
D2.2 comment resolution

#39,#40,#41,#42,#43

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Comments

- Comment#39 Type TR**

The CR4/10 Host IL (85-14) and the nPPI recommended electrical channel (86A-19) both defined with connector and test fixtures) should be IDENTICAL also for low frequencies (see page 4 of mazzini_01_0909).

- Comment#40 Type TR**

The recommended maximum loss for the PCB only (without connector) (Draft 2.2, page 446, row 51), should be aligned with formula 85A-2 (Transmitter and receiver differential printed circuit board trace loss) that gives maximum PCB loss @5.156GHz = 3.5dB (see page 4 of mazzini_01_0909).

- Comment#41 - Type TR**

The cable assembly test fixture (85-35) and the MCB (86A-5) loss formulas must be IDENTICAL. In D2.2 losses just cross at same value @ 5.165GHz (see page 5 of mazzini_01_0909).

- Comment#42 Type TR**

The test fixture (85-16) and the HCB (86A-4) loss formulas must be IDENTICAL. In D2.2 losses just cross at same value @ 5.165GHz. (see page 5 of mazzini_01_0909).

- Comment# 43 Type TR**

The connector loss (calculated as 85-37 values minus 85-35 and 85-16) of the test fixture improves when frequency increase (see slide 5). Above formulas should be corrected to avoid this.

Contributors

- Adam Healey, LSI
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Comment#39

CI 00 SC 0 P L # 39
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Comment Type TR *Comment Status* D

The CR4/10 Host IL (85-14) and the nPPI recommended electrical channel (86A-19) both defined with connector and test fixtures) should be IDENTICAL also for low frequencies (see page 4 of mazzini_01_0909).

Suggested Remedy

Harmonize the curves as above.

Proposed Response *Response Status* W

PROPOSED ACCEPT IN PRINCIPLE.

Change equation (85-14)

From:

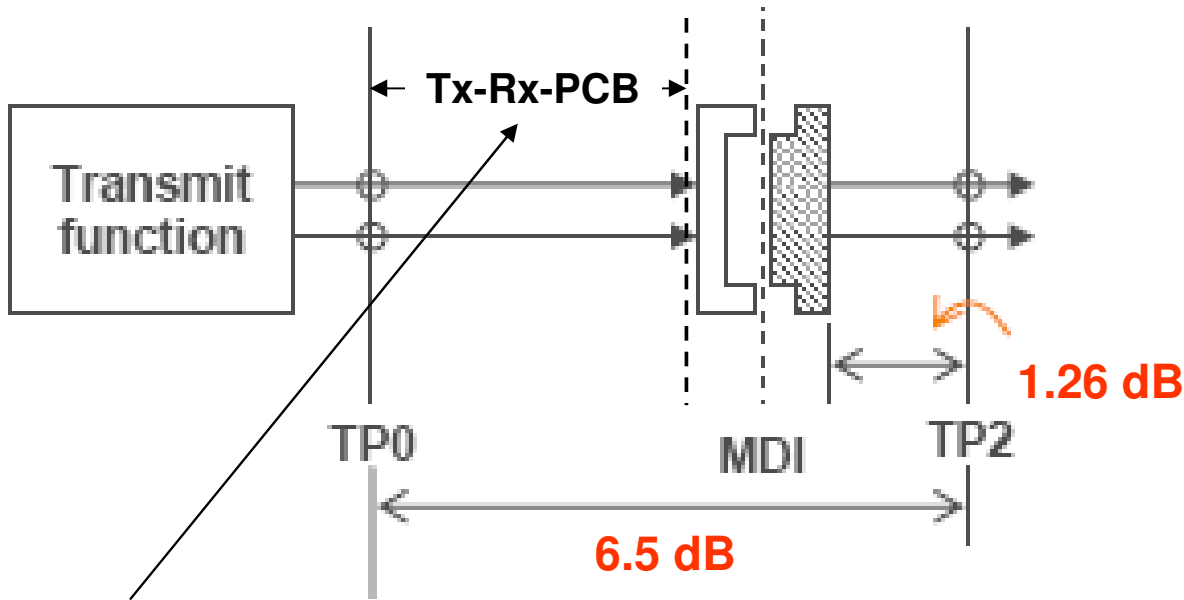
$$\begin{array}{ll} 0.114+0.8914 \times \sqrt{f}+0.846 \times f & 0.05 \leq f < 7 \\ - 35.91 + 6.3291 \times f & 7 \leq f < 8 \\ 14.72 & 8 \leq f \leq 10 \end{array}$$

