

E.M. LONG ASSOCIATES



TIME<sup>TM</sup>  
ALIGN  
TECHNIQUE

MODULAR SOUND SYSTEMS

PROJECT XLS-125

TIME-ALIGN<sup>R</sup>

LOUDSPEAKER SYSTEM

VERSION TWO

1-31-81

1-31-81

XLS-125

MODULAR SOUND.

78Hz IN PROTOTYPE CABINET. — JBL E-120-8.

JBL NEEDS 1.75" SET BACK

EM. " 2.75" " "

THEY ARE NOT INTERCHANGEABLE!

A 1" ADAPTOR BAFFLE CAN BE MADE FOR THE JBL.

82Hz FOR JBL IN PROTOTYPE CABINET

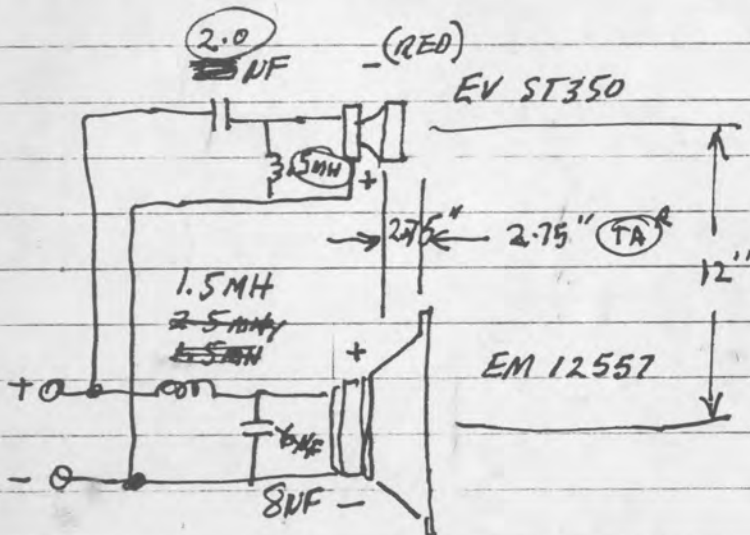
FROM 82Hz THE CAB. VOL IS ABOUT 2.3 Ft<sup>3</sup>

