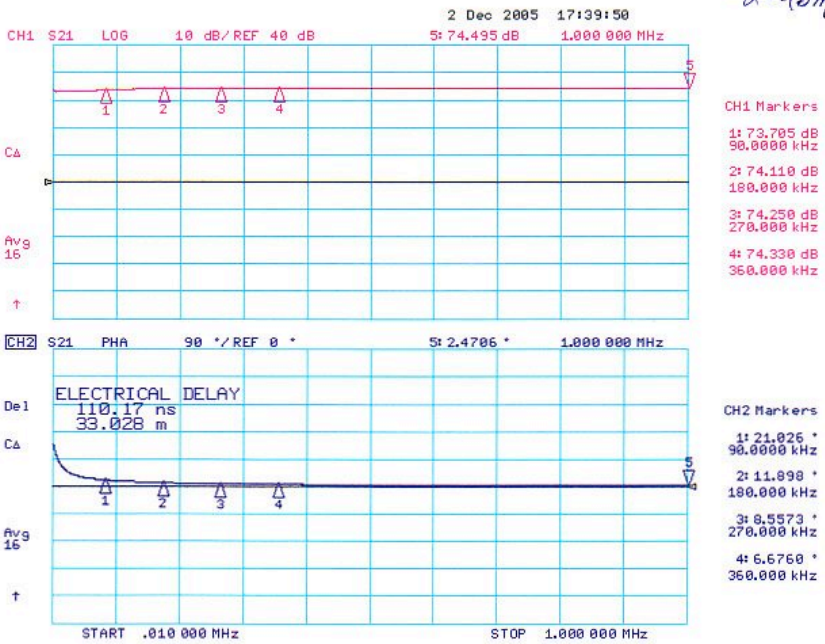
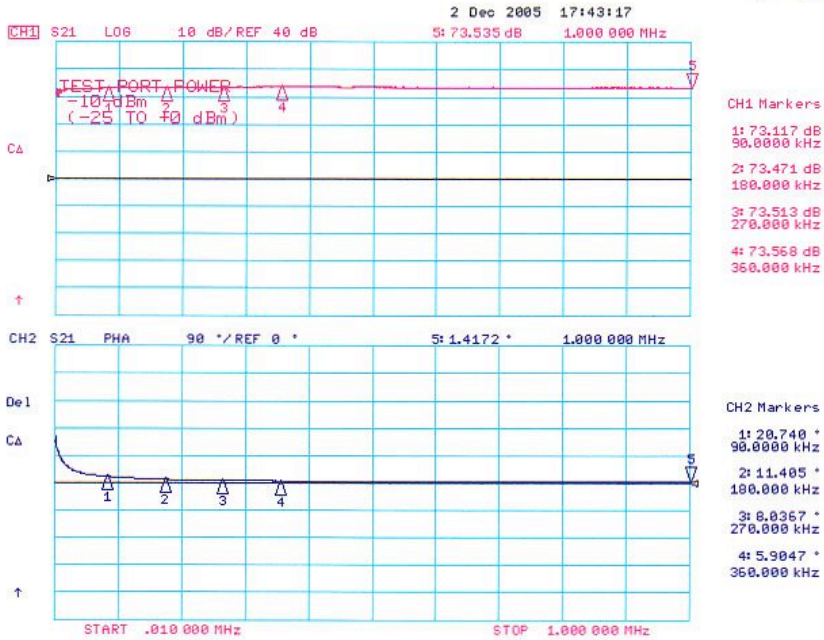
#22029

