

FCC CERTIFICATION REPORT

Test Report No. : MH/2018/30032
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 : Smart phone

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

Date of Receipt : Mar. 07, 2018
Date of Test : Mar. 07 ~ 28, 2018
Date of Issue : Apr. 09, 2018

Test Result :	PASS
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In the configuration tested, the EUT complied with the standards specified above.

Remarks :

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

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Tested By:

Thomas Liu

Thomas Liu (Engineer)

Date

Apr. 09, 2018

Approved By

Eddy Cheng

Eddy Cheng (Asst. Supervisor)

Date

Apr. 09, 2018



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Revision History

Report Number	Revision	Description	Issue Date
MH/2018/30032	Rev.00	Initial creation of document	Apr. 09, 2018

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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 : Smart phone

1.3 Details of EUT

Power Supply : AC 100~240V, 50/60Hz
Highest operate description : 1886 MHz
Battery : Model No.: UBATIA286AFN2
Supplier: SCUD(FUJIAN) Electronics Co., Ltd.
3.85V, 3130mAh
Worst case : CE worst case : Config 3
Below RE worst case : Config 2
Above RE worst case : Config 1

Normal Memory	V
LP4: Samsung / UPC: Toshiba	V
LP4: Samsung / UPC: Samsung	V
LP4: Micron / UPC: Toshiba	Worst case
LP4: Micron / UPC: Samsung	V

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Accessories List: AC Charger : HOSIDEN/AC アダプタ 06 Data Cable : Luxshare-ICT/L6KU3003-CS-R Headset : Sony / MDR-EX15AP			
Applicable standard	FCC 15B		
Accessories	EUT + AC Adaptor +USB Cable +PHF	EUT +USB Cable +PHF	EUT + AC Adaptor +USB Cable +PHF
Main function	Speech	Data Link	Camera
Additional function	BT+WiFi +NFC		
Description			
radiated emission	GSM 850/1900 WCDMA BV LTE B05/B12/B17	Data R/W	MP3/ ;REC mode (Front/Back) ;play REC
conducted emission (DC Power)	NA	NA	NA
conducted emission (AC Power)	GSM 850/1900 WCDMA BV LTE B05/B12/B17	Data R/W	MP3/ ;REC mode (Front/Back) ;play REC

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. Let EUT connect to headphones and play 1k sound source.
3. NB & EUT Link AP-WiFi (5G/2.4G) and ping EUT IP.
4. BT connect to Bluetooth speaker and turn on NFC function.
5. Set up base station, set channel (GSM 850/1900,WCDMA B5,LTE B5/B12/B17) and transmit data.
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 and turn it on.
2. Let EUT connect to headphones and play 1k sound source.
3. NB_2 & EUT Link AP-WiFi Worst(5G/2.4G) and ping EUT IP.
4. BT connect to Bluetooth speaker and turn on NFC function.
5. Set up GPS simulator and turn on GPS test app.
6. NB_1 and EUT execute Data Read/Write.
7. Start the test.

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Config 3

1. Let EUT plug in SD Card & SIM Card, connect to Adapter with USB cable and turn it on.
2. Let EUT connect to headphones and play 1k sound source.
3. NB_2 & EUT Link AP-WiFi Worst(5G/2.4G) and ping EUT IP.
4. BT connect to Bluetooth speaker and turn on NFC function.
5. Set up GPS simulator and turn on GPS test app.
6. Turn on the CAMERA function of EUT to test front and rear camera recordings and video play video files.
7. Start the test.

1.5 Description of Support Units

PRODUCT	MANUFACTURER	MODEL NO.	SERIAL NO.
SIM Card	R&S	CMW-Z05	8952530076180138474
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 (HRE.RE)	DELL	P56F	59WSJ72
Notebook (CE)	DELL	Latitude E5430	COVZYW1
Mouse (HRE.RE,CE)	DELL	MS111-T	CN-OKW2YH-71616-345-OL7T
Printer (HRE.RE,CE)	HP	VCVRA-1004	CN33K19J3F
Micro SD	Transcend	Micro SDHC (Class4)	N/A
Adapter	HOSIDEN	AC アダプタ 06	N/A
Earphone	Sony	MDR-EX15AP	N/A

Support Equipment Used in Tested Cable

Cable Type	Core	Length	Shielding/Non-shielding
USB Cable	N/A	1m	Shielding
Earphone	N/A	1.3m	Non-shielding

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
N/A	N/A	N/A	N/A

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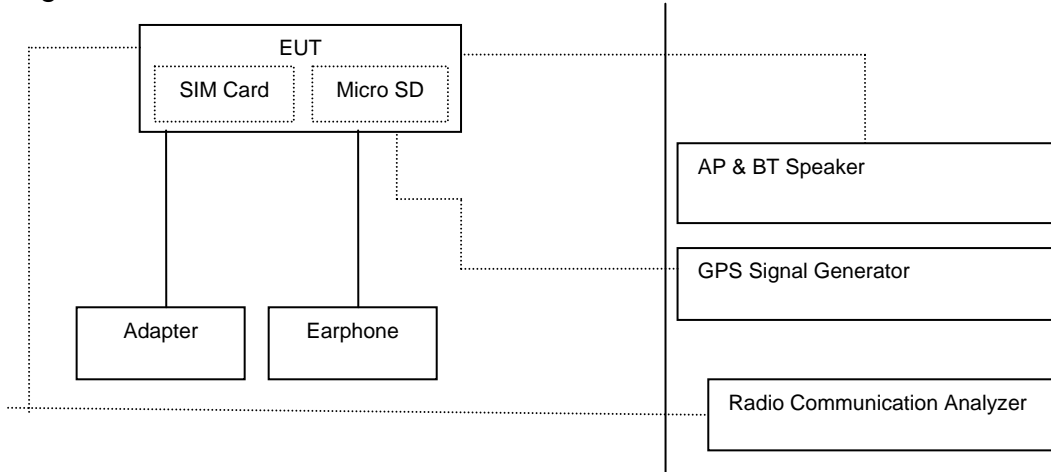
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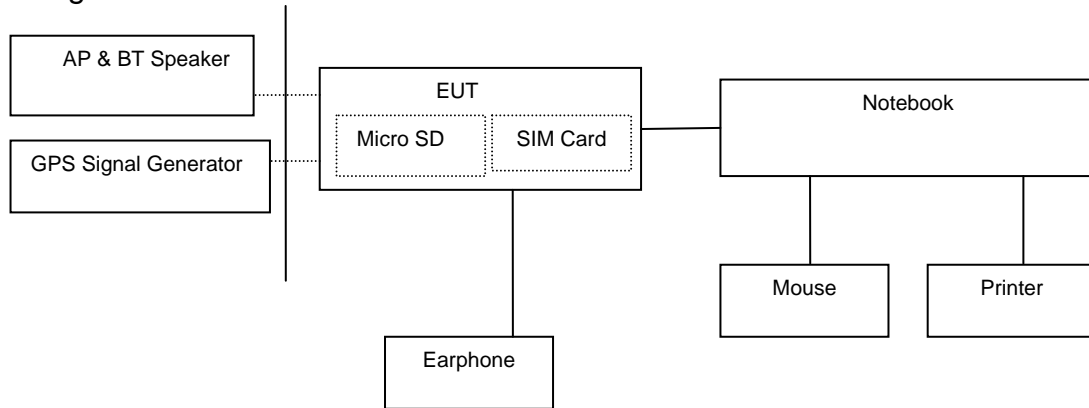
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1.8 Test Set-Up Configuration

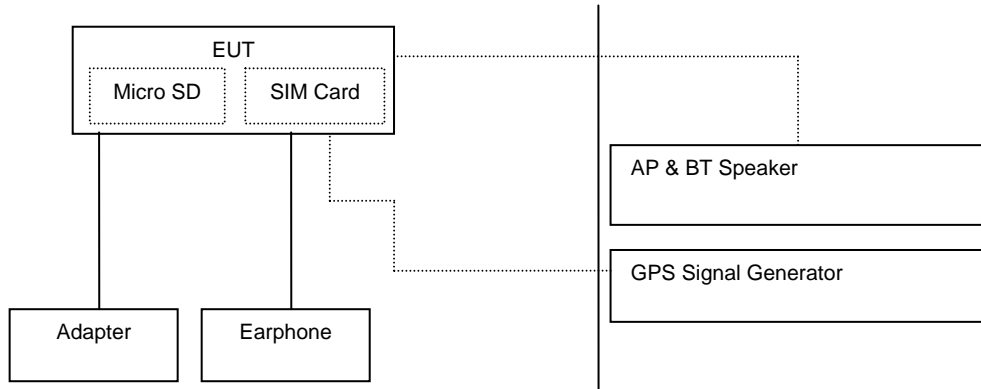
Config 1



Config 2



Config 3



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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 Part 15 Subpart B Class B	Conducted Emission	PASS	Line	0.1580	-2.63 (QP)
			Neutral	0.1620	-2.64 (QP)
	Radiated Emission	PASS	Hor.	168.0040	-7.42 (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	101311	2017/6/23	2018/6/22
Coaxial Cables	EMC Instruments Corp	EMCRG58-BM-BM-3000	160812	2017/8/12	2018/8/11
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 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 : 21 degree C

