Fiber Optics Powerwave Legend: TX level 40dBm 4 Δ BIS -> OdB Fixed values. ▲ 0dB 0dB Total UL gain Set values via O&M software 5dB 20dB 20dB NO DE LA PRIME DE OdB

Calculated or resultant values BTS initial noise figure FX Alt. 20dB TX AlL OdB
Set and resultant UL gain values in red. BTS initial sensitivity ¥ <u>₹</u> -101.3dBm High, medium, and low values in the example. BTS sensitivity with repeater -6.5dBm 1.5dBm 5,7dB 🔻 1 ▼ 10dB 1 10dB BTS sensitivity degradiation Fiber/WDM/ splitter loss Fiber/WDM/ splitter loss FOR -3.5dBm -8.5dBm Number of repeaters TEN DEON

5dB TX Att.

▲ 65dB

5dB -104,7dBm

BTS sensitivity at repeater antenna

BTS

FOR

Figure 6-6. One FOR, low optical loss, high uplink gain and attenuation

Total DL gain

12dB

RX Att.

80dB DL gain

33dBm

Limited repeater TX level

Figure 6-6 shows a FOR connected with low optical loss, high uplink gain and high uplink attenuation. The BTS sensitivity degradation is low.

High total uplink gain and a BTS sensitivity with repeater very close to the BTS sensitivity at the repeater antenna indicates a similar coverage area for the BTS and the FOR.

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