

FCC Part 15B Measurement and Test Report

For

Amelia World Corporation dba LINSAY

16340 West Dixie Highway, North Miami Beach, Florida

FCC ID: 2AAC3SL-7UHD

Test Rule(s): FCC Part 15 Subpart B

Product Description: Tablet PC

Tested Model: SL-7UHD

Report No.: STR14088027I-4

Tested Date: 2014-08-07 to 2014-09-24

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Note: This test report is limited to the above client company and the product model only. It may not be duplicated without prior permitted by Shenzhen SEM.Test Technology Co., Ltd.

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1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant: Amelia World Corporation dba LINSAY
Address of applicant: 16340 West Dixie Highway, North Miami Beach,
Florida
Manufacturer: Amelia World Corporation dba LINSAY
Address of manufacturer: 16340 West Dixie Highway, North Miami Beach,
Florida

General Description of EUT	
Product Name:	Tablet PC
Trade Name:	TECHNICS
Model No.:	SL-7UHD
Adding Model(s):	/
<i>Note: The test data is gathered from a production sample, provided by the manufacturer.</i>	

Technical Characteristics of EUT	
Rated Voltage:	AC120V Adapter:DC5V
Rated Current:	2A
Rated Power:	/
Power Adapter Model:	XHY050200UUCH
Lowest Internal Frequency:	32.768KHz
Highest Internal Frequency:	26MHz
Classification of ITE:	Class B

1.2 Test Standards

The following report is prepared on behalf of the Amelia World Corporation dba LINSAY in accordance with Part 2, Subpart J, and Part 15, Subparts A and B of the Federal Communication Commissions rules.

The objective is to determine compliance with FCC Part 15, Subpart B, and section 15.205, 15.107, and 15.109 rules.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product, which result in lowering the emission, should be checked to ensure compliance has been maintained.

1.3 Test Methodology

All measurements contained in this report were conducted with ANSI C63.4-2003, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

1.4 Test Facility

FCC – Registration No.: 934118

Shenzhen SEM.Test Technology Co., Ltd. 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 and the Registration is 934118.

Industry Canada (IC) Registration No.: 11464A

The 3m Semi-anechoic chamber of Shenzhen SEM.Test Technology Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 11464A.

CNAS Registration No.: L4062

Shenzhen SEM.Test Technology Co., Ltd. is a testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L4062. All measurement facilities used to collect the measurement data are located at 1/F, Building A, Hongwei Industrial Park, Liuxian 2nd Road, Bao'an District, Shenzhen, P.R.C (518101).

1.5 EUT Setup and Operation Mode

The equipment under test (EUT) was configured to measure its highest possible emission level. The test modes were adapted according to the operation manual for use, more detailed description as follows:

Test Mode List:

Test Mode	Description	Remark
TM1	Charging And Playing	Connect to Adapter, Earphone
TM2	Downloading	Connect to PC

EUT Cable List and Details

Cable Description	Length (M)	Shielded/Unshielded	With Core/Without Core
USB Cable	0.95	Unshielded	With Ferrite

Auxiliary Equipment List and Details

Description	Manufacturer	Model	Serial Number
Adapter	/	XHY050200UUCH	/
Notebook	Lenovo	E10	LR-63C8R
Headset	/	/	/

Special Cable List and Details

Cable Description	Length (M)	Shielded/Unshielded	With Core/Without Core
/	/	/	/

2. SUMMARY OF TEST RESULTS

FCC Rules	Description of Test Item	Result
§ 15.107 (a)	Conducted Emissions	Compliant
§ 15.109 (a)	Radiated Emissions	Compliant

N/A: not applicable

3. Conducted Emissions

3.1 Measurement Uncertainty

Base on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any conducted emissions measurement is ± 2.88 dB.

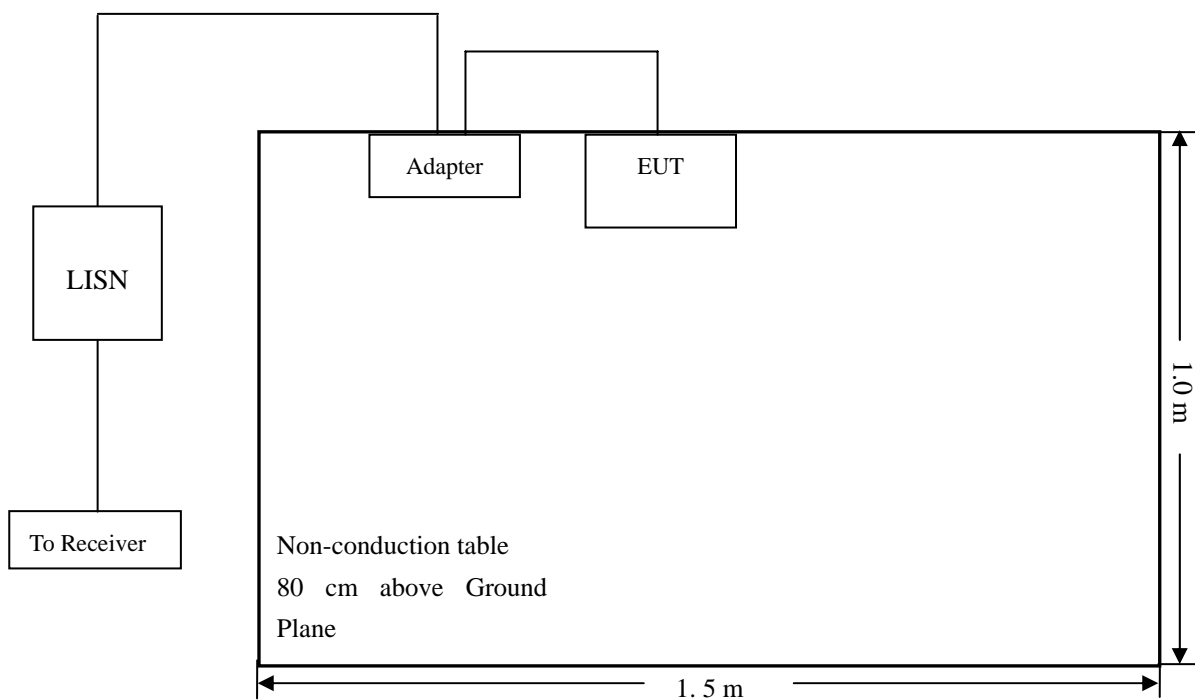
3.2 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2014-05-28	2015-05-27
L.I.S.N	Schwarz beck	NSLK8126	8126-224	2014-05-28	2015-05-27
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2014-05-28	2015-05-27

