



No. 1 Workshop, M-10, Middle section, Science & Technology
Park, Shenzhen, Guangdong, China 518057

Telephone: +86 (0) 755 2601 2053

Fax: +86 (0) 755 2671 0594

Email: sgs_internet_operations@sgs.com

Report No.: SZEMO09110622301

Page: 1 of 18

FCC REPORT

Application No. : SZEMO091106223RF
Applicant: Shenzhen Fuyeda Industry Development Corp.
Product Name: MOUSE
Operation Frequency: 2405.2MHz to 2476.2MHz
FCC ID: V4P-MS183OR
Standards: FCC CFR Title 47 Part 15 Subpart C Section 15.249: 2008
Date of Receipt 04 November 2009
Date of Test 04 to 18 November 2009
Date of Issue 20 November 2009

Test Result :	PASS *
----------------------	---------------

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

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.

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf. Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This Test Report cannot be reproduced, except in full, without prior written permission of the Company.

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



SGS-CSTC Standards Technical Services Ltd.

Report No.: SZEMO09110622301

Page: 2 of 18

2 Contents

	Page
1 COVER PAGE	1
2 CONTENTS	2
3 TEST SUMMARY	3
4 GENERAL INFORMATION	4
4.1 CLIENT INFORMATION	4
4.2 GENERAL DESCRIPTION OF E.U.T.	4
4.3 E.U.T OPERATION MODE	6
4.4 TEST FACILITY	6
4.5 TEST LOCATION	6
4.6 OTHER INFORMATION REQUESTED BY THE CUSTOMER	6
4.7 TEST INSTRUMENTS LIST:	7
5 TEST RESULTS AND MEASUREMENT DATA	8
5.1 ANTENNA REQUIREMENT:	8
5.2 RADIATED EMISSION	9
5.2.1 <i>Field Strength Of The Fundamental Signal</i>	11
5.2.2 <i>Spurious Emissions</i>	12
5.3 20dB BANDWIDTH	16-18



3 Test Summary

Test Item	Section in CFR 47	Result
Antenna requirement	15.203	Passed
Field strength of the fundamental signal	15.249 (a)	Passed
Spurious emissions	15.249/15.209	Passed
20dB Occupied Bandwidth	15.215 (c)	Passed

Remark: Passed: The EUT complies with the essential requirements in the standard.

Failed: The EUT does not comply with the essential requirements in the standard.



4 General Information

4.1 Client Information

Applicant:	Shenzhen Fuyeda Industry Development Corp.
Manufacturer/ Factory:	Shenzhen Fuyeda Industry Development Corp.
Address of Applicant:	No.1, NEWMEN ROAD, TONGSHENG VILLAGE, DALANG STREET, BAO'AN, SHENZHEN, CHINA
Address of Manufacturer/ Factory:	No.1, NEWMEN ROAD, TONGSHENG VILLAGE, DALANG STREET, BAO'AN, SHENZHEN, CHINA

4.2 General Description of E.U.T.

Product Name:	MOUSE
Trade Name:	N/A
Item No.:	MS-183OR
Operation Frequency:	2405.2MHz to 2476.2MHz
Channel numbers:	32
Channel separation:	1MHz
Modulation type:	GFSK
Antenna Type:	Integral
Dwell Time	8ms
Power supply:	2X1.5V(AAA)=3.0V



SGS-CSTC Standards Technical Services Ltd.

