SGS-CSTC Standards Technical Services Co., Ltd.

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

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FCC Test Report

Application No.:	SZEM1112005432RF
Applicant:	Philips Consumer Lifestyle
Address of Applicant:	1600 Summer Street Stamford Connecticut 06905 United States
Manufacturer:	PHILIPS Electronics Hong Kong Ltd
Address of Manufacturer:	5/F., 5 Science Park East Avenue, Hong Kong Science Park, Shatin, N.T., Hong Kong
Factory:	Yusan Technology (Shenzhen) Limited
Address of Factory:	Haoyi Technology Park, Nan Huan Road, Shajing West, Baoan Shenzhen, Guang Dong P.R. China
Equipment Under Test (EUT):	
EUT Name:	Docking System For iPod/iPhone
Model No.:	DS3600/37
Trade mark:	PHILIPS
Standards:	FCC PART15 SUBPART B:2010
FCC ID:	BOUPHDS3600
Date of Receipt:	2011-12-22
Date of Test:	2011-12-23 to 2012-01-13
Date of Issue:	2012-01-18
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.

2 Test Summary

Test	Test Requirement	Test Method	Class / Severity	Result
Radiated Emission (30MHz to 6GHz)	FCC PART 15, SUBPART B:2010	ANSI C63.4:2009	Class B	PASS
Conducted Emission (150kHz to 30MHz)	FCC PART 15, SUBPART B:2010	ANSI C63.4:2009	Class B	PASS

3 Contents

4 General Information

4.1 Details of E.U.T.

Power supply: MODEL: AS300-120-AA250
INPUT: AC100-240V 50/60Hz 1.1A
OUTPUT: DC12.0V 2.5A

Adapter: <3m

4.2 Description of Support Units

The EUT was tested with associated equipment as below:

Description	Manufacturer	Model No.
iPod	Apple	MC027CH/A
PC	DELL	OPTIPLEX 755
LCD-displaying	DELL	E1909WF
KEYBOARD	DELL	SK-8115
MOUSE	DELL	MOC5110
PC	DELL	OPTIDLEX 330
LCD-displaying	DELL	SP2208WFPT
KEYBOARD	DELL	SK-8115
MOUSE	DELL	MOC5110
Coder	HengTong ELECTRON	HT4000
Printer	Canon	BJC-1000SP

4.3 Standards Applicable for Testing

The customer requested FCC tests for Docking System For iPod/iPhone.
The standard used was FCC PART 15, SUBPART B, CLASS B.

4.4 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.

4.5 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.
- **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)**
  The 3m Semi-anechoic chamber of SGS-CSTC Standards Technical Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 4620C-1.

4.6 Deviation from Standards

None.

4.7 Abnormalities from Standard Conditions

None.

5 Equipments Used during Test

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	2012-06-10
2	EMI Test Receiver	Rohde & Schwarz	ESIB26	SEL0023	2012-03-11
3	EMI Test software	AUDIX	E3	SEL0050	N/A
4	Coaxial cable	SGS	N/A	SEL0028	2012-05-29
5	BiConiLog Antenna (26-3000MHz)	ETS-LINDGREN	3142C	SEL0015	2012-10-29
6	Pre-amplifier (0.1-1300MHz)	Agilent Technologies	8447D	SEL0053	2012-05-26
7	Double-ridged horn (1-18GHz)	ETS-LINDGREN	3117	SEL0006	2012-10-29
8	Horn Antenna (18-26GHz)	ETS-LINDGREN	3160	SEL0076	2012-10-29
9	Band filter	Amindeon	Asi 3314	SEL0094	2012-05-26
10	Active Loop Antenna	Beijing Daze	ZN30900A	SEL0097	2012-10-29
11	EMI Test Receiver (9K-3GHz)	Rohde & Schwarz	ESCI	SEL0175	2012-05-26

