SGS-CSTC Standards Technical Services Co., Ltd.

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TEST REPORT

Application No.:	GZEM1408004568RF
Applicant:	Salcomp (Shenzhen) Co., Ltd.
Manufacturer:	Salcomp (Shenzhen) Co., Ltd.
Factory:	Salcomp (Shenzhen) Co., Ltd. Salcomp Industrial Eletrônica da Amazônia Ltda Salcomp Manufacturing India Pvt Ltd.
FCC ID:	SZQ-T110
Product Name:	TYLT Vu Solo
Product Description:	Low Power Transmitter
Model No.:	VUSOLOx-T, the x is color code , which may be “GY”,”G”,”RD”and”BL”,GY=Grey, G=Green ,RD=Red, BL= Blue ♣
♣	Please refer to section 3 of this report for further details.
Trade mark:	TYLT
Standards:	KDB 680106 D01v02.
Date of Receipt:	2014-08-29
Date of Test:	2014-09-03 to 2014-09-04
Date of Issue:	2014-09-12
Test Result :	**Pass***

* In the configuration tested, the EUT detailed in this report complied with the standards specified above. Please refer to section 3 of this report for further detail.

Authorized Signature:

Richard Li
Manager

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		2014-09-12		Original

Authorized for issue by:				
Tested By		(Jack Liang) /Project Engineer		2014-09-03 to 2014-09-04 **Date**
Prepared By		(Jack Liang) /Project Engineer		2014-09-12 **Date**
Checked By		(Fred Zhu) /Reviewer		2014-09-12 **Date**

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4 General Information

4.1 Client Information

Applicant:	Salcomp (Shenzhen) Co., Ltd.
Address of Applicant:	Salcomp Road, Furong Industrial Area, Xinqiao, Shajing, Baoan District, Shenzhen 518125 CHINA
Manufacturer:	Salcomp (Shenzhen) Co., Ltd.
Address of Manufacturer	Salcomp Road, Furong Industrial Area, Xinqiao, Shajing, Baoan District, Shenzhen 518125 CHINA
Factory:	Salcomp (Shenzhen) Co., Ltd.
Address of Factory:	Salcomp Road, Furong Industrial Area, Xinqiao, Shajing, BaoanDistrict, Shenzhen 518125 CHINA
Factory:	Salcomp Industrial Eletrônica da Amazônia Ltda
Address of Factory:	Av. dos Oitis, no. 4,145, Distrito Industrial 69075-842 Manaus, Amazonas BRAZIL
Factory:	Salcomp Manufacturing India Pvt Ltd
Address of Factory:	Nokia Telecom SEZ SIPCOT Industrial Park Phase III Chennai – Bangalore Highway Sriperumbudur, Tamil Nadu-602 105

4.2 General information description

Equipment under test	TYLT Vu Solo
Model name	VUSOLOBL-T
Serial number	N/A
Frequency Range	110 KHz to 205 KHz
Antenna type	Internal type(Coil antenna)
Power source	5V DC

4.3 Test frequency

	Frequency Range
Frequency (KHz)	110 KHz to 205 KHz

4.4 Description of Support Units

The EUT has been tested with simulate receiver, resistor and adapter provided by applicant.

Adapter details	Model number:ETA-U90EBE Input:100-240V AC,50-60Hz,0.35A Output:5V DC,2A

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4.5 Deviation from Standards

None.

4.6 Abnormalities from Standard Conditions

None.

4.7 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou EMC Laboratory,
198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District,
Guangzhou, China 510663
Tel: +86 20 82155555 Fax: +86 20 82075059

No tests were sub-contracted.

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4.8 Test facility

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

- **NVLAP (Lab Code: 200611-0)**

  SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou EMC Laboratory is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP/NIST). NVLAP Code: 200611-0.

  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.

- **ACMA**

  SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory can also perform testing for the Australian C-Tick mark as a result of our NVLAP accreditation.

- **SGS UK(Certificate No.: 32), SGS-TUV SAARLAND and SGS-FIMKO**

  Have approved SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory as a supplier of EMC TESTING SERVICES and SAFETY TESTING SERVICES.

