

# CeeLok FAS-T Nano Circular - 10G Ethernet Test Data with Madison TurboTwin Cable

April 16, 2014  
TE Lab Test EMEPRJ-11-4043-001  
Rev 2

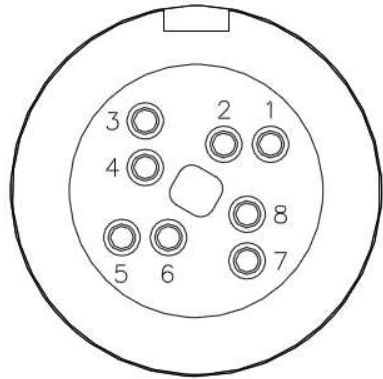
**EVERY CONNECTION COUNTS**



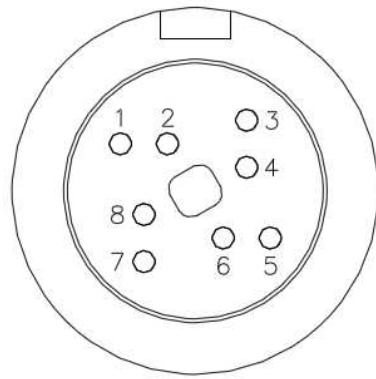
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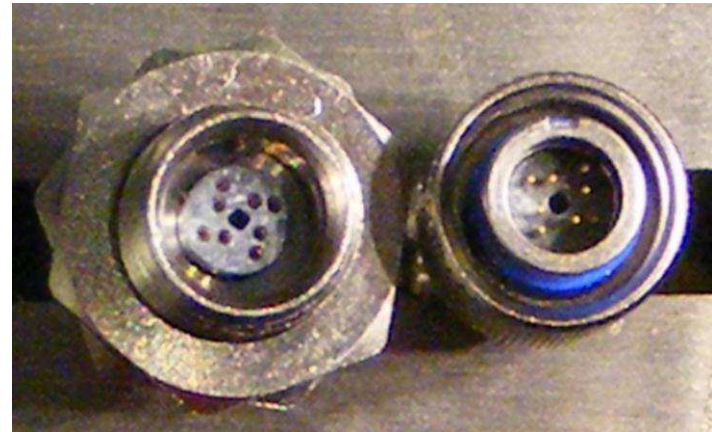
# CeeLok FAS-T Nano Circular Pinout



