

Multi-Band Average SAR

Multi-Band Configurations:

DASY Configuration for Rear/GPRS 2 slots_ch 190/Volume Scan:

Date/Time: 2/21/2014 11:23:32 PM

Test Laboratory: UL Verification Services Inc., SAR Lab 1

File Name: [GSM 850.da52:0](#)

DUT: 14U16849 (SM-G9092); Type: Sample; Serial:

Communication System: UID 0, GPRS-FDD (TDMA, GMSK, 2 slot) (0); Frequency: 836.6 MHz; Duty Cycle: 1:4.00037; PMF: 1

Medium: MSL 835 Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 1.02$ S/m; $\epsilon_r = 56.36$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

- Probe: EX3DV4 - SN3773; ConvF(8.78, 8.78, 8.78); Calibrated: 4/26/2013;
 - Sensor-Surface: 4mm (Mechanical Surface Detection)
 - Electronics: DAE4 Sn1257; Calibrated: 8/22/2013
 - Phantom: ELI B v4.0; Type: QDOVA002AA; Serial: 1196
 - Measurement SW: DASY52, Version 52.8 (7)
-

DASY Configuration for Rear/(Slave) GSM Voice_ch 661/Volume Scan:

Date/Time: 2/20/2014 1:37:04 AM

Test Laboratory: UL Verification Services Inc., SAR Lab 1

File Name: [GSM 1900.da52:0](#)

DUT: 14U16849 (SM-G9092); Type: Sample; Serial:

Communication System: UID 0, GPRS-FDD (TDMA, GMSK, 3 slot) (0); Frequency: 1880 MHz; Duty Cycle: 1:2.60016; PMF: 1

Medium: 2014/02/18 MSL 1900 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.528$ S/m; $\epsilon_r = 51.984$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

- Probe: EX3DV4 - SN3929; ConvF(7.28, 7.28, 7.28); Calibrated: 6/24/2013;
 - Sensor-Surface: 2mm (Mechanical Surface Detection)
 - Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
 - Phantom: ELI-B v5.0; Type: QDOVA002AA; Serial: TP:1195
 - Measurement SW: DASY52, Version 52.8 (7)
-

DASY Configuration for Rear/802.11a_Ch 149/Volume Scan:

Date/Time: 2/25/2014 9:50:31 AM

Test Laboratory: UL Verification Services Inc., SAR Lab 1

File Name: [5GHz.da52:0](#)

DUT: 14U16849 (SM-G9092); Type: Sample; Serial:

Communication System: UID 0, IEEE 802.11a/n 5 GHz Band (0); Frequency: 5745 MHz; Duty Cycle: 1:1; PMF: 1

Medium: MSL 3-6 GHz Medium parameters used: $f = 5745$ MHz; $\sigma = 5.881$ S/m; $\epsilon_r = 47.558$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

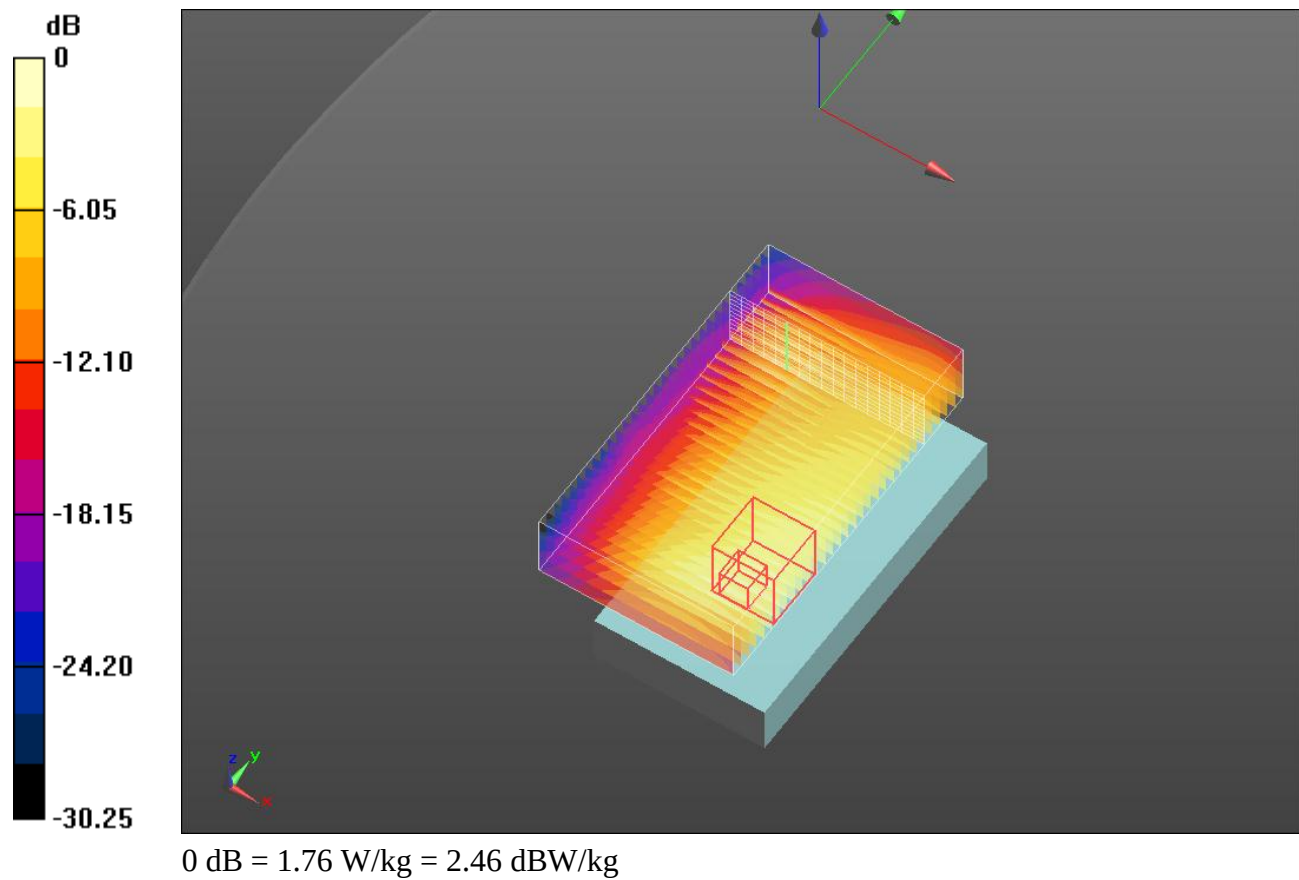
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