208V
-20dbm

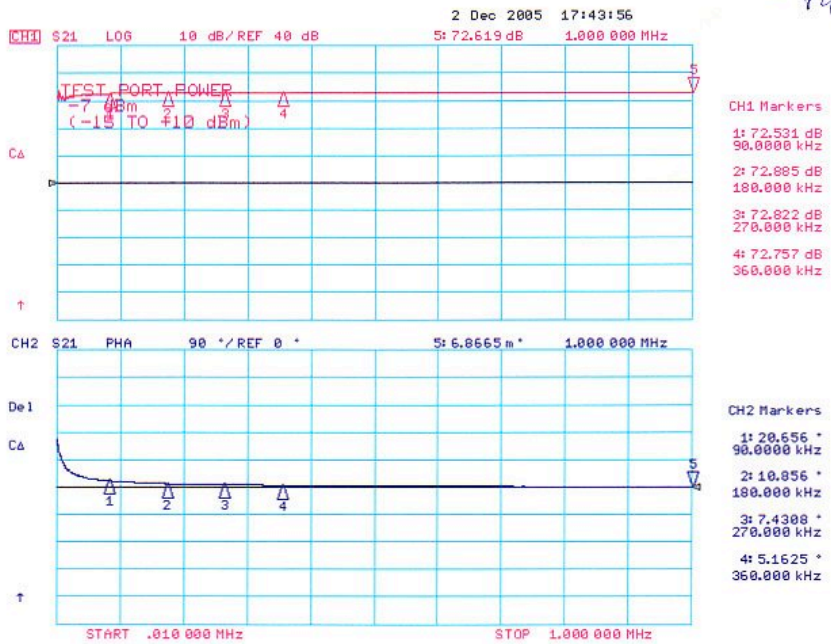


#22029

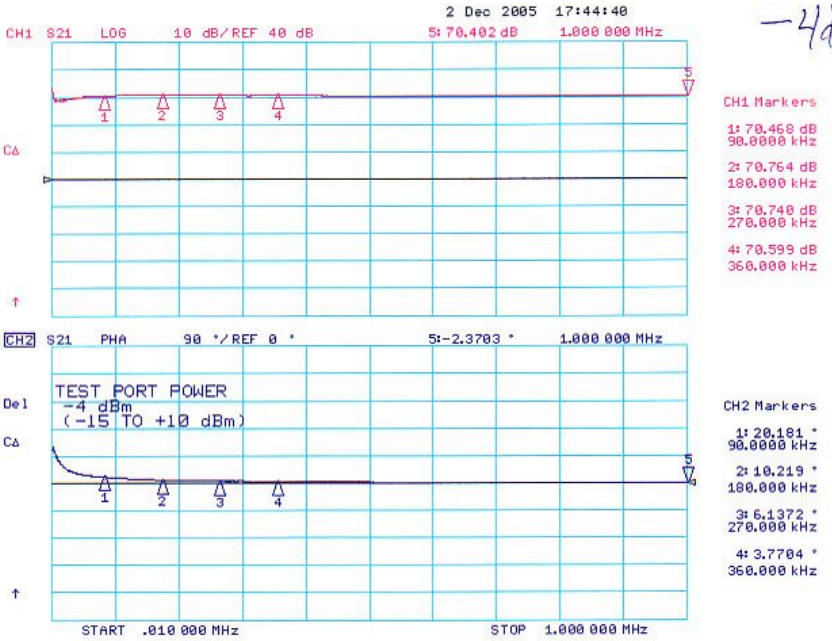
208V
- 10dbm



#22029 208V -7dbm

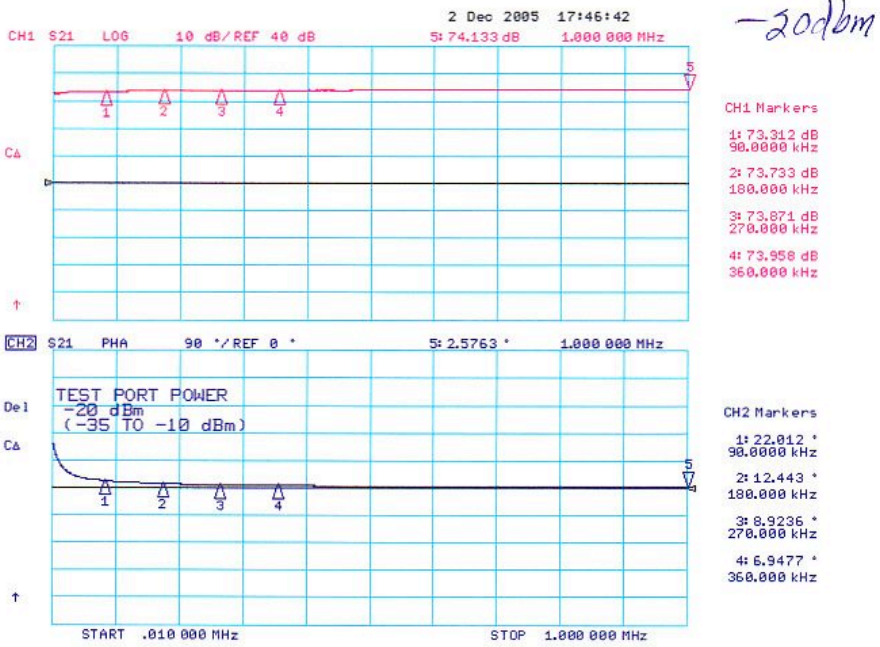


#22029 208V -4dbm



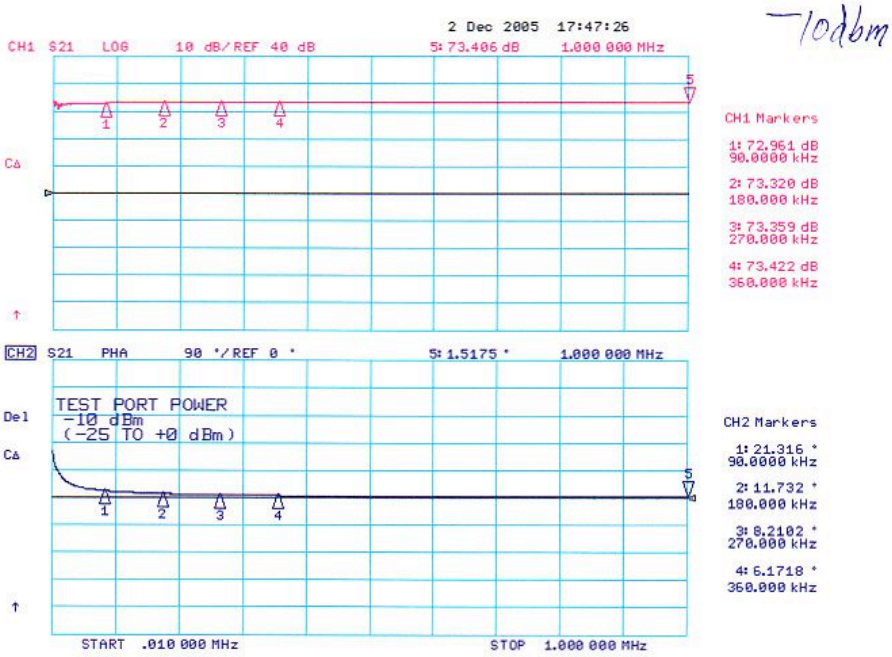
#22029

188V
-20dbm



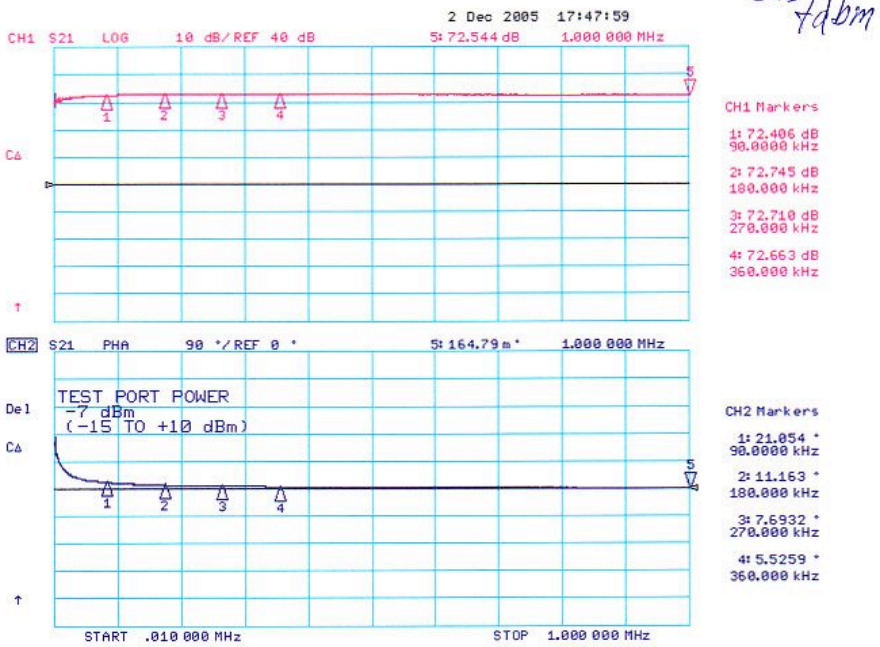
#22029

188V
-10dbm



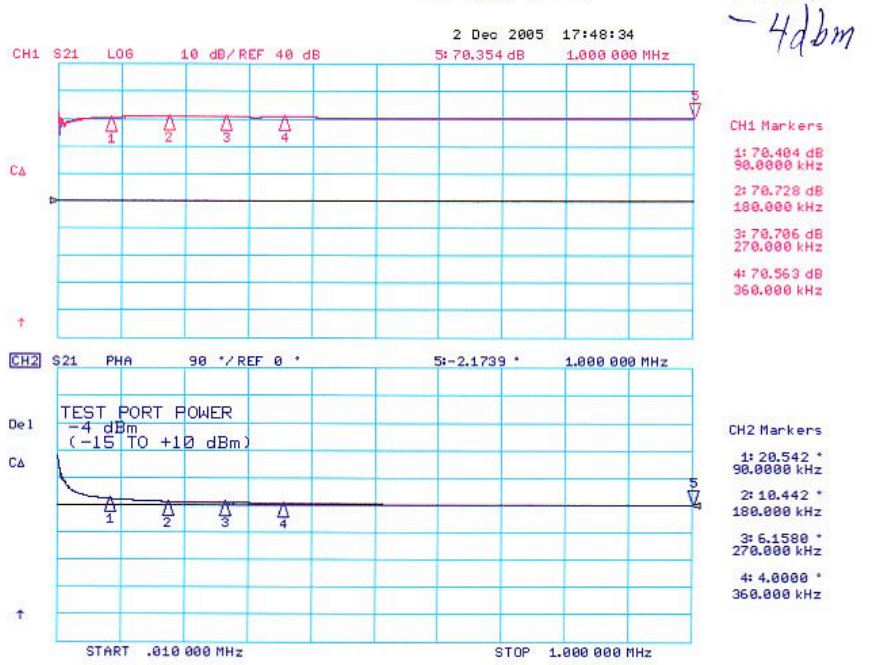
#22029

188V
-7dbm



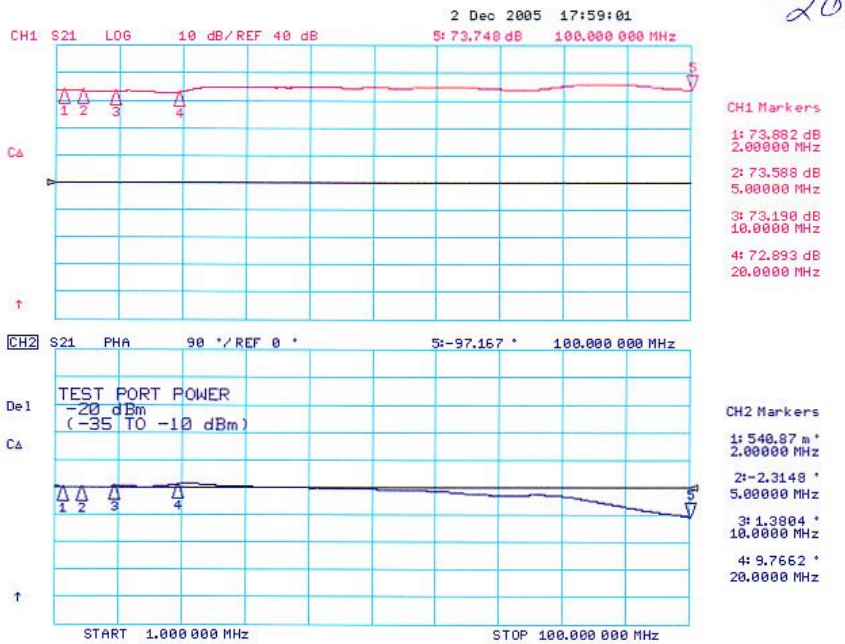
#22029

188V
-4dbm



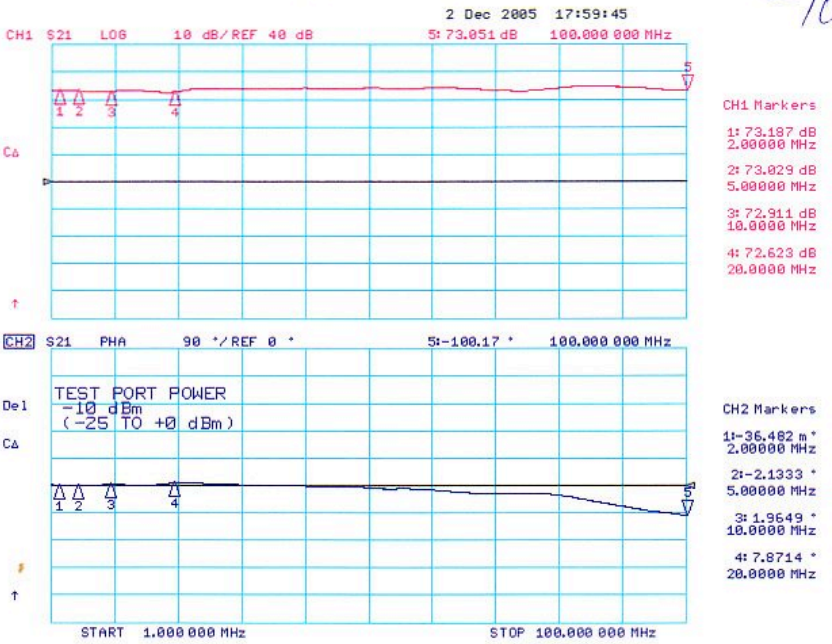
#22029

208V
-20dbm



#22029

208V
-10dbm

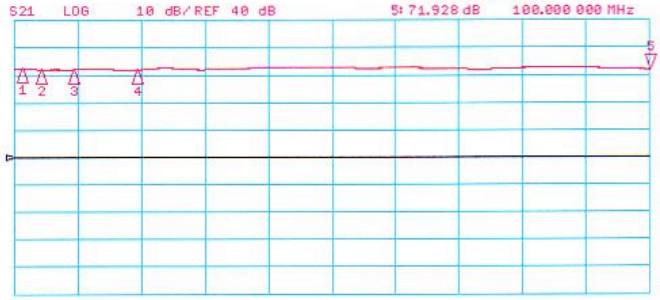


#22029

208V
-7dbm

2 Dec 2005 18:00:22

CH1 S21 LOG 10 dB/ REF 40 dB 5: 71.928 dB 100.000 000 MHz



CH1 Markers

1: 72.349 dB
2.00000 MHz

2: 71.984 dB
5.00000 MHz

3: 72.000 dB
10.0000 MHz

4: 71.863 dB
20.0000 MHz

CH2 S21 PHA 90 °/ REF 0 ° 5:-104.69 ° 100.000 000 MHz

CH2 Markers

1:-1.0810 °
2.00000 MHz

2:-1.4516 °
5.00000 MHz

3: 2.1010 °
10.0000 MHz

4: 5.8660 °
20.0000 MHz

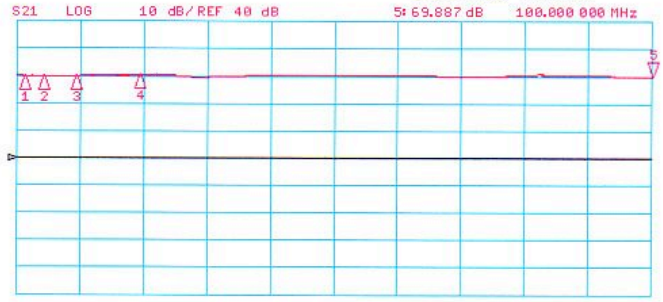
START 1.000 000 MHz STOP 100.000 000 MHz

