

# APPENDIX 1

## SAR Measurement Data

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## EXHIBIT 1. HEAD SAR MEASUREMENTS

### *Head SAR Measurement Summary*

| Antenna               | Power (W) | CH | CH. Freq | HEAD SAR1g (W/Kg) | HEAD SAR10g (W/Kg) |
|-----------------------|-----------|----|----------|-------------------|--------------------|
|                       |           |    |          | BP-280            | BP-280             |
|                       |           |    | (MHz)    | 2400mAh           | 2400mAh            |
| FA-S61VC 155MHz 151mm | 5.05      | 14 | 161.3    | 0.96              | 0.72               |
|                       | 5.10      | 13 | 167.7    | 2.54              | 1.90               |
|                       | 4.80      | 19 | 174      | 1.72              | 1.29               |

**FILE NAME:** [ICOM-511Q HEAD FA-SC61VC 151MM 167.7MHZ.DA52:0](#)

**DUT:** IC-F1100DS; **Type:** VHF Receiver; **Serial:** 61000201-0

Communication System: UID 10000, CW; Frequency: 167.7 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 168$  MHz;  $\sigma = 0.718$  S/m;  $\epsilon_r = 52.986$ ;  $\rho = 1000$  kg/m<sup>3</sup>; Phantom section:  
Flat Section; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.71, 10.71, 10.71); Calibrated: 8/23/2018;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/14/2018
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

**Configuration Head for IC-F1100DS/Head Front, P=5W, d=25mm/Zoom Scan (7x7x7)**

**(8x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 65.89 V/m; Power Drift = -1.11 dB

Peak SAR (extrapolated) = 3.62 W/kg

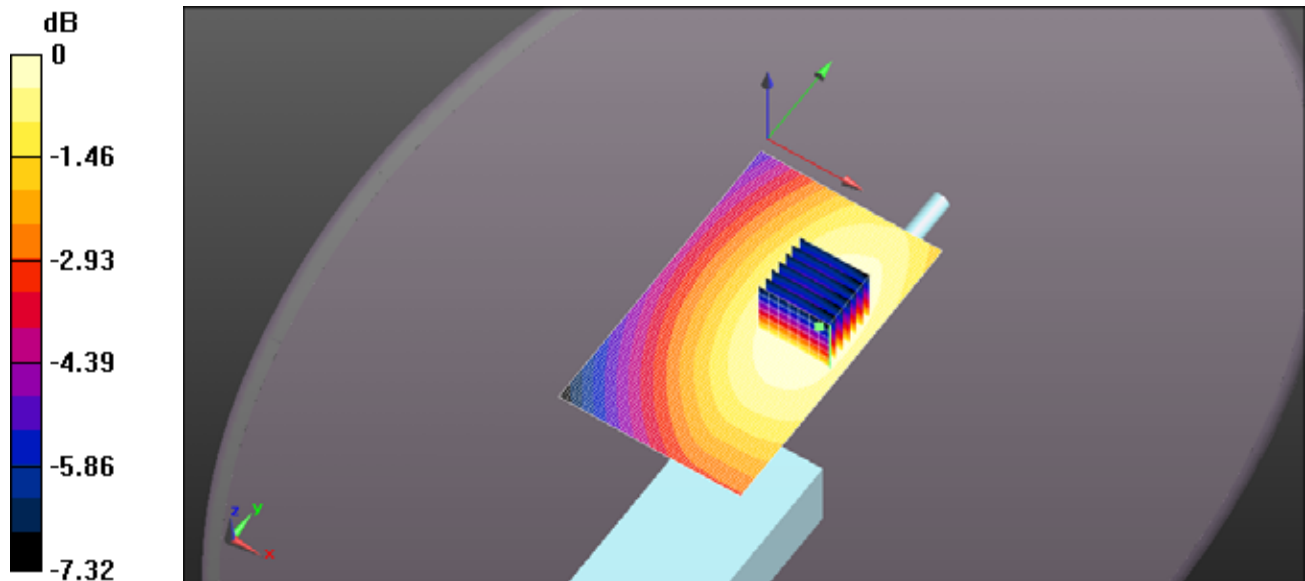
**SAR(1 g) = 2.54 W/kg; SAR(10 g) = 1.9 W/kg** (SAR corrected for target medium)