Conducted Emission					
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal.Due date (yyyy-mm-dd)**
1	Shielding Room	ZhongYu Electron	GB-88	SEL0042	2012-06-10
2	LISN	Rohde & Schwarz	ENV216	SEL0152	2012-10-23
3	LISN	ETS-LINDGREN	3816/2	SEL0021	2012-05-26
4	8 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN-T8-02	EMC0120	2012-01-17
5	4 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN-T4-02	EMC0121	2012-01-17
6	2 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN-T2-02	EMC0122	2012-01-17
7	EMI Test Receiver	Rohde & Schwarz	ESCI	SEL0022	2012-05-26
8	Coaxial Cable	SGS	N/A	SEL0024	2012-05-29

General used equipment					
Item	**Test Equipment**	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal.Due date (yyyy-mm-dd)**
1	Humidity/ Temperature Indicator	Shanghai	ZJ1-2B	SEL0102 to SEL0103	2012-10-27
2	Humidity/ Temperature Indicator	Shanghai	ZJ1-2B	SEL0101	2012-10-27
3	Barometer	ChangChun	DYM3	SEL0088	2012-05-18

6 Test Results

6.1 Radiated Emissions, 30MHz to 6GHz

Test Requirement: FCC Part15 B

Test Method: ANSI C63.4: 2009

Frequency Range: 30MHz to 25GHz

Measurement Distance: 3m

Class: Class B

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

Detector:

Frequency	Detector	RBW	VBW	Remark
30MHz-1GHz	Quasi-peak	100kHz	300kHz	Quasi-peak Value
Above 1GHz	Peak	1MHz	3MHz	Peak Value
	Peak	1MHz	10Hz	Average Value

Quasi-Peak if maximised peak within 6dB of limit

6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 24.0 °C Humidity: 50 % RH Atmospheric Pressure: 1025 mbar

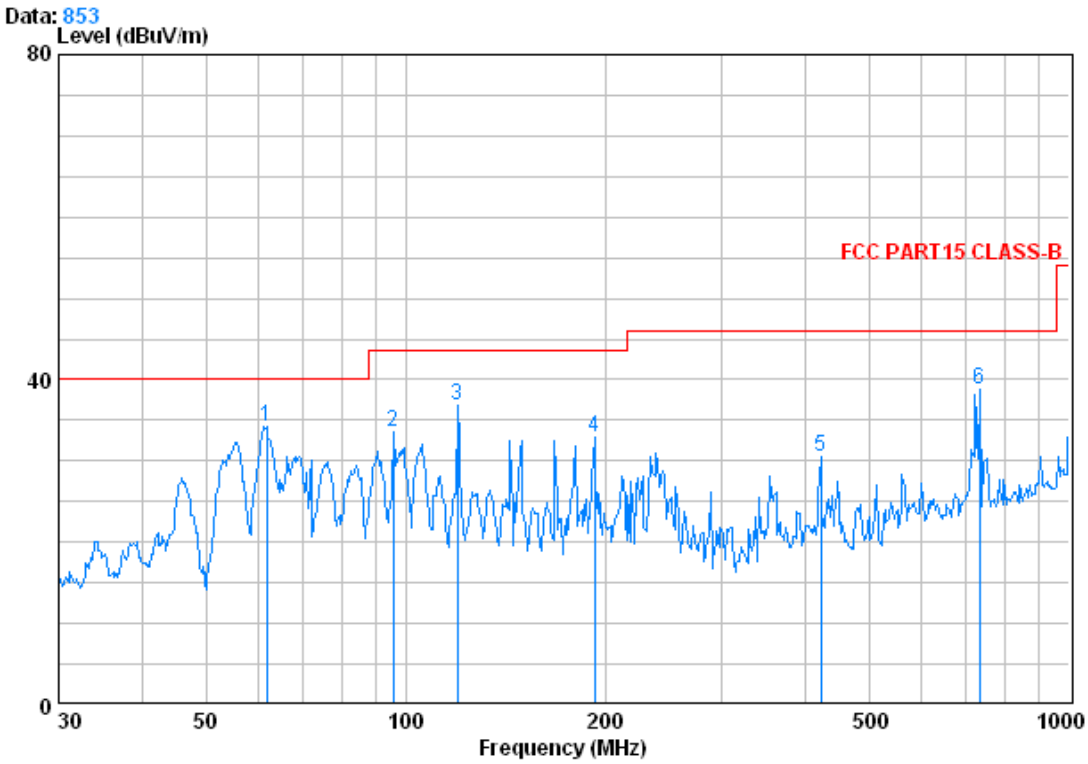
EUT Operation: Test in Communicate with PC mode, connect EUT and PC, Keep data exchanging.

