



MRT Technology (Suzhou) Co., Ltd
Phone: +86-512-66308358
Fax: +86-512-66308368
Web: www.mrt-cert.com

Report No.: 1603RSU00402
Report Version: V01
Issue Date: 03-30-2016

RF Exposure Evaluation Declaration

FCC ID: IK4RVCW

APPLICANT: Shenzhen Auto-vox Technology Co., Ltd.

Application Type: Certification

Product: Reverse Camera

Model No.: RVC-W1, RVC-W2, RVC-W3, RVC-W4, WTR-01

Brand Name: AUTO-VOX

FCC Classification: FCC Part 15 Spread Spectrum Transmitter(DSS)

Reviewed By :

Robin Wu

(Robin Wu)

Approved By :

Marlin Chen

(Marlin Chen)



The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standards through the calibration of the equipment and evaluated measurement uncertainty herein.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Suzhou) Co., Ltd.

Revision History

Report No.	Version	Description	Issue Date
1603RSU00402	Rev. 01	Initial report	03-30-2016

1. PRODUCT INFORMATION

1.1. Feature of Equipment under Test

Product Name	Reverse Camera
Model No.	RVC-W1, RVC-W2, RVC-W3, RVC-W4, WTR-01

1.2. Product Specification Subjective to this Report

Bluetooth Frequency	2409.5~2465.5MHz
Type of modulation	FHSS
Data Rate	4Mbps(GFSK)
Antenna Type	Dipole Antenna
Antenna Gain	2.5dBi

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 ²)	Average Time (Minutes)
(A) Limits for Occupational/ Control Exposures				
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6
(B) Limits for General Population/ Uncontrolled Exposures				
300-1500	--	--	f/1500	6
1500-100,000	--	--	1	30

f= Frequency in MHz

Calculation Formula: $P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$

17.2

52.480746024977259736431215702241

Where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

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

P_d is the limit of MPE, 1mW/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 Result of RF Exposure Evaluation

Product	Reverse Camera
Test Item	RF Exposure Evaluation

Antenna Gain: Refer to Clause 1.2 of antenna description.

Test Mode	Frequency Band (MHz)	Maximum Output Power (dBm)	Power Density at R = 20 cm (mW/cm ²)	Limit (mW/cm ²)
Frequency Hopping	2409.5~2465.5	14.70	0.0104	1

CONCLUSION:

The Max Power Density at R (20 cm) = 0.0104mW/cm² < 1mW/cm².

So the EUT complies with the requirement.

_____ The End _____