

UNIVERSITY OF TEXAS AT DALLAS
Department of Electrical Engineering

EE/TE 4367 - Telecommunications Switching & Transmission
Assignment #2

Date assigned: 1/17/2008

Date due: 1/24/2008

2.1 Noise measurements and TLP

(a) A value of 30 dBrnC0 is how many picowatts of absolute noise power at a -3 dB TLP?

(b) An idle-channel noise power measurement of 21 dBrnC occurs at a -7 dB TLP. Express the noise power of this measurement in dBrnC0 and determine what measurement this noise would produce at another point in the circuit that is designated as a -2 dB TLP.

2.2 Noise measurement

A transmission link has 14 dBrn of absolute noise power at a -13 dB TLP input test point and 27 dBrn of absolute noise power at a -3 dB TLP output test point. How much absolute noise is added on the transmission link?

2.3 Transmission impairments

Define singing and how do you prevent signing? Explain talker echo and listener echo with a diagram of wires and hybrids.