To:

$$\begin{array}{ll} 0.682 & 0.05 \leq f < 0.2 \\ 0.114+0.8914 \times \sqrt{f}+0.846 \times f & 0.2 \leq f < 7 \\ - 35.91 + 6.3291 \times f & 7 \leq f < 8 \\ 14.72 & 8 \leq f \leq 10 \end{array}$$

Comment#40

TP0 to TP2 or TP3 to TP5 IL



Informatively specified

$$TP0 \text{ to } TP2 = 6.5 = [TxRx-PCB] + [Mated \text{ connector IL}] + [TPTF/HCB IL]$$

Alternative 1 Host PCB loss = 3.5dB

$$TP0 \text{ to } TP2 = 6.5 = [3.5] + [Mated \text{ connector IL}] + [1.26]$$

$$[Mated \text{ connector IL}] = 6.5 - [3.5] - [1.26]$$

$$\underline{Mated \text{ connector IL} = 1.74 \text{ dB}}$$

$$TP0 \text{ to } TP2 = 6.5 = [TxRx-PCB] + [Mated \text{ connector IL}] + [TPTF/HCB IL]$$

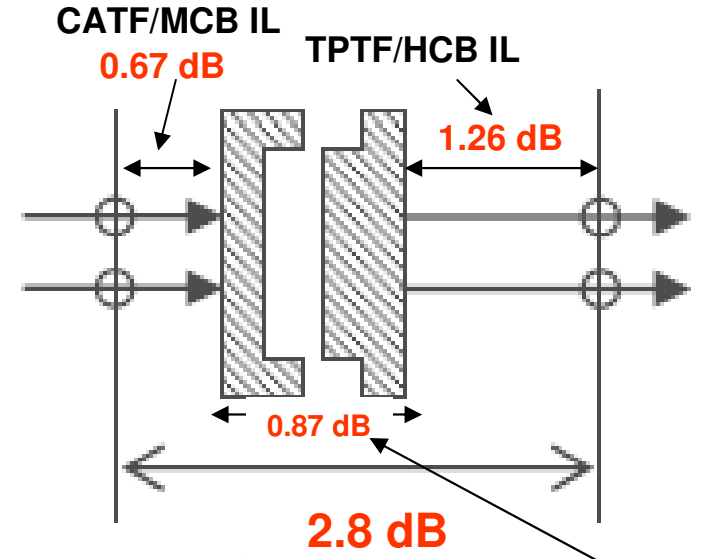
Alternative 2 Host with Mated connector IL same as used in test boards $[2.8 - 1.26 - 0.67] = 0.87 \text{ dB}$

$$TP0 \text{ to } TP2 = 6.5 = [TxRxPCB] + [0.87] + [1.26]$$

$$[TxRxPCB] = 6.5 - [0.87] - [1.26]$$

$$TxRxPCB = 4.37 \text{ dB}$$

Mated Test Fixtures



Extracted Connector IL

Comment#43 - resolution to #43,#41,#42

Proposed response:

