



A Test Lab Techno Corp.

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SAR Test Exclusion Evaluation



Test Report No.	: 1409FS14
Applicant	: Diatec Corporation
Manufacturer	: Datacomp Electronics Co., Ltd.
Product Type	: Bluetooth Keyboard
Trade Name	: FILCO
Model Number	: FILCKFBT2-33
Dates of Received	: Jul. 03, 2014
Dates of Test	: Sep. 15, 2014
Dates of Issued	: Sep. 15, 2014
Test Specification	: 47 CFR § 2.1093 KDB 447498 D01 General RF Exposure Guidance v05r02 KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r03 KDB 865664 D02 RF Exposure Reporting v01r01
Location of Test Lab.	: Chang-an Lab.

1. The test operations have to be performed with cautious behavior, the test results are as attached.
2. The test results are under chamber environment of A Test Lab Techno Corp. A Test Lab Techno Corp. does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens or samples.
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Approved By : Bill Hu
(Bill Hu)

Tested By : Sky Chou
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1. Description of Equipment under Test (EUT)

Applicant	Diatec Corporation
Applicant Address	4F Kairaku BLDG(SOTO-KANDA) 6-5-4, Soto-Kanda, Chiyoda-Ku, Tokyo, 101-0021, Japan
Manufacturer	Datacomp Electronics Co., Ltd.
Manufacturer Address	3F,No.148-1,NEI-HU RD.,SEC.2,TAIPEI TAIWAN, R.O.C.
Product Type	Bluetooth Keyboard
Trade Name	FILCO
Model Number	FILCKFBT2-33
FCC ID	XS8-CONV2
Frequency Range	2402 - 2480 MHz
Transmit Power (conducted power)	0.0004 W / -3.50 dBm
Antenna Specification	0.22 dBi
Antenna Designation	Printed antenna

The above equipment was tested by A Test Lab Techno Corp. For compliance with the requirements set forth in 47 CFR § 2.1093. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.



2. SAR Test Exclusion

As RF exposure evaluation of portable device, SAR test is not required when the evaluation results . According to KDB 447498 4.3.1, unless excluded by specific FCC test procedures, portable devices shall include SAR data for equipment approval. SAR test necessity will be based on the exclusion result.

The test exclusion refers KDB 447498 as below:

≤50mm:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f}(\text{GHz})]$
≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR



2.1 Conducted Power

Band	CH	Frequency (MHz)	Packet Type	RF Conducted Output Power (dBm)
				Average
Bluetooth v3.0 (GFSK)	0	2402	DH1	-6.94
		2441	DH3	-3.99
		2480	DH5	-3.50
	39	2402	DH1	-7.67
		2441	DH3	-4.81
		2480	DH5	-4.20
	78	2402	DH1	-8.73
		2441	DH3	-5.81
		2480	DH5	-5.30

2.2 Evaluation Results

The evaluation of SAR test reduction according to KDB447498

SAR test is not required when the results showed "SAR is not required".

Extremity SAR:

≤ 50 mm								
Band	Channel	Power-Tune-up (dBm)	Frequency (GHz)	distance (mm)	Power (mW)	Result	Limit	exclusion considerations
								SAR _{1g}
Bluetooth v3.0	0	-3.5	2.402	5	0	0	3	SAR is not required
	39	-3.5	2.441	5	0	0	3	SAR is not required
	78	-3.5	2.480	5	0	0	3	SAR is not required

2.3 Estimated SAR

Band	Channel	Power-Tune up (dBm)	Frequency (GHz)	Distance (mm)	Power (mW)	Estimated SAR ^{1g} (W/Kg)
Bluetooth v3.0	0	-3.5	2.402	5	0	0
	39	-3.5	2.441	5	0	0
	78	-3.5	2.480	5	0	0