Shenzhen Huaxia Testing Technology Co., Ltd

1F., Block A of Tongsheng Technology Building, Huahui Road, Dalang Street, Longhua District, Shenzhen, China

Telephone: +86-755-26648640
Fax: +86-755-26648637
Website: www.cqa-cert.com

Report Template Version: V03
Report Template Revision Date: Mar.1st, 2017

RF Exposure Evaluation Report

Report No. :	CQASZ20181200037E-02
Applicant:	CONTROL3, LLC
Address of Applicant:	12554 Galveston Road, Suite B230, Webster, Texas, 77598, USA
Manufacturer:	CONTROL3, LLC
Address of Manufacturer:	12554 Galveston Road, Suite B230, Webster, Texas, 77598, USA
Equipment Under Test (EUT):	
Product:	Datalogging Bottle Probe Thermometer
Model No.:	6536, 6539
Brand Name:	TRACEABLE
FCC ID:	2AO2J65350318
Standards:	47 CFR Part 1.1307 47 CFR Part 2.1093 KDB447498D01 General RF Exposure Guidance v06
Date of Test:	2018-05-25 to 2018-06-06 2018-12-19 to 2018-12-20
Date of Issue:	2018-12-20
Test Result :	**PASS***

Tested By: Martin Lee

(Martin Lee)

Reviewed By: Aaron Ma

(Aaron Ma)

Approved By:

(Jack Ai)

* In the configuration tested, the EUT complied with the standards specified above.

The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CQA, this report can't be reproduced except in full.

1 Version

Revision History Of Report

Report No.	Version	Description	Issue Date
CQASZ20180500115E-02	Rev.01	Initial report	2018-06-06
CQASZ20181200037E-02	Rev.02	change report	2018-12-20

Report supplementary information:

1. This report is change report CQASZ20181200037E-02, compared with the original report CQASZ20180500115E-02, this report changed product name, model and product appearance. Therefore, we retested the radiated spurious emissions and restricted bands around fundamental frequency.

2. For more details, please refer to the following table.

No.	Item	Before the change	After the change
1	Report No.	CQASZ20180500115E-02	CQASZ20181200037E-02
2	Product name	TraceableGO™ Datalogging Thermometer	Datalogging Bottle Probe Thermometer
3	Model No.	6535	6536, 6539
4	Product appearance	The product's temperature sensing probe is built in	The temperature sensing probe of the product is external

2 Contents

3 General Information

3.1 Client Information

Applicant:	CONTROL3, LLC
Address of Applicant:	12554 Galveston Road, Suite B230, Webster, Texas, 77598, USA
Manufacturer:	CONTROL3, LLC
Address of Manufacturer:	12554 Galveston Road, Suite B230, Webster, Texas, 77598, USA

3.2 General Description of EUT

Product Name:	Datalogging Bottle Probe Thermometer
Model No.:	6536, 6539
Trade Mark:	TRACEABLE
Hardware Version:	V2.0
Software Version:	V1.0
Operation Frequency:	2402MHz~2480MHz
Bluetooth Version:	V4.0
Modulation Type:	GFSK
Number of Channel:	40
Sample Type:	Portable production
Test Software of EUT:	RF test 1.0 (manufacturer declare)
Antenna Type:	PCB antenna
Antenna Gain:	0dBi
EUT Power Supply:	2*AAA DC3V

4 SAR Evaluation

4.1 RF Exposure Compliance Requirement

4.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06

4.3.1. Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

4.1.2 Limits

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] · [√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

f(GHz) is the RF channel transmit frequency in GHz
Power and distance are rounded to the nearest mW and mm before calculation[17]
The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion

4.1.3 EUT RF Exposure

Mode BLE						
Channel	Maximum Peak Conducted Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power		Calculated value	Exclusion threshold
			(dBm)	(mW)		
Lowest (2402MHz)	-2.16	-2±1	-1.0	0.794	0.25	3.0
Middle (2440MHz)	-1.19	-2±1	-1.0	0.794	0.25	
Highest (2480MHz)	-0.53	-1±1	0	1.000	0.31	
Conclusion: the calculated value ≤3.0, SAR is exempted.						

Remark: The Max Conducted Peak Output Power data refer to report Report No.: CQASZ20181200037E-01