



SGS-CSTC Standards Technical Services Co., Ltd.

No. 1 Workshop, M-10, Middle section, Science & Technology Park, Nanshan

District, Shenzhen, Guangdong, China 518057

Telephone: +86 (0) 755 2601 2053

Fax: +86 (0) 755 2671 0594

Email: ee.shenzhen@sgs.com

Report No.: SZEM140300127701

Page : 1 of 16

FCC REPORT

Application No. : SZEM1403001277RF
Applicant: Philips Consumer Lifestyle
Manufacturer: IDT Technology limited
Factory: IDT Technology limited
Product Name: Personal Activity Monitor
Model No.(EUT): DL8725
Add Model No.: DL8725/XX ("X" can be A-Z or 0-9)
Trade Mark: Philips
FCC ID: BOUDL8725
Standards: 47 CFR Part 15B (2013)
Date of Receipt: 2014-03-31
Date of Test: 2014-04-11
Date of Issue: 2014-05-04

Test Result:	PASS *
---------------------	---------------

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

Authorized Signature:



Jack Zhang
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.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. All test results in this report can be traceable to National or International Standards.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only



2 Test Summary

Test Item	Test Requirement	Test method	Result
Radiated Emission	47 CFR Part 15B	ANSI C63.4 (2009)	PASS
Conducted Emission (150kHz to 30MHz)	47 CFR Part 15B	ANSI C63.4 (2009)	PASS

Remark:

Model No.: DL8725, DL8725/XX ("X" can be A-Z or 0-9)

Only the model DL8725 was tested, since the electrical circuit design, layout, components used and internal wiring were identical for all above models. Only different on exterior printing.



3 Contents

	Page
1 COVER PAGE.....	1
2 TEST SUMMARY.....	2
3 CONTENTS	3
4 GENERAL INFORMATION.....	4
4.1 CLIENT INFORMATION	4
4.2 GENERAL DESCRIPTION OF EUT	4
4.3 TEST ENVIRONMENT AND MODE	4
4.4 DESCRIPTION OF SUPPORT UNITS	5
4.5 TEST LOCATION.....	5
4.6 TEST FACILITY.....	6
4.7 DEVIATION FROM STANDARDS	6
4.8 ABNORMALITIES FROM STANDARD CONDITIONS.....	6
4.9 OTHER INFORMATION REQUESTED BY THE CUSTOMER.....	6
4.10 EQUIPMENT LIST.....	7
5 TEST RESULTS AND MEASUREMENT DATA.....	9
5.1 CONDUCTED EMISSIONS	9
5.2 RADIATED EMISSION	13-16

4 General Information

4.1 Client Information

Applicant:	Philips Consumer Lifestyle
Address of Applicant:	5/F., Philips Electronics Building, 5 Science Park East Avenue, Hong Kong
Manufacturer:	IDT Technology limited
Address of Manufacturer:	Block C, 9/F., Kaiser Estate, Phase 1, 41Man YueStreet, Hunghom, Kowloon, Hong Kong.
Factory:	IDT Technology limited
Address of Factory:	Chentian industrial Estate Xixiang, BaoAn, ShenZhen, PRC

4.2 General Description of EUT

Name:	Personal Activity Monitor
Model No.:	DL8725, DL8725/XX ("X" can be A-Z or 0-9)
Trade Mark:	Philips
Sample Type:	Portable production
The Highest Frequency:	24MHz
Antenna Type:	Integral
Power Supply:	USB port (during PC connected)
Test Voltage:	DC 5V from USB
USB Cable:	10cm (Unshield)

4.3 Test Environment and Mode

Operating Environment:	
Temperature:	24.0 °C
Humidity:	50 % RH
Atmospheric Pressure:	1010 mbar
Test mode:	
PC connection mode:	Build the connection between EUT and PC, keep data transmit.

4.4 Description of Support Units

Supporting equipments :

Description	Manufacturer	Model No.	Serial No.	Data Cable	Power Cable
Personal Computer	IBM	8172	L3L0361	N/A	1.5m
Personal Computer	IBM	8172	L3N7632	N/A	1.5m
Monitor	DELL	SP2208WFPt	DT09068168FB	VGA	1.5m
Monitor	IBM	6737-66N/A	E173Fb	N/A	1.5m
Printer	Canon	BJC-1000SP	000812	LPT	1.8m
Universal Programmer	HengTong ELECTRON	HT4000	SEL0038	COM	1.5m (DC)
Keyboard	Lenovo	SK-8115	09779673	USB ²⁾	N/A
Mouse	Lenovo	MO28UOL	23-049011	USB ³⁾	N/A-
Note: For the cable detail please refer to below table.					