Humidity : 63 %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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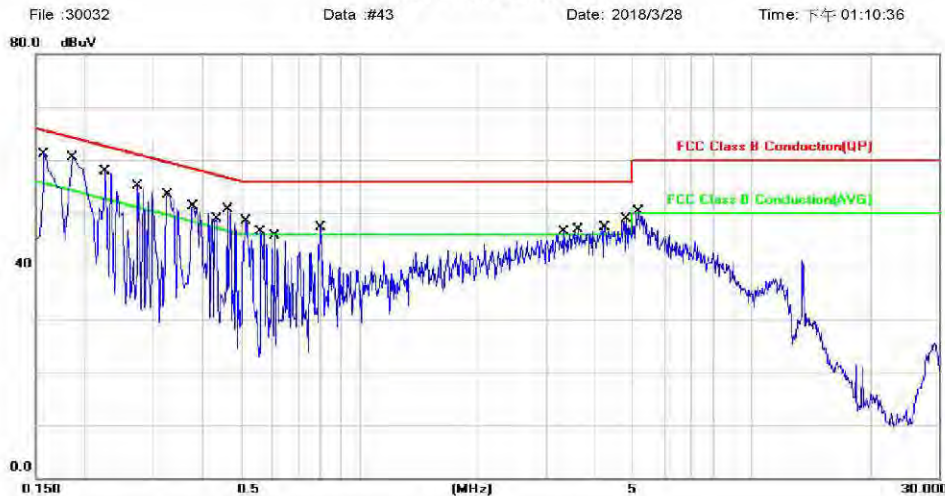


2.4.4 Measurement Data:

Config_1_L

Site : Conduction Room Phase: **N** Temperature: 21 °C
 Limit: FCC Class B Conduction(QP) Power: AC 120V/60Hz Humidity: 63 %
 Mode: Config 1
 Note: LTE B17

Conducted Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1580	50.80	0.12	50.92	65.57	-14.65	QP	
2		0.1580	27.10	0.12	27.22	55.57	-28.35	AVG	
3		0.1860	52.00	0.11	52.11	64.21	-12.10	QP	
4		0.1860	29.60	0.11	29.71	54.21	-24.50	AVG	
5		0.2260	45.10	0.11	45.21	62.60	-17.39	QP	
6		0.2260	21.10	0.11	21.21	52.60	-31.39	AVG	
7		0.2740	42.40	0.11	42.51	61.00	-18.49	QP	
8		0.2740	14.60	0.11	14.71	51.00	-36.29	AVG	
9		0.3260	39.80	0.12	39.92	59.55	-19.63	QP	
10		0.3260	16.60	0.12	16.72	49.55	-32.83	AVG	
11		0.3780	39.20	0.12	39.32	58.32	-19.00	QP	
12		0.3780	17.00	0.12	17.12	48.32	-31.20	AVG	
13		0.4340	34.30	0.12	34.42	57.18	-22.76	QP	

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

File :30032\Data :#43

Page: 1

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No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Defector	Comment
		MHz	dBuV	dB	dBuV	dBuV	dB		
14		0.4340	14.50	0.12	14.62	47.18	-32.56	AVG	
15		0.4610	41.30	0.12	41.42	56.67	-15.25	QP	
16		0.4610	27.80	0.12	27.92	46.67	-18.75	AVG	
17		0.5180	33.90	0.12	34.02	56.00	-21.98	QP	
18		0.5180	22.60	0.12	22.72	46.00	-23.28	AVG	
19		0.5620	30.90	0.12	31.02	56.00	-24.98	QP	
20		0.5620	16.30	0.12	16.42	46.00	-29.58	AVG	
21		0.6100	31.90	0.12	32.02	56.00	-23.98	QP	
22		0.6100	20.40	0.12	20.52	46.00	-25.48	AVG	
23		0.7948	45.60	0.13	45.73	56.00	-10.27	QP	
24 *		0.7948	37.30	0.13	37.43	46.00	-8.57	AVG	
25		3.3380	36.00	0.26	36.26	56.00	-19.74	QP	
26		3.3380	22.90	0.26	23.16	46.00	-22.84	AVG	
27		3.6260	33.20	0.27	33.47	56.00	-22.53	QP	
28		3.6260	21.10	0.27	21.37	46.00	-24.63	AVG	
29		4.2460	38.60	0.27	38.87	56.00	-17.13	QP	
30		4.2460	24.40	0.27	24.67	46.00	-21.33	AVG	
31		4.8220	40.40	0.28	40.68	56.00	-15.32	QP	
32		4.8220	25.90	0.28	26.18	46.00	-19.82	AVG	
33		5.1540	40.30	0.29	40.59	60.00	-19.41	QP	
34		5.1540	26.00	0.29	26.29	50.00	-23.71	AVG	

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

File :30032\Data :#43

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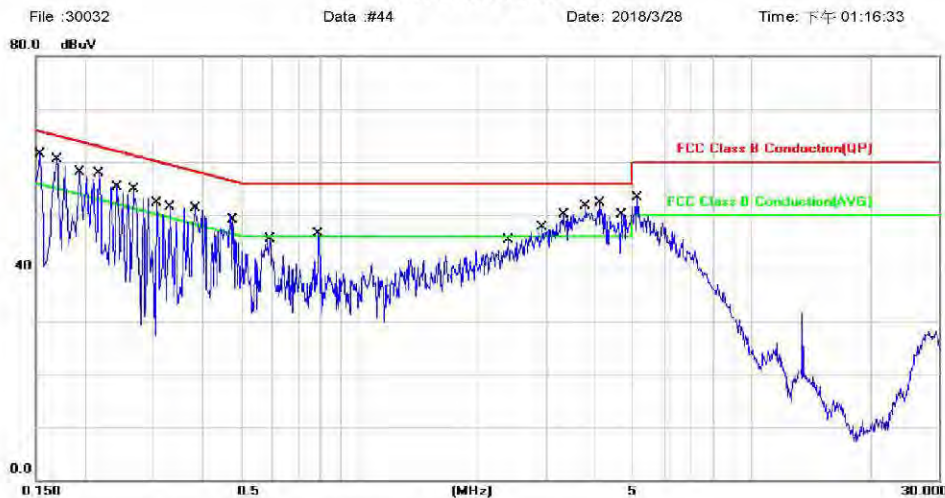
Config_1_N

Site : Conduction Room
Limit: FCC Class B Conduction(QP)
Mode: Config 1
Note: LTE B17

Phase: L1
Power: AC 120V/60Hz

Temperature: 21 °C
Humidity: 63 %

Conducted Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1540	53.40	0.04	53.44	65.78	-12.34	QP	
2		0.1540	29.40	0.04	29.44	55.78	-26.34	AVG	
3		0.1700	51.20	0.04	51.24	64.96	-13.72	QP	
4		0.1700	29.20	0.04	29.24	54.96	-25.72	AVG	
5		0.1940	48.70	0.03	48.73	63.86	-15.13	QP	
6		0.1940	27.10	0.03	27.13	53.86	-26.73	AVG	
7		0.2180	47.10	0.03	47.13	62.89	-15.76	QP	
8		0.2180	26.60	0.03	26.63	52.89	-26.26	AVG	
9		0.2420	46.40	0.03	46.43	62.03	-15.60	QP	
10		0.2420	24.30	0.03	24.33	52.03	-27.70	AVG	
11		0.2660	45.00	0.03	45.03	61.24	-16.21	QP	
12		0.2660	18.80	0.03	18.83	51.24	-32.41	AVG	
13		0.3060	42.00	0.04	42.04	60.08	-18.04	QP	

