Exhibit 5: EMI Test Report

External Radio Frequency Power Amplifier ACOM 1011

Model 1011

Array Solutions
2611 North Beltline Rd
Suite 109
Sunnyvale, Texas 75182
USA
Tel: 214 954 7140
fax: 214 954 7142

E-mail: **info@arraysolutions.com**

EMI Test Report
for ACOM

Product Name: ACOM1011
Regulation: FCC, Part97 Sub Part D
Date of test: JAN 20 2010

Tested by: Eng. Dr. Stanimir Lekov, R&D at ACOM OOD
Test Method: FCC, Part 97.317 (a)(1)(2)(3), (b)(1)(2), (c)(i)(ii)
Part 97.307 (d), (e)
Responsible Parties
Manufacturer: ACOM OOD – Bulgaria
Applicant: Array Solutions

EUT Type/Model #: Linear Amplifier ACOM1011

Test Location: ACOM OOD laboratory

EUT Description

The EUT (ACOM1011) is a Linear Amplifier for Amateur Radio.

The tests were run in a typical configuration including the following support equipment:

1) H.F. Transceiver
2) Power Supply for transceiver

Reason for Test

Qualification for FCC Part 97

Changes made during test: none
Deviations from standard test method: none

Test Summary

The ACOM1011 complied with FCC Part 97 Subpart D, 97.307 and 97.317 Limits for Amateur Radio equipment when tested in the system configuration defined herein.

The following table indicates the measurement points and test results for the harmonic emissions to the tenth order:

Power Gain per 97.317-(a) (1) (2) (3), (c) (6) (ii)				Spurious emissions per 97.307 (e)			
Frequency f_1, MHz	**Input Power, W**	**Output Power, W**	**Amplifier Gain, dB**	**2f1, dBc**	**3f1, dBc**	**4f1, dBc**	**5-10f1, dBc worst case**
1.900	55.6	700	11.0	-53.1	-78.2	-83.8	-71.0
3.750	65.3	700	10.3	-52.8	-98.0	-88.6	-92.3
7.150	69.5	700	10.0	-57.6	-98.1	-97.4	-93.8
10.125	65.3	700	10.3	-53.7	-95.5	-67.3	-95.0
14.175	62.4	700	10.5	-57.8	-96.3	-88.8	-85.1
18.100	63.8	700	10.4	-53.2	-78.1	-78.5	-75.3
21.225	61.0	700	10.6	-62.0	-90.2	-84.5	-77.0
Amplifier was not capable of operation on any frequency or frequencies between 24 and 35MHz as measured at the points below per 97.317-(b) (1) (2). Data for: amplifier in Stand-by / amplifier ON.							
24.000	50	49.2 / 166	-0.07 / 5.21				
26.000	50	48.3 / 47.5	-0.15 / -0.22				
27.120	50	48.3 / 35.1	-0.15 / -1.54				
28.000	50	48.3 / 28.3	-0.15 / -2.47				
35.000	50	48.0 / 1.24	-0.18 / -16.1				
Amplifier was not capable of full power output and the gain is less than 11.3dB when driven with less than 50 watts per 97.317-(c)(6) (i)(iii).							
1.900	30	414	11.4				
3.750	30	369	10.9				
7.150	30	321	10.3				
10.125	30	361	10.8				
14.175	30	361	10.8				
18.100	30	361	10.8				
21.225	30	378	11.0				
24.930*	30	367	10.5				
28.500*	30	369	10.9				
After owner modification to activate 24-28 MHz bands:							
24.930*	73.7	700	9.8	-72.8	-81.6	-80.3	-60.9
28.500*	59.7	700	10.7	-67.0	-82.6	-82.0	-70.4

*Not usable as shipped; data applicable only after enabling of 24.5 & 28 MHz bands as follows.

The following table indicates the measurement points and test results for the Inter Modulation Distortions to the 11-th order:

Inter-modulation in dB relative to 700W PEP per 97.307(a)(b)					
Order:	**D3**	**D5**	**D7**	**D9**	**D11 and higher**
Freq. (MHz)	**dB**	**dB**	**dB**	**dB**	**dB**
1.900	-43	-48	-45	-48	-51
3.750	-41	-48	-45	-48	-51
7.150	-41	-47	-46	-47	-50
10.125	-42	-47	-46	-48	-51
14.175	-42	-47	-46	-48	-51
18.100	-41	-47	-47	-49	-51
21.225	-42	-46	-48	-49	-52
24.930*	-42	-46	-48	-49	-51
28.500*	-43	-45	-47	-48	-51

*Not usable as shipped; data applicable only after authorized owner modification.

