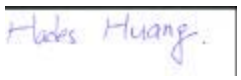
RFI / EMI TEST REPORT

APPLICANT	:	SYSTEMS & TECHNOLOGY CORP.
E. U. T.	:	IntelliTrac
TRADE NAME	:	N/A
FCC ID	:	RLS-STAVL0358
REGULATION	:	CFR 47 , Part 15 Subpart B , **Class B**
TEST SITE	:	PEP Testing Laboratory
TEST ENGINEER	:	
TEST DATE	:	OCT. 01, 2003
ISSUED DATE	:	DEC. 16, 2003
REPORT No.	:	E920327

VERIFICATION

WE HEREBY VERIFY THAT:

The E. U. T. listed below has completed RFI testing by PEP Testing Laboratory and the interference emissions can pass **FCC Class B** limitations .

The tested configurations and the facility complies with the radiated and AC line conducted test site criteria in ANSI C63 . 4 - 1992 .

Any data in this RFI report is **“ reference “** only .

APPLICANT : SYSTEMS & TECHNOLOGY CORP. *
PRODUCT : IntelliTrac *
FCC ID : RLS-STAVL0358 *
MODEL : X8 *

M. Y. TSUI / Manager

PEP Testing Laboratory
12-3FL., NO. 27-1, Lane 169, Kang-Ning St.,
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TEL : 886-2-6922097 FAX : 886-2-6956236

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1. GENERAL

1.1 GENERAL INFORMATION:

APPLICANT : SYSTEMS & TECHNOLOGY CORP.

17-7F, NO. 79, HSIN TAI WU ROAD, SEC. 1,
HSICHIH, TAIPEI HSIEN,TAIWAN, R. O. C.

MANUFACTURER : KYLINK COMMUNICATIONS CORP.

NO. 31, TZYH CHYANG ST., TU-CHENG INDUSTRIAL
DISTRICT TAIPEI, TAIWAN, R. O. C.

MEASUREMENT PROCEDURE : ANSI C63 , 4 - 1992

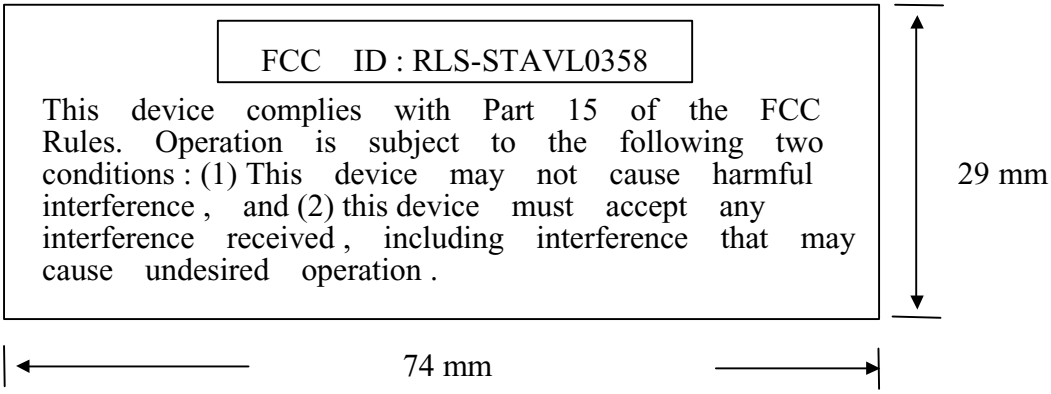
TESTED FOR COMPLIANCE WITH : Title 47 of CFR
Part 15 , Subpart B , Class B

1.2 PLACE OF MEASUREMENT

PEP Testing Laboratory

1.3 LABELING REQUIREMENT

A FCC ID label shall be permanently attached and conspicuously located on the equipment :



1.4 INFORMATION TO THE USER

The following FCC statement should be declared in a conspicuous location in the user's manual .

