

FCC ID: APYHRO00256 Report No.: E1/2017/80213

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# FCC CERTIFICATION REPORT

**Test Report No.** : E1/2017/80213

: SHARP CORPORATION, IoT Communication BU **Applicant** 

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

739-0192, Japan

Manufacturer : Sharp Corporation

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

**Equipment Under Test (EUT): Product Name** : Mobile phone

**Standards** : FCC Part 15:2017, Subpart B, Class B

FCC Designation Numbers: 916890 / TW1087

Date of Receipt: Aug. 29, 2017

Date of Test : Aug. 29 ~ Sep. 19, 2017

Date of Issue : Oct. 05, 2017

Test Result: **PASS** 

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

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

This report shall not be reproduced except in full, without the written approval of the laboratory. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

Oct. 05, 2017 Tested By: Ivan Hsieh (Engineer) Date

Approved By Oct. 05, 2017 Date

Eddy Cheng (Asst. Supervisor)



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# **Revision History**

Report Number	Revision	Description	Issue Date
E1/2017/80213	Rev.00	Initial creation of document	Oct. 05, 2017

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# 1. General Information

### 1.1 Applicant & Manufacturer Information

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Address of Applicant : 2-13-1, Hachihonmatsu-lida, Higashi-hiroshima-shi,

Hiroshima, 739-0192, Japan

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 : Mobile phone

#### 1.3 Details of EUT

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

Worst case : Config 4 : CE worst case

> Below RE worst case : Config 2

> Above RE worst case : Config 3

Highest operate description : 1094.4 MHz

. Model No.: XN-2QC25 Adapter

Supplier: SHARP

I/P: AC 100-240V, 50/60Hz, 0.2A

O/P: DC 5.0V, 800mA

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QD25	FCC 15B					
QD23	Config 1	Config 1 Config2		Config 4		
Applicable standard		FCC	15B			
II \\ \mu\ AC Adaptor		+USB Cable	EUT + AC Adaptor (XN-2QC25) +USB Cable	EUT + AC Adaptor (XN-2QC25) + Cradle +USB Cable +EARPHONE		
Main function	Speech	Data Link	Audio	Cradle Charger		
Additional function		BT+WiFI +	GPS+NFC			
Description						
radiated emission	GSM 850/1900 WCDMA B1 LTE B1	Data Read/Write	MP3	Cradle Charger + MP3		
conducted emission (DC Power)	NA	NA	NA	NA		
conducted emission (AC Power)	GSM 850/1900 WCDMA B1 LTE B1	Data Read/Write	MP3	Cradle Charger + MP3		

#### 1.4 Operation Procedure

#### Config 1

- 1. Let EUT install the SIM Card & SD Card.
- 2. Let USB Port of EUT connect to the Adapter.
- 3. Set the BT mouse to pair with EUT.
- 4. Set WiFi to obtain IP Address and execute Ping IP Address.
- 5. Turned on the GPS function & NFC function.
- 6. Set up the base station and test GSM / WCDMA / LTE connection.
- 7. Started the test.

#### Config 2

- 1. Let EUT install the SIM Card & SD Card.
- 2. Let USB Port of EUT connect to the PC and execute Data R/W.
- 3. Set the BT mouse to pair with EUT.
- 4. Set WiFi to obtain IP Address and execute Ping IP Address.
- 5. Turned on the GPS function & NFC function.
- 6. Started the test.

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#### Config 3

- 1. Let EUT install the SIM Card & SD Card.
- 2. Let USB Port of EUT connect to the Adapter.
- 3. Set the BT mouse to pair with EUT.
- 4. Set WiFi to obtain IP Address and execute Ping IP Address.
- 5. Turned on the GPS function & NFC function.
- 6. Played the MP3 music.
- 7. Started the test.

#### Config 4

- 1. Let EUT install the SIM Card & SD Card.
- 2. Let USB Port of EUT connect to the Earphone.
- 3. Set the BT mouse to pair with EUT.
- 4. Set WiFi to obtain IP Address and execute Ping IP Address.
- 5. Turned on the GPS function & NFC function.
- 6. Played the MP3 music.
- 7. Let USB Port of Cradle connect to the Adapter.
- 8. Put the EUT into Cradle to charge.
- 9. Started the test.

#### 1.5 Description of Support Units

Micro SD	Transcend	Micro SDHC (Class4)	N/A
BT Mouse	Logiteck	M555b	N/A
Radio Communication Analyzer	R&S	CMU200	102189
Radio Communication Analyzer	R&S	CMU500	1201.002K50-152303-Zr
AP	BUFFALO	WZR-HP-G300NH2	44066221202559[[G]]
GPS Signal Generator	Spectracom	GSG53 GNSS4	200218
Mouse	DELL	MS111-T	CN-OKW2YH-71616-345-OL7T
Printer	HP	VCVRA-1004	CN33K19J3F
Notebook	DELL	Latitude E5430	COVZYW1

**Support Equipment Used in Tested Cable** 

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

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#### 1.6 Modification List

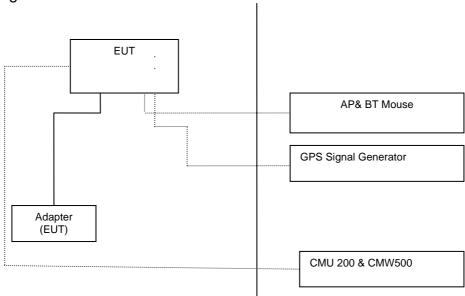
No modification was made by SGS Taiwan Electronics & Communication Laboratory.

#### 1.7 Accessories Cable List

Cable Type	Core	Length	Shielding/Non-shielding
USB Cable	N/A	1M	Shielding
USB to Audio Cable	N/A	0.12M	Shielding
Earphone	N/A	1.25M	Non-shielding

