**Test Report** 

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Test of: NTT docomo P-07A

To: OET Bulletin 65 Supplement C: (2001-01)

# **Appendix 3. SAR Distribution Scans**

This appendix contains SAR distribution scans which are not included in the total number of pages for this report.

Scan Reference Number	Title
SCN/74681JD09/001	Touch Left UMTS FDD V CH4183
SCN/74681JD09/002	Tilt Left UMTS FDD V CH4183
SCN/74681JD09/003	Touch Right UMTS FDD V CH4183
SCN/74681JD09/004	Tilt Right UMTS FDD V CH4183
SCN/74681JD09/005	Front of EUT Facing Phantom UMTS FDD V CH4183
SCN/74681JD09/006	Rear of EUT Facing Phantom UMTS FDD V CH4183
SCN/74681JD09/007	Rear of EUT Facing Phantom With Display 90 Degrees to Keypad UMTS FDD V CH4183
SCN/74681JD09/008	Rear of EUT Facing Phantom With PHF UMTS FDD V CH4183
SCN/74681JD09/009	Rear of EUT Facing Phantom HSDPA FDD V CH4183
SCN/74681JD09/010	Rear of EUT Facing Phantom With Display 90 Degrees to Keypad With PHF 0mm separation UMTS FDD V CH4183
SCN/74681JD09/011	Rear of EUT Facing Phantom With Display 90 Degrees to Keypad With PHF 0mm separation UMTS FDD V CH4132
SCN/74681JD09/012	Rear of EUT Facing Phantom With Display 90 Degrees to Keypad With PHF 0mm separation UMTS FDD V CH4233
SCN/74681JD09/013	Touch Left PCS CH660
SCN/74681JD09/014	Tilt Left PCS CH660
SCN/74681JD09/015	Touch Right PCS CH660
SCN/74681JD09/016	Tilt Right PCS CH660
SCN/74681JD09/017	Front of EUT Facing Phantom GPRS CH660
SCN/74681JD09/018	Rear of EUT Facing Phantom GPRS CH660
SCN/74681JD09/019	Rear of EUT Facing Phantom With Display 90 Degrees to Keypad PCS CH660
SCN/74681JD09/020	Rear of EUT Facing Phantom With PHF GPRS CH660
SCN/74681JD09/021	Rear of EUT Facing Phantom PCS CH660
SCN/74681JD09/022	Rear of EUT Facing Phantom With Display 90 Degrees to Keypad 0mm separation PCS CH660
SCN/74681JD09/023	Rear of EUT Facing Phantom With Display 90 Degrees to Keypad 0mm separation PCS CH512
SCN/74681JD09/024	Rear of EUT Facing Phantom With Display 90 Degrees to Keypad 0mm separation PCS CH810
SCN/74681JD09/025	System Performance Check 1900MHz Body 03 03 08
SCN/74681JD09/026	System Performance Check 1900MHz Head 03 03 09

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Scan Reference Number	Title
SCN/74681JD09/027	System Performance Check 900MHz Body 28 02 09
SCN/74681JD09/028	System Performance Check 900MHz Head 27 02 09
SCN/74681JD09/029	System Performance Check 900MHz Body 02 04 09
SCN/74681JD09/030	System Performance Check 1900MHz Body 02 04 09

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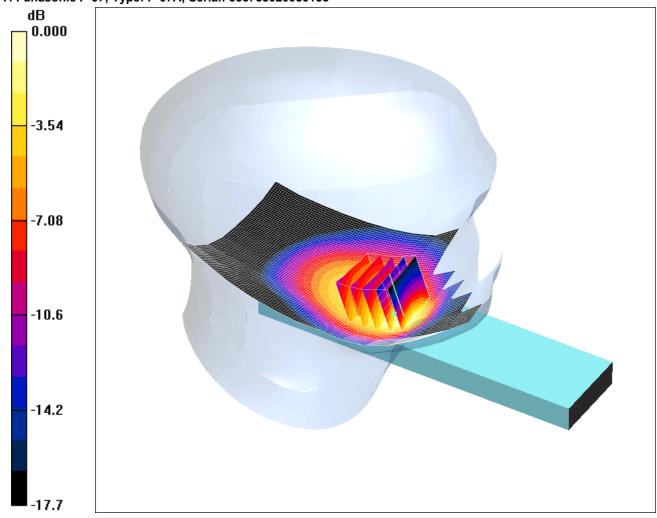
Test of: NTT docomo P-07A

To: OET Bulletin 65 Supplement C: (2001-01)

SCN/74681JD09/001: Touch Left UMTS FDD V CH4183

Date: 27/02/2009

DUT: Panasonic P-07; Type: P-07A; Serial: 356753020050153



0 dB = 0.622 mW/g

Communication System: UMTS-FDD V; Frequency: 836.4 MHz;Duty Cycle: 1:1

Medium: 900 MHz HSL Medium parameters used (interpolated): f = 836.4 MHz;  $\sigma = 0.918$  mho/m;  $\epsilon_r = 43.1$ ;  $\rho = 1000$  kg/m<sup>3</sup> Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV3 SN3508; ConvF(10.14, 10.14, 10.14); Calibrated: 24/06/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 25/06/2008
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Touch Left - Middle/Area Scan (71x161x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.609 mW/g

Touch Left - Middle/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.73 V/m; Power Drift = -0.150 dB

Peak SAR (extrapolated) = 1.37 W/kg

SAR(1 g) = 0.575 mW/g; SAR(10 g) = 0.333 mW/g Maximum value of SAR (measured) = 0.622 mW/g

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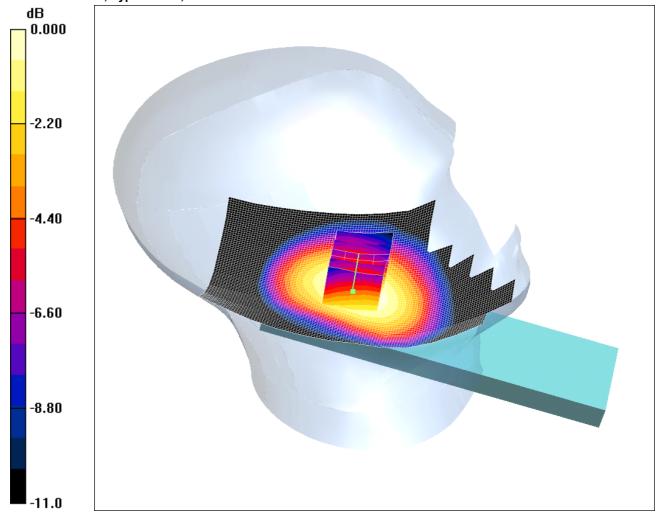
Test of: NTT docomo P-07A

To: OET Bulletin 65 Supplement C: (2001-01)

SCN/74681JD09/002: Tilt Left UMTS FDD V CH4183

Date: 27/02/2009

DUT: Panasonic P-07; Type: P-07A; Serial: 356753020050153



0 dB = 0.159 mW/g

Communication System: UMTS-FDD V; Frequency: 836.4 MHz;Duty Cycle: 1:1

Medium: 900 MHz HSL Medium parameters used (interpolated): f = 836.4 MHz;  $\sigma = 0.918$  mho/m;  $\epsilon_r = 43.1$ ;  $\rho = 1000$  kg/m<sup>3</sup> Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV3 SN3508; ConvF(10.14, 10.14, 10.14); Calibrated: 24/06/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 25/06/2008
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt Left - Middle/Area Scan (71x161x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.160 mW/g

Tilt Left - Middle/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.97 V/m; Power Drift = -0.041 dB

Peak SAR (extrapolated) = 0.193 W/kg

SAR(1 g) = 0.151 mW/g; SAR(10 g) = 0.112 mW/g Maximum value of SAR (measured) = 0.159 mW/g

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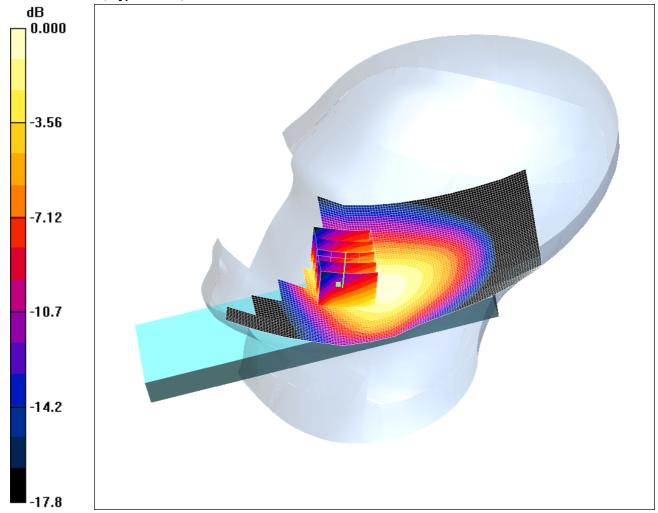
Test of: NTT docomo P-07A

To: OET Bulletin 65 Supplement C: (2001-01)

SCN/74681JD09/003: Touch Right UMTS FDD V CH4183

Date: 27/02/2009

DUT: Panasonic P-07; Type: P-07A; Serial: 356753020050153



0 dB = 0.364 mW/g

Communication System: UMTS-FDD V; Frequency: 836.4 MHz;Duty Cycle: 1:1

Medium: 900 MHz HSL Medium parameters used (interpolated): f = 836.4 MHz;  $\sigma = 0.918$  mho/m;  $\epsilon_r = 43.1$ ;  $\rho = 1000$  kg/m<sup>3</sup> Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV3 SN3508; ConvF(10.14, 10.14, 10.14); Calibrated: 24/06/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 25/06/2008
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Touch Right - Middle/Area Scan (71x161x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.399 mW/g

Touch Right - Middle/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.45 V/m; Power Drift = -0.004 dB

Peak SAR (extrapolated) = 0.636 W/kg

SAR(1 g) = 0.351 mW/g; SAR(10 g) = 0.223 mW/g Maximum value of SAR (measured) = 0.364 mW/g

