



FCC CERTIFICATION REPORT

Test Report No. : MH/2020/80042
Applicant : FUJITSU CONNECTED TECHNOLOGIES Ltd.
Address : Chuorinkan 7-10-1 Yamato, Kanagawa 242-0007, Japan
Manufacturer : FUJITSU CONNECTED TECHNOLOGIES Ltd.
Address : Chuorinkan 7-10-1 Yamato, Kanagawa 242-0007, Japan

Equipment Under Test (EUT) :

Product Name : Smart Phone
Brand Name : FUJITSU
Model No. : F-52A
Added Model(s) : N/A

Standards : FCC Part 15 Subpart B, Class B
FCC Designation Numbers : 916890 / TW1087

Date of Sample Receipt : Aug. 11th, 2020
Date of Test : Aug. 15th ~ Sep. 24th, 2020
Date of Issue : Sep. 26th, 2020


Test Result :	PASS
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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 
Eddy Cheng (Asst. Supervisor)

Date Sep. 26th, 2020



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Revision History

Revision	Description	Issue Date	Remark
00	Original.	Sep. 26th, 2020	MH/2020/80042

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1. General Information

1.1 Applicant & Manufacturer Information

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 Japan
 Manufacturer : FUJITSU CONNECTED TECHNOLOGIES Ltd.
 Address of Manufacturer : Chuorinkan 7-10-1 Yamato, Kanagawa 242-0007,
 Japan

1.2 General Description of EUT

Product Name : Smart Phone
 Brand Name : FUJITSU
 Model No. : F-52A
 Added Model(s) : N/A
 Model Difference : N/A

1.3 Details of EUT

Power Supply : AC 100~240V, 50~60Hz
 Modes/Function : Mode 1. ADP + Earphone + WiFi Link(2.4G) +
 NFC OFF + BT Link + GPS/Glonass Link
 + SD Card + GSM : 850 Link
 Mode 2. ADP + Earphone + WiFi Idle + NFC OFF
 + BT Idle + GPS/Glonass Idle + SD Card
 + GSM : 1900 Idle
 Mode 3. WiFi Link(2.4G) + NFC ON(Standalone)
 + BT Link + GPS/Glonass Link + SD
 Card + GSM : 850 (Worst) Single
 Mode 4. ADP + Earphone + WiFi Idle + NFC OFF
 + BT Idle + GPS/Glonass Idle + SD Card
 + WCDMA : B V Link

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- Mode 5. ADP + Earphone + WiFi Link(5G) + NFC OFF + BT Link + GPS/Glonass Link + SD Card + LTE : B5 Link
- Mode 6. ADP + Earphone + Camera Rear REC + Worst WiFi (5G) Link + NFC OFF + BT Stand by + GPS/Glonass Link + SD Card
- Mode 7. ADP + Earphone + Camera Front REC+ Worst WiFi (5G) Link + NFC OFF + BT Stand by + GPS/Glonass Link+ SD Card
- Mode 8. Worst WiFi (5G) Link + BT Link + GPS/Glonass Link + Earphone + SD Card + USB Cable to NB(SD Write)
- Mode 9. Worst WiFi (5G) Link + BT Link + GPS/Glonass Link + Earphone + SD Card + USB Cable to NB(SD Read)
- Mode 10 For Audio breakthrough measurement (worst mode GSM900) NO Earphone

Worst case

: CE Worst case:

- Mode 1. ADP + Earphone + WiFi Link(2.4G) + NFC OFF + BT Link + GPS/Glonass Link + SD Card + GSM : 850 Link

Below 1GHz RE Worst case :

- Mode 1. ADP + Earphone + WiFi Link(2.4G) + NFC OFF + BT Link + GPS/Glonass Link + SD Card + GSM : 850 Link

Above 1GHz RE Worst case :

- Mode 8. Worst WiFi (5G) Link + BT Link + GPS/Glonass Link + Earphone + SD Card + USB Cable to NB(SD Write)

Highest internal frequency : 5725MHz

Battery : Model No.: CA54310-0081

- 3.85V, 3500mAh, 13.47Wh(Rated),
3600mAh, 13.86Wh(Typical)

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1.4 Description of Support Units

PRODUCT	MANUFACTURER	MODEL NO.	SERIAL NO.
SIM Card	R&S	CMW-Z05	8952530076180138474
Micro SD	Transcend	Micro SDHC (Class4)	N/A
Earphone	htc	N/A	N/A
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 (Win10)	DELL	P56F	59WSJ72
Mouse	Logitech	M-U0026	1738HS05FGU8
Adapter	HOSIDEN	ACアダプタ 06	N/A

Support Equipment Used in Tested Cable

Cable Type	Core	Length	Shielding/Non-shielding
DC power cable	Near AE	1.15m	Shielding
USB cable	N/A	1m	Shielding
Earphone cable	N/A	1.8m	Non-shielding

1.5 Operation Procedure

Mode 1

1. Let EUT install SIM Card & SD Card and connect to Adapter & Earphone.
2. Turn on WiFi and AP connection of EUT, turn on Bluetooth and connect to Bluetooth speaker, turn off NFC, turn on GPS and connect with GPS simulator, and plays 1KHz in SD Card.
3. Turn on GSM and talk to CMU200 (GSM850).
4. Start the test.

