TEST REPORT

Application No.:	SZEM1905014667CR
Applicant:	DT Research. Inc.
Address of Applicant:	2000 Concourse Drive. San Jose. CA 95131. U.S.A
Manufacturer:	DT Research. Inc.
Address of Manufacturer:	2000 Concourse Drive. San Jose. CA 95131. U.S.A
Factory:	DT Research. Inc. Taiwan Branch
Address of Factory:	6F., No.36 Wuquan 7th Rd., Wugu Dist. New Taipei City 248 Taiwan
Equipment Under Test (EUT):	
EUT Name:	Dual Band Wireless-AC 8265
Model No.:	600D ♣
♣	The EUT is mounted in the Medical Tablet DT313.
Trade mark:	DT Research. Inc.
FCC ID	YE3600D
Standard(s) :	47 CFR Part 15, Subpart B
Date of Receipt:	2019-05-31
Date of Test:	2019-06-12 to 2019-06-18
Date of Issue:	2019-10-28
Test Result:	**Pass***

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

Keny Xu
EMC Laboratory Manager

Revision Record				
Version	**Chapter**	**Date**	**Modifier**	**Remark**
01		2019-10-28		Original

Authorized for issue by:

Leo Li /Project Engineer

Eric Fu /Reviewer

2 Test Summary

Emission Part				
Item	**Standard**	**Method**	**Requirement**	**Result**
Conducted Emissions at Mains Terminals (150kHz-30MHz)	47 CFR Part 15, Subpart B	ANSI C63.4:2014	Class B	Pass
Radiated Emissions (30MHz-1GHz)	47 CFR Part 15, Subpart B	ANSI C63.4:2014	Class B	Pass
Radiated Emissions (above 1GHz)	47 CFR Part 15, Subpart B	ANSI C63.4:2014	Class B	Pass

Internal Source	Upper Frequency
Below 1.705MHz	30MHz
1.705MHz to 108MHz	1GHz
108MHz to 500MHz	2GHz
500MHz to 1GHz	5GHz
Above 1GHz	5th harmonic of the highest frequency or 40GHz, whichever is lower

Remark:

For the host device Medical Tablet, Model No.: DT313XXXXX, X:0~9 or A~Z or "-" or blank

Only the model DT313T was tested, since the electrical circuit design, layout, components used, internal wiring and functions were identical for the above models, with only difference on model No. and the "XXXXX" delegate different market.

For Desktop Charging Cradle:

Item No.: ACC-008-72H; ACC-008-72HMD

Only the Item ACC-008-72H was tested, since the electrical circuit design, layout, components used, internal wiring and functions were identical for the above models, with only difference on Item No.

For Wall Mount Cradle:

Item No.: ACC-008-113; ACC-008-113MD

Only the Item ACC-008-113 was tested, since the electrical circuit design, layout, components used, internal wiring and functions were identical for the above models, with only difference on Item No.

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

3 Contents

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

4 General Information

4.1 Details of E.U.T.

Power supply:	Lithium Ion Polymer Battery 1: 11.4V 5400mAh rechargeable battery which charged by adapter Battery Model No.: ACC-006-60K(3ICP9/36/115) Lithium Ion Polymer Battery 2: 7.4V 250mAh rechargeable battery which charged by adapter Battery Model No.: PT352044-25(2ICP4/20/44) Adapter Model No.: EM11011M Input: 100-240V~50/60Hz, 2.0-1.0A Output: DC 19V/6.31A
Test voltage:	AC 120V/60Hz
Cable:	AC cable 1: 180cm shielded AC cable 2: 500cm shielded DC cable: 120cm shielded with one ferrite core
The highest working frequency(except RF modulator):	More than 108MHz

4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Earphone	PHILIPS	SHE6000	REF. No.SEA1000
HDMI Cable	Apple	MC838FE/B	REF. No.SEA0900
Mouse	Lenovo	M-U0025-O	REF. No.:SEA2400
Network Cable	SGS	N/A	REF. No.SEA1100
Router	NETGEAR	DGN2200	REF. No.SEA2200
Television	AOC	280LM00004	KBWG9JA000563
Television	SONY	KDL-24EX520	6351646
U-disk	Sandisk	SDCZ60-016G	REF. No.SEA0100

4.3 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Conduction Emission	± 3.0dB (150kHz to 30MHz)
2	Radiated Emission	± 4.5dB (30MHz-1GHz)
		± 4.8dB (1GHz-6GHz)
3	Temperature test	± 1℃
4	Humidity test	± 3%

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

4.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China. 518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.

