



# FCC CERTIFICATION REPORT

**Test Report No.** : E1/2016/70001  
**Applicant** : Huawei Technologies Co., Ltd.  
**Address** : Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C  
**Manufacturer** : Huawei Technologies Co., Ltd.  
**Address** : Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C

**Equipment Under Test (EUT) :**  
**Product Name** : Smart Phone  
**Brand Name** : HUAWEI  
**Model No.** : HUAWEI MLA-L13 , MLA-L13 , HUAWEI MLA-L03 , MLA-L03  
**Added Model(s)** : N/A

**Standards** : FCC Part 15:2016, Subpart B, Class B

**Date of Receipt** : Jul. 01, 2016  
**Date of Test** : Jul. 01 ~ 14, 2016  
**Date of Issue** : Jul. 29, 2016

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

**Remarks :**

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

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**Tested By:**

*Jeremy Cheng*

**Date**

Jul. 29, 2016

**Jeremy Cheng (Engineer)**

**Approved By**

*Wisely Huang*

**Date**

Jul. 29, 2016

**Wisely Huang  
(Assistant Supervisor)**



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f (886-2) 2298-0488

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## Revision History

Report Number	Revision	Description	Issue Date
E1/2016/70001	Rev.00	Initial creation of document	Jul. 29, 2016

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# 1. General Information

## 1.1 Applicant & Manufacturer Information

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Manufacturer : Huawei Technologies Co., Ltd.  
Address of Manufacturer : Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C

## 1.2 General Description of EUT

Product Name : Smart Phone  
Brand Name : HUAWEI  
Model No. : HUAWEI MLA-L13 , MLA-L13 , HUAWEI MLA-L03 , MLA-L03  
Added Model(s) : N/A  
Model Difference : Model HUAWEI MLA-L13, MLA-L13 is a smart phone with dual SIM.  
Model HUAWEI MLA-L03, MLA-L03 is a smart phone with single SIM.  
The difference of them is only for SIM CARD. HUAWEI MLA-L03, MLA-L03 delete one SIM by software.

## 1.3 Details of EUT

Power Supply : AC 120V, 60Hz  
Modes/Function : Mode 1. Earphone:Hong sheng+BT Link+WiFi  
Link+GPS Link+USB:FOXCONN  
+ADP:HW-050200U01 #BYD+Camera  
Front REC

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Mode 2. Earphone:Quancheng+BT Link+WiFi  
Link+GPS Link+USB:FOXCONN  
+ADP:HW-050200U01 #BYD+Camera  
Rear REC

Mode 3. Earphone: Quancheng +BT Link+WiFi  
Link+GPS Link+USB:FOXCONN  
+ADP:HW-050200U01 #BYD+GSM:850 Link

Mode 4. Earphone: Quancheng +BT Link+WiFi  
Link+GPS Link+USB:Luxshareict  
+ADP:HW-050200U01 #BYD+3G:B1 Link

Mode 5. Earphone: Quancheng +BT Link+WiFi  
Link+GPS Link+USB:Hongin+ADP:H  
W-050200U01 #BYD+LTE:B7 Link

Mode 6. Earphone: Quancheng +BT Link+WiFi  
Link+GPS Link+USB:  
FOXCONN+ADP:HW-050200U01  
#BYD+FM(For CE)

Mode 7. Earphone: Quancheng Worst+BT  
Link+WiFi Link+GPS Link+  
USB:Luxshareict +ADP:HW-050200U01  
#BYD+FM(For RE)

Mode 8. Earphone: Quancheng+BT Link+WiFi  
Link+GPS Link+USB:FOXCONN  
+ADP:HW-050200U01 #Phltek(For CE)

Mode 9. Earphone: Quancheng Worst+BT  
Link+WiFi Link+GPS Link  
+USB:Luxshareict +ADP:HW-050200U01  
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Mode 10. Earphone: Quancheng+BT  
Link+WiFi Link+GPS Link  
+USB:FOXCONN + ADP:HW-  
050200U01 #Huntkey(For CE)

Mode 11. Earphone: Quancheng Worst+BT  
Link+WiFi Link+GPS  
Link+USB:Luxshareict  
+ ADP:HW-050200U01  
#Huntkey+3G:B1 Link (For RE)

Mode 12. PC LINK Micro SD Write

Mode 13. PC LINK Micro SD Read

Worst case

: CE Worst : Mode 10. Earphone: Quancheng+BT  
Link+WiFi Link+GPS  
Link+USB:FOXCONN +  
ADP:HW-050200U01  
#Huntkey(For CE)

