

# A Test Lab Techno Corp.

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# MPE Report





Test Report No. : 1305FS12-01

Applicant : Dovado FZ-LLC

Manufacturer : BaudTec Corporation

Product Type : Wireless Broadband Router

Trade Name : dovado

Model Number : GO (DGO)

Date of Received : Apr. 10, 2013

Test Period : May 07, 2013

Date of Issued : May 30, 2013

Test Specification : 47 CFR § 2.1091

47 CFR §1.1310

ANSI / IEEE Std.C95.1-1992

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

: Yung Tan Tsai) Tested By :

(Bill Hu)



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### 1. Description of Equipment under Test (EUT)

Applicant	Dovado FZ-LLC				
Applicant Address	Al-Thuraya Tower 1, suite 504, Dubai, United Arab Emirates, 500422				
Manufacturer	BaudTec Corporation				
Manufacturer Address	7F.,No.32,Zhongxing Rd., Xizhi Dist., New Taipei City 22161,Taiwan(R.O.C)				
Product Type	Wireless Broadband Router				
Trade Name	dovado				
Model Number	GO (DGO)				
FCC ID	X7V6291103273				
Frequency Range	IEEE 802.11b / IEEE 802.11g / 802.11n 2.4GHz (20MHz): 2412 ~ 2462 MHz				
	IEEE 802.11n 2.4GHz (40MHz): 2422 ~ 2452 MHz				
Transmit Power	IEEE 802.11b: 0.043 W / 16.35 dBm				
(Average conducted power)	IEEE 802.11g: 0.020 W / 12.92 dBm				
	IEEE 802.11n 2.4GHz (20MHz): 0.019 W / 12.88 dBm				
	IEEE 802.11n 2.4GHz (40MHz): 0.018 W / 12.65 dBm				
Antenna Specification	1.79 dBi				
Antenna Designation	PIFA Antenna				
Temperature Range	-30 ~ +70°C				

The above equipment was tested by A Test Lab Techno Corp. For compliance with the requirements set forth in 47 CFR § 2.1091 & 47 CFR § 1.1310. 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

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### 2. Human Exposure Assessment

Due to the design and installation of this product, it is not possible to conduct SAR evaluation. This is because client either manufactures or supplies the antenna(s) that will be used in the installation of this product. Therefore, this product will be evaluated as a mobile device per 47 CFR §1.1310 titled "Radiofrequency radiation exposure limits", generally referred to as MPE limits.

In 47 CFR § 2.1091, paragraph (b) defines a mobile device as "a transmitting device designed to be used in other than fixed locations and to generally be used in such a way that a separation distance of at least 20 cm is normally maintained between the transmitter's radiating structure(s) and the body of the user or nearby persons. " This product is intended to be installed into a vehicle such that the unit is physically secured at one location. In the installation guide supplied with the product,

Client has made the following statement: "IMPORTANT: To meet the FCC's RF Exposure Guidelines, the antenna should be installed so there is at least 20 cm of separation between the body of the user and nearby persons and the antenna". Based on the installation of the transceiver and the antenna, the transmitters radiating structure is more than 20 cm from the user. Thus, this product is a "mobile device" as defined in section § 2.1091 paragraph (b).

#### Exposure evaluation

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = \frac{PG}{4\pi R^2}$$

Where

S: power density

P: power input to the antenna

G: power gain of the antenna in the direction of interest relative to an isotropic radiator.

R: distance to the center of radiation of the antenna.



### 3. RF Output Power

Band	Date Rate	СН	Frequency (MHz)	Conducted power Time-Avg. (dBm)	Worst Case
		1	2412.0	16.35	
	1M	6	2437.0	16.27	
IEEE 802.11b		11	2462.0	16.06	
IEEE 002.11D	2M	6	2437.0	16.22	
	5.5M	6	2437.0	16.19	
	11M	6	2437.0	16.12	
		1	2412.0	12.92	
	6M	6	2437.0	12.89	
		11	2462.0	12.69	
[	9M	6	2437.0	12.85	
	12M	6	2437.0	12.77	
IEEE 802.11g	18M	6	2437.0	12.71	
	24M	6	2437.0	12.63	
	36M	6	2437.0	12.57	
	48M	6	2437.0	12.53	
	54M	6	2437.0	12.47	
		1	2412.0	12.88	
	6.5M	6	2437.0	12.83	
		11	2462.0	12.60	
	13M	6	2437.0	12.81	
IEEE 802.11n	19.5M	6	2437.0	12.77	
2.4GHz (20MHz)	26M	6	2437.0	12.73	
(2011112)	39M	6	2437.0	12.70	
	52M	6	2437.0	12.67	
	58.5M	6	2437.0	12.64	
	65M	6	2437.0	12.62	
	13.5M	3	2422.0	12.65	
		6	2437.0	12.62	
		9	2452.0	12.60	
	27M	6	2437.0	12.56	
IEEE 802.11n	40.5M	6	2437.0	12.48	
2.4GHz (40MHz)	54M	6	2437.0	12.42	
(401011 12)	81M	6	2437.0	12.36	
	108M	6	2437.0	12.26	
	121.5M	6	2437.0	12.22	
	135M	6	2437.0	12.16	

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### 4. Test Result

Band	Data Rate	Frequency (MHz)	Limit (mw/cm²)	Distance [R] (cm)	Max. Tune-up power [P] (dBm)	ANT Gain [G] (dB)	Duty Cycle	[P]+ [G] with Duty Cycle [TP] (W)	Power Density [S] (mw/cm²)	Min. Distance (cm)
	1 M	2412	1.000	20	18.0	1.79	1	0.095	0.019	20cm
IEEE 802.11b		2437	1.000	20	18.0	1.79	1	0.095	0.019	20cm
		2462	1.000	20	18.0	1.79	1	0.095	0.019	20cm
	6 M	2412	1.000	20	14.5	1.79	1	0.043	0.009	20cm
IEEE 802.11g		2437	1.000	20	14.5	1.79	1	0.043	0.009	20cm
		2462	1.000	20	14.5	1.79	1	0.043	0.009	20cm
IEEE 802.11n	6.5 M	2412	1.000	20	14.5	1.79	1	0.043	0.009	20cm
2.4GHz		2437	1.000	20	14.5	1.79	1	0.043	0.009	20cm
(20MHz)		2462	1.000	20	14.5	1.79	1	0.043	0.009	20cm
IEEE 802.11n	135M	2422	1.000	20	14.5	1.79	1	0.043	0.009	20cm
2.4GHz		2437	1.000	20	14.5	1.79	1	0.043	0.009	20cm
(40MHz)		2452	1.000	20	14.5	1.79	1	0.043	0.009	20cm

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