

Prepared (also subject responsible if other) EUS/CV/RF/P Will Stewart	No. EUS/CV/R-01:0484/REP
Approved	Checked
EUS/CV/RF/P Mark Douglas	MGD

2001-4-25 C U:\FCC Submittals\FCC_417 Ditto
Nicole\XHIBIT11\New SAR.doc

T60d

Generic Twin A Phantom; Flat Section; Position: (90°,270°); Frequency: 1850 MHz

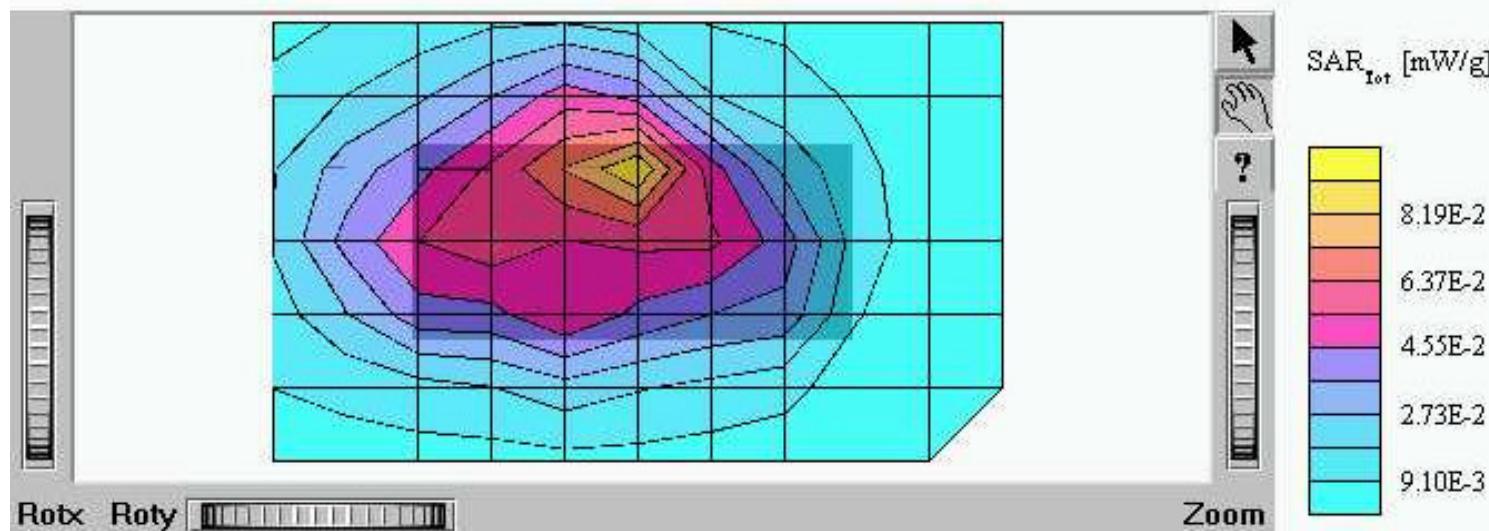
Probe: ET3DV6 - SN1538; ConvF(5.67,5.67,5.67); Crest factor: 3.0; Muscle 1800 MHz: $\sigma = 1.76 \text{ mho/m}$ $\epsilon_r = 39.2$ $\rho = 1.00 \text{ g/cm}^3$
Cube 5x5x7: SAR (1g): 0.0999 mW/g, SAR (10g): 0.0504 mW/g. (Worst-case extrapolation)

Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0

Powerdrift: 0.08 dB

File name: FCC body T60d PCS_CH0002_480H_BF01, Date: 04/11/01

S/N:UA2020480H Holster:SXK 109 4518/1



Distribution of maximum SAR in 1900 PCS band. Measured against the body using product # SXK -109-4518/1 as a carry case.

