

ETR 24359

TEST SETUP DRAWING RADIATED EMISSIONS

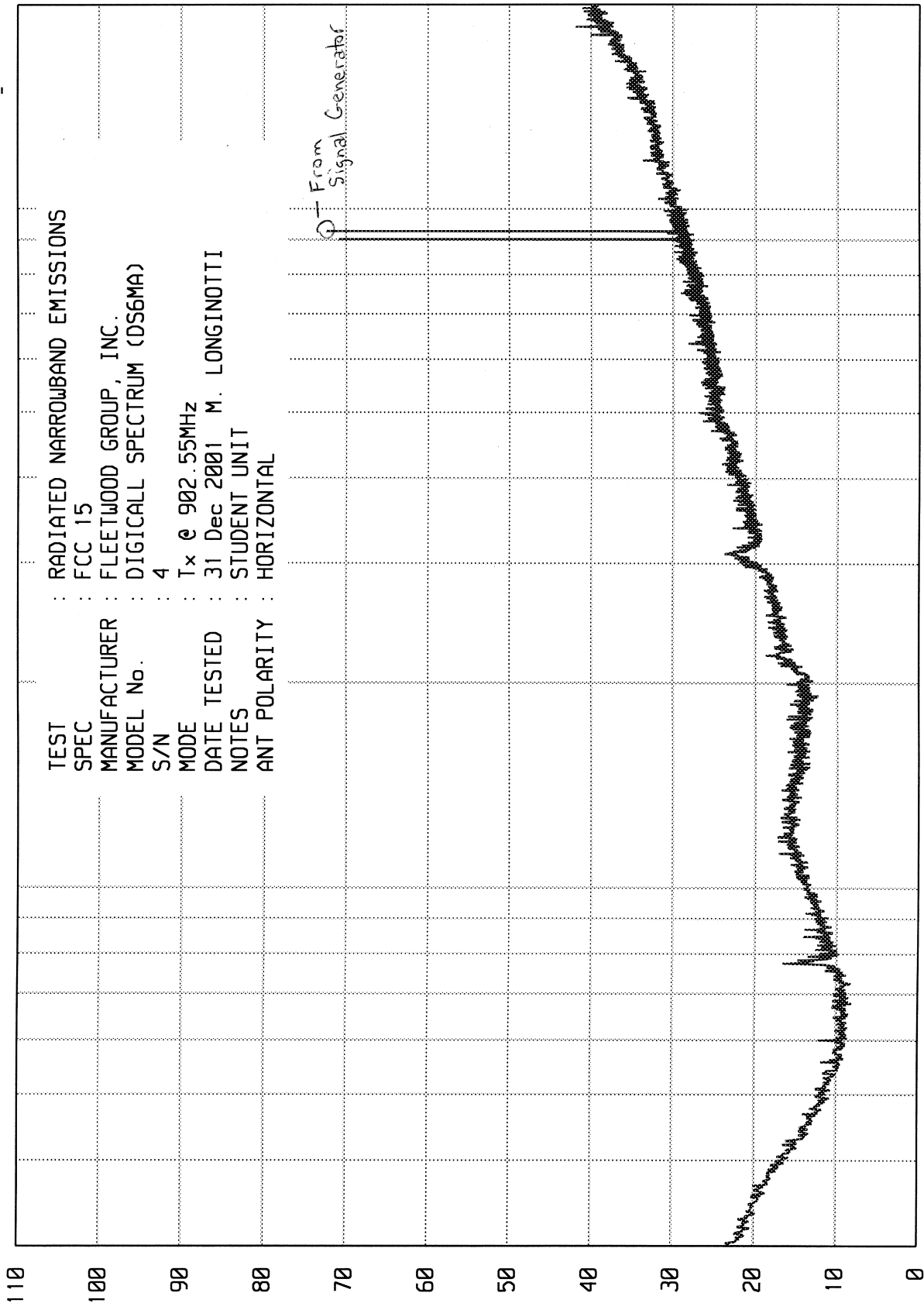
Figure 3

ELITE ELECTRONIC ENGINEERING Co.

Downers Grove, Ill. 60515

UNTU_EM RUN RUN 1

UKA0 11/26/01



TEST : RADIATED NARROWBAND EMISSIONS
 SPEC : FCC 15
 MANUFACTURER : FLEETWOOD GROUP, INC.
 MODEL No. : DIGICALL SPECTRUM (DS6MA)
 S/N : 4
 MODE : Tx @ 902.55MHz
 DATE TESTED : 31 Dec 2001 M. LONGINOTTI
 NOTES : STUDENT UNIT
 ANT POLARITY : HORIZONTAL

