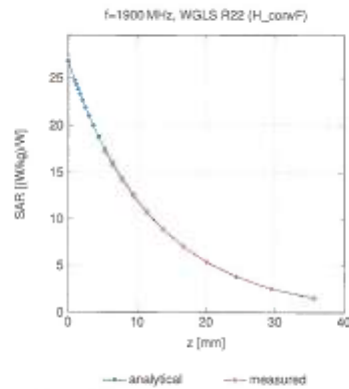
Certificate No: EX-7412_Mar25

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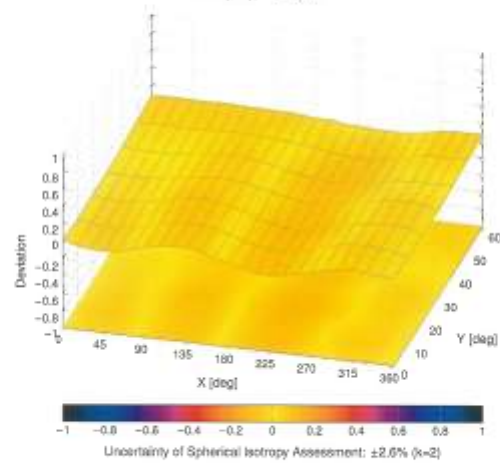
March 19, 2025

Conversion Factor Assessment



Deviation from Isotropy in Liquid

Error (ϕ, θ), f = 990 MHz



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March 19, 2025

Appendix: Modulation Calibration Parameters

UWB	Rev	Communication System Name	Group	FNR (dB)	Unc ² k = 2
0		CW	CW	0.00	±4.7
10010	CAB	SAR Validation (Square, 100 ms, 10 ms)	Test	10.00	±9.8
10011	CAC	UMTS-FDD (WCDMA)	WCDMA	2.91	±9.6
10012	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	WLAN	1.87	±9.8
10013	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS OFDM, 6 Mbps)	WLAN	0.46	±9.6
10021	CAC	GSM-FDD (TDMA, GMSK)	GSM	0.39	±9.6
10025	CAC	GPRS-FDD (TDMA, GMSK, TN 3)	GSM	0.57	±9.8
10024	CAC	GPRS-FDD (TDMA, GMSK, TN 3-1)	GSM	0.55	±9.6
10025	CAC	EDGE-FDD (TDMA, 8PSK, TN 3)	GSM	0.32	±9.6
10026	CAC	EDGE-FDD (TDMA, 8PSK, TN 3-1)	GSM	0.55	±9.6
10027	CAC	GPRS-FDD (TDMA, GMSK, TN 3-2)	GSM	4.80	±9.6
10028	CAC	GPRS-FDD (TDMA, GMSK, TN 3-1-3)	GSM	3.55	±9.6
10029	CAC	EDGE-FDD (TDMA, 8PSK, TN 3-1-2)	GSM	7.79	±9.6
10030	CAB	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Bluetooth	5.30	±9.6
10031	CAB	IEEE 802.15.1 Bluetooth (GFSK, DH2)	Bluetooth	1.87	±9.6
10032	CAB	IEEE 802.15.1 Bluetooth (FS-SS, FH1)	Bluetooth	1.16	±9.6
10033	CAB	IEEE 802.15.1 Bluetooth (FS-SS, FH2)	Bluetooth	7.74	±9.6
10034	CAB	IEEE 802.15.1 Bluetooth (FS-SS, FH3)	Bluetooth	4.53	±9.6
10035	CAB	IEEE 802.15.1 Bluetooth (FS-SS, FH4)	Bluetooth	3.83	±9.6
10036	CAB	IEEE 802.15.1 Bluetooth (FS-SS, FH5)	Bluetooth	8.81	±9.6
10037	CAB	IEEE 802.15.1 Bluetooth (FS-SS, FH6)	Bluetooth	4.77	±9.6
10038	CAB	IEEE 802.15.1 Bluetooth (FS-SS, FH7)	Bluetooth	4.18	±9.6
10039	CAB	CDMA2000 (1W, 1.25)	CDMA2000	4.57	±9.6
10042	CAB	IS-54 / IS-136 FDD (TDMA-FDM, PSK-QPSK, Full Rate)	AMPS	7.78	±9.6
10043	CAB	IS-97/IS-136 FDD (TDMA-FDM, PSK-QPSK, Full Rate)	AMPS	5.66	±9.6
10044	CAB	DECT (TDD, TDMA-FDM, GFSK, Full Slot, 24)	DECT	13.80	±9.6
10045	CAB	DECT (TDD, TDMA-FDM, GFSK, Double Slot, 12)	DECT	10.79	±9.6
10050	CAB	UMTS-TDD (TD-SSDMA, 3.84 Mbps)	TD-SSDMA	11.01	±9.6
10058	CAC	EDGE-FDD (TDMA, 8PSK, TN 3-1-3)	GSM	8.52	±9.6
10059	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	WLAN	2.12	±9.8
10060	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	WLAN	2.83	±9.8
10061	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	WLAN	3.66	±9.8
10062	CAB	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps)	WLAN	8.68	±9.8
10063	CAB	IEEE 802.11a WiFi 5 GHz (OFDM, 9 Mbps)	WLAN	8.53	±9.8
10064	CAB	IEEE 802.11a WiFi 5 GHz (OFDM, 12 Mbps)	WLAN	5.09	±9.8
10065	CAB	IEEE 802.11a WiFi 5 GHz (OFDM, 18 Mbps)	WLAN	9.00	±9.8
10066	CAB	IEEE 802.11a WiFi 5 GHz (OFDM, 24 Mbps)	WLAN	5.38	±9.8
10067	CAB	IEEE 802.11a WiFi 5 GHz (OFDM, 36 Mbps)	WLAN	10.12	±9.8
10068	CAB	IEEE 802.11a WiFi 5 GHz (OFDM, 48 Mbps)	WLAN	10.24	±9.8
10069	CAB	IEEE 802.11a WiFi 5 GHz (OFDM, 54 Mbps)	WLAN	10.06	±9.8
10071	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS OFDM, 6 Mbps)	WLAN	9.83	±9.8
10072	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS OFDM, 12 Mbps)	WLAN	9.62	±9.8
10073	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS OFDM, 18 Mbps)	WLAN	9.94	±9.8
10074	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS OFDM, 24 Mbps)	WLAN	10.30	±9.8
10075	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS OFDM, 36 Mbps)	WLAN	10.77	±9.8
10076	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS OFDM, 48 Mbps)	WLAN	10.04	±9.8
10077	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS OFDM, 54 Mbps)	WLAN	11.00	±9.8
10081	CAB	CDMA2000 (1W, 1.25)	CDMA2000	3.97	±9.8
10082	CAB	IS-54 / IS-136 FDD (TDMA-FDM, PSK-QPSK, Full Rate)	AMPS	4.77	±9.8
10090	CAC	GPRS-FDD (TDMA, GMSK, TN 3-4)	GSM	6.56	±9.8
10091	CAC	UMTS-FDD (WCDMA)	WCDMA	2.90	±9.8
10098	CAC	UMTS-FDD (WCDMA, SSS, 3.1)	WCDMA	3.98	±9.8
10099	CAC	EDGE-FDD (TDMA, 8PSK, TN 3-4)	GSM	9.25	±9.8
10100	CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-FDD	5.97	±9.8
10101	CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	±9.8
10102	CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-FDD	6.80	±9.8
10103	CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-TDD	9.29	±9.8
10104	CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-TDD	9.97	±9.8
10105	CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-TDD	10.01	±9.8
10106	CAB	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-FDD	5.80	±9.8
10109	CAB	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	±9.8
10110	CAB	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-FDD	5.75	±9.8
10111	CAB	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-FDD	6.44	±9.8

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10112	CAH	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-FDD	6.69	±0.8
10113	CAH	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-FDD	6.62	±0.8
10114	CAE	IEEE 802.11n (HT Greenfield, 15.5 Mbps, BPSK)	WLAN	8.10	±0.8
10115	CAE	IEEE 802.11n (HT Greenfield, 31 Mbps, 16-QAM)	WLAN	8.46	±0.8
10116	CAE	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	WLAN	8.15	±0.8
10117	CAE	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	WLAN	8.07	±0.8
10118	CAE	IEEE 802.11n (HT Mixed, 31 Mbps, 16-QAM)	WLAN	8.59	±0.8
10119	CAE	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	WLAN	8.13	±0.8
10140	CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.49	±0.8
10141	CAF	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-FDD	6.53	±0.8
10142	CAF	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-FDD	5.73	±0.8
10143	CAF	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-FDD	6.35	±0.8
10144	CAF	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-FDD	6.86	±0.8
10145	CAG	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-FDD	5.76	±0.8
10146	CAG	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.41	±0.8
10147	CAG	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.72	±0.8
10149	CAF	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	±0.8
10150	CAF	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-FDD	6.50	±0.8
10151	CAH	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-TDD	9.38	±0.8
10152	CAH	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-TDD	9.82	±0.8
10153	CAH	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-TDD	10.85	±0.8
10154	CAH	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-FDD	5.75	±0.8
10155	CAH	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	±0.8
10156	CAH	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-FDD	5.79	±0.8
10157	CAH	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-FDD	6.49	±0.8
10158	CAH	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-FDD	6.82	±0.8
10159	CAH	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-FDD	6.56	±0.8
10160	CAF	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-FDD	5.82	±0.8
10161	CAF	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-FDD	6.43	±0.8
10162	CAF	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-FDD	6.58	±0.8
10165	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-FDD	5.44	±0.8
10167	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.25	±0.8
10168	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.79	±0.8
10169	CAF	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-FDD	5.73	±0.8
10170	CAF	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-FDD	6.53	±0.8
10171	AKF	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-FDD	6.49	±0.8
10172	CAH	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-TDD	9.21	±0.8
10173	CAH	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-TDD	9.48	±0.8
10174	CAH	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-TDD	10.25	±0.8
10175	CAH	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-FDD	5.72	±0.8
10176	CAH	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-FDD	6.52	±0.8
10177	CAF	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-FDD	5.73	±0.8
10178	CAH	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-FDD	6.52	±0.8
10179	CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-FDD	6.52	±0.8
10180	CAH	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-FDD	6.55	±0.8
10181	CAF	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-FDD	5.72	±0.8
10182	CAF	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-FDD	6.53	±0.8
10183	AKF	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-FDD	6.50	±0.8
10184	CAF	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-FDD	5.73	±0.8
10185	CAF	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-FDD	6.51	±0.8
10186	AKF	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-FDD	6.50	±0.8
10187	CAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-FDD	5.73	±0.8
10188	CAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.52	±0.8
10189	AKF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.50	±0.8
10190	CAE	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	WLAN	8.09	±0.8
10194	CAE	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	WLAN	8.12	±0.8
10195	CAE	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	WLAN	8.21	±0.8
10196	CAE	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	WLAN	8.10	±0.8
10197	CAE	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	WLAN	8.13	±0.8
10198	CAE	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	WLAN	8.27	±0.8
10199	CAE	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	WLAN	8.03	±0.8
10200	CAE	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	WLAN	8.13	±0.8
10201	CAE	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	WLAN	8.27	±0.8
10202	CAE	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	WLAN	8.06	±0.8
10203	CAE	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	WLAN	8.48	±0.8
10204	CAE	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	WLAN	8.05	±0.8