6.1.2 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.

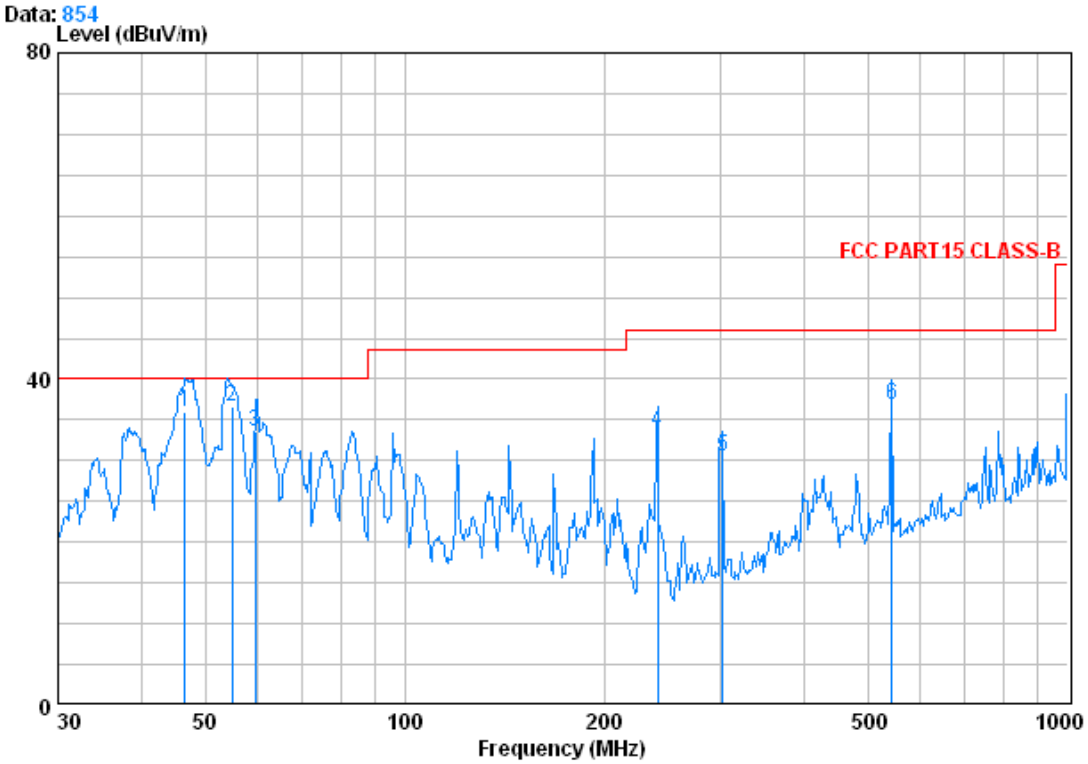
Below 1GHz

Horizontal:



	Freq	Cable Loss	Antenna Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	61.778	0.80	7.14	27.26	53.51	34.20	40.00	-5.80
2	95.762	1.16	8.93	27.21	50.79	33.67	43.50	-9.83
3	119.856	1.25	7.90	27.07	54.72	36.81	43.50	-6.69
4	192.419	1.39	10.12	26.73	48.05	32.84	43.50	-10.66
5	422.058	2.30	16.39	27.27	39.15	30.56	46.00	-15.44
6	731.920	3.00	21.62	27.37	41.54	38.79	46.00	-7.21

