

Removing added Tx noise in interference tolerance measurement

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Since all or most of the interference tolerance tests are COM calibrated, we can use COM to allow for the actual value of SNDR_TX in the test Tx used and can do away with the Tx noise generator. I think that these are the needed changes do it.

In 93C

delete points:

- a) “the relevant noise parameter and target value for test setup,
and
- d) “ the noise parameter and target value for test method step 3”

I 93C-1 fourth paragraph

replace:

“The transmit and channel noise sources have adjustable outputs such that the levels may be set according to the test procedure. The noise produced by the transmit and channel noise sources are measured directly at the output of each noise source (see Figure 93C–6).”

with:

“The channel noise source has an adjustable output such that the level may be set according to the test procedure. The noise produced by the channel noise source is measured directly at the output of the noise source (see Figure 93C–6).”

in Figure 93C-2:

delete Transmit noise source, first summer block and TPta

in Figure 93C-3

delete Transmit noise source, first summer block and TPta

in second paragraph of 93C.1

delete:

"The transmit noise source is used to degrade the transmitter output so that it exhibits the worst-case noise characteristics specified by the invoking PMD clause as measured at TPta. The transmit noise source and summer may be excluded from the test setup if the transmitter can provide the correct noise characteristics"

in third paragraph of 93C.1

change "TPta" to "TP0a" in two places

in 93C.2

change point 1) from

“Set the transmit noise source and channel noise source to zero.”

To:

“Set the channel noise source to zero.”

remove points 3) and 4)

Add a point after 5):

"Measure the noise parameters relevant to the PMD clause that invokes this method that are to be used to set the value SNR_TX.."

Change 8) add another exception: The value of SNR_TX is set based on a transformation of the measured parameters specified in the PMD clause that invokes this method.

In Clause 93.8.2.3 in the second paragraph

change TPta to TP0a

delete:

“If the test transmitter SNDR (see 93.8.1.6) is greater than the minimum compliant value, the amplitude of transmit noise source shown in Figure 93C–3 is increased until the minimum compliant SNDR is achieved.
“

In Clause 93.8.2.3 in the second paragraph

change:

“The COM parameter sigma_RJ is set to the measured value of effective random jitter and the COM parameter A_DD is set to half the measured value of effective bounded uncorrelated jitter (see 93.8.1.7)

To:

“The COM parameter sigma_RJ is set to the measured value of effective random jitter (see 93.8.1.7), the COM parameter A_DD is set to half the measured value of effective bounded uncorrelated jitter (see 93.8.1.7), and the COM parameter SNR_TX is set to the value of SNDR measured at TP0a (see 93.8.1.6).”

In clause 94.3.13.3 second paragraph

Delete:

“The transmitter noise parameter is SNDR (see 94.3.12.7).”

change::

“The COM parameter sigma_RJ is set to the measured value of CRJ_rms and the COM parameter ADD is set to half the measured value of CDJ.”

to:

“The COM parameter sigma_RJ is set to the measured value of CRJ_rms, the COM parameter ADD is set to half the measured value of CDJ, and the COM parameter SNR_TX is set to the value of SNDR (see 94.3.12.7) measured at TP0a.

I think I have covered all needed changes but would allow editorial license.