The FCC requested additional information in reference to the submission for certification of the Automatic Power Phalcon-2000 Radar Beacon. The data below and the attached data plots revises paragraphs 4.1.2, 4.3.1, and Appendix D of the SwRI test report entitled "FCC Measurement and Technical Report on the Automatic Power Incorporated Phalcon-2000 Radar Beacon," dated November 1999 (report no. 99/129).

Question 1 from the FCC: *Since this unit has a built-in antenna, the power output listings should be in terms of ERP. Please supply these values.*

The effective radiated power (ERP) from the Phalcon-2000, with reference to a half-wave dipole, is shown in the following table. The calculated average factor was applied to each level of computed ERP.

Band	**Frequency (MHz)**	**Peak Power at Antenna Terminals**		**Peak Power at Antenna Terminals with average factor applied**		**ERP with Reference to a Half-wave Dipole Antenna**	
		dBm	**Power**	**dBm**	**Power**	**dBm**	**Power**
S	2905	+27	501 mW	+20.6	115 mW	+22.74	189 mW
	3000	+28	631 mW	+21.6	145 mW	+23.74	238mW
	3095	+27.1	513 mW	+20.7	117 mW	+22.84	192 mW
X	9305	+28.3	676 mW	+21.9	155 mW	+24.04	254 mW
	9400	+29.7	933 mW	+23.3	214 mW	+25.44	351 mW
	9495	+28.5	708 mW	+22.1	162 mW	+24.24	266 mW

Question 2 from the FCC: *The attenuation specification for radiated spurious emissions should be computed on the basis of the (average) ERP. Please do this and report the results on that basis.*

The harmonics and spurious emissions were required to be 43 plus 10 log (average ERP in watts) dB below the fundamental emission:

Band		Limit
S	43 + 10 log (.238) dB =	36.8 dB (below fundamental)
X	43 + 10 log (.351) dB =	38.5 dB (below fundamental)

The data plots showing the radiated spurious emissions have been revised to show the corrected attenuation levels based on average ERP. These plots are attached to this letter. The worst case emission level was detected from the S-band, horizontal polarization, at 14.478 GHz, and was 5 dB under the limit.

Question 3 from the FCC: *We did not receive a letter requesting Confidentiality as required by Section 0.459 of the Commission's R&R Please supply this letter with details as required.*

The following letter was originally sent by Mr. Bill Peterman of Automatic Power with the signed Form 159 and the payment for the FCC compliance submittal. The request for confidentially is included in the letter.

Federal Communications Commission
Equipment Approval Services
P.O. Box 358315
Pittsburgh, PA 15251-5315

Dear Sirs:

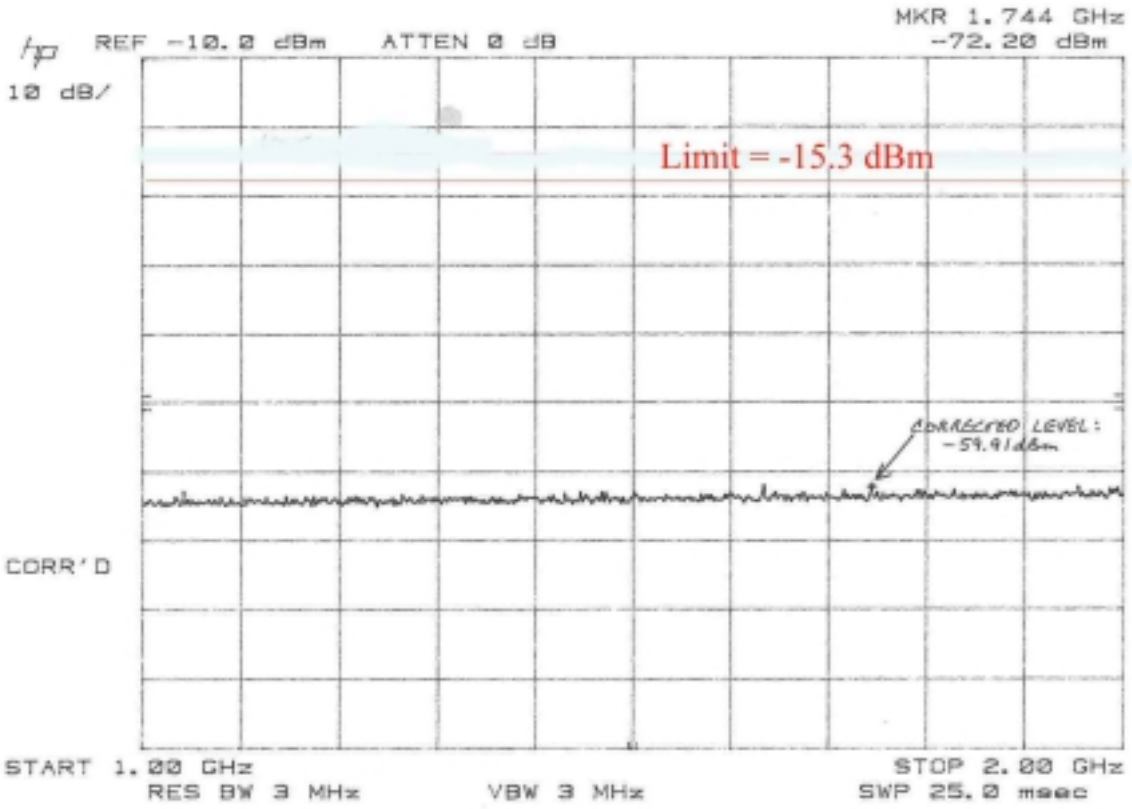
Enclosed is a completed and signed Form 159, along with payment for FCC compliance submittal referenced by FCC ID: GNT002000, confirmation #EA96701. It is requested that confidentiality be maintained for all schematics, block diagrams, and operational descriptions.

Thank you,

William M. Peterman
Sr. Electronic Engineer
Automatic Power, Inc.