Cables:

#	Type	Length, m	Shield	Metallic hood	Ferrite
1	VGA	1.8	Yes	No	Yes
2	LPT	1.8	Yes	No	No
3	COM	1.5	Yes	No	No
4	USB ¹⁾	1.5	Yes	No	No
5	USB ²⁾	1.8	Yes	No	No

Software:

Description	Manufacturer	Software name	Version no.
USB Driver	Microsoft	USB Input Device Driver	6.1.7601.17514
Test software	Philips Consumer Lifestyle	DirectLifeFactoryCalibration -am06-idt	6.0.21.17831

4.5 Test Location

All tests were performed at:

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



4.6 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.

- **VCCI**

The 3m Semi-anechoic chamber, Full-anechoic Chamber and Shielded Room (7.5m x 4.0m x 3.0m) of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-2197, G-416, T-1153 and C-2383 respectively.

- **FCC – Registration No.: 556682**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No.: 556682.

- **Industry Canada (IC)**

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

4.7 Deviation from Standards

None.

4.8 Abnormalities from Standard Conditions

None.

4.9 Other Information Requested by the Customer

None.

**4.10 Equipment List**

RE in Chamber					
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Due date (yyyy-mm-dd)
1	3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEL0017	2014-06-10
2	EMI Test Receiver	Rohde & Schwarz	ESIB26	SEL0023	2014-05-16
3	EMI Test software	AUDIX	E3	SEL0050	N/A
4	Coaxial cable	SGS	N/A	SEL0027	2014-05-29
5	Coaxial cable	SGS	N/A	SEL0189	2014-05-29
6	Coaxial cable	SGS	N/A	SEL0121	2014-05-29
7	Coaxial cable	SGS	N/A	SEL0178	2014-05-29
8	BiConiLog Antenna (26-3000MHz)	ETS-LINDGREN	3142C	SEL0015	2014-10-24
9	Double-ridged horn (1-18GHz)	ETS-LINDGREN	3117	SEL0006	2014-10-24
10	Pre-amplifier (0.1-1300MHz)	Agilent Technologies	8447D	SEL0053	2014-05-16
11	Pre-Amplifier (0.1-26.5GHz)	Compliance Directions Systems Inc.	PAP-0126	SEL0168	2014-10-24
12	Barometer	ChangChun	DYM3	SEL0088	2014-05-24
13	DC Power Supply	Zhao Xin	RXN-305D	SEL0117	2014-10-24
14	Humidity/ Temperature Indicator	Shanghai Qixiang	ZJ1-2B	SEL0103	2014-10-24
15	Signal Generator	Rohde & Schwarz	SMY01	SEL0155	2014-10-24
16	Signal Generator (10M-27GHz)	Rohde & Schwarz	SMR27	SEL0067	2014-05-16
17	Loop Antenna	Beijing Daze	ZN30401	SEL0203	2014-06-04



SGS-CSTC Standards Technical Services Co., Ltd.

Report No.: SZEM140300127701

Page : 8 of 16

Conducted Emission					
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Due date (yyyy-mm-dd)
1	Shielding Room	ZhongYu Electron	GB-88	SEL0042	2014-06-10
2	LISN	Rohde & Schwarz	ENV216	SEL0152	2014-10-24
3	LISN	ETS-LINDGREN	3816/2	SEL0021	2014-05-16
4	8 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN-T8-02	SEL0162	2014-11-10
5	4 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN-T4-02	SEL0163	2014-11-10
6	2 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN-T2-02	SEL0164	2014-11-10
7	EMI Test Receiver	Rohde & Schwarz	ESCI	SEL0022	2014-05-16
8	Coaxial Cable	SGS	N/A	SEL0025	2014-05-29
9	DC Power Supply	Zhao Xin	RXN-305D	SEL0117	2014-10-24
10	Humidity/ Temperature Indicator	Shanghai Qixiang	ZJ1-2B	SEL0103	2014-10-24
11	Barometer	Chang Chun	DYM3	SEL0088	2014-05-24