Mode 8

1. Use USB Cable to connect EUT to NB and connect to Earphone.
2. Turn on WiFi and AP connection of EUT, turn on Bluetooth and connect to Bluetooth speaker, turn on GPS and connect with GPS simulator, SD Card Write NB data.
3. Start the test.

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1.6 Modification List

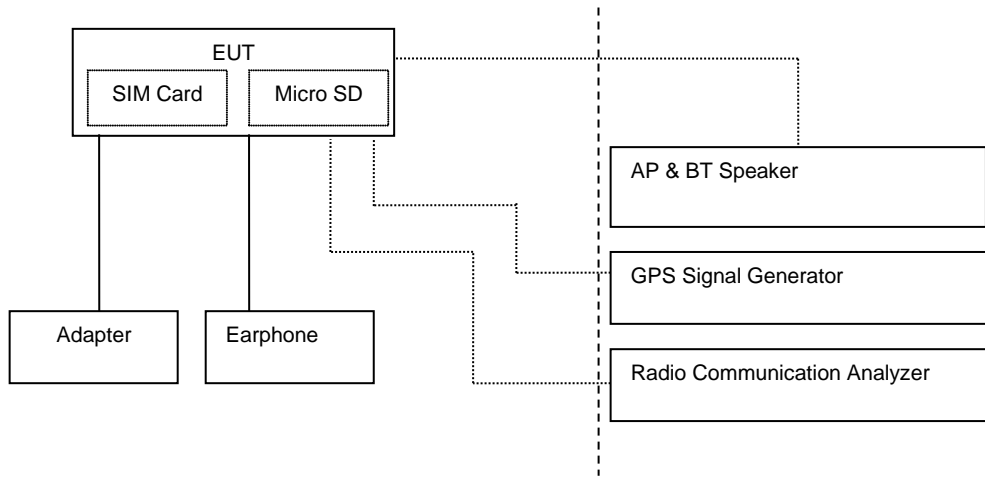
No modification was made by SGS Taiwan Electromagnetic Compatibility Laboratory.

1.7 Accessories Cable List

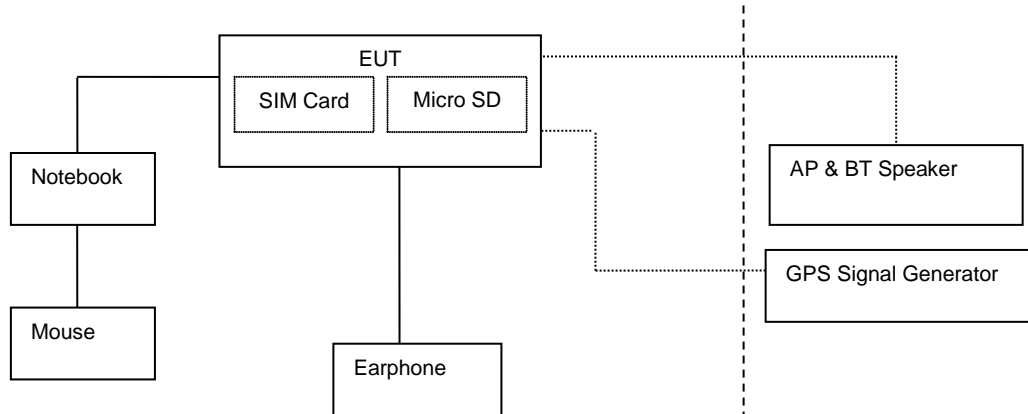
Cable Type	Core	Length	Shielding/Non-shielding
N/A	N/A	N/A	N/A

1.8 Test Set-Up Configuration

Mode 1



Mode 8



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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 Part 15 Subpart B/CISPR 22

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

1.11 Decision Rules of Results

Reported measurement data comply with ANSI C63.4:2014

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

1.12 Summary of Results

Highest Emission					
Standard	Test Type	Result	Phase/Pol.	Frequency(MHz)	Margin(dB)
FCC Part 15 Subpart B, Class B	Conducted Emission	PASS	Line	4.5104	-12.87 (QP)
			Neutral	4.7040	-16.54 (QP)
	Radiated Emission	PASS	Ver.	935.0100	-6.74 (QP)

1.13 Reporting Statements of Conformity

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

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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 (MHz)	Class A (dBuV)		Class B (dBuV)	
	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.

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2.3.2 Limits of Radiated Emissions

FCC Part 15 Subpart B Limit:

- Detector Function : Quasi – Peak

FREQUENCY (MHz)	Class A (at 10 m)	Class B (at 3 m)
	dBuV/m	dBuV/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 (dBuV/m) (at 10 m)		Class B (dBuV/m) (at 3 m)	
	Peak	Average	Peak	Average
Above 1000	69.5	49.5	74	54

CISPR 22 Limit:

- Detector Function : Quasi – Peak

FREQUENCY (MHz)	Class A (at 10 m)	Class B (at 10 m)
	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 (GHz)	Class A (dBuV/m) (at 3 m)		Class B (dBuV/m) (at 3 m)	
	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.

