



SGS-CSTC Standards Technical Services Co., Ltd.

No.198 Kezhu Road, Science Town Economic& Technology Development District
Guangzhou, China 510663

Telephone: +86 (0) 20 8215 5555
Fax: +86 (0) 20 8207 5059
Email: sgs_internet_operations@sgs.com

Report No.: SZEMO071203634RFF
Page: 1 of 12
FCC ID: WED-G62CT

FCC Test Report

Application No.: SZEMO0801203634RF
Applicant: BINATONE ELECTRONICS INTERNATIONAL LIMITED
Manufacturer: Electronics Co.,Ltd
FCC ID: WED-G62CT
Equipment Under Test (EUT):
EUT Name: GPS
Item No.: X350, Z350, A350, S350, G52C, G51C, G63C, G66C, G61C, G62C ♣
♣ Please refer to section 2 of this report which indicates which item was actually tested and which were electrically identical.
Trade mark.: Binatone
Standards: FCC PART15 SUBPART B:2007
Date of Receipt: 18 January 2008
Date of Test: 18 January to 10 June 2008
Date of Issue: 15 June 2008

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

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

Authorized Signature:

Robinson Lo
Laboratory 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.



2 Test Summary

Test	Test Requirement	Test Method	Class / Severity	Result
Radiated Emission (30MHz to 1GHz)	FCC PART 15, SUBPART B: 2007	ANSI C63.4:2003	Class B	PASS
Conducted Emission (150KHz to 30MHz)	FCC PART 15, SUBPART B: 2007	ANSI C63.4:2003	Class B	PASS

Remark:

Item No.: X350, Z350, A350, S350, G52C, G51C, G63C, G66C, G61C, G62C

Only the Item in the picture 7.3 was tested, since the electrical circuit design, layout, components used and internal wiring were identical for the above items.



3 Contents

	Page
1 COVER PAGE	1
2 TEST SUMMARY	2
3 CONTENTS	3
4 GENERAL INFORMATION	4
4.1 CLIENT INFORMATION	4
4.2 GENERAL DESCRIPTION OF E.U.T.	4
4.3 DETAILS OF E.U.T.	4
4.4 DESCRIPTION OF SUPPORT UNITS	4
4.5 STANDARDS APPLICABLE FOR TESTING	4
4.6 TEST LOCATION	4
4.7 TEST FACILITY	5
4.8 DEVIATION FROM STANDARDS	5
4.9 ABNORMALITIES FROM STANDARD CONDITIONS	5
5 EQUIPMENTS USED DURING TEST	6
6 TEST RESULTS	7
6.1 CONDUCTED EMISSIONS MAINS TERMINALS, 150kHz TO 30MHz	7
6.1.1 E.U.T. Operation	7
6.1.2 Measurement Data	7-9
6.2 RADIATED EMISSIONS, 30MHz TO 1GHz	10
6.2.1 E.U.T. Operation	10
6.2.2 Measurement Data	10-12



4 General Information

4.1 Client Information

Applicant: Binatone Electronics International Limited.
Address of Applicant: Floor 23A 9Des Voeux Road West Sheung Wan Hong Kong.
Manufacturer: Electronics Co.,Ltd
Address of Manufacturer : New industrial Developing Zone,Xiao Bian, Chang An ,Dong Guan,Guangdong,China.

4.2 General Description of E.U.T.

EUT Name: GPS
Item No.: X350, Z350, A350, S350, G52C, G51C, G63C, G66C, G61C, G62C

4.3 Details of E.U.T.

Power Supply: DC 3.7V Rechargeable Battery

4.4 Description of Support Units

The EUT has been tested with a personal computer system for 'Web-Cam' mode.

Description	Manufacturer	Model No.
PC	IBM	2662
Printer	Canon	BJC-1000SP

4.5 Standards Applicable for Testing

The customer requested FCC tests for a digital camera.
The standard used was FCC PART 15, SUBPART B, CLASS B (2007)

4.6 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 8215 5555 Fax: +86 20 8207 5059

No tests were sub-contracted.



4.7 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 recognized under the National Voluntary Laboratory Accreditation Program (NVLAP/NIST). NVLAP Code: 200611-0.
- **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 (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, 2005. Valid until September 28, 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.
- **CNAS 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.: 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, Aug. 04, 2005
- **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.: 6002.

4.8 Deviation from Standards

None.

4.9 Abnormalities from Standard Conditions

None.