RADIATED NARROWBAND EMISSIONS - dBu/3

14 of 24

START = 30

FREQUENCY - MHz

1000

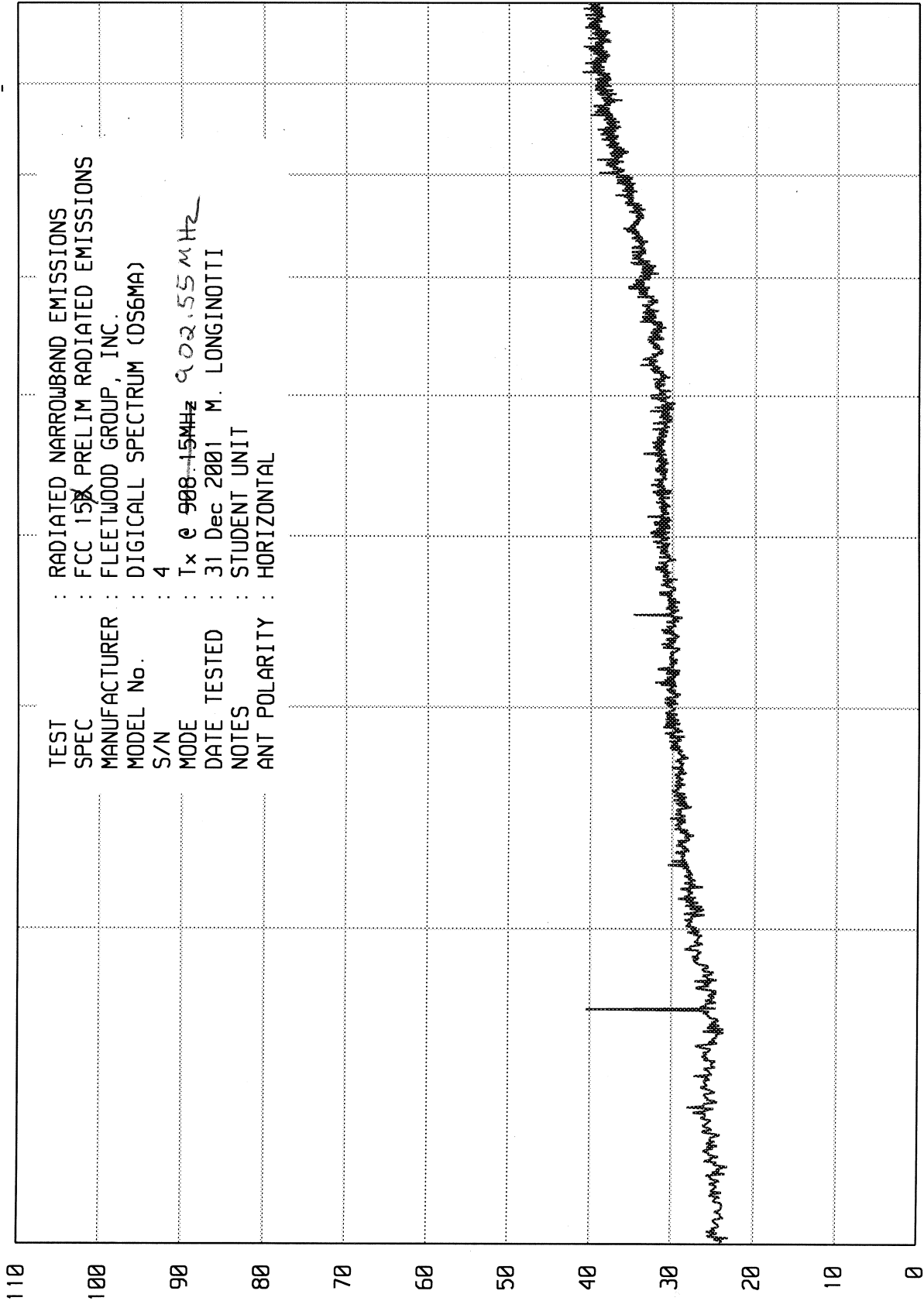
STOP = 2000

ELITE ELECTRONIC ENGINEERING Co.

Downers Grove, Ill. 60515

UNIT EM RUN RUN 2

UKAB 11/26/01



TEST : RADIATED NARROWBAND EMISSIONS
 SPEC : FCC 15X PRELIM RADIATED EMISSIONS
 MANUFACTURER : FLEETWOOD GROUP, INC.
 MODEL No. : DIGICALL SPECTRUM (DS6MA)
 S/N : 4
 MODE : Tx @ 908.15MHz 902.55MHz
 DATE TESTED : 31 Dec 2001 M. LONGINOTTI
 NOTES : STUDENT UNIT
 ANT POLARITY : HORIZONTAL