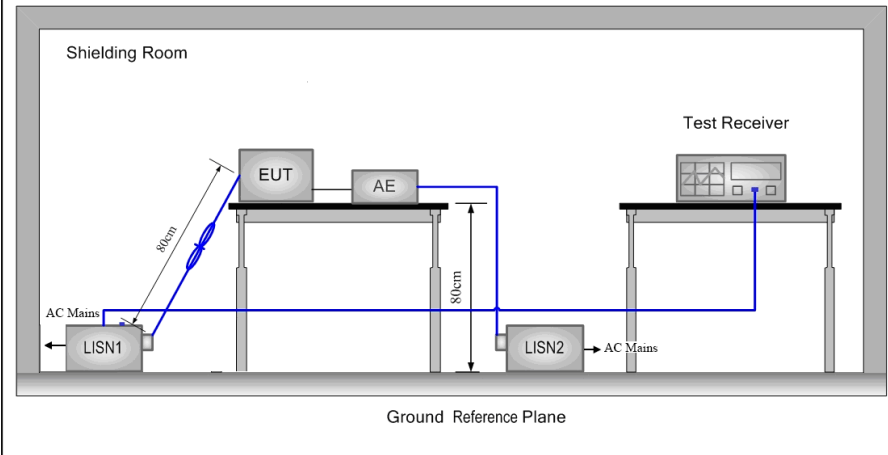
Note: The calibration interval is one year, all the instruments are valid.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only

5 Test results and Measurement Data

5.1 Conducted Emissions

Test Requirement:	47 CFR Part 15B		
Test Method:	ANSI C63.4: 2009		
Test Frequency Range:	150kHz to 30MHz		
Limit:	Frequency range (MHz)	Limit (dBuV)	
		Quasi-peak	Average
	0.15-0.5	66 to 56*	56 to 46*
	0.5-5	56	46
	5-30	60	50
* Decreases with the logarithm of the frequency.			
Test Procedure:	1) The mains terminal disturbance voltage test was conducted in a shielded room. 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50Ω/50μH + 5Ω linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded. 3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane. 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2. 5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2009 on conducted measurement.		

Test setup:	
Instruments Used:	Refer to section 4.10 for details
Test Mode:	Communicate with PC mode
Test Results:	Pass



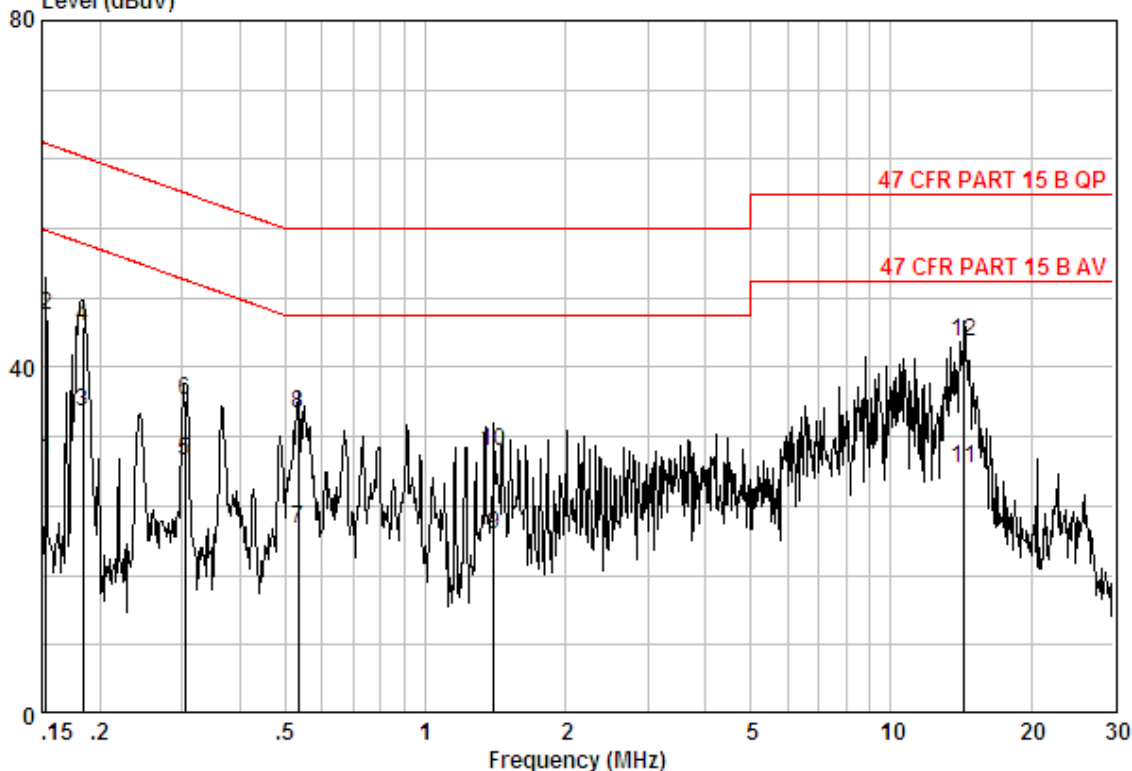
Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector.

Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

Live Line:

Data: 153
Level (dBuV)



Site : Shielding Room
Condition : 47 CFR PART 15 B QP CE LINE
Job No. : 1277RF
Mode : Communicate with PC

	Freq	Cable	LISN	Read	Limit	Over	
	MHz	Loss	Factor	Level	Line	Limit	Remark
		dB		dBuV	dBuV	dBuV	dB
1	0.15321	0.02	9.70	19.64	29.36	55.82	-26.47 Average
2	0.15321	0.02	9.70	36.35	46.07	65.82	-19.75 QP
3	0.18346	0.02	9.70	25.07	34.79	54.33	-19.54 Average
4	0.18346	0.02	9.70	35.07	44.79	64.33	-19.54 QP
5	0.30509	0.01	9.71	19.53	29.25	50.10	-20.86 Average
6	0.30509	0.01	9.71	26.52	36.24	60.10	-23.87 QP
7	0.53215	0.01	9.80	11.45	21.26	46.00	-24.74 Average
8	0.53215	0.01	9.80	24.77	34.58	56.00	-21.42 QP
9	1.403	0.02	9.80	10.81	20.63	46.00	-25.37 Average
10	1.403	0.02	9.80	20.49	30.31	56.00	-25.69 QP
11	14.364	0.01	10.08	18.15	28.24	50.00	-21.76 Average
12 @	14.364	0.01	10.08	32.78	42.87	60.00	-17.13 QP

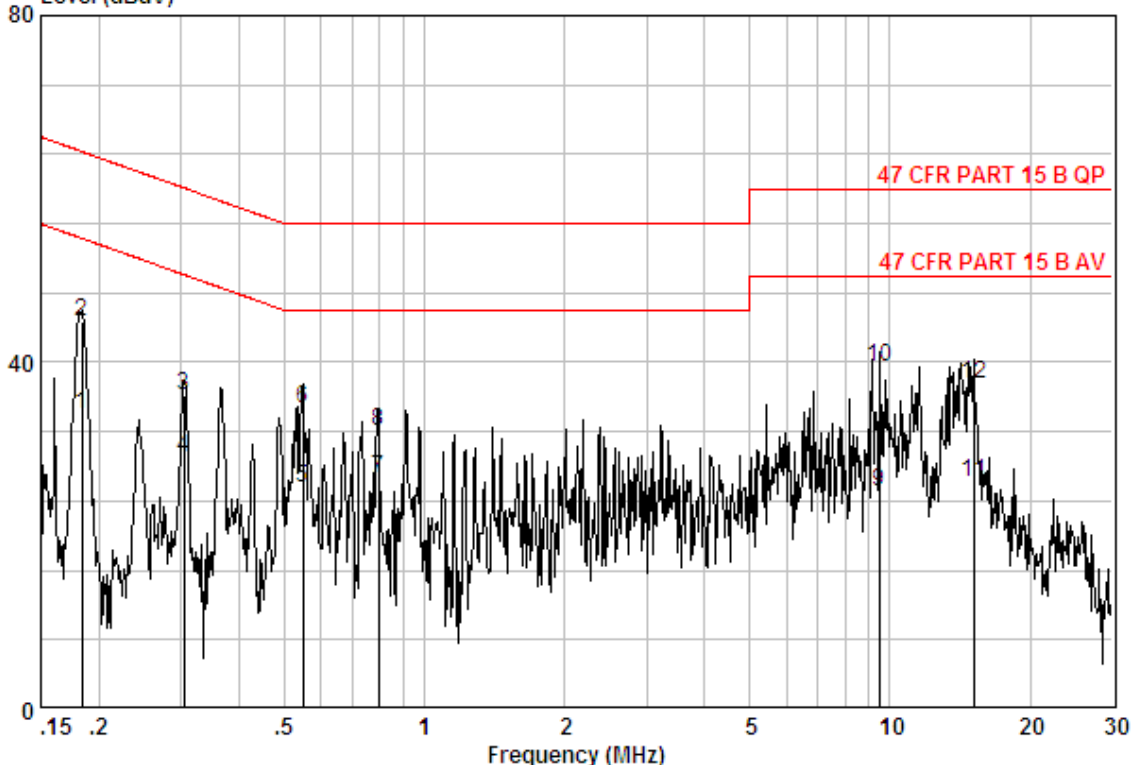
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only



