



Page: 1 of 23

# FCC-DOC COMPLIANCE REPORT

Test Report No. : E1/2016/80113

**Applicant** : FUJITSU LIMITED

**Address** : 1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki 211-8588,

Japan

: FUJITSU LIMITED Manufacturer

**Address** : 1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki 211-8588,

Japan

**Equipment Under Test (EUT): Product Name** : Mobile Phone

**Brand Name** : FUJITSU

Model No. : F-01J

Added Model(s) : N/A

**Standards** : FCC Part 15:2016, Subpart B, Class B

Date of Receipt: Aug. 22, 2016

: Aug. 22 ~ Sep. 07, 2016 **Date of Test** 

Date of Issue : Oct. 05, 2016

Test Result: **PASS** 

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

#### Remarks:

This report details the results of the testing carried out on one sample, the results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report shall not be reproduced except in full, without the written approval of the laboratory. 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.

Tested By: Oct. 05, 2016 Date

Approved By Date Oct. 05, 2016

Wisely Huang (Asst. Supervisor)



Copyright of this verification is owned by SGS Taiwan LTD. Electronics & Communication Laboratory and may not be reproduced except in full and with the prior approval of the Manager of SGS Taiwan Ltd. Electronics & Communication Laboratory.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and <a href="https://www.sgs.com/terms">conditions.htm</a> and, for electronic

format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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.

SGS Taiwan Ltd.





Page: 2 of 23

# **Revision History**

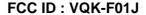
Report Number	Revision	Description	Issue Date
E1/2016/80113	Rev.00	Initial creation of document	Oct. 05, 2016

Copyright of this verification is owned by SGS Taiwan LTD. Electronics & Communication Laboratory and may not be reproduced except in full and with the prior approval of the Manager of SGS Taiwan Ltd. Electronics & Communication Laboratory.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and <a href="https://www.sgs.com/terms">conditions.htm</a> and, for electronic

Inis document is issued by the Company subject to its General Conditions, three and Conditions, three and Conditions, three and Conditions for Electronic Documents at <a href="www.sgs.com/terms">www.sgs.com/terms</a> endocument.htm</a>. 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.

SGS Taiwan Ltd. 台灣檢驗科技股份有限公司





Page: 3 of 23

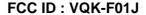
## **Contents**

1. GENERAL INFORMATION	4
1.1 APPLICANT & MANUFACTURER INFORMATION	4
1.2 GENERAL DESCRIPTION OF EUT	4
1.3 DETAILS OF EUT	4
1.4 OPERATION PROCEDURE	6
1.5 DESCRIPTION OF SUPPORT UNITS	8
1.6 MODIFICATION LIST	8
1.7 CABLE LIST	8
1.8 TEST SET-UP CONFIGURATION	9
1.9 MEASURMENT PROCEDURE	11
1.10 STANDARDS APPLICABLE FOR TESTING	11
1.11 SUMMARY OF RESULTS	11
2. EMISSION	12
2.1 TEST RESULTS	12
2.2 Frequency Range	12
2.3 LIMITS OF CONDUCTED AND RADIATED EMISSION	12
2.3.1 LIMITS OF CONDUCTED EMISSION FOR FCC PART 15, SUBPART B/CISPR 22	12
2.3.2 LIMITS OF RADIATED EMISSIONS FOR FCC PART 15, SUBPART B/CISPR 22	
2.4.Test of Conducted Emission	14
2.4.1 TEST EQUIPMENTS	14
2.4.2 OPERATING ENVIRONMENT	14
2.4.3 MEASUREMENT LEVEL CALCULATION	14
2.4.4 MEASUREMENT DATA:	15
2.5 TEST OF RADIATED EMISSION	17
2.5.1 TEST EQUIPMENTS	17
2.5.2 OPERATING ENVIRONMENT	19
2.5.3 MEASUREMENT LEVEL CALCULATION	19
2.5.4 MEASUREMENT DATA	20
3. PHOTOGRAPHS OF TEST	定義書籤。
4. PHOTOGRAPHS OF PRODUCT	定義書籤。

Copyright of this verification is owned by SGS Taiwan LTD. Electronics & Communication Laboratory and may not be reproduced except in full and with the prior approval of the Manager of SGS Taiwan Ltd.

Electronics & Communication Laboratory.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and <a href="https://www.sgs.com/terms">conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm</a>. Attention is drawn to the limitation of liability, indemis 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.





Page: 4 of 23

## 1. General Information

## 1.1 Applicant & Manufacturer Information

Applicant : FUJITSU LIMITED

Address of Applicant : 1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki

211-8588, Japan

Manufacturer : FUJITSU LIMITED

Address of Manufacturer: 1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki

211-8588, Japan

## 1.2 General Description of EUT

Product Name : Mobile Phone

Brand Name : FUJITSU

Model No. : F-01J Added Model(s) : N/A

Model Difference: N/A

#### 1.3 Details of EUT

Power Supply : AC 100~240V, 50~60Hz

Modes/Function . Mode 1. ADP+ Earphone + WiFi Link +

NFC ON(Standalone) + BT Link + GPS/Glonass Link + SD Card +

**GSM**: 850 Link

Mode 2. ADP+ Earphone + WiFi Idle +

NFC ON(Standalone) + BT Idle + GPS/Glonass Idle + SD Card +

GSM: 1900 Idle

Mode 3. WiFi Link + NFC ON(Standalone) +

BT Link + GPS/Glonass Link + SD Card+

GSM: 850/1900 (Wosrt) Single

Mode 4. ADP+ Earphone + WiFi Idle +

NFC ON(Standalone) + BT Idle +

GPS/Glonass Idle +SD Card+3G:B Idle

Copyright of this verification is owned by SGS Taiwan LTD. Electronics & Communication Laboratory and may not be reproduced except in full and with the prior approval of the Manager of SGS Taiwan Ltd. Electronics & Communication Laboratory.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and Conditions.htm</a> and, for electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm</a>. 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.