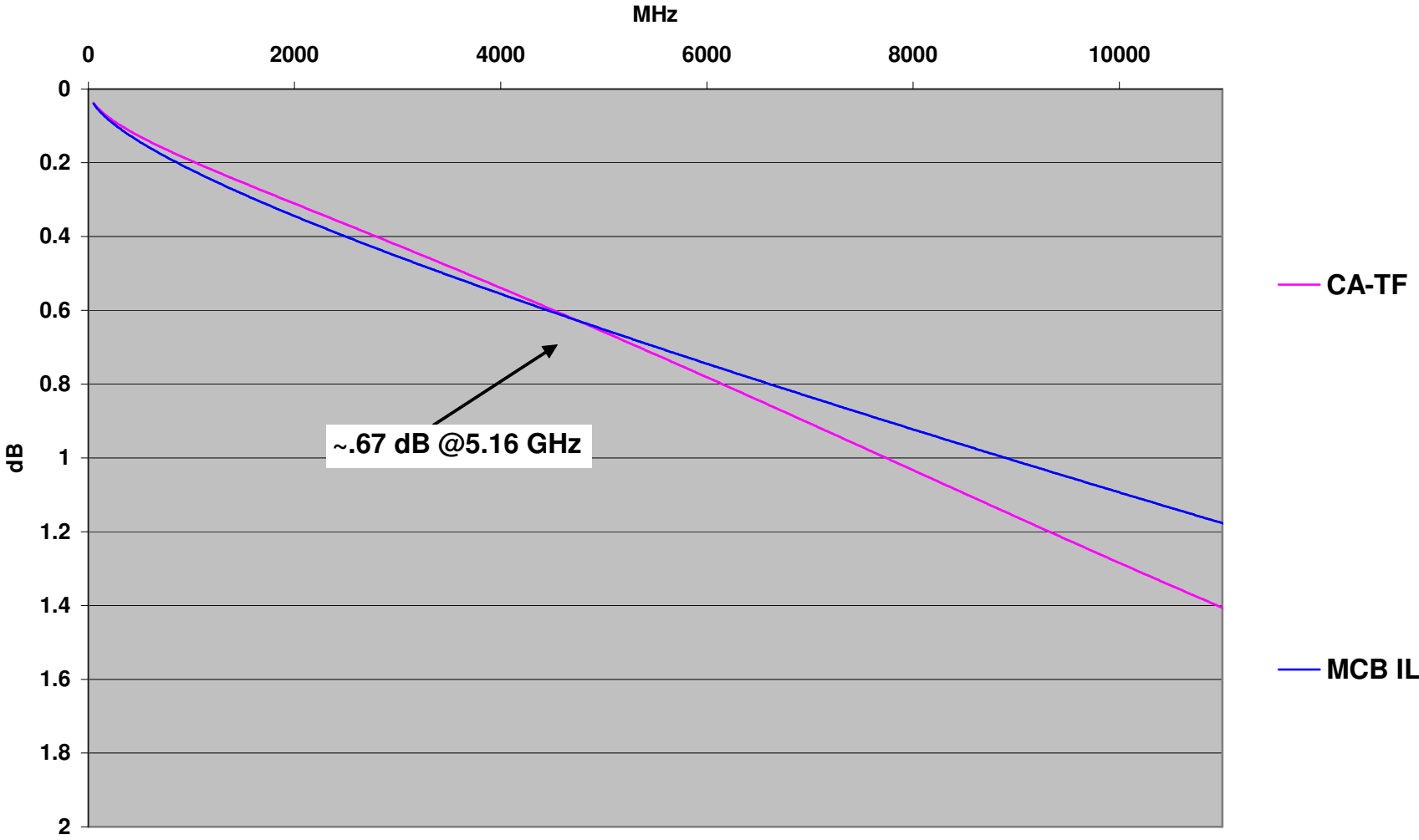
(1)Replace 85.8.3.7 Test fixture insertion loss equation (85-16).
With 86A.5.1.1.1 Reference through responses (SDD21) of HCB and MCB For the HCB, equation (86A-4) using frequency range of 0.05 Ghz to 6 GHz (6 GHz >change to 10 GHz).

(2)Replace 85.10.9 Cable assembly test fixture equation (85-35).
With 86A.5.1.1.1 Reference through responses (SDD21) of HCB and MCB For the MCB, equation (86A-5) using frequency range of 0.05 Ghz to 6 GHz (6 GHz >change to 10 GHz).

