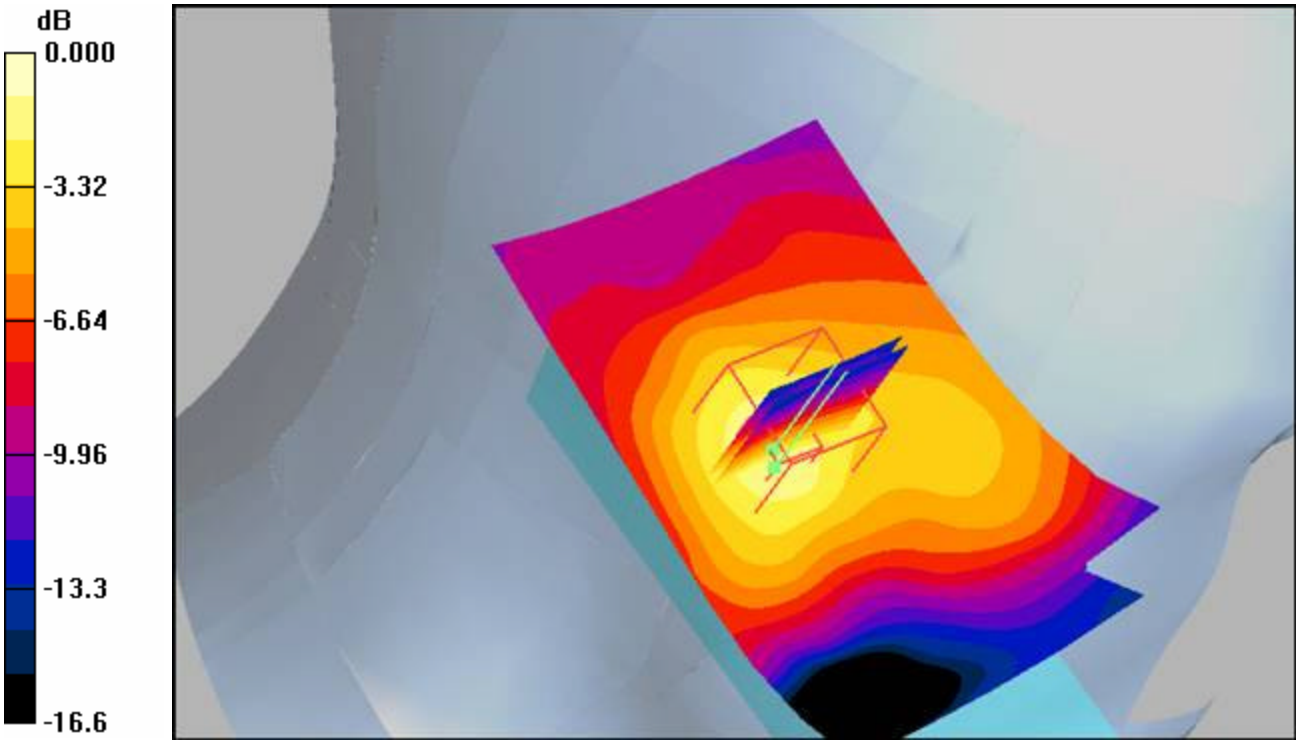
Prepared (also subject responsible if other)	No.		
SEM/CV/PF/P Gerard Hayes and Rodney Dixon	REP 2006 005 Z525i 02		
Approved / Checked			
SEM/CV/PF/P Gerard Hayes		A	X:\SAR Chamber\FCC reports\Z520I\Final Reports\FCCZ520I.doc

1900 GSM Band: Distribution and Extrapolation of Maximum SAR
Model: Z520i SN: BD3050NURF with Standard Battery: BST-37
Left Side, Tilt Position.

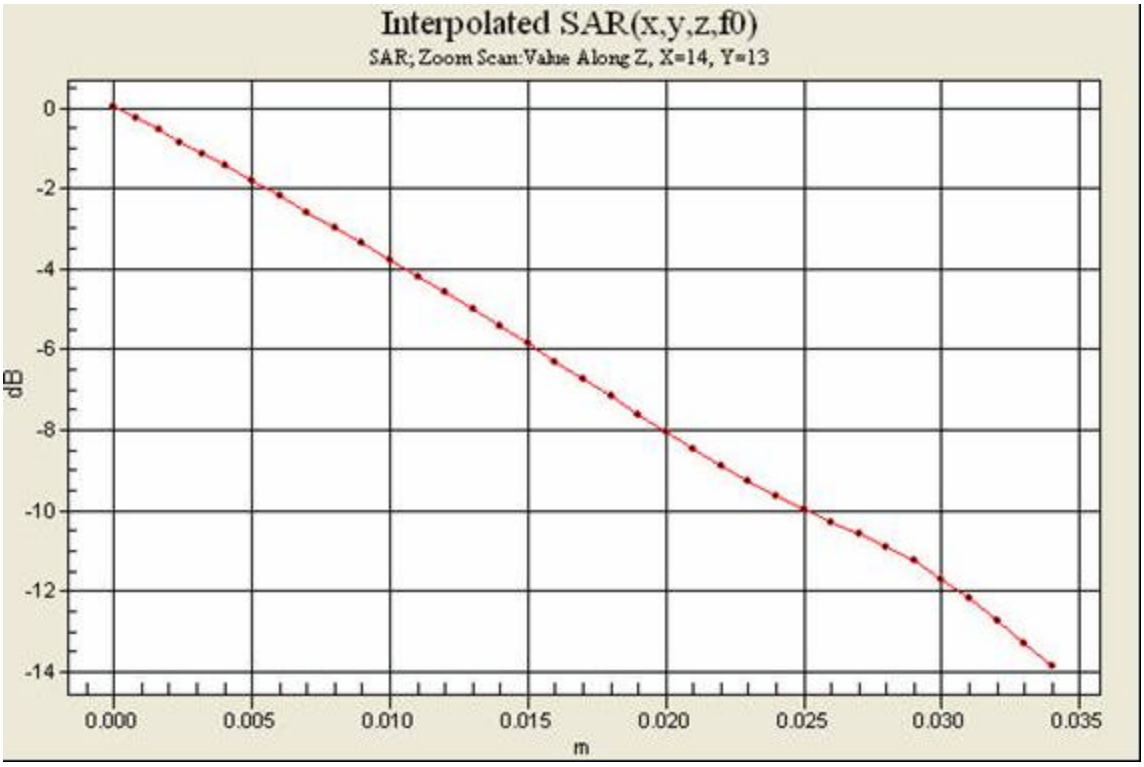
Date/Time: 3/10/2006 4:01:17 PM
File Name: 10Mar06_Z520i_GSM1900_NURF_LT01.da4
DUT: Z520i
Program Notes: Battery: BST-37 Humidity: 33.2% Ambient Temp: 22.5 C Simulant Temp: 22.4 C
Communication System: DCS 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium: Head 1800/1900 MHzMedium parameters used (interpolated): f = 1850.2 MHz; s = 1.41 mho/m; e_r = 38.6; ? = 1000 kg/m^3
Phantom section: Left Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1539; ConvF(4.55, 4.55, 4.55); Calibrated: 11/22/2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn345; Calibrated: 11/10/2005
- Phantom: SAM with CRP (High Band Head); Type: SAM; Serial: TP: 1054
- Measurement SW: DASY4, V4.6 Build 23; Post processing SW: SEMCAD, V1.8 Build 160

Low Channel/Area Scan (51x81x1): Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.104 mW/g
Low Channel/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.45 V/m; Power Drift = -0.095 dB
Peak SAR (extrapolated) = 0.142 W/kg
SAR(1 g) = 0.093 mW/g; SAR(10 g) = 0.057 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.103 mW/g
Low Channel/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.45 V/m; Power Drift = -0.095 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.142 mW/g

Prepared (also subject responsible if other)		No.	
SEM/CV/PF/P Gerard Hayes and Rodney Dixon		REP 2006 005 Z525i 02	
Approved	Checked		
SEM/CV/PF/P Gerard Hayes		A	X:\SAR Chamber\FCC reports\Z520I\Final Reports\FCCZ520I.doc



0 dB = 0.142mW/g



Prepared (also subject responsible if other)	No.		
SEM/CV/PF/P Gerard Hayes and Rodney Dixon	REP 2006 005 Z525i 02		
Approved / Checked			
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1900 GSM Band: Distribution and Extrapolation of Maximum SAR Model: Z520i SN: BD3050NURF with Standard Battery: BST-37 Right Side, Cheek/Touch Position with Blue Tooth.

Date/Time: 3/10/2006 7:42:44 PM

File Name: 10Mar06_Z520i_GSM1900_NURF_BT_RC01.da4

DUT: Z520i

Program Notes: Battery: BST 37 Humidity: 34% Ambient Temp: 22.3C Simulant Temp: 22.4C

Communication System: DCS 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3

Medium: Head 1800/1900 MHzMedium parameters used (interpolated): f = 1850.2 MHz; s = 1.41 mho/m; e_r = 38.6; ? = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1539; ConvF(4.55, 4.55, 4.55); Calibrated: 11/22/2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn345; Calibrated: 11/10/2005
- Phantom: SAM with CRP (High Band Head); Type: SAM; Serial: TP: 1054
- Measurement SW: DASY4, V4.6 Build 23; Post processing SW: SEMCAD, V1.8 Build 160

Low Channel/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.579 mW/g

Low Channel/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.06 V/m; Power Drift = 0.030 dB

Peak SAR (extrapolated) = 1.07 W/kg

SAR(1 g) = 0.517 mW/g; SAR(10 g) = 0.253 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.606 mW/g

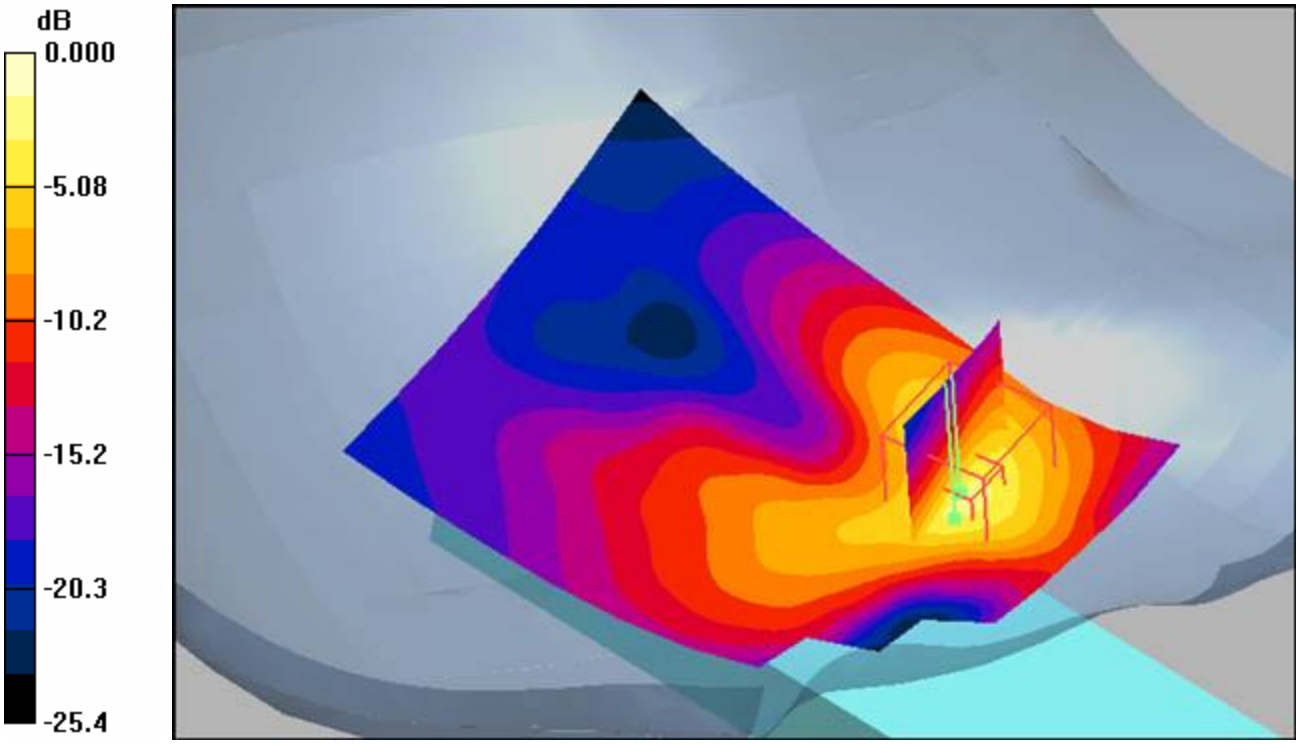
Low Channel/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.06 V/m; Power Drift = 0.030 dB

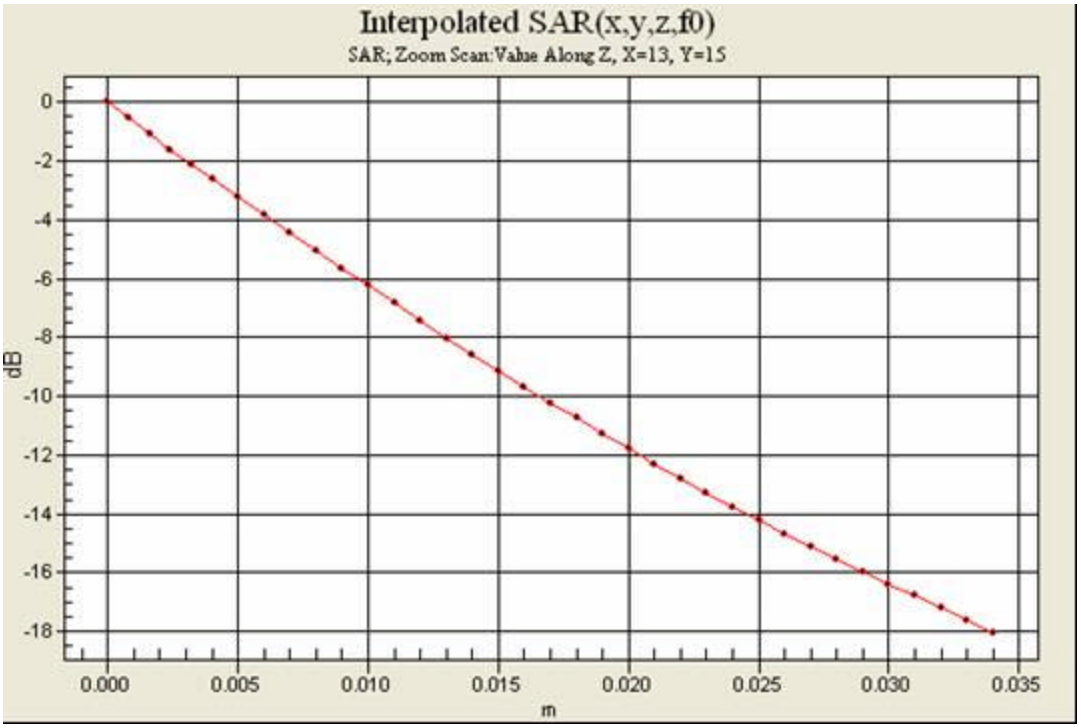
Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 1.07 mW/g

