

C-Band Global Uplink/Global Downlink

| UPLINK BEAM INFORMATION | | | | | |
|---|-----------|-------------|-------------|-------------|-------------|
| Uplink Beam Name | GLOBAL | GLOBAL | GLOBAL | GLOBAL | GLOBAL |
| Uplink Frequency (GHz) | 6.175 | 6.175 | 6.175 | 6.175 | 6.175 |
| Uplink Beam Polarization | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR |
| Uplink Relative Contour Level (dB) | -4 | -4 | -4 | -4 | -4 |
| Uplink Contour G/T (dB/K) | -11 | -11 | -11 | -11 | -11 |
| Uplink SFD (dBW/m2) | -84.3 | -89.3 | -81.3 | -81.3 | -89.3 |
| Rain Rate (mm/hr) | 42 | 42 | 42 | 42 | 42 |
| DOWNLINK BEAM INFORMATION | | | | | |
| Downlink Beam Name | GLOBAL | GLOBAL | GLOBAL | GLOBAL | GLOBAL |
| Downlink Frequency (GHz) | 3.95 | 3.95 | 3.95 | 3.95 | 3.95 |
| Downlink Beam Polarization | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR |
| Downlink Relative Contour Level (dB) | -4 | -4 | -4 | -4 | -4 |
| Downlink Contour EIRP (dBW) | 27.6 | 27.6 | 27.6 | 27.6 | 27.6 |
| Rain Rate (mm/hr) | 42 | 42 | 42 | 42 | 42 |
| ADJACENT SATELLITE 1 | | | | | |
| Satellite 1 Orbital Location | 30.9E | 30.9E | 30.9E | 30.9E | 30.9E |
| Uplink Power Density (dBW/Hz) | -38.7 | -38.7 | -38.7 | -38.7 | -38.7 |
| Uplink Polarization Advantage (dB) | 0 | 0 | 0 | 0 | 0 |
| Downlink EIRP Density (dBW/Hz) | -32.0 | -32.0 | -32.0 | -32.0 | -32.0 |
| Downlink Polarization Advantage (dB) | 0 | 0 | 0 | 0 | 0 |
| ADJACENT SATELLITE 2 | | | | | |
| Satellite 1 Orbital Location | 34.9E | 34.9E | 34.9E | 34.9E | 34.9E |
| Uplink Power Density (dBW/Hz) | -38.7 | -38.7 | -38.7 | -38.7 | -38.7 |
| Uplink Polarization Advantage (dB) | 0 | 0 | 0 | 0 | 0 |
| Downlink EIRP Density (dBW/Hz) | -32.0 | -32.0 | -32.0 | -32.0 | -32.0 |
| Downlink Polarization Advantage (dB) | 0 | 0 | 0 | 0 | 0 |
| CARRIER INFORMATION | | | | | |
| Carrier ID | 36M0F3F | 36M0G7W | 10M3G7W | 100KG7W | 41M0G7W |
| Carrier Modulation | TV/FM | QPSK | QPSK | QPSK | QPSK |
| Peak to Peak Bandwidth of EDS (MHz) | 4 | N/A | N/A | N/A | N/A |
| Information Rate(kbps) | N/A | 24575 | 6000 | 64 | 31490 |
| Code Rate | N/A | 1/2x188/204 | 1/2x188/204 | 1/2x239/256 | 1/2x188/204 |
| Occupied Bandwidth(kHz) | 36000 | 30133 | 6771.1 | 75.4 | 34170.0 |
| Allocated Bandwidth(kHz) | 36000 | 36000 | 10300 | 100 | 41000 |
| Minimum C/N, Clear Sky (dB) | 10 | 3.36 | 3.87 | 2.99 | 3.4 |
| Minimum C/N, Rain (dB) | 10 | 3.36 | 3.57 | 2.79 | 3.4 |
| UPLINK EARTH STATION | | | | | |
| Earth Station Diameter (meters) | 13.0 | 6.1 | 2.4 | 2.4 | 7.0 |
| Earth Station Gain (dBi) | 56.4 | 49.4 | 41.9 | 41.9 | 51.0 |
| Earth Station Elevation Angle | 20 | 20 | 20 | 20 | 20 |
| DOWNLINK EARTH STATION | | | | | |
| Earth Station Diameter (meters) | 15.2 | 7.0 | 11.0 | 11.0 | 8.1 |
| Earth Station Gain (dBi) | 55.0 | 47.5 | 51.9 | 51.9 | 49.3 |
| Earth Station G/T (dB/K) | 34.5 | 26.6 | 31.0 | 31.0 | 28.4 |
| Earth Station Elevation Angle | 20 | 20 | 20 | 20 | 20 |
| LINK FADE TYPE | | | | | |
| | Clear Sky | Clear Sky | Clear Sky | Clear Sky | Clear Sky |
| UPLINK PERFORMANCE | | | | | |