- **CNAS (Lab Code: L0167)**

  SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been assessed and in compliance with CNAS-CL01:2006 accreditation criteria for testing laboratories (identical to ISO/IEC 17025:2005 General Requirements) for the Competence of Testing Laboratories.

- **FCC (Registration No.: 282399)**

  SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 282399, May 31, 2002.

- **Industry Canada (Registration No.: 4620B-1)**

  The 3m/10m Alternate Semi-anechoic chamber of SGS-CSTC Standards Technical Services Co., Ltd., has been registered by Certification and Engineering of Industry Canada for radio equipment testing with Registration No. 4620B-1.

- **VCCI (Registration No.: R-2460, C-2584, G-449 and T-1179)**

  The 10m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services Co. Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-2460, C-2584，G-449 and T-1179 respectively.

- **CBTL (Lab Code: TL129)**

  SGS-CSTC Standards Technical Services Co., Ltd., E&E Laboratory has been assessed and fully comply with the requirements of ISO/IEC 17025:2005, the Basic Rules, IECEE 01:2006-10 and Rules of procedure IECEE 02:2006-10, and the relevant IECEE CB-Scheme Operational documents.

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5 Equipment Used during Test

RE in Chamber						
No.	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. date (YYYY-MM-DD)	Cal.Due date (YYYY-MM-DD)
EMC0525	Compact Semi-Anechoic Chamber	ChangZhou ZhongYu	N/A	N/A	2012-08-30	2014-08-30
EMC0522	EMI Test Receiver	Rohde & Schwarz	ESIB26	100283	2014-04-19	2015-04-19
EMC0056	EMI Test Receiver	Rohde & Schwarz	ESCI	100236	2014-03-03	2015-03-03
EMC0528	RI High frequency Cable	SGS	20 m	N/A	2014-05-09	2015-05-09
EMC2025	Trilog Broadband Antenna 30-3000MHz	SCHWARZBECK MESS-ELEKTRONIK	VULB 9163	9163-450	2013-08-31	2016-08-31
EMC0524	Bi-log Type Antenna	Schaffner -Chase	CBL6112B	2966	2013-08-31	2016-08-31
EMC0519	Bilog Type Antenna	Schaffner -Chase	CBL6143	5070	2012-06-02	2015-06-02
EMC2026	Horn Antenna 1-18GHz	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120D	9120D-841	2013-08-31	2016-08-31
EMC0518	Horn Antenna	Rohde & Schwarz	HF906	100096	2012-07-01	2015-07-01
EMC0521	1-26.5 GHz Pre-Amplifier	Agilent	8449B	3008A01649	2014-03-03	2015-03-03
EMC2065	Amplifier	HP	8447F	N/A	2013-08-31	2014-08-31
EMC2063	1-26GHz Pre Amplifier	Compliance Direction System Inc.	PAP-1G26-48	6279.628	2013-07-29	2014-07-29
EMC0075	310N Amplifier	Sonama	310N	272683	2014-03-03	2015-03-03
EMC0523	Active Loop Antenna	EMCO	6502	42963	2014-03-03	2016-03-03
EMC2041	Broad-Band Horn Antenna (14)15-26.5(40)GHz	SCHWARZBECK MESS-ELEKTRONI	BBHA 9170	9170-375	2014-05-26	2017-05-26
EMC2069	2.4GHz filter	Micro-Tronics	BRM 50702	149	2014-04-19	2015-04-19
EMC0530	10m Semi-Anechoic Chamber	ETS	N/A	N/A	2014-05-03	2016-05-03

General used equipment						
No.	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. date (YYYY-MM-DD)	Cal.Due date (YYYY-MM-DD)
EMC0006	DMM	Fluke	73	70681569	2013-09-13	2014-09-13
EMC0007	DMM	Fluke	73	70671122	2013-09-13	2014-09-13
EMC0907	Electric Field Probe	WANDEL & GOLTERMANN	EMR-20	M-0063	2014-04-19	2015-04-19

