



# FCC CERTIFICATION REPORT

**Test Report No.** : MH/2019/10097  
**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 City, Osaka 590-8522, Japan

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

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

**Date of Receipt** : Jan. 14, 2019  
**Date of Test** : Jan. 14 ~ 28, 2019  
**Date of Issue** : Jan. 29, 2019

<b>Test Result :</b>	<b>PASS</b>
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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.

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

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**Tested By:**

*Lowka Chen*

**Date**

Jan. 29, 2019

**Lowka Chen (Engineer)**

**Approved By**

*Eddy Cheng*

**Date**

Jan. 29, 2019

**Eddy Cheng (Asst. Supervisor)**



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## Revision History

Report Number	Revision	Description	Issue Date
MH/2019/10097	Rev.00	Initial creation of document	Jan. 29, 2019

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# 1. General Information

## 1.1 Applicant & Manufacturer Information

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 Manufacturer : Sharp Corporation  
 Address of Manufacturer : 1 Takumi-cho, Sakai-ku, Sakai City, Osaka 590-8522, Japan

## 1.2 General Description of EUT

Product Name : Cellular Phone

## 1.3 Details of EUT

Power Supply : AC 100~240V, 50/60Hz  
 Highest operate description : 2480 MHz  
 Battery : 3.8V, 1680mAh, 6.38Wh  
 Cradle : Model No.: A  
 Supplier : A  
 Worst case : CE worst case : Config 1  
 Below / Above RE worst case : Config 3

FCC ID : APYHRO00270	DDR	PCB	(Select which one is worst case)
Type~A	Main Source	Main Source	Worst case
Type~B	2 <sup>nd</sup> source-1	Main Source	V
Type~C	2 <sup>nd</sup> source-2	2 <sup>nd</sup> source	V

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<b>Accessories List:</b> <b>AC Charger : Salom/XN-2QC25</b> <b>Data Cable : L6KU2001-CS-H</b> <b>PHF : Sony / MDR-EX15AP</b> <b>Conversion plug : n/a / SHX11QVA</b> <b>Cradle(In Box) : A</b>	<b>Config 1</b>	<b>Config 2</b>	<b>Config 3</b>	<b>Config 4</b>
Applicable standard	FCC 15B			
Accessories	EUT + AC Adaptor +USB Cable	EUT +USB Cable	EUT + Conversion plug +PHF	EUT +USB Cable +Cradle +Adapter
Main function	Speech	Data Link	Camera	Charging
Additional function	BT+WiFi +GPS			
Description				
radiated emission	GSM 1900	Data R/W	MP3/ ;REC mode ;play REC	Charging
conducted emission (DC Power)	NA	NA	NA	NA
conducted emission (AC Power)	GSM 1900	Data R/W	NA	Charging

**1.4 Operation Procedure**

**Config 1**

1. Let EUT plug in SD Card & SIM Card, connect to Adapter with USB cable and turn it on.
2. Turn on BT function and connect to the Bluetooth speaker.
3. Turned on WiFi function, connect to WiFi-AP with NB\_2 and ping EUT IP Address.
4. Set up GPS simulator to send GPS signals and turn on GPS test app.
5. Set up base station, set channel (GSM Link or Idle) and transfer data.
6. Start the test.

**Config 2**

1. Let EUT plug in SD Card & SIM Card, connect to NB with USB Cable and turn it on.
2. Turn on BT function and connect to the Bluetooth speaker.
3. Turned on WiFi function, connect to WiFi-AP with NB\_2 and ping EUT IP Address.
4. Set up GPS simulator to send GPS signals and turn on GPS test app.
5. Execute Data Read/Write in NB.
6. Start the test.

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### Config 3

1. Let EUT plug in SD Card & SIM Card, connect to USB & Audio Cable to Earphone and turn it on.
2. Turn on BT function and connect to the Bluetooth speaker.
3. Turned on WiFi function, connect to WiFi-AP with NB\_2 and ping EUT IP Address.
4. Set up GPS simulator to send GPS signals and turn on GPS test app.
5. EUT execution: a\_1729.mp3 Play, b\_Camera REC, c\_Camera\_Play
6. Start the test.

### Config 4

1. Let Cradle connect to Adapter with USB cable.
2. Let EUT plug in SD Card & SIM Card and turn it on.
3. Turn on BT function and connect to the Bluetooth speaker.
4. Turned on WiFi function, connect to WiFi-AP with NB\_2 and ping EUT IP Address.
5. Set up GPS simulator to send GPS signals and turn on GPS test app.
6. Placed EUT on Cradle to charge.
7. Start the test.

## 1.5 Description of Support Units

PRODUCT	MANUFACTURER	MODEL NO.	SERIAL NO.
SIM Card	R&S	CMW-Z05	8952530076180138474
Micro SD	Transcend	SDHC (Class 4 )	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 (RE, HRE)	DELL	Latitude E6440	3VGS162
Notebook (CE)	DELL	Latitude E5430	COVZYW1
Mouse	Logitech	M-U0026	1738HS05FGU8
Earphone	SONY	MDR-EX15AP	N/A
Adapter	Salom	XN-2QC25	N/A

### Support Equipment Used in Tested Cable

Cable Type	Core	Length	Shielding/Non-shielding
USB Cable	N/A	1.8m	Shielding

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1.6 Modification List

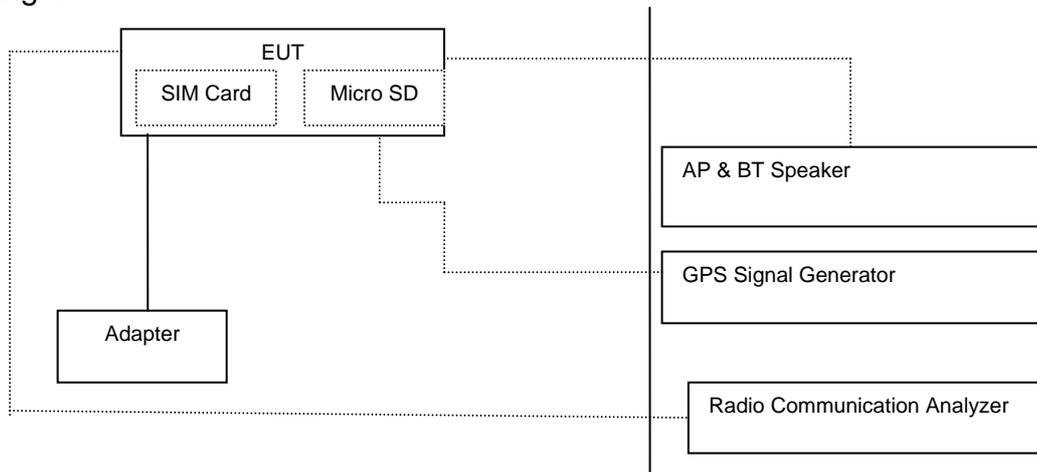
No modification was made by SGS Taiwan Electronics & Communication Laboratory.

1.7 Accessories Cable List

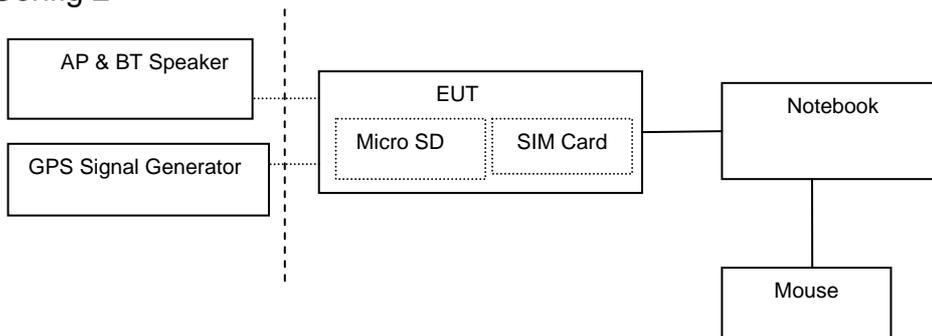
Cable Type	Core	Length	Shielding/Non-shielding
USB Cable	N/A	1m	Shielding
Earphone Cable	N/A	1.25m	Non-shielding
Conversion plug	N/A	0.1m	Non-shielding

1.8 Test Set-Up Configuration

Config 1



Config 2

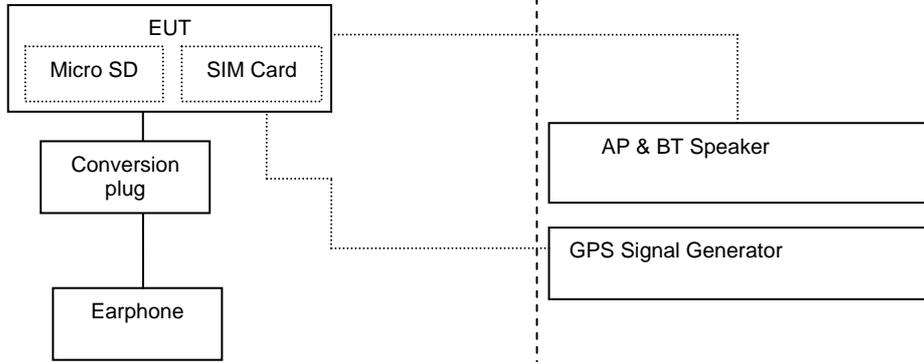


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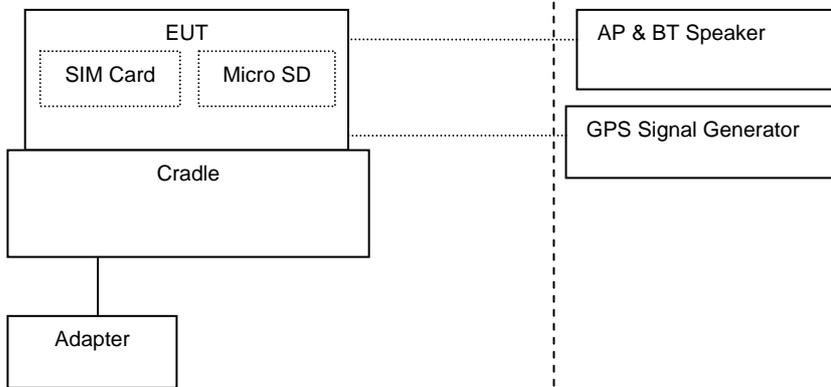
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Config 3