70Hz → 16IN<sup>2</sup> 4 1/2" DIA X 3/4" PORT

→ " OR 4" X 4" ~~HE~~ OPENING

→ " OR 3" X 5 3/8" OPENING

CROSSOVER FOR EMINENCE 12" 12557 + EV ST350



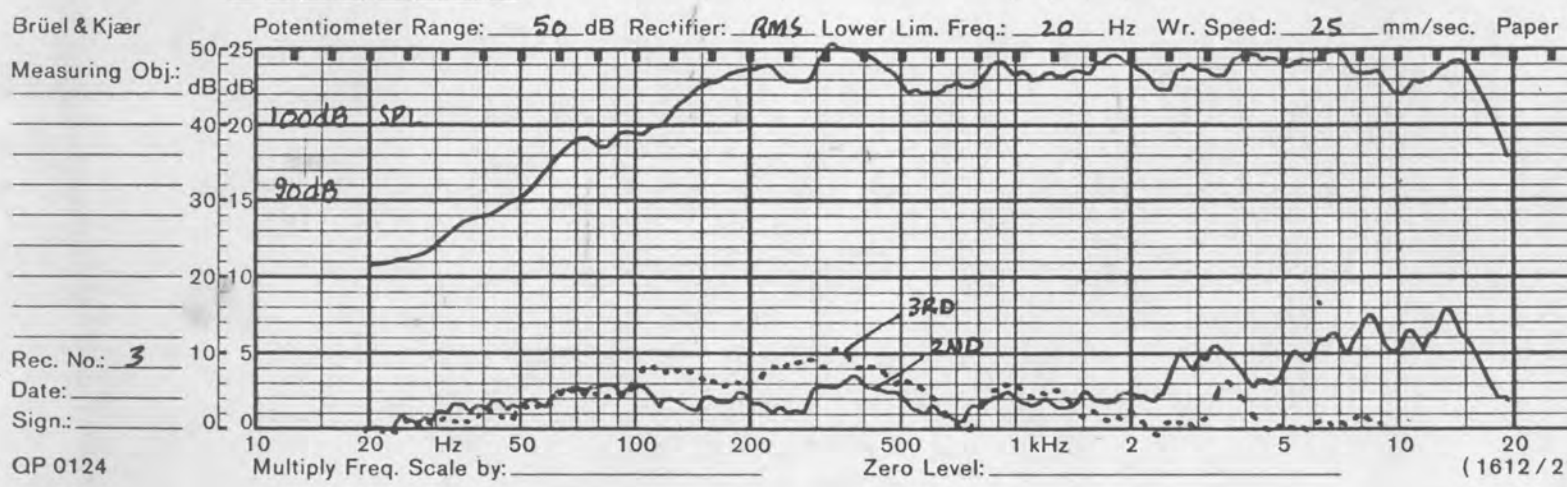
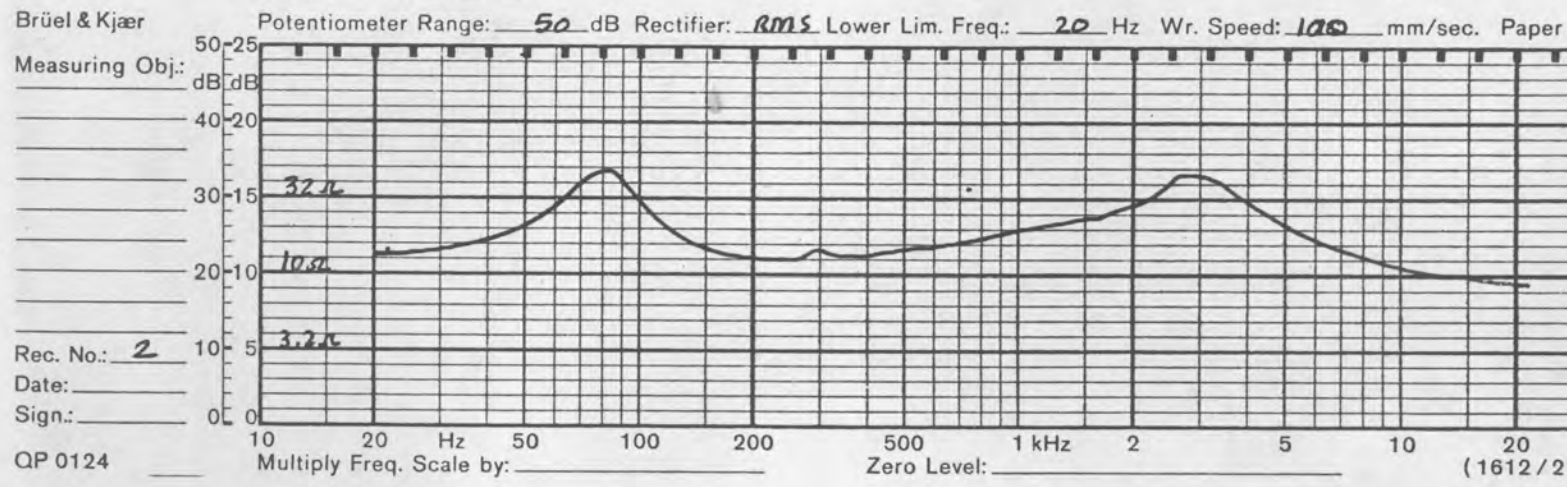
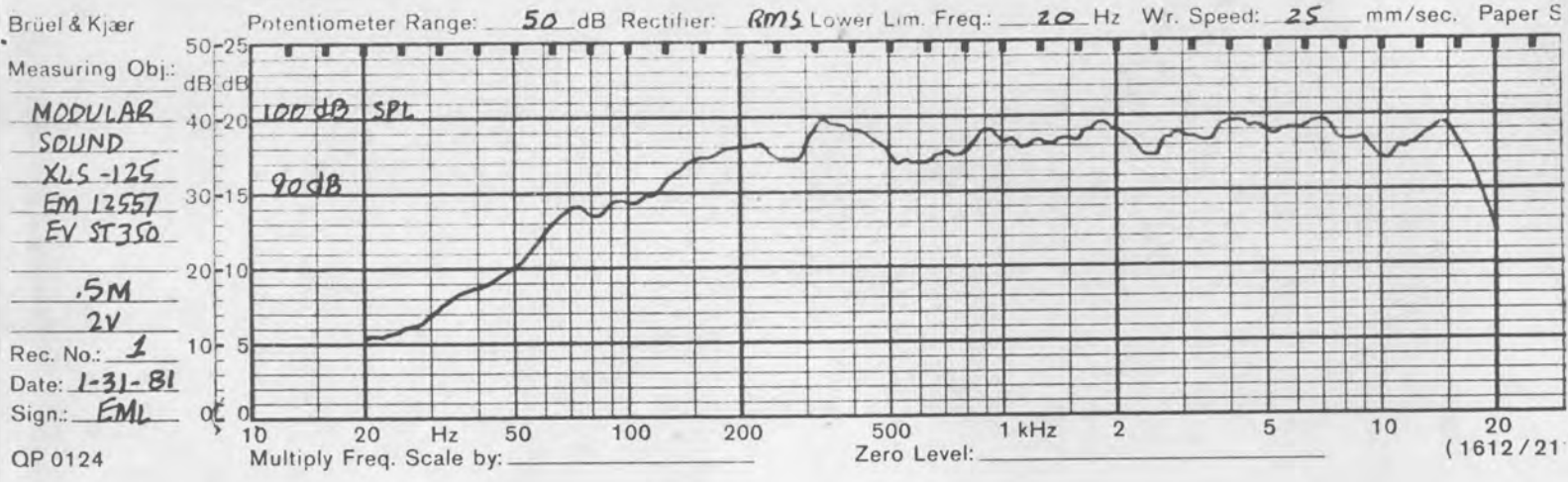
\* NOTE EV ST350 GIVES  
 NEGATIVE IMPULSE  
 WHEN + IS CONNECTED  
 TO + OR RED TERMINAL  
 THE SCHEMATIC IS  
 MARKED - RED FOR EV.

