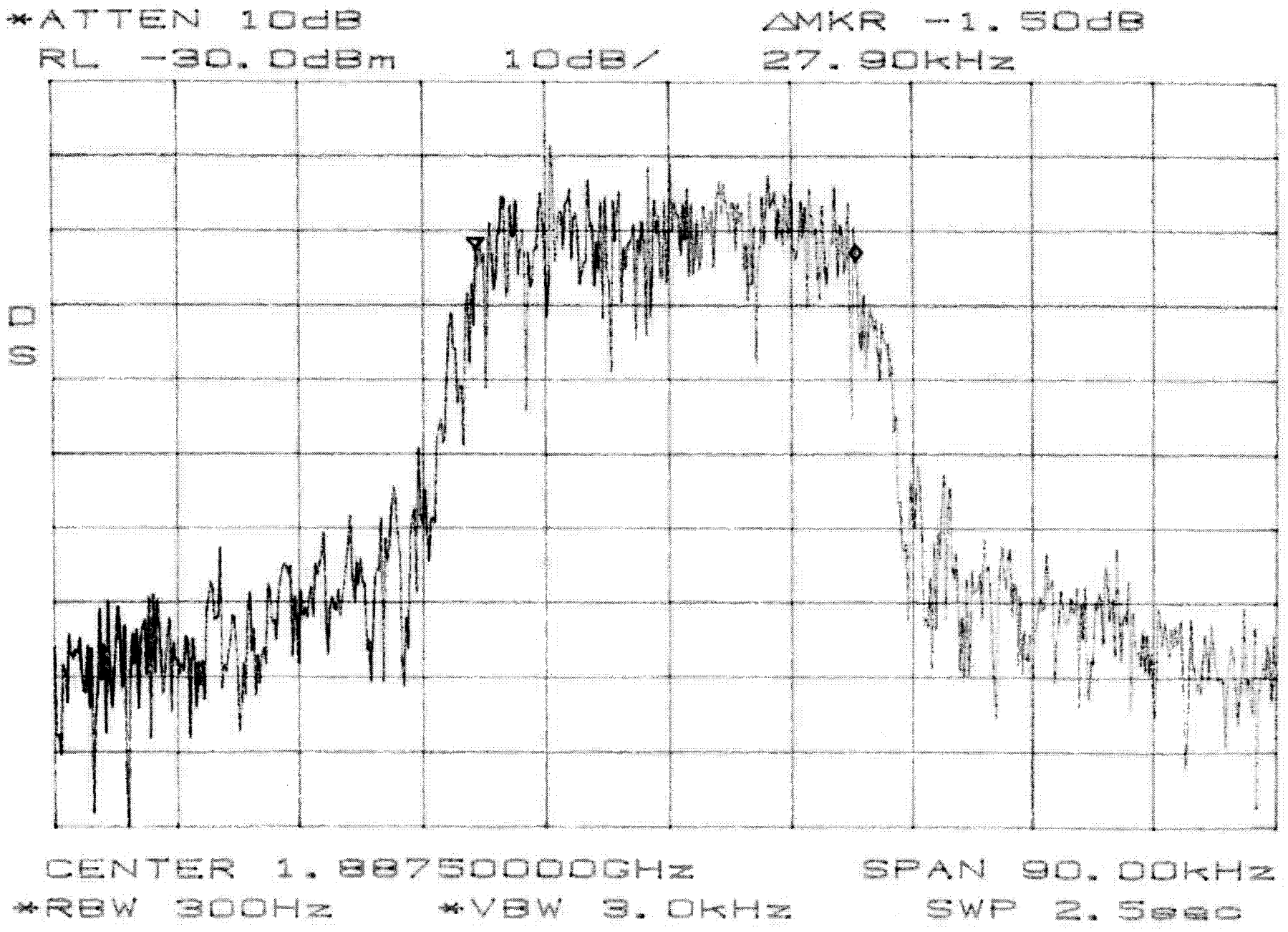
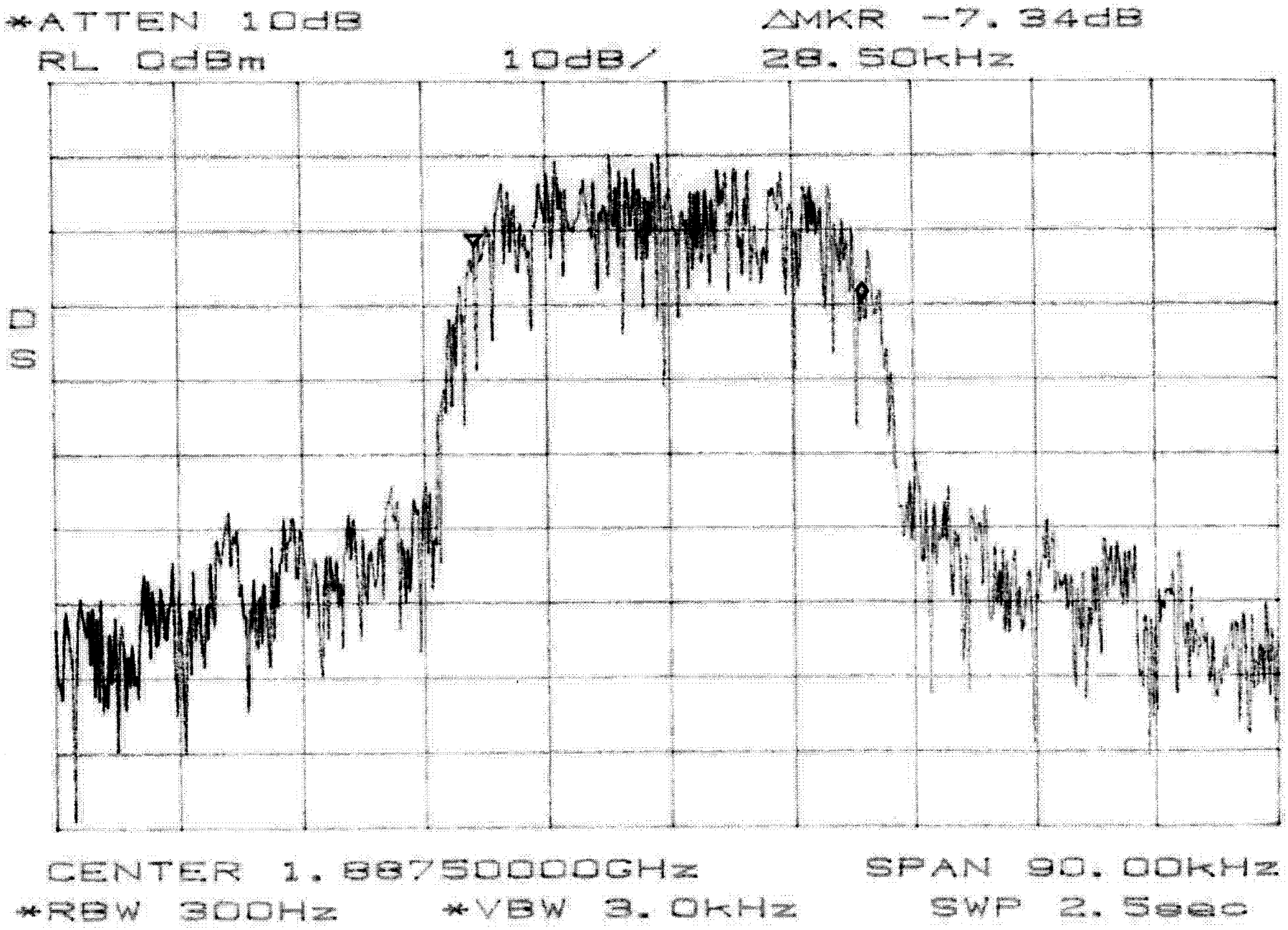
BAND E
OCC BW

