

FCC CERTIFICATION REPORT

Test Report No.	: MH/2018/80179
Applicant	: Sharp Corporation, Mobile Communication B.U.
Address	: 2-13-1, Hachihonmatsu-lida, Higashi-hiroshima-shi,Hiroshima 739-0192, Japan
Manufacturer	: Sharp Corporation
Address	: 1 Takumi-cho, Sakai-ku, Sakai-Shi, Osaka 590-8522,Japan
Equipment Under Product Name	Test (EUT) : : Smart Phone
	FCC Part 15, Subpart B, Class B Numbers : 916890 / TW1087
FCC Designation	Numbers : 916890 / TW1087
Date of Receipt :	Aug. 29, 2018

Date of Test : Aug. 29 ~ Sep. 11, 2018

PASS

Date of Issue : Sep. 28, 2018

Test Result :

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:

Thomas Linu Thomas Liu (Engineer) Why Cheng Eddy Cheng (Asst. Supervisor)

Sep. 28, 2018 Date

Approved By

Date

Sep. 28, 2018



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.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sqs.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.

> 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 SGS Taiwan Ltd.

Testing Laboratory 0513



Report No.: MH/2018/80179 Page: 2 of 39



Revision History

Report Number	Revision	Description	Issue Date
MH/2018/80179	Rev.00	Initial creation of document	Sep. 28, 2018

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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms</u> and <u>conditions.htm</u> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sqs.com/terms</u> and <u>conditions.htm</u> and for electronic format 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 is unlawful and offenders may be prosecuted to the full-extent of the law. 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 SGS Taiwan Ltd.

台灣檢驗科技股份有限公司 t (886-2) 2299-3279

```
www.tw.sqs.com
```

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	5
1.5 DESCRIPTION OF SUPPORT UNITS	6
1.6 Modification List	7
1.7 Accessories Cable List	7
1.8 TEST SET-UP CONFIGURATION	8
1.9 Measurement Procedure	9
1.10 STANDARDS APPLICABLE FOR TESTING	9
1.11 SUMMARY OF RESULTS	9
2. EMISSION	10
2.1 Test Results	10
2.2 FREQUENCY RANGE	10
2.3 LIMITS OF CONDUCTED AND RADIATED EMISSION	
2.3.1 LIMITS OF CONDUCTED EMISSION	10
2.3.2 LIMITS OF RADIATED EMISSIONS	11
2.4.TEST OF CONDUCTED EMISSION	12
2.4.1 TEST EQUIPMENTS	12
2.4.2 OPERATING ENVIRONMENT	12
2.4.3 MEASUREMENT LEVEL CALCULATION	12
2.4.4 Measurement Data:	
2.5 TEST OF RADIATED EMISSION	
2.5.1 TEST EQUIPMENTS	
2.5.2 OPERATING ENVIRONMENT	21
2.5.3 MEASUREMENT LEVEL CALCULATION	21
2.5.4 Measurement Data	
3. PHOTOGRAPHS OF TEST	錯誤! 尚未定義書籤。

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.

```
f (886-2) 2298-0488
```

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms</u> and <u>conditions.htm</u> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sqs.com/terms</u> and <u>conditions.htm</u> and for electronic format 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 is unlawful and offenders may be prosecuted to the full-extent of the law. prosecuted to the fullest extent of the law.

1. General Information

1.1 Applicant & Manufacturer Information

Applicant	: Sharp Corporation, Mobile Communication B.U.
Address of Applicant	: 2-13-1, Hachihonmatsu-Iida, Higashi-hiroshima- shi,Hiroshima 739-0192, Japan
Manufacturer	: Sharp Corporation
Address of Manufacture	⁻ : 1 Takumi-cho, Sakai-ku, Sakai-Shi, Osaka 590- 8522,Japan

1.2 General Description of EUT

Product Name : Smart Phone

1.3 Details of EUT

SG

Power Supply	: AC 100~240V,50/60Hz
Highest operate description	: 2480 MHz
Battery	: 3.85V, 2700mAh, 10.40Wh
Worst case	: CE worst case : Config 2 Below RE worst case : Config 2 Above RE worst case : Config 3

	FCC ID : APYHRO00266
1 st Source (eMCP memory, PCB, Shield, Sub camera)	Worst case
2 nd Source (eMCP memory, PCB, Shield, Sub camera)	V

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.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and for electronic format the company's sole responsibility is to its Client's university and contained because and the contained and the contained because 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 compared to 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 SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

```
f (886-2) 2298-0488
```



Salom/XN-2QC25 Data Cable : Luxshare-ICT/L6KU2007-CS-H Headset : Sony / MDR-EX15AP	Config 1	Config2	Config 3		
Applicable standard		FCC 15B			
Accessories	EUT + AC Adaptor +USB Cable +PHF	EUT +USB Cable +PHF	EUT + AC Adaptor +USB Cable +PHF		
Main function	Speech	Data Link	Camera		
Additional function	BT+WiFI +GPS+NFC				
Description					
radiated emission	GSM 850/1900 WCDMA BV LTE B05/12/17	Data R/W	MP3/ ;REC mode (Front/Back) ;play REC		
conducted emission (DC Power)	NA	NA	NA		
conducted emission (AC Power)	GSM 850/1900 WCDMA BV LTE B05/12/17	Data R/W	MP3/ ;REC mode (Front/Back) ;play REC		

1.4 Operation Procedure

Config 1

- 1. Let EUT plug in SD Card & SIM Card & Earphone, connect to Adapter with USB cable and turn it on.
- 2. Turn on BT function and Link BT Speaker.
- 3. Turn on WiFi function, connected with NB WiFi-AP (5G/2.4G), NB ping EUT IP Address.
- 4. Turn on NFC function and use proximity card to close the back of the phone before and after the test to confirm that the NFC function is normal.
- 5. Set up GPS simulator and turn on GPS test app.
- 6. Set up base station, set channel (GSM 850/1900, WCDMA B5, LTE B5/B12/B17)Link(2G/3G talk) & Idle.
- 7. Start the test.

Config 2

- 1. Let EUT plug in SD Card & SIM Card & Earphone, connect to NB with USB cable and turn it on.
- 2. Turn on BT function and Link BT Speaker.
- 3. Turn on WiFi function, connected with NB WiFi-AP (5G/2.4G), NB ping EUT IP Address.
- 4. Turn on NFC function and use proximity card to close the back of the phone before and after the test to confirm that the NFC function is normal.
- 5. Set up GPS simulator and turn on GPS test app.
- 6. Execute Data Read & Write with EUT in NB.
- 7. Start the test.

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.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sqs.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.



Confia 3

- 1. Let EUT plug in SD Card & SIM Card & Earphone, connect to Adapter with USB cable and turn it on.
- 2. Turn on BT function and Link BT Speaker.
- 3. Turn on WiFi function, connected with NB WiFi-AP (5G/2.4G), NB ping EUT IP Address.
- 4. Turn on NFC function and use proximity card to close the back of the phone before and after the test to confirm that the NFC function is normal.
- 5. Set up GPS simulator and turn on GPS test app.
- 6. Execute music playback MP3 (1k audio source).
- 7. Turn on Camera (Front/Rear) and execute Record.
- 8. Start the test.

1.5 Description of Support Units

PRODUCT	MANUFACTURER	MODEL NO.	SERIAL NO.
SIM Card	R&S	CMW-Z05	8952530076180138474
BT Speaker	Creative	MF8090	YFMF8090245R00855Y
Radio Communication Analyzer	R&S	CMU200	102189
Radio Communication Analyzer	R&S	CMW500	1201.002K50-152303-Zr
AP	BUFFALO	WZR-HP-G300NH2	44066221202559[[G]]
GPS Signal Generator	Spectracom	GSG53 GNSS4	200218
Notebook (RE)	DELL	Latitude E6440	3VGS162
Notebook (CE)	DELL	Latitude E5430	COVZYW1
Mouse (RE,CE)	Logitech	M-U0026	1738HS05FGU8
Printer (RE,CE)	HP	VCVRA-1004	CN33K19J3F
Earphone	SONY	MDR-EX15AP	N/A
Adapter	Salom	XN-2QC25	N/A
Micro SD	Transcend	Micro SDHC (Class4)	N/A

Support Equipment Used in Tested Cable

Cable Type	Core	Length	Shielding/Non-shielding
USB Cable*2	N/A	1.8m	Shielding
USB Cable	N/A	1m	Shielding
Earphone Cable	N/A	1.25m	Non-shielding

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.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sqs.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.