Prepared (also subject responsible if other)	No.	
SEM/CV/PF/P Gerard Hayes and Rodney Dixon	REP 2006 005 Z525i 02	
Approved / Checked		
SEM/CV/PF/P Gerard Hayes	A	X:\SAR Chamber\FCC reports\Z520I\Final Reports\FCCZ520I.doc



0 dB = 1.07mW/g



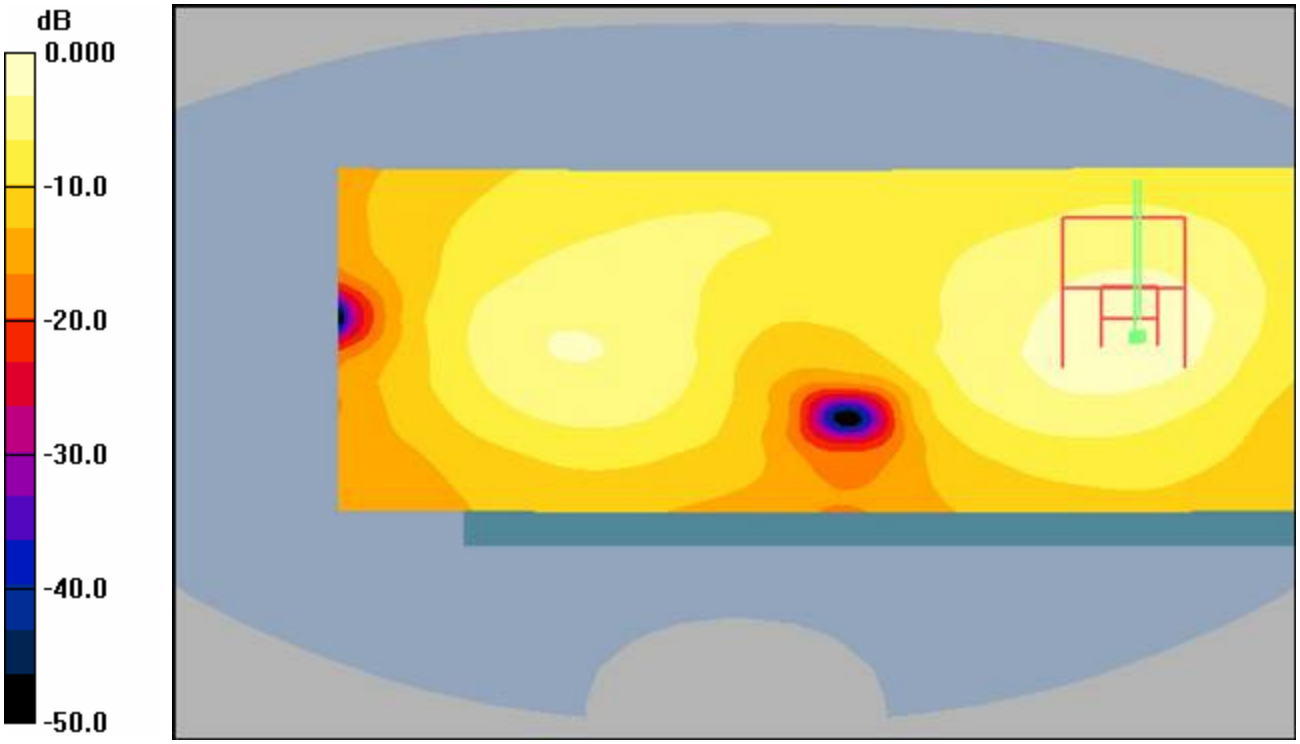
Prepared (also subject responsible if other)	No.	
SEM/CV/PF/P Gerard Hayes and Rodney Dixon	REP 2006 005 Z525i 02	
Approved / Checked		
SEM/CV/PF/P Gerard Hayes	A	X:\SAR Chamber\FCC reports\Z520I\Final Reports\FCCZ520I.doc

1900 GSM Band: SAR Distribution and Extrapolation of Maximum SAR
Model: Z525I SN: BD3050PJBB with Standard Battery: BST-37
PTT, 25mm Separation, Flat section, Open Position.

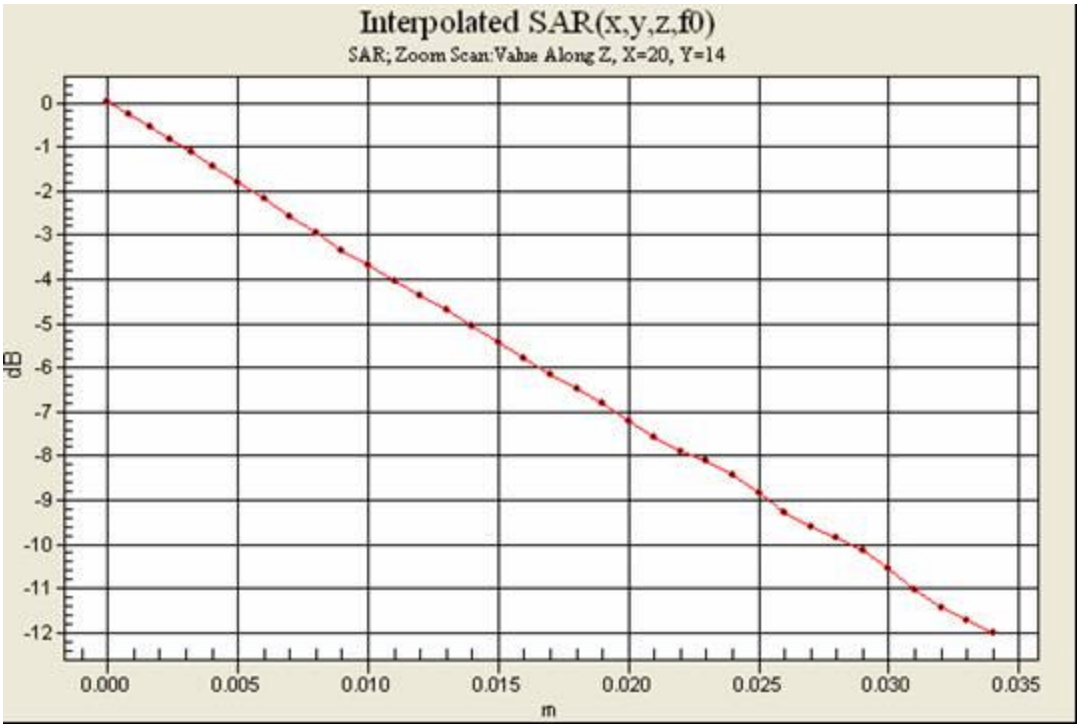
Date/Time: 4/28/2006 11:51:25 AM
File Name: 28Apr06_Z525i_GSM1900_PJBB_open_PTT01.da4
DUT: Z525i
Program Notes: Battery BST-37 Humidity: 40.7% Ambient Temp: 23.8 C Simulant Temp: 23.6 C
Communication System: DCS 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium: Head 1800/1900 MHzMedium parameters used (interpolated): f = 1850.2 MHz; s = 1.42 mho/m; e_r = 38.6; ? = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1539; ConvF(4.55, 4.55, 4.55); Calibrated: 11/22/2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn345; Calibrated: 11/10/2005
- Phantom: SAM with CRP (High Band Head); Type: SAM; Serial: TP: 1054
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 161

Unnamed procedure/Area Scan (71x121x1):
Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.111 mW/g
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.69 V/m; Power Drift = 0.193 dB
Peak SAR (extrapolated) = 0.146 W/kg
SAR(1 g) = 0.097 mW/g; SAR(10 g) = 0.061 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.105 mW/g
Unnamed procedure/Zoom Scan (31x31x36)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.69 V/m; Power Drift = 0.193 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.146 mW/g

Prepared (also subject responsible if other)	No.	
SEM/CV/PF/P Gerard Hayes and Rodney Dixon	REP 2006 005 Z525i 02	
Approved / Checked		
SEM/CV/PF/P Gerard Hayes	A	X:\SAR Chamber\FCC reports\Z520I\Final Reports\FCCZ520I.doc



0 dB = 0.146mW/g



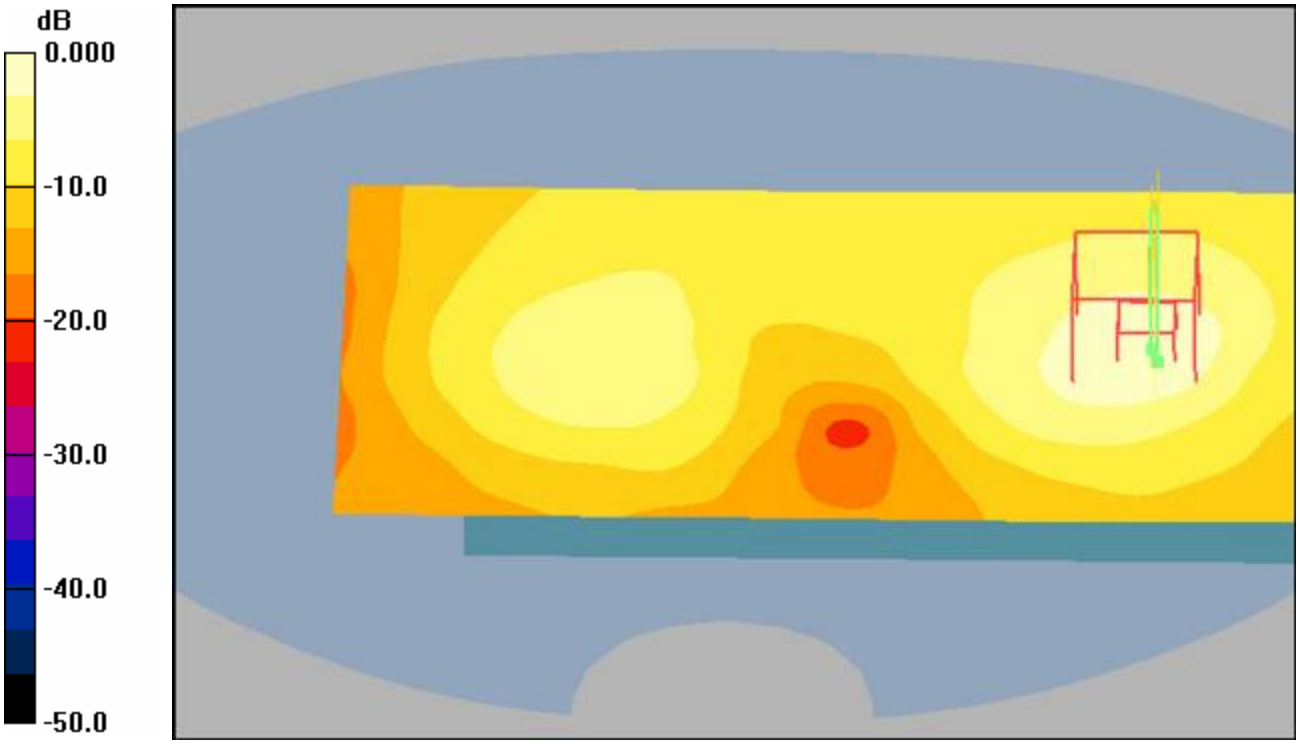
Prepared (also subject responsible if other)	No.	
SEM/CV/PF/P Gerard Hayes and Rodney Dixon	REP 2006 005 Z525i 02	
Approved / Checked		
SEM/CV/PF/P Gerard Hayes	A	X:\SAR Chamber\FCC reports\Z520I\Final Reports\FCCZ520I.doc

1900 GSM Band: SAR Distribution and Extrapolation of Maximum SAR
Model: Z525I SN: BD3050PJBB with Standard Battery: BST-37
PTT, 25mm Separation, Flat section, Open Position with Bluetooth on.

