

FCC ID: APYHRO00269 Report No.: MH/2018/B0213

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# **FCC CERTIFICATION REPORT**

Test Report No. : MH/2018/B0213

**Applicant** : Sharp Corporation, Mobile Communication B.U.

**Address** : 2-13-1, Hachihonmatsu-lida, Higashi-hiroshima-shi, Hiroshima

739-0192, Japan

Manufacturer : Sharp Corporation

**Address** : 1 Takumi-cho, Sakai-ku, Sakai-Shi, Osaka 590-8522, Japan

**Equipment Under Test (EUT):** 

**Product Name** : Cellular Phone

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

FCC Designation Numbers: 916890 / TW1087

Date of Receipt: Nov. 22, 2018

Date of Test : Nov. 22 ~ Dec. 05, 2018

: Dec. 19, 2018 Date of Issue

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.

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

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 Electronics & Communication Laboratory or testing done by SGS Taiwan Electronics & Communication Laboratory in connection with distribution or use of the product described in this report must be approved by SGS Taiwan Electronics & Communication Laboratory in writing.

Lowka Chen
Lowka Chen (Engineer) Tested By: Date Dec. 19, 2018

Date Approved By Dec. 19, 2018

Eddy Cheng (Asst. Supervisor)





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FCC ID: APYHRO00269 Report No.: MH/2018/B0213

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# **Revision History**

Report Number	Revision	Description	Issue Date
MH/2018/B0213	Rev.00	Initial creation of document	Dec. 19, 2018

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# 1.1 Applicant & Manufacturer Information

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Manufacturer : Sharp Corporation

Address of Manufacturer: 1 Takumi-cho, Sakai-ku, Sakai-Shi, Osaka 590-

8522, Japan

# 1.2 General Description of EUT

**Product Name** : Cellular Phone

#### 1.3 Details of EUT

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

Highest operate description : 2480 MHz

Battery : 3.8V, 1680mAh, 6.38Wh

Cradle : Model No.: A

Supplier: A

: CE, Above RE worst case : Config 1 Worst case

Below RE worst case: Config 3

FCC ID : APYHRO00269	DDR	PCB	(Select which one is worst case)
Type~A	Main Source	Main Source	V
Type~B	2 <sup>nd</sup> source-1	Main Source	V
Type~C	2 <sup>nd</sup> source-2	2 <sup>nd</sup> source	Worst case

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Accessories List: AC Charger : Salom/XN-2QC25 Data Cable : L6KU2001-CS-H PHF : Sony / MDR-EX15AP Conversion plug : n/a / SHX11QVA Cradle(In Box) : A	Config 1	Config 2	Config 3	Config 4
Applicable standard		FC	C 15B	
Accessories	EUT + AC Adaptor +USB Cable	II-I I I	EUT + Conversion plug +PHF	EUT +USB Cable + Cradle +Adapter
Main function	Speech	Data Link	Camera	Charging
Additional function				
Description				
radiated emission	GSM 1900 WCDMA BII LTE B02	Data R/W	MP4/ ;REC mode ;play REC	Charging
conducted emission (DC Power)	NA	NA	NA	NA
conducted emission (AC Power)	GSM 1900 WCDMA BII LTE B02	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. Execute 1k source.
- 3. NB & EUT with Link AP-WiFi (2.4G), NB execute ping EUT IP.
- 4. Turn on BT function and connect to the Bluetooth speaker.
- 5. Set up base station, set channel (GSM 1900, WCDMA B2, LTE B2) and transfer
- 6. Set up GPS simulator and turn on GPS test app.
- 7. Start the test.

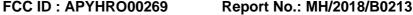
## Config 2

- 1. Let EUT plug in SD Card & SIM Card, connect to NB 1 with USB cable.
- 2. Execute 1k source.
- 3. NB\_2 & EUT with Link AP-WiFi Worst (2.4G), NB execute ping EUT IP.
- 4. Turn on BT function and connect to the Bluetooth speaker.
- 5. Set up GPS simulator and turn on GPS test app.
- 6. Execute Data Read/Write in NB 1 with EUT.
- 7. Start the test.

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#### Confia 3

- 1. Let EUT plug in SD Card & SIM Card.
- 2. Let EUT connect to USB to Audio Cable, headphones, and execute 1k audio
- 3. NB 2 & EUT with Link AP-WiFi Worst (2.4G), NB execute ping EUT IP.
- 4. Turn on BT function and connect to the Bluetooth speaker.
- 5. Set up GPS simulator and turn on GPS test app.
- 6. Turn on the CAMERA function, test the recording function and play the video file.
- 7. Start the test.

# Confia 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. Turn on WiFi function and connect with NB\_2 WiFi-AP, ping EUT IP Address.
- 5. Set up GPS simulator and turn on GPS test app.
- 6. Place 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
Mouse	Logitech	M-U0026	1738HS05FH98
Notebook (RE, HRE)	DELL	Latitude E5430	COVZYW1
Notebook (CE)	DELL	P56F	59WSJ72
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

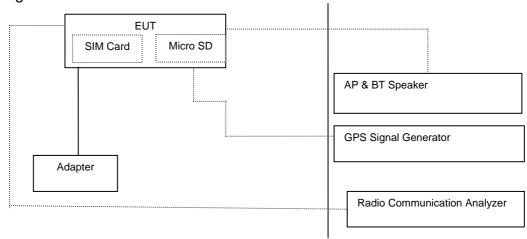
No modification was made by SGS Taiwan Electronics & Communication Laboratory.