Vertical:



	Freq	Cable Loss	Antenna Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	46.666	0.74	9.55	27.30	53.01	36.00	40.00	-4.00
2 @	54.990	0.80	7.81	27.28	55.30	36.63	40.00	-3.37
3	59.441	0.80	7.25	27.27	52.81	33.59	40.00	-6.41
4	240.830	1.63	12.01	26.56	46.49	33.57	46.00	-12.43
5	301.422	1.90	13.94	26.40	41.12	30.57	46.00	-15.43
6	543.274	2.65	18.81	27.63	42.99	36.81	46.00	-9.19

Above 1GHz

Peak

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
1787.250	2.70	30.20	39.47	50.55	43.98	74.00	-30.02	Vertical
3338.250	3.59	33.26	40.55	49.07	45.37	74.00	-28.63	Vertical
4313.500	4.37	34.69	41.26	49.91	47.71	74.00	-26.29	Vertical
5641.250	5.00	35.12	41.24	50.75	49.63	74.00	-24.37	Vertical
7074.750	5.62	35.83	39.99	50.27	51.73	74.00	-22.27	Vertical
9248.500	6.08	36.89	38.11	46.16	51.02	74.00	-22.98	Vertical
1787.250	2.70	30.20	39.47	50.97	44.40	74.00	-29.60	Horizontal
3561.500	3.79	33.28	40.72	50.21	46.56	74.00	-27.44	Horizontal
4827.422	4.70	34.68	41.64	53.91	51.65	74.00	-22.35	Horizontal
6393.250	5.23	36.16	40.58	52.04	52.85	74.00	-21.15	Horizontal
7368.500	5.96	35.95	39.74	50.42	52.59	74.00	-21.41	Horizontal
9530.500	6.01	37.23	37.86	47.13	52.51	74.00	-21.49	Horizontal

Average:

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
1787.250	2.70	30.20	39.47	42.84	36.27	54.00	-17.73	Vertical
3338.250	3.59	33.26	40.55	38.50	34.80	54.00	-19.20	Vertical
4313.500	4.37	34.69	41.26	43.58	41.38	54.00	-12.62	Vertical
5641.250	5.00	35.12	41.24	43.57	42.45	54.00	-11.55	Vertical
7074.750	5.62	35.83	39.99	43.79	45.25	54.00	-8.75	Vertical
9248.500	6.08	36.89	38.11	39.77	44.63	54.00	-9.37	Vertical
1787.250	2.70	30.20	39.47	43.84	37.27	54.00	-16.73	Horizontal
3561.500	3.79	33.28	40.72	47.17	43.52	54.00	-10.48	Horizontal
4827.422	4.70	34.68	41.64	45.18	42.92	54.00	-11.08	Horizontal
6393.250	5.23	36.16	40.58	46.15	46.96	54.00	-7.04	Horizontal
7368.500	5.96	35.95	39.74	42.75	44.92	54.00	-9.08	Horizontal
9530.500	6.01	37.23	37.86	39.16	44.54	54.00	-9.46	Horizontal

Remark: The disturbance above 10GHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

6.2 Conducted Emissions Mains Terminals, 150kHz to 30MHz

Test Requirement:	FCC Part15 B
Test Method:	ANSI C63.4
Frequency Range:	150kHz to 30MHz
Class / Severity:	Class B
Limit:	
0.15M-0.5MHz	66dB(dBμV)-56dB(dBμV) quasi-peak, 56dB(dBμV)-46dB(dBμV) average
0.5M-5MHz	56dB(dBμV) quasi-peak, 46dB(dBμV) average
5M-30MHz	60dB(dBμV) quasi-peak, 50dB(dBμV) average
Detector:	Peak for pre-scan (9kHz Resolution Bandwidth)
	Quasi-Peak if maximised peak within 6dB of Quasi-Peak limit

6.2.1 E.U.T. Operation

Operating Environment:

Temperature: 24.0 °C Humidity: 50 % RH Atmospheric Pressure: 1025 mbar

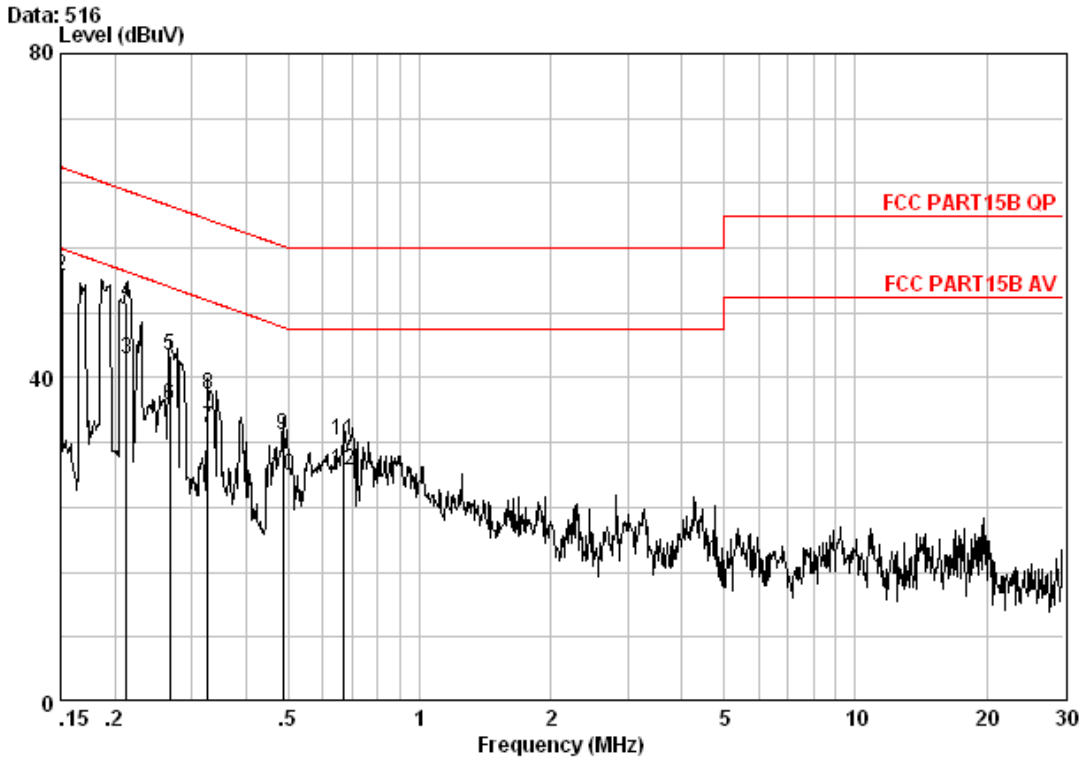
EUT Operation: Test in Communicate with PC mode, connect EUT and PC, Keep data exchanging.