SGS Taiwan Ltd. 台灣檢驗科技股份有限公司





Page: 5 of 23

Mode 5. ADP+ Earphone + WiFi Link +
NFC ON(Standalone) + BT Link +
GPS/Glonass Link + SD Card +

LTE: B5 Link

Mode 6. ADP+ Earphone +Camera Rear REC +
WiFi Link + NFC ON(Standalone) +
BT Stand by + GPS/Glonass Link +

SD Card

Mode 7. ADP+ Earphone+ Camera Front REC+ WiFi Link + NFC ON(Standalone) + BT Stand by + GPS/Glonass Link +

SD Card

Mode 8. WiFi Link + BT Link +
GPS/Glonass Link + Earphone +
SD Card + SD Write

Mode 9. WiFi Link + BT Link +

GPS/Glonass Link + Earphone +

SD Card + SD Read

. CE Worst : Mode 5. ADP+ Earphone + WiFi Link +

NFC ON(Standalone) +

BT Link + GPS/Glonass Link +

SD Card + LTE : B5 Link

RE Worst : Mode 9. WiFi Link + BT Link +

GPS/Glonass Link + Earphone + SD Card +

SD Read

Highest operate description : 5 GHz

Battery : Model No.: CA54310-0069

Supplier: FUJITSU CONNECTED

**TECHNOLOGIES LIMITED** 

3.8V, 2850mAh, 10.9Wh

Adapter : Model No.: FMV-AC346

Supplier: FUJITSU LIMITED I/P: AC100~240, 50/60Hz, 0.3A

O/P: DC5.0V, 2.0A

IMEI : 352058080012331

Copyright of this verification is owned by SGS Taiwan LTD. Electronics & Communication Laboratory and may not be reproduced except in full and with the prior approval of the Manager of SGS Taiwan Ltd. Electronics & Communication Laboratory.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and <a href="https://www.sgs.com/terms">conditions.htm</a> and, for electronics

Inis document is issued by the Company subject to its General Conditions of Service printed overlear, available on request or accessible at <a href="https://www.sgs.com/terms.and.conditions.ntm">www.sgs.com/terms.and.conditions.ntm</a> and, for electronic Documents at <a href="https://www.sgs.com/terms.and.conditions.ntm">www.sgs.com/terms.and.conditions.ntm</a> 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.

SGS Taiwan Ltd.

Worst case





Page: 6 of 23

## 1.4 Operation Procedure

#### Mode: 1

- 1. Let EUT connect to the USB Cable, Adapter and Earphone.
- 2. Turned on the WiFi of EUT and connected to the AP.

Turned on Bluetooth and connected to the Bluetooth speaker.

Turned on NFC and scanned the card.

Turned on the GPS and connected to GPS simulator.

Played 1KHz from SD Card.

Turned on GSM and call connection with CMU200 (GSM850).

3. Started the test.

#### Mode 2

- 1. Let EUT connect to the USB Cable, Adapter and Earphone.
- 2. Turned on the WiFi of EUT and connected to the AP.

Turned on Bluetooth and connected to the Bluetooth speaker.

Turned on NFC and scanned the card.

Turned on the GPS and connected to GPS simulator.

Played 1KHz from SD Card.

Turned on GSM and call connection with CMU200 (GSM1900).

Started the test.

#### Mode 3

- 1. Let EUT connect to the USB Cable, Adapter and Earphone.
- 2. Turned on the WiFi of EUT and connected to the AP.

Turned on Bluetooth and connected to the Bluetooth speaker.

Turned on NFC and scanned the card.

Turned on the GPS and connected to GPS simulator.

Played 1KHz from SD Card.

Turned on GSM and call connection with CMU200 (GSM850/GSM1900).

3. Started the test.

#### Mode 4

- 1. Let EUT connect to the USB Cable, Adapter and Earphone.
- 2. Turned on the WiFi of EUT and connected to the AP.

Turned on Bluetooth and connected to the Bluetooth speaker.

Turned on NFC and scanned the card.

Turned on the GPS and connected to GPS simulator.

Played 1KHz from SD Card.

Turned on GSM and call connection with CMU200 (3G B ).

3. Started the test.

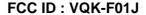
Copyright of this verification is owned by SGS Taiwan LTD. Electronics & Communication Laboratory and may not be reproduced except in full and with the prior approval of the Manager of SGS Taiwan Ltd. Electronics & Communication Laboratory.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="www.sqs.com/terms">www.sqs.com/terms</a> and <a href="conditions.htm">conditions.htm</a> and, for electronic

format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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.

SGS Taiwan Ltd. 台灣檢驗科技股份有限公司

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 f (886-2) 2298-0488 www.tw.sqs.com





Page: 7 of 23

#### Mode 5

- 1. Let EUT connect to the USB Cable, Adapter and Earphone.
- 2. Turned on the WiFi of EUT and connected to the AP.