#### 1.7 Accessories Cable List

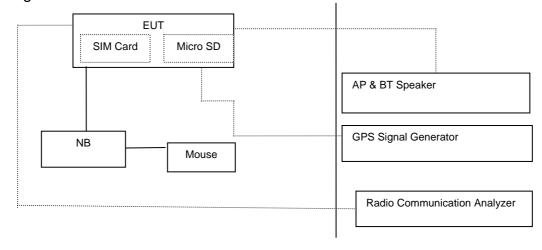
Cable Type	Core	Length	Shielding/Non-shielding
USB Cable	N/A	1m	Shielding
Earphone Cable	N/A	1.25m	Non-shielding

# 1.8 Test Set-Up Configuration

# Config 1



# Config 2



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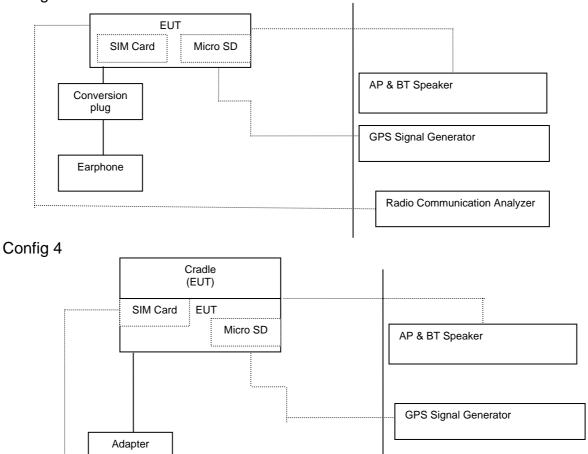
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# Config 3



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Radio Communication Analyzer



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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

Highest Emission					
Standard	Test Type	Result	Phase/Pol.	Frequency(MHz)	Margin(dB)
ECC Dart 15 Cultinant D	Conducted Emission	IS O has all B. Conducted Engineers BACC	Line	0.2060	-12.59 (QP)
FCC Part 15 Subpart B Class B		PASS	Neutral	0.1540	-18.16 (QP)
Class B	Radiated Emission	PASS	Hor.	250.9960	-2.70 (QP)

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#### 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 - 1081000 108 - 500 2000 500 - 1000 5000

Above 1000 5th harmonic of the highest frequency or

40 GHz, whichever is lower

#### 2.3 Limits of Conducted and Radiated Emission

#### 2.3.1 Limits of Conducted Emission

### FCC Part 15, Subpart B/CISPR 22:

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

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

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

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#### 2.3.2 Limits of Radiated Emissions

# FCC Part 15, Subpart B Limit:

Detector Function : Quasi – Peak

- Botootor run	ototor i dilottori i Quadi i out		
FREQUENCY	Class A (at 10m)	Class B (at 3m)	
(MHz)	dBuV/m	dBuV/m	
30~88	39	40	
88~216	43.5	43.5	
216~960	46.44	46	
Above 960	49.54	54	

Detector Function : Peak , Average

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

#### **CISPR 22 Limit:**

Detector Function : Quasi – Peak

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

NOTE 1 The lower limit shall apply at the transition frequency.

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

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

NOTE The lower limit applies at the transition frequency.

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#### 2.4.Test of Conducted Emission

### 2.4.1 Test Equipments

SG	SGS Conducted_Emission HWAYA Conducted Room No.A_EMC										
EQUIPMENT TYPE	Manufacturer	Manufacturer Model Number S		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.						

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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: 20 degree C Humidity: 65 %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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20 °C

30.000

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#### 2.4.4 Measurement Data:

# Config\_1\_L

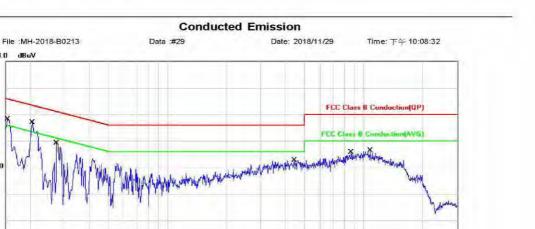
Power:

Conduction Room A Phase: Temperature: Site: L1 AC 120V/60Hz Humidity: 65 % Limit: FCC Class B Conduction(QP)

Mode: Config\_1

0.0 0.150

Note: Type-C (6643418); LTE B02



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1540	51.94	0.04	51.98	65.78	-13.80	QP	
2		0.1540	27.12	0.04	27.16	55.78	-28.62	AVG	
3	*	0.2060	50.75	0.03	50.78	63.37	-12.59	QP	
4		0.2060	35.36	0.03	35.39	53.37	-17.98	AVG	
5		0.2740	43.47	0.05	43.52	61.00	-17.48	QP	
6		0.2740	26.42	0.05	26.47	51.00	-24.53	AVG	
7		4.4340	35.39	0.32	35.71	56.00	-20.29	QP	
8		4.4340	26.72	0.32	27.04	46.00	-18.96	AVG	
9		8.6500	35.76	0.43	36.19	60.00	-23.81	QP	
10		8.6500	26.65	0.43	27.08	50.00	-22.92	AVG	
11		10.8020	36.37	0.49	36.86	60.00	-23.14	QP	
12		10.8020	26.75	0.49	27.24	50.00	-22.76	AVG	

(MHz)

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

0.5

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Power:

Site : Conduction Room A

Limit: FCC Class B Conduction(QP)