Config 4



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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 Summary of Results

Standard	Test Type	Highest Emission			
		Result	Phase/Pol.	Frequency(MHz)	Margin(dB)
FCC Part 15 Subpart B Class B	Conducted Emission	PASS	Line	0.1500	-11.96 (QP)
			Neutral	0.2100	-12.87 (QP)
	Radiated Emission	PASS	Ver.	251.1600	-2.74 (QP)

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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 10m)	Class B (at 3m)
	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 (MHz)	Class A (dBuV/m) (at 3m)		Class B (dBuV/m) (at 3m)	
	Peak	Average	Peak	Average
Above 1000	79.3	59.3	73.9	53.9

#### CISPR 22 Limit:

- Detector Function : Quasi – Peak

FREQUENCY (MHz)	Class A (at 10m)	Class B (at 10m)
	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 3m)		Class B (dBuV/m) (at 3m)	
	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	101342	2018/1/31	2019/1/30
Coaxial Cables	EMC Instruments Corp	EMCRG58-BM-BM-3000	160812	2018/8/12	2019/8/11
LISN	Schwarzbeck	NSLK 8127	8127-648	2018/7/9	2019/7/8
Pulse Limiter	Narda S.T.S.	PMM PL01	1110X30602	2018/8/12	2019/8/11
LISN	Schwarzbeck	NSLK 8128	NSLK8128-300	2018/9/3	2019/9/2
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
Test S/W	Farad	EZ-EMC	Ver. SGS-03A2	N.C.R.	N.C.R.

SGS Taiwan LTD. Electronics & Communication Laboratory  
 No.2, Keji 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)  
 Measurement Uncertainty of Conducted Emission  
 Expanded uncertainty 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 : 23 degree C

Humidity : 59 %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

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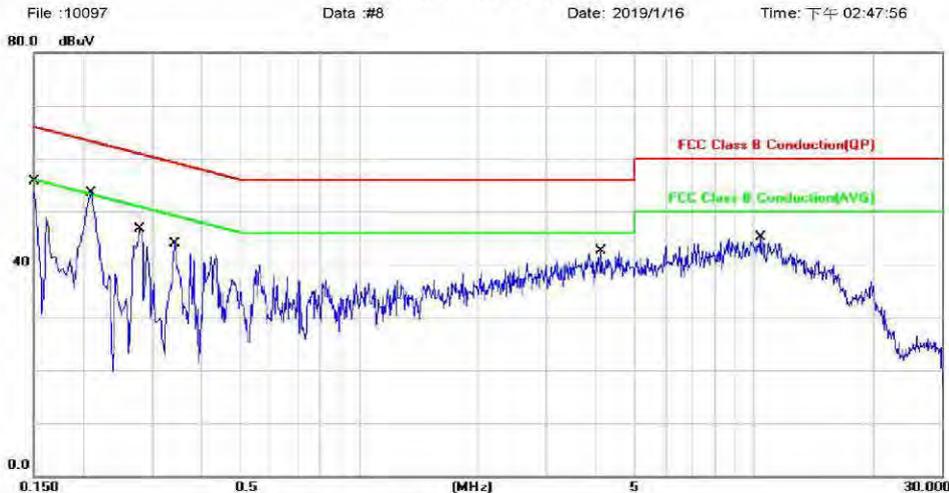


2.4.4 Measurement Data:

Config\_1\_L

Site : Conduction Room A      Phase: **L1**      Temperature: 23 °C  
 Limit: FCC Class B Conduction(QP)      Power: AC 120V/60Hz      Humidity: 59 %  
 Mode: Config 1  
 Note: GSM 1900

Conducted Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV	dBuV	dB		
1	*	0.1500	54.00	0.04	54.04	66.00	-11.96	QP	
2		0.1500	32.30	0.04	32.34	56.00	-23.66	AVG	
3		0.2100	50.90	0.03	50.93	63.21	-12.28	QP	
4		0.2100	36.20	0.03	36.23	53.21	-16.98	AVG	
5		0.2780	43.70	0.06	43.76	60.88	-17.12	QP	
6		0.2780	27.80	0.06	27.86	50.88	-23.02	AVG	
7		0.3420	40.40	0.09	40.49	59.15	-18.66	QP	
8		0.3420	27.60	0.09	27.69	49.15	-21.46	AVG	
9		4.1340	36.00	0.31	36.31	56.00	-19.69	QP	
10		4.1340	26.10	0.31	26.41	46.00	-19.59	AVG	
11		10.4260	37.30	0.47	37.77	60.00	-22.23	QP	
12		10.4260	26.40	0.47	26.87	50.00	-23.13	AVG	

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

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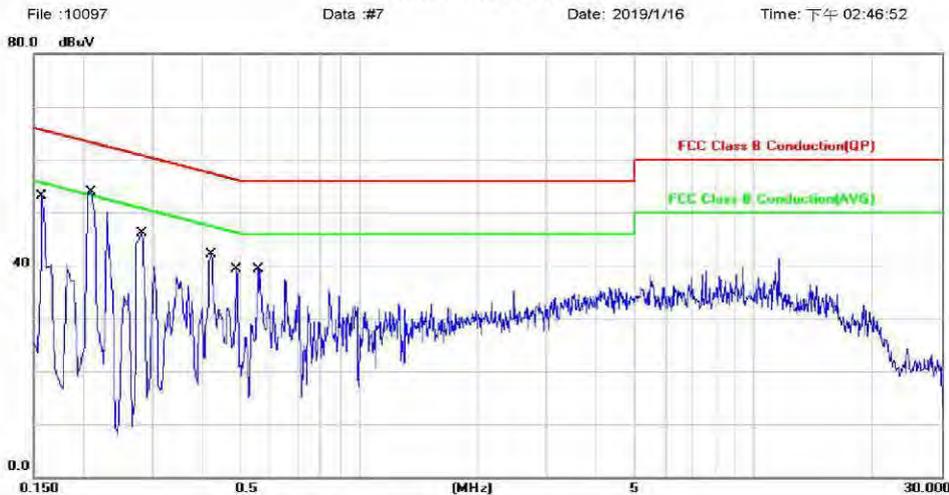
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### Config\_1\_N

Site : Conduction Room A      Phase: **N**      Temperature: 23 °C  
 Limit: FCC Class B Conduction(QP)      Power: AC 120V/60Hz      Humidity: 59 %  
 Mode: Config 1  
 Note: GSM 1900

#### Conducted Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.1580	48.80	0.04	48.84	65.57	-16.73	QP	
2		0.1580	25.10	0.04	25.14	55.57	-30.43	AVG	
3	*	0.2100	50.30	0.04	50.34	63.21	-12.87	QP	
4		0.2100	35.50	0.04	35.54	53.21	-17.67	AVG	
5		0.2820	40.20	0.07	40.27	60.76	-20.49	QP	
6		0.2820	23.80	0.07	23.87	50.76	-26.89	AVG	
7		0.4220	38.40	0.11	38.51	57.41	-18.90	QP	
8		0.4220	28.20	0.11	28.31	47.41	-19.10	AVG	
9		0.4900	34.70	0.14	34.84	56.17	-21.33	QP	
10		0.4900	21.60	0.14	21.74	46.17	-24.43	AVG	
11		0.5580	33.20	0.15	33.35	56.00	-22.65	QP	
12		0.5580	23.70	0.15	23.85	46.00	-22.15	AVG	

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

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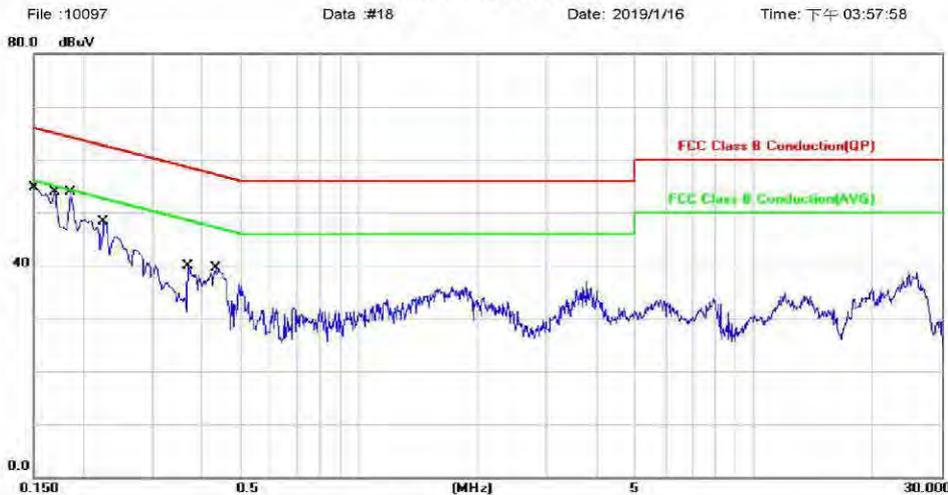
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### Config\_2\_L