4.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

• **A2LA (Certificate No. 3816.01)**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

• **VCCI**

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

• **FCC –Designation Number: CN1178**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1178. Test Firm Registration Number: 406779.

• **Innovation, Science and Economic Development Canada**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006.

IC#: 4620C.

4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None

5 Equipment List

Conducted Emissions at Mains Terminals (150kHz-30MHz)					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Shielding Room	ChangZhou ZhongYu	GB-88	SEM001-06	2019-06-13	2022-06-12
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM024-01	2019-07-11	2020-07-10
LISN	Rohde & Schwarz	ENV216	SEM007-01	2019-09-24	2020-09-23
LISN	ETS-LINDGREN	3816/2	SEM007-02	2019-04-01	2020-03-31
EMI Test Receiver	Rohde & Schwarz	ESCI	SEM004-02	2019-04-01	2020-03-31

Radiated Emissions (30MHz-1GHz)					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEM001-01	2017-08-05	2020-08-04
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM025-01	2019-07-11	2020-07-10
EMI Test Receiver	Agilent Technologies	N9038A	SEM004-05	2019-09-24	2020-09-23
BiConiLog Antenna (26-3000MHz)	ETS-LINDGREN	3142C	SEM003-01	2017-06-27	2020-06-26
Pre-amplifier (0.1-1300MHz)	Agilent Technologies	8447D	SEM005-01	2019-04-01	2020-03-31

Radiated Emissions (above 1GHz)					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
3m Semi-Anechoic Chamber	AUDIX	N/A	SEM001-02	2018-03-13	2021-03-12
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM026-01	2019-07-11	2020-07-10
EXA Spectrum Analyzer	AgilentTechnologies Inc	N9010A	SEM004-12	2019-04-12	2020-04-11
Horn Antenna(1-18GHz)	Rohde & Schwarz	HF907	SEM003-07	2018-04-13	2021-04-12
Pre-Amplifier (0.1-26.5GHz)	Compliance Directions Systems Inc.	PAP-0126	SEM004-11	2019-09-24	2020-09-23

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

General used equipment					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	ZJ1-2B	SEM002-03	2019-09-26	2020-09-25
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	ZJ1-2B	SEM002-04	2019-09-26	2020-09-25
Humidity/ Temperature Indicator	Mingle	N/A	SEM002-08	2019-09-26	2020-09-25
Barometer	Changchun Meteorological Industry Factory	DYM3	SEM002-01	2019-04-04	2020-04-03

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

6 Emission Test Results

6.1 Conducted Emissions at Mains Terminals (150kHz-30MHz)

Test Requirement:	47 CFR Part 15, Subpart B
Test Method:	ANSI C63.4:2014
Frequency Range:	150kHz to 30MHz
Limit:	
0.15M-0.5MHz	66dB(μV)-56dB(μV) quasi-peak, 56dB(μV)-46dB(μV) average
0.5M-5MHz	56dB(μV) quasi-peak, 46dB(μV) average
5M-30MHz	60dB(μV) quasi-peak, 50dB(μV) average
Detector:	Peak for pre-scan (9kHz resolution bandwidth) 0.15M to 30MHz

6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 25 °C Humidity: 51 % RH Atmospheric Pressure: 1010 mbar

Pretest these modes to find the worst case:

a: Full system_Adapter+ Stand-alone+HDMI Monitor+LAN Port+USB Disk+Earphone+charging+Rear Camera

b: Full system_Adapter+ Docking Station(DC208)+Two way HDMI Monitor+LAN Port(Docking Station)+USB Disk+Earphone+charging+Rear Camera