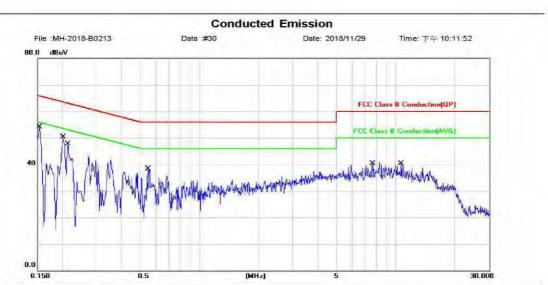
Mode: Config\_1

Note: Type-C (6643418); LTE B02

Phase: AC 120V/60Hz

Temperature: 20 °C

Humidity: 65 %



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1540	47.58	0.04	47.62	65.78	-18.16	QP	
2		0.1540	22.75	0.04	22.79	55.78	-32.99	AVG	
3		0.2020	33.77	0.04	33.81	63.53	-29.72	QP	
4		0.2020	20.35	0.04	20.39	53.53	-33.14	AVG	
5		0.2140	32.79	0.04	32.83	63.05	-30.22	QP	
6	9	0.2140	22.19	0.04	22.23	53.05	-30.82	AVG	
7		0.5500	29.09	0.15	29.24	56.00	-26.76	QP	
8		0.5500	20.86	0.15	21.01	46.00	-24.99	AVG	
9		7.6700	33.49	0.36	33.85	60.00	-26.15	QP	
10		7.6700	25.38	0.36	25.74	50.00	-24.26	AVG	
11	1	10.6900	31.84	0.42	32.26	60.00	-27.74	QP	
12		10.6900	24.01	0.42	24.43	50.00	-25.57	AVG	

\*:Maximum data x:Over limit

File :MH-2018-B0213\Data :#30

Page: 1

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## Config\_2\_L

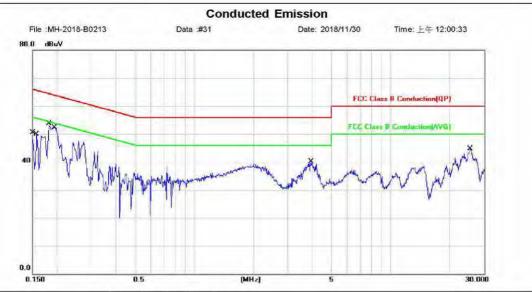
Site : Conduction Room A Phase: L1 From System Power:

Temperature: 20 ℃

Limit: FCC Class B Conduction(QP) Mode: Config\_2

Note: Type-C (6643418); Data Write

Humidity: 65 %



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	44.14	0.04	44.18	66.00	-21.82	QP	
2		0.1500	24.44	0.04	24.48	56.00	-31.52	AVG	
3		0.1580	42.78	0.04	42.82	65.57	-22.75	QP	
4		0.1580	24.31	0.04	24.35	55.57	-31.22	AVG	
5	*	0.1820	50.78	0.03	50.81	64.39	-13.58	QP	
6		0.1820	34.43	0.03	34.46	54.39	-19.93	AVG	
7		0.1940	49.87	0.03	49.90	63.86	-13.96	QP	
8		0.1940	37.40	0.03	37.43	53.86	-16.43	AVG	
9		3.9340	35.11	0.31	35.42	56.00	-20.58	QP	
10		3.9340	26.47	0.31	26.78	46.00	-19.22	AVG	
11		25.3620	39.40	1.13	40.53	60.00	-19.47	QP	
12		25,3620	34.11	1.13	35.24	50.00	-14.76	AVG	

\*:Maximum data x:Over limit Lover margin

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# Config\_2\_N

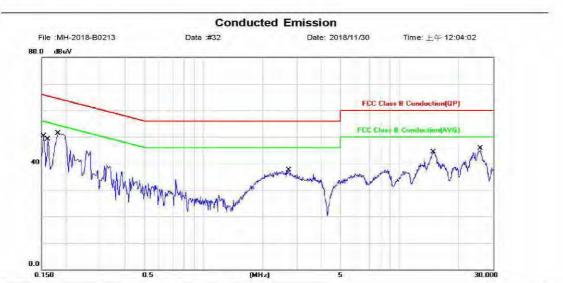
Conduction Room A Site : Limit: FCC Class B Conduction(QP)

Mode: Config\_2

Note: Type-C (6643418); Data Write

Temperature: 20 °C Phase: From System Power:

Humidity: 65 %



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1540	43.42	0.04	43.46	65.78	-22.32	QP	
2		0.1540	25.01	0.04	25.05	55.78	-30.73	AVG	
3		0.1620	41.91	0.04	41.95	65.36	-23.41	QP	
4		0.1620	24.15	0.04	24.19	55.36	-31.17	AVG	
5	*	0.1820	50.17	0.04	50.21	64.39	-14.18	QP	
6		0.1820	32.23	0.04	32.27	54.39	-22.12	AVG	
7		2.7260	32.58	0.28	32.86	56.00	-23.14	QP	
8		2.7260	23.57	0.28	23.85	46.00	-22.15	AVG	
9		14.8300	38.16	0.50	38.66	60.00	-21.34	QP	
10		14.8300	31,99	0.50	32.49	50.00	-17.51	AVG	
11		25.8100	32.95	0.82	33.77	60.00	-26.23	QP	
12		25.8100	27.27	0.82	28.09	50.00	-21.91	AVG	

\*:Maximum data x:Over limit

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20 °C

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# Config\_4\_L

Conduction Room A Site :