Federal Communications Commission (FCC) Statement

This equipment has been tested and found to comply with the limits for a Class B digital device , pursuant to Part 15 of the FCC Rules . These limits are designed to provide reasonable protection against harmful interference in a residential installation . This equipment generates , uses and can radiate radio frequency energy and , if not installed and used in accordance with the instruction, may cause harmful interference to radio communications . However , there is no guarantee that interference will not occur in a particular installation . If this equipment does cause harmful interference to radio or television reception , which can be determined by turning the equipment off and on , the user is encouraged to try to correct the interference by one or more of the following measures :

- Reorient or relocate the receiving antenna .
- Increase the separation between the equipment and receiver .
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected .
- Consult the dealer or an experienced radio / TV technician for help .

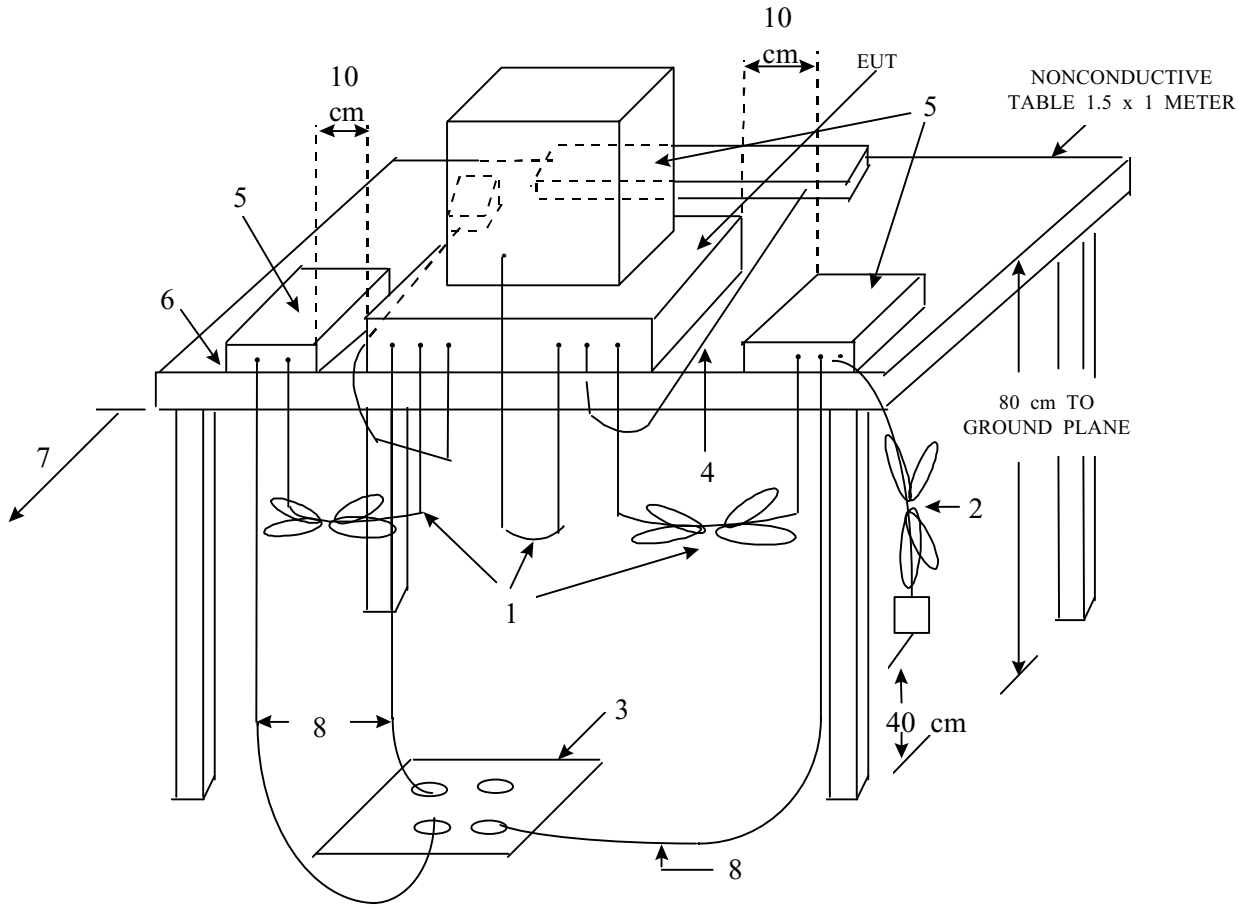
Warning : A shielded- type power cord is required in order to meet FCC emission limits and also to prevent interference to the nearby radio and television reception . It is essential that only the supplied power cord be used .

