

FCC SDoC REPORT

ICES-003 TEST REPORT

Project No. : TM-2208000281P
Applicant : MICHELIN NORTH AMERICA (US) INC.
Address : One Parkway South Greenville South Carolina 29615 United States
Manufacturer : MFP MICHELIN
Address : 23 Place des Carmes-Deschaux - 63040 Clermont-Fd Cedex9 - France
Equipment Under Test (EUT) :
Product Name : MEMS EVOLUTION 4 RF 433MHz MODULE
Brand Name : MICHELIN
Model No. : RV7-01
Added Model(s) : N/A
Standards : 47 CFR FCC Part 15 Subpart B (Class A)
ICES-003 Issue 7 : October 2020 (Class A)
ANSI C63.4 : 2014
Date of Sample Receipt : Aug. 17, 2022
Date of Test : Oct. 25 ~ Nov. 04, 2022
Date of Issue : May 19, 2023

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

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

Remarks :

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

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS Taiwan Electromagnetic Compatibility Laboratory or testing done by SGS Taiwan Electromagnetic Compatibility Laboratory in connection with distribution or use of the product described in this report must be approved by SGS Taiwan Electromagnetic Compatibility Laboratory in writing.

Approved By



Date

May 19, 2023

Eddy Cheng
(Assistant Supervisor)



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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan / 桃園市龜山區科技一路2號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-3) 327-7559

www.sgs.com.tw

Member of SGS Group



Revision History

Revision	Report Number	Description	Issue Date
00	TMHY2208001385YE	Original.	May 19, 2023

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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan / 桃園市龜山區科技一路2號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-3) 327-7559

www.sgs.com.tw

Member of SGS Group



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 DESCRIPTION OF SUPPORT UNITS	5
1.5 OPERATION PROCEDURE	5
1.6 ACCESSORIES CABLE LIST	6
1.7 TEST SET-UP CONFIGURATION	6
1.8 MEASUREMENT PROCEDURE	7
1.9 STANDARDS APPLICABLE FOR TESTING	7
1.10 DECISION RULES OF RESULTS	8
1.11 SUMMARY OF RESULTS	8
1.12 REPORTING STATEMENTS OF CONFORMITY	8
1.13 TEST FACILITY	8
2. EMISSION	9
2.1 TEST RESULTS	9
2.2 FREQUENCY RANGE	9
2.3 LIMITS OF CONDUCTED AND RADIATED EMISSION	10
2.3.1 LIMITS OF CONDUCTED EMISSION	10
2.3.2 LIMITS OF RADIATED EMISSIONS	11
2.4. TEST OF CONDUCTED EMISSION	13
2.5 TEST OF RADIATED EMISSION	14
2.5.1 TEST EQUIPMENTS	14
2.5.2 MEASUREMENT LEVEL CALCULATION	15
2.5.3 MEASUREMENT DATA	16
APPENDIX	22
PHOTOGRAPH OF TESTING GENERAL SET-UP	22
PHOTOGRAPHS OF PRODUCT	24

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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan / 桃園市龜山區科技一路2號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-3) 327-7559

www.sgs.com.tw

Member of SGS Group

1. General Information

1.1 Applicant & Manufacturer Information

Applicant : MICHELIN NORTH AMERICA (US) INC.
Address of Applicant : One Parkway South Greenville South Carolina 29615
United States
Manufacturer : MFP MICHELIN
Address of Manufacturer : 23 Place des Carmes-Deschaux - 63040 Clermont-Fd
Cedex9 - France

1.2 General Description of EUT

Product Name : MEMS EVOLUTION 4 RF 433MHz MODULE
Brand Name : MICHELIN
Model No. : RV7-01
Added Model(s) : N/A
Model Difference : N/A

1.3 Details of EUT

Power Supply : From system
Modes/Function : Mode 1: EUT(RF 433MHz Module)+
Transceiver(RV5-01)+Full System+
Emulateur Beacon+RF 433MHz Rx+
DC24V
Worst case : CE Worst case : N/A
Below 1GHz RE Worst case : Mode 1
Above 1GHz RE Worst case : Mode 1
Highest internal frequency : 433.92MHz

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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. 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.