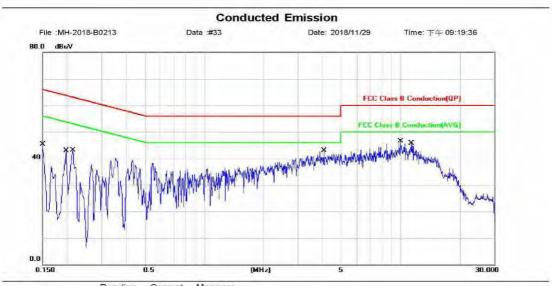
Limit: FCC Class B Conduction(QP)

Mode: Config\_4

Note: Type-C (6643418)

Temperature: Phase: L1

AC 120V/60Hz Humidity: 65 % Power:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	46.24	0.04	46.28	66.00	-19.72	QP	
2		0.1500	23.49	0.04	23.53	56.00	-32.47	AVG	
3		0.1980	38.74	0.03	38.77	63.69	-24.92	QP	
4		0.1980	21.90	0.03	21.93	53.69	-31.76	AVG	
5		0.2140	39.80	0.03	39.83	63.05	-23.22	QP	
6		0.2140	23.95	0.03	23.98	53.05	-29.07	AVG	
7		4.0780	36.45	0.31	36.76	56.00	-19.24	QP	
8	*	4.0780	26.49	0.31	26.80	46.00	-19.20	AVG	
9		10.0420	36.91	0.46	37.37	60.00	-22.63	QP	
10		10.0420	26.24	0.46	26.70	50.00	-23.30	AVG	
11		11.3660	34.60	0.51	35.11	60.00	-24.89	QP	
12		11.3660	25.33	0.51	25.84	50,00	-24.16	AVG	

\*:Maximum data x:Over limit

File :MH-2018-B0213\Data :#33

Page: 1

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# Config\_4\_N

Conduction Room A Phase: Site : Limit: FCC Class B Conduction(QP)

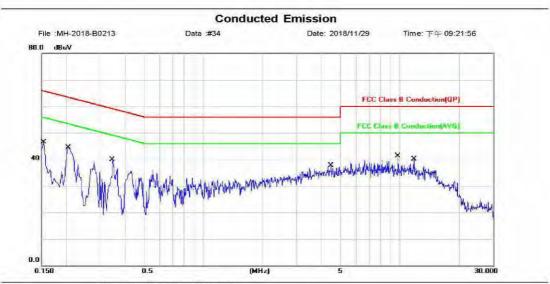
AC 120V/60Hz Power:

Temperature: 20 °C

Humidity: 65 %

Mode: Config\_4

Note: Type-C (6643418)



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1540	41.25	0.04	41.29	65.78	-24.49	QP	
2		0.1540	17.93	0.04	17.97	55.78	-37.81	AVG	
3	*	0.2060	42.71	0.04	42.75	63.37	-20.62	QP	
4		0.2060	28.90	0.04	28.94	53.37	-24.43	AVG	
5		0.3460	35.74	0.09	35.83	59.06	-23.23	QP	
6		0.3460	27.38	0.09	27.47	49.06	-21.59	AVG	
7		4.4780	29.47	0.31	29.78	56.00	-26.22	QP	
8	)	4.4780	21.43	0.31	21.74	46.00	-24.26	AVG	
9		9.8300	30.09	0.40	30.49	60.00	-29.51	QP	
10		9.8300	22.51	0.40	22.91	50.00	-27.09	AVG	
11	1	11.9220	28.35	0.44	28.79	60.00	-31.21	QP	
12		11.9220	20.90	0.44	21.34	50.00	-28.66	AVG	
_									

\*:Maximum data x:Over limit

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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	Calibration	Calibration						
EQUITIVIENT TITE		Woder Number	Number	Date	Due						
EMI Test Receiver	R&S	ESCI 7	100950	2017/12/12	2018/12/11						
EMI Test Receiver	R&S	ESCI 3	101343	2018/1/31	2019/1/30						
Broadband Antenna	SCHWAZBECK	VULB9168	9168-628	2018/9/7	2019/9/6						
Broadband Antenna	SCHWAZBECK	VULB9168	9168-629	2018/9/7	2019/9/6						
Pre Amplifier	EMC Instruments Corp.	EMC330	980178	2018/3/31	2019/3/30						
Pre Amplifier	EMC Instruments Corp.	EMC330	980179	2018/3/31	2019/3/30						
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150917	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	2017/12/31	2018/12/30						
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 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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| 形式方式成列・山東日台本権国列砲人と採出時間、「回野山採出時間が開発人・半報日本建立公司管間に列・不可能力接続。
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#### **Above 1GHz**

	SGS Radiated_Abo	ove_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	
EMI Test Receiver	R&S	ESR 7	101459	2018/2/21	2019/2/20
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA9120D28 5	2018/10/26	2019/10/25
Pre Amplifier	EMC Instruments Corp.	EMC012645B	980216	2018/3/31	2019/3/30
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	<b>EMC Instruments</b>	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	2018/1/12	2019/1/11
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)