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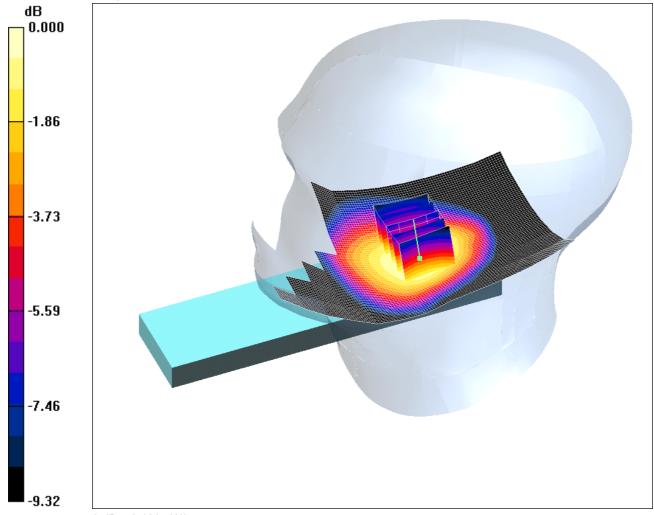
Test of: NTT docomo P-07A

To: OET Bulletin 65 Supplement C: (2001-01)

SCN/74681JD09/004: Tilt Right UMTS FDD V CH4183

Date: 27/02/2009

DUT: Panasonic P-07; Type: P-07A; Serial: 356753020050153



0 dB = 0.126 mW/g

Communication System: UMTS-FDD V; Frequency: 836.4 MHz;Duty Cycle: 1:1

Medium: 900 MHz HSL Medium parameters used (interpolated): f = 836.4 MHz;  $\sigma = 0.918$  mho/m;  $\epsilon_r = 43.1$ ;  $\rho = 1000$  kg/m<sup>3</sup> Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV3 SN3508; ConvF(10.14, 10.14, 10.14); Calibrated: 24/06/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 25/06/2008
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Touch Right - Middle/Area Scan (71x161x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.127 mW/g

Touch Right - Middle/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.77 V/m; Power Drift = -0.067 dB

Peak SAR (extrapolated) = 0.155 W/kg

SAR(1 g) = 0.119 mW/g; SAR(10 g) = 0.087 mW/g Maximum value of SAR (measured) = 0.126 mW/g

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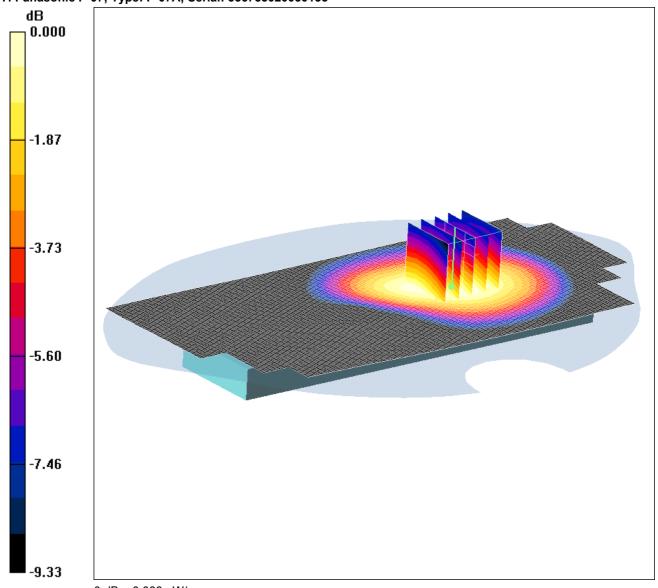
Test of: NTT docomo P-07A

To: OET Bulletin 65 Supplement C: (2001-01)

SCN/74681JD09/005: Front of EUT Facing Phantom UMTS FDD V CH4183

Date: 28/02/2009

DUT: Panasonic P-07; Type: P-07A; Serial: 356753020050153



0 dB = 0.088 mW/g

Communication System: UMTS-FDD V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: 900 MHz MSL Medium parameters used (interpolated): f = 836.4 MHz;  $\sigma$  = 0.959 mho/m;  $\epsilon_r$  = 53.9;  $\rho$  = 1000 kg/m<sup>3</sup> Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 SN3508; ConvF(10.21, 10.21, 10.21); Calibrated: 24/06/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 25/06/2008
- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Front of EUT Facing Phantom 2/Area Scan (81x171x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.087 mW/g

Front of EUT Facing Phantom 2/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.90 V/m; Power Drift = 0.102 dB

Peak SAR (extrapolated) = 0.108 W/kg

SAR(1 g) = 0.083 mW/g; SAR(10 g) = 0.062 mW/g

Maximum value of SAR (measured) = 0.088 mW/g

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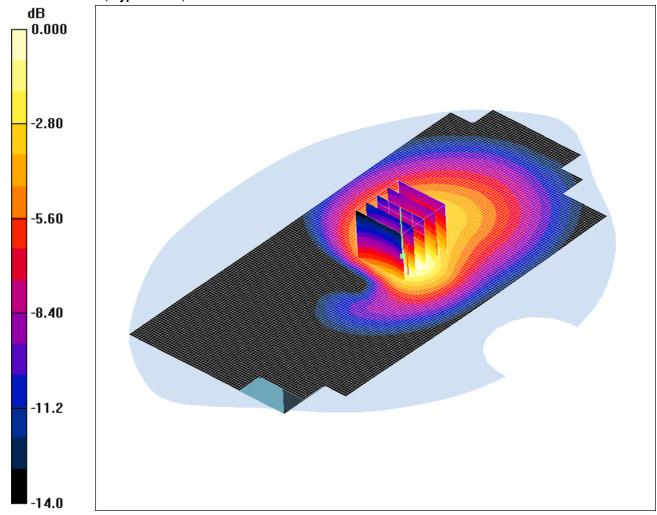
Test of: NTT docomo P-07A

To: OET Bulletin 65 Supplement C: (2001-01)

SCN/74681JD09/006: Rear of EUT Facing Phantom UMTS FDD V CH4183

Date: 28/02/2009

DUT: Panasonic P-07; Type: P-07A; Serial: 356753020050153



0 dB = 0.158 mW/g

Communication System: UMTS-FDD V; Frequency: 836.4 MHz;Duty Cycle: 1:1

Medium: 900 MHz MSL Medium parameters used (interpolated): f = 836.4 MHz;  $\sigma = 0.959$  mho/m;  $\epsilon_r = 53.9$ ;  $\rho = 1000$  kg/m<sup>3</sup> Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 SN3508; ConvF(10.21, 10.21, 10.21); Calibrated: 24/06/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 25/06/2008
- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Rear of EUT Facing Phantom/Area Scan (81x171x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.166 mW/g

Rear of EUT Facing Phantom/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.5 V/m; Power Drift = -0.001 dB

Peak SAR (extrapolated) = 0.238 W/kg

SAR(1 g) = 0.148 mW/g; SAR(10 g) = 0.091 mW/g Maximum value of SAR (measured) = 0.158 mW/g

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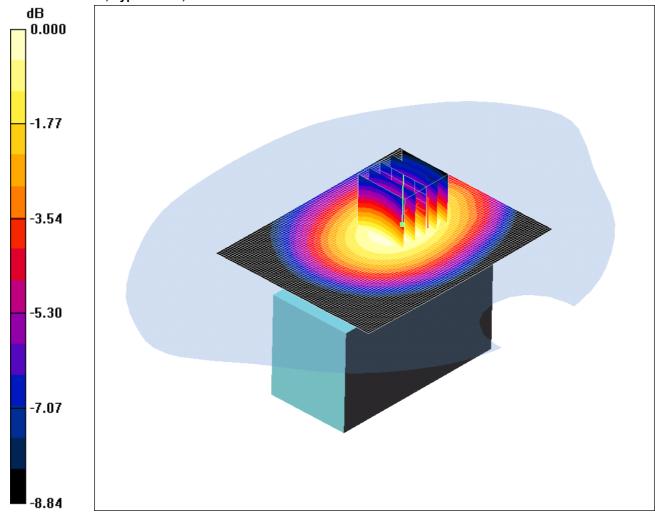
Test of: NTT docomo P-07A

To: OET Bulletin 65 Supplement C: (2001-01)

SCN/74681JD09/007: Rear of EUT Facing Phantom With Display 90 Degrees to Keypad UMTS FDD V CH4183

Date: 28/02/2009

DUT: Panasonic O-07; Type: P-07A; Serial: 356753020050153



0 dB = 0.149 mW/g

Communication System: UMTS-FDD V; Frequency: 836.4 MHz;Duty Cycle: 1:1

Medium: 900 MHz MSL Medium parameters used (interpolated): f = 836.4 MHz;  $\sigma$  = 0.959 mho/m;  $\epsilon_r$  = 53.9;  $\rho$  = 1000 kg/m<sup>3</sup> Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 SN3508; ConvF(10.21, 10.21, 10.21); Calibrated: 24/06/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 25/06/2008
- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Rear of EUT Facing Phantom - Middle 2/Area Scan (71x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.150 mW/g

Rear of EUT Facing Phantom - Middle 2/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm Reference Value = 12.1 V/m; Power Drift = 0.015 dB

Peak SAR (extrapolated) = 0.184 W/kg

SAR(1 g) = 0.142 mW/g; SAR(10 g) = 0.105 mW/g Maximum value of SAR (measured) = 0.149 mW/g