TDMA IN



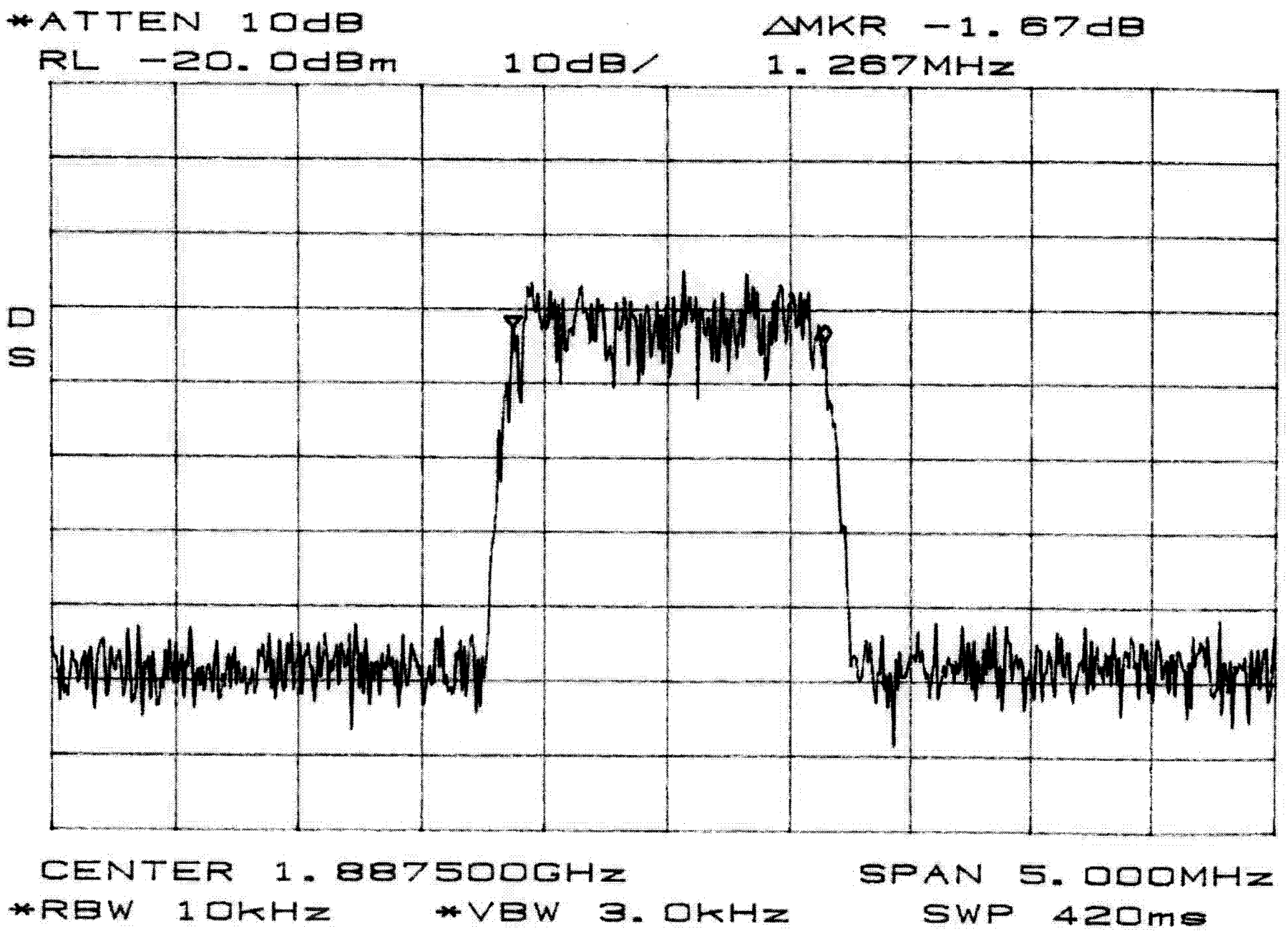
BAND E
OCC BW

TDMA OUT



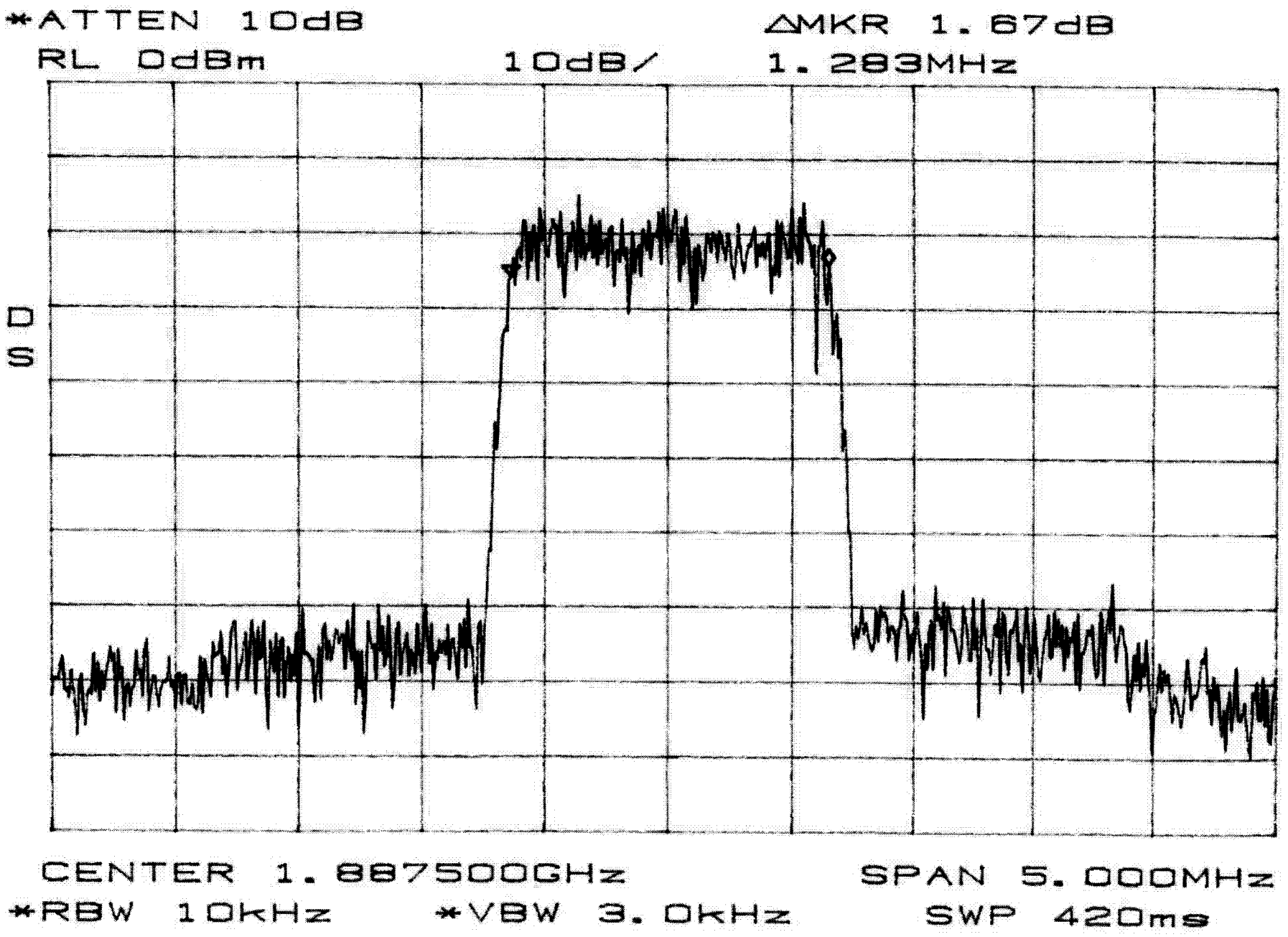
BAND E
OCC BW

CDMA IN



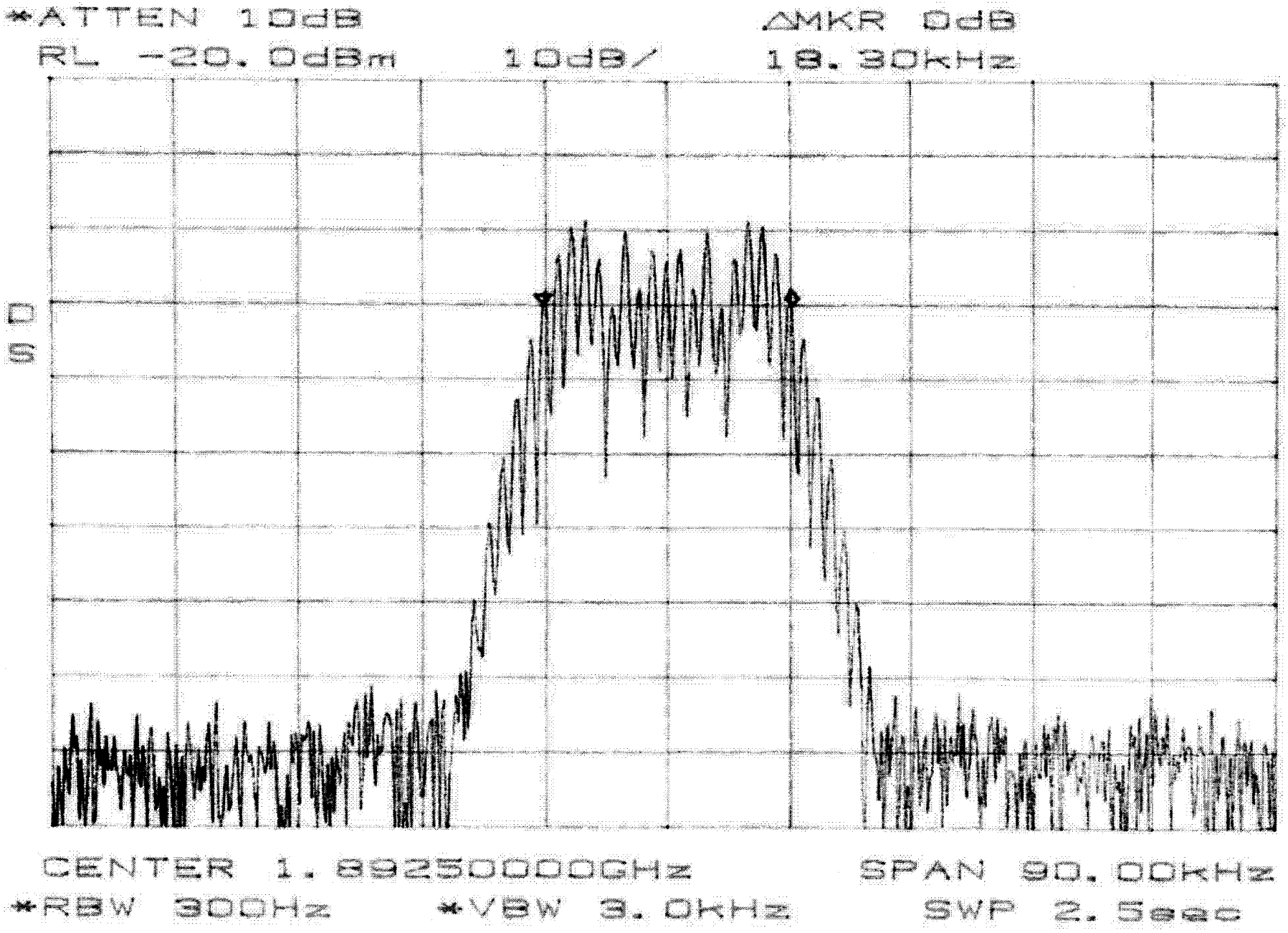
BAND E
OCC BW

CDMA OUT



BAND F
Occ Bw

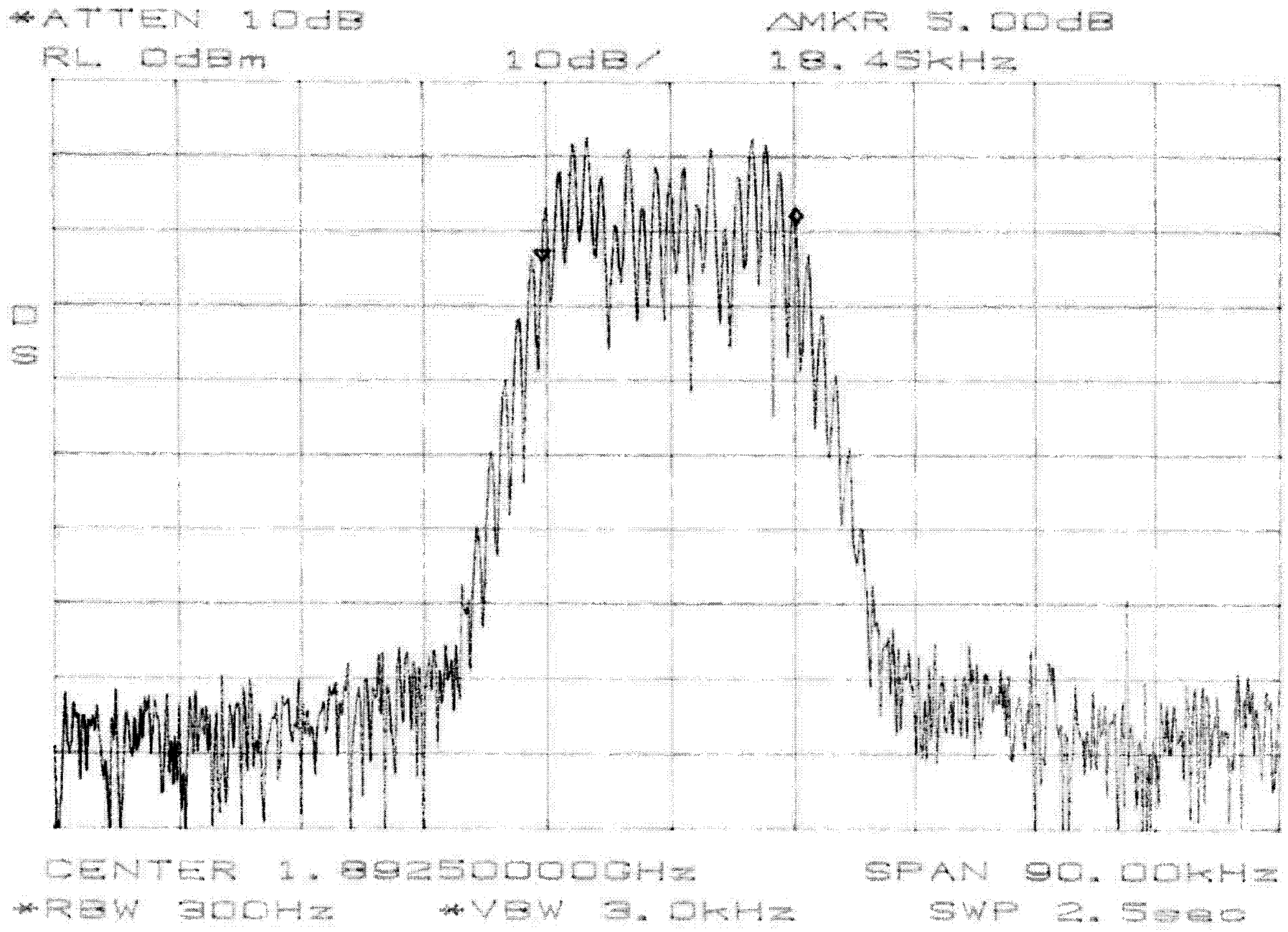
FM IN



BAND F

FM OUT

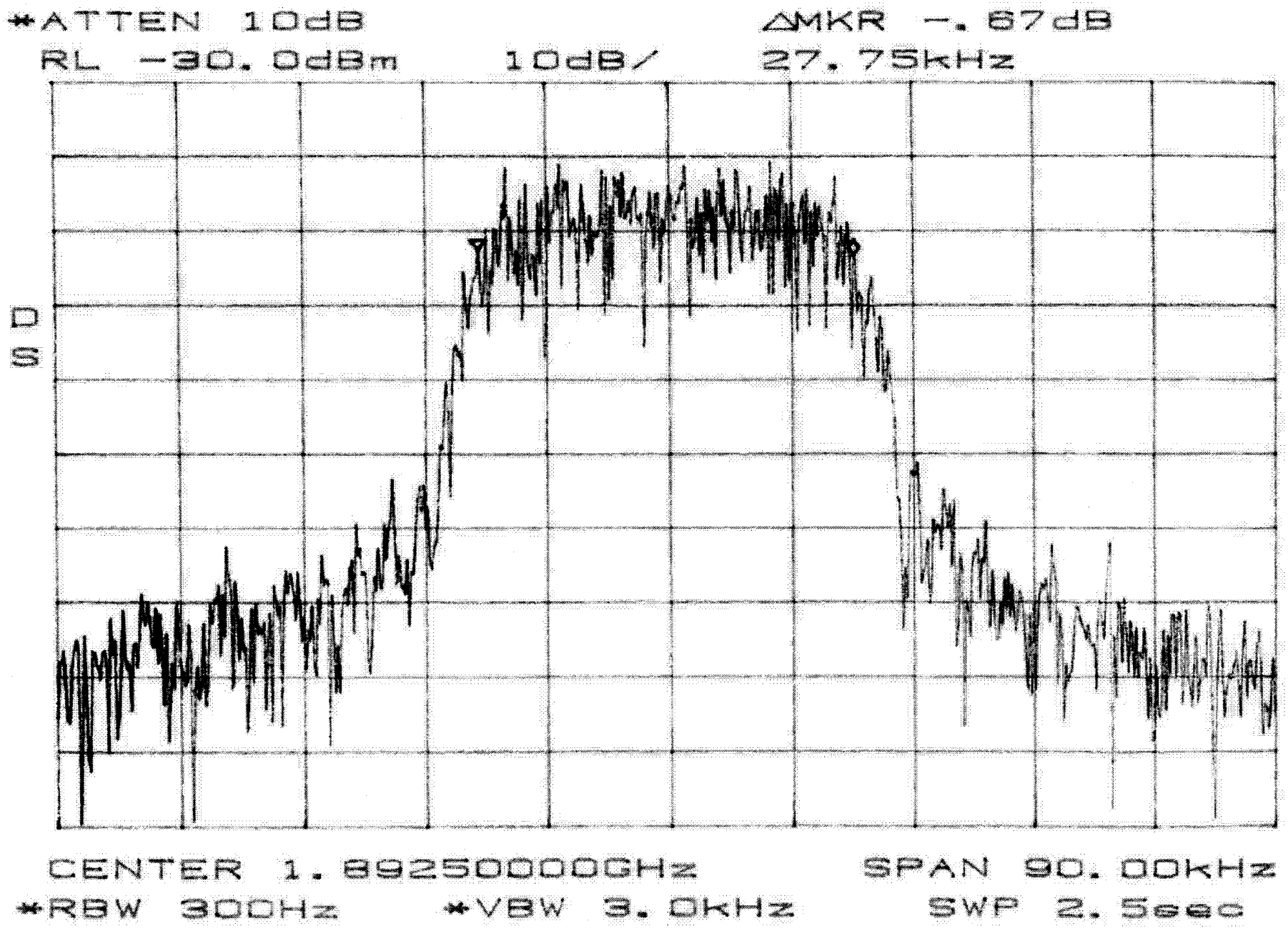
occ Bw



BAND F

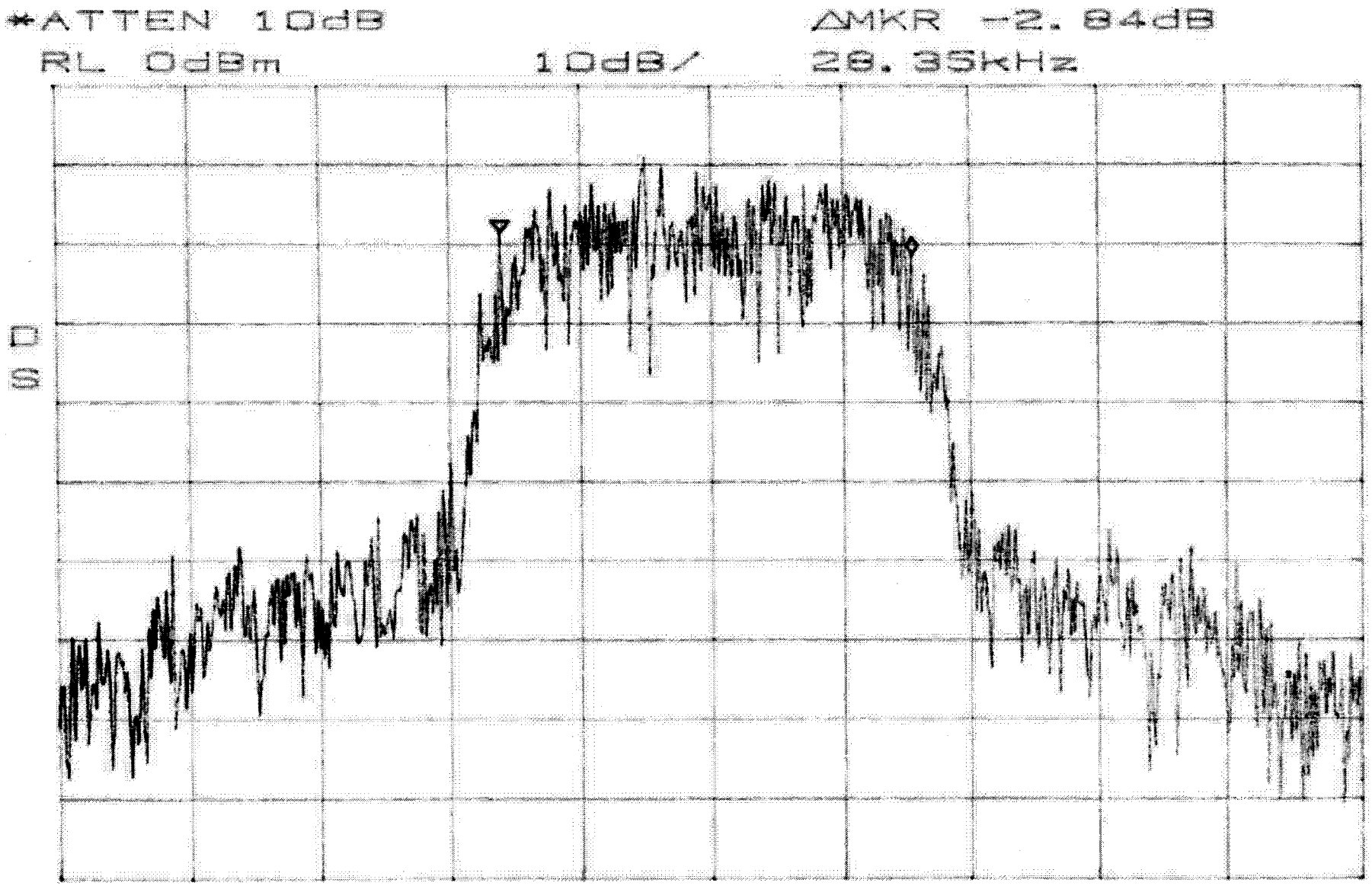
TDMA IN

Occ Bw



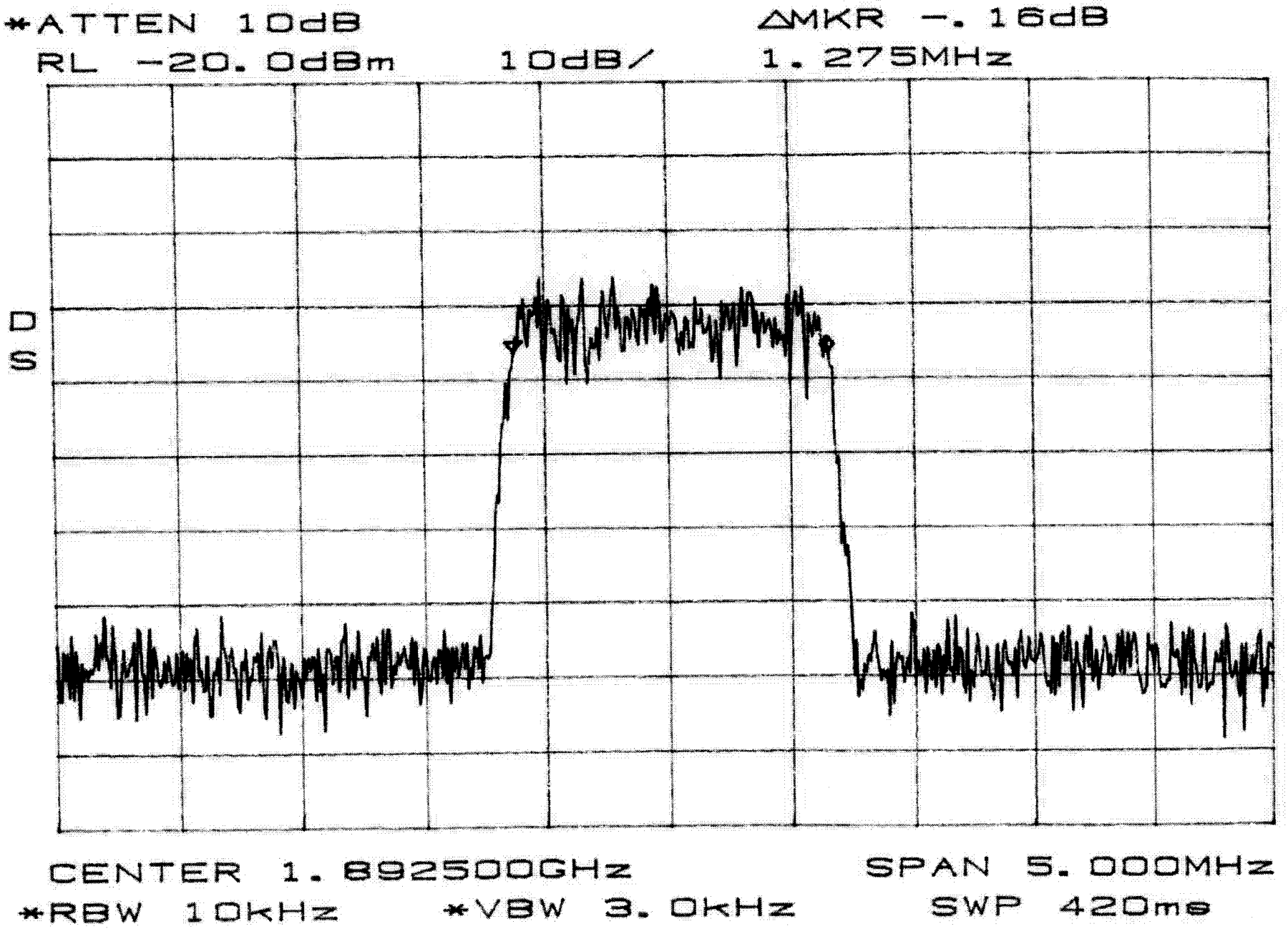
BAND F
OCC BW

TDMA OUT



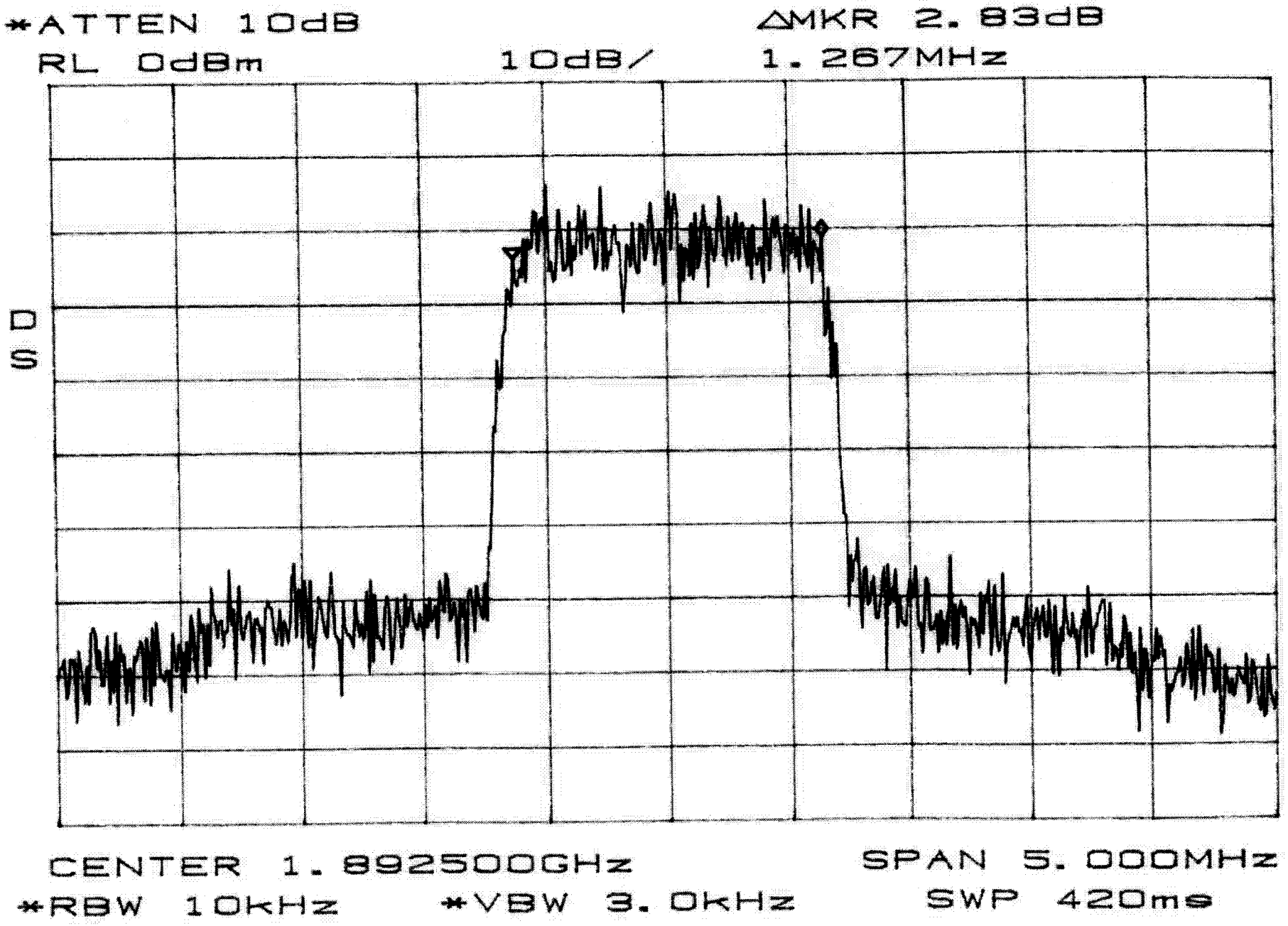
BAND F
OCC BW

CDMA IN



BAND F
OCC BW

CDMA OUT



24.238 Emission Limits

The Emission limitations for cellular measurements were performed at the following test location :

■ - ADC facility
■ - Wild River Lab Large Test Site (Case Emissions Test)

TÜV Product Service Test equipment used for Case Emissions Test:

	TUV ID	Model Number	Manufacturer	Description	Serial Number	Cal Due
■ -	3202	EM-6917B	Electro-Metrics	Biconicalog Periodic	102	24 Sept 02
■ -	2075	3115	Electro-Mechanics (EMCO)	Ridge Guide Ant. 1-18 GHz	9001-3275	20 Oct 02
■ -	2865	11867A	Hewlett-Packard	RF Limiter	01972	Code B
■ -	2543	ZHL-1042J	Hewlett-Packard	Preamplifier 1-4 GHz	HO72294-11	Code B
■ -	2477	AFT-8434	Avantek	Preamplifier 4-8 GHz	2613A92801	21 Mar 02
■ -	2478	AWT-18037	Avantek	Preamplifier 8-18 GHz	1001-9226	21 Mar 02
■ -	2690	8566B	Hewlett-Packard	Spectrum Analyzer	2430A00930	19 Nov 02
■ -	2678	85662A	Hewlett-Packard	Analyzer Display	2403A08134	19 Nov 02