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T60d

Generic Twin B Phantom; Flat Section; Position: (90°,270°); Frequency: 824 MHz

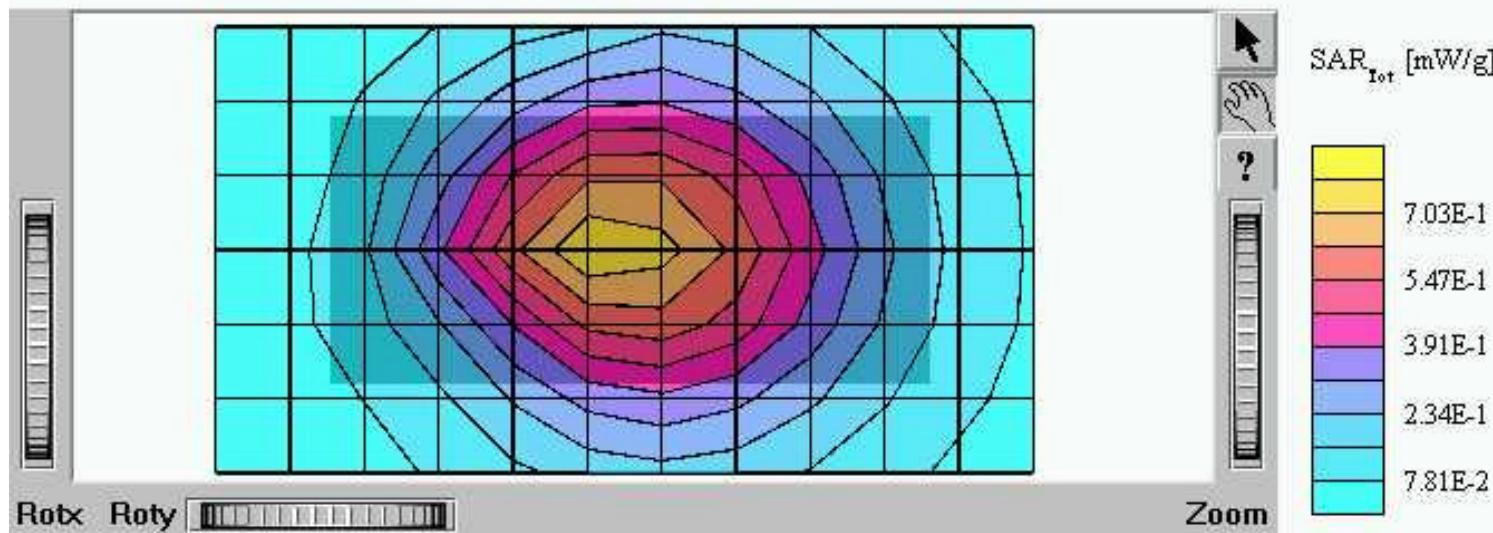
Probe: ET3DV5 - SN1337; ConvF(5.39,5.39,5.39); Crest factor: 1.0; Muscle 835 MHz: $\sigma = 0.98 \text{ mho/m}$ $\epsilon_r = 55.6$ $\rho = 1.00 \text{ g/cm}^3$
Cube 5x5x7: SAR (1g): 0.782 mW/g, SAR (10g): 0.542 mW/g, (Worst-case extrapolation)

Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0

Powerdrift: -0.04 dB

File name: FCC body T60d AMPS_CH991_480H_BB01, Date: 04/12/01

S/N:UA2020480H Holster:SXK 109 4518/2



**Distribution of maximum SAR in 800 AMPS band. Measured against the body using
product # SXK -109-4518/2 as a carry case.**

Prepared (also subject responsible if other) EUS/CV/RF/P Will Stewart		No. EUS/CV/R-01:0484/REP		
Approved EUS/CV/RF/P Mark Douglas	Checked MGD	2001-4-25	C	U:\FCC Submittals\FCC_417 Ditto Nicole\XHIBIT11\New SAR.doc

T60d

Generic Twin A Phantom; Flat Section; Position: (90°,270°); Frequency: 1910 MHz

Probe: ET3DV6 - SN1538; ConvF(5.67,5.67,5.67); Crest factor: 3.0; Muscle 1800 MHz: $\sigma = 1.76 \text{ mho/m}$ $\epsilon_r = 39.2$ $\rho = 1.00 \text{ g/cm}^3$

