



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

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Report No.: SZEM180200132102
Page: 1 of 15

TEST REPORT

Application No.: SZEM1802001321CR
Applicant: SCOSCHE Industries Inc.
Address of Applicant: 1550 Pacific Avenue, Oxnard, California, 93033, United States
Manufacturer: SCOSCHE Industries Inc.
Address of Manufacturer: 1550 Pacific Avenue, Oxnard, California, 93033, United States
Factory: SCOSCHE Industries Inc.
Address of Factory: 1550 Pacific Avenue, Oxnard, California, 93033, United States
Equipment Under Test (EUT):
EUT Name: QI 5W Charging Dock 5000mah
Model No.: PBQ5DK, PBQ5DKSG-SP, PBQ5DKWT-SP ♣
♣ Please refer to section 2 of this report which indicates which model was actually tested and which were electrically identical.
FCC ID: IKQPBQ5DK
Trade mark: SCOSCHE
Standard(s) : 47 CFR Part 18
Date of Receipt: 2018-02-09
Date of Test: 2018-02-27 to 2018-03-02
Date of Issue: 2018-03-06

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



Keny Xu
EMC Laboratory Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

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Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2018-03-06		Original

Authorized for issue by:				
				
		<hr/>		
		Peter Geng /Project Engineer		
				
		<hr/>		
		Eric Fu /Reviewer		



2 Test Summary

Radio Spectrum Matter Part				
Item	Standard	Method	Requirement	Result
Conducted disturbance	47 CFR Part 18	FCC MP-5	Part 18.307	Pass
Radiated emission	47 CFR Part 18	FCC MP-5	Part 18.305	Pass

Remark:

Model No.: PBQ5DK, PBQ5DKSG-SP, PBQ5DKWT-SP

Only the model PBQ5DK was tested, since the electrical circuit design, layout, components used, internal wiring and functions were identical for all the above models, with only difference on housing color.



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4 General Information

4.1 Details of E.U.T.

Power supply:	Input: DC 5V/2A; DC 9V/1.67A from TYPE C port or docking station Wireless output: 5W, 10W; USB output: DC 5V, 2.4A Power supply information, MODEL: DBS15Q INPUT: AC 100-240V, 50/60Hz OUTPUT: DC 5V/2A; DC 9V/2A; DC 12V/1.5A
Cable:	USB line attached in Docking station: 100cm, unshielded TYPE C USB charging line: 100cm, unshielded
Operation frequency:	111.2-183.3kHz
Antenna type:	Inductive Loop Coil Antenna
Modulation type:	Load modulation
Remark:	Tests were conducted in both loads and the worst case (DC 9V/1.1A) is reported only.

4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
mobile phone	Samsung	Galaxy S6 Edge+	N/A
Cement resistor	Supplied by SGS	REF. No.SEA0600	REF. No.SEA0600

4.3 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	7.25×10^{-8}
2	Duty cycle	0.37%
3	Occupied Bandwidth	3%
4	RF conducted power	0.75dB
5	RF power density	2.84dB
6	Conducted Spurious emissions	0.75dB
7	RF Radiated power	4.5dB (below 1GHz)
		4.8dB (above 1GHz)
8	Radiated Spurious emission test	4.5dB (Below 1GHz)
		4.8dB (Above 1GHz)
9	Temperature test	1 °C
10	Humidity test	3%
11	Supply voltages	1.5%
12	Time	3%



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:

- **CNAS (No. CNAS L2929)**

CNAS has accredited SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

- **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.

- **Industry Canada (IC)**

Two 3m Semi-anechoic chambers and the 10m Semi-anechoic chamber of SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab have been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 4620C-1, 4620C-2, 4620C-3.