1.4 Description of Support Units

PRODUCT	MANUFACTURER	MODEL NO.	SERIAL NO.
MEMS4 Transceiver	MICHELIN	RV5-01	50750
CAN LOAD BOX	N/A	N/A	N/A
Antenna	N/A	N/A	N/A
433M Hz Antenna	Laird	YS4303	N/A
Sensors	MICHELIN	RV1-30	31751420
MEMS3 Command Unit Retro fit	MICHELIN	N/A	10
Emulateur beacon	MICHELIN	N/A	N/A
DC Source	DP-3003	D7070035	N/A
PC	Lenovo	M920t	PC16AZ3N
AP	D-Link	DIR-865L	R3R01C9000402
Phone	ASUS	Zenfone4	HBAZCY00A848HZD
USB-Flash	Kingston	DTSE9H/16GB	C4525-305A00LR

Support Equipment Used in Tested Cable

Cable Type	Core	Length	Shielding/Non-shielding
DC power cable	Near AE	2.8m	Non-shielding
Can1 cable	N/A	0.2m	Non-shielding
RS232 cable	N/A	1.4m	Non-shielding
Can2/3 cable	N/A	0.5m	Non-shielding
Data cable	N/A	5m	Non-shielding
Antenna cable	N/A	7m	Non-shielding
433M Hz Antenna cable	N/A	3m	Non-shielding

1.5 Operation Procedure

Mode 1

1. Install the EUT into the host (Transceiver), connect the I/O of the host to the corresponding adapter cable, connect the two sets of RF 433MHz antennas, and connect the other WiFi/WWAN/GPS antennas, then connect the DC24V to start the machine.
2. The LAN Port is connected to the AP ROUTER, the remote PC is also connected to the AP ROUTER, and the remote PC pings the EUT IP.
3. Connect the mobile phone to the MEMS3 Command Unit Retro fit, then place the Sensor (RV1-30) on the top of the Retro fit, and then place the EMULATEUR BEACON next to it, set the MEMS3 Command Unit Retro fit to launch, execute putty.exe on the remote PC, and then enter the command to receive Emulateur Beacon Signal.
4. 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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan / 桃園市龜山區科技一路2號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-3) 327-7559

www.sgs.com.tw

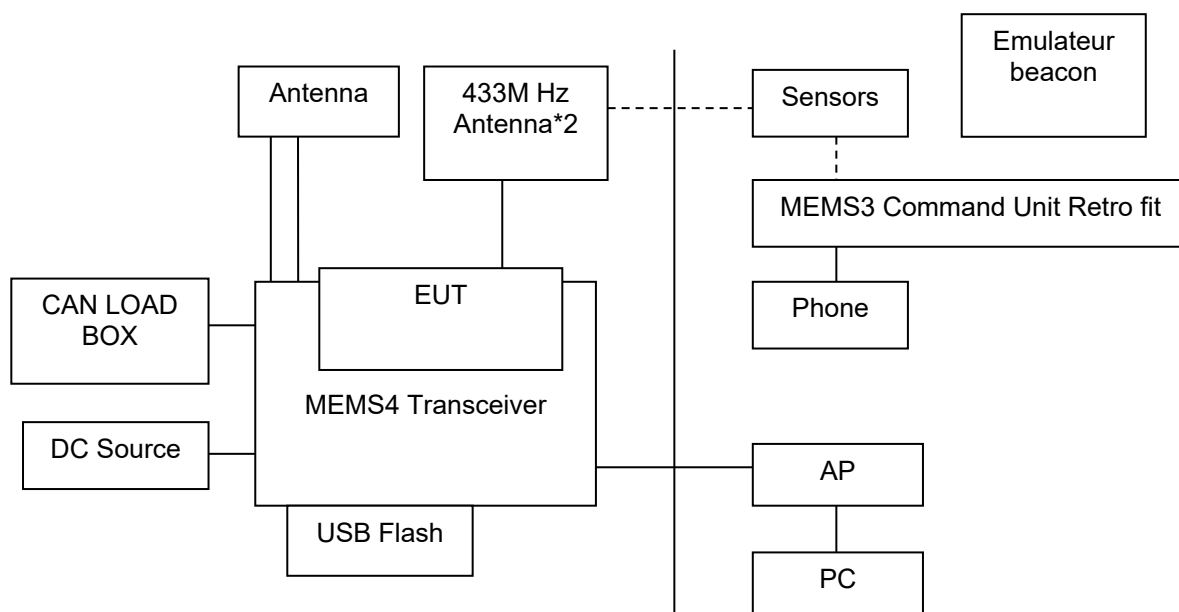
Member of SGS Group

1.6 Accessories Cable List

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

1.7 Test Set-Up Configuration

Mode 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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. 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.



1.8 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 3/10m 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 frequency and amplitude of the worse emissions were measured at varying azimuths, antenna heights and antenna polarities. Maximum emission levels are then reported.

1.9 Standards Applicable for Testing

Tests to be carried out under 47 CFR FCC Part 15 Subpart B/CISPR 22/
ICES-003/ANSI C63.4 : 2014

Test Standards	Status
47 CFR FCC Part 15 Subpart B CISPR 22 ICES-003 ANSI C63.4 : 2014	Applicable
Deviation from Standard	No deviation

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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan / 桃園市龜山區科技一路2號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-3) 327-7559

www.sgs.com.tw

Member of SGS Group



1.10 Decision Rules of Results

Reported measurement data comply with 47 CFR FCC Part 15 Subpart B and ICES-003.