- Probe: EX3DV4 - SN3902; ConvF(4.23, 4.23, 4.23); Calibrated: 7/12/2013;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1377; Calibrated: 7/15/2013
- Phantom: ELI v5.0 (A); Type: QDOVA001BB; Serial: 1213
- Measurement SW: DASY52, Version 52.8 (7)

Multi Band Result:

SAR(1 g) = 0.977 W/kg; SAR(10 g) = 0.606 W/kg

Maximum value of SAR (interpolated) = 1.76 W/kg



Multi-Band Average SAR

Multi-Band Configurations:

DASY Configuration for Rear/GPRS 2 slots_ch 190/Volume Scan:

Date/Time: 2/21/2014 11:23:32 PM

Test Laboratory: UL Verification Services Inc., SAR Lab 1

File Name: [GSM 850.da52:0](#)

DUT: 14U16849 (SM-G9092); Type: Sample; Serial:

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Medium: MSL 835 Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 1.02$ S/m; $\epsilon_r = 56.36$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

- Probe: EX3DV4 - SN3773; ConvF(8.78, 8.78, 8.78); Calibrated: 4/26/2013;
 - Sensor-Surface: 4mm (Mechanical Surface Detection)
 - Electronics: DAE4 Sn1257; Calibrated: 8/22/2013
 - Phantom: ELI B v4.0; Type: QDOVA002AA; Serial: 1196
 - Measurement SW: DASY52, Version 52.8 (7)
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DASY Configuration for Rear/(Slave) GSM Voice_ch 661/Volume Scan:

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File Name: [GSM 1900.da52:0](#)

DUT: 14U16849 (SM-G9092); Type: Sample; Serial:

Communication System: UID 0, GPRS-FDD (TDMA, GMSK, 3 slot) (0); Frequency: 1880 MHz; Duty Cycle: 1:2.60016; PMF: 1

Medium: 2014/02/18 MSL 1900 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.528$ S/m; $\epsilon_r = 51.984$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

- Probe: EX3DV4 - SN3929; ConvF(7.28, 7.28, 7.28); Calibrated: 6/24/2013;
 - Sensor-Surface: 2mm (Mechanical Surface Detection)
 - Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
 - Phantom: ELI-B v5.0; Type: QDOVA002AA; Serial: TP:1195
 - Measurement SW: DASY52, Version 52.8 (7)
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DASY Configuration for Rear/802.11a_Ch 124/Volume Scan:

Date/Time: 2/24/2014 9:48:27 PM

Test Laboratory: UL Verification Services Inc., SAR Lab 1

File Name: [5GHz.da52:0](#)

DUT: 14U16849 (SM-G9092); Type: Sample; Serial:

Communication System: UID 0, IEEE 802.11a/n 5 GHz Band (0); Frequency: 5620 MHz; Duty Cycle: 1:1; PMF: 1
Medium: MSL 3-6 GHz Medium parameters used: $f = 5620$ MHz; $\sigma = 5.714$ S/m; $\epsilon_r = 47.758$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