4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None

5 Equipment List

RE in Chamber					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date (yyyy-mm-dd)	Cal. Due date (yyyy-mm-dd)
10m Semi-Anechoic Chamber	SAEMC	FSAC1018	SEM001-03	2017-05-10	2018-05-09
EMI Test Receiver (9k-7GHz)	Rohde & Schwarz	ESR	SEM004-03	2017-04-14	2018-04-13
Trilog-Broadband Antenna (30M-1GHz)	Schwarzbeck	VULB9168	SEM003-18	2016-06-29	2019-06-28
Pre-amplifier (9kHz-1GHz)	Sonoma Instrument Co	310N	SEM005-04	2017-06-05	2018-06-04
Loop Antenna (9kHz-30MHz)	ETS-Lindgren	6502	SEM003-08	2017-08-22	2020-08-21
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM029-01	2017-07-13	2018-07-12

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	2017-09-29	2018-09-28
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	ZJ1-2B	SEM002-04	2017-09-29	2018-09-28
Humidity/ Temperature Indicator	Mingle	N/A	SEM002-08	2017-09-29	2018-09-28
Barometer	Changchun Meteorological Industry Factory	DYM3	SEM002-01	2017-04-18	2018-04-17

6 Radio Spectrum Matter Test Results

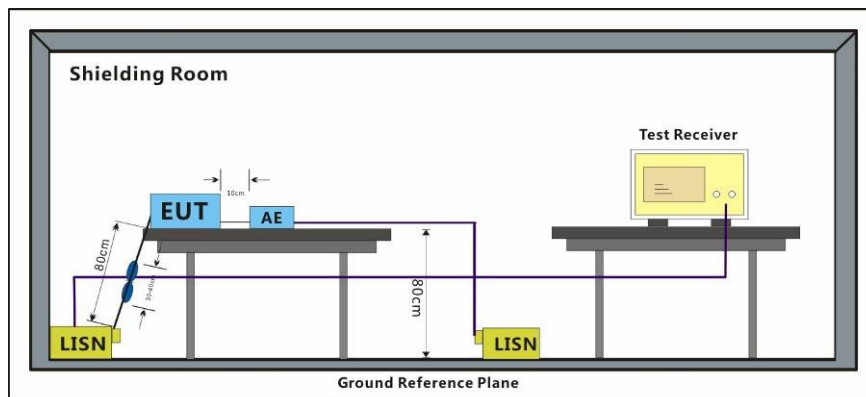
6.1 Conducted Emissions at Mains Terminals (150kHz-30MHz)

Test Requirement: 47 CFR Part 18
 Test Method: FCC OST/MP-5:1986
 Frequency Range: 150kHz to 30MHz

6.1.1 E.U.T. Operation

Operating Environment:
 Temperature: 17.9 °C Humidity: 46.6 % RH Atmospheric Pressure: 1015 mbar
 Test mode a:Charge mode_Keep the EUT charging