15 of 24

START = 2000

FREQUENCY - MHz

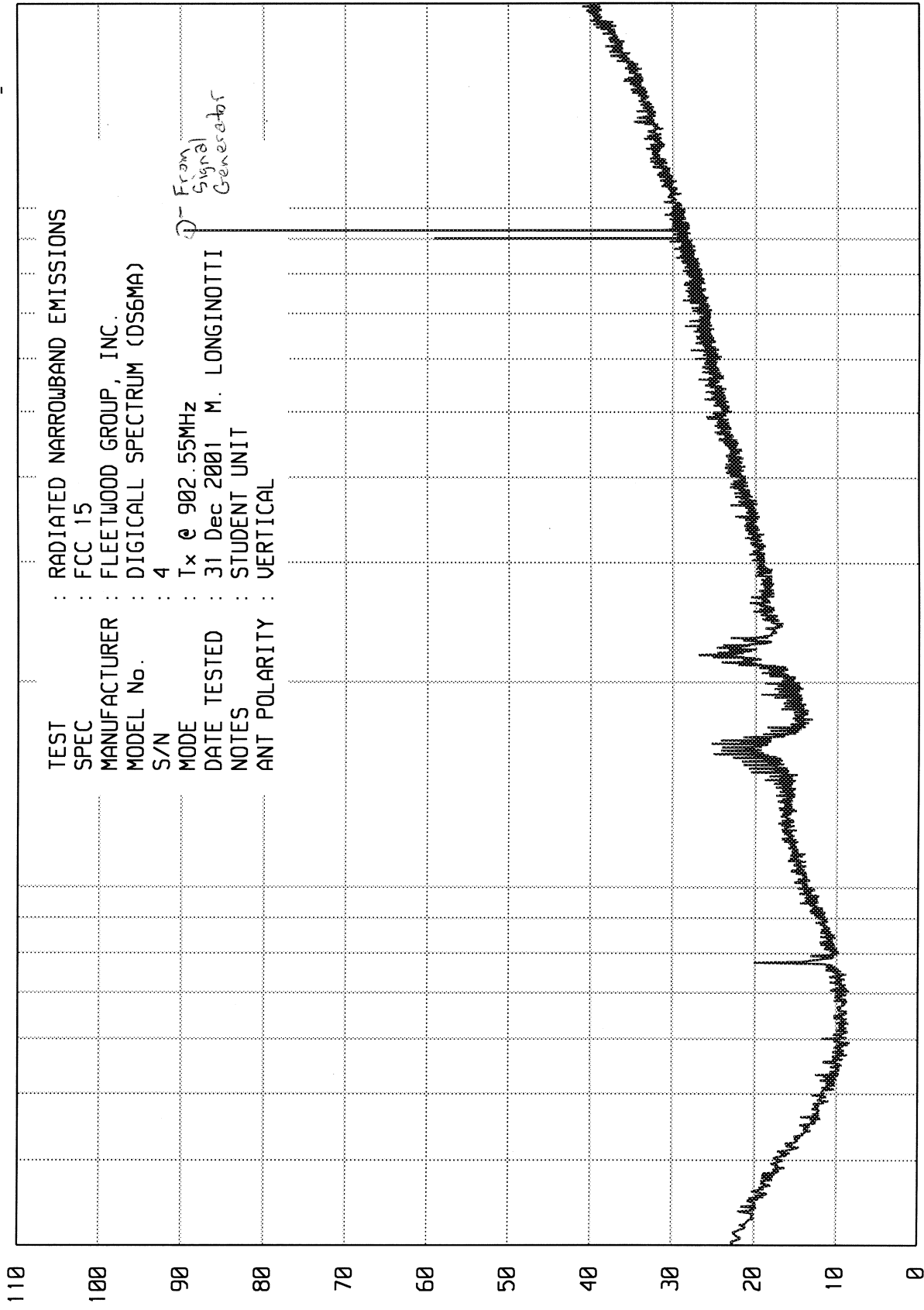
STOP = 10000

ELITE ELECTRONIC ENGINEERING Co.

Downers Grove, Ill. 60515

UNTU_EM RUN RUN 1

UKA0 11/26/01



TEST : RADIATED NARROWBAND EMISSIONS
 SPEC : FCC 15
 MANUFACTURER : FLEETWOOD GROUP, INC.
 MODEL No. : DIGICALL SPECTRUM (DS6MA)
 S/N : 4
 MODE : Tx @ 902.55MHz
 DATE TESTED : 31 Dec 2001 M. LONGINOTTI
 NOTES : STUDENT UNIT
 ANT POLARITY : VERTICAL

D From Signal Generator

RADIATED NARROWBAND EMISSIONS - dBu/3m

16 of 24

START = 30

FREQUENCY - MHz

1000

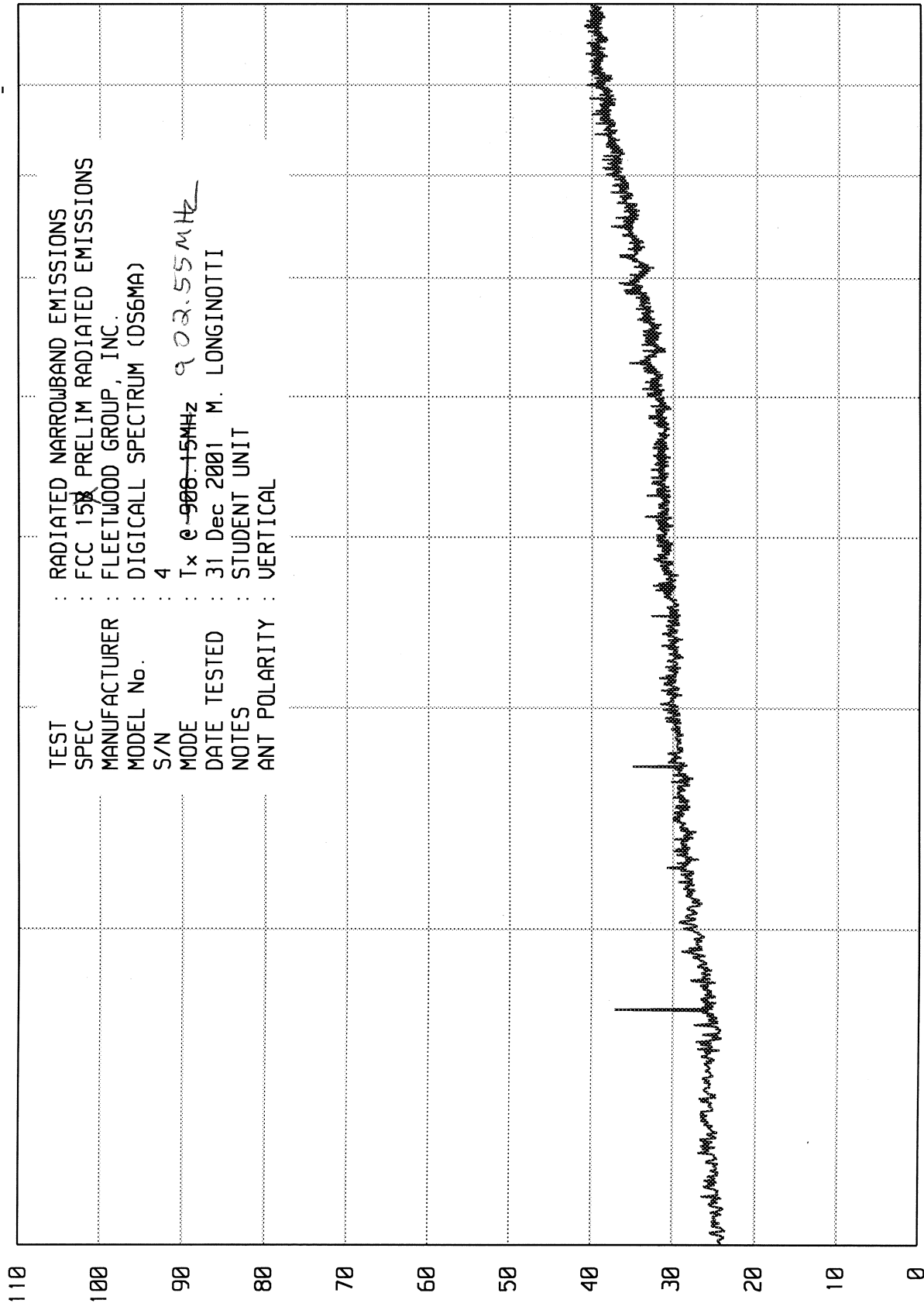
STOP = 2000

ELITE ELECTRONIC ENGINEERING Co.

