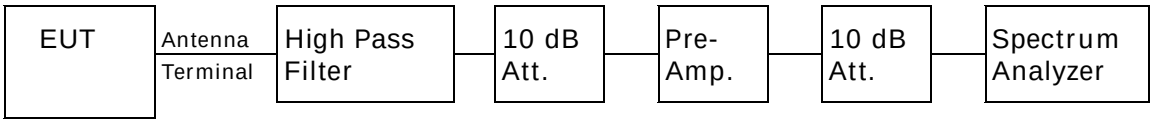
Additional Report

Antenna Conducted Spurious Emission Measurement (§2.1051,§24.238))
-Spurious Emission Except the harmonics frequency-

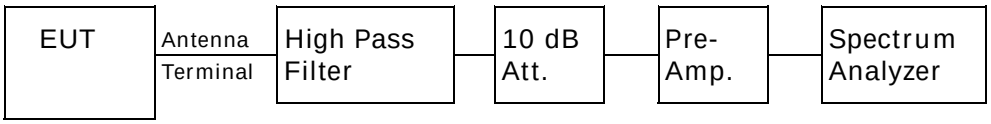
Test Procedure :

The Antenna Conducted Emission was measured with a spectrum analyzer, one or two 10 dB attenuator, a high pass filter., a pre-amplifier and a short, low loss cable.

1) Frequency Range : 2GHz - 6GHz



2) Frequency Range : 6GHz - 20GHz



Test location :

KITA-KANSAI Testing Center
7-7, Ishimaru, 1-Chome, Mino-Shi, Osaka, 562-0027, Japan
● - Shielded room
KAMEOKA EMC Branch
9-1, Ozaki, Inukanno, Nishibetsuin-Cho, Kameoka-Shi, Kyoto, 621-0126, Japan
○ - Shielded room

Used test instruments:

Model No.	Device ID	Last Cal. Date	Cal. Interval
○ - MP721C	D - 66		
● - 4T-10	D - 73	May, 2002	1 Year
● - 4T-10	D - 74	May, 2002	1 Year
○ - 2-10	D - 79		
○ - 2-10	D - 80		
● - UHP-127	D - 42	May, 2002	1 Year
○ - UHP-128	D - 43		
● - 8566B	A - 13	February, 2003	1 Year
○ - 8593A	A - 15		
○ - WJ-6611-513	A - 23		
● - WJ-6882-824	A - 21	May, 2002	1 Year
● - DBL-0618N515	A - 33	May, 2002	1 Year

Environmental conditions:

Temperature: 22 °C Humidity: 54 %

Measurment Result:

The plot data is shown in the attachment.
Pages 3-5 : 1850.200MHz(512ch)
Pages 6-8 : 1880.000MHz(661ch)
Pages 9-11 : 1909.800MHz(810ch)

The all spurious emission not listed in page 28 of 42 in KL8030023 were found to be more than 20 dB below the limit.

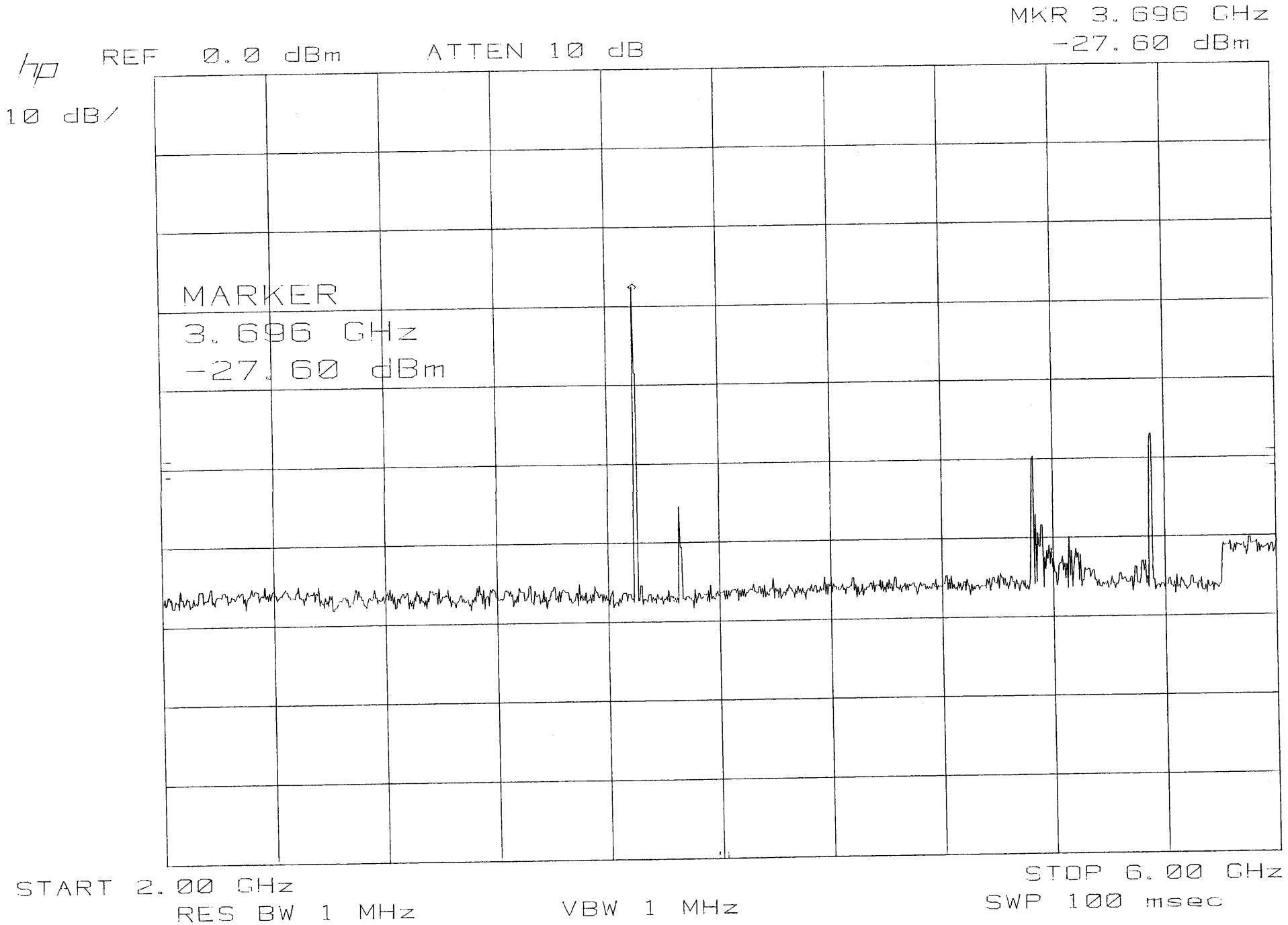
Sample Calculation:

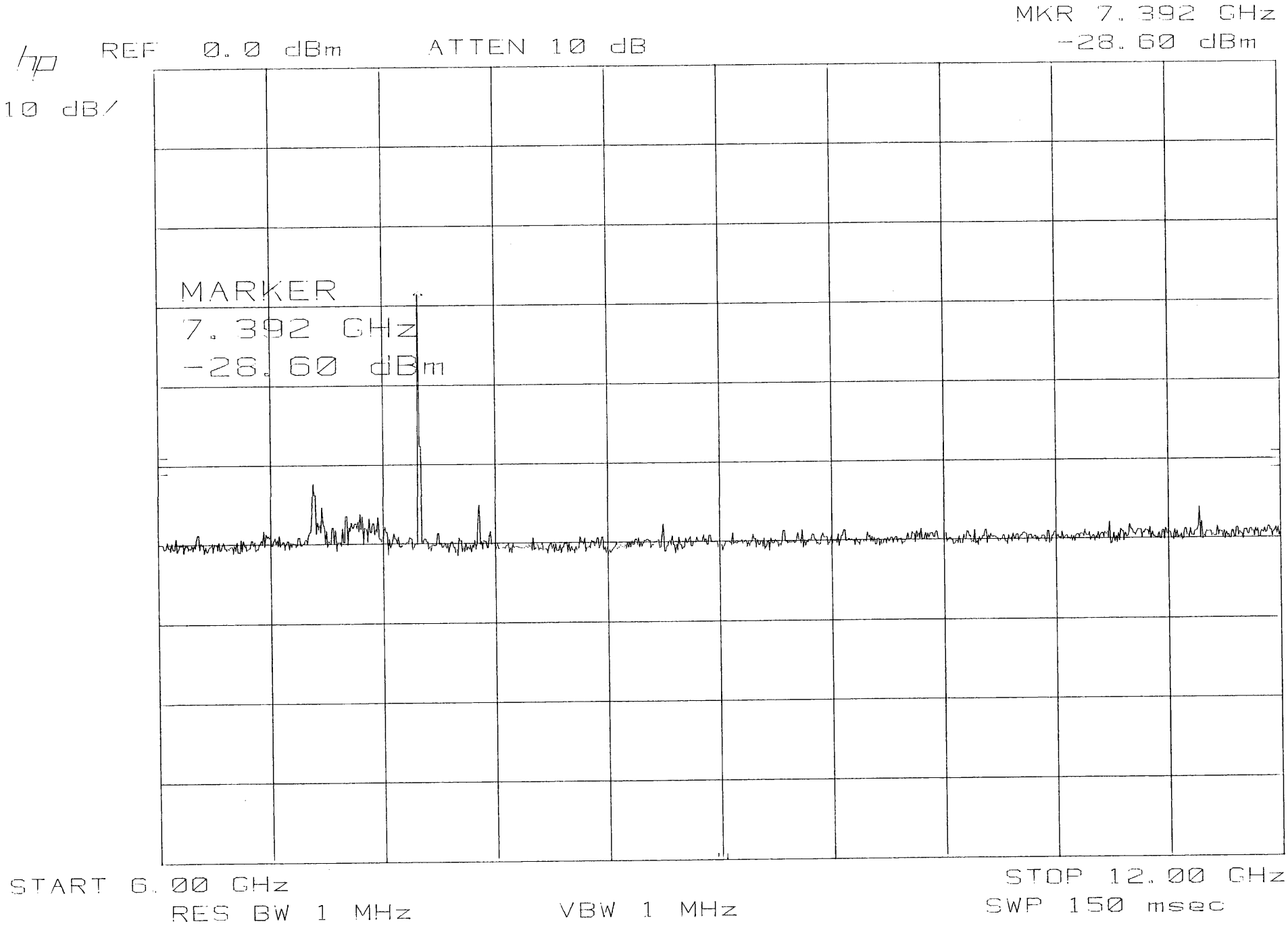
Transmitting Frequency [MHz]	Frequency [MHz]	Correction Factor [dB]	Meter Readings (dBm)	Limits (dBm)	Results (dBm)
1850.2	3696.0	-20.8	-27.6	-13.0	-48.4
1880.0	3756.0	-20.7	-25.8	-13.0	-46.5
1909.2	3816.0	-20.7	-27.6	-13.0	-48.3