■ -	2684	85650A	Hewlett-Packard	Quasi-Peak Adapter	2521A01006	19 Nov 02

Cal Code B = Calibration verification performed internally. Cal Code Y = Calibration not required when used with other calibrated equipment.

All measurement instrumentation is traceable to the National Institute of Standards and Technology (NIST) and is calibrated annually. Equipment labeled CNR (Calibration Not Required) is verified and compensated for with NIST traceable calibrated equipment.

Emissions Limits Data on following pages

TÜV PRODUCT SERVICE INC 19333 Wild Mountain Road Taylors Falls MN 55084-1758 Tel: 651 638 0297 Fax: 651 638 0298 Rev.No 1.0

Conducted Emission Limits Test for ADC Inc. Digivance 1900 MHz RIU Models DGVI-310000RIU, DGVI-320000RIU, DGVI-330000RIU, DGVI-340000RIU, DGVI-350000RIU, and DGVI-360000RIU. Per FCC CFR 47 Part 24.238 Emission Limits

The out of band emissions were measured directly from the EUT antenna output with a spectrum analyzer from 30 MHz to the 10^{th} harmonic of the highest carrier frequency. Test signals used: CW, FM (1 kHz @ 8 kHz deviation), TDMA, and CDMA. The different signals were input one at a time to the EUT. In all cases, the out of band emissions were less than –13dBm from the equation

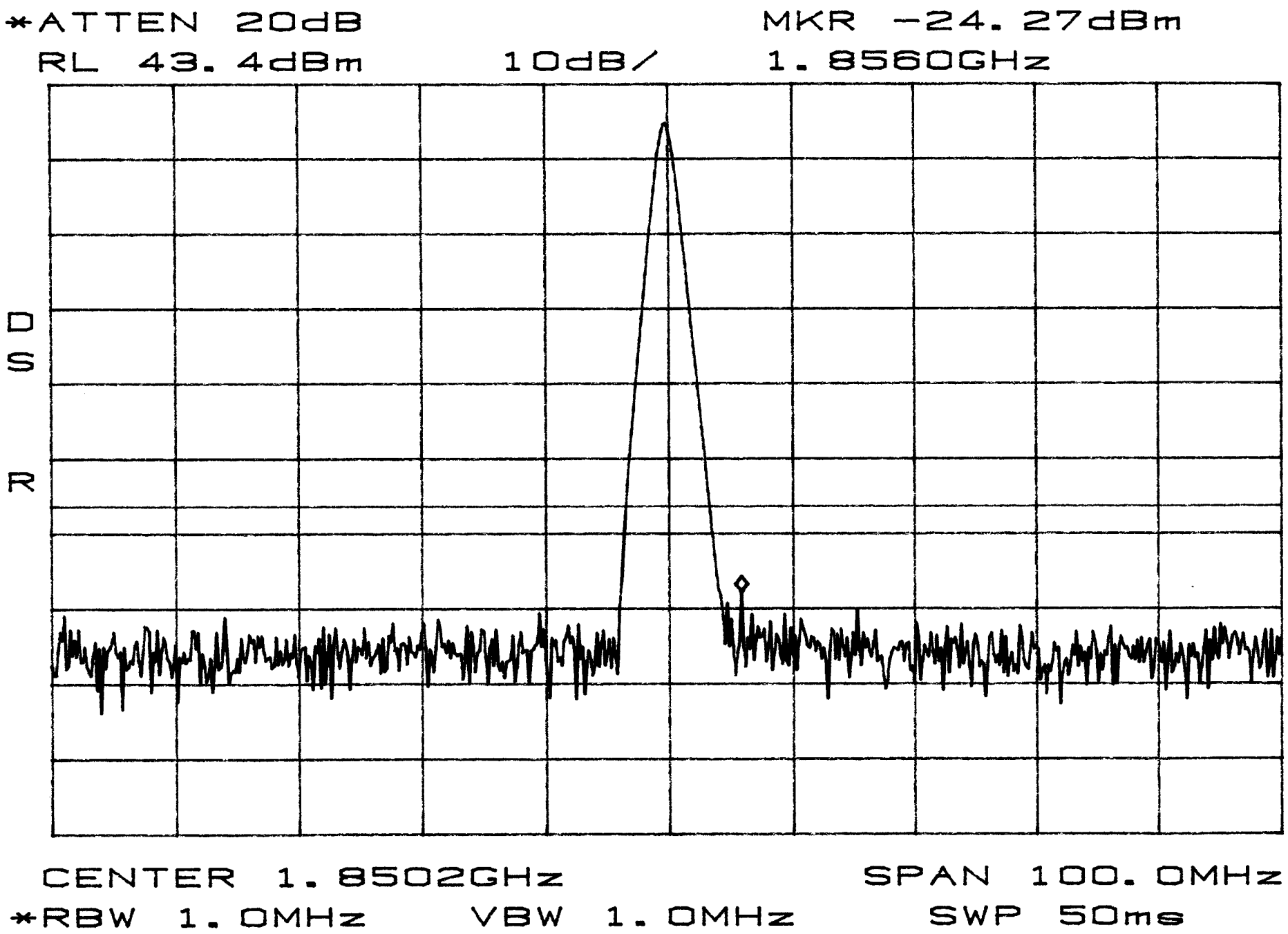
$$(19\text{dBm} - [43 + 10\log(0.08\text{W})])$$

Band edge compliance is also demonstrated using a CW signal at the upper and lower limits of the band and a resolution bandwidth of 300 Hz per 24.238 (b).