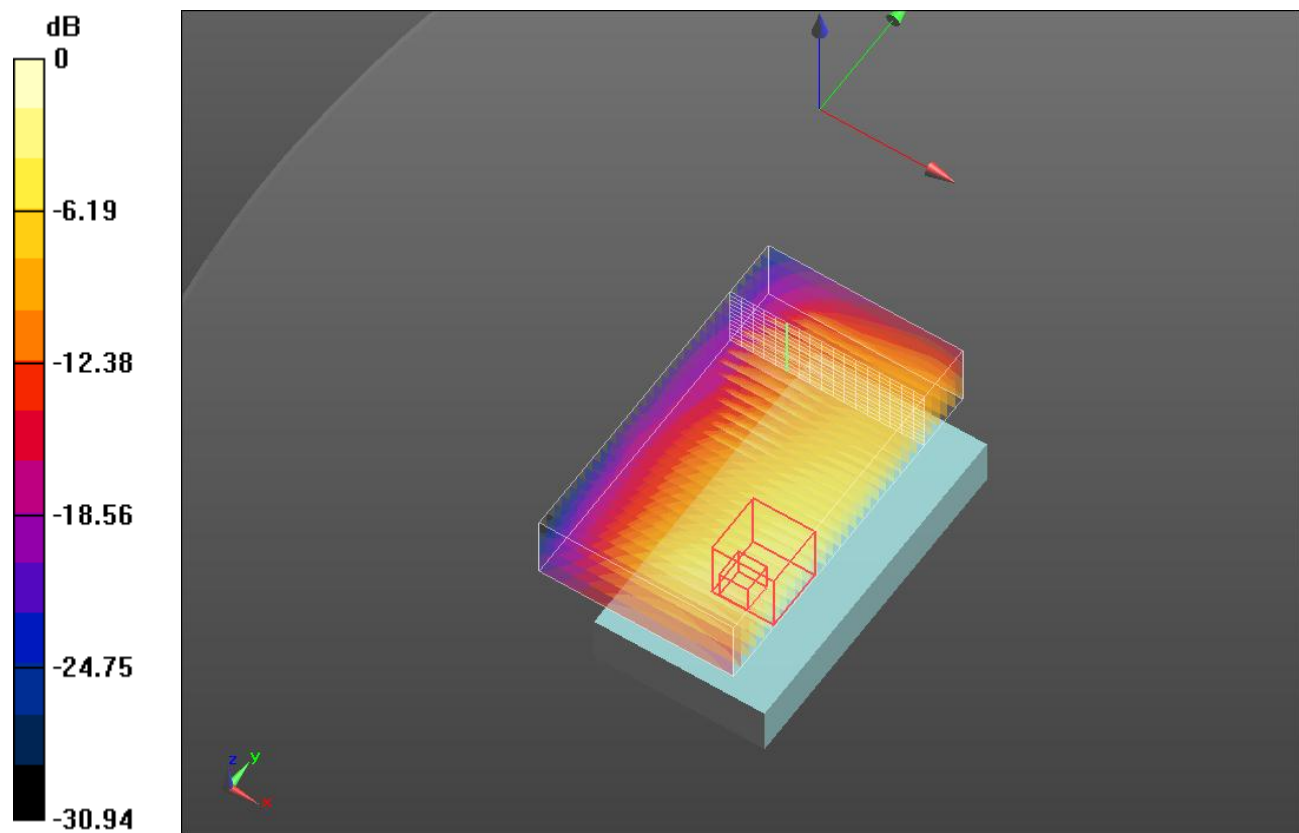
Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

- Probe: EX3DV4 - SN3902; ConvF(3.93, 3.93, 3.93); Calibrated: 7/12/2013;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1377; Calibrated: 7/15/2013
- Phantom: ELI v5.0 (A); Type: QDOVA001BB; Serial: 1213
- Measurement SW: DASYS52, Version 52.8 (7)

Multi Band Result:

SAR(1 g) = 0.977 W/kg; SAR(10 g) = 0.607 W/kg

Maximum value of SAR (interpolated) = 2.06 W/kg



0 dB = 2.06 W/kg = 3.14 dBW/kg

Multi-Band Average SAR

Multi-Band Configurations:

DASY Configuration for Rear/(Master) GPRS 2 slots_ch 661/Volume Scan:

Date/Time: 2/25/2014 12:33:19 AM

Test Laboratory: UL Verification Services Inc., SAR Lab 1

File Name: [GSM 1900.da52:0](#)

DUT: 14U16849 (SM-G9092); Type: Sample; Serial:

Communication System: UID 0, GPRS-FDD (TDMA, GMSK, 2 slot) (0); Frequency: 1880 MHz; Duty Cycle: 1:4.00037; PMF: 1