| Uplink Earth Station EIRP (dBW) | 80.6 | 73.6 | 66.6 | 46.5 | 73.6 |
| Uplink Path Loss, Clear Sky (dB) | -200.2 | -200.2 | -200.2 | -200.2 | -200.2 |
| Uplink Rain Attenuation | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Satellite G/T(dB/K) | -11.0 | -11.0 | -11.0 | -11.0 | -11.0 |
| Boltzman Constant(dBW/K-Hz) | 228.6 | 228.6 | 228.6 | 228.6 | 228.6 |
| Carrier Noise Bandwidth (dB-Hz) | -75.6 | -74.8 | -68.3 | -48.8 | -75.3 |
| Uplink C/N(dB) | 22.4 | 16.2 | 15.7 | 15.1 | 15.7 |
| DOWNLINK PERFORMANCE | | | | | |
| Downlink EIRP per Carrier (dBW) | 27.6 | 27.6 | 17.5 | -2.6 | 27.6 |
| Antenna Pointing Error (dB) | -0.5 | -0.5 | -0.5 | -0.5 | -0.5 |
| Downlink Path Loss, Clear Sky (dB) | -196.3 | -196.3 | -196.3 | -196.3 | -196.3 |
| Downlink Rain Attenuation | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Earth Station G/T (dB/K) | 34.5 | 26.6 | 31.0 | 31.0 | 28.4 |
| Boltzman Constant(dBW / K - Hz) | 228.6 | 228.6 | 228.6 | 228.6 | 228.6 |
| Carrier Noise Bandwidth (dB-Hz) | -75.6 | -74.8 | -68.3 | -48.8 | -75.3 |
| Downlink C / N(dB) | 18.3 | 11.2 | 12.0 | 11.4 | 12.5 |
| COMPOSITE LINK PERFORMANCE | | | | | |
| C/N Uplink (dB) | 22.4 | 16.2 | 15.7 | 15.1 | 15.7 |
| C/N Downlink (dB) | 18.3 | 11.2 | 12.0 | 11.4 | 12.5 |
| C/I Intermodulation (dB) | N/A | N/A | 18.9 | 18.3 | N/A |
| C/I Uplink Co-Channel (dB)* | 27.6 | 27.6 | 27.0 | 27.0 | 27.6 |
| C/I Downlink Co-Channel (dB)* | 27.6 | 27.6 | 27.0 | 27.0 | 27.6 |
| C/I Uplink Adjacent Satellite 1 (dB) | 21.7 | 15.5 | 15.0 | 14.4 | 15.0 |
| C/I Downlink Adjacent Satellite 1 (dB) | 17.2 | 10.0 | 11.1 | 10.5 | 11.4 |
| C/I Uplink Adjacent Satellite 2 (dB) | 21.7 | 15.5 | 15.0 | 14.4 | 15.0 |
| C/I Downlink Adjacent Satellite 2 (dB) | 17.9 | 11.6 | 12.1 | 11.6 | 12.7 |
| C/(N+I) Composite (dB) | 11.4 | 4.8 | 5.1 | 4.5 | 5.6 |
| Required System Margin (dB) | -1.0 | -1.0 | -1.0 | -1.0 | -1.0 |
| Net C/(N+I) Composite (dB) | 10.4 | 3.8 | 4.1 | 3.5 | 4.6 |
| Minimum Required C/N (dB) | -10.0 | -3.4 | -3.9 | -3.0 | -3.4 |
| Excess Link Margin (dB) | 0.4 | 0.4 | 0.2 | 0.5 | 1.2 |
| Number of Carriers | 1 | 1 | 4 | 410 | 1 |
| CARRIER DENSITY LEVELS | | | | | |
| Uplink Power Density (dBW/Hz) | -51.4 | -50.6 | -43.6 | -44.2 | -52.7 |
| Downlink EIRP Density At Beam Peak (dBW/Hz) | -44 | -43.2 | -46.8 | -47.4 | -43.7 |

C-Band Global Uplink/C-Band Spot Downlink

| UPLINK BEAM INFORMATION | | | | | |
|---|-----------|-------------|-------------|-------------|-------------|
| Uplink Beam Name | GLOBAL | GLOBAL | GLOBAL | GLOBAL | GLOBAL |
| Uplink Frequency (GHz) | 6.175 | 6.175 | 6.175 | 6.175 | 6.175 |
| Uplink Beam Polarization | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR |
| Uplink Relative Contour Level (dB) | -4 | -4 | -4 | -4 | -4 |
| Uplink Contour G/T (dB/K) | -11 | -11 | -11 | -11 | -11 |
| Uplink SFD (dBW/m2) | -84.3 | -89.3 | -84.3 | -84.3 | -89.3 |
| Rain Rate (mm/hr) | 42 | 42 | 42 | 42 | 42 |
| DOWNLINK BEAM INFORMATION | | | | | |
| Downlink Beam Name | CSPOT | CSPOT | CSPOT | CSPOT | CSPOT |