Turned on Bluetooth and connected to the Bluetooth speaker.

Turned on NFC and scanned the card.

Turned on the GPS and connected to GPS simulator.

Played 1KHz from SD Card.

Turned on GSM and call connection with 8820C (4G B5).

3. Started the test.

#### Mode 6

- 1. Let EUT connect to the USB Cable, Adapter and Earphone.
- 2. Turned on the rear camera to start recording.

Turned on the WiFi of EUT and connected to the AP.

Turned on Bluetooth and connected to the Bluetooth speaker.

Turned on NFC and scanned the card.

Turned on the GPS and connected to GPS simulator.

Played 1KHz from SD Card.

3. Started the test.

#### Mode 7

- 1. Let EUT connect to the USB Cable, Adapter and Earphone.
- 2. Turned on the front camera to start recording.

Turned on the WiFi of EUT and connected to the AP.

Turned on Bluetooth and connected to the Bluetooth speaker.

Turned on NFC and scanned the card.

Turned on the GPS and connected to GPS simulator.

Played 1KHz from SD Card.

3. Started the test.

#### Mode 8

- 1. Let EUT connect to the USB Cable, notebook and Earphone.
- 2. Turned on the WiFi of EUT and connected to the AP.

Turned on Bluetooth and connected to the Bluetooth speaker.

Turned on the GPS and connected to GPS simulator.

Let DATA from SD Card write into notebook.

3. Started the test.

#### Mode 9

- 1. Let EUT connect to the USB Cable, notebook and Earphone.
- 2. Turned on the WiFi of EUT and connected to the AP.

Turned on Bluetooth and connected to the Bluetooth speaker.

Turned on the GPS and connected to GPS simulator.

Let DATA from notebook read into SD Card.

3. Started the test.

Copyright of this verification is owned by SGS Taiwan LTD. Electronics & Communication Laboratory and may not be reproduced except in full and with the prior approval of the Manager of SGS Taiwan Ltd. Electronics & Communication Laboratory.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and <a href="https://www.sgs.com/terms">conditions.htm</a> and, for electronics

Ins document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and Conditions.htm</a> and, for electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm</a>. 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.

SGS Taiwan Ltd. 台灣檢驗科技股份有限公司





Page: 8 of 23

## 1.5 Description of Support Units

PRODUCT	MANUFACTURER	MODEL NO.	SERIAL NO.
BT Speaker	Creative	MF8090	YFMF8090245R00855Y
AP	BUFFALO	WZR-HP-G300NH2	44066221202559[[G]]
GPS Signal Generator	Spectracom	GSG53 GNSS4	200218
Notebook (EMI)(Win8)	DELL	P37G	H55Z0Z1
Mouse	DELL	MS111-T	CN-OKW2YH-71616- 345-OL7T
Printer	HP	VCVRA-1004	CN33K19J3F
Micro SD	Transcend	Micro SDHC (Class4)	N/A
EasyCad	Taipei smart card corporation	N/A	N/A

#### 1.6 Modification List

No modification was made by SGS Taiwan Electronics & Communication Laboratory.

#### 1.7 Cable List

Cable Type	Core	Length	Shielding/Non-shielding
USB Cable	N/A	1.1m	Non-shielding
Earphone (HTC/Sony )	N/A	1.8m	Non-shielding

Copyright of this verification is owned by SGS Taiwan LTD. Electronics & Communication Laboratory and may not be reproduced except in full and with the prior approval of the Manager of SGS Taiwan Ltd. Electronics & Communication Laboratory.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and <a href="https://www.sgs.com/terms">conditions.htm</a> and, for electronic

format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm</a>. Attention is drawn to the limitation of liability, indemis 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.

台灣檢驗科技股份有限公司



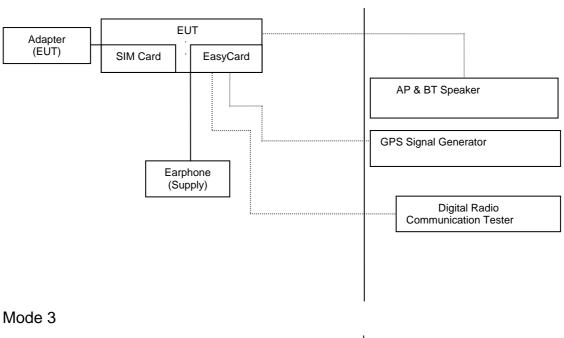
SGS

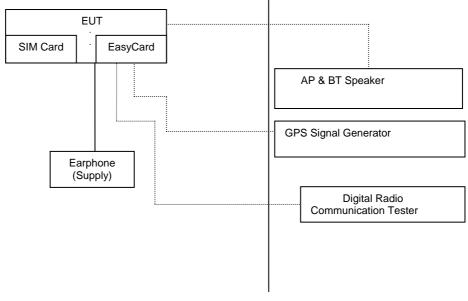
Report No.: E1/2016/80113

Page: 9 of 23

## 1.8 Test Set-Up Configuration

Mode 1,2,4





Copyright of this verification is owned by SGS Taiwan LTD. Electronics & Communication Laboratory and may not be reproduced except in full and with the prior approval of the Manager of SGS Taiwan Ltd. Electronics & Communication Laboratory.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and <a href="https://www.sgs.com/terms">conditions.htm</a> and, for electronic