Report No.: SZEMO09110622301

Page: 5 of 18

Operation Frequency of each channel

Frequency Group1		Frequency Group2		Unit
2407.2	2442.2	2405.2	2443.2	[MHz]
2408.2	2447.2	2406.2	2444.2	
2412.2	2451.2	2409.2	2446.2	
2414.2	2452.2	2410.2	2448.2	
2417.2	2457.2	2411.2	2449.2	
2420.2	2458.2	2413.2	2453.2	
2421.2	2459.2	2415.2	2455.2	
2422.2	2460.2	2416.2	2456.2	
2427.2	2461.2	2418.2	2462.2	
2428.2	2465.2	2419.2	2463.2	
2431.2	2468.2	2423.2	2464.2	
2435.2	2469.2	2425.2	2466.2	
2436.2	2472.2	2429.2	2467.2	
2437.2	2473.2	2430.2	2470.2	
2438.2	2475.2	2432.2	2471.2	
2439.2	2476.2	2434.2	2474.2	

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Channel	Frequency
The lowest channel	2405.2MHz
The middle channel	2439.2MHz
The Highest channel	2476.2MHz



4.3 E.U.T Operation mode

Operating Environment:	
Temperature:	24.0 °C
Humidity:	52 % RH
Atmospheric Pressure:	1008 mbar
Test mode:	
Normal operation mode:	Keep the EUT in communicating mode with the dongle
Transmitting mode:	Keep the EUT in transmitting mode with modulation.

4.4 Test Facility

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

CNAS (No. CNAS L2929)

CNAS has accredited SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab 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.

VCCI

The 3m Semi-anechoic chamber and Shielded Room (7.5m x 4.0m x 3.0m) of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-2197 and C-2383 respectively.

Date of Registration: September 29, 2008. Valid until September 28, 2011.

FCC – Registration No.: 556682

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen 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 556682, June 27, 2008.

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.: 4620C-1.

4.5 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch E&E Lab

No. 1 Workshop, M-10, Middle section, Science & Technology Park, Shenzhen, Guangdong, China 518057

Telephone: +86 (0) 755 2601 2053 Fax: +86 (0) 755 2671 0594

No tests were sub-contracted.

4.6 Other Information Requested by the Customer

None.



SGS-CSTC Standards Technical Services Ltd.

Report No.: SZEMO09110622301

Page: 7 of 18

4.7 Test Instruments list:

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	16-06-2009	15-06-2010
2	EMI Test Receiver	Rohde & Schwarz	ESIB26	SEL0023	12-12-2009	11-12-2010
3	EMI Test software	AUDIX	E3	SEL0050	N/A	N/A
4	Coaxial cable	SGS	N/A	SEL0028	18-06-2009	17-06-2010
6	BiConiLog Antenna (26-3000MHz)	ETS-LINDGREN	3142C	SEL0014	12-08-2009	11-08-2010
7	Double-ridged horn (1-18GHz)	ETS-LINDGREN	3117	SEL0005	12-08-2009	11-08-2010
8	Horn Antenna (18-26GHz)	ETS-LINDGREN	3160	SEL0076	12-08-2009	11-08-2010
9	Pre-amplifier (0.1-1300MHz)	Agilent Technologies	8447D	SEL0053	18-06-2009	17-06-2010
10	Pre-amplifier (1-18GHz)	Rohde & Schwarz	AFS42-00101 800-25-S-42	SEL0081	18-06-2009	17-06-2010
11	Pre-amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	SEL0080	18-06-2009	17-06-2010
12	Band filter	Amindeon	82346	SEL0094	18-06-2009	17-06-2010



5 Test results and Measurement Data

5.1 Antenna requirement:

Standard requirement:	FCC Part15 C Section 15.203
15.203 requirement: <i>An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.</i>	
E.U.T Antenna:	
<i>The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is 2dBi.</i>	



