

July 4, 2006

AmericanTCB, Inc.  
6731 Whittier Avenue  
Suite C110  
McLean, VA 22101

**SUBJECT: Vocollect Inc.  
FCC ID: MQOTT700-20000**

To Whom It May Concern:

On behalf of Vocollect Inc. is our response to TCB questions regarding Celltech Labs' RF Exposure SAR test report (TRSN: 052906MQO-T754-S15W) as follows:

TCB Question

Please note that IEEE1528 states that the actual drift should be listed in the uncertainty budget. Please note that the power drift listed in the SAR report exceeds 0.86dB (approximately 22+% which is significantly more than the allowed 5% drift. This is an unacceptable drift uncertainty. Other than stating the power drifts were measured, the SAR report does not appear to address this drift (i.e. scaling, SAR vs time, etc). If this is addressed in the report, please point to the exact page. Please explain and please address the 22+% power drift shown in the data.

Celltech Response


The power drift of the DUT during the SAR evaluations was measured by the DASY4 system. For the SAR evaluations performed on the back side and top side of the device, the >5% power drift readings are inaccurate due to the SAR level at the reference point was close to the measurement noise floor. For the SAR evaluation performed on the front side of the device with +0.869 dB drift (max. SAR configuration with co-transmit Bluetooth) we have determined that the transmit power must have been unstable at the beginning of power up. We have reevaluated the front side co-transmit SAR configuration with the power stabilized for a two minute period from power up prior to the SAR evaluation, and the measured drift was +3% (see SAR test plot - next page). The reevaluated SAR result was 0.695 W/kg and this level should be reported on the grant.

Please do not hesitate to contact me if you have any further questions.

Sincerely,



Jonathan Hughes  
General Manager  
Celltech Labs Inc.

	Test Report Serial No.:	052906MQO-T754-S15W-A1	Addendum Issue Date:	July 04, 2006
	Date(s) of Evaluation:	June 30, 2006	Addendum Revision No.:	Revision 1.0
	Description of Tests:	RF Exposure	SAR	FCC 47 CFR §2.1093 IC RSS-102 Issue 2

Date Tested: 06/30/2006

## Body-Worn SAR - 802.11b - 1 Mbps - Front Side of DUT (Battery/Antenna Side) - 2412 MHz

### Simultaneous Transmit with Co-located Bluetooth

**DUT: Vocollect Model: T5; Type: Waist-Worn Terminal with internal 802.11b WLAN & Bluetooth; Serial: 20060153**

**Body-Worn Accessory: Belt-Strap with Belt-Clip (P/N: BL-601-105)**

**Audio Accessory: Headset-Microphone (Model: SR-20)**

Ambient Temp: 24.5 °C; Fluid Temp: 23.7 °C; Barometric Pressure: 101.1 kPa; Humidity: 32%

Communication System: DSSS WLAN

RF Output Power: 20.1 dBm (Peak Conducted)

Frequency: 2412 MHz; Channel 1; Duty Cycle: 1:1

3.6V 4400mAh Li-ion Battery Pack (Model: 730022)

Frequency: 2402 MHz; Channel 1; Duty Cycle: 1:1 (Bluetooth)