Determining compliance shall be based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

1.11 Summary of Results

Standard	Test Type	Result
47 CFR FCC Part 15 Subpart B ICES-003 Issue 7 : October 2020 ANSI C63.4 : 2014	Conducted Emission	N/A
	Radiated Emission	PASS

1.12 Reporting Statements of Conformity

The conformity statement in this report is based solely on the test results, measurement uncertainty is excluded.

1.13 Test Facility

Laboratory	SGS Taiwan Ltd. Electromagnetic Compatibility Lab
Test Site	No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan
FCC Designation Number	TW1124

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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan / 桃園市龜山區科技一路2號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-3) 327-7559

www.sgs.com.tw

Member of SGS Group

2. EMISSION

2.1 Test Results

Conducted Emission	N/A
Radiated Emission	Pass

2.2 Frequency Range

47 CFR FCC Part 15 Subpart B:

Conducted Emission : 150 kHz - 30 MHz

Radiated Emission : See below table

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

ICES-003:

Conducted Emission : 150 kHz - 30 MHz

Radiated Emission : 30 MHz to 5thharmonic of the highest frequency or 40GHz, whichever is lower.

Highest internal frequency (F_x)	Highest measurement frequency
$F_x \leq 108$ MHz	1 GHz
108 MHz < $F_x \leq 500$ MHz	2 GHz
500 MHz < $F_x \leq 1$ GHz	5 GHz
$F_x > 1$ GHz	5 x F_x up to a maximum of 40 GHz

Note: F_x is the highest fundamental frequency generated and/or used in the ITE or digital apparatus under 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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. 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 Limits of Conducted and Radiated Emission

2.3.1 Limits of Conducted Emission

47 CFR FCC Part 15 Subpart B:

FREQUENCY (MHz)	Class A dB(μV)		Class B dB(μV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 - 0.5	79	66	66 - 56	56 - 46
0.5 - 5	73	60	56	46
5.0 - 30	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.

ICES-003:

FREQUENCY (MHz)	Class A dB(μV)		Class B dB(μV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 - 0.5	79	66	66 - 56*	56 - 46*
0.5 - 5	73	60	56	46
5.0 - 30	73	60	60	50

Note: The more stringent limit applies at transition frequencies.

*. The limit level in dBμV decreases linearly with the logarithm of 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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. 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

47 CFR FCC Part 15 Subpart B Limit:

- Detector Function : Quasi – Peak

FREQUENCY (MHz)	Class A (at 10 m)	Class B (at 3 m)
	dB(μ V/m)	dB(μ V/m)
30~88	39	40
88~216	43.5	43.5
216~960	46.4	46
960~1000	49.5	54

- Detector Function : Peak , Average

FREQUENCY (MHz)	Class A dB(μ V/m) (at 3 m)		Class B dB(μ V/m) (at 3 m)	
	Peak	Average	Peak	Average
Above 1000	80	60	74	54

CISPR 22 Limit:

- Detector Function : Quasi – Peak

FREQUENCY (MHz)	Class A (at 10 m)	Class B (at 10 m)
	dB(μ V/m)	dB(μ V/m)
30~230	40	30
230~1000	47	37

Note: 1. The lower limit shall apply at the transition frequency.

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

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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. 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.

**ICES-003 Limit:**

● Detector Function : Quasi-peak

Frequency (MHz)	Class A (3 m) dB(μ V/m)	Class A (10 m) dB(μ V/m)	Class B (3 m) dB(μ V/m)	Class B (10 m) dB(μ V/m)
30 - 88	50	40	40	30
88 - 216	54	43.5	43.5	33.1
216 - 230	56.9	46.4	46	35.6
230 - 960	57	47	47	37
960 - 1000	60	49.5	54	43.5

Note: The more stringent limit applies at transition frequencies

● Detector Function : Peak, Average

Frequency (MHz)	Class A (3 m) dB(μ V/m)		Class B (3 m) dB(μ V/m)	
	Peak	Average	Peak	Average
Above 1000	80	60	74	54

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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. 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. Test of Conducted Emission

