

Category 6 Cabling Alien Crosstalk Requirements

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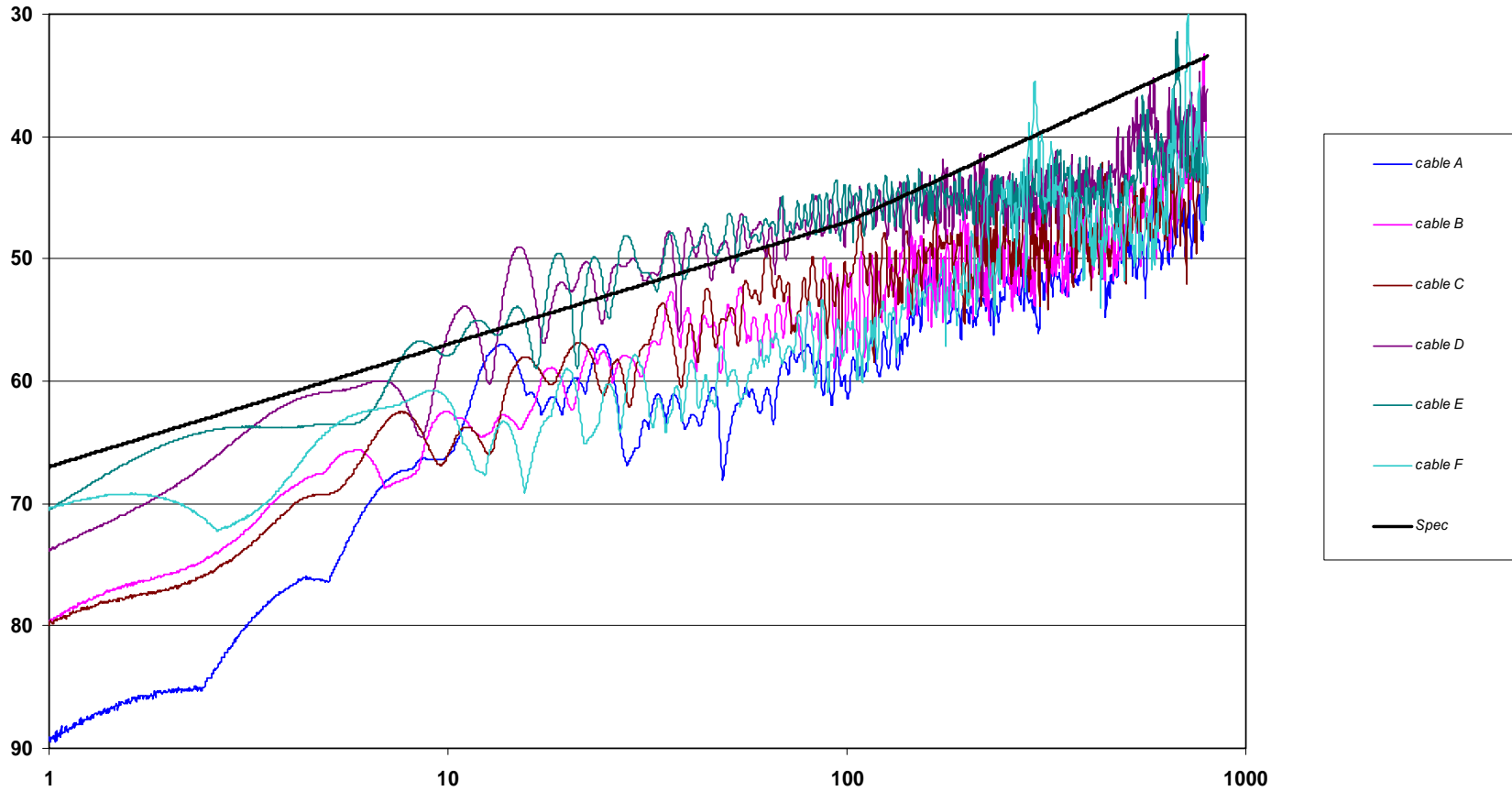
Nexans

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- /// “Category 6” does not have alien crosstalk specifications.
- /// Actual category 6 alien crosstalk laboratory measurements reveal wide deviations from typical behavior.
 - /// An industry-wide selection found individuals that exceed the expected, PSANEXT 47dB at 100MHz.
 - /// The measurement used “2-cables-in-conduit”, not worst case configuration “6-around-1”, which would shift typical results worse by as much as 11 or more dB.
 - /// Effects from connecting hardware and patch cords will spread deviations wider.
 - /// Some anomalies appear above 250 MHz.
- /// Deviation will occur similarly for alien far-end crosstalk as they do for alien near-end crosstalk.
- /// Category 6 alien crosstalk cannot be specified and may not be entirely mitigated according to the method to be given in TSB-155.

PSANEXT, 6 different cables, max for 4 pairs for each cable shown
 Measured: (6X) 2 each 30m samples of same cable placed in 1/2 inch conduit
 Calc. PSANEXT: (6X) max/f PS of 4 each disturber cable pairs for each of 4 disturbed cable pairs



Augmented Cat6 UTP PSANEXT Test method comparison
single pair data, 2-cables-in-conduit versus 6-around-1-in-bundle

