Test Date: 16 February 2006

File Name: Touch Right 1600 MHz (DAE442 Probe1380) 16-02-06.da4 DUT: Thuraya Satelite Phone; Type: SG-2520; Serial: IMEI:36601300-030053-6

- * Communication System: 1640 MHz Satelite; Frequency: 1643 MHz; Duty Cycle: 1:8
- * Medium parameters used: σ = 1.25216 mho/m, ϵ_r = 40.2643; ρ = 1000 kg/m³
- Electronics: DAE3 Sn442; Probe: ET3DV6 SN1380; ConvF(5.42, 5.42, 5.42)
- Phantom: SAM 22; Serial: 1260; Phantom section: Right Section

Channel 0544 Test/Area Scan (131x61x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.233 mW/g

Channel 0544 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm,

```
dy=5mm, dz=5mm
Reference Value = 8.60 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.397 W/kg
SAR(1 g) = 0.222 mW/g; SAR(10 g) = 0.128 mW/g
Maximum value of SAR (measured) = 0.242 mW/g
```



Test Date: 16 February 2006

File Name: <u>Touch Right Extended Antenna 1600 MHz (DAE442 Probe1380) 16-02-06.da4</u> DUT: Thuraya Satelite Phone; Type: SG-2520; Serial: IMEI:36601300-030053-6

* Communication System: 1640 MHz Satelite; Frequency: 1643 MHz; Duty Cycle: 1:8

* Medium parameters used: σ = 1.25216 mho/m, ϵ_r = 40.2643; ρ = 1000 kg/m³

- Electronics: DAE3 Sn442; Probe: ET3DV6 - SN1380; ConvF(5.42, 5.42, 5.42)

- Phantom: SAM 22; Serial: 1260; Phantom section: Right Section

Channel 0544 Test/Area Scan (171x61x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.060 mW/g

Channel 0544 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm,

dy=5mm, dz=5mm Reference Value = 6.26 V/m; Power Drift = -0.096 dB Peak SAR (extrapolated) = 0.094 W/kg SAR(1 g) = 0.058 mW/g; SAR(10 g) = 0.038 mW/g Maximum value of SAR (measured) = 0.061 mW/g



Z-Axis Graph for Plot 7



Z-Axis Graph for Plot 8



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Test Date: 17 February 2006

File Name: <u>Tilted Right 1600 MHz (DAE442 Probe1380) 17-02-06.da4</u> DUT: Thuraya Satelite Phone; Type: SG-2520; Serial: IMEI:36601300-030053-6

- * Communication System: 1640 MHz Satelite; Frequency: 1643 MHz; Duty Cycle: 1:8
- * Medium parameters used: σ = 1.26223 mho/m, ϵ_r = 40.239; ρ = 1000 kg/m³
- Electronics: DAE3 Sn442; Probe: ET3DV6 SN1380; ConvF(5.42, 5.42, 5.42)
- Phantom: SAM 22; Serial: 1260; Phantom section: Right Section

Channel 0544 Test/Area Scan (131x61x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.218 mW/g

Channel 0544 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm,

dy=5mm, dz=5mm Reference Value = 9.40 V/m; Power Drift = 0.189 dB Peak SAR (extrapolated) = 0.367 W/kg SAR(1 g) = 0.212 mW/g; SAR(10 g) = 0.128 mW/g Maximum value of SAR (measured) = 0.229 mW/g



Ambient Temperature Liquid Temperature Humidity 21.7 Degrees Celsius 21.2 Degrees Celsius 62.0 %

Test Date: 17 February 2006

File Name: <u>Tilted Right Extended Antenna 1600 MHz (DAE442 Probe1380) 17-02-06.da4</u> DUT: Thuraya Satelite Phone; Type: SG-2520; Serial: IMEI:36601300-030053-6

- * Communication System: 1640 MHz Satelite; Frequency: 1643 MHz; Duty Cycle: 1:8
- * Medium parameters used: σ = 1.26223 mho/m, ε_r = 40.239; ρ = 1000 kg/m³
- Electronics: DAE3 Sn442; Probe: ET3DV6 SN1380; ConvF(5.42, 5.42, 5.42)
- Phantom: SAM 22; Serial: 1260; Phantom section: Right Section

Channel 0544 Test/Area Scan (171x61x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.178 mW/g

Channel 0544 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm,

dy=5mm, dz=5mm Reference Value = 8.60 V/m; Power Drift = -0.047 dB Peak SAR (extrapolated) = 0.328 W/kg SAR(1 g) = 0.174 mW/g; SAR(10 g) = 0.111 mW/g Maximum value of SAR (measured) = 0.186 mW/g



Ambient Temperature Liquid Temperature Humidity 21.7 Degrees Celsius 21.2 Degrees Celsius 62.0 %

Z-Axis Graph for Plot 9



Z-Axis Graph for Plot 10



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Test Date: 16 February 2006

File Name: Validation 1640 MHz (DAE442 Probe1380) 16-02-06.da4 DUT: Dipole 1640 MHz; Type: DV1640V2; Serial: 314

- * Communication System: CW 1640 MHz; Frequency: 1640 MHz; Duty Cycle: 1:1
- * Medium parameters used: σ = 1.25252 mho/m, ε_r = 40.2881; ρ = 1000 kg/m³
- Electronics: DAE3 Sn442; Probe: ET3DV6 SN1380; ConvF(5.42, 5.42, 5.42)
- Phantom: SAM 22; Serial: 1260; Phantom section: Flat Section

Channel 1 Test/Area Scan (51x51x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 10.6 mW/g

Channel 1 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 88.1 V/m; Power Drift = 0.00 dB Peak SAR (extrapolated) = 18.4 W/kg SAR(1 g) = 8.99 mW/g; SAR(10 g) = 4.76 mW/g Maximum value of SAR (measured) = 9.77 mW/g



Ambient Temperature Liquid Temperature Humidity

21.2 Degrees Celsius 20.9 Degrees Celsius 64.0 %

Test Date: 17 February 2006

File Name: Validation 1640 MHz (DAE442 Probe1380) 17-02-06.da4 DUT: Dipole 1640 MHz; Type: DV1640V2; Serial: 314

- * Communication System: CW 1640 MHz; Frequency: 1640 MHz; Duty Cycle: 1:1
- * Medium parameters used: σ = 1.2593 mho/m, ε_r = 40.2812; ρ = 1000 kg/m³
- Electronics: DAE3 Sn442; Probe: ET3DV6 SN1380; ConvF(5.42, 5.42, 5.42)
- Phantom: SAM 22; Serial: 1260; Phantom section: Flat Section

Channel 1 Test/Area Scan (51x51x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 10.6 mW/g

Channel 1 Test/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 87.2 V/m; Power Drift = -0.00 dB Peak SAR (extrapolated) = 18.1 W/kg SAR(1 g) = 8.85 mW/g; SAR(10 g) = 4.7 mW/g Maximum value of SAR (measured) = 9.67 mW/g



Ambient Temperature Liquid Temperature Humidity 21.7 Degrees Celsius 21.2 Degrees Celsius 62.0 %

Z-Axis Graph for Plot 11



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Z-Axis Graph for Plot 12
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APPENDIX C SAR TESTING EQUIPMENT CALIBRATION CERTIFICATE ATTACHMENTS

Calibration Certificate Attachments

1. 1380 E-Field Probe Calibration Sheet	9 Pages
2. 1600MHz Dipole Calibration Sheet	6 pages