Neutral Line:

Data: 154

Level (dBuV)



Site : Shielding Room
Condition : 47 CFR PART 15 B QP CE NEUTRAL
Job No. : 1277RF
Mode : Communicate with PC

	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.18346	0.02	9.70	24.28	34.00	54.33	-20.33	Average
2	0.18346	0.02	9.70	34.88	44.60	64.33	-19.73	QP
3	0.30509	0.01	9.71	26.49	36.21	60.10	-23.90	QP
4	0.30509	0.01	9.71	19.29	29.01	50.10	-21.10	Average
5	0.54934	0.01	9.80	15.78	25.59	46.00	-20.41	Average
6	0.54934	0.01	9.80	24.77	34.58	56.00	-21.42	QP
7 @	0.79600	0.02	9.80	16.77	26.59	46.00	-19.41	Average
8	0.79600	0.02	9.80	22.26	32.08	56.00	-23.92	QP
9	9.502	0.01	10.00	15.10	25.11	50.00	-24.89	Average
10	9.502	0.01	10.00	29.34	39.35	60.00	-20.65	QP
11	15.146	0.02	10.00	16.21	26.23	50.00	-23.77	Average
12	15.146	0.02	10.00	27.42	37.44	60.00	-22.56	QP

Notes:

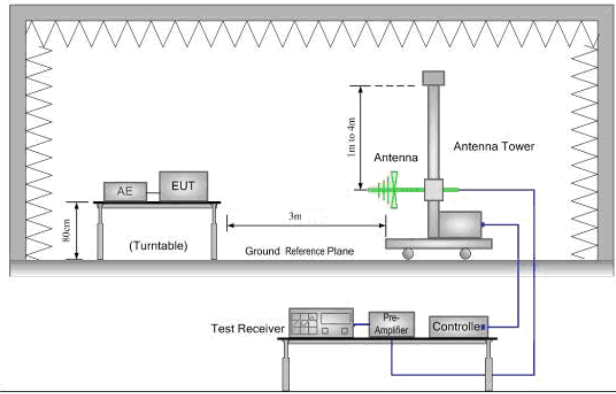
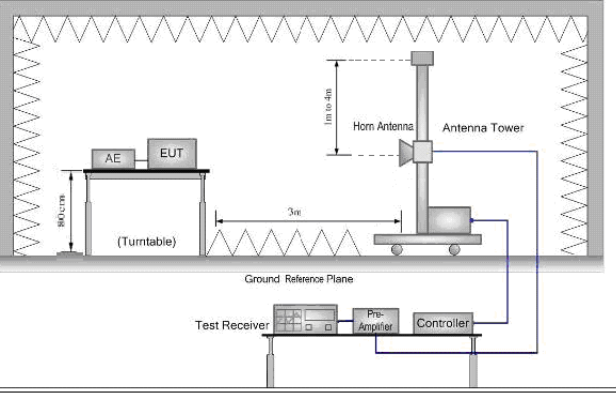
1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level = Receiver Reading + LISN Factor + Cable Loss.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only