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10225	CAC	UMTS-FDD (HSRPA)	WCDMA	5.97	+0.6
10226	CAC	LTE-TDD (SC-FDMA, 1 RB, 1.4MHz, 16-QAM)	LTE-TDD	9.49	+0.8
10227	CAC	LTE-TDD (SC-FDMA, 1 RB, 1.4MHz, 64-QAM)	LTE-TDD	10.25	+0.8
10228	CAC	LTE-TDD (SC-FDMA, 1 RB, 1.4MHz, QPSK)	LTE-TDD	9.22	+0.5
10229	CAC	LTE-TDD (SC-FDMA, 1 RB, 3MHz, 16-QAM)	LTE-TDD	9.48	+0.8
10230	CAC	LTE-TDD (SC-FDMA, 1 RB, 3MHz, 64-QAM)	LTE-TDD	10.25	+0.8
10231	CAC	LTE-TDD (SC-FDMA, 1 RB, 3MHz, QPSK)	LTE-TDD	9.19	+0.8
10232	CAH	LTE-TDD (SC-FDMA, 1 RB, 3MHz, 16-QAM)	LTE-TDD	9.48	+0.5
10233	CAH	LTE-TDD (SC-FDMA, 1 RB, 3MHz, 64-QAM)	LTE-TDD	10.25	+0.8
10234	CAH	LTE-TDD (SC-FDMA, 1 RB, 3MHz, QPSK)	LTE-TDD	9.21	+0.5
10235	CAH	LTE-TDD (SC-FDMA, 1 RB, 10MHz, 16-QAM)	LTE-TDD	9.48	+0.5
10236	CAH	LTE-TDD (SC-FDMA, 1 RB, 10MHz, 64-QAM)	LTE-TDD	10.25	+0.8
10237	CAH	LTE-TDD (SC-FDMA, 1 RB, 10MHz, QPSK)	LTE-TDD	9.21	+0.8
10238	CAG	LTE-TDD (SC-FDMA, 1 RB, 15MHz, 16-QAM)	LTE-TDD	9.48	+0.5
10239	CAG	LTE-TDD (SC-FDMA, 1 RB, 15MHz, 64-QAM)	LTE-TDD	10.25	+0.5
10240	CAG	LTE-TDD (SC-FDMA, 1 RB, 15MHz, QPSK)	LTE-TDD	9.21	+0.8
10241	CAC	LTE-TDD (SC-FDMA, 50% RB, 1.4MHz, 16-QAM)	LTE-TDD	9.82	+0.8
10242	CAC	LTE-TDD (SC-FDMA, 50% RB, 1.4MHz, 64-QAM)	LTE-TDD	9.86	+0.5
10243	CAC	LTE-TDD (SC-FDMA, 50% RB, 1.4MHz, QPSK)	LTE-TDD	9.48	+0.5
10244	CAC	LTE-TDD (SC-FDMA, 50% RB, 3MHz, 16-QAM)	LTE-TDD	10.26	+0.8
10245	CAC	LTE-TDD (SC-FDMA, 50% RB, 3MHz, 64-QAM)	LTE-TDD	10.06	+0.5
10246	CAC	LTE-TDD (SC-FDMA, 50% RB, 3MHz, QPSK)	LTE-TDD	9.30	+0.5
10247	CAH	LTE-TDD (SC-FDMA, 50% RB, 3MHz, 16-QAM)	LTE-TDD	9.91	+0.8
10248	CAH	LTE-TDD (SC-FDMA, 50% RB, 3MHz, 64-QAM)	LTE-TDD	10.09	+0.5
10249	CAH	LTE-TDD (SC-FDMA, 50% RB, 3MHz, QPSK)	LTE-TDD	9.29	+0.5
10250	CAH	LTE-TDD (SC-FDMA, 50% RB, 10MHz, 16-QAM)	LTE-TDD	9.81	+0.8
10251	CAH	LTE-TDD (SC-FDMA, 50% RB, 10MHz, 64-QAM)	LTE-TDD	10.17	+0.5
10252	CAH	LTE-TDD (SC-FDMA, 50% RB, 10MHz, QPSK)	LTE-TDD	9.24	+0.8
10253	CAG	LTE-TDD (SC-FDMA, 50% RB, 15MHz, 16-QAM)	LTE-TDD	9.90	+0.5
10254	CAG	LTE-TDD (SC-FDMA, 50% RB, 15MHz, 64-QAM)	LTE-TDD	10.14	+0.5
10255	CAG	LTE-TDD (SC-FDMA, 50% RB, 15MHz, QPSK)	LTE-TDD	9.55	+0.8
10256	CAC	LTE-TDD (SC-FDMA, 100% RB, 1.4MHz, 16-QAM)	LTE-TDD	9.86	+0.5
10257	CAC	LTE-TDD (SC-FDMA, 100% RB, 1.4MHz, 64-QAM)	LTE-TDD	10.08	+0.5
10258	CAC	LTE-TDD (SC-FDMA, 100% RB, 1.4MHz, QPSK)	LTE-TDD	9.34	+0.5
10259	CAC	LTE-TDD (SC-FDMA, 100% RB, 3MHz, 16-QAM)	LTE-TDD	9.98	+0.8
10260	CAC	LTE-TDD (SC-FDMA, 100% RB, 3MHz, 64-QAM)	LTE-TDD	9.97	+0.5
10261	CAC	LTE-TDD (SC-FDMA, 100% RB, 3MHz, QPSK)	LTE-TDD	9.24	+0.5
10262	CAH	LTE-TDD (SC-FDMA, 100% RB, 3MHz, 16-QAM)	LTE-TDD	9.83	+0.5
10263	CAH	LTE-TDD (SC-FDMA, 100% RB, 3MHz, 64-QAM)	LTE-TDD	10.15	+0.8
10264	CAH	LTE-TDD (SC-FDMA, 100% RB, 3MHz, QPSK)	LTE-TDD	9.23	+0.5
10265	CAH	LTE-TDD (SC-FDMA, 100% RB, 10MHz, 16-QAM)	LTE-TDD	9.82	+0.8
10266	CAH	LTE-TDD (SC-FDMA, 100% RB, 10MHz, 64-QAM)	LTE-TDD	10.07	+0.5
10267	CAH	LTE-TDD (SC-FDMA, 100% RB, 10MHz, QPSK)	LTE-TDD	9.38	+0.8
10268	CAG	LTE-TDD (SC-FDMA, 100% RB, 15MHz, 16-QAM)	LTE-TDD	10.06	+0.5
10269	CAG	LTE-TDD (SC-FDMA, 100% RB, 15MHz, 64-QAM)	LTE-TDD	10.13	+0.5
10270	CAG	LTE-TDD (SC-FDMA, 100% RB, 15MHz, QPSK)	LTE-TDD	9.58	+0.5
10271	CAC	UMTS-FDD (HSRPA, Subnet 5, 3GPP Rel.10)	WCDMA	4.97	+0.6
10272	CAC	UMTS-FDD (HSRPA, Subnet 5, 3GPP Rel.14)	WCDMA	3.96	+0.5
10273	CAA	PHS (QPSK)	PHS	11.81	+0.5
10274	CAA	PHS (QPSK, BW 884MHz, Roll-off 0.5)	PHS	11.81	+0.8
10275	CAA	PHS (QPSK, BW 884MHz, Roll-off 0.38)	PHS	12.18	+0.5
10290	AAB	CDMA2000, R1.0, 3.1MHz, Full Rate	CDMA2000	3.91	+0.5
10291	AAB	CDMA2000, R1.0, 3.1MHz, Full Rate	CDMA2000	3.46	+0.5
10292	AAB	CDMA2000, R1.0, 3.1MHz, Full Rate	CDMA2000	3.39	+0.8
10293	AAB	CDMA2000, R1.0, 3.1MHz, Full Rate	CDMA2000	3.30	+0.5
10294	AAB	CDMA2000, R1.0, 3.1MHz, Full Rate	CDMA2000	12.49	+0.5
10295	AAB	CDMA2000, R1.0, 3.1MHz, Full Rate	CDMA2000	12.49	+0.5
10296	AAB	CDMA2000, R1.0, 3.1MHz, Full Rate	CDMA2000	12.49	+0.5
10297	AAB	CDMA2000, R1.0, 3.1MHz, Full Rate	CDMA2000	12.49	+0.5
10298	AAB	CDMA2000, R1.0, 3.1MHz, Full Rate	CDMA2000	12.49	+0.5
10299	AAB	CDMA2000, R1.0, 3.1MHz, Full Rate	CDMA2000	12.49	+0.5
10300	AAB	CDMA2000, R1.0, 3.1MHz, Full Rate	CDMA2000	12.49	+0.5
10301	AAA	IEEE 802.15.4 WIMAX (20-18, 5ms, 10MHz, QPSK, PUSC)	WIMAX	12.03	+0.8
10302	AAA	IEEE 802.15.4 WIMAX (20-18, 5ms, 10MHz, QPSK, PUSC, 3 CTR, symbols)	WIMAX	12.07	+0.5
10303	AAA	IEEE 802.15.4 WIMAX (20-18, 5ms, 10MHz, 64QAM, PUSC)	WIMAX	12.52	+0.5
10304	AAA	IEEE 802.15.4 WIMAX (20-18, 5ms, 10MHz, 64QAM, PUSC)	WIMAX	11.86	+0.8
10305	AAA	IEEE 802.15.4 WIMAX (20-18, 5ms, 10MHz, 64QAM, PUSC, 15 symbols)	WIMAX	15.24	+0.5
10306	AAA	IEEE 802.15.4 WIMAX (20-18, 5ms, 10MHz, 64QAM, PUSC, 15 symbols)	WIMAX	14.27	+0.5

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10307	AAA	IEEE 802.15e WIMAX (20-18, 10 ms, 10 MHz, QPSK, PUSC, 16 symbols)	WIMAX	14.49	± 0.6
10308	AAA	IEEE 802.15e WIMAX (20-18, 10 ms, 10 MHz, 16QAM, PUSC)	WIMAX	14.49	± 0.6
10309	AAA	IEEE 802.15e WIMAX (20-18, 10 ms, 10 MHz, 16QAM, AMC 2x3, 16 symbols)	WIMAX	14.55	± 0.6
10310	AAA	IEEE 802.15e WIMAX (20-18, 10 ms, 10 MHz, QPSK, AMC 2x3, 16 symbols)	WIMAX	14.57	± 0.6
10311	AAE	LTE-FDD (SC-FDMA, 180% RB, 15 MHz, QPSK)	LTE-FDD	9.99	± 0.6
10313	AAA	CDEN 1.3	CDEN	10.51	± 0.6
10314	AAA	CDEN 1.3	CDEN	13.48	± 0.6
10315	AAB	IEEE 802.11a WLAN 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	WLAN	1.71	± 0.6
10316	AAB	IEEE 802.11g WLAN 2.4 GHz (DSSS, 6 Mbps, 90pc duty cycle)	WLAN	3.35	± 0.6
10317	AAB	IEEE 802.11a WLAN 2.4 GHz (OFDM, 6 Mbps, 90pc duty cycle)	WLAN	3.35	± 0.6
10320	AAA	Pulse Waveform (250Hz, 10%)	Generic	13.00	± 0.6
10323	AAA	Pulse Waveform (250Hz, 20%)	Generic	6.99	± 0.6
10324	AAA	Pulse Waveform (250Hz, 40%)	Generic	3.88	± 0.6
10325	AAA	Pulse Waveform (250Hz, 60%)	Generic	2.22	± 0.6
10326	AAA	Pulse Waveform (250Hz, 80%)	Generic	0.97	± 0.6
10327	AAA	QPSK Waveform, 1 MHz	Generic	5.10	± 0.6
10330	AAA	QPSK Waveform, 10 MHz	Generic	5.22	± 0.6
10331	AAA	64-QAM Waveform, 100 KHz	Generic	8.27	± 0.6
10332	AAA	64-QAM Waveform, 40 MHz	Generic	8.27	± 0.6
10400	AAE	IEEE 802.11ac WLAN (80 MHz, 64-QAM, 90pc duty cycle)	WLAN	8.37	± 0.6
10401	AAE	IEEE 802.11ac WLAN (40 MHz, 64-QAM, 90pc duty cycle)	WLAN	8.65	± 0.6
10402	AAE	IEEE 802.11ac WLAN (80 MHz, 64-QAM, 90pc duty cycle)	WLAN	8.53	± 0.6
10403	AAB	CDMA2000 1xEV-DO, Rev. 0	CDMA2000	3.76	± 0.6
10404	AAB	CDMA2000 1xEV-DO, Rev. A	CDMA2000	3.77	± 0.6
10405	AAB	CDMA2000 1xEV-DO, Rev. A	CDMA2000	5.22	± 0.6
10410	AAH	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Cont=4)	LTE-TDD	7.82	± 0.6
10414	AAA	WLAN COFDM, 64-QAM, 40 MHz	Generic	8.54	± 0.6
10415	AAA	IEEE 802.11b WLAN 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	WLAN	1.54	± 0.6
10416	AAA	IEEE 802.11g WLAN 2.4 GHz (DSSS, 6 Mbps, 90pc duty cycle)	WLAN	8.23	± 0.6
10417	AAE	IEEE 802.11n WLAN 2.4 GHz (OFDM, 6 Mbps, 90pc duty cycle)	WLAN	8.23	± 0.6
10418	AAA	IEEE 802.11g WLAN 2.4 GHz (DSSS, 6 Mbps, 90pc duty cycle, Long preamble)	WLAN	8.14	± 0.6
10419	AAA	IEEE 802.11g WLAN 2.4 GHz (DSSS, 6 Mbps, 90pc duty cycle, Short preamble)	WLAN	8.19	± 0.6
10420	AAE	IEEE 802.11n WLAN 2.4 GHz (OFDM, 6 Mbps, 90pc duty cycle, Short preamble)	WLAN	8.32	± 0.6
10423	AAE	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	WLAN	8.47	± 0.6
10424	AAE	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	WLAN	8.46	± 0.6
10425	AAE	IEEE 802.11n (HT Greenfield, 15 Mbps, 16-QAM)	WLAN	8.41	± 0.6
10426	AAE	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	WLAN	8.45	± 0.6
10427	AAE	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	WLAN	8.41	± 0.6
10430	AAE	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	LTE-FDD	8.26	± 0.6
10431	AAE	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	LTE-FDD	8.38	± 0.6
10432	AAE	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	LTE-FDD	8.34	± 0.6
10433	AAE	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	LTE-FDD	8.34	± 0.6
10435	AAE	WCDMA (HS Test Model 1, 64 QPSK)	WCDMA	8.00	± 0.6
10436	AAE	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 0.6
10447	AAE	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.56	± 0.6
10448	AAE	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.63	± 0.6
10449	AAE	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.51	± 0.6
10450	AAE	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.46	± 0.6
10451	AAE	WCDMA (HS Test Model 1, 64 QPSK, Clipping 44%)	WCDMA	7.68	± 0.6
10453	AAE	Validation (Square, 10 ms, 1 ms)	Test	10.00	± 0.6
10456	AAE	IEEE 802.11ac WLAN (160 MHz, 64-QAM, 90pc duty cycle)	WLAN	8.03	± 0.6
10457	AAE	UMTS-FDD (DC-HS-DS-SS)	WCDMA	6.62	± 0.6
10458	AAA	CDMA2000 1xEV-DO, Rev. B, 2 carriers	CDMA2000	6.55	± 0.6
10459	AAA	CDMA2000 1xEV-DO, Rev. B, 3 carriers	CDMA2000	8.25	± 0.6
10460	AAE	UMTS-FDD (WCDMA, AMR)	WCDMA	2.39	± 0.6
10461	AAE	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 0.6
10462	AAE	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.00	± 0.6
10463	AAE	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.56	± 0.6
10464	AAE	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 0.6
10465	AAE	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	± 0.6
10466	AAE	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	± 0.6
10467	AAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 0.6
10468	AAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	± 0.6
10469	AAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.56	± 0.6
10470	AAE	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 0.6
10471	AAE	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	± 0.6

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10472	AA0	LTE-TDD (SC-FDMA, 1 RB, 10MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	±0.6
10473	AA0	LTE-TDD (SC-FDMA, 1 RB, 15MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±0.6
10474	AA0	LTE-TDD (SC-FDMA, 1 RB, 15MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	±0.6
10475	AA0	LTE-TDD (SC-FDMA, 1 RB, 15MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	±0.6
10477	AA0	LTE-TDD (SC-FDMA, 1 RB, 20MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	±0.6
10478	AA0	LTE-TDD (SC-FDMA, 1 RB, 20MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	±0.6
10479	AA0	LTE-TDD (SC-FDMA, 50% RB, 1.4MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±0.6
10480	AA0	LTE-TDD (SC-FDMA, 50% RB, 1.4MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.16	±0.6
10481	AA0	LTE-TDD (SC-FDMA, 50% RB, 1.4MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.45	±0.6
10482	AA0	LTE-TDD (SC-FDMA, 50% RB, 3MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.71	±0.6
10483	AA0	LTE-TDD (SC-FDMA, 50% RB, 3MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.39	±0.6
10484	AA0	LTE-TDD (SC-FDMA, 50% RB, 3MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.47	±0.6
10485	AA0	LTE-TDD (SC-FDMA, 50% RB, 5MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.59	±0.6
10486	AA0	LTE-TDD (SC-FDMA, 50% RB, 5MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.36	±0.6
10487	AA0	LTE-TDD (SC-FDMA, 50% RB, 5MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.60	±0.6
10488	AA0	LTE-TDD (SC-FDMA, 50% RB, 15MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.70	±0.6
10489	AA0	LTE-TDD (SC-FDMA, 50% RB, 15MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.31	±0.6
10490	AA0	LTE-TDD (SC-FDMA, 50% RB, 15MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.54	±0.6
10491	AA0	LTE-TDD (SC-FDMA, 50% RB, 15MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±0.6
10492	AA0	LTE-TDD (SC-FDMA, 50% RB, 15MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.41	±0.6
10493	AA0	LTE-TDD (SC-FDMA, 50% RB, 15MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.56	±0.6
10494	AA0	LTE-TDD (SC-FDMA, 50% RB, 20MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±0.6
10495	AA0	LTE-TDD (SC-FDMA, 50% RB, 20MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.37	±0.6
10496	AA0	LTE-TDD (SC-FDMA, 50% RB, 20MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.54	±0.6
10497	AA0	LTE-TDD (SC-FDMA, 100% RB, 1.4MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.67	±0.6
10498	AA0	LTE-TDD (SC-FDMA, 100% RB, 1.4MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.40	±0.6
10499	AA0	LTE-TDD (SC-FDMA, 100% RB, 1.4MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.60	±0.6
10500	AA0	LTE-TDD (SC-FDMA, 100% RB, 3MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.67	±0.6
10501	AA0	LTE-TDD (SC-FDMA, 100% RB, 3MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.44	±0.6
10502	AA0	LTE-TDD (SC-FDMA, 100% RB, 3MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.62	±0.6
10503	AA0	LTE-TDD (SC-FDMA, 100% RB, 5MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.72	±0.6
10504	AA0	LTE-TDD (SC-FDMA, 100% RB, 5MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.31	±0.6
10505	AA0	LTE-TDD (SC-FDMA, 100% RB, 5MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.54	±0.6
10506	AA0	LTE-TDD (SC-FDMA, 100% RB, 10MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±0.6
10507	AA0	LTE-TDD (SC-FDMA, 100% RB, 10MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.36	±0.6
10508	AA0	LTE-TDD (SC-FDMA, 100% RB, 10MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.55	±0.6
10509	AA0	LTE-TDD (SC-FDMA, 100% RB, 15MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.99	±0.6
10510	AA0	LTE-TDD (SC-FDMA, 100% RB, 15MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.49	±0.6
10511	AA0	LTE-TDD (SC-FDMA, 100% RB, 15MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.51	±0.6
10512	AA0	LTE-TDD (SC-FDMA, 100% RB, 20MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±0.6
10513	AA0	LTE-TDD (SC-FDMA, 100% RB, 20MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.42	±0.6
10514	AA0	LTE-TDD (SC-FDMA, 100% RB, 20MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.45	±0.6
10515	AAA	IEEE 802.11b WIF 2.4GHz (2685, 2Mbps, 90pc duty cycle)	WLAN	7.99	±0.6
10516	AAA	IEEE 802.11b WIF 2.4GHz (2685, 5.5Mbps, 90pc duty cycle)	WLAN	7.57	±0.6
10517	AAA	IEEE 802.11b WIF 2.4GHz (2685, 11Mbps, 90pc duty cycle)	WLAN	7.59	±0.6
10518	AA0	IEEE 802.11a WIF 5GHz (3638, 6Mbps, 90pc duty cycle)	WLAN	8.29	±0.6
10519	AA0	IEEE 802.11a WIF 5GHz (3638, 12Mbps, 90pc duty cycle)	WLAN	8.39	±0.6
10520	AA0	IEEE 802.11a WIF 5GHz (3638, 18Mbps, 90pc duty cycle)	WLAN	8.12	±0.6
10521	AA0	IEEE 802.11a WIF 5GHz (3638, 24Mbps, 90pc duty cycle)	WLAN	7.97	±0.6
10522	AA0	IEEE 802.11a WIF 5GHz (3638, 36Mbps, 90pc duty cycle)	WLAN	8.45	±0.6
10523	AA0	IEEE 802.11a WIF 5GHz (3638, 48Mbps, 90pc duty cycle)	WLAN	8.08	±0.6
10524	AA0	IEEE 802.11a WIF 5GHz (3638, 54Mbps, 90pc duty cycle)	WLAN	8.27	±0.6
10525	AA0	IEEE 802.11ac WIF 20MHz, MCS0, 90pc duty cycle)	WLAN	8.36	±0.6
10526	AA0	IEEE 802.11ac WIF 20MHz, MCS1, 90pc duty cycle)	WLAN	8.37	±0.6
10527	AA0	IEEE 802.11ac WIF 20MHz, MCS2, 90pc duty cycle)	WLAN	8.21	±0.6
10528	AA0	IEEE 802.11ac WIF 20MHz, MCS3, 90pc duty cycle)	WLAN	8.36	±0.6
10529	AA0	IEEE 802.11ac WIF 20MHz, MCS4, 90pc duty cycle)	WLAN	8.36	±0.6
10530	AA0	IEEE 802.11ac WIF 20MHz, MCS5, 90pc duty cycle)	WLAN	8.43	±0.6
10531	AA0	IEEE 802.11ac WIF 20MHz, MCS6, 90pc duty cycle)	WLAN	8.29	±0.6
10532	AA0	IEEE 802.11ac WIF 20MHz, MCS7, 90pc duty cycle)	WLAN	8.39	±0.6
10533	AA0	IEEE 802.11ac WIF 20MHz, MCS8, 90pc duty cycle)	WLAN	8.39	±0.6
10534	AA0	IEEE 802.11ac WIF 40MHz, MCS0, 90pc duty cycle)	WLAN	8.45	±0.6
10535	AA0	IEEE 802.11ac WIF 40MHz, MCS1, 90pc duty cycle)	WLAN	8.45	±0.6
10536	AA0	IEEE 802.11ac WIF 40MHz, MCS2, 90pc duty cycle)	WLAN	8.32	±0.6
10537	AA0	IEEE 802.11ac WIF 40MHz, MCS3, 90pc duty cycle)	WLAN	8.44	±0.6
10538	AA0	IEEE 802.11ac WIF 40MHz, MCS4, 90pc duty cycle)	WLAN	8.54	±0.6
10540	AA0	IEEE 802.11ac WIF 40MHz, MCS8, 90pc duty cycle)	WLAN	8.39	±0.6