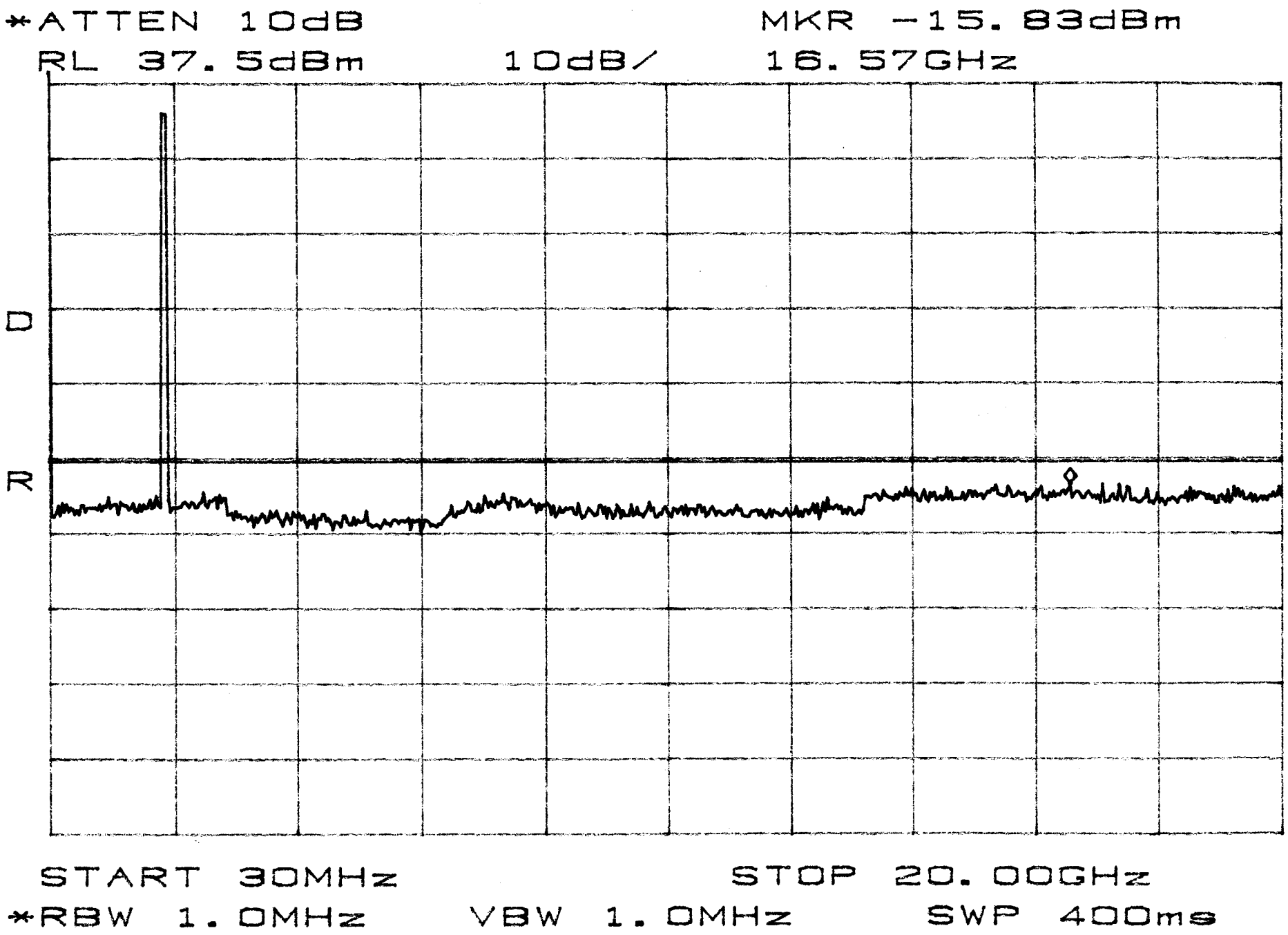
Results:

Pass (see plots)