Use only shielded cables to connect I / O devices to this equipment .

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment .

2. RADIATED EMISSION TEST

2.1 GENERAL SETUP OF THE FACILITIES



2.2 TEST PROCEDURES

Radiated Emission Test Procedures

The EUT is placed in the center of a non-conducting table which size is 1m by 1.5m and 80cm (or may be enlarged , if necessary) above the ground plane , it's rear shall be flush with the rear of the table and a 10cm separation spaces between the other peripheral devices .

The preliminary tests is performed in 3m standard anechonic chamber and as specified in ANSI C63.4 (section 8.3.1.1) should be carried out while varying cable positions in order to determine the maximum or near-maximum emission level . Method of maximization follow ANSI C63.4 Appendix D .

For the final test , the EUT is relocated from chamber to open field site ; then , based on the preliminary tests record , the highest emission shall be re-maximized before final radiated emissions measurements are performed . However , antenna height (1m to 4m) and polarity (Horizontal and Vertical) and EUT azimuth (0 degree to 360 degree) are to be varied .

The highest emissions data were recorded in this RFI test report .

3. DESCRIPTION FOR EUT TESTING CONFIGURATION

** **Operational description - - - -**

The equipment under test (EUT) is IntelliTrac, FCC ID: RLS-STAVL0358, model X8. The EUT that supports either GSM 900 or GSM 1800 network system is designed for the use of GPS automatic vehicle location application. After respective preliminary test on EUT with power source of DC 12V and DC 24V from DC power supply, we took the worst-case power rating: DC 12V for final test. The EUT I/O ports include GPS connector, GSM connector, Serial connector, Input connector, AUX connector, Output connector and power connector. For more detail information about the EUT, please refer to the user's manual.

Setup Method: The EUT configuration was set up by the following steps for test.

(A) Respectively plug RJ-45 data cable and Serial data cable to EUT AUX connector and Serial connector.

(B) Respectively plug GSM antenna cable and GPS antenna cable to EUT GSM connector and GPS connector.

(C) Install triggered input cables to EUT input connector and install triggered output cables to EUT output connector.

(D) Install EUT power connector to DC power supply.

(E) Insert SIM card to EUT SIM card holder.

According to the use designed, the test was respectively carried out on the function of ongoing receipt of GPS satellite signals by dialing the SIM card number of EUT and on the function of GSM ready status after a response received by mobile phone from EUT (note: being limited to the incapability of ongoing signal transmission of EUT, the test was merely carried out on GSM ready status after its prompt transmission process completed). The worst-case test result of each test mode of EUT was recorded and provided in this report.

4. SUPPORTING DEVICES TO TEST

SUPPORT UNIT 1. - - - - DC Power Supply

Manufacturer : SCHMIDT

Model Number : EPS-3030SD (DC-0-30V)

EQUIPMENT UNDER TEST - - - -

Manufacturer : SYSTEMS & TECHNOLOGY CORP.

Model Number : X8

Data Cable : N/A

FCC ID : RLS-STAVL0358

5. TEST CONFIGURATION

N/A

RADIATED TEST CONFIGURATION PHOTOS

< FRONT VIEW >

< REAR VIEW >

RADIATED EMISSIONS TEST DATA

Antenna polarization : HORIZONTAL ; Test distance : 3 m ;

Freq. (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dB)	Probe Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)
53.131	20.11	-19.89	40.00	27.82	12.23	0.26	20.20
93.768	29.11	-14.39	43.50	41.05	7.59	0.64	20.17
110.569	21.82	-21.68	43.50	31.45	10.34	0.24	20.21
160.346	34.58	- 8.92	43.50	39.60	14.58	0.70	20.30
207.123	27.57	-15.93	43.50	36.04	11.02	0.75	20.24
236.645	29.57	-16.43	46.00	36.86	12.19	0.69	20.17
482.216	20.73	-25.27	46.00	21.36	17.85	1.18	19.66
663.473	24.22	-21.78	46.00	20.30	21.75	1.77	19.60

Note :

