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Exhibit 5: EMI Test Report

**External Radio Frequency
Linear Amplifier
Model Expert 2K-FA**



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EMI Test Report

Product Name: EXPERT 2K-FA

Regulation: FCC, Part 97 Sub Part D

Date of test: December 2010.

Tested by: Dr. Eng. Gianfranco Scasciafratti SPE srl.

Test Method: FCC, Part 97.317 (a) (1)(2)(3), (b)(1)(2), Part 97.307 (a), (b), (c), (d).

Responsible Parties

Manufacturer: SPE.srl. Italy

Applicant: Dr. Eng. Gianfranco Scasciafratti SPE.srl. Italy

EUT Type/Model #: Linear Amplifier SPE EXPERT 2K-FA

Test Location: SPE srl Rome.

EUT Description

The EUT (EXPERT 2K-FA) is a Linear Amplifier for Amateur Radio Bands.

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

1. H.F. plus six meters Transceiver

Reason for Test

Qualification for FCC Part 97

Change made during test: none

Deviation from standard test method: none

Test Summary

The EXPERT 2K-FA 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 emission to the tenth order:



Power Gain per 97.317 (a), (2).				Spurious emission per 97.307 (d), (e).			
Frequency f1 MHz	Input Power, W	Output Power, W	Amplifier Gain, dB	2f1 dBc	3f1 dBc	4f1 dBc	5-10 f1 dBc worst case
1.900	67.0	1500	13.5	-49.9	-55.7	-67.4	> -72
3.750	62.5	1500	13.8	-59.1	-63.4	-66.5	> -72
7.150	58.4	1500	14.1	-64.3	-66.0	-68.1	> -72
10.125	58.4	1500	14.1	-63.5	-66.1	-67.6	> -72
14.175	64.0	1500	13.7	-61.0	-65.0	-66.3	> -72
18.100	59.7	1500	14.0	-68.9	-69.2	-69.1	> -72
21.225	58.4	1500	14.1	-63.3	-66.0	-67.7	> -72
24.930	62.5	1500	13.8	-64.7	-67.3	-70.0	> -72
28.500	59.7	1500	14.0	-70.2	-70.5	-71.0	> -72
50.250	57.0	1500	14.2	-67.7	-71.1	-71.0	> -72
The amplifier conforms per 97.317 (a), (1). See Spurious emission per 97.307 (d), (e).							
The Power Gain was less than 15 dB. See Power Gain per 97.317 (a), (2).							
Amplifier was not capable of operation on any frequency outside the radio amateur bands, 26-28 MHz included, for the look-up table in its software per 97.317 (a), (3). Conformance to 97.317 (b), (1), (2).							

The following table indicates the measurements and test results for the intermodulation distortions to the 11 th order.

Intermodulation in dB per 97.307 (a),(b)						
Freq. (MHz)	Output Power W Pep	D3 dB	D5 dB	D7 dB	D9 dB	D11 and higher dB
1.900	1500	-36	-37	-53	-55	> -62
3.750	1500	-36	-38	-53	-55	> -62
7.150	1500	-41	-44	-57	-60	> -62
10.125	1500	-39	-42	-56	-60	> -62
14.175	1500	-37	-41	-56	-59	> -62
18.100	1500	-39	-41	-55	-59	> -62
21.225	1500	-38	-39	-54	-57	> -62
24.930	1500	-35	-37	-54	-57	> -62
28.500	1500	-37	-43	-51	-54	> -62
50.250	1500	-41	-43	-58	-60	> -62



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EUT Technical Data

Description: Linear Amplifier EXPERT 2K-FA.

Manuf / Model: SPE Italy / EXPERT 2K-FA.

Serial # : 104900001.

FCC / FTZ Ident.: Y9C2K-FA.

Power (Rated): 190-255 Vac 50/60 Hz.

Power (Tested): 230 Vac 50 Hz.

Internal Options: None.

Frequencies Amplified: Amateur Radio Bands from 1.8 MHz through 50 MHz.

Support Equipment Data

Description: HF Transceiver.

Manuf / Model: ICOM / IC-7800.

Serial # : 0301295

Power : 230 Vac 50 Hz.

Internal Options: None.

Frequencies Generated: Amateur Radio Bands from 1.8 MHz through 50 MHz.

Description: Two Tone Generator.

Generator: 2x HP, Model 8904.