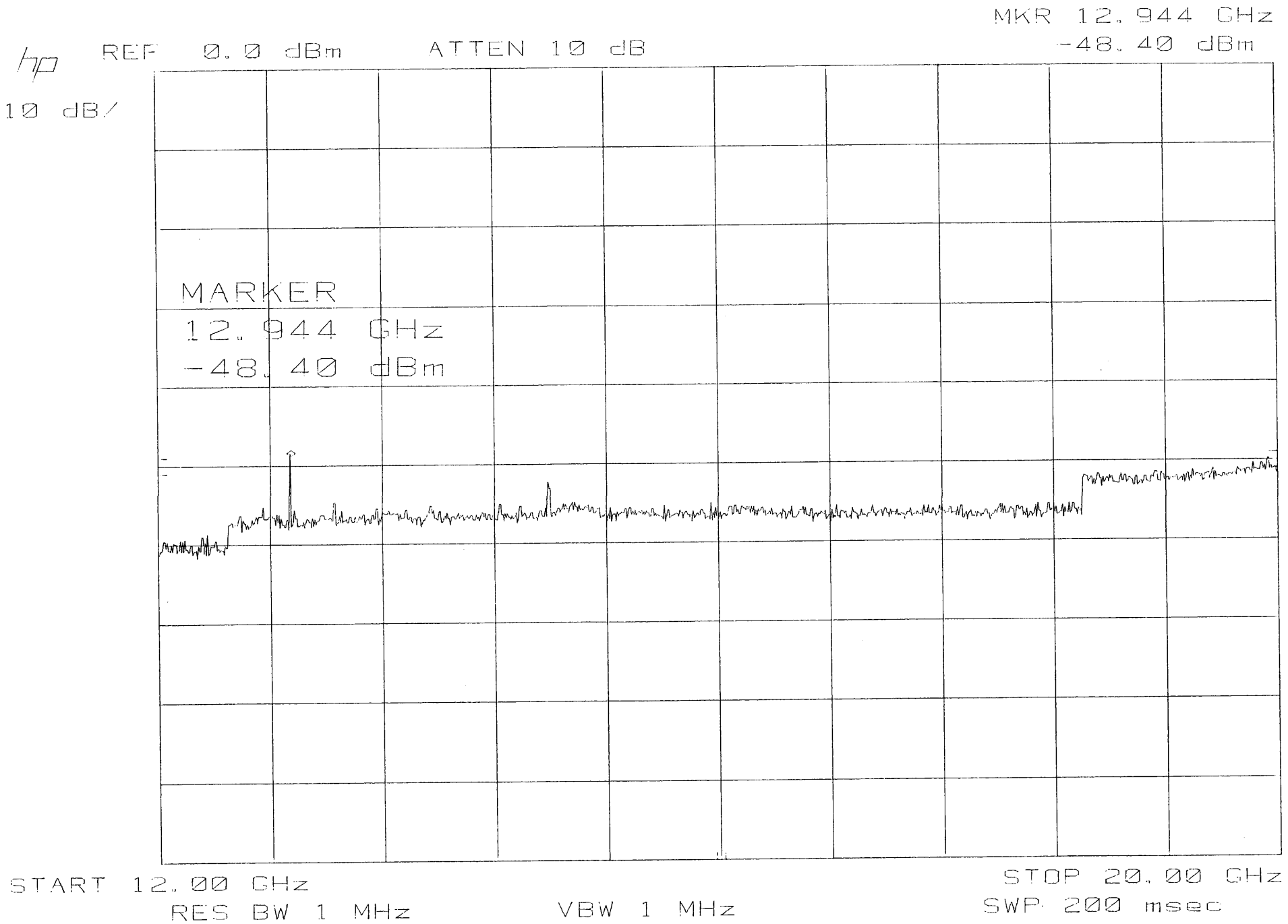
Note: The Amp Gain , the attenuator loss and the cable loss are included in the correction factor.