Medium: 2014/02/24 MSL 1900 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.486$ S/m; $\epsilon_r = 52.004$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

- Probe: EX3DV4 - SN3929; ConvF(7.28, 7.28, 7.28); Calibrated: 6/24/2013;
 - Sensor-Surface: 2mm (Mechanical Surface Detection)
 - Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
 - Phantom: ELI-B v5.0; Type: QDOVA002AA; Serial: TP:1195
 - Measurement SW: DASY52, Version 52.8 (7)
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DASY Configuration for Rear/(Slave) GSM Voice_ch 661/Volume Scan:

Date/Time: 2/20/2014 1:37:04 AM

Test Laboratory: UL Verification Services Inc., SAR Lab 1

File Name: [GSM 1900.da52:0](#)

DUT: 14U16849 (SM-G9092); Type: Sample; Serial:

Communication System: UID 0, GPRS-FDD (TDMA, GMSK, 3 slot) (0); Frequency: 1880 MHz; Duty Cycle: 1:2.60016; PMF: 1

Medium: 2014/02/18 MSL 1900 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.528$ S/m; $\epsilon_r = 51.984$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

- Probe: EX3DV4 - SN3929; ConvF(7.28, 7.28, 7.28); Calibrated: 6/24/2013;
 - Sensor-Surface: 2mm (Mechanical Surface Detection)
 - Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
 - Phantom: ELI-B v5.0; Type: QDOVA002AA; Serial: TP:1195
 - Measurement SW: DASY52, Version 52.8 (7)
-

DASY Configuration for Rear/802.11a_Ch 149/Volume Scan:

Date/Time: 2/25/2014 9:50:31 AM

Test Laboratory: UL Verification Services Inc., SAR Lab 1

File Name: [5GHz.da52:0](#)

DUT: 14U16849 (SM-G9092); Type: Sample; Serial:

Communication System: UID 0, IEEE 802.11a/n 5 GHz Band (0); Frequency: 5745 MHz; Duty Cycle: 1:1; PMF: 1
Medium: MSL 3-6 GHz Medium parameters used: $f = 5745$ MHz; $\sigma = 5.881$ S/m; $\epsilon_r = 47.558$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

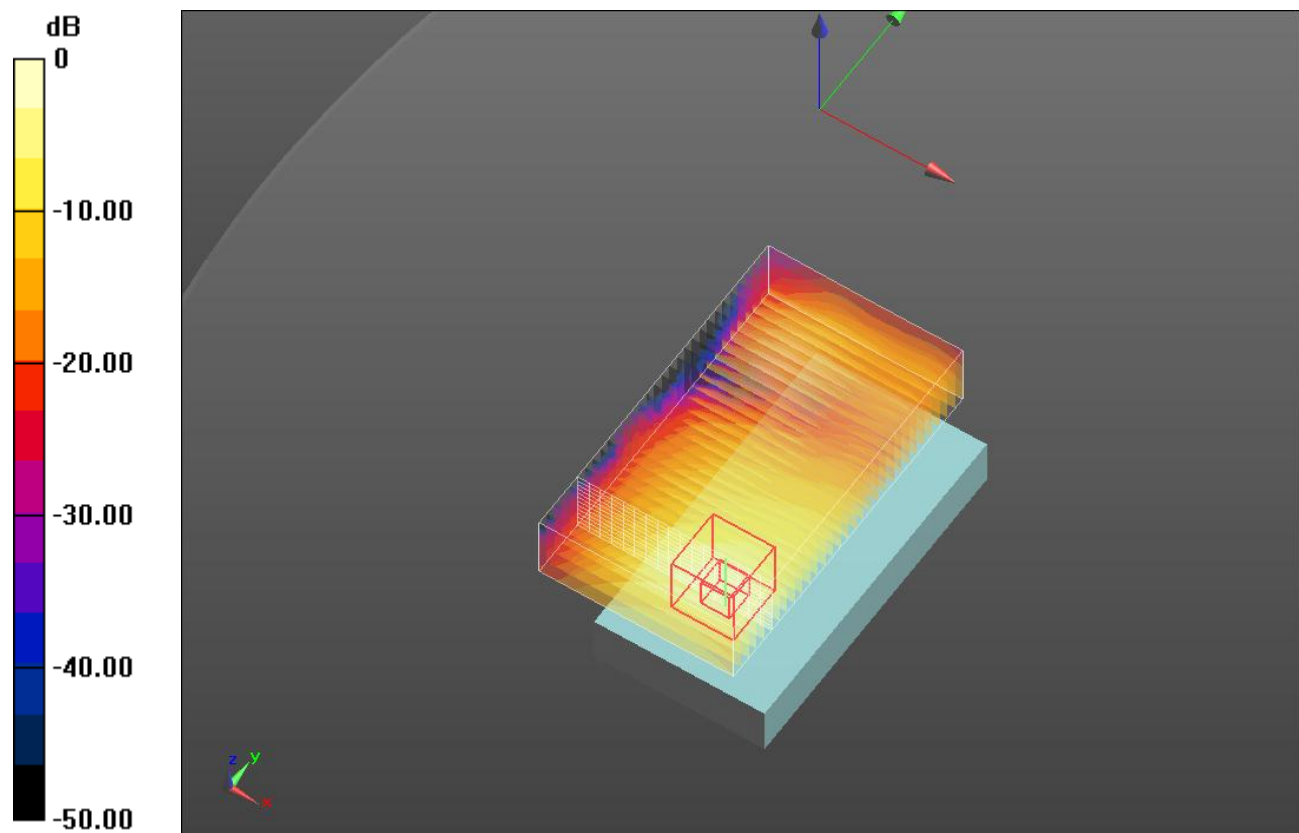
Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