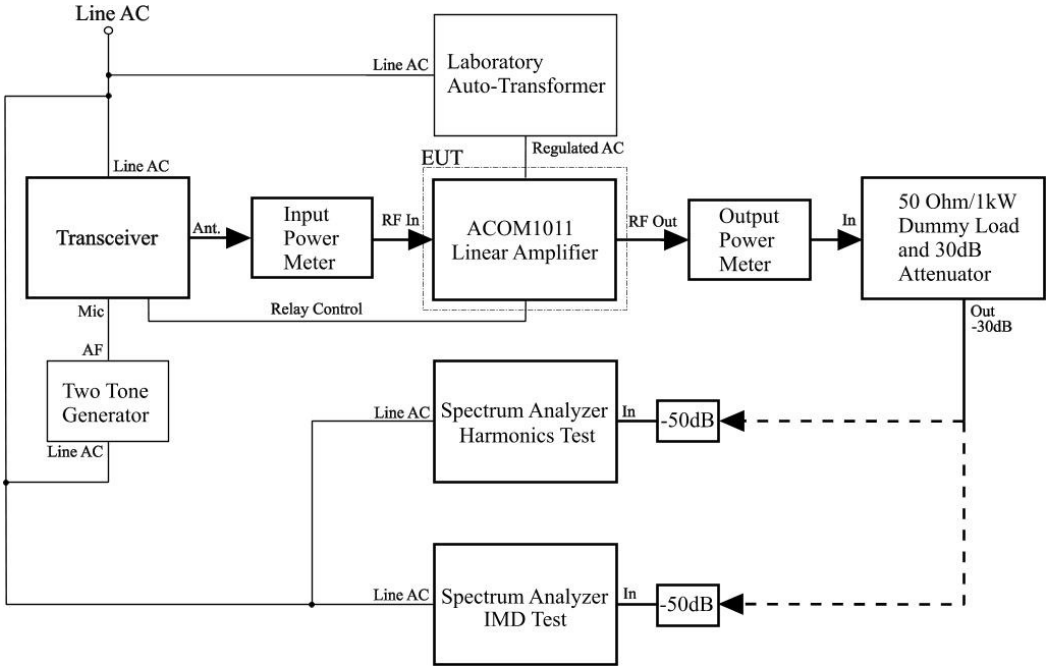

Fig.1 Setup Block Diagram for ACOM1011

EUT Technical Data

Description: Linear Amplifier ACOM1011
Manuf/Model: ACOM OOD Bulgaria / Model 1011
Serial #: 100101
FCC/FTZ Ident.: N/A
Power (Rated): 240 VAC 50/60Hz
Power (Tested): 240VAC 50Hz
Internal Options: None
Frequencies Amplified: Amateur radio bands from 1.8MHz through 29.7MHz

Support Equipment Data

Description: HF Transceiver
Manuf/Model: ICOM Model No. IC-746
Serial #: 03678
Power: 220VAC 50Hz
Internal Options: None
Frequencies Generated: from 1.8MHz through 35MHz

Description: Two-Tone Generator
Manuf/Model: Kenwood Station Monitor, Model SM-220
Serial #: None
Power: 220VAC 50Hz
Internal Options: None
Frequencies Generated: 1000Hz plus 1575Hz Audio

Description: Laboratory Auto-Transformer
Manuf/Model: RFT, Model LSS 020
Serial #: 13/004
Power: 220VAC 50Hz
Internal Options: None
Frequencies Generated: None

Cables Description

Transceiver Ant. to Input Power Meter - RG58/U, 1m length
Input Power Meter to EUT input - RG58/U, 25cm length
Output Power Meter to Dummy/Attenuator - RG213/U, 1m length
Dummy/Atten/out to Spectrum Analyzer - RG58/U, 1.5m length

EUT I/O Ports

ACOM1011
Key-In (Transmit/Receive Relay Control)
RF INPUT 50 Ohm
RF OUTPUT A1 or A2 - 50 Ohm
Mains AC Input 240V 50/60Hz

Test Equipment List

#	Equipment type	Manufacturer	Model #	Serial #	Used
1	Spectrum Analyzer	TEKTRONIX	2710	B 02 0771	Yes
2	Spectrum Analyzer	Russia	CK4-59	8806264/8806204	Yes
3	1kW 30dB Attenuator	Bird	8327-300	2026	Yes
4	50dB Attenuator	Russia	n/a	n/a	Yes
5	Signal Generator	Marconi Instruments	MI 2018A	118454/058	Yes
6	Power Meter	Bird Electronic Corp.	Model 4421-101	1665	Yes
7	Power Sensor	Bird Electronic Corp.	4021	0004	Yes
8	Power Sensor	Bird Electronic Corp.	BIR 100A	n/a	Yes
9	HF Transceiver	ICOM	IC-746	03678	Yes
10	Two-Tone Generator	Kenwood	SM-220 Station Monitor	n/a	Yes
11	Laboratory Auto-Transformer	RFT	LSS 020	13/004	Yes