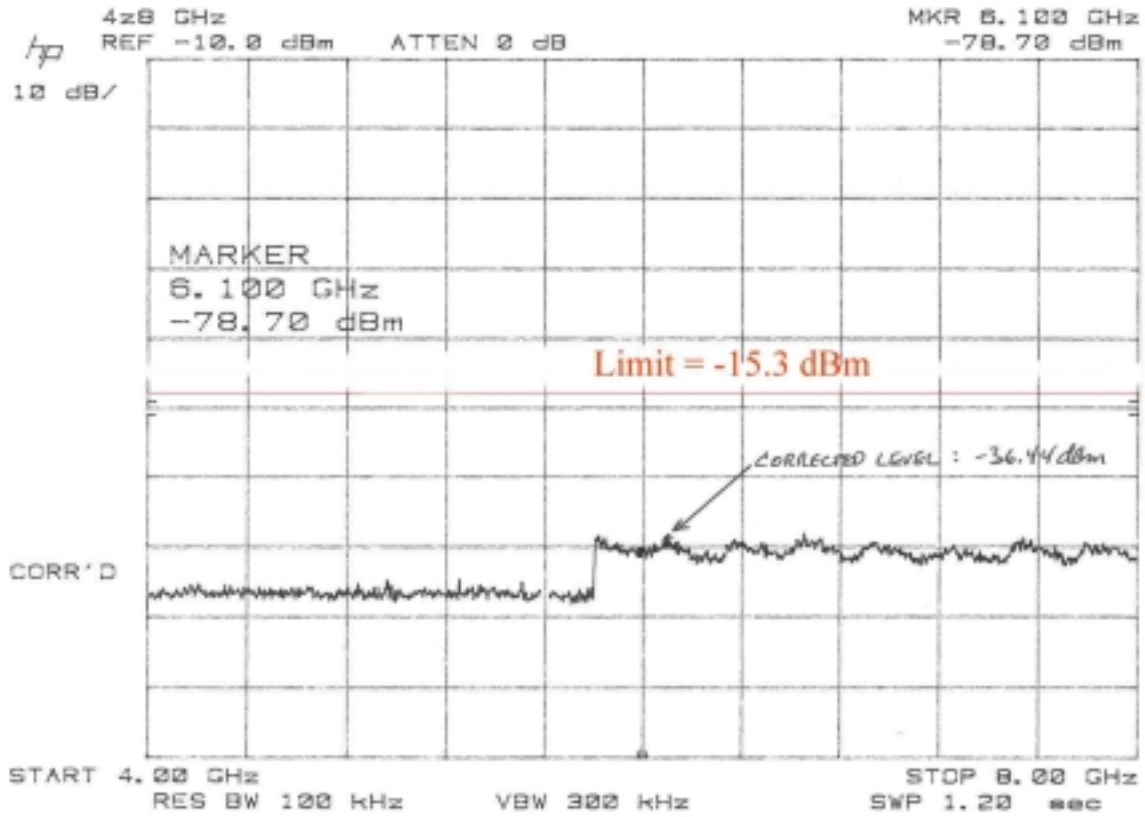
S-Band Horizontal

28 Oct 99

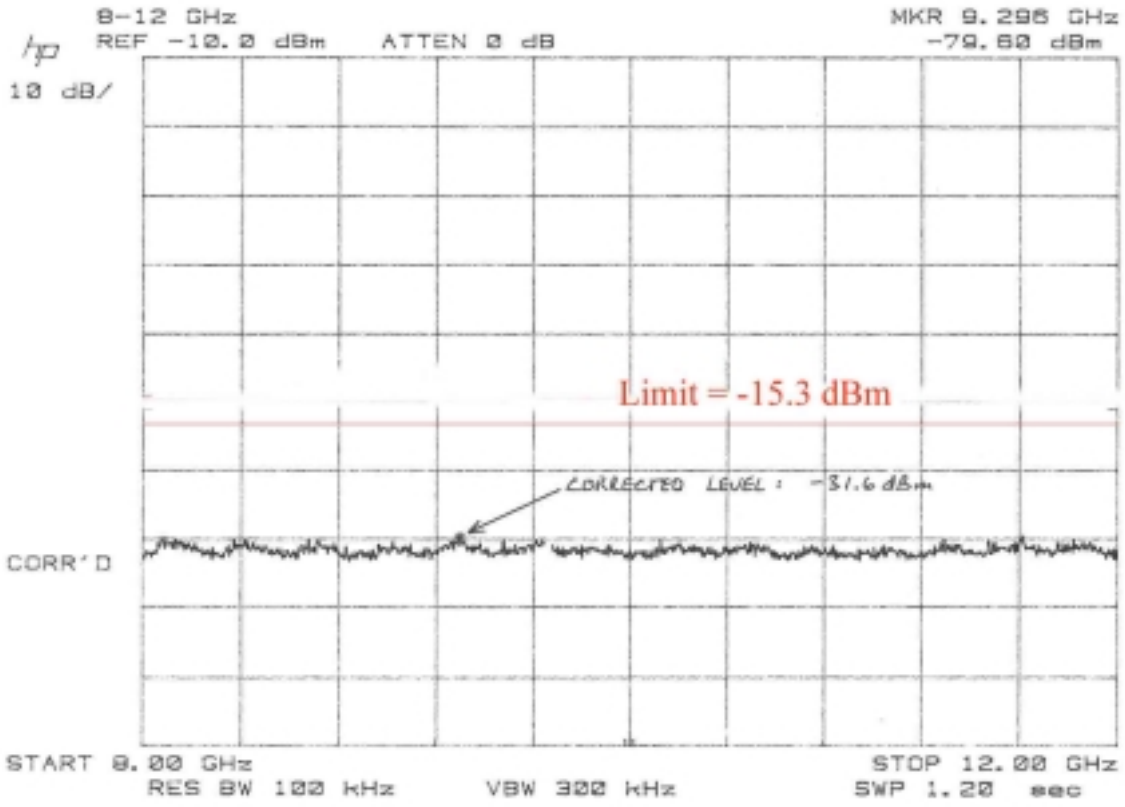


S-Band Horizontal

2 Dec 19
Dad

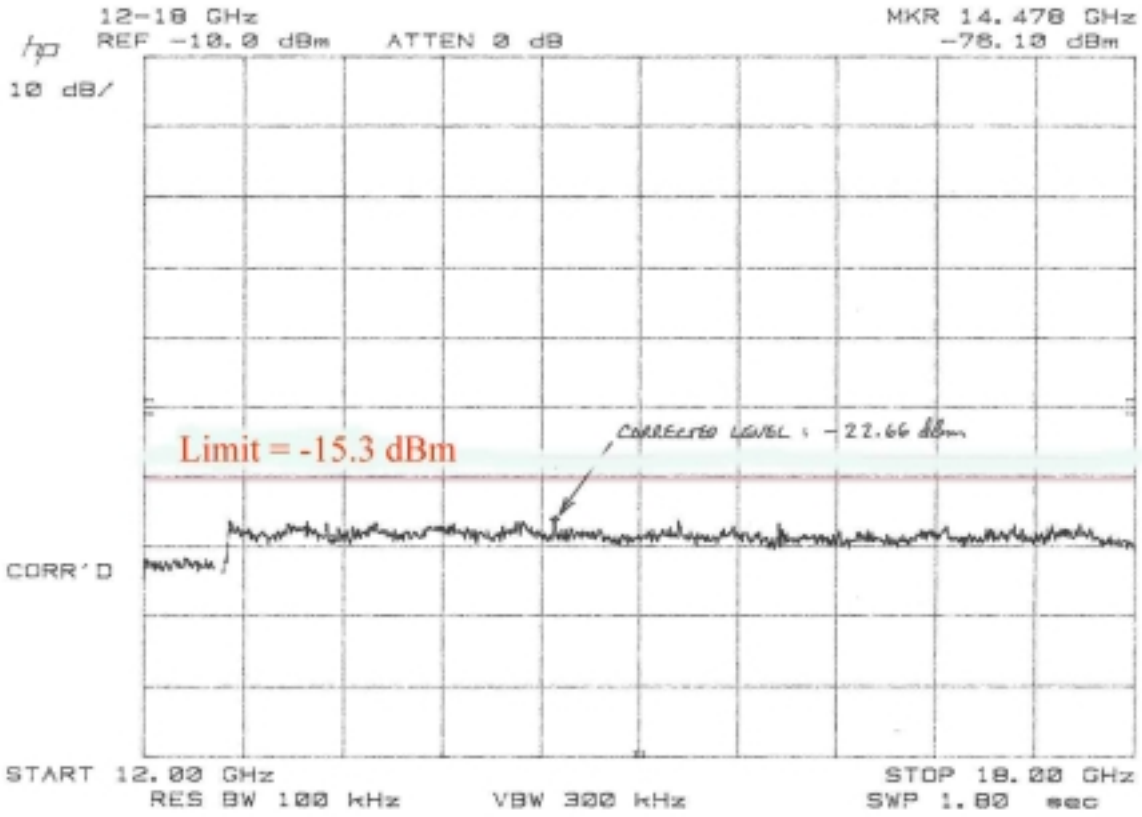