5 Equipments Used during Test

Conducted Emission						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (dd-mm-yy)	Cal.Due date (dd-mm-yy)
1	Shielding Room	ZhongYu Electron	GB-88	SEL0042	N/A	N/A
2	LISN	ETS-LINDGREN	3816/2	SEL0021	18-06-2008	17-06-2009
3	ISN	Rohde & Schwarz	ENY 22 1109	EMC0114	18-06-2008	17-06-2009
4	ISN	Rohde & Schwarz	ENY 41 1110	EMC0115	18-06-2008	17-06-2009
5	EMI Test Receiver	Rohde & Schwarz	ESCI	SEL0022	18-06-2008	17-06-2009
6	Coaxial Cable	SGS	N/A	SEL0024	18-06-2008	17-06-2009

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	12-08-2007	11-08-2008
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	12-08-2007	11-08-2008
8	Pre-amplifier (1-18GHz)	Rohde & Schwarz	AFS42-00101 800-25-S-42	SEL0081	18-06-2008	17-06-2009
9	Band filter	Amindeon	82346	SEL0094	18-06-2008	17-06-2009

General used equipment						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (dd-mm-yy)	Cal.Due date (dd-mm-yy)
1	Humidity/ Temperature Indicator	Shanghai	ZJ1-2B	SEL0101 to SEL0103	18-11-2007	17-11-2008
2	Barometer	ChangChun	DYM3	SEL0088	22-06-2006	21-06-2009



6 Test Results

6.1 Conducted Emissions Mains Terminals, 150kHz to 30MHz

Test Requirement: FCC Part15 B
Test Method: ANSI C63.4
Test Date: 28 March 2008
Frequency Range: 150KHz to 30MHz
Class / Severity: Class B
Detector: Peak for pre-scan (9kHz Resolution Bandwidth)
Quasi-Peak if maximised peak within 6dB of Quasi-Peak limit

6.1.1 E.U.T. Operation

Operating Environment:
Temperature: 24.0 °C Humidity: 52 % RH Atmospheric Pressure: 1012 Mbar
EUT Test in 'Web-Cam' mode with PC system.
Operation:

6.1.2 Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector.

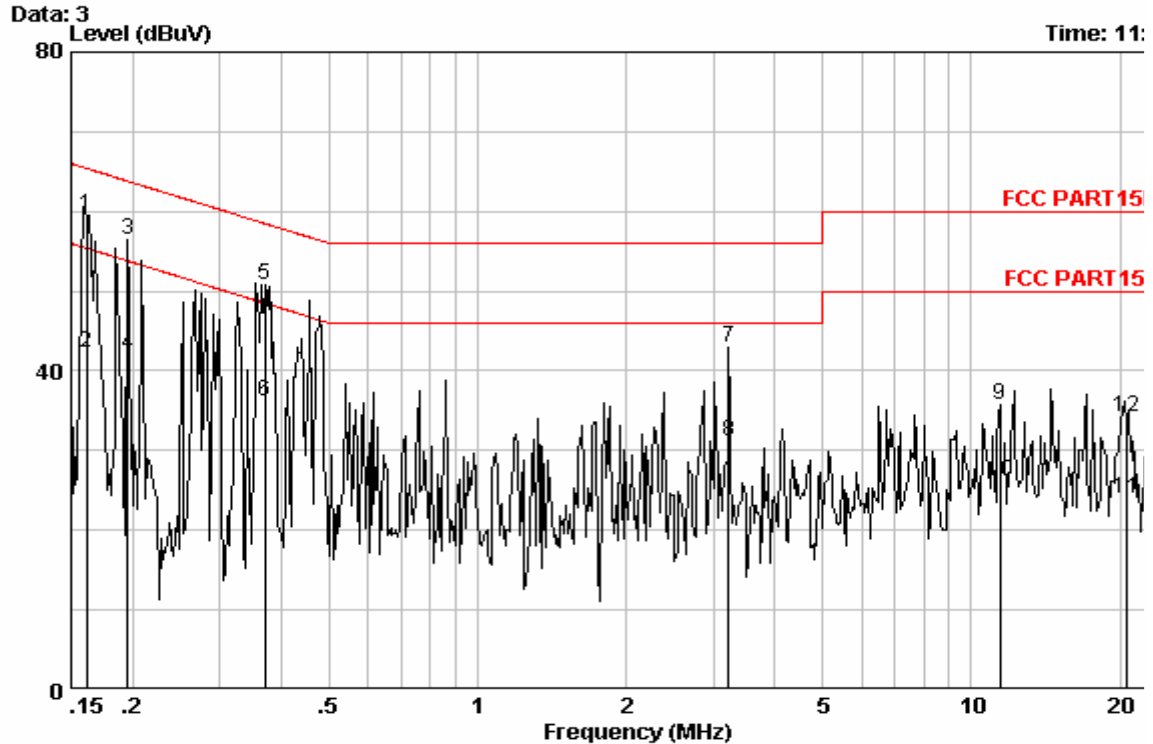
Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

The following Quasi-Peak and Average measurements were performed on the EUT on 28 March 2008:

Test the EUT on charging USB mode:



Line:



Site : Shielding Room
Condition : FCC PART15B QP CE LINE
EUT : GPS
NO : 3634RF

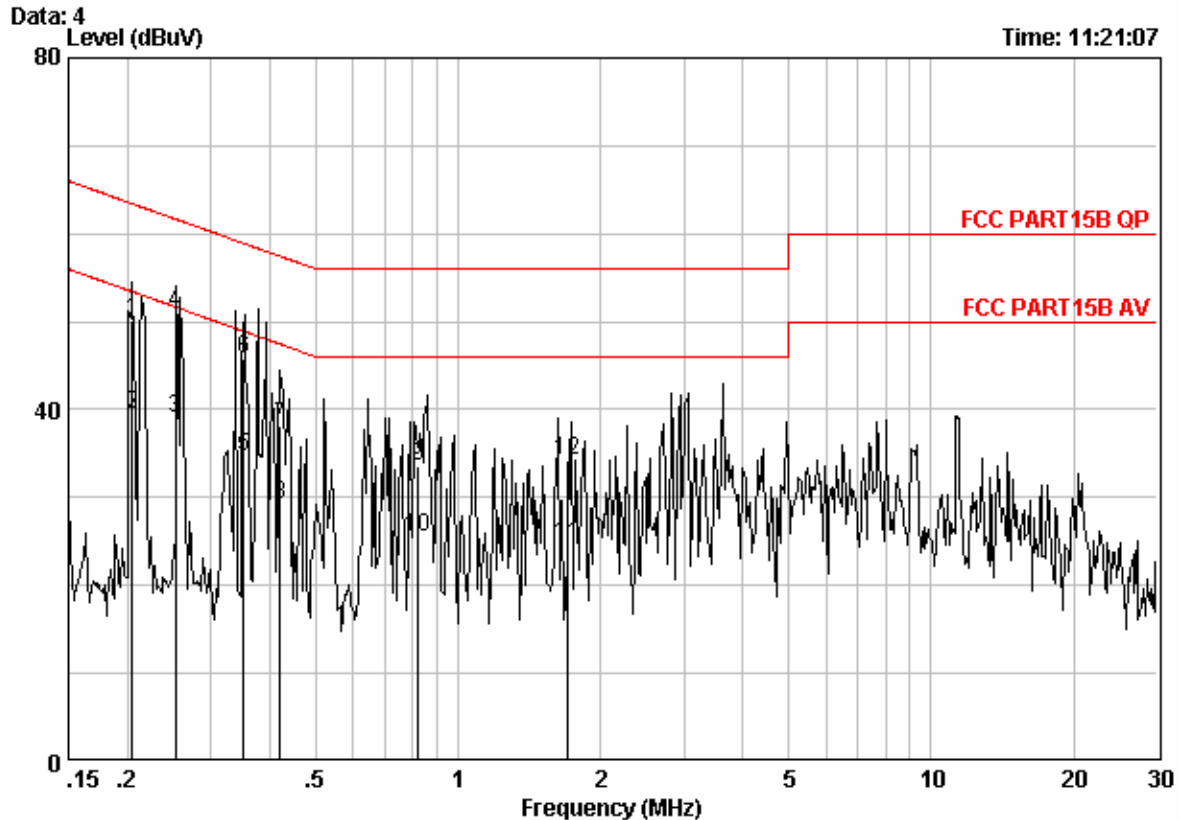
	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1 @	0.16155	-0.03	-0.05	59.69	59.62	65.38	-5.77	QP
2	0.16155	-0.03	-0.05	42.30	42.23	55.38	-13.16	Average
3	0.19550	-0.09	-0.05	56.53	56.39	63.80	-7.41	QP
4	0.19550	-0.09	-0.05	42.31	42.17	53.80	-11.63	Average
5	0.37117	0.00	-0.04	50.79	50.74	58.47	-7.73	QP
6	0.37117	0.00	-0.04	36.30	36.26	48.47	-12.22	Average
7	3.224	0.10	-0.08	42.98	43.00	56.00	-13.00	QP
8	3.224	0.10	-0.08	31.20	31.22	46.00	-14.78	Average
9	11.438	0.22	-0.36	35.91	35.77	60.00	-24.23	QP
10	11.438	0.22	-0.36	26.35	26.22	50.00	-23.78	Average
11	20.594	0.33	-0.66	24.37	24.04	50.00	-25.96	Average
12	20.594	0.33	-0.66	34.58	34.26	60.00	-25.74	QP

FCC ID:WED-G62CT

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms_and_conditions.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. 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. This document cannot be reproduced except in full, without prior approval of the Company.