N/A, the EUT power from system, the system is powered by DC, no necessary to perform 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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan / 桃園市龜山區科技一路2號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-3) 327-7559

www.sgs.com.tw

Member of SGS Group



2.5 Test of Radiated Emission

2.5.1 Test Equipments

Below 1GHz

SGS Radiated_Below_1GHz HWAYA 10m EMC					
EQUIPMENT TYPE	Manufacturer	Model Number	Serial Number	Calibration Date	Calibration Due
EMI Test Receiver	R&S	ESCI	101300	2022/9/30	2023/9/29
EMI Test Receiver	R&S	ESCI	101343	2022/1/28	2023/1/27
Broadband Antenna	SCHWAZBECK	VULB9168	9168-297	2022/8/12	2023/8/11
Broadband Antenna	SCHWAZBECK	VULB9168	9168-628	2022/8/26	2023/8/25
Pre Amplifier	EMC Instruments	EMC330	980178	2022/3/31	2023/3/30
Pre Amplifier	EMC Instruments	EMC330	980179	2022/3/31	2023/3/30
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150917	2022/9/17	2023/9/16
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150919	2022/9/17	2023/9/16
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150820	2022/9/17	2023/9/16
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150918	2022/9/17	2023/9/16
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150821	2022/9/17	2023/9/16
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150822	2022/9/17	2023/9/16
Site NSA	SGS	10m Chamber	10M SAC	2021/12/31	2022/12/30
Test S/W	Farad	EZ-EMC	Ver. SGS 10m-03A2-9	N.C.R.	N.C.R.
Testing Site : No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan					
Measurement Uncertainty of Radiated Emission					
Expanded uncertainty U _{lab} (k=2) of Radiated Emission is 4.43 dB.(30MHz-1000MHz)					
Expanded uncertainty CISPR 16-4-2:2011+A1:2014+A2:2018 (k=2) of Radiated Emission measurement is 5.10 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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan / 桃園市龜山區科技一路2號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-3) 327-7559

www.sgs.com.tw

Member of SGS Group



Above 1GHz

SGS Radiated_Above_1GHz HWAYA 966A EMC					
EQUIPMENT TYPE	Manufacturer	Model Number	Serial Number	Calibration Date	Calibration Due
Spectrum Analyzer	R&S	FSV 40	101419	2022/5/27	2023/5/26
EMI Test Receiver	R&S	ESR 7	101459	2022/2/17	2023/2/16
Horn Antenna	Schwarzbeck	BBHA9120D	BBHA9120D285	2022/4/19	2023/4/18
Pre Amplifier	EMC Instruments	EMC012645B	980216	2022/4/25	2023/4/24
Coaxial Cable	JUNFLOW	MWX221-NMSNMS	J0778929	2022/9/8	2023/9/7
Coaxial Cable	Huber+Suhner	SUCOFLEX 104PEA	30255/4PEA	2022/9/8	2023/9/7
Coaxial Cable	EMC Instruments	EMC104-SM-SM	140927	2022/9/8	2023/9/7
Site VSWR	SGS	966 Chamber A	SAC-A	2022/1/12	2023/1/11
Test Software	Farad	EZ-EMC	Ver. SGS-03A2-11	N.C.R.	N.C.R.
Testing Site : No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan					
Measurement Uncertainty of Radiated Emission					
Expanded uncertainty U _{lab} (k=2) of Radiated Emission measurement is 4.15 dB.(1-6GHz)					
Expanded uncertainty U _{lab} (k=2) of Radiated Emission measurement is 4.11 dB.(6-18GHz)					
Expanded uncertainty CISPR 16-4-2:2011+A1:2014+A2:2018 (k=2) of Radiated Emission measurement is 5.18 dB.(1-6GHz)					
Expanded uncertainty CISPR 16-4-2:2011+A1:2014+A2:2018 (k=2) of Radiated Emission measurement is 5.48 dB.(6-18GHz)					

2.5.2 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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan / 桃園市龜山區科技一路2號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-3) 327-7559