Site : Conduction Room A      Phase: **L1**      Temperature: 23 °C  
 Limit: FCC Class B Conduction(QP)      Power: From System      Humidity: 59 %  
 Mode: Config 2  
 Note: AC 120V/60Hz , Data Write (Internal Sotrage)

#### Conducted Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV	dBuV	dB		
1	*	0.1500	52.00	0.04	52.04	66.00	-13.96	QP	
2		0.1500	36.90	0.04	36.94	56.00	-19.06	AVG	
3		0.1700	48.10	0.04	48.14	64.96	-16.82	QP	
4		0.1700	29.10	0.04	29.14	54.96	-25.82	AVG	
5		0.1860	44.50	0.03	44.53	64.21	-19.68	QP	
6		0.1860	27.00	0.03	27.03	54.21	-27.18	AVG	
7		0.2260	41.50	0.04	41.54	62.60	-21.06	QP	
8		0.2260	27.60	0.04	27.64	52.60	-24.96	AVG	
9		0.3700	25.70	0.10	25.80	58.50	-32.70	QP	
10		0.3700	14.80	0.10	14.90	48.50	-33.60	AVG	
11		0.4340	35.80	0.12	35.92	57.18	-21.26	QP	
12		0.4340	23.10	0.12	23.22	47.18	-23.96	AVG	

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

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### Config\_2\_N

Site : Conduction Room A      Phase: **N**      Temperature: 23 °C  
 Limit: FCC Class B Conduction(QP)      Power: From System      Humidity: 59 %  
 Mode: Config 2  
 Note: AC 120V/60Hz , Data Write (Internal Sotrage)

#### Conducted Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV	dBuV	dB		
1	*	0.1500	53.10	0.04	53.14	66.00	-12.86	QP	
2		0.1500	37.20	0.04	37.24	56.00	-18.76	AVG	
3		0.1700	49.30	0.04	49.34	64.96	-15.62	QP	
4		0.1700	28.90	0.04	28.94	54.96	-26.02	AVG	
5		0.1820	47.70	0.04	47.74	64.39	-16.65	QP	
6		0.1820	27.70	0.04	27.74	54.39	-26.65	AVG	
7		0.2460	40.50	0.06	40.56	61.89	-21.33	QP	
8		0.2460	27.80	0.06	27.86	51.89	-24.03	AVG	
9		0.4460	35.50	0.12	35.62	56.95	-21.33	QP	
10		0.4460	25.30	0.12	25.42	46.95	-21.53	AVG	
11		15.2540	33.40	0.50	33.90	60.00	-26.10	QP	
12		15.2540	26.80	0.50	27.30	50.00	-22.70	AVG	

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

File :10097\Data :#17

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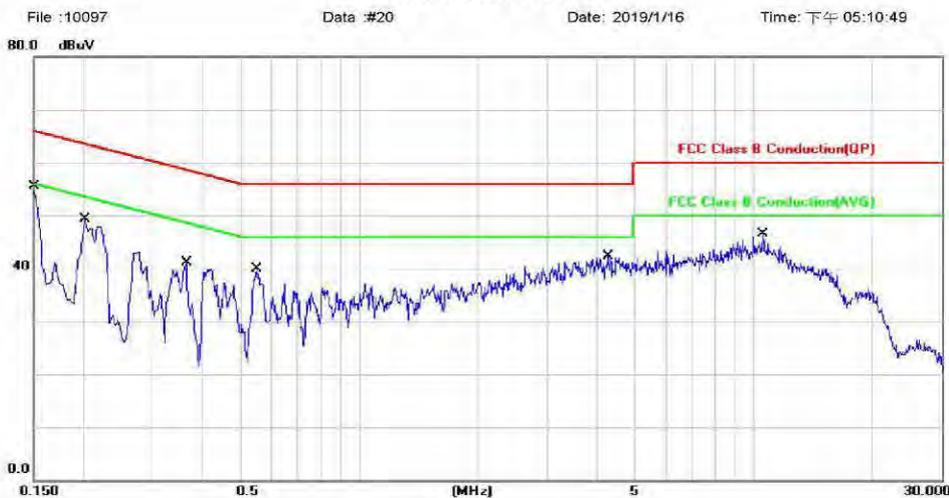
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### Config\_4\_L

Site : Conduction Room A      Phase: **L1**      Temperature: 23 °C  
 Limit: FCC Class B Conduction(QP)      Power: AC 120V/60Hz      Humidity: 59 %  
 Mode: Config 4  
 Note:

#### Conducted Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV	dBuV	dB		
1	*	0.1500	48.50	0.04	48.54	66.00	-17.46	QP	
2		0.1500	25.90	0.04	25.94	56.00	-30.06	AVG	
3		0.2020	44.40	0.03	44.43	63.53	-19.10	QP	
4		0.2020	28.10	0.03	28.13	53.53	-25.40	AVG	
5		0.3660	31.30	0.10	31.40	58.59	-27.19	QP	
6		0.3660	15.90	0.10	16.00	48.59	-32.59	AVG	
7		0.5540	36.00	0.15	36.15	56.00	-19.85	QP	
8		0.5540	25.70	0.15	25.85	46.00	-20.15	AVG	
9		4.2820	34.60	0.32	34.92	56.00	-21.08	QP	
10		4.2820	26.10	0.32	26.42	46.00	-19.58	AVG	
11		10.5660	36.00	0.48	36.48	60.00	-23.52	QP	
12		10.5660	25.80	0.48	26.28	50.00	-23.72	AVG	

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

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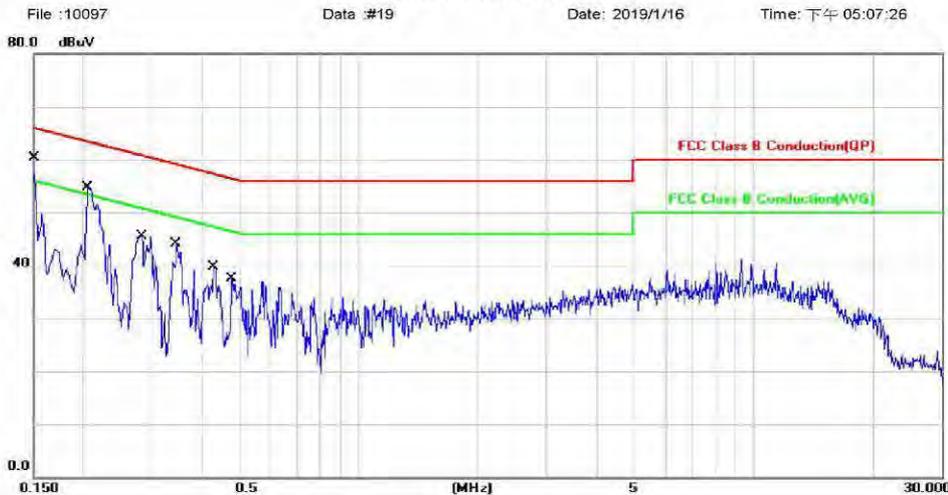
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### Config\_4\_N

Site : Conduction Room A      Phase: **N**      Temperature: 23 °C  
 Limit: FCC Class B Conduction(QP)      Power: AC 120V/60Hz      Humidity: 59 %  
 Mode: Config 4  
 Note:

#### Conducted Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV	dBuV	dB		
1	*	0.1500	53.50	0.04	53.54	66.00	-12.46	QP	
2		0.1500	31.00	0.04	31.04	56.00	-24.96	AVG	
3		0.2060	49.70	0.04	49.74	63.37	-13.63	QP	
4		0.2060	33.90	0.04	33.94	53.37	-19.43	AVG	
5		0.2820	42.40	0.07	42.47	60.76	-18.29	QP	
6		0.2820	26.00	0.07	26.07	50.76	-24.69	AVG	
7		0.3460	39.40	0.09	39.49	59.06	-19.57	QP	
8		0.3460	27.80	0.09	27.89	49.06	-21.17	AVG	
9		0.4300	32.60	0.12	32.72	57.25	-24.53	QP	
10		0.4300	20.40	0.12	20.52	47.25	-26.73	AVG	
11		0.4780	32.40	0.13	32.53	56.37	-23.84	QP	
12		0.4780	19.20	0.13	19.33	46.37	-27.04	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	100924	2018/10/23	2019/10/22
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	2018/9/18	2019/9/17
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150919	2018/9/18	2019/9/17
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150820	2018/9/18	2019/9/17
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150918	2018/9/18	2019/9/17
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150821	2018/9/18	2019/9/17
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150822	2018/9/18	2019/9/17
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	2018/12/31	2019/12/30
Test S/W	Farad	EZ-EMC	Ver. SGS-03A2	N.C.R.	N.C.R.