3.3 Test Procedure

Test is conducting under the description of ANSI C63.4-2003, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

3.4 Basic Test Setup Block Diagram



3.5 Environmental Conditions

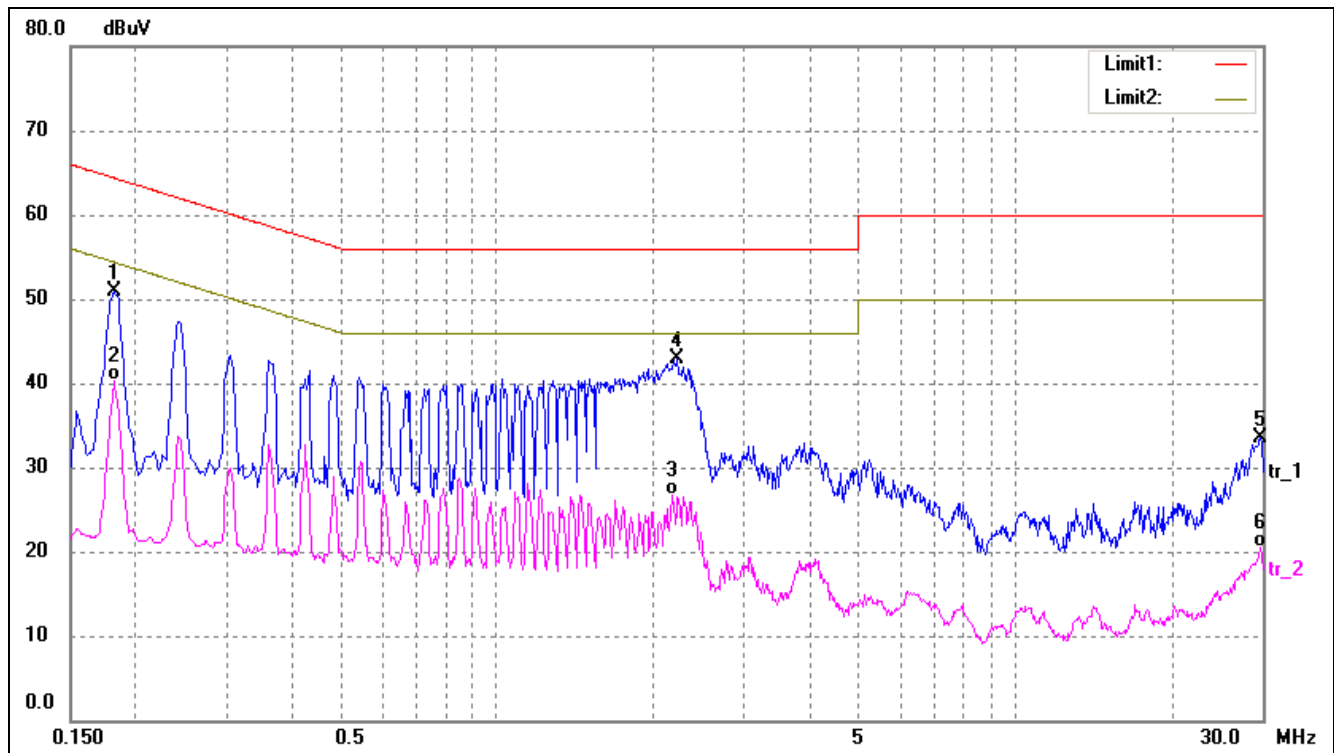
Temperature:	23 °C
Relative Humidity:	52%
ATM Pressure:	1011 mbar

3.6 Summary of Test Results/Plots

According to the data in section 3.7, the EUT complied with the FCC Part 15.107(a) Conducted margin for a Class B device, with the *worst* margin reading of:

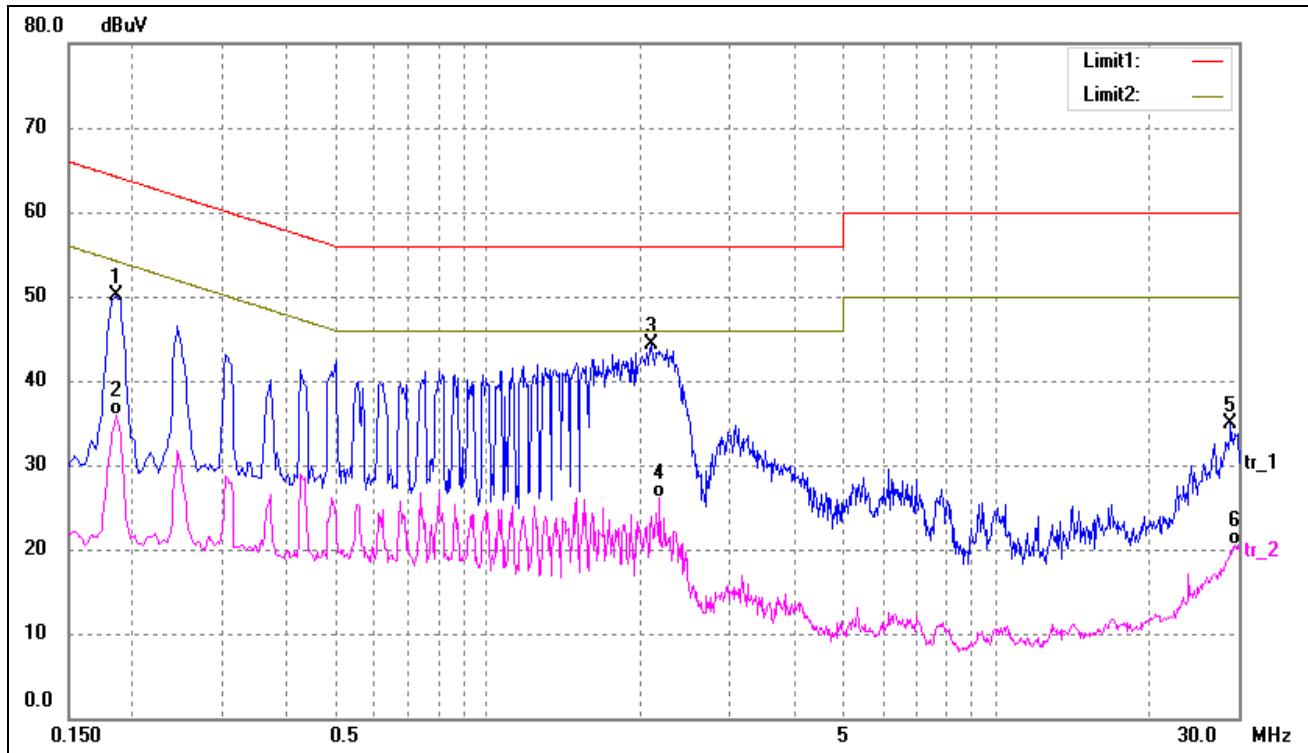
-7.30 dB at **0.1700 MHz** in the **Neutral, Downloading** mode, **Peak** detector, 0.15-30MHz

3.7 Conducted Emissions Test Data

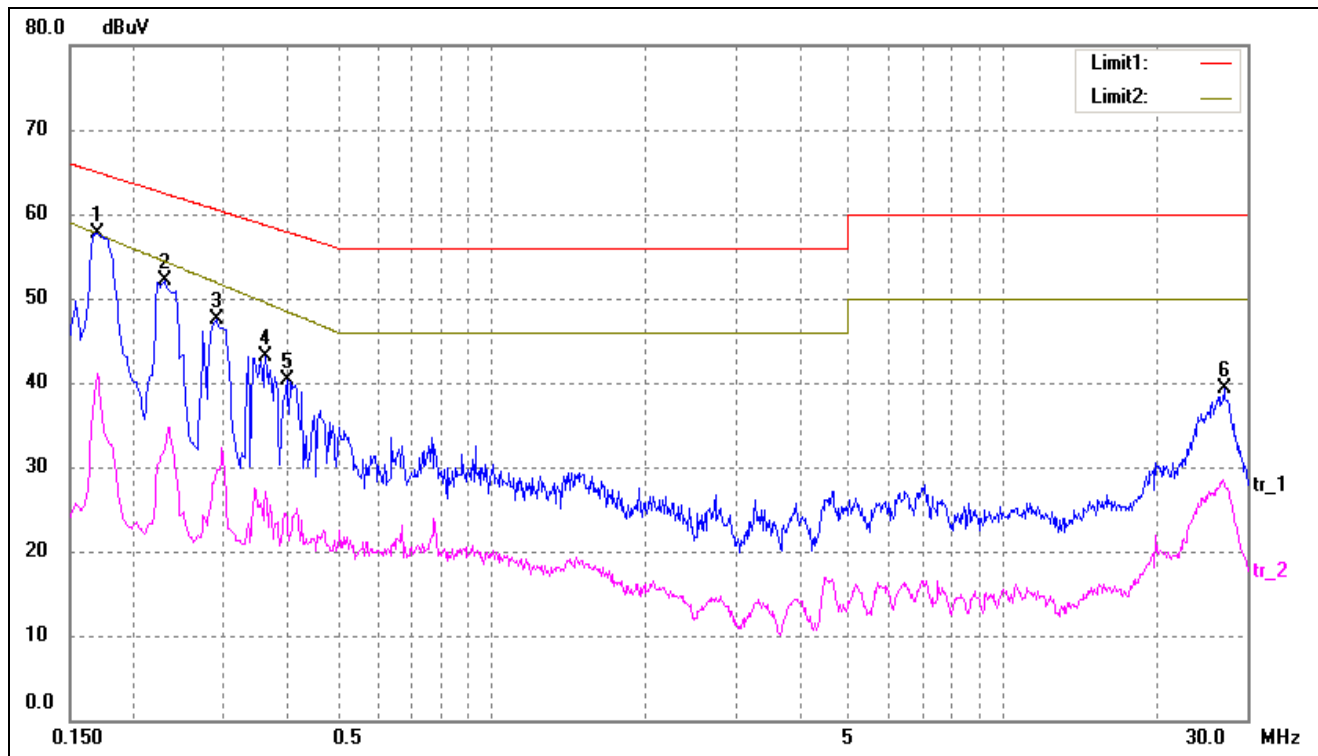
Plot of Conducted Emissions Test Data*EUT:* Tablet PC*Tested Model:* SL-7UHD*Operating Condition:* AC 120V/60Hz; Adapter DC 5V/2A*Comment:* Charging And Playing*Test Specification:* Neutral