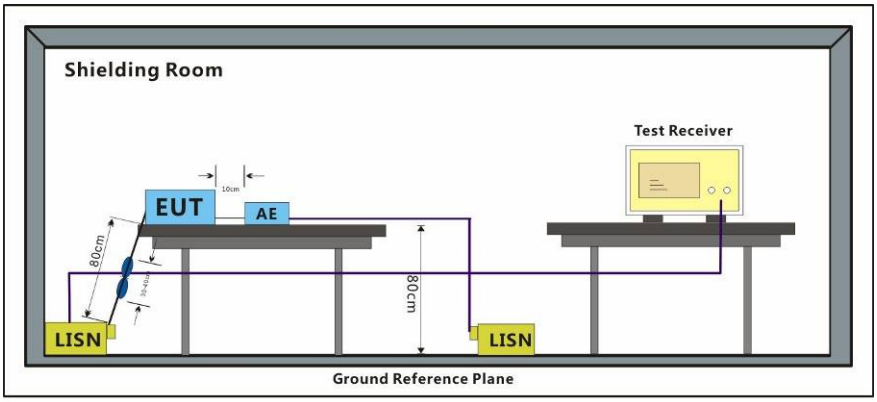
c: Full system_Adapter+ Docking Station(DC208)+Two way HDMI Monitor+LAN Port(Tablet)+USB Disk+Earphone+charging+Rear Camera

d: Full system_Adapter+ Docking Station(WM210)+Two way HDMI Monitor+LAN Port(Docking Station)+USB Disk+Earphone+charging+Rear Camera

e: Full system_Adapter+ Docking Station(WM210)+Two way HDMI Monitor+LAN Port(Tablet)+USB Disk+Earphone+charging+Rear Camera

The worst case for final test: b: Full system_Adapter+ Docking Station(DC208)+Two way HDMI Monitor+LAN Port(Docking Station)+USB Disk+Earphone+charging+Rear Camera

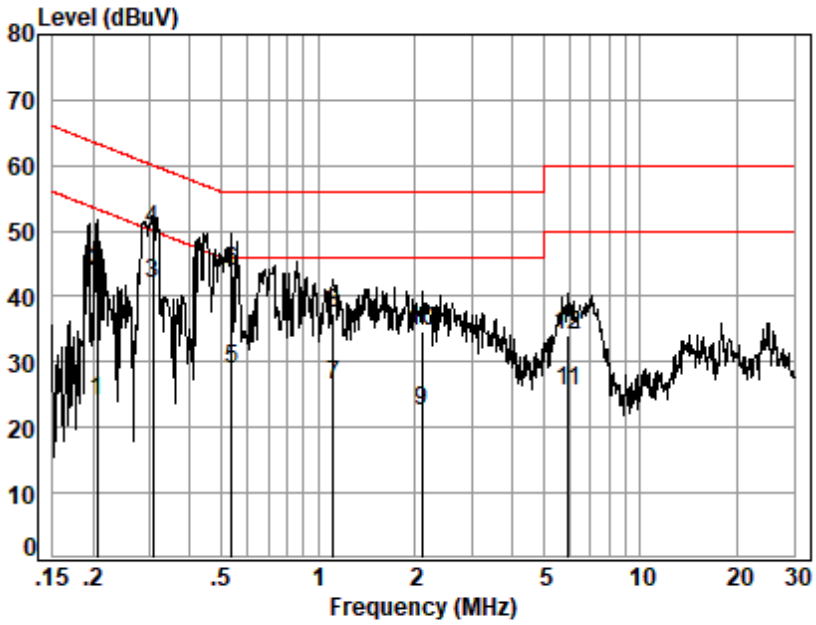
6.1.2 Test Setup Diagram



6.1.3 Measurement Data

An initial pre-scan was performed with peak detector.Quasi-Peak or Average measurement were performed at the frequencies with maximized peak emission were detected.

