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|                          REVISION REQUEST                            |
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DATE: 2 September 2023
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REQUESTED REVISION:
  STANDARD: IEEE Std 802.3-2022
  CLAUSE NUMBER: 149.8.2.1
  CLAUSE TITLE: MDI return loss
PROPOSED REVISION TEXT:

Change the 'less than or equal to' symbol in equation 149-27:

MDI_Return_Loss(f) <= {...}  (dB) (149-27)

to a 'greater than or equal to' symbol:

MDI_Return_Loss(f) >= {...} (dB) (149-27)



RATIONALE FOR REVISION:

Subclause 149.8.2.1 'MDI return loss' says that 'The differential
impedance at the MDI ... for each transmit/receive channel shall be such
that any reflection ... is attenuated relative to the incident signal per
Equation (149-27).'.

It isn't correct to require the MDI return loss to be less than or equal
to the value specified, that is to require that any reflection be
attenuated less than or equal to the value specified, as the equation
currently requires.

Instead, the MDI return should be required to be greater than or equal to
the value specified, that is to require that any reflection is attenuated
greater than or equal to the value specified, as proposed in this change.



IMPACT ON EXISTING NETWORKS:

This change will impact any 2.5GBASE-T1, 5GBASE-T1, or 10GBASE-T1 PHY
implementations that have a return loss value that is less than the value
specified.
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|Please attach supporting material, if any                      |
|Submit to:-   David Law, Chair IEEE 802.3                      |
|and copy:-    Adam Healey, Vice-Chair IEEE 802.3               |
|                                                               |
|At:-          E-Mail: stds-802-3-maint-req@ieee.org            |
|                                                               |
|              +------------ For official use ------------+     |
|              | REV REQ NUMBER: 1415                     |     |
|              | DATE RECEIVED: 7 September, 2023         |     |
|              | EDITORIAL/TECHNICAL                      |     |
|              | ACCEPTED/DENIED                          |     |
|              | BALLOT REQ'D    YES/NO                   |     |
|              | COMMENTS:                                |     |
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| For information about this Revision Request see -             |
|http://www.ieee802.org/3/maint/requests/revision_history.html#REQ1415 |
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