S-Band Horizontal



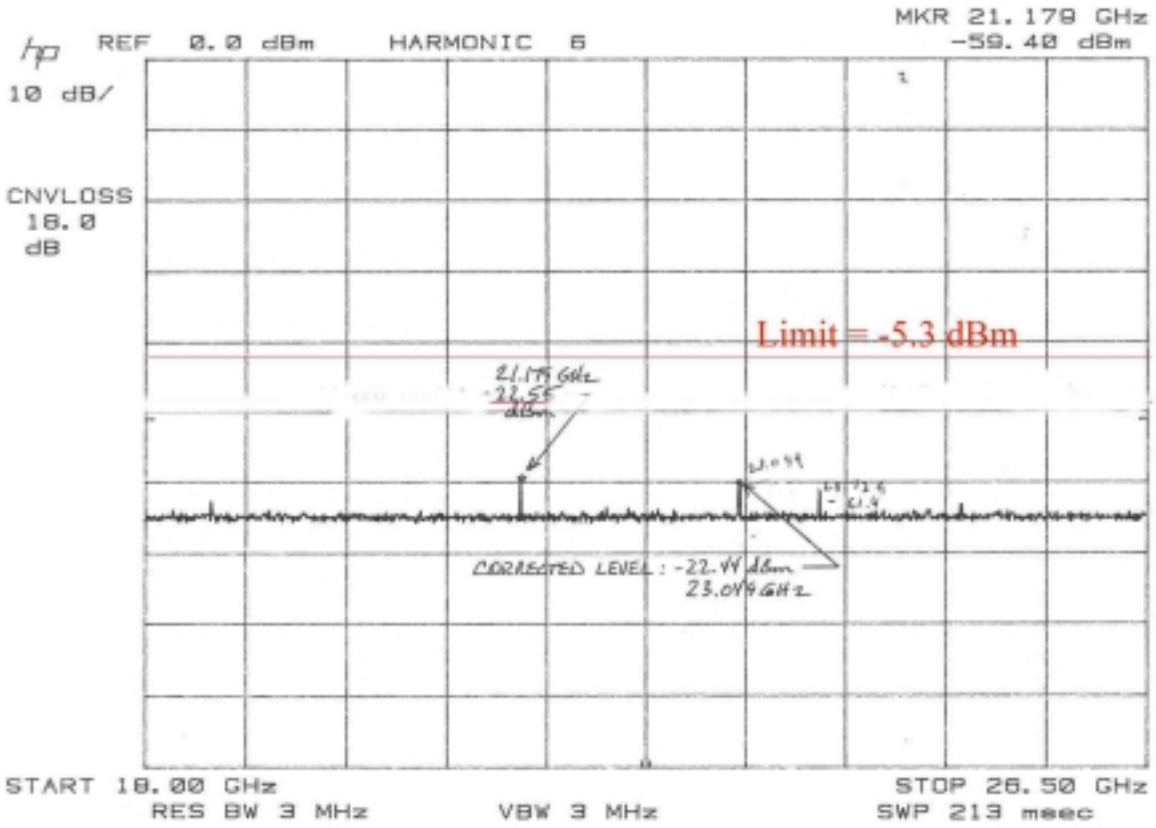
S-Band Horizontal

28 Oct 99
Daj

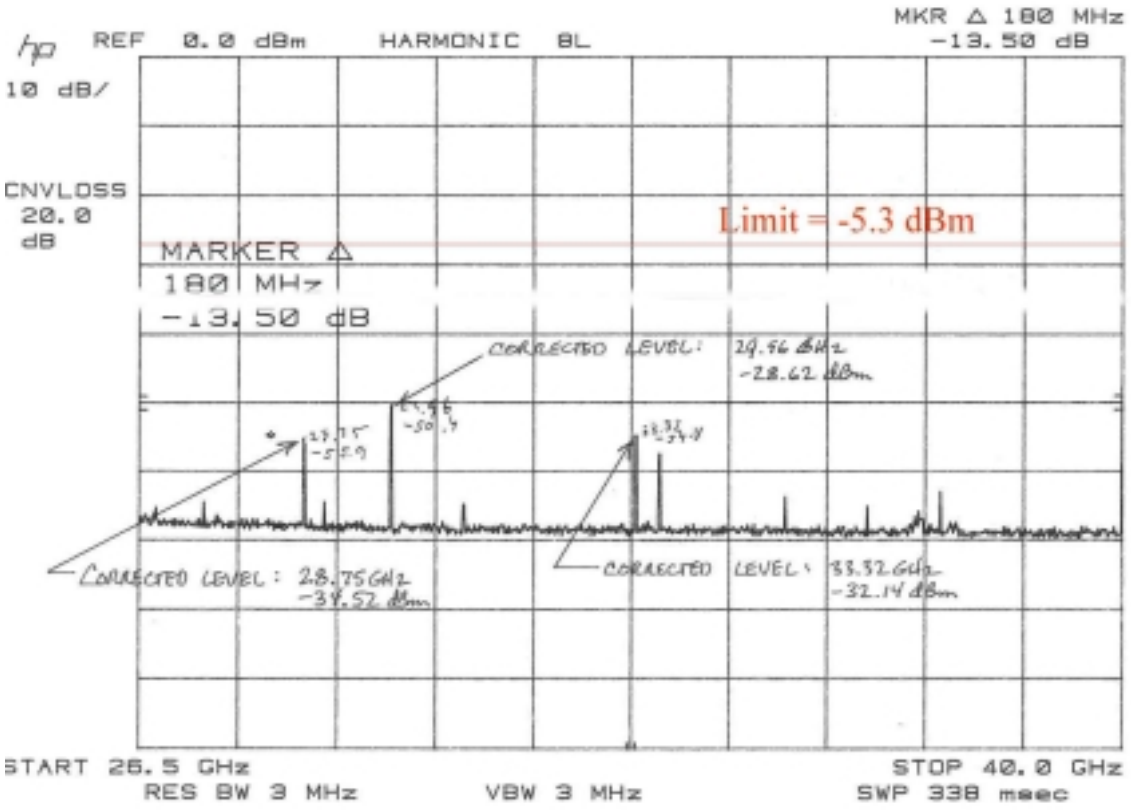


5-8 GHz Horn ant
0.3 meter test distance

pwr