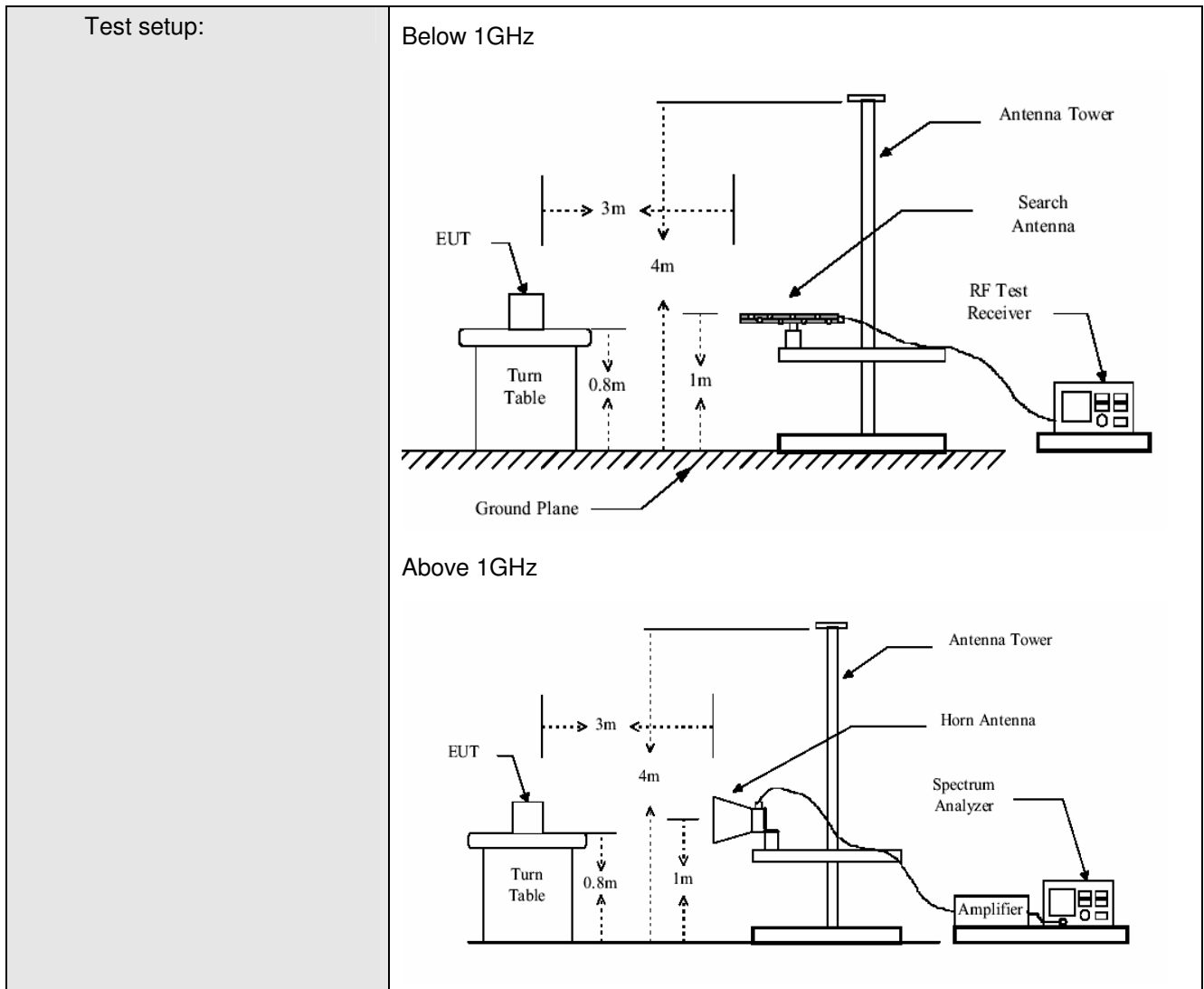
SGS-CSTC Standards Technical Services Ltd.

