

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

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Report No.: SHEMA10080104804

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EMC TEST REPORT

Application No.: SHEMA10080104804

Applicant: Celsius X VI II

FCC ID: YVQ2N1

Equipment Under Test (EUT):

NOTE: The following sample(s) submitted was/were identified on behalf of the client as

EUT Name: 2N1

Brand Name: Celsius X VI II

Model No: 2N1

Marketing Name: LeDIX

Standards: FCC PART 15

Date of Receipt: Aug 16, 2010

Date of Test: Aug 16, 2010 to Sep 27, 2010

Date of Issue: Sep 27, 2010

Test Result :	PASS*
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* In the configuration tested, the EUT complied with the standards specified above.



Tino Pan
E&E Section Manager
SGS-CSTC(Shanghai) Co., Ltd.



Jack Wu
E&E Project Engineer
SGS-CSTC(Shanghai)Co.,Ltd.

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2 Test Summary

Test	Test Requirement	Test Method	Class / Severity	Result
Radiated Emission 30MHz-1000MHz	CFR 47 Part 15.109	ANSI C63.4: 2003	Class B	PASS
Conducted Emission 150KHz-30MHz	CFR 47 Part 15.107	ANSI C63.4: 2003	Class B	PASS

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4 General Information

4.1 Client Information

Applicant: Celsius X VI II
Address of Applicant: Paris Innovation République - Celsius X VI II
18, rue du Faubourg du Temple
75011 Paris - FRANCE
Manufacturer: Celsius X VI II
Address of Manufacturer: Paris Innovation République - Celsius X VI II
18, rue du Faubourg du Temple
75011 Paris - FRANCE

4.2 General Description of E.U.T.

EUT Name: 2N1
Brand Name: Celsius X VI II
Model No: 2N1
Marketing Name: LeDIX
FCC ID: YVQ2N1
Support Frequency Band: GSM 900/1800/1900
Testing frequency Band: GSM 1900
IMEI: 358751030001594
Hardware Version: V0x
Software Version: EA, V19

4.3 Details of E.U.T.

Power Supply01: Model: FS5GE, Reference: PI00200004AA
(Input :100-240V~ 50-60 Hz, 75mA,
Output : 5.0 VDC, 600mA)
Power Supply02: Model: FS5GU, Reference: PI00200005AA
(Input :100-240V~ 50-60 Hz, 75mA,
Output : 5.0 VDC, 600mA)
Power Supply03: Model: FS5GX, Reference: PI00200006AA
(Input :100-240V~ 50-60 Hz, 75mA,
Output : 5.0 VDC, 600mA)

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Power Supply04: Model: FS5GA, Reference: PI00200007AA
(Input :100-240V~ 50-60 Hz, 75mA,
Output : 5.0 VDC, 600mA)
Battery Celsius battery DC 3.7V, Reference: PI00200001AA
Headset: Model: Celsius headset MEP1023, Reference: PI00500001AA
Data cable: Model:Celsius Data cable WR1024, Reference: PI00200008AA
Dock: Model:Celsius dock station, Reference:PI00600001AA

4.4 Standards Applicable for Testing

The standards used were CFR 47 Part 15B, ANSI C63.4: 2003

Table 1 : Tests Carried Out

Standard		Status
FCC Part 15 Subpart B	Radiated Emission	√
FCC Part 15 Subpart B	Conducted Emission	√

× Indicates that the test is not applicable
√ Indicates that the test is applicable

4.5 Test Location

Tests were performed at SGS E&E EMC lab

SGS-CSTC EMC Laboratory, No.588 West Jindu Road,Songjiang District,Shanghai,China
Tel:+86 21 6191 5666 Fax:+86 21 6191 5655

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4.6 Test Facility

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

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: 2011-07-29.

- **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: 2012-03-17.

- **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. Expiry Date: 2011-09-29.

- **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-3172 and C-3514 respectively. Date of Registration: 2009-11-30. Date of Expiry: 2012-03-17.