1. Level = Read Level + Probe Factor + Cable Loss – Preamp Factor
2. Over Limit = Level – Limit Line

RADIATED EMISSIONS TEST DATA

Antenna polarization : VERTICAL ; Test distance : 3 m ;

Freq. (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dB)	Probe Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)
43.659	19.11	-20.89	40.00	27.37	11.84	0.03	20.13
58.613	21.33	-18.67	40.00	28.95	12.21	0.37	20.20
153.739	23.99	-19.51	43.50	28.85	14.64	0.70	20.20
216.783	18.75	-27.25	46.00	26.73	11.63	0.67	20.28
236.645	21.91	-24.09	46.00	29.20	12.19	0.69	20.17
437.120	26.30	-19.70	46.00	28.45	16.67	1.14	19.96
694.417	24.71	-21.29	46.00	20.50	22.02	1.79	19.60
945.440	28.18	-17.82	46.00	21.02	24.19	2.10	19.13

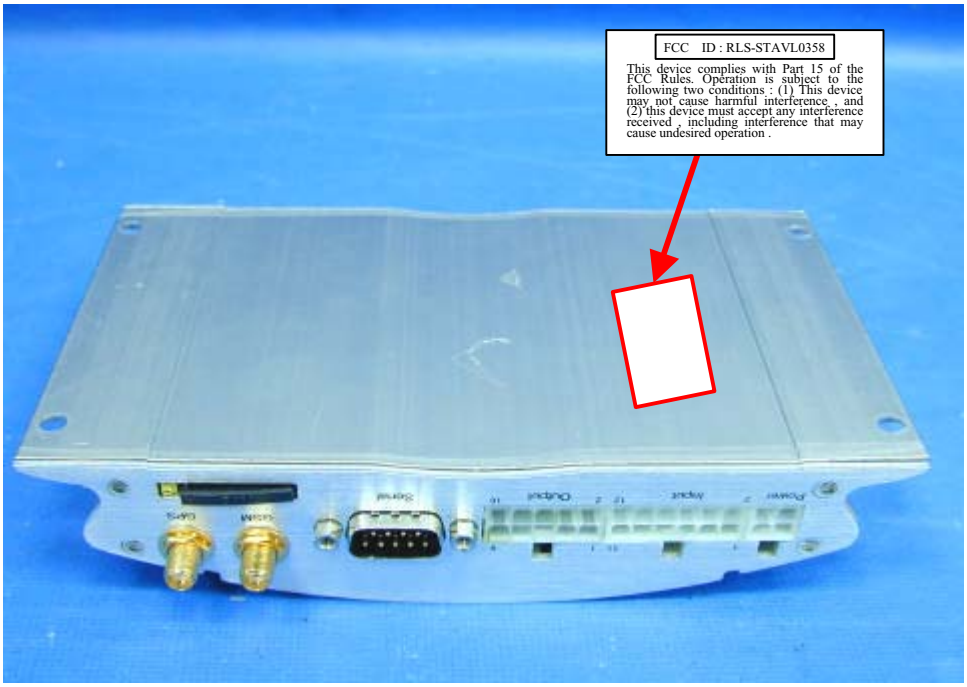
Note :

1. Level = Read Level + Probe Factor + Cable Loss – Preamp Factor
2. Over Limit = Level – Limit Line

APPENDIX A.
PHOTOS OF EUT APPEARANCE

< EUT FRONT VIEW >

< EUT REAR VIEW >



APPENDIX B.
List of Test Equipment

Test Mode	Instrument	Model No.	Serial No.	Next Cal. Date	Cal. Interval
Radiation (OP No.3)	R & S Receiver	ESBI	845658/003	July 28, 2004	1Year
	Schaffner Pre-Amp.	CPA-9232	1012	Aug. 20, 2004	1Year
	SCJWARZBECL Antenna	VULB9161	D-69250	May 19, 2004	1Year
	COM-Power Horn Ant.	AH-118 (1GHz~18GHz)	10095	May 25, 2004	1Year
	RF Cable	No.2	N/A	Feb. 19, 2004	1Year
	SCHWARZBECK Precision Dipole Ant.	VHAP (30MHz~1GHz)	970+971 953+954	Jun. 26, 2006	3Year
	R & S Signal Generator	SMY01	829846/038	Feb. 16, 2005	2Year