# 1.8 Test Set-Up Configuration

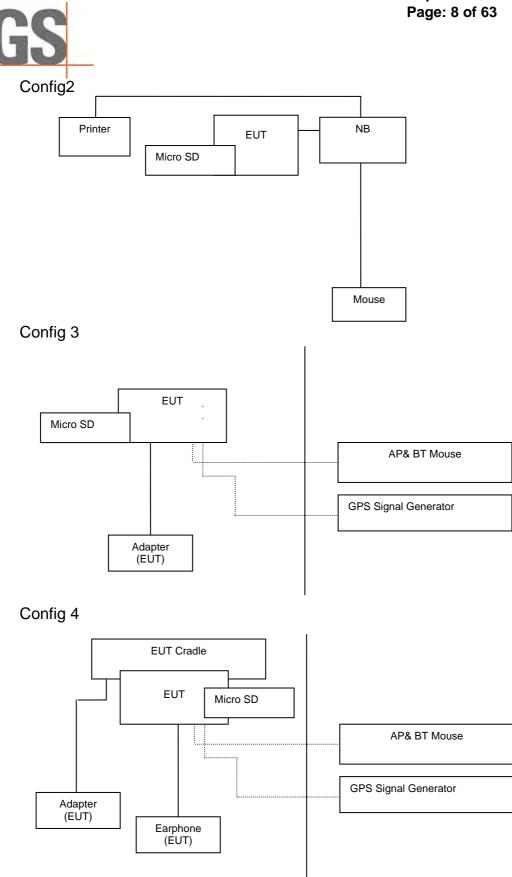
#### Config 1



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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)						
FCC Doub 45 Cub sout D	Conducted Emission	PASS	Line	11.1340	-9.30 (AVG	
FCC Part 15 Subpart B Class B	15 Subpart B Conducted Emission	PASS	Neutral	0.3940	-13.46 (QP)	
Class B	Radiated Emission	PASS	Hor.	171.8800	-4.20 (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

2 Bototor Function : Quadr Tour				
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 (dBuV/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	BuV/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

SC	GS Conducted_Emi	ssion HWAYA Conducte	d Room No.A_E	MC	
EQUIPMENT TYPE	Manufacturer	Model Number	Serial Number	Calibration	Calibration
EQUI MENT THE	Manaradard	Wieder Harriser	Conai Hamboi	Date	Due
EMI Test Receiver	R&S	ESCI 3	101311	2017/6/23	2018/6/22
Coaxial Cables	EMC Instruments	EMCRG58-BM-BM-	160812	2017/8/30	2018/8/29
Coaxiai Cables	Corp	3000	100012	2017/6/30	2010/0/29
LISN	SCHWARZBECK	NSLK 8127	8127-648	2017/6/18	2018/6/17
Pulse Limiter	Narda S.T.S.	PMM PL01	1110X30602	2017/8/12	2018/8/11
LISN	Schwarzbeck	NSLK 8128	NSLK8128-300	2017/9/4	2018/9/3
Universal Digital Radio	R&S	CMU 200	122400	2016/11/9	2017/11/8
Communication Tester	K&S	CIVIU 200	122498	2016/11/9	2017/11/8
Wideband Radio	R&S	CMW 500	150000	2017/2/23	2018/2/22
Communication Tester	Ras	CIVIVV 500	152303	2017/2/23	2010/2/22
Test S/W	Farad	EZ-EMC	Ver. SGS-	N.C.R.	N.C.R.
1621 2/11	гагай	EZ-EIVIC	03A2	N.C.K.	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 (K=2) of conducted emission is 2.25 dB

Expanded uncertainty (K=2) of ISN conducted emission is 2.57 dB

# 2.4.2 Operating Environment

Temperature: 24 degree C Humidity: 64 %RH

Atmospheric Pressure: 992 mBar

#### 2.4.3 Measurement Level Calculation

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

Measurement Level = Reading Level + Factor

Over (Margin) = Measurement Level – Limit

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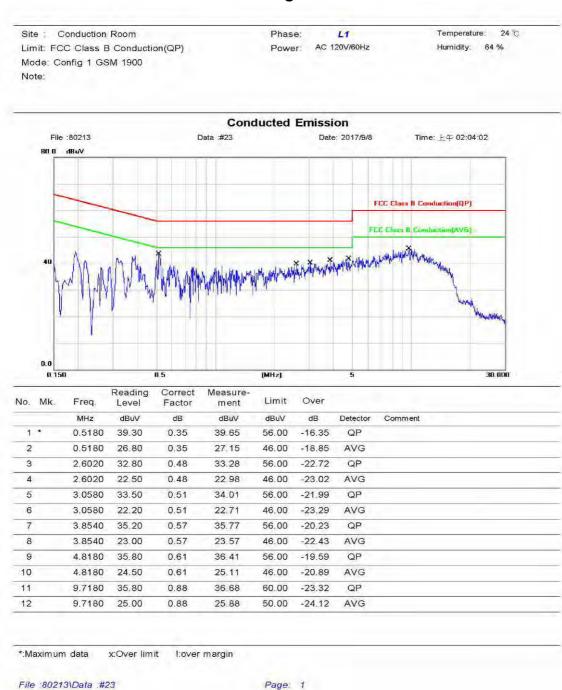
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#### 2.4.4 Measurement Data:

# Config\_1\_L



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SGS Taiwan Ltd.



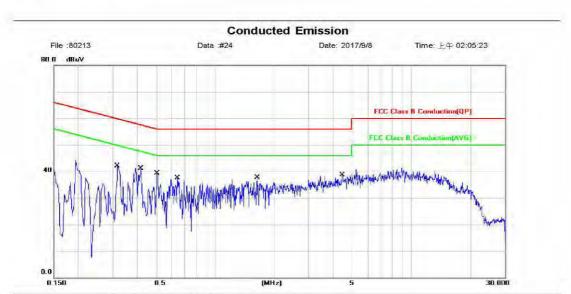
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# Config\_1\_N

Temperature: 24 0 Conduction Room Phase: Site : Limit: FCC Class B Conduction(QP) AC 120V/60Hz Humidity: 64 % Power:

Mode: Config 1 GSM 1900

Note:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.3180	37.00	0.42	37,42	59.76	-22.34	QP	
2		0.3180	24.20	0.42	24.62	49.76	-25.14	AVG	
3	0	0.4180	33.60	0.42	34.02	57.49	-23.47	QP	
4		0.4180	18.20	0.42	18.62	47.49	-28.87	AVG	
5	*	0.5060	33.70	0.42	34.12	56.00	-21.88	QP	
6		0.5060	20.10	0.42	20.52	46.00	-25.48	AVG	
7		0.6420	32.60	0.42	33.02	56.00	-22.98	QP	
8		0.6420	20.70	0.42	21.12	46.00	-24.88	AVG	
9		1.6420	30.00	0.44	30.44	56.00	-25.56	QP	
10		1.6420	19.60	0.44	20.04	46.00	-25.96	AVG	
11		4.4420	31.50	0.48	31.98	56.00	-24.02	QP	
12		4.4420	21.00	0.48	21.48	46.00	-24.52	AVG	

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

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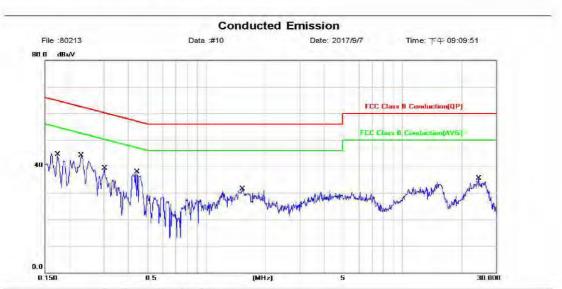
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# Config\_2\_L