Downers Grove, Ill. 60515

UNTU_EM RUN RUN 2

UKA0 11/26/01



TEST : RADIATED NARROWBAND EMISSIONS
 SPEC : FCC 15K PRELIM RADIATED EMISSIONS
 MANUFACTURER : FLEETWOOD GROUP, INC.
 MODEL No. : DIGICALL SPECTRUM (DS6MA)
 S/N : 4
 MODE : Tx @ ~~900~~-15MHz 902.55MHz
 DATE TESTED : 31 Dec 2001 M. LONGINOTTI
 NOTES : STUDENT UNIT
 ANT POLARITY : VERTICAL

RADIATED NARROWBAND EMISSIONS - dBu/m

17 of 24

START = 2000

FREQUENCY - MHz

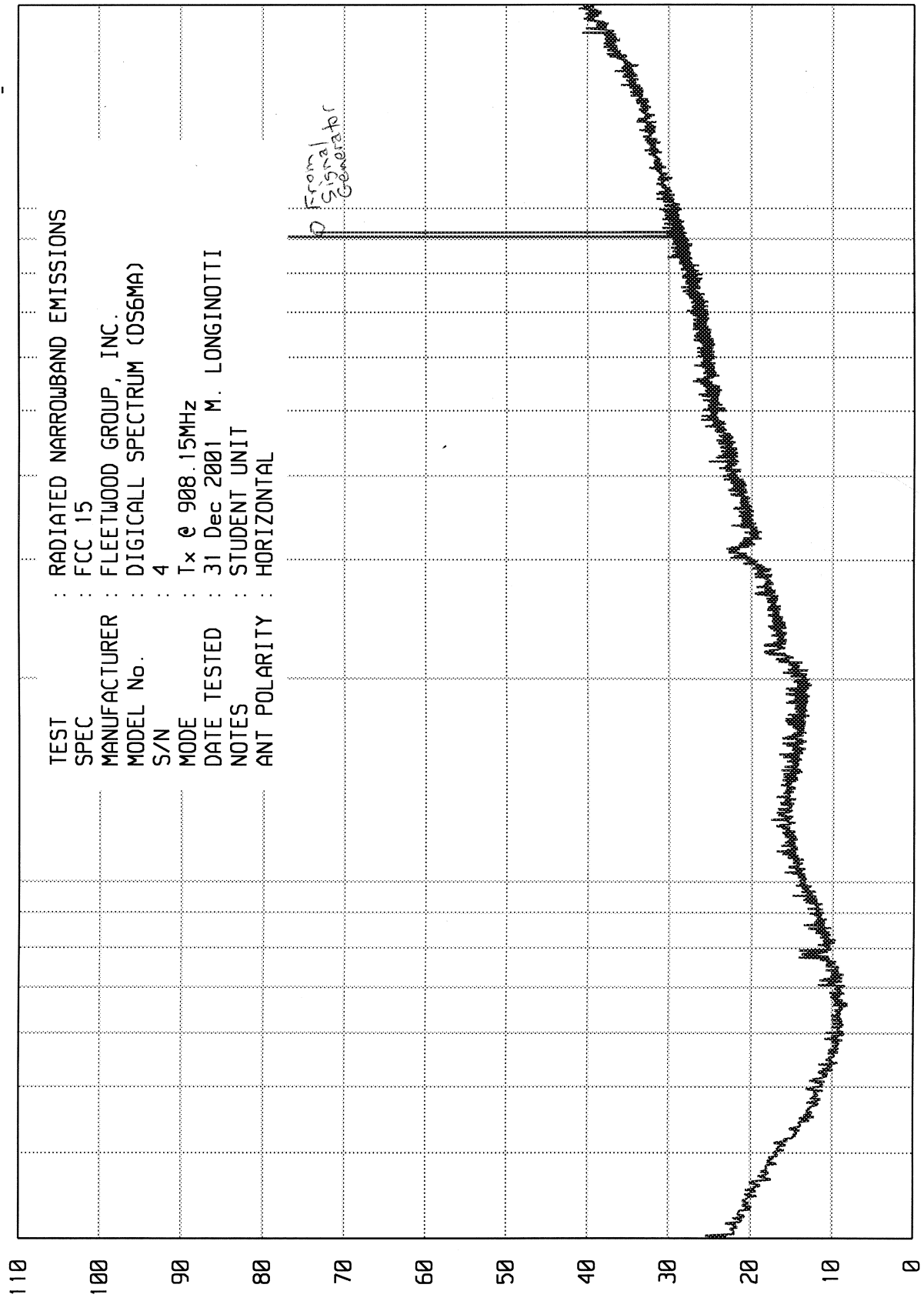
STOP = 10000

ELITE ELECTRONIC ENGINEERING Co.