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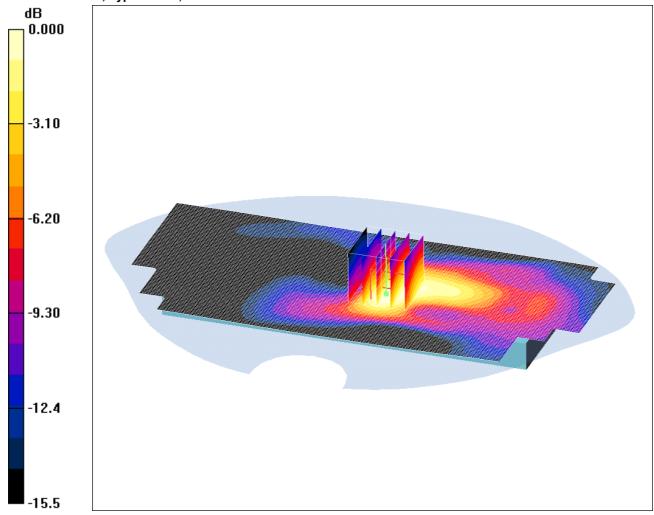
Test of: NTT docomo P-07A

To: OET Bulletin 65 Supplement C: (2001-01)

SCN/74681JD09/008: Rear of EUT Facing Phantom With PHF UMTS FDD V CH4183

Date: 28/02/2009

DUT: Panasonic P-07; Type: P-07A; Serial: 356753020050153



0 dB = 0.150 mW/g

Communication System: UMTS-FDD V; Frequency: 836.4 MHz;Duty Cycle: 1:1

Medium: 900 MHz MSL Medium parameters used (interpolated): f = 836.4 MHz;  $\sigma = 0.959$  mho/m;  $\epsilon_r = 53.9$ ;  $\rho = 1000$  kg/m<sup>3</sup> Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 SN3508; ConvF(10.21, 10.21, 10.21); Calibrated: 24/06/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 25/06/2008
- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Rear of EUT Facing Phantom/Area Scan (81x171x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.157 mW/g

Rear of EUT Facing Phantom/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.03 V/m; Power Drift = 0.101 dB

Peak SAR (extrapolated) = 0.226 W/kg

SAR(1 g) = 0.138 mW/g; SAR(10 g) = 0.084 mW/g

Maximum value of SAR (measured) = 0.150 mW/g

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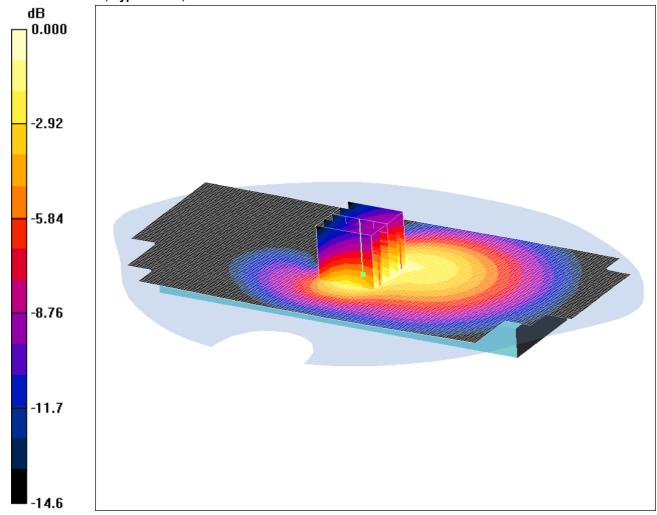
Test of: NTT docomo P-07A

To: OET Bulletin 65 Supplement C: (2001-01)

SCN/74681JD09/009: Rear of EUT Facing Phantom HSDPA FDD V CH4183

Date: 28/02/2009

DUT: Panasonic P-07; Type: P-07A; Serial: 356753020050153



0 dB = 0.156 mW/g

Communication System: UMTS-FDD V; Frequency: 836.4 MHz;Duty Cycle: 1:1

Medium: 900 MHz MSL Medium parameters used (interpolated): f = 836.4 MHz;  $\sigma = 0.959$  mho/m;  $\epsilon_r = 53.9$ ;  $\rho = 1000$  kg/m<sup>3</sup> Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 SN3508; ConvF(10.21, 10.21, 10.21); Calibrated: 24/06/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 25/06/2008
- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Rear of EUT Facing Phantom/Area Scan (81x171x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.151 mW/g

Rear of EUT Facing Phantom/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.0 V/m; Power Drift = 0.016 dB

Peak SAR (extrapolated) = 0.233 W/kg

SAR(1 g) = 0.144 mW/g; SAR(10 g) = 0.089 mW/g

Maximum value of SAR (measured) = 0.156 mW/g

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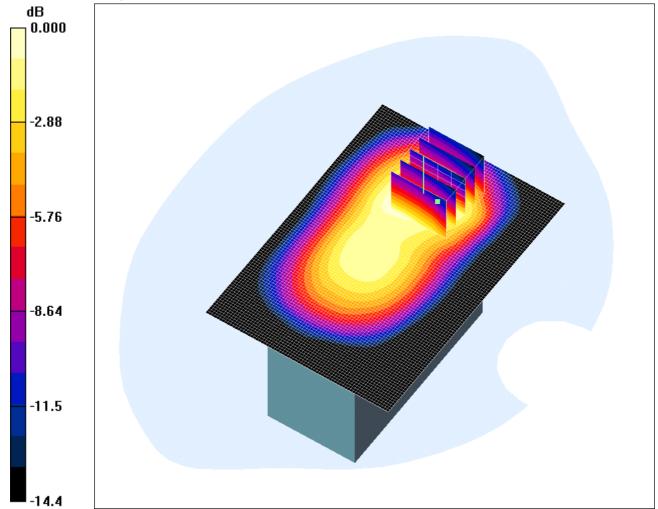
Issue Date: 07 April 2009

Test of: NTT docomo P-07A

To: OET Bulletin 65 Supplement C: (2001-01)

SCN/74681JD09/010: Rear of EUT Facing Phantom With Display 90 Degrees to Keypad With PHF 0mm separation UMTS FDD V CH4183. Date: 02/04/2009

DUT: Panasonic O-07; Type: P-07A; Serial: 356753020050153



0 dB = 0.419 mW/g

Communication System: UMTS-FDD V; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium: 900 MHz MSL Medium parameters used (interpolated): f = 836.6 MHz;  $\sigma = 0.98$  mho/m;  $\epsilon_r = 54$ ;  $\rho = 1000$  kg/m<sup>3</sup> Phantom section: Flat Section

### DASY4 Configuration:

- Probe: EX3DV3 SN3508; ConvF(10.21, 10.21, 10.21); Calibrated: 24/06/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 25/06/2008
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Rear of EUT Facing Phantom - Middle/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.450 mW/g

Rear of EUT Facing Phantom - Middle/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm Reference Value = 18.0 V/m; Power Drift = 0.067 dB

Peak SAR (extrapolated) = 0.720 W/kg

SAR(1 g) = 0.398 mW/g; SAR(10 g) = 0.237 mW/g Maximum value of SAR (measured) = 0.419 mW/g

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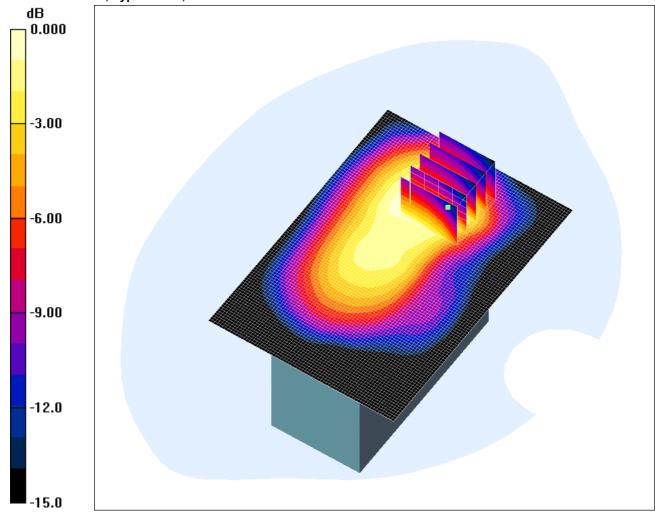
To: OET Bulletin 65 Supplement C: (2001-01)

SCN/74681JD09/011: Rear of EUT Facing Phantom With Display 90 Degrees to Keypad With PHF 0mm

separation UMTS FDD V CH4132

Date: 02/04/2009

DUT: Panasonic O-07; Type: P-07A; Serial: 356753020050153



0 dB = 0.427 mW/g

Communication System: UMTS-FDD V; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium: 900 MHz MSL Medium parameters used (interpolated): f = 826.4 MHz;  $\sigma = 0.97$  mho/m;  $\epsilon_r = 54.1$ ;  $\rho = 1000$  kg/m<sup>3</sup> Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 SN3508; ConvF(10.21, 10.21, 10.21); Calibrated: 24/06/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 25/06/2008
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Rear of EUT Facing Phantom - Low/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.488 mW/g

Rear of EUT Facing Phantom - Low/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm Reference Value = 16.9 V/m; Power Drift = 0.043 dB

Peak SAR (extrapolated) = 0.753 W/kg

SAR(1 g) = 0.386 mW/g; SAR(10 g) = 0.244 mW/g Maximum value of SAR (measured) = 0.427 mW/g

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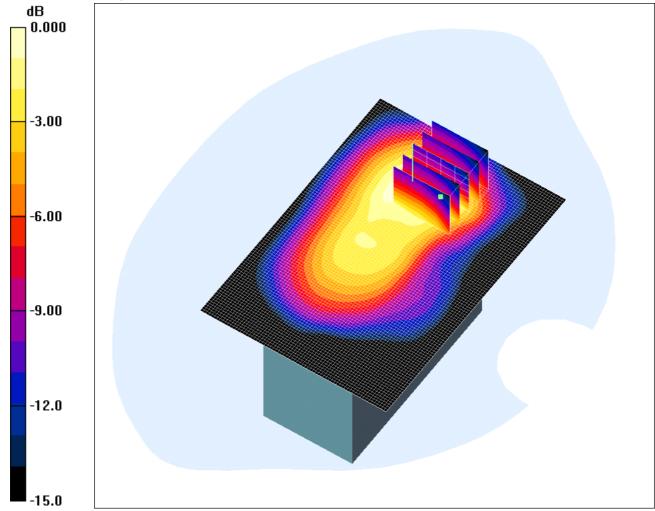
Test of: NTT docomo P-07A