#22029

208V
-4dbm

2 Dec 2005 18:00:59

CH1 S21 LOG 10 dB/ REF 40 dB 5: 69.887 dB 100.000 000 MHz



CH1 Markers

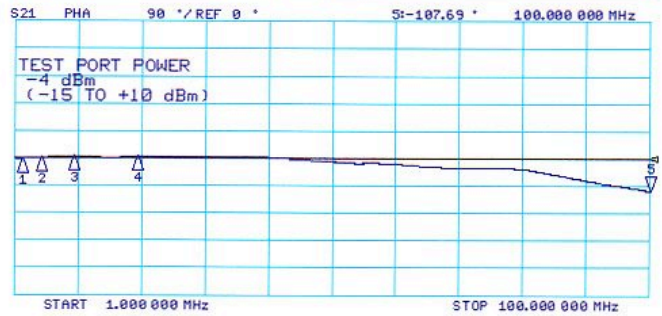
1: 70.011 dB
2.00000 MHz

2: 69.877 dB
5.00000 MHz

3: 69.975 dB
10.0000 MHz

4: 70.211 dB
20.0000 MHz

CH2 S21 PHA 90 °/ REF 0 ° 5:-107.69 ° 100.000 000 MHz



CH2 Markers

1:-2.7104 °
2.00000 MHz

2:-329.37 m°
5.00000 MHz

3: 3.3627 °
10.0000 MHz

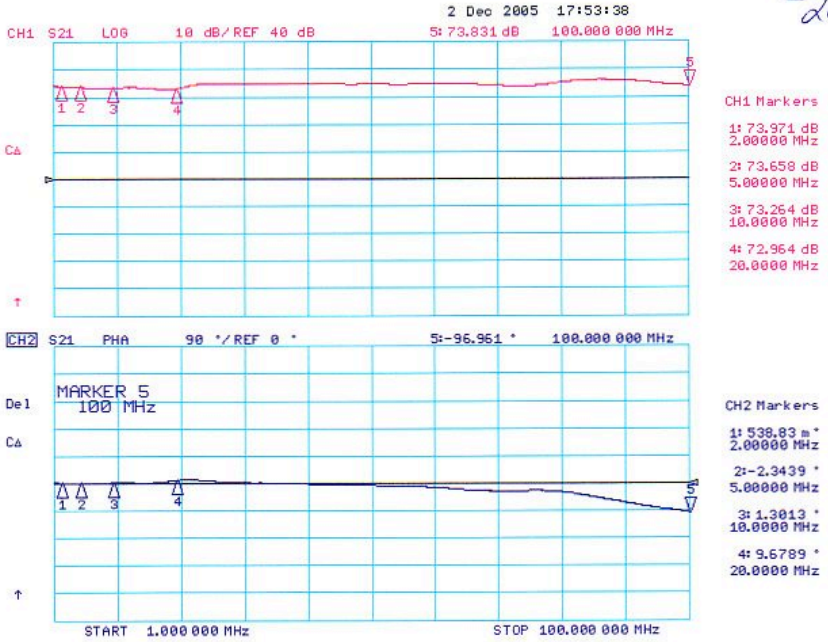
4: 4.4262 °
20.0000 MHz

START 1.000 000 MHz STOP 100.000 000 MHz

#22029

188V
-20dbm

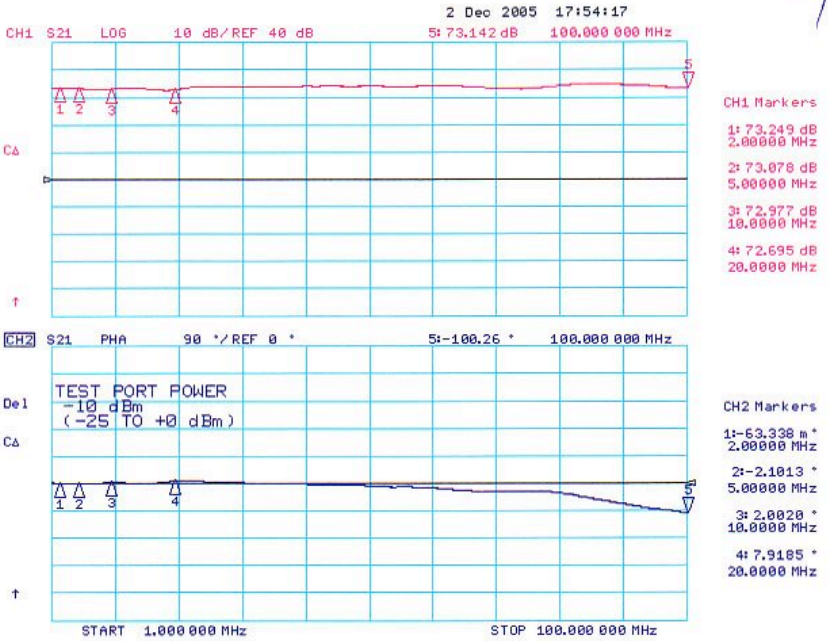
2 Dec 2005 17:53:38



#22029

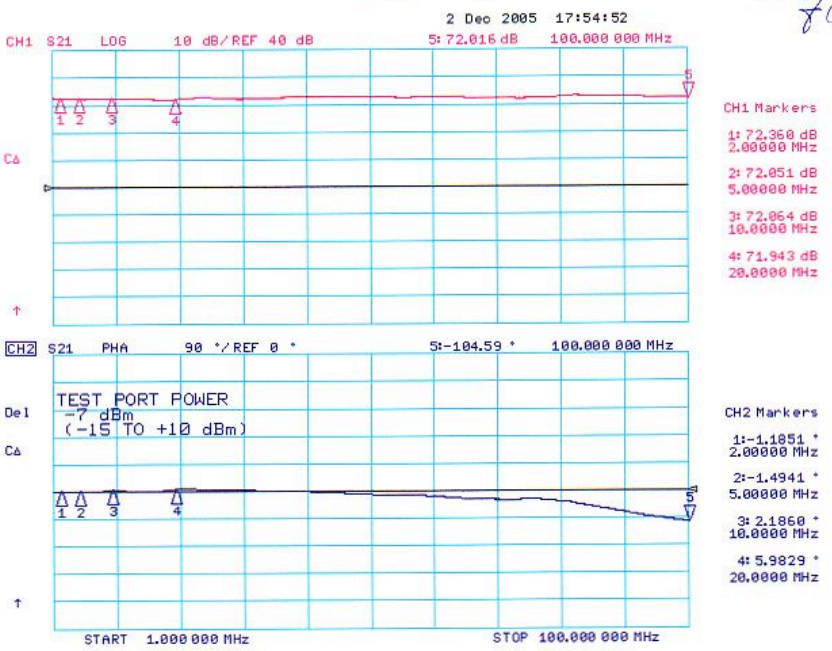
188V
-10dbm

2 Dec 2005 17:54:17



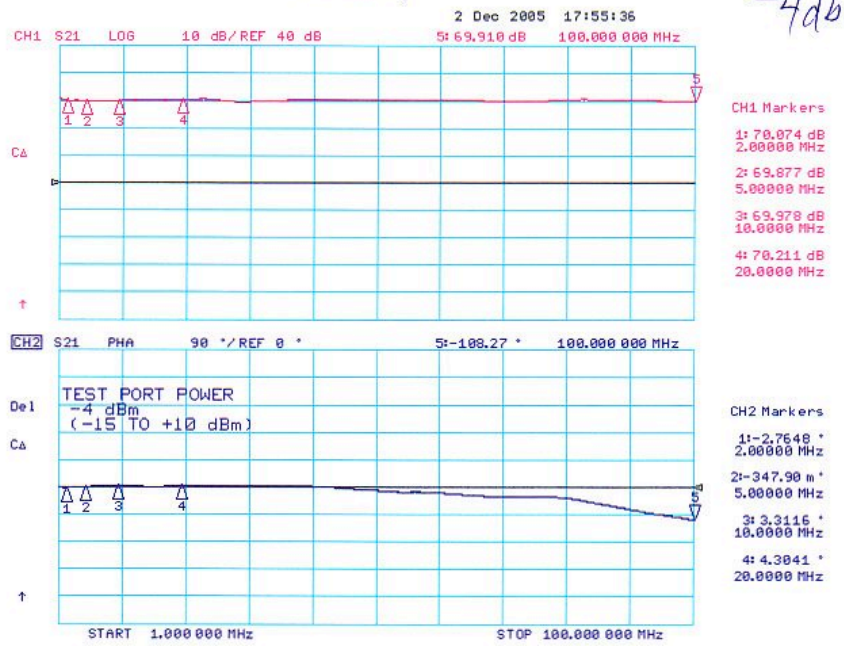
#22029

188V
-7dbm



#22029

188V
-4dbm



FERMILAB
ENGINEERING NOTE

SECTION	PROJECT	SERIAL-CATEGORY	PAGE
	Recycler	22029	

SUBJECT: 3500A100 Gain variation with time/temp.

NAME: MCA

DATE: 12-1-05

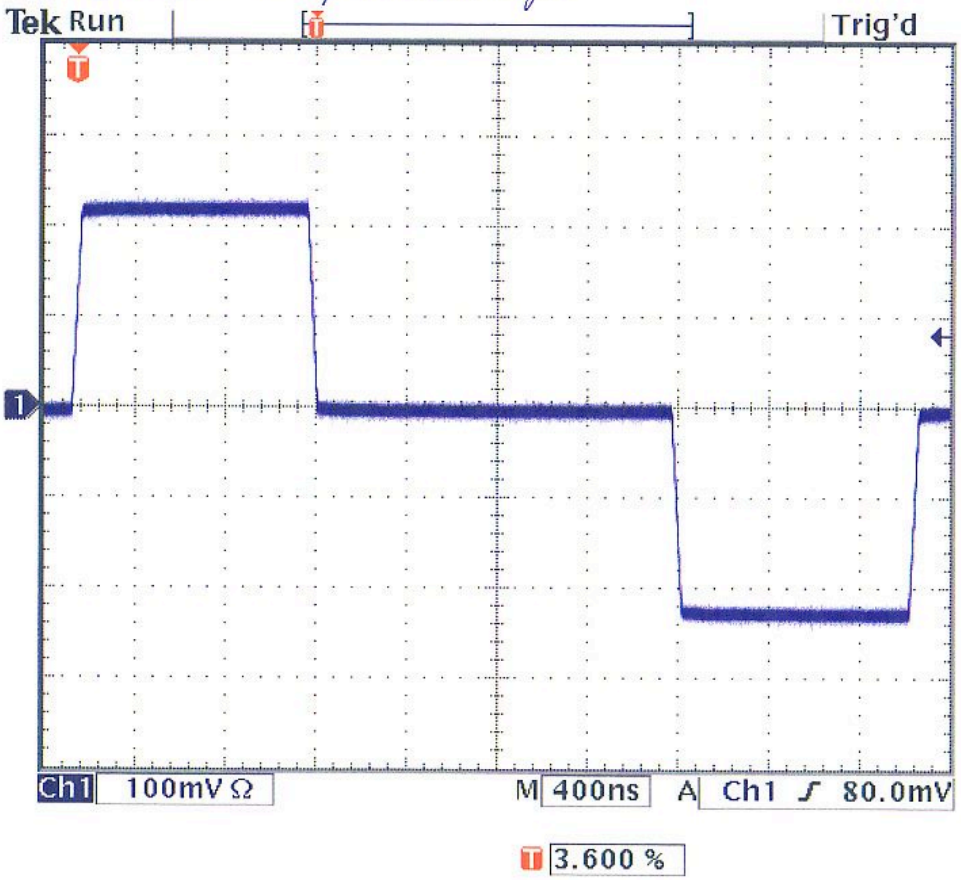
REVISION DATE:

Cold Start	Vector Voltmeter	Panel
14:05	-3.49 dbm	436 watts
14:10	-4.4 dbm	336 watts.
14:15	-4.86 dbm	300 watts
14:20	-5.11 dbm	284 watts
14:25	-5.25 dbm	275 watts
14:30	-5.34 dbm	269 watts
14:35	-5.41 dbm	265 watts
14:40	-5.45 dbm	263 watts

1 Mtr @ -20 dbm 100% Gain

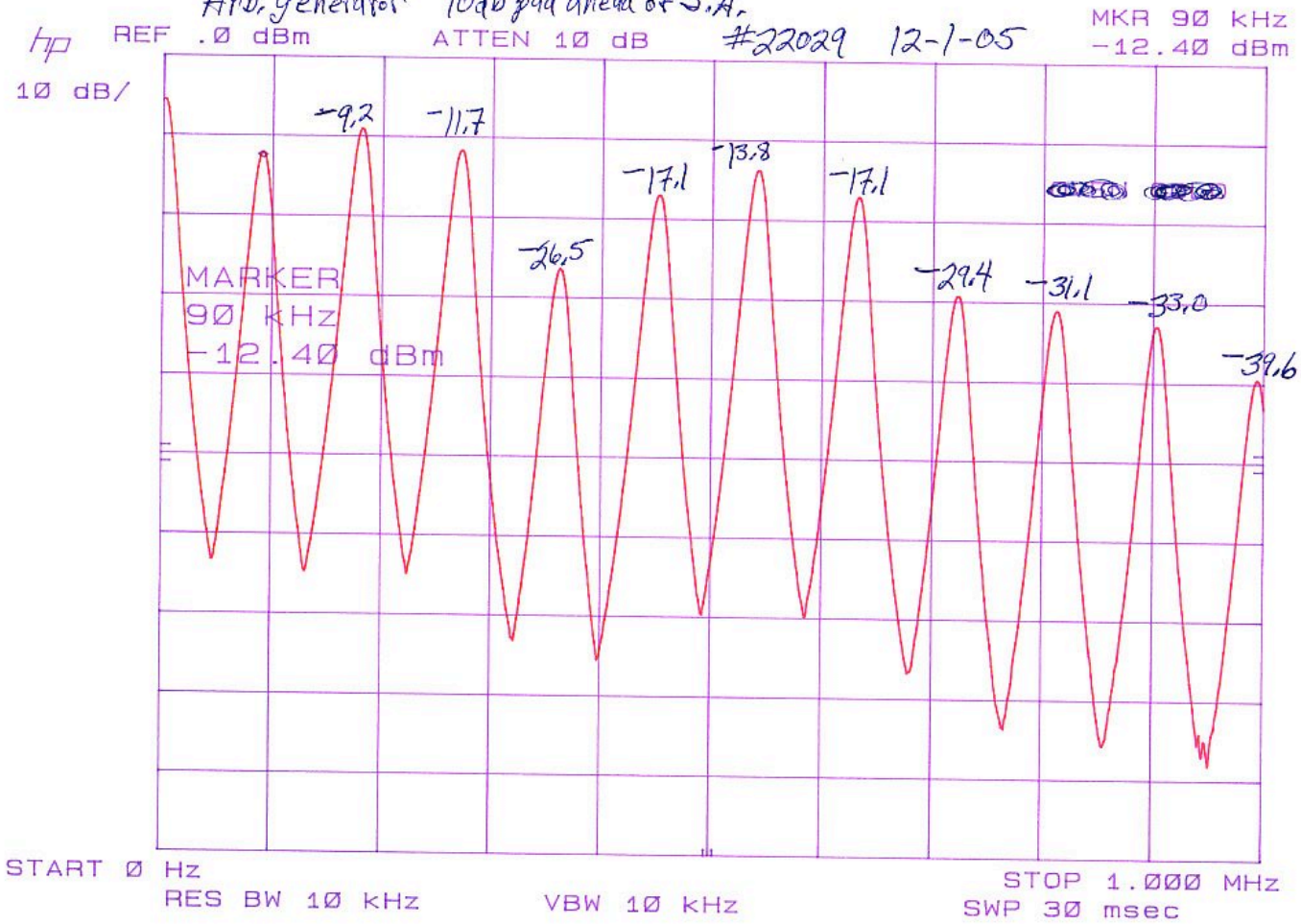
Arb. generator 13db pad ahead of scope

#22029

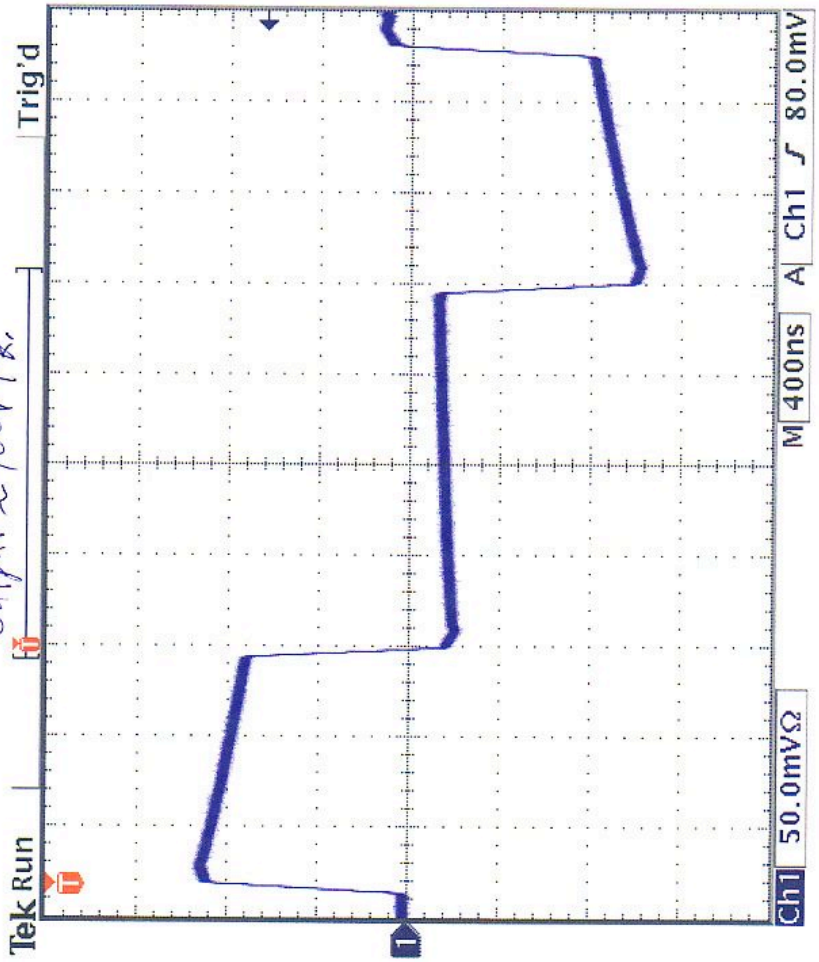


1 Dec 2005
16:42:58

Arb. generator 10db pad ahead of S.A.