SGS Taiwan LTD. Electronics & Communication Laboratory

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

Measurement Uncertainty of Radiated Emission

Expanded uncertainty U<sub>lab</sub> (K=2) of radiated emission is 4.09 dB. (30MHz ~ 1000MHz)

Theory values uncertainty U<sub>cispr 16-4-2:2011+A1:2014</sub> (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	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	BBHA9120D285	2018/10/26	2019/10/25
Horn Antenna	Schwarzbeck	BBHA9170	BBHA9170-184	2018/12/27	2019/12/26
Pre Amplifier	EMC Instruments Corp.	EMC012645B	980216	2018/3/31	2019/3/30
Pre Amplifier	EMC Instruments Corp.	EMC184045B	980135	2018/10/27	2019/10/26
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
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	2019/1/12	2020/1/11
Test S/W	Farad	EZ-EMC	Ver. SGS-03A2	N.C.R.	N.C.R.

SGS Taiwan LTD. Electronics & Communication Laboratory  
 No.2, Keji 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)  
 Measurement Uncertainty of Radiated Emission  
 Expanded uncertainty (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)

## 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

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2.5.4 Measurement Data

Below 1GHz

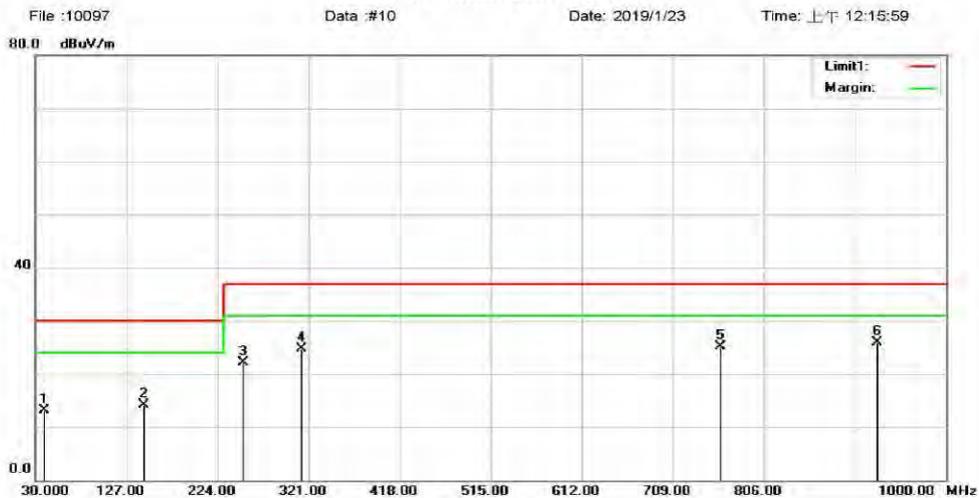
Config\_1\_H

Site: SGS 10m Chamber  
 Limit: CISPR22 Class B 10M Radiation  
 Mode: Config 1  
 Note: GSM 1900

Polarization: *Horizontal*  
 Power: AC 120V/60Hz  
 Distance: 10m

Temperature: 24 °C  
 Humidity: 66 %

Radiated Emission



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		39.7000	24.84	-11.69	13.15	30.00	-16.85	QP	
2		145.4300	25.41	-11.25	14.16	30.00	-15.84	QP	
3		251.1600	34.17	-11.99	22.18	37.00	-14.82	QP	
4		313.2400	34.58	-9.79	24.79	37.00	-12.21	QP	
5		759.4400	24.38	0.77	25.15	37.00	-11.85	QP	
6 *		926.2800	23.02	2.87	25.89	37.00	-11.11	QP	

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

File :10097\Data :#10

Page: 1

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### Config\_1\_V

Site: SGS 10m Chamber	Polarization: <b>Vertical</b>	Temperature: 24 °C
Limit: CISPR22 Class B 10M Radiation	Power: AC 120V/60Hz	Humidity: 66 %
Mode: Config 1	Distance: 10m	
Note: GSM 1900		

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1		67.8300	27.07	-12.75	14.32	30.00	-15.68	QP	
2		165.8000	30.11	-11.19	18.92	30.00	-11.08	QP	
3		251.1600	32.72	-11.79	20.93	37.00	-16.07	QP	
4	*	313.2400	38.47	-9.55	28.92	37.00	-8.08	QP	
5		376.2900	31.93	-7.80	24.13	37.00	-12.87	QP	
6		946.6500	23.97	1.92	25.89	37.00	-11.11	QP	

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

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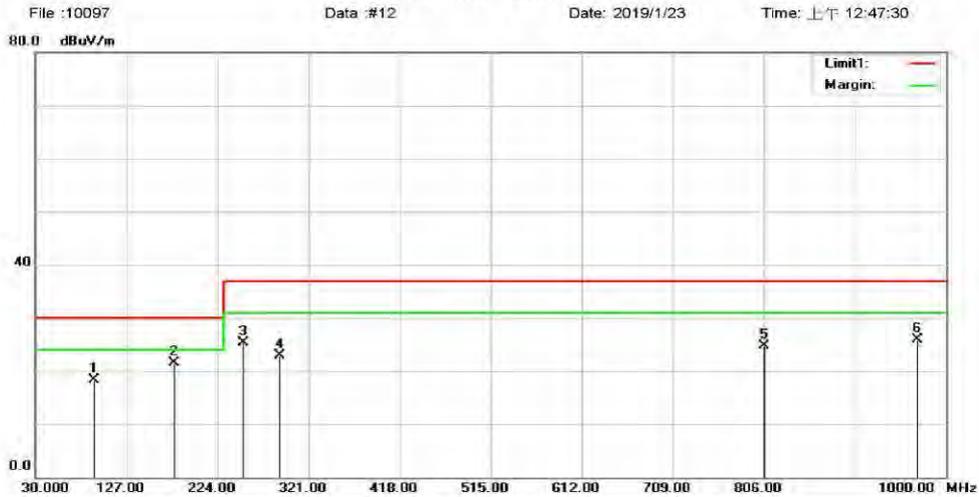
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### Config\_2\_H

Site: SGS 10m Chamber	Polarization: <b>Horizontal</b>	Temperature: 24 °C
Limit: CISPR22 Class B 10M Radiation	Power: From System	Humidity: 66 %
Mode: Config 2	Distance: 10m	
Note: Data Write		

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1		92.0800	35.73	-17.44	18.29	30.00	-11.71	QP	
2	*	178.4100	33.82	-12.28	21.54	30.00	-8.46	QP	
3		251.1600	37.32	-11.99	25.33	37.00	-11.67	QP	
4		290.9300	33.10	-10.29	22.81	37.00	-14.19	QP	
5		806.9700	23.80	0.96	24.76	37.00	-12.24	QP	
6		968.9600	22.84	3.08	25.92	37.00	-11.08	QP	

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

File :10097\Data :#12

Page: 1

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### Config\_2\_V

Site: SGS 10m Chamber      Polarization: **Vertical**      Temperature: 24 °C  
 Limit: CISPR22 Class B 10M Radiation      Power: From System      Humidity: 66 %  
 Mode: Config 2      Distance: 10m  
 Note: Data Write

#### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1		44.5500	34.99	-11.10	23.89	30.00	-6.11	QP	
2	*	99.8400	41.84	-15.93	25.91	30.00	-4.09	QP	
3	!	173.5600	36.36	-11.74	24.62	30.00	-5.38	QP	
4		243.4000	35.54	-12.36	23.18	37.00	-13.82	QP	
5		313.2400	34.66	-9.55	25.11	37.00	-11.89	QP	
6		971.8700	23.41	2.02	25.43	37.00	-11.57	QP	

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

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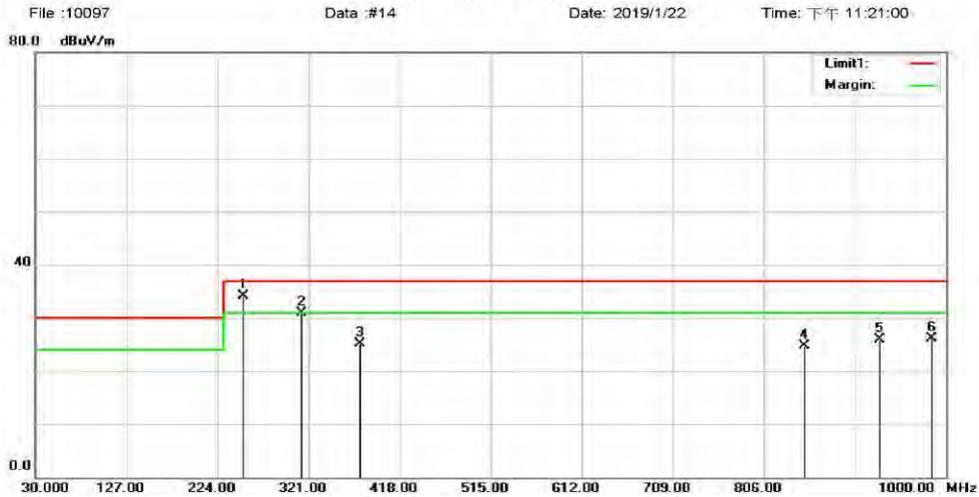
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### Config\_3\_H

Site: SGS 10m Chamber	Polarization: <b>Horizontal</b>	Temperature: 24 °C
Limit: CISPR22 Class B 10M Radiation	Power: From Battery	Humidity: 66 %
Mode: Config 3	Distance: 10m	
Note: Play MP3		

### Radiated Emission



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	251.1600	46.15	-11.99	34.16	37.00	-2.84	QP	
2		313.2400	40.61	-9.79	30.82	37.00	-6.18	QP	
3		376.2900	33.07	-7.94	25.13	37.00	-11.87	QP	
4		849.6500	23.19	1.50	24.69	37.00	-12.31	QP	
5		929.1900	22.91	2.91	25.82	37.00	-11.18	QP	
6		985.4500	23.23	2.88	26.11	37.00	-10.89	QP	

