FCC PART 15B

MEASUREMENT AND TEST REPORT

FOR

Quickte Technology Co., Ltd.

2nd/F, 8 Block, Xinwu Industrial Area, Xili, Nanshan District, Shenzhen,

Guangdong, PRC

FCC ID: ZM3-IES-I30

Report Concerns: Original Report	**Equipment Type:** Industrial Ethernet Switch

Model:	I 30-802M
Report No.:	STR11068027I
Test Date:	2011-06-07 to 2011-06-23
Issue Date:	2011-06-24
Tested By:	Seven Song / Engineer
Reviewed By:	Lahm Peng / EMC Manager
Approved & Authorized By:	Jandy so / PSQ Manager

Prepared By:

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1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant:	Quickte Technology Co., Ltd.
Address of applicant:	2nd/F, 8 Block, Xinwu Industrial Area, Xili, Nanshan District, Shenzhen, Guangdong, PRC
Manufacturer:	Quickte Technology Co., Ltd.
Address of manufacturer:	2nd/F, 8 Block, Xinwu Industrial Area, Xili, Nanshan District, Shenzhen, Guangdong, PRC

General Description of E.U.T

Items	Description
EUT Description:	Industrial Ethernet Switch
Trade Name:	QUICKTE
Model No.:	I 30-802M
Adding Models:	I 30-1208M, I 30-1204M, I 30-402M, I 30-400M, I 30-806M, I 30-804M, I 30-800M
Rated Voltage:	DC 48V
Rated Current:	0.3A
Rated Power:	14.4W
Category of Equipment:	Class A
For more information refer to the circuit diagram form and the user's manual.	

The test data is gathered from a production sample, provided by the manufacturer. The other model listed in the report has different appearance only of I 30-802M without circuit and electronic construction changed, declared by the manufacturer

1.2 Test Standards

The following report is prepared on behalf of the Quickte Technology Co., Ltd. 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 15.107, and 15.109 rules.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product, which results in lowering the emission/immunity, 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.

The equipment under test (EUT) was configured to measure its highest possible susceptibility against the tested phenomena. The test modes were adapted accordingly in reference to the Operating Instructions.

1.4 Test Facility

- **FCC – Registration No.: 994117**
  SEM.Test Compliance Services 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 994117.

- **Industry Canada (IC) Registration No.: 7673A**
  The 3m Semi-anechoic chamber of SEM.Test Compliance Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 7673A.

- **CNAS Registration No.: L4062**
  Shenzhen SEM.Test Electronics Service 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 3/F, Jinbao Commerce Building, Xin'an Fanshen Road, Bao'an District, Shenzhen, P.R.C (518101)

1.5 EUT Exercise Software

The EUT exercise program used during radiated and conducted testing was designed to exercise the system components. The test software, provided by the customer, is started while the EUT is on to simulate the normal work. under the Windows XP terminal.

1.6 Accessories Equipment List and Details

Description	Manufacturer	Model	Serial Number
Notebook	ASUS	X50R	74NOAS297138
POE Ethernet Switch	QUICKTE	I804G-8P	/

1.7 EUT Cable List and Details

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

2. SUMMARY OF TEST RESULTS

Description of Test	Result
§15.107 (a) Conducted Emission	N/A
§15.109(a) Radiated Emission	Compliant