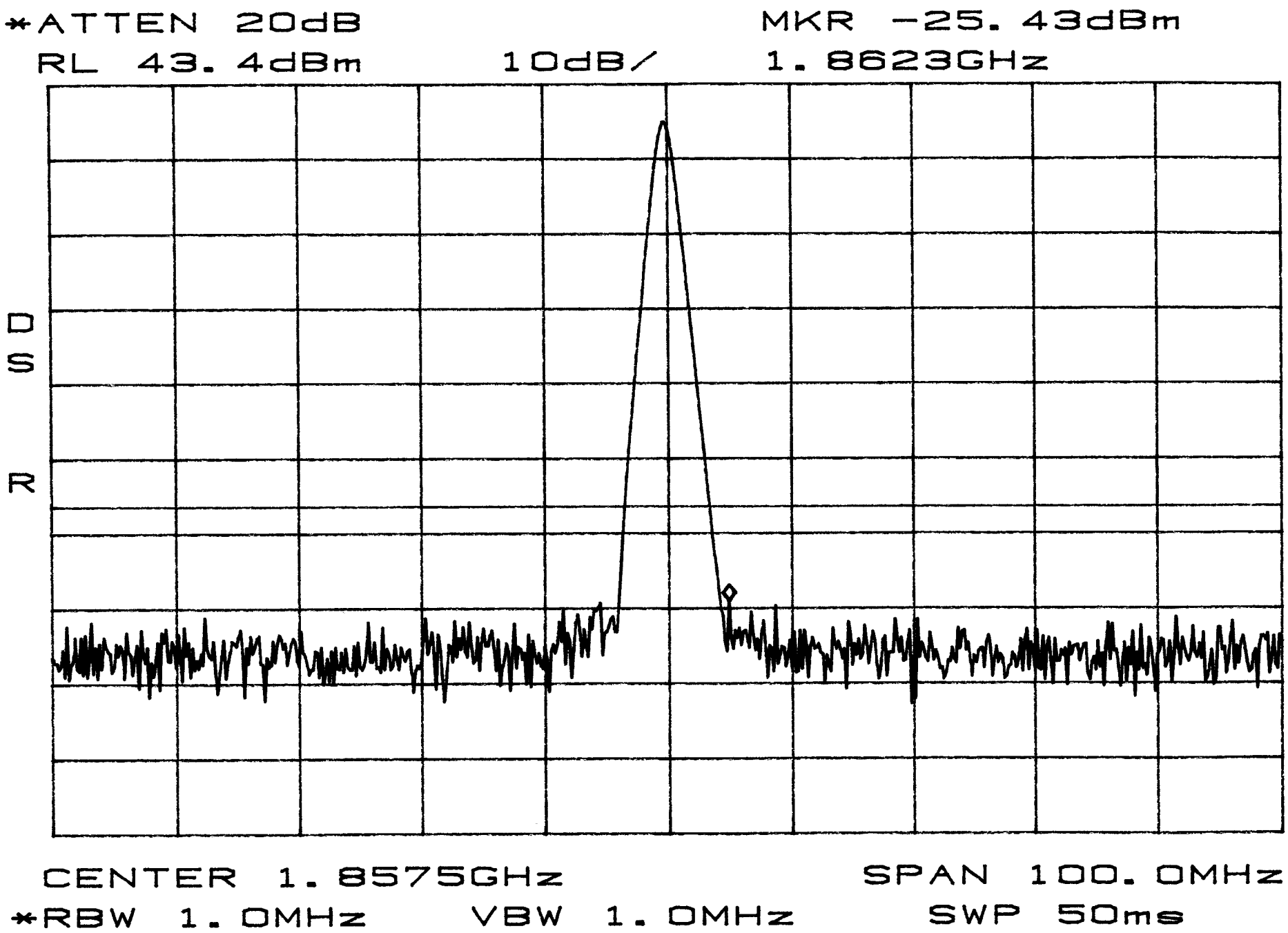
COND Emissions BAND A
LOW



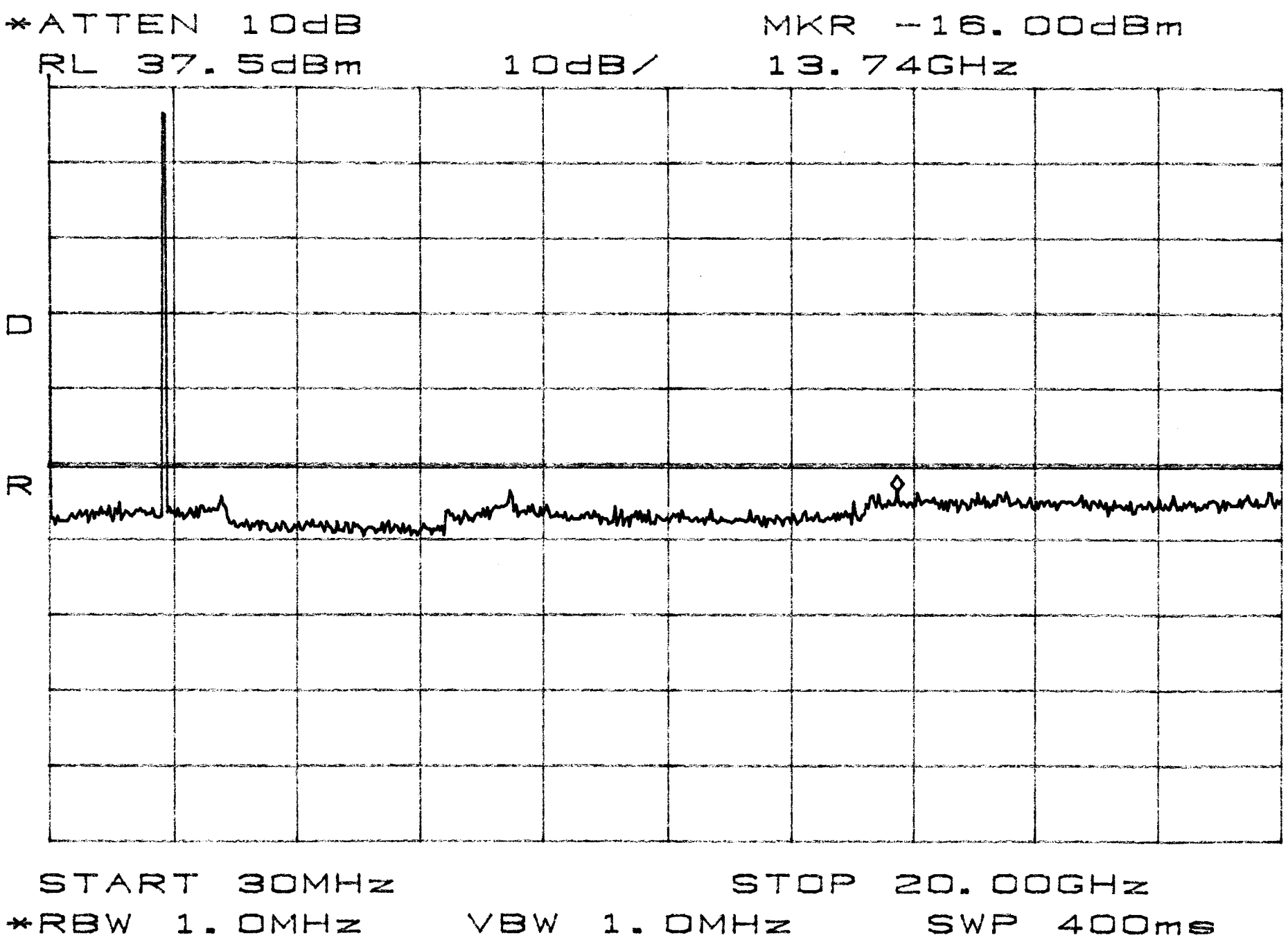
Cond Emissions BAND A
LOW



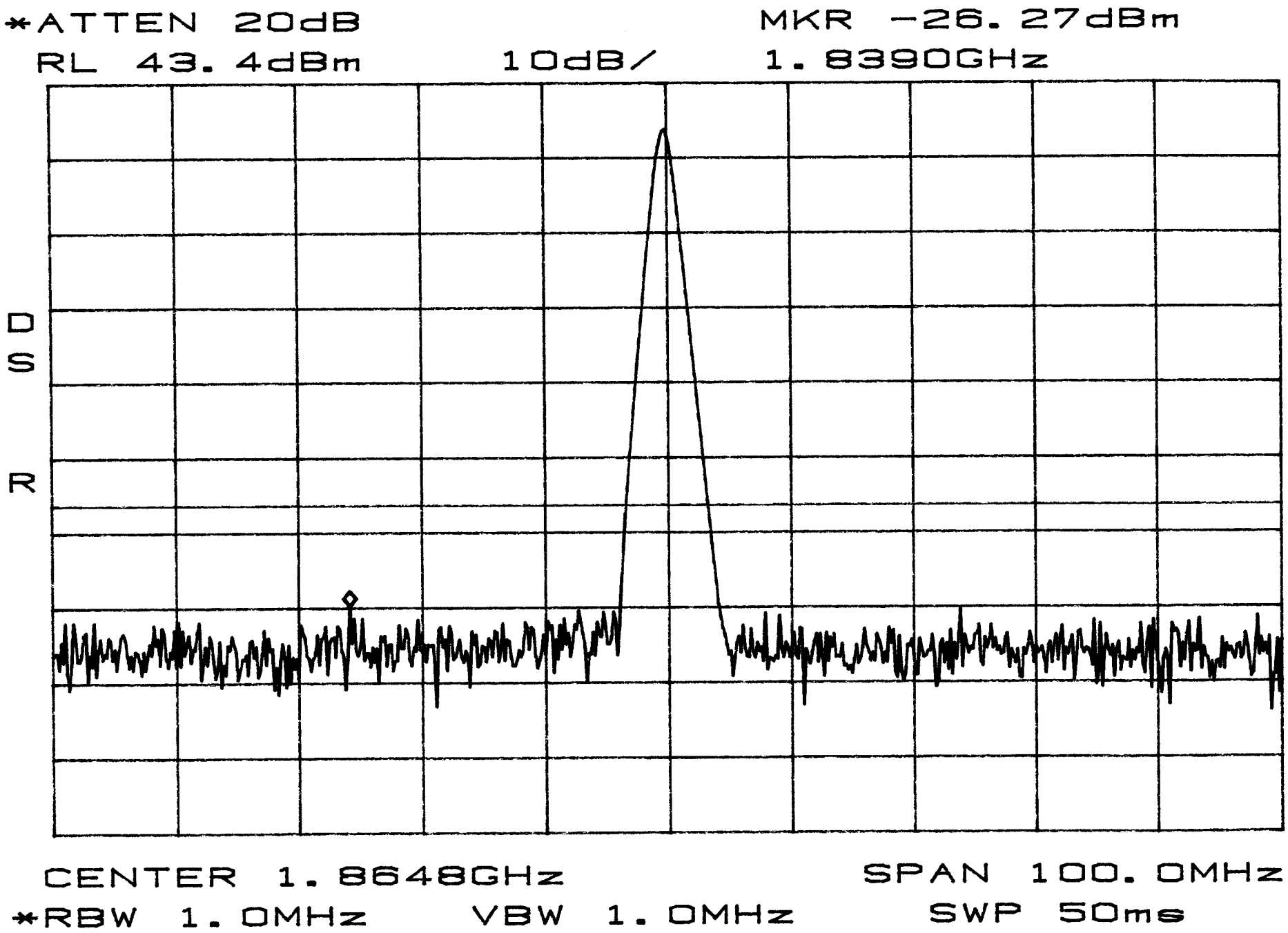
COND Emissions BAND A
mid



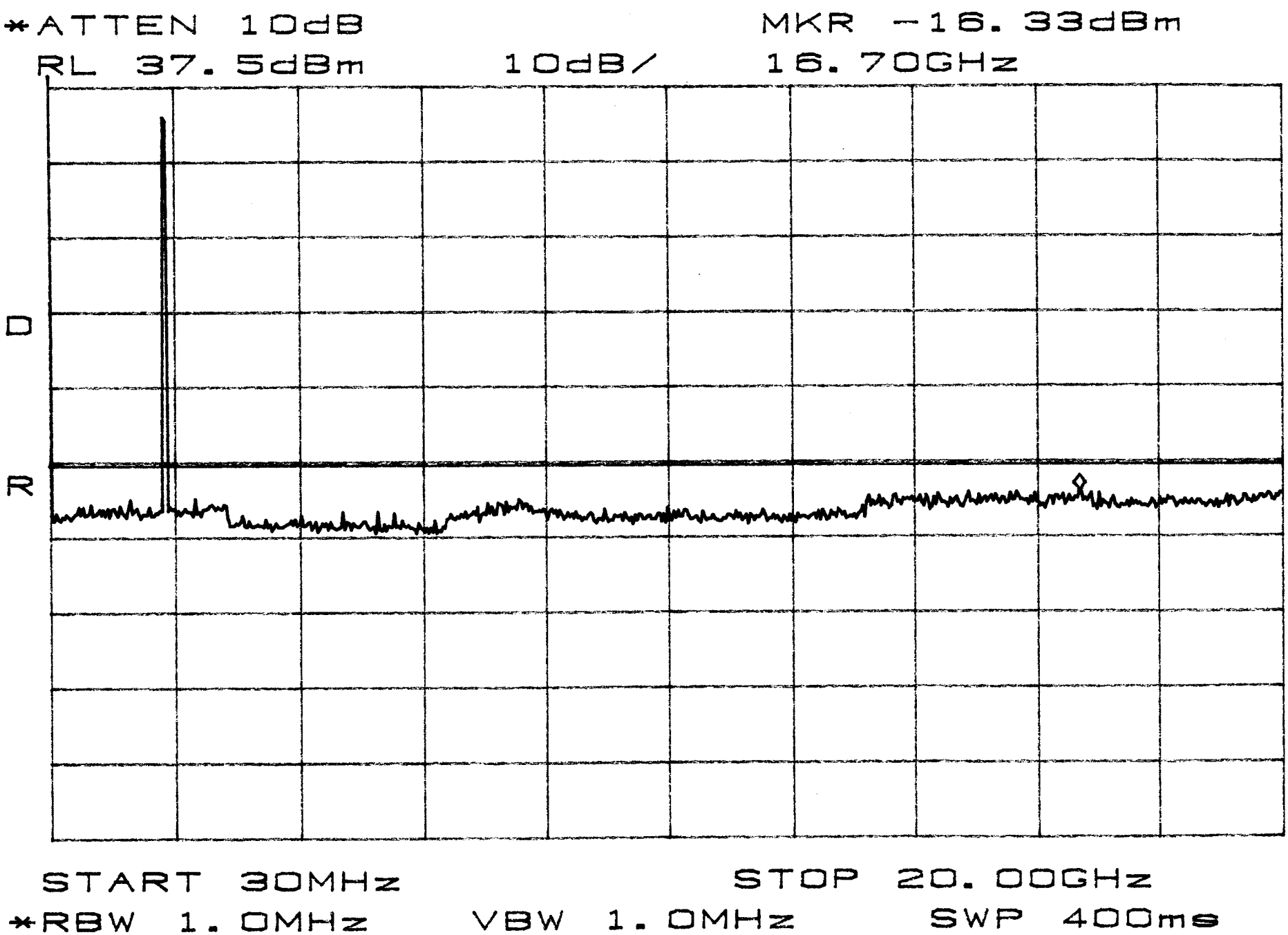
Cond Emissions BAND A
Mid



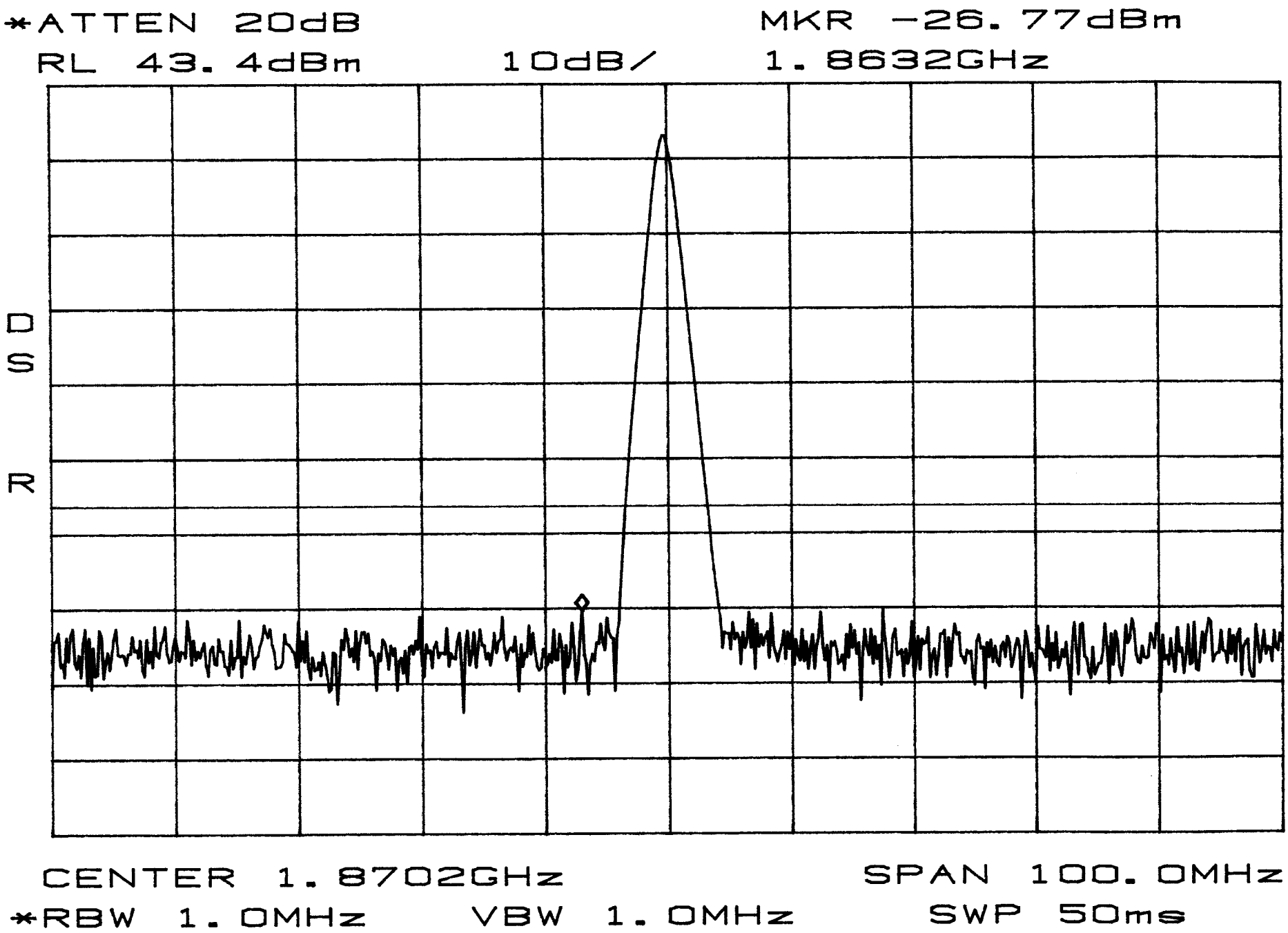
COND Emissions BAND A
High