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5 Equipment Used during Test

Radiated Emission

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due date
1	EMI test receiver	Rohde & Schwarz	ESU40	100109	2010-06-04	2011-06-03
2	Antenna	SCHWARZBECK	VULB9168	9168-313	2010-06-04	2011-06-03
3	Antenna	SCHWARZBECK	BBHA9120D	9120D-679	2010-06-04	2011-06-03
4	Controller	INNCO	CO200	474	/	/
5	UNIVERSAL RADIO COMMUNICATION TESTER	Rohde & Schwarz	CMU 200	112012	2009-08-25	2010-08-24

Conducted Emission on AC

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due date
1	EMI test receiver	Rohde & Schwarz	ESCS30	100086	2010-06-04	2011-06-03
2	Line impedance stabilization network	SCHWARZBECK	NSLK8127	8127-490	2010-07-30	2011-07-29

6 Emission Test Results

6.1 Radiated Emissions

Test Requirement: CFR 47 Part 15.109
Test Method: ANSI C63.4:2003
Test Date: Aug 31, 2010
Frequency Range: 30MHz to 1GHz
Measurement Distance: 3m
Detector: Peak for pre-scan (120kHz resolution bandwidth)
Result: **PASS**

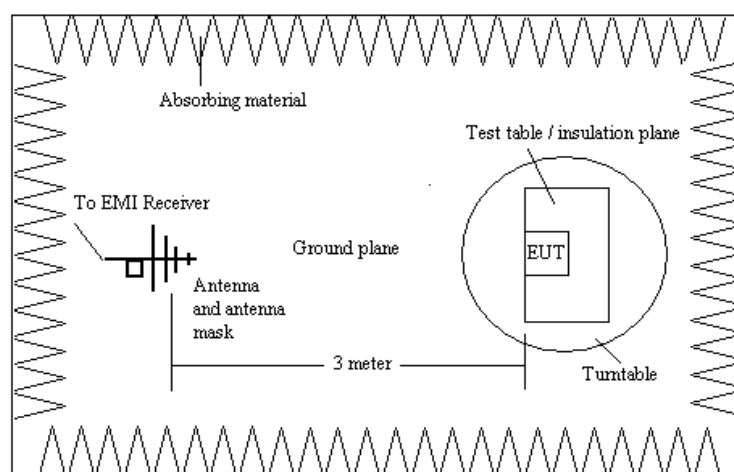
6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 25.0 °C Humidity: 48 % RH Atmospheric Pressure: 1010 mbar

EUT Operation: Test EUT connected with adapter in GSM 1900 idle mode;
Test EUT connected with earphone in GSM 1900 idle mode;
Test EUT in dock station charging mode;
Test EUT connected with PC mode;

6.1.2 Test setup:



Note: All test modes have been tested.

Below is the worst case for connected with PC mode.

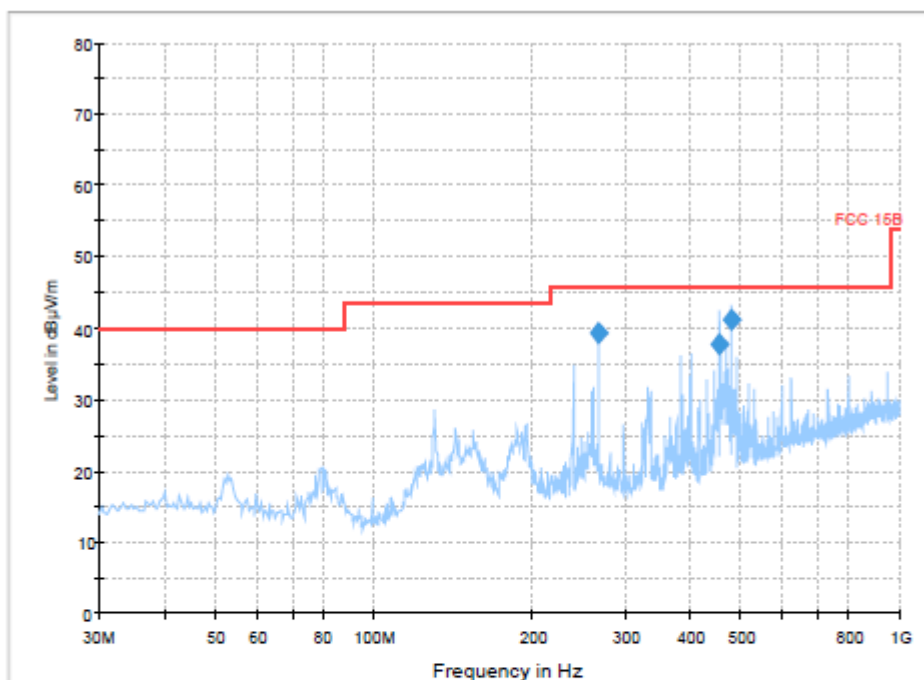
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Connected with PC mode

Horizontal:



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Antenna height (cm)	Polarity	Turntable position (deg)	Corr. (dB)	Margin (dB)
267.743200	39.3	1000.000	120.000	112.0	H	194.0	-9.0	6.70
456.090240	37.7	1000.000	120.000	100.0	H	88.0	-4.1	8.30
480.105920	41.2	1000.000	120.000	100.0	H	205.0	-3.6	4.80

(continuation of the "Final Result 1" table from column 9 ...)

