Report on the FCC and IC Testing of the

Paxton Access Ltd
Access Reader, Model: Entry VR Panel

In accordance with FCC 47 CFR Part 15B and Industry Canada RSS-GEN

Prepared for: Paxton Access Ltd
Paxton House
Home Farm Road
Brighton
BN1 9HU
United Kingdom

FCC ID: USE377520A
IC: 10217A-377520A

Product Service

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Date: June 2018
Document Number: 75942506-02 | Issue: 01

RESPONSIBLE FOR	NAME	DATE	SIGNATURE
Project Management	Natalie Bennett	27 June 2018	
Authorised Signatory	Kim Archer	27 June 2018	

Signatures in this approval box have checked this document in line with the requirements of TÜV SÜD Product Service document control rules.

ENGINEERING STATEMENT
The measurements shown in this report were made in accordance with the procedures described on test pages. All reported testing was carried out on a sample equipment to demonstrate limited compliance with FCC 47 CFR Part 15B and Industry Canada RSS-GEN. The sample tested was found to comply with the requirements defined in the applied rules.

RESPONSIBLE FOR	NAME	DATE	SIGNATURE
Testing	Graeme Lawler	27 June 2018	

FCC Accreditation
90987 Octagon House, Fareham Test Laboratory

Industry Canada Accreditation
IC2932B-1 Octagon House, Fareham Test Laboratory

EXECUTIVE SUMMARY
A sample of this product was tested and found to be compliant with FCC 47 CFR Part 15B: 2017 and Industry Canada RSS-GEN: Issue 04 (2014-11).

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Product Service

Contents

1 Report Summary

1.1 Report Modification Record

Alterations and additions to this report will be issued to the holders of each copy in the form of a complete document.

Issue	Description of Change	Date of Issue
1	First Issue	27 June 2018

Table 1

1.2 Introduction

Applicant	Paxton Access Ltd
Manufacturer	Paxton Access Ltd
Model Number(s)	Entry VR Panel
Serial Number(s)	5932488
Hardware Version(s)	z-n2erv
Software Version(s)	2.19.7707.0
Number of Samples Tested	1
Test Specification/Issue/Date	FCC 47 CFR Part 15B: 2017 Industry Canada RSS-GEN: Issue 04 (2014-11)
Order Number Date	174737 18-April-2018
Date of Receipt of EUT	12-June-2018
Start of Test	13-June-2018
Finish of Test	13-June-2018
Name of Engineer(s)	Graeme Lawler
Related Document(s)	ANSI C63.4: 2014

Product Service

1.3 Brief Summary of Results

A brief summary of the tests carried out in accordance with FCC 47 CFR Part 15B and Industry Canada RSS-GEN is shown below.

Section	Specification Clause		Test Description	Result	Comments/Base Standard
	Part 15B	RSS-GEN			
Configuration and Mode: Idle					
2.1	15.109	7.1	Radiated Disturbance	Pass	ANSI C63.4: 2014