To: OET Bulletin 65 Supplement C: (2001-01)

SCN/74681JD09/012: Rear of EUT Facing Phantom With Display 90 Degrees to Keypad With PHF 0mm separation UMTS FDD V CH4233

Date: 02/04/2009

DUT: Panasonic O-07; Type: P-07A; Serial: 356753020050153



0 dB = 0.418 mW/q

Communication System: UMTS-FDD V; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium: 900 MHz MSL Medium parameters used (interpolated): f = 846.6 MHz;  $\sigma$  = 0.989 mho/m;  $\epsilon_r$  = 53.9;  $\rho$  = 1000 kg/m<sup>3</sup> Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 SN3508; ConvF(10.21, 10.21, 10.21); Calibrated: 24/06/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 25/06/2008
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Rear of EUT Facing Phantom - High/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.457 mW/g

Rear of EUT Facing Phantom - High/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm Reference Value = 16.0 V/m; Power Drift = 0.046 dB

Peak SAR (extrapolated) = 0.798 W/kg

SAR(1 g) = 0.366 mW/g; SAR(10 g) = 0.223 mW/g Maximum value of SAR (measured) = 0.418 mW/g

**Test Report** 

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Issue Date: 07 April 2009

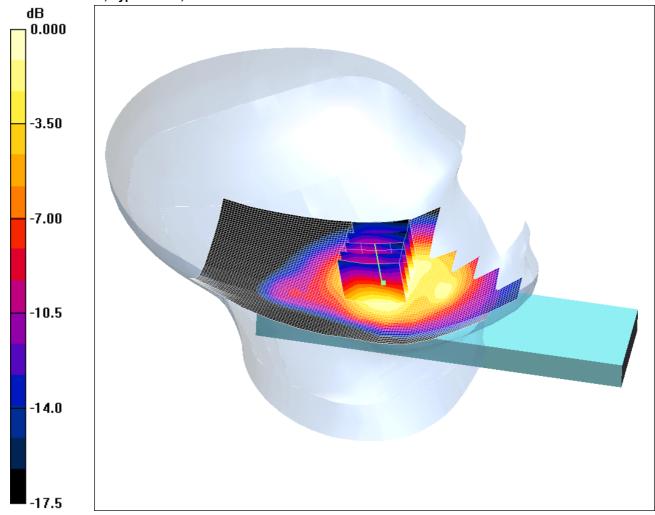
Test of: NTT docomo P-07A

To: OET Bulletin 65 Supplement C: (2001-01)

SCN/74681JD09/013: Touch Left PCS CH660

Date: 03/03/2009

DUT: Panasonic P-07; Type: P-07A; Serial: 356753020050153



0 dB = 0.610 mW/g

Communication System: PCS 1900; Frequency: 1879.8 MHz; Duty Cycle: 1:8.3

Medium: 1900 MHz HSL Medium parameters used (interpolated): f = 1879.8 MHz;  $\sigma = 1.44$  mho/m;  $\epsilon_r = 40.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV3 SN3508; ConvF(8.83, 8.83, 8.83); Calibrated: 24/06/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 25/06/2008
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Touch Left - Middle/Area Scan (71x161x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.647 mW/g

Touch Left - Middle/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.71 V/m; Power Drift = -0.361 dB

Peak SAR (extrapolated) = 0.892 W/kg

SAR(1 g) = 0.569 mW/g; SAR(10 g) = 0.346 mW/g Maximum value of SAR (measured) = 0.610 mW/g

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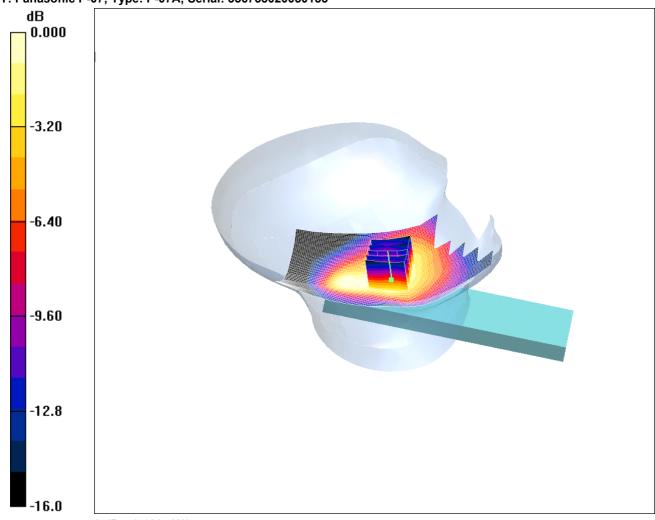
Test of: NTT docomo P-07A

To: OET Bulletin 65 Supplement C: (2001-01)

SCN/74681JD09/014: Tilt Left PCS CH660

Date: 03/03/2009

DUT: Panasonic P-07; Type: P-07A; Serial: 356753020050153



0 dB = 0.120 mW/g

Communication System: PCS 1900; Frequency: 1879.8 MHz; Duty Cycle: 1:8.3

Medium: 1900 MHz HSL Medium parameters used (interpolated): f = 1879.8 MHz;  $\sigma = 1.44$  mho/m;  $\epsilon_r = 40.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV3 SN3508; ConvF(8.83, 8.83, 8.83); Calibrated: 24/06/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 25/06/2008
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt Left - Middle/Area Scan (71x161x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.122 mW/g

Tilt Left - Middle/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.78 V/m; Power Drift = -0.112 dB

Peak SAR (extrapolated) = 0.171 W/kg

SAR(1 g) = 0.111 mW/g; SAR(10 g) = 0.069 mW/g Maximum value of SAR (measured) = 0.120 mW/g

**Test Report** 

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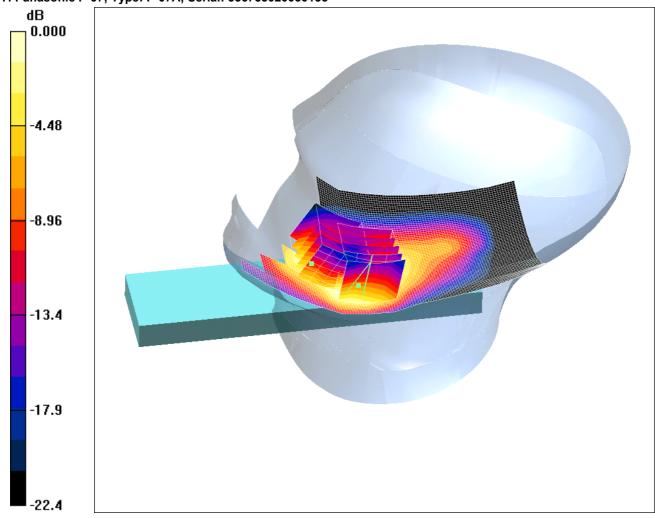
Test of: NTT docomo P-07A

To: OET Bulletin 65 Supplement C: (2001-01)

SCN/74681JD09/015: Touch Right PCS CH660

Date: 03/03/2009

DUT: Panasonic P-07; Type: P-07A; Serial: 356753020050153



0 dB = 0.675 mW/g

Communication System: PCS 1900; Frequency: 1879.8 MHz; Duty Cycle: 1:8.3

Medium: 1900 MHz HSL Medium parameters used (interpolated): f = 1879.8 MHz;  $\sigma$  = 1.44 mho/m;  $\epsilon_r$  = 40.4;  $\rho$  = 1000 kg/m<sup>3</sup> Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV3 SN3508; ConvF(8.83, 8.83, 8.83); Calibrated: 24/06/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 25/06/2008
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Touch Right - Middle/Area Scan (71x161x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.756 mW/g

Touch Right - Middle/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.15 V/m; Power Drift = -0.469 dB

Peak SAR (extrapolated) = 1.28 W/kg

SAR(1 g) = 0.715 mW/g; SAR(10 g) = 0.397 mW/g

Maximum value of SAR (measured) = 0.751 mW/g

Touch Right - Middle/Zoom Scan (5x5x7) (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.15 V/m; Power Drift = -0.469 dB

Peak SAR (extrapolated) = 1.17 W/kg

SAR(1 g) = 0.515 mW/g; SAR(10 g) = 0.291 mW/g

Maximum value of SAR (measured) = 0.675 mW/g

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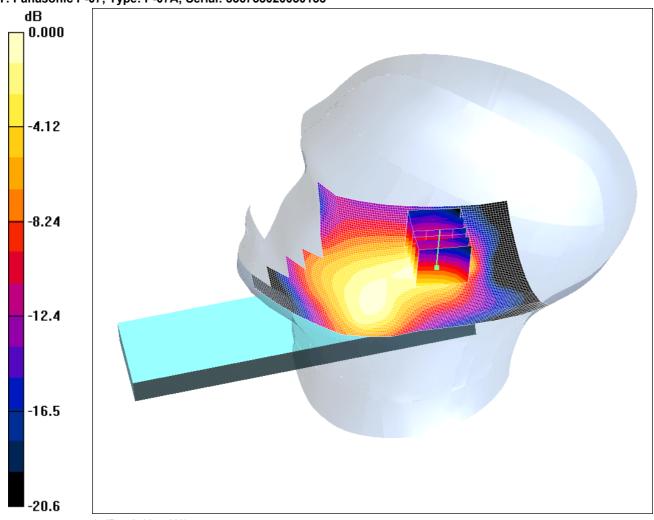
Test of: NTT docomo P-07A

To: OET Bulletin 65 Supplement C: (2001-01)