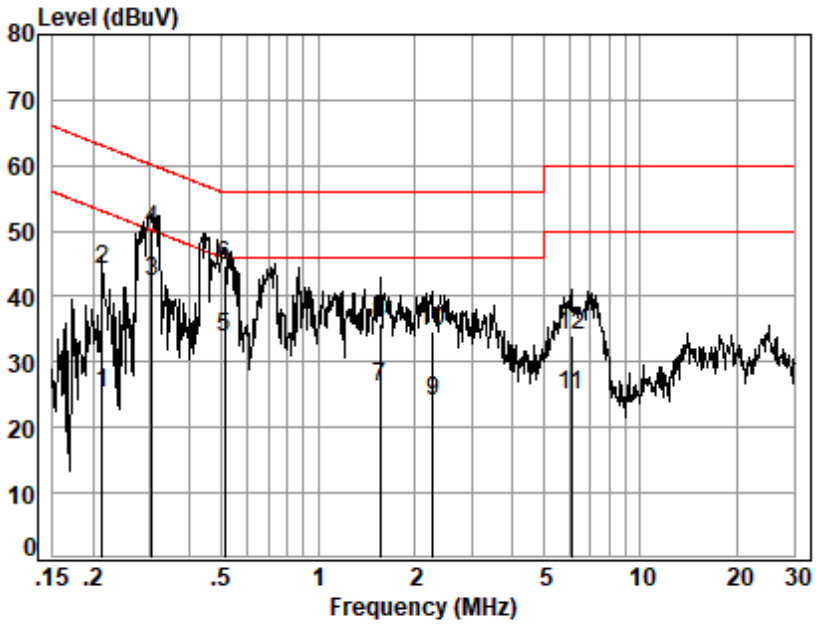
Mode:b; Line:Live Line



Site : Shielding Room
Condition: Line
Job No. : 14667CR
Test mode: b

	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.2061	0.02	9.66	14.25	23.93	53.36	-29.43	Average
2	0.2061	0.02	9.66	34.16	43.84	63.36	-19.52	QP
3	0.3067	0.04	9.67	32.17	41.88	50.06	-8.18	Average
4	0.3067	0.04	9.67	40.39	50.10	60.06	-9.96	QP
5	0.5378	0.06	9.67	19.26	28.99	46.00	-17.01	Average
6	0.5378	0.06	9.67	34.17	43.90	56.00	-12.10	QP
7	1.1114	0.10	9.73	16.63	26.46	46.00	-19.54	Average
8	1.1114	0.10	9.73	27.70	37.53	56.00	-18.47	QP
9	2.0990	0.16	9.72	12.63	22.51	46.00	-23.49	Average
10	2.0990	0.16	9.72	24.89	34.77	56.00	-21.23	QP
11	5.9925	0.17	9.76	15.69	25.62	50.00	-24.38	Average
12	5.9925	0.17	9.76	24.24	34.17	60.00	-25.83	QP

Mode:b; Line:Neutral Line



Site : Shielding Room
Condition: Neutral
Job No. : 14667CR
Test mode: b

	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.2139	0.02	9.64	15.45	25.11	53.05	-27.94	Average
2	0.2139	0.02	9.64	34.35	44.01	63.05	-19.04	QP
3	0.3051	0.04	9.64	32.59	42.27	50.10	-7.83	Average
4	0.3051	0.04	9.64	40.52	50.20	60.10	-9.90	QP
5	0.5128	0.06	9.64	23.95	33.65	46.00	-12.35	Average
6	0.5128	0.06	9.64	35.13	44.83	56.00	-11.17	QP
7	1.5518	0.13	9.70	16.38	26.21	46.00	-19.79	Average
8	1.5518	0.13	9.70	25.93	35.76	56.00	-20.24	QP
9	2.2726	0.16	9.68	14.09	23.93	46.00	-22.07	Average
10	2.2726	0.16	9.68	24.83	34.67	56.00	-21.33	QP
11	6.0885	0.17	9.74	15.15	25.06	50.00	-24.94	Average
12	6.0885	0.17	9.74	24.17	34.08	60.00	-25.92	QP

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

6.2 Radiated Emissions (30MHz-1GHz)

Test Requirement:	47 CFR Part 15, Subpart B
Test Method:	ANSI C63.4:2014
Frequency Range:	30MHz to 1GHz
Measurement Distance:	3m
Limit:	
30MHz -88MHz	40.0(dBμV/m) quasi-peak
88MHz-216MHz	43.5(dBμV/m) quasi-peak
216MHz-960MHz	46.0(dBμV/m) quasi-peak
960MHz-1000MHz	54.0(dBμV/m) quasi-peak
Detector:	Peak for pre-scan (120kHz resolution bandwidth) 30M to1000MHz

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

6.2.1 E.U.T. Operation

Operating Environment:

Temperature: 24.7 °C Humidity: 55 % RH Atmospheric Pressure: 1005 mbar

Pretest these modes to find the worst case:

a: Full system_Adapter+ Stand-alone+HDMI Monitor+LAN Port+USB Disk+Earphone+charging+Rear Camera

b: Full system_Adapter+ Docking Station(DC208)+Two way HDMI Monitor+LAN Port(Docking Station)+USB Disk+Earphone+charging+Rear Camera

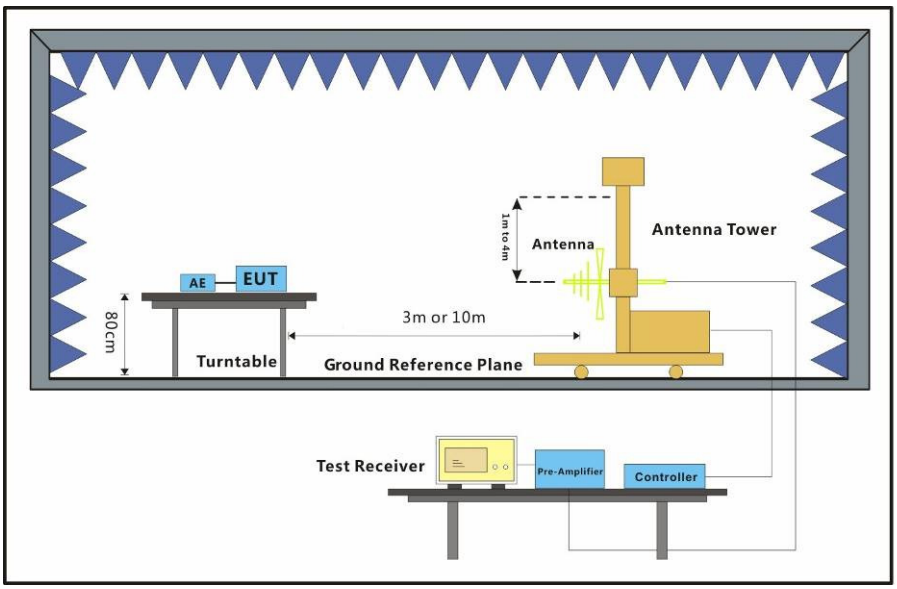
c: Full system_Adapter+ Docking Station(DC208)+Two way HDMI Monitor+LAN Port(Tablet)+USB Disk+Earphone+charging+Rear Camera

d: Full system_Adapter+ Docking Station(WM210)+Two way HDMI Monitor+LAN Port(Docking Station)+USB Disk+Earphone+charging+Rear Camera

e: Full system_Adapter+ Docking Station(WM210)+Two way HDMI Monitor+LAN Port(Tablet)+USB Disk+Earphone+charging+Rear Camera

The worst case for final test: b: Full system_Adapter+ Docking Station(DC208)+Two way HDMI Monitor+LAN Port(Docking Station)+USB Disk+Earphone+charging+Rear Camera