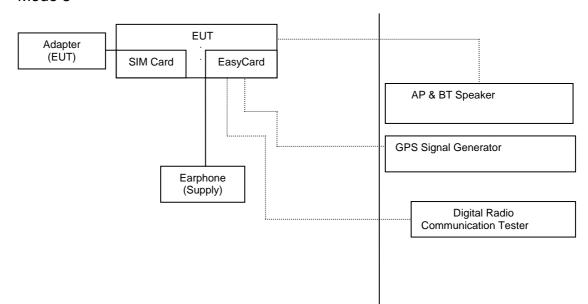
format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm</a>. Attention is drawn to the limitation of liability, indemis and jurisdiction issues defined therein. Any holder of this document is advised that information 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.

FCC ID: VQK-F01J

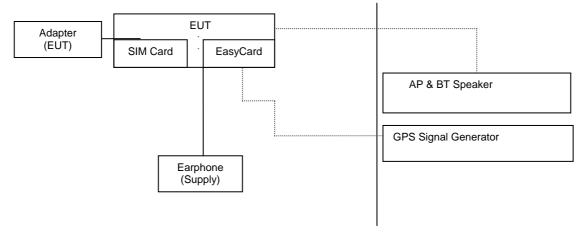


Report No.: E1/2016/80113

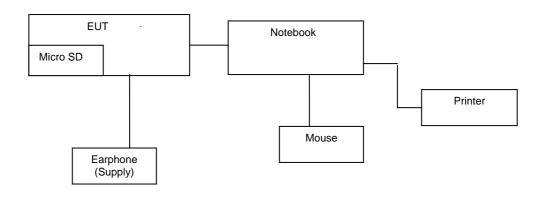
Page: 10 of 23



## Mode 6.7



## Mode 8.9



Copyright of this verification is owned by SGS Taiwan LTD. Electronics & Communication Laboratory and may not be reproduced except in full and with the prior approval of the Manager of SGS Taiwan Ltd.

Electronics & Communication Laboratory.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and <a href="https://www.sgs.com/terms">conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm</a>. Attention is drawn to the limitation of liability, indemis 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.

f (886-2) 2298-0488





Page: 11 of 23

#### 1.9 Measurement Procedure

Conducted Emission Testing was performed according to ANSI C63.4:2014 in a shielded room with peripherals placed on a table, 0.8m high over a metal floor. It was located more than required distance away from the shielded room wall.

Radiated Emission Testing was performed according to ANSI C63.4:2014 at the 10m semi-anechoic chamber. The EUT was placed on a 0.8m high table along with the peripherals. The turn table was placed 10m distance from the antenna. Cables were placed in a position to produce maximum emissions as determined by experimentation, and operation mode was selected for production of maximum emission.

The frequencies and amplitudes of maximum emission were measured at varying azimuths, antenna heights and antenna polarities. Maximum emission levels are then reported.

## 1.10 Standards Applicable for Testing

Tests to be carried out under FCC Part 15. Subpart B

rocto to be carried out under roc rait ro, caspart B				
Test Standards	Status			
FCC Part 15, Subpart B	Applicable			
Deviation from Standard	No deviation			

## 1.11 Summary of Results

Highest Emission					
Standard Test Type Result Phase/Pol. Frequency(MHz) Margin(dB)					
FCC Part 15 Subpart B Class B	Conducted Emission	DACC	Line	13.5662	-5.32 (QP)
	Conducted Emission	PASS	Neutral	13.5602	-8.90 (QP)
	Radiated Emission	PASS	Ver.	167.9905	-3.28 (QP)

Copyright of this verification is owned by SGS Taiwan LTD. Electronics & Communication Laboratory and may not be reproduced except in full and with the prior approval of the Manager of SGS Taiwan Ltd. Electronics & Communication Laboratory.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and <a href="https://www.sgs.com/terms">conditions.htm</a> and, for electronic

format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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.

SGS Taiwan Ltd.



Page: 12 of 23

## 2. EMISSION

#### 2.1 Test Results

	Results
Conducted Emission	Pass
Radiated Emission	Pass

## 2.2 Frequency Range

Conducted Emission : 150 kHz - 30 MHz Radiated Emission : See below table

Highest frequency generated or Upper frequency of measurement used in the device or on which the range (MHz) device operates or tunes (MHz)

> Below 1.705 30 1.705 - 1081000 2000 108 - 500 500 - 1000 5000 Above 1000

5th harmonic of the highest frequency or

40 GHz, whichever is lower

#### 2.3 Limits of Conducted and Radiated Emission

## 2.3.1 Limits of Conducted Emission for FCC Part 15, Subpart B/CISPR 22

FREQUENCY	Class A (dBuV)		Class B (dBuV)	
(MHz)	Quasi - peak	Average	Quasi - peak	Average
0.15 - 0.5	79	66	66 - 56	56 - 46
0.50 - 5.0	73	60	56	46
5.0 - 30.0	73	60	60	50

Note: (1) The lower limit shall apply at the transition frequencies.

- (2) The limit decreases linearly with the logarithm of the frequency in the range 0.15 to 0.50 MHz.
- (3) All emanation from a class A/B digital device or system, including any network of conductors and apparatus connected there to, shall not exceed the level of field strengths specified above.