6.1.2 Test Setup Diagram

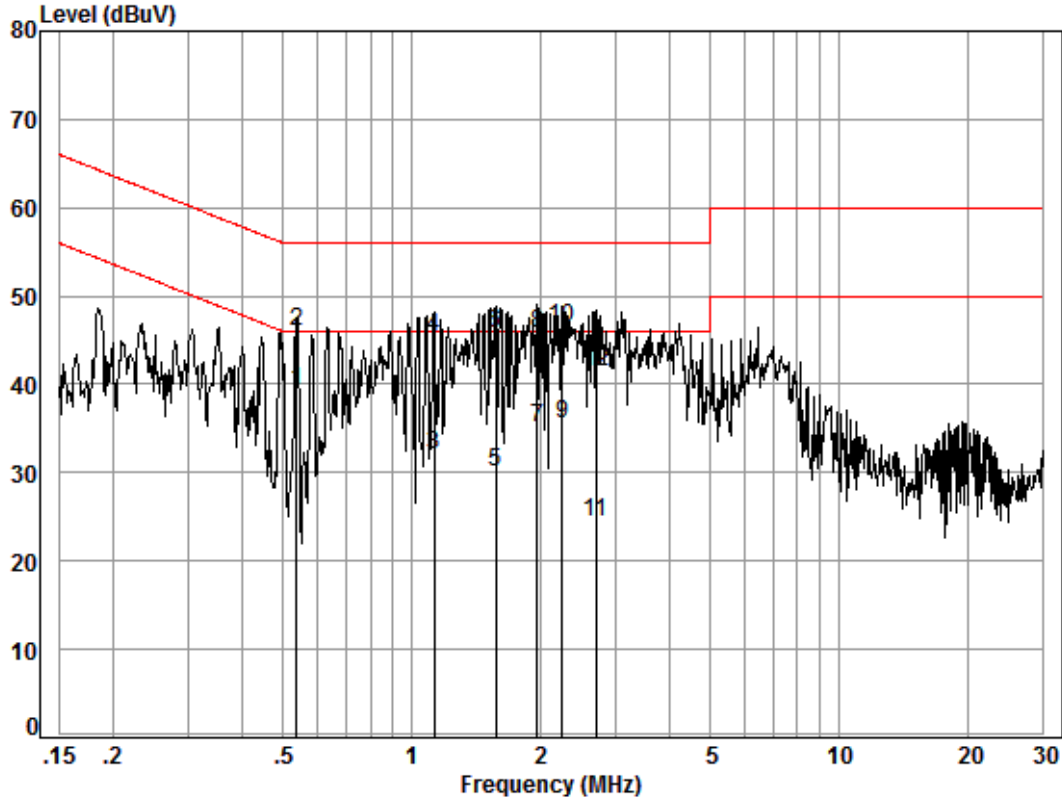


6.1.3 Measurement Data

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:a; Line:Live Line

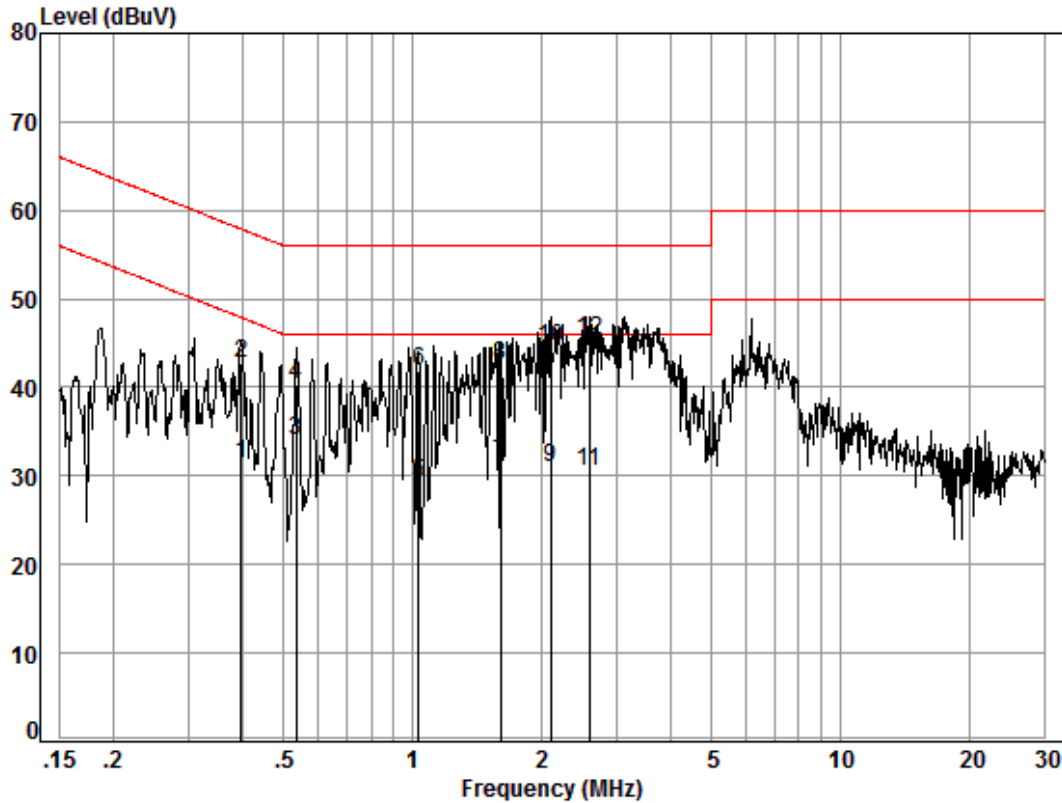


Site : Shielding Room
Condition: Line
Job No. : 01321CR
Test mode: b S6

	Freq	Cable Loss	LISN Factor	Read Level	Limit Level	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dB	
1	0.54	0.01	9.51	29.63	39.15	46.00	-6.85 Average
2	0.54	0.01	9.51	36.45	45.97	56.00	-10.03 QP
3	1.13	0.02	9.51	22.60	32.13	46.00	-13.87 Average
4	1.13	0.02	9.51	35.75	45.28	56.00	-10.72 QP
5	1.58	0.02	9.51	20.45	29.98	46.00	-16.02 Average
6	1.58	0.02	9.51	36.32	45.85	56.00	-10.15 QP
7	1.97	0.02	9.51	25.66	35.19	46.00	-10.81 Average
8	1.97	0.02	9.51	36.35	45.88	56.00	-10.12 QP
9	2.25	0.02	9.52	26.01	35.55	46.00	-10.45 Average
10	2.25	0.02	9.52	36.83	46.37	56.00	-9.63 QP
11	2.71	0.02	9.53	14.89	24.44	46.00	-21.56 Average
12	2.71	0.02	9.53	31.82	41.37	56.00	-14.63 QP