- Probe: EX3DV4 - SN3902; ConvF(4.23, 4.23, 4.23); Calibrated: 7/12/2013;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1377; Calibrated: 7/15/2013
- Phantom: ELI v5.0 (A); Type: QDOVA001BB; Serial: 1213
- Measurement SW: DASYS52, Version 52.8 (7)

Multi Band Result:

SAR(1 g) = 1.28 W/kg; SAR(10 g) = 0.668 W/kg

Maximum value of SAR (interpolated) = 2.13 W/kg



0 dB = 2.13 W/kg = 3.28 dBW/kg

Multi-Band Average SAR

Multi-Band Configurations:

DASY Configuration for Rear/(Master) GPRS 2 slots_ch 661/Volume Scan:

Date/Time: 2/25/2014 12:33:19 AM

Test Laboratory: UL Verification Services Inc., SAR Lab 1

File Name: [GSM 1900.da52:0](#)

DUT: 14U16849 (SM-G9092); Type: Sample; Serial:

Communication System: UID 0, GPRS-FDD (TDMA, GMSK, 2 slot) (0); Frequency: 1880 MHz; Duty Cycle: 1:4.00037; PMF: 1

Medium: 2014/02/24 MSL 1900 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.486$ S/m; $\epsilon_r = 52.004$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

- Probe: EX3DV4 - SN3929; ConvF(7.28, 7.28, 7.28); Calibrated: 6/24/2013;
 - Sensor-Surface: 2mm (Mechanical Surface Detection)
 - Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
 - Phantom: ELI-B v5.0; Type: QDOVA002AA; Serial: TP:1195
 - Measurement SW: DASY52, Version 52.8 (7)
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DASY Configuration for Rear/(Slave) GSM Voice_ch 661/Volume Scan:

Date/Time: 2/20/2014 1:37:04 AM

Test Laboratory: UL Verification Services Inc., SAR Lab 1

File Name: [GSM 1900.da52:0](#)

DUT: 14U16849 (SM-G9092); Type: Sample; Serial:

Communication System: UID 0, GPRS-FDD (TDMA, GMSK, 3 slot) (0); Frequency: 1880 MHz; Duty Cycle: 1:2.60016; PMF: 1

Medium: 2014/02/18 MSL 1900 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.528$ S/m; $\epsilon_r = 51.984$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

- Probe: EX3DV4 - SN3929; ConvF(7.28, 7.28, 7.28); Calibrated: 6/24/2013;
 - Sensor-Surface: 2mm (Mechanical Surface Detection)
 - Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
 - Phantom: ELI-B v5.0; Type: QDOVA002AA; Serial: TP:1195
 - Measurement SW: DASY52, Version 52.8 (7)
-

DASY Configuration for Rear/802.11a_Ch 124/Volume Scan:

Date/Time: 2/24/2014 9:48:27 PM

Test Laboratory: UL Verification Services Inc., SAR Lab 1

File Name: [5GHz.da52:0](#)

DUT: 14U16849 (SM-G9092); Type: Sample; Serial:

Communication System: UID 0, IEEE 802.11a/n 5 GHz Band (0); Frequency: 5620 MHz; Duty Cycle: 1:1; PMF: 1
Medium: MSL 3-6 GHz Medium parameters used: $f = 5620$ MHz; $\sigma = 5.714$ S/m; $\epsilon_r = 47.758$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