2 Feb 94

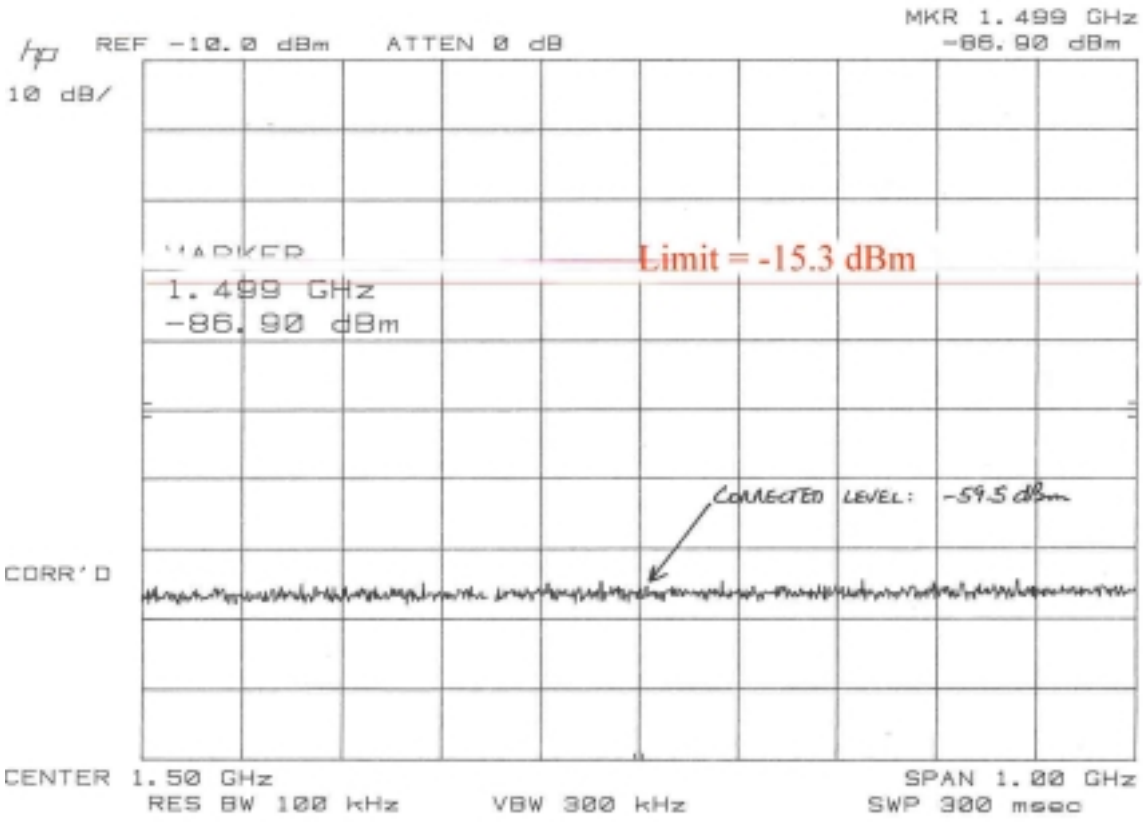


S-Band Horizontal
0.3 meter test distance

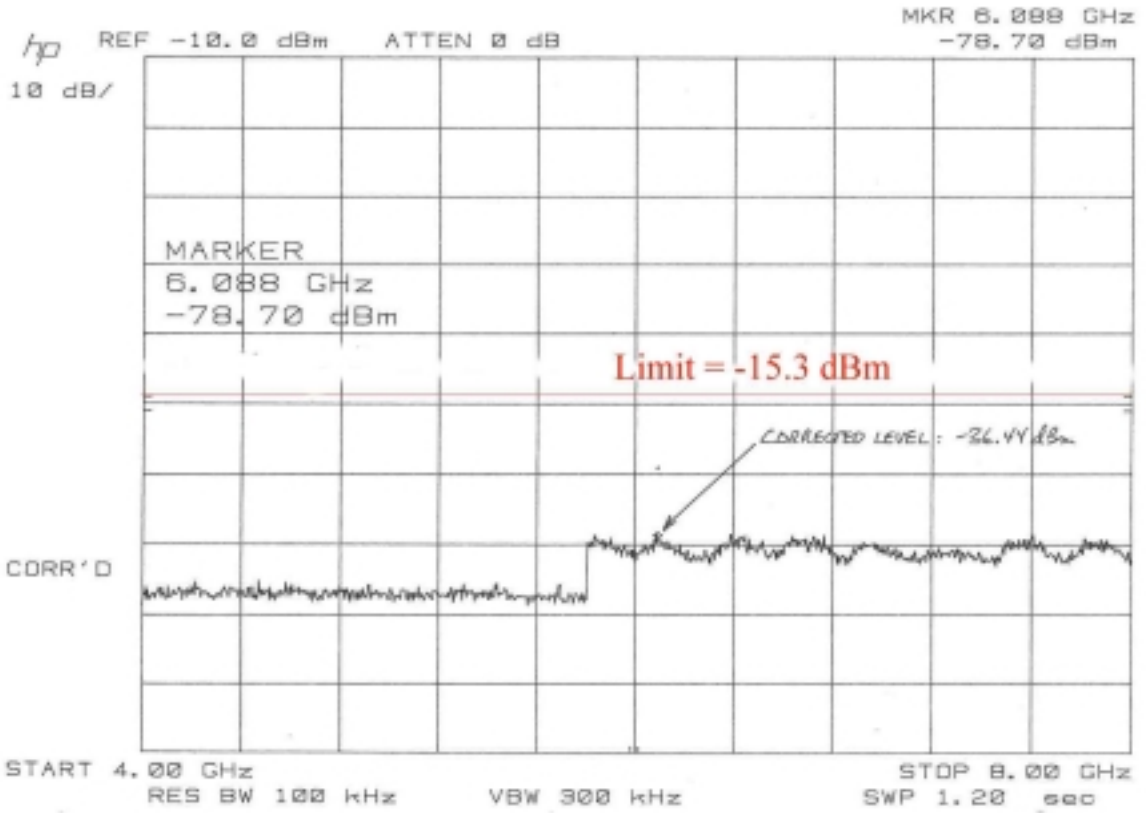


S-Band Vertical

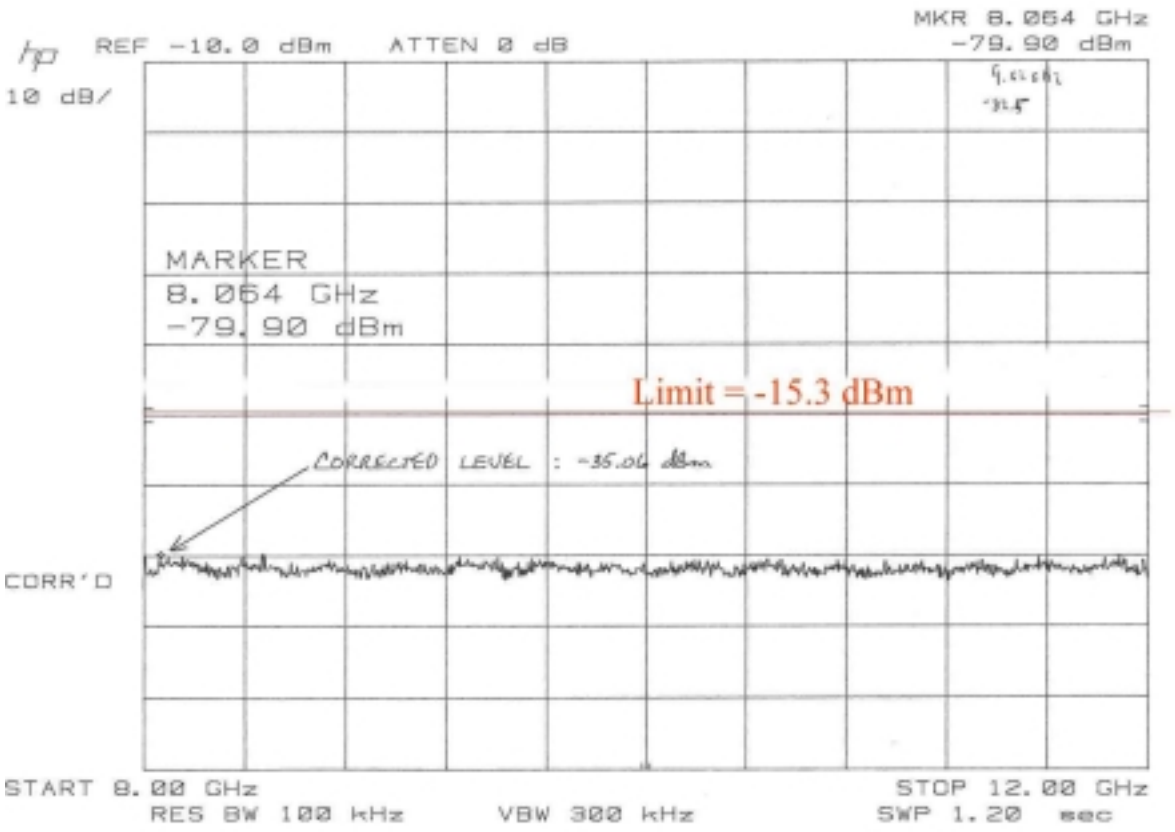