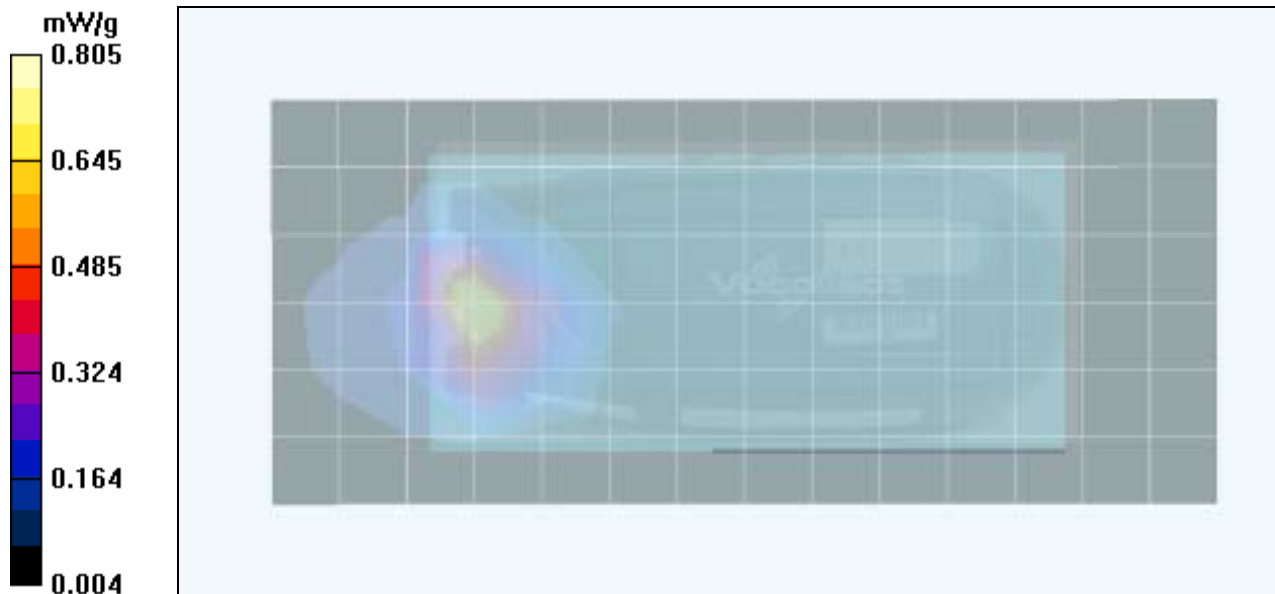
RF Output Power: 0.6 dBm - Peak Conducted (Bluetooth)


Medium: M2450 ( $\sigma = 1.99$  mho/m;  $\epsilon_r = 50.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>)

- Probe: EX3DV4 - SN3547; ConvF(7.53, 7.53, 7.53); Calibrated: 