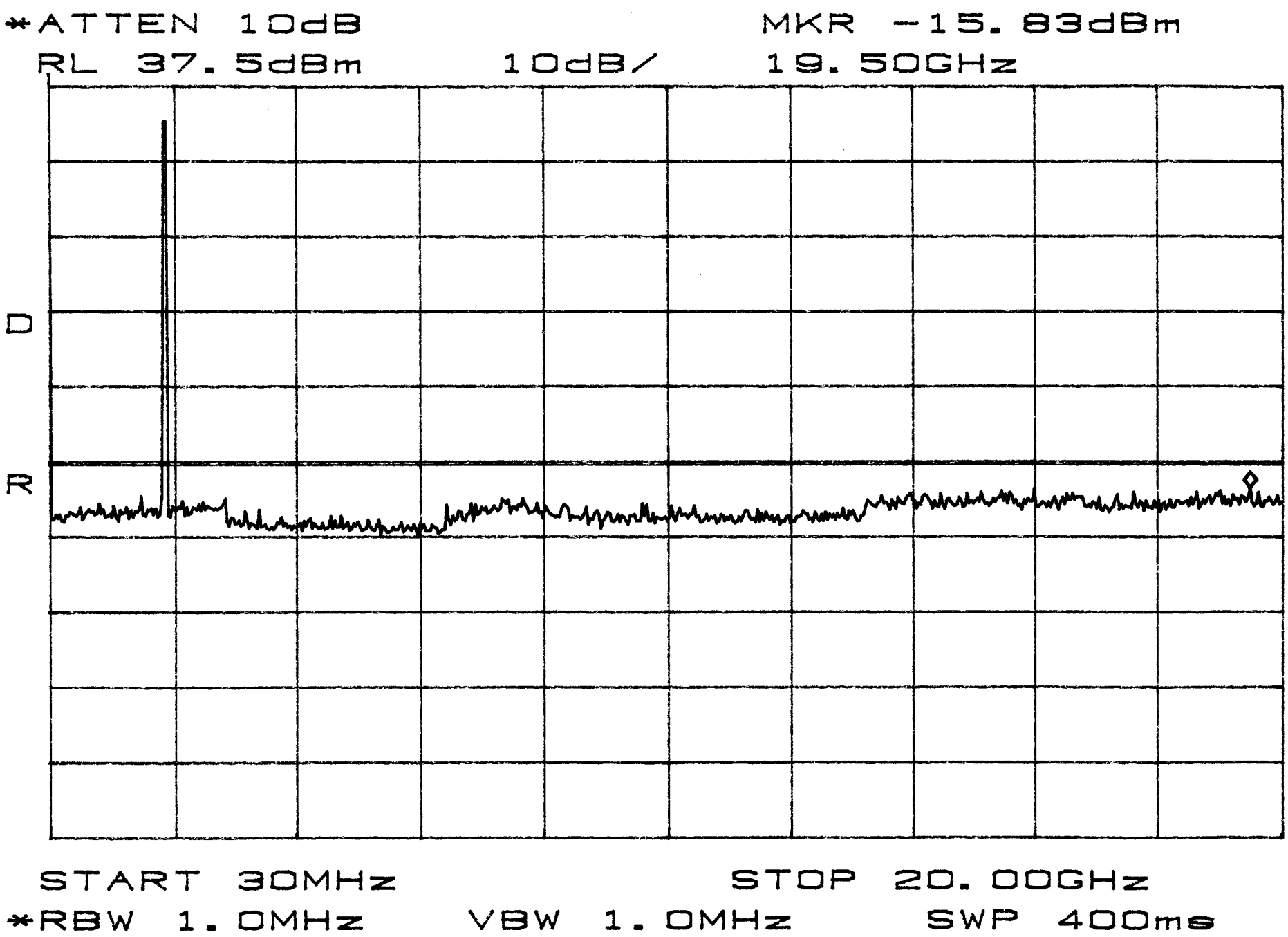
Cond Emissions BAND A
High



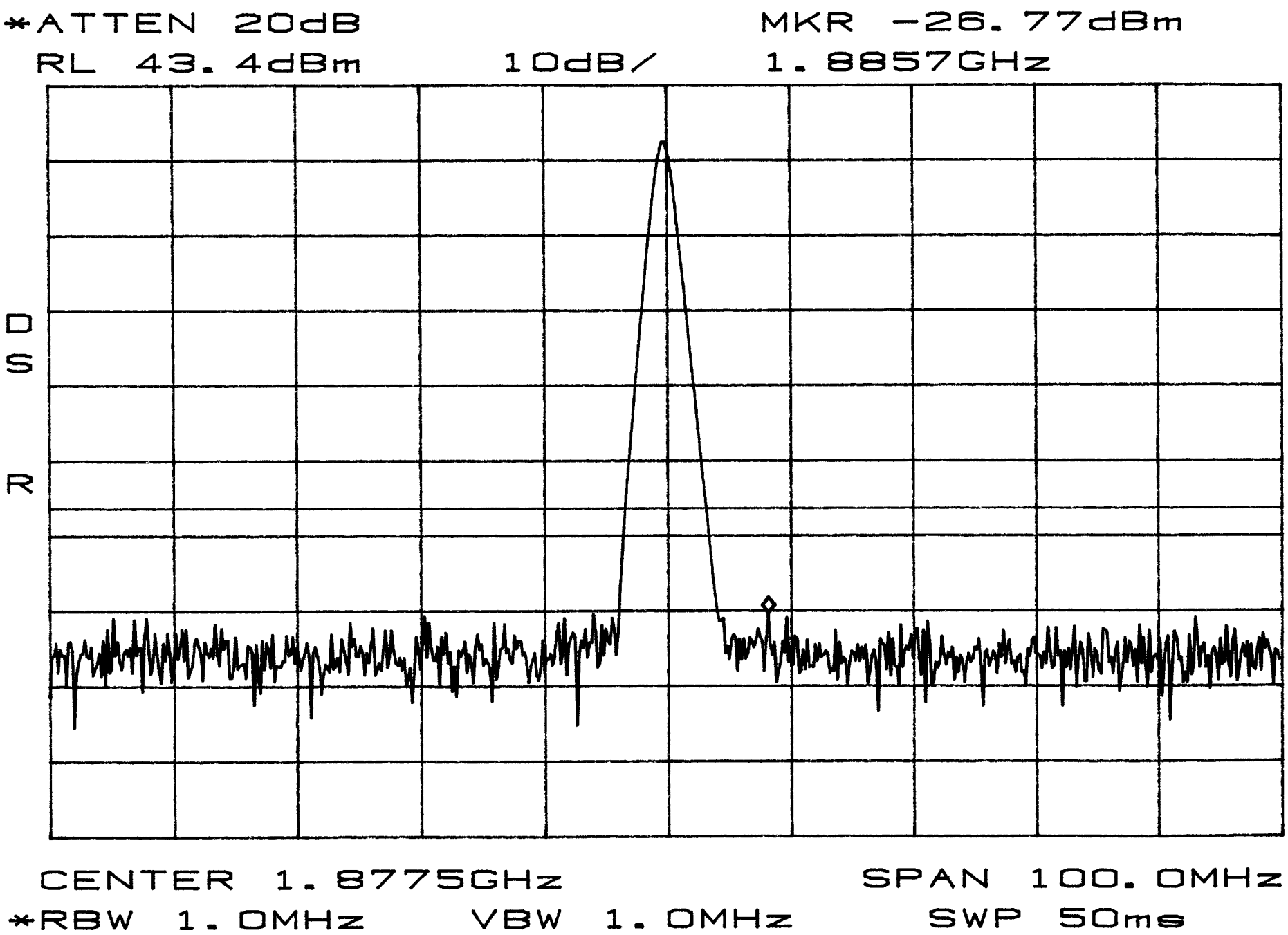
COND Emission BAND B
LOW



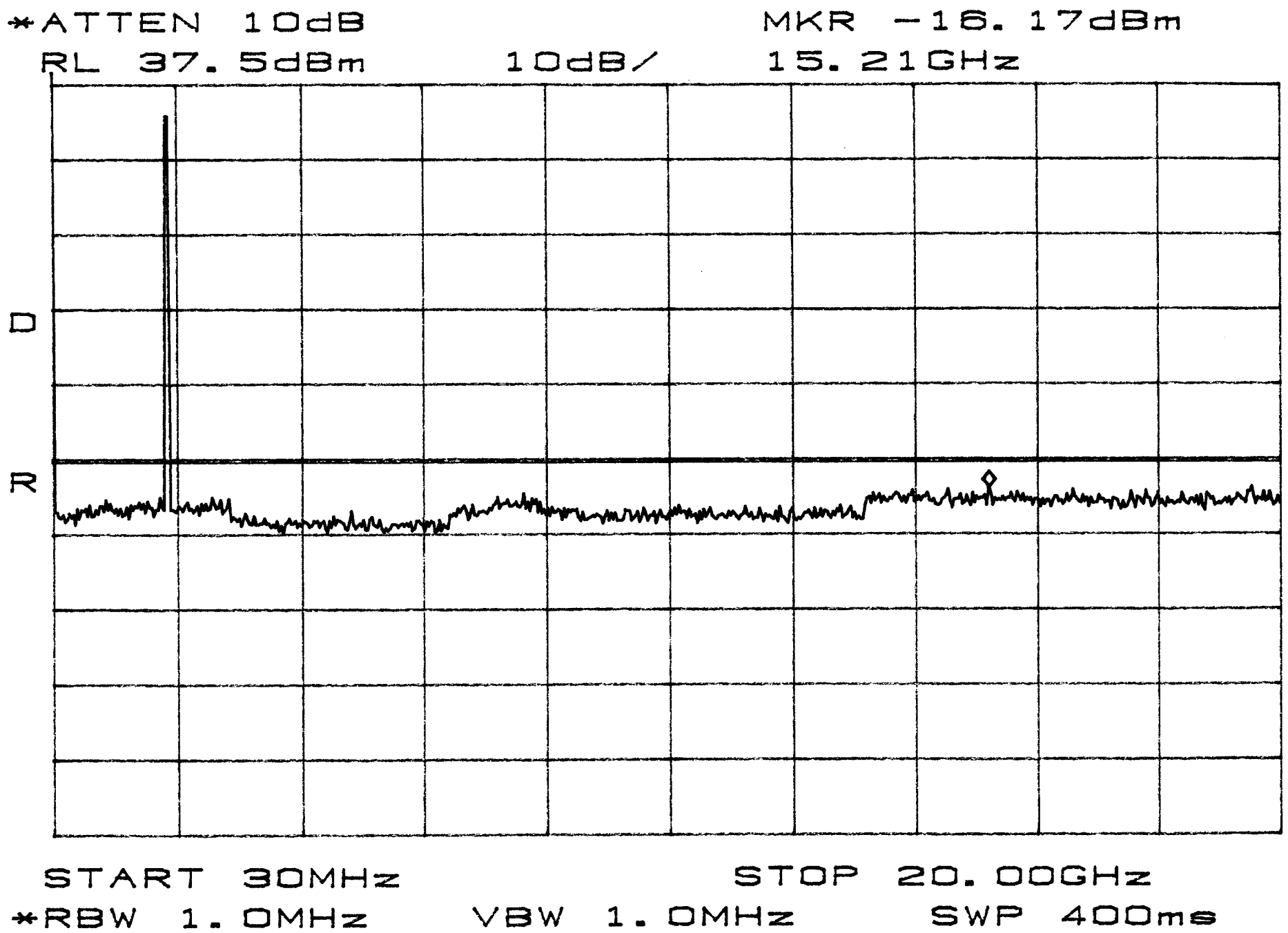
Cond Emissions BAND B
Low



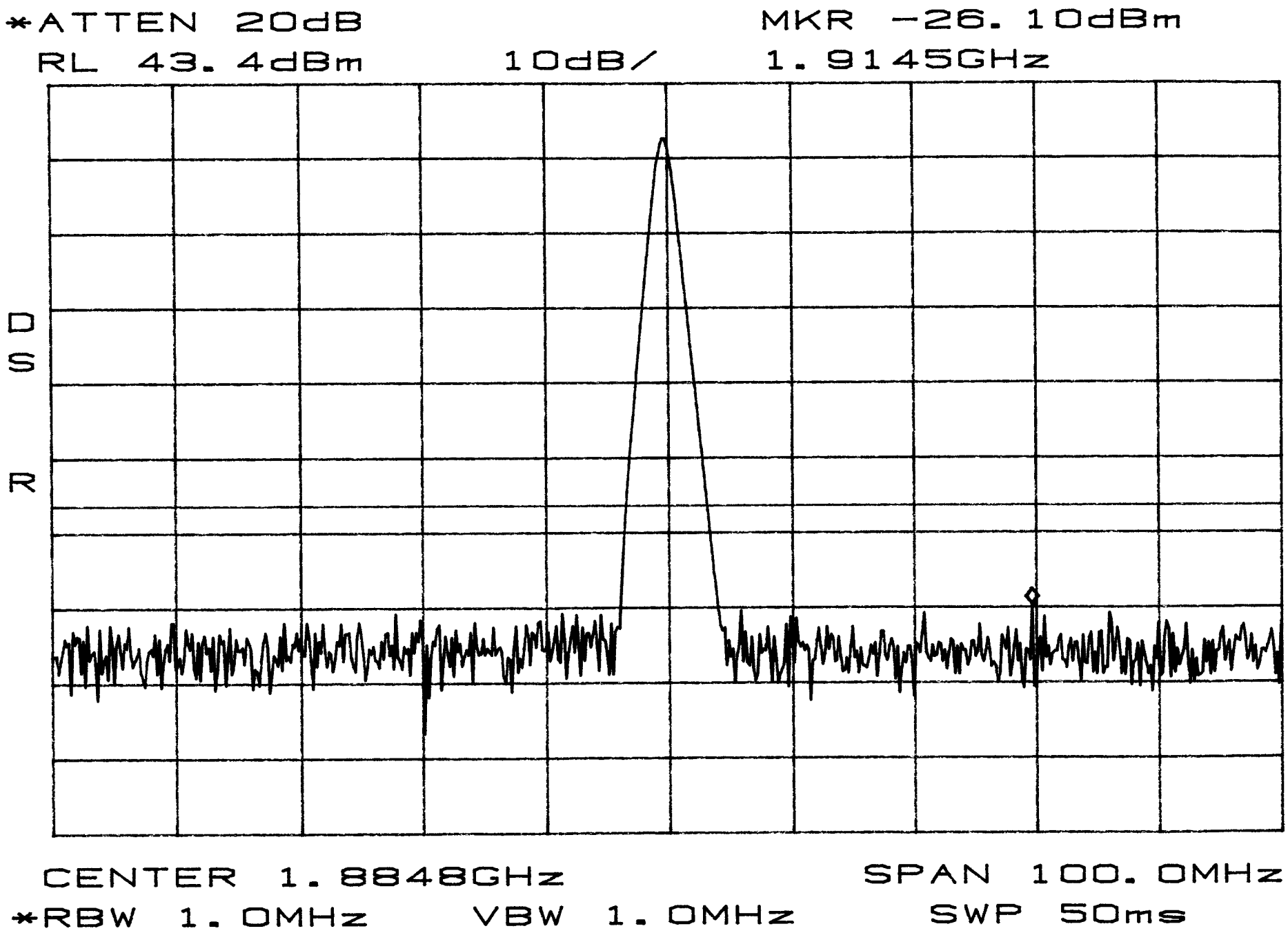
COND Emission BAND B
Med



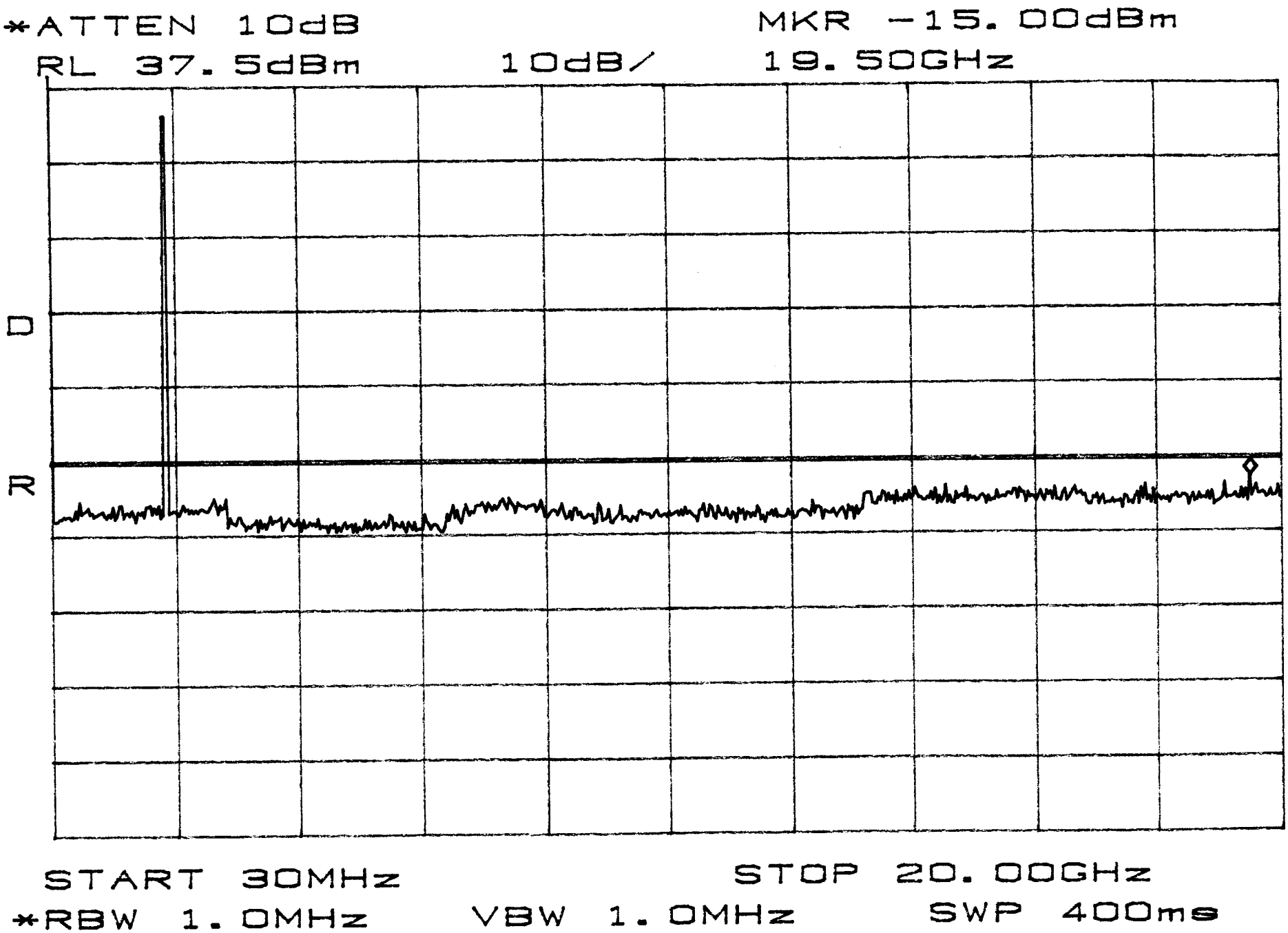
Cond Mid Emissions BAND B