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1820	41.50	9.50	51.00	64.39	-13.39	peak
2	0.1820	30.74	9.50	40.24	54.39	-14.15	AVG
3	2.1700	16.70	10.00	26.70	46.00	-19.30	AVG
4	2.2340	32.99	10.00	42.99	56.00	-13.01	peak
5	29.7380	20.59	13.00	33.59	60.00	-26.41	peak
6	29.7380	7.54	13.00	20.54	50.00	-29.46	AVG

Test Specification: Line

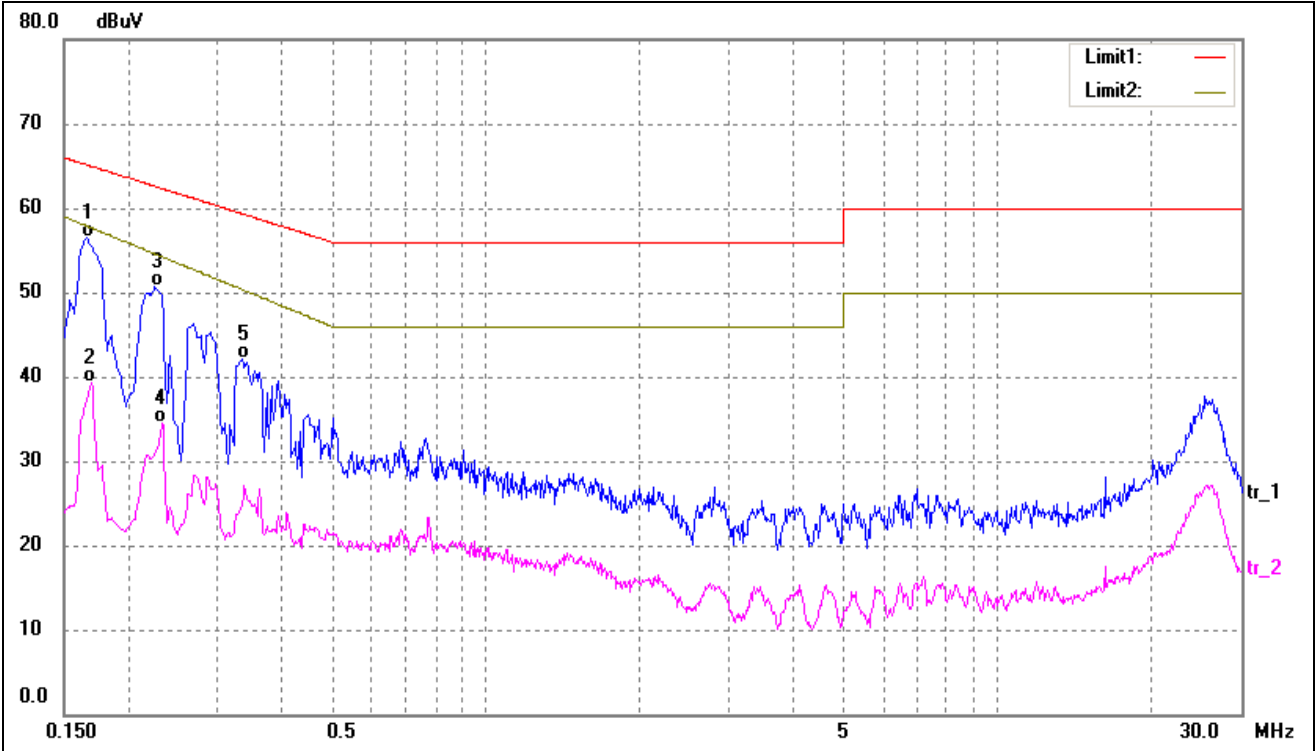


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1860	40.51	9.50	50.01	64.21	-14.20	peak
2	0.1860	26.38	9.50	35.88	54.21	-18.33	AVG
3	2.1100	34.24	10.00	44.24	56.00	-11.76	peak
4	2.1860	16.14	10.00	26.14	46.00	-19.86	AVG
5	28.9740	21.84	13.00	34.84	60.00	-25.16	peak
6	29.4780	7.54	13.00	20.54	50.00	-29.46	AVG