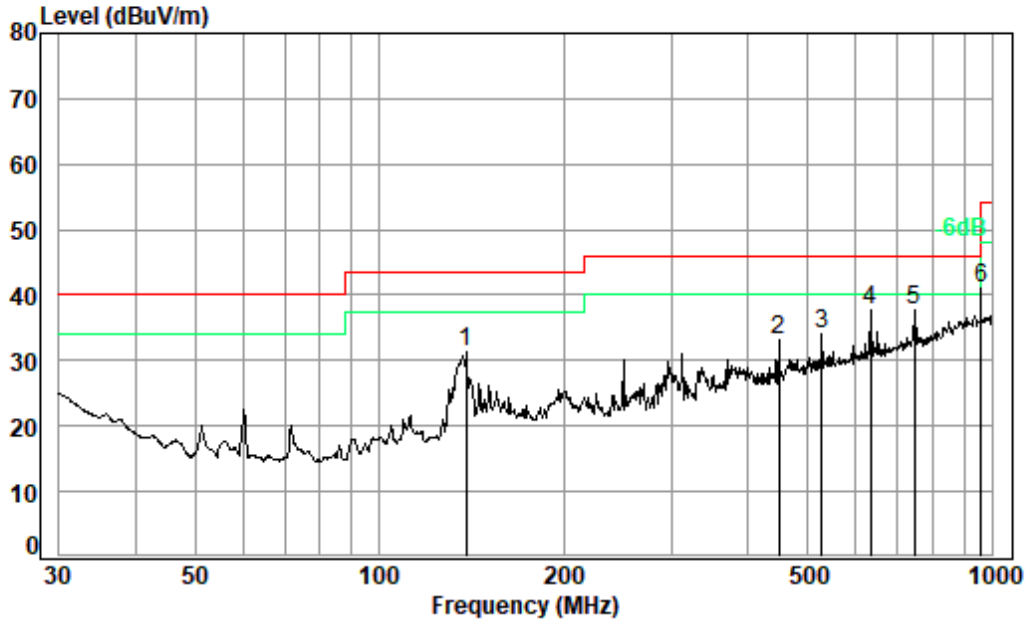
6.2.2 Test Setup Diagram



6.2.3 Measurement Data

An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by BiConiLog antenna with 2 orthogonal polarities.

Mode:b; Polarization:Horizontal

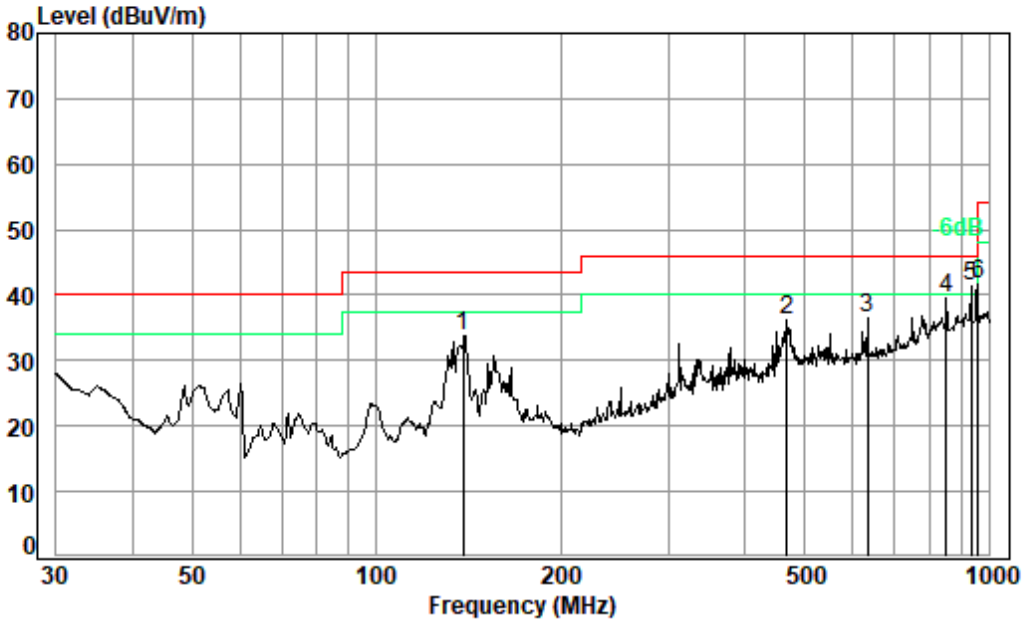


Condition: 3m HORIZONTAL
Job No. : 14667CR
Test Mode: b

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	138.87	1.29	13.67	27.42	43.81	31.35	43.50	-12.15
2	449.56	2.41	23.55	27.64	34.81	33.13	46.00	-12.87
3	528.25	2.63	25.20	27.93	34.22	34.12	46.00	-11.88
4	633.91	2.77	27.06	28.08	35.94	37.69	46.00	-8.31
5	747.48	3.05	28.19	27.83	34.24	37.65	46.00	-8.35
6 pp	958.79	3.66	30.10	27.06	34.24	40.94	46.00	-5.06

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

Mode:b; Polarization:Vertical



Condition: 3m VERTICAL
Job No. : 14667CR
Test Mode: b

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	138.87	1.29	13.67	27.42	46.32	33.86	43.50	-9.64
2	468.88	2.49	23.97	27.71	37.58	36.33	46.00	-9.67
3	633.91	2.77	27.06	28.08	34.88	36.63	46.00	-9.37
4	851.04	3.41	29.18	27.50	34.51	39.60	46.00	-6.40
5	935.55	3.64	29.98	27.15	34.77	41.24	46.00	-4.76
6 pp	958.79	3.66	30.10	27.06	34.87	41.57	46.00	-4.43