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 SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

```
f (886-2) 2298-0488
```

1.6 Modification List

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

1.7 Accessories Cable List

Cable Type	Core	Length	Category	Shielding/Non-shielding
N/A	N/A	N/A	N/A	N/A

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.

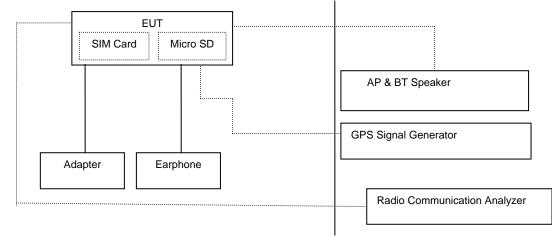
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms</u> and <u>conditions.htm</u> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sqs.com/terms</u> and <u>conditions.htm</u> and for electronic format 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 is unlawful and offenders may be prosecuted to the full-extent of the law. 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 SGS Taiwan Ltd.

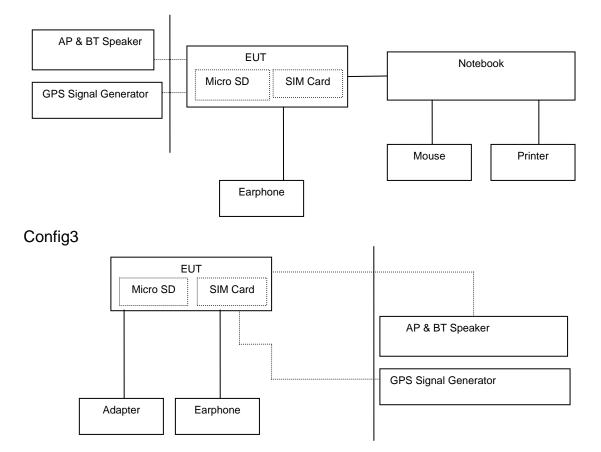


1.8 Test Set-Up Configuration

Config1



Config2



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.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and for electronic format the company's sole responsibility is to its Client's university and contained because and the contained and the contained because 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 compared to 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 S Taiwan Ltd.



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 3/10m 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 Par	rt 15, Subpart B/CISPR 22
---------------------------------------	---------------------------

Test Standards	Status	
FCC Part 15, Subpart B/ CISPR 22	Applicable	
Deviation from Standard	No deviation	

1.11 Summary of Results

	Highes	t Emissio	on		
Standard	Test Type	Result	Phase/Pol.	Frequency(MHz)	Margin(dB)
FCC Dart 45 Subsart 5		PASS	Line	0.5540	-7.06 (AVG
FCC Part 15 Subpart E Class B	Conducted Emission	PASS	Neutral	0.5740	-7.09 (AVG
	Radiated Emission	PASS	Ver.	30.0000	-5.80 (QP)

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.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sqs.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.



2. EMISSION

2.1 Test Results

	Results
Conducted Emission	Pass
Radiated Emission	Pass

2.2 Frequency Range

FCC Part 15, Subpart B:

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 - 108	1000
108 - 500	2000
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

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.

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.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sqs.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.



2.3.2 Limits of Radiated Emissions

FCC Part 15, Subpart B 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 (dB	uV/m) (at 3m)	Class B (dBı	uV/m) (at 3m)
(MHz)	Peak	Average	Peak	Average
Above 1000	79.3	59.3	73.9	53.9

CISPR 22 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 1 The lower limit shall apply at the transition frequency.

NOTE 2 Additional provisions may be required for cases where interference occurs.

FREQUENCY	Class A (dB	uV/m) (at 3m)	Class B (dB	uV/m) (at 3m)
(GHz)	Average	Peak	Average	Peak
1~3	56	76	50	70
3~6	60	80	54	74

NOTE The lower limit applies at the transition frequency.

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.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sqs.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 document. 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 SGS Taiwan Ltd.

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488



2.4.Test of Conducted Emission

2.4.1 Test Equipments

	SGS Conduc	ted_Emission HWAYA Co	onducted Room N	lo.B_EMC	
EQUIPMENT TYPE	Manufacturer	Model Number	Serial Number	Calibration Date	Calibration Due
EMI Test Receiver	R&S	ESCI 3	101300	2017/11/1	2018/10/31
Coaxial Cable	EMC Instruments Corp.	EMC5D-BM-BM-3000	1401004	2018/5/25	2019/5/24
LISN	TESEQ	NNB 51	36061	2018/2/26	2019/2/25
Pulse Limiter	R&S	ESH3Z2	102099	2018/6/8	2019/6/7
LISN	TESEQ	NNB 51	36062	2018/3/30	2019/3/29
Communication Tester	R&S	CMU200	119988	2018/2/22	2019/2/21
Communication Tester	R&S	CMW500	152303	2018/2/21	2019/2/20
Test S/W	Farad	EZ-EMC	Ver. SGS-03A2	N.C.R.	N.C.R.
		ommunication Laboratory aoyuan City 333, Taiwan			

Measurement Uncertainty of Conducted Emission

Expanded uncertainty Ulab (K=2) of conducted emission is 2.25 dB

Theory values uncertainty Ucispr 16-4-2:2011+A1:2014 (K=2) of AC mains Conducted Emission is 3.44dB

2.4.2 Operating Environment

Temperature : 22 degree C

Humidity : 64 %RH Atmospheric Pressure : 992 mBar

2.4.3 Measurement Level Calculation

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

t (886-2) 2299-3279 台灣檢驗科技股份有限公司

```
www.tw.sqs.com
```

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.

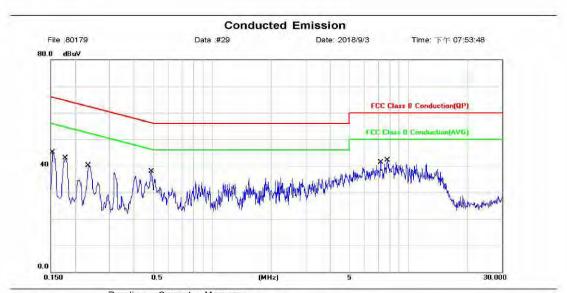
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sqs.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.



2.4.4 Measurement Data:

Config_1_L

22 °C Temperature: Site : Conduction Room Phase 11 AC 120V/60Hz Humidity: 64 % Limit: FCC Class B Conduction(QP) Power: Mode: Config 1 Note: LTE B17



Vo.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1540	20.75	19.66	40.41	65.78	-25.37	QP	
2		0.1540	7.28	19.66	26.94	55.78	-28.84	AVG	
3		0.1780	17.50	19.70	37.20	64.58	-27.38	QP	
4		0.1780	4.62	19.70	24.32	54.58	-30.26	AVG	
5		0.2340	13.85	19.80	33.65	62.31	-28.66	QP	
6		0.2340	6.03	19.80	25.83	52.31	-26.48	AVG	
7		0.4900	12.84	20.21	33.05	56.17	-23,12	QP	
8	*	0.4900	7.75	20.21	27.96	46.17	-18.21	AVG	
9		7.1780	13.58	19.98	33.56	60.00	-26.44	QP	
10		7.1780	4.76	19.98	24.74	50.00	-25.26	AVG	
11	1	7.7740	11.74	19.96	31.70	60.00	-28.30	QP	
12		7.7740	4.90	19.96	24.86	50.00	-25.14	AVG	