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10541	AAD	IEEE 802.11ac WPI 140 MHz, MCS7, 90pc duty cycle	WLAN	8.48	±0.8
10542	AAD	IEEE 802.11ac WPI 140 MHz, MCS8, 90pc duty cycle	WLAN	8.65	±0.8
10543	AAD	IEEE 802.11ac WPI 140 MHz, MCS9, 90pc duty cycle	WLAN	8.65	±0.8
10544	AAD	IEEE 802.11ac WPI 140 MHz, MCS10, 90pc duty cycle	WLAN	8.67	±0.8
10545	AAD	IEEE 802.11ac WPI 140 MHz, MCS11, 90pc duty cycle	WLAN	8.55	±0.8
10546	AAD	IEEE 802.11ac WPI 140 MHz, MCS12, 90pc duty cycle	WLAN	8.35	±0.8
10547	AAD	IEEE 802.11ac WPI 140 MHz, MCS13, 90pc duty cycle	WLAN	8.40	±0.8
10548	AAD	IEEE 802.11ac WPI 140 MHz, MCS14, 90pc duty cycle	WLAN	8.37	±0.8
10550	AAD	IEEE 802.11ac WPI 140 MHz, MCS15, 90pc duty cycle	WLAN	8.36	±0.8
10551	AAD	IEEE 802.11ac WPI 140 MHz, MCS16, 90pc duty cycle	WLAN	8.50	±0.8
10552	AAD	IEEE 802.11ac WPI 140 MHz, MCS17, 90pc duty cycle	WLAN	8.42	±0.8
10553	AAD	IEEE 802.11ac WPI 140 MHz, MCS18, 90pc duty cycle	WLAN	8.48	±0.8
10554	AAD	IEEE 802.11ac WPI 140 MHz, MCS19, 90pc duty cycle	WLAN	8.48	±0.8
10555	AAD	IEEE 802.11ac WPI 140 MHz, MCS20, 90pc duty cycle	WLAN	8.47	±0.8
10556	AAD	IEEE 802.11ac WPI 140 MHz, MCS21, 90pc duty cycle	WLAN	8.50	±0.8
10557	AAD	IEEE 802.11ac WPI 140 MHz, MCS22, 90pc duty cycle	WLAN	8.52	±0.8
10558	AAD	IEEE 802.11ac WPI 140 MHz, MCS23, 90pc duty cycle	WLAN	8.51	±0.8
10559	AAD	IEEE 802.11ac WPI 140 MHz, MCS24, 90pc duty cycle	WLAN	8.73	±0.8
10561	AAD	IEEE 802.11ac WPI 140 MHz, MCS25, 90pc duty cycle	WLAN	8.56	±0.8
10562	AAD	IEEE 802.11ac WPI 140 MHz, MCS26, 90pc duty cycle	WLAN	8.59	±0.8
10563	AAD	IEEE 802.11ac WPI 140 MHz, MCS27, 90pc duty cycle	WLAN	8.77	±0.8
10564	AAA	IEEE 802.11g WPI 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)	WLAN	8.35	±0.8
10565	AAA	IEEE 802.11g WPI 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle)	WLAN	8.45	±0.8
10566	AAA	IEEE 802.11g WPI 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle)	WLAN	8.13	±0.8
10567	AAA	IEEE 802.11g WPI 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle)	WLAN	8.00	±0.8
10568	AAA	IEEE 802.11g WPI 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle)	WLAN	8.37	±0.8
10569	AAA	IEEE 802.11g WPI 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle)	WLAN	8.10	±0.8
10570	AAA	IEEE 802.11g WPI 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle)	WLAN	8.30	±0.8
10571	AAA	IEEE 802.11n WPI 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	WLAN	1.39	±0.8
10572	AAA	IEEE 802.11n WPI 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	WLAN	1.39	±0.8
10573	AAA	IEEE 802.11n WPI 2.4 GHz (DSSS, 3.5 Mbps, 90pc duty cycle)	WLAN	1.98	±0.8
10574	AAA	IEEE 802.11n WPI 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	WLAN	1.93	±0.8
10575	AAA	IEEE 802.11n WPI 2.4 GHz (DSSS, 6 Mbps, 90pc duty cycle)	WLAN	8.59	±0.8
10576	AAA	IEEE 802.11n WPI 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)	WLAN	8.50	±0.8
10577	AAA	IEEE 802.11n WPI 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle)	WLAN	8.70	±0.8
10578	AAA	IEEE 802.11n WPI 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle)	WLAN	8.49	±0.8
10579	AAA	IEEE 802.11n WPI 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle)	WLAN	8.36	±0.8
10580	AAA	IEEE 802.11n WPI 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle)	WLAN	8.76	±0.8
10581	AAA	IEEE 802.11n WPI 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle)	WLAN	8.35	±0.8
10582	AAA	IEEE 802.11n WPI 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle)	WLAN	8.67	±0.8
10583	AAD	IEEE 802.11ah WPI 5 GHz (OFDM, 8 Mbps, 90pc duty cycle)	WLAN	8.59	±0.8
10584	AAD	IEEE 802.11ah WPI 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	WLAN	8.60	±0.8
10585	AAD	IEEE 802.11ah WPI 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	WLAN	8.70	±0.8
10586	AAD	IEEE 802.11ah WPI 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	WLAN	8.49	±0.8
10587	AAD	IEEE 802.11ah WPI 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	WLAN	8.36	±0.8
10588	AAD	IEEE 802.11ah WPI 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	WLAN	8.76	±0.8
10589	AAD	IEEE 802.11ah WPI 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	WLAN	8.35	±0.8
10590	AAD	IEEE 802.11ah WPI 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	WLAN	8.67	±0.8
10591	AAD	IEEE 802.11n (HT Mixad, 20 MHz, MCS0, 90pc duty cycle)	WLAN	8.63	±0.8
10592	AAD	IEEE 802.11n (HT Mixad, 20 MHz, MCS1, 90pc duty cycle)	WLAN	8.79	±0.8
10593	AAD	IEEE 802.11n (HT Mixad, 20 MHz, MCS2, 90pc duty cycle)	WLAN	8.64	±0.8
10594	AAD	IEEE 802.11n (HT Mixad, 20 MHz, MCS3, 90pc duty cycle)	WLAN	8.74	±0.8
10595	AAD	IEEE 802.11n (HT Mixad, 20 MHz, MCS4, 90pc duty cycle)	WLAN	8.74	±0.8
10596	AAD	IEEE 802.11n (HT Mixad, 20 MHz, MCS5, 90pc duty cycle)	WLAN	8.71	±0.8
10597	AAD	IEEE 802.11n (HT Mixad, 20 MHz, MCS6, 90pc duty cycle)	WLAN	8.72	±0.8
10598	AAD	IEEE 802.11n (HT Mixad, 20 MHz, MCS7, 90pc duty cycle)	WLAN	8.50	±0.8
10599	AAD	IEEE 802.11n (HT Mixad, 20 MHz, MCS8, 90pc duty cycle)	WLAN	8.79	±0.8
10600	AAD	IEEE 802.11n (HT Mixad, 20 MHz, MCS9, 90pc duty cycle)	WLAN	8.88	±0.8
10601	AAD	IEEE 802.11n (HT Mixad, 20 MHz, MCS10, 90pc duty cycle)	WLAN	8.82	±0.8
10602	AAD	IEEE 802.11n (HT Mixad, 20 MHz, MCS11, 90pc duty cycle)	WLAN	9.04	±0.8
10603	AAD	IEEE 802.11n (HT Mixad, 20 MHz, MCS12, 90pc duty cycle)	WLAN	9.03	±0.8
10604	AAD	IEEE 802.11n (HT Mixad, 20 MHz, MCS13, 90pc duty cycle)	WLAN	8.75	±0.8
10605	AAD	IEEE 802.11n (HT Mixad, 20 MHz, MCS14, 90pc duty cycle)	WLAN	8.97	±0.8
10606	AAD	IEEE 802.11n (HT Mixad, 20 MHz, MCS15, 90pc duty cycle)	WLAN	8.82	±0.8
10607	AAD	IEEE 802.11ac WPI 36 MHz, MCS0, 90pc duty cycle	WLAN	8.54	±0.8
10608	AAD	IEEE 802.11ac WPI 36 MHz, MCS1, 90pc duty cycle	WLAN	8.77	±0.8

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SRD	Rev	Communication System Name	Group	PAR (dB)	Unit ² k = 2
10100	AAD	IEEE 802.11ac WiFi (20 MHz, MCS0, 50pc duty cycle)	WLAN	8.57	+0.6
10101	AAD	IEEE 802.11ac WiFi (20 MHz, MCS0, 50pc duty cycle)	WLAN	8.79	+0.6
10101	AAD	IEEE 802.11ac WiFi (20 MHz, MCS4, 50pc duty cycle)	WLAN	8.70	+0.6
10102	AAD	IEEE 802.11ac WiFi (20 MHz, MCS5, 50pc duty cycle)	WLAN	8.77	+0.6
10103	AAD	IEEE 802.11ac WiFi (20 MHz, MCS9, 50pc duty cycle)	WLAN	8.94	+0.6
10104	AAD	IEEE 802.11ac WiFi (20 MHz, MCS7, 50pc duty cycle)	WLAN	8.59	+0.6
10105	AAD	IEEE 802.11ac WiFi (20 MHz, MCS8, 50pc duty cycle)	WLAN	8.82	+0.6
10106	AAD	IEEE 802.11ac WiFi (40 MHz, MCS0, 50pc duty cycle)	WLAN	8.83	+0.6
10107	AAD	IEEE 802.11ac WiFi (40 MHz, MCS7, 50pc duty cycle)	WLAN	8.81	+0.6
10108	AAD	IEEE 802.11ac WiFi (40 MHz, MCS2, 50pc duty cycle)	WLAN	8.58	+0.6
10109	AAD	IEEE 802.11ac WiFi (40 MHz, MCS3, 50pc duty cycle)	WLAN	8.86	+0.6
10120	AAD	IEEE 802.11ac WiFi (40 MHz, MCS4, 50pc duty cycle)	WLAN	8.87	+0.6
10121	AAD	IEEE 802.11ac WiFi (40 MHz, MCS5, 50pc duty cycle)	WLAN	8.77	+0.6
10122	AAD	IEEE 802.11ac WiFi (40 MHz, MCS8, 50pc duty cycle)	WLAN	8.68	+0.6
10123	AAD	IEEE 802.11ac WiFi (40 MHz, MCS7, 50pc duty cycle)	WLAN	8.82	+0.6
10124	AAD	IEEE 802.11ac WiFi (40 MHz, MCS9, 50pc duty cycle)	WLAN	8.96	+0.6
10125	AAD	IEEE 802.11ac WiFi (40 MHz, MCS9, 50pc duty cycle)	WLAN	8.96	+0.6
10126	AAD	IEEE 802.11ac WiFi (80 MHz, MCS0, 50pc duty cycle)	WLAN	8.83	+0.6
10127	AAD	IEEE 802.11ac WiFi (80 MHz, MCS7, 50pc duty cycle)	WLAN	8.84	+0.6
10128	AAD	IEEE 802.11ac WiFi (80 MHz, MCS2, 50pc duty cycle)	WLAN	8.71	+0.6
10129	AAD	IEEE 802.11ac WiFi (80 MHz, MCS3, 50pc duty cycle)	WLAN	8.85	+0.6
10130	AAD	IEEE 802.11ac WiFi (80 MHz, MCS4, 50pc duty cycle)	WLAN	8.72	+0.6
10131	AAD	IEEE 802.11ac WiFi (80 MHz, MCS5, 50pc duty cycle)	WLAN	8.81	+0.6
10132	AAD	IEEE 802.11ac WiFi (80 MHz, MCS9, 50pc duty cycle)	WLAN	8.74	+0.6
10133	AAD	IEEE 802.11ac WiFi (80 MHz, MCS7, 50pc duty cycle)	WLAN	8.83	+0.6
10134	AAD	IEEE 802.11ac WiFi (80 MHz, MCS8, 50pc duty cycle)	WLAN	8.82	+0.6
10135	AAD	IEEE 802.11ac WiFi (80 MHz, MCS9, 50pc duty cycle)	WLAN	8.81	+0.6
10136	AAC	IEEE 802.11ac WiFi (160 MHz, MCS0, 50pc duty cycle)	WLAN	8.83	+0.6
10137	AAC	IEEE 802.11ac WiFi (160 MHz, MCS7, 50pc duty cycle)	WLAN	8.79	+0.6
10138	AAC	IEEE 802.11ac WiFi (160 MHz, MCS2, 50pc duty cycle)	WLAN	8.66	+0.6
10139	AAC	IEEE 802.11ac WiFi (160 MHz, MCS3, 50pc duty cycle)	WLAN	8.85	+0.6
10140	AAC	IEEE 802.11ac WiFi (160 MHz, MCS4, 50pc duty cycle)	WLAN	8.88	+0.6
10141	AAC	IEEE 802.11ac WiFi (160 MHz, MCS5, 50pc duty cycle)	WLAN	8.98	+0.6
10142	AAC	IEEE 802.11ac WiFi (160 MHz, MCS8, 50pc duty cycle)	WLAN	8.96	+0.6
10143	AAC	IEEE 802.11ac WiFi (160 MHz, MCS7, 50pc duty cycle)	WLAN	8.88	+0.6
10144	AAC	IEEE 802.11ac WiFi (160 MHz, MCS9, 50pc duty cycle)	WLAN	8.95	+0.6
10145	AAC	IEEE 802.11ac WiFi (160 MHz, MCS9, 50pc duty cycle)	WLAN	9.11	+0.6
10146	AAR	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL, Subframe=2.7)	LTE-TDD	11.96	+0.6
10147	AAR	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL, Subframe=2.7)	LTE-TDD	11.96	+0.6
10148	AAA	CDMA2000 (1x Advanced)	CDMA2000	3.45	+0.6
10150	AAP	LTE-TDD (OFDMA, 4 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	8.91	+0.6
10151	AAP	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.42	+0.6
10152	AAR	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	8.96	+0.6
10153	AAP	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.21	+0.6
10154	AAB	Pulse Waveform (200Hz, 10%)	Test	13.00	+0.6
10155	AAB	Pulse Waveform (200Hz, 20%)	Test	9.99	+0.6
10156	AAB	Pulse Waveform (200Hz, 40%)	Test	3.98	+0.6
10157	AAB	Pulse Waveform (200Hz, 60%)	Test	2.22	+0.6
10158	AAB	Pulse Waveform (200Hz, 80%)	Test	0.97	+0.6
10159	AAA	Bluetooth Low Energy	Bluetooth	2.19	+0.6
10160	AAC	IEEE 802.11ax (20 MHz, MCS0, 90pc duty cycle)	WLAN	8.99	+0.6
10161	AAC	IEEE 802.11ax (20 MHz, MCS1, 90pc duty cycle)	WLAN	8.57	+0.6
10162	AAC	IEEE 802.11ax (20 MHz, MCS2, 90pc duty cycle)	WLAN	8.78	+0.6
10163	AAC	IEEE 802.11ax (20 MHz, MCS3, 90pc duty cycle)	WLAN	8.74	+0.6
10164	AAC	IEEE 802.11ax (20 MHz, MCS4, 90pc duty cycle)	WLAN	8.90	+0.6
10165	AAC	IEEE 802.11ax (20 MHz, MCS5, 90pc duty cycle)	WLAN	8.77	+0.6
10166	AAC	IEEE 802.11ax (20 MHz, MCS8, 90pc duty cycle)	WLAN	8.73	+0.6
10167	AAC	IEEE 802.11ax (20 MHz, MCS7, 90pc duty cycle)	WLAN	8.78	+0.6
10168	AAC	IEEE 802.11ax (20 MHz, MCS9, 90pc duty cycle)	WLAN	8.89	+0.6
10169	AAC	IEEE 802.11ax (20 MHz, MCS9, 90pc duty cycle)	WLAN	8.80	+0.6
10170	AAC	IEEE 802.11ax (20 MHz, MCS10, 90pc duty cycle)	WLAN	8.82	+0.6
10171	AAC	IEEE 802.11ax (20 MHz, MCS11, 90pc duty cycle)	WLAN	8.83	+0.6
10172	AAC	IEEE 802.11ax (20 MHz, MCS9, 90pc duty cycle)	WLAN	8.42	+0.6
10173	AAC	IEEE 802.11ax (20 MHz, MCS1, 90pc duty cycle)	WLAN	8.26	+0.6
10174	AAC	IEEE 802.11ax (20 MHz, MCS2, 90pc duty cycle)	WLAN	8.33	+0.6
10175	AAC	IEEE 802.11ax (20 MHz, MCS3, 90pc duty cycle)	WLAN	8.28	+0.6

