



# FCC CERTIFICATION REPORT

**Test Report No.** : E1/2017/60157  
**Applicant** : HMD Global Oy  
**Address** : Karaportti 2, 02610 Espoo, Finland  
**Manufacturer** : HMD Global Oy  
**Address** : Karaportti 2, 02610 Espoo, Finland

## Equipment Under Test (EUT) :

**Product Name** : Smart Phone  
**Brand Name** : Nokia  
**Model No.** : TA-1023  
**Added Model(s)** : N/A

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

**Date of Receipt** : Jun. 24, 2017  
**Date of Test** : Jun. 24 ~ Jul. 10, 2017  
**Date of Issue** : Jul. 24, 2017

<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:** Ivan Hsieh **Date** Jul. 24, 2017  
**Ivan Hsieh (Engineer)**

**Approved By** Eddy Cheng **Date** Jul. 24, 2017  
**Eddy Cheng**  
**(Assistant Supervisor)**



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## Revision History

Report Number	Revision	Description	Issue Date
E1/2017/60157	Rev.00	Initial creation of document	Jul. 24, 2017

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# 1. General Information

## 1.1 Applicant & Manufacturer Information

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 Address of Applicant : Karaportti 2, 02610 Espoo, Finland  
 Manufacturer : HMD Global Oy  
 Address of Manufacturer : Karaportti 2, 02610 Espoo, Finland

## 1.2 General Description of EUT

Product Name : Smart Phone  
 Brand Name : Nokia  
 Model No. : TA-1023  
 Added Model(s) : N/A  
 Model Difference : N/A

## 1.3 Details of EUT

Power Supply : AC 100~240V, 50~60Hz  
 From System  
 Inside Battery 3.85V

Modes/Function :

- Mode 1. Rear REC+ADP+Earphone+USB Cable +BT Link+WiFi 2.4G Link+GPS/ AGPS/ Gloness/ Beidou Link
- Mode 2. Front REC+ADP+Earphone+USB Cable +BT Link+WiFi 2.4G Link+GPS/ AGPS/ Gloness/ Beidou Link
- Mode 3. ADP+Earphone+USB Cable+BT Link+WiFi Link+GPS/ AGPS/ Gloness/ Beidou Link +GSM 900 Link
- Mode 4. ADP+Earphone+USB Cable+BT Link+WiFi Link+GPS/ AGPS/ Gloness/ Beidou Link +GSM 1800 Link
- Mode 5. ADP+Earphone+USB Cable+BT Link+WiFi Link+GPS/ AGPS/ Gloness/ Beidou Link +3G B1 Link

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	Mode 6. ADP+Earphone+USB Cable+BT Link+WiFi Link+GPS/ AGPS/ Gloness/ Beidou Link +3G B8 Link
	Mode 7. ADP+Earphone+USB Cable+BT Link+WiFi Link+GPS/ AGPS/ Gloness/ Beidou Link +4G B38 Link
	Mode 8. PC LINK Micro SD Read + Earphone +USB Cable
	Mode 9. PC LINK Micro SD Write + Earphone +USB Cable
	Mode 10. Phone only play Music
	Mode 11. FM +ADP+Earphone+t USB Cable
Worst case	: CE _Worst_ case: Mode 2. Front REC+ADP+Earphone+USB Cable +BT Link+WiFi 2.4G Link+GPS/ AGPS/ Gloness/ Beidou Link Below_RE_Worst_case: Mode 8. PC LINK Micro SD Read + Earphone +USB Cable Above_RE_Worst_case: Mode 8. PC LINK Micro SD Read + Earphone +USB Cable
Highest operate description	: 2620MHz
Adapter	: Model No.: FC0100 Supplier : HMD Global Oy I/P : AC 100-240V, 50-60Hz, 0.3A O/P : DC 5.0V, 2A  Model No.: FC0101 Supplier : HMD Global Oy I/P : AC 100-240V, 50-60Hz, 0.3A O/P : DC 5.0V, 2A  Model No.: FC0102 Supplier : HMD Global Oy I/P : AC 100-240V, 50-60Hz, 0.3A O/P : DC 5.0V, 2A
Battery	: Model No.:HE338 Supplier: NOKIA 3.85V, 4000mAh, 15.4Wh

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## 1.4 Operation Procedure

### Test Mode: 1

1. EUT connected to Adapter & USB Cable & Earphone and power on.
2. Open the preset lens video, Executing BT & WIFI & GPS Link.
3. Start the test.