* Maximum data x:Over limit !:over margin

File :80179\Data :#29

Page: 1

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.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and for electronic format the company's sole responsibility is to its Client's university and contained because and the contained and the contained because 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 compared to the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

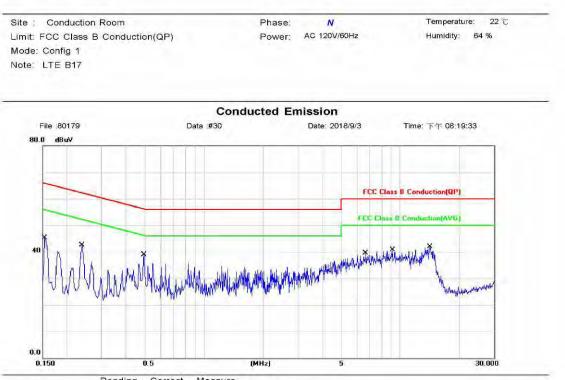
No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 GS Taiwan Ltd.

t (886-2) 2299-3279 台灣檢驗科技股份有限公司

f (886-2) 2298-0488



Config_1_N



lo. Mk	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.1540	20.44	19.65	40.09	65.78	-25.69	QP	
2	0.1540	6.14	19.65	25.79	55.78	-29.99	AVG	
3	0.2380	15.28	19.78	35.06	62.17	-27,11	QP	
4	0.2380	4.93	19.78	24.71	52.17	-27.46	AVG	
5	0.4940	12.55	20.21	32.76	56.10	-23.34	QP	
6 *	0.4940	5.22	20.21	25.43	46.10	-20.67	AVG	
7	6.6420	11.64	19.97	31.61	60.00	-28,39	QP	
8	6.6420	3.67	19.97	23.64	50.00	-26.36	AVG	
9	9.0940	12.50	19.95	32.45	60.00	-27.55	QP	
10	9.0940	3.65	19.95	23.60	50.00	-26.40	AVG	
11	14.0780	15.13	19.99	35.12	60.00	-24.88	QP	
12	14.0780	2.79	19.99	22.78	50.00	-27.22	AVG	

*: Maximum data x:Over limit Lover margin

File :80179\Data :#30

Page: 1

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.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and for electronic format the company's sole responsibility is to its Client's university and contained because and the contained and the contained because 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 compared to the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

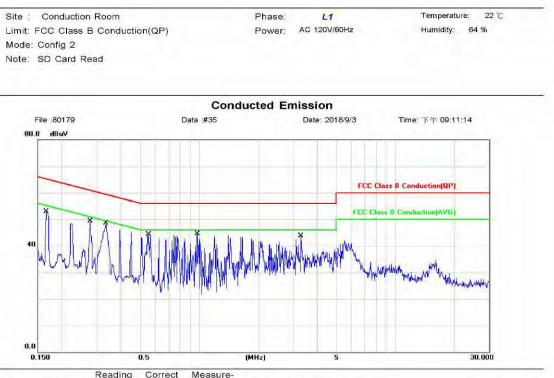
No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 GS Taiwan Ltd.

t (886-2) 2299-3279 台灣檢驗科技股份有限公司

f (886-2) 2298-0488



Config_2_L



No. M	k. Fr	eq.	Level	Factor	ment	Limit	Over		
	M	Hz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.1	1660	32.53	19.68	52.21	65.16	-12.95	QP	
2	0.1	1660	24.52	19.68	44.20	55.16	-10.96	AVG	
3	0.2	2780	28.27	19.87	48.14	60.88	-12.74	QP	
4	0.2	2780	22.13	19.87	42.00	50.88	-8.88	AVG	
5	0.3	3340	28.41	19.95	48.36	59.35	-10.99	QP	
6	0.3	3340	21.24	19.95	41.19	49.35	-8.16	AVG	
7	0.5	5540	23.62	20.19	43.81	56.00	-12.19	QP	
8 *	0.5	5540	18.75	20.19	38.94	46.00	-7.06	AVG	
9	0.9	9740	23.55	19.86	43.41	56.00	-12.59	QP	
10	0.9	9740	16.25	19.86	36.11	46.00	-9.89	AVG	
11	3.2	2980	22.58	20.31	42.89	56.00	-13.11	QP	
12	3.2	2980	15.20	20.31	35.51	46.00	-10.49	AVG	

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

File :80179\Data :#35

Page: 1

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.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and for electronic format the company's sole responsibility is to its Client's university and contained because and the contained and the contained because 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 compared to the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

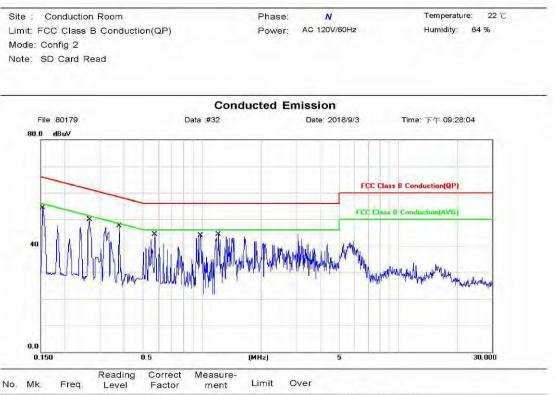
No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134號 SGS Taiwan Ltd.

t (886-2) 2299-3279 台灣檢驗科技股份有限公司

f (886-2) 2298-0488



Config_2_N



NO. IVIK.	Freq.	Level	Factor	ment	Linne	Over		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.1540	33.25	19.65	52.90	65.78	-12.88	QP	
2	0.1540	24.37	19.65	44.02	55.78	-11.76	AVG	
3	0.2660	28.57	19.83	48.40	61.24	-12.84	QP	
4	0.2660	22.57	19.83	42.40	51.24	-8.84	AVG	
5	0.3780	26.30	20.02	46.32	58.32	-12.00	QP	
6	0.3780	21.20	20.02	41.22	48.32	-7.10	AVG	
7	0.5740	23.53	20.16	43.69	56.00	-12.31	QP	
8 *	0.5740	18.75	20.16	38.91	46.00	-7.09	AVG	
9	0.9780	23.58	19.85	43.43	56.00	-12.57	QP	
10	0.9780	16.38	19.85	36.23	46.00	-9.77	AVG	
11	1.2060	23.02	19.97	42.99	56.00	-13.01	QP	
12	1.2060	17.42	19.97	37.39	46.00	-8.61	AVG	

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

File :80179\Data :#32

Page: 1

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.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and for electronic format the company's sole responsibility is to its Client's university and contained because and the contained and the contained because 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 compared to 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 SGS Taiwan Ltd.

t (886-2) 2299-3279 台灣檢驗科技股份有限公司

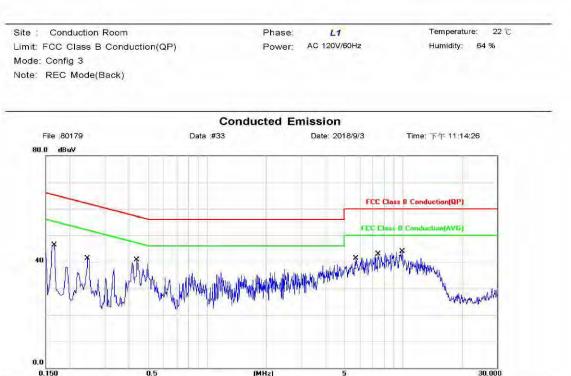
f (886-2) 2298-0488

www.tw.sgs.com

Member of SGS Group



Config_3_L



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment	
1		0.1660	20.12	19.68	39.80	65.16	-25.36	QP		
2		0.1660	7.09	19.68	26.77	55.16	-28.39	AVG		
3		0.2468	14.00	19.82	33.82	61.86	-28.04	QP		
4	1.000	0.2468	5.96	19.82	25.78	51.86	-26.08	AVG		
5		0.4380	8.73	20.13	28.86	57.10	-28.24	QP		
6	*	0.4380	3.51	20.13	23.64	47.10	-23,46	AVG		
7		5.7300	11.72	19.99	31.71	60.00	-28.29	QP		
8		5.7300	4.26	19.99	24.25	50.00	-25.75	AVG		
9		7.4180	12.11	19.97	32.08	60.00	-27.92	QP		
10	1	7.4180	5.06	19.97	25.03	50.00	-24.97	AVG		
11	1	9.8300	12.88	19.95	32.83	60.00	-27.17	QP		
12		9.8300	4.87	19.95	24.82	50.00	-25.18	AVG		

