



Sony Ericsson

REPORT

34(71)

|                                                                             |               |                                                                  |
|-----------------------------------------------------------------------------|---------------|------------------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/Q-02:0112/REP                                      |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | A<br>U:\FCC Submittals\Fcc_CA1102 (T606)\XHIBIT11\SAR report.doc |

## T606

SAM 1031(R) Phantom; Left Hand Section; Position: (107°,61°); Frequency: 1910 MHz

Probe: ET3DV6 - SN1587; ConvF(5.20,5.20,5.20); Crest factor: 1.0; Head 1900 MHz:  $\sigma = 1.42$  mho/m  $\epsilon_r = 39.1$   $\rho = 1.00$  g/cm<sup>3</sup>

Cube 5x5x7: SAR (1g): 1.45 mW/g, SAR (10g): 0.819 mW/g, (Worst-case extrapolation)

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

Powerdrift: 0.01 dB

SN:UA2020P6B0

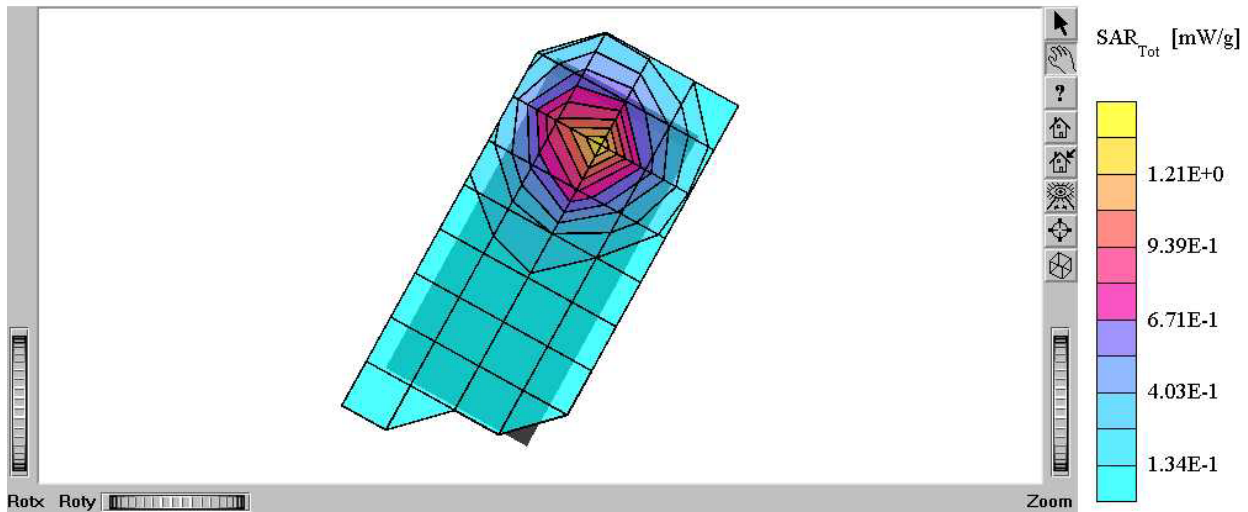
Battery:BKB 193 167 (BST-25)

Humidity:31.0

Ambient Temp:23.1

Simulant Temp:23.2

File name: 21Nov02\_T606\_CDMA1900\_P6B0\_CH1175\_LT01, Date: 11/21/02



**Distribution of maximum SAR in 1900 CDMA band. Measured against the left hand side of the head in the “tilt” position.**



|                                                                             |               |                             |                                                             |
|-----------------------------------------------------------------------------|---------------|-----------------------------|-------------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/Q-02:0112/REP |                                                             |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | A                           | U:\FCC Submittals\Fcc_CA1102 (T606)\XHIBIT11\SAR report.doc |

## T606

SAM 1031(R) Phantom; Left Hand Section; Position: (92°, 61°); Frequency: 1880 MHz

Probe: ET3DV6 - SN1587; ConvF(5.20,5.20,5.20); Crest factor: 1.0; Head 1900 MHz:  $\sigma = 1.42$  mho/m  $\epsilon_r = 39.1$   $\rho = 1.00$  g/cm<sup>3</sup>

Cube 5x5x7: SAR (1g): 1.22 mW/g, SAR (10g): 0.726 mW/g, (Worst-case extrapolation)

Cube 5x5x7: Dx = 8.0, Dy = 8.0, Dz = 5.0

SN:UA2020P6B0

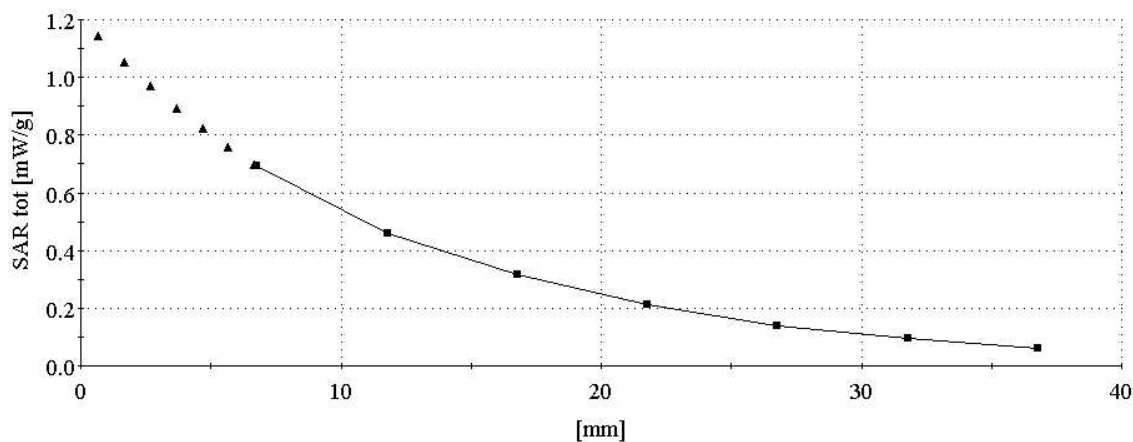
Battery:BKB 193 167 (BST-25)

Humidity:31.7

Ambient Temp:24.7

Simulant Temp:22.8

File name: 21Nov02\_T606\_CDMA1900\_P6B0\_CH0600\_LC01, Date: 11/21/02



**SAR Extrapolation to the phantom inner surface. Measured for Maximum SAR in 1900 CDMA band, while phone is against the left hand side of the head in the “tilt” position.**



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REPORT

36(71)

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|-----------------------------------------------------------------------------|---------------|-----------------------------|----------------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/Q-02:0112/REP |                                                                |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | A                           | U:\FCC Submittals\Fcc_CA1102<br>(T606)\XHIBIT11\SAR report.doc |

### Appendix 3

#### SAR distribution plots for Body Worn Configuration



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## REPORT

37(71)

|                                                                             |               |                             |                                                                |
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| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/Q-02:0112/REP |                                                                |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | A                           | U:\FCC Submittals\Fcc_CA1102<br>(T606)\XHIBIT11\SAR report.doc |

## T606

SAM 1023 (L) Phantom; Flat Section; Position: (90°, 270°); Frequency: 824 MHz

Probe: ET3DV6 - SN1538; ConvF(6.20,6.20,6.20); Crest factor: 1.0; Body 835 MHz:  $\sigma = 0.99$  mho/m  $\epsilon_r = 55.5$   $\rho = 1.00$  g/cm<sup>3</sup>

Cube 5x5x7: SAR (1g): 1.04 mW/g, SAR (10g): 0.709 mW/g, (Worst-case extrapolation)

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

Powerdrift: 0.01 dB

SN:UA2020P5RP

Battery: BKB 193 167 (BST-25)

Hands free: RLF 501 25/05 (HPE-14)

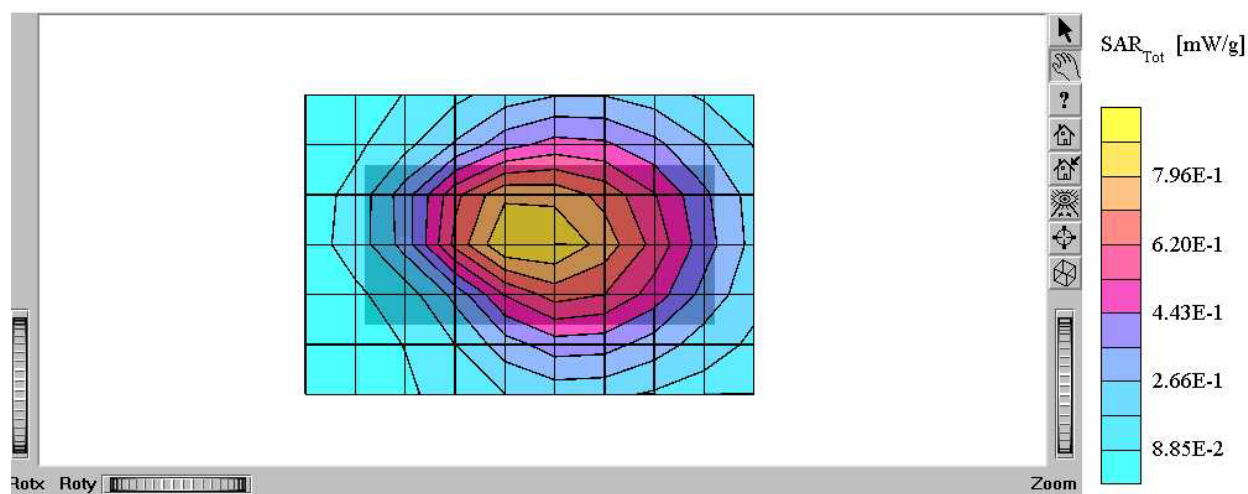
Holster: KRY 105 186

Humidity: 28.1

Ambient Temp: 23.3

Simulant Temp: 22.3

File name: 26Nov02\_T606\_AMPS\_P6CF\_CH991\_BB02, Date: 11/26/02



**Distribution of maximum SAR in 835 AMPS band. Measured with back of device facing the body using carry accessory KRY-105-186 and hands free accessory RLF 501 25/05.**



|                                                                             |               |                             |                                                                |
|-----------------------------------------------------------------------------|---------------|-----------------------------|----------------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/Q-02:0112/REP |                                                                |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | A                           | U:\FCC Submittals\Fcc_CA1102<br>(T606)\XHIBIT11\SAR report.doc |

## T606

SAM 1023 (L) Phantom; Flat Section; Position: (90°,270°); Frequency: 824 MHz

Probe: ET3DV6 - SN1538; ConvF(6.20,6.20,6.20); Crest factor: 1.0; Body 835 MHz:  $\sigma = 0.99 \text{ mho/m}$   $\epsilon_r = 55.5$   $\rho = 1.00 \text{ g/cm}^3$ 

Cube 5x5x7: SAR (1g): 1.04 mW/g, SAR (10g): 0.709 mW/g, (Worst-case extrapolation)

Cube 5x5x7: Dx = 8.0, Dy = 8.0, Dz = 5.0

SN:UA2020P5RP

Battery: BKB 193 167 (BST-25)

Hands free: RLF 501 25/05 (HPE-14)