6.3 Radiated Emissions (above 1GHz)

Test Requirement:	47 CFR Part 15, Subpart B
Test Method:	ANSI C63.4:2014
Frequency Range:	Above 1GHz
Measurement Distance:	3m
Limit:	
Above 1GHz	74(dBμV/m) peak, 54(dBμV/m) average
Detector:	Peak for pre-scan (1000kHz resolution bandwidth) 1000M to18000MHz

6.3.1 E.U.T. Operation

Operating Environment:

Temperature: 20.7 °C Humidity: 58.1 % RH Atmospheric Pressure: 1010 mbar

Pretest these modes to find the worst case:

a: Full system_Adapter+ Stand-alone+HDMI Monitor+LAN Port+USB Disk+Earphone+charging+Rear Camera

b: Full system_Adapter+ Docking Station(DC208)+Two way HDMI Monitor+LAN Port(Docking Station)+USB Disk+Earphone+charging+Rear Camera

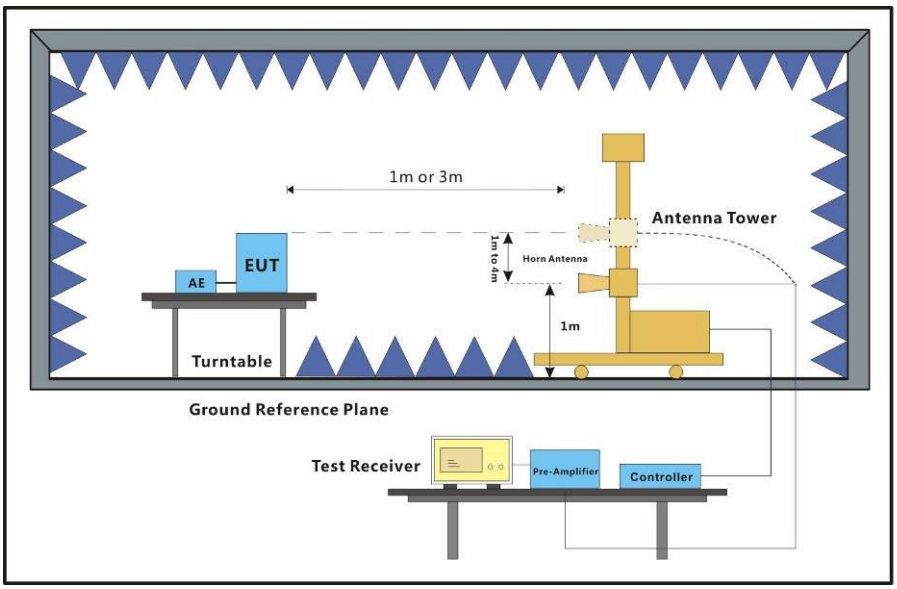
c: Full system_Adapter+ Docking Station(DC208)+Two way HDMI Monitor+LAN Port(Tablet)+USB Disk+Earphone+charging+Rear Camera

d: Full system_Adapter+ Docking Station(WM210)+Two way HDMI Monitor+LAN Port(Docking Station)+USB Disk+Earphone+charging+Rear Camera

e: Full system_Adapter+ Docking Station(WM210)+Two way HDMI Monitor+LAN Port(Tablet)+USB Disk+Earphone+charging+Rear Camera

The worst case for final test: b: Full system_Adapter+ Docking Station(DC208)+Two way HDMI Monitor+LAN Port(Docking Station)+USB Disk+Earphone+charging+Rear Camera