Report No.: SZEMO09110622301

Page: 9 of 18

5.2 Radiated Emission

Test Requirement:	FCC Part15 C Section 15.249, 15.209 and 15.205				
Test Method:	ANSI C63.4: 2003				
Test Frequency Range:	30MHz to 25GHz				
Test site:	Measurement Distance: 3m (Semi-Anechoic Chamber)				
Receiver setup:	Frequency	Detector	RBW	VBW	Remark
	30MHz-1GHz	Quasi-peak	100KHz	300KHz	Quasi-peak Value
	Above 1GHz	Peak	1MHz	3MHz	Peak Value
		Peak	1MHz	10Hz	Average Value
Limit: (Field strength of the fundamental signal)	Frequency		Limit (dBuV/m @3m)		Remark
	2400MHz-2483.5MHz		94.0		Average Value
			114.0		Peak Value
Limit: (Spurious Emissions)	Frequency		Limit (dBuV/m @3m)		Remark
	30MHz-88MHz		40.0		Quasi-peak Value
	88MHz-216MHz		43.5		Quasi-peak Value
	216MHz-960MHz		46.0		Quasi-peak Value
	960MHz-1GHz		54.0		Quasi-peak Value
	Above 1GHz		54.0		Average Value
			74.0		Peak Value
Test Procedure:	<p>The E.U.T and its simulators are placed on a turn table which is 0.8meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.</p> <p>Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4:2003 on radiated measurement.</p>				
Test Instruments:	Refer to section 4.7 for details				
Test mode:	Normal operation mode				
Test results:	Passed				



Note:

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

$$\text{Final Test Level} = \text{Receiver Reading} + \text{Antenna Factor} + \text{Cable Factor} - \text{Preamplifier Factor}$$



SGS-CSTC Standards Technical Services Ltd.

Report No.: SZEMO09110622301

Page: 11 of 18

Measurement Data

5.2.1 Field Strength Of The Fundamental Signal

Peak value:

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)	Polarization
2405.2	6.25	30.05	38.83	80.84	78.31	114.00	-35.69	Horizontal
2405.2	6.25	30.05	38.83	85.61	83.08	114.00	-30.92	Vertical
2439.2	6.29	30.15	38.64	84.5	82.30	114.00	-31.70	Horizontal
2439.2	6.29	30.15	38.64	85.65	83.45	114.00	-30.55	Vertical
2476.2	6.45	30.3	39.72	85.2	82.23	114.00	-31.77	Horizontal
2476.2	6.45	30.3	39.72	85.76	82.79	114.00	-31.21	Vertical

Average value:

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)	Polarization
2405.2	6.25	30.05	38.83	75.29	72.76	94.00	-21.24	Horizontal
2405.2	6.25	30.05	38.83	80.24	77.71	94.00	-16.29	Vertical
2439.2	6.29	30.15	38.64	78.95	76.75	94.00	-17.25	Horizontal
2439.2	6.29	30.15	38.64	80.57	78.37	94.00	-15.63	Vertical
2476.2	6.45	30.30	39.72	81.06	78.09	94.00	-15.91	Horizontal
2476.2	6.45	30.30	39.72	80.97	78.00	94.00	-16.00	Vertical



SGS-CSTC Standards Technical Services Ltd.

Report No.: SZEMO09110622301

Page: 12 of 18

5.2.2 Spurious Emissions

30MHz~1GHz

Test mode: Normal operation mode:

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamplifier Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
35.820	0.60	12.70	28.13	39.24	24.41	40.00	-15.59	Vertical
48.430	0.78	8.47	28.11	35.60	16.74	40.00	-23.26	Vertical
123.120	1.26	7.84	27.66	34.60	16.04	43.50	-27.46	Vertical
184.230	1.38	9.98	27.24	32.02	16.14	43.50	-27.36	Vertical
797.270	3.20	22.09	26.95	39.21	37.55	46.00	-8.45	Vertical
935.980	3.64	23.30	26.43	35.70	36.21	46.00	-9.79	Vertical
32.910	0.60	13.84	28.16	29.24	15.52	40.00	-24.48	Horizontal
184.230	1.38	9.98	27.24	32.85	16.97	43.50	-26.53	Horizontal
432.550	2.34	16.56	27.52	42.78	34.16	46.00	-11.84	Horizontal
710.940	2.94	21.60	27.24	39.21	36.51	46.00	-9.49	Horizontal
749.740	3.06	21.70	27.11	44.60	42.25	46.00	-3.75	Horizontal
797.270	3.20	22.09	26.95	38.23	36.57	46.00	-9.43	Horizontal

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



SGS-CSTC Standards Technical Services Ltd.