Receptacle  
Mating Face



Plug Mating  
Face

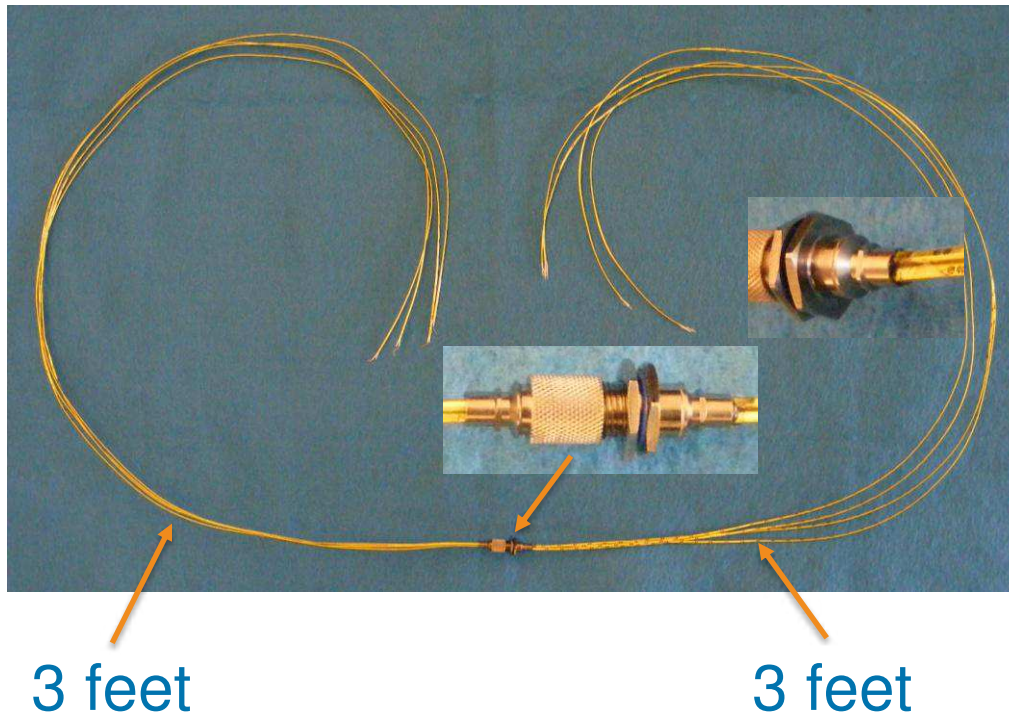




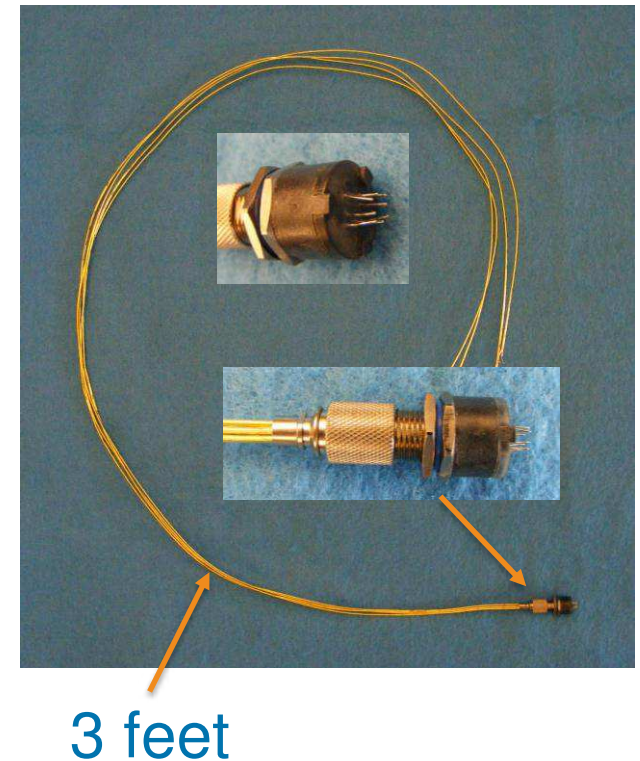
# CeeLok FAS-T Nano Circular Test Samples

- Terminated with 30AWG Madison TurboTwin Cable

Cable Plug mated to Cable Receptacle

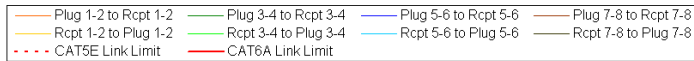
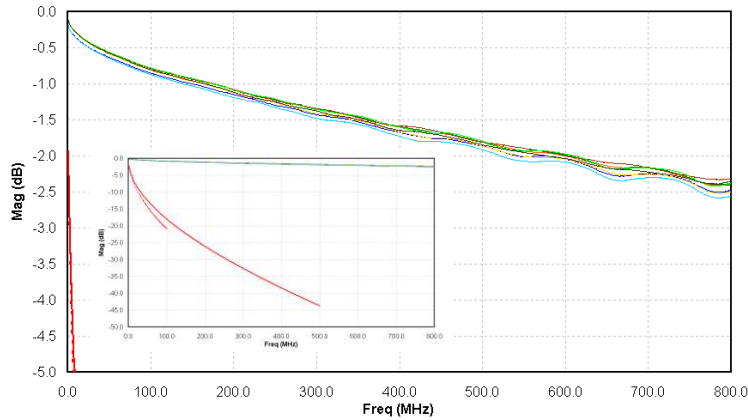


Cable Plug mated to PCB Receptacle

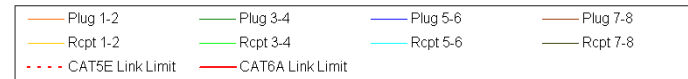
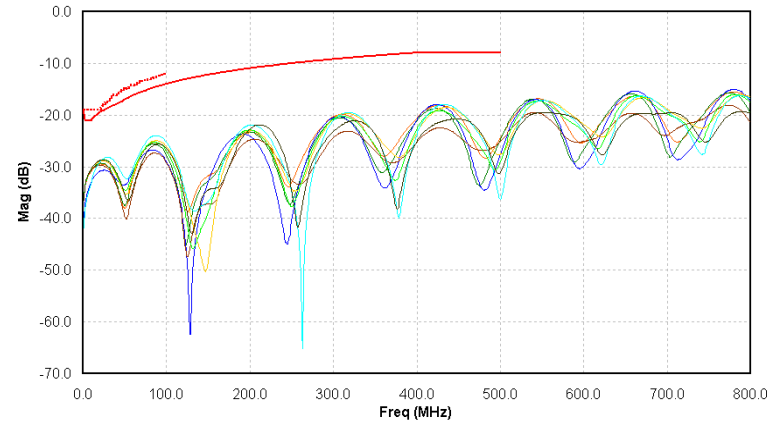