Copyright of this verification is owned by SGS Taiwan LTD. Electronics & Communication Laboratory and may not be reproduced except in full and with the prior approval of the Manager of SGS Taiwan Ltd. Electronics & Communication Laboratory.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and <a href="https://www.sgs.com/terms">conditions.htm</a> and, for electronic

format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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.

SGS Taiwan Ltd.





Page: 13 of 23

## 2.3.2 Limits of Radiated Emissions for FCC Part 15, Subpart B/CISPR 22

#### **FCC Limit:**

• Detector Function : Quasi - Peak

FREQUENCY	Class A (at 10m)	Class B (at 3m)
(MHz)	dBuV/m	dBuV/m
30~88	39	40
88~216	43.5	43.5
216~960	46.44	46
Above 960	49.54	54

Detector Function : Peak , Average

FREQUENCY	Class A (dBuV/m) (at 3m)		Class B (dBuV/m) (at 3m)			
(MHz)	Peak Average		Peak	Average		
Above	79.3	59.3	73.9	53.9		
1000-18000						

#### CISPR Limit:...

Detector Function : Quasi – Peak

FREQUENCY	Class A (at 10m)	Class B (at 10m)
(MHz)	dBuV/m	dBuV/m
30-230	40	30
230-1000	47	37

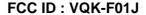
Note: The lower limit applies at the transition frequency.

Copyright of this verification is owned by SGS Taiwan LTD. Electronics & Communication Laboratory and may not be reproduced except in full and with the prior approval of the Manager of SGS Taiwan Ltd. Electronics & Communication Laboratory.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm and, for electronic

Inis document is issued by the Company subject to Terms and Conditions, row electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is of a 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.

SGS Taiwan Ltd. 台灣檢驗科技股份有限公司





Page: 14 of 23

## 2.4.Test of Conducted Emission

## 2.4.1 Test Equipments

	SGS Conducted_Emission HWAYA Conducted Room No.A_EMC					
EQUIPMENT TYPE	Manufacturer	Model Number	Serial Number	Calibration Date	Calibration Due	
EMI Test Receiver	R&S	ESCI 3	101311	2016/6/23	2017/6/22	
Coaxial Cables	N/A	N30N30-1042- 150	N/A	2016/2/6	2017/2/5	
LISN	SCHWARZBECK	NSLK 8127	8127-648	2016/6/13	2017/6/12	
Pulse Limiter	Narda S.T.S.	PMM PL01	1110X30602	2016/8/12	2017/8/11	
LISN	Schwarzbeck	NSLK 8128	NSLK8127-300	2016/6/22	2017/6/21	
Universal Digital Radio Communication Tester	R&S	CMU 200	120239	2015/11/24	2016/11/23	
Radio Communication Analyzer	Anritsu	MT8820C	6201107337	2016/5/25	2017/5/24	
Test S/W	Farad	EZ-EMC	Ver. SGS-03A2	N.C.R.	N.C.R.	

SGS Taiwan LTD. Electronics & Communication Laboratory

No.2, Keji 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)

Measurement Uncertainty of Conducted Emission

Expanded uncertainty (K=2) of conducted emission is 2.20 dB

## 2.4.2 Operating Environment

Temperature: 23 degree C Humidity: 66 %RH

Atmospheric Pressure: 992 mBar

#### 2.4.3 Measurement Level Calculation

Factor = LISN insertion loss + Cable loss Measurement Level = Reading Level + Factor Over (Margin) = Measurement Level – Limit

Copyright of this verification is owned by SGS Taiwan LTD. Electronics & Communication Laboratory and may not be reproduced except in full and with the prior approval of the Manager of SGS Taiwan Ltd. Electronics & Communication Laboratory.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and <a href="https://www.sgs.com/terms">conditions.htm</a> and, for electronic

Inis document is issued by the Company subject to tis General Conditions of Service printed overlear, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a>. 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.

SGS Taiwan Ltd. 台灣檢驗科技股份有限公司





Page: 15 of 23

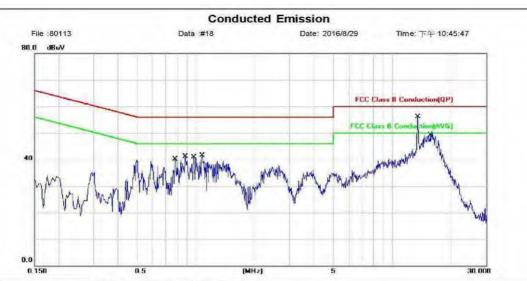
#### 2.4.4 Measurement Data:

## Mode 5 L

Site: Conduction Room Phase. L1 Temperature: 23 °C Limit: FCC Class B Conduction(QP) Power: AC 120V/60Hz Humidity: 66 %

Mode: Mode 5

Note:



No.	Mk.	Freq	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.7820	36.80	0.35	37.15	56.00	-18.85	QP	
2		0.7820	25.10	0.35	25.45	46.00	-20.55	AVG	
3		0.8820	34.50	0.35	34.85	56.00	-21.15	QP	
4		0.8820	26.10	0.35	26.45	46.00	-19.55	AVG	
5		0.9780	34.80	0.34	35.14	56.00	-20.86	QP	
6		0.9780	26.40	0.34	26.74	46.00	-19.26	AVG	
7		1.0740	37.90	0.34	38.24	56.00	-17.76	QP	
8		1.0740	26.00	0.34	26.34	46.00	-19.66	AVG	
9	*	13.5662	54.10	0.67	54.77	60.00	-5.23	QP	NFC
10		13.5662	30.10	0.67	30.77	50.00	-19.23	AVG	
11		15.4060	41.70	0.70	42.40	60.00	-17.60	QP	
12		15.4060	30.50	0.70	31.20	50.00	-18.80	AVG	