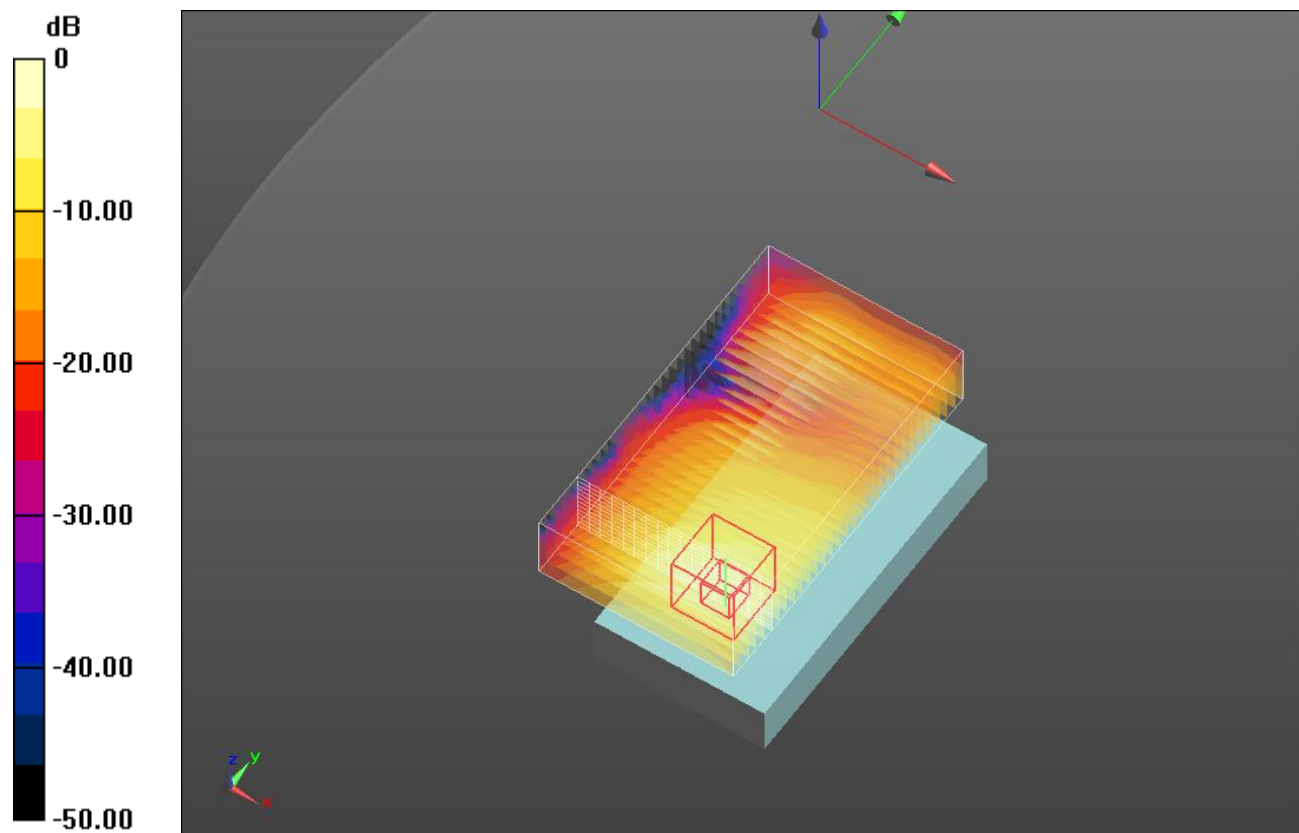
Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

- Probe: EX3DV4 - SN3902; ConvF(3.93, 3.93, 3.93); Calibrated: 7/12/2013;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1377; Calibrated: 7/15/2013
- Phantom: ELI v5.0 (A); Type: QDOVA001BB; Serial: 1213
- Measurement SW: DASYS52, Version 52.8 (7)

Multi Band Result:

SAR(1 g) = 1.28 W/kg; SAR(10 g) = 0.668 W/kg

Maximum value of SAR (interpolated) = 2.12 W/kg



0 dB = 2.12 W/kg = 3.26 dBW/kg

Multi-Band Average SAR

Multi-Band Configurations:

DASY Configuration for Rear/Rel.99_RMC_12.2kbps_Ch_4183/Volume Scan:

Date/Time: 2/21/2014 8:30:32 PM

Test Laboratory: UL Verification Services Inc., SAR Lab 2

File Name: [W-CDMA Band V.da52:1](#)

DUT: 14U16849 (SM-G9092); Type: Sample; Serial:

Communication System: UID 0, UMTS-FDD (WCDMA) (0); Frequency: 836.6 MHz; Duty Cycle: 1:1; PMF: 1
Medium: MSL900 Medium parameters used (interpolated): $f = 836.6 \text{ MHz}$; $\sigma = 1.02 \text{ S/m}$; $\epsilon_r = 56.36$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

- Probe: EX3DV4 - SN3773; ConvF(8.78, 8.78, 8.78); Calibrated: 4/26/2013;
 - Sensor-Surface: 4mm (Mechanical Surface Detection)
 - Electronics: DAE4 Sn1257; Calibrated: 8/22/2013
 - Phantom: ELI B v4.0; Type: QDOVA002AA; Serial: 1196
 - Measurement SW: DASY52, Version 52.8 (5)
-