Table 2

Product Service

1.4 Application Form

MANUFACTURING DESCRIPTION	Entry VR Panel		
MANUFACTURER	Paxton Access Ltd		
MODEL NAME/NUMBER	Entry VR Panel 337-520		
PART NUMBER	337-520		
SERIAL NUMBER	5932488		
HARDWARE VERSION	z-n2erv		
SOFTWARE VERSION	2.19.7707.0		
PSU VOLTAGE/FREQUENCY/CURRENT	The VR Panel is powered by an external PoE (IEEE 802.3af) PSU		
HIGHEST INTERNALLY GENERATED / USED FREQUENCY	2485 MHz		
FCC ID (if applicable)	USE377520A		
INDUSTRY CANADA ID (if applicable)	10217A-377520A		
TECHNICAL DESCRIPTION (a brief description of the intended use and operation)	The Entry VR panel is used as part of an access control system and will be the first point of contact for a visitor to a premises or entranceway allowing them to gain communication with the occupant so that they may then be allowed entrance		
COUNTRY OF ORIGIN	United Kingdom		
RF CHARACTERISTICS (if applicable)			
TRANSMITTER FREQUENCY OPERATING RANGE (MHz)	125kHz and 13.56MHz (RFID) and Bluetooth 2402 and 2480MHz		
RECEIVER FREQUENCY OPERATING RANGE (MHz)	N/A		
INTERMEDIATE FREQUENCIES	N/A		
EMISSION DESIGNATOR(S): (i.e. G1D, GXW)	G1D		
MODULATION TYPES: (i.e. GMSK, QPSK)			
OUTPUT POWER (W or dBm)	<1mW		
SEPARATE BATTERY/POWER SUPPLY (if applicable)			
MANUFACTURING DESCRIPTION	TP Link PoE Module		
MANUFACTURER	TP Link		
TYPE	8 Port 10/100Mbps Desktop PoE Switch		
PART NUMBER	TL-SF-1008P		
PSU VOLTAGE/FREQUENCY/CURRENT	Input 115V/240V - Output 48Vdc		
COUNTRY OF ORIGIN	China		
MODULES (if applicable)			
MANUFACTURING DESCRIPTION			
MANUFACTURER			
TYPE			
POWER			
FCC ID			
INDUSTRY CANADA ID			
EMISSION DESIGNATOR			
DHSS/FHSS/COMBINED OR OTHER			
COUNTRY OF ORIGIN			
ANCILLARIES (if applicable)			
MANUFACTURING DESCRIPTION			
MANUFACTURER			
TYPE			
PART NUMBER			
SERIAL NUMBER			
COUNTRY OF ORIGIN			

I hereby declare that the information supplied is correct and complete.

Name: Walter Riche Position held: Compliance Engineer
Date: 08/06/2018

1.5 Product Information

1.5.1 Technical Description

The Entry VR Panel is used as part of an access control system and will be the first point of contact for a visitor to a premises or entranceway allowing them to gain communication with the occupant so that they may then be allowed entrance

1.6 Deviations from the Standard

No deviations from the applicable test standard were made during testing.

1.7 EUT Modification Record

The table below details modifications made to the EUT during the test programme.
The modifications incorporated during each test are recorded on the appropriate test pages.

Modification State	Description of Modification still fitted to EUT	Modification Fitted By	Date Modification Fitted
Serial Number: 5932488			
0	As supplied by the customer	Not Applicable	Not Applicable

Table 3

1.8 Test Location

TÜV SÜD Product Service conducted the following tests at our Fareham Test Laboratory.

Test Name	Name of Engineer(s)	Accreditation
Configuration and Mode: Idle		
Radiated Disturbance	Graeme Lawler	UKAS

Table 4

Office Address:

Octagon House
Concorde Way
Segensworth North
Fareham
Hampshire
PO15 5RL
United Kingdom

2 Test Details

2.1 Radiated Disturbance

2.1.1 Specification Reference

FCC 47 CFR Part 15B, Clause 15.109
Industry Canada RSS-GEN, Clause 7.1

2.1.2 Equipment Under Test and Modification State

Entry VR Panel, S/N: 5932488 - Modification State 0

2.1.3 Date of Test

13-June-2018

2.1.4 Test Method

Testing was performed in accordance with ANSI C63.4 clause 8

2.1.5 Environmental Conditions

Ambient Temperature	21.4 °C
Relative Humidity	51.9 %

2.1.6 Test Results

Results for Configuration and Mode: Idle.

Performance assessment of the EUT made during this test: Pass.

Detailed results are shown below.

Highest frequency generated or used within the EUT: 2485 MHz
Which necessitates an upper frequency test limit of: 13 GHz