\*:Maximum data x:Over limit !:over margin

File :80113\Data :#18

Page: 1

Copyright of this verification is owned by SGS Taiwan LTD. Electronics & Communication Laboratory and may not be reproduced except in full and with the prior approval of the Manager of SGS Taiwan Ltd. Electronics & Communication Laboratory.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and <a href="https://www.sgs.com/terms">conditions.htm</a> and, for electronic

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm</a>. 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.

SGS Taiwan Ltd.



SGS

Report No.: E1/2016/80113

Page: 16 of 23

## Mode 5 N

Site : Conduction Room

Limit: FCC Class B Conduction(QP)

Mode: Mode 5

Note:

 Phase:
 N
 Temperature:
 23 ℃

 Power:
 AC 120V/60Hz
 Humidity:
 66 %

**Conducted Emission** 

File: 80113 Data: #17 Date: 2016/8/29 Time: 下午 10:44:28

80.0 dBuV

FEE: Class R Conduction((P))

0.0 0.150 0.5 (MHz) 5 30.000

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.4980	32.50	0.39	32.89	56.03	-23.14	QP	
2		0.4980	19.50	0.39	19.89	46.03	-26.14	AVG	
3		0.6100	29.20	0.40	29.60	56.00	-26.40	QP	
4		0.6100	15.90	0.40	16.30	46.00	-29.70	AVG	
5		0.9100	31.30	0.42	31.72	56.00	-24.28	QP	
6		0.9100	18.20	0.42	18.62	46.00	-27.38	AVG	
7		1.0020	29.60	0.42	30.02	56.00	-25.98	QP	
8		1.0020	17.60	0.42	18.02	46.00	-27.98	AVG	
9	*	13.5602	50.40	0.70	51.10	60.00	-8.90	QP	NFC
10		13.5602	28.60	0.70	29.30	50.00	-20.70	AVG	
11		15.4260	41.30	0.73	42.03	60.00	-17.97	QP	
12		15.4260	28.10	0.73	28.83	50.00	-21.17	AVG	

<sup>\*:</sup>Maximum data x:Over limit !:over margin

File: 80113\Data: #17

Page: 1

Copyright of this verification is owned by SGS Taiwan LTD. Electronics & Communication Laboratory and may not be reproduced except in full and with the prior approval of the Manager of SGS Taiwan Ltd. Electronics & Communication Laboratory.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and <a href="https://www.sgs.com/terms">conditions.htm</a> and, for electronic

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and Conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm</a>. 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.

SGS Taiwan Ltd.





Page: 17 of 23

#### 2.5 Test of Radiated Emission

## 2.5.1 Test Equipments

#### **Below 1GHz**

SGS Radiated Below 1GHz HWAYA 10m EMC												
EQ.	SGS Rad	liated_BeloW_1GHz H\ I	VAYA TUM_EN									
EQUIPMENT TYPE	Manufacturer	Model Number	Serial Number	Calibration Date	Calibration Due							
EMI Test Receiver	R&S	ESCI 7	100950	2015/12/8	2016/12/7							
EMI Test Receiver	R&S	ESCI 3	101343	2015/12/25	2016/12/24							
Broadband Antenna	SCHWAZBECK	VULB9168	9168-628	2015/9/23	2016/9/22							
Broadband Antenna	SCHWAZBECK	VULB9168	9168-629	2015/9/23	2016/9/22							
Pre Amplifier	EMC Instruments Corp.	EMC330	980178	2016/3/31	2017/3/30							
Pre Amplifier	EMC Instruments Corp.	EMC330	980179	2016/3/31	2017/3/30							
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150917	2015/9/18	2016/9/17							
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150919	2015/9/18	2016/9/17							
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150820	2015/9/18	2016/9/17							
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150918	2015/9/18	2016/9/17							
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150821	2015/9/18	2016/9/17							
Coaxial Cable	<b>EMC Instruments</b>	EMCCFD400-NM-NM	150822	2015/9/18	2016/9/17							
Universal Digital Radio Communication Tester	R&S	CMU 200	120239	2015/11/24	2016/11/23							
Radio Communication Analyzer	Anritsu	MT8820C	6201107337	2016/5/25	2017/5/24							
Controller	MF	MF-7802	N/A	N.C.R.	N.C.R.							
Controller	MF	MF-7802	N/A	N.C.R.	N.C.R.							
Antenna Master	MF	N/A	N/A	N.C.R.	N.C.R.							
Antenna Master	MF	N/A	N/A	N.C.R.	N.C.R.							
Antenna Master	MF	N/A	N/A	N.C.R.	N.C.R.							
Turn Table	MF	N/A	N/A	N.C.R.	N.C.R.							
Site NSA	Chance Most	10M Chamber	10M SAC	2015/12/31	2016/12/30							
Test S/W	Farad	EZ-EMC	Ver. SGS- 03A2	N.C.R.	N.C.R.							