6.2.2 Measurement Data

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

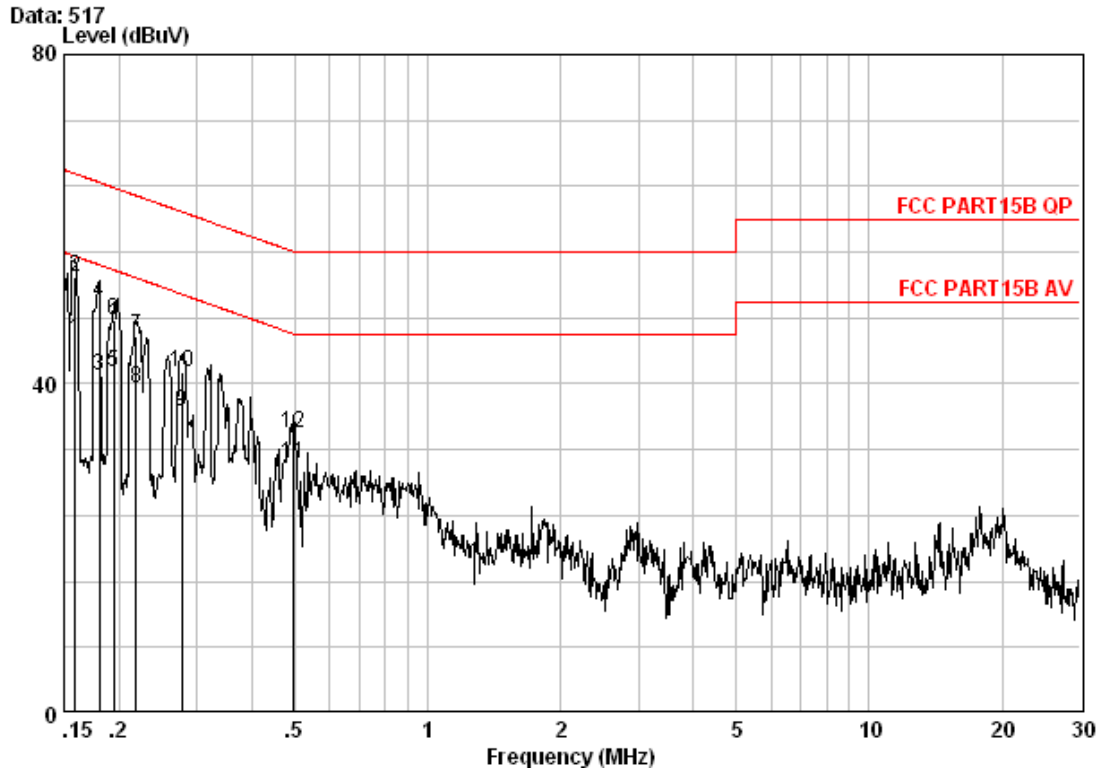
Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

Live Line:



	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.15000	0.58	9.60	33.98	44.16	56.00	-11.84	Average
2	0.15000	0.58	9.60	42.31	52.49	66.00	-13.51	QP
3 @	0.21279	0.62	9.60	32.08	42.30	53.10	-10.79	Average
4	0.21279	0.62	9.60	39.08	49.30	63.10	-13.79	QP
5	0.26724	0.63	9.60	32.50	42.72	61.20	-18.48	QP
6	0.26724	0.63	9.60	26.50	36.72	51.20	-14.48	Average
7	0.32685	0.63	9.60	23.51	33.74	49.53	-15.79	Average
8	0.32685	0.63	9.60	27.64	37.87	59.53	-21.67	QP
9	0.48632	0.63	9.60	22.78	33.01	56.23	-23.22	QP
10	0.48632	0.63	9.60	17.78	28.01	46.23	-18.22	Average
11	0.67187	0.62	9.69	21.95	32.26	56.00	-23.74	QP
12	0.67187	0.62	9.69	18.24	28.55	46.00	-17.45	Average

Neutral Line:



	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1 @	0.15900	0.59	9.60	35.21	45.40	55.52	-10.12	Average
2	0.15900	0.59	9.60	42.69	52.88	65.52	-12.64	QP
3	0.18056	0.61	9.60	30.81	41.02	54.46	-13.44	Average
4	0.18056	0.61	9.60	39.81	50.02	64.46	-14.44	QP
5	0.19447	0.62	9.60	31.22	41.44	53.84	-12.41	Average
6	0.19447	0.62	9.60	37.60	47.82	63.84	-16.03	QP
7	0.21851	0.62	9.60	35.56	45.78	62.88	-17.09	QP
8	0.21851	0.62	9.60	29.23	39.45	52.88	-13.43	Average
9	0.27734	0.63	9.60	26.35	36.58	50.90	-14.32	Average
10	0.27734	0.63	9.60	31.28	41.51	60.90	-19.39	QP
11	0.49411	0.63	9.60	20.11	30.34	46.10	-15.76	Average
12	0.49411	0.63	9.60	23.87	34.10	56.10	-22.00	QP