Temperature: 24 % Conduction Room Phase: Site : L1 Limit: FCC Class B Conduction(QP) From System Humidity: 64 % Power:

Mode: Config 2 Data Read/Write

Note: AC 120V/60Hz , Internal Sotrage Write



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1740	45.40	0.34	45.74	64.77	-19.03	QP	
2		0.1740	33.30	0.34	33.64	54.77	-21.13	AVG	
3	7 10	0.2300	37.60	0.33	37.93	62.45	-24.52	QP	
4		0.2300	22.70	0.33	23.03	52.45	-29.42	AVG	
5		0.3020	35.50	0.34	35.84	60.19	-24.35	QP	
6		0.3020	28.50	0.34	28.84	50.19	-21.35	AVG	
7		0.4460	32.50	0.34	32.84	56.95	-24.11	QP	
8		0.4460	16.90	0.34	17.24	46.95	-29.71	AVG	-
9		1.5300	29.00	0.41	29.41	56.00	-26.59	QP	
10		1.5300	21.90	0.41	22.31	46.00	-23.69	AVG	
11		24.5940	26.90	1.12	28.02	60.00	-31.98	QP	
12		24.5940	21.60	1.12	22.72	50.00	-27.28	AVG	

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

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Report No.: E1/2017/80213

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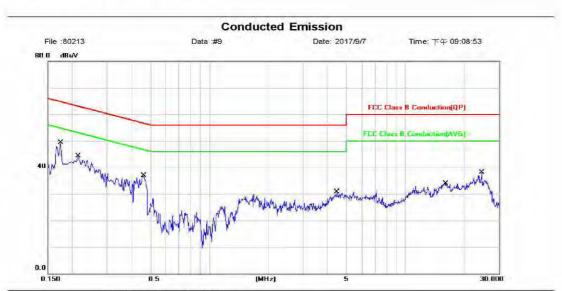


# Config\_2\_N

Temperature: 24 % Conduction Room Phase: Site : N Limit: FCC Class B Conduction(QP) From System Humidity: 64 % Power:

Mode: Config 2 Data Read/Write

Note: AC 120V/60Hz , Internal Sotrage Write



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1740	45.40	0.42	45.82	64.77	-18.95	QP	
2		0.1740	31.20	0.42	31.62	54.77	-23.15	AVG	
3	7	0.2140	42.10	0.41	42.51	63.05	-20.54	QP	
4	11	0.2140	31.20	0.41	31.61	53.05	-21.44	AVG	
5	1	0.4620	35.20	0.42	35.62	56.66	-21.04	QP	
6	*	0.4620	28.70	0.42	29.12	46.66	-17.54	AVG	
7		4.4780	26.20	0.48	26.68	56.00	-29.32	QP	
8		4.4780	21.00	0.48	21.48	46.00	-24.52	AVG	
9		16.1220	28.80	0.71	29.51	60.00	-30.49	QP	
10		16.1220	23.70	0.71	24.41	50.00	-25.59	AVG	
11		24.5500	28.00	0.89	28.89	60.00	-31.11	QP	
12		24.5500	22.70	0.89	23.59	50.00	-26.41	AVG	

\*: Maximum data x:Over limit

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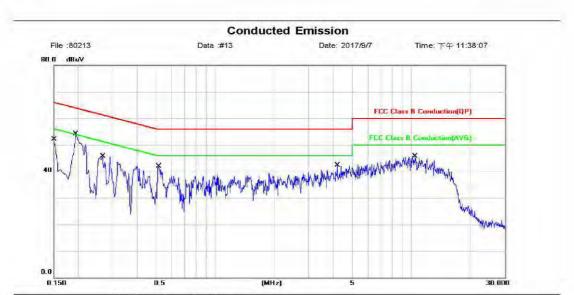
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# Config\_3\_L

Temperature: 24 % Conduction Room Phase: Site : L1 Limit: FCC Class B Conduction(QP) AC 120V/60Hz Humidity: 64 % Power:

Mode: Config 3 MP3

Note:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	44.50	0.34	44.84	66.00	-21.16	QP	
2		0.1500	26.00	0.34	26.34	56.00	-29.66	AVG	
3	*	0.1940	50.80	0.33	51.13	63.86	-12.73	QP	
4		0.1940	37.00	0.33	37.33	53.86	-16.53	AVG	
5		0.2660	41.60	0.33	41.93	61.24	-19.31	QP	
6		0.2660	26.80	0.33	27.13	51.24	-24.11	AVG	
7		0.5140	36.90	0.35	37.25	56.00	-18.75	QP	
8		0.5140	25.90	0.35	26.25	46.00	-19.75	AVG	
9		4.1860	34.10	0.59	34.69	56.00	-21.31	QP	
10		4.1860	23.50	0.59	24.09	46.00	-21.91	AVG	
11		10.4820	35.80	0.89	36.69	60.00	-23.31	QP	
12		10.4820	24.90	0.89	25.79	50.00	-24.21	AVG	

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

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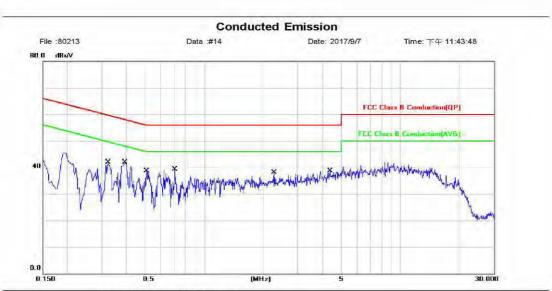
# Config\_3\_N

Temperature: 24 % Conduction Room Phase: Site : AC 120V/60Hz Humidity: 64 % Power:

Limit: FCC Class B Conduction(QP)

Mode: Config 3 MP3

Note:



Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
	0.3220	37.40	0.42	37.82	59.66	-21.84	QP	
	0.3220	26.00	0.42	26.42	49.66	-23.24	AVG	
*	0.3940	39.80	0.42	40.22	57.98	-17.76	QP	
	0.3940	28.10	0.42	28.52	47.98	-19.46	AVG	
	0.5100	33.60	0.42	34.02	56.00	-21,98	QP	
	0.5100	21.70	0.42	22.12	46.00	-23.88	AVG	
	0.7100	31.50	0.43	31.93	56.00	-24.07	QP	
	0.7100	19.20	0.43	19.63	46.00	-26.37	AVG	
	2.2780	29.50	0.45	29.95	56.00	-26.05	QP	
	2.2780	19.20	0.45	19.65	46.00	-26.35	AVG	
	4.3700	30.90	0.48	31.38	56.00	-24.62	QP	
	4.3700	20.70	0.48	21.18	46.00	-24.82	AVG	
	*	MHz 0.3220 0.3220 * 0.3940 0.3940 0.5100 0.5100 0.7100 2.2780 2.2780 4.3700	Mk. Freq. Level  MHz dBuV  0.3220 37.40  0.3220 26.00  * 0.3940 39.80  0.3940 28.10  0.5100 33.60  0.5100 21.70  0.7100 31.50  0.7100 19.20  2.2780 29.50  2.2780 19.20  4.3700 30.90	Mk.         Freq.         Level         Factor           MHz         dBuV         dB           0.3220         37.40         0.42           *         0.3220         26.00         0.42           *         0.3940         39.80         0.42           0.3940         28.10         0.42           0.5100         33.60         0.42           0.5100         21.70         0.42           0.7100         31.50         0.43           0.7100         19.20         0.43           2.2780         29.50         0.45           4.3700         30.90         0.48	Mk.         Freq.         Level         Factor         ment           MHz         dBuV         dB         dBuV           0.3220         37.40         0.42         37.82           0.3220         26.00         0.42         26.42           *         0.3940         39.80         0.42         40.22           0.3940         28.10         0.42         28.52           0.5100         33.60         0.42         34.02           0.5100         21.70         0.42         22.12           0.7100         31.50         0.43         31.93           0.7100         19.20         0.43         19.63           2.2780         29.50         0.45         29.95           2.2780         19.20         0.45         19.65           4.3700         30.90         0.48         31.38	Mk.         Freq.         Level         Factor         ment         Limit           MHz         dBuV         dB         dBuV         dBuV           0.3220         37.40         0.42         37.82         59.66           0.3220         26.00         0.42         26.42         49.66           *         0.3940         39.80         0.42         40.22         57.98           0.3940         28.10         0.42         28.52         47.98           0.5100         33.60         0.42         34.02         56.00           0.5100         21.70         0.42         22.12         46.00           0.7100         31.50         0.43         31.93         56.00           0.7100         19.20         0.43         19.63         46.00           2.2780         29.50         0.45         29.95         56.00           4.3700         30.90         0.48         31.38         56.00	Mk.         Freq.         Level         Factor         ment         Limit         Over           MHz         dBuV         dB         dBuV         dBuV         dB           0.3220         37.40         0.42         37.82         59.66         -21.84           0.3220         26.00         0.42         26.42         49.66         -23.24           *         0.3940         39.80         0.42         40.22         57.98         -17.76           0.3940         28.10         0.42         28.52         47.98         -19.46           0.5100         33.60         0.42         34.02         56.00         -21.98           0.5100         21.70         0.42         22.12         46.00         -23.88           0.7100         31.50         0.43         31.93         56.00         -24.07           0.7100         19.20         0.43         19.63         46.00         -26.35           2.2780         29.50         0.45         29.95         56.00         -26.05           2.2780         19.20         0.45         19.65         46.00         -26.35           4.3700         30.90         0.48         31.38         56.00 <td>Mk.         Freq.         Level         Factor         ment         Limit         Over           MHz         dBuV         dB         dBuV         dBuV         dB         Detector           0.3220         37.40         0.42         37.82         59.66         -21.84         QP           0.3220         26.00         0.42         26.42         49.66         -23.24         AVG           *         0.3940         39.80         0.42         40.22         57.98         -17.76         QP           0.3940         28.10         0.42         28.52         47.98         -19.46         AVG           0.5100         33.60         0.42         34.02         56.00         -21.98         QP           0.5100         21.70         0.42         22.12         46.00         -23.88         AVG           0.7100         31.50         0.43         31.93         56.00         -24.07         QP           0.7100         19.20         0.43         19.63         46.00         -26.37         AVG           2.2780         29.50         0.45         29.95         56.00         -26.05         QP           2.2780         19.20         0.</td>	Mk.         Freq.         Level         Factor         ment         Limit         Over           MHz         dBuV         dB         dBuV         dBuV         dB         Detector           0.3220         37.40         0.42         37.82         59.66         -21.84         QP           0.3220         26.00         0.42         26.42         49.66         -23.24         AVG           *         0.3940         39.80         0.42         40.22         57.98         -17.76         QP           0.3940         28.10         0.42         28.52         47.98         -19.46         AVG           0.5100         33.60         0.42         34.02         56.00         -21.98         QP           0.5100         21.70         0.42         22.12         46.00         -23.88         AVG           0.7100         31.50         0.43         31.93         56.00         -24.07         QP           0.7100         19.20         0.43         19.63         46.00         -26.37         AVG           2.2780         29.50         0.45         29.95         56.00         -26.05         QP           2.2780         19.20         0.

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

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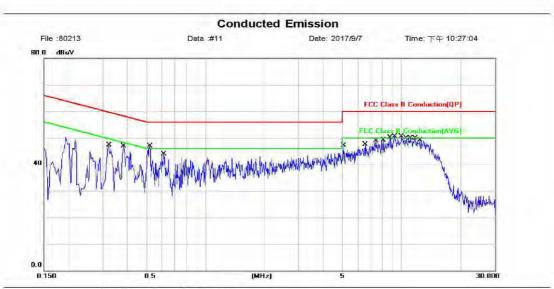


# Config\_4\_L

Temperature: 24 % Conduction Room Phase: Site : L1 Limit: FCC Class B Conduction(QP) AC 120V/60Hz Humidity: 64 % Power:

Note:

Mode: Config 4 Cradle Charger+MP3



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.3220	43.40	0.34	43.74	59.66	-15.92	QP	
2		0.3220	33.40	0.34	33.74	49.66	-15.92	AVG	
3		0.3820	43.50	0.34	43.84	58.24	-14.40	QP	
4		0.3820	30.80	0.34	31.14	48.24	-17.10	AVG	
5		0.5220	42.80	0.35	43,15	56.00	-12.85	QP	
6		0.5220	31.20	0.35	31,55	46.00	-14.45	AVG	
7		0.6140	36.20	0.35	36.55	56.00	-19.45	QP	
8		0.6140	24.20	0.35	24.55	46.00	-21.45	AVG	
9		5.1100	37.30	0.62	37.92	60.00	-22.08	QP	
10		5.1100	27.90	0.62	28.52	50.00	-21.48	AVG	
11		6.5380	39.80	0.67	40.47	60.00	-19.53	QP	
12		6.5380	29.40	0.67	30.07	50.00	-19.93	AVG	
13		7.4100	40.20	0.70	40.90	60.00	-19.10	QP	