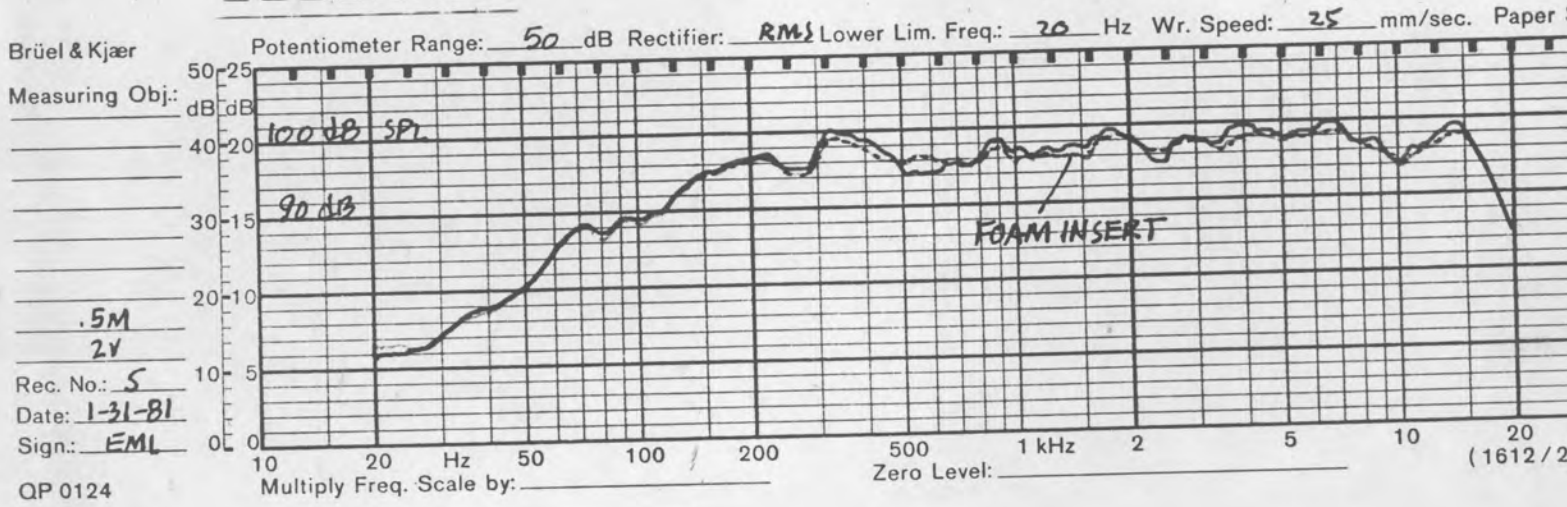
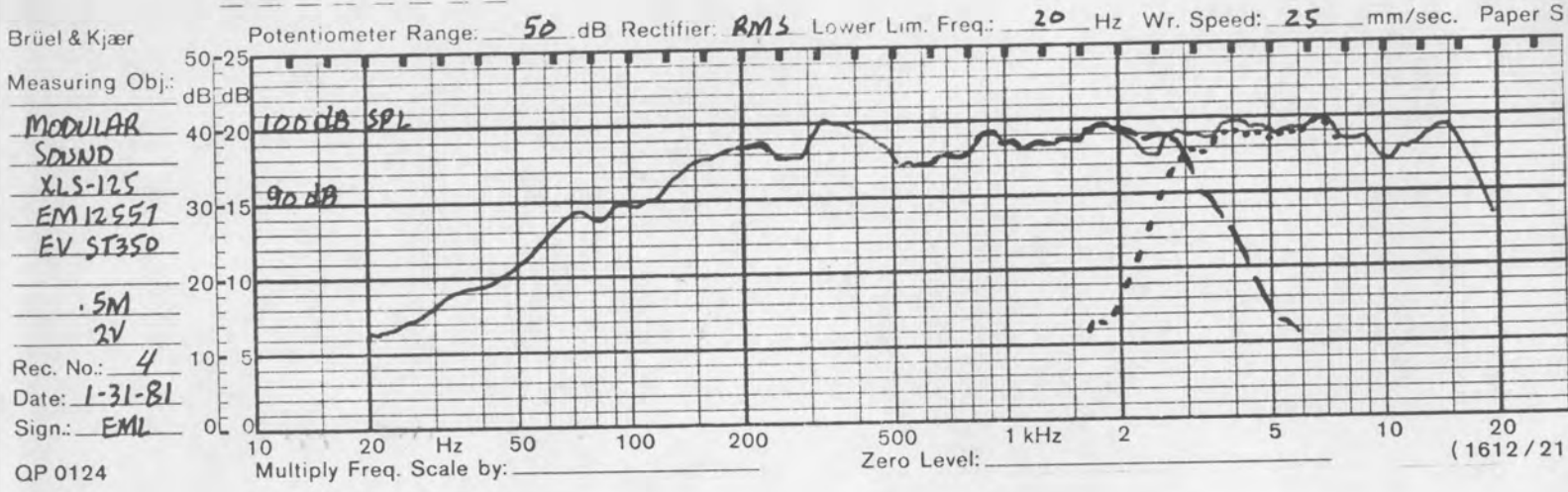
THE JBL E-120-8 IS ALSO  
 REVERSE MARKED POLARITY.