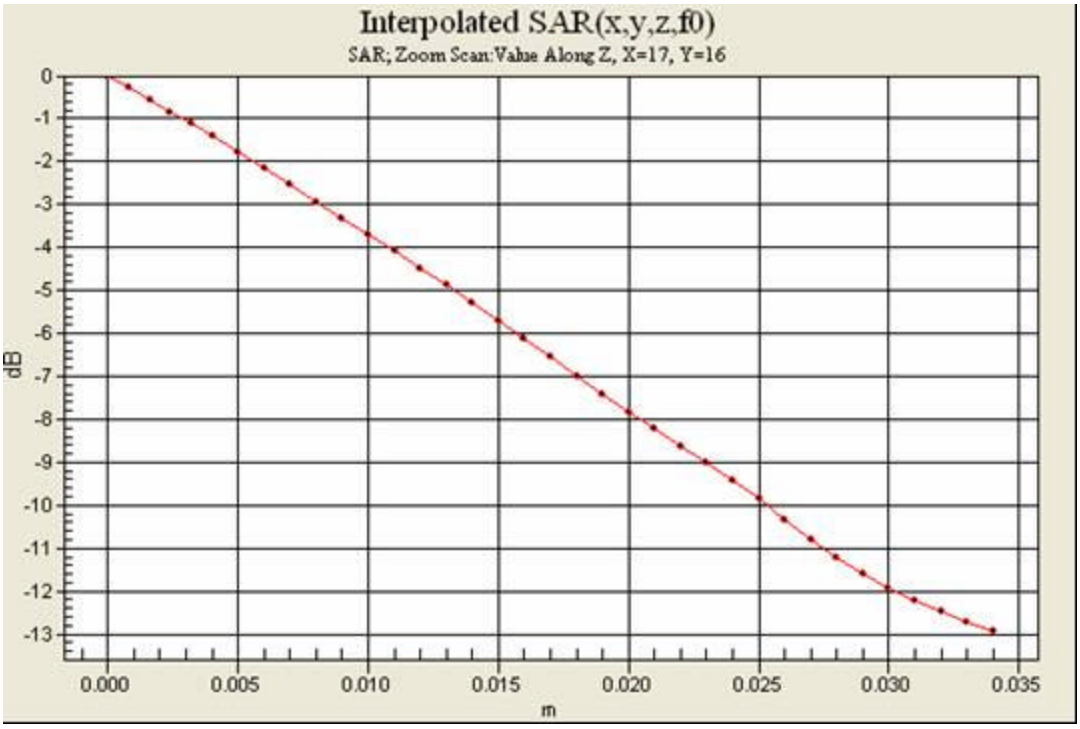
Date/Time: 4/28/2006 3:02:37 PM
File Name: 28Apr06_Z525i_GSM1900_PJBB_open_BT_PTT01.da4
DUT: Z525i
Program Notes: Battery BST-37 Humidity: 40.7% Ambient Temp: 23.8 C Simulant Temp: 23.6 C
Communication System: DCS 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium: Head 1800/1900 MHzMedium parameters used (interpolated): f = 1850.2 MHz; s = 1.42 mho/m; e_r = 38.6; ? = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1539; ConvF(4.55, 4.55, 4.55); Calibrated: 11/22/2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn345; Calibrated: 11/10/2005
- Phantom: SAM with CRP (High Band Head); Type: SAM; Serial: TP: 1054
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 161

Unnamed procedure/Area Scan (71x121x1):
Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.115 mW/g
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.74 V/m; Power Drift = -0.074 dB
Peak SAR (extrapolated) = 0.147 W/kg
SAR(1 g) = 0.098 mW/g; SAR(10 g) = 0.060 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.106 mW/g
Unnamed procedure/Zoom Scan (31x31x36)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.74 V/m; Power Drift = -0.074 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.147 mW/g

Prepared (also subject responsible if other)		No.	
SEM/CV/PF/P Gerard Hayes and Rodney Dixon		REP 2006 005 Z525i 02	
Approved	Checked		
SEM/CV/PF/P Gerard Hayes		A	X:\SAR Chamber\FCC reports\Z520I\Final Reports\FCCZ520I.doc



0 dB = 0.147mW/g



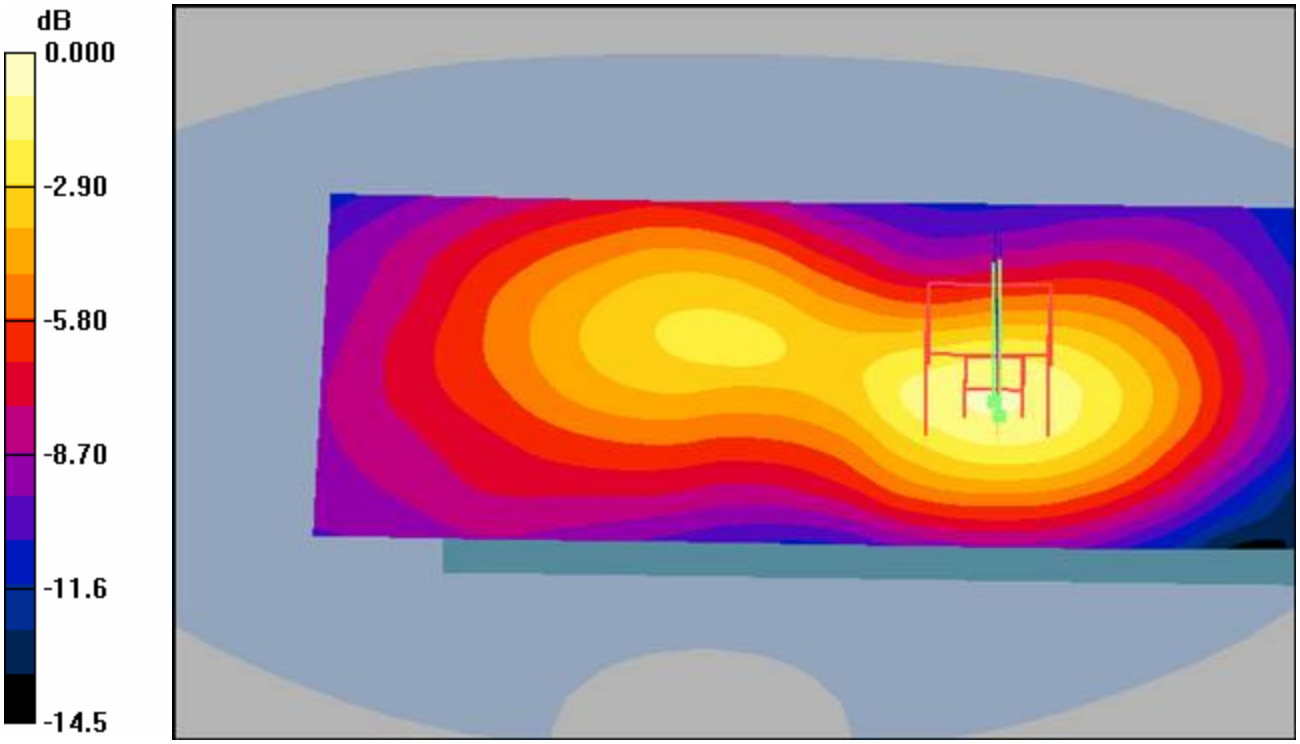
Prepared (also subject responsible if other)	No.	
SEM/CV/PF/P Gerard Hayes and Rodney Dixon	REP 2006 005 Z525i 02	
Approved / Checked		
SEM/CV/PF/P Gerard Hayes	A	X:\SAR Chamber\FCC reports\Z520I\Final Reports\FCCZ520I.doc

1900 GSM Band: SAR Distribution and Extrapolation of Maximum SAR
Model: Z525I SN: BD3050PJBB with Standard Battery: BST-37
PTT, 25mm Separation, Flat section, Closed Position.

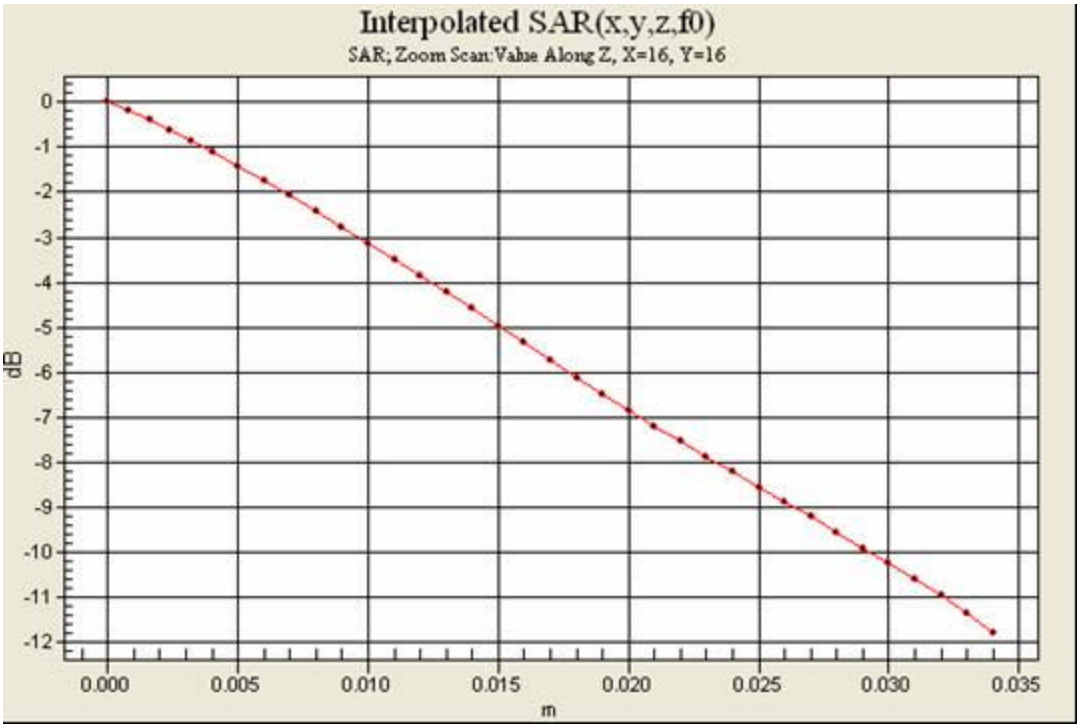
Date/Time: 4/28/2006 10:05:23 AM
File Name: 28Apr06_Z525i_GSM1900_PJBB_closed_PTT01.da4
DUT: Z525i
Program Notes: Battery BST-37 Humidity: 40.2% Ambient Temp: 22.1 C Simulant Temp: 23.1 C
Communication System: DCS 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium: Head 1800/1900 MHzMedium parameters used (interpolated): f = 1850.2 MHz; s = 1.42 mho/m; e_r = 38.6; ? = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1539; ConvF(4.55, 4.55, 4.55); Calibrated: 11/22/2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn345; Calibrated: 11/10/2005
- Phantom: SAM with CRP (High Band Head); Type: SAM; Serial: TP: 1054
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 161

Unnamed procedure/Area Scan (71x121x1):
Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.158 mW/g
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.44 V/m; Power Drift = -0.142 dB
Peak SAR (extrapolated) = 0.193 W/kg
SAR(1 g) = 0.139 mW/g; SAR(10 g) = 0.090 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.150 mW/g
Unnamed procedure/Zoom Scan (31x31x36)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.44 V/m; Power Drift = -0.142 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.193 mW/g

Prepared (also subject responsible if other)		No.	
SEM/CV/PF/P Gerard Hayes and Rodney Dixon		REP 2006 005 Z525i 02	
Approved	Checked		
SEM/CV/PF/P Gerard Hayes		A	X:\SAR Chamber\FCC reports\Z520I\Final Reports\FCCZ520I.doc



0 dB = 0.193mW/g



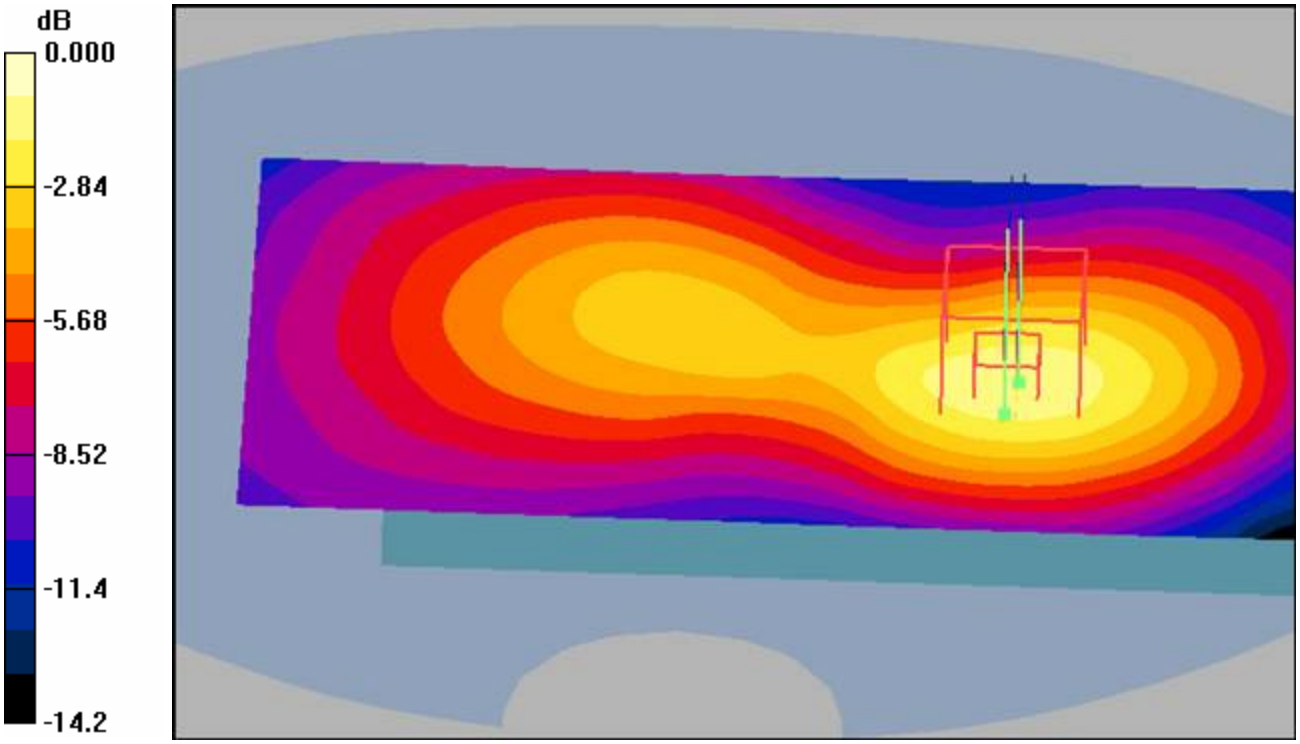
Prepared (also subject responsible if other)	No.	
SEM/CV/PF/P Gerard Hayes and Rodney Dixon	REP 2006 005 Z525i 02	
Approved / Checked		
SEM/CV/PF/P Gerard Hayes	A	X:\SAR Chamber\FCC reports\Z520I\Final Reports\FCCZ520I.doc

1900 GSM Band: SAR Distribution and Extrapolation of Maximum SAR
Model: Z525I SN: BD3050PJBB with Standard Battery: BST-37
PTT, 25mm Separation, Flat section, Closed Position with Blue Tooth on.