www.sgs.com.tw

Member of SGS Group



2.5.3 Measurement Data

Below 1GHz

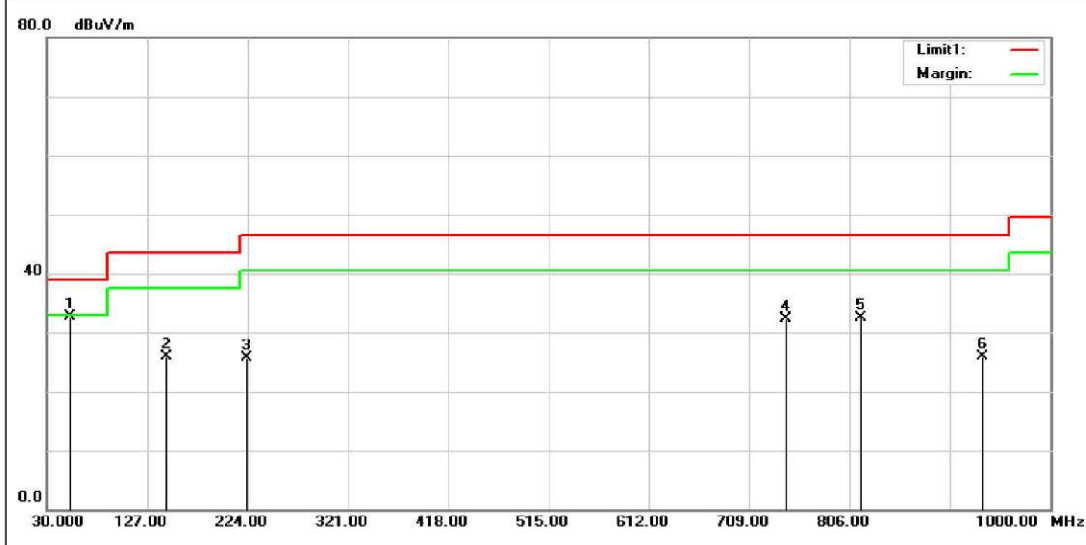
Model No.: RV7-01

Mode_1_H

Site: SGS 10m Chamber	Date: 2022/11/4	Time: 上午 02:20:15
Limit: FCC Class A 10m Radiation	Polarization: Horizontal	Temperature: 21 °C
Mode: Mode 1	Power: DC24V	Humidity: 68 %RH
Report: File : TMHY2208001385YE	Distance: 10m	atm pressure: 990 mbar
Tester: Jeffrey Chou		

Note:

SGS Taiwan Ltd. Electromagnetic Compatibility Laboratory Address: No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan 333



No.	Mk	Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Measurement (dBuV/m)	Limit (dBuV/m)	Over (dB)	Detector	Height (cm)	Degree (deg.)	Comment
1	*	51.8650	44.05	-11.28	32.77	39.00	-6.23	QP	400	0	
2		144.7900	37.75	-11.83	25.92	43.50	-17.58	QP			
3		222.7100	40.14	-14.50	25.64	46.44	-20.80	QP			
4		744.0400	32.00	0.32	32.32	46.44	-14.12	QP			
5		816.0350	31.57	0.99	32.56	46.44	-13.88	QP			
6		934.0400	23.50	2.47	25.97	46.44	-20.47	QP			

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

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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan / 桃園市龜山區科技一路2號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-3) 327-7559

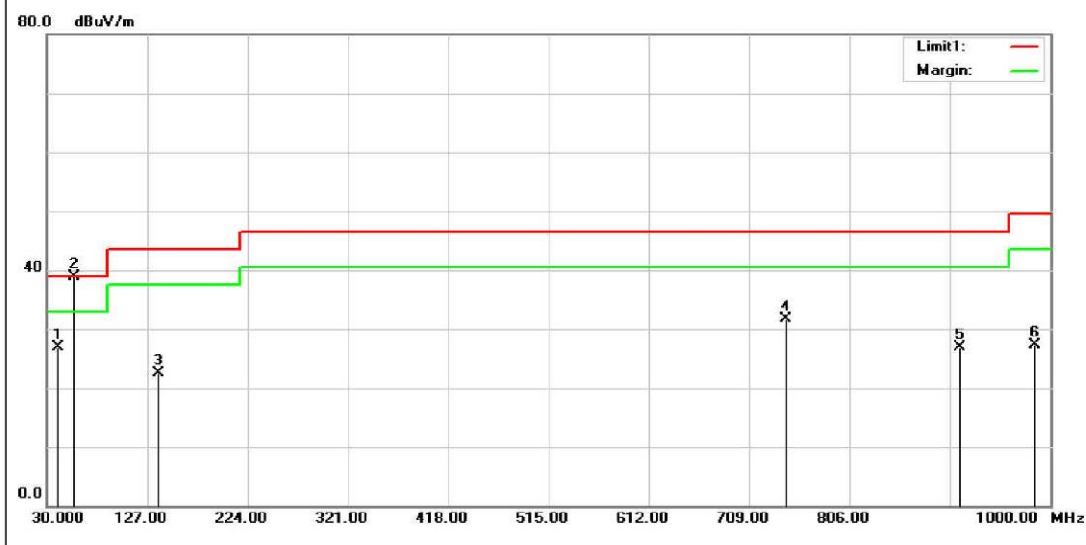
www.sgs.com.tw

Member of SGS Group

Mode_1_V

Site: SGS 10m Chamber	Date: 2022/11/4	Time: 上午 02:20:14
Limit: FCC Class A 10m Radiation	Polarization: Vertical	Temperature: 21 °C
Mode: Mode 1	Power: DC24V	Humidity: 68 %RH
Report: File :TMHY2208001385YE	Distance: 10m	atm pressure: 990 mbar
Tester: Jeffrey Chou		
Note:		

SGS Taiwan Ltd. Electromagnetic Compatibility Laboratory Address: No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan 333