# CeeLok FAS-T Nano Circular Insertion Loss, Return Loss, and NEXT - Cable to Cable

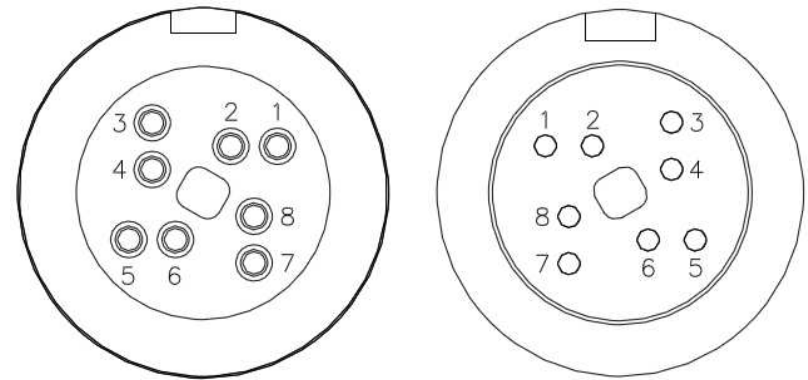
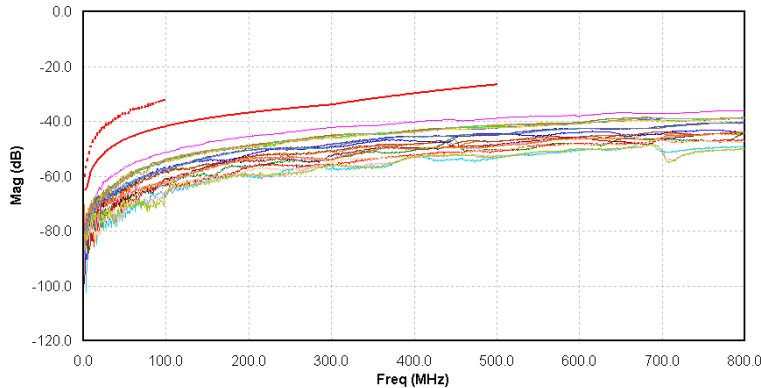
DIFFERENTIAL INSERTION LOSS



DIFFERENTIAL RETURN LOSS

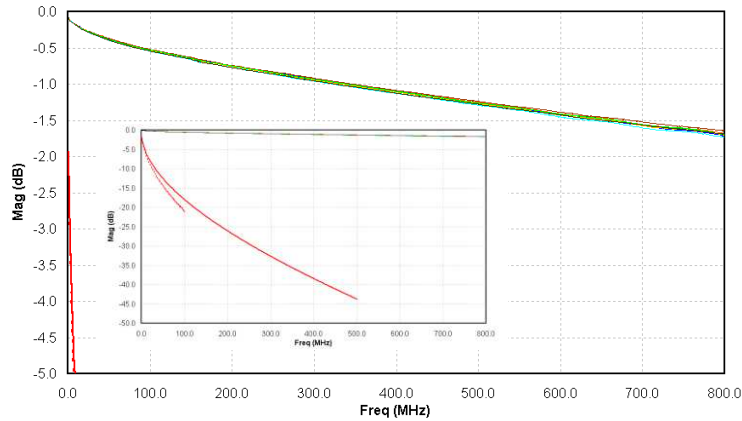


DIFFERENTIAL NEXT



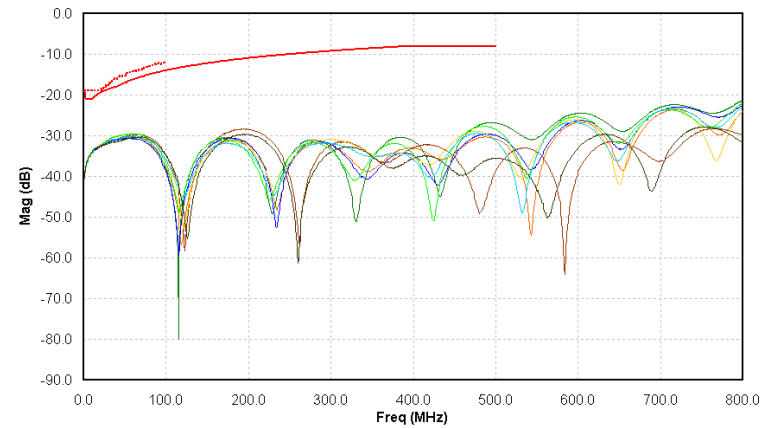
# CeeLok FAS-T Nano Circular Insertion Loss, Return Loss, and NEXT - Cable to PCB