Downers Grove, Ill. 60515

UNIU_EM RUN RUN 1

WKA0 11/26/01



TEST : RADIATED NARROWBAND EMISSIONS
 SPEC : FCC 15
 MANUFACTURER : FLEETWOOD GROUP, INC.
 MODEL No. : DIGICALL SPECTRUM (DS6MA)
 S/N : 4
 MODE : Tx @ 908.15MHz
 DATE TESTED : 31 Dec 2001 M. LONGINOTTI
 NOTES : STUDENT UNIT
 ANT POLARITY : HORIZONTAL

18 of 24

START = 30

FREQUENCY - MHz

1000

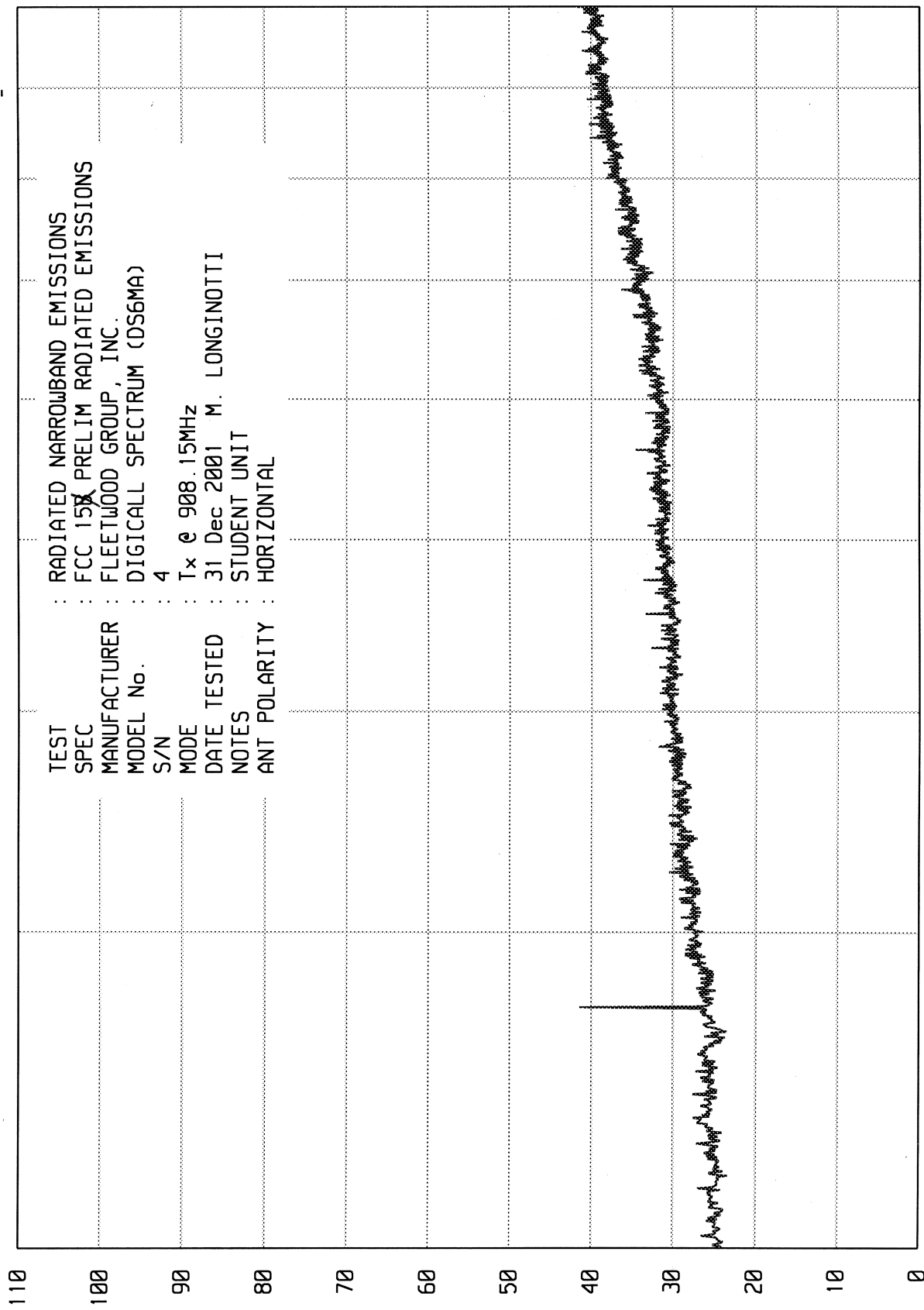
STOP = 2000

ELITE ELECTRONIC ENGINEERING Co.

Downers Grove, Ill. 60515

UNTU_EM RUN RUN 2

WKAB 11/26/01



TEST : RADIATED NARROWBAND EMISSIONS
 SPEC : FCC 15K PRELIM RADIATED EMISSIONS
 MANUFACTURER : FLEETWOOD GROUP, INC.
 MODEL No. : DIGICALL SPECTRUM (DS6MA)
 S/N : 4
 MODE : Tx @ 908.15MHz
 DATE TESTED : 31 Dec 2001 M. LONGINOTTI
 NOTES : STUDENT UNIT
 ANT POLARITY : HORIZONTAL