SCN/74681JD09/016: Tilt Right PCS CH660

Date: 03/03/2009

DUT: Panasonic P-07; Type: P-07A; Serial: 356753020050153



0 dB = 0.135 mW/g

Communication System: PCS 1900; Frequency: 1879.8 MHz;Duty Cycle: 1:8.3

Medium: 1900 MHz HSL Medium parameters used (interpolated): f = 1879.8 MHz;  $\sigma = 1.44$  mho/m;  $\epsilon_r = 40.4$ ;  $\rho = 1000$  kg/m<sup>3</sup> Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV3 SN3508; ConvF(8.83, 8.83, 8.83); Calibrated: 24/06/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 25/06/2008
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt Right - Middle/Area Scan (71x161x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.152 mW/g

Tilt Right - Middle/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.88 V/m; Power Drift = 0.161 dB

Peak SAR (extrapolated) = 0.220 W/kg

SAR(1 g) = 0.124 mW/g; SAR(10 g) = 0.068 mW/g Maximum value of SAR (measured) = 0.135 mW/g

**Test Report** 

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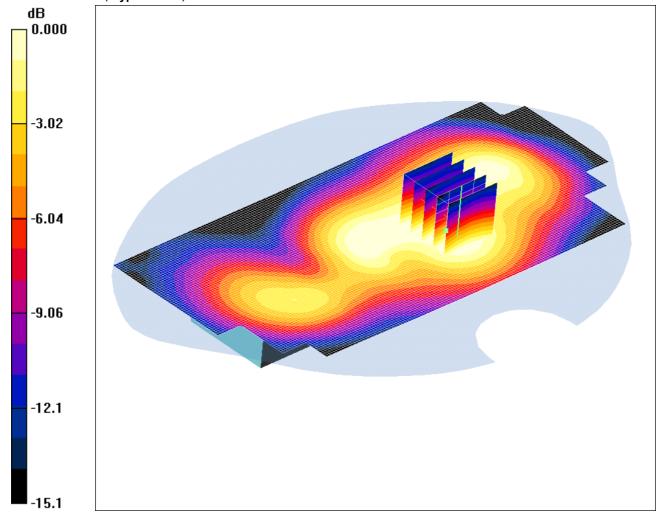
Test of: NTT docomo P-07A

To: OET Bulletin 65 Supplement C: (2001-01)

SCN/74681JD09/017: Front of EUT Facing Phantom GPRS CH660

Date: 03/03/2009

DUT: Panasonic P-07; Type: P-07A; Serial: 356753020050153



0 dB = 0.095 mW/g

Communication System: GPRS 1900; Frequency: 1879.8 MHz; Duty Cycle: 1:4

Medium: 1900 MHz MSL Medium parameters used (interpolated): f = 1879.8 MHz;  $\sigma = 1.5$  mho/m;  $\epsilon_r = 51$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 SN3508; ConvF(8.29, 8.29, 8.29); Calibrated: 24/06/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 25/06/2008
- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Front of EUT Facing Phantom/Area Scan (81x171x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.102 mW/g

Front of EUT Facing Phantom/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.98 V/m; Power Drift = -0.335 dB

Peak SAR (extrapolated) = 0.143 W/kg

SAR(1 g) = 0.088 mW/g; SAR(10 g) = 0.055 mW/g Maximum value of SAR (measured) = 0.095 mW/g

**Test Report** 

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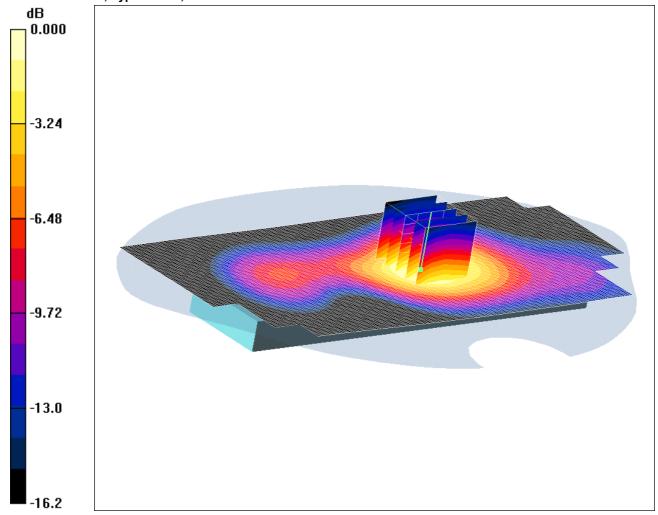
Test of: NTT docomo P-07A

To: OET Bulletin 65 Supplement C: (2001-01)

SCN/74681JD09/018: Rear of EUT Facing Phantom GPRS CH660

Date: 03/03/2009

DUT: Panasonic P-07; Type: P-07A; Serial: 356753020050153



0 dB = 0.418 mW/g

Communication System: GPRS 1900; Frequency: 1879.8 MHz; Duty Cycle: 1:4

Medium: 1900 MHz MSL Medium parameters used (interpolated): f = 1879.8 MHz;  $\sigma = 1.5$  mho/m;  $\epsilon_r = 51$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 SN3508; ConvF(8.29, 8.29, 8.29); Calibrated: 24/06/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 25/06/2008
- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Rear of EUT Facing Phantom/Area Scan (81x171x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.434 mW/g

Rear of EUT Facing Pantom/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.2 V/m; Power Drift = -0.181 dB

Peak SAR (extrapolated) = 0.623 W/kg

SAR(1 g) = 0.383 mW/g; SAR(10 g) = 0.226 mW/g

Maximum value of SAR (measured) = 0.418 mW/g

Test Report

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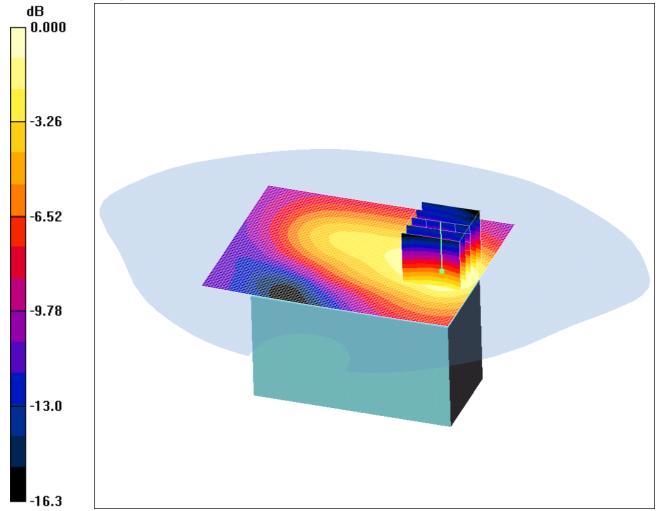
Test of: NTT docomo P-07A

To: OET Bulletin 65 Supplement C: (2001-01)

SCN/74681JD09/019: Rear of EUT Facing Phantom With Display 90 Degrees to Keypad PCS CH660

Date: 03/03/2009

DUT: Panasonic O-07; Type: P-07A; Serial: 356753020050153



0 dB = 0.124 mW/g

Communication System: GPRS 1900; Frequency: 1879.8 MHz; Duty Cycle: 1:4

Medium: 1900 MHz MSL Medium parameters used (interpolated): f = 1879.8 MHz;  $\sigma = 1.5$  mho/m;  $\epsilon_r = 51$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 SN3508; ConvF(8.29, 8.29, 8.29); Calibrated: 24/06/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 25/06/2008
- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Rear of EUT Facing Phantom - Middle 2/Area Scan (71x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.124 mW/g

Rear of EUT Facing Phantom - Middle 2/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm Reference Value = 6.54 V/m; Power Drift = 0.076 dB

Peak SAR (extrapolated) = 0.189 W/kg

SAR(1 g) = 0.114 mW/g; SAR(10 g) = 0.068 mW/g Maximum value of SAR (measured) = 0.124 mW/g

**Test Report** 

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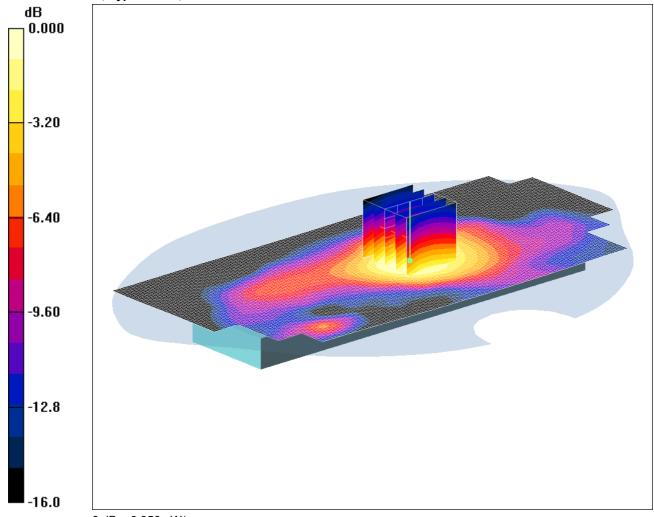
Test of: NTT docomo P-07A

To: OET Bulletin 65 Supplement C: (2001-01)

SCN/74681JD09/020: Rear of EUT Facing Phantom With PHF GPRS CH660

Date: 03/03/2009

DUT: Panasonic P-07; Type: P-07A; Serial: 356753020050153



0 dB = 0.356 mW/g

Communication System: GPRS 1900; Frequency: 1879.8 MHz;Duty Cycle: 1:4

Medium: 1900 MHz MSL Medium parameters used (interpolated): f = 1879.8 MHz;  $\sigma = 1.5$  mho/m;  $\epsilon_r = 51$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 SN3508; ConvF(8.29, 8.29, 8.29); Calibrated: 24/06/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 25/06/2008
- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Rear of EUT Facing Phantom/Area Scan (81x171x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.360 mW/g

Rear of EUT Facing Phantom/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.3 V/m; Power Drift = -0.117 dB

Peak SAR (extrapolated) = 0.547 W/kg

SAR(1 g) = 0.333 mW/g; SAR(10 g) = 0.197 mW/g Maximum value of SAR (measured) = 0.356 mW/g