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

File :80213\Data :#11

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No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
14		7.4100	29.30	0.70	30.00	50.00	-20,00	AVG	
15		8.1460	40.70	0.74	41.44	60.00	-18.56	QP	
16		8.1460	29.80	0.74	30.54	50.00	-19.46	AVG	
17		8.7660	41.30	0.83	42.13	60.00	-17.87	QP	
18		8.7660	30.20	0.83	31.03	50.00	-18.97	AVG	
19		9.2220	41.00	0.86	41.86	60.00	-18.14	QP	
20		9.2220	30.20	0.86	31.06	50.00	-18.94	AVG	
21		10.0420	41.70	0.89	42.59	60.00	-17.41	QP	
22		10.0420	30.10	0.89	30,99	50.00	-19.01	AVG	
23		10.5900	41.10	0.90	42.00	60.00	-18.00	QP	
24		10.5900	29.90	0.90	30.80	50.00	-19.20	AVG	
25		11.1340	41.50	0.90	42.40	60.00	-17.60	QP	
26	*	11.1340	39.80	0.90	40.70	50.00	-9.30	AVG	
27		11.7620	41.60	0.91	42.51	60.00	-17.49	QP	
28		11.7620	29.50	0.91	30.41	50.00	-19.59	AVG	
29	1	12.4540	40.90	0.91	41.81	60.00	-18.19	QP	
30		12.4540	29.30	0.91	30.21	50.00	-19.79	AVG	

\*: Maximum data x:Over limit Lover margin

File :80213\Data :#11

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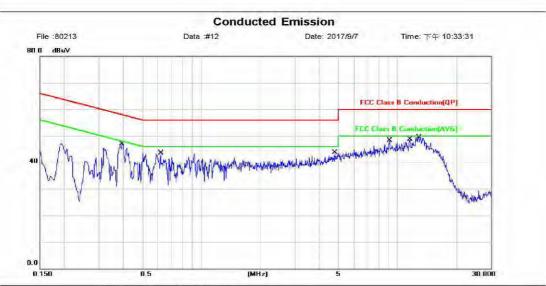
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# Config\_4\_N

Temperature: 24 % Conduction Room Phase: Site : Limit: FCC Class B Conduction(QP) AC 120V/60Hz Humidity: 64 % Power:

Mode: Config 4 Cradle Charger+MP3

Note:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.3940	44.10	0.42	44.52	57.98	-13.46	QP	
2		0.3940	32.00	0.42	32.42	47.98	-15.56	AVG	
3		0.6220	36.80	0.42	37.22	56.00	-18.78	QP	
4		0.6220	21.60	0.42	22.02	46.00	-23.98	AVG	
5		4.7980	35.50	0.48	35.98	56.00	-20.02	QP	
6		4.7980	24.80	0.48	25.28	46.00	-20.72	AVG	
7		9.1380	39.00	0.66	39.66	60.00	-20.34	QP	
8		9.1380	28.50	0.66	29.16	50.00	-20.84	AVG	
9		11.5860	40.20	0.68	40.88	60.00	-19.12	QP	
10		11.5860	28.50	0.68	29.18	50.00	-20.82	AVG	
11		12.9300	41.00	0.69	41.69	60.00	-18.31	QP	
12		12.9300	28.30	0.69	28.99	50.00	-21.01	AVG	

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

File :80213\Data :#12

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#### 2.5 Test of Radiated Emission

#### 2.5.1 Test Equipments

#### **Below 1GHz**

	SGS Radiated_B	selow_1GHz HWAYA	10m_EMC		
EQUIPMENT TYPE	Manufacturer	Model Number	Serial	Calibration	Calibration
EQUIPMENT TYPE	Manufacturer	Model Number	Number	Date	Due
EMI Test Receiver	R&S	ESCI 7	100924	2016/9/30	2017/9/29
EMI Test Receiver	R&S	ESCI 3	101343	2016/12/21	2017/12/20
Broadband Antenna	SCHWAZBECK	VULB9168	9168-628	2017/9/8	2018/9/7
Broadband Antenna	SCHWAZBECK	VULB9168	9168-629	2017/9/12	2018/9/11
Pre Amplifier	EMC Instruments Corp.	EMC330	980178	2017/3/31	2018/3/30
Pre Amplifier	EMC Instruments Corp.	EMC330	980179	2017/3/31	2018/3/30
Coaxial Cable	EMC Instruments	EMCCFD400-NM- NM	150917	2017/9/18	2018/9/17
Coaxial Cable	EMC Instruments	EMCCFD400-NM- NM	150919	2017/9/18	2018/9/17
Coaxial Cable	EMC Instruments	EMCCFD400-NM- NM	150820	2017/9/18	2018/9/17
Coaxial Cable	EMC Instruments	EMCCFD400-NM- NM	150918	2017/9/18	2018/9/17
Coaxial Cable	EMC Instruments	EMCCFD400-NM- NM	150821	2017/9/18	2018/9/17
Coaxial Cable	EMC Instruments	EMCCFD400-NM- NM	150822	2017/9/18	2018/9/17
Universal Digital Radio Communication Tester	R&S	CMU 200	122498	2016/11/9	2017/11/8
Wideband Radio Communication Tester	R&S	CMW 500	152303	2017/2/23	2018/2/22
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	2016/12/31	2017/12/31
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 of radiated emission is 4.09 dB. (30MHz ~ 1000MHz)

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#### **Above 1GHz**

	SGS Radiated	Above_1GHz HWAY	A 966A EMC		
EQUIPMENT TYPE	Manufacturer	Model Number	Serial Number	Calibration Date	Calibration Due
Spectrum Analyzer	R&S	FSV 40	101419	2017/3/1	2018/2/28
EMI Test Receiver	R&S	ESR 7	101459	2017/2/17	2018/2/16
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA9120D67 3	2016/10/14	2017/10/13
Horn Antenna	Schwarzbeck	BBHA9170	BBHA9170-184	2016/12/12	2017/12/11
Pre Amplifier	EMC Instruments Corp.	EMC012645B	980216	2017/4/25	2018/4/24
Pre Amplifier	EMC Instruments Corp.	EMC184045B	980135	2016/10/27	2017/10/26
Coaxial Cable	JUNFLOW	MWX221-NMSNMS	J0778929	2017/4/23	2018/4/22
Coaxial Cable	Huber+Suhner	SUCCOFLEX 104PEA	30255/4PEA	2017/4/23	2018/4/22
Coaxial Cable	EMC Instruments	EMC104-SM-SM	140927	2017/4/23	2018/4/22
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	MY 2152/2	2017/6/5	2018/6/4
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	MY 2153/2	2017/6/5	2018/6/4
Universal Digital Radio Communication Tester	R&S	CMU 200	122498	2016/11/9	2017/11/8
Wideband Radio Communication Tester	R&S	CMW 500	152303	2017/2/23	2018/2/22
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	2017/1/12	2018/1/11
Test S/W	Farad	EZ-EMC	Ver. SGS-03A2	N.C.R.	N.C.R.