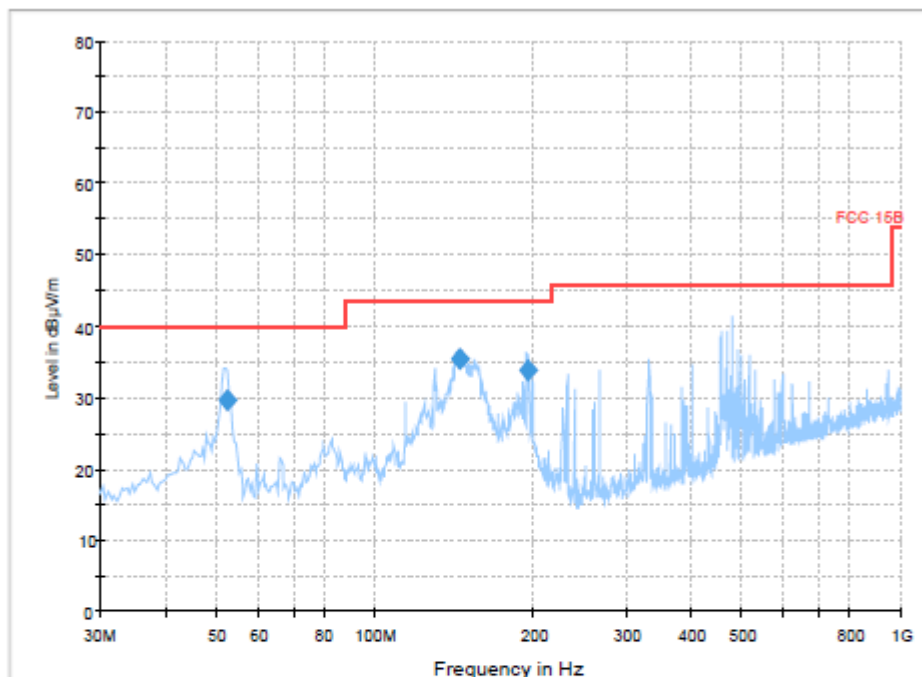
Frequency (MHz)	Limit (dBµV/m)	Comment
267.743200	46.00	
456.090240	46.00	
480.105920	46.00	

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Vertical:



Final Result 1

Frequency (MHz)	QuasiPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Antenna height (cm)	Polarity	Turntable position (deg)	Corr. (dB)	Margin (dB)
52.309760	29.7	1000.000	120.000	100.0	V	308.0	-9.5	10.30
145.233600	35.5	1000.000	120.000	100.0	V	3.0	-8.4	8.00
195.176480	33.8	1000.000	120.000	100.0	V	226.0	-11.8	9.70

(continuation of the "Final Result 1" table from column 9 ...)

Frequency (MHz)	Limit (dBμV/m)	Comment
52.309760	40.00	
145.233600	43.50	
195.176480	43.50	

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6.2 Conducted Emissions

Test Requirement: CFR 47 part 15.107

Test Method: ANSI C63.4:2003

Test Date: Sep 15, 2010

Frequency Range: 150kHz to 30MHz

Limit:

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56 [*]	56 to 46 [*]
0.5-5	56	46
5-30	60	50

^{*} Decreases with the logarithm of the frequency.

Result: **PASS**

6.2.1 E.U.T. Operation

Operating Environment:

Temperature: 24.0°C Humidity: 48% RH Atmospheric Pressure: 1010 mbar

EUT Operation: Test EUT connected with adapter in GSM 1900 idle mode;

Test EUT in dock station charging mode;