Maximum value of SAR (measured) = 3.08 W/kg

**Configuration Head for IC-F1100DS/Head Front, P=5W, d=25mm/Area Scan**

**(61x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 3.19 W/kg



0 dB = 3.08 W/kg = 4.89 dBW/kg

FILE NAME: ICOM-511Q HEAD FA-SC61VC 151MM 161.3 MHZ.DA52:0

DUT: IC-F1100DS; Type: VHF Receiver; Serial: 61000201-0

Communication System: UID 10000, CW; Frequency: 161.3 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 162 \text{ MHz}$ ;  $\sigma = 0.724 \text{ S/m}$ ;  $\epsilon_r = 53.178$ ;  $\rho = 1000 \text{ kg/m}^3$ ; Phantom section:  
Flat Section; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.71, 10.71, 10.71); Calibrated: 8/23/2018;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/14/2018
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

**Configuration Head for IC-F1100DS/Head Front, P=5W, d=25mm/Zoom Scan (7x7x7)**

**(8x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 40.72 V/m; Power Drift = -0.69 dB

Peak SAR (extrapolated) = 1.38 W/kg

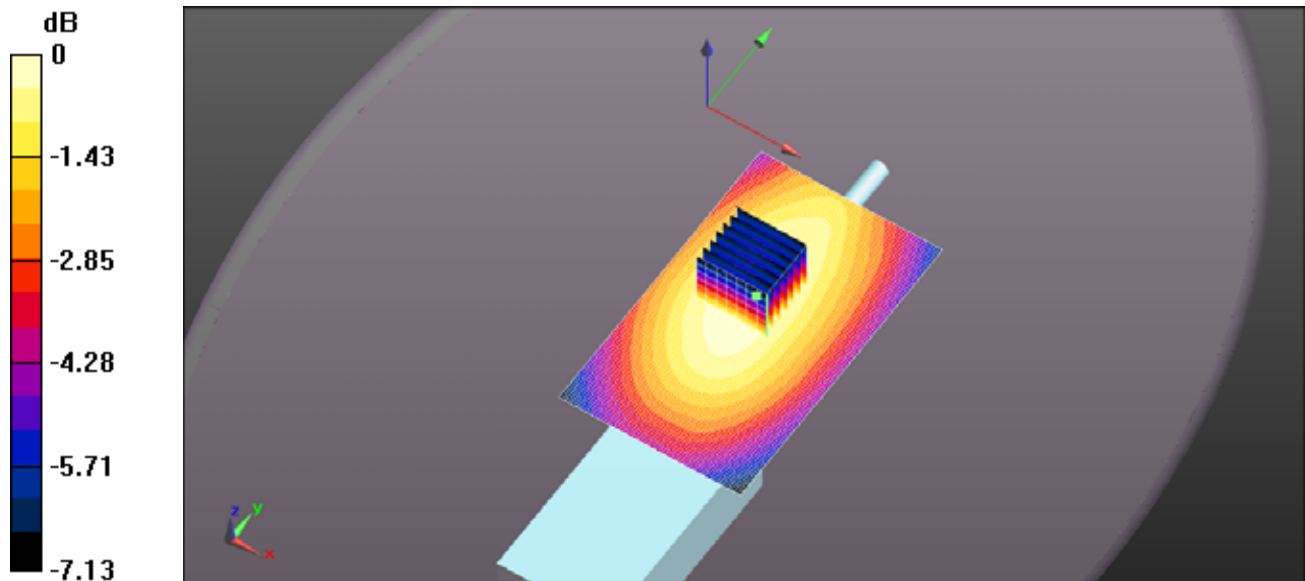
**SAR(1 g) = 0.959 W/kg; SAR(10 g) = 0.722 W/kg** (SAR corrected for target medium)