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2.4. Test of Conducted Emission

2.4.1 Test Equipments

SGS Conducted_Emission HWAYA Conducted Room No.A_EMC					
EQUIPMENT TYPE	Manufacturer	Model Number	Serial Number	Calibration Date	Calibration Due
EMI Test Receiver	R&S	ESCI 3	101311	Jul. 08th, 2020	Jul. 07th, 2021
Coaxial Cables	EMC Instruments Corp	HY-CE-CABLE	HYCE-2000-01	May 19th, 2020	May 18th, 2021
Pulse Limiter	Narda S.T.S.	PMM PL01	1110X30602	Aug. 12th, 2020	Aug. 11th, 2021
LISN	Schwarzbeck	NSLK 8127	8127-648	Jul. 14th, 2020	Jul. 13th, 2021
LISN	Schwarzbeck	NSLK 8128	NSLK8128-300	Sep. 16th, 2019	Sep. 15th, 2020
Communication Tester	R&S	CMU200	114273	May 31th, 2020	May 30th, 2021
Communication Tester	R&S	CMW500	152303	Feb. 24th, 2020	Feb. 23th, 2021
Communication Tester	Anritsu	MT8820C	6201465315	N.C.R.	N.C.R.
Test S/W	Farad	EZ-EMC	Ver. SGS-03A2-3	N.C.R.	N.C.R.

Testing Site : No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan
 Measurement Uncertainty of Conducted Emission
 Expanded uncertainty U_{lab}(K=2) of conducted emission is 2.25 dB
 Theory values uncertainty U_{cispr 16-4-2 :2011+A1_2014} (K=2) of AC mains conducted Emission is 3.44dB

2.4.2 Measurement Level Calculation

Factor = LISN insertion loss + Cable loss + Pulse Limiter insertion loss

Measurement Level = Reading Level + Factor

Over (Margin) = Measurement Level – Limit

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2.4.3 Measurement Data:

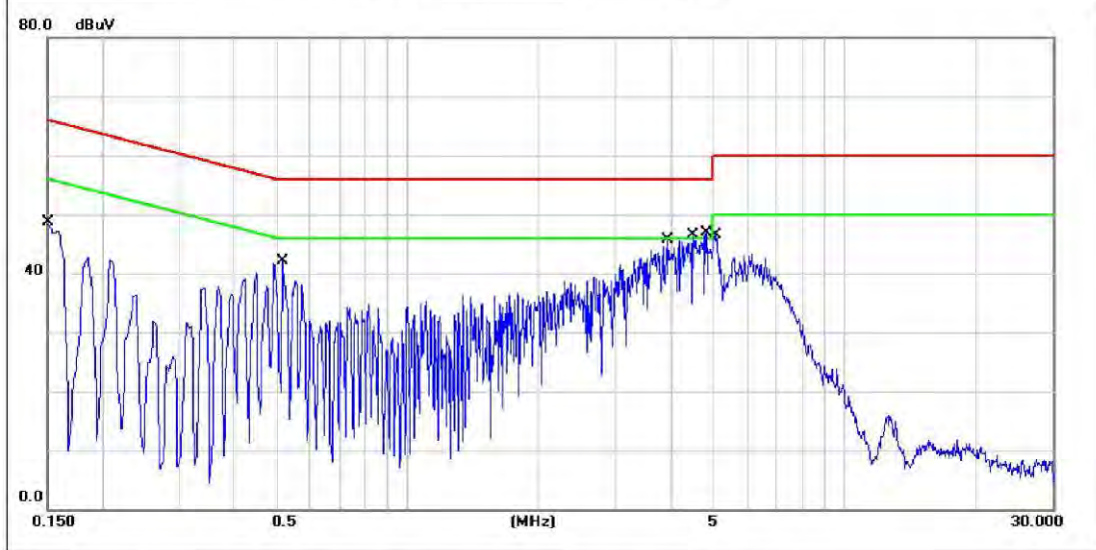
Model No.:F-52A

Mode_1_L

Site: : Conduction Room A	Date: 2020/8/15	Time: 上午 11:40:41
Limit: FCC Class B Conduction(QP)	Phase: L1	Temperature: 22 ℃
Mode: Mode1	Power: AC120V/60Hz	Humidity: 65 %RH
Report: MH-2020-80042		Air Pressure: 990 hpa
Tester: Vic Hsu		

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)	Measurement (dBuV)	Limit (dBuV)	Over (dB)	Detector	Comment
1		0.1500	45.39	0.01	45.40	66.00	-20.60	QP	
2		0.1500	31.05	0.01	31.06	56.00	-24.94	AVG	
3		0.5190	37.37	0.01	37.38	56.00	-18.62	QP	
4		0.5190	26.74	0.01	26.75	46.00	-19.25	AVG	
5		3.9615	41.38	0.17	41.55	56.00	-14.45	QP	
6		3.9615	27.81	0.17	27.98	46.00	-18.02	AVG	
7	*	4.5104	42.95	0.18	43.13	56.00	-12.87	QP	
8		4.5104	27.52	0.18	27.70	46.00	-18.30	AVG	
9		4.8435	42.89	0.19	43.08	56.00	-12.92	QP	
10		4.8435	28.67	0.19	28.86	46.00	-17.14	AVG	
11		5.0954	42.43	0.20	42.63	60.00	-17.37	QP	
12		5.0954	27.68	0.20	27.88	50.00	-22.12	AVG	