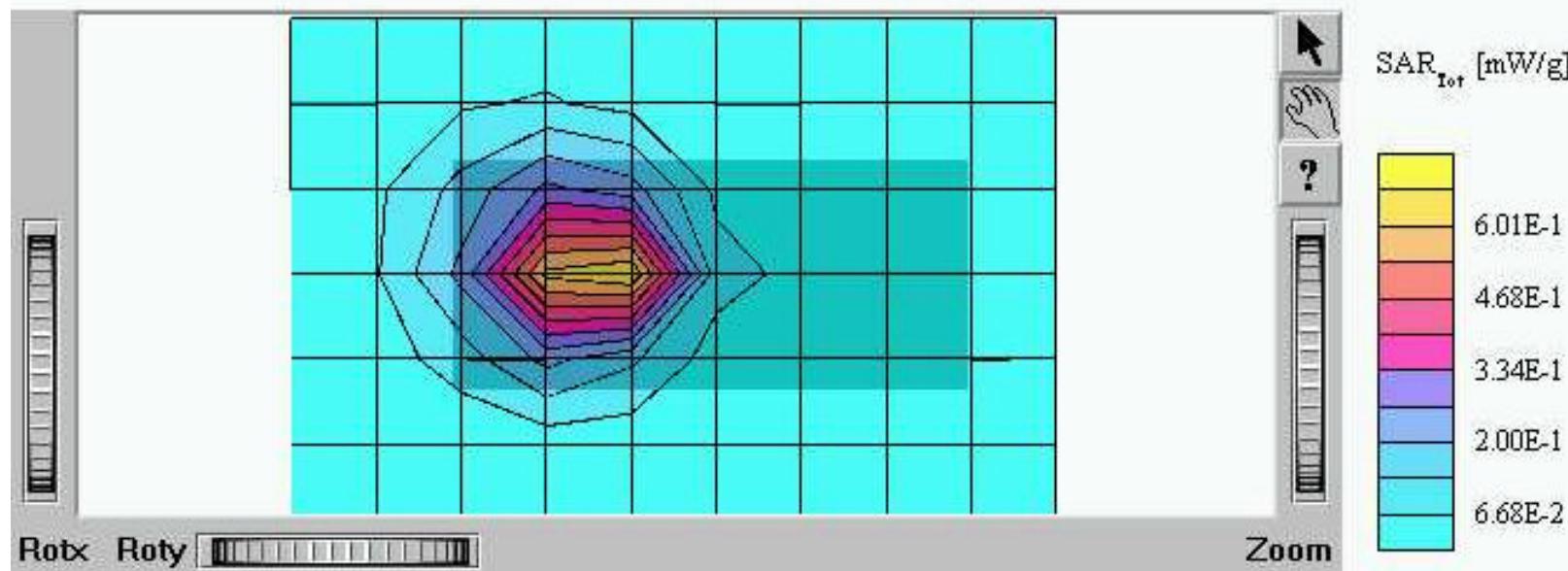
Cube 5x5x7: SAR (1g): 0.722 mW/g, SAR (10g): 0.377 mW/g. (Worst-case extrapolation)

Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0

Powerdrift: 0.04 dB

File name: FCC body T60d PCS_CH1998_480H_BB02, Date: 04/11/01

S/N:UA2020480H Holster:SXK 109 4518/2



Distribution of maximum SAR in 1900 PCS band. Measured against the body using product # SXK -109-4518/2 as a carry case.

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Nicole\XHIBIT11\New SAR.doc**T60d**

Generic Twin B; Flat

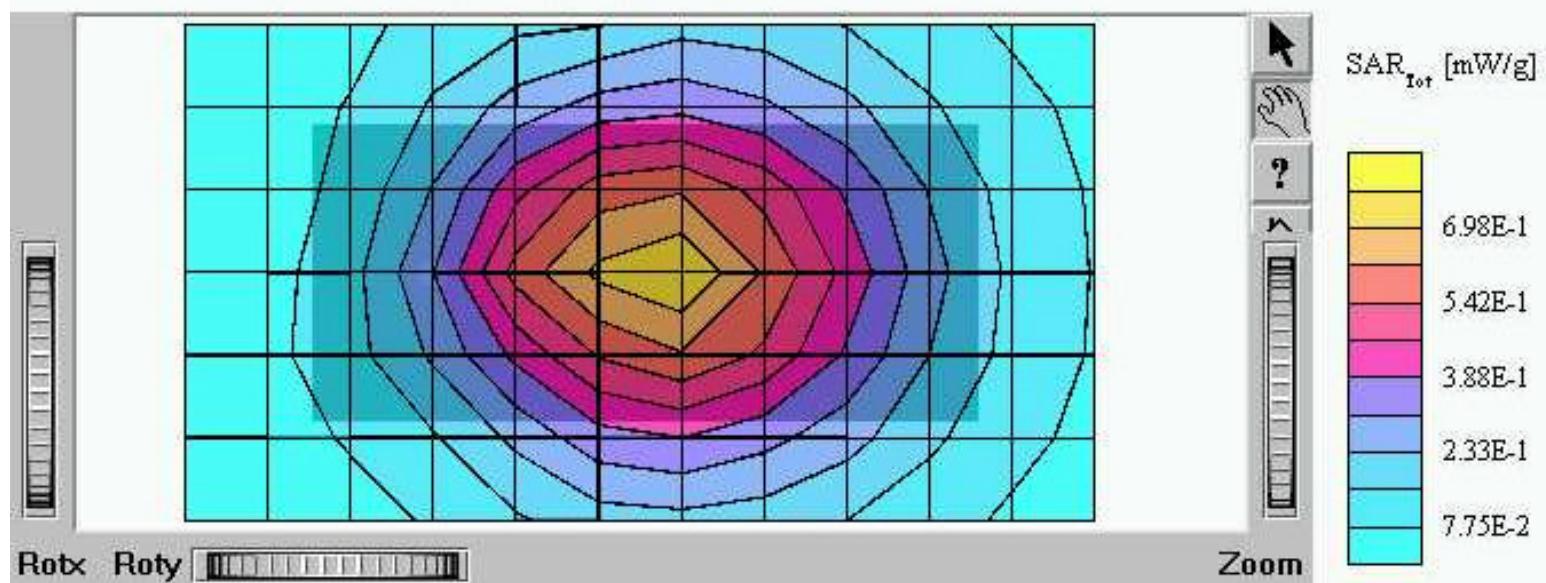
Probe: ET3DV5 - SN1337; ConvF(5.39,5.39,5.39); Crest factor: 1.0; Muscle 835 MHz: $\sigma = 0.98 \text{ mho/m}$ $\epsilon_r = 55.5$ $\rho = 1.00 \text{ g/cm}^3$