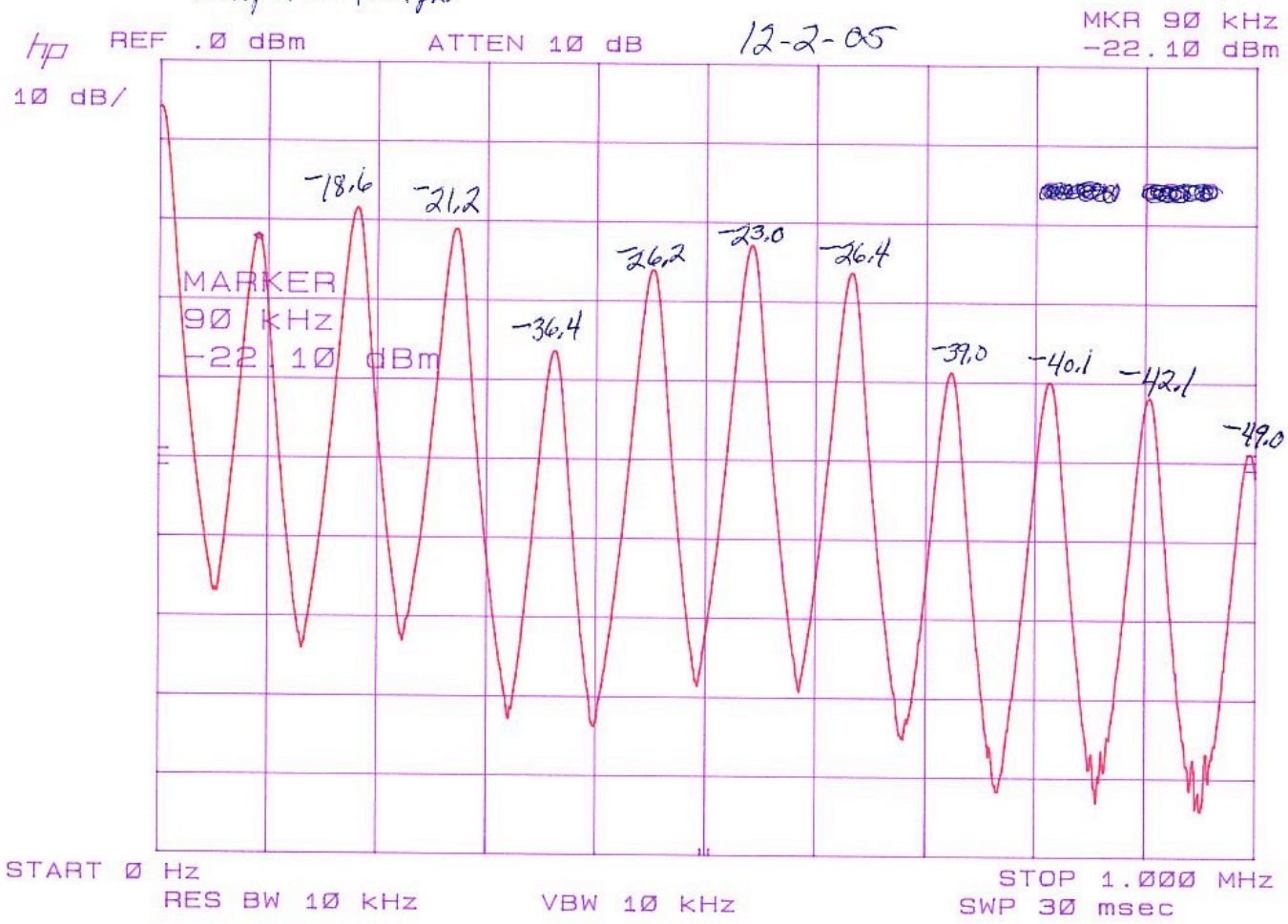


TDS 3034 2 Dec 2005 10:51:56

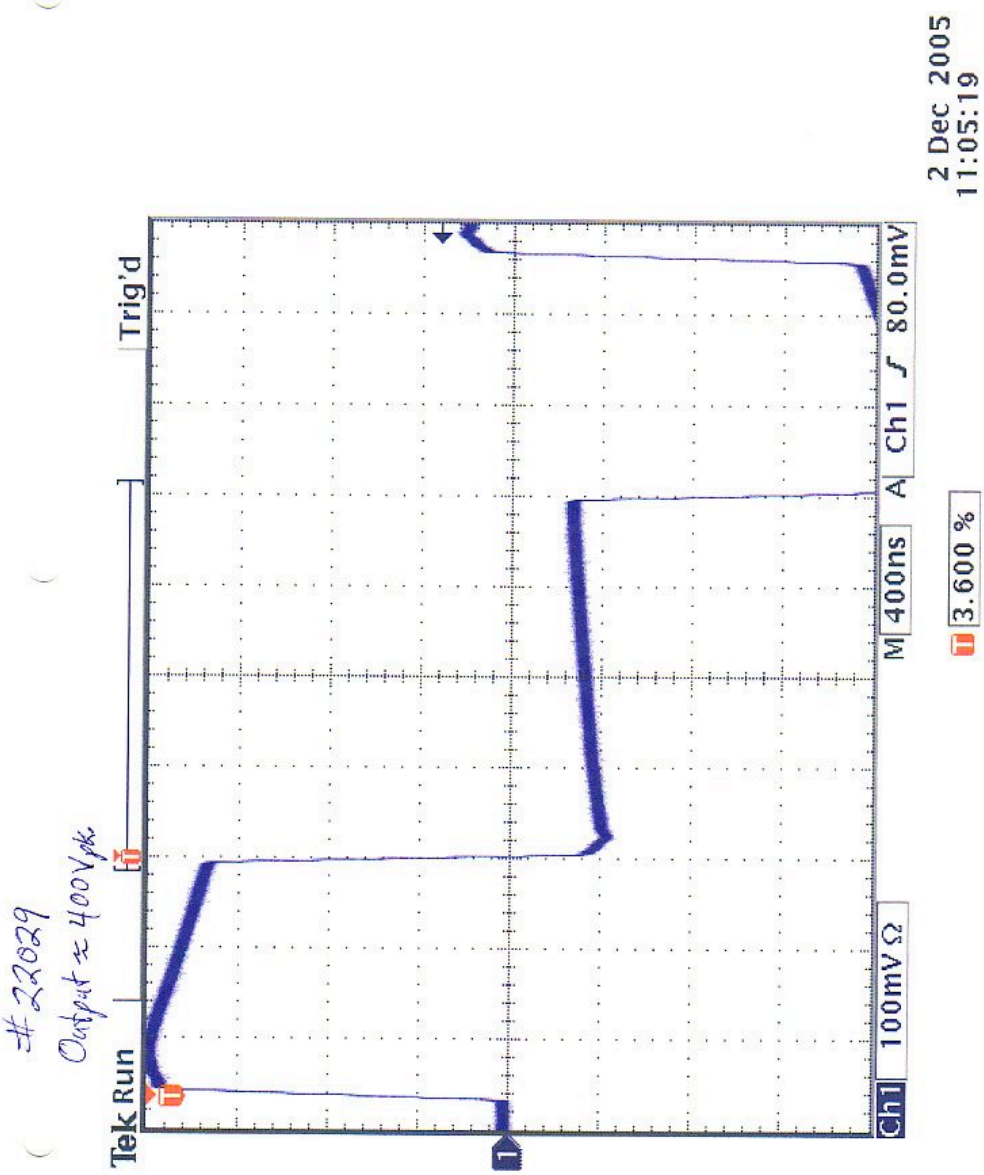


2 Dec 2005
10:51:56

#22029
Output ≈ 100Vpk.

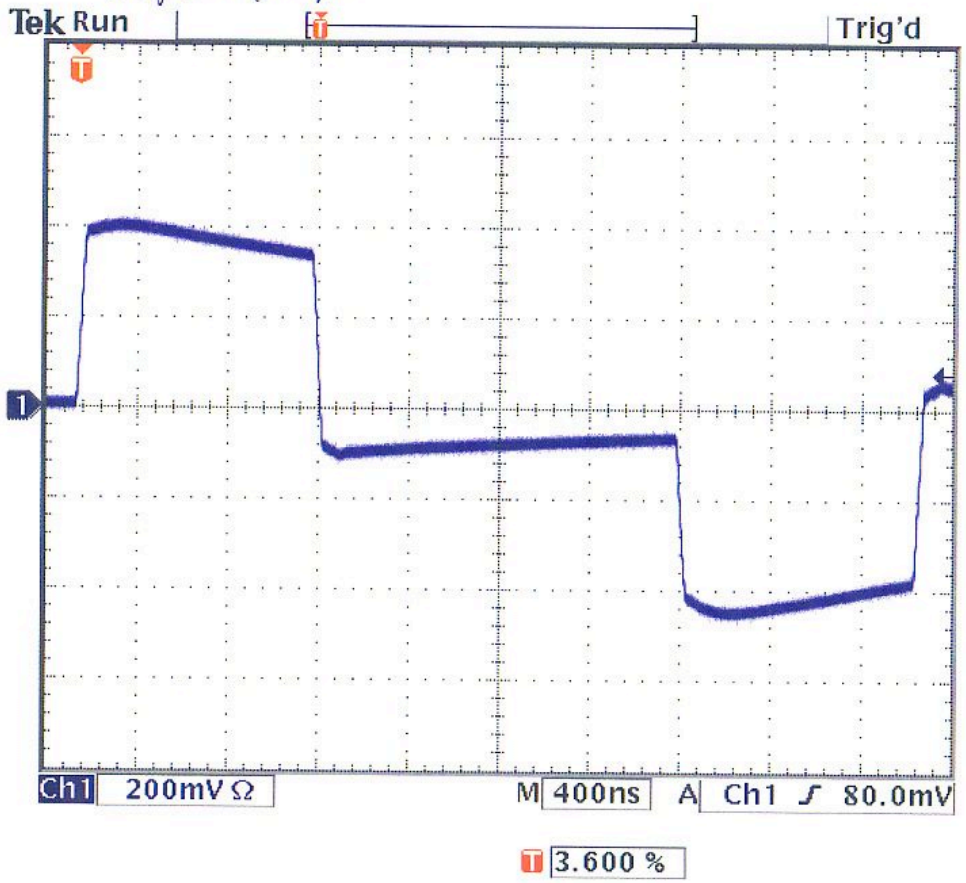


TDS 3034 2 Dec 2005 11:05:20



#22029

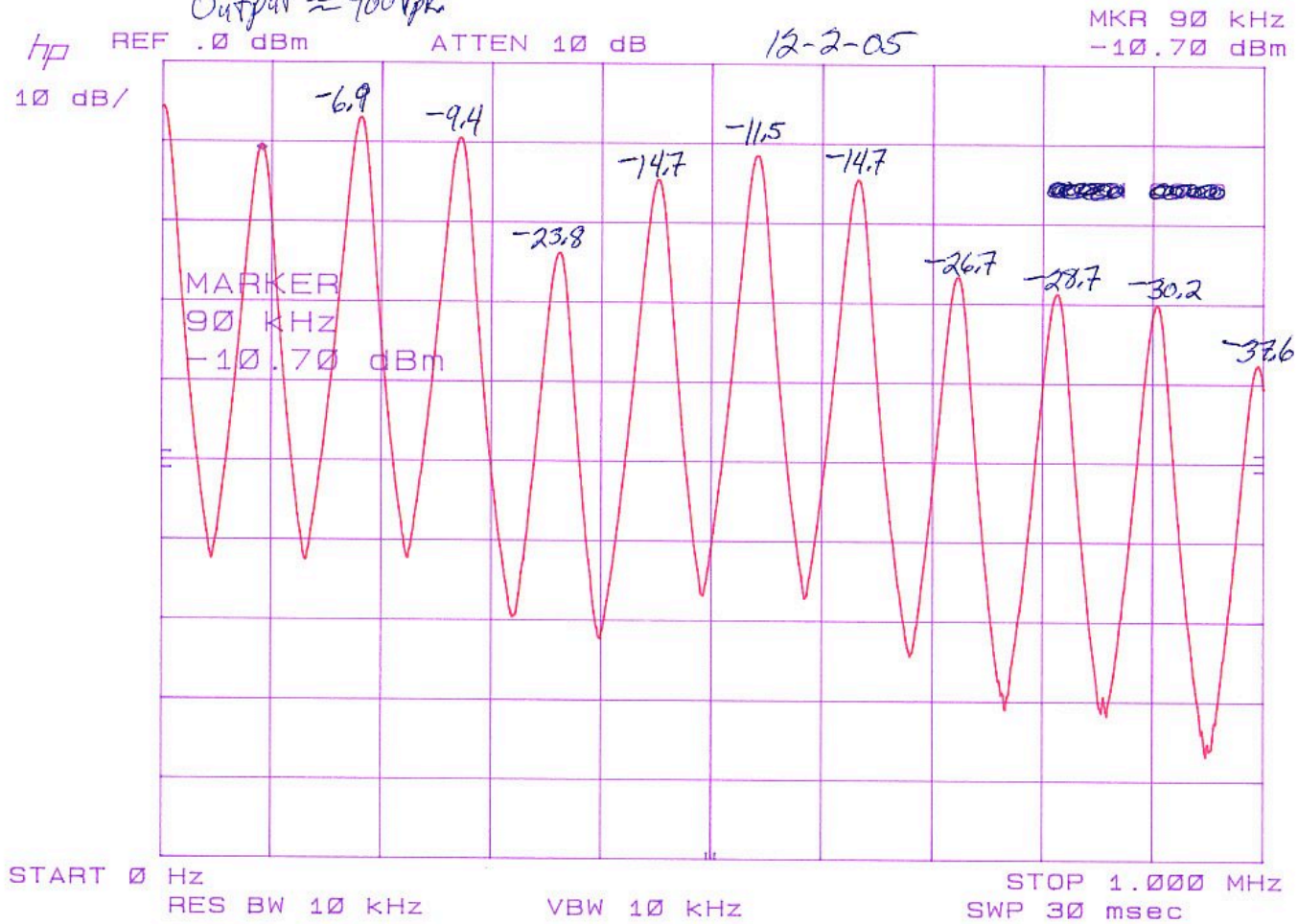
Output ≈ 400V pk.