Mode:a; Line:Neutral Line



Site : Shielding Room
Condition: Neutral
Job No. : 01321CR
Test mode: b S6

	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.40	0.01	9.59	21.78	31.38	47.90	-16.52	Average
2	0.40	0.01	9.59	33.09	42.69	57.90	-15.21	QP
3	0.53	0.01	9.61	24.40	34.02	46.00	-11.98	Average
4	0.53	0.01	9.61	30.72	40.34	56.00	-15.66	QP
5	1.03	0.02	9.63	19.54	29.19	46.00	-16.81	Average
6	1.03	0.02	9.63	32.21	41.86	56.00	-14.14	QP
7	1.61	0.02	9.63	21.72	31.37	46.00	-14.63	Average
8	1.61	0.02	9.63	32.81	42.46	56.00	-13.54	QP
9	2.11	0.02	9.65	21.21	30.88	46.00	-15.12	Average
10	2.11	0.02	9.65	34.72	44.39	56.00	-11.61	QP
11	2.59	0.02	9.64	20.97	30.63	46.00	-15.37	Average
12	2.59	0.02	9.64	35.58	45.24	56.00	-10.76	QP

6.2 Radiated Emissions (Magnetic field Strength) (9kHz-30MHz)

Test Requirement: 47 CFR Part 18
 Test Method: FCC OST/MP-5:1986
 Frequency Range: 9kHz to 30MHz
 Measurement Distance: 10m