• PORT SHOULD BE 16IN<sup>2</sup> AREA

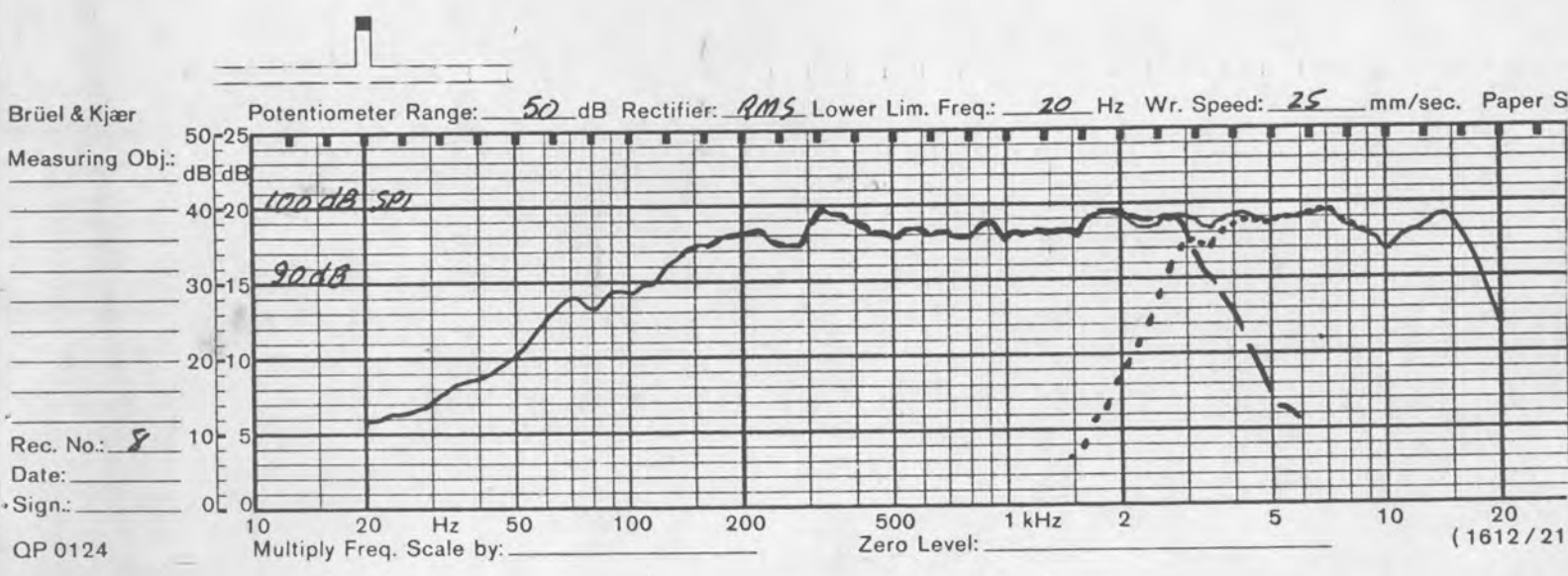
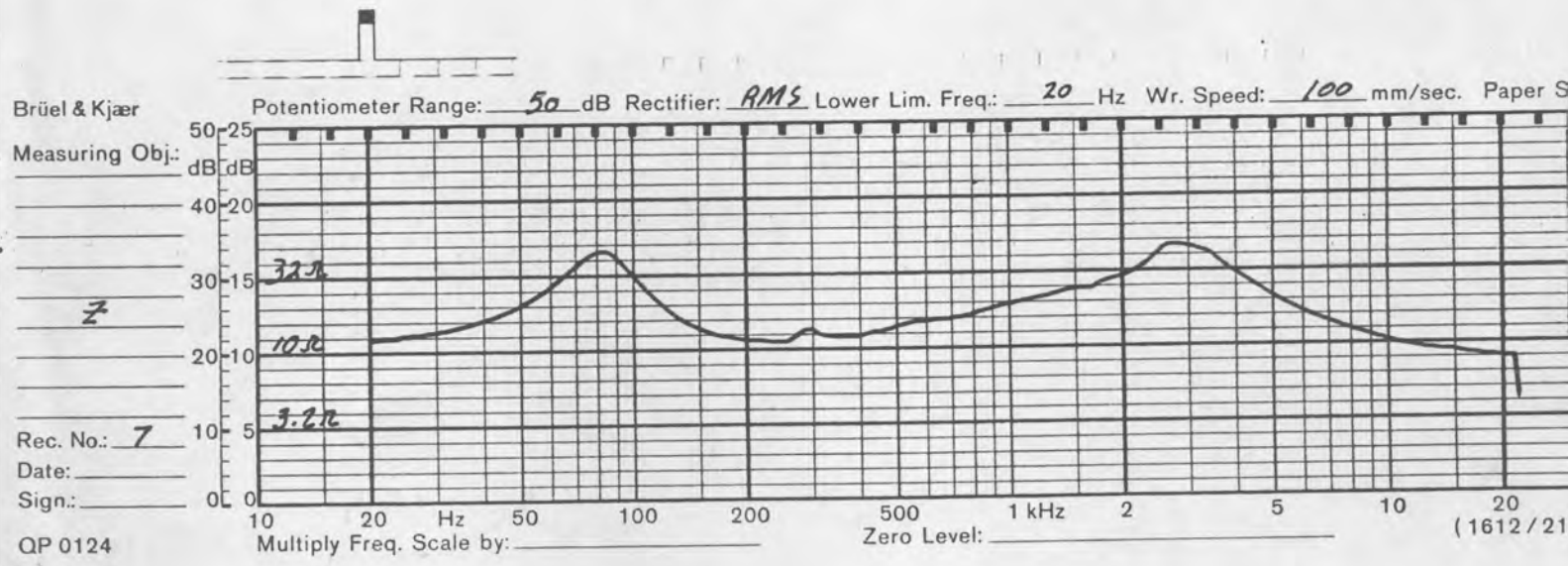
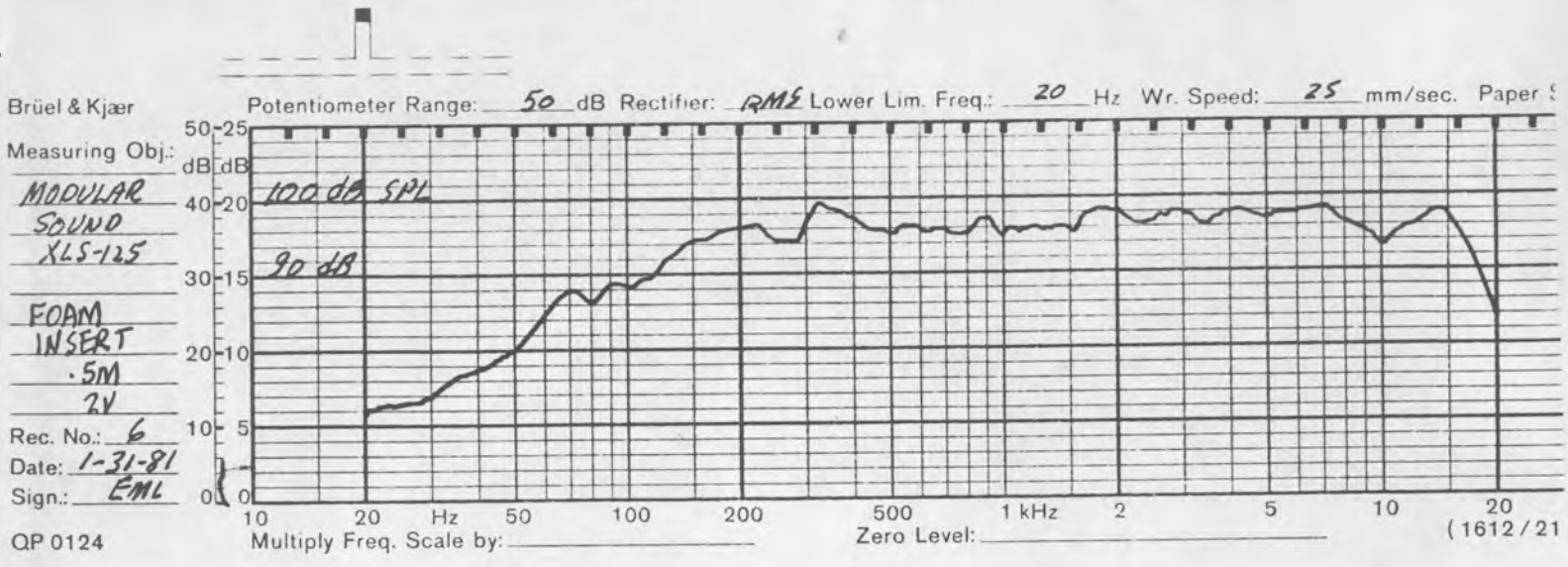
3" X 5 3/8" RECTANGLE IN HF AREA RECOMMENDED.