Frequency Range of Test: 30 MHz to 13 GHz

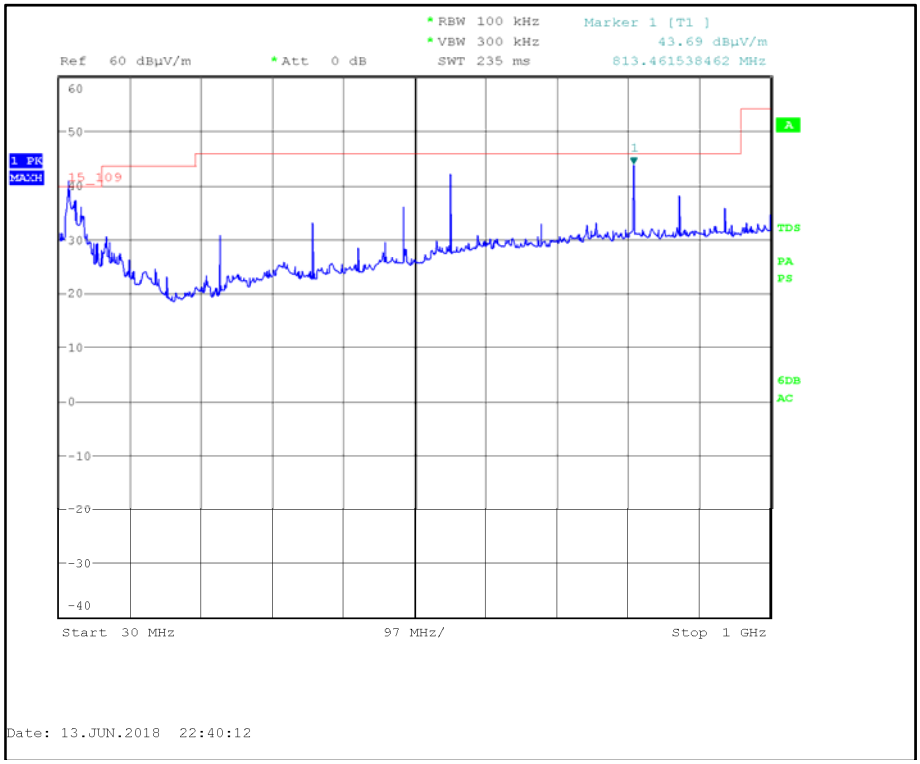

Figure 1 – Pre-scan Graphical Results – 30 MHz to 1 GHz – Combined Polarity

Frequency (MHz)	QP Level (dBuV/m)	QP Limit (dBuV/m)	QP Margin (dBuV/m)	Angle(Deg)	Height(m)	Polarity
43.782	38.33	40.0	-1.7	6	1.00	Vertical
47.788	36.96	40.0	-3.0	6	1.00	Vertical
50.433	39.27	40.0	-0.7	6	1.00	Vertical
60.208	36.62	40.0	-3.4	6	1.00	Vertical
64.776	33.74	40.0	-6.3	6	1.00	Vertical
563.189	42.95	46.0	-3.0	143	1.00	Vertical
813.462	44.07	46.0	-1.9	152	1.00	Vertical
875.048	39.84	46.0	-6.2	262	1.00	Vertical

Table 5 – 30 MHz to 1 GHz

Quasi Peak final results for 30MHz to 1GHz were performed with a RBW of 120 kHz.

