



# RF EXPOSURE REPORT

**REPORT NO.:** SA140704E05A

**MODEL NO.:** xCE-25-M

**FCC ID:** MQT-E25M

**RECEIVED:** July 04, 2014

**TESTED:** July 29, 2014

**ISSUED:** Aug. 22, 2014

**APPLICANT:** XAC AUTOMATION CORP.

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SCIENCE-BASED INDUSTRIAL  
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## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA140704E05A	Original release	Aug. 22, 2014




A D T

## 1. CERTIFICATION

**PRODUCT:** PINPAD  
**BRAND NAME:** XAC  
**MODEL NO.:** xCE-25-M  
**TEST SAMPLE:** ENGINEERING SAMPLE  
**APPLICANT:** XAC AUTOMATION CORP.  
**TESTED:** July 29, 2014  
**STANDARDS:** FCC Part 2 (Section 2.1091)  
KDB 447498 D03  
IEEE C95.1

The above equipment (Model: xCE-25-M) 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** : , **DATE:** Aug. 22, 2014  
(Lori Chung, Specialist)

**APPROVED BY** : , **DATE:** Aug. 22, 2014  
(May Chen, Manager)

## 2. EVALUATION RESULT

### 2.1 SAR TEST EXCLUSION THRESHOLDS

#### Following FCC KDB 447498 D03 “General SAR test exclusion guidance”

The corresponding SAR Exclusion Threshold condition, listed below:

- 1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$  for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR where

- $f(\text{GHz})$  is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is  $< 5$  mm, a distance of 5 mm is applied to determine SAR test exclusion.

- 2) At 100 MHz to 6 GHz and for test separation distances  $> 50$  mm, the SAR test exclusion threshold is determined according to the following:

- a) [Threshold at 50 mm in step 1) + (test separation distance - 50 mm) · (f(MHz)/150)] mW, at 100MHz to 1500 MHz
- b) [Threshold at 50 mm in step 1) + (test separation distance - 50 mm) · 10] mW at  $> 1500$  MHz and  $\leq 6$  GHz

- 3) At frequencies below 100 MHz, the following may be considered for SAR test exclusion.

- a) The threshold at the corresponding test separation distance at 100 MHz in step 2) is multiplied by  $[1 + \log(100/f(\text{MHz}))]$  for test separation distances  $> 50$  mm and  $< 200$  mm.
- b) The threshold determined by the equation in a) for 50 mm and 100 MHz is multiplied by  $\frac{1}{2}$  for test separation distances  $\leq 50$  mm.
- c) SAR measurement procedures are not established below 100 MHz. When SAR test exclusion cannot be applied, a KDB inquiry is required to determine SAR evaluation requirements for any test results to be acceptable.

Maximum measured transmitter power:

Frequency (GHz)	Max. Power (mW)	Min. test separation distance (mm)	SAR test exclusion calculation value <sup>(NOTE 2)</sup>	10-g extremity SAR test exclusion thresholds	Result
2.402 ~ 2.480	1.531	5	0.482	7.5	Pass

**NOTE:** 1. The antenna type is Chip printed antenna with 1.5dBi gain.

2. Calculate SAR test exclusion thresholds from condition "1" formulas.

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