DAJ



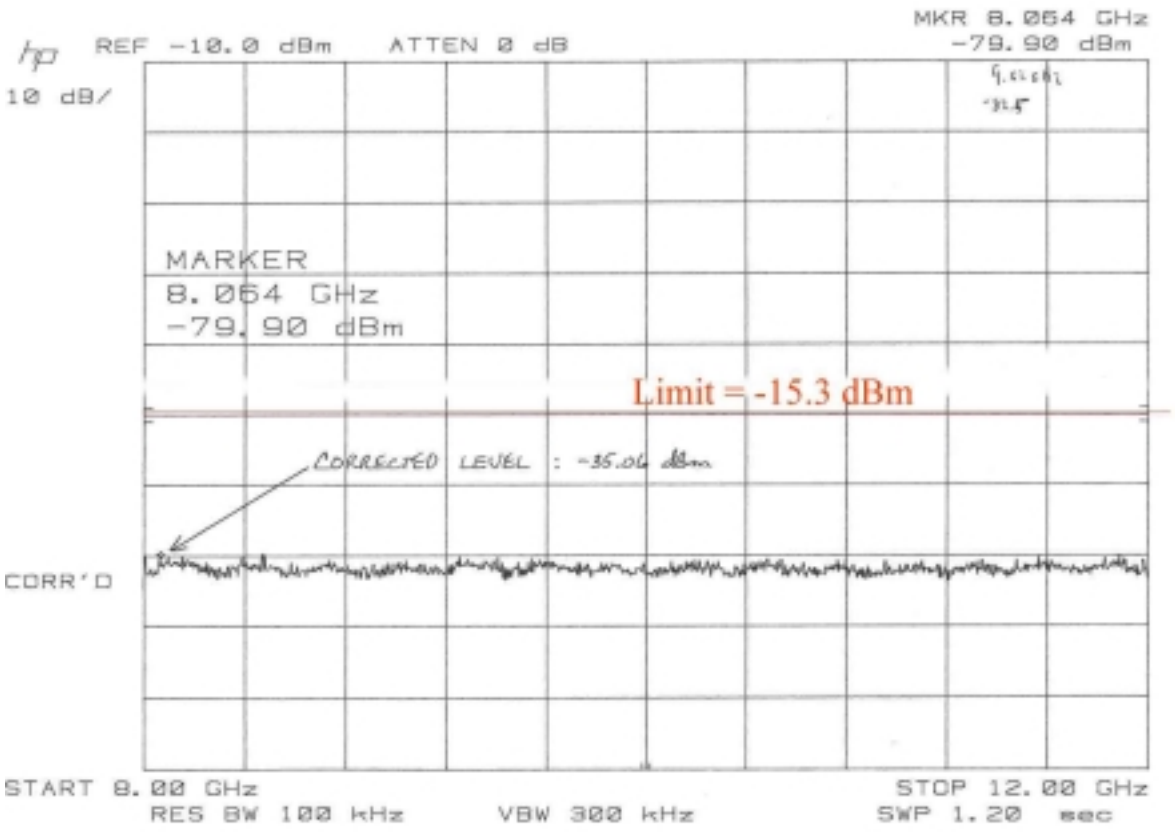
5 - Band Vertical



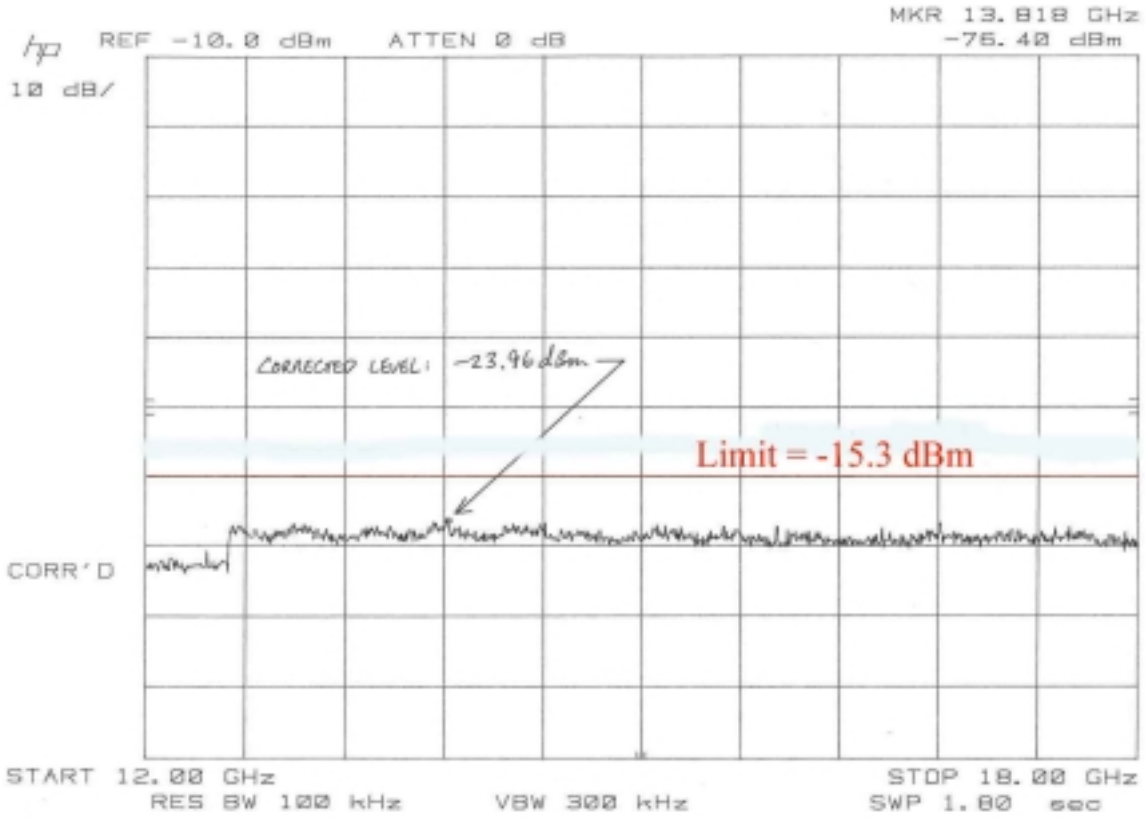
X-Band Vertical



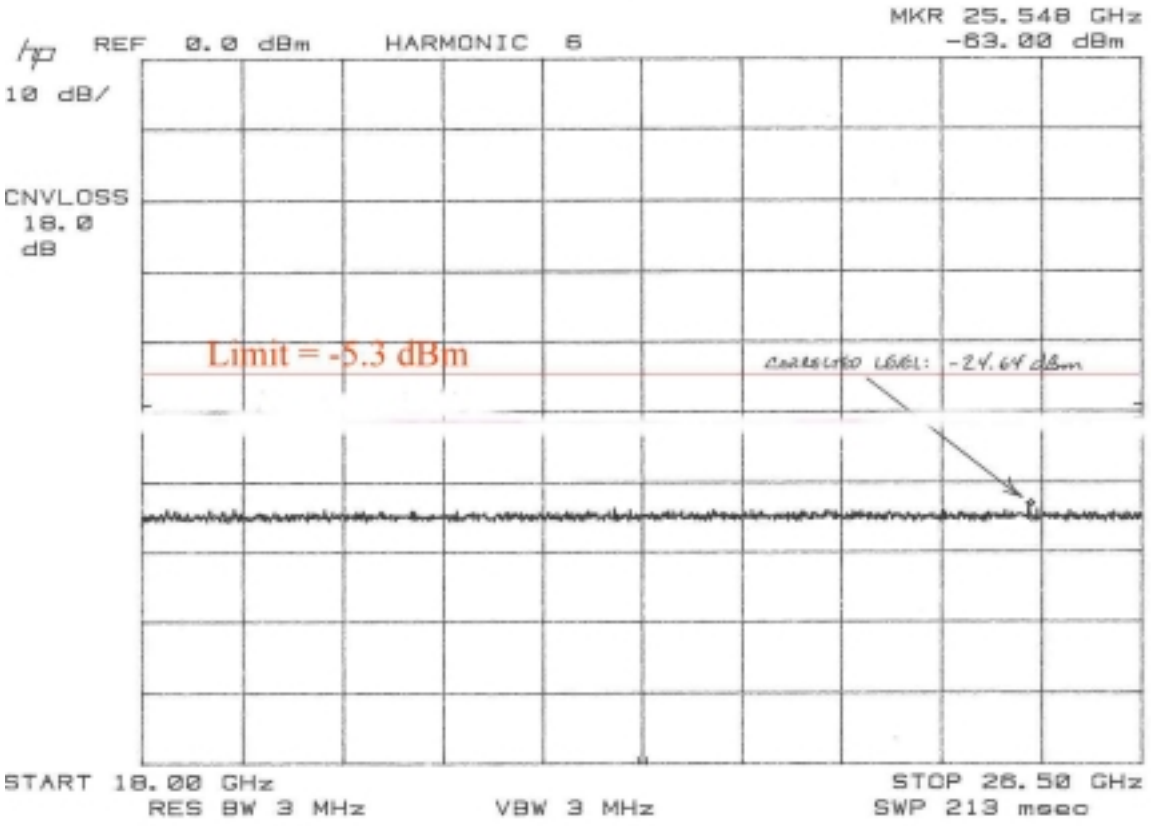
X-Band Vertical