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

File :30032\Data :#44

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No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Defector	Comment
		MHz	dBuV	dB	dBuV	dBuV	dB		
14		0.3060	17.20	0.04	17.24	50.08	-32.84	AVG	
15		0.3300	41.00	0.04	41.04	59.45	-18.41	QP	
16		0.3300	21.90	0.04	21.94	49.45	-27.51	AVG	
17		0.3820	39.10	0.04	39.14	58.24	-19.10	QP	
18		0.3820	19.60	0.04	19.64	48.24	-28.60	AVG	
19		0.4813	46.10	0.04	46.14	56.32	-10.18	QP	
20		0.4813	37.60	0.04	37.64	46.32	-8.68	AVG	
21		0.5940	31.80	0.05	31.85	56.00	-24.15	QP	
22		0.5940	17.40	0.05	17.45	46.00	-28.55	AVG	
23		0.7962	46.80	0.06	46.86	56.00	-9.14	QP	
24 *		0.7962	40.80	0.06	40.86	46.00	-5.14	AVG	
25		2.4060	35.20	0.27	35.47	56.00	-20.53	QP	
26		2.4060	21.70	0.27	21.97	46.00	-24.03	AVG	
27		2.9420	37.60	0.31	37.91	56.00	-18.09	QP	
28		2.9420	24.30	0.31	24.61	46.00	-21.39	AVG	
29		3.3260	40.20	0.33	40.53	56.00	-15.47	QP	
30		3.3260	25.60	0.33	25.93	46.00	-20.07	AVG	
31		3.7820	40.70	0.36	41.06	56.00	-14.94	QP	
32		3.7820	27.00	0.36	27.36	46.00	-18.64	AVG	
33		4.1340	40.90	0.38	41.28	56.00	-14.72	QP	
34		4.1340	26.10	0.38	26.48	46.00	-19.52	AVG	
35		4.6700	46.00	0.40	46.40	56.00	-9.60	QP	
36		4.6700	33.40	0.40	33.80	46.00	-12.20	AVG	
37		5.1300	37.10	0.42	37.52	60.00	-22.48	QP	
38		5.1300	23.90	0.42	24.32	50.00	-25.68	AVG	

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

File :30032\Data :#44

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Config_2_L

Site : Conduction Room

Phase: L1

Temperature: 17 °C

Limit: FCC Class B Conduction(QP)

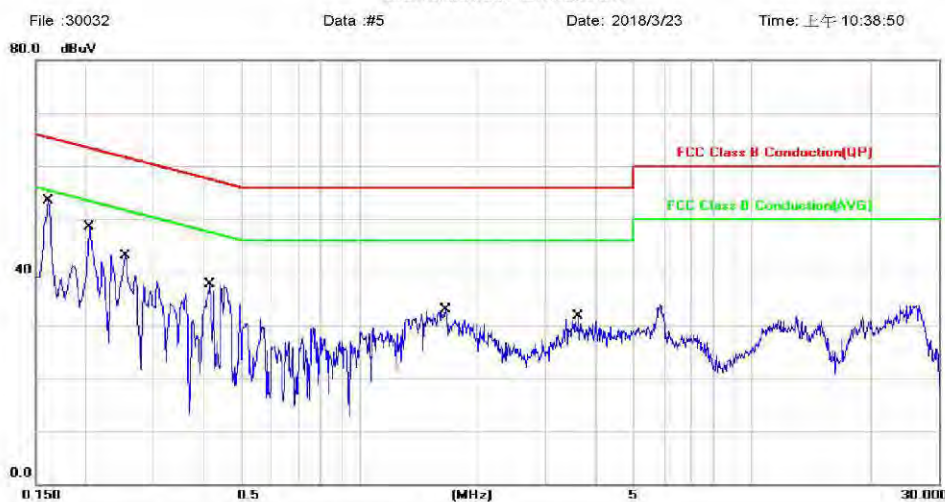
Power: From System

Humidity: 49 %

Mode: Config 2

Note: AC 120V/60Hz , Data R/W (Read)

Conducted Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1620	47.00	0.04	47.04	65.36	-18.32	QP	
2		0.1620	30.80	0.04	30.84	55.36	-24.52	AVG	
3		0.2060	45.90	0.03	45.93	63.37	-17.44	QP	
4		0.2060	35.00	0.03	35.03	53.37	-18.34	AVG	
5		0.2540	41.70	0.03	41.73	61.63	-19.90	QP	
6 *		0.2540	34.70	0.03	34.73	51.63	-16.90	AVG	
7		0.4180	35.20	0.04	35.24	57.49	-22.25	QP	
8		0.4180	23.20	0.04	23.24	47.49	-24.25	AVG	
9		1.6700	28.60	0.19	28.79	56.00	-27.21	QP	
10		1.6700	20.50	0.19	20.69	46.00	-25.31	AVG	
11		3.6340	25.60	0.35	25.95	56.00	-30.05	QP	
12		3.6340	19.20	0.35	19.55	46.00	-26.45	AVG	

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

File :30032\Data :#5

Page: 1

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Config_2_N

Site : Conduction Room

Phase: N

Temperature: 17 °C

Limit: FCC Class B Conduction(QP)

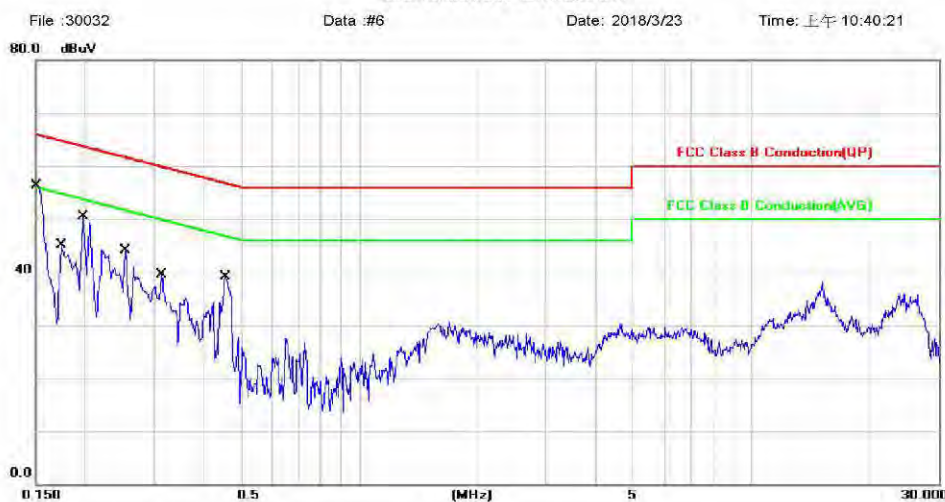
Power: From System

Humidity: 49 %

Mode: Config 2

Note: AC 120V/60Hz , Data R/W (Read)

Conducted Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1500	53.50	0.12	53.62	66.00	-12.38	QP	
2		0.1500	38.70	0.12	38.82	56.00	-17.18	AVG	
3		0.1740	46.10	0.12	46.22	64.77	-18.55	QP	
4		0.1740	27.40	0.12	27.52	54.77	-27.25	AVG	
5		0.1980	44.10	0.11	44.21	63.69	-19.48	QP	
6		0.1980	29.50	0.11	29.61	53.69	-24.08	AVG	
7		0.2540	40.50	0.11	40.61	61.63	-21.02	QP	
8		0.2540	32.20	0.11	32.31	51.63	-19.32	AVG	
9		0.3140	34.20	0.12	34.32	59.86	-25.54	QP	
10		0.3140	24.10	0.12	24.22	49.86	-25.64	AVG	
11		0.4580	36.70	0.12	36.82	56.73	-19.91	QP	
12		0.4580	31.30	0.12	31.42	46.73	-15.31	AVG	

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

File :30032\Data :#6

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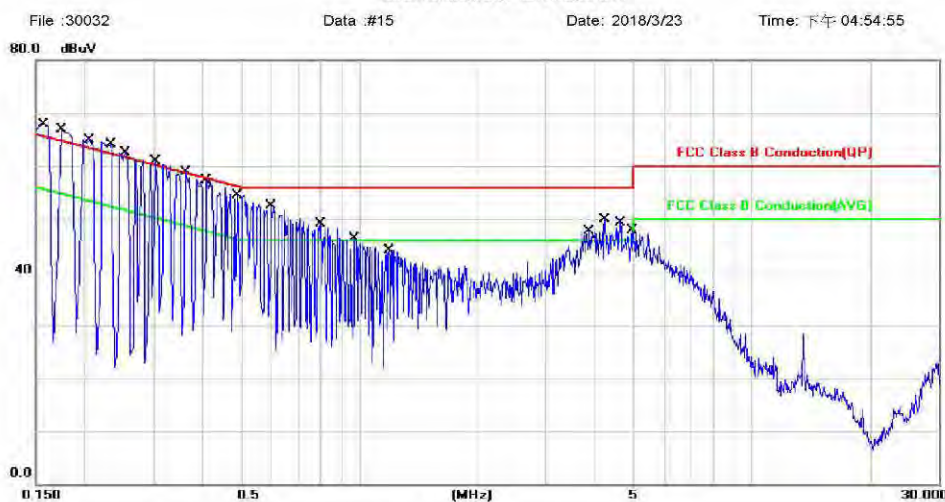
Config_3_L