No.	Mk	Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Measurement (dBuV/m)	Limit (dBuV/m)	Over (dB)	Detector	Height (cm)	Degree (deg.)	Comment
1		40.3700	37.64	-10.81	26.83	39.00	-12.17	QP			
2	*	55.8800	49.38	-10.47	38.91	39.00	-0.09	QP	110	222	
3		136.9700	34.09	-11.57	22.52	43.50	-20.98	QP			
4		744.0100	29.73	1.90	31.63	46.44	-14.81	QP			
5		912.7000	23.76	3.13	26.89	46.44	-19.55	QP			
6		984.4800	23.88	3.33	27.21	49.54	-22.33	QP			

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

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。

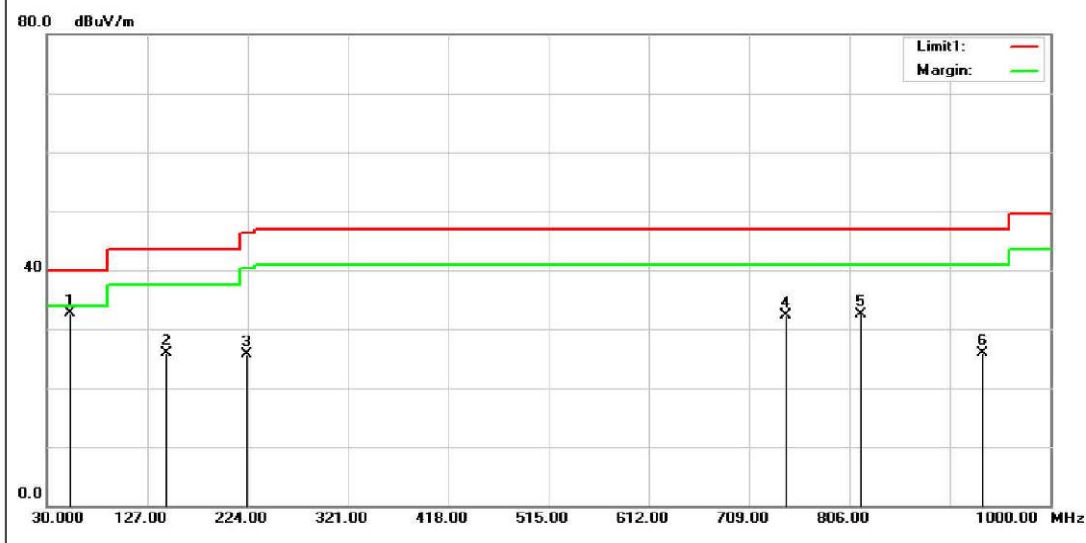
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>.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



Mode_1_H

Site: SGS 10m Chamber	Date: 2022/11/4	Time: 上午 02:20:15
Limit: ICES-003 Issue 7 Class A 10m Radiation	Polarization: Horizontal	Temperature: 21 °C
Mode: Mode 1	Power: DC24V	Humidity: 68 %RH
Report: File : TMHY2208001385YE	Distance: 10m	atm pressure: 990 mbar
Tester: Jeffrey Chou		
Note:		

SGS Taiwan Ltd. Electromagnetic Compatibility Laboratory Address: No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan 333



No.	Mk	Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Measurement (dBuV/m)	Limit (dBuV/m)	Over (dB)	Detector	Height (cm)	Degree (deg.)	Comment
1	*	51.8650	44.05	-11.28	32.77	40.00	-7.23	QP	400	0	
2		144.7900	37.75	-11.83	25.92	43.50	-17.58	QP			
3		222.7100	40.14	-14.50	25.64	46.40	-20.76	QP			
4		744.0400	32.00	0.32	32.32	47.00	-14.68	QP			
5		816.0350	31.57	0.99	32.56	47.00	-14.44	QP			
6		934.0400	23.50	2.47	25.97	47.00	-21.03	QP			

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

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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan / 桃園市龜山區科技一路2號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-3) 327-7559

