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FEDERAL COMMUNICATIONS COMMISSION

Registration number: 282399

Report No.: SZEMO081004986RFF-1

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FCC ID: VZBCM3808080926

TEST REPORT

Application No: SZEMO081004986RF

Applicant/ Manufacturer/ SHENZHEN XINZHENSHENG ELECTRONICS CO, LTD

Factory:

FCC ID: VZBCM3808080926

Fundamental Carrier Frequency: 2.402GHz to 2.480GHz

Equipment Under Test (EUT):

Name: PS3 multifunction remote controller

Model: CM3808

Standards: FCC PART 15: 2008

Date of Receipt: 09 October 2008

Date of Test: 09 October to 11 November 2008

Date of Issue: 12 November 2008

Test Result : PASS *

Authorized Signature:

Robinson Lo 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. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

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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^{*} In the configuration tested, the EUT complied with the standards specified above.



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2 Test Summary

Test	Test Requirement	Stanadard Paragraph	Result
Flied Strength of Fundamental	FCC PART 15 : 2008	Section 15.249 (a)	PASS
Flied Strength of Harmornics or other Frequency Emission	FCC PART 15 : 2008	Section 15.249 (a) Section 15.209/15.205	PASS
Occupied Bandwidth	FCC PART 15 : 2008	Section 15.249	PASS



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General Information

4.1 Client Information

Applicant/ SHENZHEN XINZHENSHENG ELECTRONICS CO, LTD

Manufacturer/ Factory:

Address of Applicant: Building 49, Baotian Industrial Zone Xixiang Town, Baoan District,

Shenzhen. China

4.2 General Description of E.U.T.

Product Name: PS3 multifunction remote controller

Model: CM3808

Power Supply: DC3.0V(2*1.5V"AAA"Size Batteries)

Power Cord: N/A-

4.3 Description of Support Units

The EUT was tested as an independent unit:

4.4 Standards Applicable for Testing

The customer requested FCC tests for a 2.4GHz unit.

The standard used was FCC PART 15, SUBPART C (2008) section 15.249.

4.5 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou EMC Laboratory, No.198 Kezhu Road, Science Town Economic& Technology Development District Guangzhou, China 510663

Tel: +86 20 82155555 Fax: +86 20 82075059

No tests were sub-contracted.

4.6 Other Information Requested by the Customer

None.



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4.7 Test Facility

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

NVLAP – Lab Code: 200811-0

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou EMC Laboratory is recognized under the National Voluntary Laboratory Accreditation Program (NVLAP/NIST). NVLAP Code: 200811-0. Effective through December 31, 2008.

ACA

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.

VCCI

The 3m Semi-anechoic chamber and Shielded Room (11.5m x 4m x 4m) of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-1599 and C-1706 respectively.

Date of Registration:June 01, 2005. Valid until February 22, 2008

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.

CNAL – LAB Code: L0141

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been assessed and in compliance with CNAL/AC01: 2002 accreditation criteria for testing laboratories (identical to ISO/IEC 17025:1999 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. With the above and NVLAP's accreditation, SGS-CSTC is an authorised test laboratory for the DoC process.

• Industry Canada (IC)

The 3m Semi-anechoic chamber of SGS-CSTC Standards Technical Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 5169.