TUNING ≈ ~~70~~ 70Hz

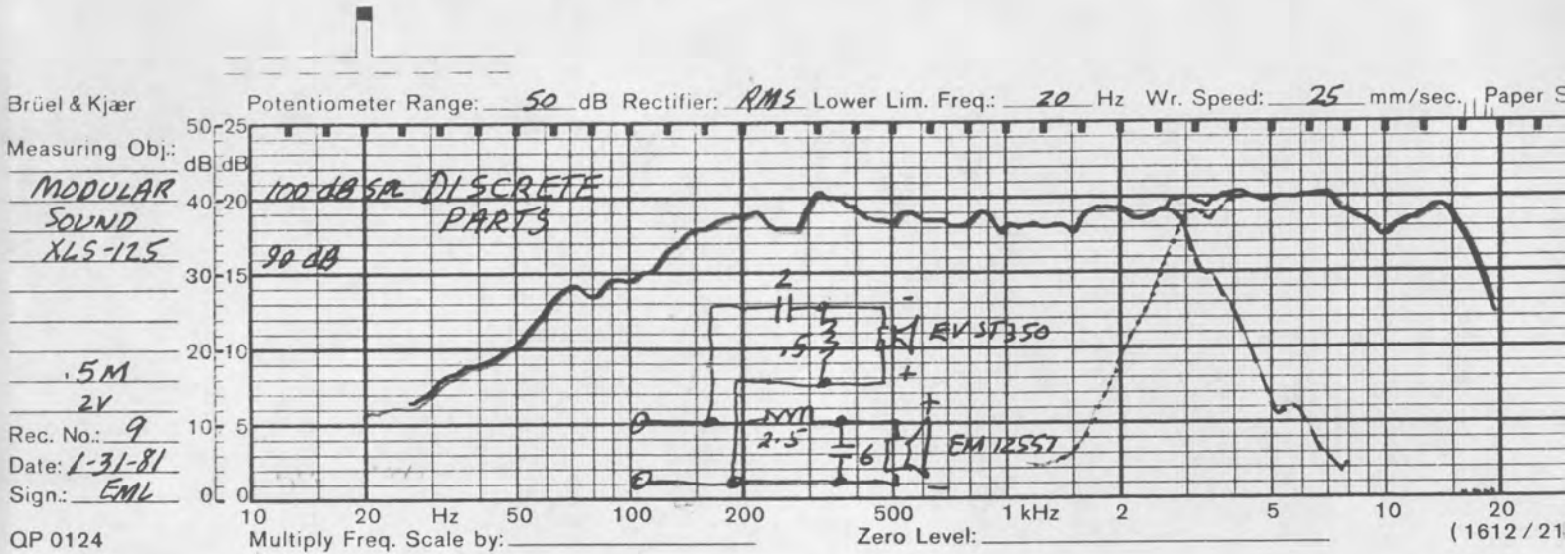




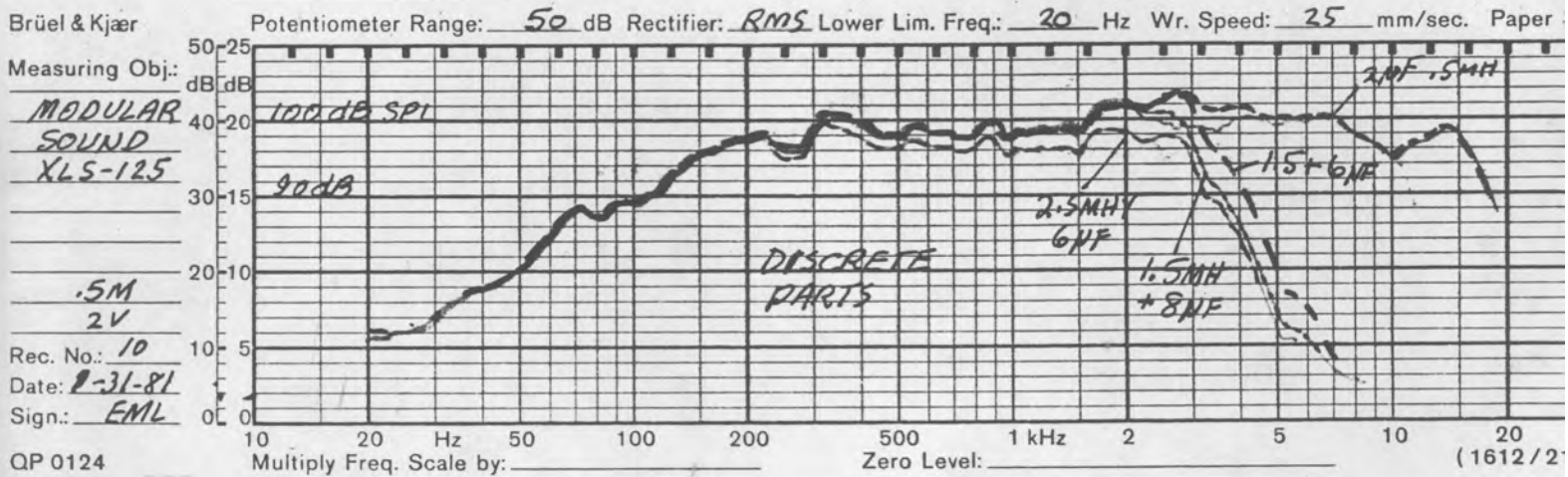
# FOAM INSERT IN CAVITY



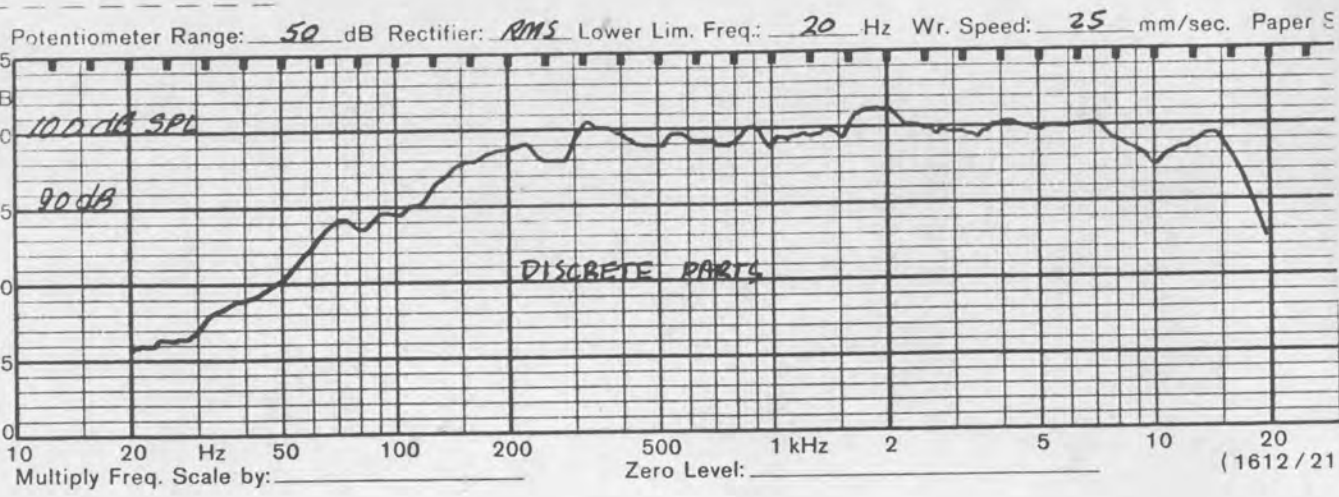
# DISCRETE XOVER PARTS



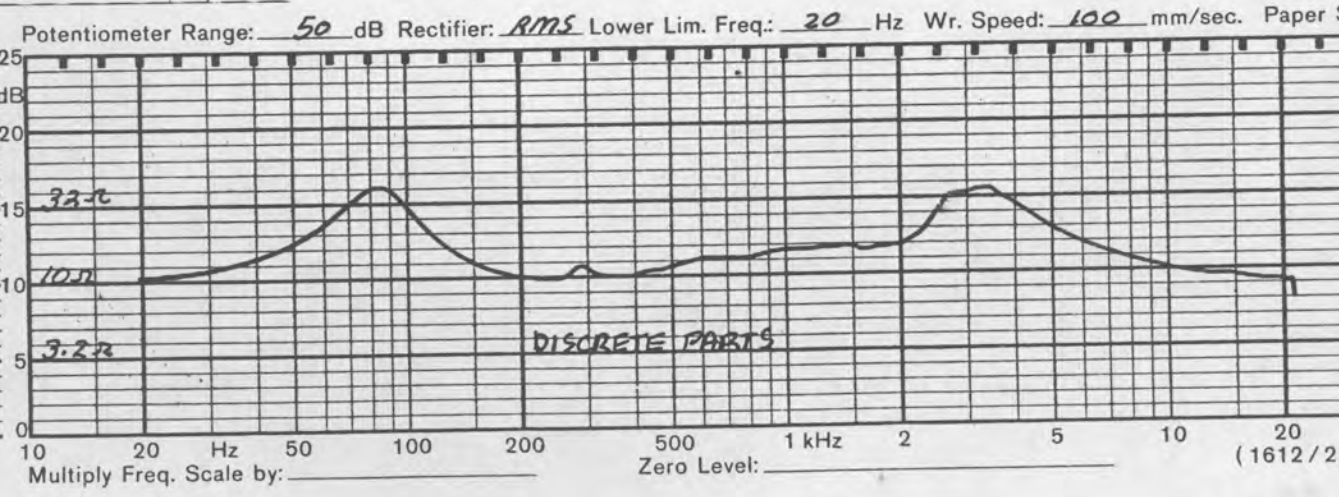
