

802.3ck D1.3 Cable Assembly Minimum Insertion Loss



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Overview:

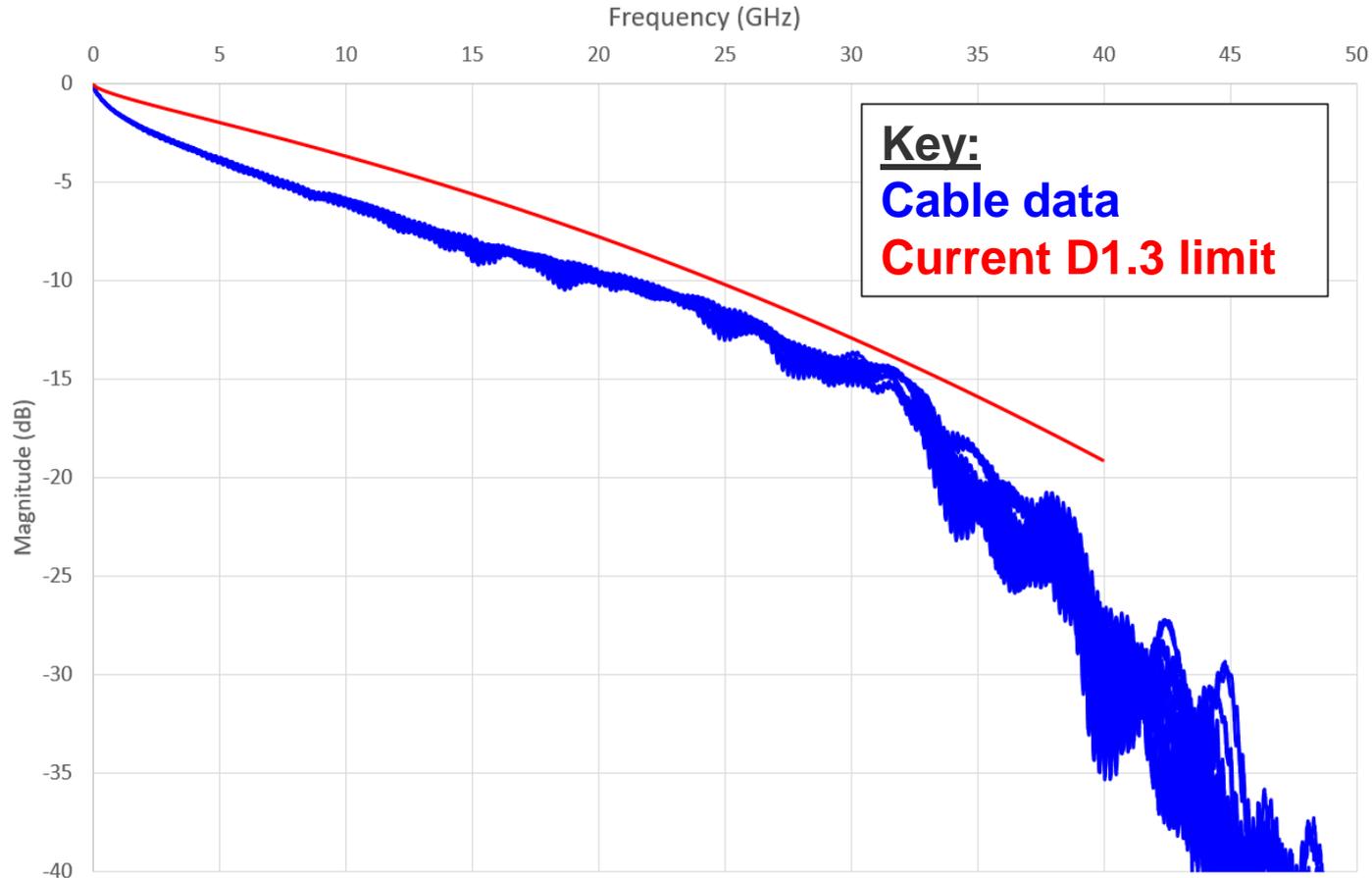
- 802.3ck D1.3 specifies the following for minimum cable assembly insertion loss:

$$IL_{\min}(f) \geq 0.418\sqrt{f} + 0.177f + 0.0059f^2$$

for TBD $\leq f \leq 40$ GHz

- This limit does not permit short cables to comply with the specification
- The data shown on the next slide is for a 0.5m 30awg OSFP cable
 - NOTE: This is data from an early-production cable; performance is expected to improve as the manufacturing process stabilizes

IL: 0.5m 30awg OSFP



Summary:

- If 0.5m 30awg cables are needed for 802.3ck applications, the minimum cable assembly IL limit needs to be relaxed
- More work is needed to determine what the min IL mask should look like



Thank You

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