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

#### 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: LTE B02 Polarization: Horizontal Power: AC 120V/60Hz

Temperature: 24 °C

Humidity: 66 %

Distance: 10m

Radiated Emission File :MH-2018-B0213 Data #24 Date: 2018/12/1 80.0 dBuV/m



No.	o. Mk.	Freq.	Freq.	Freq.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment			
1		49.4000	24.22	-10.96	13.26	30.00	-16.74	QP				
2		156.1000	24.72	-11 17	13.55	30.00	-16.45	QP				
3		579.9900	24.02	-3.18	20.84	37.00	-16.16	QP				
4		804.0600	23.90	0.91	24.81	37.00	-12.19	QP				
5		928.2200	23.93	2.89	26,82	37.00	-10.18	QP				
6	*	967.0200	24.04	3.10	27.14	37.00	-9.86	QP				

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

File :MH-2018-B0213\Data :#24

Page: 1

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## Config\_1\_V

Site SGS 10m Chamber

Limit: CISPR22 Class B 10M Radiation

Mode: Config\_1 Note: LTE B02 Polarization: Vertical

Power: AC 120V/60Hz

Distance: 10m

Temperature: 24 °C

Humidity: 66 %

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		32.9100	26.37	-11.95	14.42	30.00	-15.58	QP	
2		54.2500	24.03	-10.95	13.08	30.00	-16.92	QP	
3		152.2200	24.00	-10.72	13.28	30.00	-16.72	QP	
4		498.5100	22.82	-5.23	17.59	37.00	-19.41	QP	
5	5+ T.F	800.1800	22.43	0.50	22.93	37.00	-14.07	QP	
6	*	946.6500	22.65	1.92	24.57	37.00	-12.43	QP	

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

File :MH-2018-B0213\Data :#23

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# Config\_2\_H

Site SGS 10m Chamber

Limit: CISPR22 Class B 10M Radiation

Mode: Config\_2 Note: SD card read Polarization: Horizontal From sysetm

Temperature: 24 °C

Humidity: 66 %

Distance: 10m



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		99.8400	31.51	-16.13	15.38	30.00	-14.62	QP	
2		154.1600	26.35	-11 13	15.22	30.00	-14.78	QP	
3		238.5500	31.58	-12.51	19.07	37.00	-17.93	QP	
4		794.3600	23.39	0.82	24.21	37.00	-12.79	QP	
5		916.5800	23.28	2.37	25.65	37.00	-11.35	QP	
6	*	964.1100	23.23	3.13	26.36	37.00	-10.64	QP	

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

File :MH-2018-B0213\Data :#26

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# Config\_2\_V

Site SGS 10m Chamber

Limit: CISPR22 Class B 10M Radiation

Mode: Config\_2 Note: SD card read Polarization: Vertical

From sysetm

Temperature: 24 °C

1000.00 MHz

Humidity: 66 %

Distance: 10m

Radiated Emission

Date: 2018/12/1 Time: 上午 10:51:30



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		71.
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		30.0000	28.18	-12.10	16.08	30.00	-13.92	QP	
2		41.6400	25.70	-11.25	14.45	30.00	-15.55	QP	
3		104.6900	30.45	-14.97	15.48	30.00	-14.52	QP	
4	*	154,1600	31.38	-10.68	20.70	30.00	-9.30	QP	
5		232.7300	30.52	-13.39	17.13	37.00	-19.87	QP	
6	9 0 1	973.8100	22,49	2.08	24.57	37.00	-12.43	QP	

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

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# Config\_3\_H

Site SGS 10m Chamber

Limit: CISPR22 Class B 10M Radiation

Mode: Config\_3 Note: REC

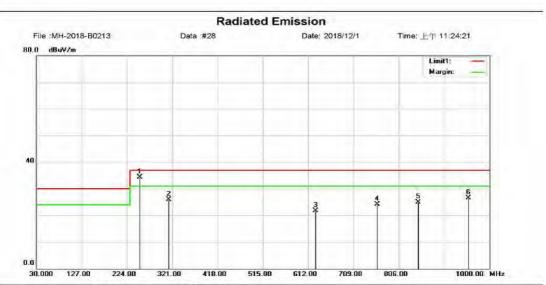
Polarization: Horizontal

From Battery

Distance: 10m

Temperature: 24 °C

Humidity: 66 %



No.	o. Mk.		Reading Level	Correct Factor	Measure- ment	Limit	Over		71.
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	250.9960	46.29	-11.99	34.30	37.00	-2.70	QP	
2		313.7370	35.61	-9.77	25.84	37.00	-11.16	QP	
3		628.4900	23.48	-1.84	21.64	37.00	-15.36	QP	
4		760.4100	23.29	0.77	24.06	37.00	-12.94	QP	
5		847.7100	23.48	1.48	24.96	37.00	-12.04	QP	
6		955.3800	23.33	3.23	26.56	37.00	-10,44	QP	

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

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# Config\_3\_V

Site SGS 10m Chamber

Limit: CISPR22 Class B 10M Radiation

Mode: Config\_3 Note: REC

Polarization: Vertical

From Battery

Distance: 10m

Temperature: 24 °C

Humidity: 66 %

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		39.7000	24.19	-11.50	12.69	30.00	-17.31	QP	
2	*	251.0000	38.97	-11.79	27.18	37.00	-9.82	QP	
3		313.7550	33.58	-9.52	24.06	37.00	-12.94	QP	
4		700.2700	22.69	-1.31	21.38	37.00	-15.62	QP	
5		916.5800	22.64	1.80	24.44	37.00	-12.56	QP	
6		940.8300	22,47	1.95	24.42	37.00	-12.58	QP	

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

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# Config\_4\_H

Site SGS 10m Chamber

Limit: CISPR22 Class B 10M Radiation

Mode: Config\_4

Note:

Polarization: Horizontal

Power: AC 120V/60Hz

Distance: 10m

Temperature: 24 °C

Humidity: 66 %

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		71.
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		54.2500	24.28	-11.25	13.03	30.00	-16.97	QP	
2		144.4600	24.40	-11.26	13.14	30.00	-16.86	QP	
3		561.5600	23.44	-3.88	19.56	37.00	-17.44	QP	
4		749.7400	23.19	0.70	23.89	37.00	-13.11	QP	
5		934.0400	23.17	2.98	26.15	37.00	-10,85	QP	
6	*	973.8100	23.19	3.10	26.29	37.00	-10,71	QP	

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

File :MH-2018-B0213\Data :#30

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## Config\_4\_V

Site SGS 10m Chamber

Limit: CISPR22 Class B 10M Radiation

Mode: Config\_4

Note:

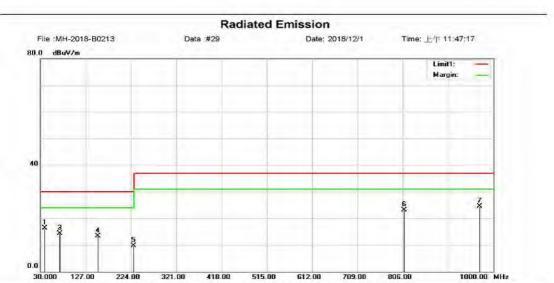
Polarization: Vertical

Power: AC 120V/60Hz

Distance: 10m

Temperature: 24 °C

Humidity: 66 %



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	3-1	77.1	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment	
1		39.7000	27.82	-11.50	16.32	30.00	-13.68	QP		
2		71.7100	27.74	-13.53	14.21	30.00	-15.79	QP		
3		71.7100	27.75	-13.53	14.22	30.00	-15.78	QP		
4		153.1900	24,16	-10.78	13.38	30.00	-16.62	QP		
5		229.8200	23.50	-13.81	9.69	30.00	-20.31	QP		
6		808,9100	22.58	0.50	23.08	37.00	-13,92	QP		
7	*	970.9000	22.42	2.00	24.42	37.00	-12.58	QP		

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

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#### **Above 1GHz**

# 1GHz-18GHz Config 1 H

Distance:

Site SGS 966 Chamber A

Limit: FCC Class B 3M Radiation(1G-40G)(Pea

Mode: Config\_1

Note:

0.0

Polarization: Horizontal Power: AC 120V/60Hz

Temperature: 20 ℃

Humidity: 61 %

Radiated Emission Data :#12 Date: 2018/12/3 Time: 下午 07:38:19 File: B0213 100.0 dBuV/m FCC Class B 3M Radiation(16-406)(Pe

	100	00.000 2700.0	0 4400.00	6100.00	7800.00	9500.00	11200	00 12900.	00 14600.00	18000.00 MHz
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment	
1		4838.963	57.58	-7.30	50.28	74.00	-23.72	peak		
2		4838.963	44.42	-7.30	37.12	54.00	-16.88	AVG		
3		5781.525	57.04	-5.25	51.79	74.00	-22.21	peak		
4	1 1 1	5781.525	44.20	-5.25	38.95	54.00	-15.05	AVG		
5		7275.577	56.27	0.32	56.59	74.00	-17.41	peak		
6		7275.577	43.21	0.32	43.53	54.00	-10.47	AVG		
7		10467.322	54.98	6.72	61.70	74.00	-12.30	peak		
8		10467.322	34.33	6.72	41.05	54.00	-12.95	AVG		
9		14991.400	53,11	9.99	63.10	74.00	-10.90	peak		
10		14991.400	33.25	9.99	43.24	54.00	-10.76	AVG		
11	*	17791.275	53.61	14.38	67.99	74.00	-6.01	peak		
12		17791,275	30.21	14.38	44.59	54.00	-9.41	AVG		

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

File :B0213\Data :#12

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## Config\_1\_V

Distance:

Site SGS 966 Chamber A

1000.000 2700.00

Limit: FCC Class B 3M Radiation(1G-40G)(Pea

Mode: Config\_1

Note:

Polarization: Vertical Power: AC 120V/60Hz

Temperature: 20 ℃

Humidity: 61 %

18000.00 MHz

Radiated Emission File :B0213 Time: 下午 07:34:02 Data :#11 Date: 2018/12/3 100.0 dBuV/m FCC Class B 3M Radiation(16-406)(Pea 50

11200.00

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		4914.515	58.14	-7.21	50.93	74.00	-23.07	peak	
2		4914.515	44.66	-7.21	37.45	54.00	-16.55	AVG	
3		6047.991	56.60	-4.25	52.35	74.00	-21.65	peak	
4	11.	6047.991	43,49	-4.25	39.24	54.00	-14.76	AVG	
5		6656.005	57,35	-1.43	55.92	74.00	-18.08	peak	
6		6656.005	43.68	-1.43	42.25	54.00	-11.75	AVG	
7	1 10	10481.664	55.02	6.80	61.82	74.00	-12.18	peak	
8	*	10481.664	42.15	6.80	48.95	54.00	-5.05	AVG	
9	- 9	14952.075	52.79	9.96	62.75	74.00	-11.25	peak	
10	- 1	14952.075	33.60	9.96	43.56	54.00	-10.44	AVG	
11		17979.314	51.45	15.66	67.11	74.00	-6.89	peak	
12	- 7	17979.314	29.06	15.66	44.72	54.00	-9.28	AVG	