# MODIFICATION OF NETWORK



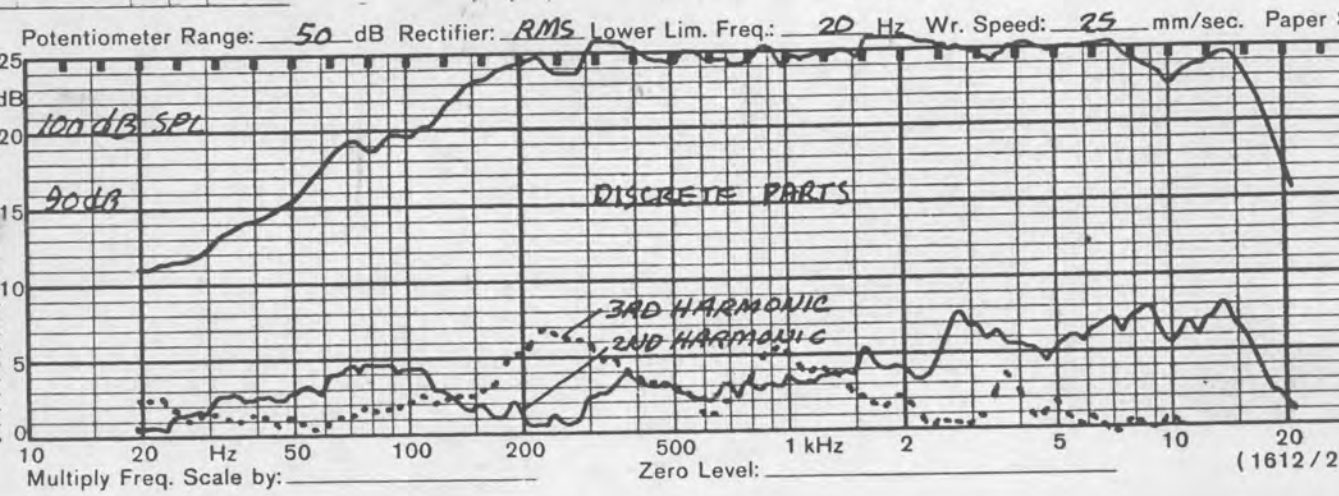
Brüel & Kjær  
 Measuring Obj.:  
 MODULAR  
 SOUND  
 XLS-125  
 .5M  
 2V  
 Rec. No.: 11  
 Date: 1-31-81  
 Sign.: EML  
 QP 0124

