CR4 and CR10 TP3 Specifications

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Test Points for Clause 85

[Diagram showing test points for Clause 85]
Present Rx Testing Clause

Existing Text
85.8.4.1 Bit error ratio
The receiver shall operate with a BER $10^{-12}$ or better when receiving a compliant transmit signal, as defined in 85.8.3, through a compliant cable assembly as defined in 85.10 exhibiting the maximum insertion loss of 85.10.2.

Change section heading to:
85.8.4.1 Receiver interference tolerance"
Change text to:
"The receiver interference tolerance shall consist of two separate tests as described in Annex 69A with the parameters specified in Table 85-XX for CR4 and CR10. The channel coefficients for the CR channel should be:

$b1=2.54e-5$
$b2=1.94e-10$
$b3=1.52e-20$

The data pattern for the interference tolerance test shall be the test patterns 2 or 3 as defined in 52.9.1.1. The receiver shall satisfy the requirements for interference tolerance specified in Annex 69A for both tests."
Proposed Test Setup

• Base channel b parameters are described in revised 85.8.4.1:
  \[ b1 = 2.54 \times 10^{-5} \]
  \[ b2 = 1.94 \times 10^{-10} \]
  \[ b3 = 1.52 \times 10^{-20} \]

• Measure mTC relative to this channel.

• All other Tx channels must be transmitting PRBS31 and terminated on cable side of TP(2&3). All other Rx channels must be receiving PRBS through a channel with mTC no larger than the Rx under test. Noise must be flat to +/-6dB from 1.0GHz to 5.15625GHz.
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Value</th>
<th>Notes</th>
</tr>
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<tbody>
<tr>
<td>Target BER</td>
<td></td>
<td>1E-12</td>
<td>1E-12</td>
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<tr>
<td>Mtc</td>
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<tr>
<td>Broadband Noise</td>
<td>mVrms</td>
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<td>16.3</td>
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<td>Applied SJ</td>
<td>Ulp-p</td>
<td>.115</td>
<td>.115</td>
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<tr>
<td>Applied DCD</td>
<td>Ulp-p</td>
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</table>

“a" Mtc is defined in Section 85.XX
"b" Applied random jitter is specified at a BER of 10–12.