RE Worst : Mode 11. Earphone: Quancheng  
Worst+BT Link+WiFi  
Link+GPS Link  
+USB:Luxshareict  
+ ADP:HW-050200U01  
#Huntkey+3G:B1 Link.  
(For RE)

Highest operate description : 2480 MHZ

Adapter

: Model No.:HW-050200U01  
Supplier : HUAWEI  
I/P :100-240V, 50/60Hz, 0.5A  
O/P : 5V, 2A

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台灣檢驗科技股份有限公司

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## 1.4 Operation Procedure

Test Mode: 1

1. EUT connected to AC ADAPTER power supply, EUT WiFi and NB connected to the same AP data link. Open BT LINK Speaker, GPS LINK GPS simulator, AUDIO Port access Earphone
2. Turn on the camera Front REC.
3. Start the test.

Test Mode: 2, 8, 10

1. EUT connected to AC ADAPTER power supply, EUT WiFi and NB connected to the same AP data link. Open BT LINK Speaker, GPS LINK GPS simulator, AUDIO Port access Earphone
2. Turn on the camera Rear REC.
3. Start the test.

Test Mode: 3, 4, 5, 9, 11

1. EUT connected to AC ADAPTER power supply, EUT WiFi and NB connected to the same AP data link. Open BT LINK Speaker, GPS LINK GPS simulator, AUDIO Port access Earphone
2. EUT inserted a SIM card, open the GSM LINK Phone: 2G: 850 & 3G: B2 & LTE: B7 call
3. Start the test.

Test Mode: 6

1. EUT connected to AC ADAPTER power supply, EUT WiFi and NB connected to the same AP data link. Open BT LINK Speaker, GPS LINK GPS simulator,
2. FM LINK FM signal generator.
3. Start the test.

Test Mode: 11

1. EUT AUDIO Port pick Earphone.
2. PC data write in Micro SD.
3. Start the test.

Test Mode: 12

1. EUT AUDIO Port pick Earphone.
2. Micro SD write data to PC.
3. Start the test.

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## 1.5 Description of Support Units

PRODUCT	MANUFACTURER	MODEL NO.	SERIAL NO.
SIM Card	R&S	CMW-Z05	8.95253E+18
BT Speaker	Creative	MF8090	YFMF8090245R00855Y
AP	BUFFALO	WZR-HP-G300NH2	44066221202559[[G]]
GPS Signal Generator	Spectracom	GSG53 GNSS4	200218
Notebook	DELL	Latitude E6440	CYRVQ32
Mouse	DELL	MS111-T	CN-OKW2YH-71616-345-OL7T
Printer	HP	VCVRA-1004	CN33K19J3F
Micro SD	Transcend	Micro SDHC (Class4)	N/A
TMC/FM Generator	Levear	VP-8194D	0821170LA

## 1.6 Modification List

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

## 1.7 Cable List

Cable Type	Core	Length	Category	Shielding/Non-shielding
USB cable ( Foxconn )	N/A	0.93m	N/A	Shielding
USB cable ( Luxshare )	N/A	0.97m	N/A	Shielding
USB cable ( Honglin )	N/A	0.94m	N/A	Shielding
Earphone cable ( Hong Sheng )	N/A	1.15m	N/A	Non-shielding
Earphone cable ( Quancheng )	N/A	1.1m	N/A	Non-shielding