3. §15.109(a)- RADIATED EMISSION

3.1 Measurement Uncertainty

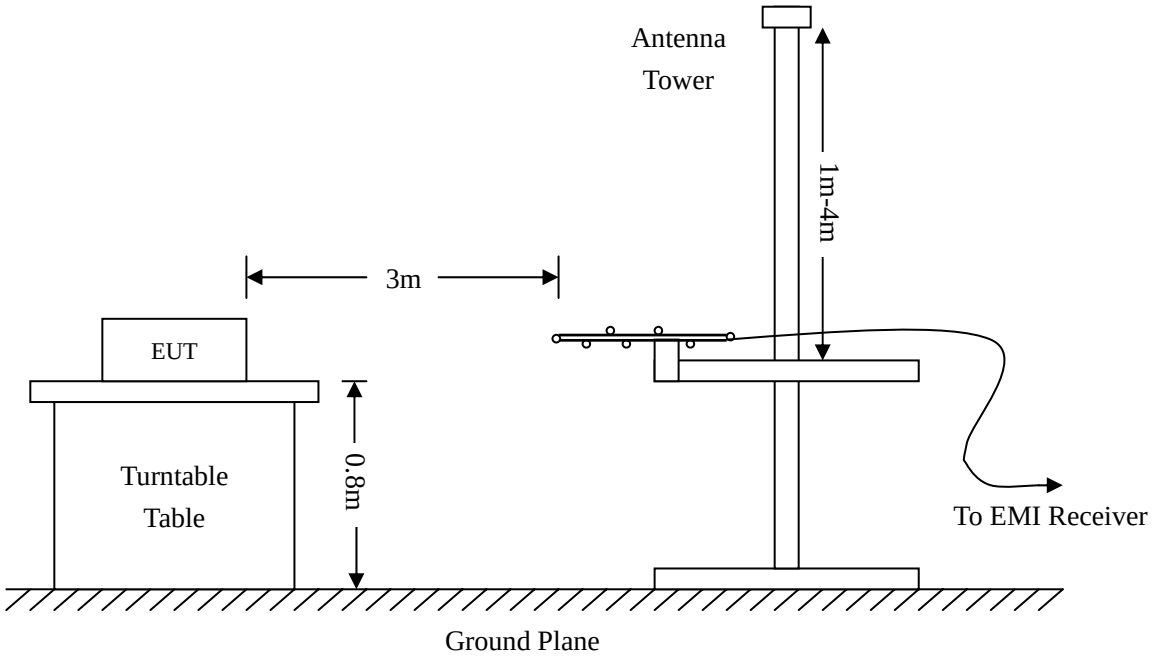
Base on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any radiation emissions measurement is ± 5.10 dB.

3.2 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
Spectrum Analyzer	R&S	FSP	836079/035	2010-12-20	2011-12-19
EMI Test Receiver	R&S	ESVB	825471/005	2010-12-20	2011-12-19
Positioning Controller	C&C	CC-C-1F	N/A	2010-12-20	2011-12-19
RF Switch	EM	EMSW18	SW060023	2010-12-20	2011-12-19
Pre-amplifier	Agilent	8447F	3113A06717	2010-12-20	2011-12-19
Pre-amplifier	Compliance Direction	PAP-0118	24002	2010-12-20	2011-12-19
Trilog Broadband Antenna	SCHWARZBECK	VULB9163	9163-333	2011-01-09	2012-01-08
Horn Antenna	ETS	3117	00086197	2011-01-09	2012-01-08

3.3 Test Procedure

The setup of EUT is according with per ANSI C63.4-2003 measurement procedure. The specification used was with the FCC Part 15.205 and 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.



3.4 Test Receiver Setup

During the radiated emission test, the test receiver was set with the following configurations:

Start Frequency ..... 30 MHz
Stop Frequency..... 1000 MHz
Sweep Speed ..... Auto
IF Bandwidth..... 100 kHz
Quasi-Peak Adapter Bandwidth ..... 120 kHz
Quasi-Peak Adapter Mode ..... Normal

3.5 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:

Corr. Ampl. = Indicated Reading – Corr. Factor

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -6dBμV means the emission is 6dBμV below the maximum limit for Class A. The equation for margin calculation is as follows:

Margin = Corr. Ampl. – FCC Part 15A Limit

3.6 Environmental Conditions

Temperature:	25 °C
Relative Humidity:	54%
ATM Pressure:	1011 mbar

3.7 Summary of Test Results/Plots

According to the data, the EUT complied with the FCC Part 15B Class A standards, and had the worst margin of:

-4.55 dBμV at **124.5690MHz** in the **Horizontal** polarization, **30 MHz to 2 GHz, 3Meters**

