Motion

- Adopt MDI RL baseline text as proposed in gardner_3bu_4_0315.

  Y: 18

  N: 0

  A: 8

Proposed Baseline Text

A 100BASE-T1 PoDL System shall meet or exceed Equation (104-TBD) for all frequencies from 1 MHz to 66 MHz (with a 100 Ω reference impedance) under all operating conditions and at all times when the PHY is transmitting data or control symbols.[1]

$$\text{MDI return loss(f)} \geq \begin{cases} 20 - 20 \times \log_{10}\left(\frac{2}{\text{f}}\right)\text{dB} & \text{for } 1\text{MHz} \leq \text{f} \leq 2\text{MHz} \\ 20\ \text{dB} & \text{for } 2\text{MHz} \leq \text{f} \leq 30\text{MHz} \\ 20 - 20 \times \log_{10}\left(\frac{\text{f}}{30}\right)\text{dB} & \text{for } 30\text{MHz} \leq \text{f} \leq 66\text{MHz} \end{cases} \qquad \text{(104-TBD)}$$

where f is frequency in MHz.

[1] For the purpose of testing compliance to the MDI RL requirement in the presence of a PoDL load current, the following test procedure may be used:

The system shall meet or exceed to the MDI RL requirement given by Equation (104-TBD) with out PI load current under all other operating conditions,

and under all operating conditions,

with the DUT transmitter in test mode 1, the magnitude of both the positive and negative droop measured with respect to an initial peak value after the zero crossing and the value 500 ns after the initial peak, shall be less than TBD%.