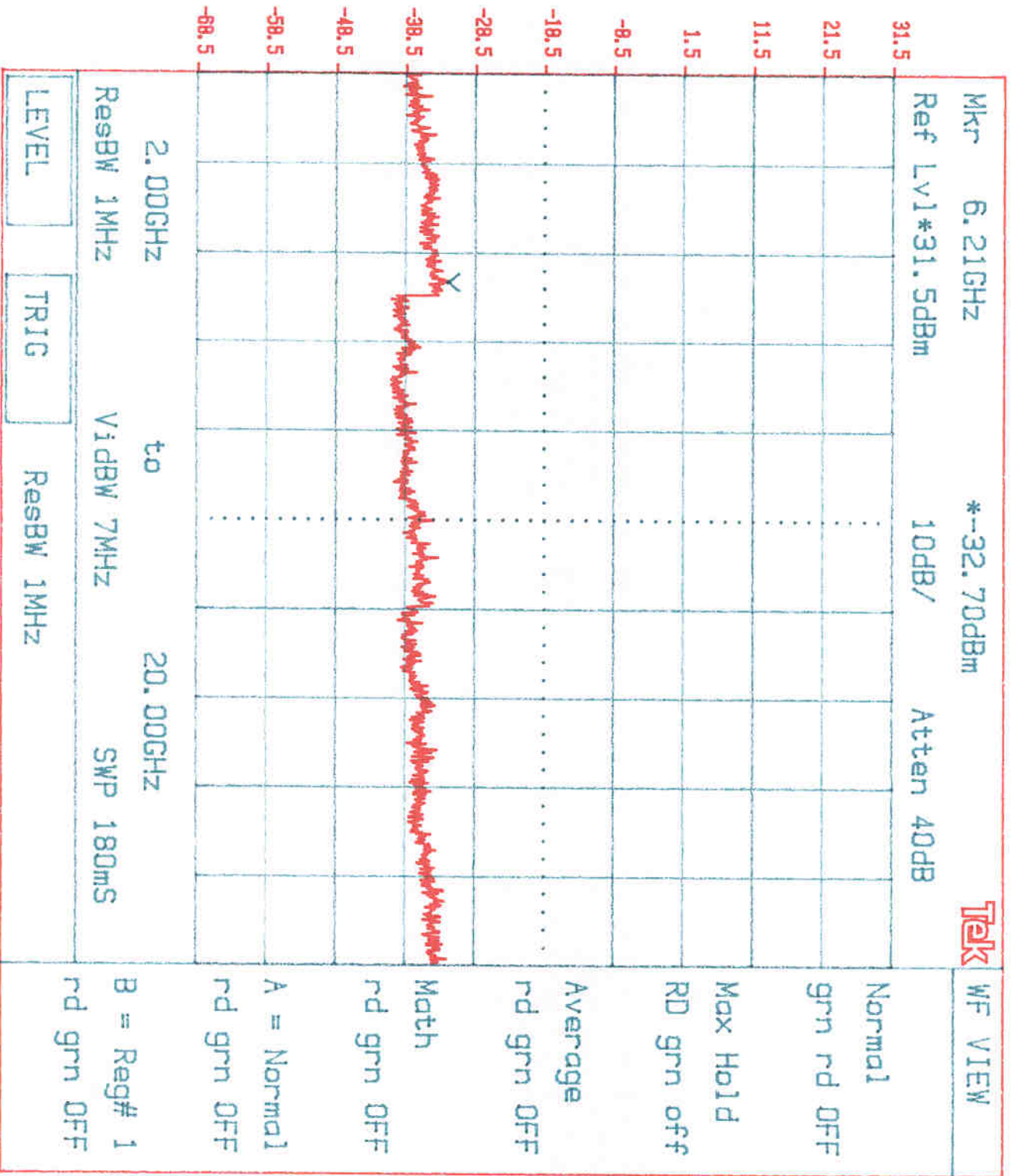


H.8



KN0B 2    KN0B 1    KEYPAD    Taktronix    2784

**7 RADIATED SPURIOUS EMISSIONS****7.1 Test description**

Parameter:	FCC §2.1053
Requirement:	FCC § 24.236, § 24.238
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**7.2 Test Procedure**

The transmitter was placed on a wooden turntable.

The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3 orthogonal axis.

The frequency range up to tenth harmonic of the fundamental frequency was investigated, with measurement equipment RBW setting at 1 MHz.

The spurious harmonic attenuation was calculated as the difference between E in dB(uV/m) at the fundamental frequency and at the spurious emission frequency.

Spurious attenuation in dB =  $43 + 10\text{Log}_{10}(\text{Power in Watts})$

**7.3 Test Results**

Please see the following pages for:

- [X] Spurious harmonic attenuation
- [X] FCC Part 15.109 Radiated Emission

**7.4 Modifications made during testing**

None

**7.5 Test instrumentation**

- [X] CDI B100/200/300 Biconical Antennas
- [X] EMCO Bi-logcon Antenna
- [X] EMCO 3115 Horn Antenna
- [X] HP 8566B Spectrum Analyzer
- [X] Preamplifiers

**Radiated Emissions Test  
Data**

Company:	Sierra	Model #:		Req.	FCC 2.993
EUT:		S/N or FCC #:		Test Dist	3 meter
Project #:		Test Date:	February 11, 2000	TP	0.10 Watt
Test Mode:		Engineer:	Xi Ming Y.	Min. Attn.	33.00 dBc

Number:	Antenna Used			Pre-Amp Used			Cable Used			Transducer Used
	2	14	21	0	8	13	0	0	12	0
Model:	EMCO 3143	EMCO 3115	3180-9	None	CDI_P1000	ACQ400	None	None	Gm_M+L	None

Frequency MHz	Reading dB(μV)	Detector P/A/Q	Ant. #	Amp. #	Ant. Pol. H/V	Ant. Factor dB(1/m)	Pre-Amp dB	Insert. Loss dB	Net dB(μV/m)	ERP mW	EIRP mW	Margin dB
1851.29	93.2	Peak	8	0	V	27.2	0.0	2.1	122.5	3.25E+02	533	
1851.29	90.8	Ave.	8	0	V	27.2	0.0	2.1	120.1	1.87E+02	307	
1880.00	93.3	Peak	8	0	V	27.2	0.0	2.1	122.6	3.33E+02	546	
1880.00	90.2	Ave.	8	0	V	27.2	0.0	2.1	119.5	1.63E+02	267	
1908.80	91.5	Peak	8	0	V	27.2	0.0	2.1	120.8	2.20E+02	361	
1908.80	89.0	Ave.	8	0	V	27.2	0.0	2.1	118.3	1.24E+02	203	
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- Notes:
- a) O.C.F.: Other Correction Factor
  - b) Insert. Loss = Cable A + Cable B + Cable C + Transducer.
  - c) Net = Reading + Antenna Factor - Pre-Amp + Insert. Loss.
  - d) Attn. = Field Strength (Fundamental) - Field Strength (Harmonics).
  - e) Negative signs (-) in Margin column signify levels below the limits.