Cube 5x5x7: Peak: 1.12 mW/g, SAR(1g): 0.774 mW/g, SAR(10g): 0.545 mW/g, (Worst-case extrapolation)

Penetration depth: 15.6 (13.8, 17.6) [mm]

Powerdrift: -0.15 dB

File name: FCC body T60d AMPS_CH991_480H_BB02, Date: 04/16/01



**Distribution of maximum SAR in 800 AMPS band. Measured against the body using
product # SXK -107-6820/55 as a carry case.**

Prepared (also subject responsible if other) EUS/CV/RF/P Will Stewart	No. EUS/CV/R-01:0484/REP
Approved	Checked
EUS/CV/RF/P Mark Douglas	MGD

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T60d

Generic Twin A Phantom; Flat Section; Position: (90°,270°); Frequency: 1910 MHz

Probe: ET3DV6 - SN1538; ConvF(5.67,5.67,5.67); Crest factor: 3.0; Muscle 1800 MHz: $\sigma = 1.76 \text{ mho/m}$ $\sigma_r = 39.2$ $\rho = 1.00 \text{ g/cm}^3$

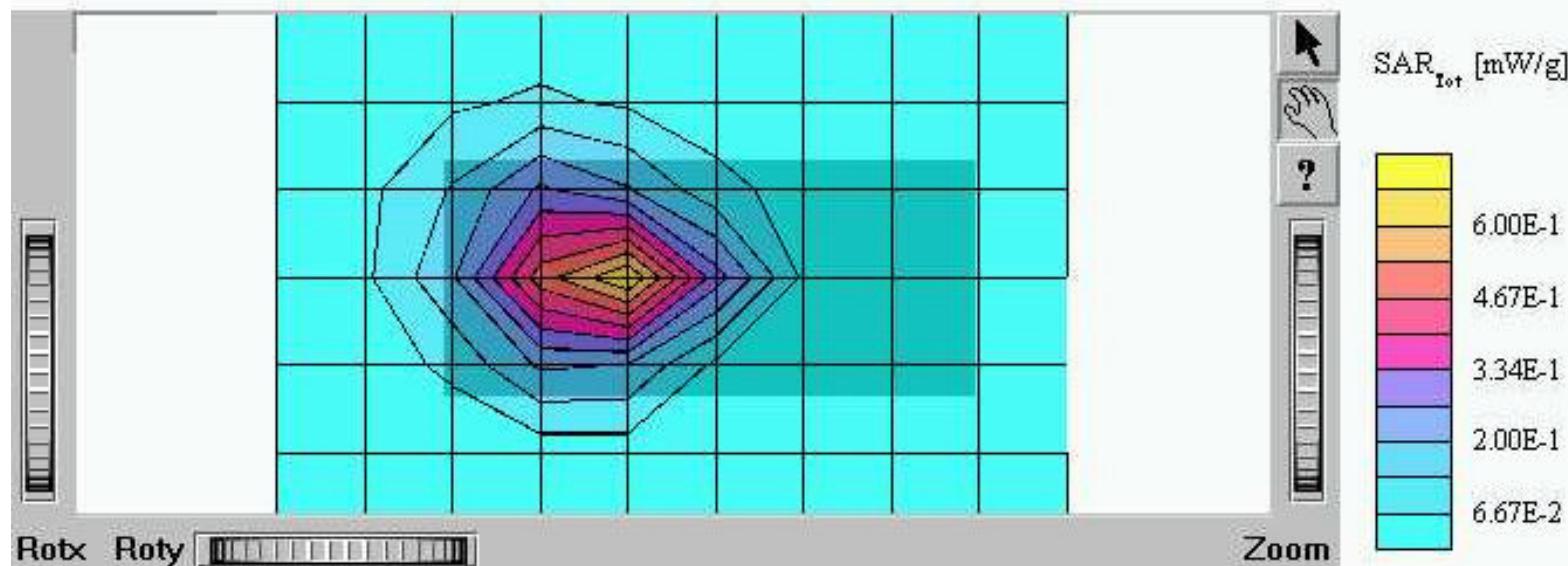
Cube 5x5x7: SAR (1g): 0.640 mW/g, SAR (10g): 0.337 mW/g. (Worst-case extrapolation)

Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0

Powerdrift: 0.07 dB

File name: FCC body T60d PCS_CH1998_480H_BB01, Date: 04/11/01

S/N:UA2020480H Holster:SXK 107 6820/55



Distribution of maximum SAR in 1900 PCS band. Measured against the body using product # SXK -107-6820/55 as a carry case.

Prepared (also subject responsible if other) EUS/CV/RF/P Will Stewart		No. EUS/CV/R-01:0484/REP		
Approved EUS/CV/RF/P Mark Douglas	Checked MGD	2001-4-25	C	U:\FCC Submittals\FCC_417 Ditto Nicole\XHIBIT11\New SAR.doc

Appendix 3: Photographs of Device Under Test**Front view of device****Back view of device**

Prepared (also subject responsible if other) EUS/CV/RF/P Will Stewart		No. EUS/CV/R-01:0484/REP		
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Side view of device.

Prepared (also subject responsible if other) EUS/CV/RF/P Will Stewart		No. EUS/CV/R-01:0484/REP		
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Front, back, and side views of product number SXK –109-4518/1

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Prepared (also subject responsible if other) EUS/CV/RF/P Will Stewart		No. EUS/CV/R-01:0484/REP		
Approved EUS/CV/RF/P Mark Douglas	Checked MGD	2001-4-25	C	U:\FCC Submittals\FCC_417 Ditto Nicole\XHIBIT11\New SAR.doc

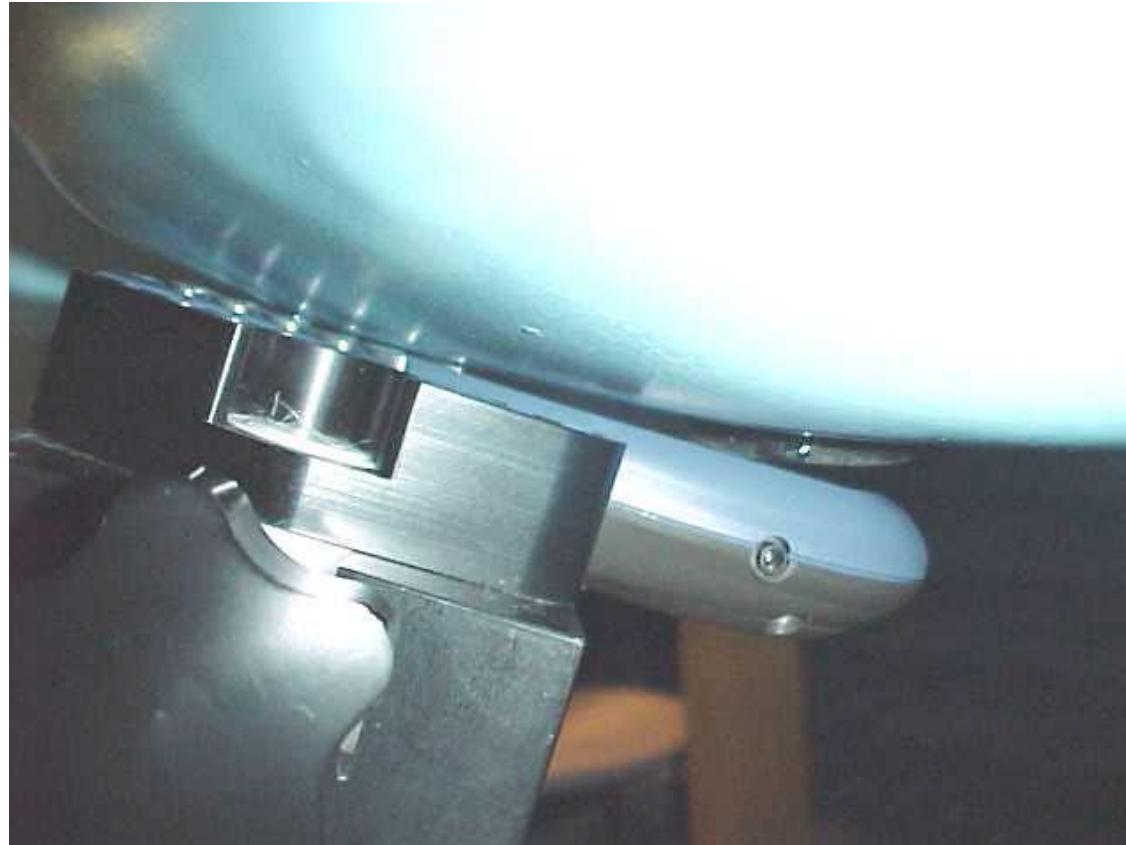
Front, back, and side views of product number SXK -109-4518/2

Prepared (also subject responsible if other) EUS/CV/RF/P Will Stewart		No. EUS/CV/R-01:0484/REP		
Approved EUS/CV/RF/P Mark Douglas	Checked MGD	2001-4-25	C	U:\FCC Submittals\FCC_417 Ditto Nicole\XHIBIT11\New SAR.doc



Front, side, and back views of part number SXK 107 6820/55.

Prepared (also subject responsible if other) EUS/CV/RF/P Will Stewart	No. EUS/CV/R-01:0484/REP		
Approved EUS/CV/RF/P Mark Douglas	Checked MGD	2001-4-25	C U:\FCC Submittals\FCC_417 Ditto Nicole\XHIBIT11\New SAR.doc

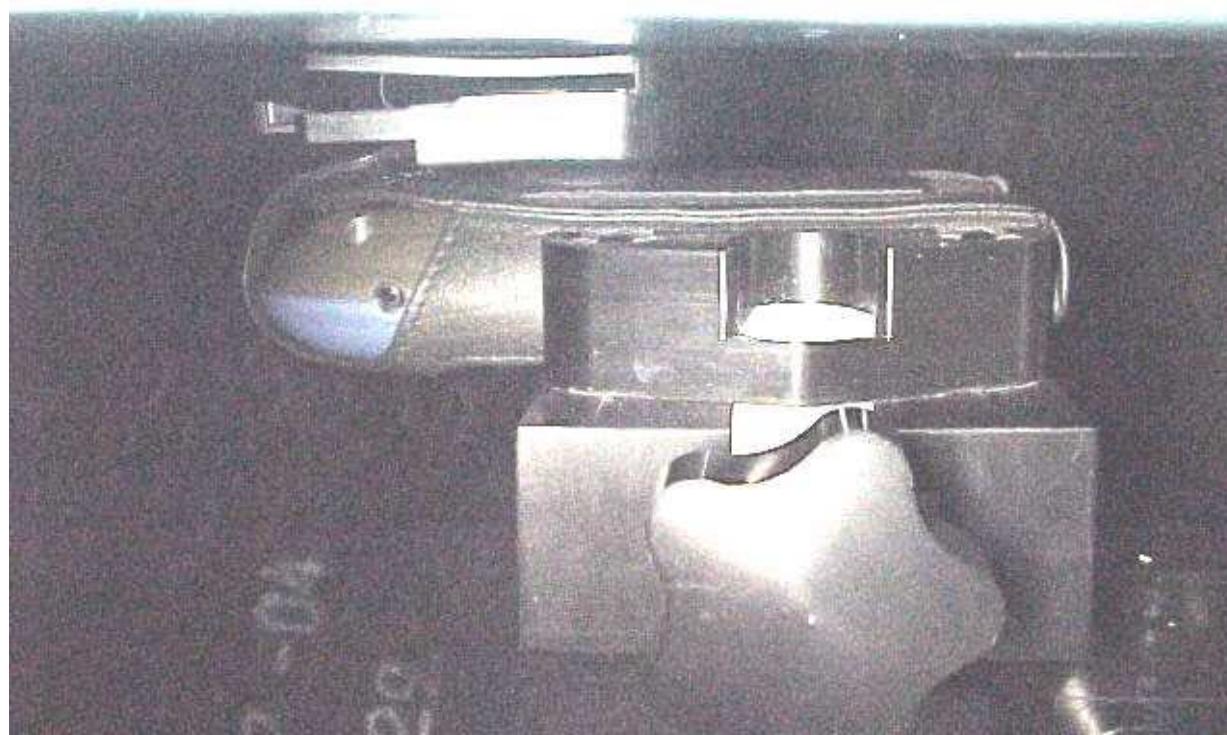
Appendix 4: Position of Device on Phantom**Position of device against head phantom.**

Prepared (also subject responsible if other) EUS/CV/RF/P Will Stewart		No. EUS/CV/R-01:0484/REP		
Approved EUS/CV/RF/P Mark Douglas	Checked MGD	2001-4-25	C	U:\FCC Submittals\FCC_417 Ditto Nicole\XHIBIT11\New SAR.doc