www.sgs.com.tw

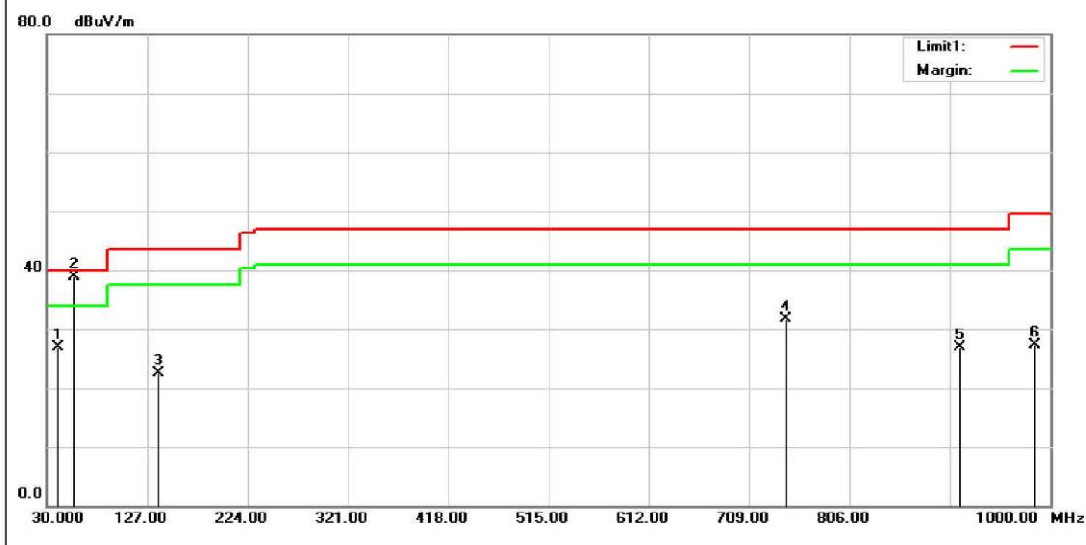
Member of SGS Group



Mode_1_V

Site: SGS 10m Chamber	Date: 2022/11/4	Time: 上午 02:20:14
Limit: ICES-003 Issue 7 Class A 10m Radiation	Polarization: Vertical	Temperature: 21 °C
Mode: Mode 1	Power: DC24V	Humidity: 68 %RH
Report: File : TMHY2208001385YE	Distance: 10m	atm pressure: 990 mbar
Tester: Jeffrey Chou		
Note:		

SGS Taiwan Ltd. Electromagnetic Compatibility Laboratory Address: No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan 333



No.	Mk	Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Measurement (dBuV/m)	Limit (dBuV/m)	Over (dB)	Detector	Height (cm)	Degree (deg.)	Comment
1		40.3700	37.64	-10.81	26.83	40.00	-13.17	QP			
2	*	55.8800	49.38	-10.47	38.91	40.00	-1.09	QP	110	222	
3		136.9700	34.09	-11.57	22.52	43.50	-20.98	QP			
4		744.0100	29.73	1.90	31.63	47.00	-15.37	QP			
5		912.7000	23.76	3.13	26.89	47.00	-20.11	QP			
6		984.4800	23.88	3.33	27.21	49.50	-22.29	QP			

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

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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan / 桃園市龜山區科技一路2號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-3) 327-7559

www.sgs.com.tw

Member of SGS Group



Above 1GHz

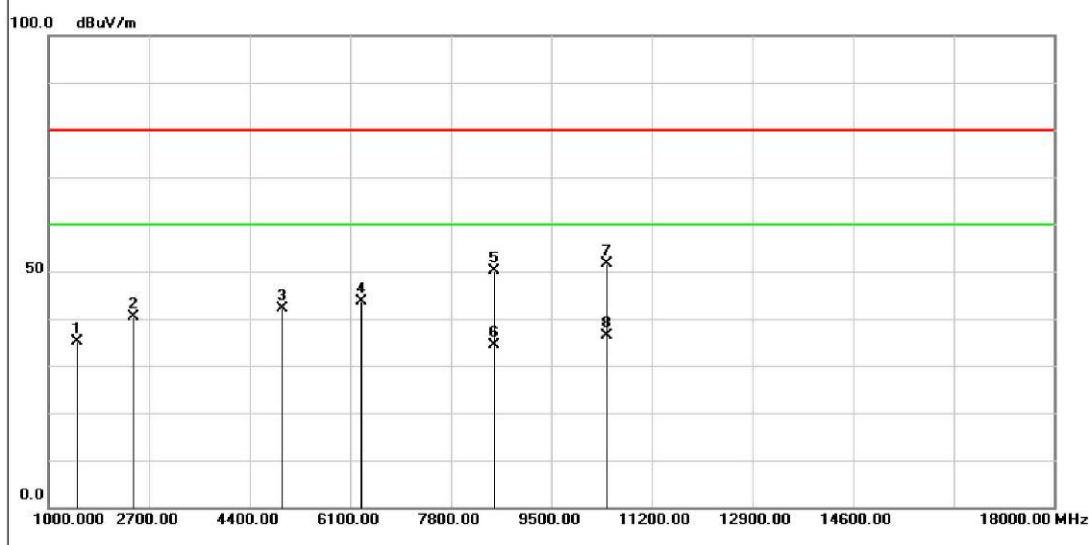
Model No.: RV7-01

Mode_1_H

Site: SGS 966 Chamber A	Date: 2022/10/25	Time: 下午 08:24:57
Limit: FCC Class A 1G-18G(Peak)	Polarization: Horizontal	Temperature: 20 °C
Mode: Mode 1	Power: DC 24V	Humidity: 65 %RH
Report: TMHY2208001385YE	Distance: 3m	atm pressure: 990 mbar
Tester: Boris Liao		