19 of 24

START = 2000

FREQUENCY - MHZ

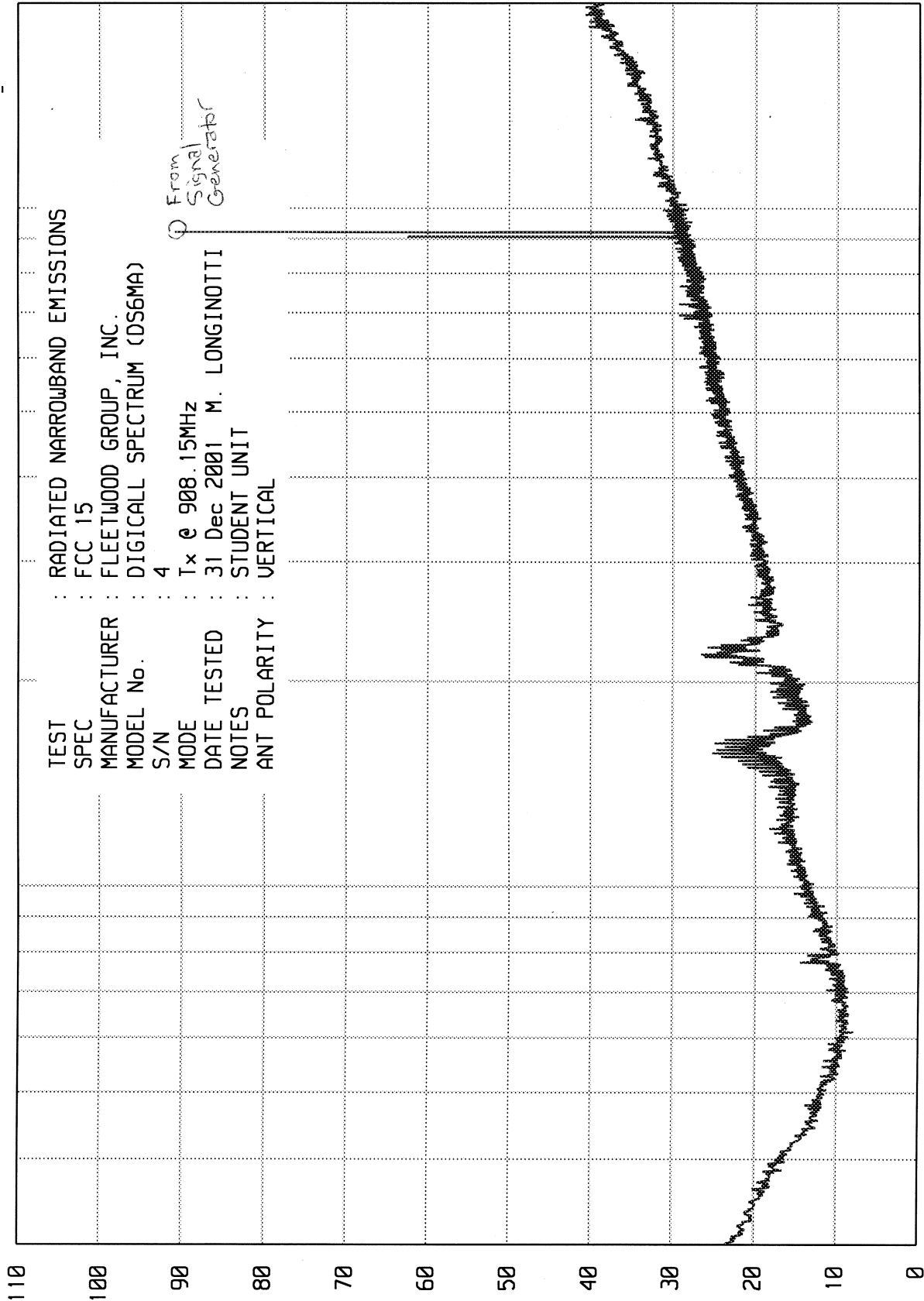
STOP = 10000

ELITE ELECTRONIC ENGINEERING Co.

Downers Grove, Ill. 60515

UNIU_EM RUN RUN 1

UKA0 11/26/01



TEST : RADIATED NARROWBAND EMISSIONS
 SPEC : FCC 15
 MANUFACTURER : FLEETWOOD GROUP, INC.
 MODEL No. : DIGICALL SPECTRUM (DSGMA)
 S/N : 4
 MODE : Tx @ 908.15MHz
 DATE TESTED : 31 Dec 2001 M. LONGINOTTI
 NOTES : STUDENT UNIT
 ANT POLARITY : VERTICAL