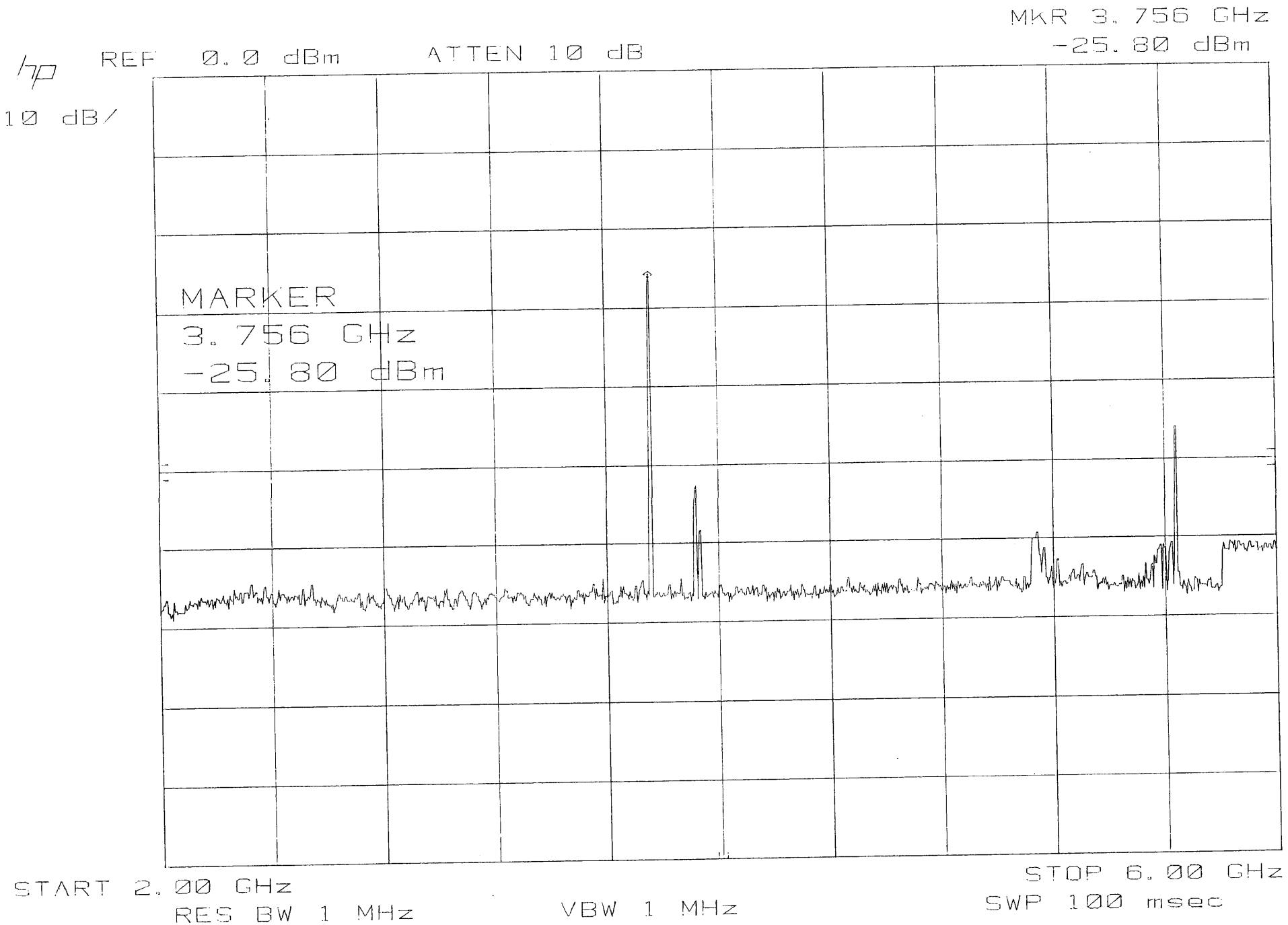
Judgement procedure:

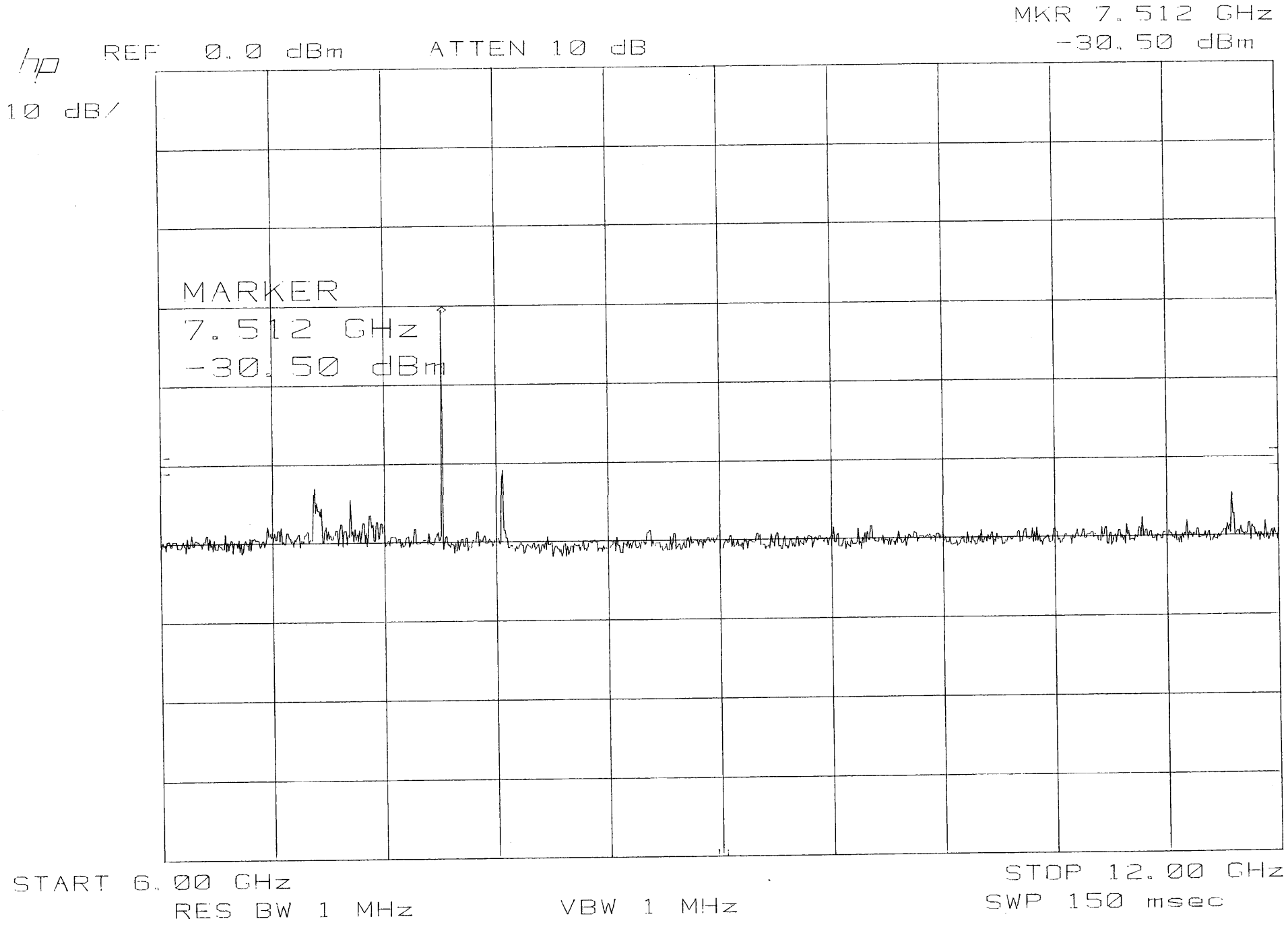
The sprious data is compared to the antenna conduced emisson level of the discrete frequcies of page 28 of 42.