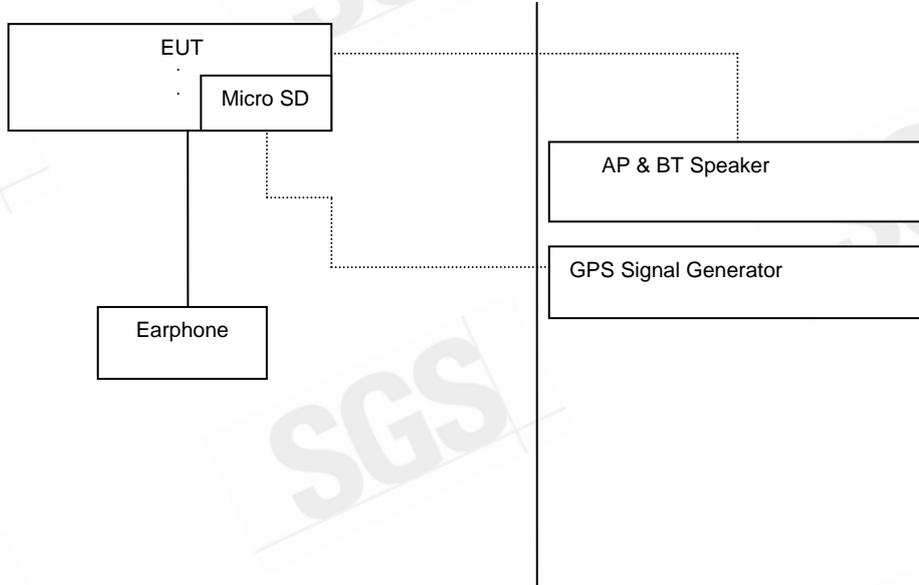
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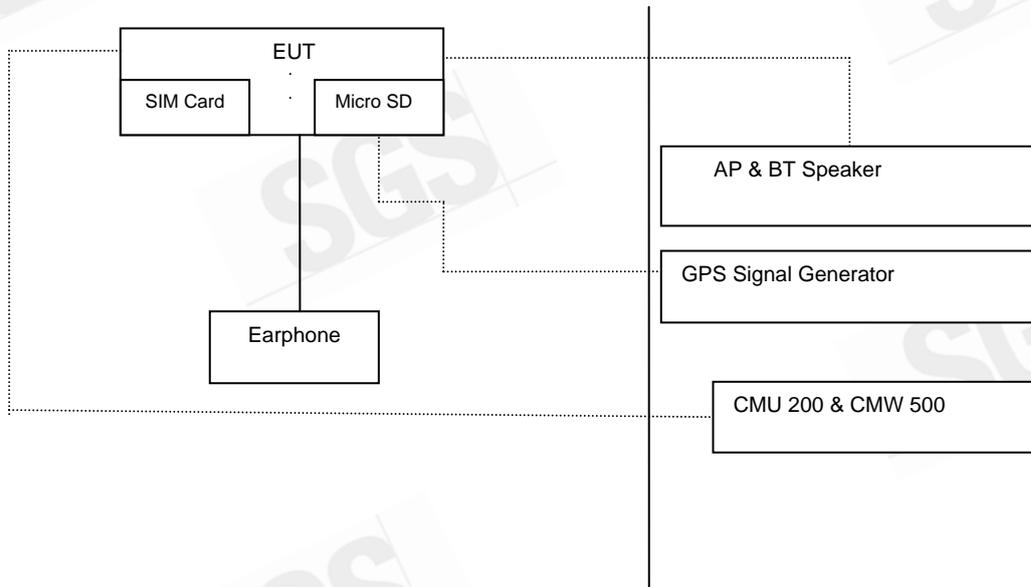


### 1.8 Test Set-Up Configuration

#### Mode 1~2



#### Mode 3~5, 8-11

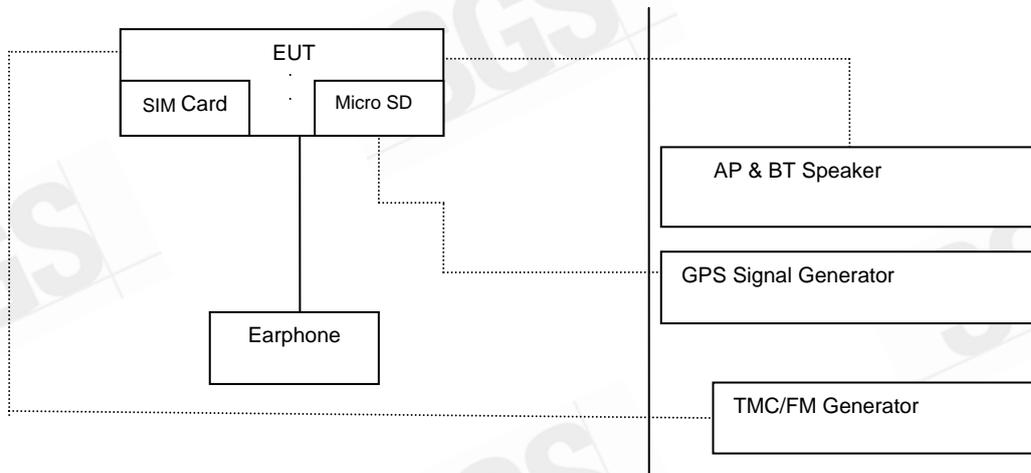


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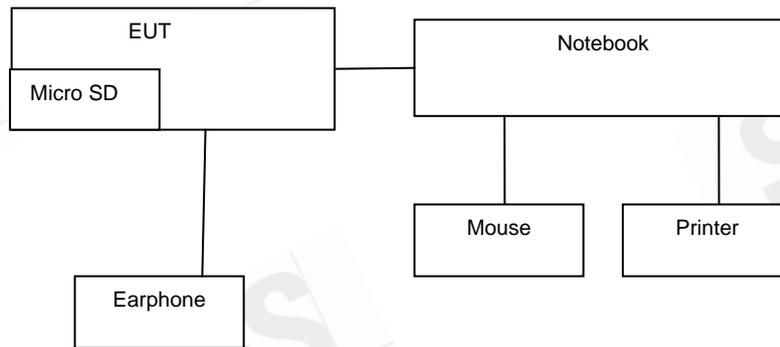
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Mode 6, 7



Mode 12-13



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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.