6.2.2 Test Result and Measurement Data

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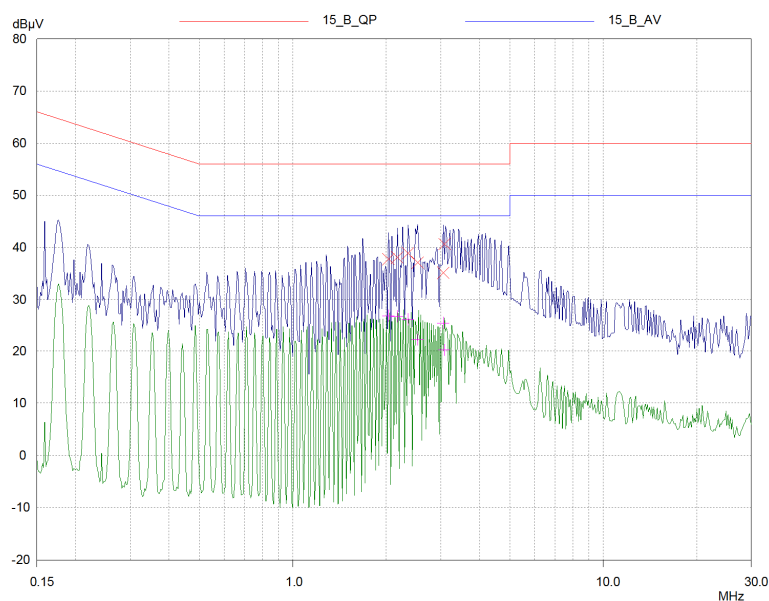
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Charging mode connected with adapter 02

GSM 1900 idle:

L Line:



Final Measurement Results

Frequency MHz	QP Level dBμV	QP Limit dBμV	QP Delta dB
2.03087	37.79	56.00	18.21
2.16455	38.13	56.00	17.87
2.34409	38.89	56.00	17.11
2.51837	37.10	56.00	18.90
3.0491	35.16	56.00	20.84
3.07349	40.68	56.00	15.32

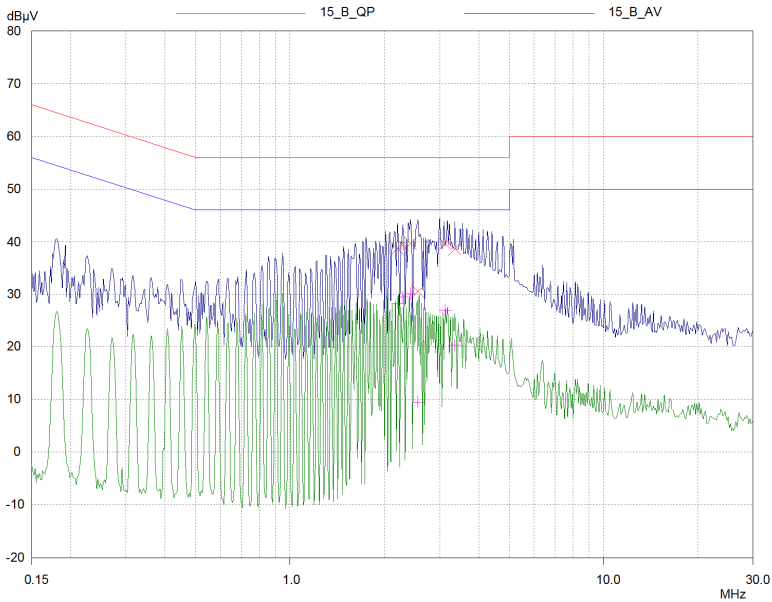
Frequency MHz	AV Level dBμV	AV Limit dBμV	AV Delta dB
2.03087	26.72	46.00	19.28
2.16455	26.56	46.00	19.44
2.34409	25.95	46.00	20.05
2.51837	22.15	46.00	23.85
3.0491	25.29	46.00	20.71
3.07349	20.19	46.00	25.81

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N Line:



Final Measurement Results

Frequency MHz	QP Level dBμV	QP Limit dBμV	QP Delta dB
2.19933	38.79	56.00	17.21
2.28872	39.31	56.00	16.69
2.42	39.71	56.00	16.29
2.55882	30.55	56.00	25.45
3.12287	39.63	56.00	16.37
3.35504	38.61	56.00	17.39

Frequency MHz	AV Level dBμV	AV Limit dBμV	AV Delta dB
2.19933	28.26	46.00	17.74
2.28872	29.53	46.00	16.47
2.42	30.12	46.00	15.88
2.55882	9.44	46.00	36.56
3.12287	26.88	46.00	19.12
3.35504	20.21	46.00	25.79