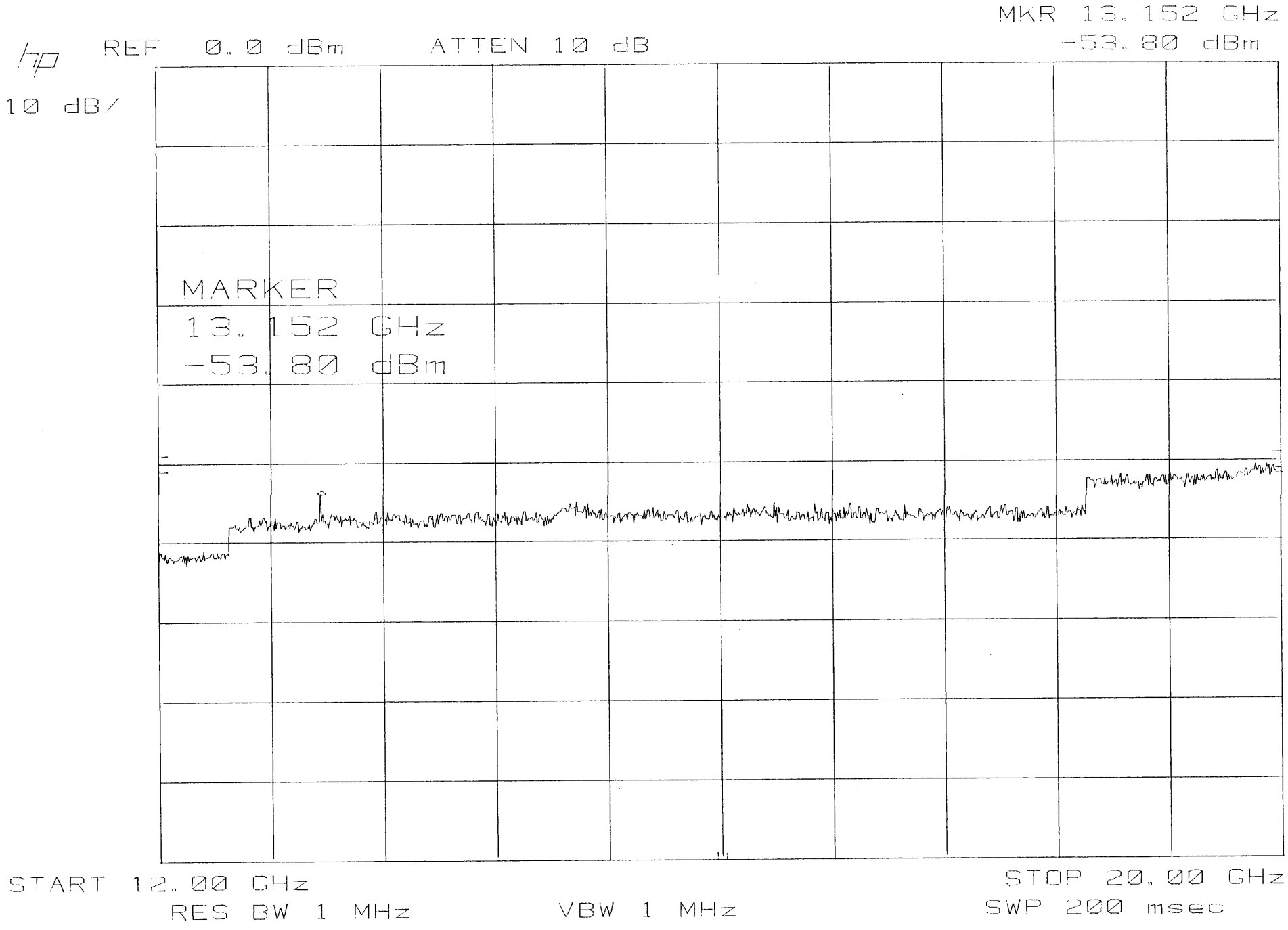

MKR 3.696 GHz
-27.60 dBm
REF 0.0 dBm
ATTEN 10 dB
10 dB/
MARKER
3.696 GHz
-27.60 dBm
START 2.00 GHz
RES BW 1 MHz
VBW 1 MHz
STOP 6.00 GHz
SWP 100 msec

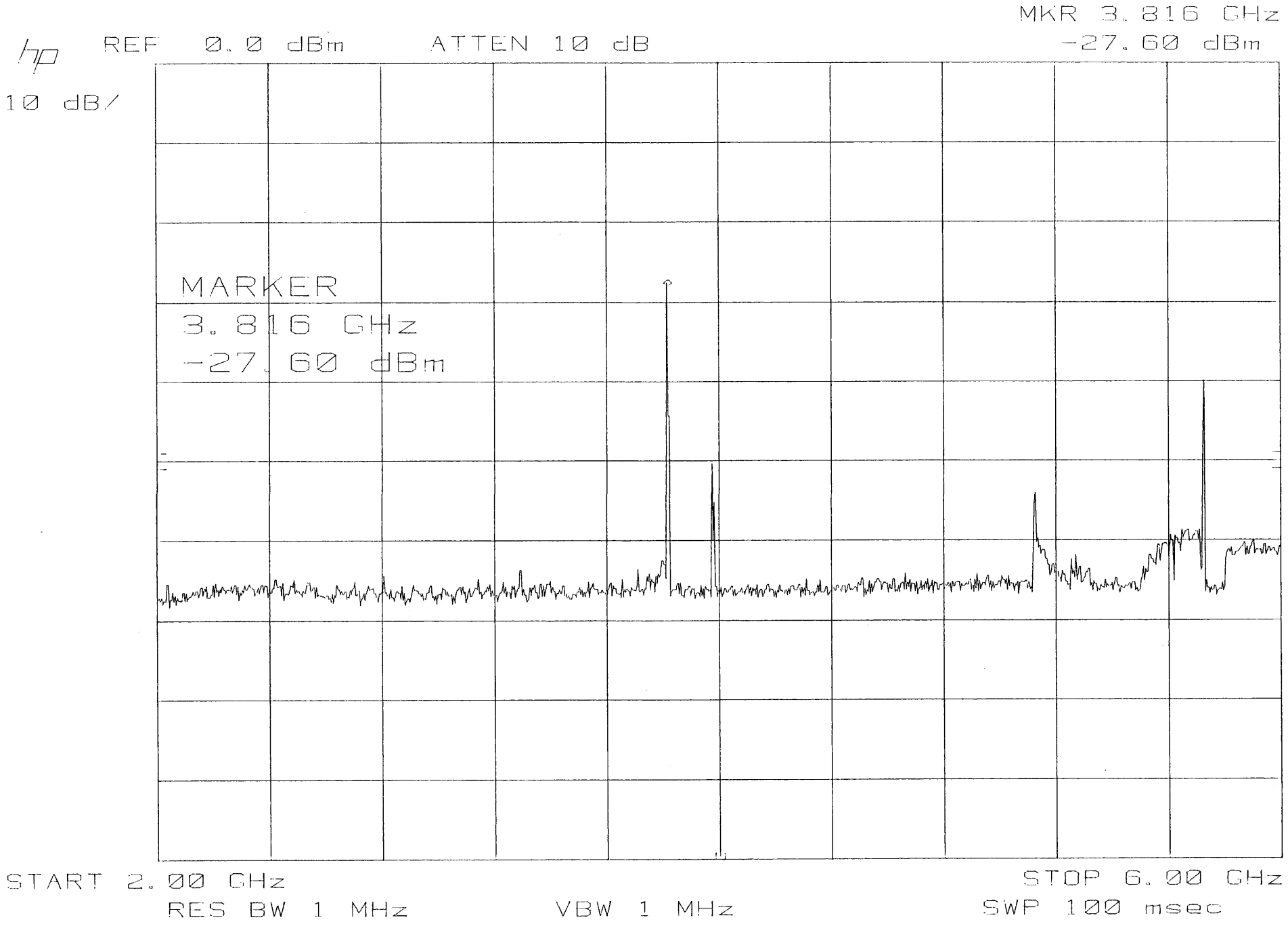

MKR 7.392 GHz
-28.60 dBm
REF 0.0 dBm
ATTEN 10 dB
10 dB/
MARKER
7.392 GHz
-28.60 dBm
START 6.00 GHz
RES BW 1 MHz
VBW 1 MHz
STOP 12.00 GHz
SWP 150 msec