### Test Mode: 2

1. EUT connected to Adapter & USB Cable & Earphone and power on.
2. Open the Post lens to video, Executing BT & WIFI & GPS Link.
3. Start the test.

### Test Mode: 3

1. EUT connected to Adapter & USB Cable & Earphone and power on.
2. Executing BT & WIFI & GPS & GSM 900 Link.
3. Start the test.

### Test Mode: 4

1. EUT connected to Adapter & USB Cable & Earphone and power on.
2. Executing BT & WIFI & GPS & GSM 1800 Link.
3. Start the test.

### Test Mode: 5

1. EUT connected to Adapter & USB Cable & Earphone and power on.
2. Executing BT & WIFI & GPS & WCDMA Band1 Link.
3. Start the test.

### Test Mode: 6

1. EUT connected to Adapter & USB Cable & Earphone and power on.
2. Executing BT & WIFI & GPS & WCDMA Band8 Link.
3. Start the test.

### Test Mode: 7

1. EUT connected to Adapter & USB Cable & Earphone and power on.
2. Executing BT & WIFI & GPS & LTE Band38 Link.
3. Start the test.

### Test Mode: 8

1. EUT install Micro SD Card.
2. EUT connected to Earphone & USB Cable and NB Link.
3. NB and mobile phone USB data transfer (Reader).
4. Start the test.

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## Test Mode: 9

1. EUT install Micro SD Card.
2. EUT connected to Earphone & USB Cable and NB Link.
3. NB and mobile phone USB data transmission (Write).
4. Start the test.

## Test Mode: 10

1. EUT stand-alone boot, play MP3 audio files.
2. Start the test.

## Test Mode: 11

1. EUT connected to Adapter & USB Cable & Earphone and power on.
2. Turn on FM Radio Function and receive FM Radio.
3. Start the test.

## 1.5 Description of Support Units

PRODUCT	MANUFACTURER	MODEL NO.	SERIAL NO.
Micro SD	Transcend	Micro SDHC (Class4)	N/A
BT Speaker	Creative	MF8090	YFMF8090245R00855Y
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 (EMI)(Win7)	DELL	Latitude E5430	COVZYW1
TMC/FM Generator	Levear	VP-8194D	0821170LA

## Support Equipment Used in Tested Cable

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

## 1.6 Modification List

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

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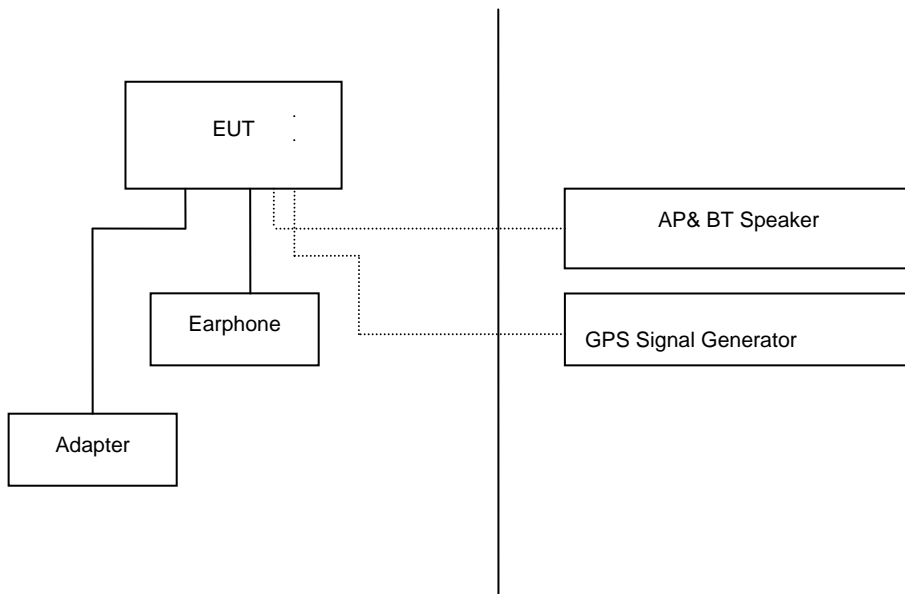