DIFFERENTIAL INSERTION LOSS



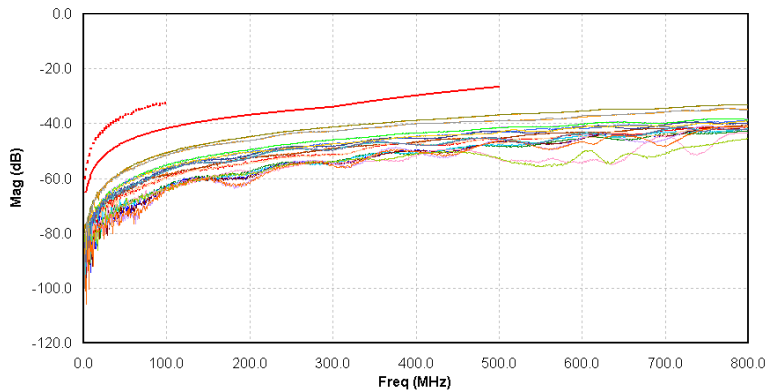
- |                      |                      |                      |                      |
|----------------------|----------------------|----------------------|----------------------|
| Plug 1-2 to Rcpt 1-2 | Plug 3-4 to Rcpt 3-4 | Plug 5-6 to Rcpt 5-6 | Plug 7-8 to Rcpt 7-8 |
| Rcpt 1-2 to Plug 1-2 | Rcpt 3-4 to Plug 3-4 | Rcpt 5-6 to Plug 5-6 | Rcpt 7-8 to Plug 7-8 |
| --- CAT5E Link Limit | --- CAT6A Link Limit |                      |                      |

DIFFERENTIAL RETURN LOSS

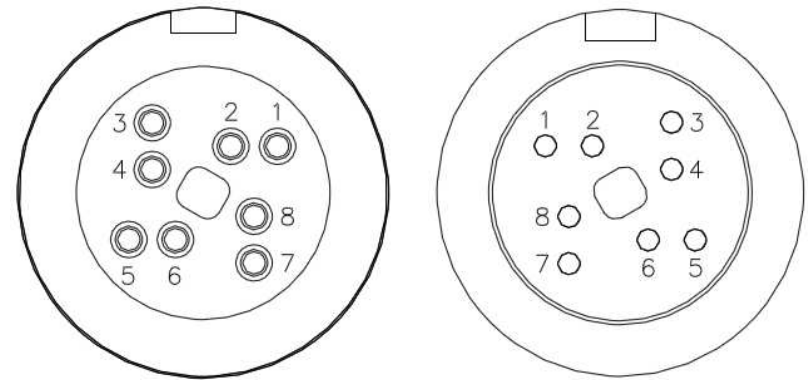


- |                      |                      |          |          |
|----------------------|----------------------|----------|----------|
| Plug 1-2             | Plug 3-4             | Plug 5-6 | Plug 7-8 |
| Rcpt 1-2             | Rcpt 3-4             | Rcpt 5-6 | Rcpt 7-8 |
| --- CAT5E Link Limit | --- CAT6A Link Limit |          |          |

DIFFERENTIAL NEXT



- |                      |                      |                |                |
|----------------------|----------------------|----------------|----------------|
| Plug 1-2 / 3-4       | Plug 1-2 / 5-6       | Plug 1-2 / 7-8 | Plug 3-4 / 1-2 |
| Plug 3-4 / 5-6       | Plug 3-4 / 7-8       | Plug 5-6 / 1-2 | Plug 5-6 / 3-4 |
| Plug 5-6 / 7-8       | Plug 7-8 / 1-2       | Plug 7-8 / 3-4 | Plug 7-8 / 5-6 |
| Rcpt 1-2 / 3-4       | Rcpt 1-2 / 5-6       | Rcpt 1-2 / 7-8 | Rcpt 3-4 / 1-2 |
| Rcpt 3-4 / 5-6       | Rcpt 3-4 / 7-8       | Rcpt 5-6 / 1-2 | Rcpt 5-6 / 3-4 |
| Rcpt 5-6 / 7-8       | Rcpt 7-8 / 1-2       | Rcpt 7-8 / 3-4 | Rcpt 7-8 / 5-6 |
| --- CAT5E Link Limit | --- CAT6A Link Limit |                |                |



# Conclusion

- Both the Plug Cable to Receptacle Cable and Plug Cable to PCB Mount Receptacle CeeLok FAS-T Nano Circulars PASS 1G and 10G Ethernet
- Both configurations exhibit significant headroom beneath the CAT 6A Link Limits for Insertion Loss, Return Loss, and NEXT