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

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

#### 2.5.2 Operating Environment

Temperature: 25 degree C Humidity: 65 %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 B1 Link Polarization: Horizontal

Power: AC 120V/60Hz

Temperature: 25 °C

Distance:

#### 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		196.5600	34.46	-14.76	19.70	30.00	-10.30	QP	
2		262.1300	36.25	-12.15	24.10	37,00	-12.90	QP	
3		851.2500	25.08	0.12	25.20	37,00	-11.80	QP	
4		912.6000	25.03	1.07	26.10	37.00	-10.90	QP	
5	*	968.1900	25.24	1.86	27.10	37.00	-9,90	QP	
6		989.5300	24.98	1.82	26.80	37.00	-10.20	QP	

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

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# Config\_1\_V

Site SGS 10m Chamber

Limit: CISPR22 Class B 10M Radiation

Mode: Config\_1 Note: LTE B1 Link Polarization: Vertical Power: AC 120V/60Hz

Temperature:

Humidity: 65 %

25 °C

Distance:

Radiated Emission

Date: 2017/9/8 Time: 1: = 02:15:07



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		30.5800	30.30	-12 70	17.60	30.00	-12.40	QP	
2	*	68,0100	32.94	-13.24	19.70	30,00	-10.30	QP	
3		817.8800	25.36	-0.26	25.10	37.00	-11.90	QP	
4		912.4000	24.42	1.08	25.50	37.00	-11.50	QP	
5		966.2700	24.60	1.50	26.10	37.00	-10.90	QP	
6		991.1100	24.71	1.79	26.50	37.00	-10.50	QP	

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

File: 80213\Data: #21

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# Config\_2\_H

Site SGS 10m Chamber

Limit: CISPR22 Class B 10M Radiation

Mode: Config\_2

Note: Data Link Internal storage Write

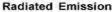
Polarization: Horizontal

From System

Distance:

Temperature: 25 °C

Humidity: 65 %





No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		9, 1, 1
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	171.8800	37.87	-12.07	25.80	30.00	-4.20	QP	
2		234.5500	40.30	-14.00	26,30	37,00	-10.70	QP	
3		262.0900	39.75	-12.15	27.60	37,00	-9,40	QP	
4		879.8800	25.08	0.52	25.60	37.00	-11.40	QP	
5		914.9400	25.17	1.13	26,30	37.00	-10.70	QP	
6		967.3200	25.24	1.86	27.10	37.00	-9,90	QP	

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

File: 80213\Data: #28

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# Config\_2\_V

Site SGS 10m Chamber

Limit: CISPR22 Class B 10M Radiation

Mode: Config\_2

Note: Data Link Internal storage Write

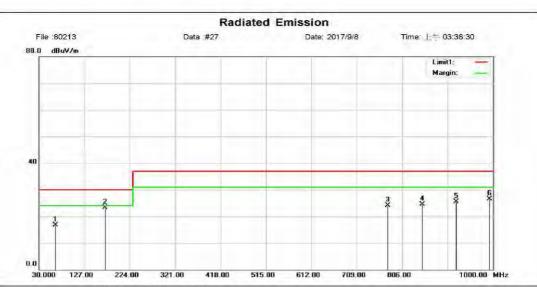
Polarization: Vertical

Power: From System

Distance:

Temperature: 25 °C

Humidity: 65 %



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		9, 1,
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		65.7100	29.52	-12.82	16.70	30.00	-13.30	QP	
2	+	171.4600	35.42	-12.12	23,30	30,00	-6.70	QP	
3		774.2100	24.55	-0.45	24.10	37.00	-12.90	QP	
4		848.3800	24.51	-0.01	24.50	37.00	-12.50	QP	
5		921.3100	24.37	1.13	25.50	37.00	-11.50	QP	
6		991.6500	24.80	1.80	26.60	37.00	-10.40	QP	

File: 80213\Data: #27

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



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# Config\_3\_H

Site SGS 10m Chamber

Limit: CISPR22 Class B 10M Radiation

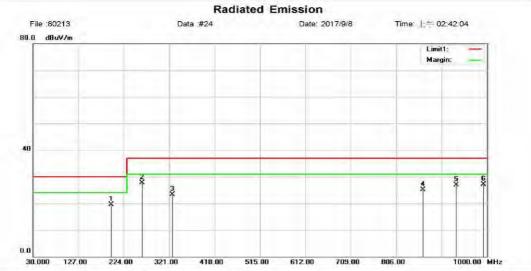
Mode: Config\_3 Note: Audio MP3 Polarization: Horizontal

Power: AC 120V/60Hz

Distance:

Temperature: 25 °C

Humidity: 65 %



		Level	Factor	ment	Limit	Over		
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
	196.5900	34.26	-14.76	19.50	30.00	-10.50	QP	
- 3	262.0700	39.86	-12.16	27.70	37,00	-9,30	QP	
	327.5700	33.48	-10.08	23,40	37.00	-13.60	QP	
	863.0700	24.82	0.28	25.10	37.00	-11.90	QP	
	933.2300	25.37	1.53	26.90	37.00	-10.10	QP	
	992.9500	25.28	1.82	27.10	37.00	-9,90	QP	
		134,000	196.5900 34.26 262.0700 39.86 327.5700 33.48 863.0700 24.82 933.2300 25.37	196.5900 34.26 -14.76 262.0700 39.86 -12.16 327.5700 33.48 -10.08 863.0700 24.82 0.28 933.2300 25.37 1.53	196.5900     34.26     -14.76     19.50       262.0700     39.86     -12.16     27.70       327.5700     33.48     -10.08     23.40       863.0700     24.82     0.28     25.10       933.2300     25.37     1.53     26.90	196.5900     34.26     -14.76     19.50     30.00       262.0700     39.86     -12.16     27.70     37.00       327.5700     33.48     -10.08     23.40     37.00       863.0700     24.82     0.28     25.10     37.00       933.2300     25.37     1.53     26.90     37.00	196.5900     34.26     -14.76     19.50     30.00     -10.50       262.0700     39.86     -12.16     27.70     37.00     -9.30       327.5700     33.48     -10.08     23.40     37.00     -13.60       863.0700     24.82     0.28     25.10     37.00     -11.90       933.2300     25.37     1.53     26.90     37.00     -10.10	196.5900 34.26 -14.76 19.50 30.00 -10.50 QP 262.0700 39.86 -12.16 27.70 37.00 -9.30 QP 327.5700 33.48 -10.08 23.40 37.00 -13.60 QP 863.0700 24.82 0.28 25.10 37.00 -11.90 QP 933.2300 25.37 1.53 26.90 37.00 -10.10 QP