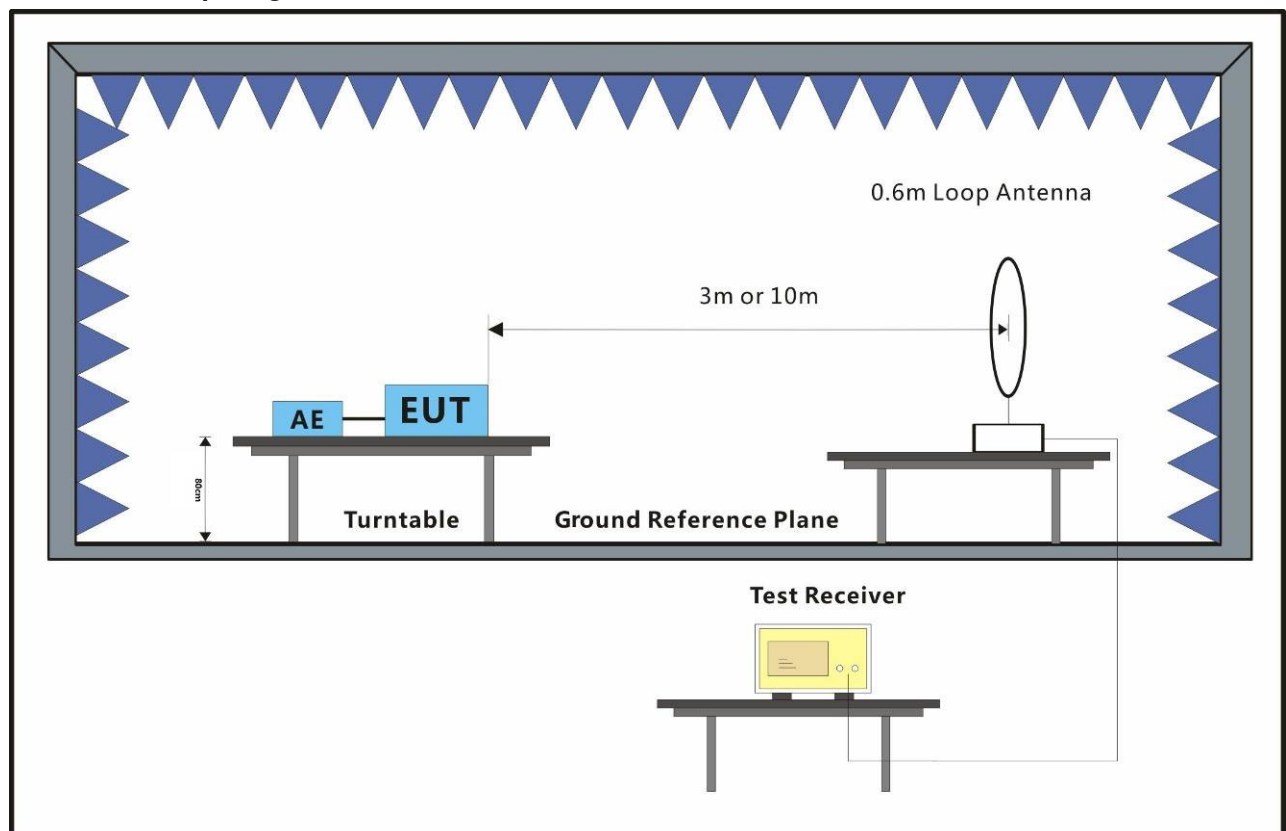
6.2.1 Measurement Data

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.

6.2.2 E.U.T. Operation

Operating Environment:
 Temperature: 23 °C Humidity: 54 % RH Atmospheric Pressure: 1015 mbar
 Test mode a:Charge mode_Keep the EUT charging

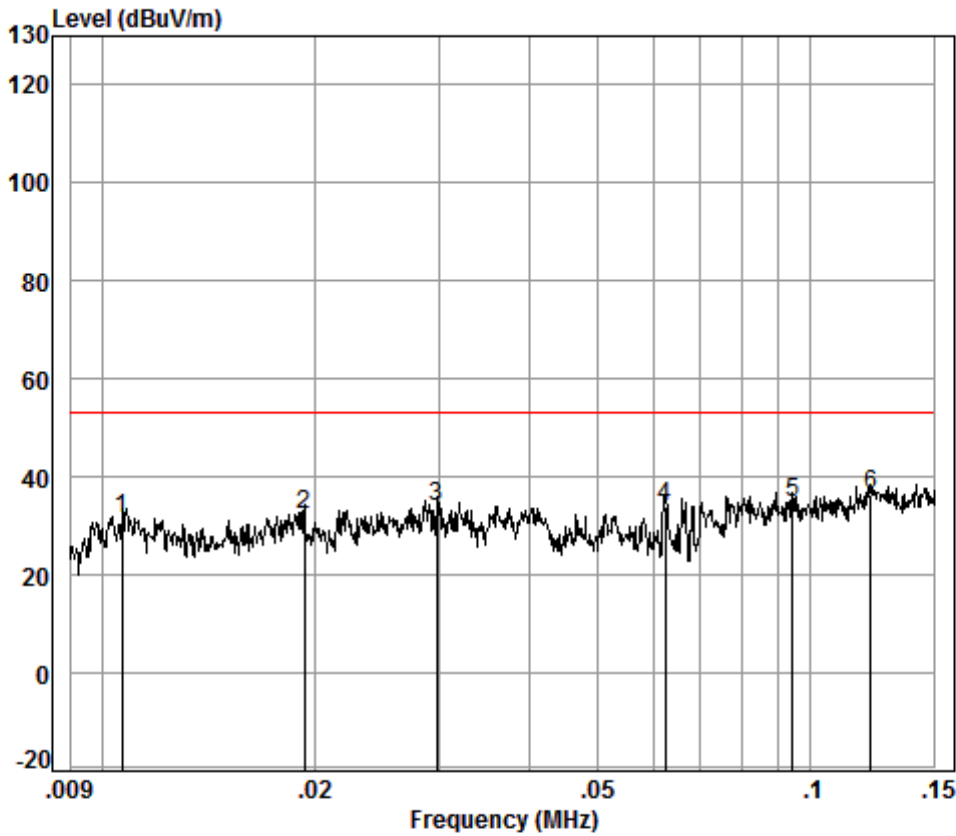
6.2.3 Test Setup Diagram



6.2.4 Measurement Procedure and Data



Model:a

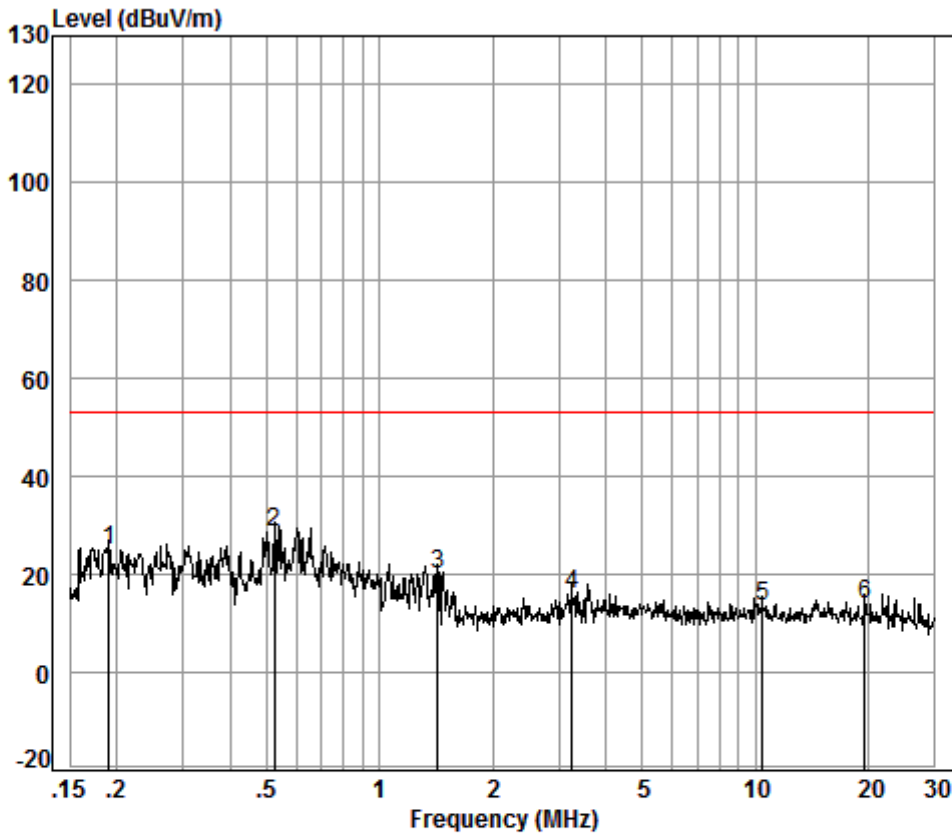


Condition: 10m
Job No. : 01321CR
Test Mode: a Phone

	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	0.01	0.28	18.89	0.00	12.35	31.52	53.06	-21.54
2	0.02	0.22	15.22	0.00	16.81	32.25	53.06	-20.81
3	0.03	0.18	13.88	0.00	19.77	33.83	53.06	-19.23
4	0.06	0.10	12.24	0.00	21.73	34.07	53.06	-18.99
5	0.09	0.06	12.02	0.00	22.75	34.83	53.06	-18.23
6 pp	0.12	0.06	11.85	0.00	24.67	36.58	53.06	-16.48



Model:a



Condition: 10m
Job No. : 01321CR
Test Mode: a Phone

	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	0.19	0.07	11.84	0.00	13.20	25.11	53.06	-27.95
2	0.52	0.12	11.73	0.00	16.66	28.51	53.06	-24.55
3	1.43	0.29	12.05	0.00	7.85	20.19	53.06	-32.87
4	3.24	0.38	12.17	0.00	3.42	15.97	53.06	-37.09
5	10.40	0.50	10.67	0.00	2.45	13.62	53.06	-39.44
6	19.53	0.67	9.57	0.00	3.70	13.94	53.06	-39.12