14/02/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370; Calibrated: 08/02/2006
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

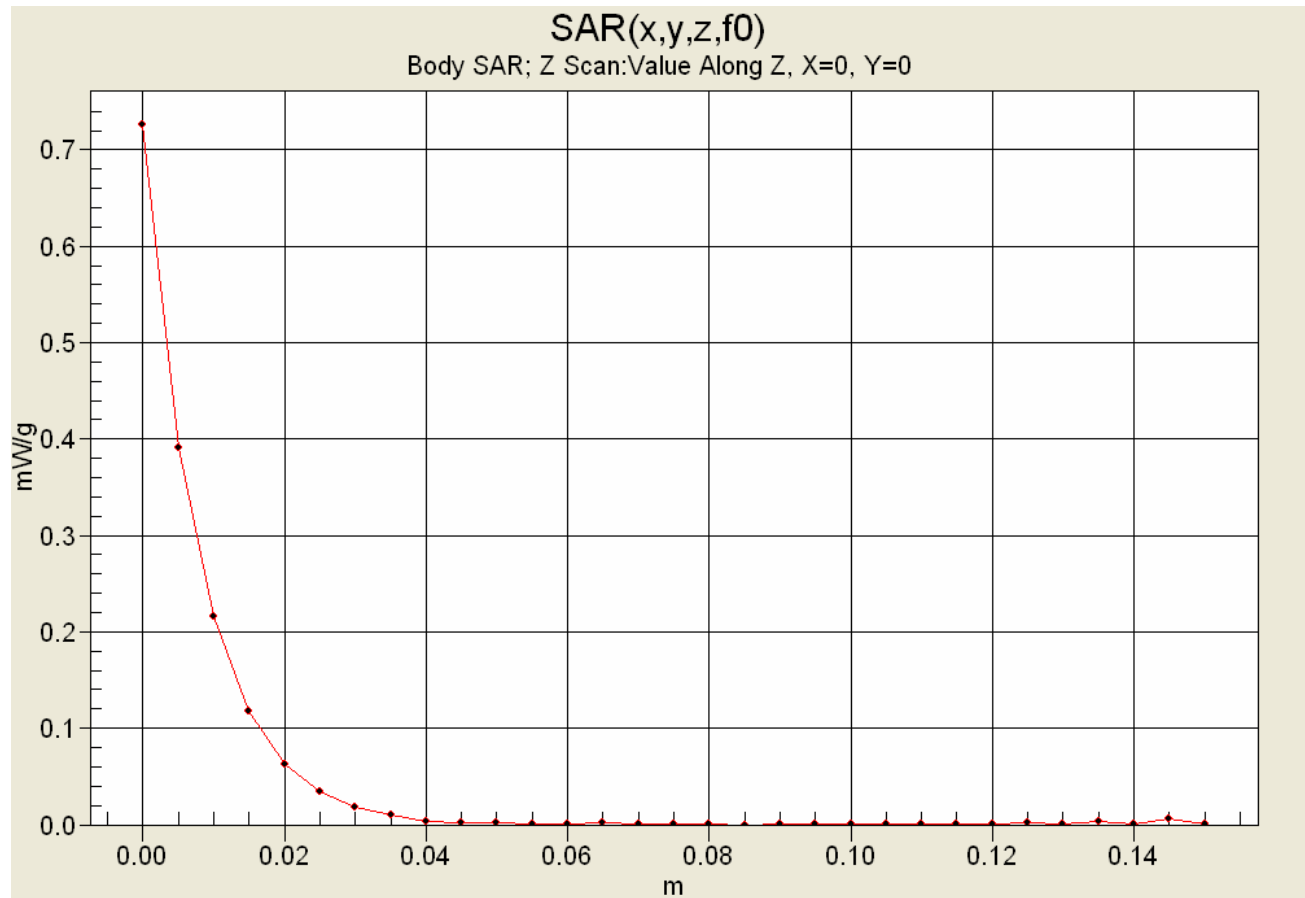
**Body-Worn SAR - 802.11b & Bluetooth - Front Side of DUT Touching Planar Phantom - Channel 1**  
**Area Scan (7x15x1):** Measurement grid: dx=15mm, dy=15mm