File: 80213\Data: #24

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# Config\_3\_V

Site SGS 10m Chamber

Limit: CISPR22 Class B 10M Radiation

127.00

224.00

Mode: Config\_3 Note: Audio MP3 Polarization: Vertical

Power: AC 120V/60Hz

Temperature: 25 °C Humidity: 65 %

Distance:

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		9, 1, 1
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		30.9200	30.75	-12.65	18.10	30.00	-11.90	QP	
2	*	65.1200	32.22	-12.72	19.50	30,00	-10.50	QP	
3		196.5600	30.76	-14.36	16.40	30.00	-13.60	QP	
4		894.9800	24.30	0.90	25.20	37.00	-11.80	QP	
5		929.3500	24.42	1.18	25.60	37.00	-11,40	QP	
6		991.4500	24.70	1.80	26.50	37.00	-10.50	QP	
_									

515.00

612.00

709.00

File: 80213\Data: #23

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# Config\_4\_H

Site SGS 10m Chamber

Limit: CISPR22 Class B 10M Radiation

Mode: Config\_4

Note: Cradle Charger + MP3

Polarization: Horizontal

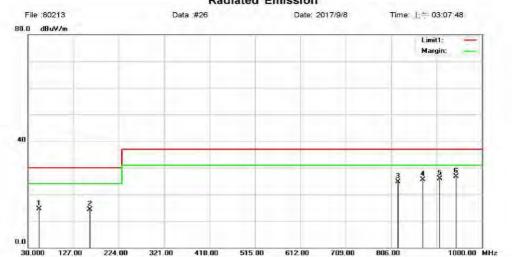
Power: AC 120V/60Hz

Temperature: 25 °C

Humidity: 65 %

Radiated Emission

Distance:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		53.1000	26.15	-11.65	14.50	30.00	-15.50	QP	
2		161.0500	25.93	-11.63	14.30	30,00	-15.70	QP	
3		820.4300	24.99	-0.19	24.80	37.00	-12.20	QP	
4		873.1300	25.08	0.42	25.50	37.00	-11.50	QP	
5		909.5500	24.89	1.01	25.90	37.00	-11.10	QP	
6	*	944.4500	25.02	1.78	26.80	37.00	-10.20	QP	

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#### Config\_4\_V

Site SGS 10m Chamber

Limit: CISPR22 Class B 10M Radiation

Mode: Config\_4

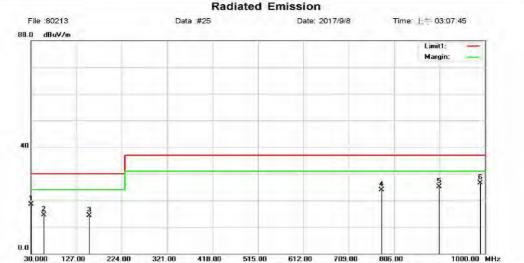
Note: Cradle Charger + MP3

Polarization: Vertical Power: AC 120V/60Hz

Temperature: 25 °C

Humidity: 65 %

Distance:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		9, 1, 1
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		30.3000	31.26	-12.76	18.50	30.00	-11.50	QP	
2		56.9800	26.06	-11.56	14.50	30,00	-15.50	QP	
3		153.4100	25.76	-11.36	14.40	30.00	-15.60	QP	
4		778.6200	24.34	-0.44	23.90	37.00	-13.10	QP	
5		901.3000	24.19	1.01	25.20	37.00	-11.80	QP	
6	*	989.6100	24.72	1.78	26.50	37.00	-10.50	QP	

File: 80213\Data: #25

Page: 1

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prosecuted to the fullest extent of the law.

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



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#### **Above 1GHz**

# Config\_1\_H

Distance:

Site SGS 966 Chamber A

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

Mode: Config\_1 Note: LTE Band 1

0.0

1000 000 2700 00

4400.00

6100.00

7800.00

Polarization: Horizontal Power: AC 120V/60Hz

22 °C Temperature:

Time: 1 = 01:49:41

Humidity: 70 %

18000 00 MHz

Radiated Emission File :E1-2017-80213 Date: 2017/9/13 100.0 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		2598.000	56.00	-13.61	42.39	74.00	-31.61	peak	
2		2870,000	56.92	-13.14	43.78	74.00	-30.22	peak	
3		3346,000	55.97	-11.92	44.05	74.00	-29.95	peak	
4		4570.000	55.29	-8.93	46.36	74.00	-27.64	peak	
5		4893.000	55.60	-7.63	47.97	74.00	-26.03	peak	
6	*	5369,000	56.77	-6.75	50.02	74.00	-23.98	peak	

9500.00

11200 00

12900 00

14600 00

File :E1-2017-80213\Data :#22

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# Config\_1\_V

Site SGS 966 Chamber A

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

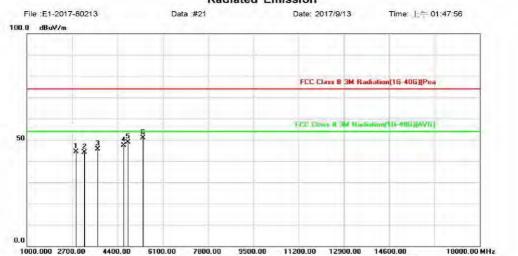
Mode: Config\_1 Note: LTE Band 1 Polarization: Vertical Temperature: 22 °C

Power: AC 120V/60Hz

Humidity: 70 %

Radiated Emission

Distance:



No.	Mk.	Freq.	Level	Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		2853.000	57.43	-13.16	44.27	74.00	-29.73	peak	
2		3159,000	56.52	-12.46	44.06	74,00	-29.94	peak	
3		3669.000	56.39	-10.78	45.61	74,00	-28.39	peak	
4		4638,000	56.13	-8.65	47.48	74.00	-26.52	peak	
5		4791.000	56.80	-8.03	48.77	74.00	-25.23	peak	
6	*	5369,000	57.61	-6.75	50.86	74.00	-23.14	peak	

File :E1-2017-80213\Data :#21

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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: Data Link Internal Storage Write

Polarization: Horizontal

Power: From System

Temperature:

Humidity: 70 %

22 °C

18000.00 MHz

Distance:

Radiated Emission File: E1-2017-80213 Data #24 Date: 2017/9/12 Time: 1: 12:46:37 100.0 dBuV/m

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment	
1		3380.000	58.22	-11.84	46.38	74.00	-27.62	peak		
2		3941,000	57,14	-9.65	47.49	74,00	-26.51	peak		
3		4247.000	57.21	-9.30	47.91	74.00	-26.09	peak		
4		5012.000	57.71	-7.19	50.52	74.00	-23.48	peak		
5		5284.000	57.14	-6.85	50.29	74.00	-23.71	peak		
6	*	5675.000	56.81	-6.21	50.60	74.00	-23.40	peak		