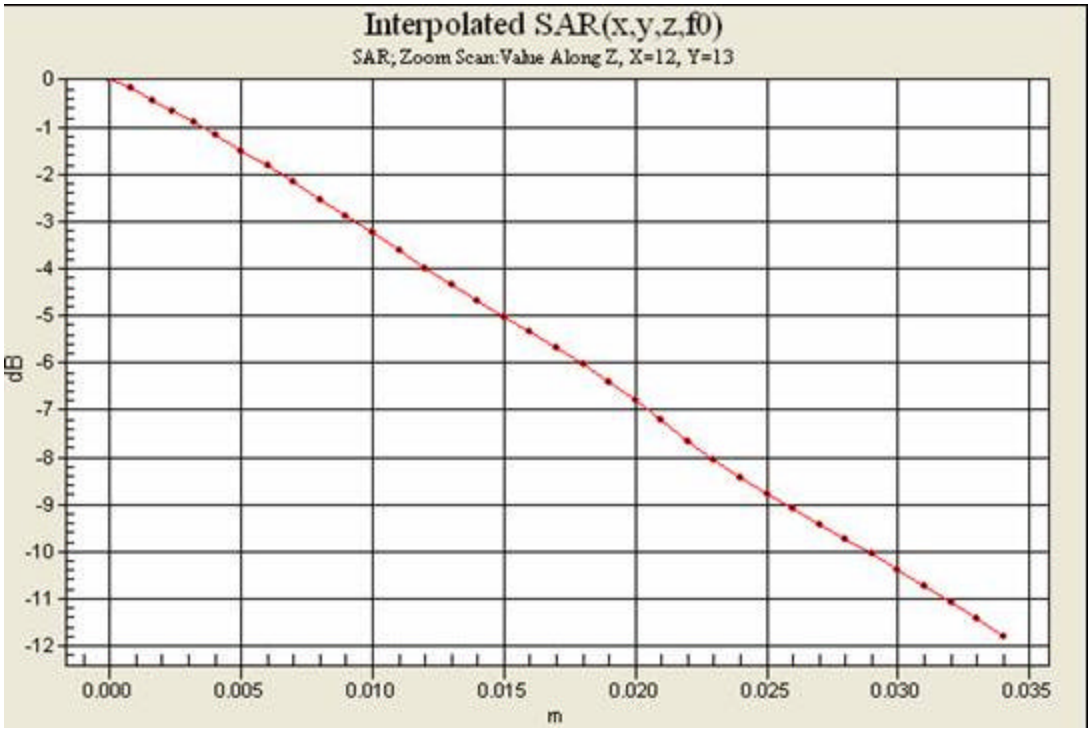
Date/Time: 4/28/2006 11:21:30 AM
File Name: 28Apr06_Z525i_GSM1900_PJBB_closed_BT_PTT01.da4
DUT: Z525i
Program Notes: Battery BST-37 Humidity: 40.2% Ambient Temp: 22.1 C Simulant Temp: 23.1 C
Communication System: DCS 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium: Head 1800/1900 MHzMedium parameters used (interpolated): f = 1850.2 MHz; s = 1.42 mho/m; e_r = 38.6; ? = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1539; ConvF(4.55, 4.55, 4.55); Calibrated: 11/22/2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn345; Calibrated: 11/10/2005
- Phantom: SAM with CRP (High Band Head); Type: SAM; Serial: TP: 1054
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 161

Unnamed procedure/Area Scan (71x121x1):
Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.145 mW/g
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.36 V/m; Power Drift = 0.017 dB
Peak SAR (extrapolated) = 0.188 W/kg
SAR(1 g) = 0.132 mW/g; SAR(10 g) = 0.086 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.142 mW/g
Unnamed procedure/Zoom Scan (31x31x36)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.36 V/m; Power Drift = 0.017 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.188 mW/g

Prepared (also subject responsible if other)	No.	
SEM/CV/PF/P Gerard Hayes and Rodney Dixon	REP 2006 005 Z525i 02	
Approved / Checked		
SEM/CV/PF/P Gerard Hayes	A	X:\SAR Chamber\FCC reports\Z520I\Final Reports\FCCZ520I.doc



0 dB = 0.188mW/g



Appendix 3

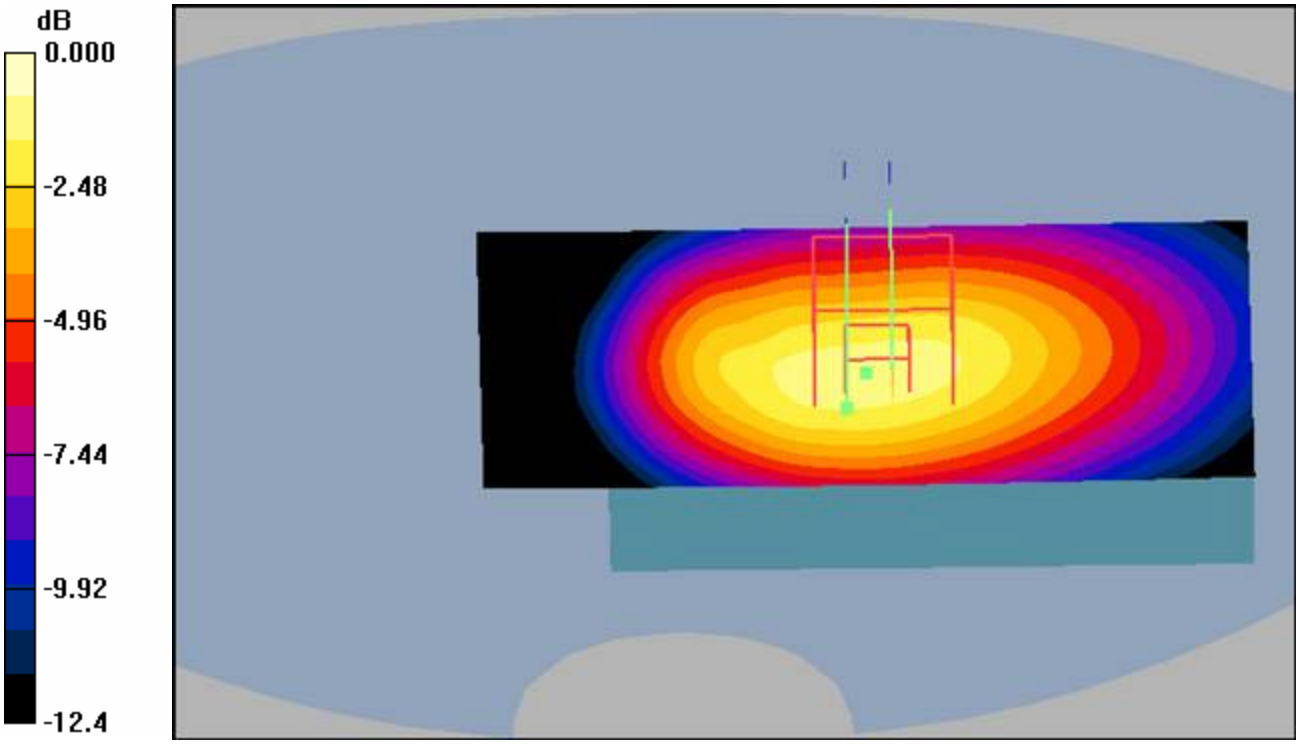
SAR distribution plots for Body Worn Configuration

Prepared (also subject responsible if other)	No.	
SEM/CV/PF/P Gerard Hayes and Rodney Dixon	REP 2006 005 Z525i 02	
Approved / Checked		
SEM/CV/PF/P Gerard Hayes	A	X:\SAR Chamber\FCC reports\Z520I\Final Reports\FCCZ520I.doc

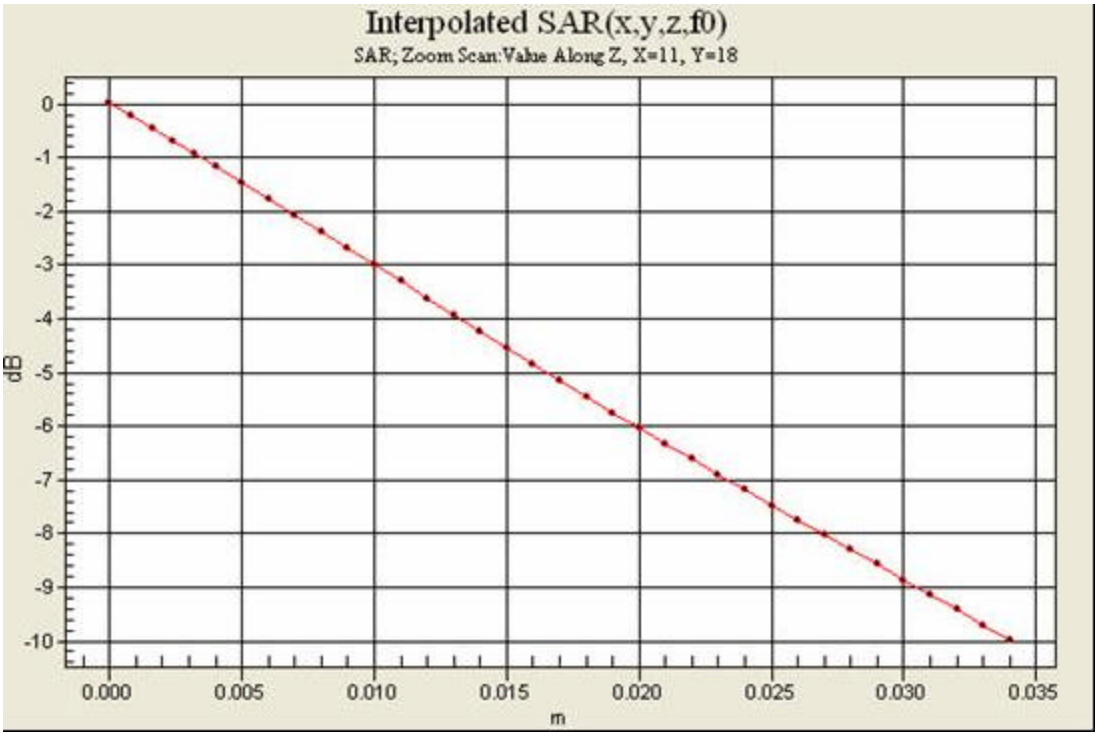
Distribution of maximum SAR in 800 GSM band. Measured with back of device facing the body using a 20MM spacer. (Standard Battery, BST-37)

Date/Time: 3/2/2006 9:55:29 AM
File Name: 02Mar06_Z520i_GSM835_NURF_BB01.da4
DUT: Zoe body; Type: Sample
Program Notes: Battery: BST-37 Humidity: 36.9 % Ambient temp: 20.9 C Simulant temp: 22.1 C
Communication System: GSM 850 Body; Frequency: 849 MHz;Duty Cycle: 1:4.15
Medium: Body 835 MHzMedium parameters used (interpolated): f = 849 MHz; s = 1.01 mho/m; e_r = 53.6; ? = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1586; ConvF(6.51, 6.51, 6.51); Calibrated: 5/26/2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn416; Calibrated: 11/10/2005
- Phantom: SAM with CRP (Low Band Body); Type: SAM; Serial: 1251
- Measurement SW: DASY4, V4.6 Build 23; Post processing SW: SEMCAD, V1.8 Build 160

High Channel/Area Scan (51x81x1): Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 1.14 mW/g
High Channel/Zoom Scan (7x9x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 24.2 V/m; Power Drift = 0.030 dB
Peak SAR (extrapolated) = 1.50 W/kg
SAR(1 g) = 1.09 mW/g; SAR(10 g) = 0.753 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 1.16 mW/g
High Channel/Zoom Scan (31x41x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 24.2 V/m; Power Drift = 0.030 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 1.50 mW/g


dB
0.000
-2.48
-4.96
-7.44
-9.92
-12.4

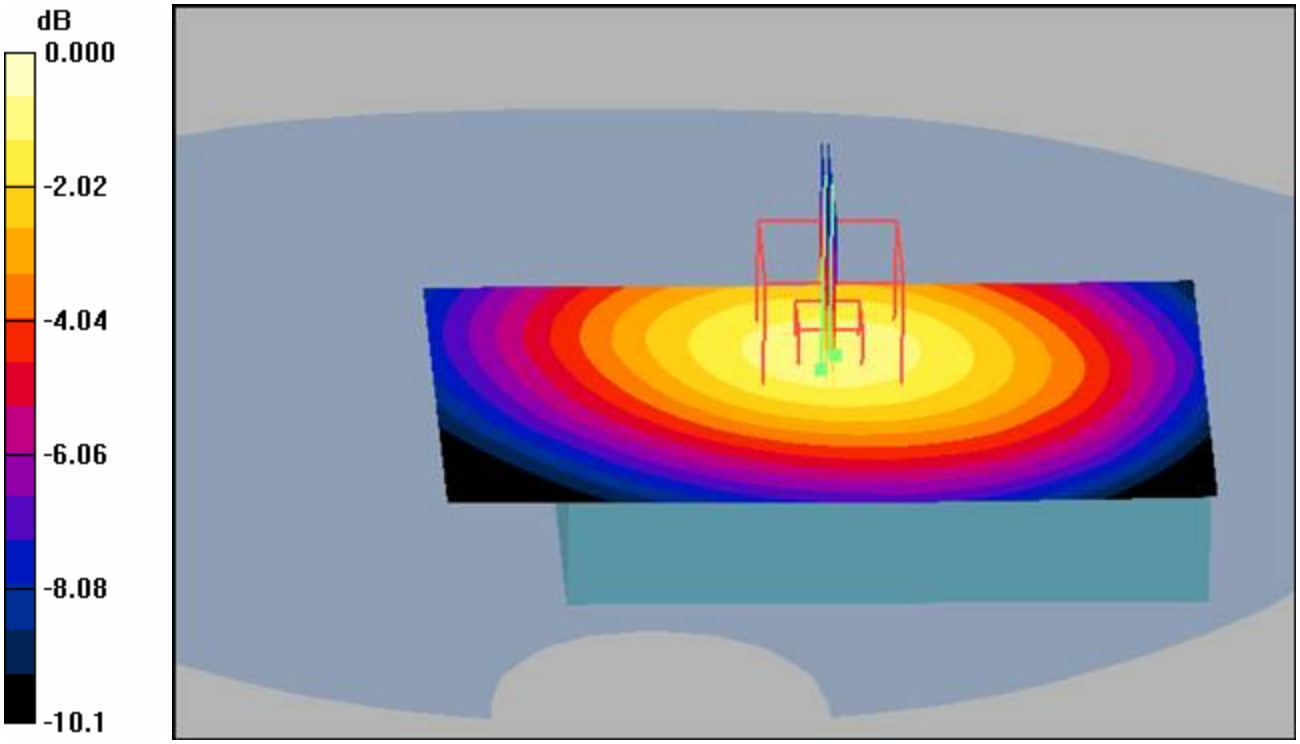
0 dB = 1.50mW/g


Interpolated SAR(x,y,z,f0)
SAR; Zoom Scan:Value Along Z, X=11, Y=18
dB
0
-1
-2
-3
-4
-5
-6
-7
-8
-9
-10
0.000
0.005
0.010
0.015
0.020
0.025
0.030
0.035
m