**Body-Worn SAR - 802.11b & Bluetooth - Front Side of DUT Touching Planar Phantom - Channel 1**  
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 2.65 V/m; Power Drift = 0.132 dB  
Peak SAR (extrapolated) = 1.40 W/kg  
**SAR(1 g) = 0.695 mW/g; SAR(10 g) = 0.311 mW/g**



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## Z-Axis Scan



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Date Tested: 06/30/2006

## System Performance Check (Body) - 2450 MHz Dipole

**DUT: Dipole 2450 MHz; Model: D2450V2; Type: System Performance Check; Serial: 150; Validation: 04/24/2006**

Ambient Temp: 24.5 °C; Fluid Temp: 23.7 °C; Barometric Pressure: 101.1 kPa; Humidity: 32%

Communication System: CW

Forward Conducted Power: 250 mW

Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: M2450 ( $\sigma = 1.99 \text{ mho/m}$ ;  $\epsilon_r = 50.8$ ;  $\rho = 1000 \text{ kg/m}^3$ )

- Probe: EX3DV4 - SN3547; ConvF(7.53, 7.53, 7.53); Calibrated: 14/02/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn370; Calibrated: 08/02/2006
- Phantom: Barski Industries; Type: Fiberglas Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

### 2450 MHz Dipole - System Performance Check/Area Scan (6x10x1):

Measurement grid: dx=10mm, dy=10mm

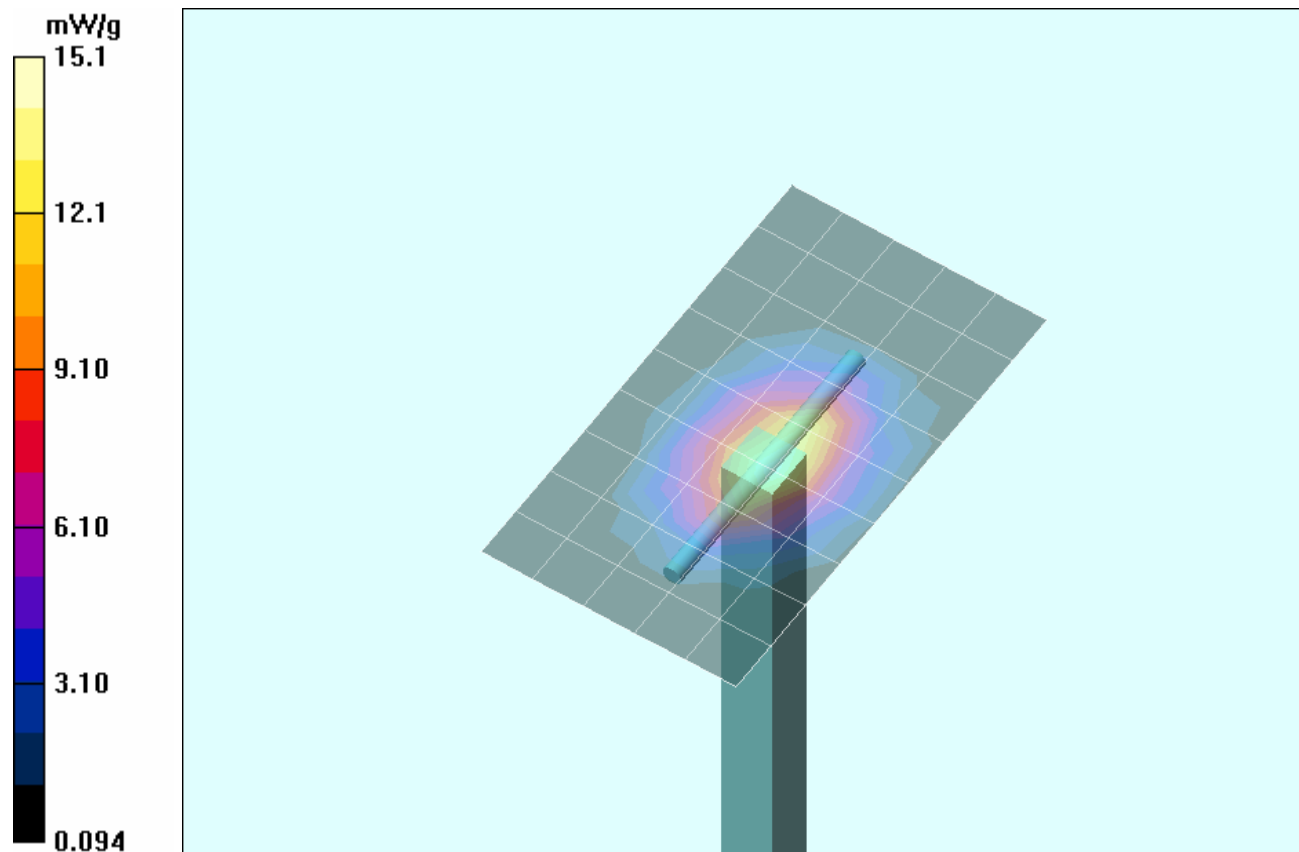
### 2450 MHz Dipole - System Performance Check/Zoom Scan (7x7x7)/Cube 0:


Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 82.4 V/m; Power Drift = -0.095 dB