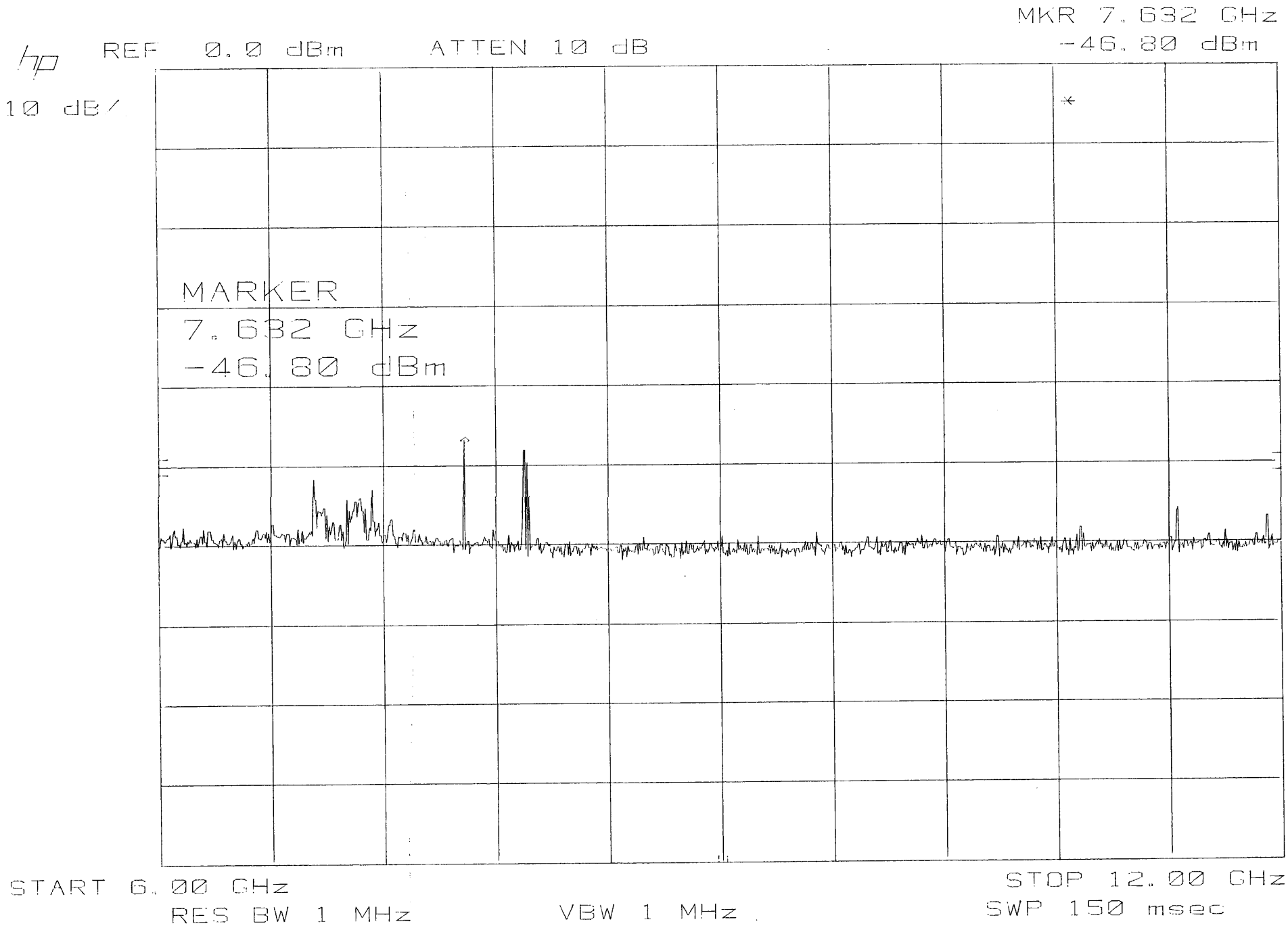

MKR 12.944 GHz
-48.40 dBm
REF 0.0 dBm
ATTEN 10 dB
10 dB/
MARKER
12.944 GHz
-48.40 dBm
START 12.00 GHz
RES BW 1 MHz
VBW 1 MHz
STOP 20.00 GHz
SWP 200 msec