Exploratory measurements shall be used to identify the frequency of the emission that has the highest amplitude relative to the limit by operating the EUT in a range of typical modes of operation, with typical cable positions, and with a typical system equipment configuration and arrangement. For each mode of operation and for each ac power current-carrying conductor, cable manipulation may be performed within the range of likely configurations. For this measurement or series of measurements, the frequency spectrum of interest shall be monitored looking for the emission that has the highest amplitude relative to the limit.

Once that emission is found for each current-carrying conductor of each power cord associated with the EUT (but not the cords associated with non-EUT equipment in the overall system), the one configuration and arrangement and mode of operation that produces the emission closest to the limit across all the measured conductors is recorded.

Radiated Emission Testing was performed according to ANSI C63.4:2014 at the 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.

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SGS Taiwan Ltd.

No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134 號

台灣檢驗科技股份有限公司

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For 9kHz to 1GHz Exploratory radiated emissions measurements, follow below procedure:

- a) Exploratory radiated measurements shall be performed at the measurement distance or at a closer distance than that specified for compliance to determine the emission characteristics of the EUT and recorded in tabular or graphical form. Significant emissions are identified using a remote-controlled turntable and antenna positioner and monitoring the spectrum while changing the EUT (turntable) azimuth, antenna polarity, and height. This spectrum exploratory monitoring can also be performed by manually moving the receiving antenna around the EUT to pick up significant emissions. A shielded room may be used for exploratory testing, but care must be taken to account for shielded room reflections that can lead to significant errors in amplitude measurements.
  
- b) Broadband antennas and a spectrum analyzer or an EMI receiver with a panoramic display are most often used in this type of testing. It is recommended that either a headset or loudspeaker be connected as an aid in detecting ambient signals and finding frequencies of significant emission from the EUT when the exploratory and final testing is performed at an OATS with strong ambient signals. Caution should be taken if either antenna heights between 1 m and 4 m or EUT azimuth is not fully explored. Not fully exploring these parameters during exploratory testing may require complete testing at the OATS or semi-anechoic chamber when the final full spectrum testing is conducted.

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台灣檢驗科技股份有限公司

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- c) The EUT should be set up in its typical configuration and arrangement and operated in its various modes. For tabletop systems, cables or wires not bundled in the initial setup shall be manipulated within the range of likely arrangements. For floor-standing equipment, the cables or wires should be located in the same manner as the user would install them and no further manipulation is made. For combination EUTs, the tabletop and floor-standing portions of the EUT shall follow the procedures for their respective setups and cable manipulation. If the manner of cable installation is not known, or if it changes with each installation, cables or wires for floor-standing equipment shall be manipulated to the extent possible to produce the maximum level of emissions.
- d) Exploratory radiated emissions testing of handheld and/or body-worn devices shall include rotation of the EUT through three orthogonal axes to determine the orientation (attitude) that maximizes the emissions. This equipment arrangement shall be used in the final measurements of radiated emission from the EUT.
- e) For each mode of operation required to be tested, the frequency spectrum shall be monitored. Variations in antenna height between 1 m and 4 m, antenna polarization, EUT azimuth, and cable or wire placement (each variable within bounds specified elsewhere) shall be explored to produce the emission that has the highest amplitude relative to the limit.

For 1GHz to 40GHz Exploratory radiated emissions measurements, follow below procedure: When measuring emissions above 1 GHz, the frequencies of maximum emission shall be determined by manually (or with an articulated antenna positioner) positioning the antenna close to the EUT and then moving the measurement antenna over the surfaces of the EUT while observing a spectral display. It will be advantageous to have prior knowledge of the frequencies of emissions above 1 GHz to help in the search for emissions at those frequencies.

The frequencies and amplitudes of maximum emission were measured at varying azimuths, antenna heights and antenna polarities. Maximum emission levels are then reported.