1.7 Accessories Cable List

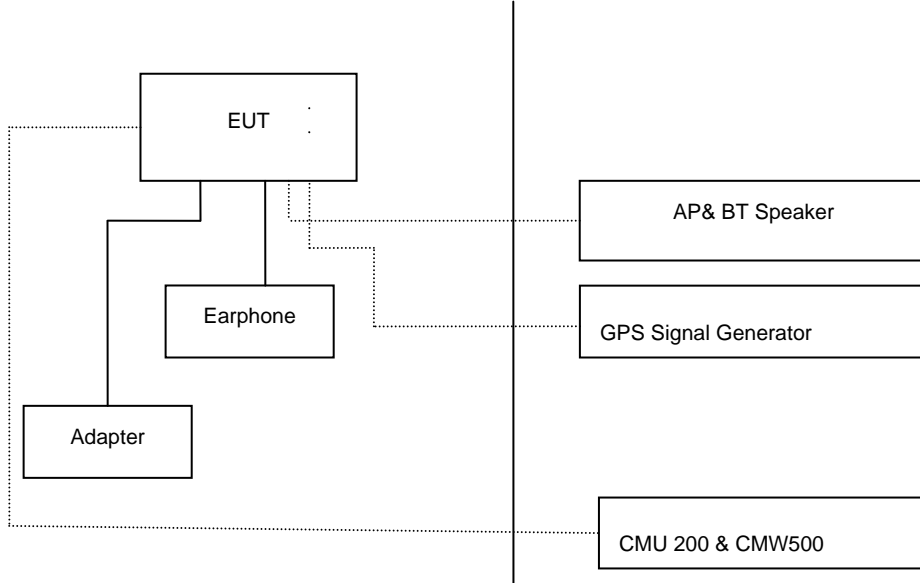
Cable Type	Core	Length	Shielding/Non-shielding
USB Cable	N/A	1M	Shielding
Earphone	N/A	1.5M	Non-shielding

1.8 Test Set-Up Configuration

Test mode 1~2



Test mode 3~7



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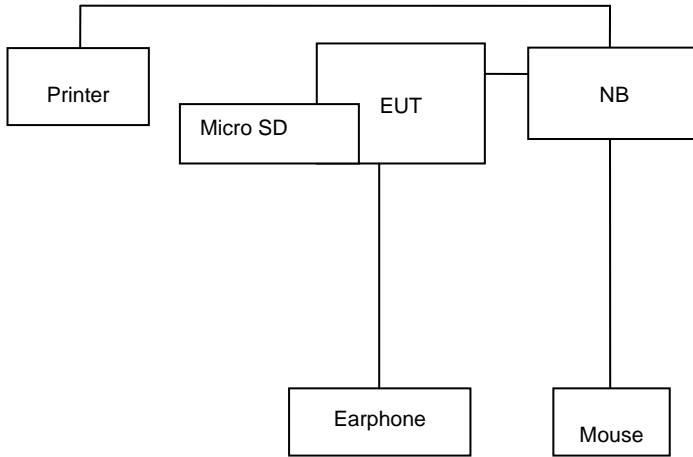
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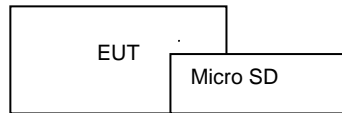