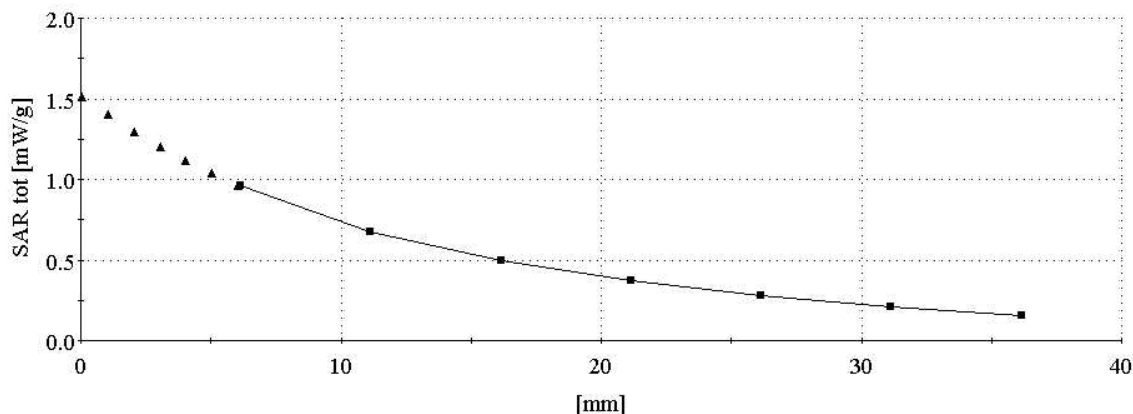
Holster: KRY 105 186

Humidity:28.1

Ambient Temp:23.3

Simulant Temp:22.3

File name: 26Nov02\_T606\_AMPS\_P6CF\_CH991\_BB02, Date: 11/26/02



**SAR Extrapolation to the phantom inner surface. Measured for maximum SAR in 835 AMPS band, while phone is against the body using carry accessory carry accessory KRY-105-186 and hands free accessory RLF 501 25/05.**



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REPORT

39(71)

|                                                                             |               |                             |                                                                |
|-----------------------------------------------------------------------------|---------------|-----------------------------|----------------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/Q-02:0112/REP |                                                                |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | A                           | U:\FCC Submittals\Fcc_CA1102<br>(T606)\XHIBIT11\SAR report.doc |

## T606

SAM 1023 (L) Phantom; Flat Section; Position: (90°, 270°); Frequency: 824 MHz

Probe: ET3DV6 - SN1538; ConvF(6.20,6.20,6.20); Crest factor: 1.0; Body 835 MHz:  $\sigma = 0.99 \text{ mho/m}$ ,  $\epsilon_r = 55.5$ ,  $\rho = 1.00 \text{ g/cm}^3$ 

Cube 5x5x7: SAR (1g): 1.18 mW/g, SAR (10g): 0.842 mW/g, (Worst-case extrapolation)

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

Powerdrift: 0.04 dB

SN:UA2020P6CF

Battery: BKB 193 167 (BST-25)

Hands free: RLF 501 25/05 (HPE-14)

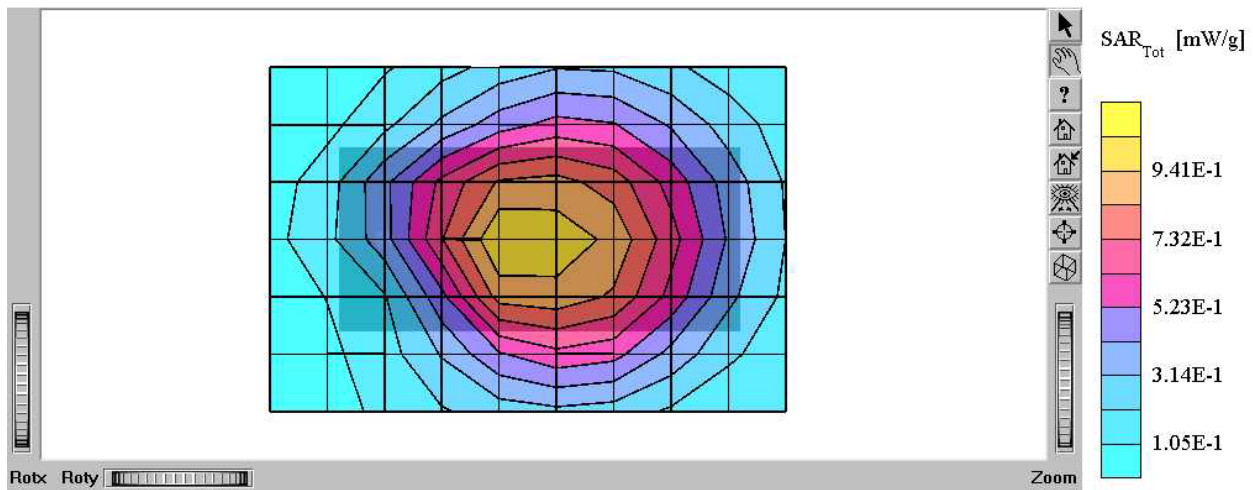
Holster: ICE-25

Humidity: 28.1

Ambient Temp: 22.7

Simulant Temp: 22.3

File name: 26Nov02\_T606\_AMPS\_P6CF\_CH991\_BB01, Date: 11/26/02



**Distribution of maximum SAR in 835 AMPS band. Measured with back of device facing the body using carry accessory ICE-25 and hands free accessory RLF 501 25/05.**



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REPORT

40(71)

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|-----------------------------------------------------------------------------|---------------|-----------------------------|----------------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/Q-02:0112/REP |                                                                |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | A                           | U:\FCC Submittals\Fcc_CA1102<br>(T606)\XHIBIT11\SAR report.doc |

## T606

SAM 1023 (L) Phantom; Flat Section; Position: (90°,270°); Frequency: 824 MHz

Probe: ET3DV6 - SN1538; ConvF(6.20,6.20,6.20); Crest factor: 1.0; Body 835 MHz:  $\sigma = 0.99$  mho/m  $\epsilon_r = 55.5$   $\rho = 1.00$  g/cm<sup>3</sup>

Cube 5x5x7: SAR (1g): 1.18 mW/g, SAR (10g): 0.842 mW/g, (Worst-case extrapolation)

Cube 5x5x7: Dx = 8.0, Dy = 8.0, Dz = 5.0

SN:UA2020P6CF

Battery: BKB 193 167 (BST-25)

Hands free: RLF 501 25/05 (HPE-14)

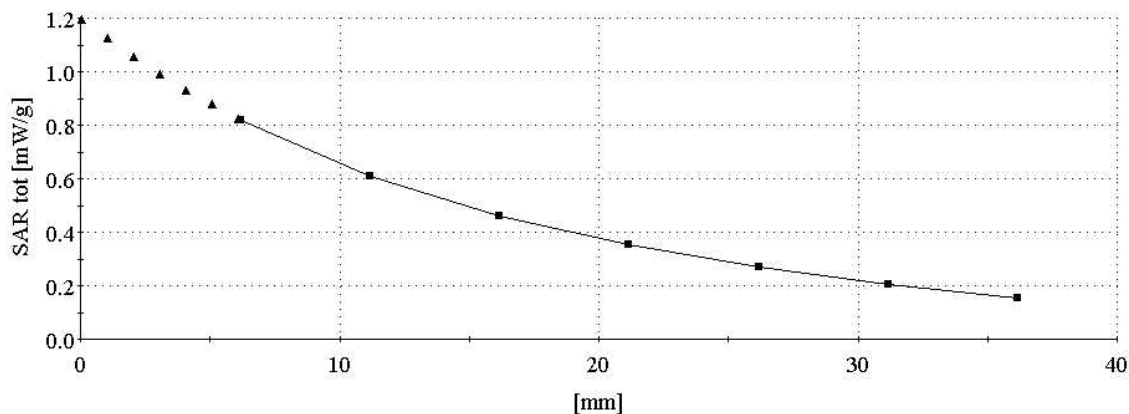
Holster: ICE-25

Humidity:28.1

Ambient Temp:22.7

Simulant Temp:22.3

File name: 26Nov02\_T606\_AMPS\_P6CF\_CH991\_BB01, Date: 11/26/02



**SAR Extrapolation to the phantom inner surface. Measured for maximum SAR in 835 AMPS band, while phone is against the body using carry accessory ICE-25 and hands free accessory RLF 501 25/05.**



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## REPORT

41(71)

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|-----------------------------------------------------------------------------|---------------|-----------------------------|----------------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/Q-02:0112/REP |                                                                |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | A                           | U:\FCC Submittals\Fcc_CA1102<br>(T606)\XHIBIT11\SAR report.doc |

## T606

SAM 1023 (L) Phantom; Flat Section; Position: (90°,270°); Frequency: 824 MHz

Probe: ET3DV6 - SN1538; ConvF(6.20,6.20,6.20); Crest factor: 1.0; Body 835 MHz:  $\sigma = 0.99$  mho/m  $\epsilon_r = 55.5$   $\rho = 1.00$  g/cm<sup>3</sup>

Cube 5x5x7: SAR (1g): 1.31 mW/g, SAR (10g): 0.943 mW/g, (Worst-case extrapolation)

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

Powerdrift: 0.04 dB

SN:UA2020P6CF

Battery: BKB 193 167 (BST-25)

Hands free: RLF 501 25/05 (HPE-14)

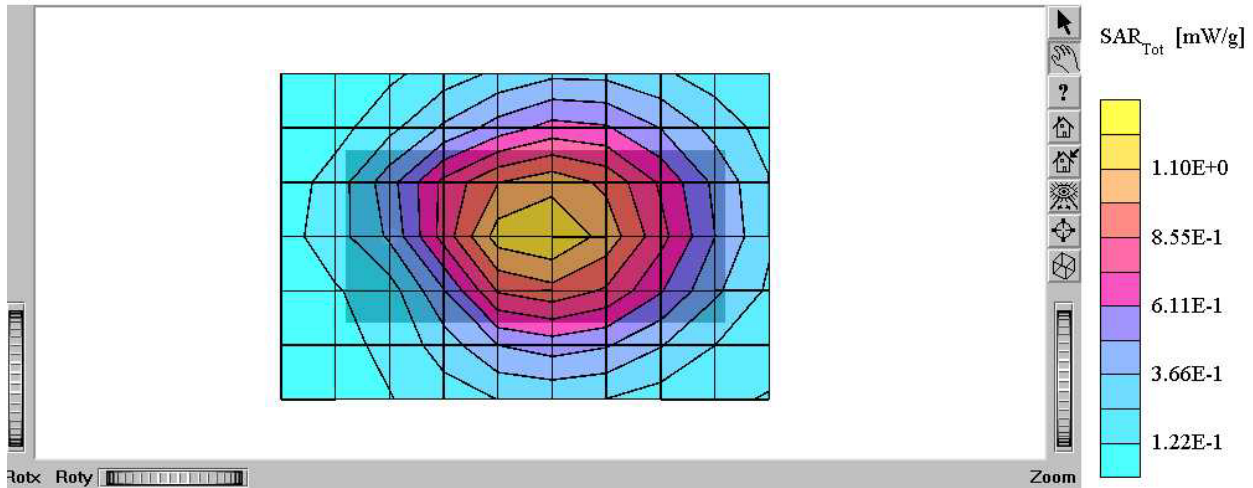
Holster: 20mm Spacer

Humidity:28.5

Ambient Temp:23.3

Simulant Temp:21.9

File name: 26Nov02\_T606\_AMPS\_P6CF\_CH991\_BB03, Date: 11/26/02



**Distribution of maximum SAR in 835 AMPS band. Measured with back of device facing the body using a 20mm spacer and hands free accessory RLF 501 25/05.**



|                                                                             |               |                             |                                                                |
|-----------------------------------------------------------------------------|---------------|-----------------------------|----------------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/Q-02:0112/REP |                                                                |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | A                           | U:\FCC Submittals\Fcc_CA1102<br>(T606)\XHIBIT11\SAR report.doc |

## T606

SAM 1023 (L) Phantom; Flat Section; Position: (90°,270°); Frequency: 824 MHz

Probe: ET3DV6 - SN1538; ConvF(6.20,6.20,6.20); Crest factor: 1.0; Body 835 MHz:  $\sigma = 0.99 \text{ mho/m}$   $\epsilon_r = 55.5$   $\rho = 1.00 \text{ g/cm}^3$ 

