Proposal for the MTF ILdd Mask

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Motivation

- Get rid of TBDs in D1P*4*, Annex 179B

179B.4.1 Mated test fixtures insertion loss

The insertion loss of the mated test fixtures shall meet Equation (179B–3) and Equation (179B–4).

$$ILdd(f) \le ILdd_{MTFmax}(f) = \begin{cases} TBD & 0.01 \le f < TBD \\ TBD & TBD \le f \le 67 \end{cases} \quad (179B\text{–}3)$$

$$ILdd(f) \ge ILdd_{MTFmin}(f) = TBD \quad (179B\text{–}4)$$

for $0.01 \le f \le 67$

where

$ILdd(f)$	is the measured insertion loss in dB at frequency f
$ILdd_{MTFmax}(f)$	is the maximum mated test fixtures insertion loss in dB at frequency f
$ILdd_{MTFmin}(f)$	is the minimum mated test fixtures insertion loss in dB at frequency f
f	is the frequency in GHz

As presented at Joint Ad-Hoc on Feb-6

Proposed Mated Test Fixture ILdd Mask

$$0.0061f^2 - 0.0613f^{1.5} + 0.2867f + 0.3799\sqrt{f} + 0.1564$$

$$0.0175f^{1.5} + 0.0918f + 0.5166\sqrt{f} - 0.0294$$

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Note: sign change on second term of $ILdd_{MTFmin}(f)$ equation (for 179B-4)

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