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

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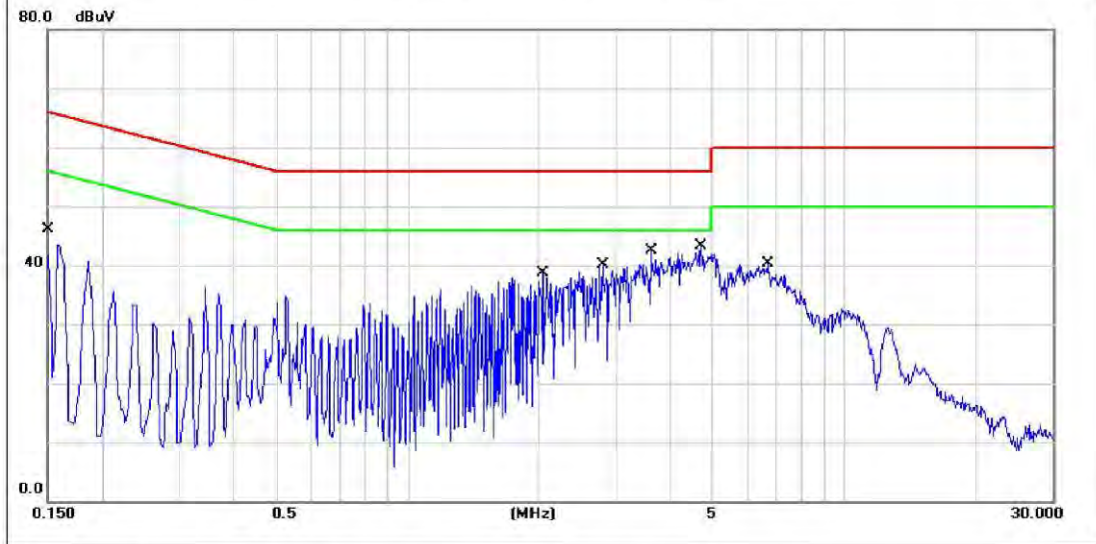


Mode_1_N

Site: : Conduction Room A	Date: 2020/8/15	Time: 上午 11:46:15
Limit: FCC Class B Conduction(QP)	Phase: N	Temperature: 22 °C
Mode: Mode1	Power: AC120V/60Hz	Humidity: 65 %RH
Report: MH-2020-80042		Air Pressure: 990 hpa
Tester: Vic Hsu		

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)	Measurement (dBuV)	Limit (dBuV)	Over (dB)	Detector	Comment
1		0.1500	43.53	0.01	43.54	66.00	-22.46	QP	
2		0.1500	28.08	0.01	28.09	56.00	-27.91	AVG	
3		2.0490	34.73	0.14	34.87	56.00	-21.13	QP	
4		2.0490	21.51	0.14	21.65	46.00	-24.35	AVG	
5		2.8050	33.99	0.16	34.15	56.00	-21.85	QP	
6		2.8050	21.07	0.16	21.23	46.00	-24.77	AVG	
7		3.6060	35.22	0.17	35.39	56.00	-20.61	QP	
8		3.6060	22.58	0.17	22.75	46.00	-23.25	AVG	
9	*	4.7040	39.27	0.19	39.46	56.00	-16.54	QP	
10		4.7040	23.80	0.19	23.99	46.00	-22.01	AVG	
11		6.6795	34.36	0.26	34.62	60.00	-25.38	QP	
12		6.6795	25.99	0.26	26.25	50.00	-23.75	AVG	

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

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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 7	100950	Dec. 11th, 2019	Dec. 10th, 2020
EMI Test Receiver	R&S	ESCI 3	101343	Feb. 17th, 2020	Feb. 16th, 2021
Broadband Antenna	SCHWAZBECK	VULB9168	9168-628	Sep. 09th, 2019	Sep. 08th, 2020
Broadband Antenna	SCHWAZBECK	VULB9168	9168-629	Sep. 09th, 2019	Sep. 08th, 2020
Pre Amplifier	EMC Instruments Corp.	EMC330	980178	Mar. 31th, 2020	Mar. 30th, 2021
Pre Amplifier	EMC Instruments Corp.	EMC330	980179	Mar. 31th, 2020	Mar. 30th, 2021
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150917	Sep. 18th, 2019	Sep. 17th, 2020
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150919	Sep. 18th, 2019	Sep. 17th, 2020
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150820	Sep. 18th, 2019	Sep. 17th, 2020
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150918	Sep. 18th, 2019	Sep. 17th, 2020
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150821	Sep. 18th, 2019	Sep. 17th, 2020
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150822	Sep. 18th, 2019	Sep. 17th, 2020
Universal Digital Radio Communication Tester	R&S	CMU 200	114273	May 31th, 2020	May 30th, 2021
Wideband Radio Communication Tester	R&S	CMW 500	152303	Feb. 24th, 2020	Feb. 23th, 2021
Radio Communication Analyzer	Anritsu	MT8820C	6201465315	N.C.R.	N.C.R.
Controller	MF	MF7802	N/A	N.C.R.	N.C.R.
Controller	MF	MF7802	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	SGS	10M Chamber	10M SAC	Dec. 31th, 2019	Dec. 30th, 2020
Test S/W	Farad	EZ-EMC	Ver. SGS 10m-03A2-3	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 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)					