Cube 5x5x7: SAR (1g): 1.31 mW/g, SAR (10g): 0.943 mW/g, (Worst-case extrapolation)

Cube 5x5x7: Dx = 8.0, Dy = 8.0, Dz = 5.0

SN:UA2020P6CF

Battery: BKB 193 167 (BST-25)

Hands free: RLF 501 25/05 (HPE-14)

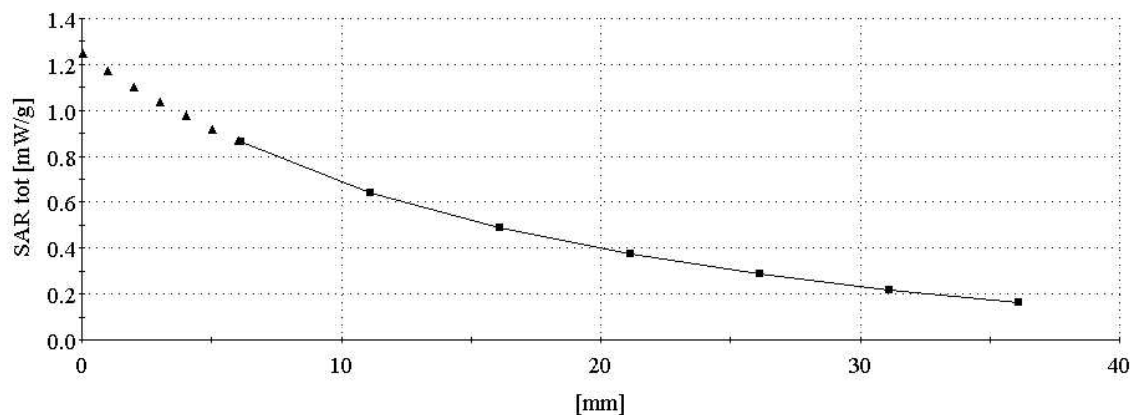
Holster: 20mm Spacer

Humidity:28.5

Ambient Temp:23.3

Simulant Temp:21.9

File name: 26Nov02\_T606\_AMPS\_P6CF\_CH991\_BB03, Date: 11/26/02



**SAR Extrapolation to the phantom inner surface. Measured for maximum SAR in 835 AMPS band, while phone is against the body using a 20mm spacer and hands free accessory RLF 501 25/05.**



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REPORT

43(71)

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|-----------------------------------------------------------------------------|---------------|-----------------------------|-------------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/Q-02:0112/REP |                                                             |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | A                           | U:\FCC Submittals\Fcc_CA1102 (T606)\XHIBIT11\SAR report.doc |

## T606

SAM 1020(L) Phantom; Flat Section; Position: (90°,270°); Frequency: 1910 MHz

Probe: ET3DV6 - SN1587; ConvF(4.90,4.90,4.90); Crest factor: 1.0; Body 1900 MHz:  $\sigma = 1.58 \text{ mho/m}$ ,  $\epsilon_r = 52.0$ ,  $\rho = 1.00 \text{ g/cm}^3$ 

Cube 5x5x7: SAR (1g): 1.01 mW/g, SAR (10g): 0.573 mW/g, (Worst-case extrapolation)

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

Powerdrift: 0.15 dB

SN:UA2020P6BO

Battery: BKB 193 167 (BST-25)

Hands free: RLF 501 25/05 (HPE-14)

Holster:KRY-105-186

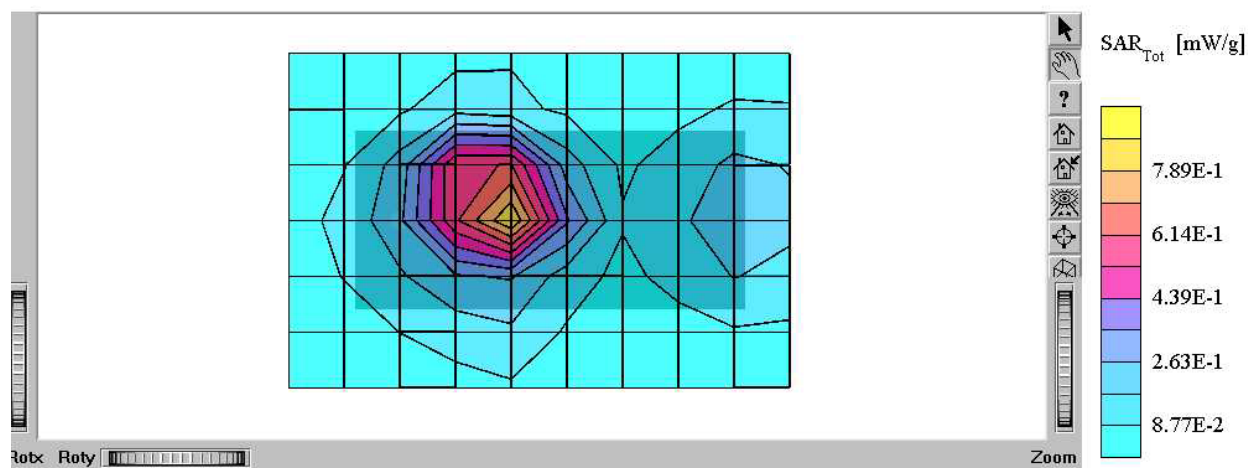
Humidity:27.5

Ambient Temp: 22.7

Simulant Temp: 21.9

Back of the phone facing the body

File name: 27Nov02\_T606\_CDMAPCS\_P6BO\_CH600\_BB02, Date: 11/27/02



**Distribution of maximum SAR in 1900 CDMA band. Measured with back of device facing the body using carry accessory KRY 105 186 and hands free accessory RLF 501 25/05.**



|                                                                             |               |                             |                                                                |
|-----------------------------------------------------------------------------|---------------|-----------------------------|----------------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/Q-02:0112/REP |                                                                |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | A                           | U:\FCC Submittals\Fcc_CA1102<br>(T606)\XHIBIT11\SAR report.doc |

## T606

SAM 1020(L) Phantom; Flat Section; Position: (90°, 270°); Frequency: 1910 MHz

Probe: ET3DV6 - SN1587; ConvF(4.90,4.90,4.90); Crest factor: 1.0; Body 1900 MHz:  $\sigma = 1.58 \text{ mho/m}$   $\epsilon_r = 52.0$   $\rho = 1.00 \text{ g/cm}^3$ 

Cube 5x5x7: SAR (1g): 1.01 mW/g, SAR (10g): 0.573 mW/g, (Worst-case extrapolation)

Cube 5x5x7: Dx = 8.0, Dy = 8.0, Dz = 5.0

SN:UA2020P6BO

Battery: BKB 193 167 (BST-25)

Hands free: RLF 501 25/05 (HPE-14)

Holster: KRY-105-186

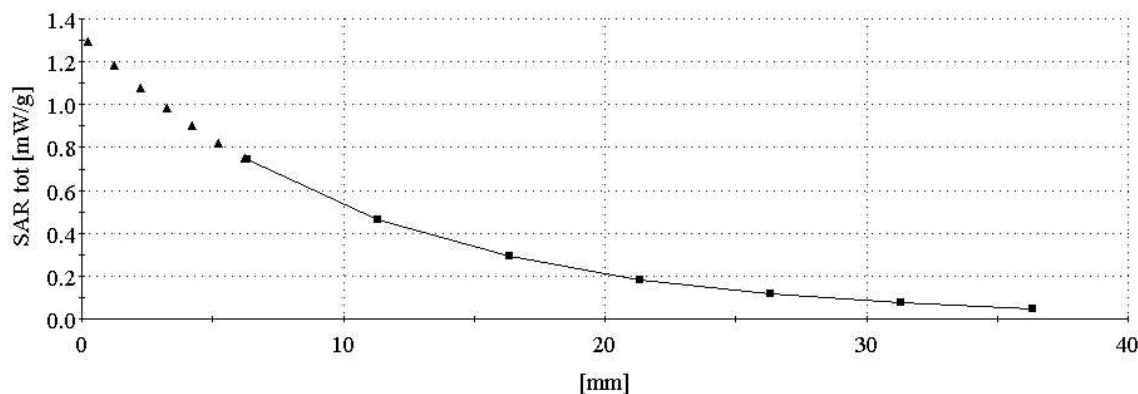
Humidity: 27.5

Ambient Temp: 22.7

Simulant Temp: 21.9

Back of the phone facing the body

File name: 27Nov02\_T606\_CDMAPCS\_P6BO\_CH600\_BB02, Date: 11/27/02



**SAR Extrapolation to the phantom inner surface. Measured for maximum SAR in 1900 CDMA band, while phone is against the body using carry accessory KRY-105-186 and hands free accessory RLF 501 25/05.**



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## REPORT

45(71)

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|-----------------------------------------------------------------------------|---------------|-----------------------------|-------------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/Q-02:0112/REP |                                                             |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | A                           | U:\FCC Submittals\Fcc_CA1102 (T606)\XHIBIT11\SAR report.doc |

## T606

SAM 1020(L) Phantom; Flat Section; Position: (90°, 270°); Frequency: 1910 MHz

Probe: ET3DV6 - SN1587; ConvF(4.90,4.90,4.90); Crest factor: 1.0; Body 1900 MHz:  $\sigma = 1.58 \text{ mho/m}$ ,  $\epsilon_r = 52.0$ ,  $\rho = 1.00 \text{ g/cm}^3$ 

Cube 5x5x7: SAR (1g): 0.713 mW/g, SAR (10g): 0.410 mW/g, (Worst-case extrapolation)

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

Powerdrift: -0.04 dB

SN:UA2020P6BO

Battery: BKB 193 167 (BST-25)

Hands free: RLF 501 25/05 (HPE-14)

Holster: ICE-25

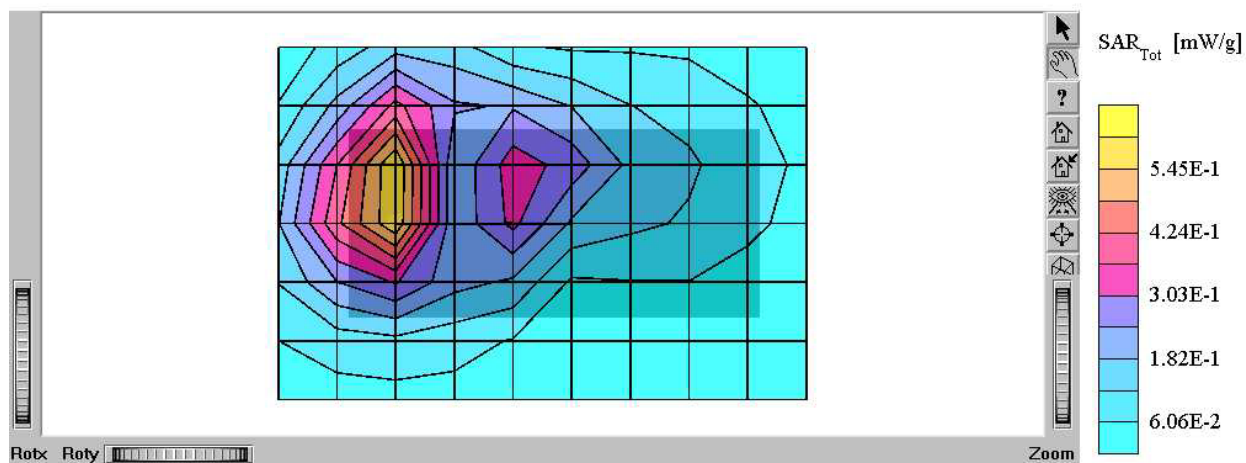
Humidity: 21.7

Ambient Temp: 22.6

Simulant Temp: 27.8

Back of the phone facing the body:

File name: 27Nov02\_T606\_CDMAPCS\_P6BO\_CH1175\_BB01, Date: 11/27/02



**Distribution of maximum SAR in 1900 CDMA band. Measured with back of device facing the body using carry ICE-25 and hands free accessory RLF 501 25/05.**



|                                                                             |               |                             |                                                                |
|-----------------------------------------------------------------------------|---------------|-----------------------------|----------------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/Q-02:0112/REP |                                                                |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | A                           | U:\FCC Submittals\Fcc_CA1102<br>(T606)\XHIBIT11\SAR report.doc |

## T606

SAM 1020(L) Phantom; Flat Section; Position: (90°,270°); Frequency: 1910 MHz

Probe: ET3DV6 - SN1587; ConvF(4.90,4.90,4.90); Crest factor: 1.0; Body 1900 MHz:  $\sigma = 1.58 \text{ mho/m}$   $\epsilon_r = 52.0$   $\rho = 1.00 \text{ g/cm}^3$ 

Cube 5x5x7: SAR (1g): 0.713 mW/g, SAR (10g): 0.410 mW/g, (Worst-case extrapolation)

Cube 5x5x7: Dx = 8.0, Dy = 8.0, Dz = 5.0

SN:UA2020P6BO

Battery: BKB 193 167 (BST-25)

Hands free: RLF 501 25/05 (HPE-14)

Holster: ICE-25

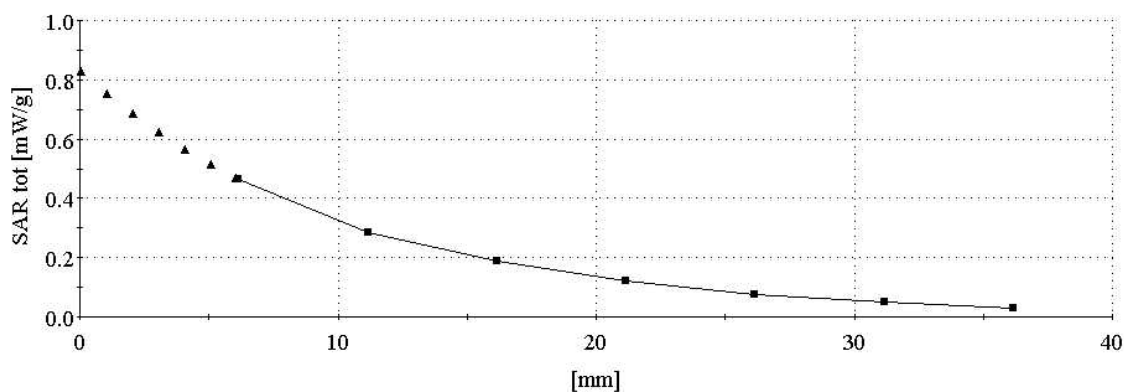
Humidity: 21.7

Ambient Temp: 22.6

Simulant Temp: 27.8

Back of the phone facing the body:

File name: 27Nov02\_T606\_CDMAPCS\_P6BO\_CH1175\_BB01, Date: 11/27/02



**SAR Extrapolation to the phantom inner surface. Measured for maximum SAR in 1900 CDMA band, while phone is against the body using carry accessory ICE-25 and hands free accessory RLF 501 25/05.**



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## REPORT

47(71)

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|-----------------------------------------------------------------------------|---------------|-----------------------------|----------------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/Q-02:0112/REP |                                                                |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | A                           | U:\FCC Submittals\Fcc_CA1102<br>(T606)\XHIBIT11\SAR report.doc |

## T606

SAM 1020(L) Phantom; Flat Section; Position: (90°,270°); Frequency: 1880 MHz

Probe: ET3DV6 - SN1587; ConvF(4.90,4.90,4.90); Crest factor: 1.0; Body 1900 MHz:  $\sigma = 1.56 \text{ mho/m}$ ,  $\epsilon_r = 51.7$ ,  $\rho = 1.00 \text{ g/cm}^3$ 

Cube 5x5x7: SAR (1g): 0.558 mW/g, SAR (10g): 0.325 mW/g, (Worst-case extrapolation)

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

Powerdrift: 0.07 dB

SN:UA2020P6B0

Battery: BKB 193 167 (BST-25)

Hands free: RLF 501 25/05 (HPE-14)

Holster: 20mm spacer

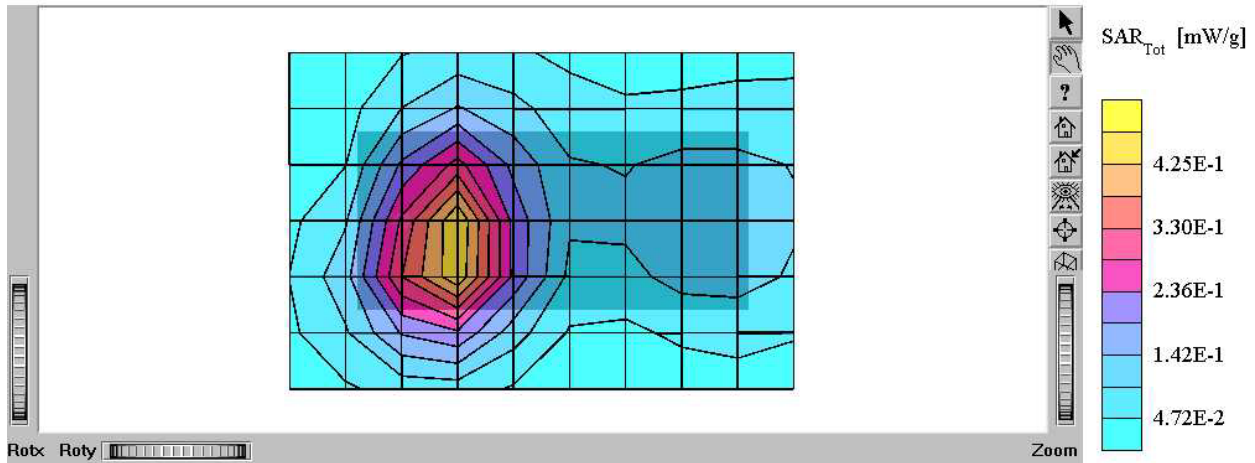
Humidity:20.5

Ambient Temp:24.2

Simulant Temp:20.5

Back of phone facing body

File name: 02Dec02\_T606\_CDMA1900\_P6B0\_CH0600\_BB01, Date: 12/02/02



**Distribution of maximum SAR in 1900 CDMA band. Measured with back of device facing the body using a 20 mm spacer as a carry accessory and hands free accessory RLF 501 25/05.**



|                                                                             |               |                             |                                                             |
|-----------------------------------------------------------------------------|---------------|-----------------------------|-------------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/Q-02:0112/REP |                                                             |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | A                           | U:\FCC Submittals\Fcc_CA1102 (T606)\XHIBIT11\SAR report.doc |

## T606

SAM 1020(L) Phantom; Flat Section; Position: (90°, 270°); Frequency: 1880 MHz

Probe: ET3DV6 - SN1587; ConvF(4.90,4.90,4.90); Crest factor: 1.0; Body 1900 MHz:  $\sigma = 1.56$  mho/m  $\epsilon_r = 51.7$   $\rho = 1.00$  g/cm<sup>3</sup>

Cube 5x5x7: SAR (1g): 0.558 mW/g, SAR (10g): 0.325 mW/g, (Worst-case extrapolation)

Cube 5x5x7: Dx = 8.0, Dy = 8.0, Dz = 5.0

SN:UA2020P6B0

Battery: BKB 193 167 (BST-25)

Hands free: RLF 501 25/05 (HPE-14)

Holster: 20mm spacer

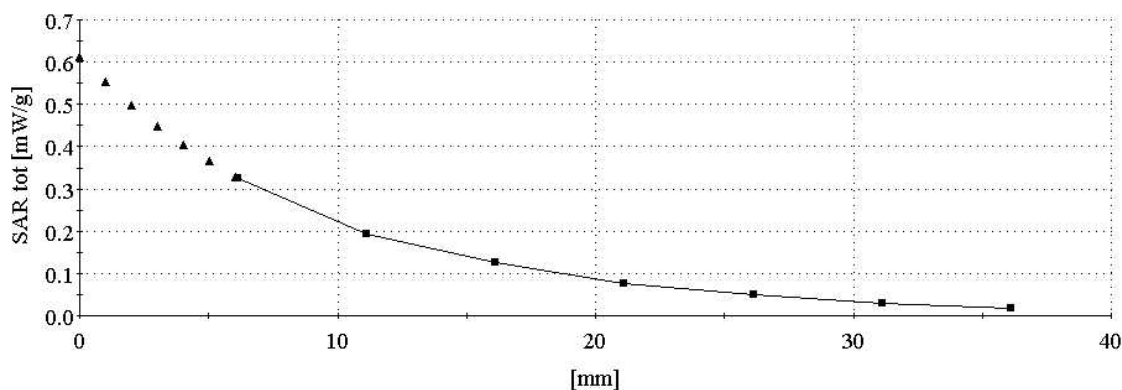
Humidity:20.5

Ambient Temp:24.2

Simulant Temp:20.5

Back of phone facing body

File name: 02Dec02\_T606\_CDMA1900\_P6B0\_CH0600\_BB01, Date: 12/02/02



**SAR Extrapolation to the phantom inner surface. Measured for maximum SAR in 1900 CDMA band, while phone is against the body using a 20 mm spacer as a carry accessory and hands free accessory RLF 501 25/05.**

**Sony Ericsson**

REPORT

49(71)

|                                                                             |               |                             |                                                                |
|-----------------------------------------------------------------------------|---------------|-----------------------------|----------------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/Q-02:0112/REP |                                                                |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | A                           | U:\FCC Submittals\Fcc_CA1102<br>(T606)\XHIBIT11\SAR report.doc |

## Appendix 4

### Probe Calibration Certificate



|                                                                             |               |                             |                                                             |
|-----------------------------------------------------------------------------|---------------|-----------------------------|-------------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/Q-02:0112/REP |                                                             |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | A                           | U:\FCC Submittals\Fcc_CA1102 (T606)\XHIBIT11\SAR report.doc |

ET3DV6 SN:1587

June 20, 2002

**DASY3 - Parameters of Probe: ET3DV6 SN:1587****Sensitivity in Free Space**

|       |                                                 |
|-------|-------------------------------------------------|
| NormX | <b>2.02</b> $\mu\text{V}/(\text{V}/\text{m})^2$ |
| NormY | <b>1.89</b> $\mu\text{V}/(\text{V}/\text{m})^2$ |
| NormZ | <b>1.76</b> $\mu\text{V}/(\text{V}/\text{m})^2$ |

**Diode Compression**

|       |           |
|-------|-----------|
| DCP X | <b>97</b> |
| DCP Y | <b>97</b> |
| DCP Z | <b>97</b> |

**Sensitivity in Tissue Simulating Liquid**

|      |          |                              |                                       |
|------|----------|------------------------------|---------------------------------------|
| Head | 835 MHz  | $\epsilon_r = 41.5 \pm 5\%$  | $\sigma = 0.90 \pm 5\% \text{ mho/m}$ |
| Head | 900 MHz  | $\epsilon_r = 41.5 \pm 5\%$  | $\sigma = 0.97 \pm 5\% \text{ mho/m}$ |
|      | ConvF X  | <b>6.8</b> $\pm 9.5\%$ (k=2) | Boundary effect:                      |
|      | ConvF Y  | <b>6.8</b> $\pm 9.5\%$ (k=2) | Alpha <b>0.40</b>                     |
|      | ConvF Z  | <b>6.8</b> $\pm 9.5\%$ (k=2) | Depth <b>2.18</b>                     |
| Head | 1900 MHz | $\epsilon_r = 40.0 \pm 5\%$  | $\sigma = 1.40 \pm 5\% \text{ mho/m}$ |
| Head | 1800 MHz | $\epsilon_r = 40.0 \pm 5\%$  | $\sigma = 1.40 \pm 5\% \text{ mho/m}$ |
|      | ConvF X  | <b>5.2</b> $\pm 9.5\%$ (k=2) | Boundary effect:                      |
|      | ConvF Y  | <b>5.2</b> $\pm 9.5\%$ (k=2) | Alpha <b>0.49</b>                     |
|      | ConvF Z  | <b>5.2</b> $\pm 9.5\%$ (k=2) | Depth <b>2.40</b>                     |