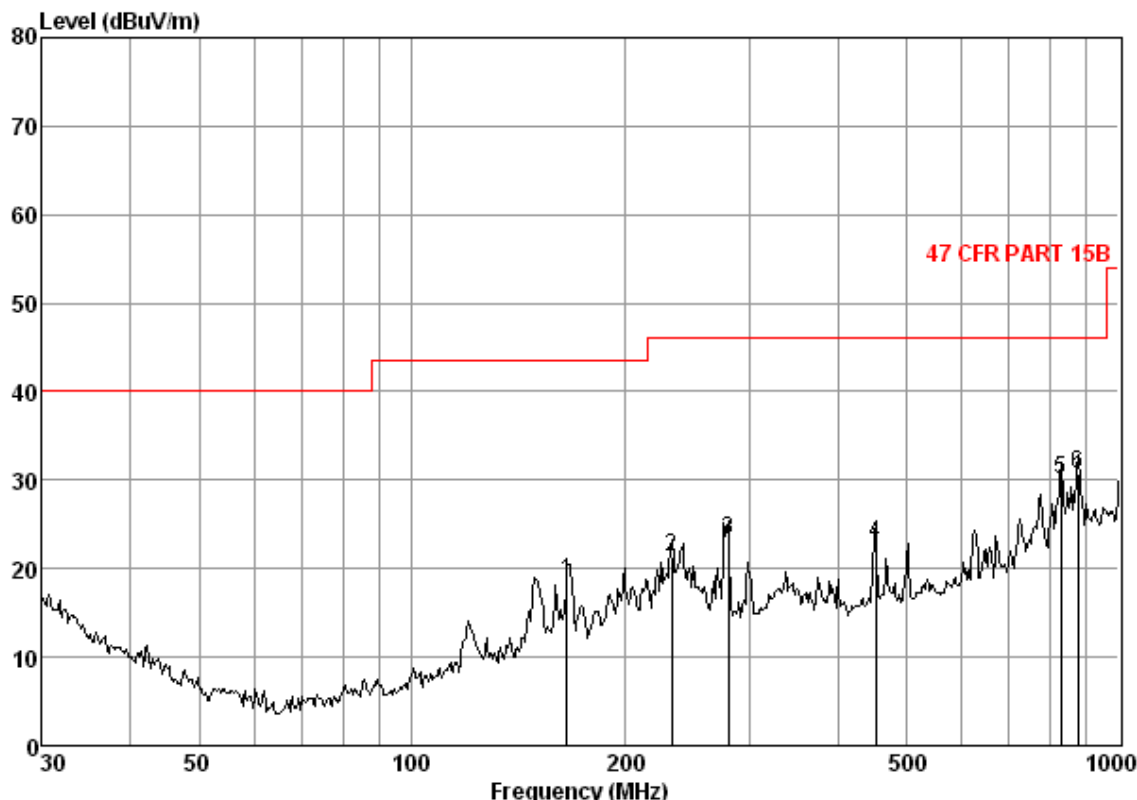
5.2 Radiated Emission

Test Requirement:	47 CFR Part 15B				
Test Method:	ANSI C63.4: 2009				
Test Site:	Measurement Distance: 3m (Semi-Anechoic Chamber)				
Receiver Setup:	Frequency	Detector	RBW	VBW	Remark
	30MHz-1GHz	Quasi-peak	100kHz	300kHz	Quasi-peak Value
	Above 1GHz	Peak	1MHz	3MHz	Peak Value
Limit:	Frequency		Limit (dBuV/m @3m)		Remark
	30MHz-88MHz		40.0		Quasi-peak Value
	88MHz-216MHz		43.5		Quasi-peak Value
	216MHz-960MHz		46.0		Quasi-peak Value
	960MHz-1GHz		54.0		Quasi-peak Value
	Above 1GHz		54.0		Average Value
			74.0		Peak Value
Test Procedure:	a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation. b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.				