Report No.: SZEMO09110622301

Page: 13 of 18

Above 1GHz					
Test mode:	Transmitting	Test channel:	Lowest	Remark:	Peak

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamplifier Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2390.0	6.28	29.98	39.03	45.31	42.54	74.00	-31.46	Vertical
2400.0	6.34	30.03	38.87	45.82	43.32	74.00	-30.68	Vertical
4810.4	9.36	34.25	41.53	52.93	55.01	74.00	-18.99	Vertical
7215.6	13.30	37.24	40.88	50.44	60.10	74.00	-13.90	Vertical
9620.8	13.39	37.99	37.56	44.27	58.09	74.00	-15.91	Vertical
12026.0	16.45	39.10	39.09	44.07	60.53	74.00	-13.47	Vertical
2390.0	6.28	29.98	39.03	45.59	42.82	74.00	-31.18	Horizontal
2400.0	6.34	30.03	38.87	45.89	43.39	74.00	-30.61	Horizontal
4810.4	9.36	34.25	41.53	56.09	58.17	74.00	-15.83	Horizontal
7215.6	13.30	37.24	40.88	50.31	59.97	74.00	-14.03	Horizontal
9620.8	13.39	37.99	37.56	43.71	57.53	74.00	-16.47	Horizontal
12026.0	16.45	39.10	39.09	44.52	60.98	74.00	-13.02	Horizontal
2390.0	6.28	29.98	39.03	45.59	42.82	74.00	-31.18	Horizontal

Test mode:	Transmitting	Test channel:	Lowest	Remark:	Average
------------	--------------	---------------	--------	---------	---------

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamplifier Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2390.0	6.28	29.98	39.03	32.94	30.17	54.00	-23.83	Vertical
2400.0	6.34	30.03	38.87	32.72	30.22	54.00	-23.78	Vertical
4810.4	9.36	34.25	41.53	35.03	37.11	54.00	-16.89	Vertical
7215.6	13.30	37.24	40.88	35.17	44.83	54.00	-9.17	Vertical
9620.8	13.39	37.99	37.56	32.24	46.06	54.00	-7.94	Vertical
12026.0	16.45	39.10	39.09	28.54	45.00	54.00	-9.00	Vertical
2390.0	6.28	29.98	39.03	31.18	28.41	54.00	-25.59	Horizontal
2400.0	6.34	30.03	38.87	32.62	30.12	54.00	-23.88	Horizontal
4810.4	9.36	34.25	41.53	36.65	38.73	54.00	-15.27	Horizontal
7215.6	13.30	37.24	40.88	28.91	38.57	54.00	-15.43	Horizontal
9620.8	13.39	37.99	37.56	32.22	46.04	54.00	-7.96	Horizontal
12026.0	16.45	39.10	39.09	28.31	44.77	54.00	-9.23	Horizontal

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



SGS-CSTC Standards Technical Services Ltd.

Report No.: SZEMO09110622301

Page: 14 of 18

Test mode:	Transmitting	Test channel:	Middle	Remark:	Peak
------------	--------------	---------------	--------	---------	------

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)	Polarization
2390.0	6.28	29.98	39.03	45.24	42.47	74.00	-31.53	Vertical
2500.0	5.76	30.37	39.15	46.39	43.37	74.00	-30.63	Vertical
4878.4	10.36	34.34	39.89	59.45	64.26	74.00	-9.74	Vertical
7317.6	12.91	37.31	40.40	47.04	56.86	74.00	-17.14	Vertical
9756.8	13.89	38.03	37.94	45.02	59.00	74.00	-15.00	Vertical
12195.0	18.03	39.21	39.27	42.25	60.22	74.00	-13.78	Vertical
2390.0	6.28	29.98	39.03	44.54	41.77	74.00	-32.23	Horizontal
2500.0	5.76	30.37	39.15	45.61	42.59	74.00	-31.41	Horizontal
4878.4	10.36	34.34	39.89	56.64	61.45	74.00	-12.55	Horizontal
7317.6	12.91	37.31	40.40	48.14	57.96	74.00	-16.04	Horizontal
9756.8	13.89	38.03	37.94	45.16	59.14	74.00	-14.86	Horizontal
12195.0	18.03	39.21	39.27	42.40	60.37	74.00	-13.63	Horizontal

Test mode:	Transmitting	Test channel:	Middle	Remark:	Average
------------	--------------	---------------	--------	---------	---------

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)	Polarization
2390.0	6.28	29.98	39.03	31.13	28.36	54.00	-25.64	Vertical
2500.0	5.76	30.37	39.15	32.67	29.65	54.00	-24.35	Vertical
4878.4	10.36	34.34	39.89	30.09	34.90	54.00	-19.10	Vertical
7317.6	12.91	37.31	40.40	28.22	38.04	54.00	-15.96	Vertical
9756.8	13.89	38.03	37.94	24.07	38.05	54.00	-15.95	Vertical
12195.0	18.03	39.21	39.27	21.50	39.47	54.00	-14.53	Vertical
2390.0	6.28	29.98	39.03	30.93	28.16	54.00	-25.84	Horizontal
2500.0	5.76	30.37	39.15	32.66	29.64	54.00	-24.36	Horizontal
4878.4	10.36	34.34	39.89	32.90	37.71	54.00	-16.29	Horizontal
7317.6	12.91	37.31	40.40	34.13	43.95	54.00	-10.05	Horizontal
9756.8	13.89	38.03	37.94	32.06	46.04	54.00	-7.96	Horizontal
12195.0	18.03	39.21	39.27	25.91	43.88	54.00	-10.12	Horizontal

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



SGS-CSTC Standards Technical Services Ltd.

Report No.: SZEMO09110622301

Page: 15 of 18

Test mode:	Transmitting	Test channel:	Highest	Remark:	Peak
------------	--------------	---------------	---------	---------	------

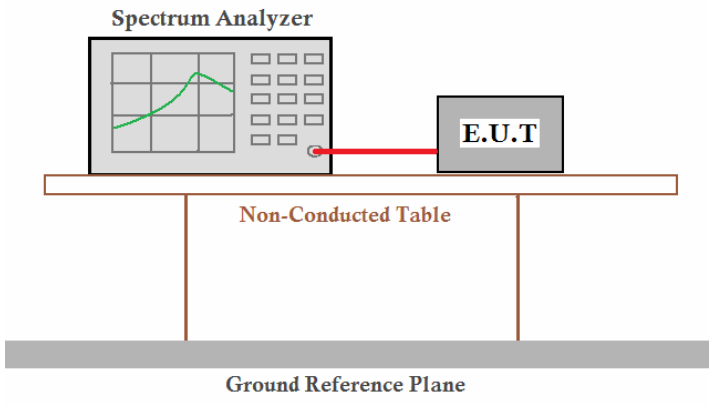
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2390.0	6.28	29.98	39.03	44.03	41.26	74.00	-32.74	Vertical
2483.5	6.22	30.32	39.53	45.87	42.88	74.00	-31.12	Vertical
2500.0	5.76	30.37	39.15	45.30	42.28	74.00	-31.72	Vertical
4952.4	10.43	34.45	41.03	62.79	66.64	74.00	-7.36	Vertical
7428.6	12.72	37.37	40.01	47.39	57.47	74.00	-16.53	Vertical
9904.8	14.21	38.07	37.85	44.99	59.42	74.00	-14.58	Vertical
12381.0	17.55	39.34	39.48	38.40	55.81	74.00	-18.19	Vertical
2390.0	6.28	29.98	39.03	45.69	42.92	74.00	-31.08	Horizontal
2483.5	6.22	30.32	39.53	45.69	42.70	74.00	-31.30	Horizontal
2500.0	5.76	30.37	39.15	45.19	42.17	74.00	-31.83	Horizontal
4952.4	10.43	34.45	41.03	58.98	62.83	74.00	-11.17	Horizontal
7428.6	12.72	37.37	40.01	47.60	57.68	74.00	-16.32	Horizontal
9904.8	14.21	38.07	37.85	46.27	60.70	74.00	-13.30	Horizontal
12380.0	17.55	39.34	39.48	39.36	56.77	74.00	-17.23	Horizontal