**Boundary Effect**

|      |                                                    |                                   |      |
|------|----------------------------------------------------|-----------------------------------|------|
| Head | 835 MHz                                            | Typical SAR gradient: 5 % per mm  |      |
|      | Probe Tip to Boundary                              | 1 mm                              | 2 mm |
|      | SAR <sub>be</sub> [%] Without Correction Algorithm | 8.1                               | 4.4  |
|      | SAR <sub>be</sub> [%] With Correction Algorithm    | 0.2                               | 0.4  |
| Head | 1900 MHz                                           | Typical SAR gradient: 10 % per mm |      |
|      | Probe Tip to Boundary                              | 1 mm                              | 2 mm |
|      | SAR <sub>be</sub> [%] Without Correction Algorithm | 11.4                              | 7.8  |
|      | SAR <sub>be</sub> [%] With Correction Algorithm    | 0.3                               | 0.4  |

**Sensor Offset**

|                            |                                 |    |
|----------------------------|---------------------------------|----|
| Probe Tip to Sensor Center | <b>2.7</b>                      | mm |
| Optical Surface Detection  | <b>1.6 <math>\pm</math> 0.2</b> | mm |

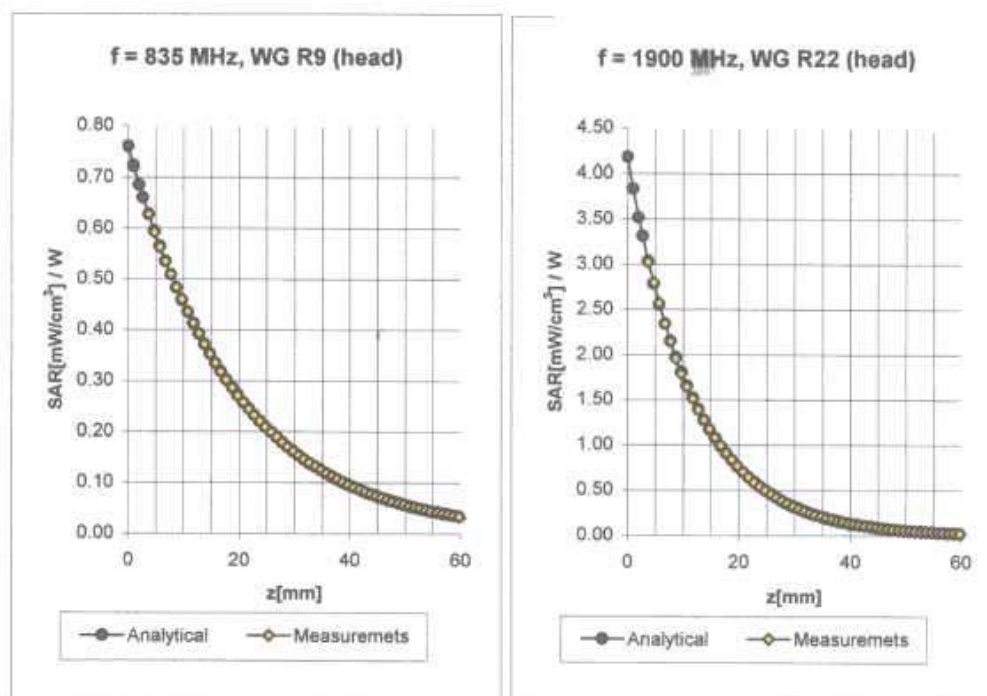


|                                                                             |               |                             |                                                                |
|-----------------------------------------------------------------------------|---------------|-----------------------------|----------------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/Q-02:0112/REP |                                                                |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | A                           | U:\FCC Submittals\Fcc_CA1102<br>(T606)\XHIBIT11\SAR report.doc |

ET3DV6 SN:1587

June 20, 2002

## Conversion Factor Assessment



|      |          |                              |                               |
|------|----------|------------------------------|-------------------------------|
| Head | 835 MHz  | $\epsilon_r = 41.5 \pm 5\%$  | $\sigma = 0.90 \pm 5\%$ mho/m |
| Head | 900 MHz  | $\epsilon_r = 41.5 \pm 5\%$  | $\sigma = 0.97 \pm 5\%$ mho/m |
|      | ConvF X  | <b>6.8</b> $\pm 9.5\%$ (k=2) | Boundary effect:              |
|      | ConvF Y  | <b>6.8</b> $\pm 9.5\%$ (k=2) | Alpha <b>0.40</b>             |
|      | ConvF Z  | <b>6.8</b> $\pm 9.5\%$ (k=2) | Depth <b>2.18</b>             |
| Head | 1900 MHz | $\epsilon_r = 40.0 \pm 5\%$  | $\sigma = 1.40 \pm 5\%$ mho/m |
| Head | 1800 MHz | $\epsilon_r = 40.0 \pm 5\%$  | $\sigma = 1.40 \pm 5\%$ mho/m |
|      | ConvF X  | <b>5.2</b> $\pm 9.5\%$ (k=2) | Boundary effect:              |
|      | ConvF Y  | <b>5.2</b> $\pm 9.5\%$ (k=2) | Alpha <b>0.49</b>             |
|      | ConvF Z  | <b>5.2</b> $\pm 9.5\%$ (k=2) | Depth <b>2.40</b>             |

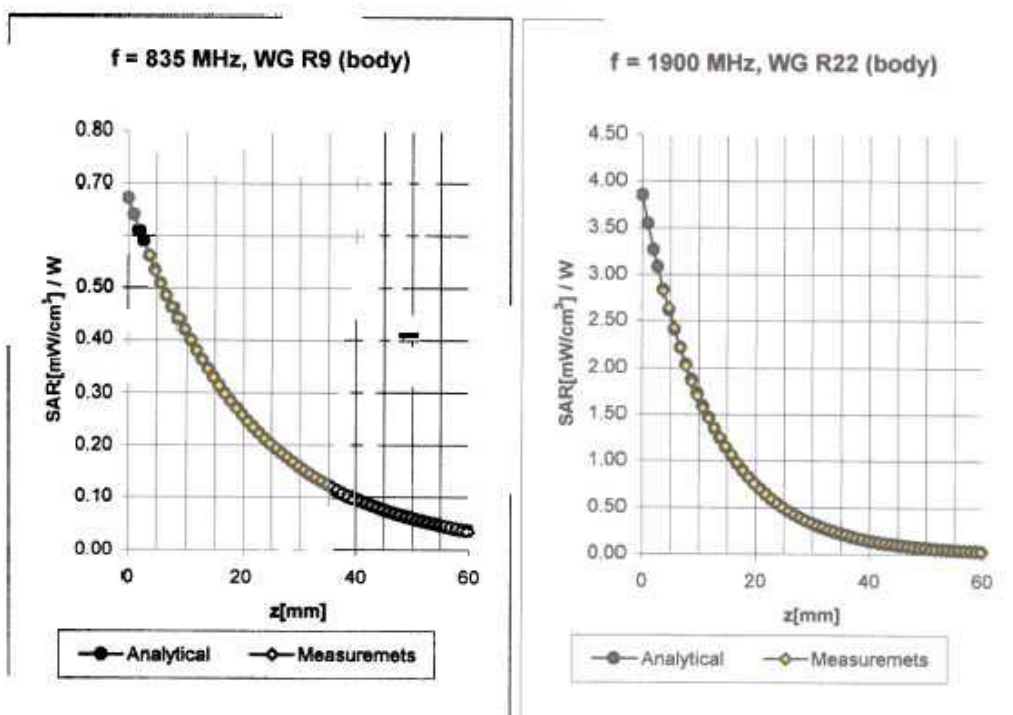


|                                                                             |               |                             |                                                             |
|-----------------------------------------------------------------------------|---------------|-----------------------------|-------------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/Q-02:0112/REP |                                                             |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | A                           | U:\FCC Submittals\Fcc_CA1102 (T606)\XHIBIT11\SAR report.doc |

ET3DV6 SN:1587

June 20, 2002

## Conversion Factor Assessment



|         |                       |                             |                                       |
|---------|-----------------------|-----------------------------|---------------------------------------|
| Body    | 835 MHz               | $\epsilon_r = 55.2 \pm 5\%$ | $\sigma = 0.97 \pm 5\% \text{ mho/m}$ |
| Body    | 900 MHz               | $\epsilon_r = 55.0 \pm 5\%$ | $\sigma = 1.05 \pm 5\% \text{ mho/m}$ |
| ConvF X | 6.5 $\pm 9.5\%$ (k=2) | Boundary effect:            |                                       |
| ConvF Y | 6.5 $\pm 9.5\%$ (k=2) | Alpha                       |                                       |
| ConvF Z | 6.5 $\pm 9.5\%$ (k=2) | Depth <b>2.38</b>           |                                       |
| Body    | 1900 MHz              | $\epsilon_r = 53.3 \pm 5\%$ | $\sigma = 1.52 \pm 5\% \text{ mho/m}$ |
| Body    | 1800 MHz              | $\epsilon_r = 53.3 \pm 5\%$ | $\sigma = 1.52 \pm 5\% \text{ mho/m}$ |
| ConvF X | 4.9 $\pm 9.5\%$ (k=2) | Boundary effect:            |                                       |
| ConvF Y | 4.9 $\pm 9.5\%$ (k=2) | Alpha                       |                                       |
| ConvF Z | 4.9 $\pm 9.5\%$ (k=2) | Depth <b>2.09</b>           |                                       |

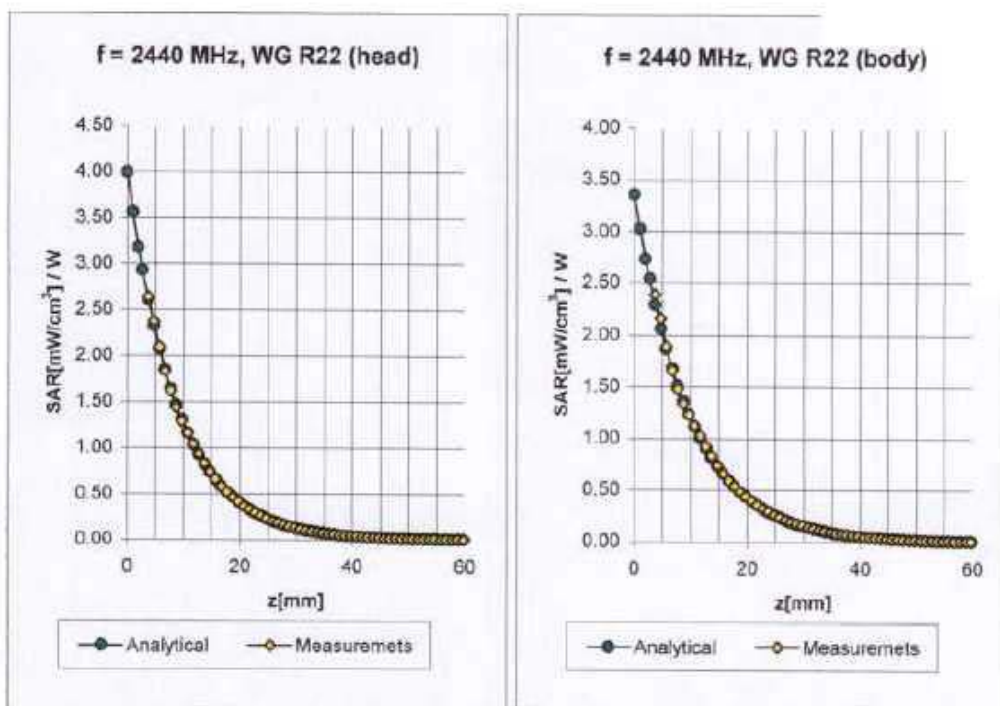


|                                                                             |               |                             |                                                             |
|-----------------------------------------------------------------------------|---------------|-----------------------------|-------------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/Q-02:0112/REP |                                                             |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | A                           | U:\FCC Submittals\Fcc_CA1102 (T606)\XHIBIT11\SAR report.doc |