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### 1.10 Standards Applicable for Testing

Tests to be carried out under FCC Part 15, Subpart B

Test Standards	Status
FCC Part 15, Subpart B	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	0.6184	-6.14 (QP)
			Neutral	0.6192	-10.70 (QP)
	Radiated Emission	PASS	Ver.	30.2200	-9.30 (QP)

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台灣檢驗科技股份有限公司

t (886-2) 2299-3279

f (886-2) 2298-0488

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## 2. EMISSION

### 2.1 Test Results

	Results
Conducted Emission	Pass
Radiated Emission	Pass

### 2.2 Frequency Range

Conducted Emission : 150 kHz - 30 MHz

Radiated Emission : See below table

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (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 for 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.

### 2.3.2 Limits of Radiated Emissions for FCC Part 15, Subpart B/CISPR 22

#### FCC 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 1000-18000	79.3	59.3	73.9	53.9

#### CISPR 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 : The lower limit applies at the transition frequency.



## 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	2016/6/23	2017/6/22
Coaxial Cables	N/A	N30N30-1042-150	N/A	2016/2/6	2017/2/5
LISN	SCHWARZBECK	NSLK 8127	8127-648	2016/6/13	2017/6/12
Pulse Limiter	Narda S.T.S.	PMM PL01	1110X30602	2015/8/13	2016/8/12
LISN	Schwarzbeck	NSLK 8128	NSLK8127-300	2016/6/22	2017/6/21
Universal Digital Radio Communication Tester	R&S	CMU 200	120239	2015/11/24	2016/11/23
Wideband Radio Communication Tester	R&S	CMW 500	131121	2015/8/23	2016/8/22
Test S/W	Farad	EZ-EMC	Ver. SGS-03A2	N.C.R.	N.C.R.
SGS Taiwan LTD. Electronics & Communication Laboratory No.2, Keji 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.) Measurement Uncertainty of Conducted Emission Expanded uncertainty (K=2) of conducted emission is 2.20 dB					

### 2.4.2 Operating Environment

Temperature : 24 degree C

Humidity : 62 %RH

Atmospheric Pressure : 992 mBar

### 2.4.3 Measurement Level Calculation

Factor = LISN insertion loss + Cable loss

Measurement Level = Reading Level + Factor

Over (Margin) = Measurement Level – Limit

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2.4.4 Measurement Data:

Mode\_10\_L

Site : Conduction Room      Phase: L1      Temperature: 24 °C  
 Limit: FCC Class B Conduction(QP)      Power: AC 120V/60Hz      Humidity: 62 %  
 Mode: Mode 10  
 Note:

Conducted Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.5152	40.70	0.18	40.88	56.00	-15.12	QP	
2		0.5152	27.20	0.18	27.38	46.00	-18.62	AVG	
3	*	0.6184	49.70	0.16	49.86	56.00	-6.14	QP	
4		0.6184	35.50	0.16	35.66	46.00	-10.34	AVG	
5		1.0210	39.00	0.15	39.15	56.00	-16.85	QP	
6		1.0210	26.90	0.15	27.05	46.00	-18.95	AVG	
7		1.4708	37.30	0.18	37.48	56.00	-18.52	QP	
8		1.4708	26.10	0.18	26.28	46.00	-19.72	AVG	
9		1.8465	37.10	0.21	37.31	56.00	-18.69	QP	
10		1.8465	25.70	0.21	25.91	46.00	-20.09	AVG	
11		2.6490	36.90	0.22	37.12	56.00	-18.88	QP	
12		2.6490	26.60	0.22	26.82	46.00	-19.18	AVG	

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

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Mode\_10\_N

Site : Conduction Room Phase: N Temperature: 24 °C  
 Limit: FCC Class B Conduction(QP) Power: AC 120V/60Hz Humidity: 62 %  
 Mode: Mode10  
 Note:

Conducted Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.1500	42.50	0.19	42.69	66.00	-23.31	QP	
2		0.1500	29.40	0.19	29.59	56.00	-26.41	AVG	
3		0.1740	40.50	0.19	40.69	64.77	-24.08	QP	
4		0.1740	25.00	0.19	25.19	54.77	-29.58	AVG	
5		0.2017	41.70	0.19	41.89	63.54	-21.65	QP	
6		0.2017	30.50	0.19	30.69	53.54	-22.85	AVG	
7		0.5165	35.30	0.22	35.52	56.00	-20.48	QP	
8		0.5165	23.50	0.22	23.72	46.00	-22.28	AVG	
9 *		0.6192	45.10	0.20	45.30	56.00	-10.70	QP	
10		0.6192	33.40	0.20	33.60	46.00	-12.40	AVG	
11		2.6546	33.80	0.26	34.06	56.00	-21.94	QP	
12		2.6546	26.80	0.26	27.06	46.00	-18.94	AVG	