Serial # : 2984A05627, 35180A07804.

Power : 230 Vac 50 Hz.

Internal Options: None.

Frequencies Generated: 1 KHz / 1.575 KHz.

Cables Description

Transceiver Ant. to Input Power Meter-RG58U,1m length.

Output Power Meter to EUT INPUT1-RG58U, 75cm length.

Linear ANT1 to Input Power Meter-RG58U,1m length.

Output Power Meter to Dummy Load / Attenuator-RG58U,1m length.

Atten / out to Spectrum Analyzer,1.5m length.

EUT I/O Ports

EXPERT 2K-FA.

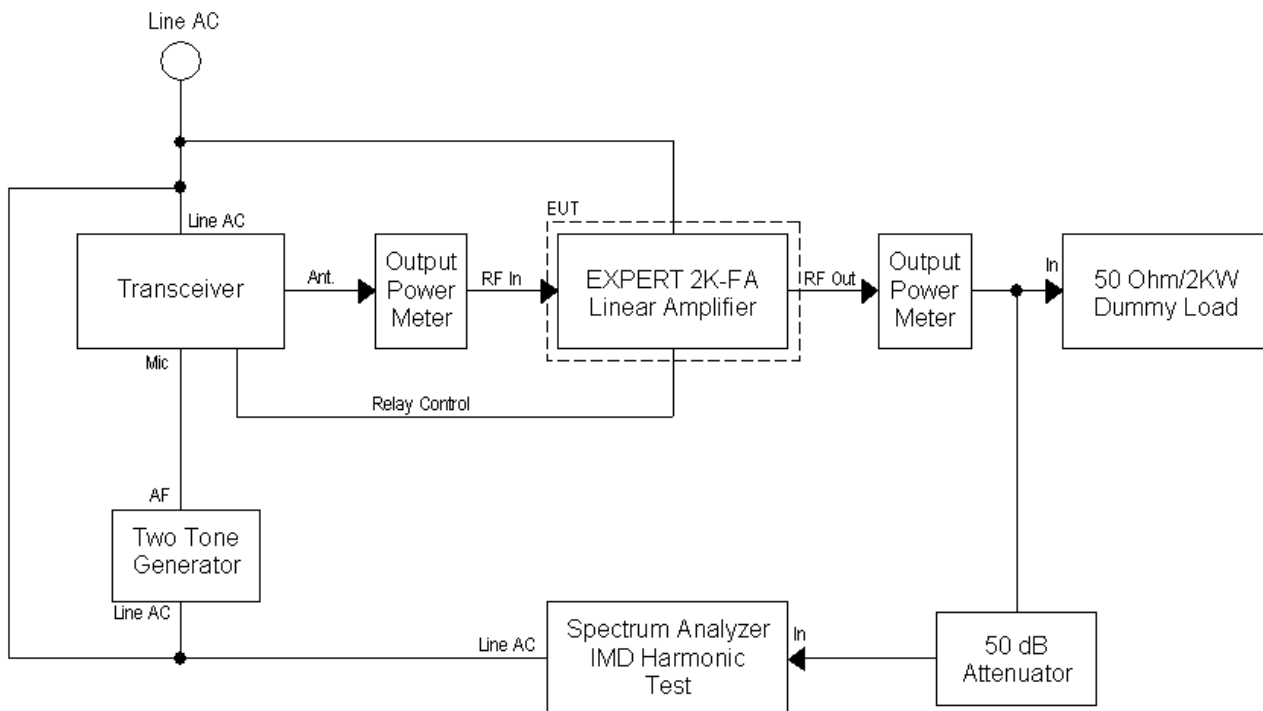
RF INPUT 50 Ohm = INPUT1.

RF OUTPUT 50 Ohm = ANT1.

Mains AC Input 230 Vac 50 Hz.



#	Equipment Type	Manufacturer	Model #	Serial #	Used
1	Spectrum Analyzer	HP	3589A	3509A00776	YES
2	50 dB Attenuator	SPE	ATT/50	0600001	YES
3	Signal Generator	HP	8904	2984A05627	YES
4	Signal Generator	HP	8904	35180A07804	YES
5	Power Meter	Array Solutions	PM003	1015	YES
6	Power Sensor	Array Solutions	HF Coupler	N /A	YES
7	Dummy Load	Bird Electronic	8890	0432	YES



Pic. – Setup Block Diagram for EXPERT 2K-FA