The test was performed at a 10m test site. According to below formulate and the test data at 10m test distance,

$$L_{300} / L_{10} = D_{10} / D_{300}$$

Note:

L₃₀₀: Level @ 300m distance. Unit: uV/m;

L₁₀: Level @ 10m distance. Unit: uV/m;

D₃₀₀: 300m distance. Unit: m

D₁₀: 10m distance. Unit: m

The level at 300m test distance is below:

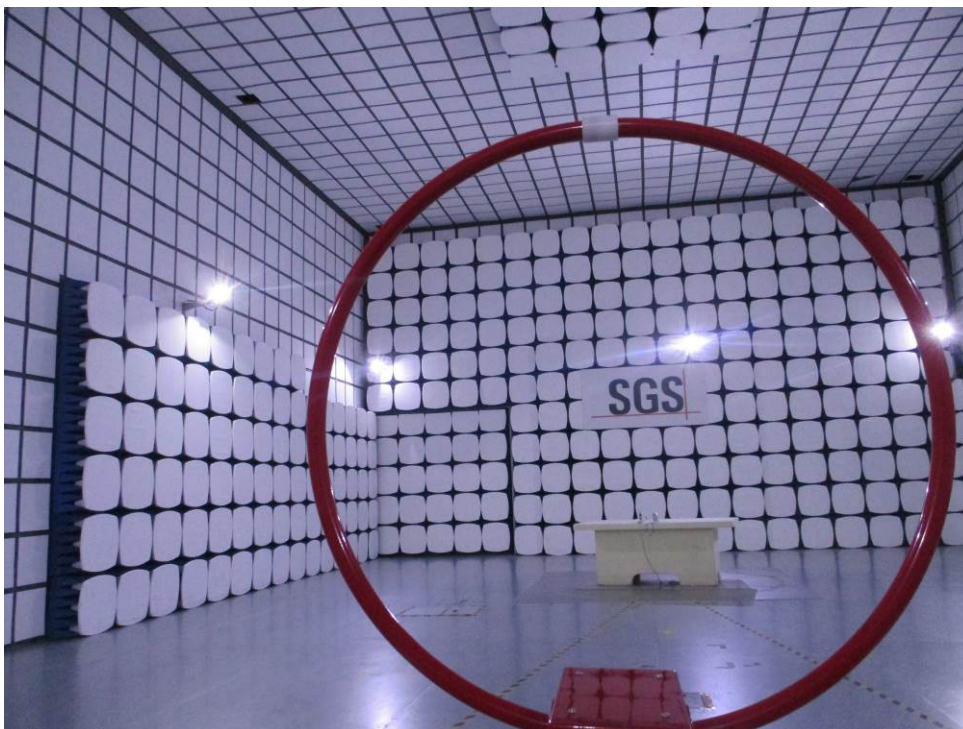
Frequency (MHz)	Level @ 10m (dBuV/m)	Level @ 10m (uV/m)	Level @ 300m (uV/m)	Level @ 300m (dBuV/m)	Limit @ 300m (dBuV/m)	Margin (dB)
0.01	31.52	37.67	1.26	1.98	23.52	-21.54
0.02	32.25	40.97	1.37	2.71	23.52	-20.81
0.03	33.83	49.15	1.64	4.29	23.52	-19.23
0.06	34.07	50.52	1.68	4.53	23.52	-18.99
0.09	34.83	55.14	1.84	5.29	23.52	-18.23
0.12	36.58	67.45	2.25	7.04	23.52	-16.48
0.19	25.11	18.01	0.60	-4.43	23.52	-27.95
0.52	28.51	26.64	0.89	-1.03	23.52	-24.55
1.43	20.19	10.22	0.34	-9.35	23.52	-32.87
3.24	15.97	6.29	0.21	-13.57	23.52	-37.09
10.40	13.62	4.80	0.16	-15.92	23.52	-39.44
19.53	13.94	4.98	0.17	-15.60	23.52	-39.12

7 Photographs

7.1 Conducted Emissions at Mains Terminals (150kHz-30MHz) Test Setup



7.2 Radiated emission Test Setup



- End of the Report -