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

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## 2.5 Test of Radiated Emission

### 2.5.1 Test Equipments

#### Below 1GHz

SGS Radiated_Below_1GHz HWAYA 10m_EMC					
EQUIPMENT TYPE	Manufacturer	Model Number	Serial Number	Calibration Date	Calibration Due
EMI Test Receiver	R&S	ESCI 7	100950	2015/12/8	2016/12/7
EMI Test Receiver	R&S	ESCI 3	101343	2015/12/25	2016/12/24
Broadband Antenna	SCHWAZBECK	VULB9168	9168-628	2015/9/23	2016/9/22
Broadband Antenna	SCHWAZBECK	VULB9168	9168-629	2015/9/23	2016/9/22
Pre Amplifier	EMC Instruments Corp.	EMC330	980178	2016/3/31	2017/3/30
Pre Amplifier	EMC Instruments Corp.	EMC330	980179	2016/3/31	2017/3/30
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150917	2015/9/18	2016/9/17
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150919	2015/9/18	2016/9/17
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150820	2015/9/18	2016/9/17
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150918	2015/9/18	2016/9/17
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150821	2015/9/18	2016/9/17
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150822	2015/9/18	2016/9/17
Universal Digital Radio Communication Tester	R&S	CMU 200	120239	2015/11/24	2016/11/23
Wideband Radio Communication Tester	R&S	CMW 500	131121	2015/8/23	2016/8/22
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	2015/12/31	2016/12/30
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 of radiated emission is 4.16 dB. (30MHz ~ 1000MHz)					

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## Above 1GHz

SGS Radiated_Above_1GHz HWAYA 966A EMC					
EQUIPMENT TYPE	Manufacturer	Model Number	Serial Number	Calibration Date	Calibration Due
Spectrum Analyzer	R&S	FSV 40	101419	2016/2/25	2017/2/24
EMI Test Receiver	R&S	ESR 7	101459	2016/2/22	2017/2/21
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA9120D673	2015/10/8	2016/10/7
Horn Antenna	Schwarzbeck	BBHA9170	BBHA9170-184	2015/12/11	2016/12/10
Pre Amplifier	EMC Instruments Corp.	EMC012645B	980216	2015/9/30	2016/9/29
Pre Amplifier	EMC Instruments Corp.	EMC184045B	980135	2015/10/27	2016/10/26
Coaxial Cable	JUNFLOW	MWX221-NMSNMS	J0778929	2016/4/23	2017/4/22
Coaxial Cable	Huber+Suhner	SUCCOFLEX 104PEA	30255/4PEA	N.C.R.	N.C.R.
Coaxial Cable	EMC Instruments	EMC104-SM-SM	140927	2016/4/23	2017/4/22
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	MY 2152/2	2016/6/5	2017/6/4
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	MY 2153/2	2016/6/5	2017/6/4
Universal Digital Radio Communication Tester	R&S	CMU 200	120239	2015/11/24	2016/11/23
Wideband Radio Communication Tester	R&S	CMW 500	131121	2015/8/23	2016/8/22
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	2016/1/12	2017/1/11
Test S/W	Farad	EZ-EMC	Ver. SGS-03A2	N.C.R.	N.C.R.
SGS Taiwan LTD. Electronics & Communication Laboratory No.2, Keji 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.) Measurement Uncertainty of Radiated Emission Expanded uncertainty (k=2) of radiated emission measurement is 4.96 dB. (1-6GHz) Expanded uncertainty (k=2) of radiated emission measurement is 5.14 dB. (6-18GHz) Expanded uncertainty (k=2) of radiated emission measurement is 4.86 dB. (18-26GHz) Expanded uncertainty (k=2) of radiated emission measurement is 4.81 dB. (26-40GHz)					

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### 2.5.2 Operating Environment

