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Report No.: SZEMO10070422704

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## RF Exposure Evaluation declaration

**Application No.:** SZEMO100704227RF  
**Applicant:** ALBAHITH TECHNOLOGIES (Known as Younivate)  
**Address of Applicant :** 165, King Abdullah Second Street Amman, 11953 Jordan  
**Manufacturer:** ALBAHITH TECHNOLOGIES (Known as Younivate)  
ALBAHITH is the ODM/OEM  
**Address of Manufacturer:** 165, King Abdullah Second Street Amman, 11953 Jordan  
**Factory:** We normally subcontract with EMSs. Currently we use the following  
EMS:(we may use some other EMS in diffcountry)  
**Address of Factory:** 1-4 Floor, B Building, Shan Li Lang Village Ind, Buji Town  
Shenzhen 518112, People's Republic of China.  
**FCC ID:** YLNY5030-C  
**Fundamental Carrier**  
**Frequency :** 2405MHz~2475MHz  
**Equipment Under Test (EUT):**  
Name: Fleet Management System  
Model No.: Y5030-C,Y5031-C  
Trade Mark: Younivate  
**Date of Receipt:** 2010-07-07  
**Date of Test:** 2010-07-13 to 2010-08-18  
**Date of Issue:** 2010-08-26

<b>Test Result :</b>	<b>PASS*</b>
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\* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:

Jack Zhang  
Laboratory Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. All test results in this report can be traceable to National or International Standards.

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## 2 RF Exposure Evaluation

### 2.1 Limits

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

#### LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Average Time (Minutes)
<b>(A) Limits for Occupational/ Control Exposures</b>				
<b>300-1500</b>	--	--	<b>F/300</b>	<b>6</b>
<b>1500-100,000</b>	--	--	<b>5</b>	<b>6</b>
<b>300-1500</b>	--	--	<b>F/1500</b>	<b>6</b>
<b>1500-100,000</b>	--	--	<b>1</b>	<b>300</b>

F= Frequency in MHz

Friis Formula

Friis transmission formula:  $P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$

Where

$P_d$  = power density in mW/cm<sup>2</sup>

$P_{out}$  = output power to antenna in mW

G = gain of antenna in linear scale

$\pi$  = 3.1416

R = distance between observation point and center of the radiator in cm

$P_d$  is the limit of MPE, 1 mW/cm<sup>2</sup>. If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.



## 2.2 Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

The temperature and related humidity: 18°C and 78% RH.

## 2.3 Test Result of RF Exposure Evaluation

Product : Fleet Management System

Test Item : RF Exposure Evaluation

Test Site : No.3 OATS

Antenna Gain: 3.2dBi

Antenna Gain: The maximum Gain measured in fully anechoic chamber is 2.09dBi in linear scale.

Output Power Into Antenna & RF Exposure Evaluation Distance (2.09dBi):

Channel	Frequency (MHz)	Output Power to Antenna (mW)	Power Density at R = 20 cm (mW/cm <sup>2</sup> )
1	2405	31.550	0.013
6	2440	30.690	0.013
11	2475	28.249	0.012

The distance r (4th column) calculated from the Fries transmission formula is far shorter than 20 cm separation requirement.