Neutral :



Site : Shielding Room
Condition : FCC PART15B QP CE NEUTRAL
EUT : GPS
NO : 3634RF

	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.20500	-0.09	-0.04	50.26	50.12	63.41	-13.28	QP
2	0.20500	-0.09	-0.04	39.62	39.48	53.41	-13.92	Average
3	0.25300	-0.04	-0.04	39.16	39.08	51.66	-12.58	Average
4	0.25300	-0.04	-0.04	51.20	51.12	61.66	-10.54	QP
5	0.35200	0.00	-0.04	34.62	34.58	48.92	-14.33	Average
6	0.35200	0.00	-0.04	45.82	45.78	58.92	-13.13	QP
7	0.42100	0.00	-0.04	38.26	38.22	57.43	-19.21	QP
8	0.42100	0.00	-0.04	29.26	29.22	47.43	-18.21	Average
9	0.82500	0.05	-0.04	33.46	33.46	56.00	-22.54	QP
10	0.82500	0.05	-0.04	25.52	25.52	46.00	-20.48	Average
11	1.710	0.10	-0.06	24.62	24.66	46.00	-21.34	Average
12	1.710	0.10	-0.06	34.26	34.30	56.00	-21.70	QP

FCC ID:WED-G62CT

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms_and_conditions.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. 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. This document cannot be reproduced except in full, without prior approval of the Company.



6.2 Radiated Emissions, 30MHz to 1GHz

Test Requirement: FCC Part15 B
Test Method: ANSI C63.4
Test Date: 31 March 2008
Frequency Range: 30MHz to 1GHz
Measurement Distance: 3m
Class: Class B
Limit: 40.0 dB μ V/m between 30MHz & 88MHz
43.5 dB μ V/m between 88MHz & 216MHz
46.0 dB μ V/m between 216MHz & 960MHz
54.0 dB μ V/m above 960MHz
Detector: Peak for pre-scan (120kHz resolution bandwidth)
Quasi-Peak if maximised peak within 6dB of limit

6.2.1 E.U.T. Operation

Operating Environment:
Temperature: 24.0 °C Humidity: 52 % RH Atmospheric Pressure: 1012 mbar

EUT Operation: Test the EUT in 'Take Photo' mode and 'Web-Cam' mode.

6.2.2 Measurement Data

An initial pre-scan was performed in the 3m chamber using the spectrum analyser in peak detection mode. The EUT was measured by Bilog antenna with 2 orthogonal polarities and peak emissions from the EUT were detected within 6dB of the class B limit line.

The following quasi-peak measurements were performed on the EUT on 31 March 2008:



Test mode: charging mode.

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)
56.190	0.80	7.48	28.07	42.32	22.53	40.00	-17.47
78.500	1.05	7.59	28.00	43.63	24.27	40.00	-15.73
152.220	1.32	9.14	27.44	39.04	22.06	43.50	-21.44
198.780	1.40	10.19	27.16	45.33	29.76	43.50	-13.74
299.660	1.90	13.85	26.72	43.20	32.23	46.00	-13.77
349.130	2.06	15.40	27.08	32.44	22.82	46.00	-23.18

Horizontal:

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)
78.500	1.05	7.59	28.00	45.72	26.36	40.00	-13.64
144.460	1.31	8.53	27.49	50.39	32.74	43.50	-10.76
183.260	1.38	9.97	27.24	47.01	31.12	43.50	-12.38
198.780	1.40	10.19	27.16	53.12	37.55	43.50	-5.95
299.660	1.90	13.85	26.72	53.49	42.52	46.00	-3.48
350.100	2.06	15.40	27.09	39.12	29.49	46.00	-16.51



SGS-CSTC Standards Technical Services Co., Ltd.

Report No.: SZEMO071203634RFF
Page: 12 of 12

Test Mode: USB mode.

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)
164.830	1.35	9.55	27.36	48.65	32.19	43.50	-11.31
198.780	1.40	10.19	27.16	48.66	33.09	43.50	-10.41
265.710	1.75	12.63	26.85	37.42	24.95	46.00	-21.05
365.620	2.11	15.78	27.20	40.67	31.36	46.00	-14.64
455.830	2.43	17.09	27.58	47.79	39.73	46.00	-6.27
832.190	3.34	22.40	26.77	39.83	38.80	46.00	-7.20

Horizontal:

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)
109.540	1.23	8.62	27.78	47.93	30.00	43.50	-13.50
175.500	1.36	9.71	27.29	53.41	37.19	43.50	-6.31
199.890	1.40	10.20	27.15	53.57	38.02	43.50	-5.48
299.660	1.90	13.85	26.72	48.24	37.27	46.00	-8.73
453.890	2.43	17.03	27.58	42.71	34.59	46.00	-11.41
730.340	2.99	21.62	27.17	40.41	37.85	46.00	-8.15

FCC ID:WED-G62CT

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms_and_conditions.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. 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. This document cannot be reproduced except in full, without prior approval of the Company.