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Above 1GHz

SGS Radiated_Above_1GHz HWAYA 966A EMC					
EQUIPMENT TYPE	Manufacturer	Model Number	Serial Number	Calibration Date	Calibration Due
Spectrum Analyzer	Agilent	E4446A	MY48250064	Apr. 06th, 2020	Apr. 05th, 2021
EMI Test Receiver	R&S	ESR 7	101459	Feb. 24th, 2020	Feb. 23th, 2021
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA9120D285	Apr. 29th, 2020	Apr. 28th, 2021
Horn Antenna	Schwarzbeck	BBHA9170	BBHA9170-184	Dec. 25th, 2019	Dec. 24th, 2020
Pre Amplifier	EMC Instruments Corp.	EMC012645B	980216	Apr. 25th, 2020	Apr. 24th, 2021
Pre Amplifier	EMC Instruments Corp.	EMC184045B	980135	Oct. 27th, 2019	Oct. 26th, 2020
Coaxial Cable	JUNFLOW	MWX221-NMSNMS	J0778929	Apr. 23th, 2020	Apr. 22th, 2021
Coaxial Cable	Huber+Suhner	SUCCOFLEX 104PEA	30255/4PEA	Apr. 23th, 2020	Apr. 22th, 2021
Coaxial Cable	EMC Instruments	EMC104-SM-SM	140927	Apr. 23th, 2020	Apr. 22th, 2021
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	520415/2	Jun. 05th, 2020	Jun. 04th, 2021
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	MY 2153/2	Jun. 05th, 2020	Jun. 04th, 2021
Universal Digital Radio Communication Tester	R&S	CMU 200	114273	May. 31th, 2020	May. 30th, 2021
Wideband Radio Communication Tester	R&S	CMW 500	152303	Feb. 24th, 2020	Feb. 23th, 2021
Radio Communication Analyzer	Anritsu	MT8820C	6201465315	N.C.R.	N.C.R.
Controller	MF	MF7802	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	Jan. 12th, 2020	Jan. 11th, 2021
Test S/W	Farad	EZ-EMC	Ver. SGS-03A2-3	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 5.05 dB. (1-6GHz)

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

Expanded uncertainty U_{lab} (k=2) of radiated emission measurement is 5.19 dB. (18-26GHz)

Expanded uncertainty U_{lab} (k=2) of radiated emission measurement is 5.14 dB. (26-40GHz)

Theory values uncertainty U_{cispr} 16-4-2:2011+A1:2014 (K=2) of radiated emission measurement is 5.18 dB.(1-6GHz)

Theory values uncertainty U_{cispr} 16-4-2:2011+A1:2014 (K=2) of radiated emission measurement is 5.48 dB.(6-18GHz)

Theory values uncertainty U_{cispr} 16-4-2:2011+A1:2014 (K=2) of radiated emission measurement is ---- dB.(18-26GHz)

Theory values uncertainty U_{cispr} 16-4-2:2011+A1:2014 (K=2) of radiated emission measurement is ---- dB.(26-40GHz)

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

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2.5.3 Measurement Data

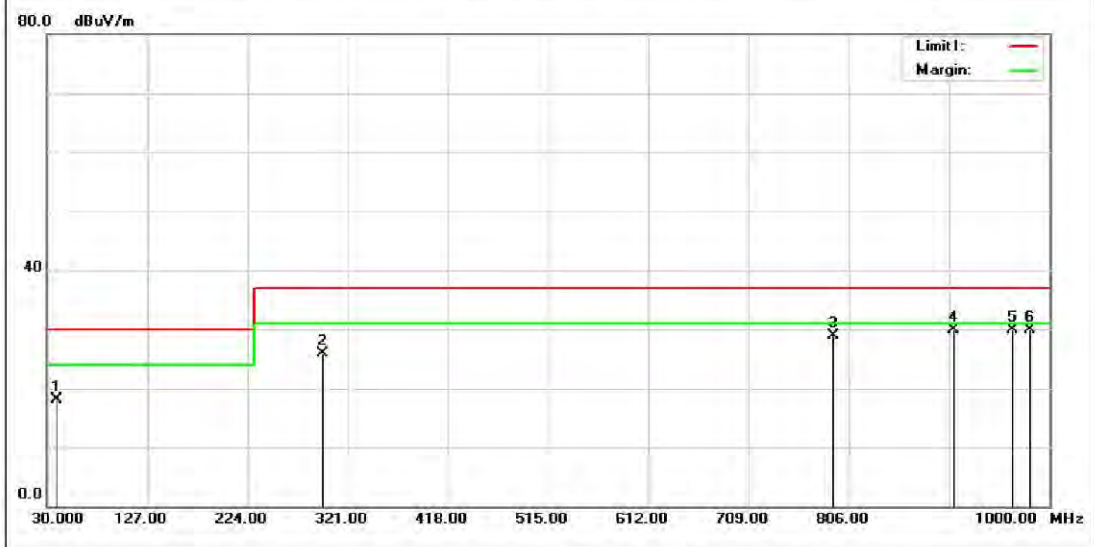
Below 1GHz

Model No.:F-52A

Mode_1_H

Site: SGS 10m Chamber	Date: 2020/8/16	Time: 上午 07:08:51
Limit: CISPR22 Class B 10m Radiation	Polarization: Horizontal	Temperature: 26 °C
Mode: Mode 1	Power: AC120V/60Hz	Humidity: 60 %RH
Report: File :MH-2020-80042	Distance:	Air Pressure: 990 hpa
Tester: Moore Cheng		
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)	Height (cm)	Degree (deg.)	Detector	Comment
1		39.7000	29.53	-11.40	18.13	30.00	-11.87			peak	
2		296.7500	36.72	-10.76	25.96	37.00	-11.04			peak	
3		790.4800	28.92	0.05	28.97	37.00	-8.03			peak	
4		906.8800	29.20	0.71	29.91	37.00	-7.09			peak	
5	*	964.1100	28.45	1.52	29.97	37.00	-7.03	136	0	peak	
6		981.5700	28.36	1.53	29.89	37.00	-7.11			peak	