DASY Configuration for Rear/(Slave) GSM Voice_ch 661/Volume Scan:

Date/Time: 2/20/2014 1:37:04 AM

Test Laboratory: UL Verification Services Inc., SAR Lab 1

File Name: [GSM 1900.da52:0](#)

DUT: 14U16849 (SM-G9092); Type: Sample; Serial:

Communication System: UID 0, GPRS-FDD (TDMA, GMSK, 3 slot) (0); Frequency: 1880 MHz; Duty Cycle: 1:2.60016; PMF: 1

Medium: 2014/02/18 MSL 1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.528 \text{ S/m}$; $\epsilon_r = 51.984$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

- Probe: EX3DV4 - SN3929; ConvF(7.28, 7.28, 7.28); Calibrated: 6/24/2013;
 - Sensor-Surface: 2mm (Mechanical Surface Detection)
 - Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
 - Phantom: ELI-B v5.0; Type: QDOVA002AA; Serial: TP:1195
 - Measurement SW: DASY52, Version 52.8 (7)
-

DASY Configuration for Rear/802.11a_Ch 149/Volume Scan:

Date/Time: 2/25/2014 9:50:31 AM

Test Laboratory: UL Verification Services Inc., SAR Lab 1

File Name: [5GHz.da52:0](#)

DUT: 14U16849 (SM-G9092); Type: Sample; Serial:

Communication System: UID 0, IEEE 802.11a/n 5 GHz Band (0); Frequency: 5745 MHz; Duty Cycle: 1:1; PMF: 1

Medium: MSL 3-6 GHz Medium parameters used: $f = 5745$ MHz; $\sigma = 5.881$ S/m; $\epsilon_r = 47.558$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

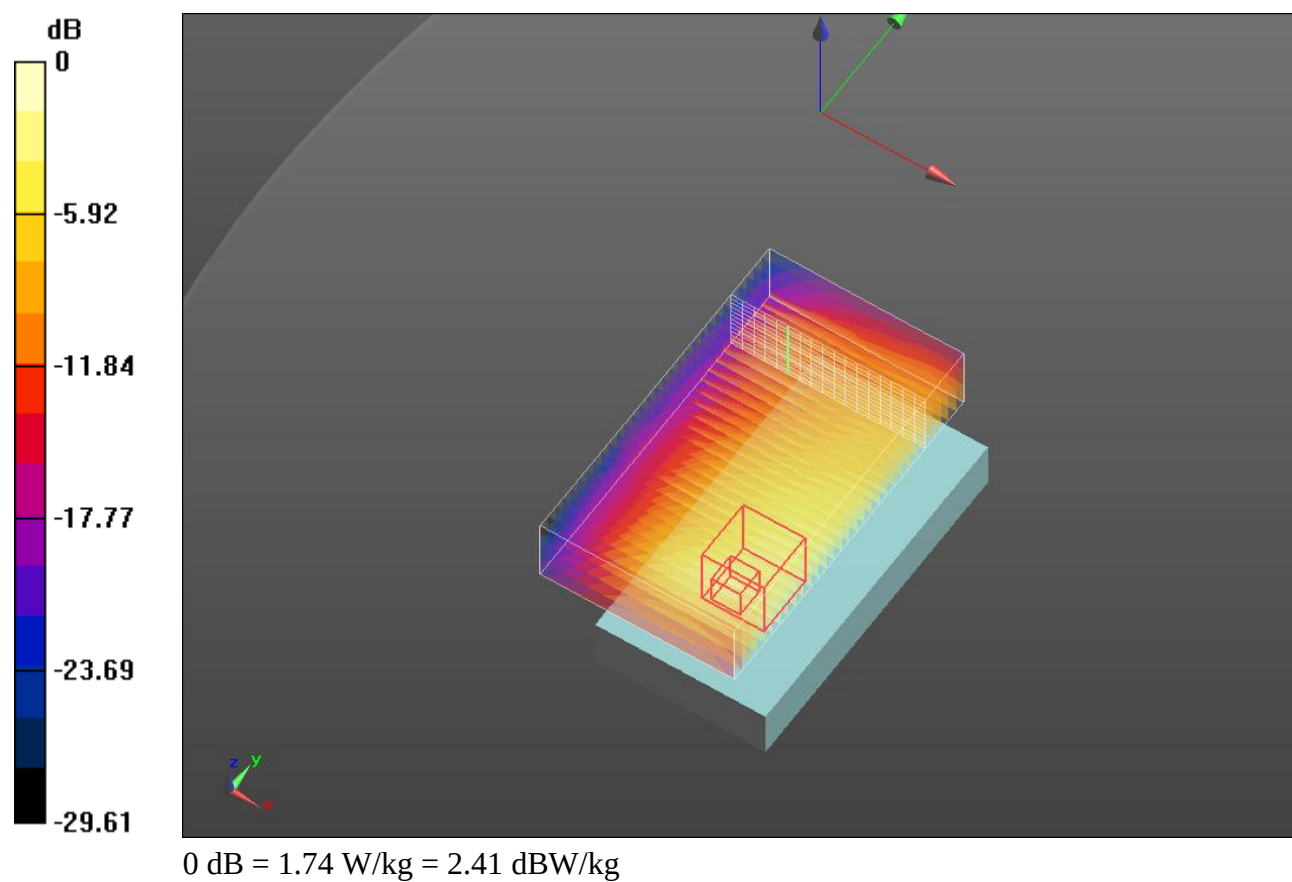
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