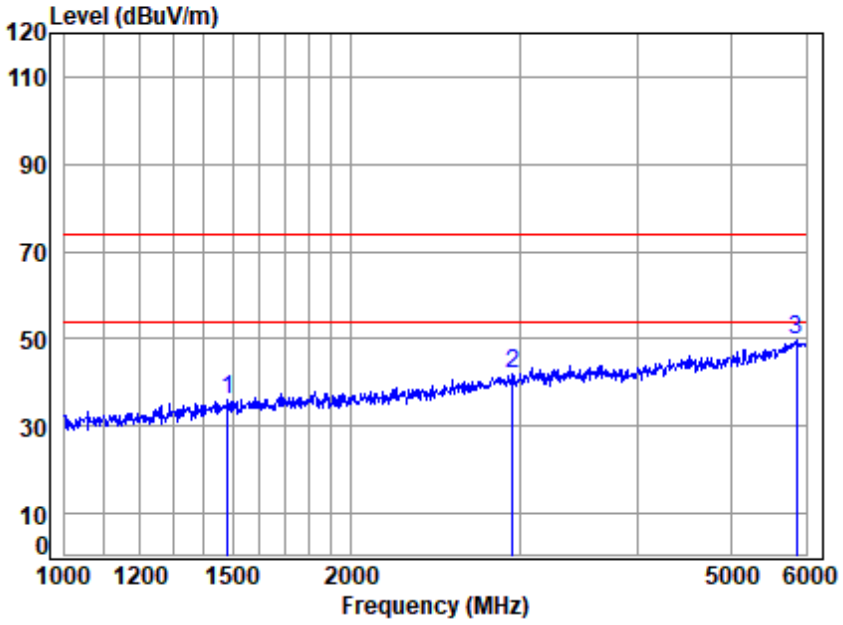
6.3.2 Test Setup Diagram



6.3.3 Measurement Data

An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. Average measurements were conducted based on the peak sweep graph. The EUT was measured by Horn antenna with 2 orthogonal polarities.

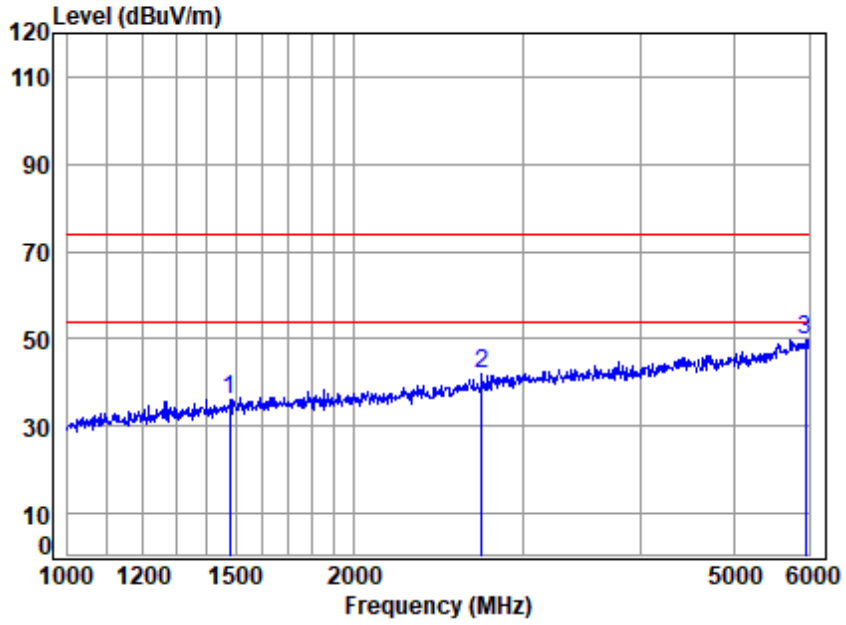
Mode:b; Polarization:Horizontal



Site : chamber
Condition: 3m HORIZONTAL
Job No : 14667CR/14670CR
Mode : b

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1483.178	5.43	25.74	40.69	45.49	35.97	74.00	-38.03	Peak
2	2951.232	5.95	30.70	41.38	46.77	42.04	74.00	-31.96	Peak
3	5861.858	10.11	34.97	42.95	47.67	49.80	74.00	-24.20	Peak

Mode:b; Polarization:Vertical



Site : chamber
Condition: 3m VERTICAL
Job No : 14667CR/14670CR
Mode : b

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1480.523	5.42	25.73	40.69	45.65	36.11	74.00	-37.89	Peak
2	2722.617	5.79	29.73	41.30	47.57	41.79	74.00	-32.21	Peak
3	5946.487	10.39	35.05	42.88	47.32	49.88	74.00	-24.12	Peak

7 Photographs

7.1 Test Setup

Please refer to setup photos.

7.2 EUT Constructional Details (EUT Photos)

Please refer to external and internal photos for details.

- End of the Report -

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com