Test Setup:	
	
Figure 1. 30MHz to 1GHz	Figure 2. Above 1 GHz
Instruments Used:	Refer to section 4.10 for details
Test Mode:	Communicate with PC mode
Test Results:	Pass

QP value: 30MHz~1GHz

Horizontal



Condition: 47 CFR PART 15B 3m 3142C HORIZONTAL

Job No. : 1277RF

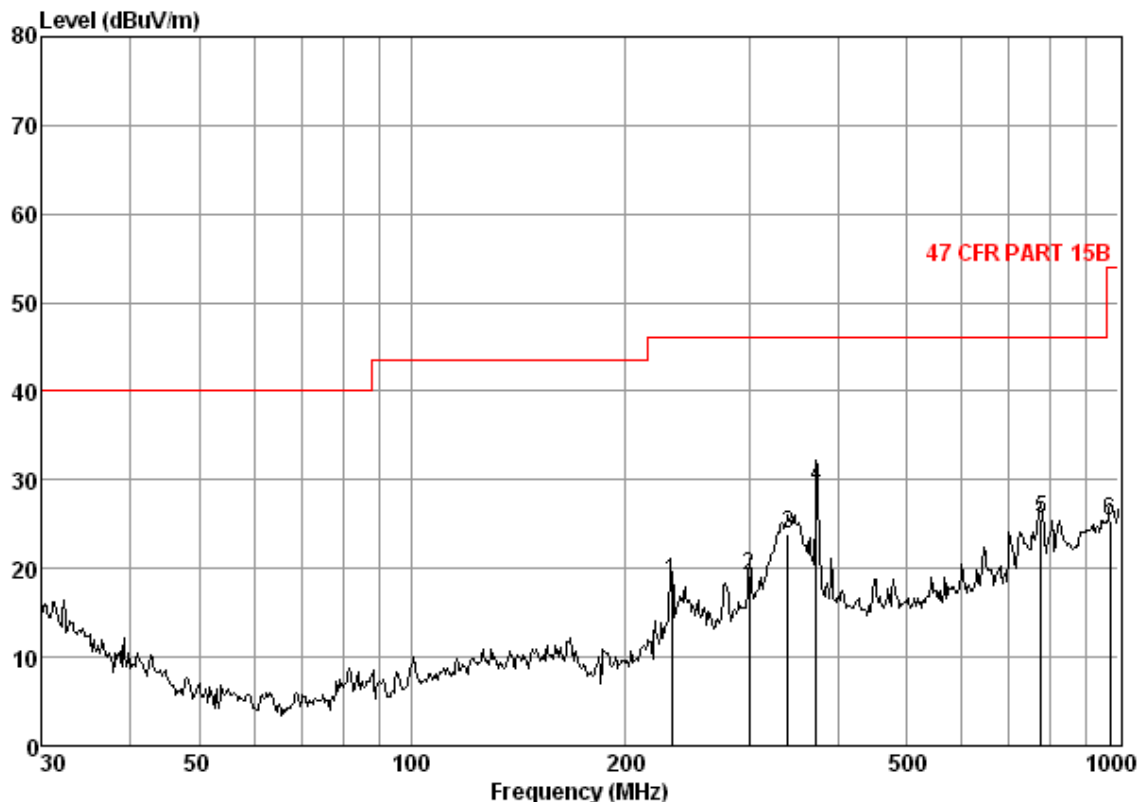
Test Mode: Communicate with PC

	Freq	Cable Loss	Antenna Factor	Preamplifier	Read Level	Level	Limit	Over
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	165.49	1.35	9.50	26.83	34.60	18.62	43.50	-24.88
2	233.35	1.59	8.42	26.58	37.85	21.28	46.00	-24.72
3	280.02	1.81	9.30	26.45	38.65	23.31	46.00	-22.69
4	452.72	2.42	12.92	27.46	35.05	22.93	46.00	-23.07
5	827.49	3.32	19.00	27.13	34.91	30.10	46.00	-15.90
6	875.25	3.51	19.47	26.89	34.68	30.77	46.00	-15.23





Vertical



Condition: 47 CFR PART 15B 3m 3142C VERTICAL

Job No. : 1277RF

Test Mode: Communicate with PC

		CableAntenna Preamp			Read		Limit	Over
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	233.35	1.59	8.42	26.58	35.14	18.57	46.00	-27.43
2	300.37	1.90	9.70	26.40	33.95	19.15	46.00	-26.85
3	340.78	2.03	10.50	26.73	38.15	23.95	46.00	-22.05
4	373.31	2.13	11.41	26.95	42.68	29.27	46.00	-16.73
5	776.88	3.14	17.92	27.32	31.84	25.58	46.00	-20.42
6	972.34	3.67	21.20	26.44	26.97	25.40	54.00	-28.60

Remark:

The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level = Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor