



A Test Lab Techno Corp.


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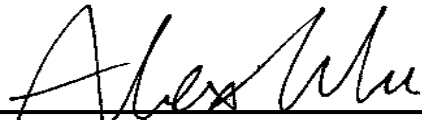
MPE Report



Test Report No.	: 0908FS12-01
Applicant	: RoyalTek Company Ltd.
Manufacturer	: Uptron Technology Inc.
Model Name	: Outdoor Sport GPS
Trade Mark	: RoyalTek
Model Number	: BV-3200
FCC ID	: RCCBV-3200
Dates of Test	: Aug. 05, 2009
Test Specification	: 47 CFR § 2.1091 47 CFR §1.1310
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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Sam Chuang **20090904**
Approval


Alex Wu **20090904**
Testing Engineer



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1. Description of Equipment Under Test (EUT)

Applicant :	RoyalTek Company Ltd.
Applicant Address :	4F, No. 188 Wen Hwa 2nd Rd., Kuei Shan, Tao Yuan 33383, Taiwan , R.O.C
Manufacturer :	Upron Technology Inc.
Manufacturer Address :	No. 16, Tze Chiang 1st Road, Chungli Industrial Park Taoyuan Hsien, Taiwan, R.O.C
Product Name :	Outdoor Sport GPS
Trade Mark :	RoyalTek
Model Name :	BV-3200
Serial No :	S000194A970017
Frequency Range :	2402 - 2480 MHz
Maximum Output Power to Antenna :	-5.629 dBm
Hardware Version :	Ver. C
Software Version :	1.0.0.45SimpleBT_RTK_ENG
Modulation Technique :	GFSK
Antenna Type :	Internal Type
Antenna Gain :	-2.35dBi
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



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 $S = \frac{PG}{4\pi R^2}$ <p>Where</p> <p>S: power density</p> <p>P: power input to the antenna</p> <p>G: power gain of the antenna in the direction of interest relative to an isotropic radiator.</p> <p>R: distance to the center of radiation of the antenna.</p>



2.1 Test Result

Frequency (MHz)	Limit (mw)	Distance[R] (cm)	Power [P] (dBm)	ANT Gain [G] (dBi)	Power + Ant Gain [TP] (W)	Power Density [S]	Min. distance (cm)
2402	1.000	20	-7.400	-2.880	0.000	0.00002	20
2441	1.000	20	-6.300	-2.350	0.000	0.00003	20
2480	1.000	20	-5.600	-3.000	0.000	0.00003	20