Site : Conduction Room
Limit: FCC Class B Conduction(QP)
Mode: Config 3
Note: play REC

Phase: L1
Power: AC 120V/60Hz

Temperature: 17 °C
Humidity: 49 %

Conducted Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1580	62.90	0.04	62.94	65.57	-2.63	QP	
2		0.1580	35.10	0.04	35.14	55.57	-20.43	AVG	
3		0.1740	61.70	0.04	61.74	64.77	-3.03	QP	
4		0.1740	35.20	0.04	35.24	54.77	-19.53	AVG	
5		0.2060	59.60	0.03	59.63	63.37	-3.74	QP	
6		0.2060	32.90	0.03	32.93	53.37	-20.44	AVG	
7		0.2340	59.00	0.03	59.03	62.31	-3.28	QP	
8		0.2340	30.00	0.03	30.03	52.31	-22.28	AVG	
9		0.2540	57.80	0.03	57.83	61.63	-3.80	QP	
10		0.2540	29.60	0.03	29.63	51.63	-22.00	AVG	
11		0.3020	56.20	0.04	56.24	60.19	-3.95	QP	
12		0.3020	28.20	0.04	28.24	50.19	-21.95	AVG	
13		0.3620	54.10	0.04	54.14	58.68	-4.54	QP	

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

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No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Defector	Comment
		MHz	dBuV	dB	dBuV	dBuV	dB		
14		0.3620	30.50	0.04	30.54	48.68	-18.14	AVG	
15		0.4100	52.40	0.04	52.44	57.65	-5.21	QP	
16		0.4100	25.90	0.04	25.94	47.65	-21.71	AVG	
17		0.4900	49.60	0.04	49.64	56.17	-6.53	QP	
18		0.4900	28.50	0.04	28.54	46.17	-17.63	AVG	
19		0.5980	46.70	0.05	46.75	56.00	-9.25	QP	
20		0.5980	22.40	0.05	22.45	46.00	-23.55	AVG	
21		0.7980	44.40	0.06	44.46	56.00	-11.54	QP	
22		0.7980	39.30	0.06	39.36	46.00	-6.64	AVG	
23		0.9740	39.20	0.07	39.27	56.00	-16.73	QP	
24		0.9740	19.20	0.07	19.27	46.00	-26.73	AVG	
25		1.1940	36.80	0.10	36.90	56.00	-19.10	QP	
26		1.1940	19.10	0.10	19.20	46.00	-26.80	AVG	
27		3.8740	41.90	0.37	42.27	56.00	-13.73	QP	
28		3.8740	25.30	0.37	25.67	46.00	-20.33	AVG	
29		4.2380	40.40	0.39	40.79	56.00	-15.21	QP	
30		4.2380	24.20	0.39	24.59	46.00	-21.41	AVG	
31		4.6420	42.70	0.40	43.10	56.00	-12.90	QP	
32		4.6420	27.70	0.40	28.10	46.00	-17.90	AVG	
33		4.9660	41.90	0.41	42.31	56.00	-13.69	QP	
34		4.9660	27.40	0.41	27.81	46.00	-18.19	AVG	

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

File :30032\Data :#15

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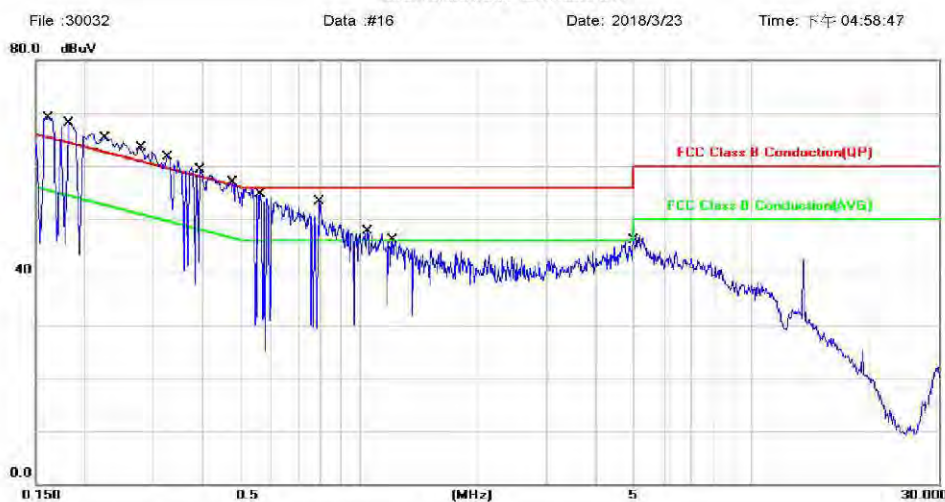
Config_3_N

Site : Conduction Room
Limit: FCC Class B Conduction(QP)
Mode: Config 3
Note: play REC

Phase: **N**
Power: AC 120V/60Hz

Temperature: 17 °C
Humidity: 49 %

Conducted Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1620	62.60	0.12	62.72	65.36	-2.64	QP	
2		0.1620	34.80	0.12	34.92	55.36	-20.44	AVG	
3		0.1820	60.00	0.11	60.11	64.39	-4.28	QP	
4		0.1820	29.90	0.11	30.01	54.39	-24.38	AVG	
5		0.2267	58.40	0.11	58.51	62.57	-4.06	QP	
6		0.2267	28.60	0.11	28.71	52.57	-23.86	AVG	
7		0.2780	56.00	0.11	56.11	60.88	-4.77	QP	
8		0.2780	26.20	0.11	26.31	50.88	-24.57	AVG	
9		0.3260	54.90	0.12	55.02	59.55	-4.53	QP	
10		0.3260	28.40	0.12	28.52	49.55	-21.03	AVG	
11		0.3940	52.20	0.12	52.32	57.98	-5.66	QP	
12		0.3940	25.10	0.12	25.22	47.98	-22.76	AVG	
13		0.4780	50.00	0.12	50.12	56.37	-6.25	QP	

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

File :30032\Data :#16

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No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Defector	Comment
		MHz	dBuV	dB	dBuV	dBuV	dB		
14		0.4780	23.70	0.12	23.82	46.37	-22.55	AVG	
15		0.5620	47.10	0.12	47.22	56.00	-8.78	QP	
16		0.5620	23.80	0.12	23.92	46.00	-22.08	AVG	
17		0.7940	43.40	0.13	43.53	56.00	-12.47	QP	
18		0.7940	31.80	0.13	31.93	46.00	-14.07	AVG	
19		1.0500	39.20	0.14	39.34	56.00	-16.66	QP	
20		1.0500	18.30	0.14	18.44	46.00	-27.56	AVG	
21		1.2180	37.50	0.15	37.65	56.00	-18.35	QP	
22		1.2180	20.30	0.15	20.45	46.00	-25.55	AVG	
23		5.0000	38.80	0.29	39.09	56.00	-16.91	QP	
24		5.0000	26.80	0.29	27.09	46.00	-18.91	AVG	

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

File :30032\Data :#16

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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	2017/10/20	2018/10/19
EMI Test Receiver	R&S	ESCI 3	101343	2018/1/5	2019/1/4
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	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 U_{lab} (K=2) of radiated emission is 4.09 dB. (30MHz ~ 1000MHz)
Theory values uncertainty U_{cispr} 16-4-2:2011+A1:2014
(K=2) of radiated emission is 5.22 dB. (30MHz ~ 1000MHz)

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Above 1GHz

SGS Radiated_Above_1GHz HWAYA 966A_EMC					
EQUIPMENT TYPE	Manufacturer	Model Number	Serial Number	Calibration Date	Calibration Due
Spectrum Analyzer	R&S	FSV 40	100979	2017/12/21	2018/12/20
EMI Test Receiver	R&S	ESR 7	101459	2018/2/21	2019/2/20
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA9120D673	2017/10/16	2018/10/15
Horn Antenna	Schwarzbeck	BBHA9170	BBHA9170-184	2017/12/12	2018/12/11
Pre Amplifier	EMC Instruments Corp.	EMC012645B	980216	2017/4/25	2018/4/24
Pre Amplifier	EMC Instruments Corp.	EMC184045B	980135	2017/10/27	2018/10/26
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	119988	2018/2/22	2019/2/21
Wideband Radio Communication Tester	R&S	CMW 500	152303	2018/2/21	2019/2/20
Radio Communication Analyzer	Anritsu	MT8820C	6201465315	2017/12/10	2018/12/9
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.