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6 Environmental evaluation and exposure limit according to FCC CFR 47 Part 1.1307(b), 1.1310

6.1 Limits for Maximum Permissible Exposure (MPE)

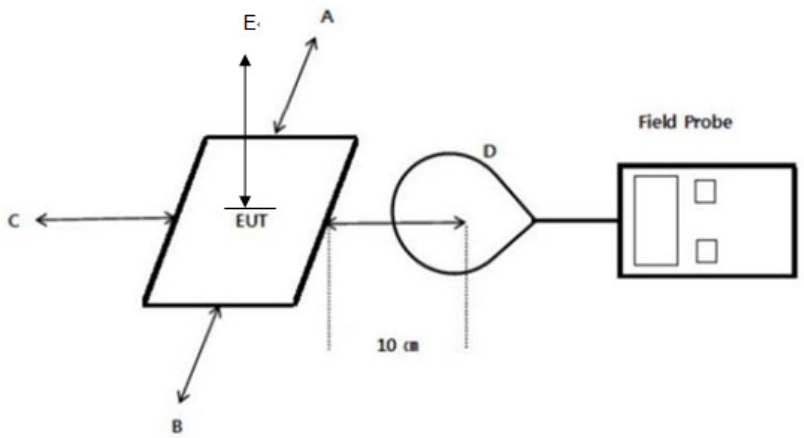
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm^2)	Average Time (minutes)
(A) Limits for Occupational / Control Exposures				
0.3-3.0	614	1.63	*(100)	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30

“*” means Plane-wave equivalent power density

6.2 Test mode

Mode	Description
Charging mode With load	Using Max load
	Using Mid load
	Using Min load
Standby mode	No load

6.3 Test Setup



1. The test was performed on 360 degree turn table in anechoic chamber.
2. The probe was placed at distance 10 cm which is between the edge of the charger and the geometric centre of the probe.
3. The highest emission level was recorded and compared with limit as soon as measurement of each point; A, B, C, D were completed.
4. The EUT was measured according to the KDB 680106 D01v02.

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6.4 Test results

6.4.1 E-Field Strength at 10 cm from each edges the EUT (Pad type)

Test Mode	Frequency Range(KHz)	Position A (V/m)	Position B (V/m)	Position C (V/m)	Position D (V/m)	Position E (V/m)	Limits (V/m)
Charging mode With load (Max)	110 KHz to 205 KHz	0.59	0.62	0.34	0.23	0.67	614
Charging mode With load (Mid)	110 KHz to 205 KHz	0.45	0.56	0.54	0.98	0.34	614
Charging mode With load (Min)	110 KHz to 205 KHz	0.26	0.23	0.52	0.45	0.49	614
Standby mode (Not charging)	110 KHz to 205 KHz	0.97	0.89	0.54	0.14	0.85	614

6.4.2 H-Field Strength at 10 cm from each edges the EUT (Pad type)

Test Mode	Frequency Range(KHz	Position A (A/m)	Position B (A/m)	Position C (A/m)	Position D (A/m)	Position E (A/m)	Limits (A/m)
Charging mode With load (Max)	110 KHz to 205 KHz	0.95	0.19	0.34	0.23	0.45	1.63
Charging mode With load (Mid)	110 KHz to 205 KHz	0.12	0.87	0.46	0.29	0.23	1.63
Charging mode With load (Min)	110 KHz to 205 KHz	0.24	0.41	0.22	0.95	0.37	1.63
Standby mode (Not charging)	110 KHz to 205 KHz	0.69	0.43	0.63	0.29	0.38	1.63