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

File :10097\Data :#14

Page: 1

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### Config\_3\_V

Site: SGS 10m Chamber      Polarization: **Vertical**      Temperature: 24 °C  
 Limit: CISPR22 Class B 10M Radiation      Power: From Battery      Humidity: 66 %  
 Mode: Config 3      Distance: 10m  
 Note: Play MP3

### Radiated Emission



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	251.1600	46.05	-11.79	34.26	37.00	-2.74	QP	
2		313.2400	37.13	-9.55	27.58	37.00	-9.42	QP	
3		773.0200	24.50	0.13	24.63	37.00	-12.37	QP	
4		908.8200	23.93	1.73	25.66	37.00	-11.34	QP	
5		967.9900	23.44	1.94	25.38	37.00	-11.62	QP	
6		990.3000	23.95	2.16	26.11	37.00	-10.89	QP	

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

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### Config\_4\_H

Site: SGS 10m Chamber	Polarization: <i>Horizontal</i>	Temperature: 24 °C
Limit: CISPR22 Class B 10M Radiation	Power: AC 120V/60Hz	Humidity: 66 %
Mode: Config 4	Distance: 10m	
Note: Charging		

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1		52.3100	24.35	-11.07	13.28	30.00	-16.72	QP	
2		156.1000	25.32	-11.17	14.15	30.00	-15.85	QP	
3		557.6800	24.71	-4.04	20.67	37.00	-16.33	QP	
4		763.3200	23.34	0.82	24.16	37.00	-12.84	QP	
5 *		820.5500	25.22	1.16	26.38	37.00	-10.62	QP	
6		929.1900	23.03	2.91	25.94	37.00	-11.06	QP	

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

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### Config\_4\_V

Site: SGS 10m Chamber	Polarization: <b>Vertical</b>	Temperature: 24 °C
Limit: CISPR22 Class B 10M Radiation	Power: AC 120V/60Hz	Humidity: 66 %
Mode: Config 4	Distance: 10m	
Note: Charging		

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1		56.1900	24.89	-11.00	13.89	30.00	-16.11	QP	
2		167.7400	32.30	-11.33	20.97	30.00	-9.03	QP	
3		512.0900	29.12	-4.98	24.14	37.00	-12.86	QP	
4		628.4900	28.09	-2.73	25.36	37.00	-11.64	QP	
5 *		912.7000	28.65	1.78	30.43	37.00	-6.57	QP	
6		990.3000	28.22	2.16	30.38	37.00	-6.62	QP	

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

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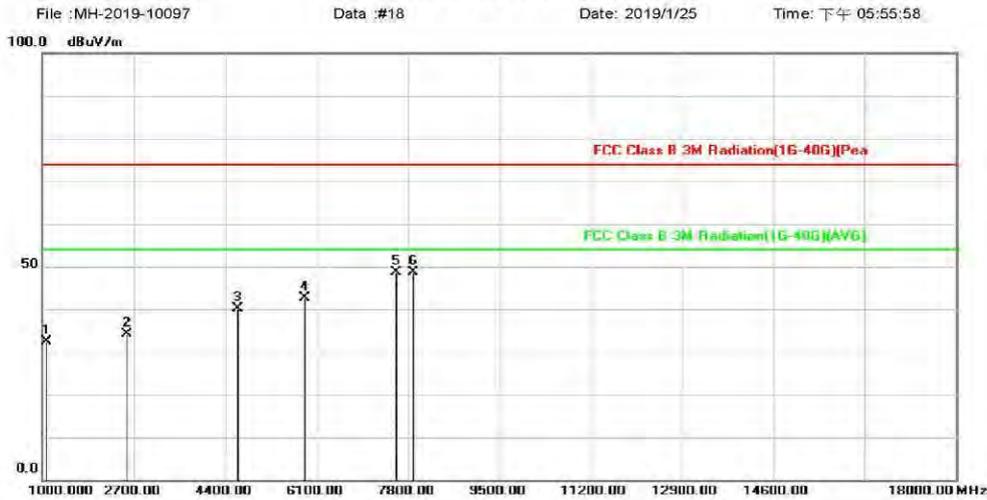
Above 1GHz

1GHz-18GHz

Config\_1\_H

Site: SGS 966 Chamber A  
 Limit: FCC Class B 3M Radiation(1G-40G)(Pea  
 Mode: Config\_1  
 Note: GSM 1900  
 Polarization: **Horizontal**  
 Power: AC 120V/60Hz  
 Distance:  
 Temperature: 20 °C  
 Humidity: 57 %

Radiated Emission



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		1068.000	53.96	-21.61	32.35	74.00	-41.65	peak	
2		2581.000	46.58	-12.54	34.04	74.00	-39.96	peak	
3		4638.000	47.91	-7.67	40.24	74.00	-33.76	peak	
4		5879.000	47.91	-5.34	42.57	74.00	-31.43	peak	
5		7579.000	47.48	1.14	48.62	74.00	-25.38	peak	
6 *		7902.000	46.62	2.10	48.72	74.00	-25.28	peak	

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

File :MH-2019-10097\Data :#18

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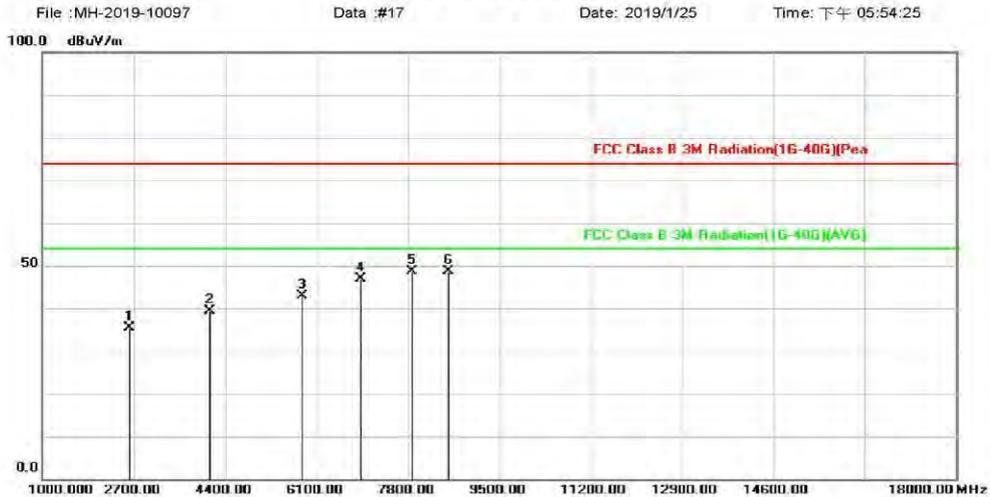
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### Config\_1\_V

Site: SGS 966 Chamber A	Polarization: <b>Vertical</b>	Temperature: 20 °C
Limit: FCC Class B 3M Radiation(1G-40G)(Pea)	Power: AC 120V/60Hz	Humidity: 57 %
Mode: Config_1	Distance:	
Note: GSM 1900		

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1		2615.000	48.01	-12.51	35.50	74.00	-38.50	peak	
2		4111.000	48.32	-8.97	39.35	74.00	-34.65	peak	
3		5845.000	48.23	-5.44	42.79	74.00	-31.21	peak	
4		6933.000	47.42	-0.60	46.82	74.00	-27.18	peak	
5	*	7868.000	46.75	2.00	48.75	74.00	-25.25	peak	
6		8548.000	46.16	2.36	48.52	74.00	-25.48	peak	

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

File :MH-2019-10097\Data :#17

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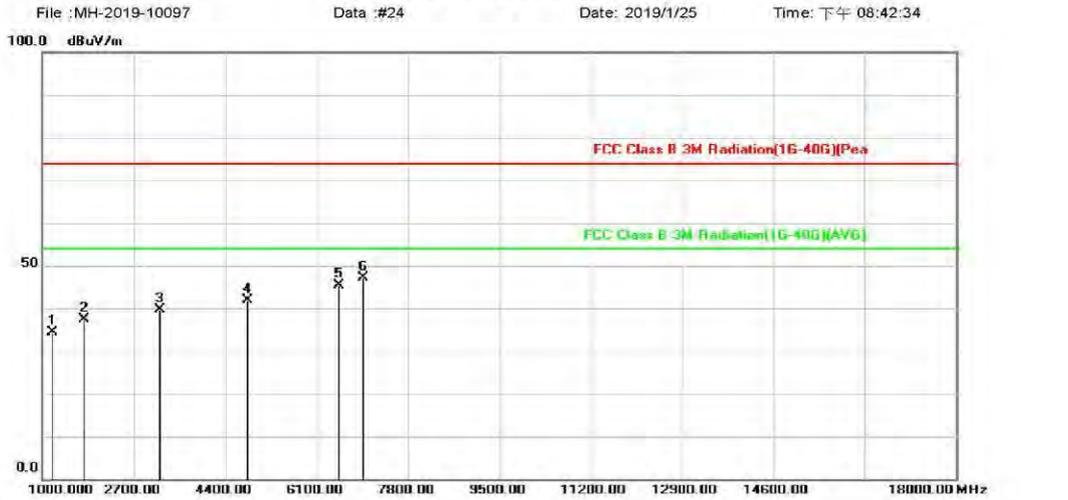
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### Config\_2\_H