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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 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)

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2.5.2 Operating Environment

Temperature : 20 degree C

Humidity : 52 %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

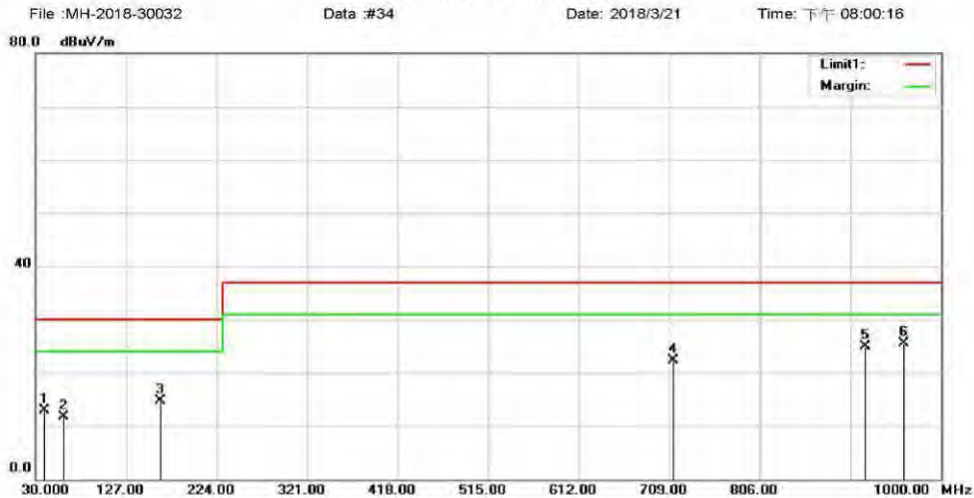
Config_1_H

Site: SGS 10m Chamber
 Limit: CISPR22 Class B 10M Radiation
 Mode: Config_1
 Note: (2nd source of memory) 2-3
 GSM 850

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

Temperature: 20 °C
 Humidity: 52 %

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	24.37	-11.53	12.84	30.00	-17.16	QP	
2		60.0700	23.70	-11.91	11.79	30.00	-18.21	QP	
3		163.8600	25.97	-11.19	14.78	30.00	-15.22	QP	
4		713.8500	23.66	-1.30	22.36	37.00	-14.64	QP	
5		918.5200	23.94	1.01	24.95	37.00	-12.05	QP	
6 *		960.2300	23.81	1.68	25.49	37.00	-11.51	QP	

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

File :MH-2018-30032\Data :#34

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Config_1_V

Site: SGS 10m Chamber
Limit: CISPR22 Class B 10M Radiation
Mode: Config_1
Note: (2nd source of memory) 2-3
GSM 850

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

Temperature: 20 °C
Humidity: 52 %

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		30.9700	27.31	-12.40	14.91	30.00	-15.09	QP	
2		41.6400	24.94	-11.22	13.72	30.00	-16.28	QP	
3		154.1600	25.47	-11.02	14.45	30.00	-15.55	QP	
4		189.0800	30.24	-13.50	16.74	30.00	-13.26	QP	
5		799.2100	22.78	-0.10	22.68	37.00	-14.32	QP	
6 *		963.1400	22.79	1.24	24.03	37.00	-12.97	QP	

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

File: MH-2018-30032\Data: #33

Page: 1

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Config_2_H

Site: SGS 10m Chamber
Limit: CISPR22 Class B 10M Radiation
Mode: Config_2
Note: (2nd source of memory) 2-3
Data Link (Write)

Polarization: **Horizontal**
Power: From System
Distance: 10m

Temperature: 20 °C
Humidity: 52 %

Radiated Emission



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB/m	dBuV/m	dBuV/m	dB		
1		140.5580	33.10	-11.97	21.13	30.00	-8.87	QP	
2		155.6120	32.57	-11.37	21.20	30.00	-8.80	QP	
3 *		168.0040	33.96	-11.20	22.76	30.00	-7.24	QP	
4		777.6600	25.59	-0.32	25.27	37.00	-11.73	QP	
5		914.6400	23.94	0.93	24.87	37.00	-12.13	QP	
6		974.7800	23.90	1.65	25.55	37.00	-11.45	QP	

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

File: MH-2018-30032\Data: #20

Page: 1

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Config_2_V

Site: SGS 10m Chamber
Limit: CISPR22 Class B 10M Radiation
Mode: Config_2
Note: (2nd source of memory) 2-3
Data Link (Write)

Polarization: **Vertical**
Power: From System
Distance: 10m

Temperature: 20 °C
Humidity: 52 %

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Detector	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1		44.9800	26.37	-10.85	15.52	30.00	-14.48	QP	
2	*	171.7700	32.36	-11.92	20.44	30.00	-9.56	QP	
3		429.6400	29.29	-6.73	22.56	37.00	-14.44	QP	
4		530.9000	30.08	-4.72	25.36	37.00	-11.64	QP	
5		780.7800	22.97	-0.14	22.83	37.00	-14.17	QP	
6		972.8400	22.82	1.33	24.15	37.00	-12.85	QP	

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

File: MH-2018-30032\Data: #19

Page: 1

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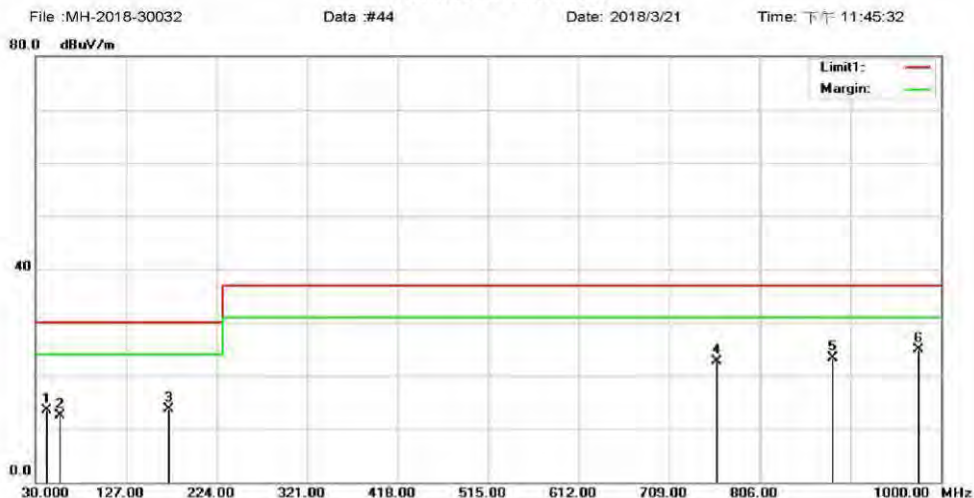
Config_3_H

Site: SGS 10m Chamber
 Limit: CISPR22 Class B 10M Radiation
 Mode: Config_3
 Note: (2nd source of memory) 2-3
 REC mode (Back)

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

Temperature: 20 °C
 Humidity: 52 %

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		42.6100	24.86	-11.29	13.57	30.00	-16.43	QP	
2		56.1900	24.08	-11.59	12.49	30.00	-17.51	QP	
3		172.5900	25.25	-11.48	13.77	30.00	-16.23	QP	
4		759.4400	23.14	-0.44	22.70	37.00	-14.30	QP	
5		884.5700	22.86	0.45	23.31	37.00	-13.69	QP	
6 *		975.7500	23.26	1.64	24.90	37.00	-12.10	QP	

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

File: MH-2018-30032\Data: #44

Page: 1

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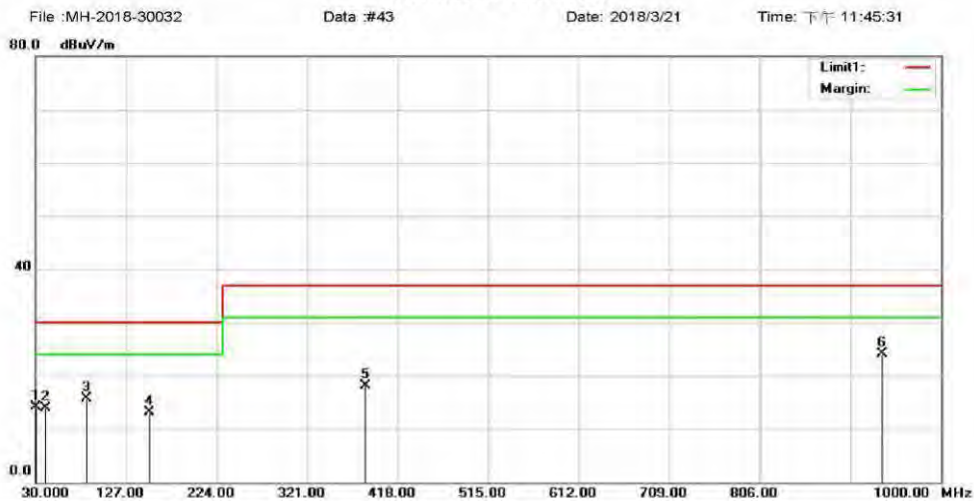
Config_3_V