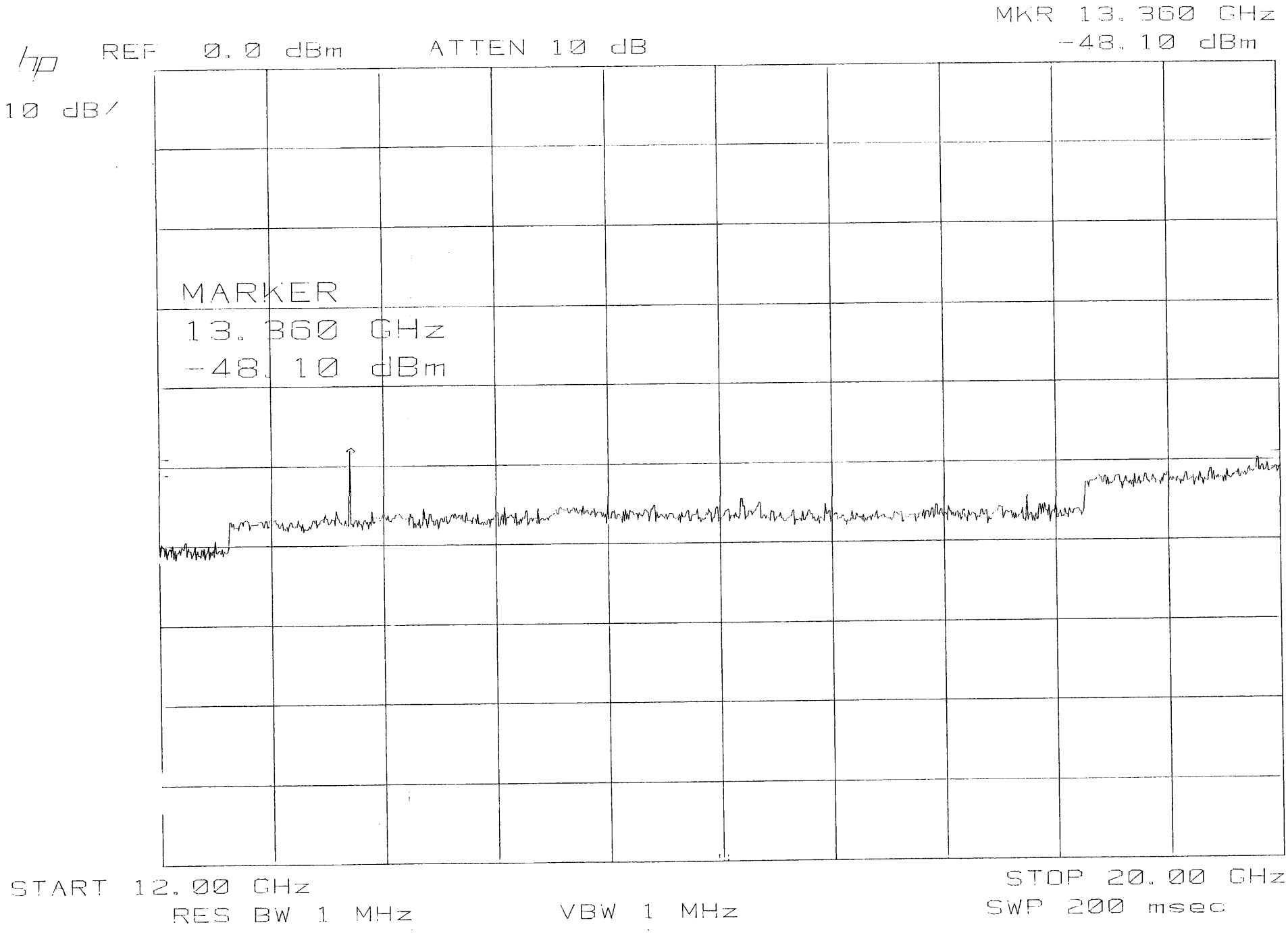

MkR 3.756 GHz
-25.80 dBm
REF 0.0 dBm
ATTEN 10 dB
10 dB/
MARKER
3.756 GHz
-25.80 dBm
START 2.00 GHz
RES BW 1 MHz
VBW 1 MHz
STOP 6.00 GHz
SWP 100 msec


MKR 7.512 GHz
-30.50 dBm
REF 0.0 dBm
ATTEN 10 dB
10 dB/
MARKER
7.512 GHz
-30.50 dBm
START 6.00 GHz
RES BW 1 MHz
VBW 1 MHz
STOP 12.00 GHz
SWP 150 msec


MKR 13.152 GHz
-53.80 dBm
REF 0.0 dBm
ATTEN 10 dB
10 dB/
MARKER
13.152 GHz
-53.80 dBm
START 12.00 GHz
RES BW 1 MHz
VBW 1 MHz
STOP 20.00 GHz
SWP 200 msec


MKR 3.816 GHz
-27.60 dBm
REF 0.0 dBm
ATTEN 10 dB
10 dB/
MARKER
3.816 GHz
-27.60 dBm
START 2.00 GHz
STOP 6.00 GHz
RES BW 1 MHz
VBW 1 MHz
SWP 100 msec


MKR 7.632 GHz
-46.80 dBm
REF 0.0 dBm
ATTEN 10 dB
10 dB/
MARKER
7.632 GHz
-46.80 dBm
START 6.00 GHz
RES BW 1 MHz
VBW 1 MHz
STOP 12.00 GHz
SWP 150 msec


MKR 13.360 GHz
-48.10 dBm
REF 0.0 dBm
ATTEN 10 dB
10 dB/
MARKER
13.360 GHz
-48.10 dBm
START 12.00 GHz
RES BW 1 MHz
VBW 1 MHz
STOP 20.00 GHz
SWP 200 msec