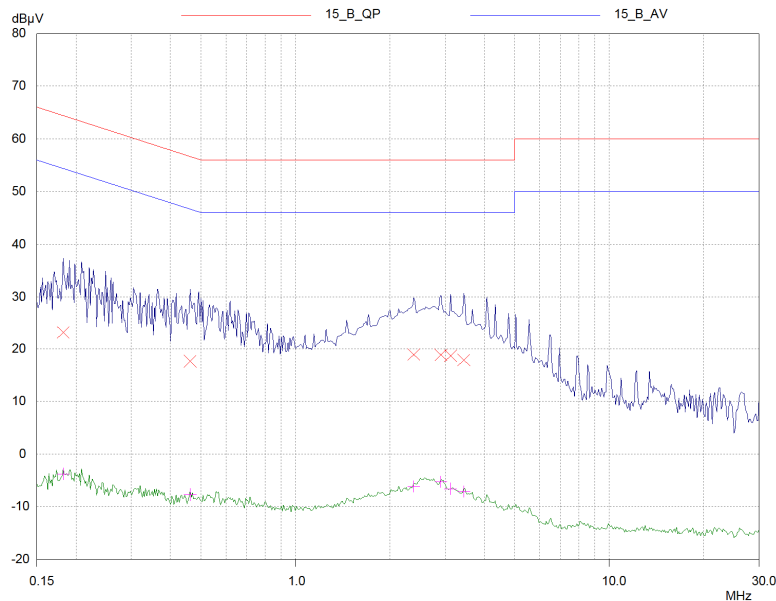
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Charging mode in dock station

L Line:



Final Measurement Results

Frequency MHz	QP Level dBμV	QP Limit dBμV	QP Delta dB
0.18161	23.09	64.41	41.32
0.46134	17.65	56.67	39.02
2.38174	18.92	56.00	37.08
2.90676	18.82	56.00	37.18
3.12287	18.72	56.00	37.28
3.43621	17.88	56.00	38.12

Frequency MHz	AV Level dBμV	AV Limit dBμV	AV Delta dB
0.18161	-3.78	54.41	58.19
0.46134	-7.75	46.67	54.42
2.38174	-6.16	46.00	52.16
2.90676	-5.28	46.00	51.28
3.12287	-6.63	46.00	52.63
3.43621	-7.20	46.00	53.20

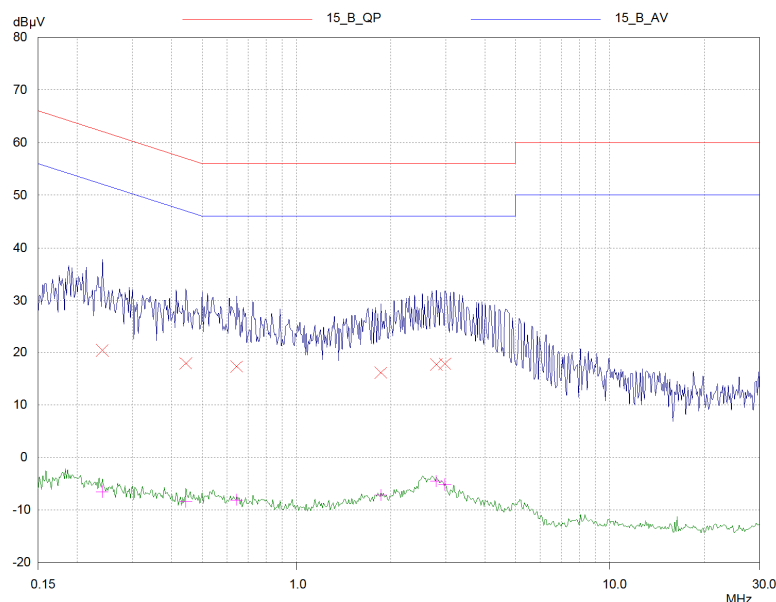
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N Line:



Final Measurement Results

Frequency MHz	QP Level dBμV	QP Limit dBμV	QP Delta dB
0.24002	20.36	62.10	41.74
0.44332	17.87	57.00	39.13
0.64471	17.30	56.00	38.70
1.86045	16.08	56.00	39.92
2.79322	17.68	56.00	38.32
2.97708	17.80	56.00	38.20

Frequency MHz	AV Level dBμV	AV Limit dBμV	AV Delta dB
0.24002	-6.59	52.10	58.69
0.44332	-8.48	47.00	55.48
0.64471	-8.10	46.00	54.10
1.86045	-7.20	46.00	53.20
2.79322	-4.53	46.00	50.53
2.97708	-5.23	46.00	51.23

End of Report~