SGS Taiwan LTD. Electronics & Communication Laboratory

No.2, Keji 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)

Measurement Uncertainty of Radiated Emission

Expanded uncertainty of radiated emission is 4.16 dB. (30MHz ~ 1000MHz)

Copyright of this verification is owned by SGS Taiwan LTD. Electronics & Communication Laboratory and may not be reproduced except in full and with the prior approval of the Manager of SGS Taiwan Ltd. Electronics & Communication Laboratory.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and <a href="https://www.sgs.com/terms">conditions.htm</a> and, for electronic

format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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.

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 t (886-2) 2299-3279 f (886-2) 2298-0488





Page: 18 of 23

## **Above 1GHz**

	SGS Radia	ated Above 1G	Hz HWAYA 966A	EMC	
EQUIPMENT TYPE	Manufacturer	Model Number		Calibration Date	Calibration Due
Spectrum Analyzer	R&S	FSV 40	101419	2016/2/25	2017/2/24
EMI Test Receiver	R&S	ESR 7	101459	2016/2/22	2017/2/21
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA9120D673	2015/10/8	2016/10/7
Horn Antenna	Schwarzbeck	BBHA9170	BBHA9170-184	2015/12/11	2016/12/10
Pre Amplifier	EMC Instruments Corp.	EMC012645B	980216	2015/9/30	2016/9/29
Pre Amplifier	EMC Instruments Corp.	EMC184045B	980135	2015/10/27	2016/10/26
Coaxial Cable	JUNFLOW	MWX221- NMSNMS	J0778929	2016/4/23	2017/4/22
Coaxial Cable	Huber+Suhner	SUCCOFLEX 104PEA	30255/4PEA	N.C.R.	N.C.R.
Coaxial Cable	EMC Instruments	EMC104-SM- SM	140927	2016/4/23	2017/4/22
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	MY 2152/2	2016/6/5	2017/6/4
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	MY 2153/2	2016/6/5	2017/6/4
Universal Digital Radio Communication Tester	R&S	CMU 200	120239	2015/11/24	2016/11/23
Radio Communication Analyzer	Anritsu	MT8820C	6201107337	2016/5/25	2017/5/24
Controller	MF	MF-7802	N.C.R.	N.C.R.	N.C.R.
Antenna Master	MF	N/A	N/A	N.C.R.	N.C.R.
Turn Table	MF	N/A	N/A	N.C.R.	N.C.R.
Site VSWR	SGS	966 Chamber A	SAC-A	2016/1/12	2017/1/11
Test S/W	Farad	EZ-EMC	Ver. SGS-03A2	N.C.R.	N.C.R.
SCS Taiwan I T	D Flootropies & Co	mmunication La	horotony		

SGS Taiwan LTD. Electronics & Communication Laboratory

No.2, Keji 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)

Measurement Uncertainty of Radiated Emission

Expanded uncertainty (k=2) of radiated emission measurement is 4.96 dB. (1-6GHz)

Expanded uncertainty (k=2) of radiated emission measurement is 5.14 dB. (6-18GHz)

Expanded uncertainty (k=2) of radiated emission measurement is 4.86 dB. (18-26GHz)

Expanded uncertainty (k=2) of radiated emission measurement is 4.81 dB. (26-40GHz)

Copyright of this verification is owned by SGS Taiwan LTD. Electronics & Communication Laboratory and may not be reproduced except in full and with the prior approval of the Manager of SGS Taiwan Ltd. Electronics & Communication Laboratory.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and <a href="https://www.sgs.com/terms">conditions.htm</a> and, for electronic

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and Conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions.htm and, for electronic Documents at <a href="https://www.sgs.com/terms.e-document.htm">www.sgs.com/terms.e-document.htm</a>. Attention is a 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.

SGS Taiwan Ltd. 台灣檢驗科技股份有限公司





Page: 19 of 23

## 2.5.2 Operating Environment

Temperature : 22 degree C Humidity : 73 %RH

Atmospheric Pressure: 996 mBar

#### 2.5.3 Measurement Level Calculation

Correction Factor = Antenna Factor + Cable loss- Amplifier Gain Measurement Level = Reading Level + Correction Factor Over (Margin) = Measurement Level – Limit

Copyright of this verification is owned by SGS Taiwan LTD. Electronics & Communication Laboratory and may not be reproduced except in full and with the prior approval of the Manager of SGS Taiwan Ltd. Electronics & Communication Laboratory.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and <a href="https://www.sgs.com/terms">conditions.htm</a> and, for electronic

This documents, subject to Terms and Conditions. The General Containers of Service printee of verteal, available on request or accessing a www.sgs.com/terms and conditions. The flectronic 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.