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UID	Rev	Communication System Name	Group	PAR (dB)	Unc ² & = 2
10687	AAC	IEEE 802.11ax (20 MHz, MCS4, 99pc duty cycle)	WLAN	3.45	±0.5
10688	AAC	IEEE 802.11ax (20 MHz, MCS5, 99pc duty cycle)	WLAN	3.29	±0.5
10689	AAC	IEEE 802.11ax (20 MHz, MCS6, 99pc duty cycle)	WLAN	3.55	±0.5
10690	AAC	IEEE 802.11ax (20 MHz, MCS7, 99pc duty cycle)	WLAN	3.29	±0.5
10691	AAC	IEEE 802.11ax (20 MHz, MCS8, 99pc duty cycle)	WLAN	3.25	±0.5
10692	AAC	IEEE 802.11ax (20 MHz, MCS9, 99pc duty cycle)	WLAN	3.29	±0.5
10693	AAC	IEEE 802.11ax (20 MHz, MCS10, 99pc duty cycle)	WLAN	3.25	±0.5
10694	AAC	IEEE 802.11ax (20 MHz, MCS11, 99pc duty cycle)	WLAN	3.57	±0.5
10695	AAC	IEEE 802.11ax (40 MHz, MCS5, 99pc duty cycle)	WLAN	3.76	±0.5
10696	AAC	IEEE 802.11ax (40 MHz, MCS6, 99pc duty cycle)	WLAN	3.81	±0.5
10697	AAC	IEEE 802.11ax (40 MHz, MCS7, 99pc duty cycle)	WLAN	3.61	±0.5
10698	AAC	IEEE 802.11ax (40 MHz, MCS8, 99pc duty cycle)	WLAN	3.69	±0.5
10699	AAC	IEEE 802.11ax (40 MHz, MCS9, 99pc duty cycle)	WLAN	3.82	±0.5
10700	AAC	IEEE 802.11ax (40 MHz, MCS10, 99pc duty cycle)	WLAN	3.75	±0.5
10701	AAC	IEEE 802.11ax (40 MHz, MCS11, 99pc duty cycle)	WLAN	3.86	±0.5
10702	AAC	IEEE 802.11ax (40 MHz, MCS7, 99pc duty cycle)	WLAN	3.70	±0.5
10703	AAC	IEEE 802.11ax (40 MHz, MCS8, 99pc duty cycle)	WLAN	3.62	±0.5
10704	AAC	IEEE 802.11ax (40 MHz, MCS9, 99pc duty cycle)	WLAN	3.56	±0.5
10705	AAC	IEEE 802.11ax (40 MHz, MCS10, 99pc duty cycle)	WLAN	3.69	±0.5
10706	AAC	IEEE 802.11ax (40 MHz, MCS11, 99pc duty cycle)	WLAN	3.66	±0.5
10707	AAC	IEEE 802.11ax (40 MHz, MCS6, 99pc duty cycle)	WLAN	3.32	±0.5
10708	AAC	IEEE 802.11ax (40 MHz, MCS7, 99pc duty cycle)	WLAN	3.55	±0.5
10709	AAC	IEEE 802.11ax (40 MHz, MCS8, 99pc duty cycle)	WLAN	3.33	±0.5
10710	AAC	IEEE 802.11ax (40 MHz, MCS9, 99pc duty cycle)	WLAN	3.29	±0.5
10711	AAC	IEEE 802.11ax (40 MHz, MCS10, 99pc duty cycle)	WLAN	3.39	±0.5
10712	AAC	IEEE 802.11ax (40 MHz, MCS11, 99pc duty cycle)	WLAN	3.67	±0.5
10713	AAC	IEEE 802.11ax (40 MHz, MCS8, 99pc duty cycle)	WLAN	3.33	±0.5
10714	AAC	IEEE 802.11ax (40 MHz, MCS7, 99pc duty cycle)	WLAN	3.26	±0.5
10715	AAC	IEEE 802.11ax (40 MHz, MCS9, 99pc duty cycle)	WLAN	3.45	±0.5
10716	AAC	IEEE 802.11ax (40 MHz, MCS10, 99pc duty cycle)	WLAN	3.30	±0.5
10717	AAC	IEEE 802.11ax (40 MHz, MCS11, 99pc duty cycle)	WLAN	3.40	±0.5
10718	AAC	IEEE 802.11ax (40 MHz, MCS11, 99pc duty cycle)	WLAN	3.34	±0.5
10719	AAC	IEEE 802.11ax (80 MHz, MCS3, 99pc duty cycle)	WLAN	3.81	±0.5
10720	AAC	IEEE 802.11ax (80 MHz, MCS1, 99pc duty cycle)	WLAN	3.87	±0.5
10721	AAC	IEEE 802.11ax (80 MHz, MCS2, 99pc duty cycle)	WLAN	3.76	±0.5
10722	AAC	IEEE 802.11ax (80 MHz, MCS3, 99pc duty cycle)	WLAN	3.95	±0.5
10723	AAC	IEEE 802.11ax (80 MHz, MCS4, 99pc duty cycle)	WLAN	3.70	±0.5
10724	AAC	IEEE 802.11ax (80 MHz, MCS5, 99pc duty cycle)	WLAN	3.90	±0.5
10725	AAC	IEEE 802.11ax (80 MHz, MCS9, 99pc duty cycle)	WLAN	3.74	±0.5
10726	AAC	IEEE 802.11ax (80 MHz, MCS7, 99pc duty cycle)	WLAN	3.72	±0.5
10727	AAC	IEEE 802.11ax (80 MHz, MCS9, 99pc duty cycle)	WLAN	3.93	±0.5
10728	AAC	IEEE 802.11ax (80 MHz, MCS1, 99pc duty cycle)	WLAN	3.85	±0.5
10729	AAC	IEEE 802.11ax (80 MHz, MCS10, 99pc duty cycle)	WLAN	3.84	±0.5
10730	AAC	IEEE 802.11ax (80 MHz, MCS11, 99pc duty cycle)	WLAN	3.87	±0.5
10731	AAC	IEEE 802.11ax (80 MHz, MCS3, 99pc duty cycle)	WLAN	3.42	±0.5
10732	AAC	IEEE 802.11ax (80 MHz, MCS1, 99pc duty cycle)	WLAN	3.46	±0.5
10733	AAC	IEEE 802.11ax (80 MHz, MCS2, 99pc duty cycle)	WLAN	3.40	±0.5
10734	AAC	IEEE 802.11ax (80 MHz, MCS3, 99pc duty cycle)	WLAN	3.25	±0.5
10735	AAC	IEEE 802.11ax (80 MHz, MCS4, 99pc duty cycle)	WLAN	3.33	±0.5
10736	AAC	IEEE 802.11ax (80 MHz, MCS5, 99pc duty cycle)	WLAN	3.27	±0.5
10737	AAC	IEEE 802.11ax (80 MHz, MCS9, 99pc duty cycle)	WLAN	3.38	±0.5
10738	AAC	IEEE 802.11ax (80 MHz, MCS7, 99pc duty cycle)	WLAN	3.42	±0.5
10739	AAC	IEEE 802.11ax (80 MHz, MCS9, 99pc duty cycle)	WLAN	3.23	±0.5
10740	AAC	IEEE 802.11ax (80 MHz, MCS9, 99pc duty cycle)	WLAN	3.48	±0.5
10741	AAC	IEEE 802.11ax (80 MHz, MCS10, 99pc duty cycle)	WLAN	3.43	±0.5
10742	AAC	IEEE 802.11ax (80 MHz, MCS11, 99pc duty cycle)	WLAN	3.43	±0.5
10743	AAC	IEEE 802.11ax (160 MHz, MCS3, 99pc duty cycle)	WLAN	3.84	±0.5
10744	AAC	IEEE 802.11ax (160 MHz, MCS1, 99pc duty cycle)	WLAN	3.18	±0.5
10745	AAC	IEEE 802.11ax (160 MHz, MCS2, 99pc duty cycle)	WLAN	3.50	±0.5
10746	AAC	IEEE 802.11ax (160 MHz, MCS3, 99pc duty cycle)	WLAN	3.11	±0.5
10747	AAC	IEEE 802.11ax (160 MHz, MCS4, 99pc duty cycle)	WLAN	3.64	±0.5
10748	AAC	IEEE 802.11ax (160 MHz, MCS9, 99pc duty cycle)	WLAN	3.93	±0.5
10749	AAC	IEEE 802.11ax (160 MHz, MCS1, 99pc duty cycle)	WLAN	3.50	±0.5
10750	AAC	IEEE 802.11ax (160 MHz, MCS7, 99pc duty cycle)	WLAN	3.79	±0.5
10751	AAC	IEEE 802.11ax (160 MHz, MCS8, 99pc duty cycle)	WLAN	3.82	±0.5
10752	AAC	IEEE 802.11ax (160 MHz, MCS9, 99pc duty cycle)	WLAN	3.61	±0.5

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UID	Rev	Communication System Name	Group	PAIR (dB)	Unc ¹ k = 2
10753	AAC	IEEE 802.11ax (180 MHz, MCS15, 90pc duty cycle)	WLAN	8.00	±0.8
10754	AAC	IEEE 802.11ax (180 MHz, MCS11, 90pc duty cycle)	WLAN	8.04	±0.8
10755	AAC	IEEE 802.11ax (180 MHz, MCS0, 90pc duty cycle)	WLAN	8.04	±0.8
10756	AAC	IEEE 802.11ax (180 MHz, MCS1, 90pc duty cycle)	WLAN	8.77	±0.8
10757	AAC	IEEE 802.11ax (180 MHz, MCS2, 90pc duty cycle)	WLAN	8.77	±0.8
10758	AAC	IEEE 802.11ax (180 MHz, MCS3, 90pc duty cycle)	WLAN	8.69	±0.8
10759	AAC	IEEE 802.11ax (180 MHz, MCS4, 90pc duty cycle)	WLAN	8.58	±0.8
10760	AAC	IEEE 802.11ax (180 MHz, MCS5, 90pc duty cycle)	WLAN	8.49	±0.8
10761	AAC	IEEE 802.11ax (180 MHz, MCS6, 90pc duty cycle)	WLAN	8.56	±0.8
10762	AAC	IEEE 802.11ax (180 MHz, MCS7, 90pc duty cycle)	WLAN	8.49	±0.8
10763	AAC	IEEE 802.11ax (180 MHz, MCS8, 90pc duty cycle)	WLAN	8.53	±0.8
10764	AAC	IEEE 802.11ax (180 MHz, MCS9, 90pc duty cycle)	WLAN	8.54	±0.8
10765	AAC	IEEE 802.11ax (180 MHz, MCS10, 90pc duty cycle)	WLAN	8.54	±0.8
10766	AAC	IEEE 802.11ax (180 MHz, MCS11, 90pc duty cycle)	WLAN	8.51	±0.8
10767	AAG	5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	7.99	±0.6
10768	AAG	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.01	±0.6
10769	AAD	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.01	±0.6
10770	AAB	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	±0.6
10771	AAD	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	±0.6
10772	AAB	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.03	±0.6
10773	AAP	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.03	±0.6
10774	AAB	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	±0.6
10775	AAP	5G NR (CP-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.31	±0.6
10776	AAB	5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.30	±0.6
10777	AAC	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.30	±0.6
10778	AAC	5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.34	±0.6
10779	AAC	5G NR (CP-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.42	±0.6
10780	AAB	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.38	±0.6
10781	AAP	5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.38	±0.6
10782	AAB	5G NR (CP-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.43	±0.6
10783	AAD	5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.31	±0.6
10784	AAD	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.29	±0.6
10785	AAD	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.43	±0.6
10786	AAB	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.35	±0.6
10787	AAD	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.44	±0.6
10788	AAB	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.39	±0.6
10789	AAP	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.37	±0.6
10790	AAB	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.39	±0.6
10791	AAG	5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.83	±0.6
10792	AAB	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.82	±0.6
10793	AAD	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.95	±0.6
10794	AAB	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.82	±0.6
10795	AAD	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.84	±0.6
10796	AAB	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.88	±0.6
10797	AAP	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.01	±0.6
10798	AAB	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.88	±0.6
10799	AAP	5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.93	±0.6
10800	AAP	5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.89	±0.6
10801	AAB	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.87	±0.6
10802	AAP	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.93	±0.6
10803	AAB	5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	±0.6
10804	AAD	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.37	±0.6
10805	AAB	5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	±0.6
10806	AAP	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	±0.6
10807	AAP	5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.35	±0.6
10808	AAB	5G NR (CP-OFDM, 50% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.35	±0.6
10809	AAB	5G NR (CP-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	±0.6
10810	AAP	5G NR (CP-OFDM, 50% RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	±0.6
10811	AAD	5G NR (CP-OFDM, 50% RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.35	±0.6
10812	AAB	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	±0.6
10813	AAD	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.35	±0.6
10814	AAB	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.30	±0.6
10815	AAD	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	±0.6
10816	AAB	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	±0.6
10817	AAP	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.36	±0.6
10818	AAB	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.39	±0.6
10819	AAP	5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	±0.6
10820	AAP	5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.42	±0.6
10821	AAB	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.43	±0.6