Maximum value of SAR (measured) = 1.18 W/kg

**Configuration Head for IC-F1100DS/Head Front, P=5W, d=25mm/Area Scan**

**(61x101x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 1.16 W/kg



0 dB = 1.18 W/kg = 0.71 dBW/kg

**FILE NAME:** ICOM-511Q HEAD FA-SC61VC 151MM 174 MHZ.DA52:0

**DUT:** IC-F1100DS; **Type:** VHF Receiver; **Serial:** 61000201-0

Communication System: UID 10000, CW; Frequency: 174 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 174 \text{ MHz}$ ;  $\sigma = 0.714 \text{ S/m}$ ;  $\epsilon_r = 52.725$ ;  $\rho = 1000 \text{ kg/m}^3$ ; Phantom section:  
Flat Section ; Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY Configuration:

- Probe: EX3DV4 - SN3673; ConvF(10.71, 10.71, 10.71); Calibrated: 8/23/2018;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn874; Calibrated: 8/14/2018
- Phantom: ELI 4.0; Type: QD OVA 001 BB; Serial: 1057
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

**Configuration Head for IC-F1100DS/Head Front, P=5W, d=25mm/Zoom Scan (7x7x7)**

**(8x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 58.33 V/m; Power Drift = -1.46 dB

Peak SAR (extrapolated) = 2.42 W/kg

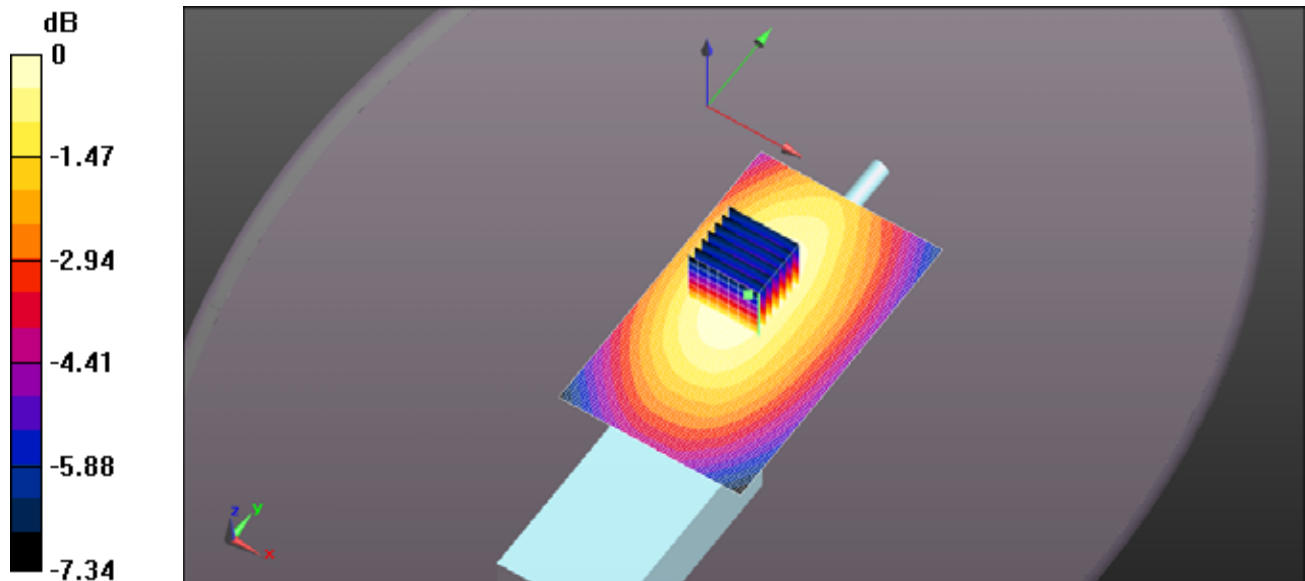
**SAR(1 g) = 1.72 W/kg; SAR(10 g) = 1.29 W/kg** (SAR corrected for target medium)

Maximum value of SAR (measured) = 2.07 W/kg

**Configuration Head for IC-F1100DS/Head Front, P=5W, d=25mm/Area Scan**

**(61x101x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$

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



0 dB = 2.07 W/kg = 3.15 dBW/kg