Processed Payload Downlink Link Budget to Type B Receivers

Item	Value	Unit
Symbol Rate		1.836 Msps
Bits/Symbol Rate		2
Coding Rate		0.25
Aggregate Carrier Information Rate		918 kbit/s
Occupied bandwidth		2.57 MHz
E _b /N ₀ Required		0.2 dB
Total implementation loss		1.5 dB
$C/(N_0+I_0)$ Required		61.3 dB(Hz)
Downlink peak eirp per carrier		32.1 dBW
Downlink beam contour		0 dB
Elevation angle		90 °
Downlink path loss		187.0 dB
Atmospheric absorption		0.1 dB
Earth Station antenna gain		11.0 dBi
Earth Station noise temperature		200.0 K
Earth Station antenna receive G/T		-12.0 dB/K
Downlink receiver power		-144.0 dBW
Downlink C/N ₀		61.6 dB(Hz)
Downlink C/I ₀		73.2 dB(Hz)
Downlink $C/(N_0+I_0)$		61.3 dB(Hz)
Downlink Margin		0.0 dB