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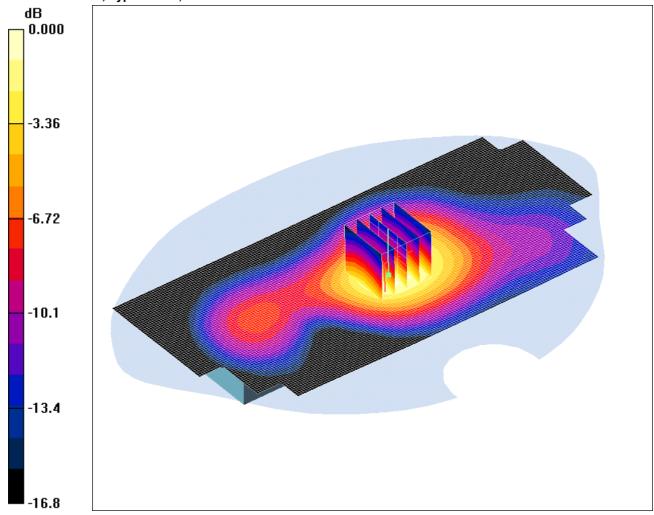
Test of: NTT docomo P-07A

To: OET Bulletin 65 Supplement C: (2001-01)

SCN/74681JD09/021: Rear of EUT Facing Phantom PCS CH660

Date: 03/03/2009

DUT: Panasonic P-07; Type: P-07A; Serial: 356753020050153



0 dB = 0.237 mW/g

Communication System: PCS 1900; Frequency: 1879.8 MHz;Duty Cycle: 1:8.3

Medium: 1900 MHz MSL Medium parameters used (interpolated): f = 1879.8 MHz;  $\sigma = 1.5$  mho/m;  $\epsilon_r = 51$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 SN3508; ConvF(8.29, 8.29, 8.29); Calibrated: 24/06/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 25/06/2008
- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Rear of EUT Facing Phantom/Area Scan (81x171x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.224 mW/g

Rear of EUT Facing Phantom/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.2 V/m; Power Drift = -0.083 dB

Peak SAR (extrapolated) = 0.358 W/kg

SAR(1 g) = 0.217 mW/g; SAR(10 g) = 0.127 mW/g

Maximum value of SAR (measured) = 0.237 mW/g

**Test Report** 

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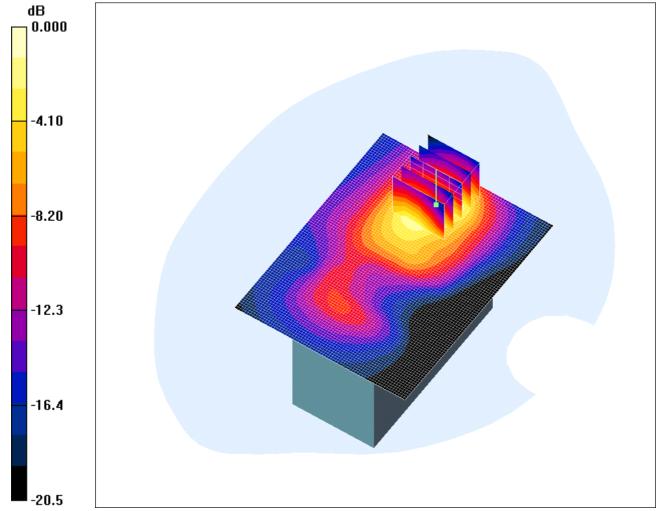
Test of: NTT docomo P-07A

To: OET Bulletin 65 Supplement C: (2001-01)

SCN/74681JD09/022: Rear of EUT Facing Phantom With Display 90 Degrees to Keypad 0mm separation PCS

CH660. Date: 02/04/2009

DUT: Panasonic O-07; Type: P-07A; Serial: 356753020050153



0 dB = 1.40 mW/g

Communication System: GPRS 1900; Frequency: 1879.8 MHz; Duty Cycle: 1:4

Medium: 1900 MHz MSL Medium parameters used (interpolated): f = 1879.8 MHz;  $\sigma$  = 1.56 mho/m;  $\epsilon_r$  = 53.2;  $\rho$  = 1000 kg/m<sup>3</sup> Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 SN3508; ConvF(8.29, 8.29, 8.29); Calibrated: 24/06/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 25/06/2008
- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Rear of EUT Facing Phantom - Middle/Area Scan (71x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.47 mW/g

Rear of EUT Facing Phantom - Middle/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm Reference Value = 12.3 V/m; Power Drift = 0.222 dB

Peak SAR (extrapolated) = 2.33 W/kg

**SAR(1 g) = 1.26 mW/g; SAR(10 g) = 0.674 mW/g** Maximum value of SAR (measured) = 1.40 mW/g

**Test Report** 

Serial No: RFI/SAR4/RP74681JD09A

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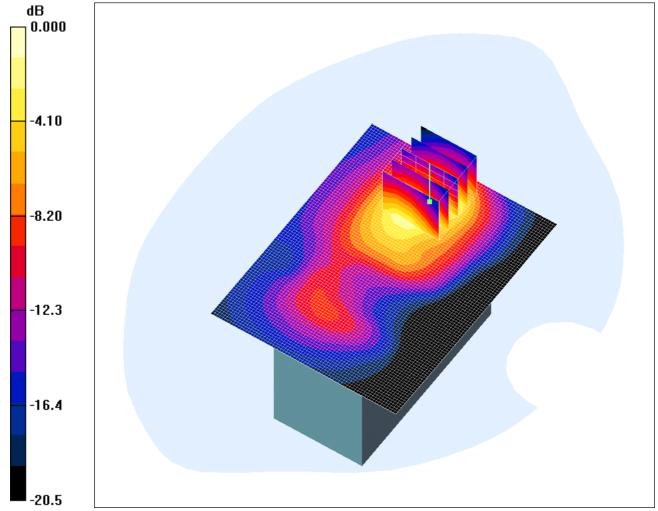
Test of: NTT docomo P-07A

To: OET Bulletin 65 Supplement C: (2001-01)

SCN/74681JD09/023: Rear of EUT Facing Phantom With Display 90 Degrees to Keypad 0mm separation PCS

CH512. Date: 02/04/2009

DUT: Panasonic O-07; Type: P-07A; Serial: 356753020050153



0 dB = 1.38 mW/g

Communication System: GPRS 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:4

Medium: 1900 MHz MSL Medium parameters used (interpolated): f = 1850.2 MHz;  $\sigma$  = 1.53 mho/m;  $\epsilon_r$  = 53.3;  $\rho$  = 1000 kg/m<sup>3</sup> Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 SN3508; ConvF(8.29, 8.29, 8.29); Calibrated: 24/06/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 25/06/2008
- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Rear of EUT Facing Phantom - Low/Area Scan (71x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.47 mW/g

Rear of EUT Facing Phantom - Low/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm Reference Value = 12.3 V/m; Power Drift = 0.089 dB

Peak SAR (extrapolated) = 2.24 W/kg

SAR(1 g) = 1.25 mW/g; SAR(10 g) = 0.669 mW/g Maximum value of SAR (measured) = 1.38 mW/g

**Test Report** 

Serial No: RFI/SAR4/RP74681JD09A

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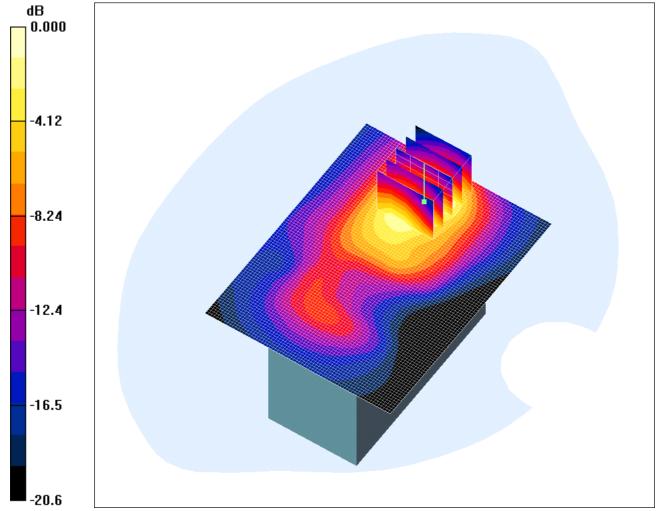
Test of: NTT docomo P-07A

To: OET Bulletin 65 Supplement C: (2001-01)

SCN/74681JD09/024: Rear of EUT Facing Phantom With Display 90 Degrees to Keypad 0mm separation PCS

CH810. Date: 02/04/2009

DUT: Panasonic O-07; Type: P-07A; Serial: 356753020050153



0 dB = 1.35 mW/g

Communication System: GPRS 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:4

Medium: 1900 MHz MSL Medium parameters used (interpolated): f = 1909.8 MHz;  $\sigma$  = 1.59 mho/m;  $\epsilon_r$  = 53.1;  $\rho$  = 1000 kg/m<sup>3</sup> Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 SN3508; ConvF(8.29, 8.29, 8.29); Calibrated: 24/06/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 25/06/2008
- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Rear of EUT Facing Phantom - High/Area Scan (71x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.47 mW/g

Rear of EUT Facing Phantom - High/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm Reference Value = 12.9 V/m; Power Drift = 0.012 dB

Peak SAR (extrapolated) = 2.24 W/kg

**SAR(1 g) = 1.22 mW/g; SAR(10 g) = 0.654 mW/g** Maximum value of SAR (measured) = 1.35 mW/g

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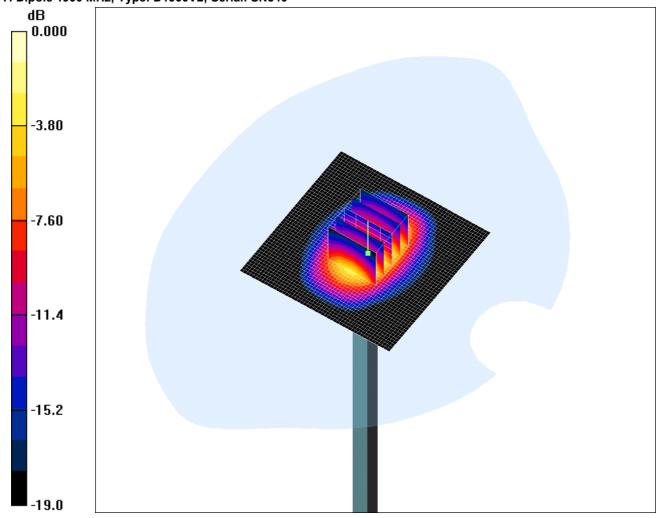
Test of: NTT docomo P-07A