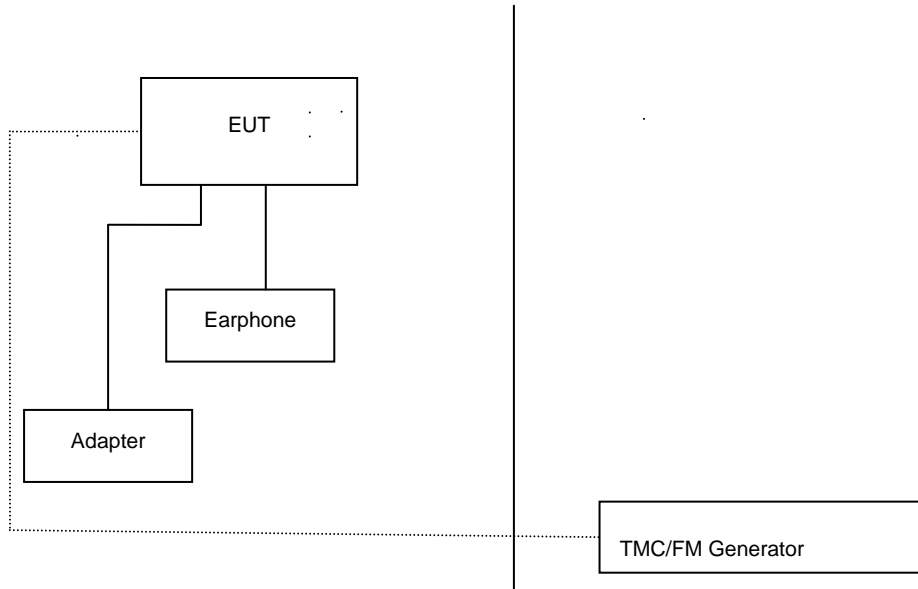
Test mode 8~9



Test mode 10



Test mode 11



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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

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## 1.11 Summary of Results

### Model No.:TA-1023

Highest Emission					
Standard	Test Type	Result	Phase/Pol.	Frequency(MHz)	Margin(dB)
FCC Part 15 Subpart B Class B	Conducted Emission	PASS	Line	0.7540	-8.30 (AVG)
			Neutral	0.1620	-15.82 (QP)
	Radiated Emission	PASS	Hor.	980.2400	-10.10 (QP)

### Model No.:TA-1035

Highest Emission					
Standard	Test Type	Result	Phase/Pol.	Frequency(MHz)	Margin(dB)
FCC Part 15 Subpart B Class B	Conducted Emission	PASS	Line	0.7540	-8.30 (AVG)
			Neutral	0.1620	-15.82 (QP)
	Radiated Emission	PASS	Hor.	960.4700	-10.10 (QP)

#### Difference Description:

The only different between TA-1035 and TA-1023 is SIM card slot, where the TA-1035 is Dual-SIM (FCC ID: 2AJOTTA-1035), the TA-1023 is Single SIM.

Other parts of the Smart Phone are the same, including the appearance, the antennas, Chipset, RF parameters, Battery, Mainboard and so on

#### Note:

According to the difference description above, TA-1023 is tested at the worst case of TA-1029(FCC ID:2AJOTTA-1035)

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## 2. EMISSION

### 2.1 Test Results

	Results
Conducted Emission	<b>Pass</b>
Radiated Emission	<b>Pass</b>

### 2.2 Frequency Range

**FCC Part 15, Subpart B:**

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

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## 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 1000-18000	79.3	59.3	73.9	53.9

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**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	2016/8/30	2017/8/29
LISN	SCHWARZBECK	NSLK 8127	8127-648	2017/6/18	2018/6/17
Pulse Limiter	Narda S.T.S.	PMM PL01	1110X30602	2016/8/12	2017/8/11
LISN	FCC	FCC-LISN-50/250-25-2-01	4034	2017/3/19	2018/3/18
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
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 2.25 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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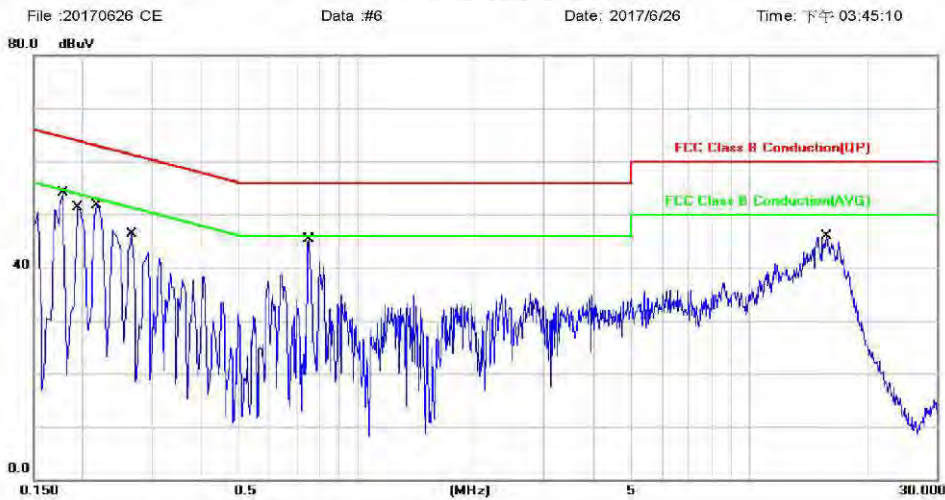