Site: SGS 966 Chamber A	Polarization: <b>Horizontal</b>	Temperature: 20 °C
Limit: FCC Class B 3M Radiation(1G-40G)(Pea	Power: From System	Humidity: 57 %
Mode: Config_2	Distance:	
Note: Data Write		

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1		1187.000	55.35	-20.91	34.44	74.00	-39.56	peak	
2		1782.000	55.04	-17.74	37.30	74.00	-36.70	peak	
3		3193.000	51.26	-11.70	39.56	74.00	-34.44	peak	
4		4825.000	49.46	-7.48	41.98	74.00	-32.02	peak	
5		6508.000	47.25	-1.88	45.37	74.00	-28.63	peak	
6	*	6967.000	47.71	-0.50	47.21	74.00	-26.79	peak	

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

File :MH-2019-10097\Data :#24

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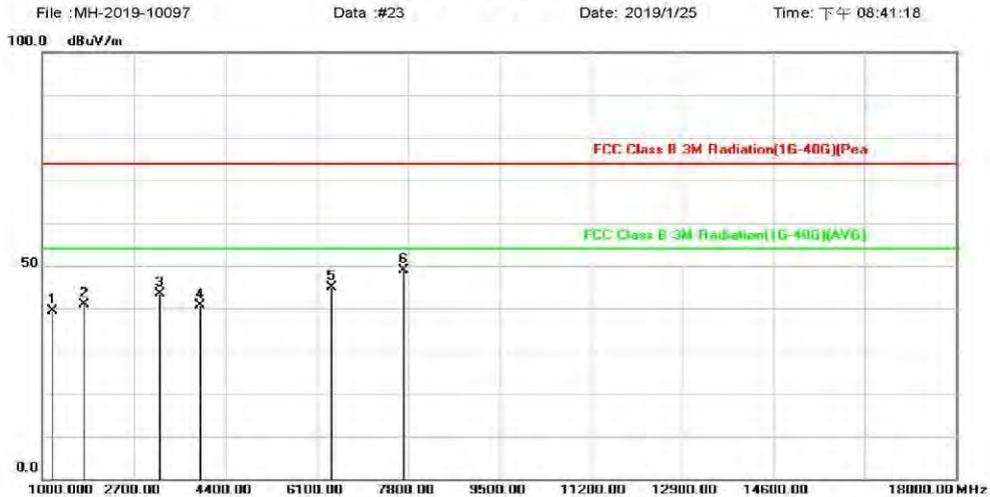
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### Config\_2\_V

Site: SGS 966 Chamber A	Polarization: <b>Vertical</b>	Temperature: 20 °C
Limit: FCC Class B 3M Radiation(1G-40G)(Pea	Power: From System	Humidity: 57 %
Mode: Config_2	Distance:	
Note: Data Write		

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1		1187.000	60.19	-20.91	39.28	74.00	-34.72	peak	
2		1782.000	58.63	-17.74	40.89	74.00	-33.11	peak	
3		3193.000	55.00	-11.70	43.30	74.00	-30.70	peak	
4		3924.000	50.21	-9.55	40.66	74.00	-33.34	peak	
5		6389.000	47.57	-2.58	44.99	74.00	-29.01	peak	
6	*	7715.000	47.25	1.55	48.80	74.00	-25.20	peak	

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

File : MH-2019-10097\Data : #23

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### Config\_3\_H

Site: SGS 966 Chamber A	Polarization: <b>Horizontal</b>	Temperature: 20 °C
Limit: FCC Class B 3M Radiation(1G-40G)(Pea	Power: From Battery	Humidity: 57 %
Mode: Config_3	Distance:	
Note: Play MP3		

### Radiated Emission

File : MH-2019-10097      Data : #20      Date: 2019/1/25      Time: 下午 06:33:08



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2326.000	48.70	-14.03	34.67	74.00	-39.33	peak	
2		2904.000	48.87	-12.27	36.60	74.00	-37.40	peak	
3		4536.000	48.78	-7.76	41.02	74.00	-32.98	peak	
4		4910.000	48.28	-7.38	40.90	74.00	-33.10	peak	
5		5794.000	48.42	-5.58	42.84	74.00	-31.16	peak	
6	*	6746.000	47.91	-1.16	46.75	74.00	-27.25	peak	

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

File : MH-2019-10097\Data : #20

Page: 1

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### Config\_3\_V

Site: SGS 966 Chamber A      Polarization: **Vertical**      Temperature: 20 °C  
 Limit: FCC Class B 3M Radiation(1G-40G)(Pea)      Power: From Battery      Humidity: 57 %  
 Mode: Config\_3      Distance:  
 Note: Play MP3

### Radiated Emission

File : MH-2019-10097      Data : #19      Date: 2019/1/25      Time: 下午 06:31:23



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1		2581.000	48.29	-12.54	35.75	74.00	-38.25	peak	
2		4740.000	48.59	-7.57	41.02	74.00	-32.98	peak	
3		5862.000	48.06	-5.39	42.67	74.00	-31.33	peak	
4		6967.000	47.26	-0.50	46.76	74.00	-27.24	peak	
5	*	8548.000	46.62	2.36	48.98	74.00	-25.02	peak	
6		9126.000	45.43	3.20	48.63	74.00	-25.37	peak	

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

File : MH-2019-10097\Data : #19

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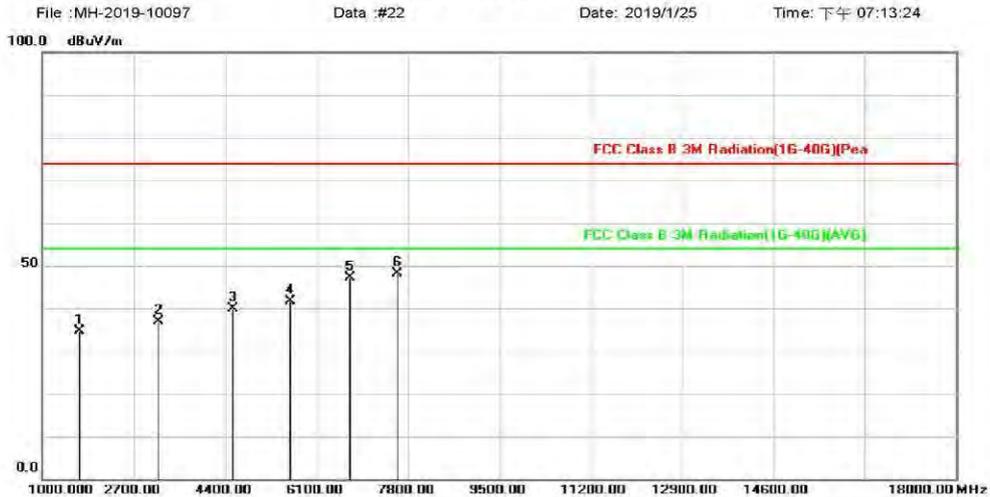
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### Config\_4\_H

Site: SGS 966 Chamber A	Polarization: <b>Horizontal</b>	Temperature: 20 °C
Limit: FCC Class B 3M Radiation(1G-40G)(Pea	Power: AC 120V/60Hz	Humidity: 57 %
Mode: Config_4	Distance:	
Note: Charging		

### Radiated Emission



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		1680.000	52.88	-18.23	34.65	74.00	-39.35	peak	
2		3159.000	48.72	-11.79	36.93	74.00	-37.07	peak	
3		4553.000	47.62	-7.75	39.87	74.00	-34.13	peak	
4		5607.000	47.70	-6.10	41.60	74.00	-32.40	peak	
5		6729.000	48.31	-1.22	47.09	74.00	-26.91	peak	
6 *		7613.000	47.00	1.23	48.23	74.00	-25.77	peak	

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

File :MH-2019-10097\Data :#22

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### Config\_4\_V

Site: SGS 966 Chamber A	Polarization: <b>Vertical</b>	Temperature: 20 °C
Limit: FCC Class B 3M Radiation(1G-40G)(Pea)	Power: AC 120V/60Hz	Humidity: 57 %
Mode: Config_4	Distance:	
Note: Charging		

### Radiated Emission

File :MH-2019-10097      Data :#21      Date: 2019/1/25      Time: 下午 07:12:00



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2122.000	50.43	-15.70	34.73	74.00	-39.27	peak	
2		3091.000	48.62	-11.96	36.66	74.00	-37.34	peak	
3		4349.000	49.50	-8.25	41.25	74.00	-32.75	peak	
4		5488.000	48.09	-6.42	41.67	74.00	-32.33	peak	
5		6746.000	47.71	-1.16	46.55	74.00	-27.45	peak	
6	*	7902.000	46.64	2.10	48.74	74.00	-25.26	peak	