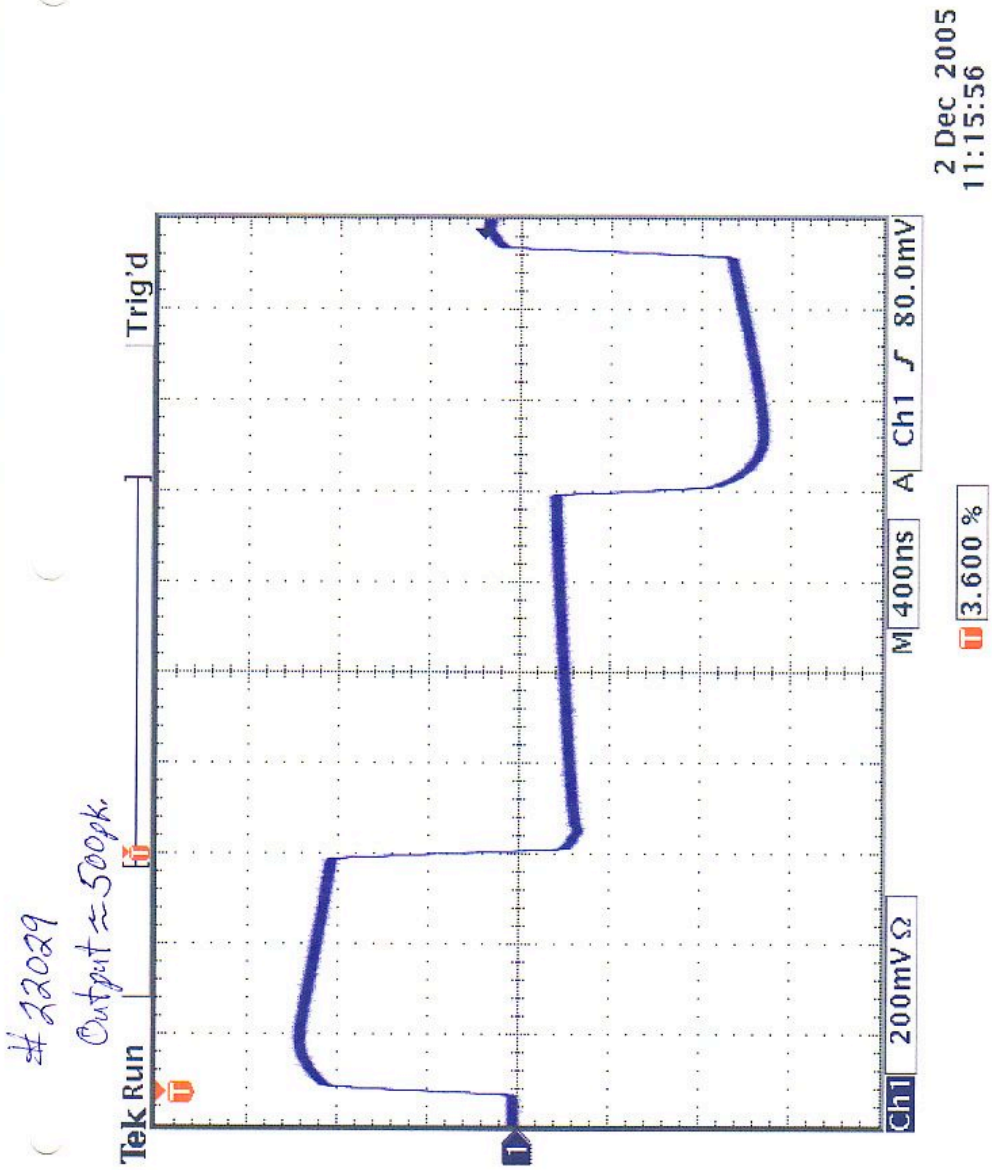
2 Dec 2005
11:06:18

#22029

Output ≈ 400Vpk.