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

File :80179\Data :#33

Page: 1

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.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and for electronic format the company's sole responsibility is to its Client's university and contained because and the contained and the contained because 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 compared to 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 GS Taiwan Ltd.

t (886-2) 2299-3279 台灣檢驗科技股份有限公司

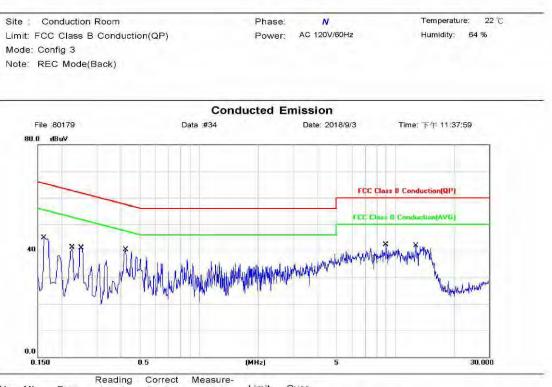
f (886-2) 2298-0488

www.tw.sgs.com

Member of SGS Group



Config_3_N



lo. Mk.	Freq.	Level	Factor	ment	Limit	Over		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.1620	20.65	19.66	40.31	65.36	-25.05	QP	
2	0.1620	6.42	19.66	26.08	55.36	-29.28	AVG	
3	0.2260	13.33	19.76	33.09	62.60	-29.51	QP	
4	0.2260	2.84	19.76	22.60	52.60	-30.00	AVG	
5	0.2500	14.23	19.80	34.03	61.76	-27.73	QP	
6	0.2500	3.83	19.80	23.63	51.76	-28.13	AVG	
7	0.4220	10.48	20.09	30.57	57.41	-26.84	QP	
8 *	0.4220	3.60	20.09	23.69	47.41	-23.72	AVG	
9	8.9180	13.32	19.95	33.27	60.00	-26.73	QP	
10	8.9180	3.87	19.95	23.82	50.00	-26.18	AVG	
11	12.7060	12.70	19.97	32.67	60.00	-27.33	QP	
12	12.7060	2.29	19.97	22.26	50.00	-27.74	AVG	

*: Maximum data x:Over limit ! over margin

File :80179\Data :#34

Page: 1

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.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and for electronic format the company's sole responsibility is to its Client's university and contained because and the contained and the contained because 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 compared to 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 GS Taiwan Ltd.

t (886-2) 2299-3279 台灣檢驗科技股份有限公司

f (886-2) 2298-0488



2.5 Test of Radiated Emission

2.5.1 Test Equipments

Below 1GHz

	SGS	Radiated_Below_1GHz H	WAYA 10m_EMC)	
EQUIPMENT TYPE	Manufacturer	Model Number	Serial Number	Calibration Date	Calibration Due
EMI Test Receiver	R&S	ESCI 7	100950	2017/12/12	2018/12/11
EMI Test Receiver	R&S	ESCI 3	101343	2018/1/31	2019/1/30
Broadband Antenna	SCHWAZBECK	VULB9168	9168-628	2018/9/7	2019/9/6
Broadband Antenna	SCHWAZBECK	VULB9168	9168-629	2018/9/7	2019/9/6
Pre Amplifier	EMC Instruments Corp.	EMC330	980178	2018/3/31	2019/3/30
Pre Amplifier	EMC Instruments Corp.	EMC330	980179	2018/3/31	2019/3/30
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150917	2017/9/18	2018/9/17
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150919	2017/9/18	2018/9/17
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150820	2017/9/18	2018/9/17
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150918	2017/9/18	2018/9/17
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150821	2017/9/18	2018/9/17
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150822	2017/9/18	2018/9/17
Universal Digital Radio Communication Tester	R&S	CMU 200	119988	2018/2/22	2019/2/21
Wideband Radio Communication Tester	R&S	CMW 500	152303	2018/2/21	2019/2/20
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	2017/12/31	2018/12/30
Test S/W	Farad	EZ-EMC	Ver. SGS-03A2	N.C.R.	N.C.R.
		munication Laboratory			

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

Measurement Uncertainty of Radiated Emission

Expanded uncertainty Ulab (K=2) of radiated emission is 4.09 dB. (30MHz ~ 1000MHz)

Theory values uncertainty Ucispr 16-4-2:2011+A1:2014 (K=2) of radiated emission is 5.22 dB. (30MHz ~ 1000MHz)