Test mode:	Transmitting	Test channel:	Highest	Remark:	Average
------------	--------------	---------------	---------	---------	---------

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)	Polarization
2390.0	6.28	29.98	39.03	31.63	28.86	54.00	-25.14	Vertical
2483.5	6.22	30.32	39.53	32.52	29.53	54.00	-24.47	Vertical
2500.0	5.76	30.37	39.15	33.16	30.14	54.00	-23.86	Vertical
4952.4	10.43	34.45	41.03	33.72	37.57	54.00	-16.43	Vertical
7428.6	12.72	37.37	40.01	33.89	43.97	54.00	-10.03	Vertical
9904.8	14.21	38.07	37.85	31.41	45.84	54.00	-8.16	Vertical
12381.0	17.55	39.34	39.48	25.91	43.32	54.00	-10.68	Vertical
2390.0	6.28	29.98	39.03	31.06	28.29	54.00	-25.71	Horizontal
2483.5	6.22	30.32	39.53	32.63	29.64	54.00	-24.36	Horizontal
2500.0	5.76	30.37	39.15	40.94	37.92	54.00	-16.08	Horizontal
4952.4	10.43	34.45	41.03	33.28	37.13	54.00	-16.87	Horizontal
7428.6	12.72	37.37	40.01	33.68	43.76	54.00	-10.24	Horizontal
9904.8	14.21	38.07	37.85	31.55	45.98	54.00	-8.02	Horizontal
12381.0	17.55	39.34	39.48	26.01	43.42	54.00	-10.58	Horizontal

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."

5.3 20dB Bandwidth

Test Requirement:	FCC Part15 C Section 15.249/15.215
Test Method:	ANSI C63.4:2003
Limit:	Operation Frequency range 2400MHz-2483.5MHz
Test Procedure:	<ol style="list-style-type: none"> 1. According to the follow Test-setup, keep the relative position between the artificial antenna and the EUT. 2. Set the EUT to proper test channel. 3. Max hold the radiated emissions, mark the peak power frequency point and the -20dB upper and lower frequency points. 4. Read 20dB bandwidth.
Test setup:	 <p><i>Remark:</i> <i>Offset the High-Frequency cable loss 1.5dB in the spectrum analyzer.</i></p>
Test Instruments:	Refer to section 4.7 for details
Test mode:	Normal operation mode
Test results:	Passed

Measurement Data

Test channel	20dB bandwidth (MHz)	Results
Lowest	0.300	Pass
Middle	0.296	Pass
Highest	0.280	Pass

Test plot as follows:

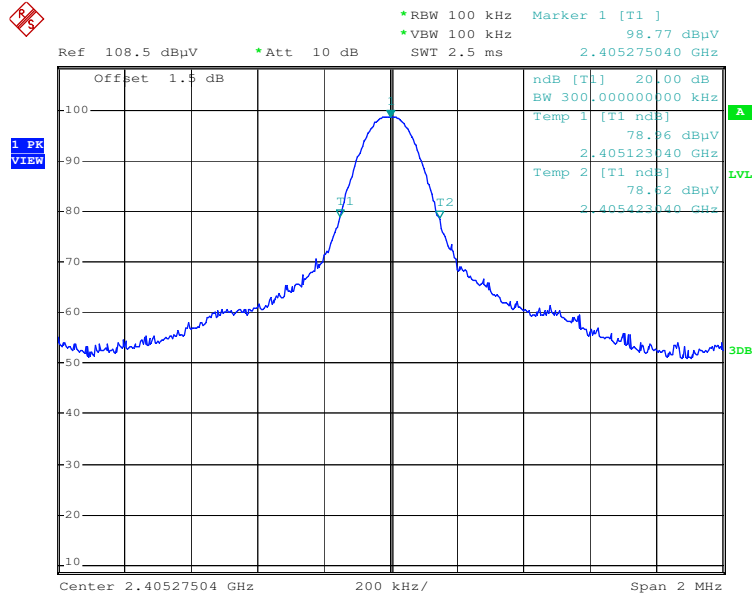


SGS-CSTC Standards Technical Services Ltd.