Site: SGS 10m Chamber
 Limit: CISPR22 Class B 10M Radiation
 Mode: Config_3
 Note: (2nd source of memory) 2-3
 REC mode (Back)

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

Temperature: 20 °C
 Humidity: 52 %

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		30.9700	26.45	-12.40	14.05	30.00	-15.95	QP	
2		40.6700	25.17	-11.32	13.85	30.00	-16.15	QP	
3		85.2900	32.40	-16.73	15.67	30.00	-14.33	QP	
4		152.2200	24.12	-10.97	13.15	30.00	-16.85	QP	
5		384.0500	26.34	-8.16	18.18	37.00	-18.82	QP	
6 *		936.9500	23.13	1.02	24.15	37.00	-12.85	QP	

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

File: MH-2018-30032\Data: #43

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Above 1GHz

1GHz-18GHz

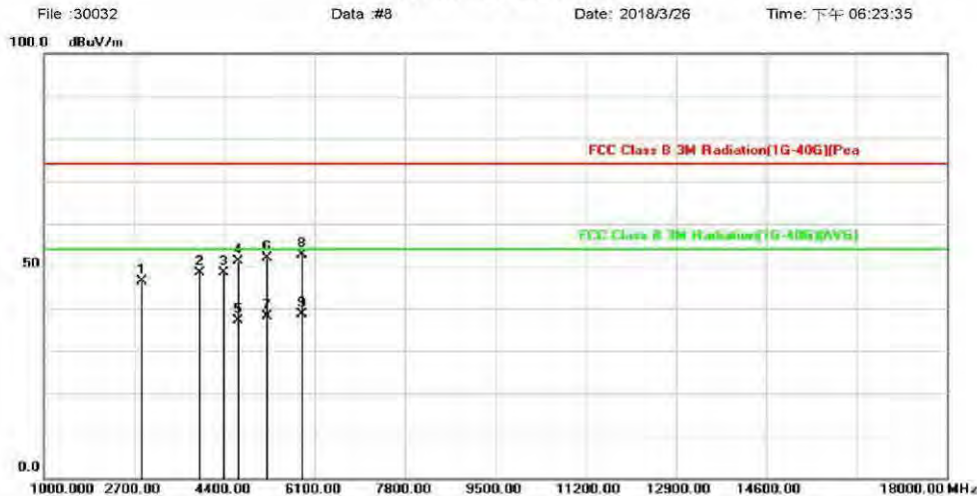
Config_1_H

Site: SGS 966 Chamber A
 Limit: FCC Class B 3M Radiation(1G-40G)(Pea
 Mode: Config 1
 Note: GSM 850

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

Temperature: 22 ℃
 Humidity: 62 %

Radiated Emission



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB/m	dBuV/m	dBuV/m	dB		
1		2853.000	59.63	-13.16	46.47	74.00	-27.53	peak	
2		3924.000	58.19	-9.82	48.37	74.00	-25.63	peak	
3		4383.000	57.90	-9.43	48.47	74.00	-25.53	peak	
4		4655.000	59.94	-8.72	51.22	74.00	-22.78	peak	
5		4655.000	45.93	-8.72	37.21	54.00	-16.79	AVG	
6		5199.000	58.89	-7.04	51.85	74.00	-22.15	peak	
7		5199.000	45.12	-7.04	38.08	54.00	-15.92	AVG	
8		5862.000	58.66	-5.93	52.73	74.00	-21.27	peak	
9 *		5862.000	44.50	-5.93	38.57	54.00	-15.43	AVG	

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

File :30032\Data :#8

Page: 1

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1GHz-18GHz

Config_1_V

Site : SGS 966 Chamber A

Polarization: **Vertical**

Temperature: 22 ℃

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

Power: AC 120V/60Hz

Humidity: 62 %

Mode: Config 1

Distance:

Note: GSM 850

Radiated Emission

File :30032

Data :#7

Date: 2018/3/26

Time: 下午 06:22:07



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		2836.000	58.37	-13.19	45.18	74.00	-28.82	peak	
2		3567.000	58.50	-11.32	47.18	74.00	-26.82	peak	
3		3958.000	58.52	-9.67	48.85	74.00	-25.15	peak	
4		4723.000	58.44	-8.43	50.01	74.00	-23.99	peak	
5		5386.000	58.03	-6.89	51.14	74.00	-22.86	peak	
6 *		5386.000	44.91	-6.89	38.02	54.00	-15.98	AVG	
7		5981.000	57.30	-5.65	51.65	74.00	-22.35	peak	
8		5981.000	43.59	-5.65	37.94	54.00	-16.06	AVG	

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

File :30032\Data :#7

Page: 1

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1GHz-18GHz

Config_2_H

Site :SGS 966 Chamber A
Limit: FCC Class B 3M Radiation(1G-40G)(Pea
Mode: Confining 2
Note: Data link(Write)

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

Temperature: 22 ℃
Humidity: 62 %

Radiated Emission



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
1		3550.000	59.10	-11.39	47.71	74.00	-26.29	peak	
2		4009.000	58.28	-9.51	48.77	74.00	-25.23	peak	
3		4689.000	58.29	-8.57	49.72	74.00	-24.28	peak	
4		4961.000	58.06	-7.37	50.69	74.00	-23.31	peak	
5		5284.000	58.65	-6.97	51.68	74.00	-22.32	peak	
6		5284.000	44.92	-6.97	37.95	54.00	-16.05	AVG	
7		5658.000	58.08	-6.42	51.66	74.00	-22.34	peak	
8	*	5658.000	44.58	-6.42	38.16	54.00	-15.84	AVG	

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

File :30032\Data :#12

Page: 1

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1GHz-18GHz

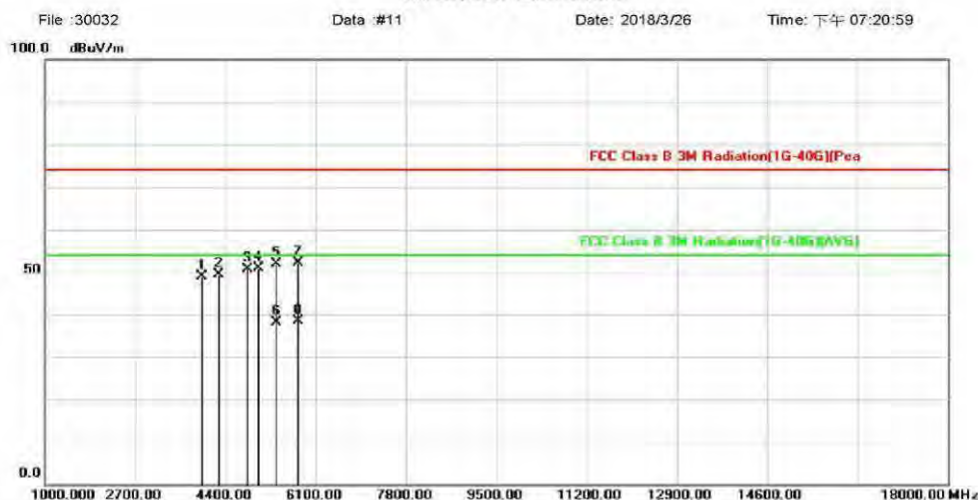
Config_2_V

Site: SGS 966 Chamber A
Limit: FCC Class B 3M Radiation(1G-40G)(Pea
Mode: Config 2
Note: Data link(Write)

Polarization: **Vertical**
Power: AC 120V/60Hz
Distance:

Temperature: 22 ℃
Humidity: 62 %

Radiated Emission



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
1		3958.000	58.61	-9.67	48.94	74.00	-25.06	peak	
2		4281.000	58.75	-9.44	49.31	74.00	-24.69	peak	
3		4825.000	58.58	-7.97	50.61	74.00	-23.39	peak	
4		5012.000	58.02	-7.20	50.82	74.00	-23.18	peak	
5		5352.000	58.77	-6.92	51.85	74.00	-22.15	peak	
6		5352.000	45.14	-6.92	38.22	54.00	-15.78	AVG	
7		5777.000	58.23	-6.14	52.09	74.00	-21.91	peak	
8	*	5777.000	44.57	-6.14	38.43	54.00	-15.57	AVG	

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

File :30032\Data :#11

Page: 1

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1GHz-18GHz

Config_3_H

Site :SGS 966 Chamber A
Limit: FCC Class B 3M Radiation(1G-40G)(Pea
Mode: Config 3
Note: REC Mode

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

Temperature: 22 ℃
Humidity: 62 %

Radiated Emission



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		3924.000	59.14	-9.82	49.32	74.00	-24.68	peak	
2		4213.000	57.82	-9.45	48.37	74.00	-25.63	peak	
3		4689.000	58.17	-8.57	49.60	74.00	-24.40	peak	
4		5012.000	57.65	-7.20	50.45	74.00	-23.55	peak	
5		5318.000	58.17	-6.95	51.22	74.00	-22.78	peak	
6		5318.000	44.46	-6.95	37.51	54.00	-16.49	AVG	
7		5794.000	58.75	-6.09	52.66	74.00	-21.34	peak	
8 *		5794.000	44.53	-6.09	38.44	54.00	-15.56	AVG	

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

File :30032\Data :#10

Page: 1

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1GHz-18GHz

Config_3_V

Site : SGS 966 Chamber A

Polarization: **Vertical**

Temperature: 22 ℃

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

Power: AC 120V/60Hz

Humidity: 62 %

Mode: Config 3

Distance:

Note: REC Mode

Radiated Emission

File :30032

Data :#9

Date: 2018/3/26

Time: 下午 06:53:45



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB/m	dBuV/m	dBuV/m	dB		
1		3958.000	58.04	-9.67	48.37	74.00	-25.63	peak	
2		4349.000	58.62	-9.43	49.19	74.00	-24.81	peak	
3		4604.000	58.14	-8.94	49.20	74.00	-24.80	peak	
4		4944.000	57.76	-7.45	50.31	74.00	-23.69	peak	
5		5369.000	58.56	-6.90	51.66	74.00	-22.34	peak	
6		5369.000	44.84	-6.90	37.94	54.00	-16.06	AVG	
7		5709.000	57.91	-6.30	51.61	74.00	-22.39	peak	
8 *		5709.000	44.36	-6.30	38.06	54.00	-15.94	AVG	

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

File :30032\Data :#9

Page: 1

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18GHz~30GHz

Config_1_H

Site: SGS 966 Chamber A

Polarization: **Horizontal**

Temperature: 21 °C

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

Power: AC 120V/60Hz

Humidity: 61 %

Mode: Confing 1

Distance:

Note: GSM 850

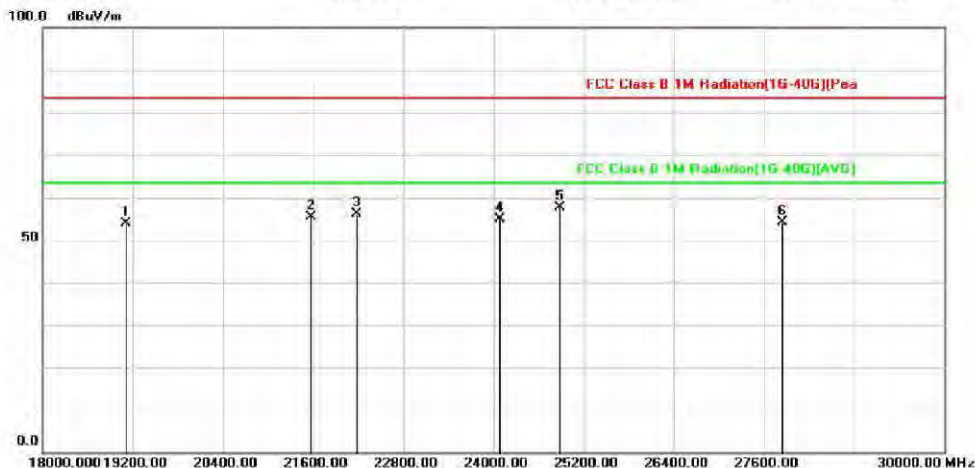
Radiated Emission

File :30032

Data :#22

Date: 2018/3/27

Time: 下午 11:43:29



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		19104.000	55.42	-1.58	53.84	83.50	-29.66	peak	
2		21576.000	54.92	0.58	55.50	83.50	-28.00	peak	
3		22176.000	54.53	1.60	56.13	83.50	-27.37	peak	
4		24084.000	52.93	1.98	54.91	83.50	-28.59	peak	
5 *		24888.000	55.03	2.55	57.58	83.50	-25.92	peak	
6		27840.000	52.12	1.97	54.09	83.50	-29.41	peak	

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

File :30032\Data :#22

Page: 1

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18GHz~30GHz

Config_1_V

Site: SGS 966 Chamber A

Polarization: **Vertical**

Temperature: 21 °C

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

Power: AC 120V/60Hz

Humidity: 61 %

Mode: Config 1

Distance:

Note: GSM 850

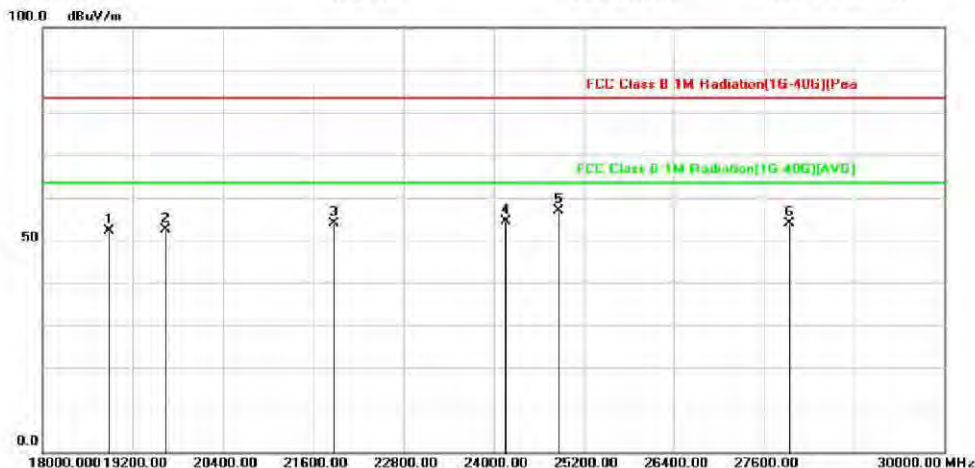
Radiated Emission

File :30032

Data :#21

Date: 2018/3/27

Time: 下午 11:42:03



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	dBuV	Factor	ment			Detector	Comment
1		18888.000	53.67	-1.57	52.10	83.50	-31.40	peak	
2		19632.000	53.74	-1.47	52.27	83.50	-31.23	peak	
3		21876.000	52.66	1.30	53.96	83.50	-29.54	peak	
4		24168.000	52.26	2.07	54.33	83.50	-29.17	peak	
5 *		24876.000	54.32	2.55	56.87	83.50	-26.63	peak	
6		27936.000	51.87	1.98	53.85	83.50	-29.65	peak	

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

File :30032\Data :#21

Page: 1

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18GHz~30GHz

Config_2_H

Site: SGS 966 Chamber A

Polarization: **Horizontal**

Temperature: 21 °C

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

Power: AC 120V/60Hz

Humidity: 61 %

Mode: Config 2

Distance:

Note: Data link(Write)