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10029	AJF	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.40	±0.6
10030	AJF	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.63	±0.6
10031	AJD	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.73	±0.6
10032	AJF	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.74	±0.6
10033	AJD	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.70	±0.6
10034	AJF	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.75	±0.6
10035	AJF	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.70	±0.6
10036	AJF	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.56	±0.6
10037	AJF	5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.58	±0.6
10038	AJF	5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.70	±0.6
10040	AJF	5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.67	±0.6
10041	AJF	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.71	±0.6
10043	AJD	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.49	±0.6
10044	AJF	5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.34	±0.6
10046	AJF	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	±0.6
10054	AJF	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.34	±0.6
10055	AJD	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.39	±0.6
10056	AJF	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.37	±0.6
10057	AJD	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.35	±0.6
10058	AJF	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.36	±0.6
10059	AJF	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.34	±0.6
10060	AJF	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	±0.6
10061	AJF	5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.40	±0.6
10063	AJF	5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	±0.6
10064	AJF	5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.37	±0.6
10065	AJF	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	±0.6
10066	AJF	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.69	±0.6
10068	AJF	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.69	±0.6
10069	AJF	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.75	±0.6
10070	AJF	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.88	±0.6
10071	AJF	5G NR (CP-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	5.75	±0.6
10072	AJF	5G NR (CP-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	5.52	±0.6
10073	AJF	5G NR (CP-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.81	±0.6
10074	AJF	5G NR (CP-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.65	±0.6
10075	AJF	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	7.78	±0.6
10076	AJF	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	8.39	±0.6
10077	AJF	5G NR (CP-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	7.85	±0.6
10078	AJF	5G NR (CP-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.41	±0.6
10079	AJF	5G NR (CP-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.12	±0.6
10080	AJF	5G NR (CP-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.38	±0.6
10081	AJF	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.75	±0.6
10082	AJF	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.88	±0.6
10083	AJF	5G NR (CP-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	5.57	±0.6
10084	AJF	5G NR (CP-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	6.53	±0.6
10085	AJF	5G NR (CP-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.81	±0.6
10086	AJF	5G NR (CP-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.65	±0.6
10087	AJF	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	7.78	±0.6
10088	AJF	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	8.35	±0.6
10089	AJF	5G NR (CP-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.02	±0.6
10090	AJF	5G NR (CP-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.40	±0.6
10091	AJF	5G NR (CP-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.13	±0.6
10092	AJF	5G NR (CP-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.21	±0.6
10093	AJF	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.66	±0.6
10094	AJF	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.67	±0.6
10095	AJF	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±0.6
10096	AJF	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±0.6
10097	AJF	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±0.6
10098	AJF	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.66	±0.6
10099	AJF	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.66	±0.6
10100	AJF	5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.66	±0.6
10101	AJF	5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.76	±0.6
10102	AJF	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.53	±0.6
10103	AJF	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.56	±0.6
10104	AJF	5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.63	±0.6

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10911	AAB	5G NR (DFTs-OFDM, 50% RB, 25 MHz, QPSK, 30 MHz)	5G NR FR1 TDD	5.03	±0.8
10912	AAC	5G NR (DFTs-OFDM, 50% RB, 30 MHz, QPSK, 30 MHz)	5G NR FR1 TDD	5.04	±0.8
10913	AAD	5G NR (DFTs-OFDM, 50% RB, 40 MHz, QPSK, 30 MHz)	5G NR FR1 TDD	5.04	±0.8
10914	AAC	5G NR (DFTs-OFDM, 50% RB, 50 MHz, QPSK, 30 MHz)	5G NR FR1 TDD	5.05	±0.8
10915	AAD	5G NR (DFTs-OFDM, 50% RB, 60 MHz, QPSK, 30 MHz)	5G NR FR1 TDD	5.03	±0.8
10916	AAD	5G NR (DFTs-OFDM, 50% RB, 60 MHz, QPSK, 30 MHz)	5G NR FR1 TDD	5.07	±0.8
10917	AAD	5G NR (DFTs-OFDM, 50% RB, 100 MHz, QPSK, 30 MHz)	5G NR FR1 TDD	5.04	±0.8
10918	AAC	5G NR (DFTs-OFDM, 100% RB, 30 MHz, QPSK, 30 MHz)	5G NR FR1 TDD	5.06	±0.8
10919	AAC	5G NR (DFTs-OFDM, 100% RB, 15 MHz, QPSK, 30 MHz)	5G NR FR1 TDD	5.05	±0.8
10920	AAB	5G NR (DFTs-OFDM, 100% RB, 15 MHz, QPSK, 30 MHz)	5G NR FR1 TDD	5.07	±0.8
10921	AAD	5G NR (DFTs-OFDM, 100% RB, 25 MHz, QPSK, 30 MHz)	5G NR FR1 TDD	5.04	±0.8
10922	AAB	5G NR (DFTs-OFDM, 100% RB, 25 MHz, QPSK, 30 MHz)	5G NR FR1 TDD	5.02	±0.8
10923	AAC	5G NR (DFTs-OFDM, 100% RB, 30 MHz, QPSK, 30 MHz)	5G NR FR1 TDD	5.04	±0.8
10924	AAD	5G NR (DFTs-OFDM, 100% RB, 40 MHz, QPSK, 30 MHz)	5G NR FR1 TDD	5.04	±0.8
10925	AAC	5G NR (DFTs-OFDM, 100% RB, 50 MHz, QPSK, 30 MHz)	5G NR FR1 TDD	5.05	±0.8
10926	AAD	5G NR (DFTs-OFDM, 100% RB, 60 MHz, QPSK, 30 MHz)	5G NR FR1 TDD	5.04	±0.8
10927	AAD	5G NR (DFTs-OFDM, 100% RB, 60 MHz, QPSK, 30 MHz)	5G NR FR1 TDD	5.04	±0.8
10928	AAD	5G NR (DFTs-OFDM, 1 RB, 5 MHz, QPSK, 15 MHz)	5G NR FR1 FDD	5.52	±0.8
10929	AAD	5G NR (DFTs-OFDM, 1 RB, 10 MHz, QPSK, 15 MHz)	5G NR FR1 FDD	5.52	±0.8
10930	AAC	5G NR (DFTs-OFDM, 1 RB, 15 MHz, QPSK, 15 MHz)	5G NR FR1 FDD	5.52	±0.8
10931	AAD	5G NR (DFTs-OFDM, 1 RB, 20 MHz, QPSK, 15 MHz)	5G NR FR1 FDD	5.51	±0.8
10932	AAD	5G NR (DFTs-OFDM, 1 RB, 25 MHz, QPSK, 15 MHz)	5G NR FR1 FDD	5.51	±0.8
10933	AAD	5G NR (DFTs-OFDM, 1 RB, 30 MHz, QPSK, 15 MHz)	5G NR FR1 FDD	5.51	±0.8
10934	AAD	5G NR (DFTs-OFDM, 1 RB, 40 MHz, QPSK, 15 MHz)	5G NR FR1 FDD	5.51	±0.8
10935	AAD	5G NR (DFTs-OFDM, 1 RB, 50 MHz, QPSK, 15 MHz)	5G NR FR1 FDD	5.51	±0.8
10936	AAD	5G NR (DFTs-OFDM, 50% RB, 5 MHz, QPSK, 15 MHz)	5G NR FR1 FDD	5.30	±0.8
10937	AAD	5G NR (DFTs-OFDM, 50% RB, 10 MHz, QPSK, 15 MHz)	5G NR FR1 FDD	5.77	±0.8
10938	AAC	5G NR (DFTs-OFDM, 50% RB, 15 MHz, QPSK, 15 MHz)	5G NR FR1 FDD	5.30	±0.8
10939	AAC	5G NR (DFTs-OFDM, 50% RB, 20 MHz, QPSK, 15 MHz)	5G NR FR1 FDD	5.82	±0.8
10940	AAC	5G NR (DFTs-OFDM, 50% RB, 25 MHz, QPSK, 15 MHz)	5G NR FR1 FDD	5.89	±0.8
10941	AAC	5G NR (DFTs-OFDM, 50% RB, 30 MHz, QPSK, 15 MHz)	5G NR FR1 FDD	5.83	±0.8
10942	AAD	5G NR (DFTs-OFDM, 50% RB, 40 MHz, QPSK, 15 MHz)	5G NR FR1 FDD	5.85	±0.8
10943	AAD	5G NR (DFTs-OFDM, 50% RB, 50 MHz, QPSK, 15 MHz)	5G NR FR1 FDD	5.39	±0.8
10944	AAD	5G NR (DFTs-OFDM, 100% RB, 5 MHz, QPSK, 15 MHz)	5G NR FR1 FDD	5.81	±0.8
10945	AAD	5G NR (DFTs-OFDM, 100% RB, 10 MHz, QPSK, 15 MHz)	5G NR FR1 FDD	5.85	±0.8
10946	AAD	5G NR (DFTs-OFDM, 100% RB, 15 MHz, QPSK, 15 MHz)	5G NR FR1 FDD	5.83	±0.8
10947	AAD	5G NR (DFTs-OFDM, 100% RB, 20 MHz, QPSK, 15 MHz)	5G NR FR1 FDD	5.87	±0.8
10948	AAC	5G NR (DFTs-OFDM, 100% RB, 25 MHz, QPSK, 15 MHz)	5G NR FR1 FDD	5.94	±0.8
10949	AAC	5G NR (DFTs-OFDM, 100% RB, 30 MHz, QPSK, 15 MHz)	5G NR FR1 FDD	5.87	±0.8
10950	AAC	5G NR (DFTs-OFDM, 100% RB, 40 MHz, QPSK, 15 MHz)	5G NR FR1 FDD	5.94	±0.8
10951	AAD	5G NR (DFTs-OFDM, 100% RB, 50 MHz, QPSK, 15 MHz)	5G NR FR1 FDD	5.82	±0.8
10952	AAA	5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 MHz)	5G NR FR1 FDD	8.25	±0.8
10953	AAA	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 MHz)	5G NR FR1 FDD	8.15	±0.8
10954	AAA	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 MHz)	5G NR FR1 FDD	8.23	±0.8
10955	AAA	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 MHz)	5G NR FR1 FDD	8.42	±0.8
10956	AAA	5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 MHz)	5G NR FR1 FDD	8.14	±0.8
10957	AAA	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 MHz)	5G NR FR1 FDD	8.31	±0.8
10958	AAA	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 MHz)	5G NR FR1 FDD	8.61	±0.8
10959	AAA	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 MHz)	5G NR FR1 FDD	8.33	±0.8
10960	AAC	5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 MHz)	5G NR FR1 TDD	9.32	±0.8
10961	AAC	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 MHz)	5G NR FR1 TDD	9.38	±0.8
10962	AAB	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 MHz)	5G NR FR1 TDD	9.40	±0.8
10963	AAC	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 MHz)	5G NR FR1 TDD	9.35	±0.8
10964	AAC	5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 MHz)	5G NR FR1 TDD	9.29	±0.8
10965	AAC	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 MHz)	5G NR FR1 TDD	9.37	±0.8
10966	AAB	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 MHz)	5G NR FR1 TDD	9.25	±0.8
10967	AAC	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 MHz)	5G NR FR1 TDD	9.43	±0.8
10968	AAD	5G NR DL (CP-OFDM, TM 3.1, 100 MHz, 64-QAM, 30 MHz)	5G NR FR1 TDD	9.48	±0.8
10972	AAC	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 15 MHz)	5G NR FR1 TDD	11.50	±0.8
10973	AAD	5G NR (DFTs-OFDM, 1 RB, 100 MHz, QPSK, 30 MHz)	5G NR FR1 TDD	2.06	±0.8
10974	AAD	5G NR (CP-OFDM, 100% RB, 100 MHz, 256-QAM, 30 MHz)	5G NR FR1 TDD	10.28	±0.8
10978	AAA	ULLA 5G-H	ULLA	1.16	±0.8
10979	AAA	ULLA H2R4	ULLA	8.58	±0.8
10985	AAA	ULLA H2R8	ULLA	10.32	±0.8
10987	AAA	ULLA H2R64	ULLA	3.19	±0.8
10988	AAA	ULLA H2R256	ULLA	3.43	±0.8

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10983	AAC	5G NR DL (CP-OFDM, TM 3.1, 48MHz, 64-QAM, 15kHz)	5G NR FR1 TDD	9.31	±0.6
10984	AAB	5G NR DL (CP-OFDM, TM 3.1, 58MHz, 64-QAM, 15kHz)	5G NR FR1 TDD	9.42	±0.6
10985	AAC	5G NR DL (CP-OFDM, TM 3.1, 48MHz, 64-QAM, 30kHz)	5G NR FR1 TDD	9.54	±0.6
10986	AAB	5G NR DL (CP-OFDM, TM 3.1, 58MHz, 64-QAM, 30kHz)	5G NR FR1 TDD	9.65	±0.6
10987	AAC	5G NR DL (CP-OFDM, TM 3.1, 68MHz, 64-QAM, 30kHz)	5G NR FR1 TDD	9.83	±0.6
10988	AAB	5G NR DL (CP-OFDM, TM 3.1, 78MHz, 64-QAM, 30kHz)	5G NR FR1 TDD	9.98	±0.6
10989	AAC	5G NR DL (CP-OFDM, TM 3.1, 88MHz, 64-QAM, 30kHz)	5G NR FR1 TDD	9.93	±0.6
10990	AAB	5G NR DL (CP-OFDM, TM 3.1, 98MHz, 64-QAM, 30kHz)	5G NR FR1 TDD	9.52	±0.6
11000	AAA	5G NR DL (CP-OFDM, TM 3.1, 28MHz, 64-QAM, 15kHz)	5G NR FR1 TDD	10.04	±0.6
11001	AAA	5G NR DL (CP-OFDM, TM 3.1, 28MHz, 64-QAM, 30kHz)	5G NR FR1 TDD	10.73	±0.6
11005	AAA	5G NR DL (CP-OFDM, TM 3.1, 28MHz, 64-QAM, 15kHz)	5G NR FR1 FDD	8.76	±0.6
11006	AAA	5G NR DL (CP-OFDM, TM 3.1, 28MHz, 64-QAM, 15kHz)	5G NR FR1 FDD	8.55	±0.6
11007	AAA	5G NR DL (CP-OFDM, TM 3.1, 48MHz, 64-QAM, 15kHz)	5G NR FR1 FDD	8.46	±0.6
11008	AAA	5G NR DL (CP-OFDM, TM 3.1, 58MHz, 64-QAM, 15kHz)	5G NR FR1 FDD	8.51	±0.6
11009	AAA	5G NR DL (CP-OFDM, TM 3.1, 58MHz, 64-QAM, 30kHz)	5G NR FR1 FDD	8.76	±0.6
11010	AAA	5G NR DL (CP-OFDM, TM 3.1, 58MHz, 64-QAM, 30kHz)	5G NR FR1 FDD	8.56	±0.6
11011	AAA	5G NR DL (CP-OFDM, TM 3.1, 48MHz, 64-QAM, 30kHz)	5G NR FR1 FDD	8.56	±0.6
11012	AAA	5G NR DL (CP-OFDM, TM 3.1, 58MHz, 64-QAM, 30kHz)	5G NR FR1 FDD	8.68	±0.6
11013	AAB	IEEE 802.11be (320MHz, MCS11, 96ps duty cycle)	WLAN	8.47	±0.6
11014	AAB	IEEE 802.11be (320MHz, MCS2, 96ps duty cycle)	WLAN	8.45	±0.6
11015	AAB	IEEE 802.11be (320MHz, MCS3, 96ps duty cycle)	WLAN	8.44	±0.6
11016	AAB	IEEE 802.11be (320MHz, MCS4, 96ps duty cycle)	WLAN	8.44	±0.6
11017	AAB	IEEE 802.11be (320MHz, MCS5, 96ps duty cycle)	WLAN	8.41	±0.6
11018	AAB	IEEE 802.11be (320MHz, MCS6, 96ps duty cycle)	WLAN	8.40	±0.6
11019	AAB	IEEE 802.11be (320MHz, MCS7, 96ps duty cycle)	WLAN	8.29	±0.6
11020	AAB	IEEE 802.11be (320MHz, MCS8, 96ps duty cycle)	WLAN	8.27	±0.6
11021	AAB	IEEE 802.11be (320MHz, MCS9, 96ps duty cycle)	WLAN	8.46	±0.6
11022	AAB	IEEE 802.11be (320MHz, MCS10, 96ps duty cycle)	WLAN	8.36	±0.6
11023	AAB	IEEE 802.11be (320MHz, MCS11, 96ps duty cycle)	WLAN	8.09	±0.6
11024	AAB	IEEE 802.11be (320MHz, MCS12, 96ps duty cycle)	WLAN	8.42	±0.6
11025	AAB	IEEE 802.11be (320MHz, MCS13, 96ps duty cycle)	WLAN	8.37	±0.6
11026	AAB	IEEE 802.11be (320MHz, MCS14, 96ps duty cycle)	WLAN	8.36	±0.6