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.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and for electronic format the company's sole responsibility is to its Client's university and contained because and the contained and the contained because 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 compared to 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
                   www.tw.sqs.com
```



Above 1GHz

	SGS I	Radiated_Above_1GHz H	WAYA 966A_EMC		
EQUIPMENT TYPE	Manufacturer	Model Number	Serial Number	Calibration Date	Calibration Due
Spectrum Analyzer	R&S	FSV 40	101419	2018/5/15	2019/5/14
EMI Test Receiver	R&S	ESR 7	101459	2018/2/21	2019/2/20
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA9120D673	2017/10/16	2018/10/15
Horn Antenna	Schwarzbeck	BBHA9170	BBHA9170-184	2017/12/12	2018/12/11
Pre Amplifier	EMC Instruments Corp.	EMC012645B	980216	2018/3/31	2019/3/30
Pre Amplifier	EMC Instruments Corp.	EMC184045B	980135	2017/10/27	2018/10/26
Coaxial Cable	JUNFLOW	MWX221-NMSNMS	J0778929	2018/4/23	2019/4/22
Coaxial Cable	Huber+Suhner	SUCCOFLEX 104PEA	30255/4PEA	2018/4/23	2019/4/22
Coaxial Cable	EMC Instruments	EMC104-SM-SM	140927	2018/4/23	2019/4/22
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	MY 2651/2	2018/6/5	2019/6/4
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	MY 2153/2	2018/6/5	2019/6/4
Universal Digital Radio Communication Tester	R&S	CMU 200	119988	2018/2/22	2019/2/21
Wideband Radio Communication Tester	R&S	CMW 500	152303	2018/2/21	2019/2/20
Radio Communication Analyzer	Anritsu	MT8820C	6201465315	2017/12/10	2018/12/9
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	2018/1/12	2019/1/11
Test S/W	Farad	EZ-EMC	Ver. SGS-03A2	N.C.R.	N.C.R.
SGS Taiwan I TD	Electronics & Commu	nication Laboratory			

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 5.05 dB. (1-6GHz)

Expanded uncertainty (k=2) of radiated emission measurement is 5.07 dB. (6-18GHz)

Expanded uncertainty Ulab (k=2) of radiated emission measurement is 5.19 dB. (18-26GHz)

Expanded uncertainty Ulab (k=2) of radiated emission measurement is 5.14 dB. (26-40GHz)

Theory values uncertainty Ucispr 16-4-2:2011+A1:2014 (K=2) of radiated emission measurement is 5.18 dB.(1-6GHz) Theory values uncertainty Ucispr 16-4-2:2011+A1:2014 (K=2) of radiated emission measurement is 5.48 dB.(6-18GHz) Theory values uncertainty Ucispr 16-4-2:2011+A1:2014 (K=2) of radiated emission measurement is ---- dB.(18-26GHz) Theory values uncertainty Ucispr 16-4-2:2011+A1:2014 (K=2) of radiated emission measurement is ---- dB.(26-

40GHz)

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.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sqs.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.

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 SGS Taiwan Ltd.

f (886-2) 2298-0488



2.5.2 Operating Environment

Temperature : 24 degree C Humidity : 66 %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

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.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and for electronic format the company's sole responsibility is to its Client's university and contained because and the contained and the contained because 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 compared to 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 SGS Taiwan Ltd.

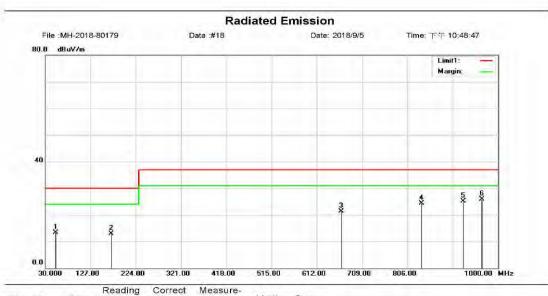


2.5.4 Measurement Data

Below 1GHz

Config_1_H

Site SGS 10m Chamber Polarization Horizontal Temperature: 24 °C Limit: CISPR22 Class B 10M Radiation Power: AC 120V/60Hz Humidity: 66 % Mode: Config_1 Distance: 10m Note: LTE B17



No.	Mk.	Freq.	Level	Factor	ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		52.3100	24.52	-11.31	13.21	30.00	-16.79	QP	6
2	187	171.6200	24.20	-11.39	12.81	30.00	-17,19	QP	
3		664.3800	23.74	-2.53	21.21	37.00	-15.79	QP	
4		836.0700	23.97	0.33	24.30	37.00	-12.70	QP	
5	1	925.3100	23.77	1.40	25.17	37.00	-11.83	QP	
6	*	965.0800	24.14	1.85	25.99	37.00	-11.01	QP	

*: Maximum data x:Over limit Lover margin

File :MH-2018-80179\Data #18

Page: 1

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.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and for electronic format the company's sole responsibility is to its Client's university and contained because and the contained and the contained because 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 compared to 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 GS Taiwan Ltd.

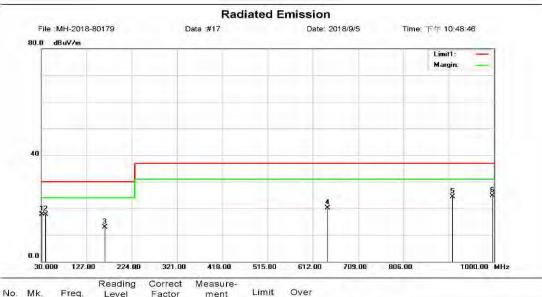
f (886-2) 2298-0488



24 0

Config_1_V

Site SGS 10m Chamber	Polarization: Vertical	Temperature: 2
Limit: CISPR22 Class B 10M Radiation	Power: AC 120V/60Hz	Humidity: 66 %
Mode: Config_1	Distance: 10m	
Note: LTE B17		



NO. WIK.	ried.	Level	Factor	ment	FILTER	Over		
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1	31.9400	29.99	-12.24	17.75	30.00	-12.25	QP	
2 *	39,7000	29.32	-11.53	17.79	30.00	-12.21	QP	
3	165.8000	24.17	-11.32	12.85	30.00	-17,15	QP	
4	644.0100	23.08	-2.95	20.13	37.00	-16.87	QP	
5	910.7600	23.16	1.18	24.34	37.00	-12.66	QP	
6	996.1200	23.00	1.68	24.68	37.00	-12.32	QP	

*:Maximum data x:Over limit ! over margin

File :MH-2018-80179\Data :#17

Page: 1

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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms</u> and <u>conditions.htm</u> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sqs.com/terms</u> and <u>conditions.htm</u> and for electronic format 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 is unlawful and offenders may be prosecuted to the full-extent of the law. 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 GS Taiwan Ltd.

t (886-2) 2299-3279 台灣檢驗科技股份有限公司

f (886-2) 2298-0488



Config_2_H

24 0 Site SGS 10m Chamber Polarization: Horizontal Temperature: Limit: CISPR22 Class B 10M Radiation Power: From System Humidity: 66 % Mode: Config_2 Distance: 10m Note: Date Read **Radiated Emission** File :MH-2018-80179 Data :#20 Date: 2018/9/5 Time: 下午 10:01:32 80.0 dBu¥/m Limit1 Margin 40 5 ŝ 3 0.0 30.000 127 80 224 00 321 00 418 00 515 00 612 00 709.00 806.00 1000.00 MHz Reading Correct Measure-

No.	Mk.	Freq.	Level	Factor	ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		58.1300	24.19	-11.83	12.36	30.00	-17.64	QP	6
2	110	171.6200	24.24	-11.39	12.85	30.00	-17.15	QP	
3		232.3700	36.60	-13.62	22.98	37.00	-14.02	QP	
4		913.6700	24.58	1.13	25.71	37.00	-11.29	QP	
5	1.	948,5900	23.74	1.97	25.71	37.00	-11.29	QP	
6	*	965.0800	24.15	1.85	26.00	37.00	-11.00	QP	

*:Maximum data x:Over limit ! over margin

File :MH-2018-80179\Data :#20

Page: 1

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.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and for electronic format the company's sole responsibility is to its Client's university and contained because and the contained and the contained because 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 compared to 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 S Taiwan Ltd

t (886-2) 2299-3279 台灣檢驗科技股份有限公司

f (886-2) 2298-0488

```
www.tw.sgs.com
```

Member of SGS Group



Site SGS 10m Chamber

24 0

Temperature:

Config_2_V

Polarization:

Vertical

	F	ile ·M	H-2018-8	0179	r	Rac ata :#19	liated E	missio	n : 2018/9/5	Time	下午 10:0	1.31
		dB		0110				Bute	. 2010/0/0	inne,	1 1 10.0	
	Ī		1								Limit1: Margin:	
									_			
	40											
				E		-		_	-		-	-
		-	-	-	-	-						
	*		3	-			_				×	5× 6×
		XX										
						_	_	_	_			
	0.0											
		.000	127.00	224.00	321.00	418.00	515.00	612.00	709.00	806.00		1000.00 MHz
.	Mk.	Ŧ	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	100	-		
-	-		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment		
1	*	30	0.0000	36,60	-12.40	24.20	30.00	-5.80	QP			
4		-	1. S.	1212	1012 10120	40.04	30.00	-11.69	QP			
2	é	46	5.9400	29.13	-10.82	18.31	30.00	-11.09	QF			
	1	91	5.9400 1.3100 4.3400	29.13 38.55 23.17	-10.82 -17.04 1.30	18.31 21.51 24.47	30.00 30.00 37.00	-11.69 -8.49 -12.53	QP QP			

*: Maximum data x:Over limit ! over margin

22.98

23.12

1.58

1.66

24.56

24.78

37.00

37.00

-12.44

-12.22

QP

QP

File :MH-2018-80179\Data :#19

968.9600

990.3000

5

6

Page: 1

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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms</u> and <u>conditions.htm</u> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sqs.com/terms</u> and <u>conditions.htm</u> and for electronic format 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 is unlawful and offenders may be prosecuted to the full-extent of the law. prosecuted to the fullest extent of the law.

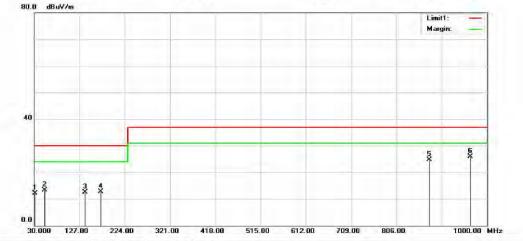
No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號 GS Taiwan Ltd.

台灣檢驗科技股份有限公司 t (886-2) 2299-3279 f (886-2) 2298-0488



Config_3_H

24 0 Site SGS 10m Chamber Polarization: Horizontal Temperature: Power: AC 120V/60Hz Limit: CISPR22 Class B 10M Radiation Humidity: 66 % Mode: Config_3 Distance: 10m Note REC (Back) **Radiated Emission** File :MH-2018-80179 Data :#22 Date: 2018/9/6 Time: 上午 12:02:07



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		31.9400	24,54	-12.39	12.15	30.00	-17.85	QP	
2	1.15	52.3100	24.58	-11.31	13.27	30.00	-16,73	QP	
3		138.6400	24.38	-11.93	12.45	30.00	-17.55	QP	
4		172.5900	24.31	-11.51	12.80	30.00	-17.20	QP	
5	1. s	875.8400	23.98	0.66	24.64	37.00	-12.36	QP	
6	*	964.1100	24.15	1.85	26.00	37.00	-11.00	QP	

*:Maximum data x:Over limit ! over margin

File :MH-2018-80179\Data :#22

Page: 1

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.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and for electronic format the company's sole responsibility is to its Client's university and contained because and the contained and the contained because 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 compared to 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 S Taiwan Ltd

台灣檢驗科技股份有限公司 t (886-2) 2299-3279 f (886-2) 2298-0488