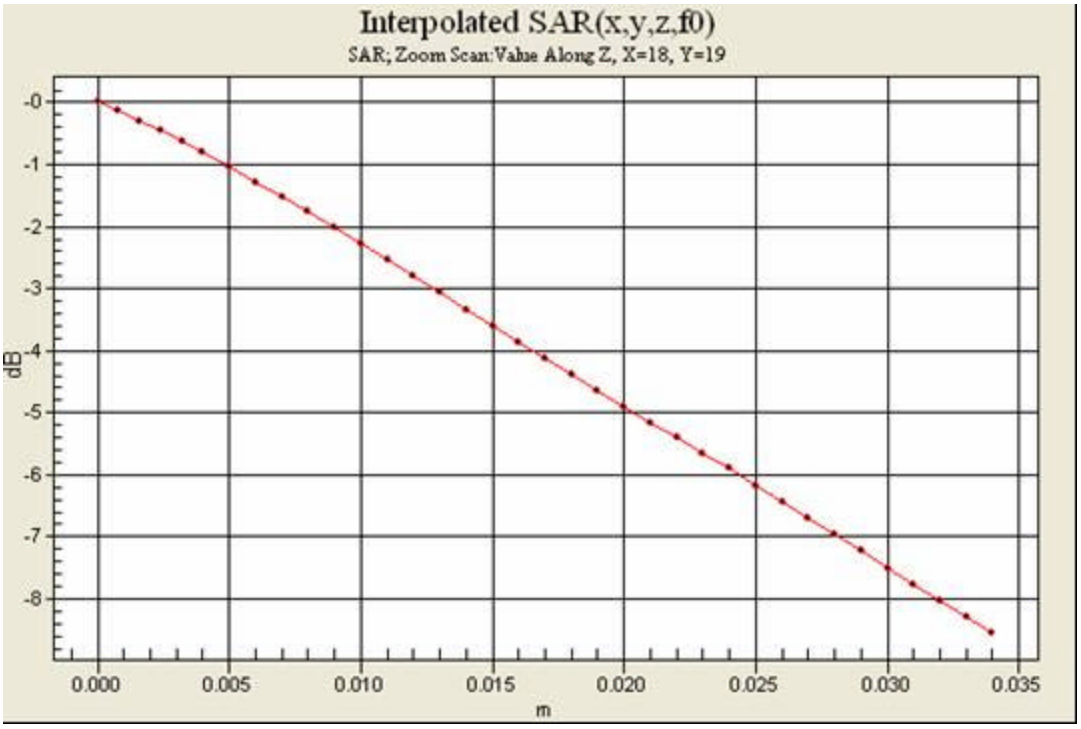
Distribution of maximum SAR in 800 GSM band. Measured with front of device facing the body using a 20MM spacer. (Standard Battery, BST-37)

Date/Time: 3/2/2006 10:20:55 AM
File Name: 02Mar06_Z520i_GSM835_NURF_BF01.da4
DUT: Zoe body; Type: Sample
Program Notes: Battery: BST-37 Humidity: 31.8 % Ambient temp: 22.8 C Simulant temp: 23.4 C
Communication System: GSM 850 Body; Frequency: 849 MHz;Duty Cycle: 1:4.15
Medium: Body 835 MHzMedium parameters used (interpolated): f = 849 MHz; s = 1.01 mho/m; e_r = 53.6; ? = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1586; ConvF(6.51, 6.51, 6.51); Calibrated: 5/26/2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn416; Calibrated: 11/10/2005
- Phantom: SAM with CRP (Low Band Body); Type: SAM; Serial: 1251
- Measurement SW: DASY4, V4.6 Build 23; Post processing SW: SEMCAD, V1.8 Build 160

High Channel/Area Scan (51x81x1): Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.316 mW/g
High Channel/Zoom Scan (7x9x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.9 V/m; Power Drift = 0.054 dB
Peak SAR (extrapolated) = 0.384 W/kg
SAR(1 g) = 0.301 mW/g; SAR(10 g) = 0.220 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.320 mW/g
High Channel/Zoom Scan (31x41x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.9 V/m; Power Drift = 0.054 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.384 mW/g


dB
0.000
-2.02
-4.04
-6.06
-8.08
-10.1

0 dB = 0.384mW/g


Interpolated SAR(x,y,z,f0)
SAR; Zoom Scan:Value Along Z, X=18, Y=19
dB
-0
-1
-2
-3
-4
-5
-6
-7
-8
0.000
0.005
0.010
0.015
0.020
0.025
0.030
0.035
m

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Distribution of maximum SAR in 800 GSM band. Measured with back of device facing the body using a 20MM SPACER with Blue Tooth. (Standard Battery BST-37)

Date/Time: 3/11/2006 3:18:37 PM
File Name: 02Mar06_Z520i_GSM835_NURF_BT_BB01.da4
DUT: Zoe body; Type: Sample
Program Notes: Battery: BST-37 Humidity: 36.9 % Ambient temp: 20.9 C Simulant temp: 22.1 C
Communication System: GSM 850 Body; Frequency: 849 MHz;Duty Cycle: 1:4.15
Medium: Body 835 MHzMedium parameters used (interpolated): f = 849 MHz; s = 1.01 mho/m; e_r = 53.6; ? = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1539; ConvF(5.88, 5.88, 5.88); Calibrated: 11/22/2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn345; Calibrated: 11/10/2005
- Phantom: SAM with CRP (Low Band Body); Type: SAM; Serial: 1251
- Measurement SW: DASY4, V4.6 Build 23; Post processing SW: SEMCAD, V1.8 Build 160

High Channel/Area Scan (51x81x1): Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 1.18 mW/g
High Channel/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 28.2 V/m; Power Drift = 0.000 dB
Peak SAR (extrapolated) = 1.55 W/kg
SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.769 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 1.19 mW/g
High Channel/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 28.2 V/m; Power Drift = 0.000 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 1.55 mW/g

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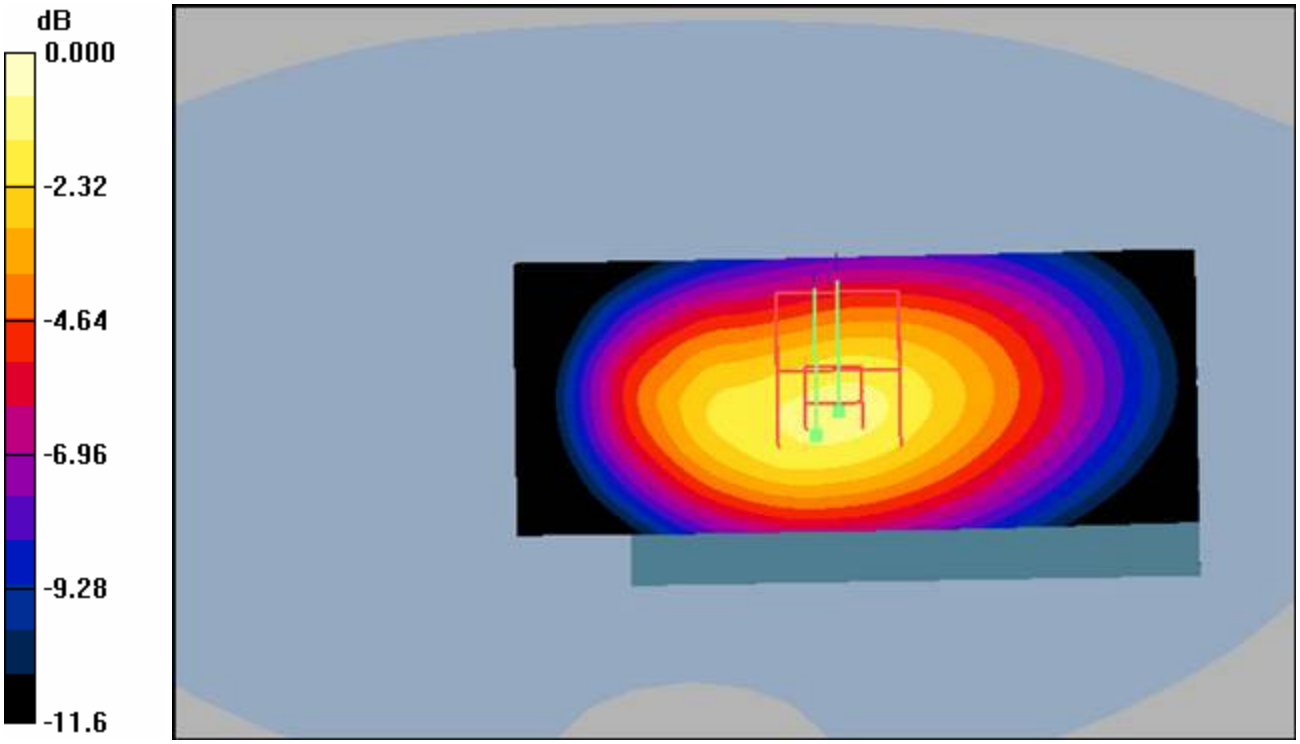
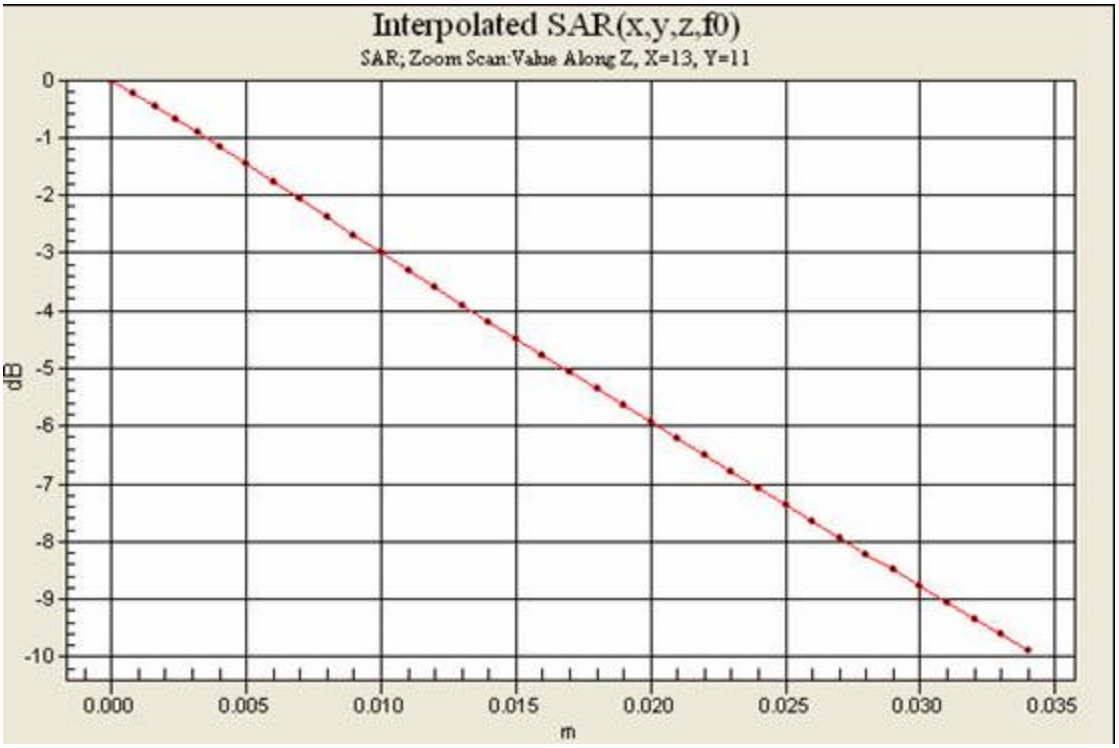


0 dB = 1.55mW/g



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Distribution of maximum SAR in 1900 GSM band. Measured with back of device facing the body using a 20MM spacer. (Standard Battery, BST-37)

Date/Time: 3/11/2006 11:04:04 AM

File Name: 10Mar06_Z520i_GSM1900_NURF_BB01.da4

DUT: Zoe body; Type: Sample

Program Notes: Battery: BST-37 Humidity: 35.1% Ambient Temp: 23.2C Simulant Temp: 22.9C