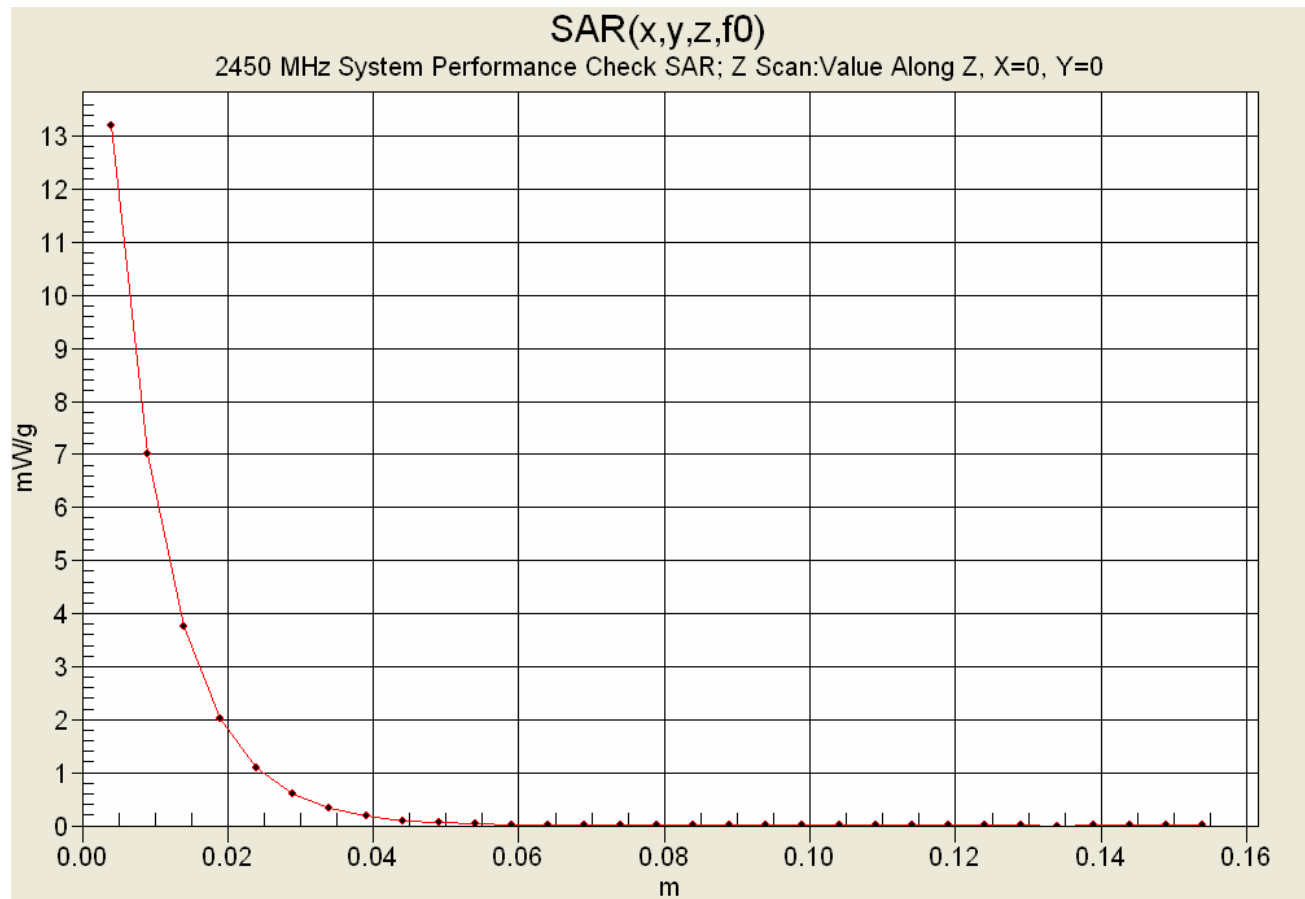
Peak SAR (extrapolated) = 27.8 W/kg


**SAR(1 g) = 13.3 mW/g; SAR(10 g) = 6.11 mW/g**



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## 2450 MHz System Performance Check & DUT Evaluation (Body)

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Celltech Labs Inc.  
Test Result for UIM Dielectric Parameter  
Fri 30/Jun/2006  
Frequency (GHz)  
FCC\_eH FCC Bulletin 65 Supplement C (June 2001) Limits for Head Epsilon  
FCC\_sH FCC Bulletin 65 Supplement C (June 2001) Limits for Head Sigma  
FCC\_eB FCC Limits for Body Epsilon  
FCC\_sB FCC Limits for Body Sigma  
Test\_e Epsilon of UIM  
Test\_s Sigma of UIM

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Freq	FCC_eB	FCC_sB	Test_e	Test_s
2.3500	52.83	1.85	51.48	1.87
2.3600	52.82	1.86	51.45	1.88
2.3700	52.81	1.87	51.40	1.89
2.3800	52.79	1.88	51.31	1.91
2.3900	52.78	1.89	51.17	1.91
2.4000	52.77	1.90	51.28	1.94
2.4100	52.75	1.91	51.11	1.96
2.4200	52.74	1.92	50.96	1.94
2.4300	52.73	1.93	50.80	1.95
2.4400	52.71	1.94	50.84	1.98
2.4500	52.70	1.95	50.84	1.99
2.4600	52.69	1.96	50.86	1.98
2.4700	52.67	1.98	50.68	2.01
2.4800	52.66	1.99	50.81	2.02
2.4900	52.65	2.01	50.65	2.04
2.5000	52.64	2.02	50.71	2.04
2.5100	52.62	2.04	50.67	2.07
2.5200	52.61	2.05	50.61	2.07
2.5300	52.60	2.06	50.60	2.10
2.5400	52.59	2.08	50.63	2.11
2.5500	52.57	2.09	50.54	2.13