① From
 Signal
 Generator

hz fo 02

RADIATED NARROWBAND EMISSIONS - dBu/m

START = 30

FREQUENCY - MHz

1000

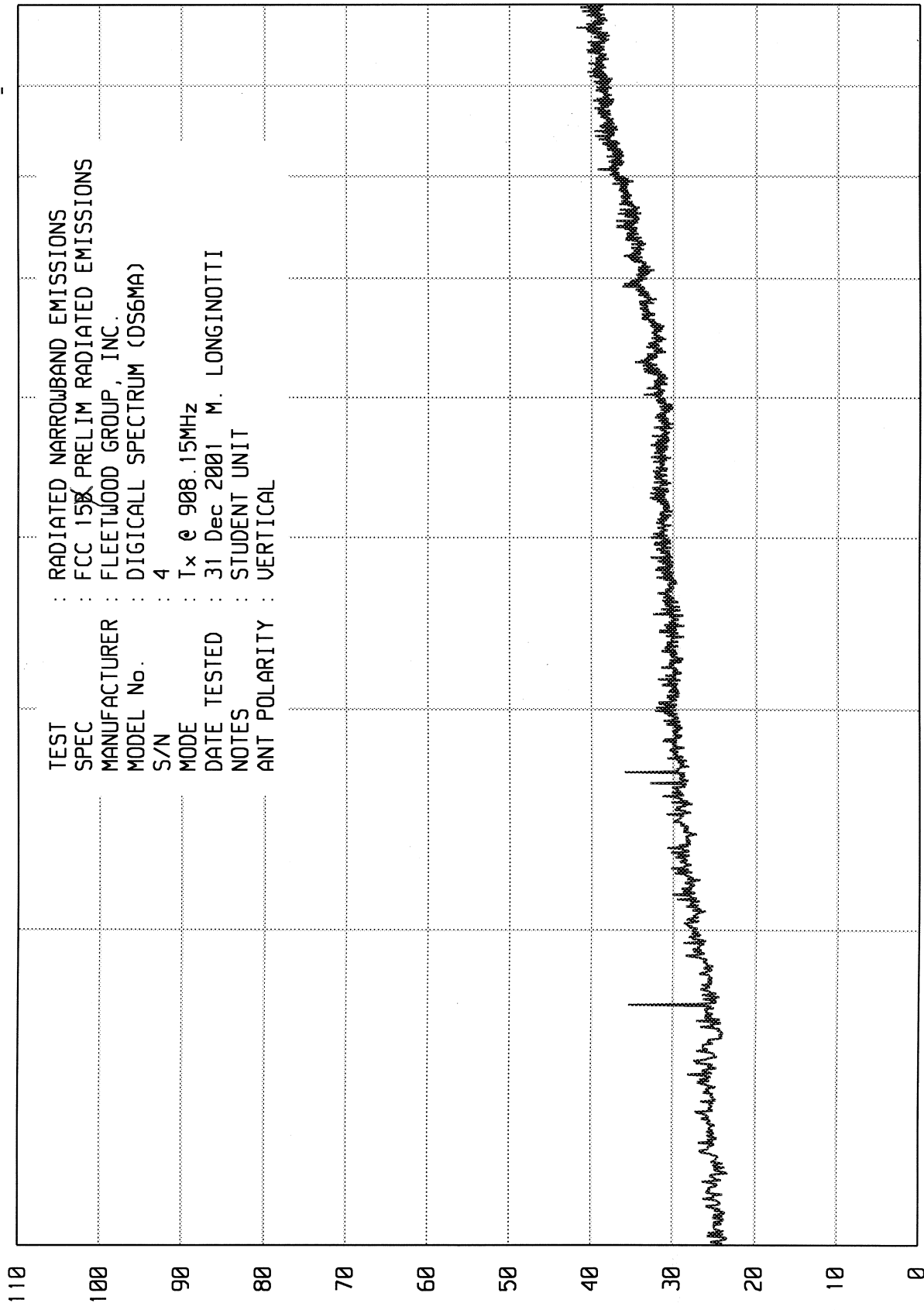
STOP = 2000

ELITE ELECTRONIC ENGINEERING Co.

Downers Grove, Ill. 60515

UNTU_EM RUN RUN 2

UKA0 11/26/01



TEST : RADIATED NARROWBAND EMISSIONS
 SPEC : FCC 15B PRELIM RADIATED EMISSIONS
 MANUFACTURER : FLEETWOOD GROUP, INC.
 MODEL No. : DIGICALL SPECTRUM (DS6MA)
 S/N : 4
 MODE : Tx @ 908.15MHz
 DATE TESTED : 31 Dec 2001 M. LONGINOTTI
 NOTES : STUDENT UNIT
 ANT POLARITY : VERTICAL

12 of 24

START = 2000

FREQUENCY - MHZ

STOP = 10000



ETR No. 24359
DATA SHEET

MANUFACTURER : Fleetwood Group, Inc.
 MODEL : Digicall Spectrum Student Unit (DS6MA)
 S/N : 4
 SPECIFICATION : FCC-15C Spurious Radiated Emissions
 DATE : 12/31/01
 NOTES : Transmitting at 902.55MHz.
 : TEST DISTANCE IS 3 METERS

Frequency MHz	Antenna Polarity	Meter Reading dBuV	Ambient	Antenna Factor	Cable Loss	Pre Amp Gain	Total dBuV	Total uV/m	Limit uV/m
902.55	H	51.20		27.8	3.30		82.30	13031.67	50000
	V	46.60		27.8	3.30		77.70	7673.61	50000
1805.10	H	19.10		26.9	2.70		48.70	272.27	500
	V	16.80		26.9	2.70		46.40	208.93	500
2707.65	H	54.40		29.8	3.60	-36.1	51.70	384.59	500
	V	52.80		29.8	3.60	-36.1	50.10	319.89	500
3610.20	H	45.00	AMB	32.4	4.20	-35.7	45.90	197.24	500
	V	46.20	AMB	32.4	4.20	-35.7	47.10	226.46	500
4512.75	H	45.00	AMB	33.0	4.70	-35.3	47.40	234.42	500
	V	46.10		33.0	4.70	-35.3	48.50	266.07	500
5415.30	H	43.40	AMB	35.0	5.20	-35.3	48.30	260.02	500
	V	45.60		35.0	5.20	-35.3	50.50	334.97	500
6317.85	H	43.50	AMB	35.6	5.70	-35.3	49.50	298.54	500
	V	45.90		35.6	5.70	-35.3	51.90	393.55	500
7220.40	H	41.80	AMB	37.1	6.70	-35.5	50.10	319.89	500
	V	41.90	AMB	37.1	6.70	-35.5	50.20	323.59	500
8122.95	H	41.10	AMB	37.7	7.60	-35.9	50.50	334.97	500
	V	40.10	AMB	37.7	7.60	-35.9	49.50	298.54	500
9025.50	H	40.30	AMB	38.1	7.60	-35.9	50.10	319.89	500
	V	40.60	AMB	38.1	7.60	-35.9	50.40	331.13	500

CHECKED BY: _____
Mark E. Longinotti



ETR No. 24359
DATA SHEET

MANUFACTURER : Fleetwood Group, Inc.
 MODEL : Digicall Spectrum Student Unit (DS6MA)
 S/N : 4
 SPECIFICATION : FCC-15C Spurious Radiated Emissions
 DATE : 12/31/01
 NOTES : Transmitting at 908.15MHz.
 : TEST DISTANCE IS 3 METERS