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5 Test Results

5.1 Test Instruments

	RE in Chamber					
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (dd-mm-yy)	Cal.Due date (dd-mm-yy)
1	3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEL0017	16-06-2007	15-06-2009
2	EMI Test Receiver	Rohde & Schwarz	ESIB26	SEL0023	12-12-2007	11-12-2008
3	EMI Test software	AUDIX	E3	SEL0050	N/A	N/A
4	Coaxial cable	SGS	N/A	SEL0028	18-06-2008	17-06-2009
5	BiConiLog Antenna (26-3000MHz)	ETS-LINDGREN	3142C	SEL0014	12-08-2008	11-08-2009
6	Pre-amplifier (0.1-1300MHz)	Agilent Technologies	8447D	SEL0053	18-06-2008	17-06-2009
7	Double-ridged horn (1-18GHz)	ETS-LINDGREN	3117	SEL0005	12-08-2008	11-08-2009
8	Horn Antenna (18-26GHz)	ETS-LINDGREN	3160	SEL0076	12-08-2008	11-08-2009
9	Pre-amplifier (1-18GHz)	Rohde & Schwarz	AFS42-00101 800-25-S-42	SEL0081	18-06-2008	17-06-2009
10	Pre-amplifier (18-26GHz)	Rohde & Schwarz	AFS33- 18002650-30- 8P-44	SEL0080	18-06-2008	17-06-2009
11	Band filter	Amindeon	82346	SEL0094	18-06-2008	17-06-2009
12	Active Loop Antenna	Beijing Daze	ZN30900A	SEL0097	15-06-2008	14-06-2009

5.2 E.U.T. Operation

Input voltage: DC3.0V(2*1.5V"AAA"Size Batteries)

Operating Environment:

Temperature: 24°C
Humidity: 50 % RH
Atmospheric Pressure: 1010 mbar

EUT Operation: Test in transmitting mode:

For channel 0: 2.402GHz.
 For channel 39: 2.441GHz.
 For channel 78: 2.480GHz.

FCC ID: VZBCM3808080926



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5.3 Test Procedure & Measurement Data

5.3.1 Radiated Emissions

5.3.1.1 Test in transmitting mode

Test Requirement: FCC Part15.249,15.209 and 15.205

Test Method: ANSI C63.4:2003

3m (Semi-Anechoic Chamber) Measurement Distance:

Frequency range 30 MHz - 25GHz

Test instrumentation resolution bandwidth

30 MHz - 1000 MHz, RBW=120KHz VBW=300KHz

Above 1GHz Peak RBW=1MHz VBW=1MHz

Average: RBW=1MHz VBW=10Hz

Operation: Receive antenna scan height 1 - 4 m, polarization Vertical/ Horizontal

Requirements:

Fundamental Frequency	Field Strength of Fundamental	Field Strength of Harmonics and Spurious Emissions
(MHz)	(dBuV/m @ 3m)	(dBuV/m @ 3m)
902 to 928	94.0	54.0
2400 to 2483.5	94.0	54.0
5725 to 5875	94.0	54.0
24000 to 24250	108.0	68.0

The fundamental frequency of the EUT is 2.4GHz to 2.480GHz

The limit for average field strength dBuv/m for the fundamental frequency = 94.0 dBμV/m.

No fundamental is allowed in the restricted bands.

Test Procedure:

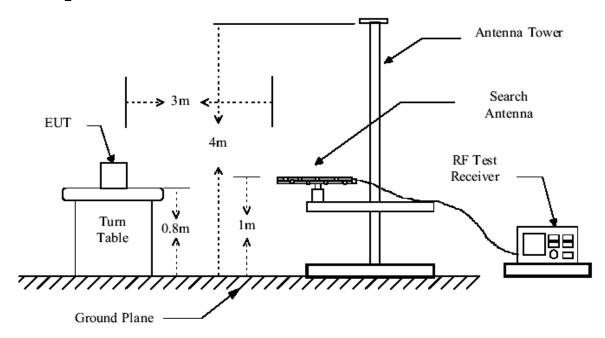
- 1. The EUT is placed on a turntable, which is 0.8m above ground plane.
- 2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission
- 3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
- 4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- 6. Repeat above procedures until the measurements for all frequencies are complete.
- 7 The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.