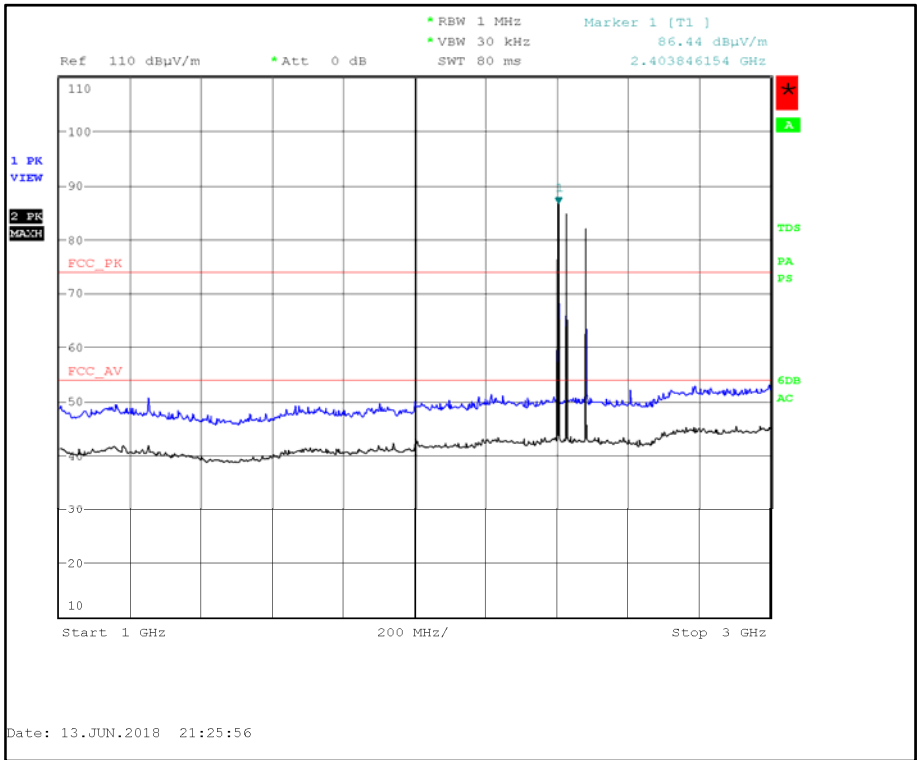

Figure 2 - Pre-scan Graphical Results - 1 GHz to 3 GHz - Combined Polarity

The emissions seen at 2.4 GHz are the EUT intentional transmitter's and are therefore not subject to this test.