2.4.4 Measurement Data:

Mode\_2\_L

Site : Conduction Room Phase: L1 Temperature: 24 °C  
 Limit: FCC Class B Conduction(QP) Power: AC 120V/60Hz Humidity: 64 %  
 Mode: Mode\_2  
 Note:

Conducted Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.1780	48.25	0.33	48.58	64.58	-16.00	QP	
2		0.1780	30.38	0.33	30.71	54.58	-23.87	AVG	
3		0.1940	43.56	0.33	43.89	63.86	-19.97	QP	
4		0.1940	26.82	0.33	27.15	53.86	-26.71	AVG	
5		0.2180	43.37	0.33	43.70	62.89	-19.19	QP	
6		0.2180	27.36	0.33	27.69	52.89	-25.20	AVG	
7		0.2660	39.02	0.33	39.35	61.24	-21.89	QP	
8		0.2660	24.43	0.33	24.76	51.24	-26.48	AVG	
9		0.7540	43.25	0.36	43.61	56.00	-12.39	QP	
10 *		0.7540	37.34	0.36	37.70	46.00	-8.30	AVG	
11		15.7420	38.30	0.95	39.25	60.00	-20.75	QP	
12		15.7420	26.80	0.95	27.75	50.00	-22.25	AVG	

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

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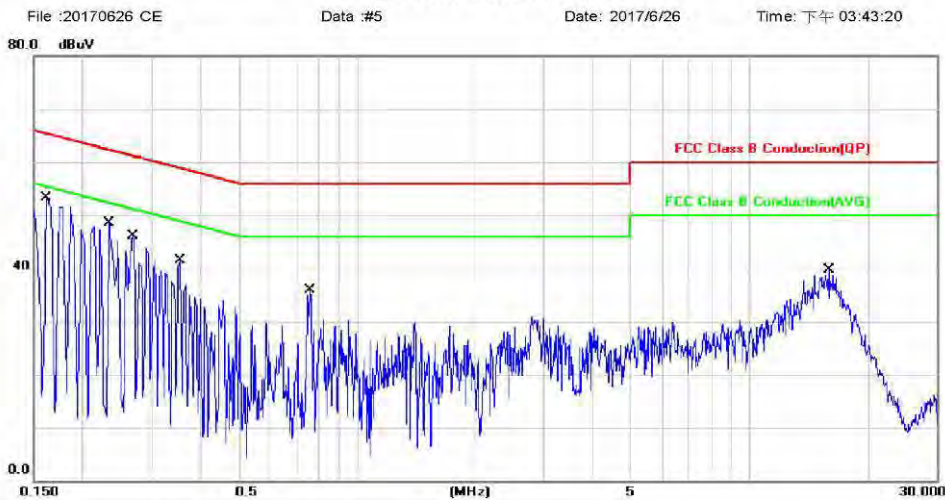
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Mode\_2\_N

Site : Conduction Room Phase: N Temperature: 24 °C  
 Limit: FCC Class B Conduction(QP) Power: AC 120V/60Hz Humidity: 64 %  
 Mode: Mode\_2  
 Note:

Conducted Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV	dBuV	dB		
1	*	0.1620	49.12	0.42	49.54	65.36	-15.82	QP	
2		0.1620	31.66	0.42	32.08	55.36	-23.28	AVG	
3		0.2340	43.43	0.41	43.84	62.31	-18.47	QP	
4		0.2340	25.24	0.41	25.65	52.31	-26.66	AVG	
5		0.2700	40.49	0.41	40.90	61.12	-20.22	QP	
6		0.2700	23.11	0.41	23.52	51.12	-27.60	AVG	
7		0.3540	35.53	0.42	35.95	58.87	-22.92	QP	
8		0.3540	18.58	0.42	19.00	48.87	-29.87	AVG	
9		0.7620	34.06	0.43	34.49	56.00	-21.51	QP	
10		0.7620	23.98	0.43	24.41	46.00	-21.59	AVG	
11		15.9260	31.66	0.71	32.37	60.00	-27.63	QP	
12		15.9260	21.44	0.71	22.15	50.00	-27.85	AVG	