Report No.: SZEMO09110622301

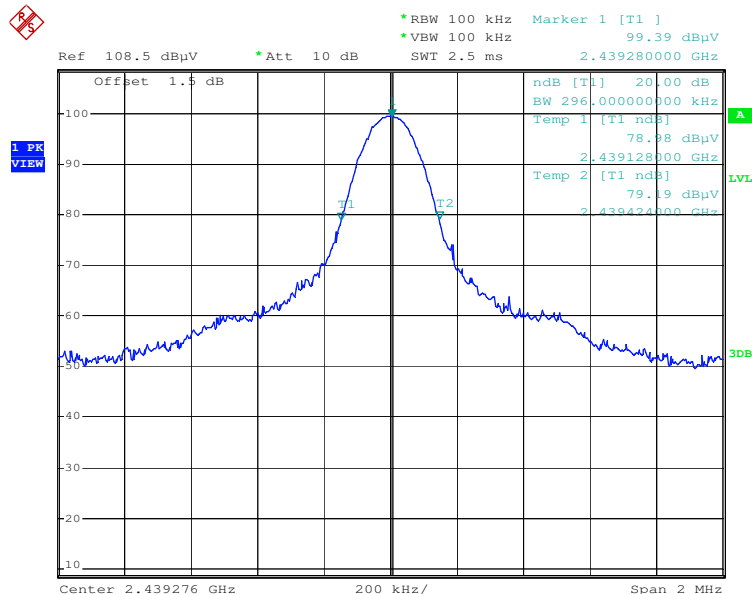
Page: 17 of 18

Test channel:	Lowest	
---------------	--------	--



Date: 10.NOV.2009 13:55:43

Test channel:	Middle	
---------------	--------	--



Date: 10.NOV.2009 13:53:40

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."

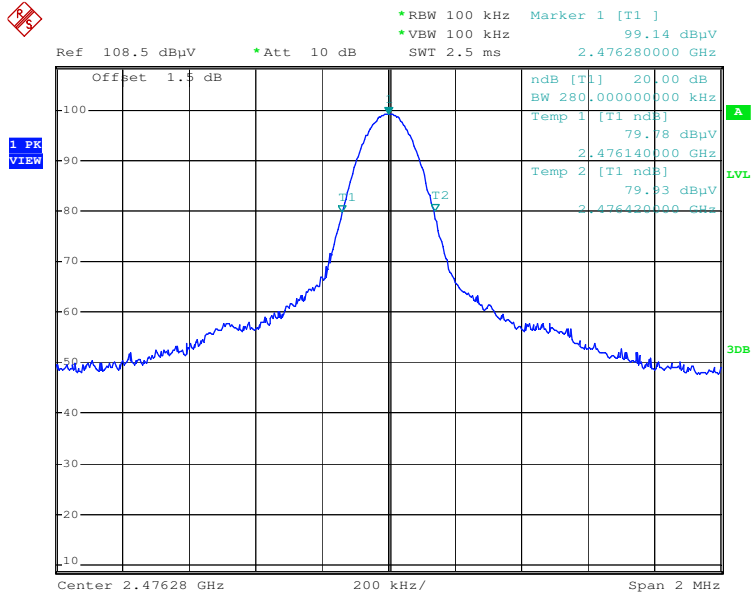


SGS-CSTC Standards Technical Services Ltd.

Report No.: SZEMO09110622301

Page: 18 of 18

Test channel:	Highest	
---------------	---------	--



Date: 10.NOV.2009 13:54:31