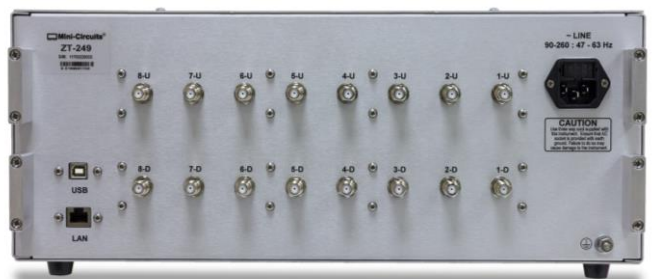
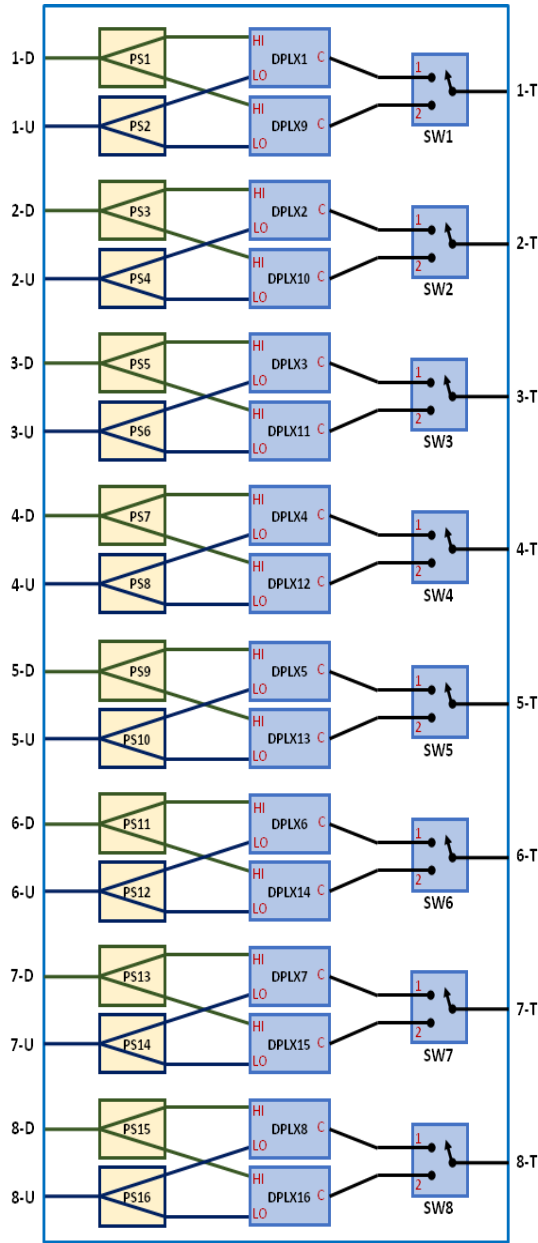


Model	ZT-249		
Description	CMTS Test Box (75Ω, 5-1218 MHz)		

Functional Schematic:



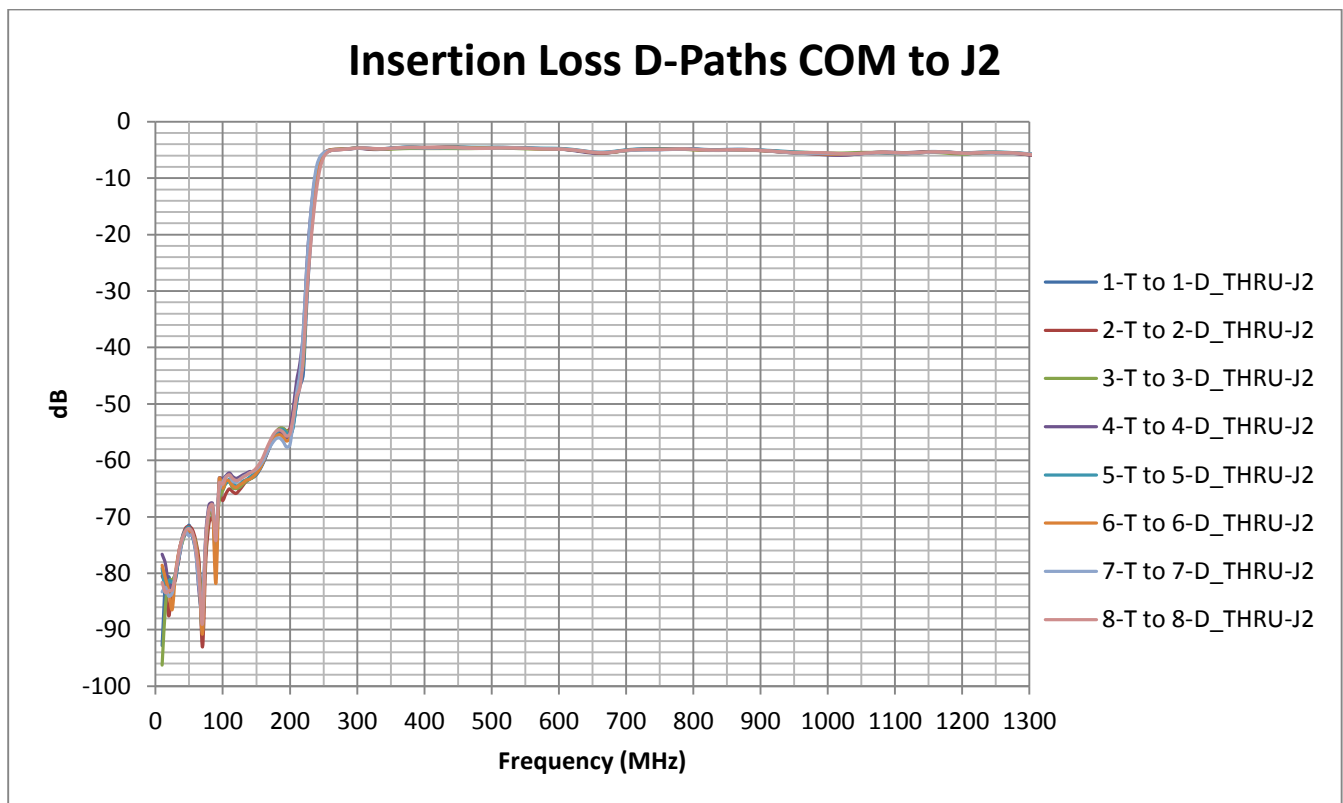
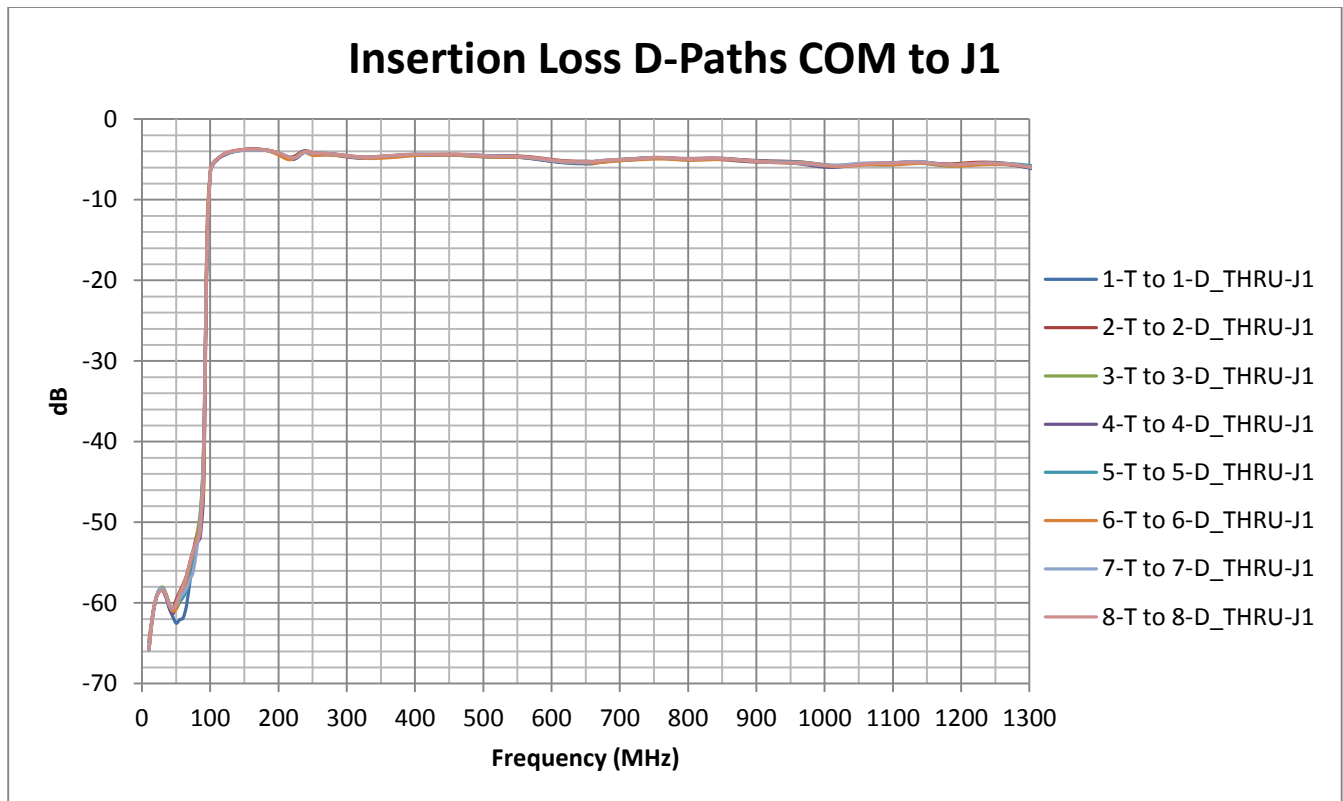
Mechanical / Software Specifications: Outline Drawing 99-01-2457

Dimensions	19" (W) x 4U (H) x 20" (D)
Case Material	Aluminum
RF Connectors	F-type female (75Ω)
Front Panel Marking	Line 1: ZT-249 Line 2: CMTS Test Box (5-1218 MHz)
Front panel	a) ON/OFF switch with indicator light b) 8x F-type female connectors (1-T to 8-T) c) Carry handles
Rear panel	a) 16x F-type female connectors (1-U to 8-U and 1-D to 8-D)) b) AC mains power supply input c) USB & RJ45 control connections d) Label with date code/serial number/MCL part# for traceability
Control Interface	a) USB and Ethernet TCP/IP supporting HTTP and TELNET protocols
Software support	a) Mini-Circuits GUI for manual testing (Windows) b) Command set for automation through Ethernet c) ActiveX/.NET DLLs for USB automation in a Windows environment d) Interrupt codes for USB automation in a Linux environment
Power supply	AC mains power supply (90-260 V, 47-63 Hz)
Operating temp	0° to +50° C

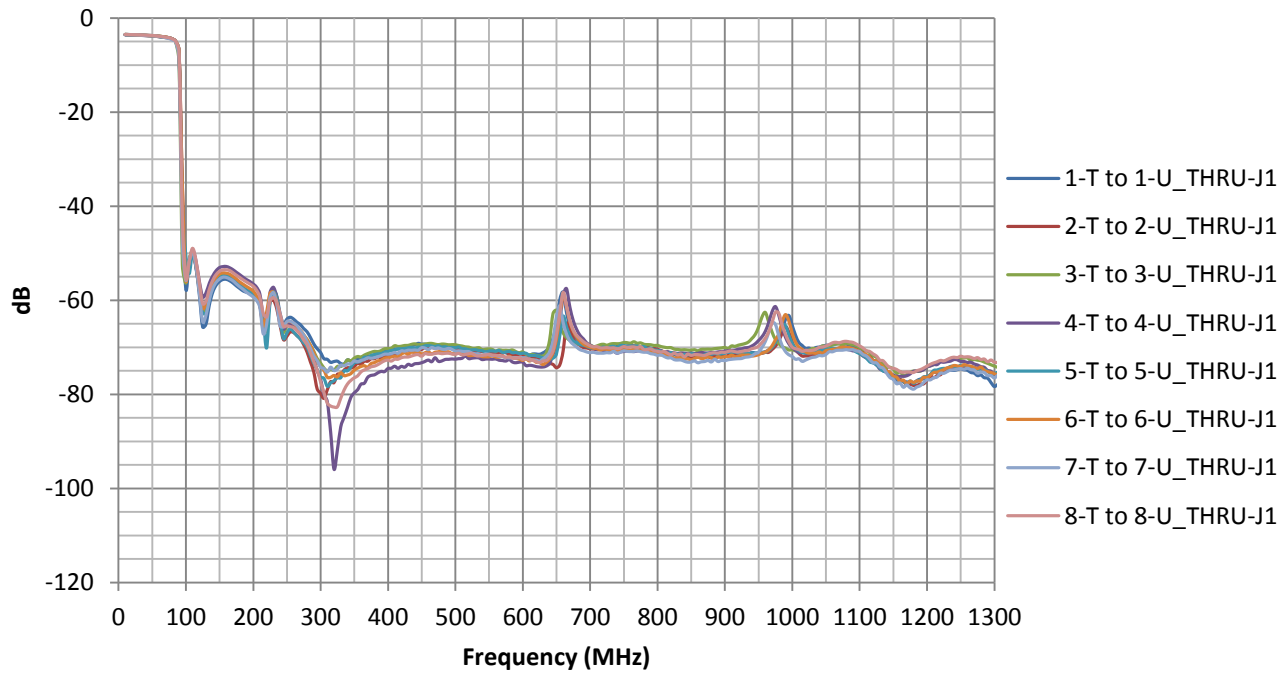
Electrical Specifications per Channel @ +25° C:

Parameter	Value	Comments
High Pass Frequency	102-1220 MHz	Switch state = COM to J1
	258-1220 MHz	Switch state = COM to J2
Low Pass Frequency	5-85 MHz	Switch state = COM to J1
	5-204 MHz	Switch state = COM to J2
Input Power	+10 dBm max	Into "T" port
	+20 dBm max	Into "D" or "U" port
Insertion Loss	7 dB typ	Relevant pass band on active path
Rejection	45 dB typ	Rejection at relevant band on active path
Return Loss	15 dB typ	"T" Ports, at relevant pass bands "D" Ports, at 258 – 1220 MHz "U" Ports, at 5 – 85 MHz

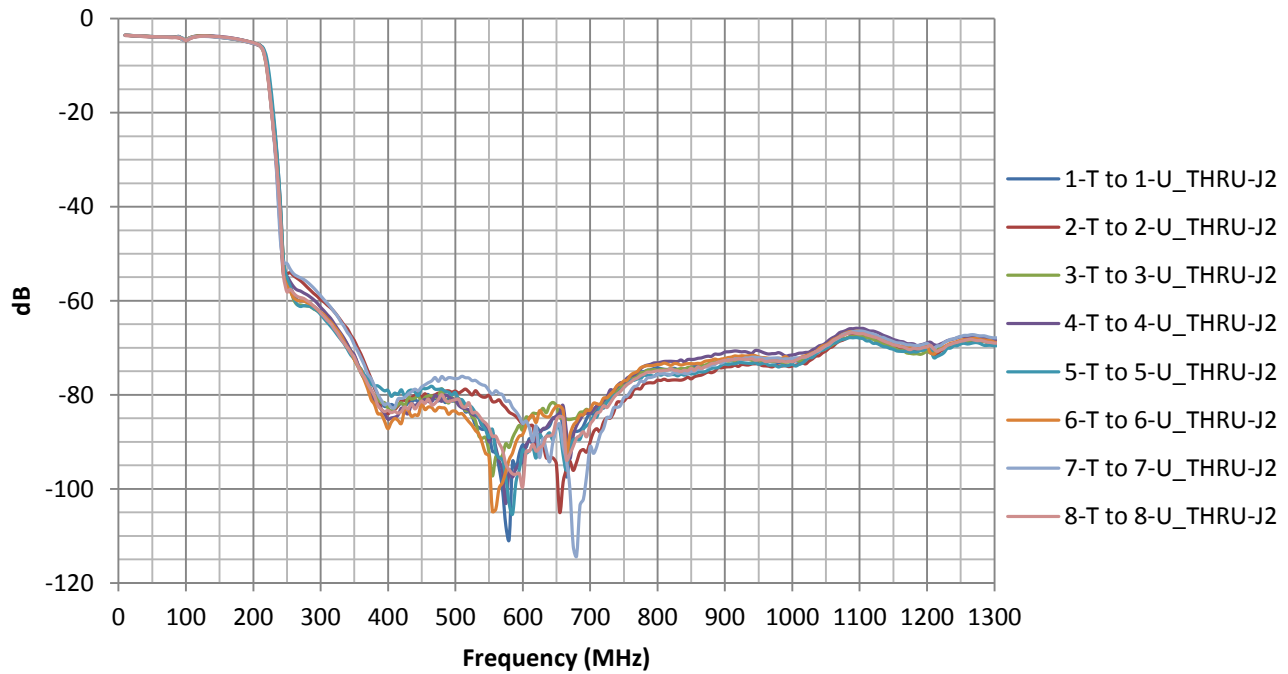
Electrical Performance per Channel @ +25° C:



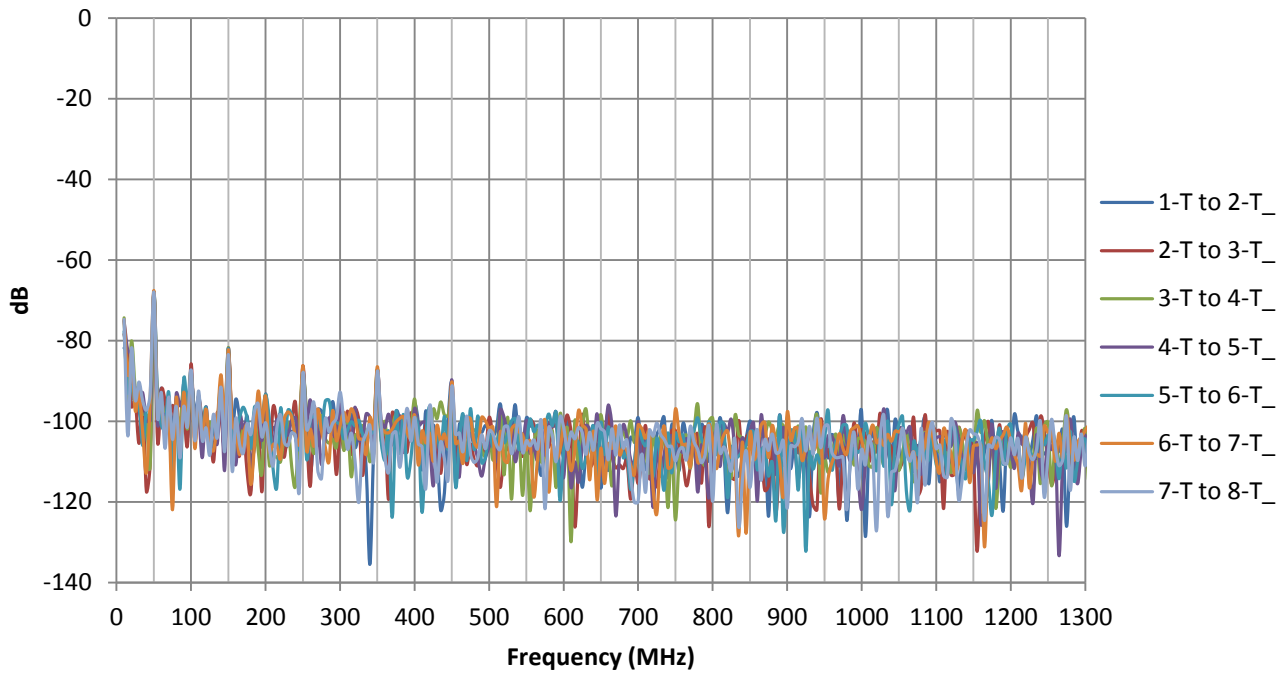
Insertion Loss U-Paths COM to J1



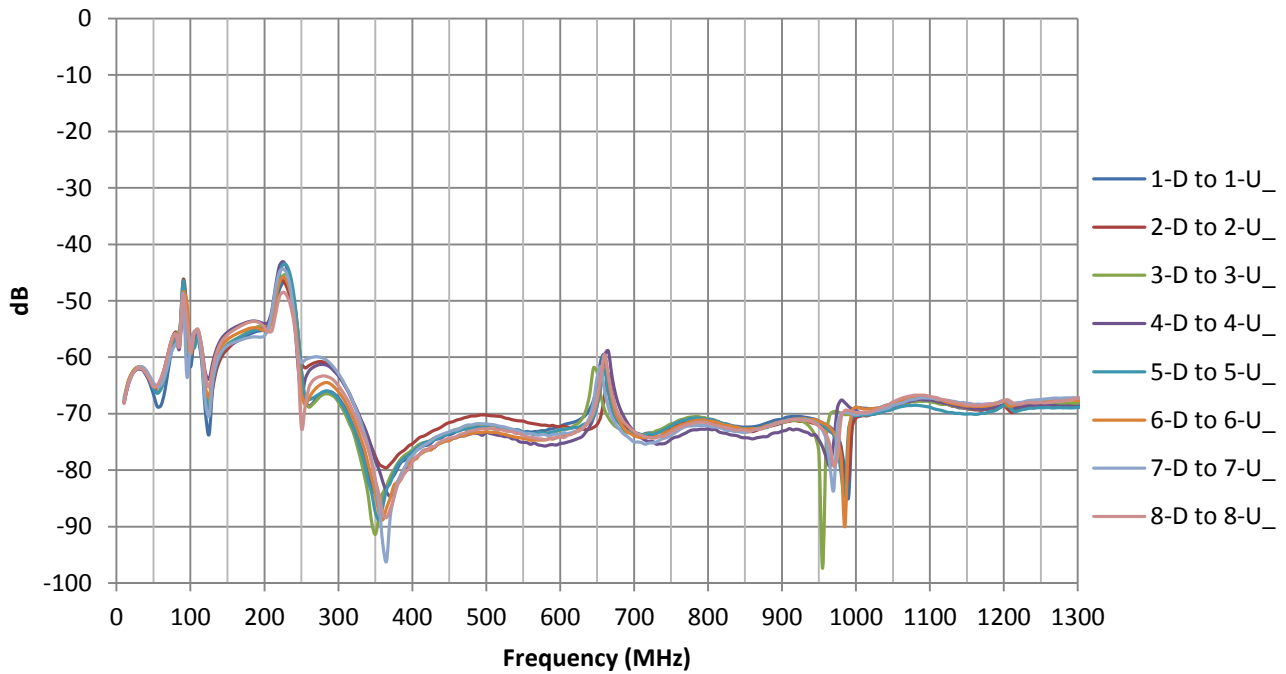
Insertion Loss U-Paths COM to J2



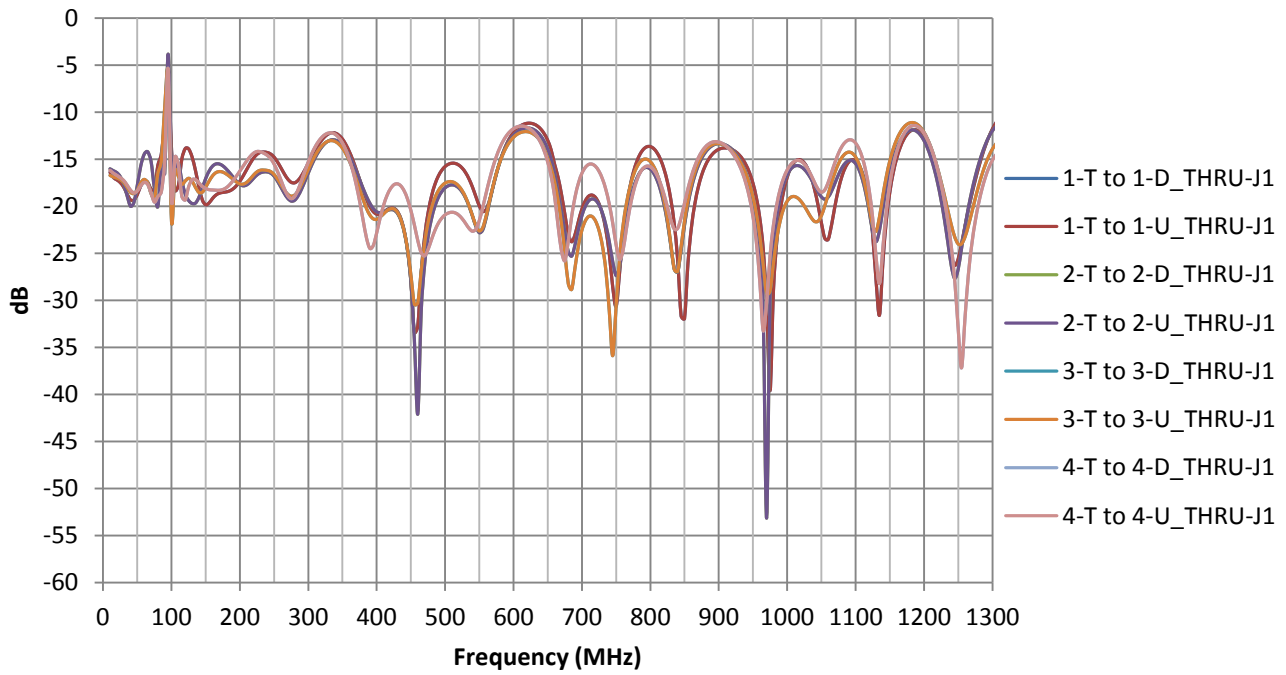
Isolation Between Input Ports



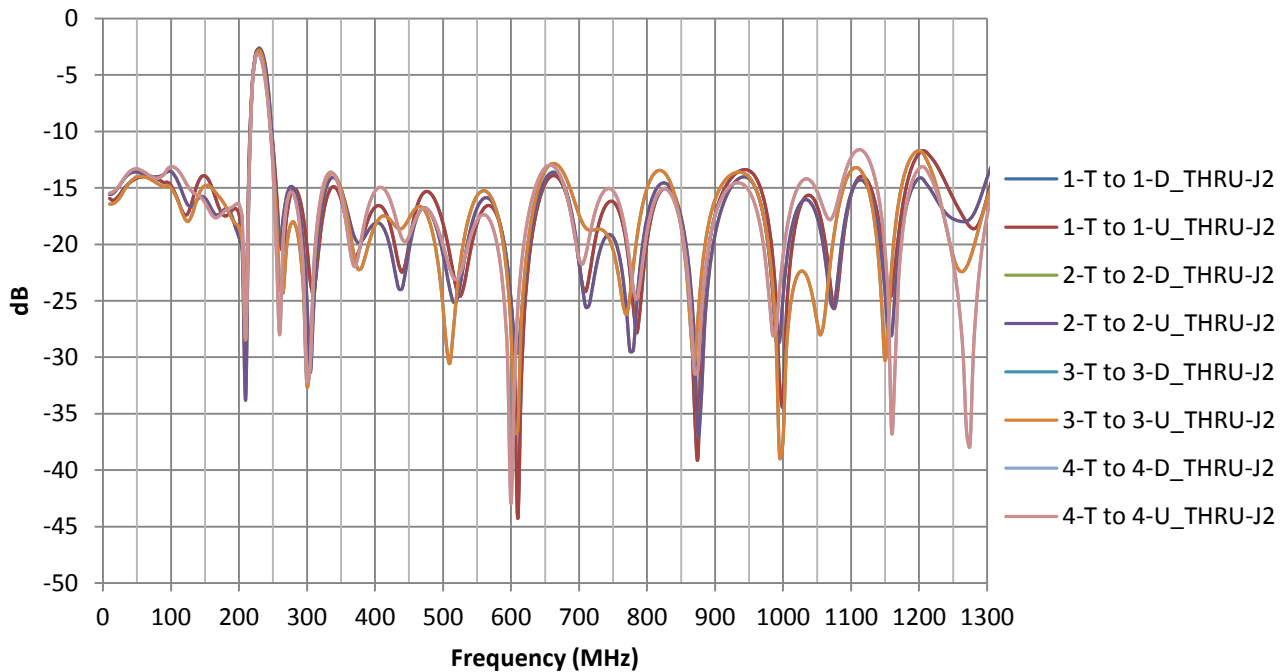
Isolation Between Output Ports



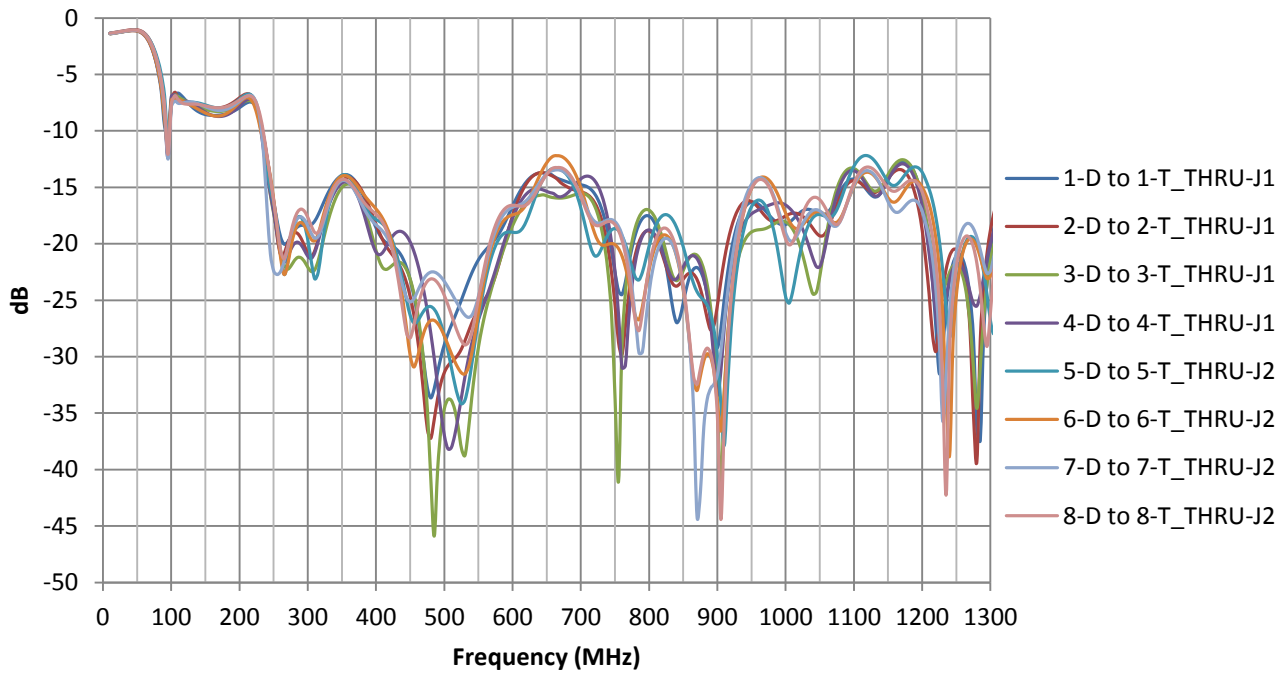
Return Loss T-Ports COM to J1



Return Loss T-Ports COM to J2



Return Loss D-Paths



Return Loss U-Paths