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

File :20170626 CEData #5

Page: 1

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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	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	2016/9/22	2017/9/21
Broadband Antenna	SCHWAZBECK	VULB9168	9168-629	2016/9/22	2017/9/21
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	2016/9/18	2017/9/17
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150919	2016/9/18	2017/9/17
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150820	2016/9/18	2017/9/17
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150918	2016/9/18	2017/9/17
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150821	2016/9/18	2017/9/17
Coaxial Cable	EMC Instruments	EMCCFD400-NM-NM	150822	2016/9/18	2017/9/17
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 HWAYA 966B_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	101507	2017/5/27	2018/5/26
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA9120D673	2016/10/14	2017/10/13
Pre Amplifier	R&S	SCU-18	100203	2017/3/26	2018/3/26
Coaxial Cable	EMC Instruments	EMC104-SM-SM	140923	2016/9/30	2017/9/29
Coaxial Cable	EMC Instruments	EMC104-SM-SM	140925	2016/9/30	2017/9/29
Coaxial Cable	EMC Instruments	EMC104-SM-SM	140927	2016/9/30	2017/9/29
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-7802	N/A	N/A	N.C.R.	N.C.R.
Antenna Master	N/A	N/A	N/A	N.C.R.	N.C.R.
Turn Table	N/A	N/A	N/A	N.C.R.	N.C.R.
Site VSWR	SGS	966 Chamber B	SAC-B	2016/10/8	2017/10/7
Test S/W	Farad	EZ-EMC	Ver. SGS-03A2	N.C.R.	N.C.R.
SGS Taiwan LTD. Electronics & Communication Laboratory No.2, Keji 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.) Measurement Uncertainty of Radiated Emission Expanded uncertainty (k=2) of radiated emission measurement is 5.06 dB. (1-6GHz) Expanded uncertainty (k=2) of radiated emission measurement is 5.15 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 : 22 degree C

Humidity : 85 %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

Model No.:TA-1023

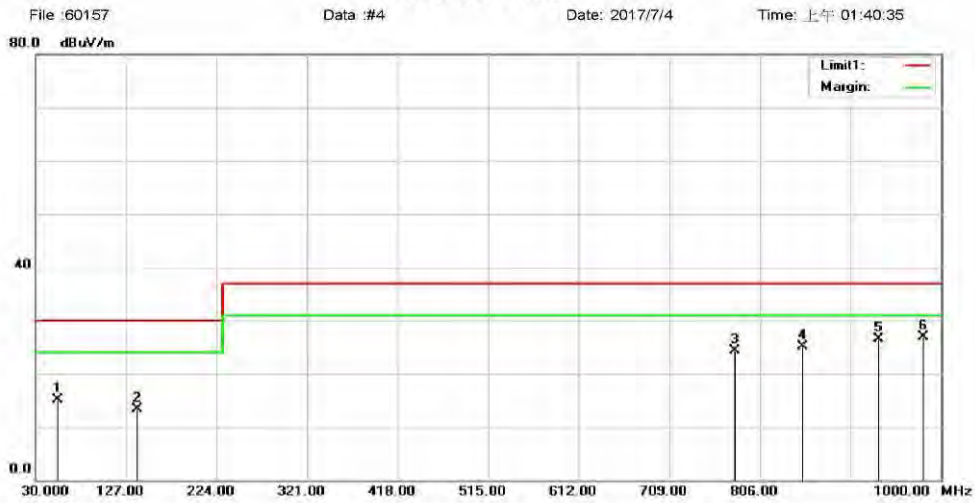
Mode\_8\_H

Site: SGS 10m Chamber  
 Limit: CISPR22 Class B 10M Radiation  
 Mode: Mode\_8  
 Note:

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

Temperature: 22 °C  
 Humidity: 85 %

Radiated Emission



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		53.1600	26.85	-11.65	15.20	30.00	-14.80	QP	
2		137.7700	25.71	-12.41	13.30	30.00	-16.70	QP	
3		779.0400	25.00	-0.60	24.40	37.00	-12.60	QP	
4		851.4300	24.98	0.12	25.10	37.00	-11.90	QP	
5		932.7300	24.99	1.51	26.50	37.00	-10.50	QP	
6	*	980.2400	25.06	1.84	26.90	37.00	-10.10	QP	

