



# ISO/IEC JTC 1/SC 25 **N 2461**

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**ISO/IEC JTC 1/SC 25  
INTERCONNECTION OF INFORMATION TECHNOLOGY EQUIPMENT  
Secretariat: Germany (DIN)**

**DOC TYPE:** Outgoing Liaison

**TITLE:** Liaison to IEEE 802.3bq on 40GBASE-T return loss requirements

**SOURCE:** Convenor SC 25/WG 3

**PROJECT:** ISO/IEC 11801 series

**STATUS:** Liaison to IEEE 802.3bq

**ACTION ID:** SC 25 to note

**DUE DATE:** n/a

**REQUESTED ACTION**

**MEDIUM:** open

**DISTRIBUTION:** ITTF, JTC 1 Secretariat  
P-, L-, O-Members of SC 25  
SC 25 PTT

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ISO/IEC JOINT TECHNICAL COMMITTEE 1  
SUBCOMMITTEE No.25: INTERCONNECTION OF  
INFORMATION TECHNOLOGY EQUIPMENT  
WORKING GROUP 3: CUSTOMER PREMISES CABLING

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**Subject: ISO/IEC 11801 series Class I/II Cabling Return Loss**

Dear David,

Please note that we have updated the channel return loss requirements for Class I and Class II cabling. This change has been made in the committee draft of ISO/IEC 11801 series and will be relevant to 40GBASE-T. The new requirements are:

|               |               |
|---------------|---------------|
| 19 dB         | 1-10 MHz      |
| 24-5log(f) dB | 10-40 MHz     |
| 16 dB         | 40-130 MHz    |
| 35-9log(f) dB | 130-1000 MHz  |
| 8 dB          | 1000-2000 MHz |

Additionally, due to the close proximity of connectors in short channels, when insertion loss at 1600 MHz  $\leq$  15 dB, the channel return loss from 1600 MHz to 2000 MHz is  $8-19\log(f/1600)$ .

Sincerely,

Albrecht

Prof. Dr.-Ing. Albrecht Oehler  
Convenor ISO/IEC JTC 1/SC 25 WG 3