SGS Taiwan Ltd. No.134, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號

f (886-2) 2298-0488





Page: 20 of 23

#### 2.5.4 Measurement Data

#### **Below 1GHz**

## Mode 9 H

Site SGS 10m Chamber

Limit: CISPR22 Class B 10M Radiation

Mode: Mode\_9

Note:

Polarization: Horizontal

Power: From System

Distance: 10m

Temperature: 22 ℃

Humidity: 73 %

Distance, Ton



No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	60.6300	33,49	-12.37	21.12	30.00	-8.88	QP		
2	122.1500	35.50	-13.58	21.92	30.00	-8.08	QP		
3 !	148.4200	38.03	-12.05	25.98	30.00	-4.02	QP		
4 *	168.0020	38.58	-11.89	26.69	30.00	-3.31	QP		
5	224.2600	35.50	-14.77	20.73	30.00	-9.27	QP		
6	240.0400	41.86	-13.41	28.45	37.00	-8.55	QP		

\*: Maximum data x: Over limit !: over margin

File :E1-2016-80113\Data :#22

Page: 1

Copyright of this verification is owned by SGS Taiwan LTD. Electronics & Communication Laboratory and may not be reproduced except in full and with the prior approval of the Manager of SGS Taiwan Ltd. Electronics & Communication Laboratory.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and <a href="https://www.sgs.com/terms">conditions.htm</a> and, for electronic

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and Conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm</a>. 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.

SGS Taiwan Ltd.



Page: 21 of 23

## Mode 9 V

Site SGS 10m Chamber

Limit: CISPR22 Class B 10M Radiation

Mode: Mode\_9

Note:

Polarization: Vertical Power: From System

Distance: 10m

Temperature:

Humidity: 73 %



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	1	60.6700	36.76	-11.84	24.92	30.00	-5.08	QP	
2		122.1500	34.19	-13.06	21.13	30.00	-8.87	QP	
3		140.3400	35.21	-11.99	23.22	30.00	-6.78	QP	
4	*	167.9905	38.08	-11.36	26.72	30.00	-3.28	QP	
5		224.1500	31.62	-14.36	17.26	30.00	-12.74	QP	
6		240.0000	38.44	-13.03	25.41	37.00	-11.59	QP	
_									

x:Over limit !:over margin

File :E1-2016-80113\Data :#21

Page: 1

Copyright of this verification is owned by SGS Taiwan LTD. Electronics & Communication Laboratory and may not be reproduced except in full and with the prior approval of the Manager of SGS Taiwan Ltd. Electronics & Communication Laboratory.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and <a href="https://www.sgs.com/terms">conditions.htm</a> and, for electronic

format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm</a>. Attention is drawn to the limitation of liability, indemis 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.





Page: 22 of 23

## **Above 1GHz**

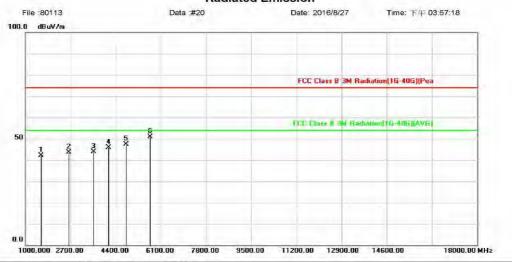
## Mode 9 H

Site SGS 966 Chamber A Polarization: Horizontal Temperature: 23 Class B 3M Radiation(1G-40G)(Pea Power: From System Humidity: 66 %

Mode: Mode\_9

Note:

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		1595.000	63.16	-20.94	42.22	74.00	-31.78	peak	
2		2649,000	58.14	-14.58	43,56	74.00	-30.44	peak	
3		3567.000	57.67	-13.91	43.76	74.00	-30.24	peak	
4		4145.000	57.94	-11.95	45.99	74.00	-28.01	peak	
5		4791.000	58.04	-10.59	47.45	74.00	-26.55	peak	
6	*	5709.000	59.09	-8.14	50.95	74.00	-23.05	peak	

\*: Maximum data x: Over limit !: over margin

File: 80113\Data: #20

Page: 1

Copyright of this verification is owned by SGS Taiwan LTD. Electronics & Communication Laboratory and may not be reproduced except in full and with the prior approval of the Manager of SGS Taiwan Ltd. Electronics & Communication Laboratory.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and <a href="https://www.sgs.com/terms">conditions.htm</a> and, for electronic

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and Conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm</a>. 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.

SGS Taiwan Ltd.





Page: 23 of 23

## Mode 9 V

Site SGS 966 Chamber A Limit: FCC Class B 3M Radiation(1G-40G)(Pea

Mode: Mode\_9

Note

Polarization: Power: From System

Temperature: 23 ( Humidity: 66 %

Distance:

Radiated Emission File :80113 Data :#19 Date: 2016/8/27 Time: 下午 03:56:21 100.0 dBuV/m FCC Class B 3M Radiation[16-406][Pe 18000.00 MHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1		1595,000	67.36	-20.94	46.42	74.00	-27.58	peak		
2		2581.000	59.29	-14.43	44.86	74.00	-29.14	peak		
3	1	3652.000	57.24	-13.57	43.67	74.00	-30.33	peak		
4	11	4060.000	57.67	-12.08	45.59	74.00	-28.41	peak		
5		4808.000	58.33	-10.53	47.80	74.00	-26.20	peak		
6	*	5743.000	58.91	-8.08	50.83	74.00	-23.17	peak		

x:Over limit !:over margin File :80113\Data :#19 Page: 1

The frequency band during 18GHz till 26.5 GHz that was not reported was verified with no extra obvious finding except ambient signals.

## \*\* End of Report \*\*

Copyright of this verification is owned by SGS Taiwan LTD. Electronics & Communication Laboratory and may not be reproduced except in full and with the prior approval of the Manager of SGS Taiwan Ltd. Electronics & Communication Laboratory.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and <a href="https://www.sgs.com/terms">conditions.htm</a> and, for electronic

format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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.

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號

www.tw.sqs.com