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

File :60157\Data :#4

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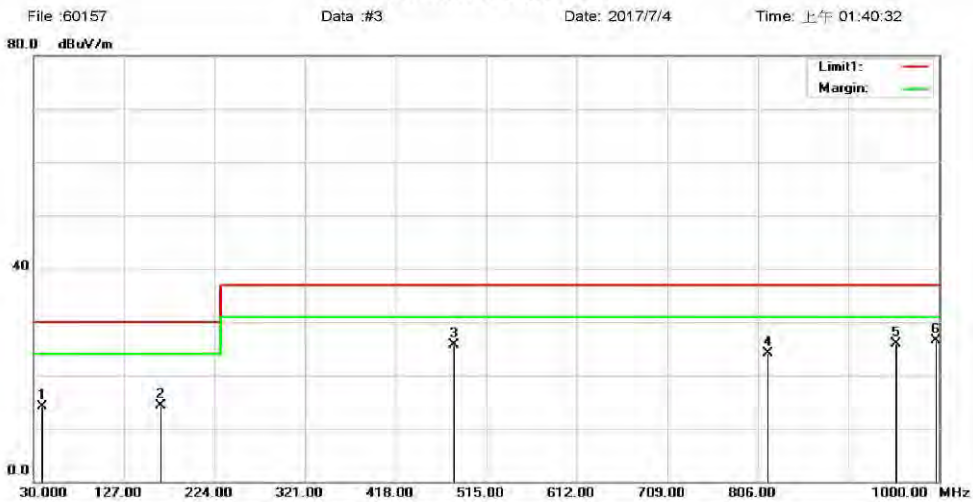
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Mode\_8\_V

Site: SGS 10m Chamber      Polarization: **Vertical**      Temperature: 23 °C  
 Limit: CISPR22 Class B 10M Radiation      Power: From System      Humidity: 84 %  
 Mode: Mode\_8      Distance: 10m  
 Note:

Radiated Emission



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		38.9700	25.70	-11.60	14.10	30.00	-15.90	QP	
2		166.6700	26.14	-11.84	14.30	30.00	-15.70	QP	
3		480.0200	31.64	-5.94	25.70	37.00	-11.30	QP	
4		816.5500	24.37	-0.27	24.10	37.00	-12.90	QP	
5		953.2400	24.56	1.34	25.90	37.00	-11.10	QP	
6 *		996.8800	24.63	1.87	26.50	37.00	-10.50	QP	

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

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Above 1GHz

Model No.:TA-1023

Mode\_8\_H

Site :SGS 966 Chamber B	Polarization: <b>Horizontal</b>	Temperature: 23 °C
Limit: FCC Class B 3M Radiation(1G-40G)(Pea	Power: From System	Humidity: 71 %
Mode: Mode_8	Distance:	
Note:		

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		1680.000	47.81	-16.30	31.51	74.00	-42.49	peak	
2		2394.000	53.59	-14.42	39.17	74.00	-34.83	peak	
3 *		3176.000	59.19	-12.86	46.33	74.00	-27.67	peak	
4		4230.000	48.46	-10.80	37.66	74.00	-36.34	peak	
5		4995.000	47.10	-8.52	38.58	74.00	-35.42	peak	
6		5862.000	47.12	-7.25	39.87	74.00	-34.13	peak	

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

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Mode\_8\_V

Site: SGS 966 Chamber B  
 Limit: FCC Class B 3M Radiation(1G-40G)(Pea  
 Mode: Mode\_8  
 Note:  
 Polarization: **Vertical**  
 Power: From System  
 Distance:  
 Temperature: 23 °C  
 Humidity: 71 %

Radiated Emission



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		1595.000	57.29	-16.49	40.80	74.00	-33.20	peak	
2	*	2394.000	60.28	-14.42	45.86	74.00	-28.14	peak	
3		3193.000	55.47	-12.84	42.63	74.00	-31.37	peak	
4		3992.000	51.40	-11.32	40.08	74.00	-33.92	peak	
5		4791.000	49.92	-9.21	40.71	74.00	-33.29	peak	
6		5811.000	47.40	-7.34	40.06	74.00	-33.94	peak	

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

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Below 1GHz

Model No.:TA-1035

Mode\_8\_H

Site: SGS 10m Chamber  
 Limit: CISPR22 Class B 10M Radiation  
 Mode: Mode\_8  
 Note:

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

Temperature: 21 °C  
 Humidity: 85 %

Radiated Emission



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		42.3300	26.06	-11.56	14.50	30.00	-15.50	QP	
2		151.9800	25.94	-11.84	14.10	30.00	-15.90	QP	
3		829.5200	25.01	-0.11	24.90	37.00	-12.10	QP	
4		861.9800	25.13	0.27	25.40	37.00	-11.60	QP	
5		896.4900	25.15	0.75	25.90	37.00	-11.10	QP	
6 *		960.4700	25.02	1.88	26.90	37.00	-10.10	QP	