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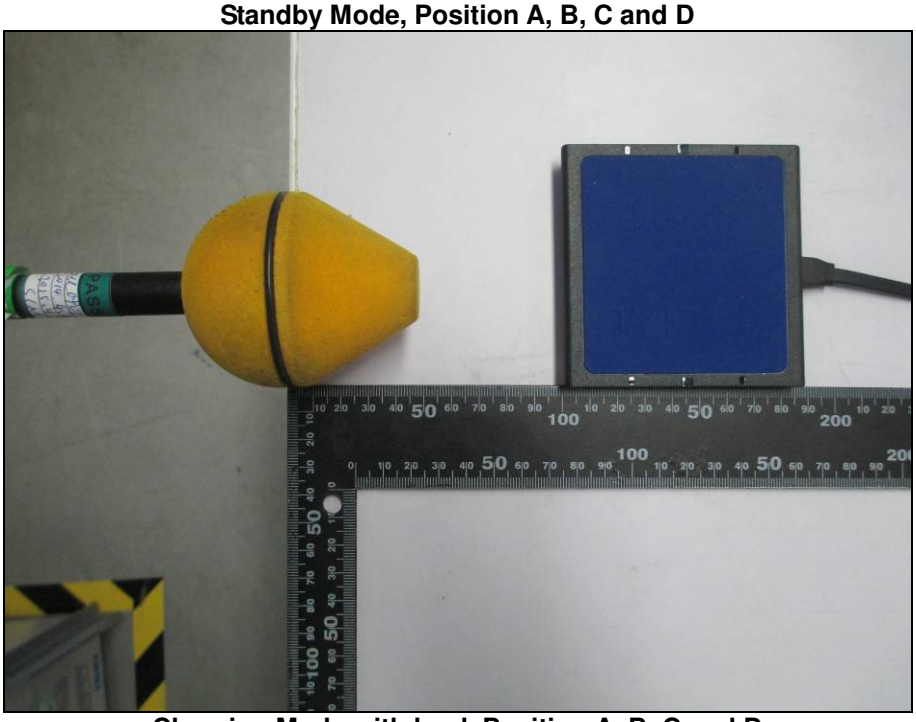
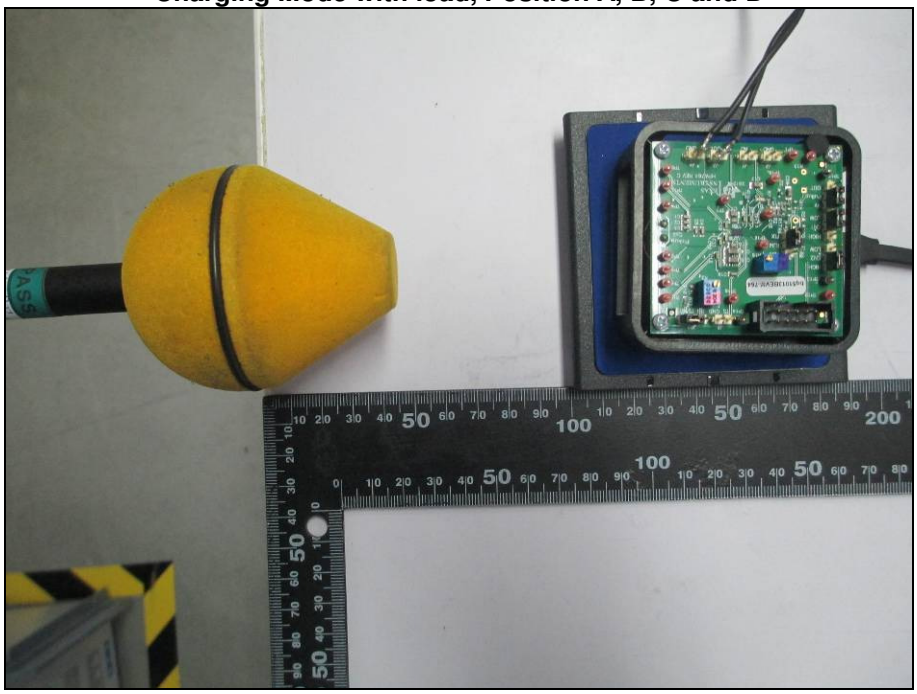
7 Photographs

