

<b>General:</b>	<b>Units</b>	<b>Clear Sky</b>
Emission Designator		53M3G7W
Data Rate	Mbit/s	51.984
Modulation		QPSK
Coding Rate		0.67
Noise Bandwidth	dB-Hz	75.8
Uplink Frequency	GHz	28.5
Downlink Frequency	GHz	18.7
Uplink Site		Japan
Downlink Site		Hawaii
<b>Uplink:</b>		
Tx E/S Antenna Diameter	m	1.2
Tx E/S Power to Antenna	W	14.5
Tx E/S Antenna Gain	dBi	48.4
Tx E/S EIRP per Carrier	dBW	60.0
Tx E/S Antenna Pointing Loss	dB	0.5
Atmospheric and Rain Losses	dB	0.5
Free Space Loss	dB	212.8
G/T	dB/K	19.5
<b>Downlink:</b>		
EIRP per Carrier towards Rx E/S	dBW	53.6
Atmospheric and Rain Losses	dB	0.4
Free Space Loss	dB	209.8
Rx E/S Antenna Pointing Loss	dB	0.5
Rx E/S Antenna Diameter	m	1.2
Rx E/S Antenna Gain	dBi	44.5
Rx E/S G/T	dB/K	19.5
<b>End-to-End:</b>		
C/N - Thermal Uplink	dB	18.5
C/I Up - ASI	dB	18.9
C/N - Thermal Downlink	dB	15.2
C/I Down - ASI	dB	18.0
C/(N+I) - Total Actual	dB	11.3
C/N - Required	dB	9.0
Excess Margin	dB	2.3