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

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Mode\_8\_V

Site: SGS 10m Chamber      Polarization: **Vertical**      Temperature: 21 °C  
 Limit: CISPR22 Class B 10M Radiation      Power: From System      Humidity: 85 %  
 Mode: Mode\_8      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		43.4000	26.60	-11.20	15.40	30.00	-14.60	QP	
2		149.4900	25.21	-11.31	13.90	30.00	-16.10	QP	
3		480.0200	30.64	-5.94	24.70	37.00	-12.30	QP	
4		749.4600	24.61	-0.51	24.10	37.00	-12.90	QP	
5		885.7400	24.39	0.71	25.10	37.00	-11.90	QP	
6 *		976.6200	24.68	1.62	26.30	37.00	-10.70	QP	

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

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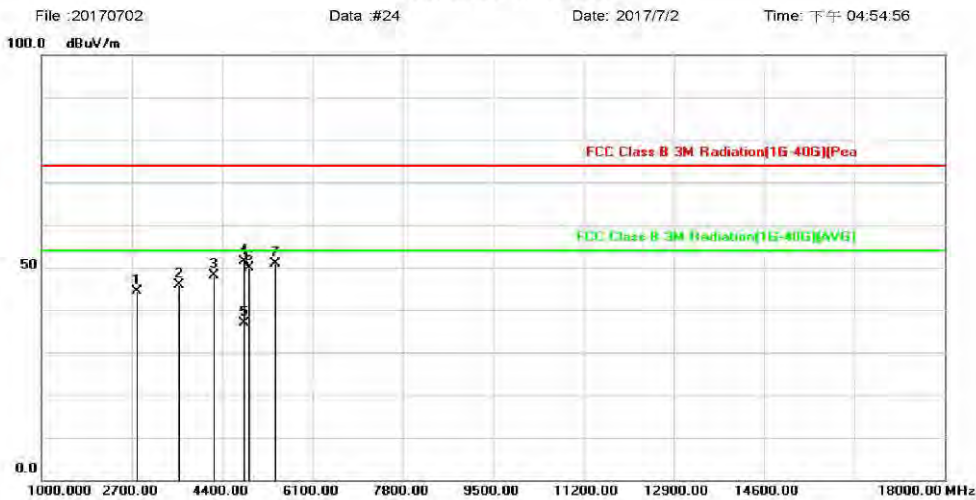
Above 1GHz

Model No.:TA-1035

Mode\_8\_H

Site: SGS 966 Chamber A  
 Limit: FCC Class B 3M Radiation(1G-40G)(Pea)  
 Mode: Mode\_8  
 Note:  
 Polarization: *Horizontal*  
 Power: From System  
 Distance:  
 Temperature: 18 °C  
 Humidity: 59 %

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		2802.000	57.77	-13.27	44.50	74.00	-29.50	peak	
2		3601.000	57.00	-11.08	45.92	74.00	-28.08	peak	
3		4247.000	57.40	-9.30	48.10	74.00	-25.90	peak	
4		4825.000	59.30	-7.90	51.40	74.00	-22.60	peak	
5 *		4825.000	44.77	-7.90	36.87	54.00	-17.13	AVG	
6		4910.000	57.49	-7.57	49.92	74.00	-24.08	peak	
7		5403.000	57.64	-6.72	50.92	74.00	-23.08	peak	

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

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Mode\_8\_V

Site: SGS 966 Chamber A  
 Limit: FCC Class B 3M Radiation(1G-40G)(Pea)  
 Mode: Mode\_8  
 Note:

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

Temperature: 18 °C  
 Humidity: 59 %

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		2598.000	58.46	-13.61	44.85	74.00	-29.15	peak	
2		3193.000	58.86	-12.36	46.50	74.00	-27.50	peak	
3		4213.000	57.16	-9.31	47.85	74.00	-26.15	peak	
4		4876.000	57.26	-7.68	49.58	74.00	-24.42	peak	
5		5420.000	56.68	-6.69	49.99	74.00	-24.01	peak	
6	*	5675.000	57.00	-6.21	50.79	74.00	-23.21	peak	

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

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

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