7.1 . Test setup photo

Standby Mode, Position A, B, C and D



Charging Mode with load, Position A, B, C and D



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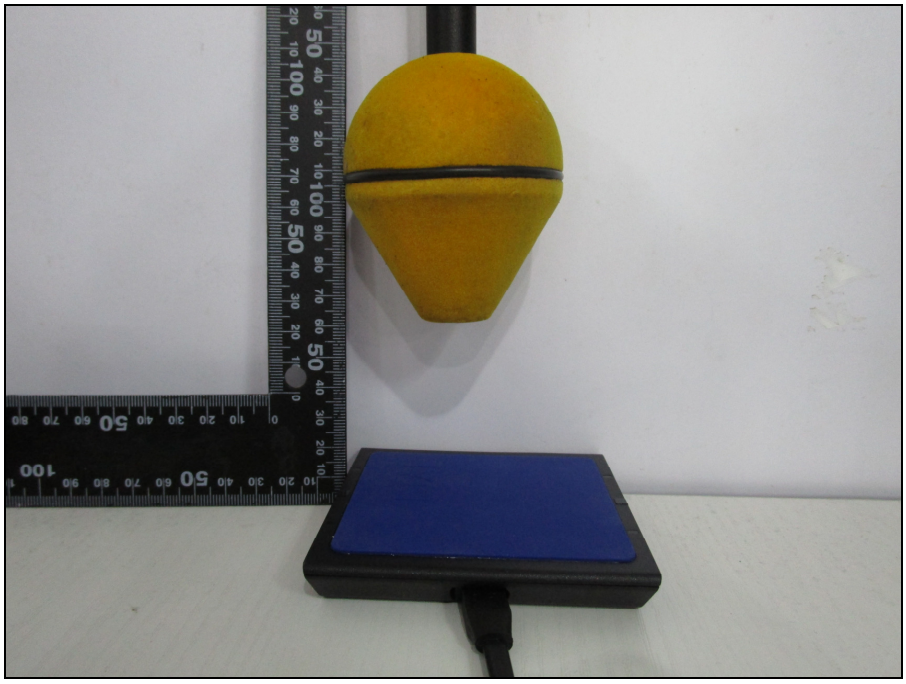
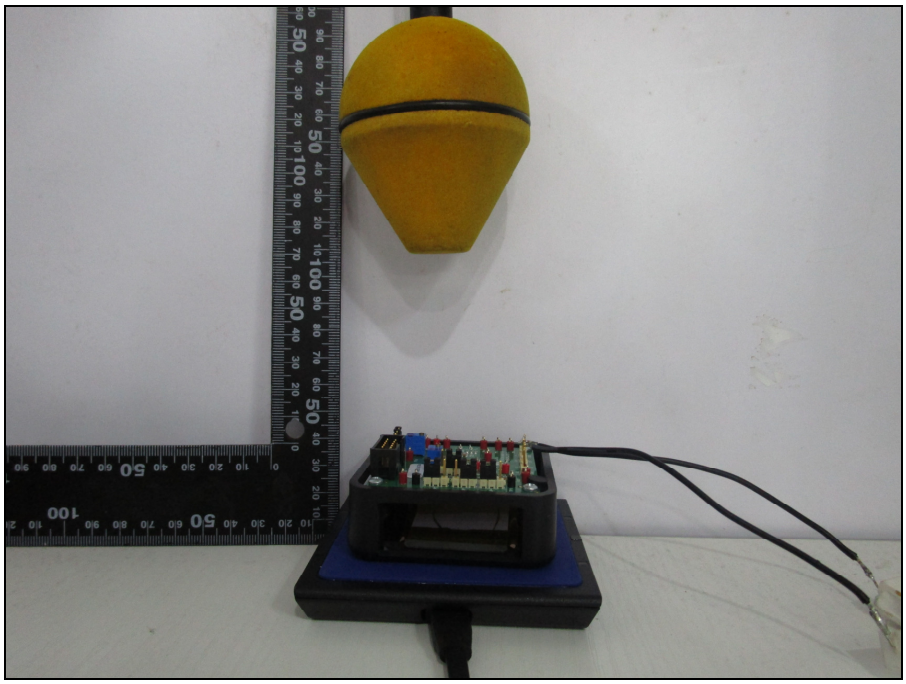
Standby Mode, Position E



Charging Mode with load, Position E



--End of Report--

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