



# SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

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Report No.: SHEM150500132102  
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## 1 Cover Page

# FCC MPE REPORT

Application No.:	SHEM1505001321CR
Applicant:	Liquet Technologies Inc
FCC ID:	QY3LQN10
<b>Equipment Under Test (EUT):</b> <b>NOTE:</b> The following sample(s) was/were submitted and identified by the client as	
Product Name:	Liquet
Model No.(EUT):	LQN10
Standards:	FCC Rules 47 CFR §2.1091 KDB447498 D01 General RF Exposure Guidance
Date of Receipt:	May 11, 2015
Date of Test:	June 12, 2015 to June 17, 2015
Date of Issue:	July 08, 2015
Test Result:	<b>Pass*</b>

\* In the configuration tested, the EUT complied with the standards specified above.



Parlam Zhan  
E&E Section Manager  
SGS-CSTC (Shanghai) Co., Ltd.



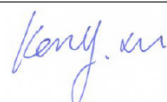
The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. All test results in this report can be traceable to National or International Standards.

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## 2 Version

Revision Record				
Version	Chapter	Date	Modifier	Remark
00	/	July 08, 2015	/	Original

Authorized for issue by:			
Engineer		Eddy Zong _____ <b>Print Name</b>	 _____
Clerk		Susie Liu _____ <b>Print Name</b>	 _____
Reviewer		Keny Xu _____ <b>Print Name</b>	 _____

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## 4 General Information

### 4.1 Client Information

Applicant:	Linquet Technologies Inc
Address of Applicant:	950 Cambie St, Vancouver, BC Canada, V6B 5X5
Manufacturer:	Ryder Industries
Address of Manufacturer:	139 Da Bao Road Bao An, district 33 Shenzhen 518133 China
Factory:	Ryder Industries
Address of Factory:	139 Da Bao Road Bao An, district 33 Shenzhen 518133 China

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

Brand Name:	Linquet
Product Description:	Portable Product
Power Supply:	DC 3V (The new Button Cell is used for the EUT during the test)

### 4.3 Details of E.U.T.

Operation Frequency:	2402MHz-2480MHz
Bluetooth Version:	4.0
Modulation Type:	GFSK
Number of Channel:	40
Antenna Type	Chip Antenna
Antenna Gain	1.39dBi

#### **4.4 Test Location**

All tests were performed at SGS E&E EMC lab

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

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#### **4.5 Test Facility**

The test facility is recognized, certified, or accredited by the following organizations:

- **CNAS (No. CNAS L0599)**

CNAS has accredited SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing. Date of expiry: 2017-07-14.

- **FCC – Registration No.: 402683**

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered and fully described in a report filed with the Federal Communications Commission (FCC). The acceptance letter from the FCC is maintained in our files. Registration No.: 402683, Expiry Date: 2017-09-16.

- **Industry Canada (IC) – IC Assigned Code: 8617A**

The 3m Semi-anechoic chamber of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 8617A-1. Expiry Date: 2017-06-18.

- **VCCI (Member No.: 3061)**

The 3m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-3868, C-4336, T-2221, G-830 respectively. Date of Expiry: 2017-11-16.

## 5 Test Standards and Limits

Approximate SAR Test Exclusion Power Thresholds at Selected Frequencies and Test Separation Distances are illustrated in the following Table. The equation and threshold in KDB447498 D01 section 4.3.1 must be applied to determine SAR test exclusion.

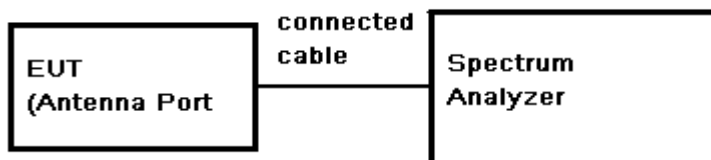
MHz	5	10	15	20	25	30	35	40	45	50	mm
150	39	77	116	155	194	232	271	310	349	387	(mW)
300	27	55	82	110	137	164	192	219	246	274	
450	22	45	67	89	112	134	157	179	201	224	
835	16	33	49	66	82	98	115	131	148	164	
900	16	32	47	63	79	95	111	126	142	158	
1500	12	24	37	49	61	73	86	98	110	122	
1900	11	22	33	44	54	65	76	87	98	109	
2450	10	19	29	38	48	57	67	77	86	96	
3600	8	16	24	32	40	47	55	63	71	79	
5200	7	13	20	26	33	39	46	53	59	66	
5400	6	13	19	26	32	39	45	52	58	65	
5800	6	12	19	25	31	37	44	50	56	62	

## 6 Measurement and Calculation

### 6.1 Maximum transmit power

**EUT Operation:** Test in fixing frequency operating mode at lowest, middle and highest frequency.

**Test Configuration:**



**Test Data:**

Test mode	Channel	Reading Power (dBm)	Cable Loss (dB)	Output Power (dBm)	Output Peak Power (mW)	Peak Power Limit (dBm)	Result
GFSK	Low	-5.45	0.5	-4.95	0.32	30	PASS
	Mid	-5.80	0.5	-5.30	0.30	30	PASS
	High	-6.71	0.5	-6.21	0.24	30	PASS

### 6.2 RF Exposure Calculation

The Max Conducted Peak Output Power is 0.32mW in middle channel, The best case gain of the antenna is 1.39dBi. 1.39dBi logarithmic terms convert to numeric result is nearly 1.09

According to the formula. calculate the EIRP test result:

$$\text{EIRP} = P \times G = 0.32 \text{ mW} \times 1.09 = 0.3488 \text{ mW} < 10 \text{ mW}$$

So the SAR report is not required.

## 7 EUT Constructional Details

Refer to the < LQN10\_External Photos > & < LQN10\_Internal Photos >.

**--End of the Report--**