```
www.tw.sgs.com
```



24 0

Temperature:

Config_3_V

Site SGS 10m Chamber Polarization: Vertical Power: AC 120V/60Hz Limit: CISPR22 Class B 10M Radiation Humidity: 66 % Mode: Config_3 Distance: 10m Note REC (Back) **Radiated Emission** File :MH-2018-80179 Data :#21 Date: 2018/9/6 Time: 上午 12:02:06 80.0 dBuV/m Limit1 Margin 40 5× * 3 3 0.0 30.000 127 80 224 00 321 00 418.00 515 00 612.00 709.00 806 00 1000.00 MHz Reading Correct Measure-No. Mk. Freq. Limit Over Factor Level ment dBuV MHz dB/m dBuV/m dBuV/m dB Detector Comment

1	31.9400	30.02	-12.24	17.78	30.00	-12.22	QP
2	56,1900	24.53	-11.19	13.34	30.00	-16,66	QP
3	150.2800	24.06	-10.70	13.36	30.00	-16.64	QP
4	916.5800	23.28	1.24	24.52	37.00	-12.48	QP
5	956.3500	23.13	1.52	24.65	37.00	-12.35	QP
6 *	967.9900	23.99	1.58	25.57	37.00	-11.43	QP

*:Maximum data x:Over limit ! over margin

File :MH-2018-80179\Data :#21

Page: 1

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.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and for electronic format the company's sole responsibility is to its Client's university and contained because and the contained and the contained because 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 compared to 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 S Taiwan Ltd

t (886-2) 2299-3279 台灣檢驗科技股份有限公司

f (886-2) 2298-0488

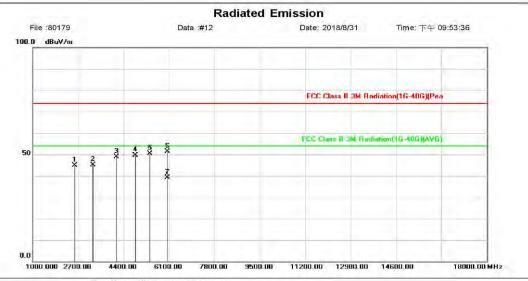


Above 1GHz

1GMz-18GMz

Config 1 H

Site SGS 966 Chamber A Polarization: Horizontal Temperature: 21 °C Power: AC 120V/60Hz Humidity: 71 % Limit: FCC Class B 3M Radiation(1G-40G)(Pea Mode: Config 1 Distance: Note: LTE B17



No.	lo. Mk.	. Freq. MHz	Reading Level	Correct Factor	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	
			dBuV	dB/m					Comment
1		2581.000	56.18	-11.35	44.83	74.00	-29.17	peak	
2	1.0.0	3261.000	56.56	-11.33	45.23	74.00	-28.77	peak	
3		4145.000	56.93	-8.13	48.80	74.00	-25.20	peak	
4		4842.000	56.79	-7.28	49.51	74.00	-24.49	peak	
5	P 8.4	5386.000	56.76	-6.33	50.43	74.00	-23.57	peak	
6	-	6049.000	55.53	-4.24	51.29	74.00	-22.71	peak	
7	*	6049.000	43.40	-4.24	39.16	54.00	-14.84	AVG	

*: Maximum data x:Over limit l:over margin

File :80179\Data :#12

Page: 1

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.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and for electronic format the company's sole responsibility is to its Client's university and contained because and the contained and the contained because 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 compared to 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 GS Taiwan Ltd.

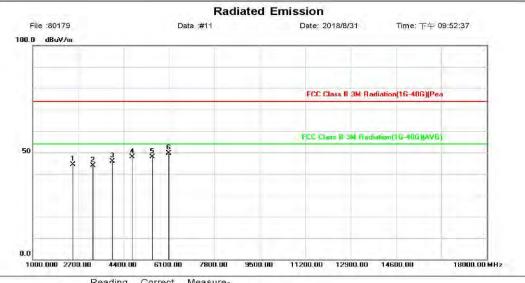
t (886-2) 2299-3279 台灣檢驗科技股份有限公司

f (886-2) 2298-0488



Config_1_V

Site SGS 966 Chamber A	Polarization: Vertical	Temperature: 21 °C
Limit: FCC Class B 3M Radiation(1G-40G)(Pea	Power: AC 120V/60Hz	Humidity: 71 %
Mode: Config 1	Distance:	
Note: LTE B17		



No.	No. Mk.	Freq.	Level	Factor	measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		2513.000	55.59	-11.22	44.37	74.00	-29.63	peak	
2	1	3261.000	55.14	-11.33	43.81	74.00	-30.19	peak	
3		3975.000	54.42	-8.42	46.00	74.00	-28.00	peak	
4		4723,000	55.29	-7.44	47.85	74.00	-26.15	peak	
5	1.1.1	5471.000	54.09	-6.16	47.93	74.00	-26.07	peak	
6	*	6083.000	53.62	-4.01	49.61	74.00	-24.39	peak	

*:Maximum data x:Over limit l:over margin

File :80179\Data :#11

Page: 1

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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms</u> and <u>conditions.htm</u> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sqs.com/terms</u> and <u>conditions.htm</u> and for electronic format 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 is unlawful and offenders may be prosecuted to the full-extent of the law. 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 GS Taiwan Ltd.

t (886-2) 2299-3279 台灣檢驗科技股份有限公司

f (886-2) 2298-0488

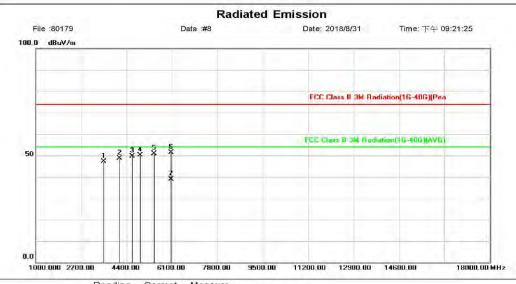


Config_2_H

Site SGS 966 Chamber A
Limit: FCC Class B 3M Radiation(1G-40G)(Pea
Mode: Config 2
Note: Date Read (SD card)

Polarization: Horizontal Power: AC 120V/60Hz Distance:

Temperature: 21 °C Humidity: 71 %



No.	Mk.	Freq.	Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1	~~~~	3550.000	57.50	-10.37	47.13	74.00	-26.87	peak	
2	1	4128.000	56.77	-8.14	48.63	74.00	-25.37	peak	
3		4621.000	57.16	-7.57	49.59	74.00	-24.41	peak	
4	1.0	4910.000	57.22	-7.20	50.02	74.00	-23.98	peak	
5	1 A.A	5437.000	57.02	-6.23	50,79	74.00	-23.21	peak	
6		6066.000	55.40	-4.11	51.29	74.00	-22.71	peak	
7	*	6066.000	42.94	-4.11	38.83	54.00	-15.17	AVG	

*:Maximum data x:Over limit l:over margin

File :80179\Data :#8

Page: 1

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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms</u> and <u>conditions.htm</u> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sqs.com/terms</u> and <u>conditions.htm</u> and for electronic format 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 is unlawful and offenders may be prosecuted to the full-extent of the law. 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 GS Taiwan Ltd.

f (886-2) 2298-0488

