CHARACTERISTICS of UNDERGROUND SECONDARY POWER DISTRIBUTION NETWORKS For POWER LINE COMMUNICATION

February 20, 2006

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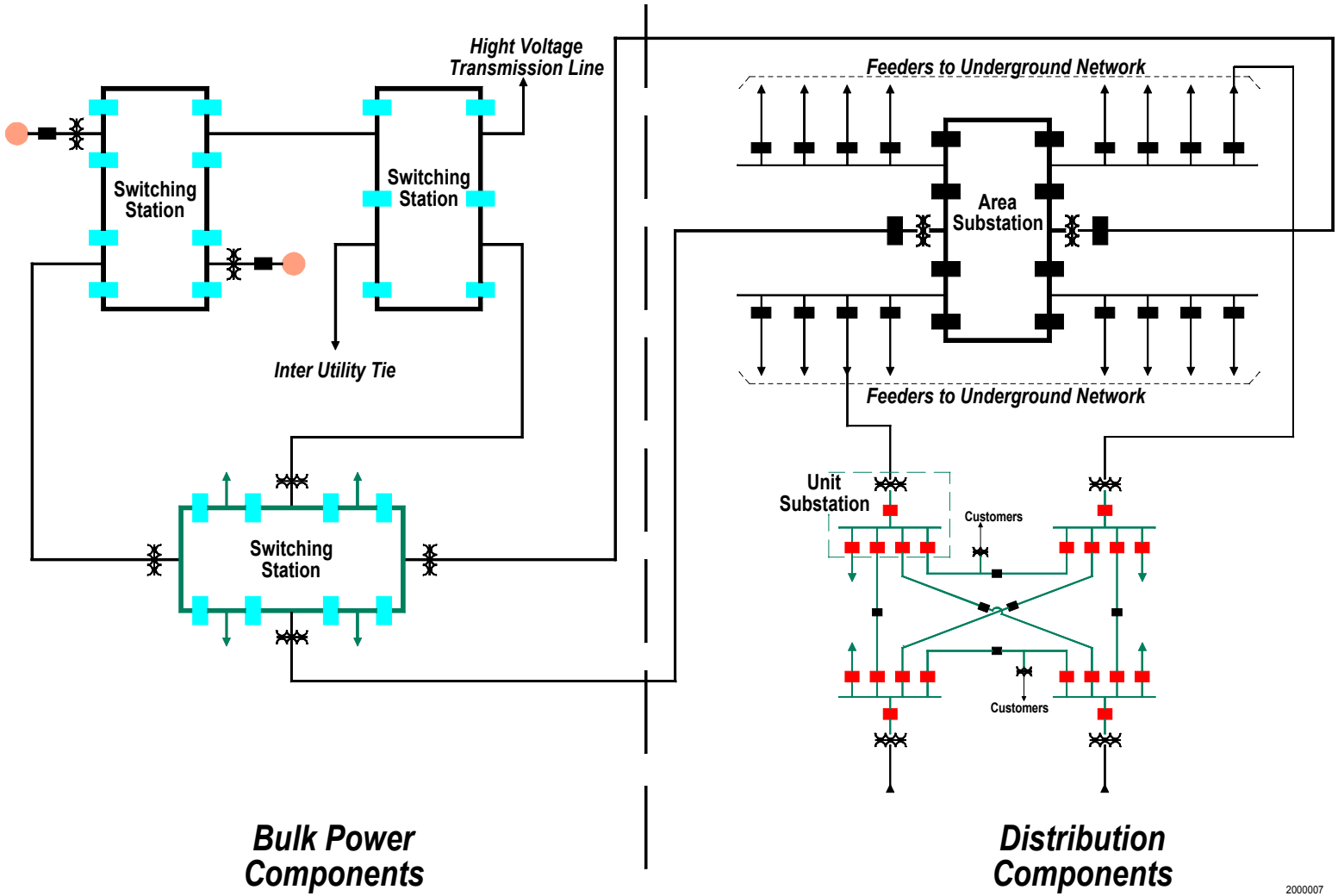
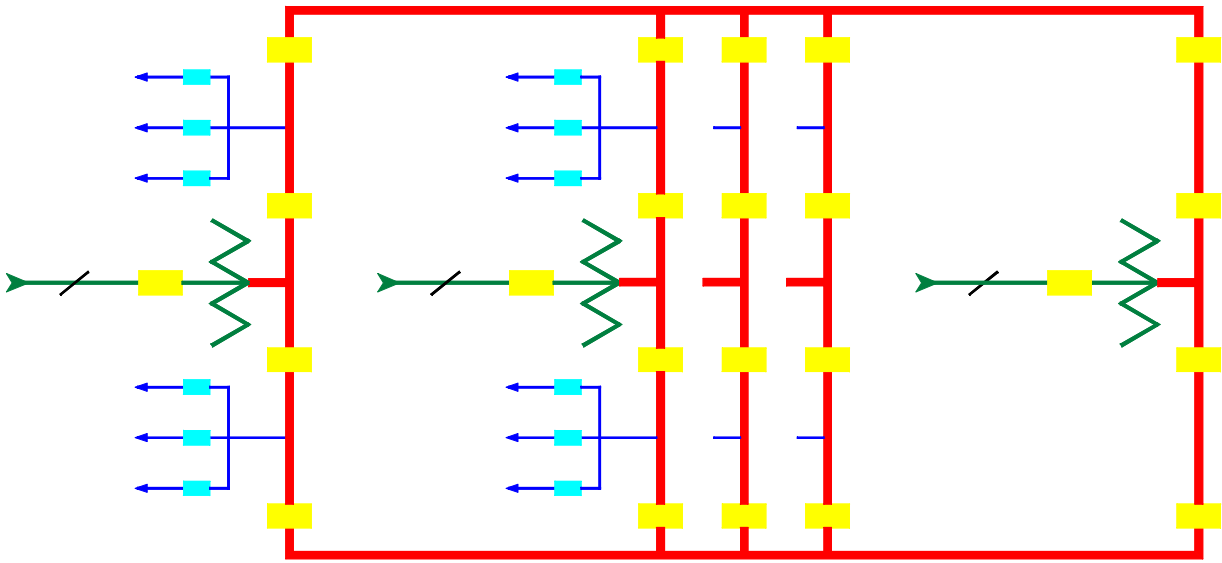
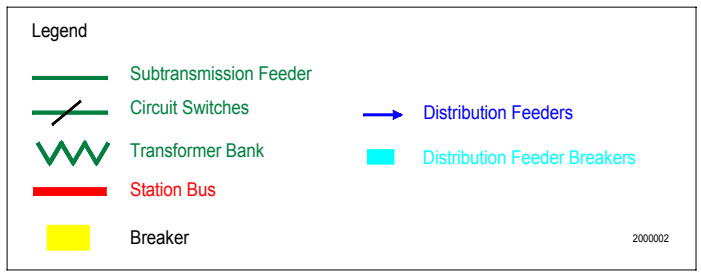
TYPICAL POWER DISTRIBUTION SYSTEM

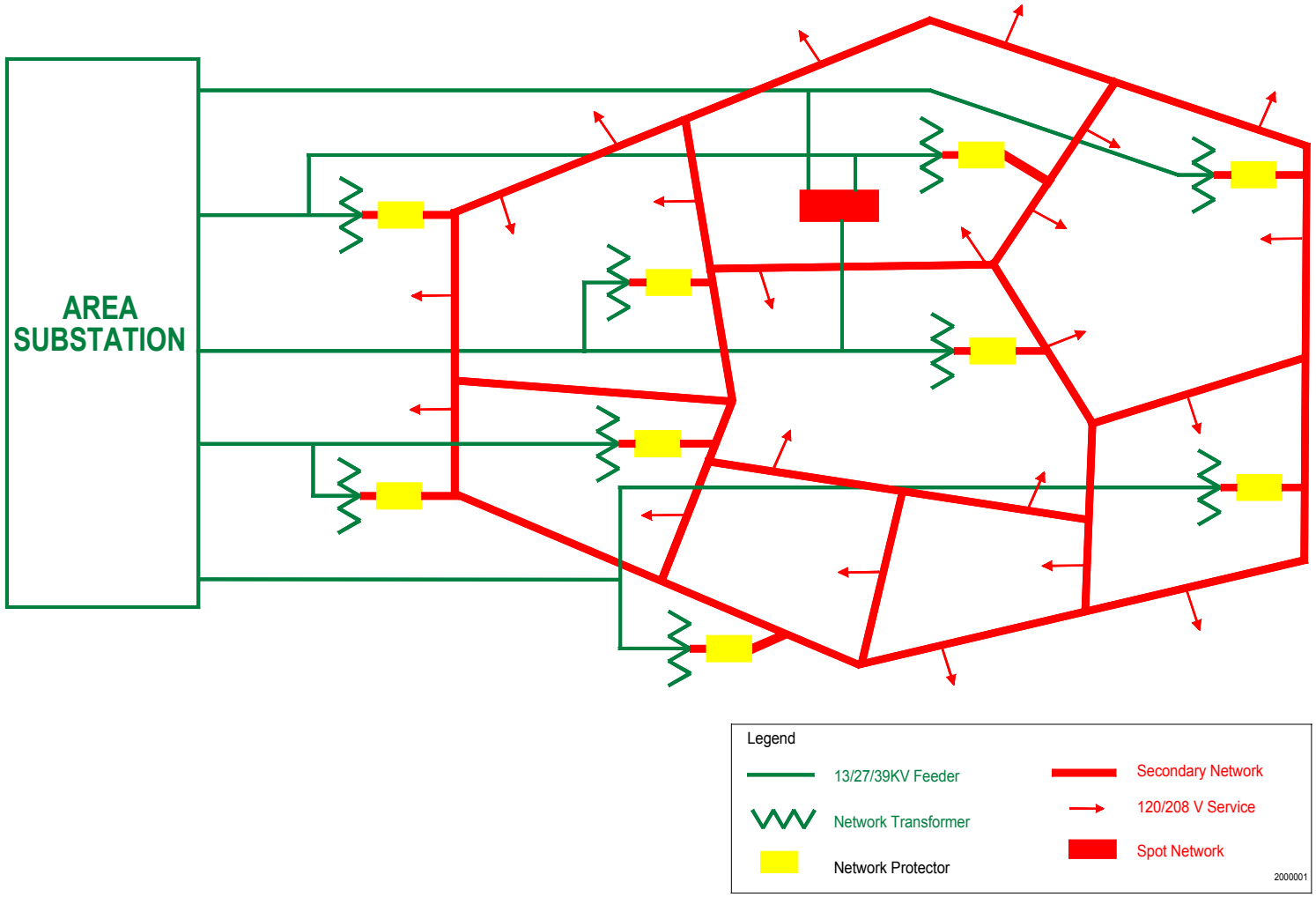


AREA SUBSTATION
Double Syn Bus Arrangement

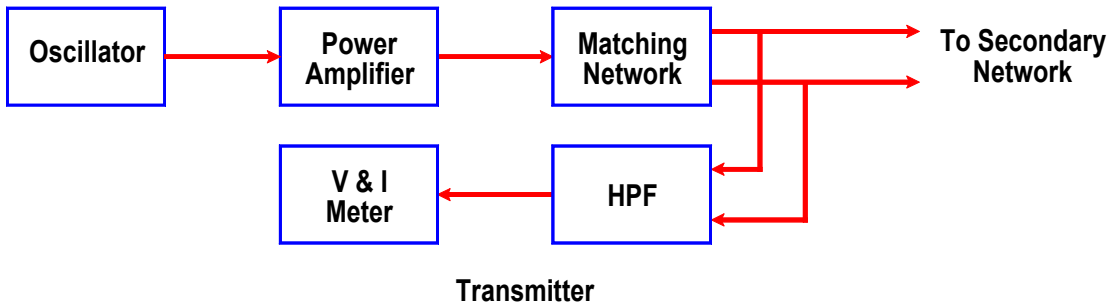




SECONDARY DISTRIBUTION NETWORK



PROPAGATION LOSS INSTRUMENTATION



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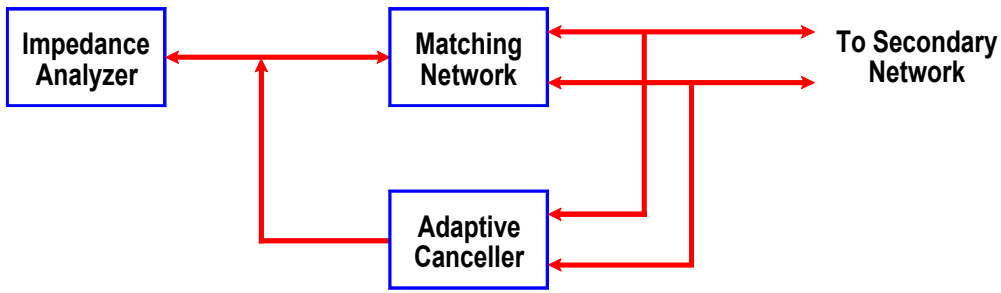
SECONDARY LINE IMPEDANCE INSTRUMENTATION



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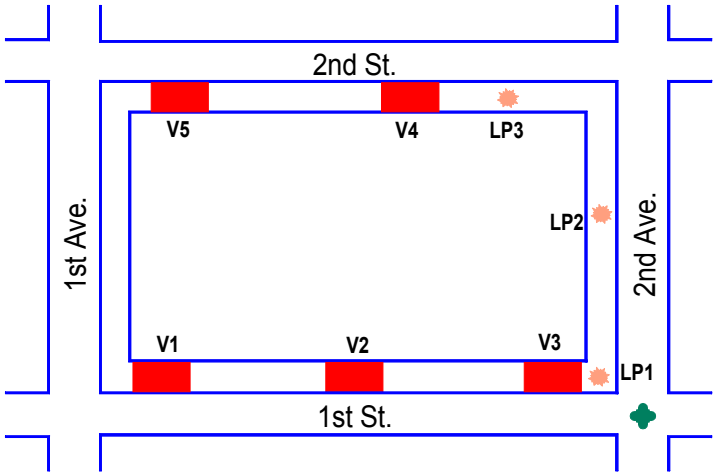
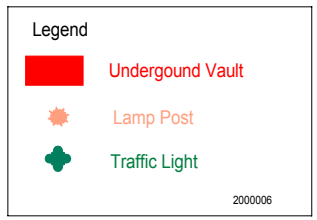
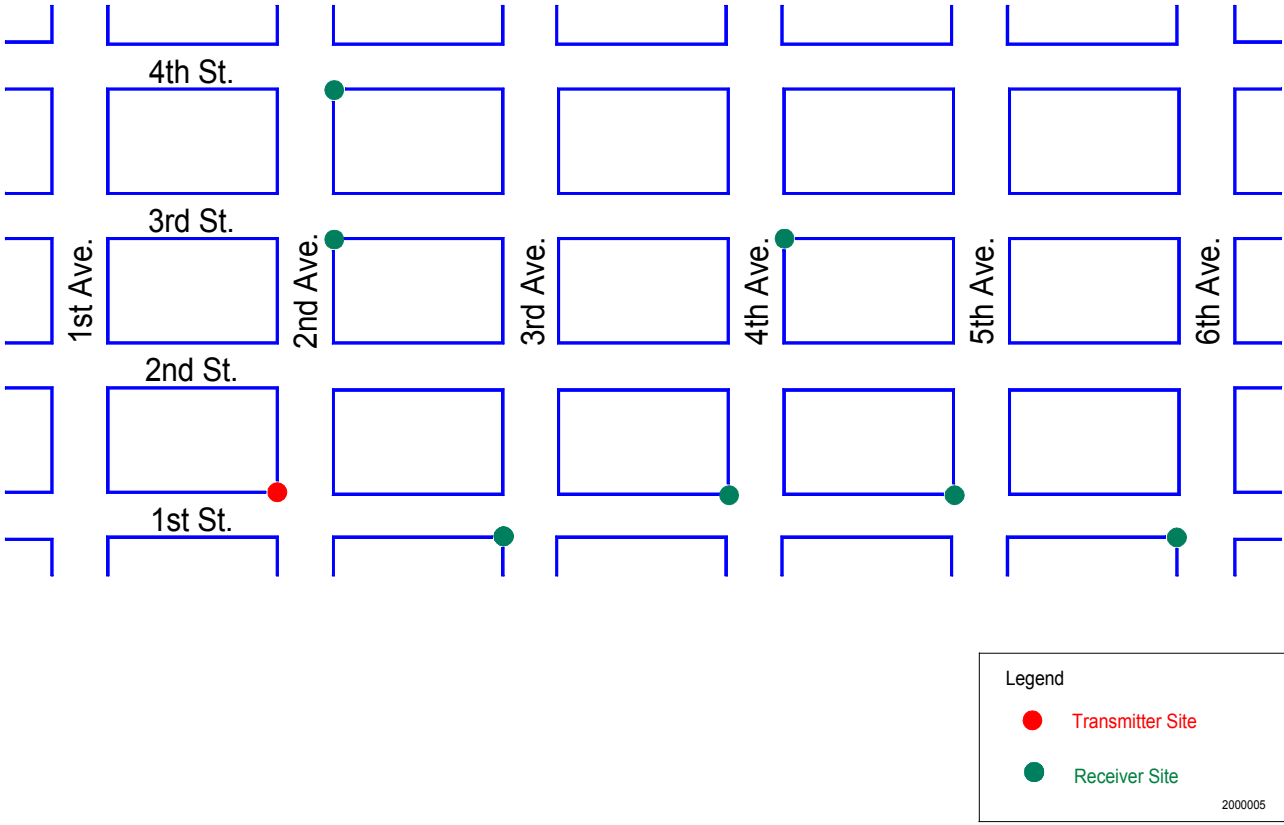
BLOCK CELL TEST AREA



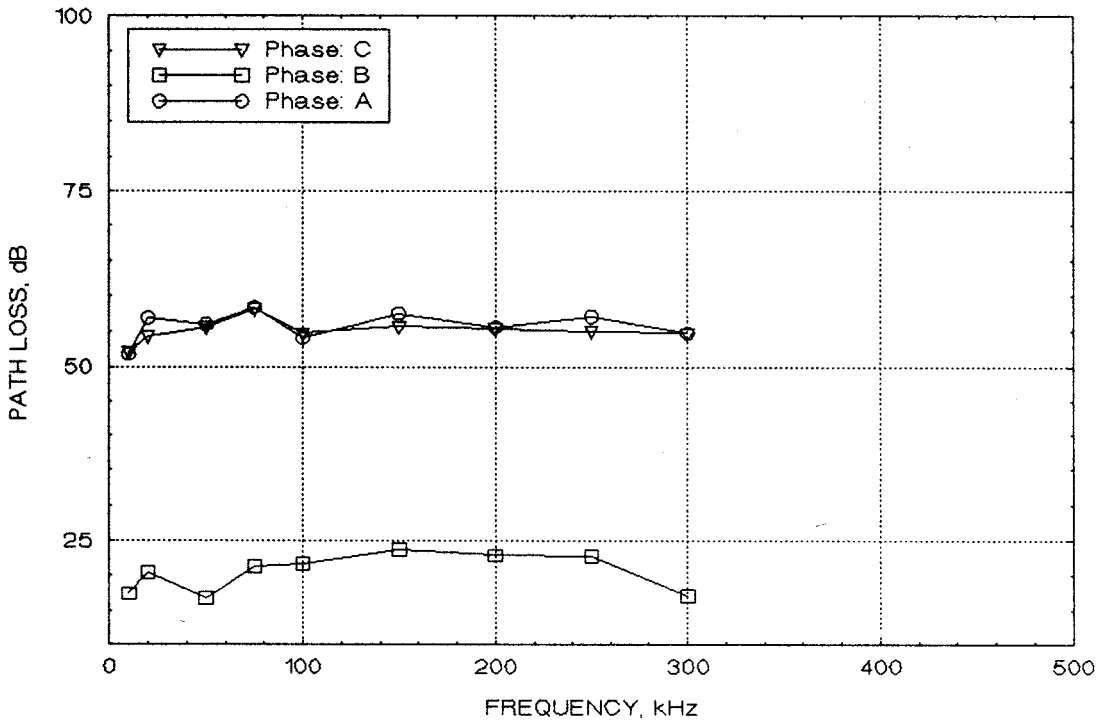


EXPANDED TEST AREA



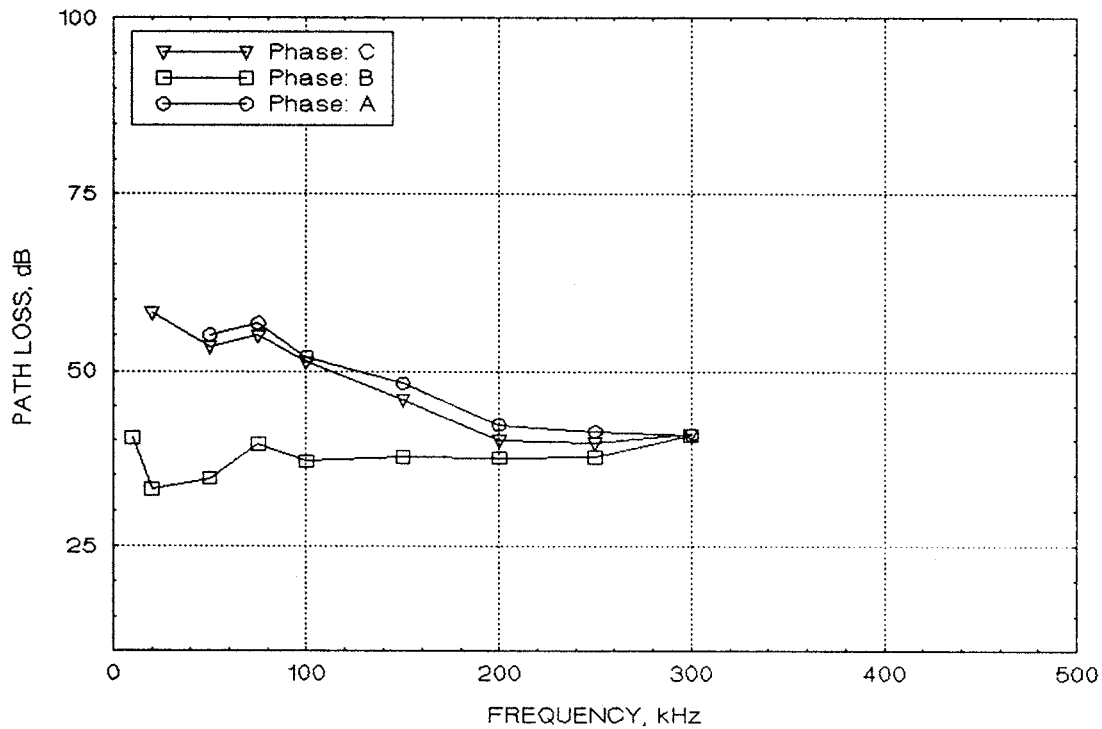
MEASURED PATH LOSS

T: V1 R: V2



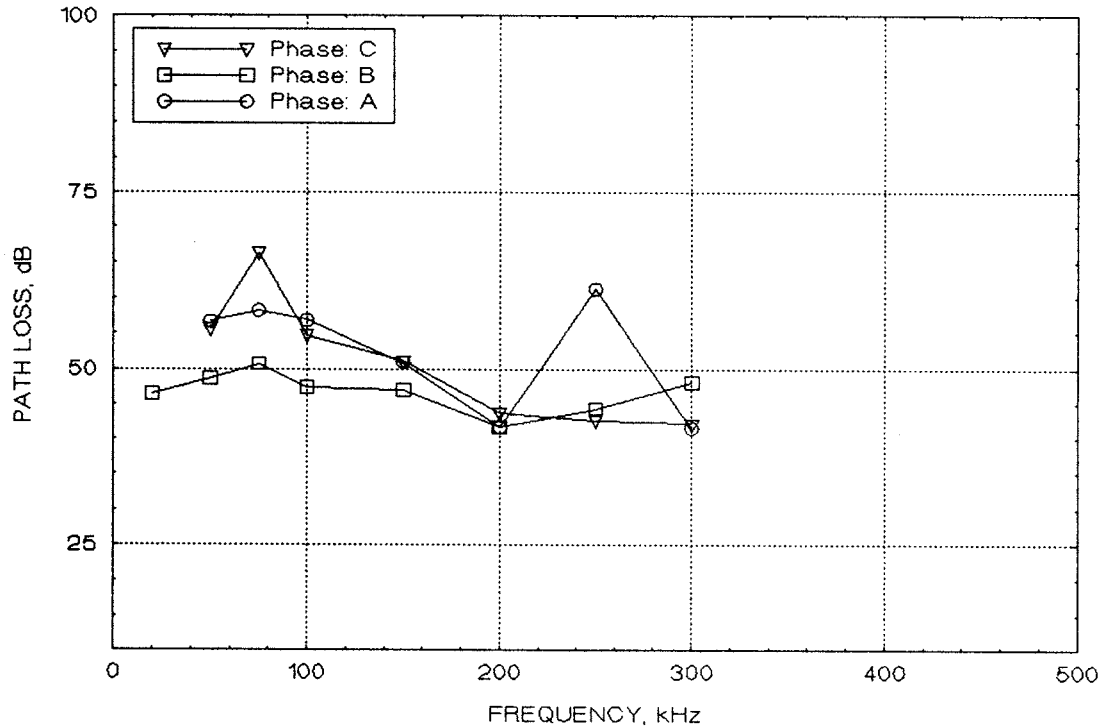
MEASURED PATH LOSS

T: V1 R: V3



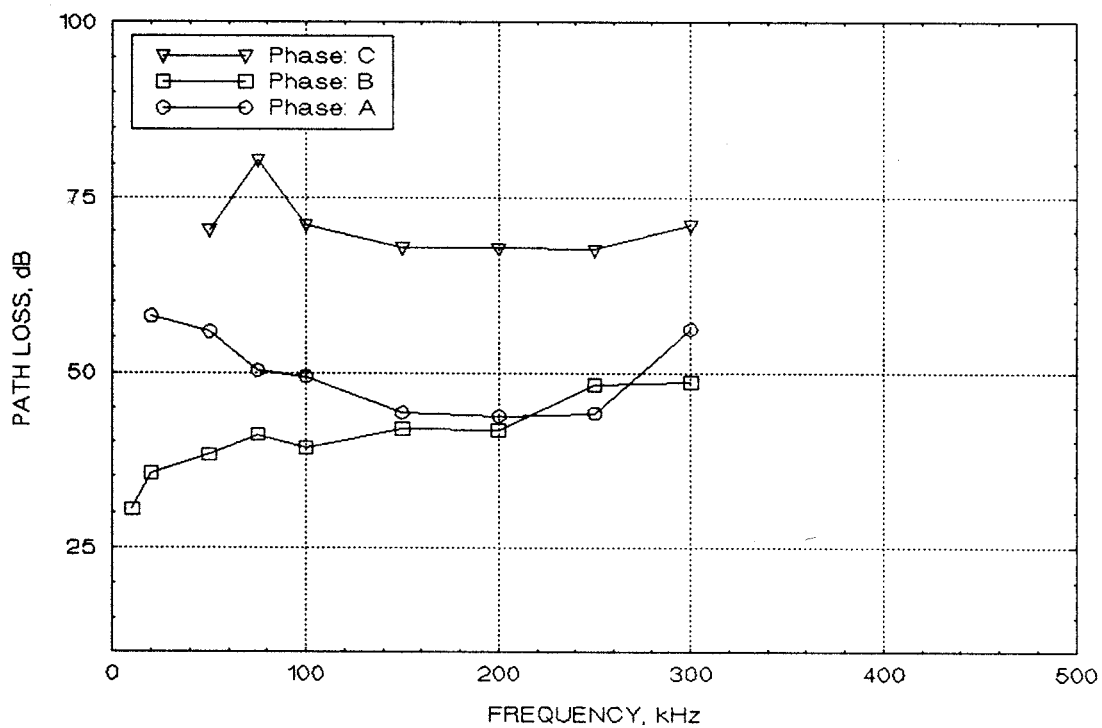
MEASURED PATH LOSS

T: V1 R: V4



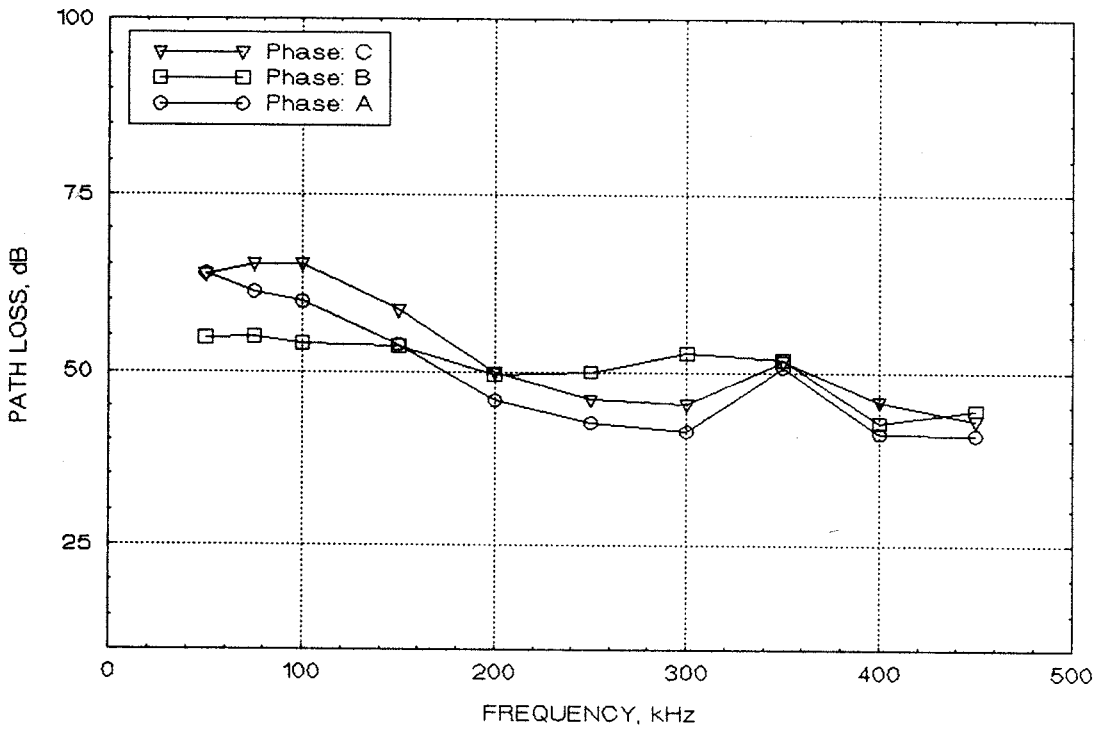
MEASURED PATH LOSS

T: V1 R: LP2



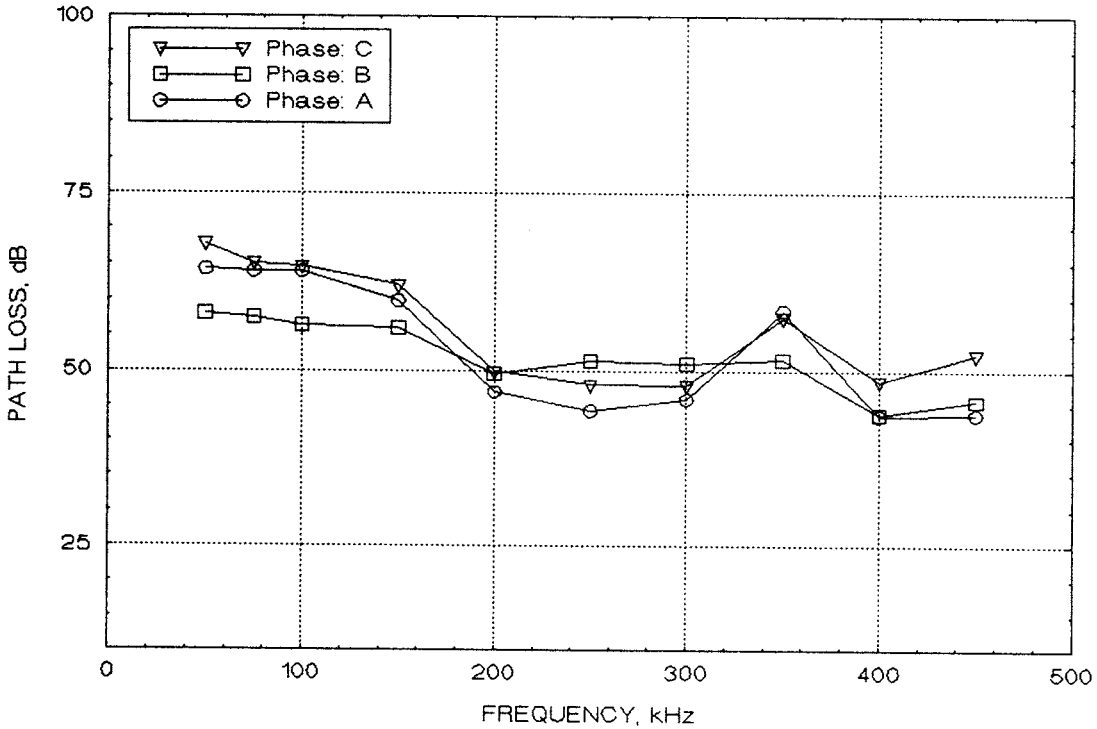
MEASURED PATH LOSS

T: V5 R: V1



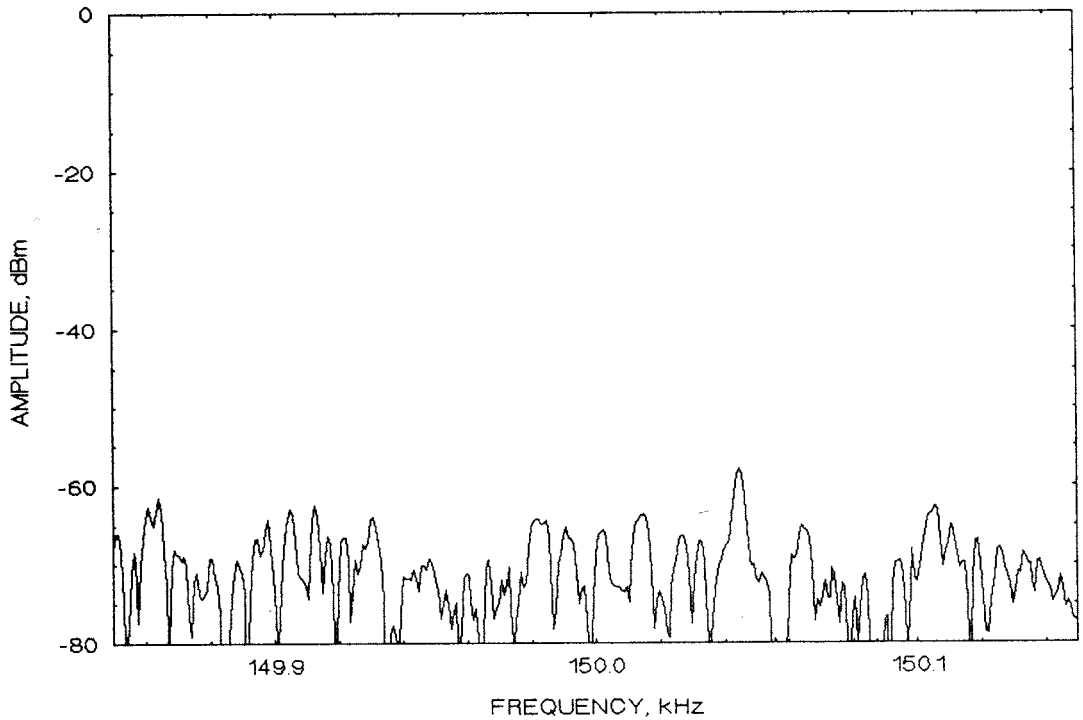
MEASURED PATH LOSS

T: V5 R: V2



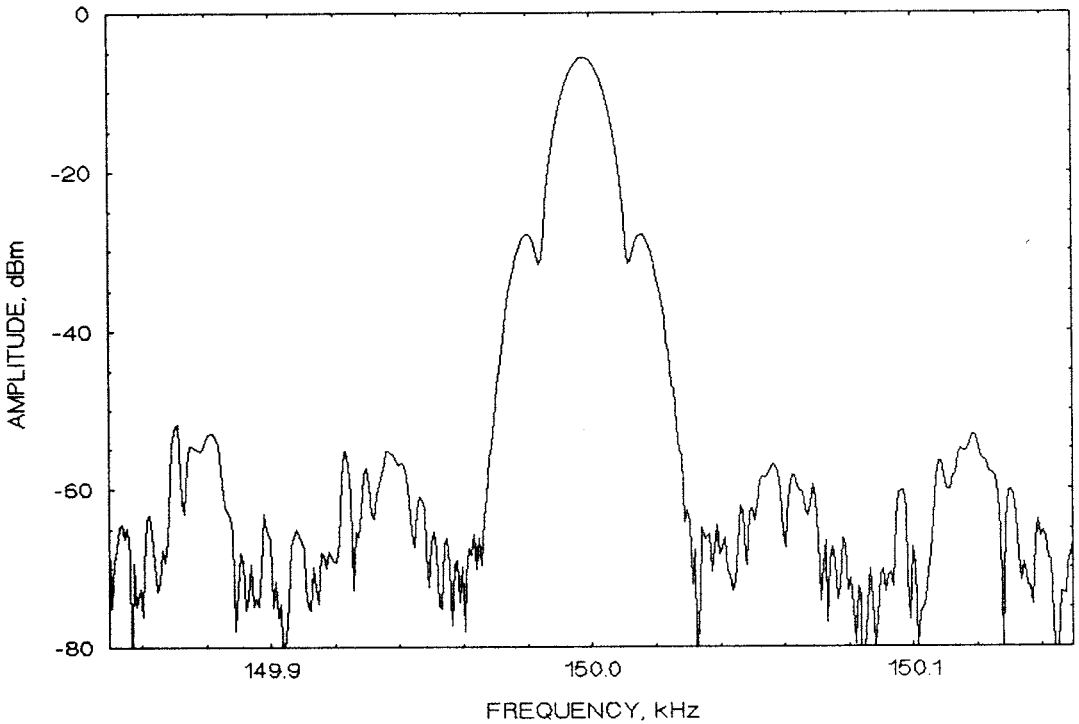
NOISE SPECTRUM

Noise R: LP2 Ph B



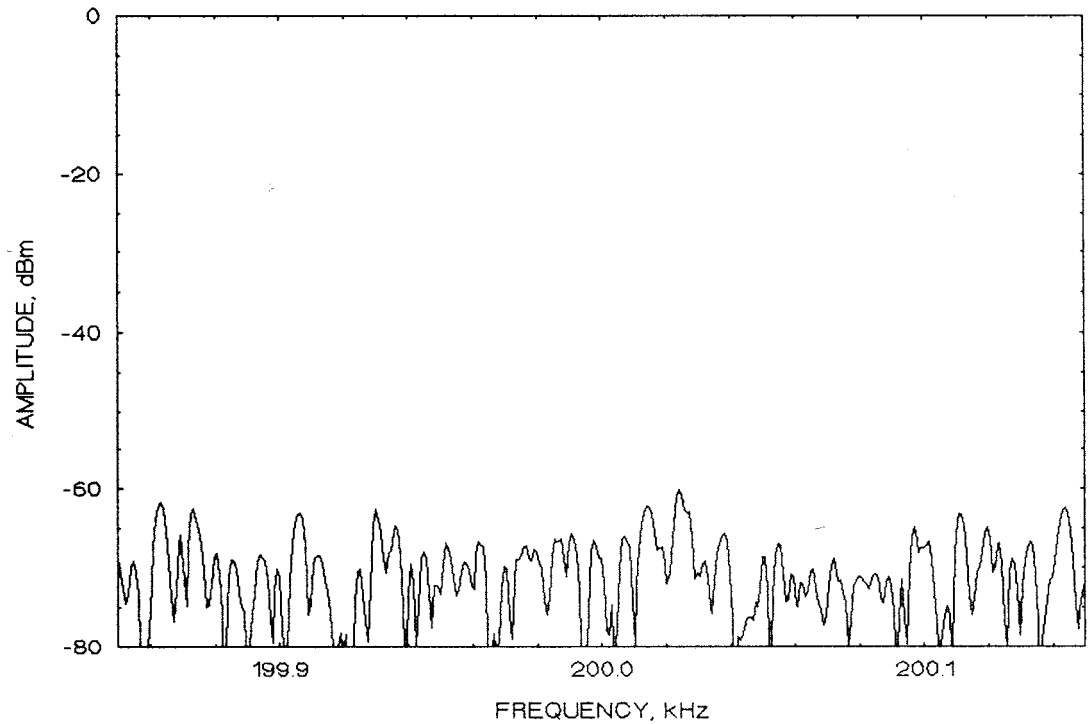
SIGNAL plus NOISE SPECTRUM

T: LP2 Ph B R: LP3 Ph B



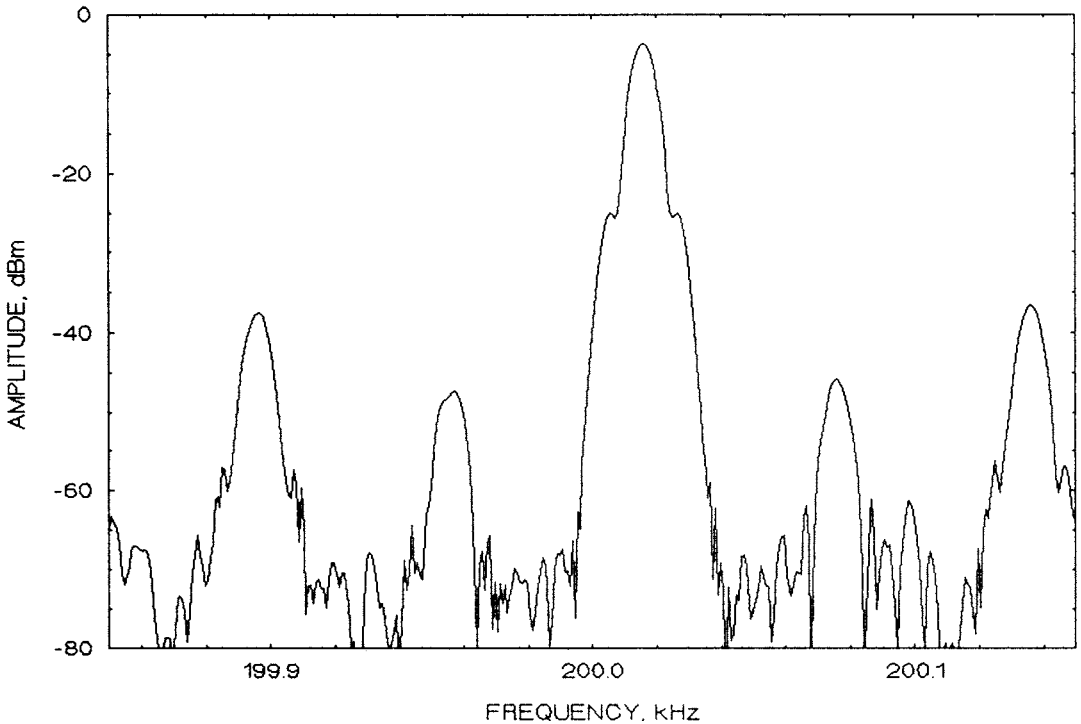
NOISE SPECTRUM

Noise R: LP3 Ph B



SIGNAL plus NOISE SPECTRUM

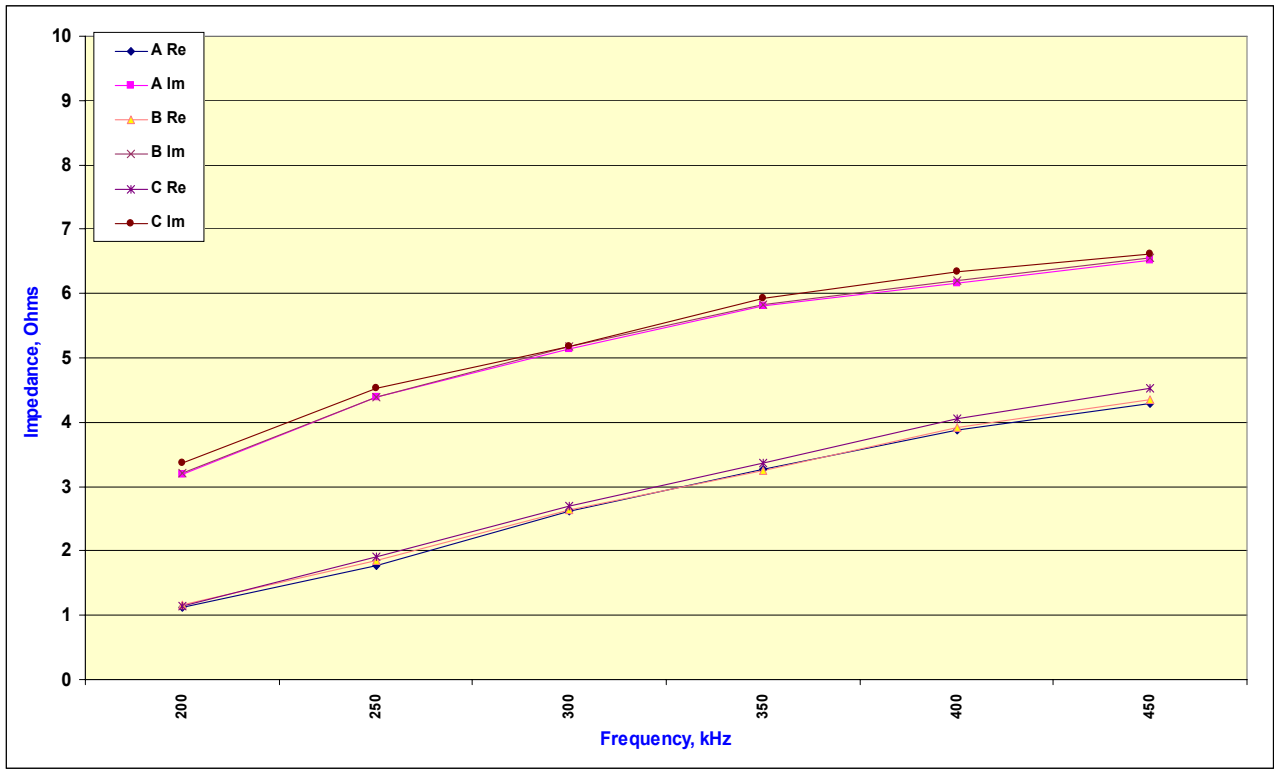
T: LP2 Ph B R: LP3 Ph B



LINE IMPEDANCE

At: V1

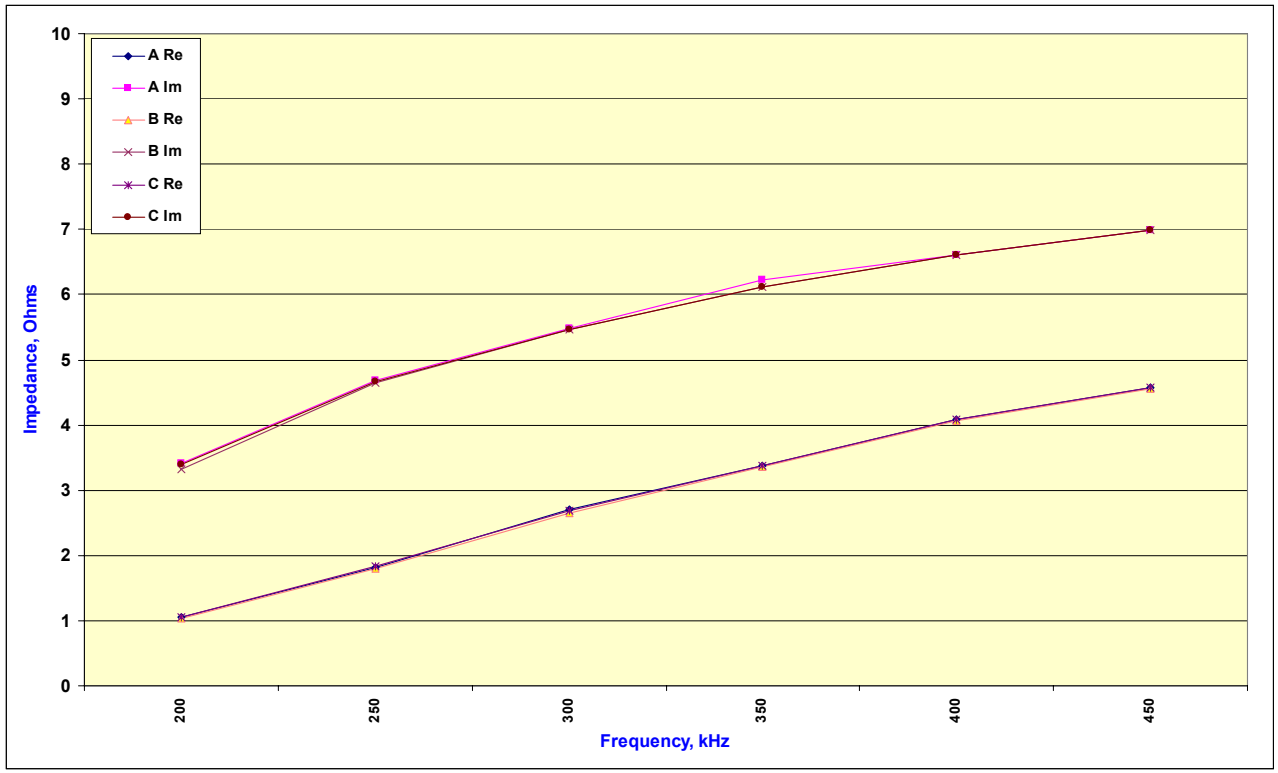
Protector Open, Network Side



LINE IMPEDANCE

At: V3

Protector Open, Network Side



LINE IMPEDANCE

At: V4

Protector Open, Network Side