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

File :MH-2019-10097\Data :#21

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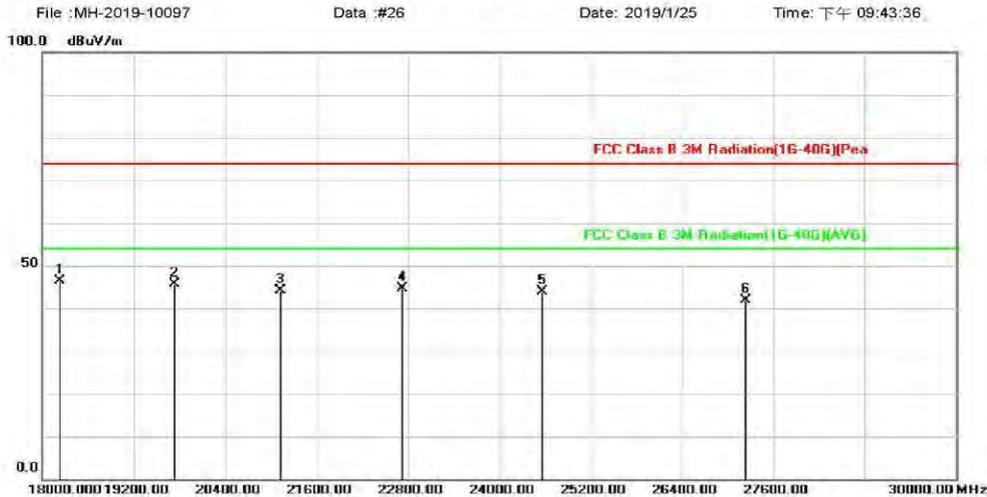
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### 18GHz-30GHz

### Config\_1\_H

Site: SGS 966 Chamber A	Polarization: <b>Horizontal</b>	Temperature: 20 °C
Limit: FCC Class B 3M Radiation(1G-40G)(Pea	Power: AC 120V/60Hz	Humidity: 57 %
Mode: Config_1	Distance:	
Note: GSM 1900		

#### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1	*	18228.000	96.31	-49.93	46.38	74.00	-27.62	peak	
2		19740.000	95.48	-49.90	45.58	74.00	-28.42	peak	
3		21120.000	93.88	-49.65	44.23	74.00	-29.77	peak	
4		22728.000	93.42	-48.90	44.52	74.00	-29.48	peak	
5		24564.000	92.84	-48.93	43.91	74.00	-30.09	peak	
6		27240.000	92.22	-50.45	41.77	74.00	-32.23	peak	

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

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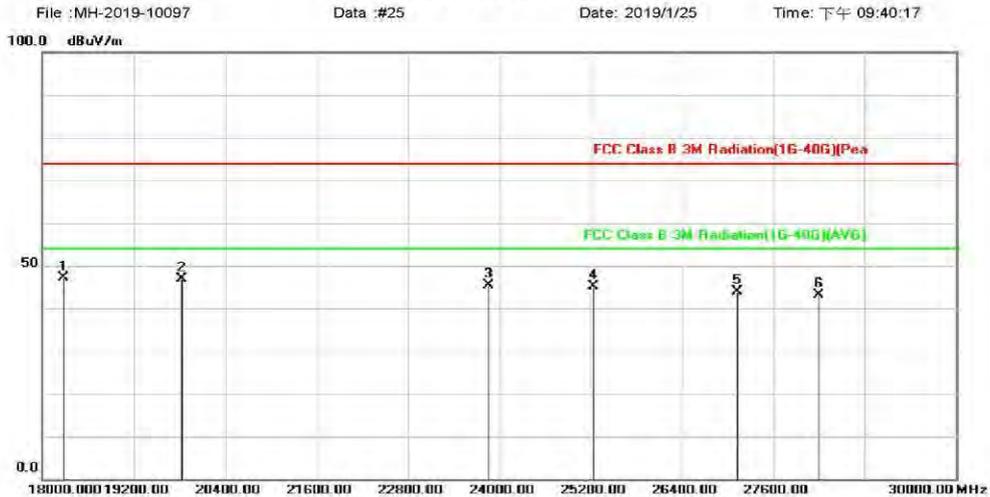
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### Config\_1\_V

Site: SGS 966 Chamber A	Polarization: <b>Vertical</b>	Temperature: 20 °C
Limit: FCC Class B 3M Radiation(1G-40G)(Pea)	Power: AC 120V/60Hz	Humidity: 57 %
Mode: Config_1	Distance:	
Note: GSM 1900		

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1	*	18276.000	97.04	-49.98	47.06	74.00	-26.94	peak	
2		19836.000	96.65	-49.87	46.78	74.00	-27.22	peak	
3		23856.000	94.53	-49.10	45.43	74.00	-28.57	peak	
4		25236.000	94.48	-49.34	45.14	74.00	-28.86	peak	
5		27120.000	94.32	-50.42	43.90	74.00	-30.10	peak	
6		28200.000	94.24	-51.00	43.24	74.00	-30.76	peak	

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

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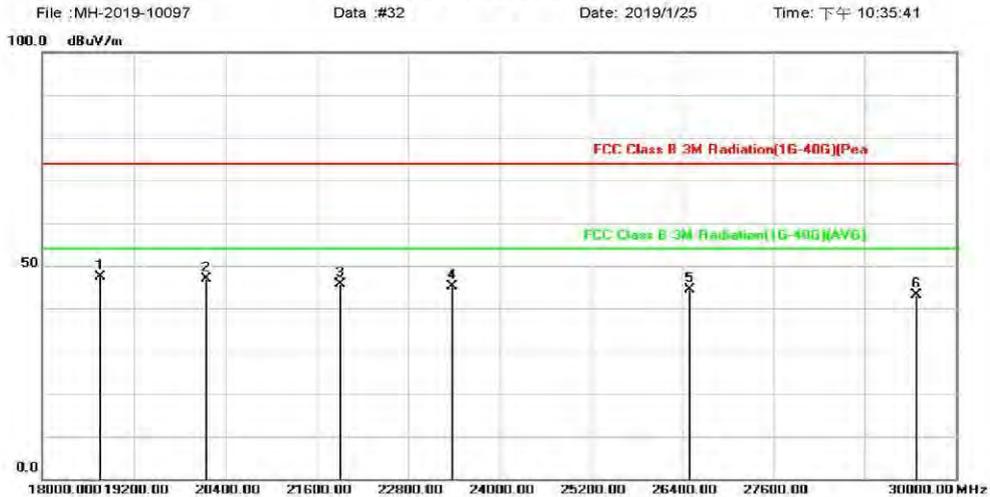
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### Config\_2\_H

Site: SGS 966 Chamber A	Polarization: <b>Horizontal</b>	Temperature: 20 °C
Limit: FCC Class B 3M Radiation(1G-40G)(Pea	Power: From System	Humidity: 57 %
Mode: Config_2	Distance:	
Note: Data Write		

### Radiated Emission



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	18756.000	97.68	-50.20	47.48	74.00	-26.52	peak	
2		20148.000	96.77	-49.77	47.00	74.00	-27.00	peak	
3		21912.000	94.85	-49.25	45.60	74.00	-28.40	peak	
4		23376.000	94.16	-49.05	45.11	74.00	-28.89	peak	
5		26508.000	94.59	-50.10	44.49	74.00	-29.51	peak	
6		29472.000	94.28	-51.12	43.16	74.00	-30.84	peak	

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

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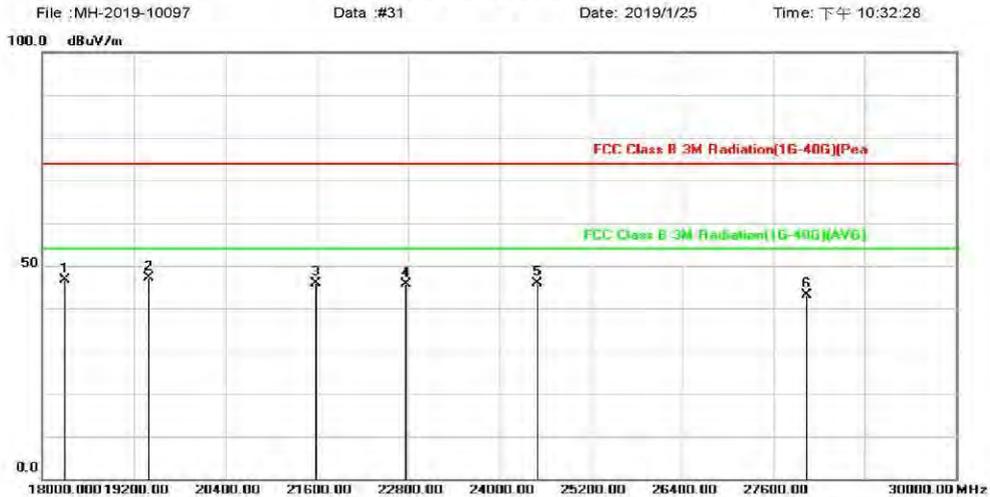
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### Config\_2\_V

Site: SGS 966 Chamber A      Polarization: **Vertical**      Temperature: 20 °C  
 Limit: FCC Class B 3M Radiation(1G-40G)(Pea)      Power: From System      Humidity: 57 %  
 Mode: Config\_2      Distance:  
 Note: Data Write

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1		18288.000	96.69	-49.99	46.70	74.00	-27.30	peak	
2	*	19392.000	97.24	-50.04	47.20	74.00	-26.80	peak	
3		21588.000	95.23	-49.45	45.78	74.00	-28.22	peak	
4		22776.000	94.51	-48.90	45.61	74.00	-28.39	peak	
5		24504.000	94.81	-48.90	45.91	74.00	-28.09	peak	
6		28044.000	93.90	-50.84	43.06	74.00	-30.94	peak	