Note:

SGS Taiwan Ltd.-Electromagnetic Compatibility Laboratory Address: No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan 333



No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Height	Degree	Comment
		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(deg.)	
1		1476.000	57.30	-22.13	35.17	80.00	-44.83	peak			
2		2428.000	59.21	-18.73	40.48	80.00	-39.52	peak			
3		4961.000	54.86	-12.67	42.19	80.00	-37.81	peak			
4		6287.000	53.08	-9.46	43.62	80.00	-36.38	peak			
5		8548.000	51.74	-1.72	50.02	80.00	-29.98	peak			
6		8548.000	36.00	-1.72	34.28	60.00	-25.72	AVG			
7		10435.000	50.83	0.79	51.62	80.00	-28.38	peak	199	0	
8	*	10435.000	35.48	0.79	36.27	60.00	-23.73	AVG	199	0	

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

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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan / 桃園市龜山區科技一路2號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-3) 327-7559

www.sgs.com.tw

Member of SGS Group

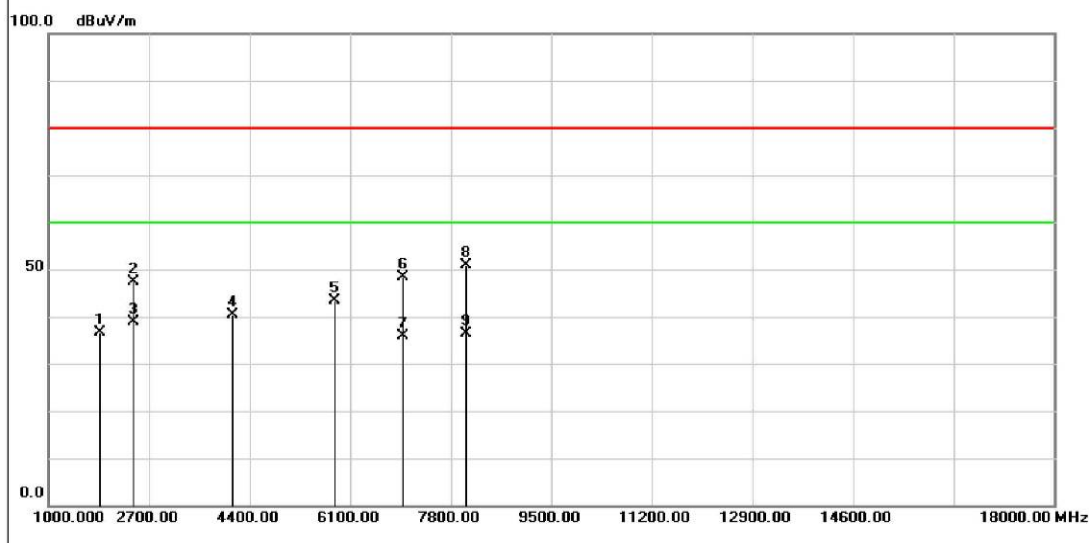


Mode_1_V

Site: SGS 966 Chamber A	Date: 2022/10/25	Time: 下午 08:11:55
Limit: FCC Class A 1G-18G(Peak)	Polarization: Vertical	Temperature: 20 °C
Mode: Mode 1	Power: DC 24V	Humidity: 65 %RH
Report: TMHY2208001385YE	Distance: 3m	atm pressure: 990 mbar
Tester: Boris Liao		

Note:

SGS Taiwan Ltd.-Electromagnetic Compatibility Laboratory Address: No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan 333



No.	Mk	Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Measurement (dBuV/m)	Limit (dBuV/m)	Over (dB)	Detector	Height (cm)	Degree (deg.)	Comment
1		1867.000	57.73	-21.12	36.61	80.00	-43.39	peak			
2		2428.000	66.14	-18.73	47.41	80.00	-32.59	peak	200	177	
3	*	2428.000	57.58	-18.73	38.85	60.00	-21.15	AVG	200	177	
4		4111.000	55.36	-14.96	40.40	80.00	-39.60	peak			
5		5845.000	54.06	-10.69	43.37	80.00	-36.63	peak			
6		7001.000	53.33	-4.87	48.46	80.00	-31.54	peak			
7		7001.000	40.64	-4.87	35.77	60.00	-24.23	AVG			
8		8055.000	53.14	-2.31	50.83	80.00	-29.17	peak			
9		8055.000	38.80	-2.31	36.49	60.00	-23.51	AVG			

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

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 <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd.

No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan / 桃園市龜山區科技一路2號

台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-3) 327-7559

www.sgs.com.tw

Member of SGS Group