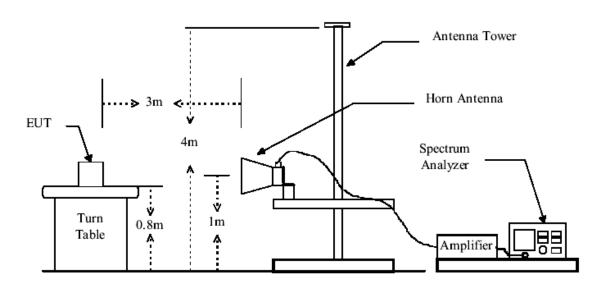


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Test Configuration:







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The field strength is calculated by adding the Antenna Factor, Cable Factor & Peramplifier . The basic equation with a sample calculation is as follows:

Final Test Level = Receiver Reading + Antenna Factor + Cable Factor - Peramlifer Factor

The following test results were performed on the EUT:

1. The following test results were performed at 30MHz—1GHz

Vertical:

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)
156.100	1.33	9.39	27.41	52.49	35.80	43.50	-7.70
322.940	1.98	14.76	26.90	44.85	34.69	46.00	-11.31
405.390	2.22	16.32	27.43	39.40	30.51	46.00	-15.49
575.140	2.68	19.10	27.64	43.97	38.11	46.00	-7.89
622.670	2.75	20.44	27.53	47.29	42.95	46.00	-3.05
665.350	2.83	21.16	27.39	45.29	41.89	46.00	-4.11

Horizonal

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)
322.940	1.98	14.76	26.90	49.78	39.62	46.00	-6.38
431.580	2.34	16.52	27.51	44.41	35.76	46.00	-10.24
622.670	2.75	20.44	27.53	44.00	39.66	46.00	-6.34
665.350	2.83	21.16	27.39	43.02	39.62	46.00	-6.38
749.740	3.06	21.70	27.11	40.83	38.48	46.00	-7.52
796.300	3.19	22.08	26.95	38.27	36.59	46.00	-9.41



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2. The following test results were performed at above 1GHz Harmonics & Spurious Emissions

Channel 0 (2402MHz):

Peak Measurement

Frequency (MHz)	Cable loss (dB)	Antenna factors (dB/m)	Preamp factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Limit (dBµV/ m)	Over limit	polarizatio n
2394.00	4.97	32.24	37.65	60.22	59.78	74.00	-14.22	Vertical
2400.00	4.97	32.25	37.65	63.37	62.94	74.00	-11.06	Vertical
2402.00	5.01	32.34	0	61.27	98.62	114.00	-15.38	Vertical
4804.00	6.61	34.04	38.18	44.61	47.08	74.00	-26.92	Vertical
7206.00	7.64	36.33	38.55	43.46	48.88	74.00	-25.12	Vertical
2394.00	4.97	32.24	37.65	56.31	55.87	74.00	-18.13	Horizontal
2400.00	4.97	32.25	37.65	60.76	60.33	74.00	-13.67	Horizontal
2402.00	5.01	32.34	0	57.43	94.78	114.00	-19.22	Horizontal
4804.00	6.61	34.04	38.18	43.85	46.32	74.00	-27.68	Horizontal
7206.00	7.64	36.33	38.55	44.70	50.12	74.00	-23.88	Horizontal

Average Measurement

Frequency (MHz)	Cable loss (dB)	Antenna factors (dB/m)	Preamp factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Limit (dBµV/ m)	Over limit	polarizatio n
2394.00	4.97	32.24	37.65	41.42	40.98	54.00	-13.02	Vertical
2400.00	4.97	32.25	37.65	45.09	44.66	54.00	-9.34	Vertical
2402.00	5.01	32.34	0	49.68	87.03	94.00	-6.97	Vertical
4804.00	6.61	34.04	38.18	33.81	36.28	54.00	-17.72	Vertical
7206.00	7.64	36.33	38.55	34.13	39.55	54.00	-14.45	Vertical
2394.00	4.97	32.24	37.65	38.86	38.42	54.00	-15.58	Horizontal
2400.00	4.97	32.25	37.65	41.11	40.68	54.00	-13.32	Horizontal
2402.00	5.01	32.34	0	47.52	84.87	94.00	-9.13	Horizontal
4804.00	6.61	34.04	38.18	33.67	36.14	54.00	-17.86	Horizontal
7206.00	7.64	36.33	38.55	33.88	39.30	54.00	-14.70	Horizontal