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

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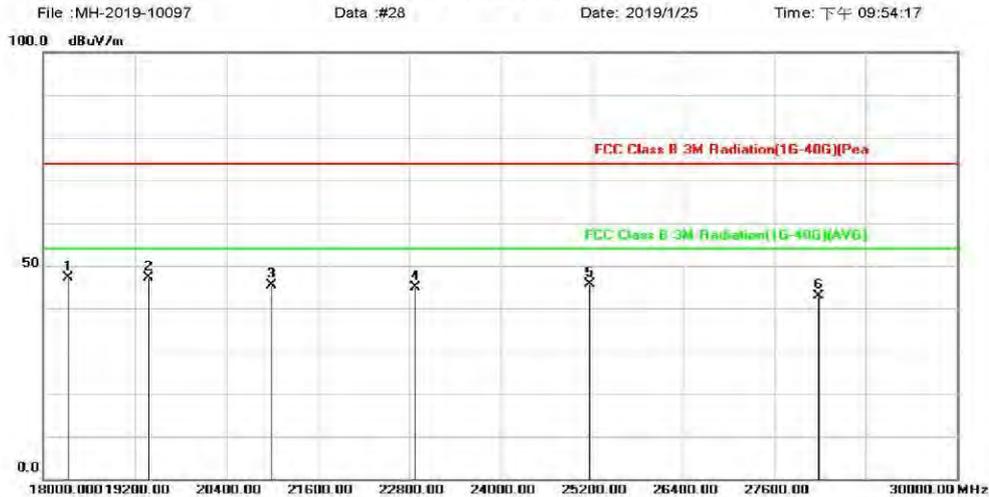
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### Config\_3\_H

Site: SGS 966 Chamber A	Polarization: <b>Horizontal</b>	Temperature: 20 °C
Limit: FCC Class B 3M Radiation(1G-40G)(Pea	Power: From Battery	Humidity: 57 %
Mode: Config_3	Distance:	
Note: Play MP3		

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1	*	18324.000	97.10	-50.02	47.08	74.00	-26.92	peak	
2		19380.000	97.09	-50.05	47.04	74.00	-26.96	peak	
3		21000.000	95.04	-49.70	45.34	74.00	-28.66	peak	
4		22884.000	93.87	-48.90	44.97	74.00	-29.03	peak	
5		25176.000	94.84	-49.28	45.56	74.00	-28.44	peak	
6		28176.000	93.83	-50.98	42.85	74.00	-31.15	peak	

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

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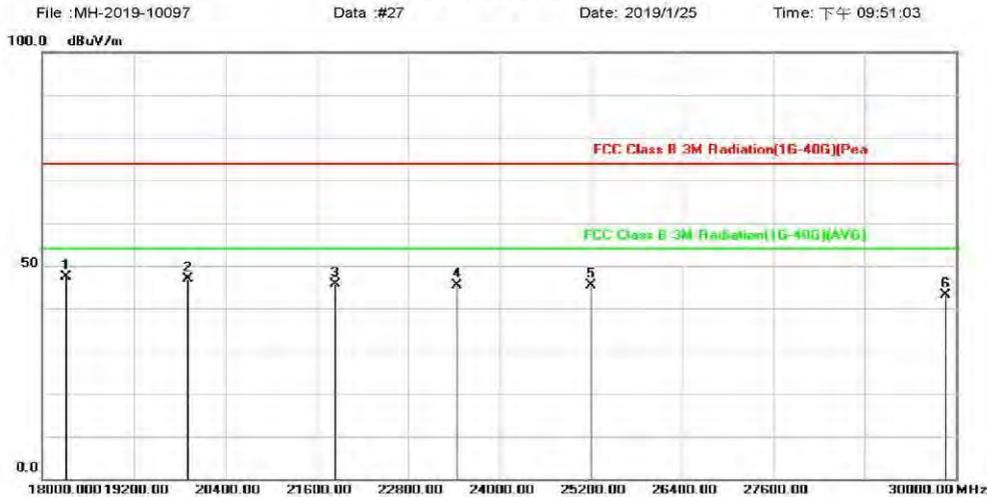
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### Config\_3\_V

Site: SGS 966 Chamber A	Polarization: <b>Vertical</b>	Temperature: 20 °C
Limit: FCC Class B 3M Radiation(1G-40G)(Pea	Power: From Battery	Humidity: 57 %
Mode: Config_3	Distance:	
Note: Play MP3		

### Radiated Emission



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	18312.000	97.43	-50.01	47.42	74.00	-26.58	peak	
2		19908.000	96.67	-49.84	46.83	74.00	-27.17	peak	
3		21840.000	94.83	-49.30	45.53	74.00	-28.47	peak	
4		23448.000	94.41	-49.08	45.33	74.00	-28.67	peak	
5		25212.000	94.67	-49.31	45.36	74.00	-28.64	peak	
6		29856.000	94.48	-51.38	43.10	74.00	-30.90	peak	

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

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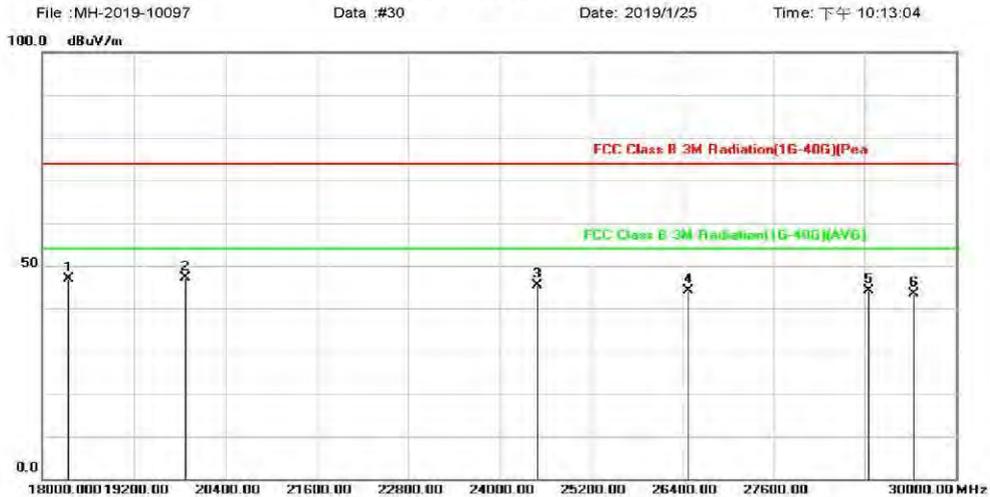
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### Config\_4\_H

Site: SGS 966 Chamber A	Polarization: <b>Horizontal</b>	Temperature: 20 °C
Limit: FCC Class B 3M Radiation(1G-40G)(Pea)	Power: AC 120V/60Hz	Humidity: 57 %
Mode: Config_4	Distance:	
Note: Charging		

### Radiated Emission



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		18336.000	96.88	-50.04	46.84	74.00	-27.16	peak	
2	*	19872.000	96.93	-49.85	47.08	74.00	-26.92	peak	
3		24504.000	94.37	-48.90	45.47	74.00	-28.53	peak	
4		26484.000	94.18	-50.09	44.09	74.00	-29.91	peak	
5		28860.000	95.39	-51.37	44.02	74.00	-29.98	peak	
6		29448.000	94.57	-51.13	43.44	74.00	-30.56	peak	

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

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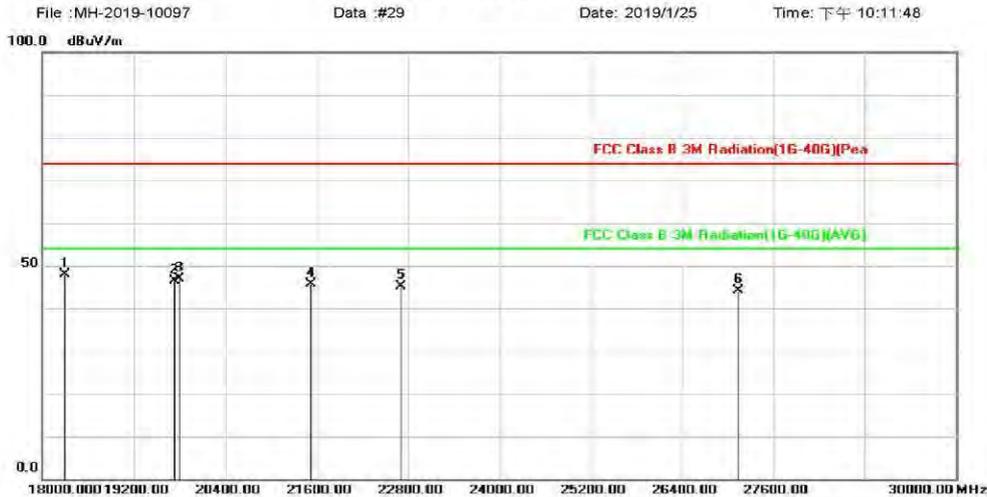
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### Config\_4\_V

Site: SGS 966 Chamber A	Polarization: <b>Vertical</b>	Temperature: 20 °C
Limit: FCC Class B 3M Radiation(1G-40G)(Pea	Power: AC 120V/60Hz	Humidity: 57 %
Mode: Config_4	Distance:	
Note: Charging		

### Radiated Emission



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	18288.000	97.82	-49.99	47.83	74.00	-26.17	peak	
2		19740.000	96.27	-49.90	46.37	74.00	-27.63	peak	
3		19800.000	96.69	-49.88	46.81	74.00	-27.19	peak	
4		21528.000	95.03	-49.48	45.55	74.00	-28.45	peak	
5		22716.000	94.07	-48.90	45.17	74.00	-28.83	peak	
6		27144.000	94.55	-50.43	44.12	74.00	-29.88	peak	

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

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