Frequency MHz	Antenna Polarity	Meter Reading dBuV	Ambient	Antenna Factor	Cable Loss	Pre Amp Gain	Total dBuV	Total uV/m	Limit uV/m
908.15	H	63.40		22.3	3.30		89.00	28183.83	50000
	V	54.80		22.3	3.30		80.40	10471.29	50000
1816.30	H	17.30		28.4	5.30		51.00	354.81	500
	V	17.90		28.4	5.30		51.60	380.19	500
2724.45	H	55.10		29.8	3.70	-36.1	52.50	421.70	500
	V	53.10		29.8	3.70	-36.1	50.50	334.97	500
3632.60	H	44.80	AMB	32.5	4.20	-35.7	45.80	194.98	500
	V	45.70	AMB	32.5	4.20	-35.7	46.70	216.27	500
4540.75	H	45.60	AMB	33.1	4.70	-35.3	48.10	254.10	500
	V	46.30	AMB	33.1	4.70	-35.3	48.80	275.42	500
5448.90	H	39.80	AMB	35.0	5.20	-35.3	44.70	171.79	500
	V	40.10	AMB	35.0	5.20	-35.3	45.00	177.83	500
6357.05	H	41.80	AMB	35.6	5.80	-35.3	47.90	248.31	500
	V	40.90	AMB	35.6	5.80	-35.3	47.00	223.87	500
7265.20	H	41.20	AMB	37.1	6.80	-35.5	49.60	302.00	500
	V	41.10	AMB	37.1	6.80	-35.5	49.50	298.54	500
8173.35	H	40.70	AMB	37.7	7.60	-35.9	50.10	319.89	500
	V	40.20	AMB	37.7	7.60	-35.9	49.60	302.00	500
9081.50	H	40.50	AMB	38.2	7.60	-35.9	50.40	331.13	500
	V	40.60	AMB	38.2	7.60	-35.9	50.50	334.97	500

CHECKED BY: _____
Mark E. Longinotti

ELITE ELECTRONIC ENGINEERING CO

MKR ^-498 kHz
-48.70 dB

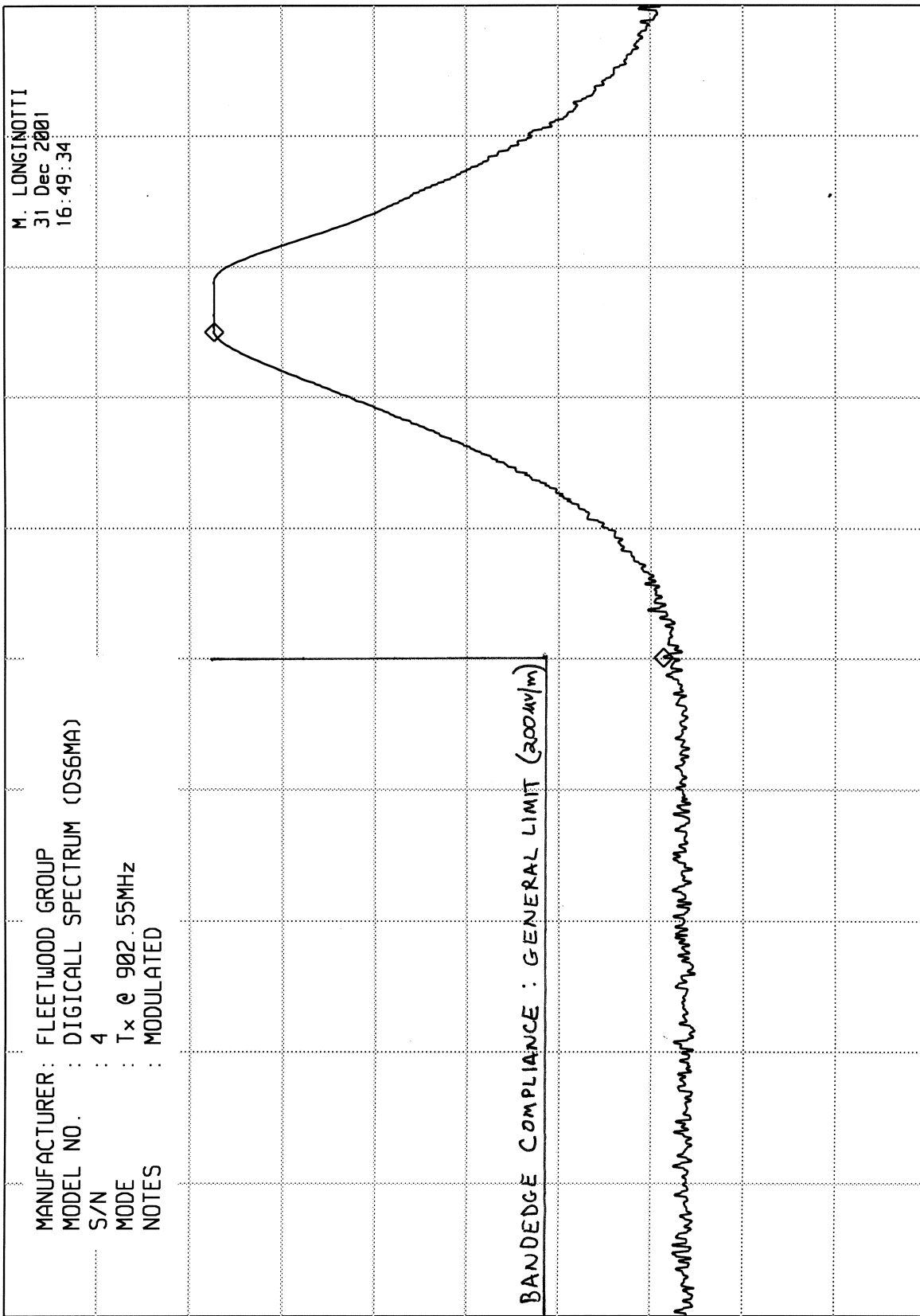
hp

REF -30.0 dBm ATTEN 0 dB

10 dB/

MANUFACTURER: FLEETWOOD GROUP
MODEL NO. : DIGICALL SPECTRUM (DS6MA)
S/N : 4
MODE : Tx @ 902.55MHz
NOTES : MODULATED

OFFSET
-20.0
dB



24 of 24

CENTER 902.00 MHz RES BW 100 kHz(i) VBW 1 MHz SPAN 2.00 MHz
SWP 20.0 msec