Temperature : 18 degree C

Humidity : 71 %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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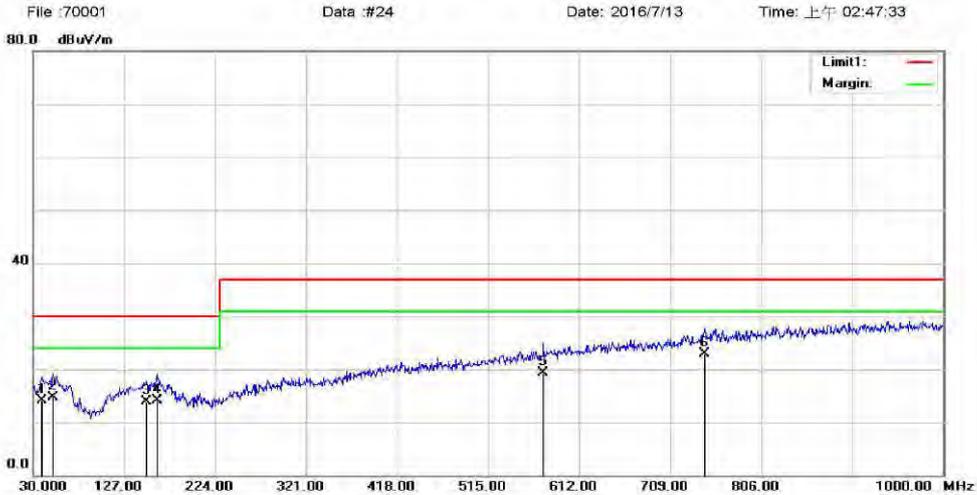
2.5.4 Measurement Data

Below 1GHz

Mode\_11\_H

Site: SGS 10m Chamber	Polarization: <i>Horizontal</i>	Temperature: 18 °C
Limit: CISPR22 Class B 10M Radiation	Power: AC 120V/60Hz	Humidity: 71 %
Mode: Mode_11	Distance:	
Note:		

Radiated Emission



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		40.0200	25.90	-11.80	14.10	30.00	-15.90	QP	
2		51.1600	26.18	-11.48	14.70	30.00	-15.30	QP	
3		151.0300	25.82	-11.92	13.90	30.00	-16.10	QP	
4		162.1000	25.70	-11.60	14.10	30.00	-15.90	QP	
5		574.0500	24.76	-5.36	19.40	37.00	-17.60	QP	
6	*	746.1600	24.80	-1.90	22.90	37.00	-14.10	QP	

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

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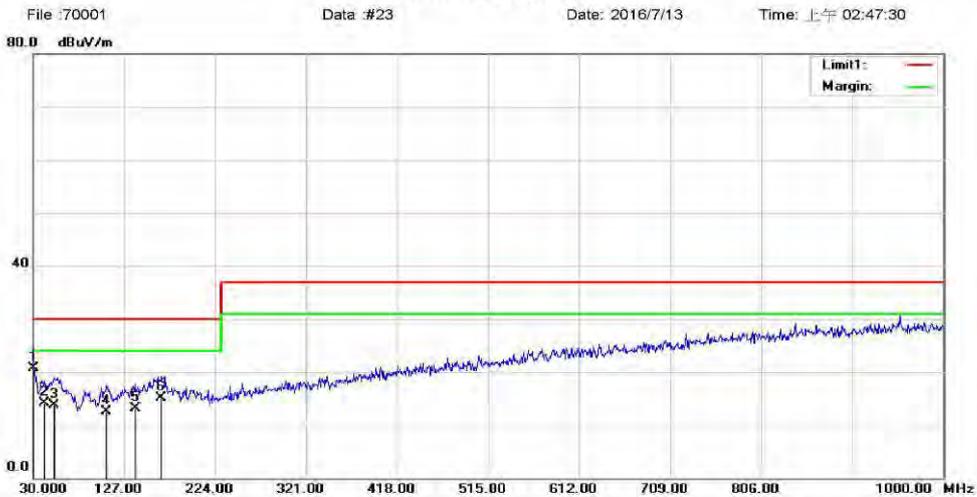
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Mode\_11\_V

Site: SGS 10m Chamber      Polarization: *Vertical*      Temperature: 18 °C  
 Limit: CISPR22 Class B 10M Radiation      Power: AC 120V/60Hz      Humidity: 71 %  
 Mode: Mode\_11      Distance:  
 Note:

Radiated Emission



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	30.2200	33.19	-12.49	20.70	30.00	-9.30	QP	
2		41.4000	25.59	-11.39	14.20	30.00	-15.80	QP	
3		52.1900	25.00	-11.20	13.80	30.00	-16.20	QP	
4		108.7300	27.19	-14.69	12.50	30.00	-17.50	QP	
5		138.9200	25.26	-12.06	13.20	30.00	-16.80	QP	
6		166.8900	26.51	-11.31	15.20	30.00	-14.80	QP	