Plot of Conducted Emissions Test Data*EUT: Tablet PC**Tested Model: SL-7UHD**Operating Condition: AC 120V/60Hz; USB 5V**Comment: Downloading**Test Specification: Neutral*

No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1*	0.1700	48.16	9.50	57.66	64.96	-7.30	peak
2	0.2300	42.66	9.50	52.16	62.45	-10.29	peak
3	0.2900	37.96	9.50	47.46	60.52	-13.06	peak
4	0.3620	33.59	9.50	43.09	58.68	-15.59	peak
5	0.3980	30.72	9.50	40.22	57.89	-17.67	peak
6	27.0580	26.31	13.00	39.31	60.00	-20.69	peak

Test Specification: Line



No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1*	0.1660	46.99	9.50	56.49	65.15	-8.66	QP
2	0.1700	29.90	9.50	39.40	57.64	-18.24	AVG
3	0.2260	41.15	9.50	50.65	62.59	-11.94	QP
4	0.2340	25.09	9.50	34.59	54.19	-19.60	AVG
5	0.3339	32.63	9.50	42.13	59.35	-17.22	QP

4. Radiated Emissions

4.1 Measurement Uncertainty

Base on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any radiation emissions measurement is ± 5.10 dB.

4.2 Test Equipment List and Details

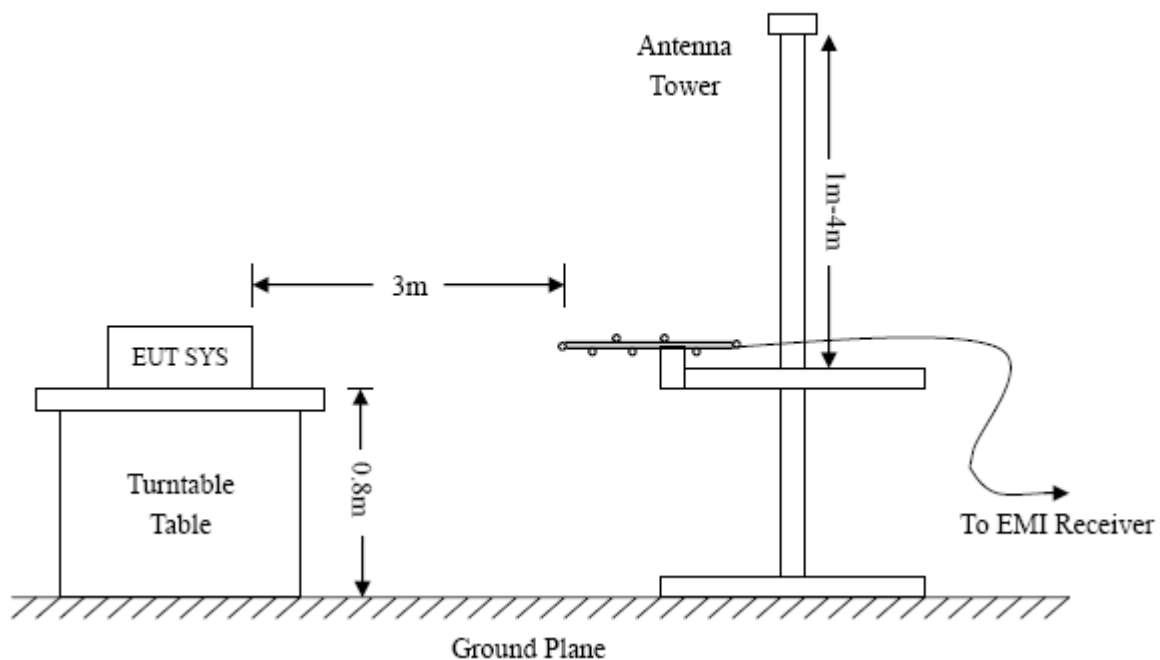
Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
Spectrum Analyzer	R&S	FSP	836079/035	2014-05-28	2015-05-27
EMI Test Receiver	R&S	ESVB	825471/005	2014-05-28	2015-05-27
Pre-amplifier	Agilent	8447F	3113A06717	2014-05-28	2015-05-27
Pre-amplifier	Compliance Direction	PAP-0118	24002	2014-05-28	2015-05-27
Trilog Broadband Antenna	SCHWARZBECK	VULB9163	9163-333	2014-05-24	2015-05-23
Horn Antenna	ETS	3117	00086197	2014-05-24	2015-05-23
Loop Antenna	SCHWARZECK	HFRA 5165	9365	2014-05-24	2015-05-23

4.3 Test Procedure

The setup of EUT is according with per ANSI C63.4-2003 measurement procedure. The specification used was with the FCC Part 15.109 Limit.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.