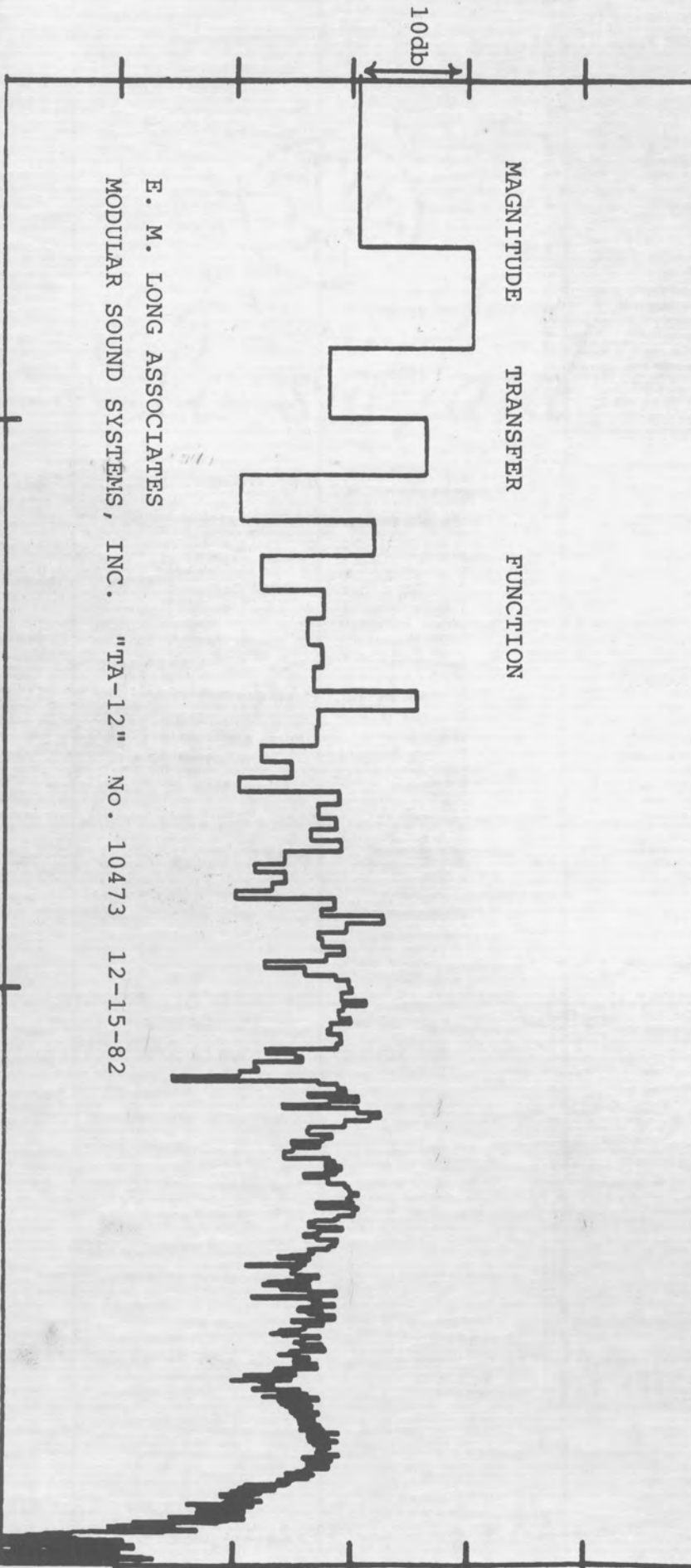
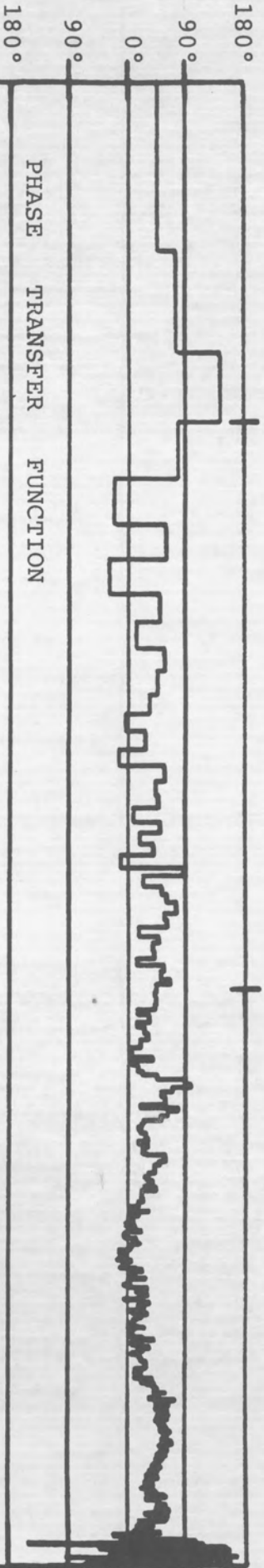


Brüel & Kjær  
 Measuring Obj.:  
 MODULAR  
 SOUND  
 XLS-125  
 Z  
 Rec. No.: 12  
 Date: 1-31-81  
 Sign.: EML  
 QP 0124



Brüel & Kjær  
 Measuring Obj.:  
 MODULAR  
 SOUND  
 XLS-125  
 DISTORTION  
 .5M  
 6.3V  
 Rec. No.: 13  
 Date: 1-31-81  
 Sign.: EML  
 QP 0124





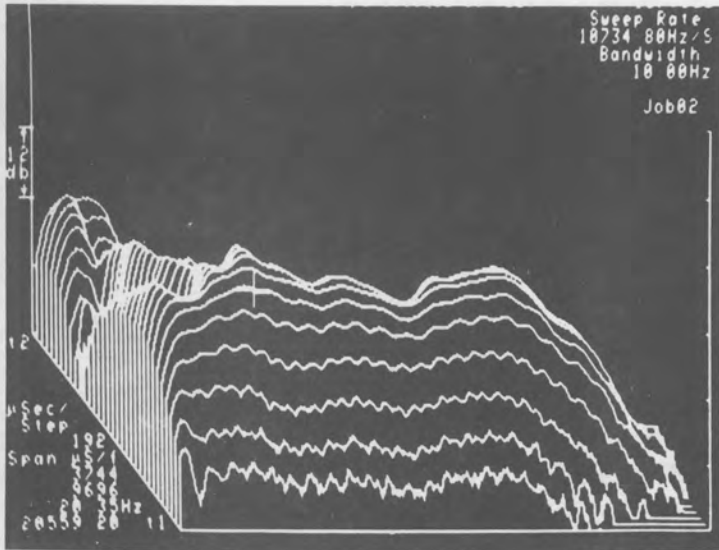
E. M. LONG ASSOCIATES  
MODULAR SOUND SYSTEMS, INC. "TA-12" NO. 10473 12-15-82

200Hz

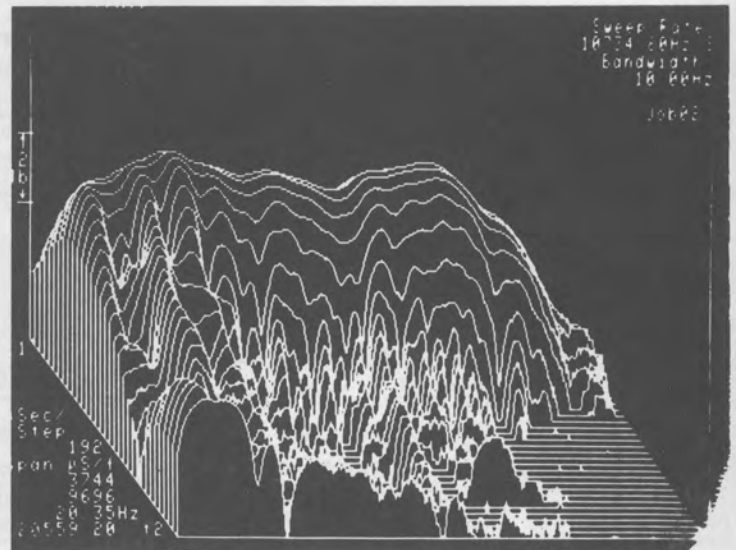
2KHz



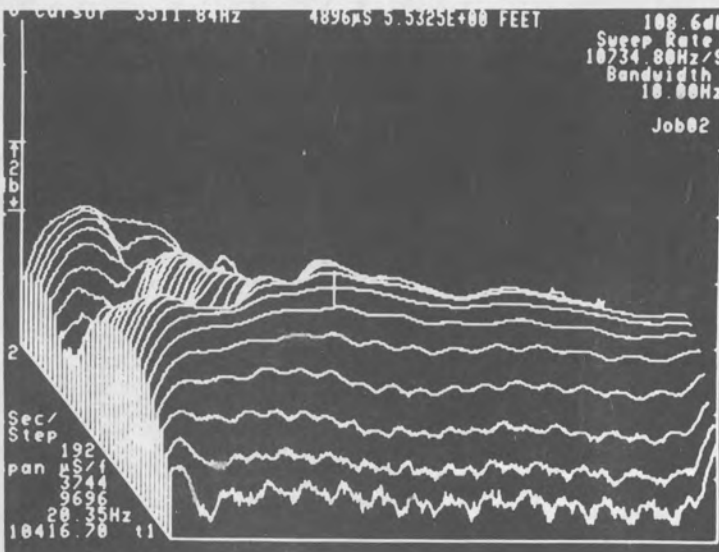
TIME ENERGY FREQUENCY CURVES ON MODULAR SOUND SYSTEMS 'TA-12'



20 kHz band width  
front side waterfall display



20 kHz band width  
back side waterfall display



10 kHz band width  
front side waterfall display

(192 microseconds per division)

Brüel & Kjær

Potentiometer Range: 50 dB Rectifier: RMS Lower Lim. Freq.: 20 Hz Wr. Speed: 25 mm/sec. Paper S

Measuring Obj:

MODULAR  
SOUND  
XLS-125

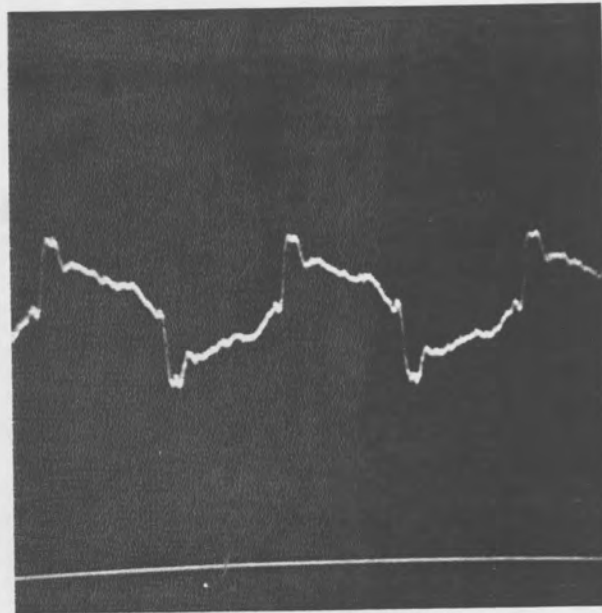
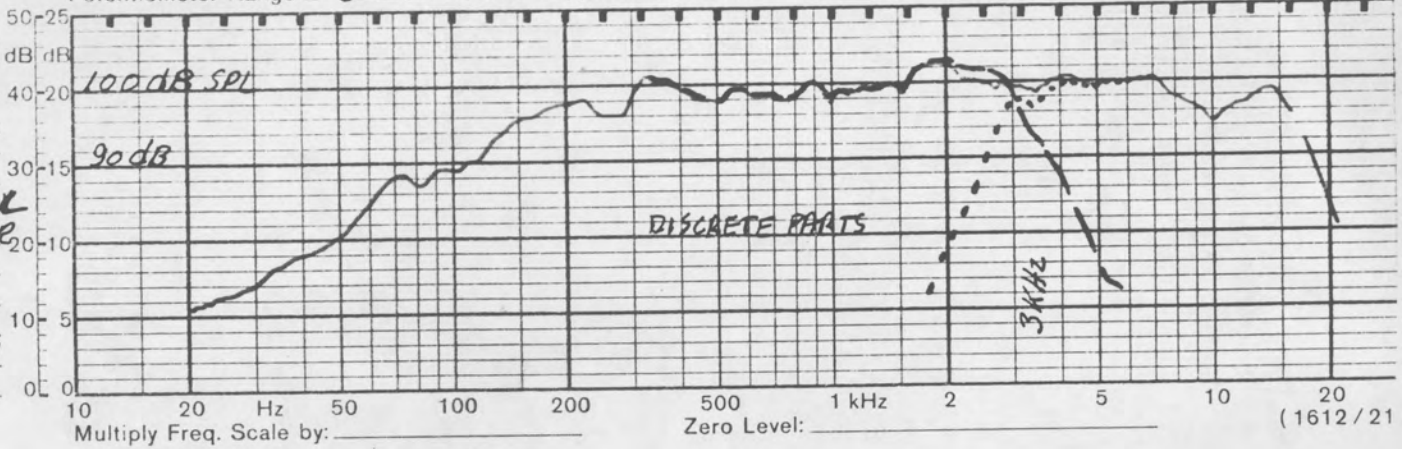
ACOUSTICAL  
CROSSOVER  
.5M  
2V

Rec. No: 14

Date: 1-31-81

Sign: EML

QP 0124



MODULAR SOUND XLS-125  
600Hz SQUARE WAVE

E.M. LONG

1-31-81

**E. M. LONG ASSOCIATES**

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