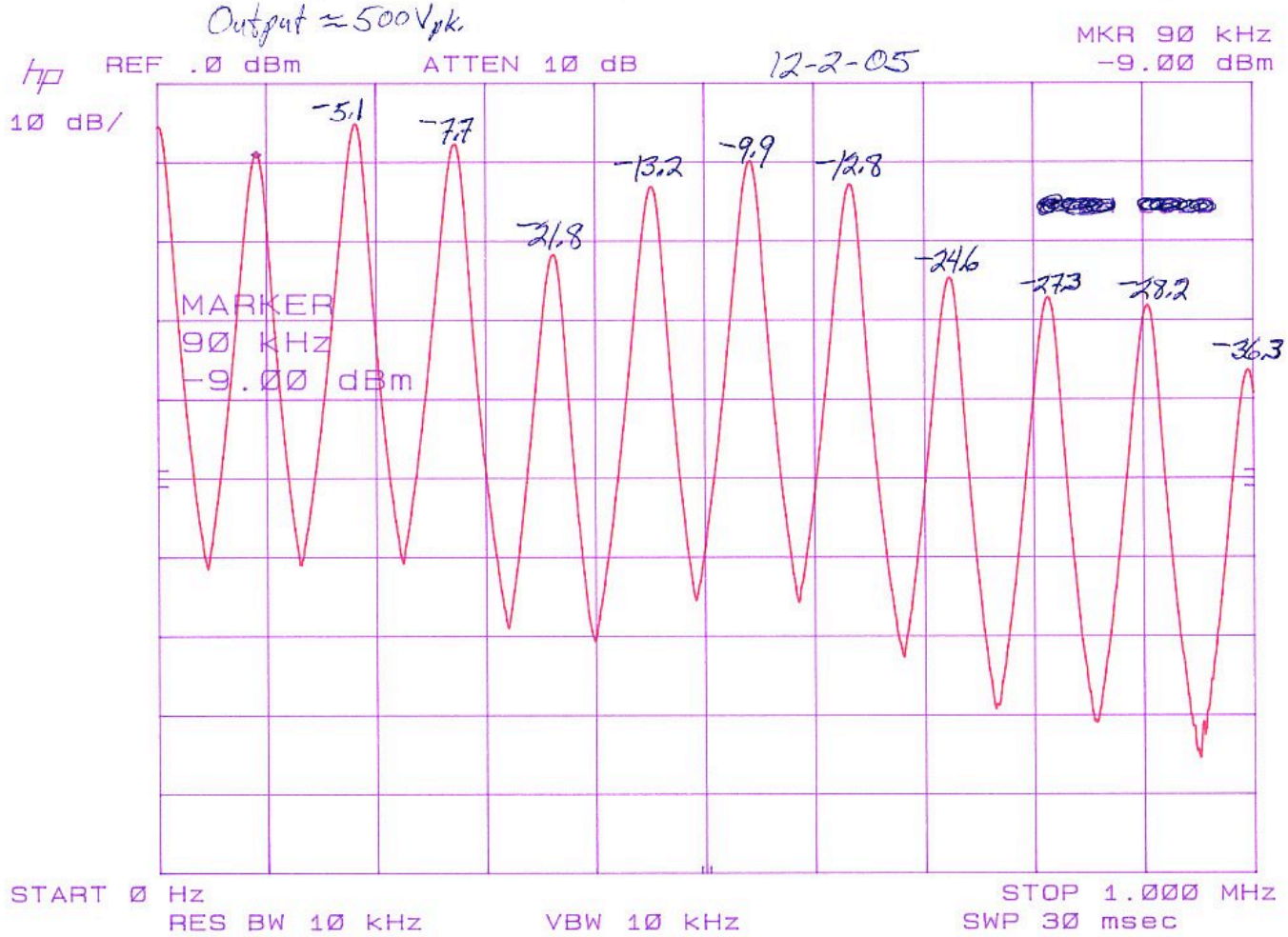


TDS 3034 2 Dec 2005 11:15:5



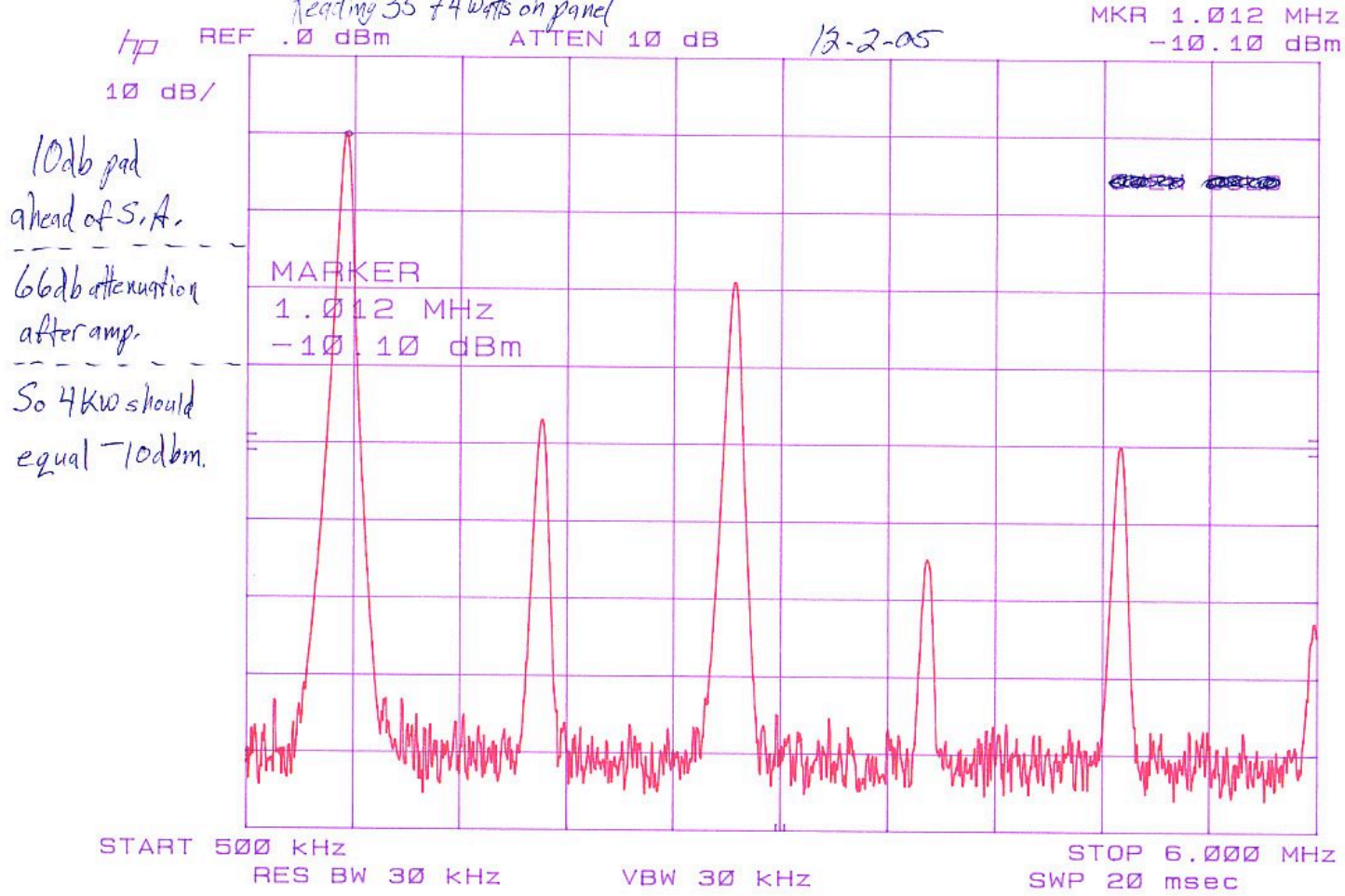
#22029

Output ≈ 500 V_{pk}.



22029

Reading 3574 watts on panel



10db pad ahead of S.A.

66db attenuation after amp.

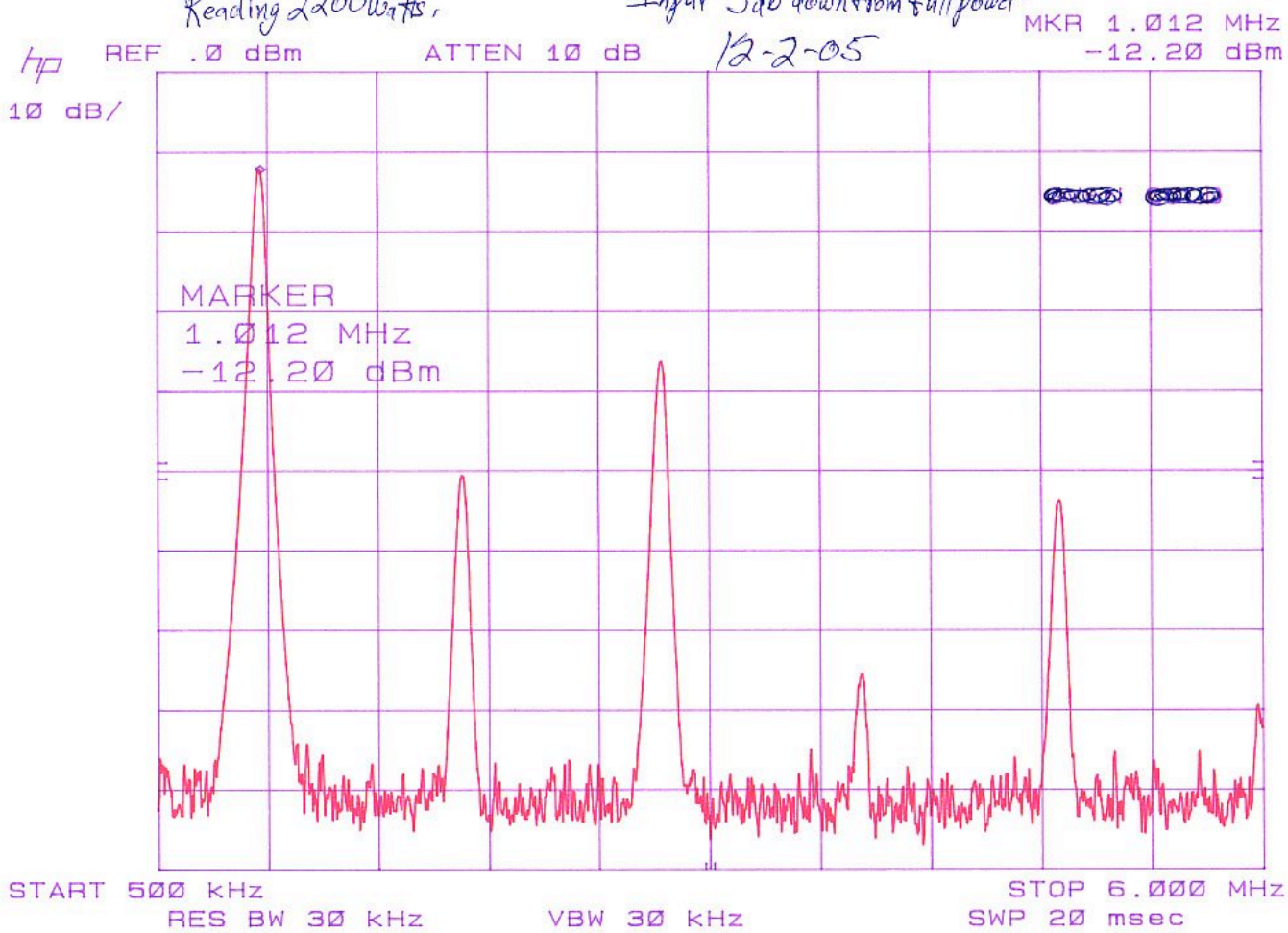
So 4Kw should equal -10dbm.

#22029

Reading 2200 watts,

Input 3db down from full power

12-2-05

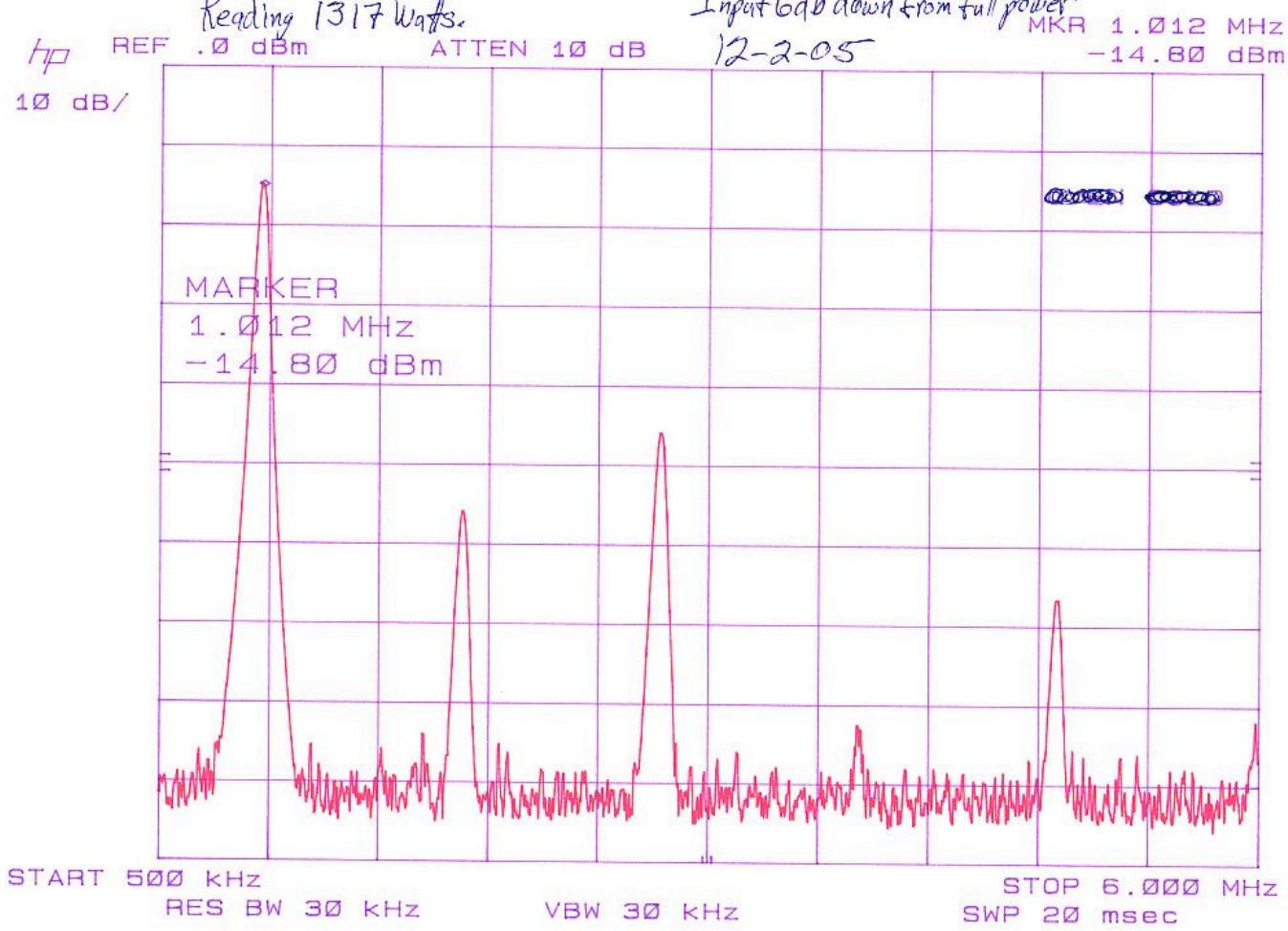


#22029

Reading 1317 Watts.