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Channel 39 (2441MHz):

Peak Measurement

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Frequency (MHz)	Cable loss (dB)	Antenna factors (dB/m)	Preamp factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Limit (dBµV/ m)	Over limit	polarization
2411.00	4.99	32.25	37.65	45.33	44.92	74.00	-29.08	Vertical
2441.00	5.03	32.26	0	65.38	102.67	114.00	-11.33	Vertical
2462.00	5.06	32.28	37.64	51.48	51.18	74.00	-22.82	Vertical
4882.00	6.64	34.02	38.24	43.91	46.33	74.00	-27.67	Vertical
7323.00	7.58	36.10	38.51	43.70	48.87	74.00	-25.13	Vertical
2411.00	4.99	32.25	37.65	51.58	51.17	74.00	-22.83	Horizontal
2441.00	5.03	32.26	0	64.79	102.08	114.00	-11.92	Horizonta
2462.00	5.06	32.28	37.64	47.05	46.75	74.00	-27.25	Horizonta
4882.00	6.64	34.02	38.24	43.47	45.89	74.00	-28.11	Horizontal
7323.00	7.58	36.10	38.51	43.14	48.31	74.00	-25.69	Horizontal

Average Measurement

Frequency (MHz)	Cable loss (dB)	Antenna factors (dB/m)	Preamp factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Limit (dBµV/ m)	Over limit	polarization
2411.00	4.99	32.25	37.65	34.76	34.35	54.00	-19.65	Vertical
2441.00	5.03	32.26	0	50.27	87.56	94.00	-6.44	Vertical
2462.00	5.06	32.28	37.64	38.02	37.72	54.00	-16.28	Vertical
4882.00	6.64	34.02	38.24	33.49	35.91	54.00	-18.09	Vertical
7323.00	7.58	36.10	38.51	33.04	38.21	54.00	-15.79	Vertical
2411.00	4.99	32.25	37.65	36.91	36.50	54.00	-17.50	Horizonta
2441.00	5.03	32.26	0	48.67	85.96	94.00	-8.04	Horizontal
2462.00	5.06	32.28	37.64	38.76	38.46	54.00	-15.54	Horizontal
4882.00	6.64	34.02	38.24	33.54	35.96	54.00	-18.04	Horizontal
7323.00	7.58	36.10	38.51	33.05	38.22	54.00	-15.78	Horizontal



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Channel 78 (2480MHz):

Peak Measurement

reak ivieasui	CITICITE							
Frequency (MHz)	Cable loss	Antenna factors	Preamp factor	Reading Level	Emission Level	Limit (dBµV/	Over limit	polarization
, ,	(dB)	(dB/m)	(dB)	(dBµV)	(dBµV/m)	m)		
2480.00	5.08	32.28	0	63.85	101.21	114.00	-12.79	Vertical
2483.50	5.08	32.29	37.64	45.33	45.06	74.00	-28.94	Vertical
2496.00	5.10	32.30	37.64	45.42	45.18	74.00	-28.82	Vertical
4960.00	6.68	34.01	38.30	43.97	46.36	74.00	-27.64	Vertical
7440.00	7.52	35.91	38.47	43.56	48.52	74.00	-25.48	Vertical
2480.00	5.08	32.28	0	62.17	99.53	114.00	-14.47	Horizonta
2483.50	5.08	32.29	37.64	45.44	45.17	74.00	-28.83	Horizonta
2496.00	5.10	32.30	37.64	44.99	44.75	74.00	-29.25	Horizontal
4960.00	6.68	34.01	38.30	43.64	46.03	74.00	-27.97	Horizontal
7440.00	7.52	35.91	38.47	43.82	48.78	74.00	-25.22	Horizontal