ET3DV6 SN:1587

June 20, 2002

## Conversion Factor Assessment



|             |                              |                             |                                        |
|-------------|------------------------------|-----------------------------|----------------------------------------|
| <b>Head</b> | <b>2440 MHz</b>              | $\epsilon_r = 39.2 \pm 5\%$ | $\sigma = 1.80 \pm 10\% \text{ mho/m}$ |
| ConvF X     | <b>5.0</b> $\pm 8.9\%$ (k=2) |                             | Boundary effect                        |
| ConvF Y     | <b>5.0</b> $\pm 8.9\%$ (k=2) |                             | Alpha                                  |
| ConvF Z     | <b>5.0</b> $\pm 8.9\%$ (k=2) |                             | Depth                                  |

|             |                              |                             |                                        |
|-------------|------------------------------|-----------------------------|----------------------------------------|
| <b>Body</b> | <b>2440 MHz</b>              | $\epsilon_r = 52.7 \pm 5\%$ | $\sigma = 1.95 \pm 10\% \text{ mho/m}$ |
| ConvF X     | <b>4.3</b> $\pm 8.9\%$ (k=2) |                             | Boundary effect                        |
| ConvF Y     | <b>4.3</b> $\pm 8.9\%$ (k=2) |                             | Alpha                                  |
| ConvF Z     | <b>4.3</b> $\pm 8.9\%$ (k=2) |                             | Depth                                  |



|                                                                             |               |                             |                                                             |
|-----------------------------------------------------------------------------|---------------|-----------------------------|-------------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/Q-02:0112/REP |                                                             |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | A                           | U:\FCC Submittals\Fcc_CA1102 (T606)\XHIBIT11\SAR report.doc |

ET3DV6 SN:1538

June 20, 2002

**DASY3 - Parameters of Probe: ET3DV6 SN:1538****Sensitivity in Free Space****Diode Compression**

|       |                                                 |       |           |    |
|-------|-------------------------------------------------|-------|-----------|----|
| NormX | <b>1.33</b> $\mu\text{V}/(\text{V}/\text{m})^2$ | DCP X | <b>98</b> | mV |
| NormY | <b>1.16</b> $\mu\text{V}/(\text{V}/\text{m})^2$ | DCP Y | <b>98</b> | mV |
| NormZ | <b>1.39</b> $\mu\text{V}/(\text{V}/\text{m})^2$ | DCP Z | <b>98</b> | mV |

**Sensitivity in Tissue Simulating Liquid**

|         |                              |                             |                               |
|---------|------------------------------|-----------------------------|-------------------------------|
| Head    | 835 MHz                      | $\epsilon_r = 41.5 \pm 5\%$ | $\sigma = 0.90 \pm 5\%$ mho/m |
| Head    | 900 MHz                      | $\epsilon_r = 41.5 \pm 5\%$ | $\sigma = 0.97 \pm 5\%$ mho/m |
| ConvF X | <b>6.4</b> $\pm 9.5\%$ (k=2) |                             | Boundary effect:              |
| ConvF Y | <b>6.4</b> $\pm 9.5\%$ (k=2) |                             | Alpha <b>0.48</b>             |
| ConvF Z | <b>6.4</b> $\pm 9.5\%$ (k=2) |                             | Depth <b>2.09</b>             |
| Head    | 1900 MHz                     | $\epsilon_r = 40.0 \pm 5\%$ | $\sigma = 1.40 \pm 5\%$ mho/m |
| Head    | 1800 MHz                     | $\epsilon_r = 40.0 \pm 5\%$ | $\sigma = 1.40 \pm 5\%$ mho/m |
| ConvF X | <b>5.1</b> $\pm 9.5\%$ (k=2) |                             | Boundary effect:              |
| ConvF Y | <b>5.1</b> $\pm 9.5\%$ (k=2) |                             | Alpha <b>0.62</b>             |
| ConvF Z | <b>5.1</b> $\pm 9.5\%$ (k=2) |                             | Depth <b>2.19</b>             |

**Boundary Effect****835 MHz Typical SAR gradient: 5 % per mm**

|                                                    |             |             |
|----------------------------------------------------|-------------|-------------|
| Probe Tip to Boundary                              | <b>1 mm</b> | <b>2 mm</b> |
| SAR <sub>be</sub> [%] Without Correction Algorithm | <b>9.1</b>  | <b>4.8</b>  |
| SAR <sub>be</sub> [%] With Correction Algorithm    | <b>0.2</b>  | <b>0.4</b>  |

**1900 MHz Typical SAR gradient: 10 % per mm**

|                                                    |             |             |
|----------------------------------------------------|-------------|-------------|
| Probe Tip to Boundary                              | <b>1 mm</b> | <b>2 mm</b> |
| SAR <sub>be</sub> [%] Without Correction Algorithm | <b>12.8</b> | <b>8.1</b>  |
| SAR <sub>be</sub> [%] With Correction Algorithm    | <b>0.2</b>  | <b>0.2</b>  |

**Sensor Offset**

|                            |                                 |    |
|----------------------------|---------------------------------|----|
| Probe Tip to Sensor Center | <b>2.7</b>                      | mm |
| Optical Surface Detection  | <b>1.6 <math>\pm</math> 0.2</b> | mm |

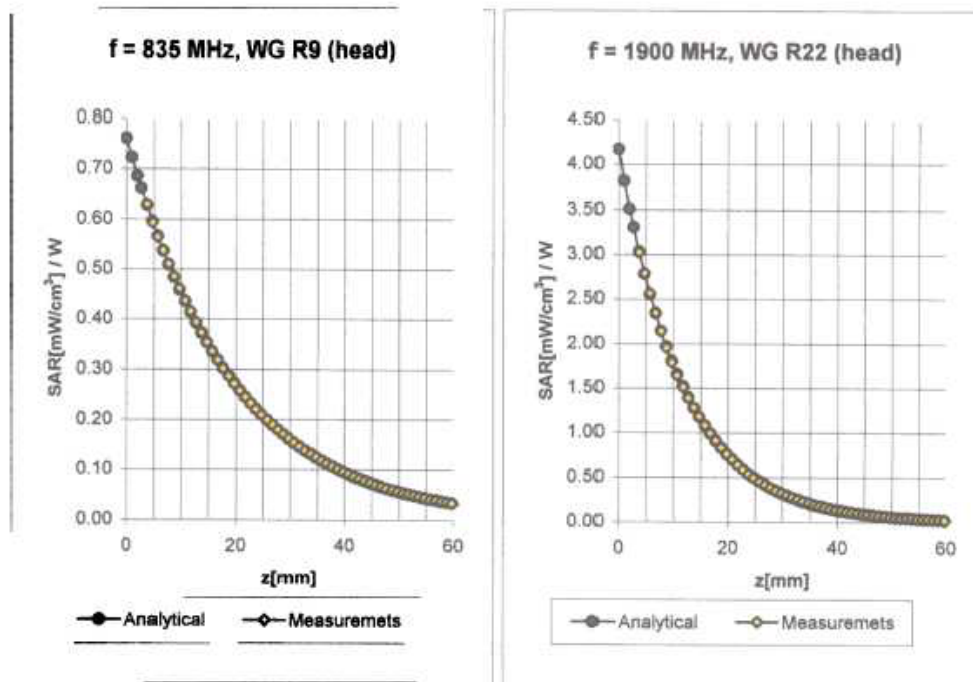


|                                                                             |               |                             |                                                                |
|-----------------------------------------------------------------------------|---------------|-----------------------------|----------------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/Q-02:0112/REP |                                                                |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | A                           | U:\FCC Submittals\Fcc_CA1102<br>(T606)\XHIBIT11\SAR report.doc |

ET3DV6 SN:1538

June 20, 2002

## Conversion Factor Assessment



|      |          |                             |                                       |
|------|----------|-----------------------------|---------------------------------------|
| Head | 835 MHz  | $\epsilon_r = 41.5 \pm 5\%$ | $\sigma = 0.90 \pm 5\% \text{ mho/m}$ |
| Head | 900 MHz  | $\epsilon_r = 41.5 \pm 5\%$ | $\sigma = 0.97 \pm 5\% \text{ mho/m}$ |
|      | ConvF X  | $6.4 \pm 9.5\% (k=2)$       | Boundary effect                       |
|      | ConvF Y  | $6.4 \pm 9.5\% (k=2)$       | Alpha                                 |
|      | ConvF Z  | $6.4 \pm 9.5\% (k=2)$       | Depth                                 |
| Head | 1900 MHz | $\epsilon_r = 40.0 \pm 5\%$ | $\sigma = 1.40 \pm 5\% \text{ mho/m}$ |
| Head | 1800 MHz | $\epsilon_r = 40.0 \pm 5\%$ | $\sigma = 1.40 \pm 5\% \text{ mho/m}$ |
|      | ConvF X  | $5.1 \pm 9.5\% (k=2)$       | Boundary effect                       |
|      | ConvF Y  | $5.1 \pm 9.5\% (k=2)$       | Alpha                                 |
|      | ConvF Z  | $5.1 \pm 9.5\% (k=2)$       | Depth                                 |

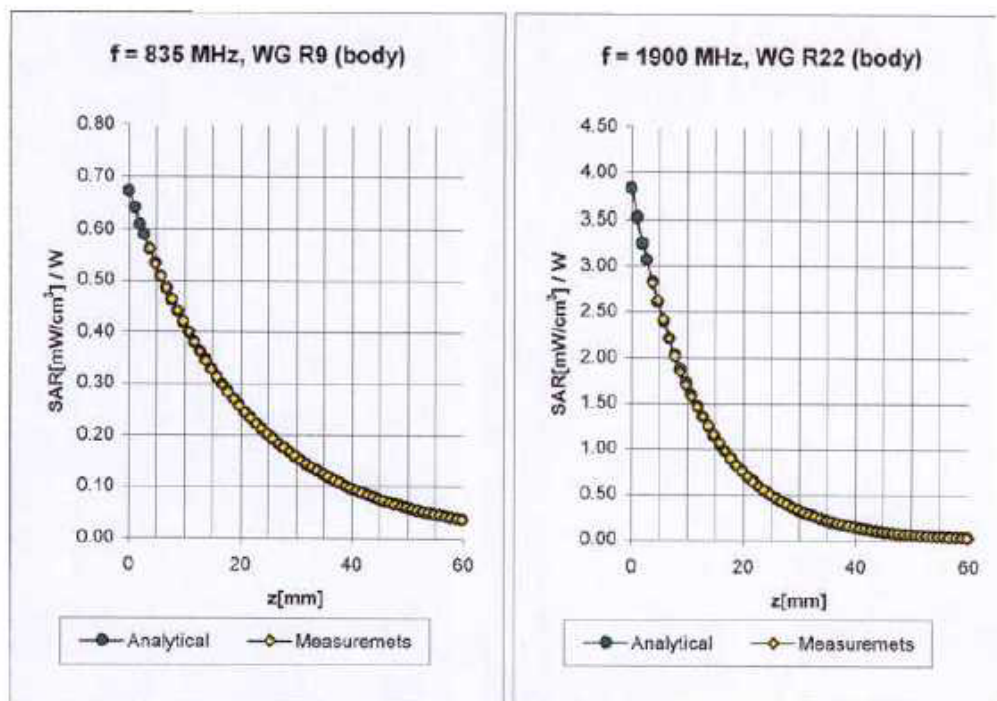


|                                                                             |               |                             |                                                             |
|-----------------------------------------------------------------------------|---------------|-----------------------------|-------------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/Q-02:0112/REP |                                                             |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | A                           | U:\FCC Submittals\Fcc_CA1102 (T606)\XHIBIT11\SAR report.doc |