To: OET Bulletin 65 Supplement C: (2001-01)

SCN/74681JD09/025: System Performance Check 1900MHz Body 03 03 08

Date: 03/03/2009

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: SN540



0 dB = 11.1 mW/g

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 MHz MSL Medium parameters used: f = 1900 MHz;  $\sigma = 1.52$  mho/m;  $\epsilon_r = 50.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 SN3508; ConvF(8.29, 8.29, 8.29); Calibrated: 24/06/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 25/06/2008
- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176 d=15mm, Pin=250mW/Area Scan (51x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 14.1 mW/g

d=15mm, Pin=250mW/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 84.4 V/m; Power Drift = 0.095 dB

Peak SAR (extrapolated) = 19.1 W/kg

**SAR(1 g) = 9.88 mW/g; SAR(10 g) = 4.97 mW/g**Maximum value of SAR (measured) = 11.1 mW/g

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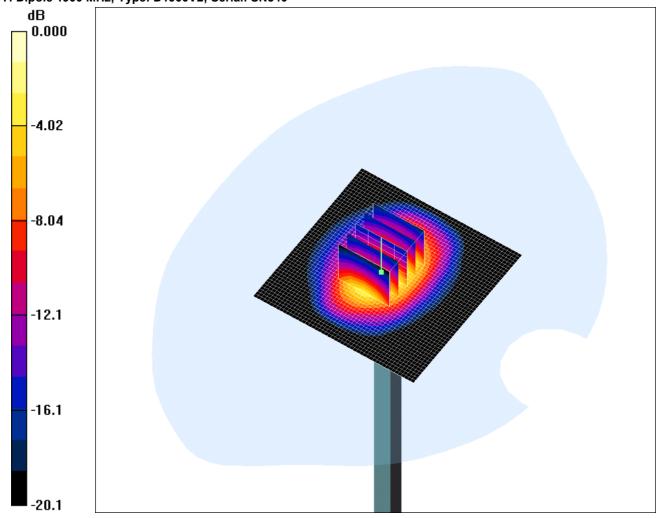
Test of: NTT docomo P-07A

To: OET Bulletin 65 Supplement C: (2001-01)

SCN/74681JD09/026: System Performance Check 1900MHz Head 03 03 09

Date: 03/03/2009

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: SN540



0 dB = 10.4 mW/g

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 MHz HSL Medium parameters used: f = 1900 MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 40.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 SN3508; ConvF(8.83, 8.83, 8.83); Calibrated: 24/06/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 25/06/2008
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176 d=15mm, Pin=250mW 2/Area Scan (51x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 12.8 mW/g

d=15mm, Pin=250mW 2/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 79.7 V/m; Power Drift = 0.017 dB

Peak SAR (extrapolated) = 18.5 W/kg

SAR(1 g) = 9.3 mW/g; SAR(10 g) = 4.63 mW/g

Maximum value of SAR (measured) = 10.4 mW/g

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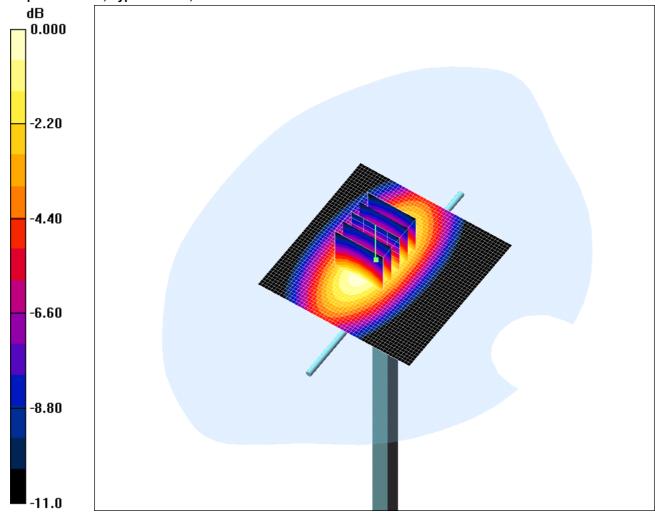
Test of: NTT docomo P-07A

To: OET Bulletin 65 Supplement C: (2001-01)

SCN/74681JD09/027: System Performance Check 900MHz Body 28 02 09

Date: 28/02/2009

DUT: Dipole 900 MHz; Type: D900V2; Serial: SN185



0 dB = 2.91 mW/g

Communication System: CW; Frequency: 900 MHz; Duty Cycle: 1:1

Medium: 900 MHz MSL Medium parameters used: f = 900 MHz;  $\sigma$  = 1.02 mho/m;  $\epsilon_r$  = 53.4;  $\rho$  = 1000 kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 SN3508; ConvF(10.21, 10.21, 10.21); Calibrated: 24/06/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 25/06/2008
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

d=15mm, Pin=250mW/Area Scan (51x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 3.01 mW/g

d=15mm, Pin=250mW/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 50.5 V/m; Power Drift = -0.029 dB

Peak SAR (extrapolated) = 4.06 W/kg

SAR(1 g) = 2.69 mW/g; SAR(10 g) = 1.73 mW/g Maximum value of SAR (measured) = 2.91 mW/g

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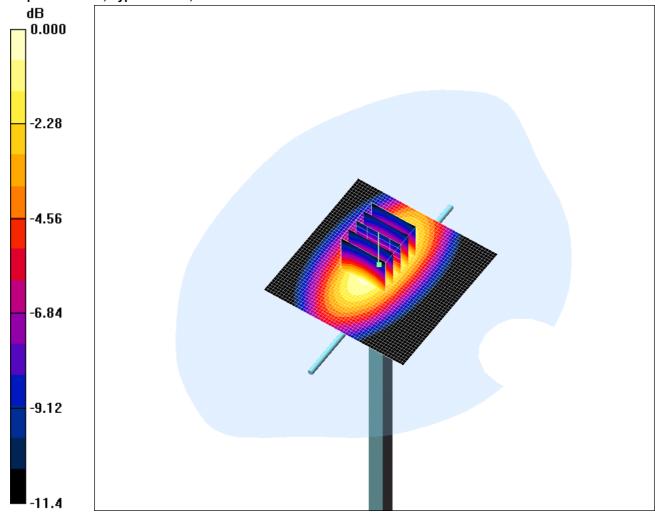
Test of: NTT docomo P-07A

To: OET Bulletin 65 Supplement C: (2001-01)

SCN/74681JD09/028: System Performance Check 900MHz Head 27 02 09

Date: 27/02/2009

DUT: Dipole 900 MHz; Type: D900V2; Serial: SN185



0 dB = 2.93 mW/g

Communication System: CW; Frequency: 900 MHz; Duty Cycle: 1:1

Medium: 900 MHz HSL Medium parameters used: f = 900 MHz;  $\sigma = 0.987$  mho/m;  $\epsilon_r = 42.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 SN3508; ConvF(10.14, 10.14, 10.14); Calibrated: 24/06/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 25/06/2008
- Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1207
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176 d=15mm, Pin=250mW/Area Scan (51x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 2.93 mW/g

d=15mm, Pin=250mW/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 52.1 V/m; Power Drift = 0.030 dB

Peak SAR (extrapolated) = 4.14 W/kg

SAR(1 g) = 2.69 mW/g; SAR(10 g) = 1.72 mW/g Maximum value of SAR (measured) = 2.93 mW/g

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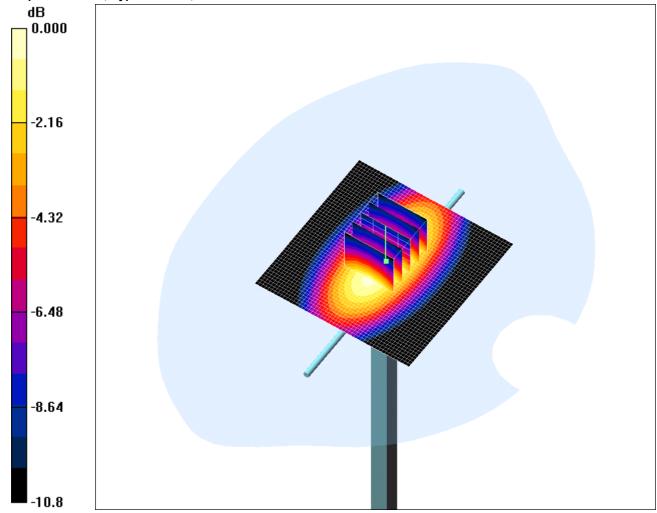
Test of: NTT docomo P-07A

To: OET Bulletin 65 Supplement C: (2001-01)

SCN/74681JD09/029: System Performance Check 900MHz Body 02 04 09

Date: 02/04/2009

DUT: Dipole 900 MHz; Type: D900V2; Serial: SN185



0 dB = 2.97 mW/g

Communication System: CW; Frequency: 900 MHz; Duty Cycle: 1:1

Medium: 900 MHz MSL Medium parameters used: f = 900 MHz;  $\sigma = 1.05$  mho/m;  $\epsilon_r = 53.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 SN3508; ConvF(10.21, 10.21, 10.21); Calibrated: 24/06/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 25/06/2008
- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

d=15mm, Pin=250mW/Area Scan (51x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 3.04 mW/g

d=15mm, Pin=250mW/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 53.1 V/m; Power Drift = 0.037 dB

Peak SAR (extrapolated) = 4.14 W/kg

SAR(1 g) = 2.74 mW/g; SAR(10 g) = 1.78 mW/g Maximum value of SAR (measured) = 2.97 mW/g