File :E1-2017-80213\Data :#24

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#### Config\_2\_V

Site SGS 966 Chamber A

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

Mode: Config\_2

Note: Data Link Internal Storage Write

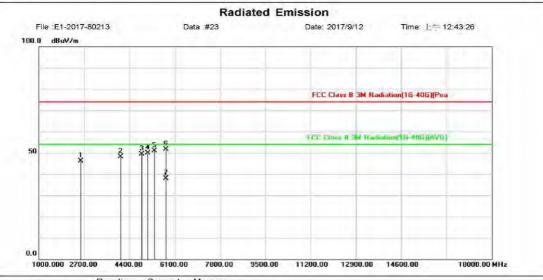
Polarization: Vertical

Power: From System

Temperature: 22 °C

Humidity: 70 %

Distance:



No.	Mk.	Freq.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment	
1		2581.000	59.67	-13.65	46.02	74.00	-27.98	peak		
2		4060,000	57,45	-9,38	48.07	74,00	-25.93	peak		
3		4859.000	57.25	-7.77	49.48	74,00	-24.52	peak		
4		5097.000	57.08	-7.08	50.00	74.00	-24.00	peak		
5		5335.000	57.56	-6.79	50.77	74.00	-23.23	peak		
6		5760.000	57,65	-6.03	51.62	74.00	-22,38	peak		
7	*	5760.000	44.02	-6.03	37.99	54.00	-16.01	AVG		

File :E1-2017-80213\Data :#23

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# Config\_3\_H

Site SGS 966 Chamber A

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

Mode: Config\_3 Note: MP3

Polarization: Horizontal

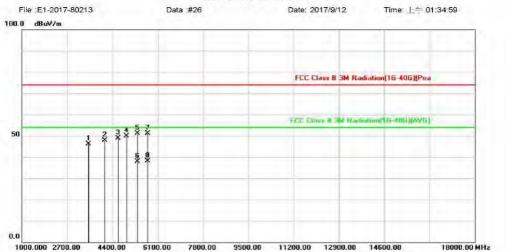
Power: AC 120V/60Hz

Temperature: 22 °C

Humidity: 70 %

Distance:

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		3499.000	57.63	-11.50	46.13	74.00	-27.87	peak	
2		4111.000	57.26	-9.36	47.90	74,00	-26.10	peak	
3		4621,000	57.62	-8.72	48.90	74.00	-25.10	peak	
4		4927.000	57.46	-7.48	49.98	74.00	-24.02	peak	
5		5335.000	57.96	-6.79	51.17	74.00	-22.83	peak	
6		5335.000	44.56	-6.79	37.77	54.00	-16.23	AVG	
7		5726.000	57.26	-6.10	51.16	74.00	-22.84	peak	
8	*	5726.000	44.11	-6.10	38.01	54.00	-15.99	AVG	

File: E1-2017-80213\Data: #26

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#### Config\_3\_V

Site SGS 966 Chamber A

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

Mode: Config\_3 Note: MP3

Polarization: Vertical

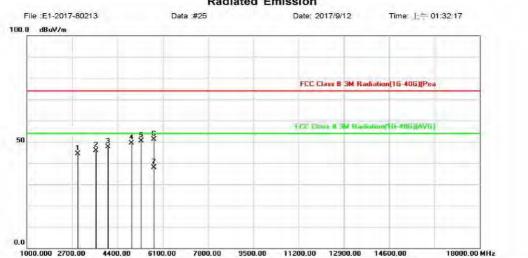
Power: AC 120V/60Hz

Temperature: 22 °C

Humidity: 70 %

Radiated Emission

Distance:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		2904.000	57.52	-13.07	44.45	74.00	-29.55	peak	
2		3601,000	57,03	-11.08	45.95	74,00	-28.05	peak	
3		4043.000	57.01	-9.38	47,63	74.00	-26.37	peak	
4		4927.000	56.91	-7,48	49.43	74.00	-24.57	peak	
5		5301.000	57.20	-6.84	50.36	74.00	-23.64	peak	
6		5777.000	57.06	-5.99	51.07	74.00	-22.93	peak	
7	*	5777.000	43.96	-5.99	37.97	54.00	-16.03	AVG	

File :E1-2017-80213\Data :#25

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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: Cradle Charger + MP3

Polarization: Horizontal Temperature:

22 °C

Power: AC 120V/60Hz

Humidity: 70 %

Distance:

Radiated Emission File: E1-2017-80213 Data #28 Date: 2017/9/12 Time: 1:= 02:19:05 100.0 dBuV/m 4400.00 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		4043.000	57.55	-9.38	48.17	74.00	-25.83	peak		
2		4281,000	57,66	-9.28	48,38	74,00	-25.62	peak		
3		4757.000	57.76	-8.17	49.59	74.00	-24.41	peak		
4		5012.000	57.41	-7.19	50.22	74.00	-23.78	peak		
5		5318.000	57.10	-6.83	50.27	74.00	-23.73	peak		
6	*	5794.000	56.59	-5.95	50.64	74.00	-23.36	peak		

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



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# Config\_4\_V

Site SGS 966 Chamber A

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

Mode: Config\_4

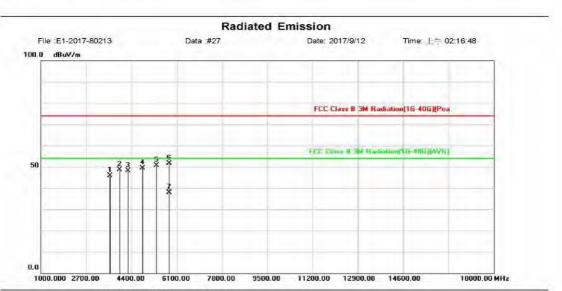
Note: Cradle Charger + MP3

Polarization: Vertical Power: AC 120V/60Hz

Temperature: 22 °C

Humidity: 70 %

Distance:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		3584.000	57.02	-11.15	45.87	74.00	-28.13	peak	
2		3958.000	58.18	-9.57	48.61	74.00	-25.39	peak	
3		4264,000	57.36	-9.29	48.07	74.00	-25.93	peak	
4		4808.000	57.42	-7.97	49.45	74.00	-24.55	peak	
5	,	5335.000	57.34	-6.79	50.55	74.00	-23.45	peak	
6		5811.000	57,44	-5.91	51.53	74.00	-22.47	peak	
7	*	5811.000	43.88	-5.91	37.97	54.00	-16.03	AVG	

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