7800 no

File :B0213\Data :#11 Page: 1

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



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20 ℃

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## Config\_2\_H

Site SGS 966 Chamber A

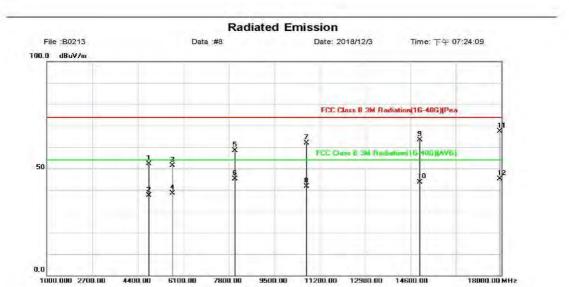
Limit: FCC Class B 3M Radiation(1G-40G)(Pea

Mode: Config\_2

Note:

Polarization: Horizontal Temperature: Power: AC 120V/60Hz Humidity: 61 %

Distance:



No.	o. Mk.	k. Freq.	Freq.	Freq.	lk. Freq.		lk. Freq.	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment						
1		4829.496	59.43	-7.30	52.13	74.00	-21.87	peak							
2		4829.496	44.65	-7.30	37.35	54.00	-16.65	AVG							
3		5712.906	56,95	-5.46	51.49	74.00	-22.51	peak							
4	111	5712.906	43,94	-5.46	38.48	54.00	-15.52	AVG							
5		8042,625	55.87	2.39	58.26	74.00	-15.74	peak							
6		8042.625	42.73	2.39	45.12	54.00	-8.88	AVG							
7	1	10704.423	55.33	6.45	61.78	74.00	-12.22	peak							
8	1	10704.423	35,27	6.45	41.72	54.00	-12.28	AVG							
9	1 19	14954.532	53.32	9.97	63.29	74.00	-10.71	peak							
10	19	14954.532	33.61	9.97	43.58	54.00	-10.42	AVG							
11	*	17946.732	51.82	15.44	67.26	74.00	-6.74	peak							
12	- 7	17946.732	29.62	15.44	45.06	54.00	-8.94	AVG							

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

File :80213\Data :#8

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Distance:

Site SGS 966 Chamber A

Limit: FCC Class B 3M Radiation(1G-40G)(Pea

Mode: Config\_2

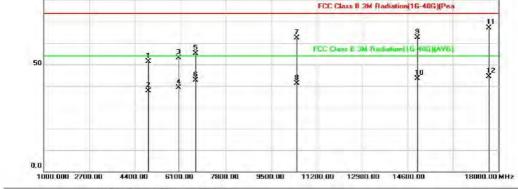
Note:

Polarization: Vertical Power: AC 120V/60Hz

Temperature: 20 ℃

Humidity: 61 %

Radiated Emission File :B0213 Time: 下午 07:20:04 Data :#7 Date: 2018/12/3 100.0 dBuV/m FCC Class B 3M Radiation(16-406)(Pea



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		4912.607	58.58	-7.21	51.37	74.00	-22.63	peak	
2		4912.607	44.77	-7.21	37.56	54.00	-16.44	AVG	
3		6049.619	57,26	-4.24	53.02	74.00	-20.98	peak	
4		6049.619	43,48	-4.24	39.24	54.00	-14.76	AVG	
5	1 1	6679.029	56.46	-1.37	55.09	74.00	-18.91	peak	
6		6679.029	44.07	-1.37	42.70	54.00	-11.30	AVG	
7		10456.086	55.66	6.66	62.32	74.00	-11.68	peak	
8		10456.086	34.38	6.66	41.04	54.00	-12.96	AVG	
9	1 1	14974.410	52.54	9.99	62.53	74.00	-11.47	peak	
10		14974.410	33.50	9.99	43.49	54.00	-10.51	AVG	
11	*	17644.279	53.87	13.38	67.25	74.00	-6.75	peak	
12	-	17644.279	31.02	13.38	44.40	54.00	-9.60	AVG	

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

File :80213\Data :#7

Page: 1

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## Config\_3\_H

Distance:

Site SGS 966 Chamber A

Limit: FCC Class B 3M Radiation(1G-40G)(Pea

Mode: Config\_3

Note:

Polarization: Horizontal Power: AC 120V/60Hz

Temperature: 20 ℃

Humidity: 61 %

Radiated Emission

Time: 下午 07:11:24 Date: 2018/12/3



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		4685.064	58.27	-7.47	50.80	74.00	-23.20	peak	
2		4685.064	43.99	-7.47	36.52	54.00	-17.48	AVG	
3		5750.193	57.72	-5.35	52.37	74.00	-21.63	peak	
4	111	5750.193	43,89	-5.35	38,54	54.00	-15.46	AVG	
5	7 6 6	6413,869	56.86	-1.63	55.23	74.00	-18.77	peak	
6		6413.869	43.04	-1.63	41.41	54.00	-12.59	AVG	
7		10459.130	54.72	6.68	61.40	74.00	-12.60	peak	
8		10459.130	34.76	6.68	41.44	54.00	-12.56	AVG	
9	1 1	14974.260	52.91	9.99	62.90	74.00	-11.10	peak	
10	T = 19	14974.260	33.52	9.99	43.51	54.00	-10.49	AVG	
11	*	17944.245	52.44	15.42	67.86	74.00	-6.14	peak	
12	- 3	17944.245	28.40	15.42	43.82	54.00	-10.18	AVG	