Position of device against flat phantom using carry accessory SXK –109-4518/1

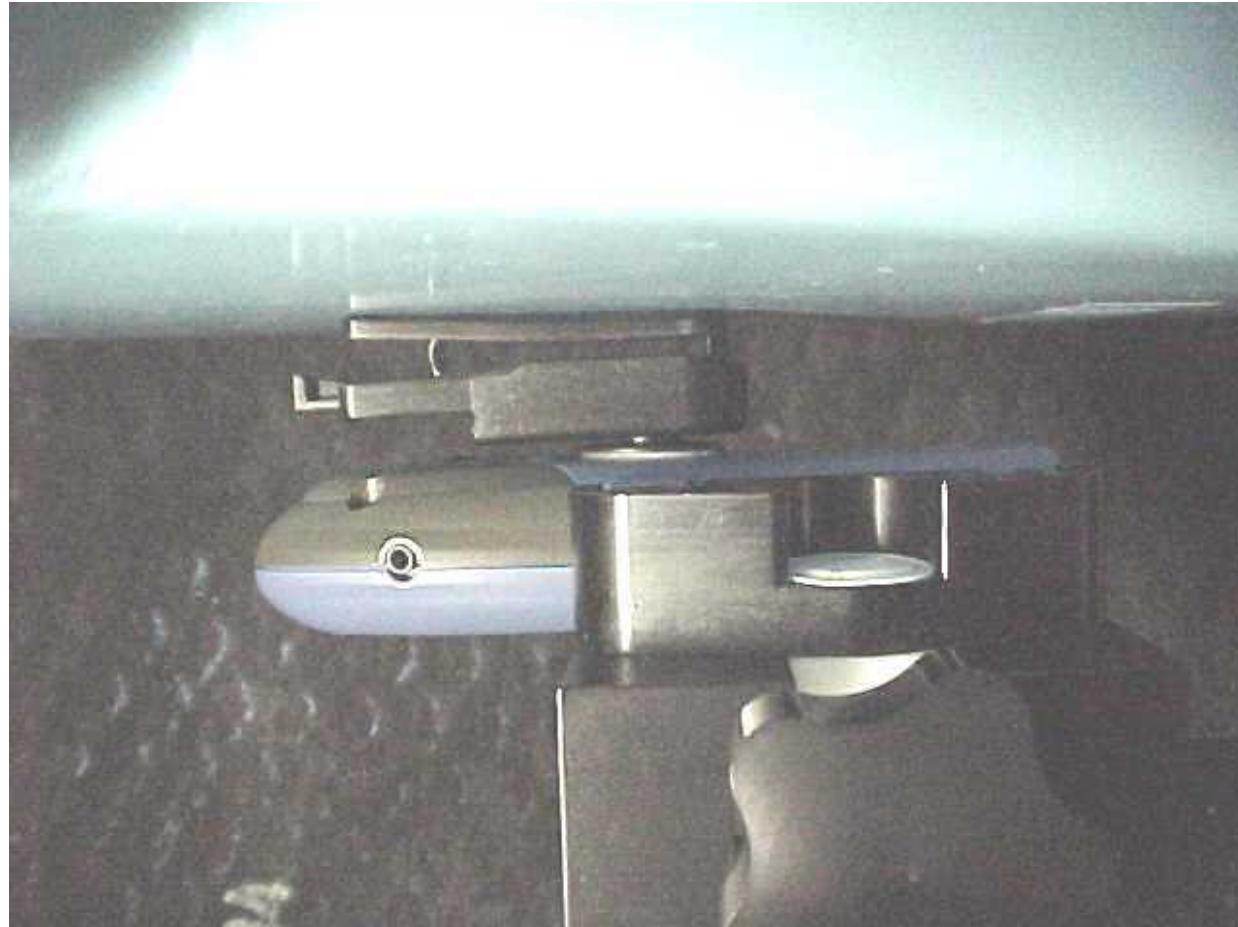
Prepared (also subject responsible if other) EUS/CV/RF/P Will Stewart		No. EUS/CV/R-01:0484/REP		
Approved EUS/CV/RF/P Mark Douglas	Checked MGD	2001-4-25	C	U:\FCC Submittals\FCC_417 Ditto Nicole\XHIBIT11\New SAR.doc



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Approved EUS/CV/RF/P Mark Douglas	Checked MGD	2001-4-25	C U:\FCC Submittals\FCC_417 Ditto Nicole\XHIBIT11\New SAR.doc

Position of device against flat phantom using carry accessory SXK –109-4518/2

Prepared (also subject responsible if other) EUS/CV/RF/P Will Stewart	No. EUS/CV/R-01:0484/REP		
Approved EUS/CV/RF/P Mark Douglas	Checked MGD	2001-4-25	C U:\FCC Submittals\FCC_417 Ditto Nicole\XHIBIT11\New SAR.doc



Position of device against flat phantom using carry accessory SXK 107 6820/55.