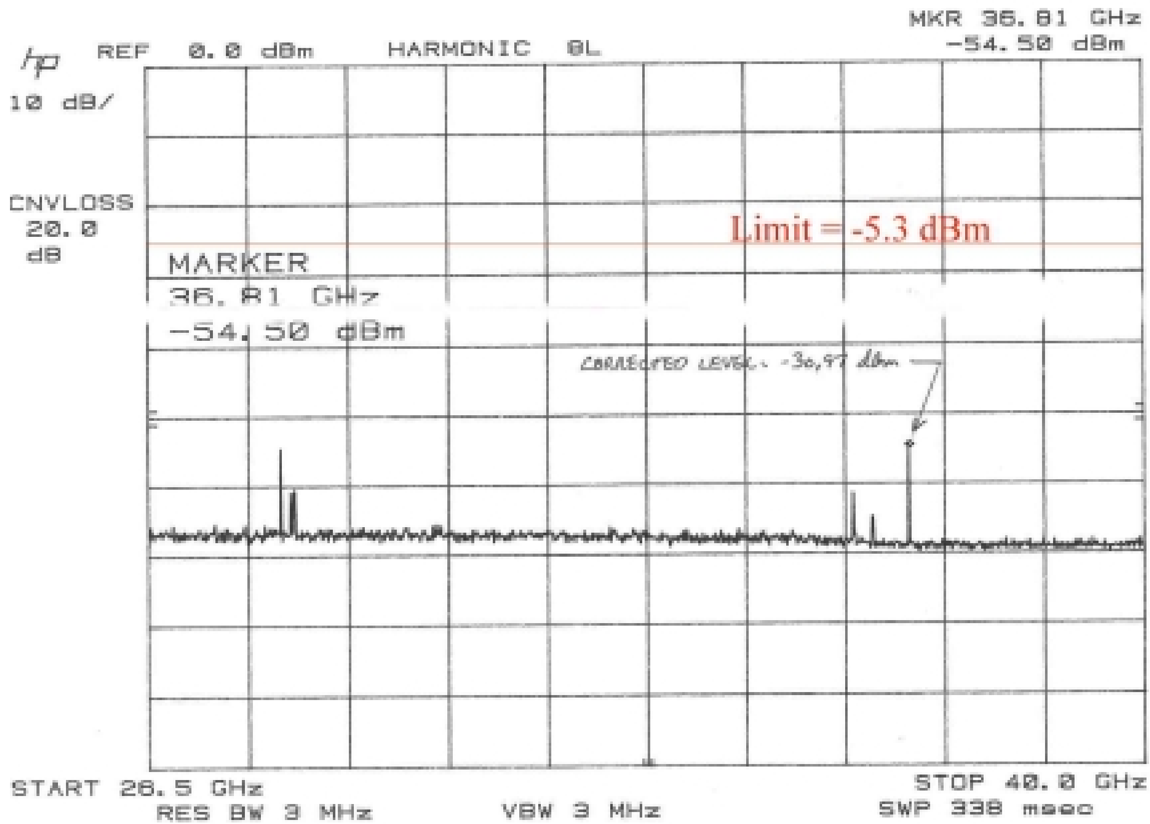
S-Band Vertical



5-Band Vertical
0.3 meter test distance

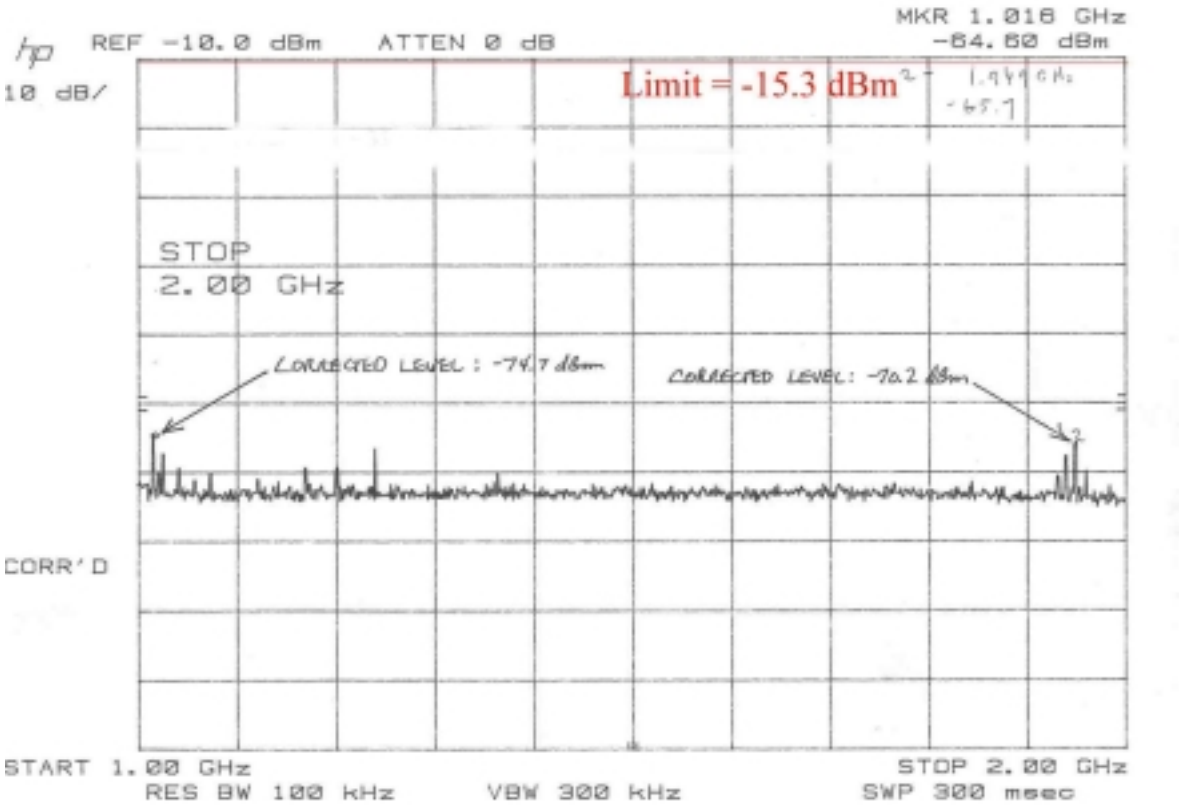


S-BAND Vertical
0.3 meter test distance