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

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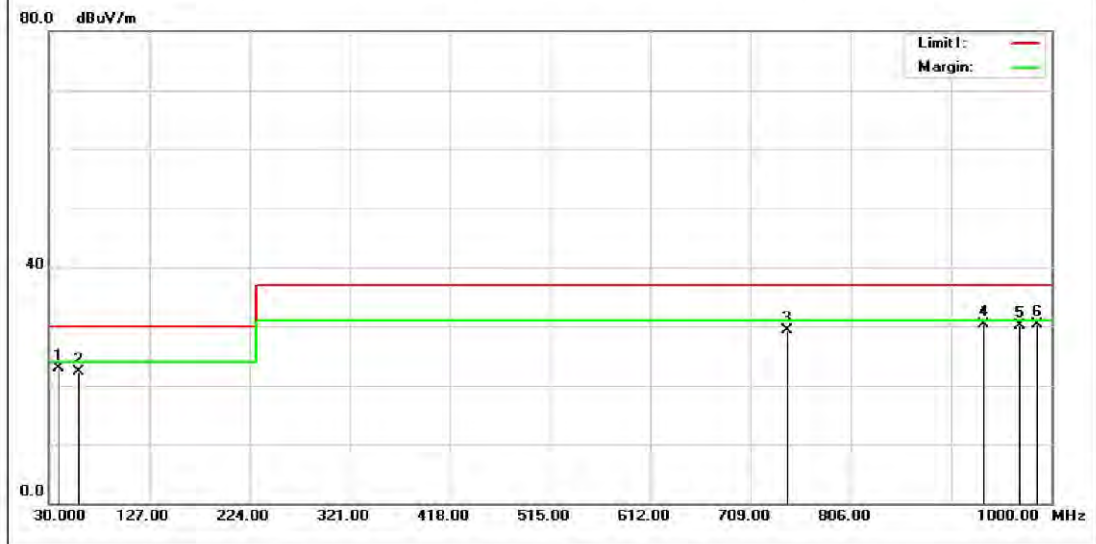
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Mode_1_V

Site: SGS 10m Chamber Date: 2020/8/16 Time: 上午 07:08:50
 Limit: CISPR22 Class B 10m Radiation Polarization: **Vertical** Temperature: 26 °C
 Mode: Mode 1 Power: AC120V/60Hz Humidity: 60 %RH
 Report: File :MH-2020-80042 Distance: Air Pressure: 990 hpa
 Tester: Moore Cheng
 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)	Height (cm)	Degree (deg.)	Detector	Comment
1		39.7000	34.17	-11.28	22.89	30.00	-7.11			peak	
2		59.1000	34.07	-11.68	22.39	30.00	-7.61			peak	
3		744.8900	28.32	1.06	29.38	37.00	-7.62			peak	
4	*	935.0100	27.85	2.41	30.26	37.00	-6.74	220	259	peak	
5		969.9300	27.78	2.42	30.20	37.00	-6.80			peak	
6		986.4200	27.77	2.46	30.23	37.00	-6.77			peak	

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

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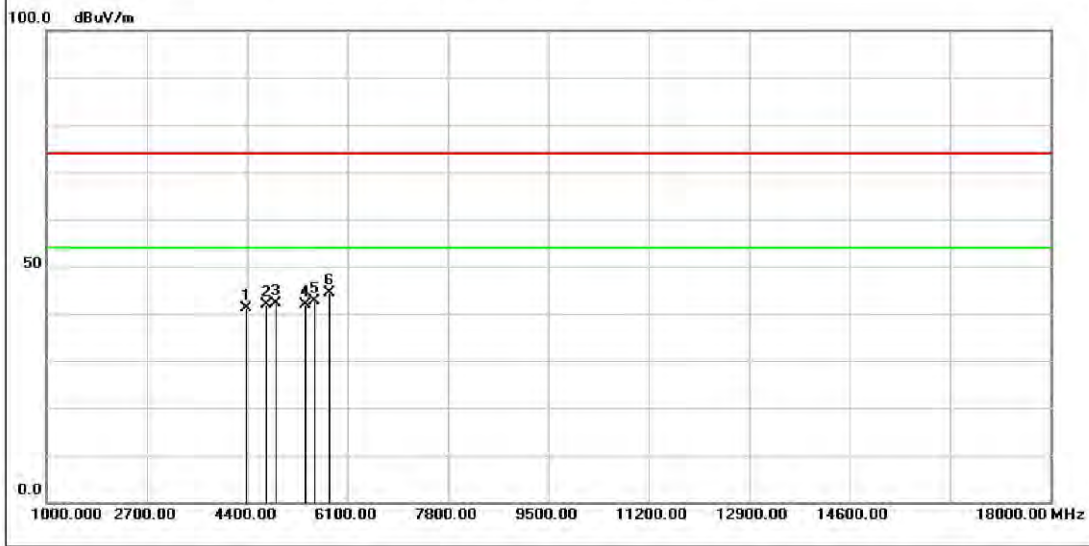
Above 1GHz

