SGS-CSTC Standards Technical Services Co., Ltd.

No. 1 Workshop, M-10, Middle section, Science & Technology Park, Shenzhen, Guangdong, China 518057
Telephone: +86 (0) 755 2601 2053
Fax: +86 (0) 755 2671 0594
Email: sgs_internet_operations@sgs.com

RF Exposure Evaluation declaration

Application No.:	SZEM1201000018RF
Applicant:	Unifat Technology Ltd
Address of Applicant:	7/F, Sui Hong Ind. Bldg, 547-549 Castie Peak Rd, Kwai Chung, N.T, H.K.
Manufacturer:	DONGGUAN EASYFAT ELECTRONIC MFY.SIMA CHANG PING
Address of Manufacturer:	Sheima Sheung, Shueng ping chang, Dongguan, People's Republic of China
Factory	DONGGUAN EASYFAT ELECTRONIC MFY.SIMA CHANG PING
Address of Factory:	Sheima Sheung, Shueng ping chang, Dongguan, People's Republic of China
FCC ID:	RIIMCR28V01, RII24RFMDLV01
Fundamental Carrier Frequency :	2.402GHz-2.480GHz, 2414.250MHz~2464.875MHz
Equipment Under Test (EUT):	
Name:	Rearview camera mirror with Bluetooth
Trade Mark:	AXIA
Model No.:	MCR28A, MCR28B, MCR18A, VCM43, VCM35 MCR18B, BT53355F-1, BT53328F-1
Date of Receipt:	2012-01-05
Date of Test:	2012-01-17 to 2012-03-23
Date of Issue:	2012-04-06

Test Result :	**PASS***

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

Authorized Signature:

Jack Zhang
EMC 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.

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 in1.1307(b)

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm2)	Average Time (Minutes)
(A) Limits for Occupational/ Control Exposures				
300-1500	**--**	**--**	**F/300**	**6**
1500-100,000	**--**	**--**	**5**	**6**
300-1500	**--**	**--**	**F/1500**	**6**
1500-100,000	**--**	**--**	**1**	**300**

F= Frequency in MHz

Friis Formula

Friis transmission formula: $Pd = (Pout*G)/(4* Pi * R^2)$

Where
Pd = power density in mW/cm^2

Pout = 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

Pd id the limit of MPE, 1 mW/cm2 . 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℃and 78％ RH.

2.3 Test Result of RF Exposure Evaluation

Antenna Gain: 2.0dBi

Antenna Gain: The maximum Gain measured in fully anechoic chamber is 1.59 in linear scale.

Output Power Into Antenna & RF Exposure Evaluation Distance:

①

2.402GHz-2.480GHz

Channel	Frequency (MHz)	Max Conducted Peak Output Power (dBm)	Output Power to Antenna (mW)	Power Density at R = 20 cm (mW/cm^2)
Middle	2441	2.56	1.803	0.00057

②

2414.250MHz~2464.875MHz

Channel	Frequency (MHz)	Max Conducted Peak Output Power (dBm)	Output Power to Antenna (mW)	Power Density at R = 20 cm (mW/cm^2)
Lowest	2414.250	9.43	8.77	0.00277

The sum of ① + ②, less than 1 mW.

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