Communication System: DCS 1900 Body; Frequency: 1850.2 MHz;Duty Cycle: 1:4.15

Medium: Head 1800/1900 MHzMedium parameters used (interpolated): f = 1850.2 MHz; s = 1.47 mho/m; e_r = 51.7; ? = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1539; ConvF(4.12, 4.12, 4.12); Calibrated: 11/22/2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn345; Calibrated: 11/10/2005
- Phantom: SAM with CRP (High Band Body); Type: SAM; Serial: TP: 1020
- Measurement SW: DASY4, V4.6 Build 23; Post processing SW: SEMCAD, V1.8 Build 160

Low Channel/Area Scan (51x81x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.564 mW/g

Low Channel/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.8 V/m; Power Drift = -0.151 dB

Peak SAR (extrapolated) = 0.814 W/kg

SAR(1 g) = 0.509 mW/g; SAR(10 g) = 0.309 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.547 mW/g

Low Channel/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.8 V/m; Power Drift = -0.151 dB

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.814 mW/g

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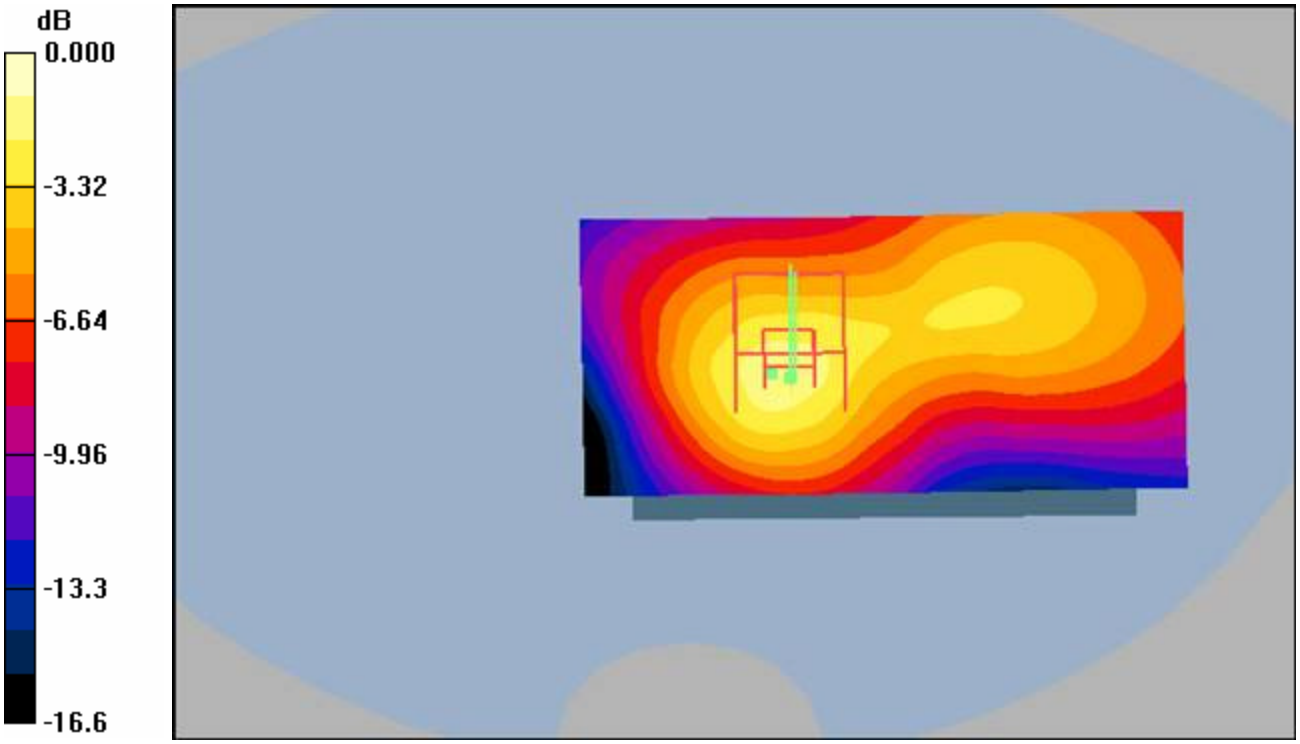
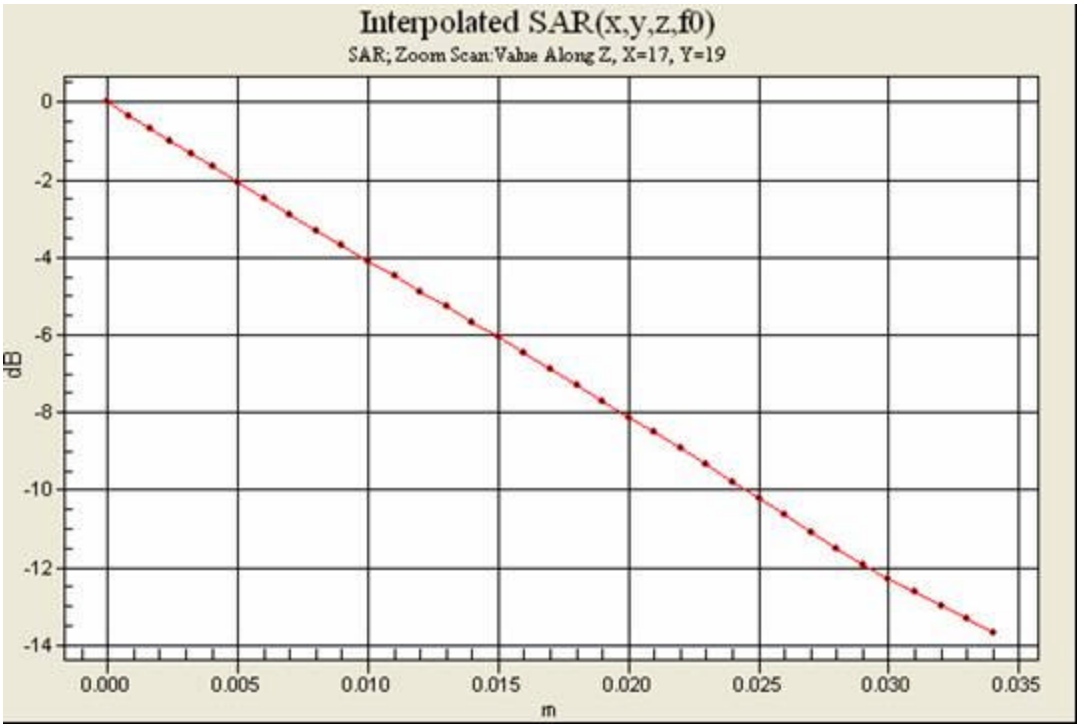


0 dB = 0.814mW/g



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Distribution of maximum SAR in 1900 GSM band. Measured with front of device facing the body using a 20MM spacer. (Standard Battery, BST-37)

Date/Time: 3/11/2006 1:35:51 PM

File Name: 10Mar06_Z520i_GSM1900_NURF_BF01.da4

DUT: Zoe body; Type: Sample

Program Notes: Battery: BST-37 Humidity: 35.8% Ambient Temp: 23.1C Simulant Temp: 23C

Communication System: DCS 1900 Body; Frequency: 1850.2 MHz;Duty Cycle: 1:4.15

Medium: Head 1800/1900 MHzMedium parameters used (interpolated): f = 1850.2 MHz; s = 1.47 mho/m; e_r = 51.7; ? = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1539; ConvF(4.12, 4.12, 4.12); Calibrated: 11/22/2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn345; Calibrated: 11/10/2005
- Phantom: SAM with CRP (High Band Body); Type: SAM; Serial: TP: 1020
- Measurement SW: DASY4, V4.6 Build 23; Post processing SW: SEMCAD, V1.8 Build 160

Low Channel/Area Scan (51x81x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.333 mW/g

Low Channel/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.6 V/m; Power Drift = -0.106 dB

Peak SAR (extrapolated) = 0.424 W/kg

SAR(1 g) = 0.295 mW/g; SAR(10 g) = 0.193 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.317 mW/g

Low Channel/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.6 V/m; Power Drift = -0.106 dB

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.424 mW/g

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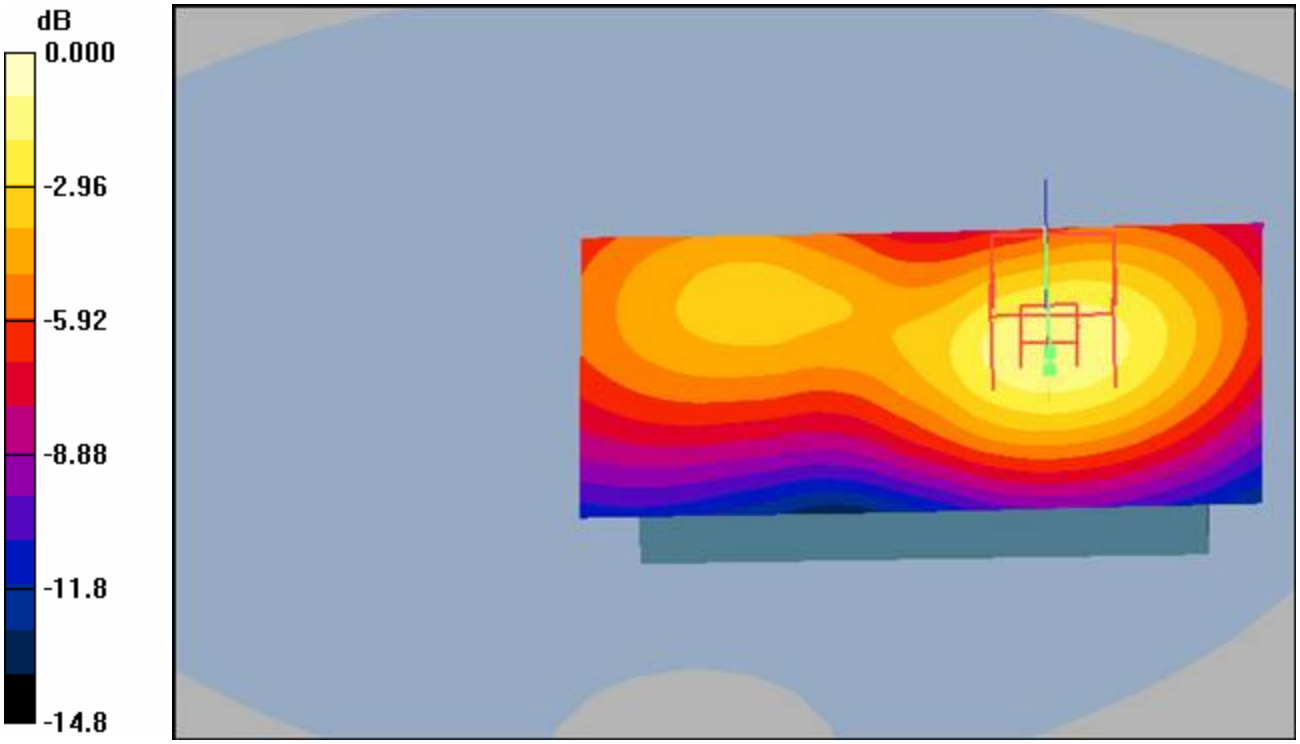
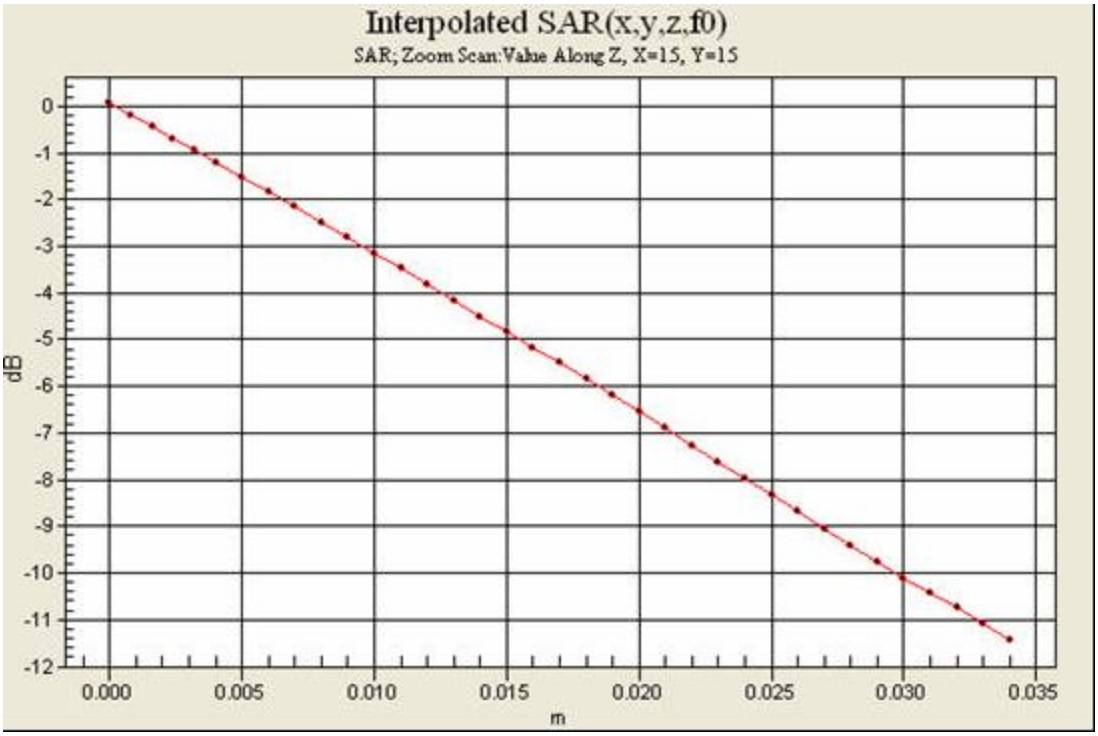


0 dB = 0.424mW/g



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Distribution of maximum SAR in 1900 GSM band. Measured with back of device facing the body using a 20MM SPACER with Blue Tooth. (Standard Battery BST-37)