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



Appendix D.2 Calibration certificate for DAE_SN1595

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland



Schweizerischer Kalibrierdienst
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Servizio svizzero di taratura
Swiss Calibration Service

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Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 0108

Client: **SGS**
Gyeonggi-do - Republic of Korea

Certificate No: **DAE4-1595_Jan25**

CALIBRATION CERTIFICATE

Object: **DAE4 - SD 000 D04 BN - SN: 1595**

Calibration procedure(s): **QA CAL-06.v30**
Calibration procedure for the data acquisition electronics (DAE)

Calibration date: **January 21, 2025**

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature $(22 \pm 3)^{\circ}\text{C}$ and humidity $< 70\%$.

Calibration Equipment used (M&TE official for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Keithley Multimeter Type 2501	SN: 0810278	27-Aug-24 (No 40547)	Aug-25
Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Auto DAE Calibration Unit	SE UWS 053 AA 1001	23-Jan-24 (in house check)	In house check Jan-25
Calibrator Box V2.1	SE UMS 005 AA 1002	23-Jan-24 (in house check)	In house check Jan-25

Calibrated by:	Name Adrian Gehring	Function Laboratory Technician	Signature 
Approved by:	Name Sven Kühn	Function Technical Manager	Signature 

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Issued: January 22, 2025

Certificate No: DAE4-1595_Jan25

Page 1 of 5

**Calibration Laboratory of
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Zeughausstrasse 43, 8004 Zurich, Switzerland



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Accreditation No.: SCS 0108

Glossary

DAE data acquisition electronics
Connector angle information used in DASY system to align probe sensor X to the robot coordinate system.

Methods Applied and Interpretation of Parameters

- **DC Voltage Measurement:** Calibration Factor assessed for use in DASY system by comparison with a calibrated instrument traceable to national standards. The figure given corresponds to the full scale range of the voltmeter in the respective range.
- **Connector angle:** The angle of the connector is assessed measuring the angle mechanically by a tool inserted. Uncertainty is not required.
- The following parameters as documented in the Appendix contain technical information as a result from the performance test and require no uncertainty.
 - **DC Voltage Measurement Linearity:** Verification of the Linearity at +10% and -10% of the nominal calibration voltage. Influence of offset voltage is included in this measurement.
 - **Common mode sensitivity:** Influence of a positive or negative common mode voltage on the differential measurement.
 - **Channel separation:** Influence of a voltage on the neighbor channels not subject to an input voltage.
 - **AD Converter Values with inputs shorted:** Values on the internal AD converter corresponding to zero input voltage
 - **Input Offset Measurement:** Output voltage and statistical results over a large number of zero voltage measurements.
 - **Input Offset Current:** Typical value for information; Maximum channel input offset current, not considering the input resistance.
 - **Input resistance:** Typical value for information; DAE input resistance at the connector, during internal auto-zeroing and during measurement.
 - **Low Battery Alarm Voltage:** Typical value for information. Below this voltage, a battery alarm signal is generated.
 - **Power consumption:** Typical value for information. Supply currents in various operating modes.



DC Voltage Measurement

A/D - Converter Resolution nominal

High Range: 1LSB = 6.1 μ V, full range = -100...+300 mV

Low Range: 1LSB = 61nV, full range = -1...+3mV

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

Calibration Factors	X	Y	Z
High Range	404.812 $\pm$ 0.02% (k=2)	405.448 $\pm$ 0.02% (k=2)	405.495 $\pm$ 0.02% (k=2)
Low Range	3.98657 $\pm$ 1.50% (k=2)	3.99617 $\pm$ 1.50% (k=2)	3.98813 $\pm$ 1.50% (k=2)

Connector Angle

Connector Angle to be used in DASY system	14.0 $^{\circ}$ $\pm$ 1 $^{\circ}$
---	------------------------------------

Appendix (Additional assessments outside the scope of SC\$0108)

1. DC Voltage Linearity

High Range	Reading (μV)	Difference (μV)	Error (%)
Channel X + Input	199997.28	1.17	0.00
Channel X + Input	20006.38	3.08	0.02
Channel X - Input	-19999.06	2.16	-0.01
Channel Y + Input	199996.42	0.25	0.00
Channel Y + Input	20004.22	1.07	0.01
Channel Y - Input	-20001.52	-0.12	0.00
Channel Z + Input	199998.23	1.50	0.00
Channel Z + Input	20002.05	-1.11	-0.01
Channel Z - Input	-20002.10	-0.65	0.00

Low Range	Reading (μV)	Difference (μV)	Error (%)
Channel X + Input	2002.64	0.58	0.03
Channel X + Input	202.81	0.53	0.26
Channel X - Input	-197.50	-0.13	0.06
Channel Y + Input	2002.53	0.50	0.03
Channel Y + Input	201.81	-0.42	-0.21
Channel Y - Input	-197.88	-0.33	0.17
Channel Z + Input	2002.37	0.43	0.02
Channel Z + Input	200.95	-1.21	-0.60
Channel Z - Input	-199.03	-1.47	0.74

2. Common mode sensitivity

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

	Common mode Input Voltage (mV)	High Range Average Reading (μV)	Low Range Average Reading (μV)
Channel X	200	-3.13	-4.30
	-200	6.05	4.04
Channel Y	200	16.01	15.80
	-200	-16.67	-17.24
Channel Z	200	14.28	13.98
	-200	-16.46	-16.67

3. Channel separation

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

	Input Voltage (mV)	Channel X (μV)	Channel Y (μV)	Channel Z (μV)
Channel X	200	-	1.44	2.10
Channel Y	200	1.04	-	2.21
Channel Z	200	2.18	-1.66	-

4. AD-Converter Values with inputs shorted

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

	High Range (LSB)	Low Range (LSB)
Channel X	16050	13406
Channel Y	15985	16708
Channel Z	15922	17139

5. Input Offset Measurement

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec
 Input 10MS2

	Average (μ V)	min. Offset (μ V)	max. Offset (μ V)	Std. Deviation (μ V)
Channel X	-0.94	-2.52	0.61	0.34
Channel Y	-1.50	-3.72	-0.73	0.41
Channel Z	-2.31	-3.37	-0.97	0.44

6. Input Offset Current

Nominal input circuitry offset current on all channels: <25nA

7. Input Resistance (Typical values for information)

	Zeroing (kOhm)	Measuring (MOhm)
Channel X	200	200
Channel Y	200	200
Channel Z	200	200

8. Low Battery Alarm Voltage (Typical values for information)

Typical values	Alarm Level (VDC)
Supply (+ Vcc)	+7.9
Supply (- Vcc)	-7.6

9. Power Consumption (Typical values for information)

Typical values	Switched off (mA)	Stand by (mA)	Transmitting (mA)
Supply (+ Vcc)	+0.01	+6	+14
Supply (- Vcc)	-0.01	-6	-9



Appendix D.3 Calibration certificate for Dipole_SN1085

Calibration Laboratory of
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Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

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Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 0108

Client: **SGS**
Gyeonggi-do, Republic of Korea

Certificate No.: **D750V3-1085_Mar25**

CALIBRATION CERTIFICATE

Object: **D750V3 - SN: 1085**

Calibration procedure(s): **QA CAL-05.v12**
Calibration procedure for SAR Validation Sources between 0.7 - 3 GHz

Calibration date: **March 12, 2025**

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.
All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3) °C and humidity < 70%.
Calibration Equipment used (MATE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Cal
Power Sensor R&S NRP-33T	SN: 100667	28-Mar-24 (No. 217-04038)	Mar-25
Power Sensor R&S NRP18A	SN: 101859	06-Feb-25 (No. 4030A315009541)	Feb-26
Spectrum Analyzer R&S FSV40	SN: 101832	29-Jan-25 (No. 4030A315009558)	Jan-26
Mismatch: Short [S4168] Attenuator [S4423]	SN: 11152	28-Mar-24 (No. 217-04050)	Mar-25
OCP DAK-12	SN: 1016	24-Sep-24 (No. OCP-DAK12-1016_Sep24)	Sep-25
OCP DAK-3.5	SN: 1249	23-Sep-24 (No. OCP-DAK3.5-1249_Sep24)	Sep-25
Reference Probe EX30V4	SN: 7349	10-Jan-25 (No. EX3-7349_Jan25)	Jan-26
DAE40	SN: 1835	26-Oct-24 (No. DAE40-1835_Oct24)	Oct-25

Secondary Standards	ID	Check Date (in house)	Scheduled Check
ACAD Source Box	SN: 1000	28-May-24 (No. 615-ACAD_Source_Box-240528)	May-25
Signal Generator R&S SMB100A	SN: 182061	28-May-24 (No. 615-CAL16-S4888-240528)	May-25
Mismatch: SMA	SN: 1102	22-May-24 (No. 615-Mismatch_SMA-240522)	May-25

Calibrated by: **Krešimir Franjić** Laboratory Technician 

Approved by: **Sven Kötlin** Technical Manager 

Issued: March 12, 2025

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Certificate No: D750V3-1085_Mar25

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Accreditation No.: SCS 0108

Glossary

TSL tissue simulating liquid
CorrF sensitivity in TSL / NORM x,y,z
N/A not applicable or not measured

Calibration is Performed According to the Following Standards

- IEC/IEEE 62209-1528, "Measurement Procedure For The Assessment Of Specific Absorption Rate Of Human Exposure To Radio Frequency Fields From Hand-Held And Body-Worn Wireless Communication Devices - Part 1528: Human Models, Instrumentation And Procedures (Frequency Range of 4 MHz to 10 GHz)", October 2020.
- KOB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation

- DASY System Handbook

Methods Applied and Interpretation of Parameters

- Measurement Conditions: Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL: The dipole is mounted with the spacer to position its feed point exactly below the center marking of the fat phantom section, with the arms oriented parallel to the body axis.
- Feed Point Impedance and Return Loss: These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- Electrical Delay: One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- SAR measured: SAR measured at the stated antenna input power.
- SAR normalized: SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor $k=2$, which for a normal distribution corresponds to a coverage probability of approximately 95%.

D750V3 - SN: 1085

March 12, 2025

Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY8 Module SAR	16.4.0
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TBL	15 mm	with spacer
Zoom Scan Resolution	dx, dy = 6mm, dz = 1.5mm	Graded Ratio = 1.5 mm (Z direction)
Frequency	750MHz ±1MHz	

HSL parameters at 750 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal HSL parameters	22.0 °C	41.9	0.890 mho/m
Measured HSL parameters	(22.0 ±0.2)°C	42.7 ±6%	0.890 mho/m ±6%
HSL temperature change during test	< 0.5 °C		

SAR result with HSL at 750 MHz

SAR averaged over 1 cm ³ (1 g) of HSL	Condition	
SAR for nominal HSL parameters	24 dBm input power	2.20 W/kg
SAR for nominal HSL parameters	normalized to 1W	5.76 W/kg ±17.0% (k = 2)

SAR averaged over 10 cm ³ (10 g) of HSL	Condition	
SAR for nominal HSL parameters	24 dBm input power	1.43 W/kg
SAR for nominal HSL parameters	normalized to 1W	5.69 W/kg ±16.5% (k = 2)

D750V3 - SN: 1085

March 12, 2025

Appendix (Additional assessments outside the scope of SGS 0108)

Antenna Parameters with HSL at 750 MHz

Impedance	51.9 Ω - 3.4 j Ω
Return Loss	-28.3 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.032 ns
----------------------------------	----------

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured. The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard. No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
-----------------	-------

D750V3 - SN: 1085

March 12, 2025

System Performance Check Report

Summary

Dipole	Frequency (MHz)	TSL	Power (dBm)
D750V3 - SN1085	750	93L	24

Exposure Conditions

Position Section, TSL	Test Distance (mm)	Band	Coupling	Frequency (MHz)	Channel Number	Conversion Factor	TSL Conductivity (S/m)	TSL Permittivity
Flat	15	CW, 0--	750, 0	750, 0		9.55	6.89	42.7

Hardware Setup

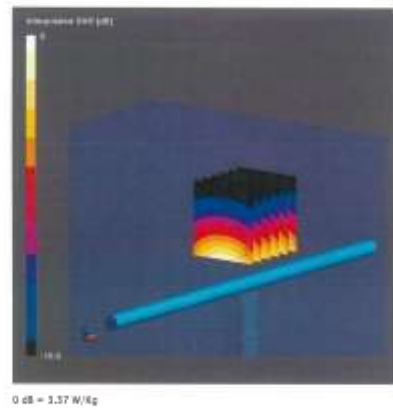
Phantom	TSL Measured Date	Probe, Calibration Date	SW, Calibration Date
Flat 10.0 mod	HS, 2025-03-12	EO304K - SN7949, 2023-01-10	EM10y 1x1E8, 2024-10-28

Scans Setup

	Zoom Scan
Grid Dimensions (mm)	18 x 30 x 30
Grid Steps (mm)	6.0 x 6.0 x 1.3
Sensor Surface (mm)	1.4
Grated Grid	Yes
Grating Rule	1.3
MARK	N/A
Surface Detection	VMS + Rp
Scan Method	Measured

Measurement Results

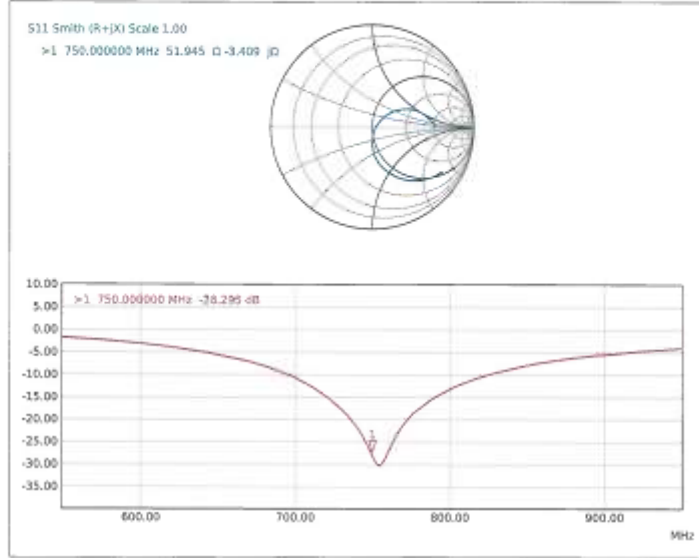
	Zoom Scan
Date	2023-03-12
pt(SAR) (g) (W/Kg)	2.39
pt(SAR) (g) (W/Kg)	1.45
Power (dB) (dB)	0.69
Power Scaling	Disabled
Scaling Factor (dB)	
TSL Correction	Positive / Negative