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

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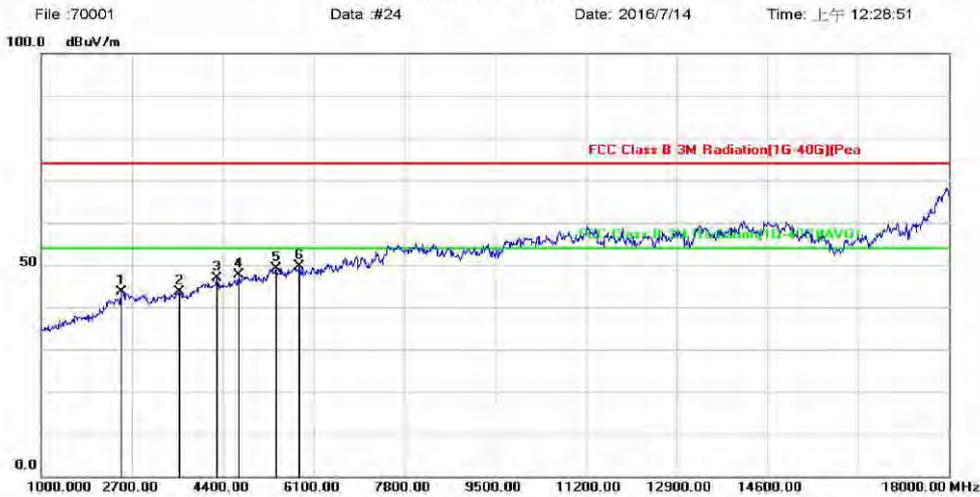


Above 1GHz

Mode\_11\_H

Site: SGS 966 Chamber A      Polarization: *Horizontal*      Temperature: 21 °C  
 Limit: FCC Class B 3M Radiation(1G-40G)(Pea      Power: AC 120V/60Hz      Humidity: 72 %  
 Mode: Mode\_11      Distance:  
 Note:

Radiated Emission



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2496.000	59.27	-15.58	43.69	74.00	-30.31	peak	
2		3584.000	57.59	-13.85	43.74	74.00	-30.26	peak	
3		4298.000	58.72	-11.72	47.00	74.00	-27.00	peak	
4		4706.000	58.41	-10.84	47.57	74.00	-26.43	peak	
5		5403.000	57.81	-8.80	49.01	74.00	-24.99	peak	
6 *		5845.000	57.52	-7.90	49.62	74.00	-24.38	peak	

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

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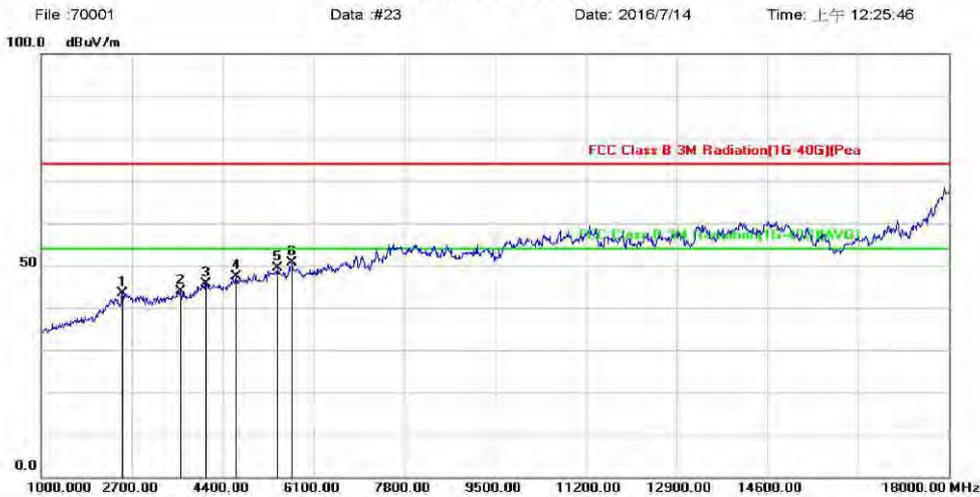
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Mode\_11\_V

Site: SGS 966 Chamber A  
 Limit: FCC Class B 3M Radiation(1G-40G)(Pea  
 Mode: Mode\_11  
 Note:  
 Polarization: **Vertical**  
 Power: AC 120V/60Hz  
 Distance:  
 Temperature: 21 °C  
 Humidity: 72 %

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		2530.000	57.75	-14.32	43.43	74.00	-30.57	peak	
2		3618.000	57.70	-13.71	43.99	74.00	-30.01	peak	
3		4094.000	57.77	-12.03	45.74	74.00	-28.26	peak	
4		4655.000	58.38	-10.98	47.40	74.00	-26.60	peak	
5		5420.000	58.04	-8.74	49.30	74.00	-24.70	peak	
6 *		5709.000	58.86	-8.14	50.72	74.00	-23.28	peak	

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

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**\*\* End of Report \*\***

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