Date/Time: 3/11/2006 2:22:34 PM
File Name: 10Mar06_Z520i_GSM1900_NURF_BT_BB01.da4
DUT: Zoe body; Type: Sample
Program Notes: Battery: BST-37 Humidity: 35.8% Ambient Temp: 23.1C Simulant Temp: 23C
Communication System: DCS 1900 Body; Frequency: 1850.2 MHz;Duty Cycle: 1:4.15
Medium: Head 1800/1900 MHzMedium parameters used (interpolated): f = 1850.2 MHz; s = 1.47 mho/m; e_r = 51.7; ? = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1539; ConvF(4.12, 4.12, 4.12); Calibrated: 11/22/2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn345; Calibrated: 11/10/2005
- Phantom: SAM with CRP (High Band Body); Type: SAM; Serial: TP: 1020
- Measurement SW: DASY4, V4.6 Build 23; Post processing SW: SEMCAD, V1.8 Build 160

Low Channel/Area Scan (51x81x1): Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.537 mW/g
Low Channel/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.5 V/m; Power Drift = -0.108 dB
Peak SAR (extrapolated) = 0.753 W/kg
SAR(1 g) = 0.466 mW/g; SAR(10 g) = 0.282 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.504 mW/g
Low Channel/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.5 V/m; Power Drift = -0.108 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.753 mW/g

Prepared (also subject responsible if other)	No.	
SEM/CV/PF/P Gerard Hayes and Rodney Dixon	REP 2006 005 Z525i 02	
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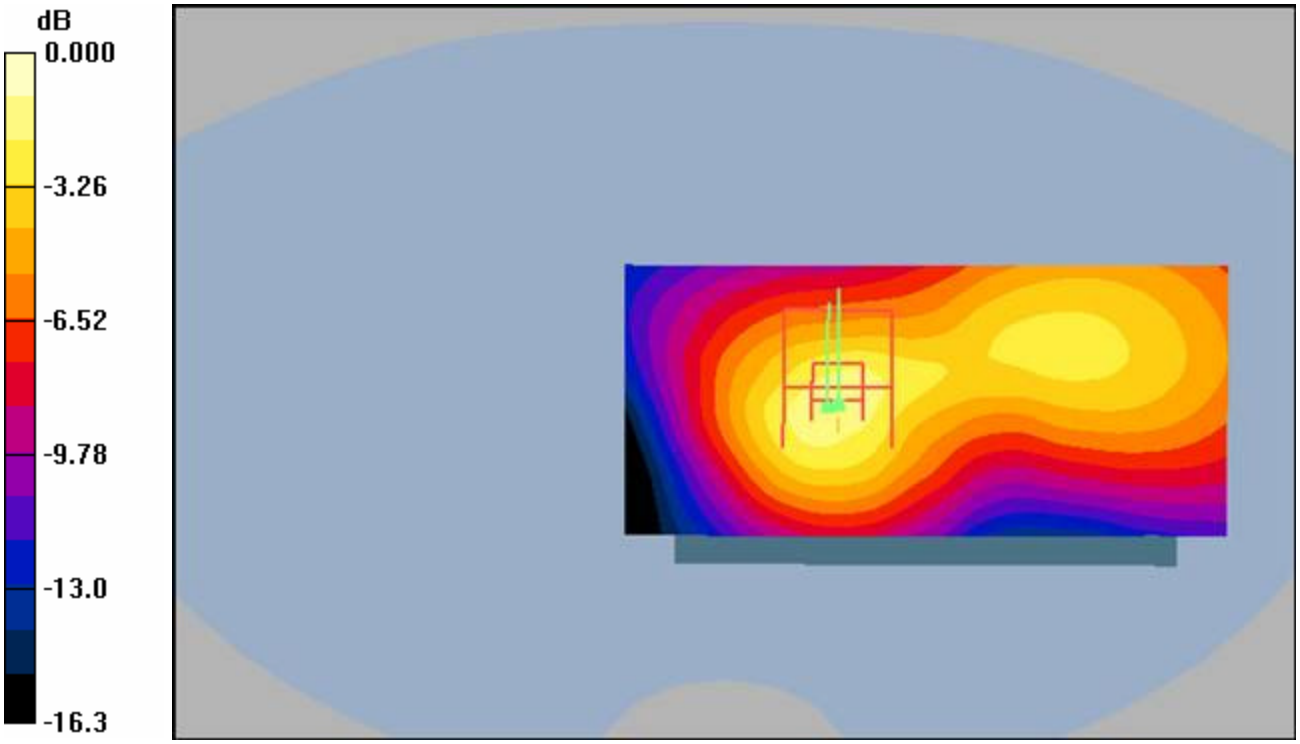
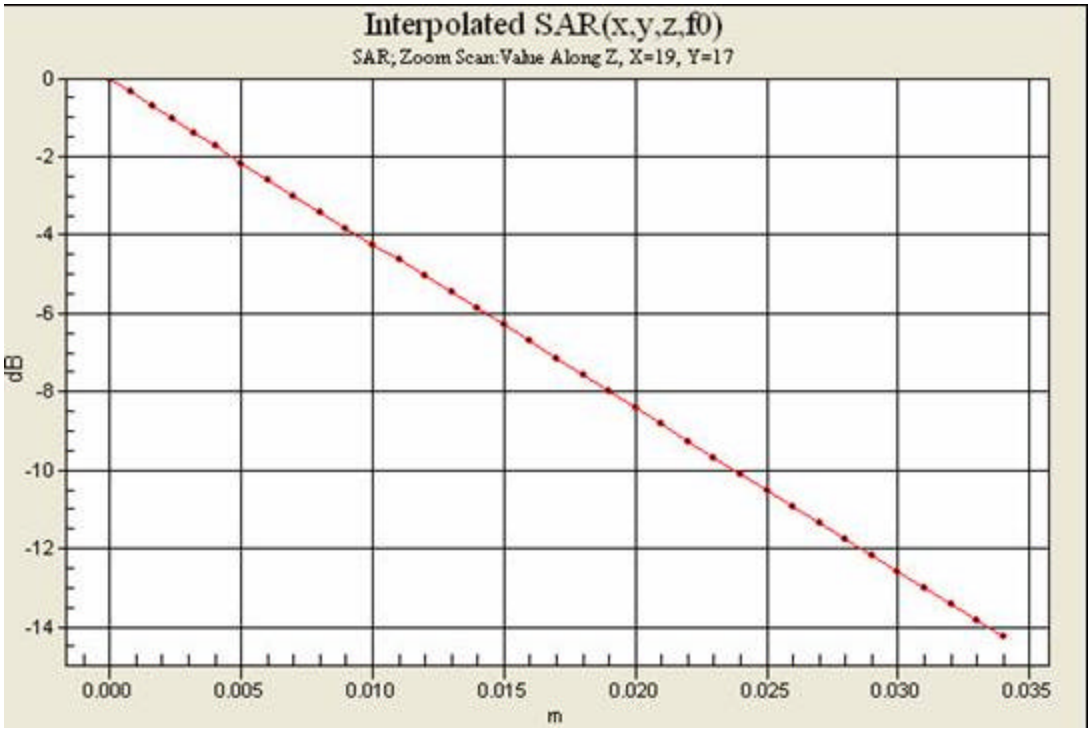


0 dB = 0.753mW/g



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Appendix 4

Probe Calibration Certificates

ET3DV6 SN:1586 **May 26, 2005**

DASY - Parameters of Probe: ET3DV6 SN:1586

Sensitivity in Free Space[A] Diode Compression[B]

NormX	1.90 ± 10.1%	$\mu V/(V/m)^2$	DCP X	94 mV
NormY	1.84 ± 10.1%	$\mu V/(V/m)^2$	DCP Y	94 mV
NormZ	1.89 ± 10.1%	$\mu V/(V/m)^2$	DCP Z	94 mV

Sensitivity in Tissue Simulating Liquid (Conversion Factors)

Please see Page 8.

Boundary Effect

TSL **900 MHz** **Typical SAR gradient: 5 % per mm**

Sensor Center to Phantom Surface Distance		3.7 mm	4.7 mm
SAR_{be} [%]	Without Correction Algorithm	8.4	4.3
SAR_{be} [%]	With Correction Algorithm	0.1	0.2

TSL **1750 MHz** **Typical SAR gradient: 10 % per mm**

Sensor Center to Phantom Surface Distance		3.7 mm	4.7 mm
SAR_{be} [%]	Without Correction Algorithm	12.2	8.2
SAR_{be} [%]	With Correction Algorithm	0.8	0.1

Sensor Offset

Probe Tip to Sensor Center	2.7 mm

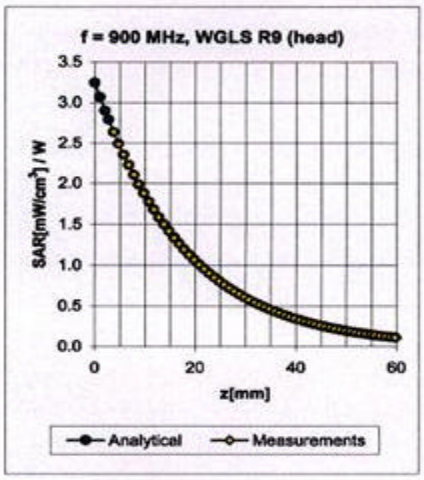
The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

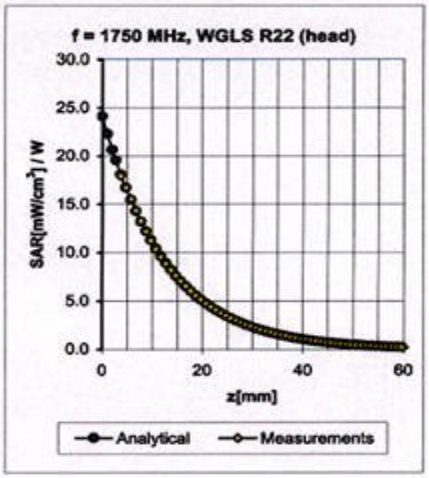
[A] The uncertainties of NormX,Y,Z do not affect the E^2-field uncertainty inside TSL (see Page 8).

[B] Numerical linearization parameter: uncertainty not required.

ET3DV6 SN:1586 **May 26, 2005**

Conversion Factor Assessment





f [MHz]	Validity [MHz][c]	TSL	Permittivity	Conductivity	Alpha	Depth	ConvF Uncertainty
835	± 50 / ± 100	Head	41.5 ± 5%	0.90 ± 5%	0.62	1.76	6.58 ± 11.0% (k=2)
900	± 50 / ± 100	Head	41.5 ± 5%	0.97 ± 5%	0.61	1.78	6.46 ± 11.0% (k=2)
1750	± 50 / ± 100	Head	40.1 ± 5%	1.37 ± 5%	0.59	2.26	5.29 ± 11.0% (k=2)
1900	± 50 / ± 100	Head	40.0 ± 5%	1.40 ± 5%	0.56	2.50	5.10 ± 11.0% (k=2)
2450	± 50 / ± 100	Head	39.2 ± 5%	1.80 ± 5%	0.66	2.22	4.58 ± 11.8% (k=2)
835	± 50 / ± 100	Body	55.2 ± 5%	0.97 ± 5%	0.54	1.96	6.51 ± 11.0% (k=2)
900	± 50 / ± 100	Body	55.0 ± 5%	1.05 ± 5%	0.52	2.05	6.21 ± 11.0% (k=2)
1750	± 50 / ± 100	Body	53.4 ± 5%	1.49 ± 5%	0.55	2.76	4.71 ± 11.0% (k=2)
1900	± 50 / ± 100	Body	53.3 ± 5%	1.52 ± 5%	0.56	2.76	4.61 ± 11.0% (k=2)
2450	± 50 / ± 100	Body	52.7 ± 5%	1.95 ± 5%	0.68	2.13	4.26 ± 11.8% (k=2)

[c] The validity of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2). The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.

Certificate No: ET3-1586_May05 Page 8 of 9

ET3DV6 SN:1539 **November 22, 2005**

DASY - Parameters of Probe: ET3DV6 SN:1539

Sensitivity in Free Space[A] Diode Compression[B]

NormX	**1.36** ± 10.1%	$\mu V/(V/m)^2$	DCP X	**89** mV
NormY	**1.27** ± 10.1%	$\mu V/(V/m)^2$	DCP Y	**89** mV
NormZ	**1.39** ± 10.1%	$\mu V/(V/m)^2$	DCP Z	**89** mV

Sensitivity in Tissue Simulating Liquid (Conversion Factors)

Please see Page 8.

Boundary Effect

TSL **900 MHz** **Typical SAR gradient: 5 % per mm**

Sensor Center to Phantom Surface Distance		**3.7 mm**	**4.7 mm**
SAR_{be} [%]	Without Correction Algorithm	8.8	4.7
SAR_{be} [%]	With Correction Algorithm	0.1	0.3

TSL **1750 MHz** **Typical SAR gradient: 10 % per mm**

Sensor Center to Phantom Surface Distance		**3.7 mm**	**4.7 mm**
SAR_{be} [%]	Without Correction Algorithm	13.0	8.4
SAR_{be} [%]	With Correction Algorithm	0.8	0.0

Sensor Offset

Probe Tip to Sensor Center	**2.7** mm

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 NormX,Y,Z do not affect the E^2-field uncertainty inside TSL (see Page 8).

[B] Numerical linearization parameter; uncertainty not required.