D750V3 - SN: 1085

March 12, 2025

Impedance Measurement Plot for HSL



Certificate No: D750V3-1085_Mar25

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Appendix D.4 Calibration certificate for Dipole_SN4d138

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Accreditation No.: SCS 0108

Client: SGS
Gyeonggi-do, Republic of Korea

Certificate No. D835V2-4d138_Apr25

CALIBRATION CERTIFICATE

Object: D835V2 - SN: 4d138

Calibration procedure(s): QA CAL-05.v12
Calibration Procedure for SAR Validation Sources between 0.7 - 3 GHz

Calibration date: April 14, 2025

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.
All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.
Calibration Equipment used (M&TE critical for calibration):

Primary Standards	ID	Cal Done (Certificate No.)	Scheduled Cal
Power Sensor R&S NRP-33T	SN: 100957	26-Mar-25 (No. 217-04290)	Mar-26
Power Sensor R&S NRP18A	SN: 101858	06-Feb-25 (No. 4030A315009541)	Feb-26
Spectrum Analyzer R&S FSV40	SN: 101832	26-Jan-25 (No. 4035A315038658)	Jan-26
3.5mm mismatch combination	SN: 1162	24-Mar-25 (No. 217-04290)	Mar-26
CCP DAK-12	SN: 1016	24-Sep-24 (No. CCP-DAK12-1016_Sep24)	Sep-25
CCP DAK-3.5	SN: 1249	24-Sep-24 (No. CCP-DAK3.5-1249_Sep24)	Sep-25
Reference Probe EX30V4	SN: 7349	10-Jan-25 (No. EX3-7349_Jan25)	Jan-26
DAE4ip	SN: 1838	28-Oct-24 (No. DAE4ip-1838_Oct24)	Oct-25

Secondary Standards	ID	Check Date (in house)	Scheduled Check
ACAD Source Box	SN: 1000	28-May-24 (No. 675-ACAD_Source_Box-240528)	May-25
Signal Generator R&S SMB100A	SN: 182081	28-May-24 (No. 675-CAL16-S4588-240528)	May-25
Mismatch: SMA	SN: 1102	22-May-24 (No. 675-Mismatch_SMA-240522)	May-25

Calibrated by: Lefi Kiyner, Laboratory Technician, Signature: 

Approved by: Sven Kohn, Technical Manager, Signature: 

Issued: April 14, 2025

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Certificate No: D835V2-4d138_Apr25

Page 1 of 6

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Accreditation No.: SCS 0106

Glossary

TSL tissue simulating liquid
ConvF sensitivity in TSL / NORM x,y,z
N/A not applicable or not measured

Calibration is Performed According to the Following Standards

- IEC/IEEE 62209-1528, "Measurement Procedure For The Assessment Of Specific Absorption Rate Of Human Exposure To Radio Frequency Fields From Hand-Held And Body-Worn Wireless Communication Devices - Part 1528: Human Models, Instrumentation And Procedures (Frequency Range of 4 MHz to 10 GHz)", October 2020.
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation

- DASY System Handbook

Methods Applied and Interpretation of Parameters

- **Measurement Conditions:** Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- **Antenna Parameters with TSL:** The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- **Feed Point Impedance and Return Loss:** These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- **Electrical Delay:** One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- **SAR measured:** SAR measured at the stated antenna input power.
- **SAR normalized:** SAR as measured, normalized to an input power of 1 W at the antenna connector.
- **SAR for nominal TSL parameters:** The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

D835V2 - SN: 4d138

April 14, 2025

Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY8 Module SAR	16.4.0
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	15 mm	with spacer
Zoom Scan Resolution	dx, dy = 6mm, dz = 1.5mm	Graded Ratio = 1.5 mm (Z direction)
Frequency	835MHz ±1MHz	

HSL parameters at 835 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal HSL parameters	22.0 °C	41.5	0.900 mho/m
Measured HSL parameters	(22.0 ±0.2) °C	42.5 ±6%	0.990 mho/m ±6%
HSL temperature change during test	< 0.5 °C		

SAR result with HSL at 835 MHz

SAR averaged over 1 cm ³ (1 g) of HSL	Condition	
SAR for nominal HSL parameters	24 dBm input power	2.39 W/kg
SAR for nominal HSL parameters	normalized to 1W	9.51 W/kg ±17.0% (k = 2)

SAR averaged over 10 cm ³ (10 g) of HSL	Condition	
SAR for nominal HSL parameters	24 dBm input power	1.54 W/kg
SAR for nominal HSL parameters	normalized to 1W	6.13 W/kg ±15.5% (k = 2)

D635V2 - SN: 4d138

April 14, 2025

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with HSL at 835 MHz

Impedance	50.5 Ω - 4.7 j Ω
Return Loss	-26.5 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.399 ns
----------------------------------	----------

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured. The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard. No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
-----------------	-------

D835V2 - SN: 4d138

April 14, 2025

System Performance Check Report

Summary

Device	Frequency [MHz]	TSL	Power [dBm]
D835V2 - SN42138	835	WGL	24

Exposure Conditions

Phantom Section, TSL	TSL Distance [mm]	Mass	Group, STD	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat	15		CN, 0--	835, 2	9.31	0.03	42.6

Hardware Setup

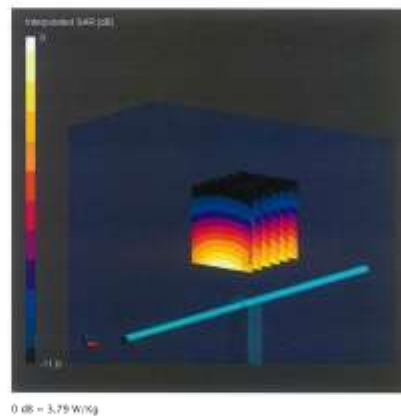
Phantom	TSL, Measured Date	Probe, Calibration Date	DME, Calibration Date
Flat 14.5 inch	WGL 2025-04-14	EO02V4 - SN7948, 2023-01-10	DMRup SN1836, 2024-10-28

Scans Setup

	Zoom Scan
Grid Size [mm]	50 x 50 x 50
Grid Steps [mm]	8.0 x 8.0 x 1.0
Sensor Surface [mm]	1.4
Grided Grid	Yes
Griding Ratio	1.5
MAK	N/A
Surface Detection	WGS + Sp
Scan Method	Measured

Measurement Results

	Zoom Scan
Date	2025-04-14
onSAR1g [W/kg]	2.38
onSAR10g [W/kg]	1.54
Power DRR [dB]	-8.01
Power Scaling	Disabled
Scaling Factor [dB]	
TSL Correction	Positive / Negative



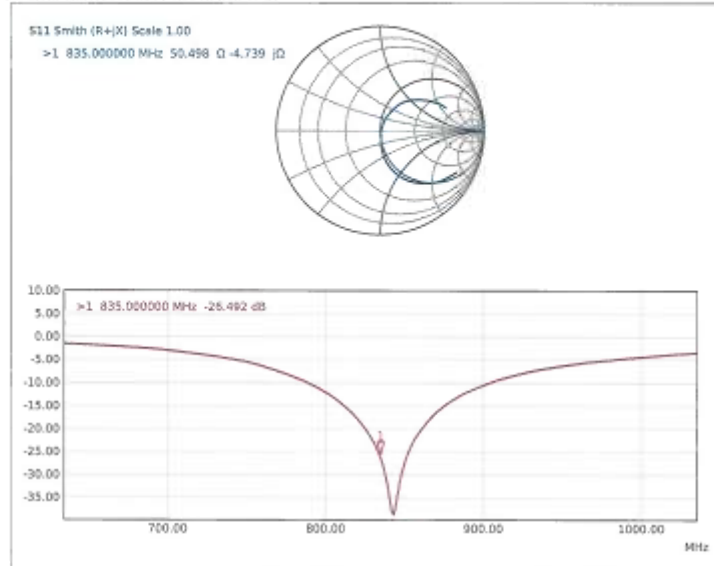
Certificate No: D835V2-4d138_Apr25

Page 5 of 6

D835V2 - SN: 4d138

April 14, 2025

Impedance Measurement Plot for HSL



Certificate No: D835V2-4d138_Apr25

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Appendix D.5 Calibration certificate for Dipole_SN2d193

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zougnastrasse 43, 8004 Zurich, Switzerland

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates

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S Swiss Calibration Service

Accreditation No.: SCS 0108

Client: **SGS**
Gyeonggi-do, Republic of Korea

Certificate No.: **D1800V2-2d193_Sep24**

CALIBRATION CERTIFICATE

Object: **D1800V2 - SN: 2d193**

Calibration procedure(s): **QA CAL-05.v12**
Calibration Procedure for SAR Validation Sources between 0.7 - 3 GHz

Calibration date: **September 4, 2024**

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.
All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.
Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Cal
Power Sensor R&S NRP-33T	SN: 100997	28-Mar-24 (No. 217-24038)	Mar-25
Power Sensor R&S NRP18A	SN: 101659	22-Jun-24 (No. 4030A315556647)	Jul-25
Spectrum Analyzer R&S PSV40	SN: 101832	25-Jan-24 (No. 4030-315557551)	Jan-25
Mismatch: Short [S4188] Attenuator [S4483]	SN: 1152	28-Mar-24 (No. 217-24038)	Mar-25
QCP DAK-1.2	SN: 1016	05-Oct-23 (No. QCP-DAK12-1016_Oct23)	Oct-24
QCP DAK-3.5	SN: 1239	05-Oct-23 (No. QCP-DAK3.5-1239_Oct23)	Oct-24
Reference Probe EX30V4	SN: 7349	03-Jun-24 (No. EX3-7349_Jun24)	Jun-25
DAE4p	SN: 1835	10-Jan-24 (No. DAE4p-1835_Jan24)	Jan-25

Secondary Standards	ID	Check Date (in house)	Scheduled Check
ACAD Source Box	SN: 1005	28-May-24 (No. 875-ACAD_Source_Box-240528)	May-25
Signal Generator R&S SMB100A	SN: 182581	28-May-24 (No. 875-CAL18-84588-240528)	May-25
Mismatch: SMA	SN: 1192	22-May-24 (No. 875-Mismatch_SMA-240522)	May-25

Calibrated by: **Krzysztof Franke** Function: **Laboratory Technician** Signature: 

Approved by: **Sven Kühn** Function: **Technical Manager** Signature: 

Issued: September 5, 2024

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Calibration Laboratory of
 Schmid & Partner
 Engineering AG
 Zeughausstrasse 43, 8004 Zurich, Switzerland



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Accreditation No.: SCS 0108

Glossary

TSL tissue simulating liquid
 ConvF sensitivity in TSL / NORM x,y,z
 N/A not applicable or not measured

Calibration is Performed According to the Following Standards

- IEC/IEEE 62259-1528, "Measurement Procedure For The Assessment Of Specific Absorption Rate Of Human Exposure To Radio Frequency Fields From Hand-Held And Body-Worn Wireless Communication Devices - Part 1528: Human Models, Instrumentation And Procedures (Frequency Range of 4 MHz to 10 GHz)", October 2020.
- KDB 865964, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation

- DASY System Handbook

Methods Applied and Interpretation of Parameters

- **Measurement Conditions:** Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- **Antenna Parameters with TSL:** The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- **Feed Point Impedance and Return Loss:** These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- **Electrical Delay:** One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- **SAR measured:** SAR measured at the stated antenna input power.
- **SAR normalized:** SAR as measured, normalized to an input power of 1 W at the antenna connector.
- **SAR for nominal TSL parameters:** The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

D1800V2 - SN: 2d193

September 6, 2024

Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY8 Module SAR	16.4.0
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	10 mm	with spacer
Zoom Scan Resolution	dx, dy = 6mm, dz = 1.5mm	Graded Ratio = 1.5 mm (Z direction)
Frequency	1800MHz ±1MHz	

Head TSL parameters at 1800 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	40.0	1.40 mho/m
Measured Head TSL parameters	(22.0 ±0.2)°C	39.8 ±6%	1.37 mho/m ±6%
Head TSL temperature change during test	< 0.5 °C		

SAR result with Head TSL at 1800 MHz

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR for nominal Head TSL parameters	24 dBm input power	9.61 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	36.3 W/kg ±17.0% (k = 2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	Condition	
SAR for nominal Head TSL parameters	24 dBm input power	5.10 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	20.3 W/kg ±16.5% (k = 2)



D1800V2 - SN: 2d193

September 4, 2024

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL at 1800 MHz

Impedance	48.2 Ω - 2.1 j Ω
Return Loss	-31.1 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.214 ns
----------------------------------	----------

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured. The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard. No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
-----------------	-------



D1800V2 - SN: 2d193

September 4, 2024

System Performance Check Report

Summary

Dipole	Frequency (MHz)	TSL	Power (dBm)
D1800V2 - SN24188	1800	NBL	24

Exposure Conditions

Phantom Section, TSL	Test Distance (mm)	Base	Group, LID	Frequency (MHz)	Channel Number	Conversion Factor	TSL Conductivity (S/m)	TSL Permittivity
Flat	10	OK, 8--		1800.0		7.00	1.37	55.8

Hardware Setup

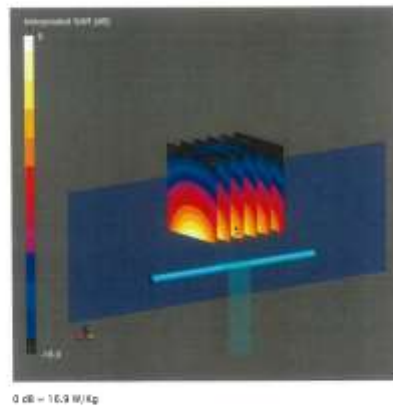
Phantom	TSL, Measured Date	Probe, Calibration Date	DRL, Calibration Date
MIP H&O Center	H&O, 2024-09-04	B31204 - SN7948, 2024-06-03	DAEjeo Sr1818, 2024-01-10

Scans Setup

	Zoom Scan
Grid Size (mm)	30 x 10 x 10
Grid Size (mm)	6.0 x 6.0 x 1.5
Scatter Surface (mm)	1.4
Cracked Grid	Yes
Cracking Ratio	1.5
MMA	N/A
Surface Detection	VMS + 6p
Scan Method	Measured

Measurement Results

	Zoom Scan
Date	2024-09-04
psSAR (W/kg)	8.61
msSAR (W/kg)	5.16
Power (dB)	0.31
Power Scaling	Obtained
Scaling Factor (dB)	
TSL Correction	Positive / Negative



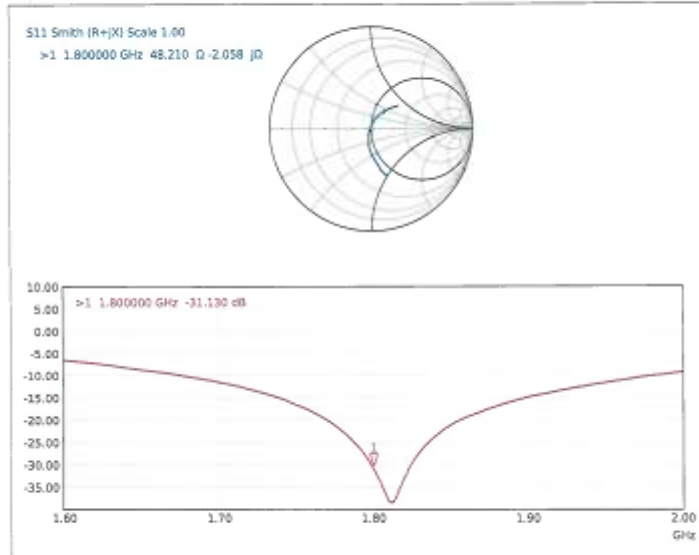
Certificate No: D1800V2-2d193_Sep24

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D1800V2 - SN: 2d193

September 4, 2024

Impedance Measurement Plot for Head TSL



Certificate No: D1800V2-2d193_Sep24

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Appendix D.6 Calibration certificate for Dipole_SN5d158