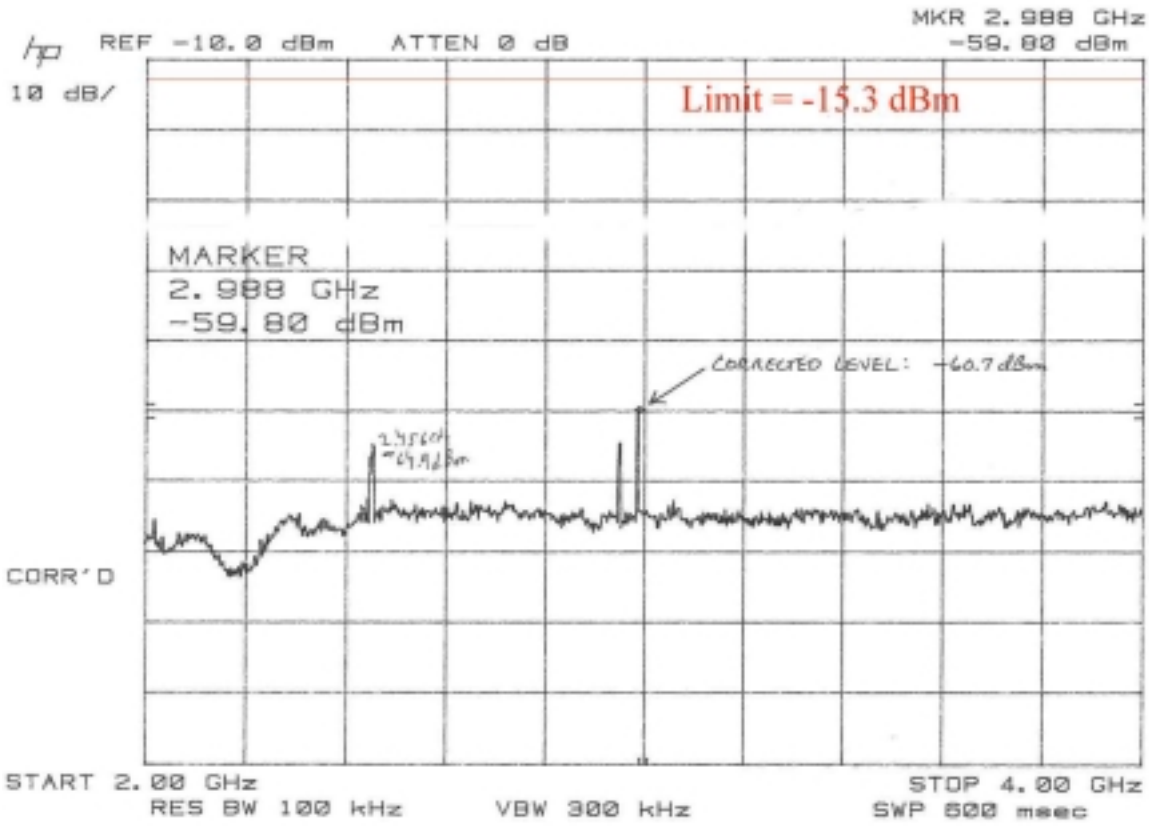


X-Band Horizontal

Lyoctech
DAC

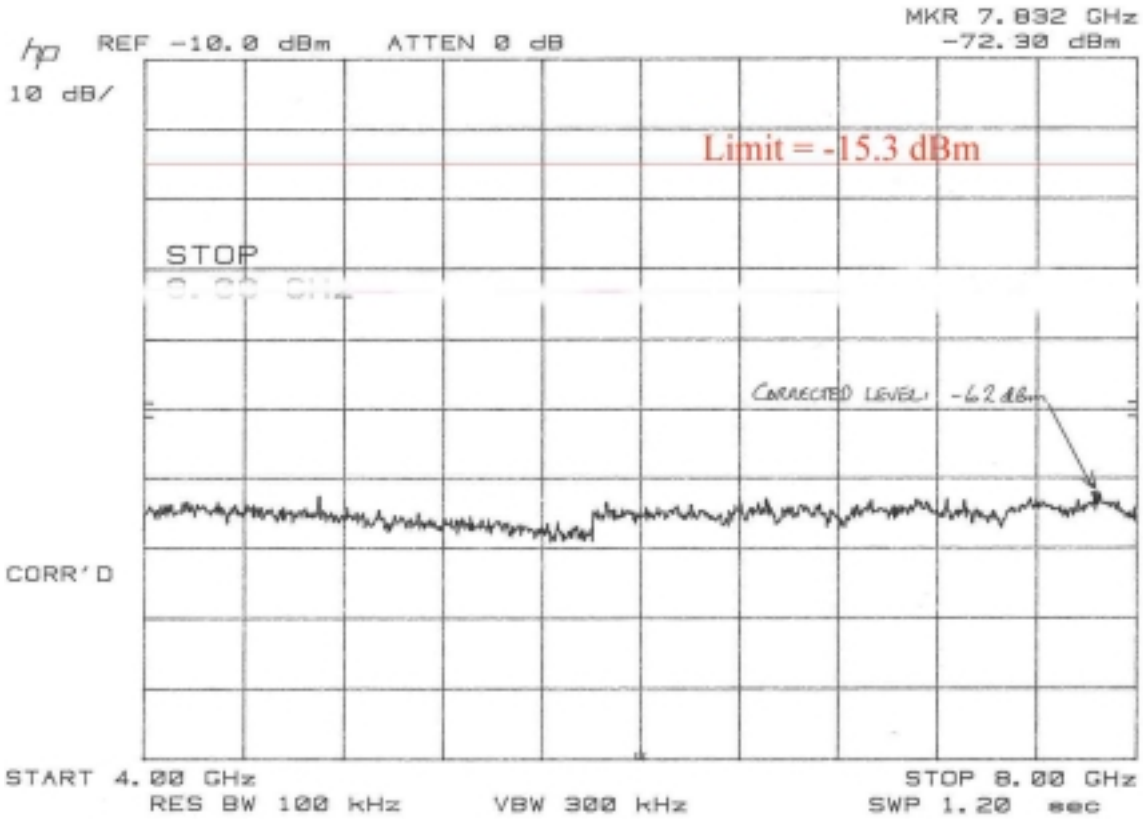


X - Band Horizontal

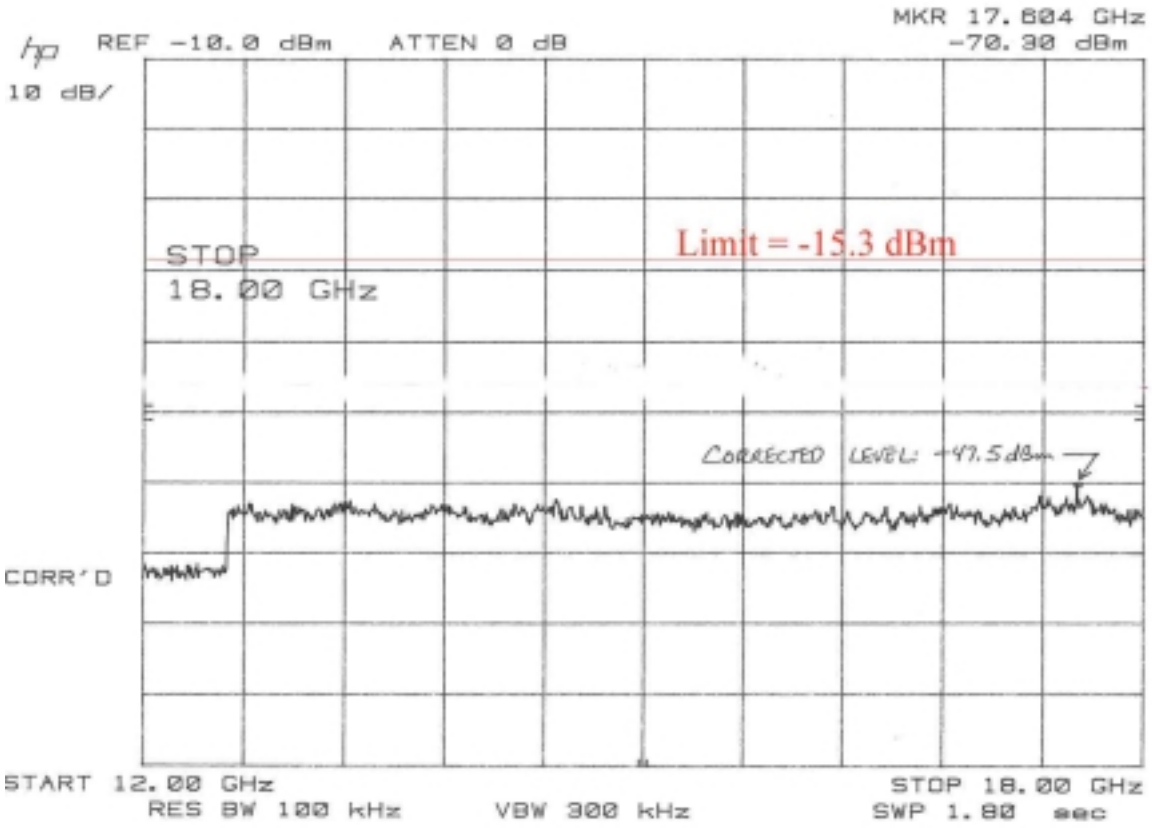