Plot of Radiation Emissions Test Data

Radiated Disturbance

EUT: Industrial Ethernet Switch

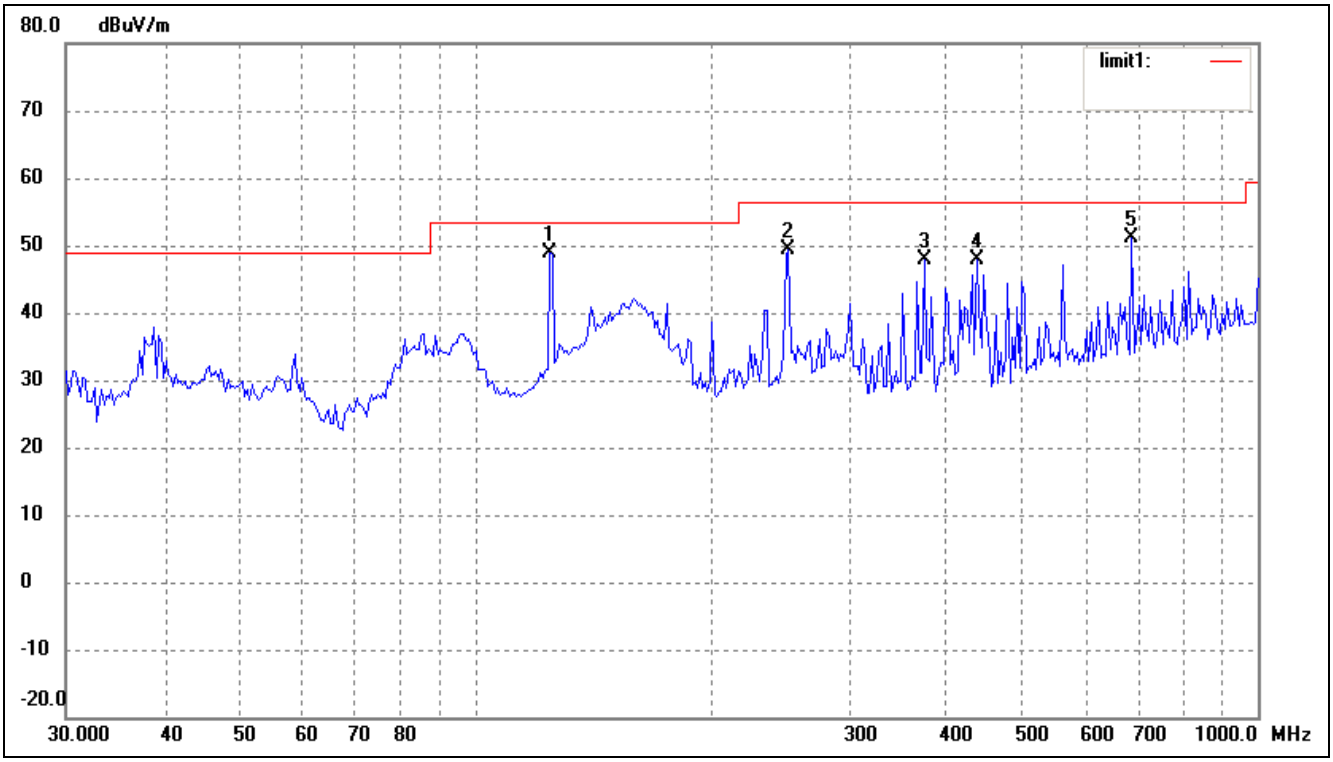
M/N: I 30-802M

Operating Condition: Ping

Test Specification: Horizontal & Vertical

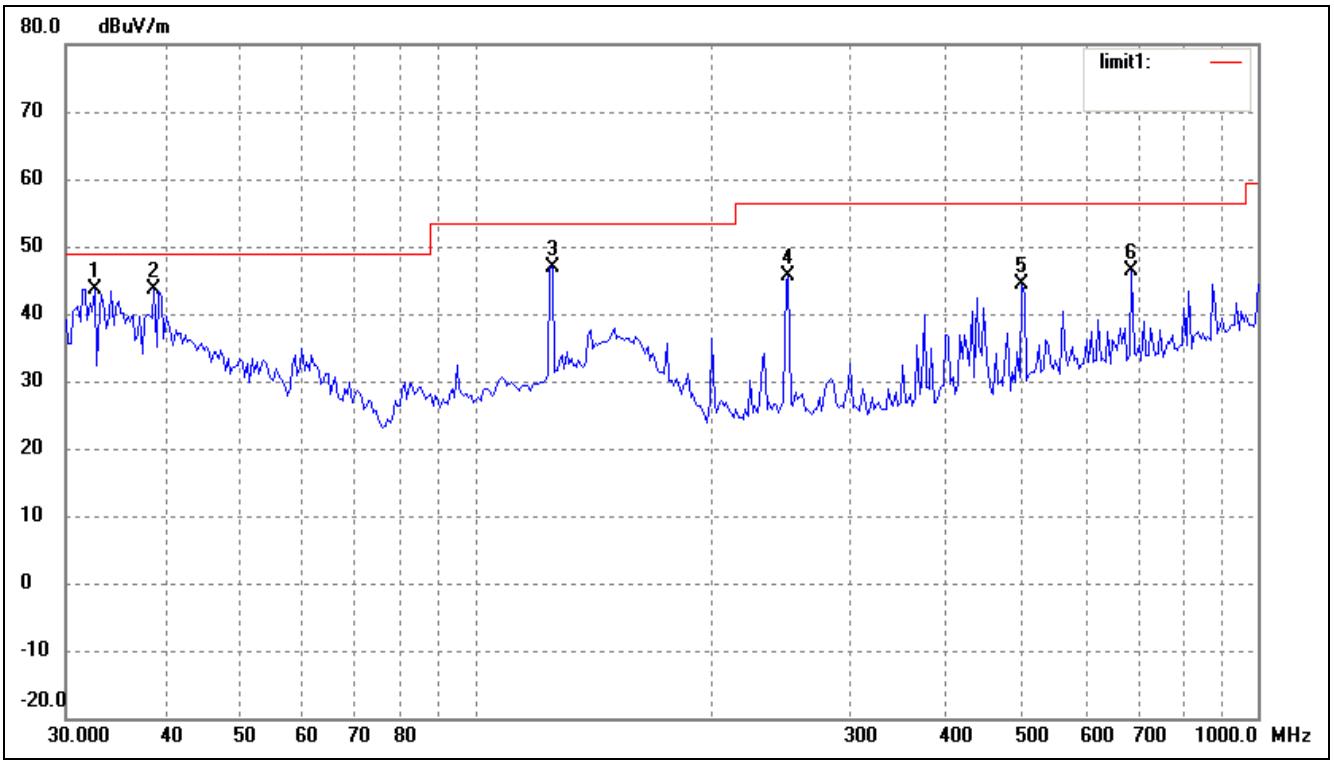
Comment: DC 48V

Horizontal



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(°)	(cm)	
1	124.5690	43.63	5.32	48.95	53.50	-4.55	265	100	QP
2	251.1804	40.74	8.72	49.46	56.40	-6.94	133	100	Peak
3	374.6225	36.69	11.11	47.80	56.40	-8.60	22	200	Peak
4	437.1199	35.86	12.07	47.93	56.40	-8.47	167	200	Peak
5	689.5644	33.75	17.41	51.16	56.40	-5.24	170	200	QP

Vertical



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(°)	(cm)	
1	32.6340	36.86	6.77	43.63	49.00	-5.37	166	100	QP
2	38.8878	35.78	7.84	43.62	49.00	-5.38	240	100	QP
3	125.4457	41.78	5.19	46.97	53.50	-6.53	100	100	peak
4	251.1804	37.01	8.72	45.73	56.40	-10.67	360	200	peak
5	499.4247	30.12	14.36	44.48	56.40	-11.92	52	200	peak
6	689.5644	28.98	17.41	46.39	56.40	-10.01	117	100	peak

Note: The emissions above 1GHz frequency closing to the base noise, so it is not report.

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