```
www.tw.sgs.com
```

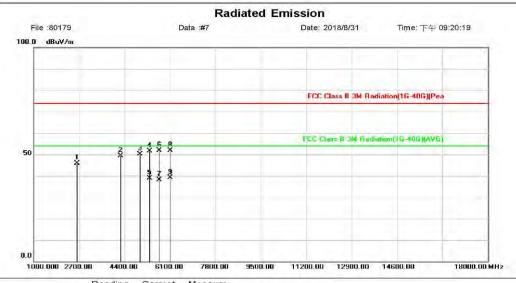


Config_2_V

Site SGS 966 Chamber A Limit: FCC Class B 3M Radiation(1G-40G)(Pea Mode: Config 2 Note: Date Read (SD card)

Polarization: Vertical Power: AC 120V/60Hz Distance:

Temperature: 21 °C Humidity: 71 %



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1	с. т. т.	2615.000	57.39	-11.41	45.98	74.00	-28.02	peak	and the second sec
2	1.1	4247.000	57.42	-8.00	49.42	74.00	-24.58	peak	
3	111	4978.000	57.29	-7.12	50.17	74.00	-23.83	peak	
4	1.1.1	5335.000	58.14	-6.43	51.71	74.00	-22.29	peak	
5	1.00	5335.000	45.36	-6.43	38.93	54.00	-15.07	AVG	
6	p	5709.000	57.44	-5.48	51.96	74.00	-22.04	peak	
7		5709.000	43.63	-5.48	38.15	54.00	-15.85	AVG	
8		6100.000	55.88	-3.88	52.00	74.00	-22.00	peak	
9	*	6100.000	43.10	-3.88	39.22	54.00	-14.78	AVG	

*:Maximum data x:Over limit l:over margin

File :80179\Data :#7

Page: 1

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.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and for electronic format the company's sole responsibility is to its Client's university and contained because and the contained and the contained because 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 compared to 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 GS Taiwan Ltd.

f (886-2) 2298-0488

```
www.tw.sgs.com
```

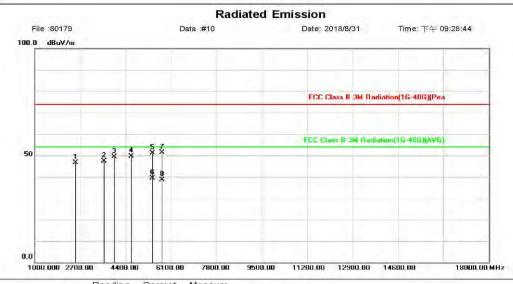


Config_3_H

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

Polarization: Horizontal Power: AC 120V/60Hz Distance:

Temperature: 21 °C Humidity: 71 %



No.	No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		2530.000	57.80	-11.25	46.55	74.00	-27.45	peak	
2		3601.000	57.57	-10.14	47.43	74.00	-26.57	peak	
3		3975.000	57.68	-8.42	49.26	74.00	-24.74	peak	P
4	(* * * *	4621.000	57.21	-7.57	49.64	74.00	-24.36	peak	
5	1.64	5403.000	57.37	-6.30	51.07	74.00	-22.93	peak	
6	*	5403.000	45,62	-6.30	39.32	54.00	-14.68	AVG	
7	1.1.1	5777.000	56.69	-5.26	51.43	74.00	-22.57	peak	
8	1.1.1	5777.000	43.90	-5.26	38.64	54.00	-15.36	AVG	

*:Maximum data x:Over limit l:over margin

File :80179\Data :#10

Page: 1

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.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and for electronic format the company's sole responsibility is to its Client's university and contained because and the contained and the contained because 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 compared to 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 GS Taiwan Ltd.

f (886-2) 2298-0488

```
www.tw.sgs.com
```

Member of SGS Group

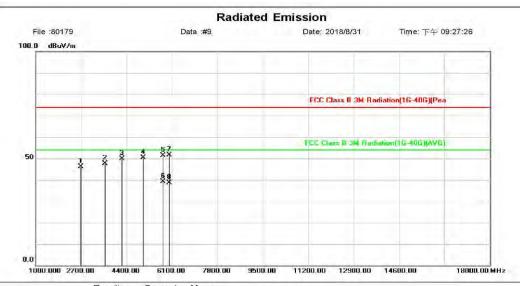


Config_3_V

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

Polarization: Vertical Power: AC 120V/60Hz Distance:

Temperature: 21 °C Humidity: 71 %



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1	£	2683.000	57.65	-11.53	46.12	74.00	-27.88	peak	
2	1.000	3584.000	57.78	-10.22	47.56	74.00	-26.44	peak	
3		4230.000	57.82	-8.02	49.80	74.00	-24.20	peak	
4	1.1	5012.000	57.43	-7.08	50.35	74.00	-23,65	peak	
5	1.1	5777.000	56.59	-5.26	51.33	74.00	-22.67	peak	
6	*	5777.000	44.40	-5.26	39.14	54.00	-14.86	AVG	
7	-	5998.000	56.19	-4.60	51.59	74.00	-22.41	peak	
8		5998.000	43.29	-4.60	38.69	54.00	-15.31	AVG	

*:Maximum data x:Over limit l:over margin

File :80179\Data :#9

Page: 1

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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms</u> and <u>conditions.htm</u> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sqs.com/terms</u> and <u>conditions.htm</u> and for electronic format 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 is unlawful and offenders may be prosecuted to the full-extent of the law. 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 GS Taiwan Ltd.

f (886-2) 2298-0488

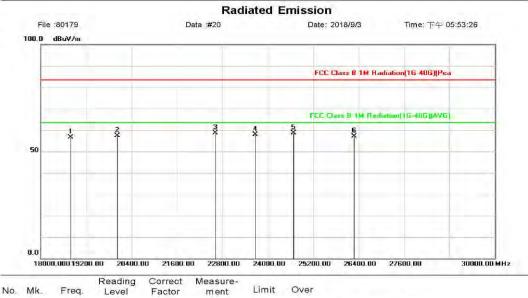
```
www.tw.sgs.com
```



18GMz-30GMz

Config_1_H

Site SGS 966 Chamber A Polarization: Temperature: 21 °C Horizontal Power: AC 120V/60Hz Humidity: 71 % Limit: FCC Class B 1M Radiation(1G-40G)(Pea Mode: Config 1 Distance: Note: LTE B17



NO.	IVIK.	Freq.	Level	Factor	ment	Linne	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1	1	8792.000	55.41	1.26	56.67	83.50	-26.83	peak	- Chever -
2	2	0028.000	54.66	2.70	57.36	83.50	-26.14	peak	
3	2	2608.000	53.17	5.42	58.59	83.50	-24.91	peak	
4	2	3676,000	51.96	5.89	57.85	83.50	-25.65	peak	
5	* 2	4672.000	52.49	6.23	58.72	83.50	-24.78	peak	
6	2	6280.000	51.15	5.94	57.09	83,50	-26.41	peak	

*:Maximum data x:Over limit l:over margin

File :80179\Data :#20

Page: 1

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.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and for electronic format the company's sole responsibility is to its Client's university and contained because and the contained and the contained because 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 compared to 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 GS Taiwan Ltd.

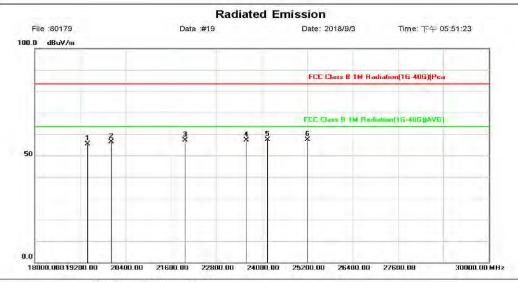
t (886-2) 2299-3279 台灣檢驗科技股份有限公司

f (886-2) 2298-0488



Config_1_V

Site SGS 966 Chamber A	Polarization: Vertical	Temperature: 21 °C
Limit: FCC Class B 1M Radiation(1G-40G)(Pea	Power: AC 120V/60Hz	Humidity: 71 %
Mode: Config 1	Distance:	
Note: LTE B17		



No.	Mk.	Mk. Freq. MHz	Reading Level	Correct Factor	Measure- ment	Limit	Over																							
			MHz	MHz	MHz	MHz	MHz	MHz	MHz	MHz	MHz	MHz	MHz	MHz	MHz	MHz	MHz	MHz	MHz	MHz	MHz	MHz	MHz	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	5	19404.000	53.72	1.62	55.34	83.50	-28.16	peak	and the second sec																					
2	1	20016.000	53.77	2.70	56.47	83.50	-27.03	peak																						
3		21972.000	52.23	4.95	57.18	83.50	-26.32	peak																						
4	1.00	23592,000	51.16	5.90	57.06	83.50	-26.44	peak																						
5	*	24144.000	51.45	5.99	57.44	83.50	-26.06	peak																						
6		25200.000	51.45	5.86	57.31	83,50	-26.19	peak																						

*:Maximum data x:Over limit l:over margin

File :80179\Data :#19

Page: 1

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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms</u> and <u>conditions.htm</u> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sqs.com/terms</u> and <u>conditions.htm</u> and for electronic format 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 is unlawful and offenders may be prosecuted to the full-extent of the law. 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 GS Taiwan Ltd.

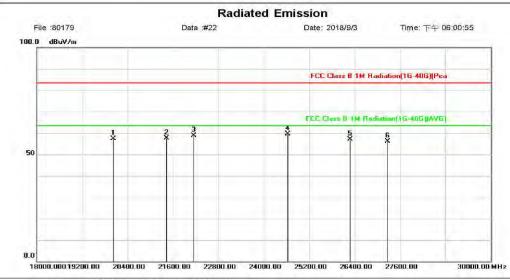


Config_2_H

Site SGS 966 Chamber A Limit: FCC Class B 1M Radiation(1G-40G)(Pea Mode: Config 2 Note: Date Read (SD card)

Polarization: Horizontal Power: AC 120V/60Hz Distance:

Temperature: 21 °C Humidity: 71 %



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		20028.000	54.67	2.70	57.37	83.50	-26.13	peak	and a second
2		21432.000	53.76	3.98	57.74	83.50	-25.76	peak	
3		22152.000	53.79	5.12	58.91	83.50	-24.59	peak	
4	*	24636.000	53.33	6.23	59.56	83.50	-23.94	peak	
5		26280.000	51.14	5.94	57.08	83.50	-26.42	peak	
6		27264.000	49.79	6.26	56.05	83,50	-27.45	peak	

*:Maximum data x:Over limit l:over margin

