



# FCC TEST REPORT

## FCC ID: 2AVZVL15Q5

Product	:	POS SYSTEM
Model Name	:	L15Q5
Brand	:	CITAQ
Report No.	:	PTC21071503901E-FC04
<b>Prepared for</b>		
CITAQ CO., LTD		
9F&13F, Chuangye Bldg, Keji Middle Road, Hi-Tech Zone, Shantou, Guangdong, China		
<b>Prepared by</b>		
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## TEST RESULT CERTIFICATION

Applicant's name : CITAQ CO., LTD  
Address : 9F&13F, Chuangye Bldg, Keji Middle Road, Hi-Tech Zone,  
Shantou, Guangdong, China  
Manufacture's name : CITAQ CO., LTD  
Address : 9F&13F, Chuangye Bldg, Keji Middle Road, Hi-Tech Zone,  
Shantou, Guangdong, China  
Product name : POS SYSTEM  
Model name : L15Q5  
Test procedure : FCC CFR47 Part 15 Section 15.247  
Test Date : ANSI C63.10:2013  
Date of Issue : Aug. 1, 2021 to Aug. 6, 2021  
Test Result : Pass

This device described above has been tested by PTS, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Test Engineer:

A handwritten signature in black ink that reads "Leo Yang" with a checkmark at the end.

Leo Yang / Engineer

Technical Manager:

A handwritten signature in black ink that appears to read "Chris Du".

Chris Du / Manager



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## 2 Test Summary

Test Items	Test Requirement	Result
Maximum Permissible Exposure (Exposure of Humans to RF Fields)	1.1307(b)(1)	PASS
Remark:		
N/A: Not Applicable		



### 3 General Information

#### 3.1 General Description of E.U.T.

Product Name	:	POS SYSTEM
Model Name	:	L15Q1,L15Q1-1 , L15Q1-2 , L15Q1-3 , L15Q1-4,L15Q1-5 L15Q2,L15Q2-1 , L15Q2-2 , L15Q2-3 , L15Q2-4 , L15Q2-5 L15Q3,L15Q3-1 , L15Q3-2 , L15Q3-3 , L15Q3-4 , L15Q3-5 L15Q4,L15Q4-1 , L15Q4-2 , L15Q4-3 , L15Q4-4 , L15Q4-5 L15Q5-1 , L15Q5-2 , L15Q5-3 , L15Q5-4 , L15Q5-5 L15K1,L15K1-1 , L15K1-2 , L15K1-3 , L15K1-4 , L15 K1-5 L15K2,L15K2-1 , L15K2-2 , L15K2-3 , L15K2-4 , L15 K2-5
Additional model	:	L15Q1\L15Q2\L15Q3\L15Q4
Specification	:	BT 5.0 BDR+EDR ; BLE 802.11b/g/n HT20/HT40
Operation Frequency	:	2412-2462MHz for 802.11b/g; n(HT20) 2422-2452 MHz for 802.11 n(HT20) 2402-2480MHz for BT
Number of Channel	:	11 channels for 802.11b/g; n(HT20) 9 channels for 802.11; n(HT40) 79 channels For BR+EDR; 40 channels For BLE
Type of Modulation	:	GFSK, $\pi/4$ -DQPSK,8DPSK For DSS; GFSK For BLE; DSSS with DBPSK/DQPSK/CCK for 802.11b; OFDM with BPSK/QPSK/16QAM/64QAM for 802.11g/n;
Antenna installation	:	PIFA antenna
Antenna Gain	:	0 dBi
Power supply	:	Input:100-240V~2.5A,50-60Hz;Output: 24V/3.75A
Hardware Version	:	N/A
Software Version	:	N/A



## 4 RF Exposure

Test Requirement : FCC Part 1.1307(b)(1)

Evaluation Method : FCC Part 2.1091

### 4.1 Requirements

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2 m normally can be maintained between the user and the device.

### 4.2 The procedures / limit

(A) Limits for Occupational / Controlled Exposure

Frequency Range	Electric Field	Magnetic Field	Power Density (S)	Averaging Time
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f)*	6
30-300	61.4	0.163	1.0	6
300-1500			F/300	6
1500-100,000			5	6

(B) Limits for General Population / Uncontrolled Exposure

Frequency Range	Electric Field	Magnetic Field	Power Density (S)	Averaging Time
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-100,000			1.0	30

Note: f = frequency in MHz ; \*Plane-wave equivalent power density



### 4.3 MPE Calculation Method

$$E \text{ (V/m)} = \frac{\sqrt{30 \times P \times G}}{d} \quad \text{Power Density: } Pd \text{ (W/m}^2\text{)} = \frac{E^2}{377}$$

E = Electric field (V/m)

P = Peak RF output power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

$$Pd = \frac{30 \times P \times G}{377 \times d^2}$$

From the peak EUT RF output power, the minimum mobile separation distance, d=0.2m, as well as the gain of the used antenna, the RF power density can be obtained

### 4.4 Test Result

Item	Antenna Gain (numeric)	Max. Peak Output Power (dBm)	Peak Output Power (W)	Power Density (mW/cm <sup>2</sup> )	Limit of Power Density (mW/cm <sup>2</sup> )	Result
WIFI	1	17.94	0.06223	0.1238	1	Pass
BLE	1	5.16	0.00328	0.0065	1	Pass
BR+EDR	1	2.77	0.00189	0.0025	1	Pass

Note: With and BT function can't simultaneously transmit

----- End of Report -----