Model No.:F-52A

Mode_8_H

Site: SGS 966 Chamber A	Date: 2020/8/20	Time: 上午 06:12:34
Limit: FCC Class B 1G-18G(Peak)	Polarization: Horizontal	Temperature: 26 °C
Mode: Mode 8	Power: AC 120V/60Hz	Humidity: 57 %RH
Report: MH-2020-80042	Distance: 3m	Air Pressure: 990 hpa
Tester: Moore Cheng		
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)	Height (cm)	Degree (deg.)	Detector	Comment
1		4383.000	49.22	-8.19	41.03	74.00	-32.97			peak	
2		4723.000	49.34	-7.39	41.95	74.00	-32.05			peak	
3		4893.000	49.60	-7.43	42.17	74.00	-31.83			peak	
4		5386.000	48.66	-6.68	41.98	74.00	-32.02			peak	
5		5539.000	48.96	-6.32	42.64	74.00	-31.36			peak	
6	*	5794.000	49.68	-5.41	44.27	74.00	-29.73	100	189	peak	

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

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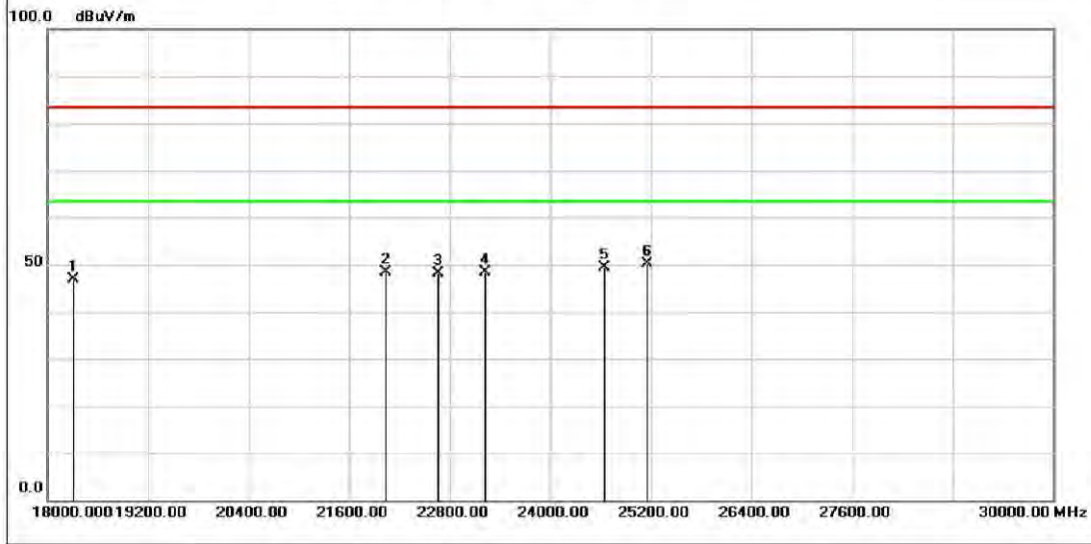
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Site: SGS 966 Chamber A	Date: 2020/9/24	Time: 上午 06:29:42
Limit: FCC Class B 1m 18-40G(Peak)	Polarization: Horizontal	Temperature: 22 ℃
Mode: Mode 8	Power: AC 120V/60Hz	Humidity: 65 %RH
Report: MH-2020-80042	Distance: 1m	Air Pressure: 990 hpa
Tester: Moore Cheng		
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)	Height (cm)	Degree (deg.)	Detector	Comment
1		18312.000	50.37	-3.43	46.94	83.50	-36.56			peak	
2		22032.000	47.94	0.37	48.31	83.50	-35.19			peak	
3		22668.000	48.10	-0.03	48.07	83.50	-35.43			peak	
4		23220.000	48.05	0.44	48.49	83.50	-35.01			peak	
5		24648.000	47.83	1.63	49.46	83.50	-34.04			peak	
6	*	25164.000	48.13	1.89	50.02	83.50	-33.48	100	138	peak	