BACKUP

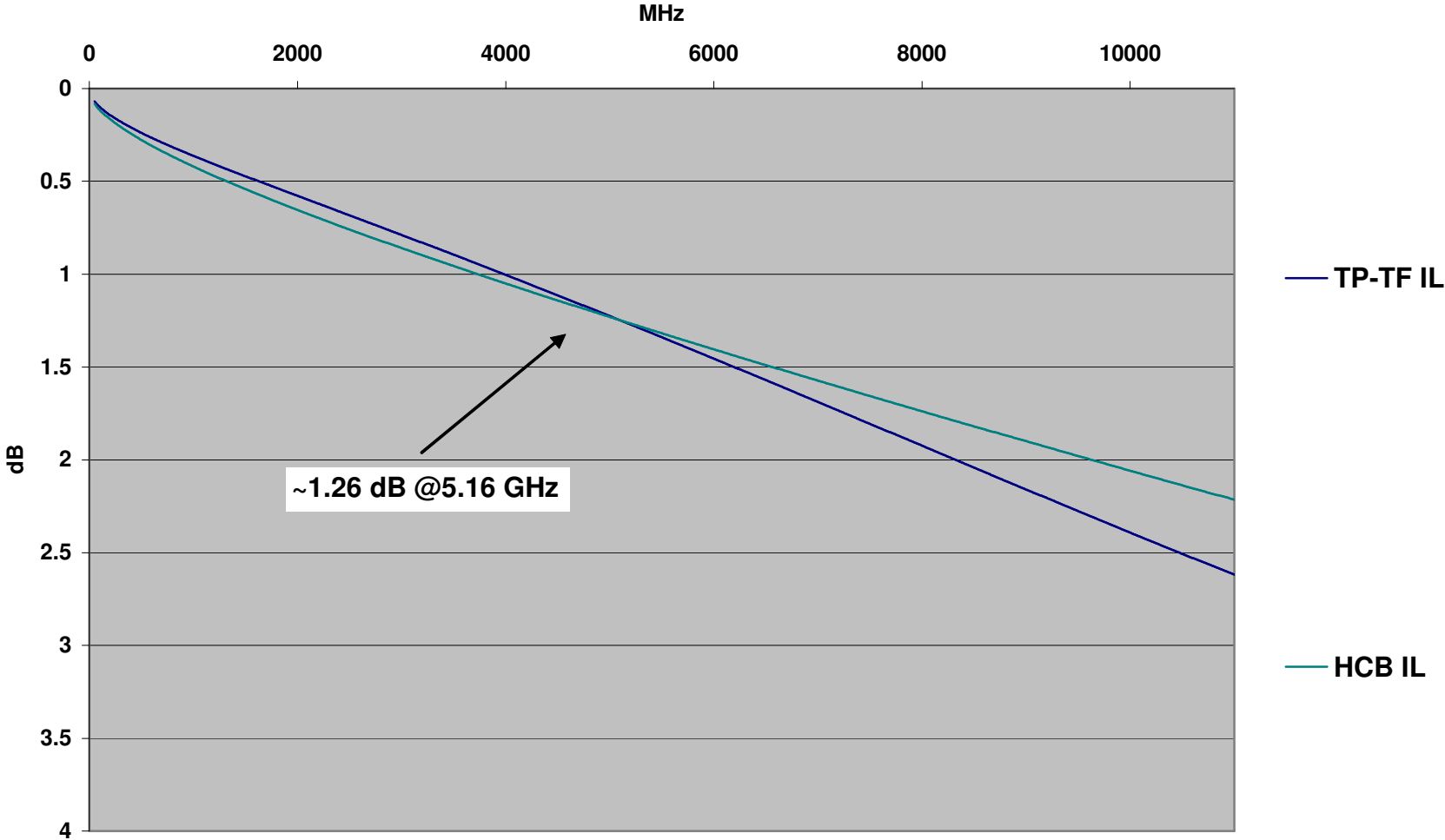
D2.2 - MCB IL and CA-TF IL

Test fixture IL



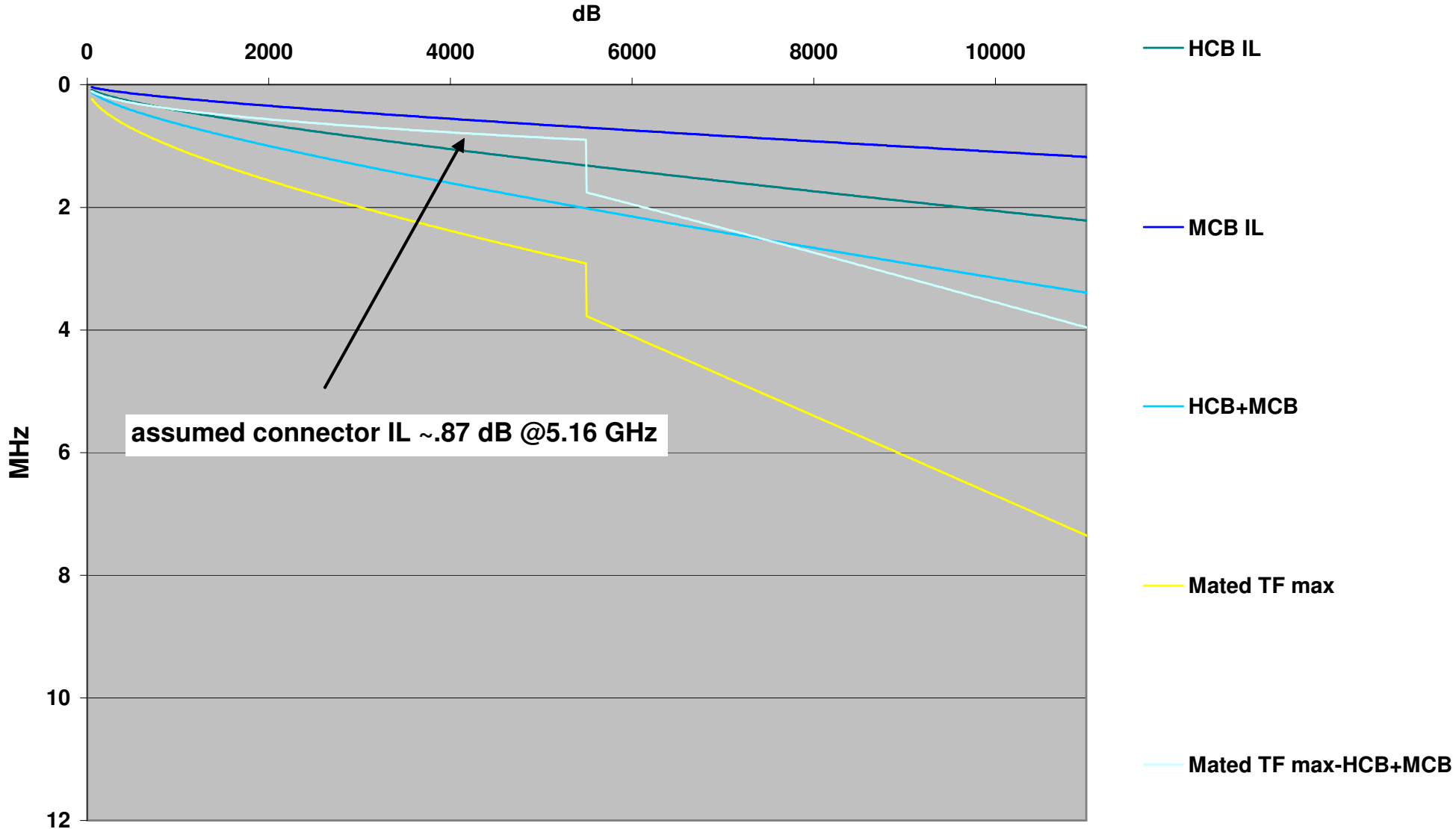