ET3DV6 SN:1538

June 20, 2002

## Conversion Factor Assessment



|      |          |                             |                                       |
|------|----------|-----------------------------|---------------------------------------|
| Body | 835 MHz  | $\epsilon_r = 55.2 \pm 5\%$ | $\sigma = 0.97 \pm 5\% \text{ mho/m}$ |
| Body | 900 MHz  | $\epsilon_r = 55.0 \pm 5\%$ | $\sigma = 1.05 \pm 5\% \text{ mho/m}$ |
|      | ConvF X  | $6.2 \pm 9.5\% (k=2)$       | Boundary effect:                      |
|      | ConvF Y  | $6.2 \pm 9.5\% (k=2)$       | Alpha <b>0.51</b>                     |
|      | ConvF Z  | $6.2 \pm 9.5\% (k=2)$       | Depth                                 |
| Body | 1900 MHz | $\epsilon_r = 53.3 \pm 5\%$ | $\sigma = 1.52 \pm 5\% \text{ mho/m}$ |
| Body | 1800 MHz | $\epsilon_r = 53.3 \pm 5\%$ | $\sigma = 1.52 \pm 5\% \text{ mho/m}$ |
|      | ConvF X  | $4.7 \pm 9.5\% (k=2)$       | Boundary effect:                      |
|      | ConvF Y  | $4.7 \pm 9.5\% (k=2)$       | Alpha <b>0.84</b>                     |
|      | ConvF Z  | $4.7 \pm 9.5\% (k=2)$       | Depth                                 |



|                                                                             |               |                             |                                                                |
|-----------------------------------------------------------------------------|---------------|-----------------------------|----------------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/Q-02:0112/REP |                                                                |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | A                           | U:\FCC Submittals\Fcc_CA1102<br>(T606)\XHIBIT11\SAR report.doc |

## Appendix 5

### Measurement Uncertainty Budget

**Table 1. Uncertainty Budget for System Performance Check (Dipole & flat phantom)**



|                                                                             |               |                             |                                                             |
|-----------------------------------------------------------------------------|---------------|-----------------------------|-------------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/Q-02:0112/REP |                                                             |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | A                           | U:\FCC Submittals\Fcc_CA1102 (T606)\XHIBIT11\SAR report.doc |

| <i>a</i>                                                                                       | <i>b</i> | <i>c</i>   | <i>d</i>    | <i>e = f(d,k)</i> | <i>f</i>                   | <i>g</i>                    | <i>h =<br/>c x f / e</i>      | <i>i =<br/>c x g / e</i>       | <i>k</i>             |
|------------------------------------------------------------------------------------------------|----------|------------|-------------|-------------------|----------------------------|-----------------------------|-------------------------------|--------------------------------|----------------------|
| Uncertainty Component                                                                          | Sec.     | Tol. (± %) | Prob. Dist. | Div.              | <i>c<sub>f</sub></i> (1-g) | <i>c<sub>g</sub></i> (10-g) | 1-g <i>u<sub>f</sub></i> (±%) | 10-g <i>u<sub>g</sub></i> (±%) | <i>v<sub>f</sub></i> |
| <b>Measurement System</b>                                                                      |          |            |             |                   |                            |                             |                               |                                |                      |
| Probe Calibration ( <i>k</i> =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    | 8.3        | R           | 1.73              | 1                          | 1                           | 4.8                           | 4.8                            | ∞                    |
| 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    | 0.0        | R           | 1.73              | 1                          | 1                           | 0.0                           | 0.0                            | ∞                    |
| Integration Time                                                                               | E.2.8    | 0.0        | R           | 1.73              | 1                          | 1                           | 0.0                           | 0.0                            | ∞                    |
| 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 constraints 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      | 3.9        | R           | 1.73              | 1                          | 1                           | 2.3                           | 2.3                            | ∞                    |
| <b>Dipole</b>                                                                                  |          |            |             |                   |                            |                             |                               |                                |                      |
| 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                            | ∞                    |
| <b>Phantom and Tissue Parameters</b>                                                           |          |            |             |                   |                            |                             |                               |                                |                      |
| 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    | 4.8        | R           | 1.73              | 0.6                        | 0.49                        | 1.66                          | 1.35                           | ∞                    |
| 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    | 2.6        | R           | 1.73              | 0.64                       | 0.43                        | 0.96                          | 0.64                           | ∞                    |
| Liquid Permittivity - measurement uncertainty (6)                                              | E.3.3    | 6.08       | R           | 1.73              | 0.6                        | 0.49                        | 2.11                          | 1.72                           | ∞                    |
| <b>Combined Standard Uncertainty</b>                                                           |          |            | RSS         |                   |                            |                             | 10.59                         | 10.31                          |                      |
| <b>Expanded Uncertainty</b><br>(95% CONFIDENCE LEVEL)                                          |          |            |             |                   |                            |                             | 21.17                         | 20.61                          |                      |

Table 2. Uncertainty Budget for the Device Under Test

| <i>a</i> | <i>b</i> | <i>c</i> | <i>d</i> | <i>e = f(d,k)</i> | <i>f</i> | <i>g</i> | <i>h =</i> | <i>i =</i> | <i>k</i> |
|----------|----------|----------|----------|-------------------|----------|----------|------------|------------|----------|
|----------|----------|----------|----------|-------------------|----------|----------|------------|------------|----------|



|                                                                             |               |                             |                                                             |
|-----------------------------------------------------------------------------|---------------|-----------------------------|-------------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/Q-02:0112/REP |                                                             |
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| Uncertainty Component                                                                          | Sec.  | Tol. (± %) | Prob. Dist. | Div. | $c_f$ (1-g) | $c_f$ (10-g) | $c \times f / e$ 1-g $u_i$ (±%) | $c \times g / e$ 10-g $u_i$ (±%) | $v_i$    |
|------------------------------------------------------------------------------------------------|-------|------------|-------------|------|-------------|--------------|---------------------------------|----------------------------------|----------|
| <b>Measurement System</b>                                                                      |       |            |             |      |             |              |                                 |                                  |          |
| Probe Calibration ( $k=1$ )                                                                    | E.2.1 | 4.8        | N           | 1    | 1           | 1            | 4.8                             | 4.8                              | $\infty$ |
| Axial Isotropy                                                                                 | E.2.2 | 4.7        | R           | 1.73 | 0.707       | 0.707        | 1.9                             | 1.9                              | $\infty$ |
| Hemispherical Isotropy                                                                         | E.2.2 | 9.6        | R           | 1.73 | 0.707       | 0.707        | 3.9                             | 3.9                              | $\infty$ |
| Boundary Effect                                                                                | E.2.3 | 8.3        | R           | 1.73 | 1           | 1            | 4.8                             | 4.8                              | $\infty$ |
| Linearity                                                                                      | E.2.4 | 4.7        | R           | 1.73 | 1           | 1            | 2.7                             | 2.7                              | $\infty$ |
| System Detection Limits                                                                        | E.2.5 | 1.0        | R           | 1.73 | 1           | 1            | 0.6                             | 0.6                              | $\infty$ |
| Readout Electronics                                                                            | E.2.6 | 1.0        | N           | 1    | 1           | 1            | 1.0                             | 1.0                              | $\infty$ |
| Response Time                                                                                  | E.2.7 | 0.8        | R           | 1.73 | 1           | 1            | 0.5                             | 0.5                              | $\infty$ |
| Integration Time                                                                               | E.2.8 | 1.4        | R           | 1.73 | 1           | 1            | 0.8                             | 0.8                              | $\infty$ |
| RF Ambient Conditions                                                                          | E.6.1 | 3.0        | R           | 1.73 | 1           | 1            | 1.7                             | 1.7                              | $\infty$ |
| Probe Positioner Mechanical Tolerance (corresponds to the mechanical constraints of the robot) | E.6.2 | 0.4        | R           | 1.73 | 1           | 1            | 0.2                             | 0.2                              | $\infty$ |
| Probe Positioning with respect to Phantom Shell                                                | E.6.3 | 2.9        | R           | 1.73 | 1           | 1            | 1.7                             | 1.7                              | $\infty$ |
| Extrapolation, interpolation and Integration Algorithms for Max. SAR Evaluation                | E.5   | 3.9        | R           | 1.73 | 1           | 1            | 2.3                             | 2.3                              | $\infty$ |
| <b>Test sample Related</b>                                                                     |       |            |             |      |             |              |                                 |                                  |          |
| Test Sample Positioning                                                                        | E.4.2 | 3.3        | N           | 1    | 1           | 1            | 3.3                             | 3.3                              | 4        |
| Device Holder Uncertainty                                                                      | E.4.1 | 2.9        | R           | 1.73 | 1           | 1            | 2.2                             | 2.2                              | 4        |
| Output Power Variation - SAR drift measurement (4)                                             | 6.6.2 | 5.0        | R           | 1.73 | 1           | 1            | 2.9                             | 2.9                              | $\infty$ |
| <b>Phantom and Tissue Parameters</b>                                                           |       |            |             |      |             |              |                                 |                                  |          |
| Phantom Uncertainty (shape and thickness tolerances)                                           | E.3.1 | 4.0        | R           | 1.73 | 1           | 1            | 2.3                             | 2.3                              | $\infty$ |
| Liquid Conductivity - deviation from target values (5)                                         | E.3.2 | 4.8        | R           | 1.73 | 0.6         | 0.49         | 1.66                            | 1.35                             | $\infty$ |
| Liquid Conductivity - measurement uncertainty (6)                                              | E.3.3 | 6.20       | R           | 1.73 | 0.64        | 0.43         | 2.3                             | 1.5                              | $\infty$ |
| Liquid Permittivity - deviation from target values (5)                                         | E.3.2 | 2.6        | R           | 1.73 | 0.64        | 0.43         | 0.96                            | 0.64                             | $\infty$ |
| Liquid Permittivity - measurement uncertainty (6)                                              | E.3.3 | 6.08       | R           | 1.73 | 0.6         | 0.49         | 2.1                             | 1.7                              | $\infty$ |
| <b>Combined Standard Uncertainty</b>                                                           |       |            | RSS         |      |             |              | 11.32                           | 10.93                            |          |
| <b>Expanded Uncertainty</b><br>(95% CONFIDENCE LEVEL)                                          |       |            | K=2         |      |             |              | 22.65                           | 21.86                            |          |



|                                                                             |               |                             |                                                                |
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Table 3a. Values for  $\epsilon'$ 

| Uncertainty Component                       | Tolerance ( $\pm\%$ ) | Probability Distribution | Divisor | $c_i$ | Standard Uncertainty ( $\pm\%$ ) | $v_i$ 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                             | $\infty$           |
| Dielectric Error Sources                    | 5.93                  | R                        | 1.73    | 1     | 3.42                             | $\infty$           |
| <b><u>Combined standard uncertainty</u></b> |                       |                          |         |       | 6.08                             |                    |

Table 3b. Values for  $\sigma$ 

| Uncertainty Component                       | Tolerance ( $\pm\%$ ) | Probability Distribution | Divisor | $c_i$ | Standard Uncertainty ( $\pm\%$ ) | $v_i$ 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                             | $\infty$           |
| Dielectric Error Sources                    | 5.93                  | R                        | 1.73    | 1     | 3.42                             | $\infty$           |
| <b><u>Combined standard uncertainty</u></b> |                       |                          |         |       | 6.20                             |                    |