Input 6db down from full power

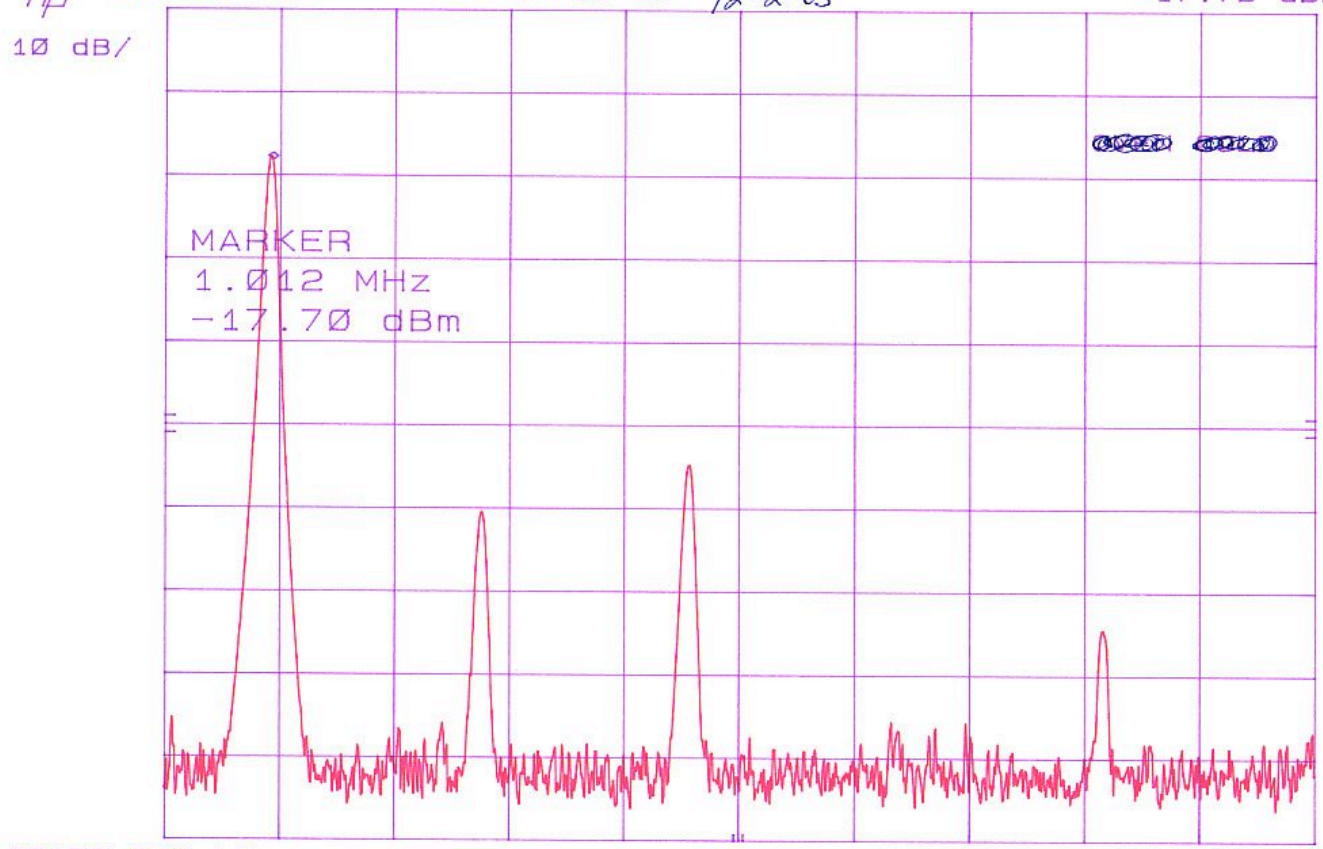
12-2-05



#22029

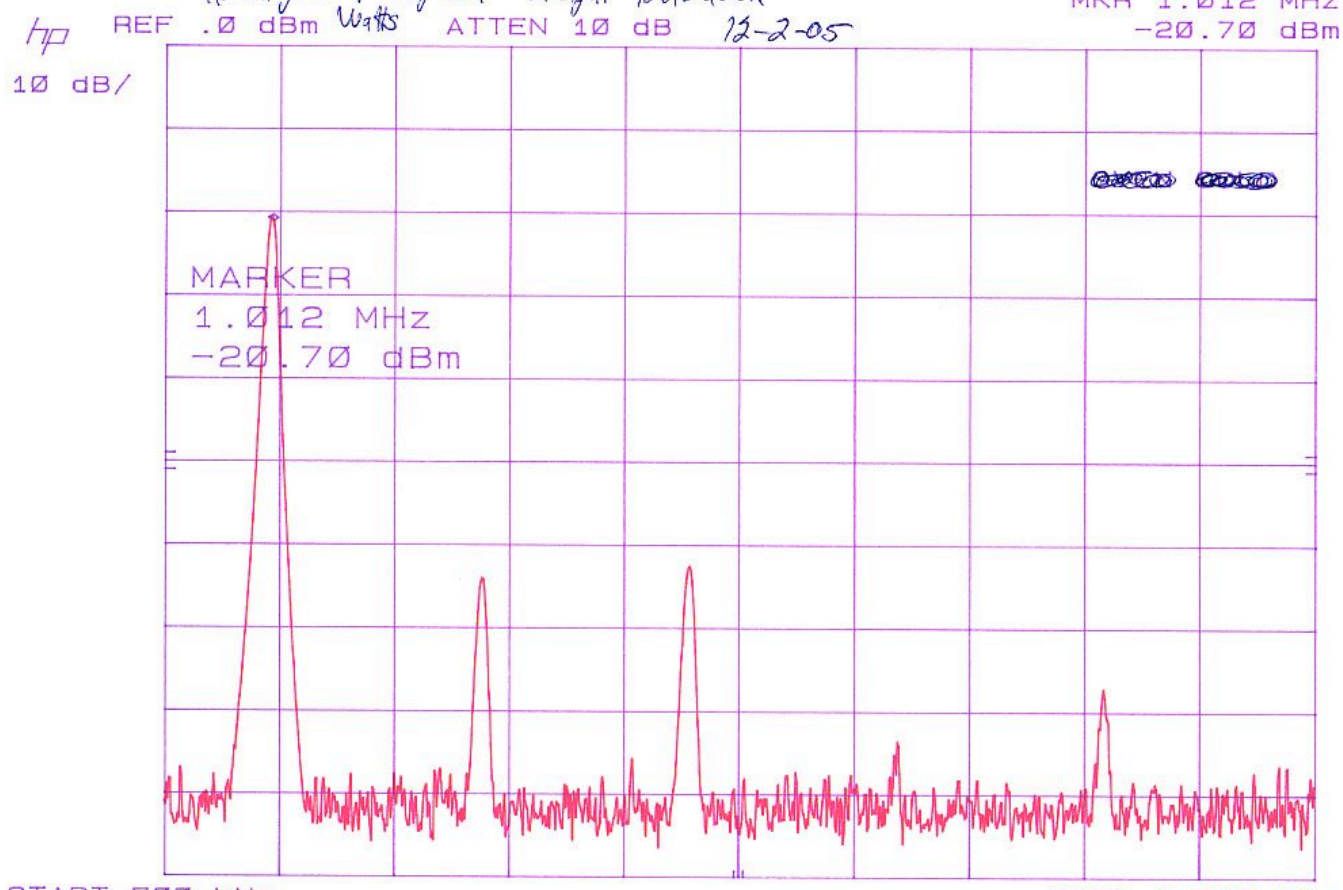
Reading 710 watts Input 9db down from full power

12-2-05

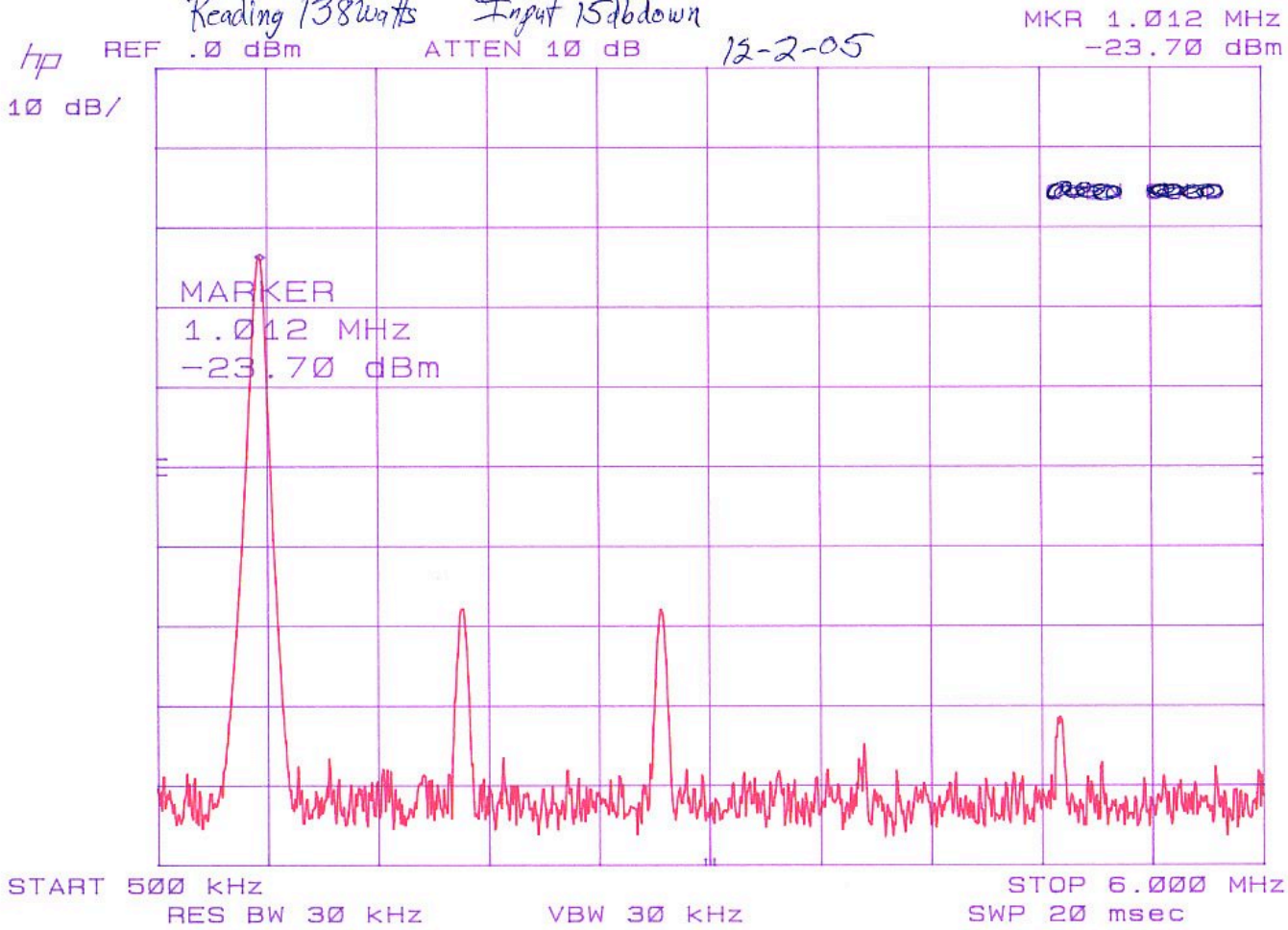


#22029

Reading 337 on panel Input 12db down



#22029

Reading 138watts Input 15db down

12-2-05