4.4 Test Receiver Setup

Frequency :9kHz-30MHz

RBW=10KHz,

VBW =30KHz

Sweep time= Auto

Trace = max hold

Detector function = peak

Frequency :30MHz-1GHz

RBW=120KHz,

VBW=300KHz

Sweep time= Auto

Trace = max hold

Detector function = peak, QP

Frequency :Above 1GHz

RBW=1MHz,

VBW=3MHz(Peak), 10Hz(AV)

Sweep time= Auto

Trace = max hold

Detector function = peak, AV

4.5 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and the Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

$$\text{Corr. Ampl.} = \text{Indicated Reading} - \text{Corr. Factor}$$

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -6dB μ V means the emission is 6dB μ V below the maximum limit for a Class B device. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Corr. Ampl.} - \text{FCC Part 15.109(a) Limit}$$

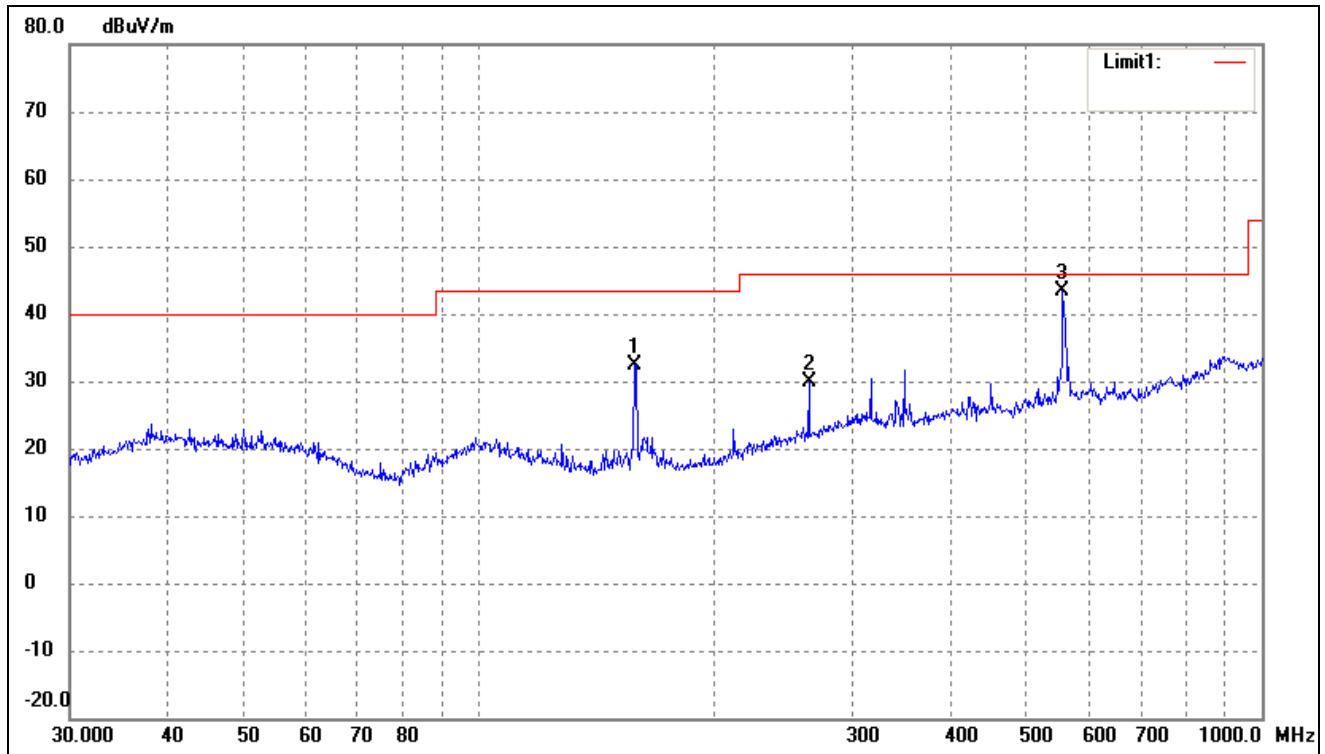