Prepared (also subject responsible if other) EUS/CV/RF/P Will Stewart	No. EUS/CV/R-01:0484/REP
Approved EUS/CV/RF/P Mark Douglas	Checked MGD

Appendix 5: Probe calibration parameters

ET3DV6 SN:1538

DASY3 - Parameters of Probe: ET3DV6 SN:1538

Sensitivity in Free Space

Diode Compression

NormX	1.31 $\mu\text{V}/(\text{V}/\text{m})^2$	DCP X	100 mV
NormY	1.11 $\mu\text{V}/(\text{V}/\text{m})^2$	DCP Y	100 mV
NormZ	1.38 $\mu\text{V}/(\text{V}/\text{m})^2$	DCP Z	100 mV

Sensitivity in Tissue Simulating Liquid

Brain 450 MHz $t_1 = 48 \pm 5\%$ $\sigma = 0.50 \pm 10\% \text{ mho/m}$

ConvF X	6.62 extrapolated	Boundary effect:	
ConvF Y	6.62 \pm 7% (k=2)	Alpha	0.05
ConvF Z	6.62 interpolated	Depth	2.89

Brain 900 MHz $e_f = 42.5 \pm 5\%$ $\sigma = 0.86 \pm 10\% \text{ mho/m}$

ConvF X	6.30 \pm 7% (k=2)	Boundary effect:	
ConvF Y	6.30 interpolated	Alpha	0.42
ConvF Z	6.30 \pm 7% (k=2)	Depth	2.42

Brain 1500 MHz $\sigma_t = 41 \pm 5\%$ $\sigma = 1.32 \pm 10\% \text{ mho/m}^2$

ConvF X	5.88 interpolated	Boundary effect:	
ConvF Y	5.88 \pm 7% (k=2)	Alpha	0.92
ConvF Z	5.88	Depth	1.79

Brain 1800 MHz $\epsilon_r = 41 \pm 5\%$ $\sigma = 1.69 \pm 10\% \text{ mho/m}$

ConvF X	5.67 \pm 7% (k=2)	Boundary effect:	
ConvF Y	5.67	Alpha	1.16
ConvF Z	5.67	Depth	1.47

Sensor Offset

Probe Tip to Sensor Center	2.7	mm
Optical Surface Detection	1.6 ± 0.2	mm

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ET3DV5 SN:1337

DASY3 - Parameters of Probe: ET3DV5 SN:1337**Sensitivity in Free Space**

NormX	2.29 $\mu\text{V}/(\text{V}/\text{m})^2$
NormY	2.05 $\mu\text{V}/(\text{V}/\text{m})^2$
NormZ	2.10 $\mu\text{V}/(\text{V}/\text{m})^2$

Diode Compression

DCP X	99 mV
DCP Y	99 mV
DCP Z	99 mV

Sensitivity in Tissue Simulating Liquid

Brain	450 MHz	$\epsilon_r = 48 \pm 5\%$	$\sigma = 0.50 \pm 10\%$ mho/m
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ConvF X	5.87 extrapolated	Boundary effect:
ConvF Y	5.87 extrapolated	Alpha 0.75
ConvF Z	5.87 extrapolated	Depth 1.45

Brain	900 MHz	$\epsilon_r = 42.5 \pm 5\%$	$\sigma = 0.86 \pm 10\%$ mho/m
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ConvF X	5.56 $\pm 7\%$ (k=2)	Boundary effect:
ConvF Y	5.56 $\pm 7\%$ (k=2)	Alpha 0.74
ConvF Z	5.56 $\pm 7\%$ (k=2)	Depth 1.63

Brain	1500 MHz	$\epsilon_r = 41 \pm 5\%$	$\sigma = 1.32 \pm 10\%$ mho/m
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ConvF X	5.14 interpolated	Boundary effect:
ConvF Y	5.14 interpolated	Alpha 0.71
ConvF Z	5.14 interpolated	Depth 1.86

Brain	1800 MHz	$\epsilon_r = 41 \pm 5\%$	$\sigma = 1.69 \pm 10\%$ mho/m
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ConvF X	4.93 $\pm 7\%$ (k=2)	Boundary effect:
ConvF Y	4.93 $\pm 7\%$ (k=2)	Alpha 0.70
ConvF Z	4.93 $\pm 7\%$ (k=2)	Depth 1.98

Sensor Offset

Probe Tip to Sensor Center	2.7	mm
Optical Surface Detection	2.0 \pm 0.2	mm

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ET3DV5 SN:1337

DASY3 - Parameters of Probe: ET3DV5 SN:1337

Sensitivity in Free Space

NormX	2.29 $\mu\text{V}/(\text{V}/\text{m})^2$
NormY	2.05 $\mu\text{V}/(\text{V}/\text{m})^2$
NormZ	2.10 $\mu\text{V}/(\text{V}/\text{m})^2$

Diode Compression

DCP X	99 mV
DCP Y	99 mV
DCP Z	99 mV

Sensitivity in Tissue Simulating Liquid

900 MHz $\epsilon_r = 41.3 \pm 5\%$ $\sigma = 0.94 \pm 10\% \text{ mho}/\text{m}$

ConvF X	5.53 $\pm 7\%$ (k=2)	Boundary effect:
ConvF Y	5.53 $\pm 7\%$ (k=2)	Alpha 0.25
ConvF Z	5.53 $\pm 7\%$ (k=2)	Depth 3.94