Average Measurement

Frequency (MHz)	Cable loss (dB)	Antenna factors (dB/m)	Preamp factor (dB)	Reading Level (dBµV)	Emission Level (dBµV/m)	Limit (dBµV/ m)	Over limit	polarization
2480.00	5.08	32.28	0	49.75	87.11	94.00	-6.89	Vertical
2483.50	5.08	32.29	37.64	35.62	35.35	54.00	-18.65	Vertical
2496.00	5.10	32.30	37.64	34.96	34.72	54.00	-19.28	Vertical
4960.00	6.68	34.01	38.30	33.11	35.50	54.00	-18.50	Vertical
7440.00	7.52	35.91	38.47	33.32	38.28	54.00	-15.72	Vertical
2480.00	5.08	32.28	0	47.75	85.11	94.00	-8.89	Horizonta
2483.50	5.08	32.29	37.64	38.77	38.50	54.00	-15.50	Horizonta
2496.00	5.10	32.30	37.64	35.70	35.46	54.00	-18.54	Horizontal
4960.00	6.68	34.01	38.30	33.22	35.61	54.00	-18.39	Horizontal
7440.00	7.52	35.91	38.47	33.12	38.08	54.00	-15.92	Horizontal



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N/A: refer to remark 1).

Remark:

1). For this intentional radiator operates below 10 GHz, the spectrum shall be investigated to the tenth harmonic of the highest fundamental frequency. And above the fourth harmonic of this intentional radiator, the disturbance is very low. So the test result only displays to 3rd harmonic.

2). According to 15.249 (e) As shown in Section 15.35(b), for frequencies above 1000 MHz, the above field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

TEST RESULTS: The unit does meet the FCC requirements.



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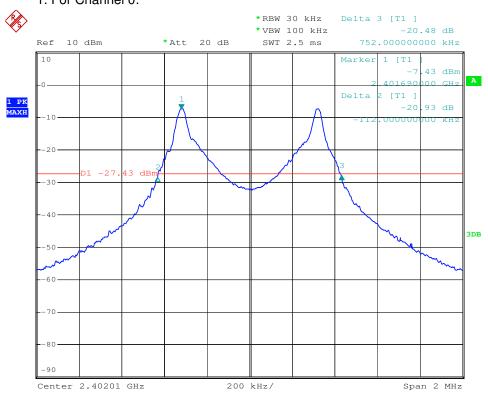
5.3.2 Occupied Bandwidth

Test Requirement: FCC Part 15.249
Test Method: ANSI C63.4:2003

Operation within the band 2.402 - 2.480GHz

The occupied bandwidth as below:

1. For Channel 0:



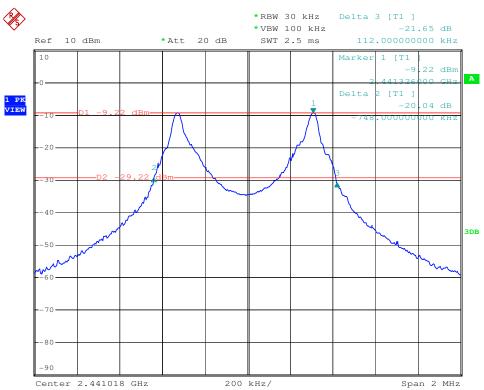
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2. For Channel 39:



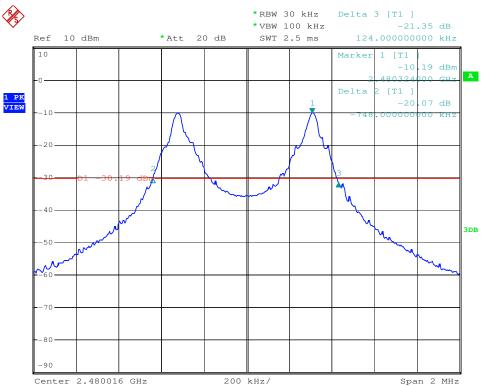
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3. For Channel 78:



Date: 27.0CT.2008 17:42:58