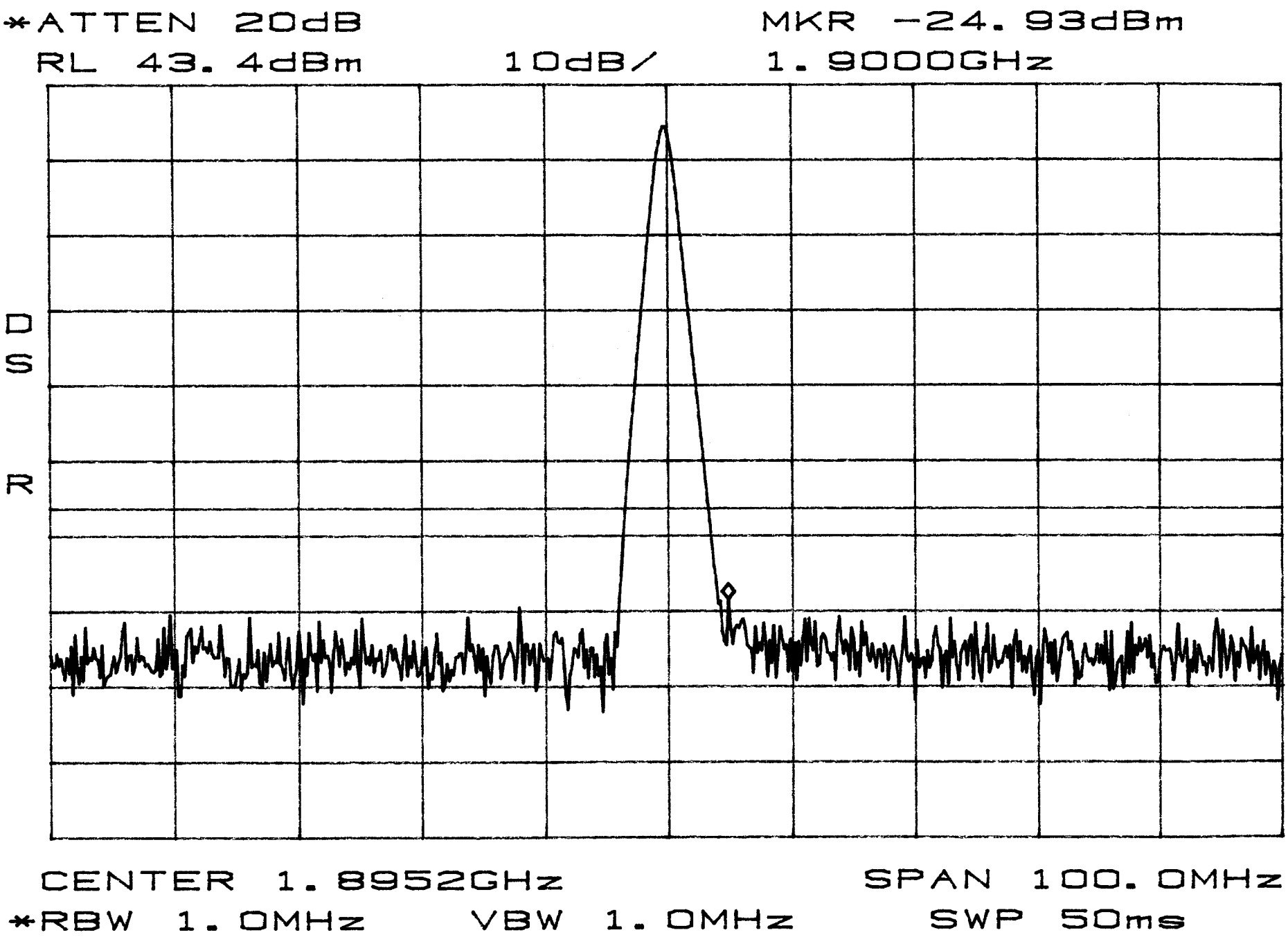
GOND Emission BAND B
High



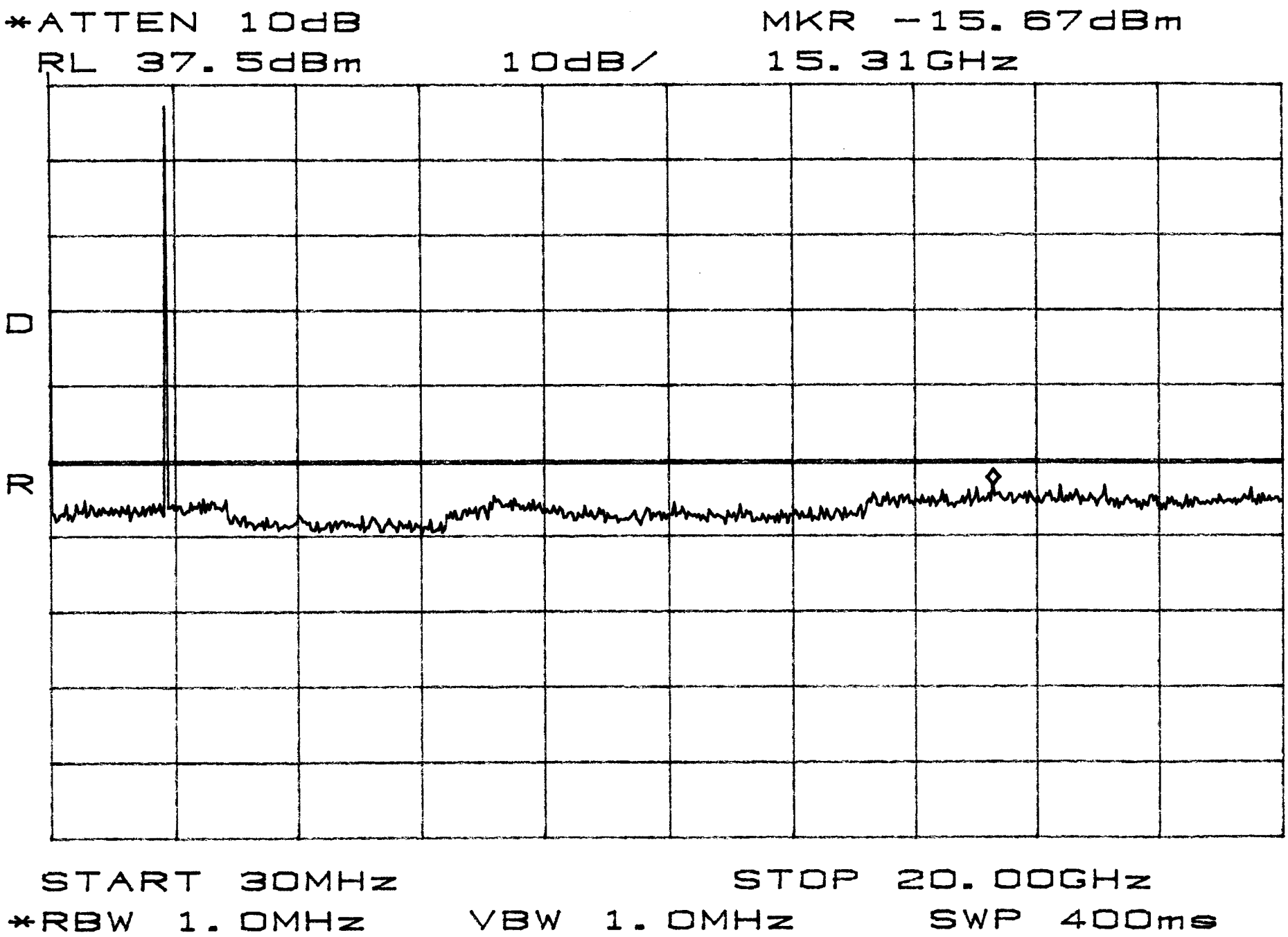
Cond Emissions BAND B
High



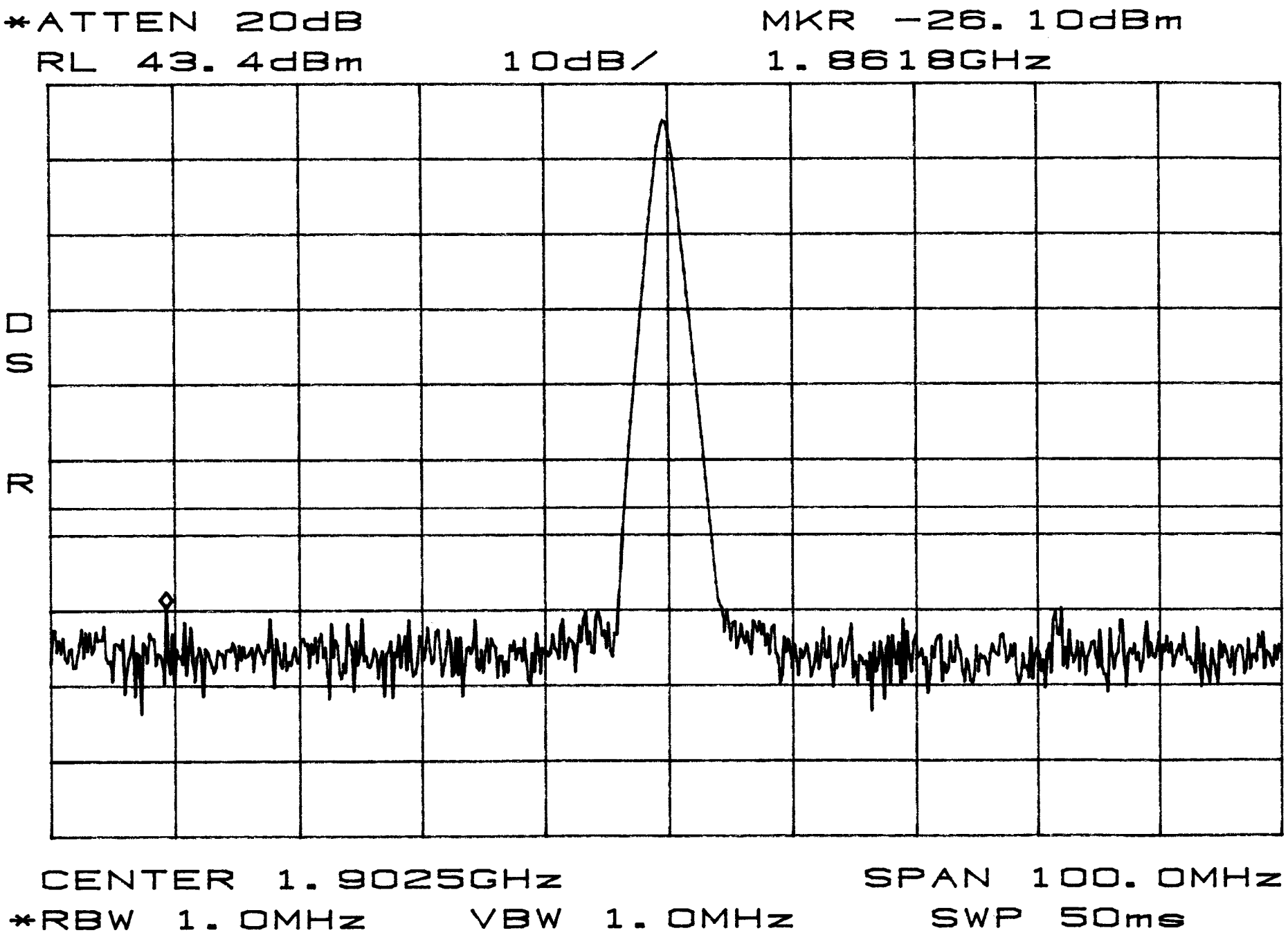
COND Emissions BAND C
LOW



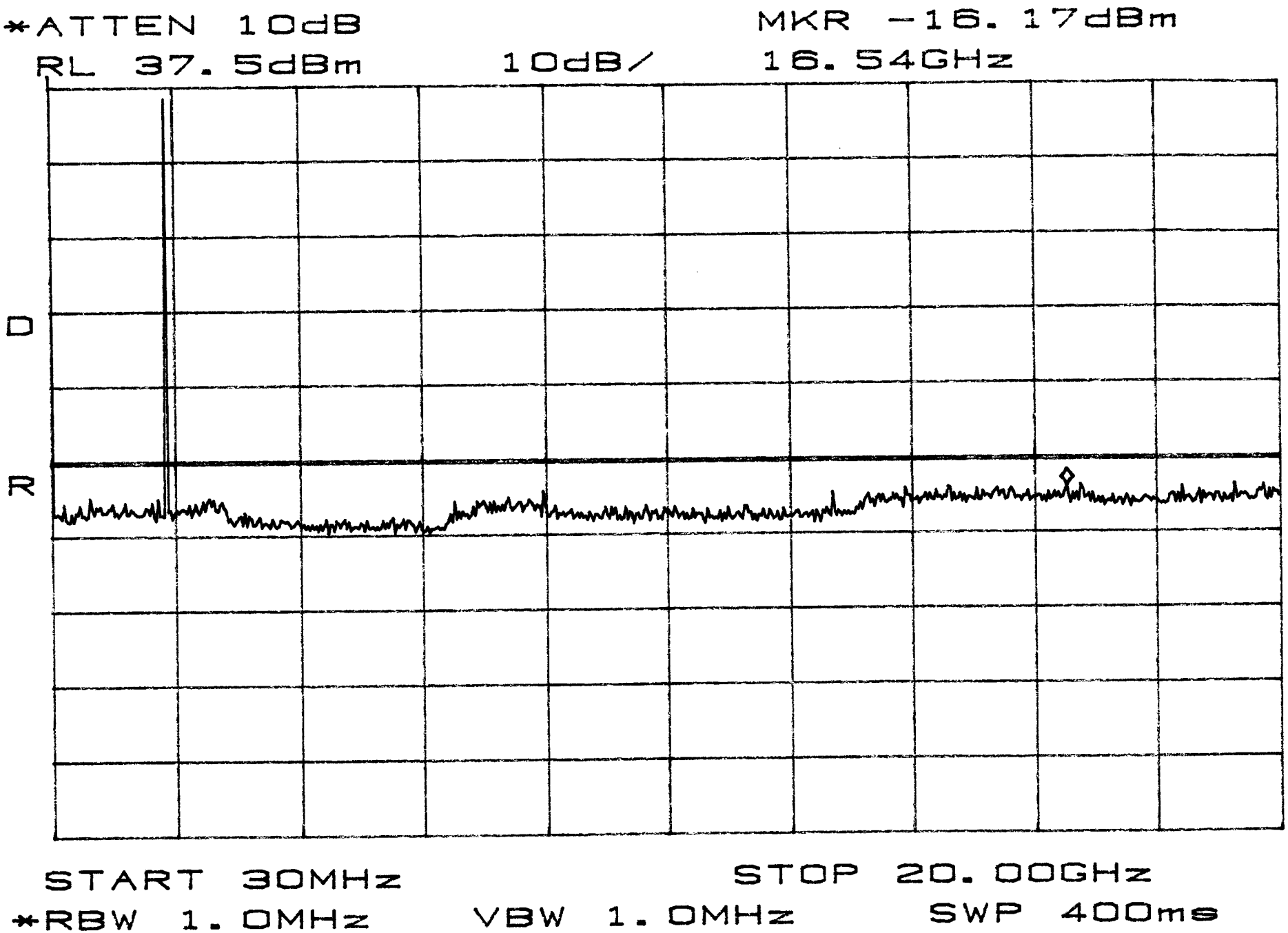
Cond Emissions BAND C
LOW



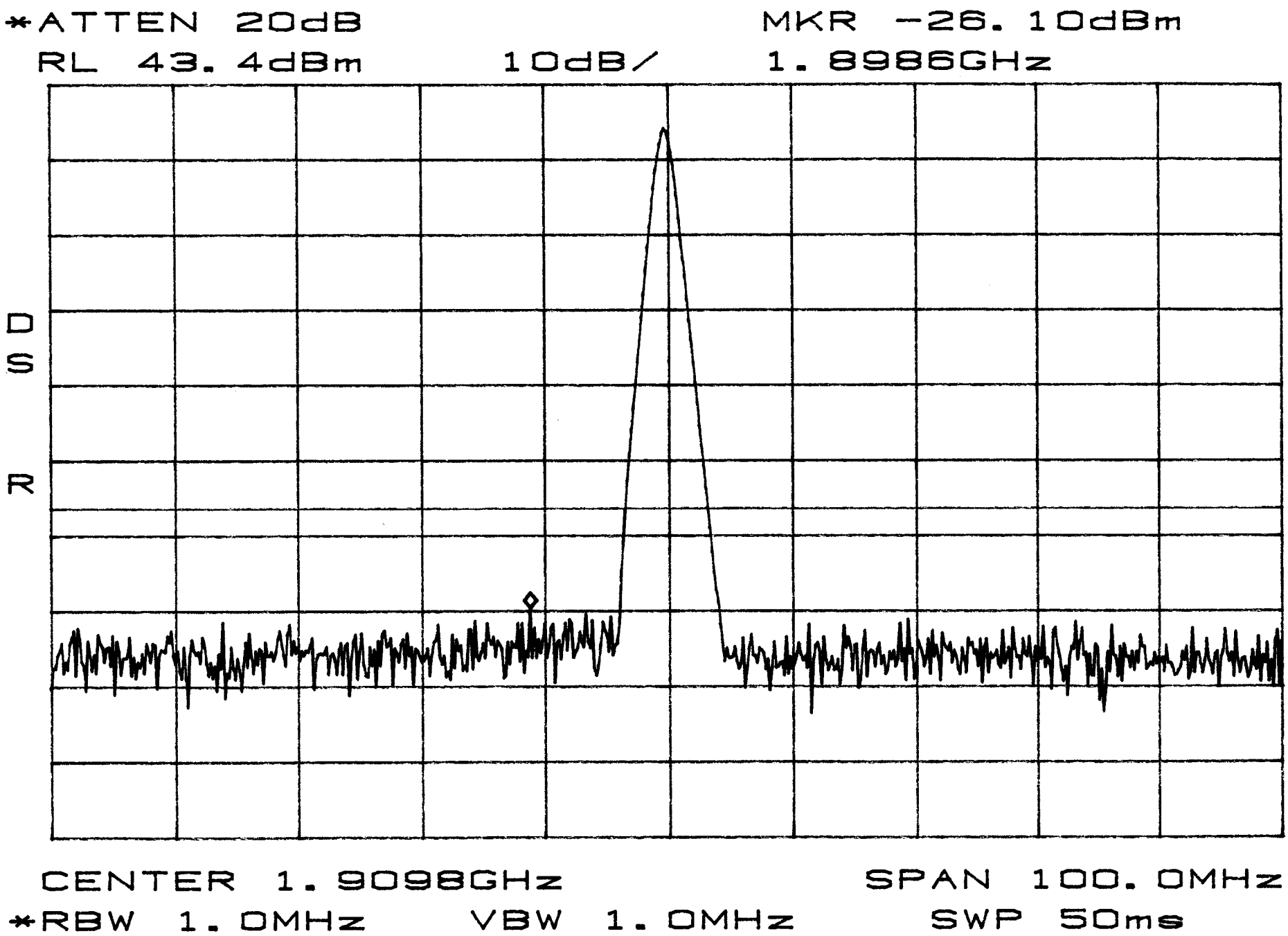
COND Emissions BAND C
mid