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland



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Accreditation No.: SCS 0108

Client
SGS
Gyeonggi-do, Republic of Korea

Certificate No. D1900V2-5d158_Apr25

CALIBRATION CERTIFICATE

Object D1900V2 - SN: 5d158

Calibration procedure(s) QA CAL-05.v12
Calibration Procedure for SAR Validation Sources between 0.7 - 3 GHz

Calibration date April 16, 2025

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.
All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3) °C and humidity < 70%.
Calibration Equipment used (NIST critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Cal
Power Sensor R&S NRP-33T	SN: 100967	26-Mar-25 (No. 217-04290)	Mar-26
Power Sensor R&S NRP16A	SN: 101859	06-Feb-25 (No. 4033A315002541)	Feb-26
Spectrum Analyzer R&S FSV40	SN: 101832	29-Jan-25 (No. 4033A315000258)	Jan-26
3.5mm mismatch combination	SN: 1152	24-Mar-25 (No. 217-04290)	Mar-26
OCP DAK-12	SN: 1016	24-Sep-24 (No. OCP-DAK12-1016_Sep24)	Sep-25
OCP DAK-3.5	SN: 1348	23-Sep-24 (No. OCP-DAK3.5-1348_Sep24)	Sep-25
Reference Probe EX3 DV4	SN: 7349	10-Jan-25 (No. EX3-7348_Jan25)	Jan-26
DAE4ip	SN: 1836	28-Oct-24 (No. DAE4ip-1836_Oct24)	Oct-25

Secondary Standards	ID	Check Date (in house)	Scheduled Check
ACAD Source Box	SN: 1090	28-May-24 (No. 675-ACAD_Source_Box-540528)	May-25
Signal Generator R&S SWB100A	SN: 182061	28-May-24 (No. 675-CAL16-54588-240528)	May-25
Mismatch: SMA	SN: 1102	22-May-24 (No. 675-Mismatch_SMA-240522)	May-25

	Name	Function	Signature
Calibrated by	Leif Koyser	Laboratory Technician	
Approved by	Evan Kohn	Technical Manager	
This calibration certificate shall not be reproduced except in full without written approval of the laboratory.			

Certificate No: D1900V2-5d158_Apr25

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Accreditation No.: SCS 0106

Glossary

TSL tissue simulating liquid
ConvF sensitivity in TSL / NORM x,y,z
N/A not applicable or not measured

Calibration is Performed According to the Following Standards

- IEC/IEEE 62209-1525, "Measurement Procedure For The Assessment Of Specific Absorption Rate Of Human Exposure To Radio Frequency Fields From Hand-Held And Body-Worn Wireless Communication Devices - Part 1525: Human Models, Instrumentation And Procedures (Frequency Range of 4 MHz to 10 GHz)", October 2020.
- KDB 855664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation

- DASY System Handbook

Methods Applied and Interpretation of Parameters

- Measurement Conditions: Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL: The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- Feed Point Impedance and Return Loss: These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- Electrical Delay: One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- SAR measured: SAR measured at the stated antenna input power.
- SAR normalized: SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

D1900V2 - SN: Sd158

April 16, 2025

Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY8 Module SAR	16.4.0
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	10 mm	with spacer
Zoom Scan Resolution	dx, dy = 6mm, dz = 1.5mm	Graded Ratio = 1.5 mm (Z direction)
Frequency	1900MHz ±1MHz	

HSL parameters at 1900 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal HSL parameters	22.0 °C	40.0	1.40 mho/m
Measured HSL parameters	(22.0 ±0.2)°C	39.9 ±6%	1.40 mho/m ±6%
HSL temperature change during test	< 0.5 °C		

SAR result with HSL at 1900 MHz

SAR averaged over 1 cm ³ (1 g) of HSL	Condition	
SAR for nominal HSL parameters	24 dBm input power	9.97 W/kg
SAR for nominal HSL parameters	normalized to 1W	39.7 W/kg ±17.0% (k = 2)

SAR averaged over 10 cm ³ (10 g) of HSL	Condition	
SAR for nominal HSL parameters	24 dBm input power	5.26 W/kg
SAR for nominal HSL parameters	normalized to 1W	20.9 W/kg ±16.5% (k = 2)

D1900V2 - SN: 5d158

April 16, 2025

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with HSL at 1900 MHz

Impedance	52.9 Ω + 5.3 j Ω
Return Loss	-24.7 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.199 ns
----------------------------------	----------

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured. The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard. No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
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D1900V2 - SN: 5d158

April 16, 2025

System Performance Check Report

Summary

Dipole	Frequency [MHz]	TSL	Power [dBm]
D1900V2 - 1N16118	1938	198	24

Exposure Conditions

Phantom Section, TSL	Test Distance [cm]	Band	Group, ERP	Frequency [MHz]	Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat	19	CW, 6--	1980.0			7.68	1.40	88.9

Hardware Setup

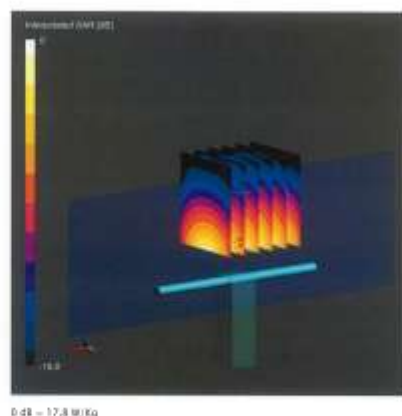
Phantom	TSL, Measured Data	Probe, Calibration Date	DAB, Calibration Date
MPP-HR-R Right	HSL 2025-04-16	DCB04 - SN7346, 2025-01-10	DAB04 SN1836, 2024-10-28

Scan Setup

	Zoom Scan
Grid Extents [mm]	20 x 20 x 20
Grid Steps [mm]	6.3 x 6.3 x 1.5
Sensor Surface [mm]	1.4
Graded Grid	Yes
Grading Ratio	1.0
MMR	NR
Surface Detection	All points
Trace Method	Measured

Measurement Results

	Zoom Scan
Date	2025-04-16
padMAvg [W/Kg]	9.97
padMAvg [W/Kg]	5.38
Power DfB [dB]	0.08
Power Scaling	Standard
Scaling Factor [dB]	
TSL Correction	Positive / Negative



Certificate No: D1900V2-5d158_Apr25

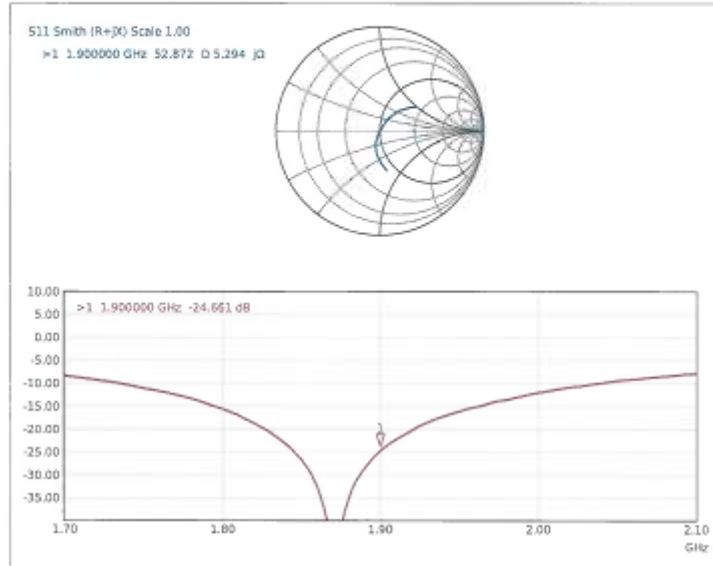
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D1900V2 - SN: 5d158

April 16, 2025

Impedance Measurement Plot for HSL



Certificate No: D1900V2-5d158_Apr25

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Appendix D.7 Calibration certificate for Dipole_SN1124

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

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Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 0106

Client: **SGS**
Gyeonggi-do, Republic of Korea

Certificate No.: **D2600V2-1124_Jul24**

CALIBRATION CERTIFICATE

Object: **D2600V2 - SN: 1124**

Calibration procedure(s): **QA CAL-05.v12**
Calibration Procedure for SAR Validation Sources between 0.7 - 3 GHz

Calibration date: **July 22, 2024**

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.
All calibrations have been conducted in the closed laboratory facility: environment temperature (23 ± 2)°C and humidity < 70%.
Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Cal
Power Sensor R&S NRP33T	SN: 103867	26-Mar-24 (No. 217-24038)	Mar-25
Power Sensor R&S NRP18A	SN: 101859	21-Mar-24 (No. 4030A315007801)	Mar-25
Spectrum Analyzer R&S FS740	SN: 101832	25-Jan-24 (No. 4030 315007851)	Jan-25
Mismatch: Short [S4188] Attenuator [S4423]	SN: 1152	29-Mar-24 (No. 217-04090)	Mar-25
CCP DAK-12	SN: 1016	05-Oct-23 (No. CCP-DAK12-1016_Cal23)	Oct-24
CCP DAK-3.5	SN: 1249	05-Oct-23 (No. CCP-DAK3.5-1249_Cal23)	Oct-24
Reference Probe EX30V4	SN: 7349	03-Jun-24 (No. EX3-7349_Jun24)	Jun-25
DRE4p	SN: 1836	10-Jan-24 (No. DRE4p-1836_Jan24)	Jan-25

Secondary Standards	ID	Check Date (in house)	Scheduled Check
ACAD Source Box	SN: 1000	28-May-24 (No. 875-ACAD_Source_Box-240528)	May-25
Signal Generator R&S SMB100A	SN: 162081	28-May-24 (No. 0001-300719404)	May-25
Mismatch: BMA	SN: 1102	22-May-24 (No. 875-Mismatch_BMA-240522)	May-25

Calibrated by: **Kristin Pranjic** Laboratory Technician

Approved by: **Sven Kohn** Technical Manager

Issued: July 22, 2024

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Certificate No: D2600V2-1124_Jul24

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Calibration Laboratory of

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Engineering AG
Zughausstrasse 43, 8604 Zurich, Switzerland



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Accredited by the Swiss Accreditation Service (SAS)
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Accreditation No.: SCS 0108

Glossary

TSL tissue simulating liquid
ConvF sensitivity in TSL / NORM x,y,z
N/A not applicable or not measured

Calibration is Performed According to the Following Standards

- IEC/IEEE 62209-1528, "Measurement Procedure For The Assessment Of Specific Absorption Rate Of Human Exposure To Radio Frequency Fields From Hand-Held And Body-Worn Wireless Communication Devices - Part 1528: Human Models, Instrumentation And Procedures (Frequency Range of 4 MHz to 10 GHz)", October 2020.
- KDB 665964, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation

- DASY System Handbook

Methods Applied and Interpretation of Parameters

- Measurement Conditions: Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL: The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- Feed Point Impedance and Return Loss: These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- Electrical Delay: One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- SAR measured: SAR measured at the stated antenna input power.
- SAR normalized: SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor $k=2$, which for a normal distribution corresponds to a coverage probability of approximately 95%.

D2600V2 - SN: 1124

July 22, 2024

Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY8 Module SAR	16.4.0
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	10 mm	with spacer
Zoom Scan Resolution	dx, dy = 5mm, dz = 1.5mm	Graded Ratio = 1.5 mm (Z direction)
Frequency	2600MHz ±1MHz	

Head TSL parameters at 2600 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	39.0	1.96 mho/m
Measured Head TSL parameters	(22.0 ±0.2)°C	37.2 ±6%	1.98 mho/m ±6%
Head TSL temperature change during test	< 0.5 °C		

SAR result with Head TSL at 2600 MHz

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR for nominal Head TSL parameters	24 dBm input power	13.7 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	54.5 W/kg ±17.0% (k = 2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	Condition	
SAR for nominal Head TSL parameters	24 dBm input power	6.15 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	24.5 W/kg ±16.5% (k = 2)



D2600V2 - SN: 1124

July 22, 2024

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL at 2600 MHz

Impedance	49.9 Ω - 7.3 j Ω
Return Loss	-22.8 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.152 ns
----------------------------------	----------

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured. The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard. No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
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D2600V2 - SN: 1124

July 22, 2024

System Performance Check Report

Summary

Dipole	Frequency (MHz)	TSL	Power (dBm)
D2600V2 - SN: 1124	2600	HSL	24

Exposure Conditions

Phantom Section, TSL	Test Distance (mm)	Ball	Group, UDF	Frequency (MHz), Channel Number	Conversion Factor	TSL Conductivity (S/m)	TSL Permeability
Bar	10	CW, 0--	2600, 0		7.29	1.85	0.72

Hardware Setup

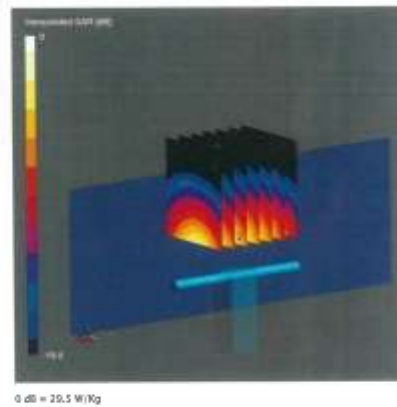
Phantom	TSL Measured Date	Probe, Calibration Date	DAQ, Calibration Date
MTP N30 Center	HSL, 2024-07-22	EXD04 - SA7345, 2024-05-09	DAQ4p Sn1836, 2024-01-10

Scan Setup

	Zoom Scan
Grid Dimensions (mm)	30 x 30 x 38
Grid Steps (mm)	5.0 x 5.0 x 1.5
Sensor Surface (mm)	1.4
Cabled Grid	Yes
Griding Rate	1.5
MNA	N/A
Surface Detection	Wd = 6p
Scan Method	Measured

Measurement Results

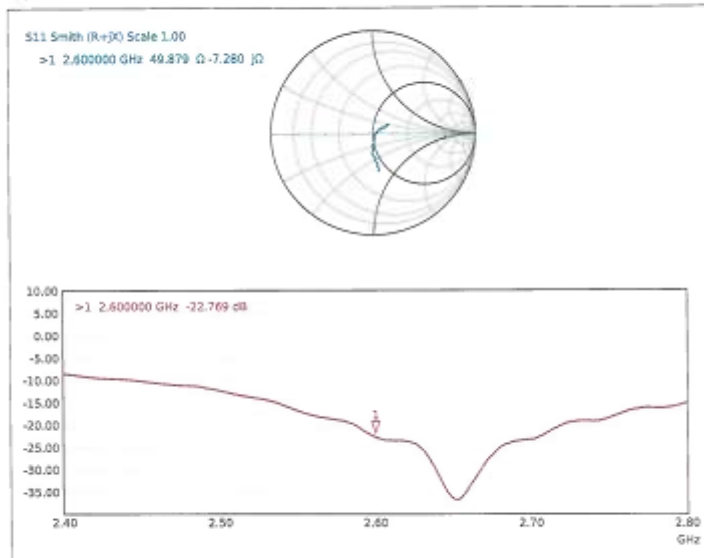
	Zoom Scan
Date	2024-07-22
Efficiency (W/kg)	15.7
Efficiency (W/kg)	6.15
Power Drift (dB)	-0.01
Power Scaling	Disabled
Isolation Factor (dB)	
TSL Correction	Positive / Negative



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Impedance Measurement Plot for Head TSL



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