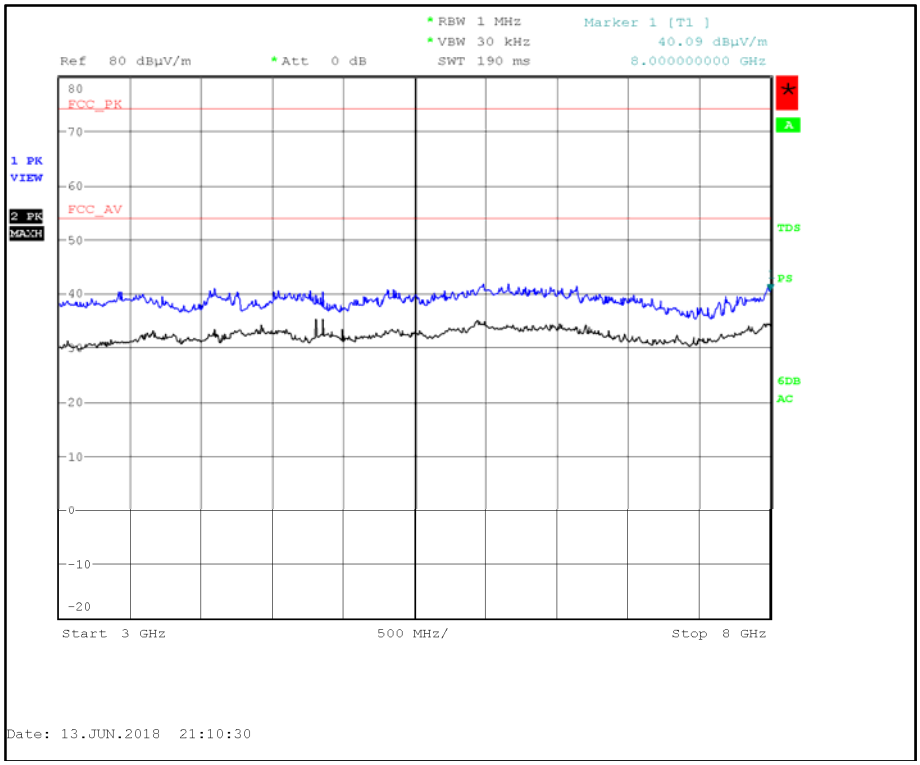

Figure 3 - Pre-scan Graphical Results - 3 GHz to 8 GHz - Combined Polarity

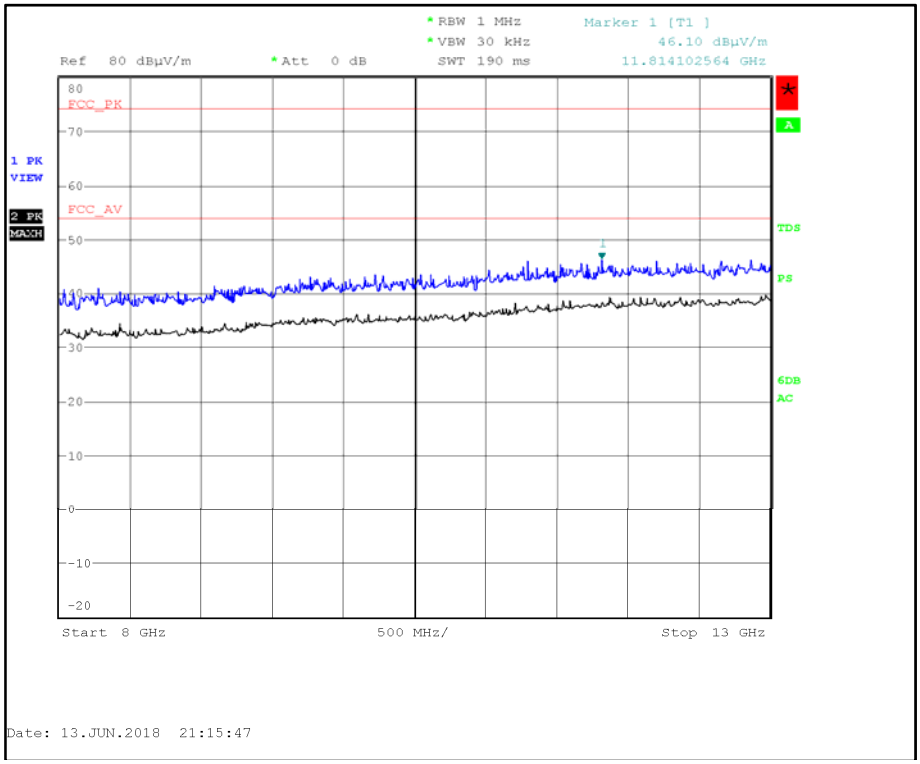

Figure 4 - Pre-scan Graphical Results - 8 GHz to 13 GHz - Combined Polarity

Frequency (MHz)	QP Level (dBuV/m)	QP Limit (dBuV/m)	QP Margin (dBuV/m)	Angle(Deg)	Height(m)	Polarity
*						

Table 6 - 1 GHz to 13 GHz

*No emissions were detected within 10 dB of the limit.

2.1.7 Test Location and Test Equipment Used

This test was carried out in EMC Chamber 5.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Due
Screened Room (5)	Rainford	Rainford	1545	36	09-Jun-2018
Turntable Controller	Inn-Co GmbH	CO 1000	1606	-	TU
Antenna (Bilog)	Chase	CBL6143	2904	24	08-Aug-2019
Comb Generator	Schaffner	RSG1000	3034	-	TU
EMI Test Receiver	Rohde & Schwarz	ESU40	3506	12	22-Nov-2018
Suspended Substrate Highpass Filter	Advance Power Components	11SH10-3000/X18000-O/O	4412	12	24-Apr-2018
Cable (Rx, Nm-Nm, 7m)	Scott Cables	SLU18-NMNM-07.00M	4498	6	19-Jun-2018
Cable (Rx, Km-Km 2m)	Scott Cables	KPS-1501-2000-KPS	4526	6	02-Jul-2018
Cable (Rx, SMAm-SMAm 0.5m)	Scott Cables	SLSLL18-SMSM-00.50M	4528	6	15-Aug-2018
Double Ridged Waveguide Horn Antenna	ETS-Lindgren	3117	4722	12	01-Mar-2019
Mast Controller	Maturo Gmbh	NCD	4810	-	TU
Tilt Antenna Mast	Maturo Gmbh	TAM 4.0-P	4811	-	TU
Double Ridge Broadband Horn Antenna	Schwarzbeck	BBHA 9120 B	4848	12	12-Feb-2019
4dB Attenuator	Pasternack	PE7047-4	4935	12	28-Nov-2018
Hygrometer	Rotronic	HP21	4989	12	26-Apr-2019

Table 7

TU - Traceability Unscheduled

3 Measurement Uncertainty

For a 95% confidence level, the measurement uncertainties for defined systems are:

Test Name	Measurement Uncertainty
Radiated Disturbance	30 MHz to 1 GHz, Bilog Antenna, ±5.2 dB 1 GHz to 40 GHz, Horn Antenna, ±6.3 dB

Table 8