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61(71)

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## Appendix 6

### Photographs of the device under test



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62(71)

|                                                                             |               |                             |                                                                |
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Front view of device



Back view of device



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63(71)

|                                                                             |               |                             |                                                                |
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Side view of device



|                                                                             |               |                             |                                                                |
|-----------------------------------------------------------------------------|---------------|-----------------------------|----------------------------------------------------------------|
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| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | A                           | U:\FCC Submittals\Fcc_CA1102<br>(T606)\XHIBIT11\SAR report.doc |



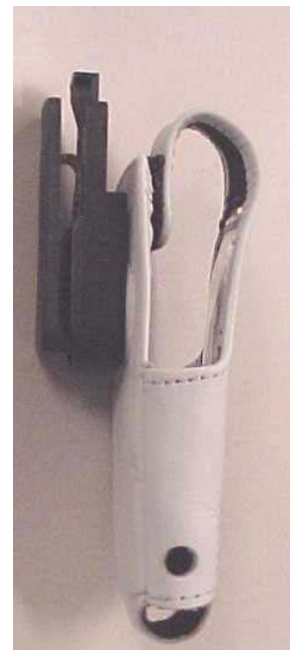
**Front, back, and side views of carry accessory model ICT-14.**



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|                                                                             |               |                             |                                                                |
|-----------------------------------------------------------------------------|---------------|-----------------------------|----------------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/Q-02:0112/REP |                                                                |
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**Front, back, and side views of carry accessory model KRY-105-186**



66(71)

|                                                                             |               |                             |                                                                |
|-----------------------------------------------------------------------------|---------------|-----------------------------|----------------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/Q-02:0112/REP |                                                                |
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**Front, back, and side views of carry accessory model ICE-25**

## Position of Device on Phantom



|                                                                             |               |                             |                                                                |
|-----------------------------------------------------------------------------|---------------|-----------------------------|----------------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/Q-02:0112/REP |                                                                |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | A                           | U:\FCC Submittals\Fcc_CA1102<br>(T606)\XHIBIT11\SAR report.doc |



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



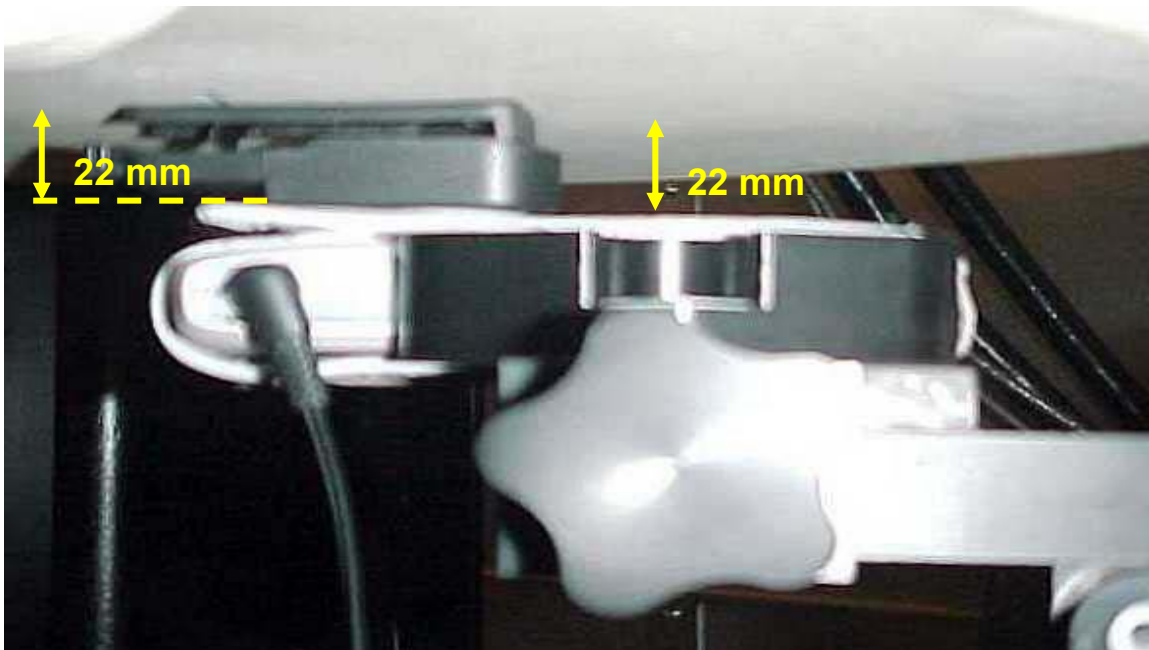
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|-----------------------------------------------------------------------------|---------------|-----------------------------|----------------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/Q-02:0112/REP |                                                                |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | A                           | U:\FCC Submittals\Fcc_CA1102<br>(T606)\XHIBIT11\SAR report.doc |



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



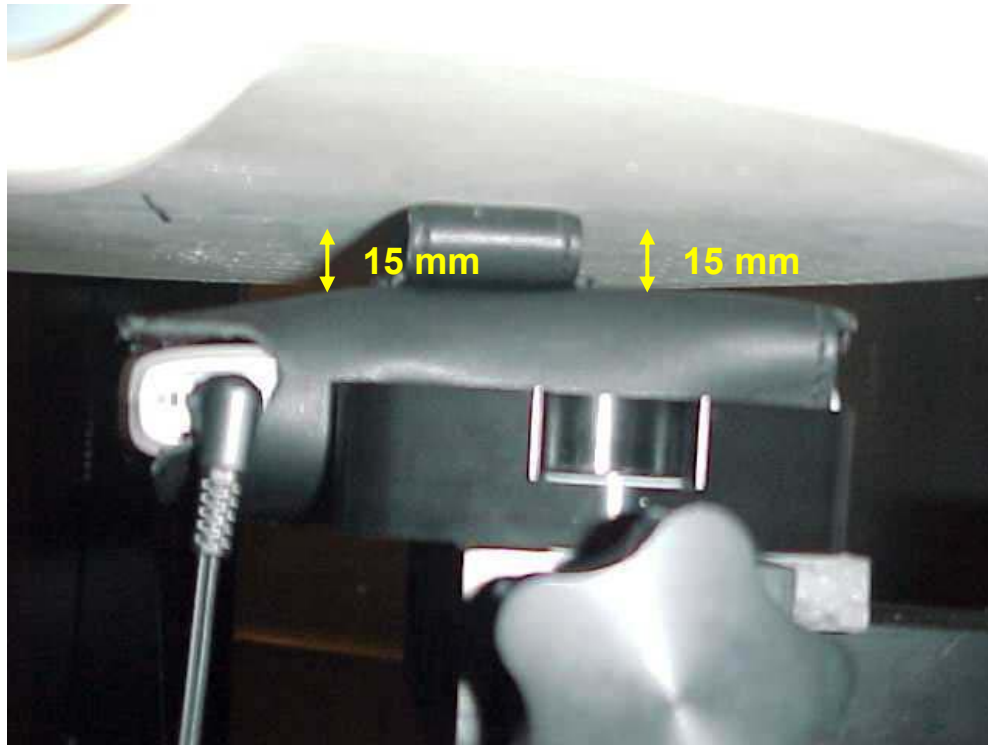
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|-----------------------------------------------------------------------------|---------------|-----------------------------|----------------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/Q-02:0112/REP |                                                                |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | A                           | U:\FCC Submittals\Fcc_CA1102<br>(T606)\XHIBIT11\SAR report.doc |



**Position of device against flat phantom using carry accessory KRY-105-186 and hands free accessory HPE-14**



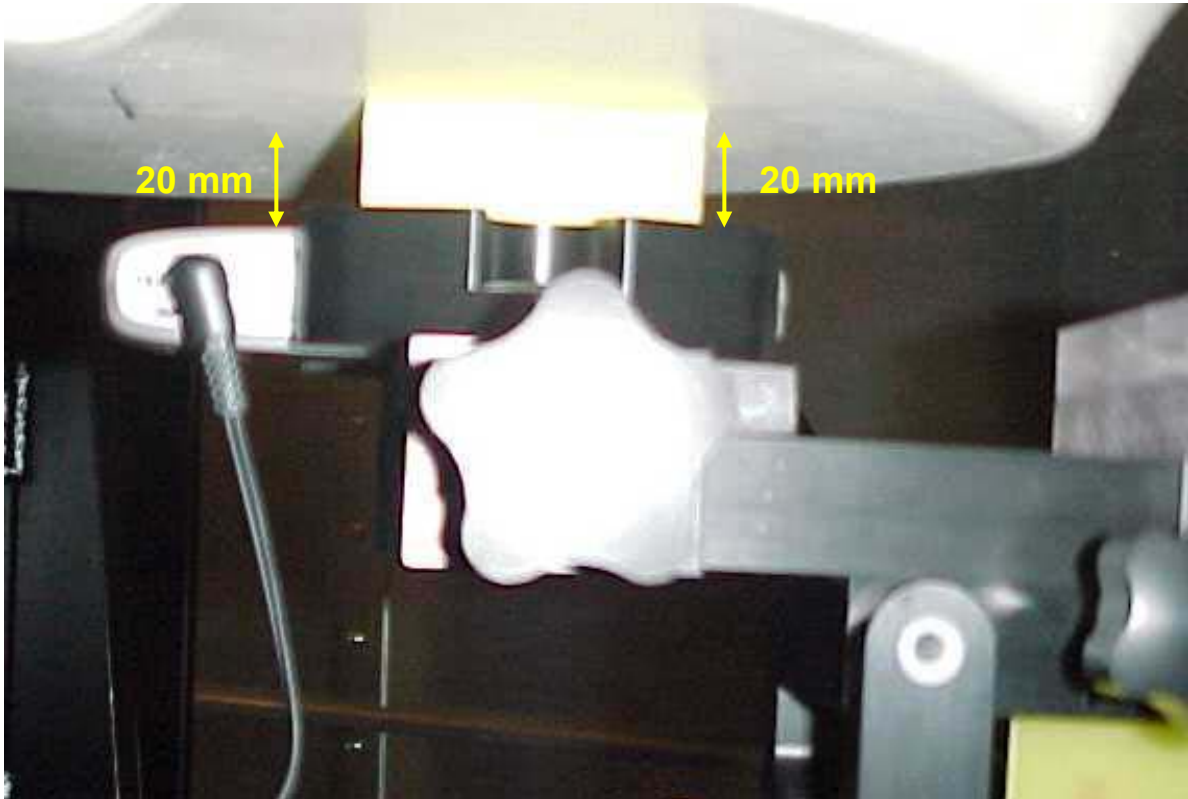
|                                                                             |               |                             |                                                                |
|-----------------------------------------------------------------------------|---------------|-----------------------------|----------------------------------------------------------------|
| Prepared (also subject responsible if other)<br>SEM/CV/PF/P Dulce Altabella |               | No.<br>SEM/CB/Q-02:0112/REP |                                                                |
| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | A                           | U:\FCC Submittals\Fcc_CA1102<br>(T606)\XHIBIT11\SAR report.doc |



**Position of device against flat phantom using carry accessory ICE-25 with hands free accessory HPE-14**



|                                                                             |               |                             |                                                                |
|-----------------------------------------------------------------------------|---------------|-----------------------------|----------------------------------------------------------------|
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| Approved<br>SEM/CV/PF/P Dulce Altabella                                     | Checked<br>DA | A                           | U:\FCC Submittals\Fcc_CA1102<br>(T606)\XHIBIT11\SAR report.doc |



**Position of device against flat phantom using a 20mm spacer with hands free accessory  
HPE-14**