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

File :B0213\Data :#4

Page: 1

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## Config\_3\_V

Distance:

Site SGS 966 Chamber A

1000.000 2700.00

Limit: FCC Class B 3M Radiation(1G-40G)(Pea

Mode: Config\_3

Note:

Polarization: Vertical Power: AC 120V/60Hz

Temperature: 20 ℃

Humidity: 61 %

18000.00 MHz

Radiated Emission File :B0213 Time: 下午 07:06:28 Data :#3 Date: 2018/12/3 100.0 dBuV/m FCC Class B 3M Radiation(16-406)(Pea 50

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1	-	6402.214	56.31	-1.71	54.60	74.00	-19.40	peak	
2		6402.214	43.47	-1.71	41.76	54.00	-12.24	AVG	
3		7277.705	56,40	0.32	56.72	74.00	-17.28	peak	
4	111	7277.705	43,33	0.32	43.65	54.00	-10.35	AVG	
5	7 . 1	7593,373	57.44	1.18	58.62	74.00	-15.38	peak	
6		7593.373	43.17	1.18	44.35	54.00	-9.65	AVG	
7		10709.977	55.09	6.44	61.53	74.00	-12.47	peak	
8	1 1 6	10709.977	35,29	6.44	41.73	54.00	-12.27	AVG	
9		14955.721	52.83	9.97	62.80	74.00	-11.20	peak	
10	7	14955.721	33.40	9.97	43.37	54.00	-10.63	AVG	
11	*	17866.857	52.50	14.89	67.39	74.00	-6.61	peak	
12	-	17866.857	29.91	14.89	44.80	54.00	-9.20	AVG	

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

File :80213\Data :#3

Page: 1

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20 ℃

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## Config\_4\_H

Site SGS 966 Chamber A

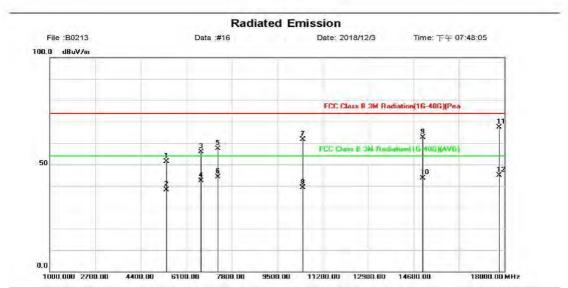
Limit: FCC Class B 3M Radiation(1G-40G)(Pea

Mode: Config\_4

Note:

Polarization: Horizontal Temperature: Power: AC 120V/60Hz Humidity: 61 %

Distance:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		5355.756	57.74	-6.40	51.34	74.00	-22.66	peak	
2		5355.756	44.55	-6.40	38.15	54.00	-15.85	AVG	
3		6664.666	57.22	-1.40	55.82	74.00	-18.18	peak	
4	117	6664,666	43,69	-1.40	42.29	54.00	-11.71	AVG	
5		7293,463	56.98	0.37	57.35	74.00	-16.65	peak	
6		7293,463	43.88	0.37	44.25	54.00	-9.75	AVG	
7	1 1 3	10468.021	54.89	6.73	61.62	74.00	-12.38	peak	
8		10468.021	32.36	6.73	39.09	54.00	-14.91	AVG	
9	1 9	14944.965	52.63	9.97	62.60	74.00	-11.40	peak	
10	1 1 1	14944.965	33.59	9.97	43.56	54.00	-10.44	AVG	
11	*	17816.097	52.86	14.54	67.40	74.00	-6.60	peak	
12	- 1	17816.097	30.35	14.54	44.89	54.00	-9.11	AVG	

Page: 1

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

File :B0213\Data :#16

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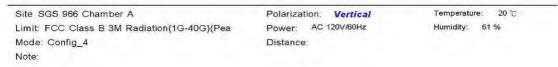
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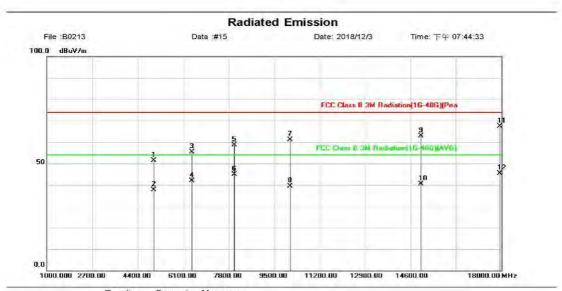
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## Config\_4\_V





No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		5007.754	58.54	-7.09	51.45	74.00	-22.55	peak	
2		5007.754	44.79	-7.09	37.70	54.00	-16.30	AVG	
3		6422.481	57.01	-1.56	55.45	74.00	-18.55	peak	
4		6422.481	43,44	-1.56	41.88	54.00	-12.12	AVG	
5		8008.476	56.13	2.39	58.52	74.00	-15.48	peak	
6		8008.476	42.53	2.39	44.92	54.00	-9.08	AVG	
7		10110.671	56.23	4.80	61.03	74.00	-12.97	peak	
8		10110.671	34,47	4.80	39.27	54.00	-14.73	AVG	
9	1 8	14987.713	52,96	9.99	62.95	74.00	-11.05	peak	
10	- /	14987.713	30.34	9.99	40.33	54.00	-13.67	AVG	
11	*	17945.903	52.03	15.44	67.47	74.00	-6.53	peak	
12	- >	17945.903	29.86	15.44	45.30	54.00	-8.70	AVG	

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

File :B0213\Data :#15 Page: 1

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

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