4.6 Environmental Conditions

Temperature:	23 °C
Relative Humidity:	55 %
ATM Pressure:	1011 mbar

4.7 Summary of Test Results/Plots

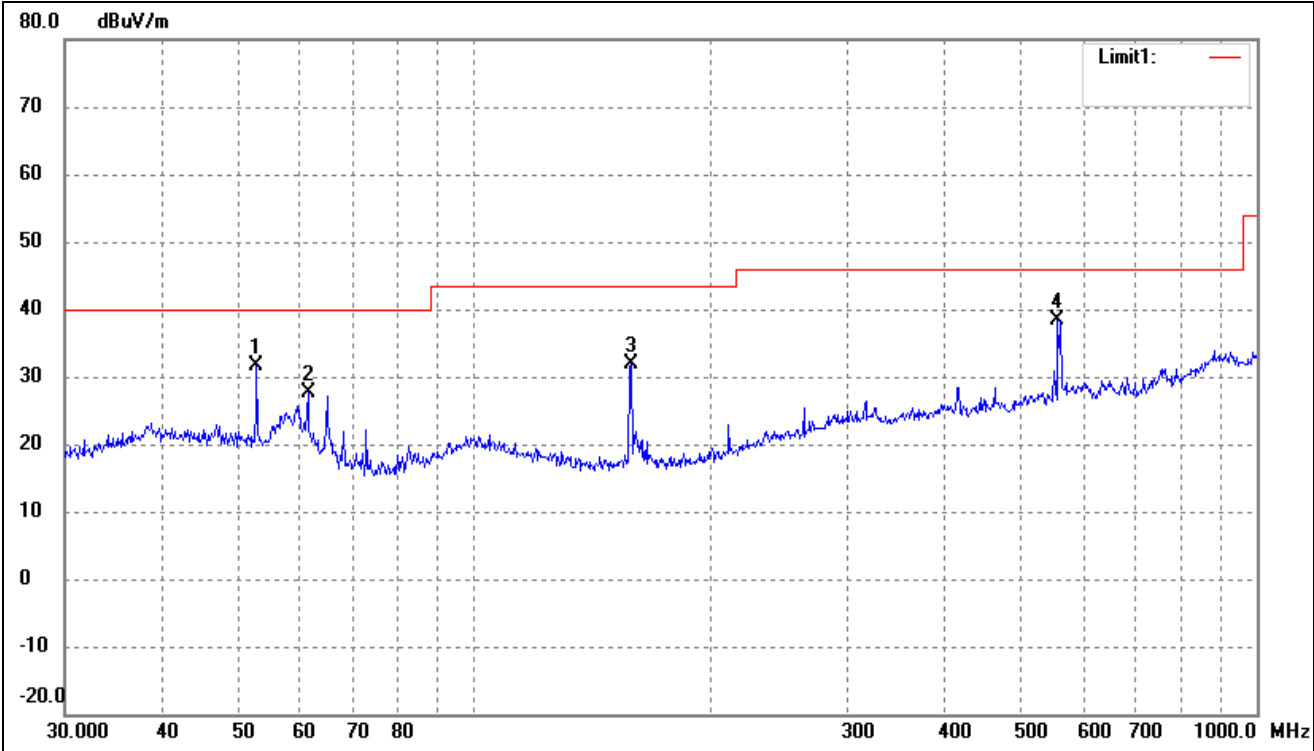
According to the data, the EUT complied with the FCC Part 15.109(a) rule, and had the worst margin of:

-2.56 dB at 556.7744 MHz in the Horizontal polarization, 9 kHz to 1 GHz, 3Meters

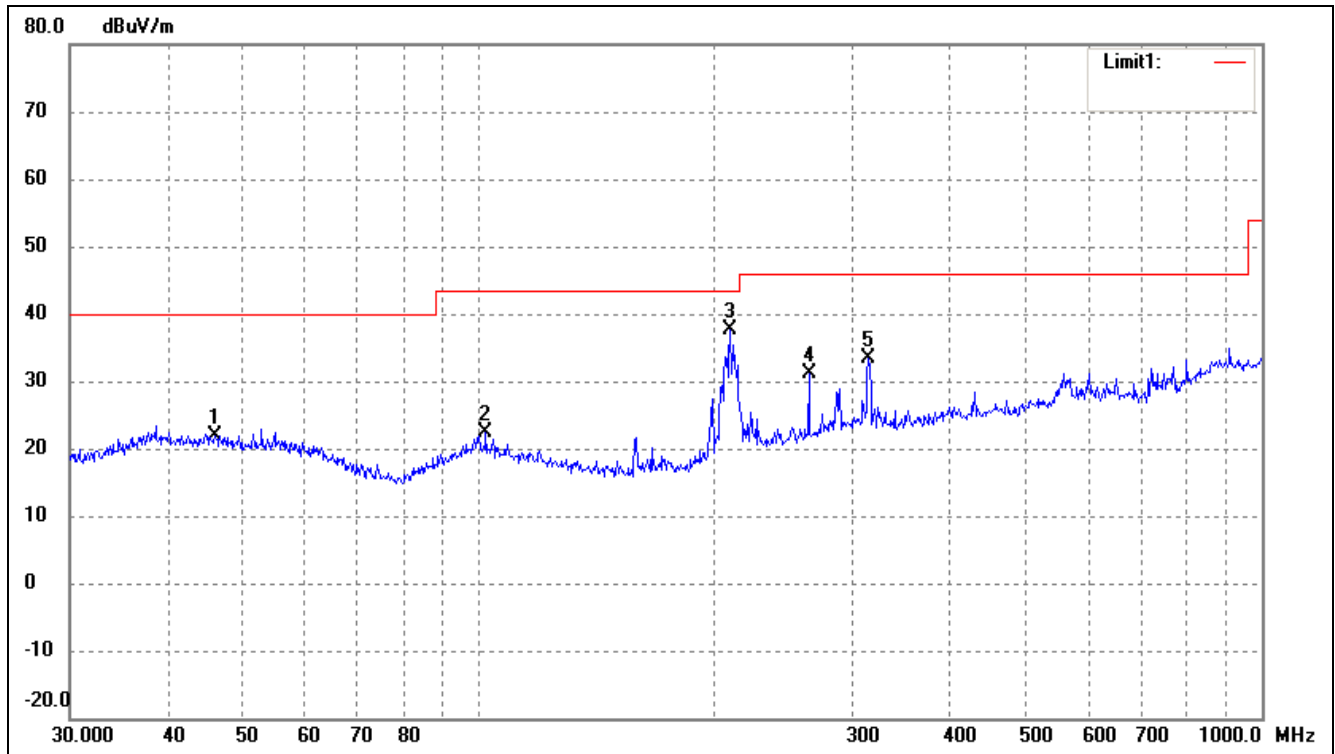
Plot of Radiated Emissions Test Data*EUT:* Tablet PC*Tested Model:* SL-7UHD*Operating Condition:* AC 120V/60Hz; Adapter DC 5V/2A*Comment:* Charging And Playing*Test Specification:* Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	(°)	(cm)	
1	158.1123	29.77	2.59	32.36	43.50	-11.14	241	100	peak
2	263.8190	22.57	7.29	29.86	46.00	-16.14	157	100	peak
3	556.7744	31.95	11.49	43.44	46.00	-2.56	321	200	peak