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SEM/CV/PF/P Gerard Hayes and Rodney Dixon		REP 2006 005 Z525i 02	
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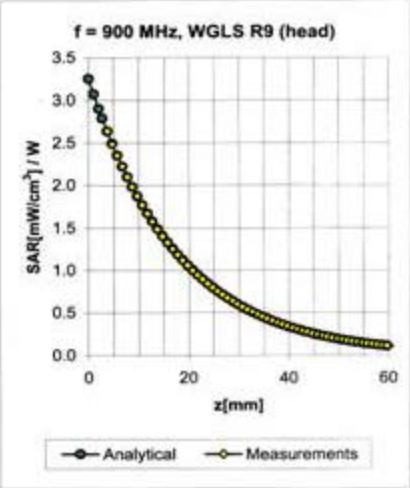
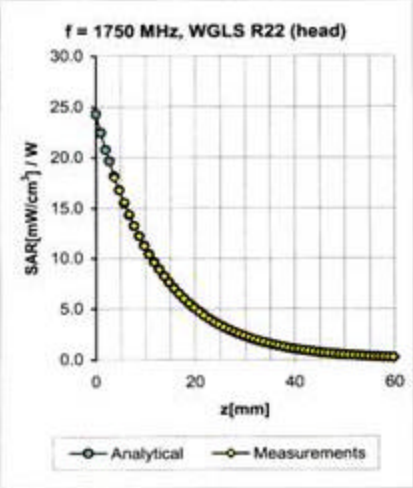
ET3DV6 SN:1539 **November 22, 2005**

Conversion Factor Assessment





f [MHz]	Validity [MHz][C]	TSL	Permittivity	Conductivity	Alpha	Depth	ConvF Uncertainty
835	± 50 / ± 100	Head	41.5 ± 5%	0.90 ± 5%	0.63	1.80	5.99 ± 11.0% (k=2)
900	± 50 / ± 100	Head	41.5 ± 5%	0.97 ± 5%	0.54	1.93	5.86 ± 11.0% (k=2)
1750	± 50 / ± 100	Head	40.1 ± 5%	1.37 ± 5%	0.66	2.19	4.76 ± 11.0% (k=2)
1900	± 50 / ± 100	Head	40.0 ± 5%	1.40 ± 5%	0.64	2.43	4.55 ± 11.0% (k=2)
2450	± 50 / ± 100	Head	39.2 ± 5%	1.80 ± 5%	0.81	2.04	4.06 ± 11.8% (k=2)
835	± 50 / ± 100	Body	55.2 ± 5%	0.97 ± 5%	0.56	1.99	5.88 ± 11.0% (k=2)
900	± 50 / ± 100	Body	55.0 ± 5%	1.05 ± 5%	0.53	2.08	5.63 ± 11.0% (k=2)
1750	± 50 / ± 100	Body	53.4 ± 5%	1.49 ± 5%	0.65	2.48	4.21 ± 11.0% (k=2)
1900	± 50 / ± 100	Body	53.3 ± 5%	1.52 ± 5%	0.66	2.48	4.12 ± 11.0% (k=2)
2450	± 50 / ± 100	Body	52.7 ± 5%	1.95 ± 5%	1.18	1.35	4.06 ± 11.8% (k=2)

[C] The validity of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2). The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.

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Appendix 5

Measurement Uncertainty Budget

Prepared (also subject responsible if other)	No.		
SEM/CV/PF/P Gerard Hayes and Rodney Dixon	REP 2006 005 Z525i 02		
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Table 1. Uncertainty Budget for System Performance Check (Dipole & flat phantom) DASY4 System

a	*b*	*c*	*d*	*e = f(d,k)*	*f*	*g*	*h = c x f / e*	*i = c x g / e*	*k*
Uncertainty Component	**Sec.**	**Tol. (± %)**	**Prob. Dist.**	**Div.**	**c_i (1-g)**	**c_i (10-g)**	**1-g u_i (±%)**	**10-g u_i (±%)**	**v_i**
Measurement System									
Probe Calibration (*k*=1)	E2.1	4.7	R	1.73	0.707	0.707	1.9	1.9	∞
Axial Isotropy	E.2.2	9.6	R	1.73	0.707	0.707	3.9	3.9	∞
Hemispherical Isotropy	E.2.2	1.0	R	1.73	1	1	0.6	0.6	∞
Boundary Effect	E.2.3	4.7	R	1.73	1	1	2.7	2.7	∞
Linearity	E.2.4	1.0	R	1.73	1	1	0.6	0.6	∞
System Detection Limits	E.2.5	1.0	N	1	1	1	1.0	1.0	∞
Readout Electronics	E.2.6	0.8	R	1.73	1	1	0.5	0.5	∞
Response Time	E.2.7	2.6	R	1.73	1	1	1.5	1.5	∞
Integration Time	E.2.8	4.7	R	1.73	0.707	0.707	1.9	1.9	∞
RF Ambient Conditions	E.6.1	3.0	R	1.73	1	1	1.7	1.7	∞
Probe Positioner Mechanical Tolerance(corresponds to the mechanical constrains of the robot)	E.6.2	0.4	R	1.73	1	1	0.2	0.2	∞
Probe Positioning with respect to Phantom Shell	E.6.3	2.9	R	1.73	1	1	1.7	1.7	∞
Extrapolation, interpolation and Integration Algorithms for Max. SAR Evaluation	E.5	1.0	R	1.73	1	1	0.6	0.6	∞
Dipole									
Dipole Axis to Liquid Distance	8, E.4.2	1.0	R	1.73	1	1	0.6	0.6	∞
Input Power and SAR Drift Measurement	8, 6.6.2	5.0	R	1.73	1	1	2.9	2.9	∞
Phantom and Tissue Parameters									
Phantom Uncertainty - shell thickness tolerance	E.3.1	4.0	R	1.73	1	1	2.3	2.3	∞
Liquid Conductivity - deviation from target values (5)	E.3.2	4.3	R	1.73	0.64	0.43	1.59	1.07	∞

Liquid Conductivity - measurement uncertainty (6)	E.3.3	6.20	R	1.73	0.64	0.43	2.29	1.54	∞
Liquid Permittivity - deviation from target values (5)	E.3.2	3.7	R	1.73	0.6	0.49	1.28	1.05	∞
Liquid Permittivity - measurement uncertainty (6)	E.3.3	6.08	R	1.73	0.6	0.49	2.11	1.72	∞
Combined Standard Uncertainty			RSS				9.37	9.03	
Expanded Uncertainty (95% C.L.)							18.74	18.05	

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Table 2: Uncertainty Budget for the Device Under Test with DASY4 System

a	*b*	*c*	*d*	*e = f(d,k)*	*f*	*g*	*h = c x f / e*	*i = c x g / e*	*k*
Uncertainty Component	**Sec.**	**Tol. (± %)**	**Prob. Dist.**	**Div.**	**c_i (1-g)**	**c_i (10-g)**	**1-g u_i (±%)**	**10-g u_i (±%)**	**v_i**
Measurement System									
Probe Calibration (*k*=1)	E2.1	4.8	N	1	1	1	4.8	4.8	∞
Axial Isotropy	E.2.2	4.7	R	1.73	0.707	0.707	1.9	1.9	∞
Hemispherical Isotropy	E.2.2	9.6	R	1.73	0.707	0.707	3.9	3.9	∞
Boundary Effect	E.2.3	1.0	R	1.73	1	1	0.6	0.6	∞
Linearity	E.2.4	4.7	R	1.73	1	1	2.7	2.7	∞
System Detection Limits	E.2.5	1.0	R	1.73	1	1	0.6	0.6	∞
Readout Electronics	E.2.6	1.0	N	1	1	1	1.0	1.0	∞
Response Time	E.2.7	0.8	R	1.73	1	1	0.5	0.5	∞
Integration Time	E.2.8	2.6	R	1.73	1	1	1.5	1.5	∞
RF Ambient Conditions	E.6.1	3.0	R	1.73	1	1	1.7	1.7	∞
Probe Positioner Mechanical Tolerance(corresponds to the mechanical constrains of the robot)	E.6.2	0.4	R	1.73	1	1	0.2	0.2	∞
Probe Positioning with respect to Phantom Shell	E.6.3	2.9	R	1.73	1	1	1.7	1.7	∞
Extrapolation, interpolation and Integration Algorithms for Max. SAR Evaluation	E.5	1.0	R	1.73	1	1	0.6	0.6	∞
Test sample Related									
Test Sample Positioning	E.4.2	1.3	N	1	1	1	1.3	1.3	4
Device Holder Uncertainty	E.4.1	1.9	R	1.73	1	1	1.1	1.1	4
Output Power Variation - SAR drift measurement (4)	6.6.2	5.0	R	1.73	1	1	2.9	2.9	∞
Phantom and Tissue Parameters									

Phantom Uncertainty (shape and thickness tolerances)	E.3.1	4.0	R	1.73	1	1	2.3	2.3	∞
Liquid Conductivity - deviation from target values (5)	E.3.2	4.3	R	1.73	0.64	0.43	1.6	1.1	∞
Liquid Conductivity - measurement uncertainty (6)	E.3.3	6.20	R	1.73	0.64	0.43	2.3	1.5	∞
Liquid Permittivity - deviation from target values (5)	E.3.2	3.7	R	1.73	0.6	0.49	1.3	1.0	∞
Liquid Permittivity - measurement uncertainty (6)	E.3.3	6.08	R	1.73	0.6	0.49	2.1	1.7	∞
Combined Standard Uncertainty			RSS				**9.49**	**9.14**	
Expanded Uncertainty (95% CONFIDENCE LEVEL)			K=2				**18.98**	**18.28**	

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Table 3a. Values for e'

Uncertainty Component	Tolerance (±%)	Probability Distribution	Divisor	c_i	Standard Uncertainty (±%)	v_i or v_{eff}
Repeatability (n repeats)	0.97	N	1	1	0.97	4
Network analyzer uncertainty sources	8.38	R	1.73	1	4.83	∞
Dielectric Error Sources	5.93	R	1.73	1	3.42	∞
Combined standard uncertainty					**6.08**	

Table 3b. Values for s

Uncertainty Component	Tolerance (±%)	Probability Distribution	Divisor	c_i	Standard Uncertainty (±%)	v_i or v_{eff}
Repeatability (n repeats)	1.85	N	1	1	1.85	4
Network analyzer uncertainty sources	8.38	R	1.73	1	4.83	∞
Dielectric Error Sources	5.93	R	1.73	1	3.42	∞
Combined standard uncertainty					**6.20**	

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Appendix 6

Photographs of the Device Under Test

a. Front

b. Back

c. Side

View of Device (Open)

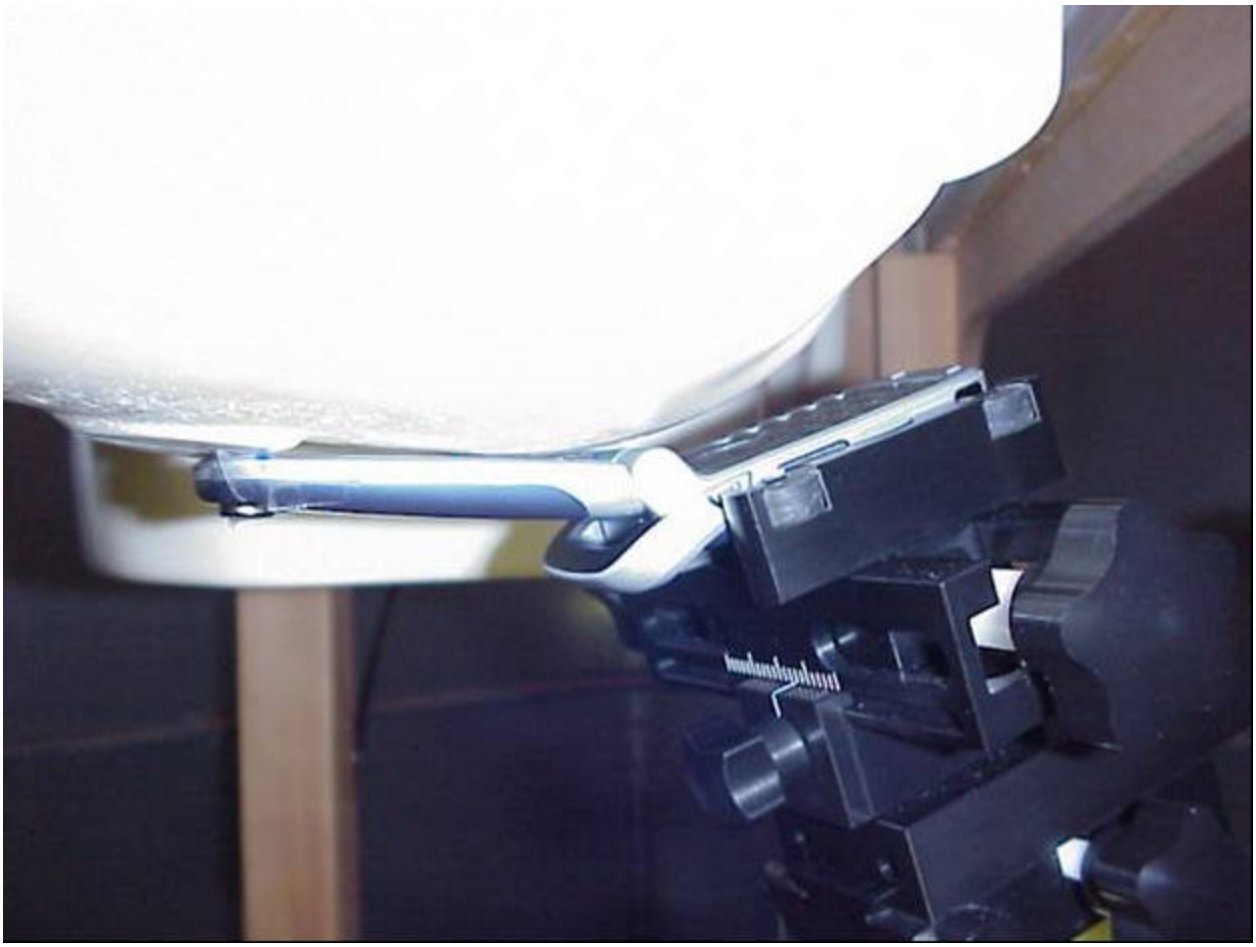
a. Front

b. Back

c. Side

View of Device (Closed)

View of Hands-free Accessory



Position of device against head phantom using the “cheek” position

Position of device against head phantom using the “tilt” position

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Position with front of device against flat phantom using a 20MM SPACER with hands free accessory.

Position with front of device against flat phantom closed using a 25MM SPACER for PTT.

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Position with front of device against flat phantom open using a 25MM SPACER for PTT.