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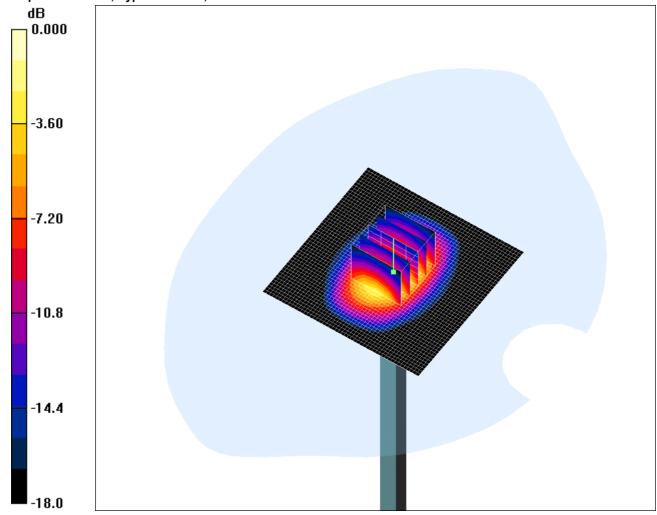
Test of: NTT docomo P-07A

To: OET Bulletin 65 Supplement C: (2001-01)

SCN/74681JD09/030: System Performance Check 1900MHz Body 02 04 09

Date: 02/04/2009

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: SN540



0 dB = 11.0 mW/g

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 MHz MSL Medium parameters used: f = 1900 MHz;  $\sigma = 1.58$  mho/m;  $\epsilon_r = 53.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 SN3508; ConvF(8.29, 8.29, 8.29); Calibrated: 24/06/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 25/06/2008
- Phantom: SAM 12a; Type: SAM 4.0; Serial: TP:1193
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176 d=15mm, Pin=250mW/Area Scan (51x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 14.3 mW/g

d=15mm, Pin=250mW/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 82.8 V/m; Power Drift = 0.057 dB

Peak SAR (extrapolated) = 18.3 W/kg

SAR(1 g) = 9.78 mW/g; SAR(10 g) = 4.99 mW/gMaximum value of SAR (measured) = 11.0 mW/g

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## **Appendix 5. Validation of System**

Prior to the assessment, the system was verified in the flat region of the phantom. 900 MHz and 1900 MHz dipole was used. A forward power of 250 mW was applied to the dipole and the system was verified to a tolerance of  $\pm 5\%$  for the 900 MHz and 1900 MHz dipole. The applicable verification (normalised to 1 Watt).

Date: 27/02/2009

Validation Dipole and Serial Number: D900V2 SN:185

Simulant	Frequency (MHz)	Room Temperature	Liquid Temperature	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)		
				ε <sub>r</sub>	41.50	42.55	2.54	5.00		
Head	900	24.0 °C	24 0 ℃	24 ∩ °C	24.0 °C	σ	0.97	0.99	1.64	5.00
ricad	000	24.0	24.0 0	1g SAR	10.60	10.76	1.15	5.00		
				10g SAR	6.84	6.88	0.58	5.00		

Date: 28/02/2009

Validation Dipole and Serial Number: D900V2 SN:185

Simulant	Frequency (MHz)	Room Temperature	Liquid Temperature	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)							
				ε <sub>r</sub>	55.00	53.37	-2.96	5.00							
Body	900	24.0 °C	24 0 °C	24 0 ℃	24 0 ℃	24 0 ℃	24 0 ℃	24 0 °€	24 0 °C	24.0 °C	σ	1.05	1.02	-3.18	5.00
Body	300	24.0 0	24.0 0	1g SAR	10.50	10.76	2.47	5.00							
				10g SAR	6.89	6.92	0.43	5.00							

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Date: 03/03/2009

Validation Dipole and Serial Number: D1900V2: SN:540

Simulant	Frequency (MHz)	Room Temperature	Liquid Temperature	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)
				ε <sub>r</sub>	40.00	40.34	0.85	5.00
Head	1900	25.0 °C	24.0 °C	σ	1.40	1.46	4.28	5.00
ricad	1300	20.0 0	24.0 0	1g SAR	36.10	37.20	3.05	5.00
				10g SAR	19.30	18.52	-4.04	5.00

Date: 03/03/2009

Validation Dipole and Serial Number: D1900V2: SN:540

Simulant	Frequency (MHz)	Room Temperature	Liquid Temperature	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)							
				ε <sub>r</sub>	53.30	50.89	-4.52	5.00							
Body	1900	25.0 °C	24 0 ℃	24 0 ℃	24 0 ℃	24 0 ℃	24 0 °C	24 0 ℃	24 0 °C	24.0 °C	σ	1.52	1.52	0.05	5.00
Body	1300	20.0 0	24.0 0	1g SAR	38.00	39.52	4.00	5.00							
				10g SAR	20.70	19.88	-3.96	5.00							

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Date: 02/04/2009

Validation Dipole and Serial Number: D900V2: SN:185

Simulant	Frequency (MHz)	Room Temperature	Liquid Temperature	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)
				ε <sub>r</sub>	55.00	53.40	-2.91	5.00
Body	900	24.0 °C	24.0 °C	σ	1.05	1.04	-0.60	5.00
Body	300	24.0 0	24.0 0	1g SAR	10.50	10.96	4.38	5.00
				10g SAR	6.89	7.12	3.34	5.00

Date: 02/04/2009

Validation Dipole and Serial Number: D1900V2:SN:540

Simulant	Frequency (MHz)	Room Temperature	Liquid Temperature	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)				
				ε <sub>r</sub>	53.30	53.18	-0.23	5.00				
Body	1900	25.0 °C	24 0 ℃	24 0 °C	24 0 ℃	24.0 °C	24 0 °€	σ	1.52	1.58	4.06	5.00
Body	1300	20.0 0	24.0 0	1g SAR	38.00	39.12	2.95	5.00				
				10g SAR	20.70	19.96	-3.57	5.00				

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# **Appendix 6. Simulated Tissues**

The body mixture consists of water and glycol. Visual inspection is made to ensure air bubbles are not trapped during the mixing process. The mixture is calibrated to obtain proper dielectric constant (permittivity) and conductivity of the tissue.

Ingredient	Frequency
	1800/1900 MHz Body
De-Ionised Water	69.79%
Diglycol Butyl Ether (DGBE)	30.00%
Salt	0.20%

Ingredient	Frequency
	1800/1900 MHz Head
De-Ionised Water	55.41%
Diglycol Butyl Ether (DGBE)	44.51%
Salt	0.08%

Ingredient	Frequency
	835/850/900 MHz Body
De-Ionised Water	50.75%
Sugar	48.21%
Salt	0.94%
Kathon	0.10%

Ingredient	Frequency
	835/850/900 MHz Head
Propanediol	64.81%
De-Ionised Water	34.40%
Salt	0.79%

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## **Appendix 7. DASY4 System Details**

### A.7.1. DASY4 SAR Measurement System

RFI Global Services Ltd, SAR measurement facility utilises the Dosimetric Assessment System (DASY™) manufactured by Schmid & Partner Engineering AG (SPEAG™) of Zurich, Switzerland. The DASY4 system is comprised of the robot controller, computer, near-field probe, probe alignment sensor, and the SAM phantom containing brain or muscle equivalent material. The robot is a six-axis industrial robot performing precise movements to position the probe to the location (points) of maximum electromagnetic field (EMF). A cell controller system contains the power supply, robot controller; teach pendant (Joystick), and remote control. This is used to drive the robot motors. The Staubli robot is connected to the cell controller to allow software manipulation of the robot. The data acquisition electronics (DAE) performs signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection etc. The DAE is connected to the Electro-optical coupler (EOC). The EOC performs the conversion from the optical into digital electric signal of the DAE and transfers data to the PC plug-in card. The DAE3 utilises a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching mulitplexer, a fast 16-bit AD-converter and a command decoder and control logic unit. Transmission to the PC-card is accomplished through an optical downlink for data and status information and an optical uplink for commands and clock lines. The mechanical probe-mounting device includes two different sensor systems for frontal and sidewise probe contacts. They are also used for mechanical surface detection and probe collision detection. The robot uses its own controller with a built in VME-bus computer.

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### A.7.2. DASY4 SAR System Specifications

### **Robot System**

Positioner:	Stäubli Unimation Corp. Robot Model: RX90L
Repeatability:	0.025 mm
No. of Axis:	6
Serial Number:	F00/SD89A1/A/01
Reach:	1185 mm
Payload:	3.5 kg
Control Unit:	CS7
Programming Language:	V+

## **Data Acquisition Electronic (DAE) System**

Serial Number:	DAE3 SN:394
----------------	-------------

## **PC Controller**

PC:	Dell Precision 340
Operating System:	Windows 2000
Data Card:	DASY4 Measurement Server
Serial Number:	1080

### **Data Converter**

Features:	Signal Amplifier, multiplexer, A/D converted and control logic.
Software:	DASY4 Software
Connecting Lines:	Optical downlink for data and status info. Optical uplink for commands and clock.

## **PC Interface Card**

24 bit (64 MHz) DSP for real time processing Link to DAE3 16 nit A/D converter for surface detection system serial link
to robot direct emergency stop output for robot.

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## **DASY4 SAR System Specifications (Continued)**

## **E-Field Probe**

Model:	EX3DV3
Serial No:	3508
Construction:	Triangular core
Frequency:	10 MHz to >6 GHz
Linearity:	±0.2 dB (30 MHz to 6 GHz)
Probe Length (mm):	330
Probe Diameter (mm):	12
Tip Length (mm):	20
Tip Diameter (mm):	2.5
Sensor X Offset (mm):	1
Sensor Y Offset (mm):	1
Sensor Z Offset (mm):	1

### **Phantom**

Phantom:	SAM Phantom
Shell Material:	Fibreglass
Thickness:	2.0 ±0.1 mm