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

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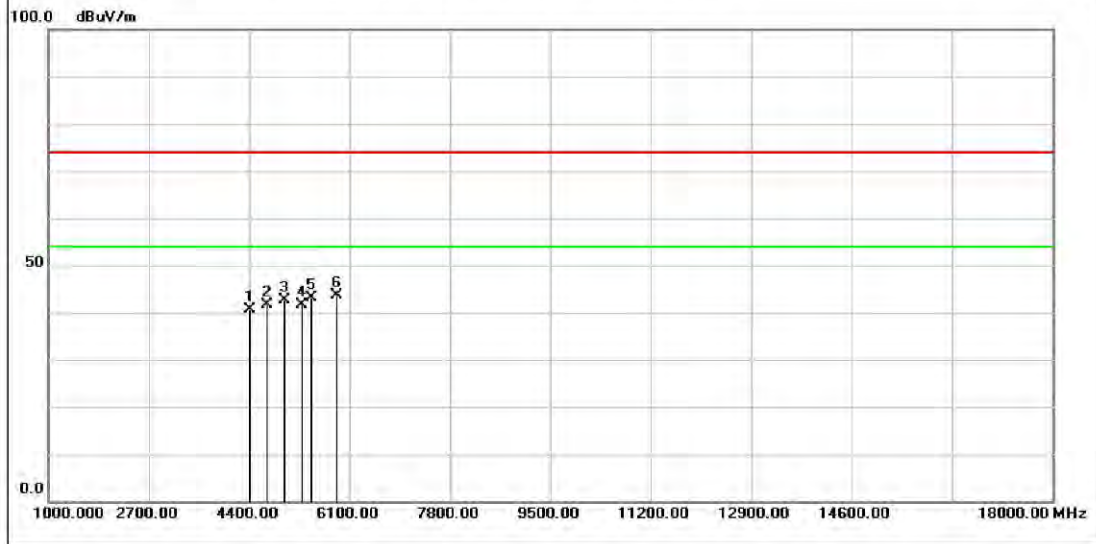
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Mode_8_V

Site: SGS 966 Chamber A	Date: 2020/8/20	Time: 上午 05:57:05
Limit: FCC Class B 1G-18G(Peak)	Polarization: Vertical	Temperature: 26 °C
Mode: Mode 8	Power: AC 120V/60Hz	Humidity: 57 %RH
Report: MH-2020-80042	Distance: 3m	Air Pressure: 990 hpa
Tester: Moore Cheng		
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)	Height (cm)	Degree (deg.)	Detector	Comment
1		4400.000	48.70	-8.10	40.60	74.00	-33.40			peak	
2		4706.000	49.01	-7.42	41.59	74.00	-32.41			peak	
3		4995.000	49.94	-7.30	42.64	74.00	-31.36			peak	
4		5284.000	48.67	-6.92	41.75	74.00	-32.25			peak	
5		5454.000	49.55	-6.44	43.11	74.00	-30.89			peak	
6	*	5879.000	48.86	-5.11	43.75	74.00	-30.25	100	325	peak	

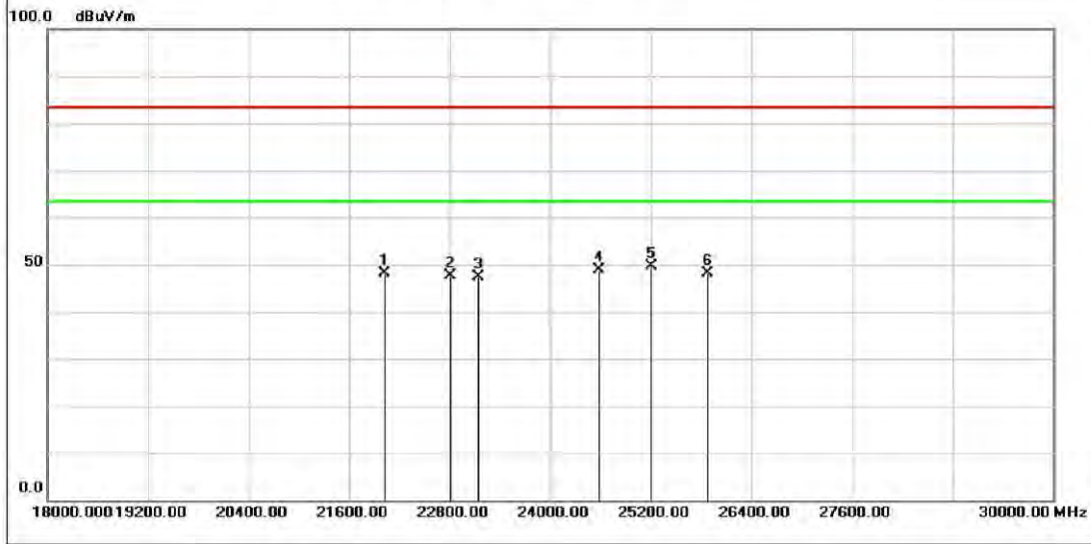
* Maximum data x Over limit | Over margin

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Site: SGS 966 Chamber A	Date: 2020/9/24	Time: 2020-09-24 06:26:17
Limit: FCC Class B 1m 18-40G(Peak)	Polarization: Vertical	Temperature: 22 °C
Mode: Mode 8	Power: AC 120V/60Hz	Humidity: 65 %RH
Report: MH-2020-80042	Distance: 1m	Air Pressure: 990 hpa
Tester: Moore Cheng		
Note:		

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No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Height	Degree	Detector	Comment
		(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)		
1		22020.000	47.65	0.38	48.03	83.50	-35.47			peak	
2		22800.000	47.65	0.02	47.67	83.50	-35.83			peak	
3		23136.000	47.13	0.31	47.44	83.50	-36.06			peak	
4		24576.000	47.29	1.62	48.91	83.50	-34.59			peak	
5	*	25200.000	47.64	1.94	49.58	83.50	-33.92	100	169	peak	
6		25872.000	46.47	1.64	48.11	83.50	-35.39			peak	

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

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