- Probe: EX3DV4 - SN3902; ConvF(4.23, 4.23, 4.23); Calibrated: 7/12/2013;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1377; Calibrated: 7/15/2013
- Phantom: ELI v5.0 (A); Type: QDOVA001BB; Serial: 1213
- Measurement SW: DASY52, Version 52.8 (7)

Multi Band Result:

SAR(1 g) = 0.905 W/kg; SAR(10 g) = 0.547 W/kg

Maximum value of SAR (interpolated) = 1.74 W/kg



Multi-Band Average SAR

Multi-Band Configurations:

DASY Configuration for Rear/Rel.99_RMC_12.2kbps_Ch_4183/Volume Scan:

Date/Time: 2/21/2014 8:30:32 PM

Test Laboratory: UL Verification Services Inc., SAR Lab 2

File Name: [W-CDMA Band V.da52:1](#)

DUT: 14U16849 (SM-G9092); Type: Sample; Serial:

Communication System: UID 0, UMTS-FDD (WCDMA) (0); Frequency: 836.6 MHz; Duty Cycle: 1:1; PMF: 1
Medium: MSL900 Medium parameters used (interpolated): $f = 836.6 \text{ MHz}$; $\sigma = 1.02 \text{ S/m}$; $\epsilon_r = 56.36$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

- Probe: EX3DV4 - SN3773; ConvF(8.78, 8.78, 8.78); Calibrated: 4/26/2013;
 - Sensor-Surface: 4mm (Mechanical Surface Detection)
 - Electronics: DAE4 Sn1257; Calibrated: 8/22/2013
 - Phantom: ELI B v4.0; Type: QDOVA002AA; Serial: 1196
 - Measurement SW: DASY52, Version 52.8 (5)
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DASY Configuration for Rear/(Slave) GSM Voice_ch 661/Volume Scan:

Date/Time: 2/20/2014 1:37:04 AM

Test Laboratory: UL Verification Services Inc., SAR Lab 1

File Name: [GSM 1900.da52:0](#)

DUT: 14U16849 (SM-G9092); Type: Sample; Serial:

Communication System: UID 0, GPRS-FDD (TDMA, GMSK, 3 slot) (0); Frequency: 1880 MHz; Duty Cycle: 1:2.60016; PMF: 1

Medium: 2014/02/18 MSL 1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.528 \text{ S/m}$; $\epsilon_r = 51.984$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

- Probe: EX3DV4 - SN3929; ConvF(7.28, 7.28, 7.28); Calibrated: 6/24/2013;
 - Sensor-Surface: 2mm (Mechanical Surface Detection)
 - Electronics: DAE4 Sn1258; Calibrated: 3/6/2013
 - Phantom: ELI-B v5.0; Type: QDOVA002AA; Serial: TP:1195
 - Measurement SW: DASY52, Version 52.8 (7)
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DASY Configuration for Rear/802.11a_Ch 124/Volume Scan:

Date/Time: 2/24/2014 9:48:27 PM

Test Laboratory: UL Verification Services Inc., SAR Lab 1

File Name: [5GHz.da52:0](#)

DUT: 14U16849 (SM-G9092); Type: Sample; Serial:

Communication System: UID 0, IEEE 802.11a/n 5 GHz Band (0); Frequency: 5620 MHz; Duty Cycle: 1:1; PMF: 1

Medium: MSL 3-6 GHz Medium parameters used: $f = 5620$ MHz; $\sigma = 5.714$ S/m; $\epsilon_r = 47.758$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

- Probe: EX3DV4 - SN3902; ConvF(3.93, 3.93, 3.93); Calibrated: 7/12/2013;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1377; Calibrated: 7/15/2013
- Phantom: ELI v5.0 (A); Type: QDOVA001BB; Serial: 1213
- Measurement SW: DASY52, Version 52.8 (7)

Multi Band Result:

SAR(1 g) = 0.905 W/kg; SAR(10 g) = 0.547 W/kg

Maximum value of SAR (interpolated) = 2.04 W/kg