X-Band Horizontal

2 Pockets
DDT

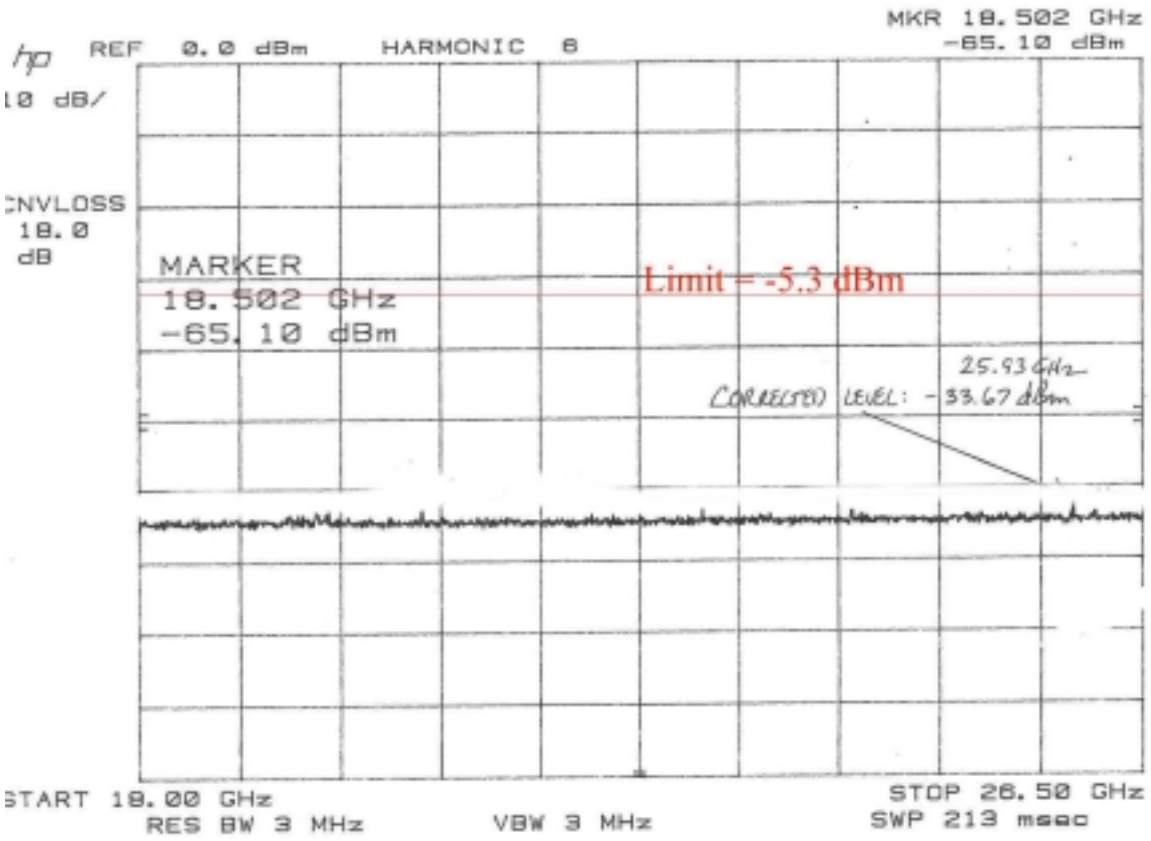


X-Band Horizontal



λ = Band Restriction

0.3 meter test distance



X-Band Horn
0.3 meter test distance

PAT
PETG