Test Specification: Vertical

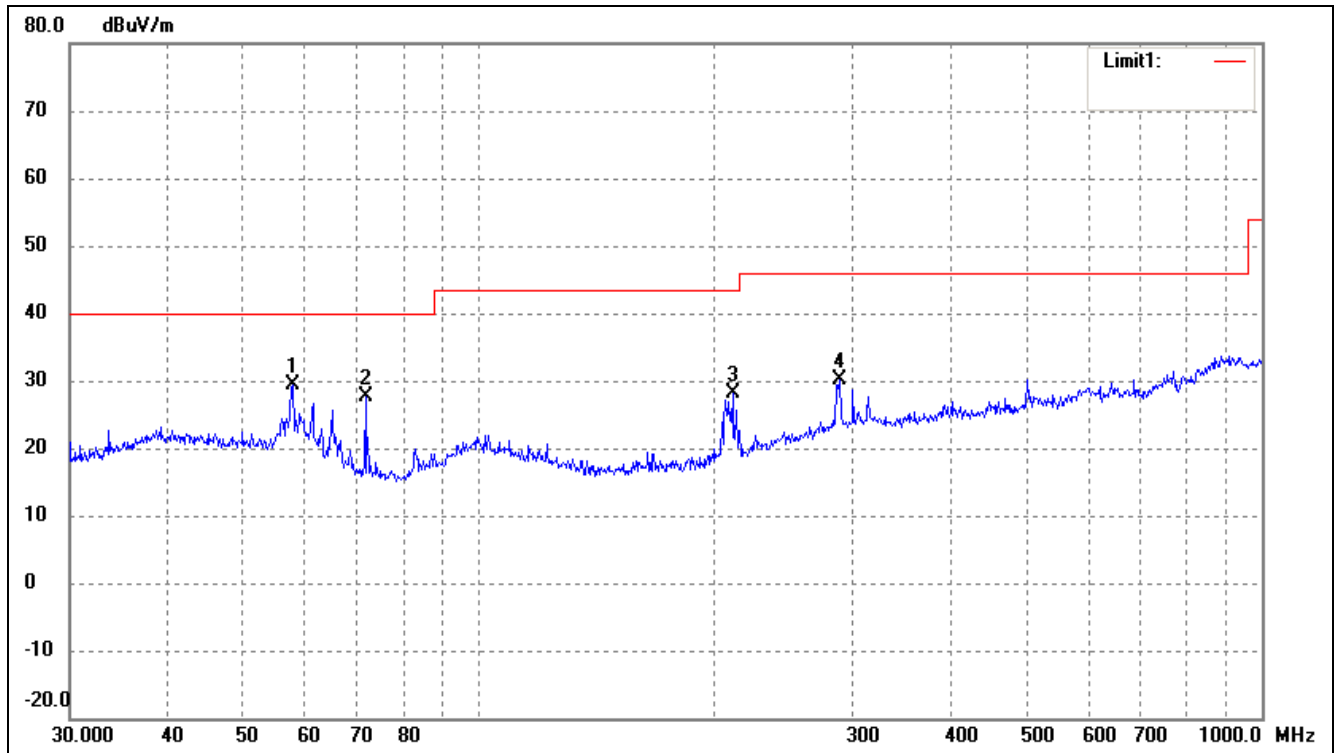


No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	(°)	(cm)	
1	52.7600	25.66	6.02	31.68	40.00	-8.32	54	100	peak
2	61.3463	22.71	4.95	27.66	40.00	-12.34	168	100	peak
3	158.6677	29.30	2.59	31.89	43.50	-11.61	210	100	peak
4	556.7744	26.89	11.49	38.38	46.00	-7.62	98	100	peak

Plot of Radiated Emissions Test Data*EUT:* Tablet PC*Tested Model:* SL-7UHD*Operating Condition:* AC 120V/60Hz; Adapter DC 5V/2A*Comment:* Downloading*Test Specification:* Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Detector
1	46.0164	15.30	6.66	21.96	40.00	-18.04	215	100	peak
2	102.0014	16.51	5.91	22.42	43.50	-21.08	166	100	peak
3	209.3129	33.38	4.35	37.73	43.50	-5.77	98	100	peak
4	263.8190	23.77	7.29	31.06	46.00	-14.94	197	100	peak
5	314.3765	24.08	9.26	33.34	46.00	-12.66	201	100	peak

Test Specification: Vertical



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Detector
1	57.7962	23.70	5.57	29.27	40.00	-10.73	21	100	peak
2	71.5806	25.56	2.00	27.56	40.00	-12.44	59	100	peak
3	210.7860	23.72	4.44	28.16	43.50	-15.34	157	100	peak
4	289.0021	21.48	8.75	30.23	46.00	-15.77	201	200	peak

Note: Testing is carried out with frequency rang 9kHz to the 6GHz, which above 1GHz is close to the noise base even antenna close up to 1meter distance according the measurement of ANSI C63.4.

The measurements greater than 20dB below the limit from 9kHz to 30MHz and test data are not provided.

***** END OF REPORT *****