D2.2 - HCB IL and TP-TF IL

Test fixture IL



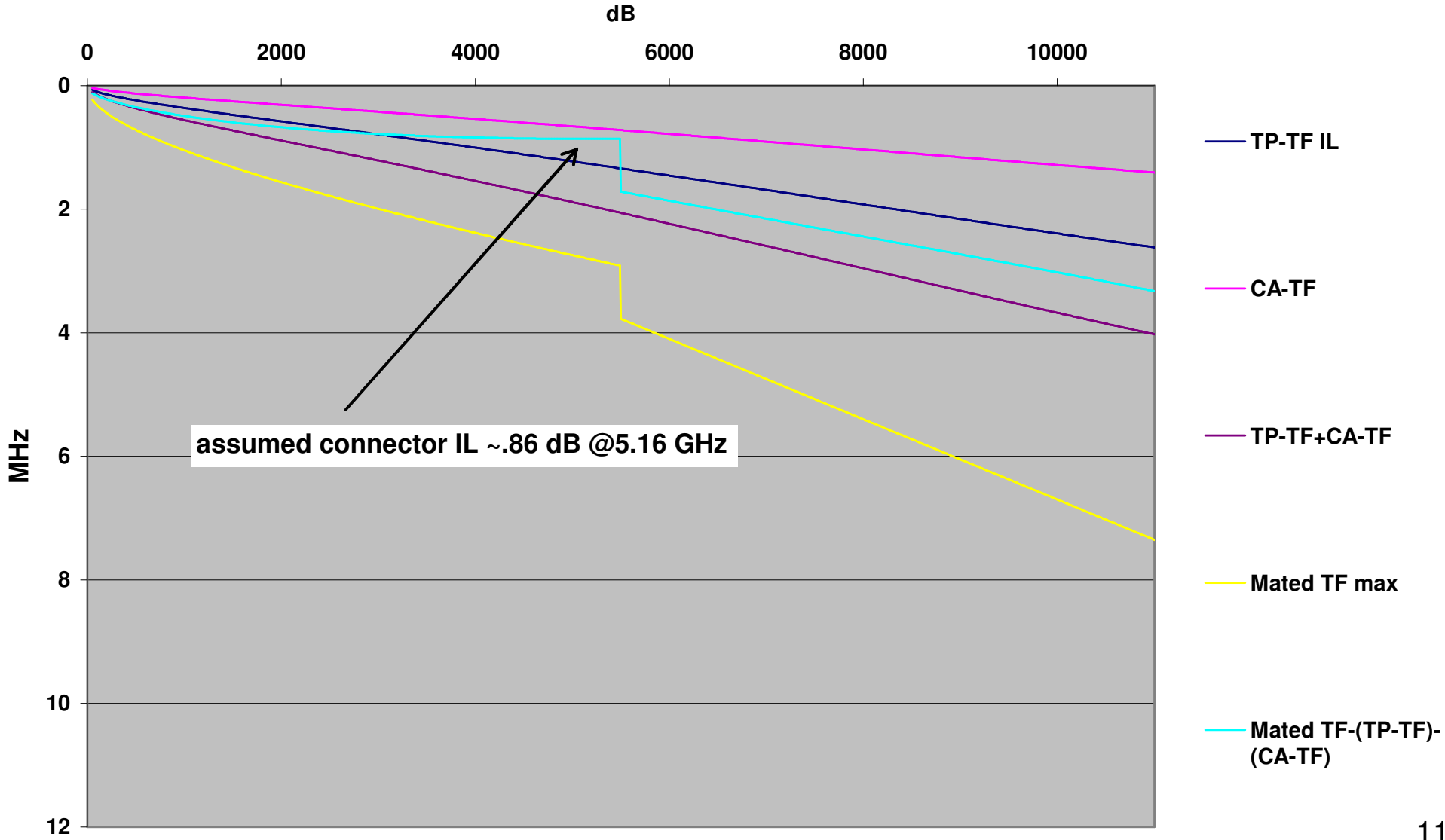
Connector IL - extracted

Test fixture IL



Connector IL – extracted

Test fixture IL



Connector IL - extracted

Test fixture IL