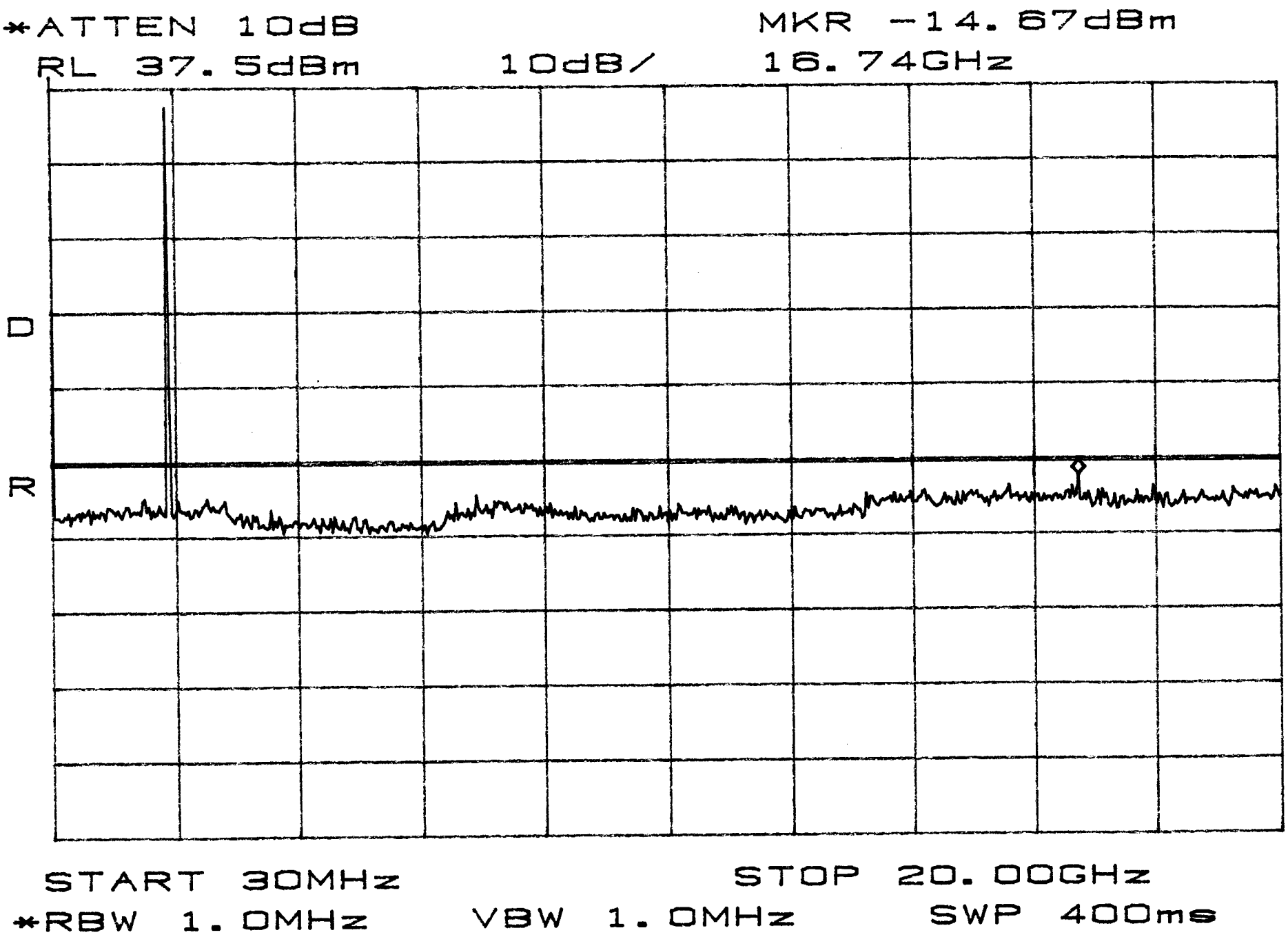
Cond Emissions BAND C
Mid



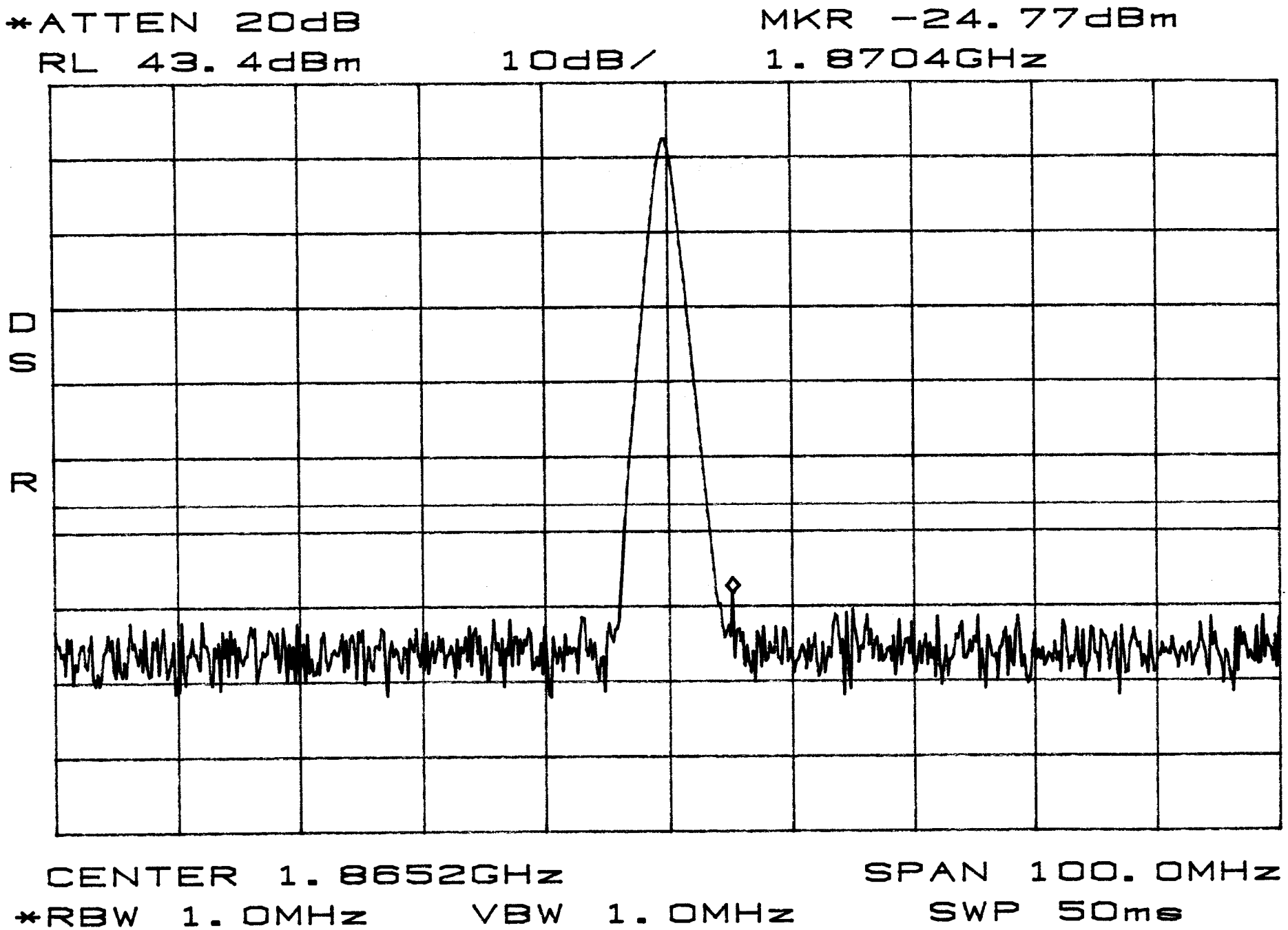
COND Emissions BAND C
High



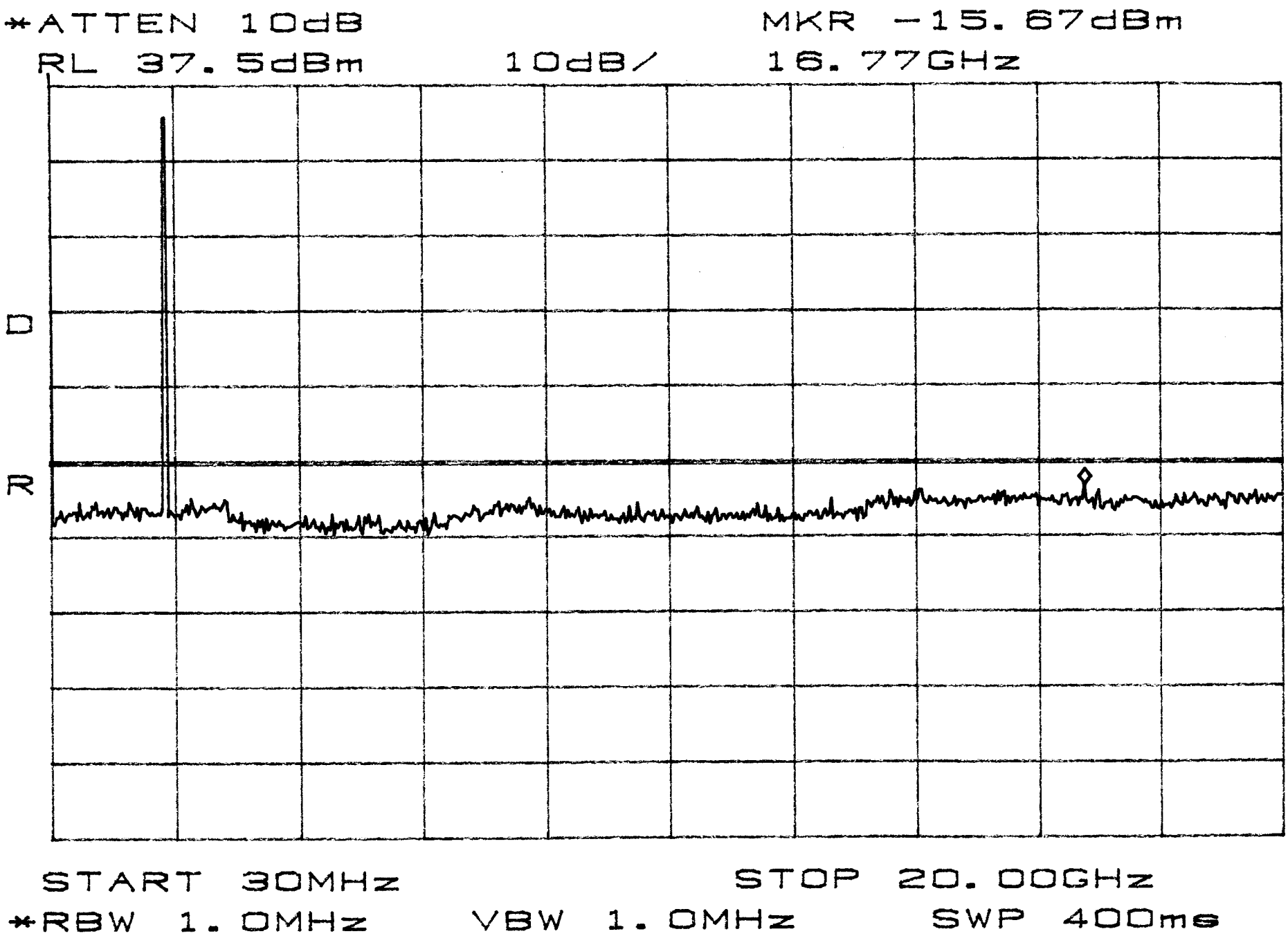
Cond Emissions BAND C
High



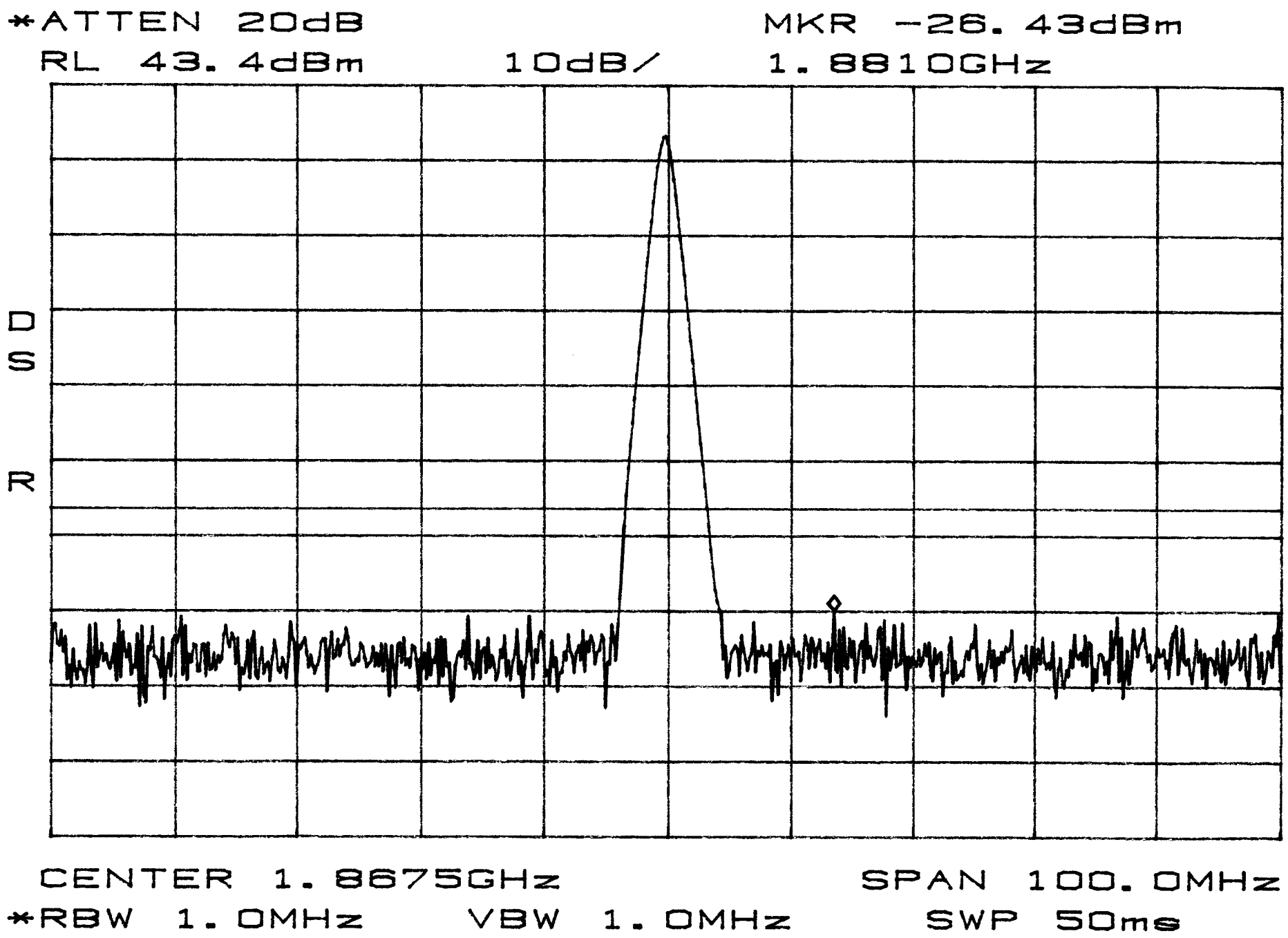
COND Emissions BAND D
LOW



Cond Emissions BAND D
Low



COND Emissions BAND D
Mid



Cond Emissions BAND D
Mid