

RF Exposure Report

Report No.: SA150902E05

FCC ID: MQT-XCEC150S

Test Model: xCE_C150S

Received Date: Sep. 02, 2015

Test Date: Sep. 18, 2015

Issued Date: Sep. 25, 2015

Applicant: XAC AUTOMATION CORP.

Address: 4F, No. 30, INDUSTRY E. RD. IX, SCIENCE-BASED INDUSTRIAL

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

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Release Control Record

Issue No.	Description	Date Issued
SA150902E05	Original release.	Sep. 25, 2015



1 Certificate of Conformity

Product: Contactless Reader

Brand: XAC

Test Model: xCE_C150S

Sample Status: ENGINEERING SAMPLE

Applicant: XAC AUTOMATION CORP.

Test Date: Sep. 18, 2015

Standards: FCC Part 2 (Section 2.1091)

KDB 447498 D03

IEEE C95.1

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by :	ZH	,	Date:	Sep. 25, 2015
	Elsie Hsu / Specialist			
Approved by :		,	Date:	Sep. 25, 2015
	May Chen / Manager	•	-	



2 RF Exposure

2.1 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)
Limits For General Population / Uncontrolled Exposure				
1.34-30	824/f	2.19/f	*(180/f ²)	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-100,000			1.0	30

² F = Frequency in MHz

2.1 MPE Calculation Formula

 $Pd = (Pout*G) / (4*pi*r^2)$

where

Pd = power density in mW/cm²

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

2.2 Classification

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.



3 Calculation Result Of Maximum Conducted Power

Channel Frequency (MHz)	Electric field (dBuV/m) @3m	Electric field (V/m)	Limit of Electric field (V/m)
13.56	78.5	1.892344	60.76

Note: Limit of Electric field=824/f

Electric field = 78.5 dBuV/m	3m
$= 78.5 \text{ dBuV/m} + 20 \log(3/0.2)^2$	0.2m
= 125.54 dBuV/m	0.2m
= 1892344 uV/m	0.2m
= 1.892344 uV/m	0.2m

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