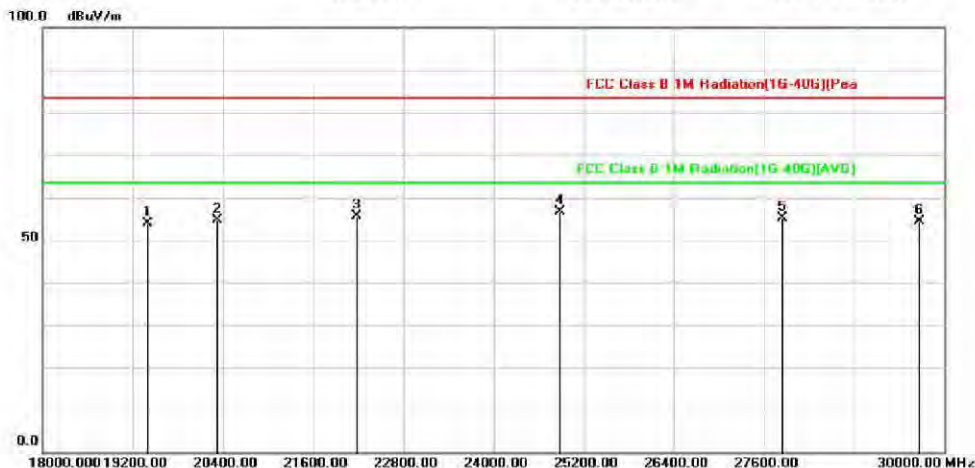
Radiated Emission

File :30032

Data :#20

Date: 2018/3/27

Time: 下午 11:32:36



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		19404.000	55.38	-1.52	53.86	83.50	-29.64	peak	
2		20328.000	55.65	-1.01	54.64	83.50	-28.86	peak	
3		22176.000	54.03	1.60	55.63	83.50	-27.87	peak	
4	*	24888.000	54.03	2.55	56.58	83.50	-26.92	peak	
5		27840.000	53.12	1.97	55.09	83.50	-28.41	peak	
6		29676.000	52.62	1.87	54.49	83.50	-29.01	peak	

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

File :30032\Data :#20

Page: 1

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18GHz~30GHz

Config_2_V

Site: SGS 966 Chamber A

Polarization: **Vertical**

Temperature: 21 °C

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

Power: AC 120V/60Hz

Humidity: 61 %

Mode: Config 2

Distance:

Note: Data link(Write)

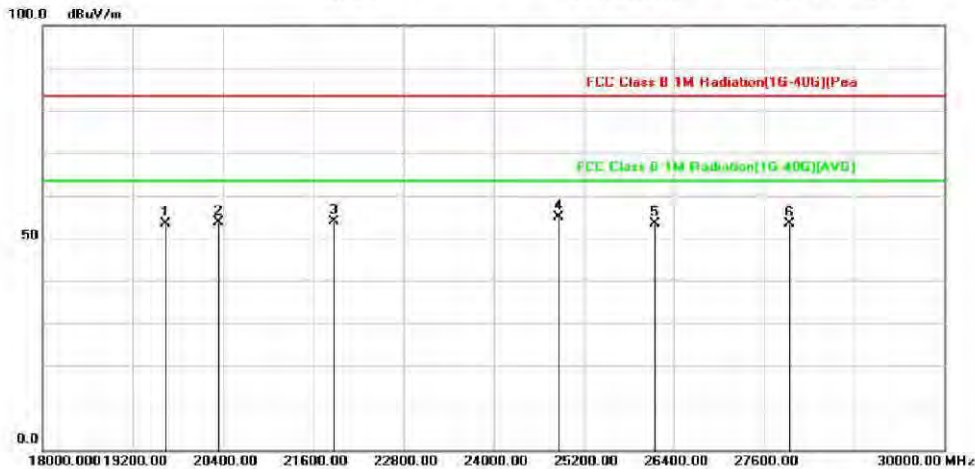
Radiated Emission

File :30032

Data :#19

Date: 2018/3/27

Time: 下午 11:31:10



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	dBuV	Factor	ment			Detector	Comment
1		19632.000	54.74	-1.47	53.27	83.50	-30.23	peak	
2		20340.000	54.61	-0.99	53.62	83.50	-29.88	peak	
3		21876.000	52.66	1.30	53.96	83.50	-29.54	peak	
4 *		24876.000	52.32	2.55	54.87	83.50	-28.63	peak	
5		26148.000	51.08	2.34	53.42	83.50	-30.08	peak	
6		27936.000	51.37	1.98	53.35	83.50	-30.15	peak	

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

File :30032\Data :#19

Page: 1

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18GHz~30GHz

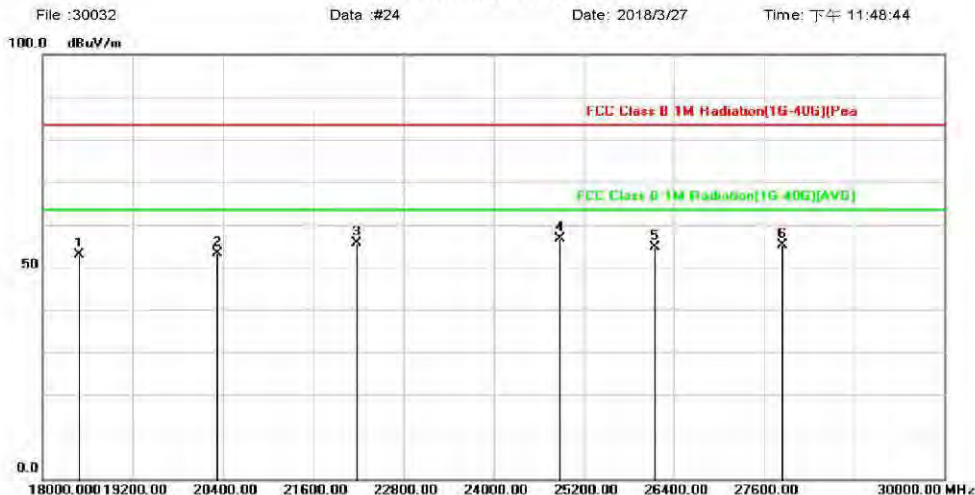
Config_3_H

Site: SGS 966 Chamber A
 Limit: FCC Class B 1M Radiation(1G-40G)(Pea
 Mode: Config 3
 Note: REC Mode

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

Temperature: 21 ℃
 Humidity: 61 %

Radiated Emission



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	dBuV	Factor	ment			Detector	Comment
1		18492.000	54.35	-1.49	52.86	83.50	-30.64	peak	
2		20328.000	54.15	-1.01	53.14	83.50	-30.36	peak	
3		22176.000	54.03	1.60	55.63	83.50	-27.87	peak	
4 *		24888.000	54.03	2.55	56.58	83.50	-26.92	peak	
5		26148.000	52.34	2.34	54.68	83.50	-28.82	peak	
6		27840.000	53.12	1.97	55.09	83.50	-28.41	peak	

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

File :30032\Data :#24

Page: 1

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18GHz~30GHz

Config_3_V

Site: SGS 966 Chamber A

Polarization: **Vertical**

Temperature: 21 °C

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

Power: AC 120V/60Hz

Humidity: 61 %

Mode: Config 3

Distance:

Note: REC Mode

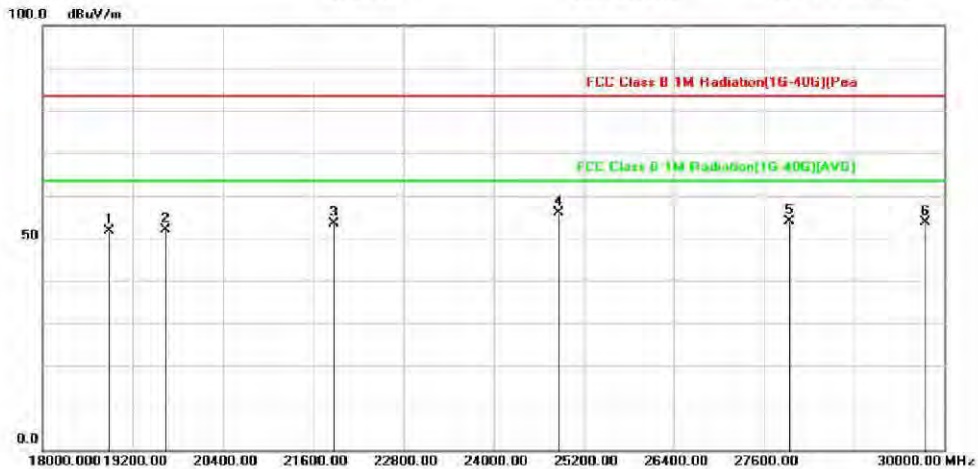
Radiated Emission

File :30032

Data :#23

Date: 2018/3/27

Time: 下午 11:47:18



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		18888.000	53.17	-1.57	51.60	83.50	-31.90	peak	
2		19632.000	53.24	-1.47	51.77	83.50	-31.73	peak	
3		21876.000	52.16	1.30	53.46	83.50	-30.04	peak	
4 *		24876.000	53.32	2.55	55.87	83.50	-27.63	peak	
5		27936.000	51.87	1.98	53.85	83.50	-29.65	peak	
6		29748.000	51.63	1.95	53.58	83.50	-29.92	peak	

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

File :30032\Data :#23

Page: 1

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