```
File :80179\Data :#22
```

Page: 1

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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms</u> and <u>conditions.htm</u> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sqs.com/terms</u> and <u>conditions.htm</u> and for electronic format 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 is unlawful and offenders may be prosecuted to the full-extent of the law. 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 GS Taiwan Ltd.

f (886-2) 2298-0488

```
www.tw.sgs.com
```

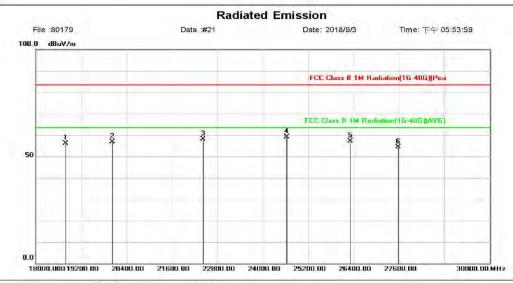


Config_2_V

Site SGS 966 Chamber A	
Limit: FCC Class B 1M Radiation(1G-40G)(Pea	
Mode: Config 2	
Note: Date Read (SD card)	

Polarization: Vertical Power: AC 120V/60Hz Distance:

Temperature: 21 °C Humidity: 71 %



No.	Mk.	k. Freq. MHz	Reading Level	Correct Factor	Measure- ment	Limit	Over				
			MHz	MHz	MHz	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1		18792.000	54.94	1.26	56.20	83.50	-27.30	peak			
2	4	20016.000	54.21	2.70	56.91	83.50	-26.59	peak			
3		22428.000	52.79	5.34	58.13	83.50	-25.37	peak			
4	* :	24636.000	52.87	6.23	59.10	83.50	-24.40	peak			
5		26316.000	51.09	5.98	57.07	83.50	-26.43	peak			
6	1	27576.000	47.93	6.46	54.39	83,50	-29.11	peak			

*:Maximum data x:Over limit l:over margin

File :80179\Data :#21

Page: 1

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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms</u> and <u>conditions.htm</u> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sqs.com/terms</u> and <u>conditions.htm</u> and for electronic format 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 is unlawful and offenders may be prosecuted to the full-extent of the law. 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 GS Taiwan Ltd.

f (886-2) 2298-0488

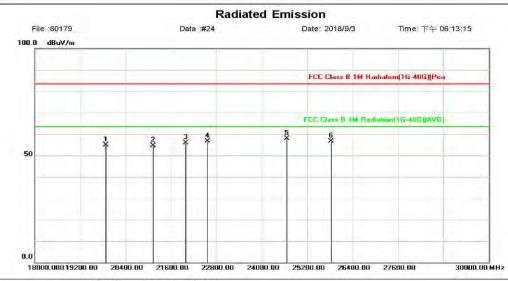


Config_3_H

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

Polarization: Horizontal Power: AC 120V/60Hz Distance:

Temperature: 21 °C Humidity: 71 %



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1	-	19872.000	52.55	2.45	55.00	83.50	-28.50	peak	
2		21120.000	51.12	3.42	54.54	83.50	-28.96	peak	
3		21996.000	50.98	5.00	55.98	83.50	-27.52	peak	
4		22572.000	51.18	5.41	56.59	83.50	-26.91	peak	
5	*	24660.000	51.57	6.24	57.81	83.50	-25.69	peak	
6	Q 3	25824.000	51.24	5.46	56.70	83,50	-26.80	peak	

*:Maximum data x:Over limit l:over margin

File :80179\Data :#24

Page: 1

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.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and for electronic format the company's sole responsibility is to its Client's university and contained because and the contained and the contained because 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 compared to 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 GS Taiwan Ltd.

f (886-2) 2298-0488

```
www.tw.sgs.com
```

Member of SGS Group

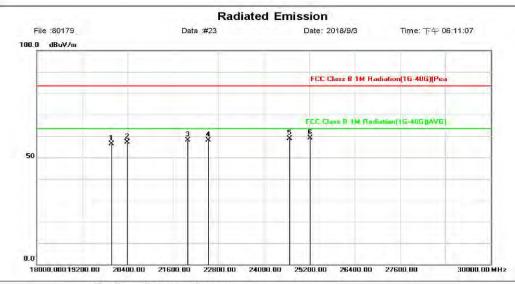


Config_3_V

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

Polarization: Vertical Power: AC 120V/60Hz Distance:

Temperature: 21 °C Humidity: 71 %



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1	-	19980.000	53.62	2.66	56.28	83.50	-27.22	peak	
2		20388.000	54.39	2.70	57.09	83.50	-26.41	peak	
3	24	21996.000	53.10	5.00	58.10	83.50	-25.40	peak	
4	3	22536.000	52.75	5.41	58.16	83.50	-25.34	peak	
5		24672.000	52.62	6.23	58.85	83.50	-24.65	peak	
6	*	25224.000	53.40	5.81	59.21	83,50	-24.29	peak	

*:Maximum data x:Over limit l:over margin File :80179\Data :#23 Page: 1

** End of Report **

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.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and for electronic format the company's sole responsibility is to its Client's university and contained because and the contained and the contained because 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 compared to 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 GS Taiwan Ltd.

t (886-2) 2299-3279 台灣檢驗科技股份有限公司

f (886-2) 2298-0488