| Downlink Frequency (GHz) | 3.95 | 3.95 | 3.95 | 3.95 | 3.95 |
| Downlink Beam Polarization | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR |
| Downlink Relative Contour Level (dB) | -4 | -4 | -4 | -4 | -4 |
| Downlink Contour EIRP (dBW) | 34.6 | 34.6 | 34.6 | 34.6 | 34.6 |
| Rain Rate (mm/hr) | 42 | 42 | 42 | 42 | 42 |
| ADJACENT SATELLITE 1 | | | | | |
| Satellite 1 Orbital Location | 30.9E | 30.9E | 30.9E | 30.9E | 30.9E |
| Uplink Power Density (dBW/Hz) | -38.7 | -38.7 | -38.7 | -38.7 | -38.7 |
| Uplink Polarization Advantage (dB) | 0 | 0 | 0 | 0 | 0 |
| Downlink EIRP Density (dBW/Hz) | -32.0 | -32.0 | -32.0 | -32.0 | -32.0 |
| Downlink Polarization Advantage (dB) | 0 | 0 | 0 | 0 | 0 |
| ADJACENT SATELLITE 2 | | | | | |
| Satellite 1 Orbital Location | 34.9E | 34.9E | 34.9E | 34.9E | 34.9E |
| Uplink Power Density (dBW/Hz) | -38.7 | -38.7 | -38.7 | -38.7 | -38.7 |
| Uplink Polarization Advantage (dB) | 0 | 0 | 0 | 0 | 0 |
| Downlink EIRP Density (dBW/Hz) | -32.0 | -32.0 | -32.0 | -32.0 | -32.0 |
| Downlink Polarization Advantage (dB) | 0 | 0 | 0 | 0 | 0 |
| CARRIER INFORMATION | | | | | |
| Carrier ID | 36M0F3F | 36M0G7W | 10M3G7W | 100KG7W | 41M0G7W |
| Carrier Modulation | TV/FM | QPSK | QPSK | QPSK | QPSK |
| Peak to Peak Bandwidth of EDS (MHz) | 4 | N/A | N/A | N/A | N/A |
| Information Rate(kbps) | N/A | 24575 | 6000 | 64 | 31490 |
| Code Rate | N/A | 1/2x188/204 | 1/2x188/204 | 1/2x239/256 | 1/2x188/204 |
| Occupied Bandwidth(kHz) | 36000 | 30133 | 6771.1 | 75.4 | 34170.0 |
| Allocated Bandwidth(kHz) | 36000 | 36000 | 10300 | 100 | 41000 |
| Minimum C/N, Clear Sky (dB) | 10 | 3.36 | 3.87 | 2.99 | 3.4 |
| Minimum C/N, Rain (dB) | 10 | 3.36 | 3.57 | 2.79 | 3.4 |
| UPLINK EARTH STATION | | | | | |
| Earth Station Diameter (meters) | 11.0 | 6.1 | 2.4 | 2.4 | 7.0 |
| Earth Station Gain (dBi) | 55.4 | 49.4 | 41.9 | 41.9 | 51.0 |
| Earth Station Elevation Angle | 20 | 20 | 20 | 20 | 20 |
| DOWNLINK EARTH STATION | | | | | |
| Earth Station Diameter (meters) | 8.1 | 3.5 | 6.1 | 6.1 | 3.7 |
| Earth Station Gain (dBi) | 49.3 | 41.1 | 46.5 | 46.5 | 41.2 |
| Earth Station G/T (dB/K) | 28.4 | 21.0 | 26.2 | 26.2 | 20.9 |
| Earth Station Elevation Angle | 20 | 20 | 20 | 20 | 20 |
| LINK FADE TYPE | | | | | |
| | Clear Sky | Clear Sky | Clear Sky | Clear Sky | Clear Sky |
| UPLINK PERFORMANCE | | | | | |
| Uplink Earth Station EIRP (dBW) | 78.6 | 73.6 | 64.1 | 44.0 | 73.6 |
| Uplink Path Loss, Clear Sky (dB) | -200.2 | -200.2 | -200.2 | -200.2 | -200.2 |
| Uplink Rain Attenuation | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Satellite G/T(dB/K) | -11.0 | -11.0 | -11.0 | -11.0 | -11.0 |
| Boltzman Constant(dBW/K-Hz) | 228.6 | 228.6 | 228.6 | 228.6 | 228.6 |
| Carrier Noise Bandwidth (dB-Hz) | -75.6 | -74.8 | -68.3 | -48.8 | -75.3 |
| Uplink C/N(dB) | 20.4 | 16.2 | 13.2 | 12.6 | 15.7 |
| DOWNLINK PERFORMANCE | | | | | |
| Downlink EIRP per Carrier (dBW) | 34.6 | 34.6 | 25.1 | 4.9 | 34.6 |
| Antenna Pointing Error (dB) | -0.5 | -0.5 | -0.5 | -0.5 | -0.5 |
| Downlink Path Loss, Clear Sky (dB) | -196.3 | -196.3 | -196.3 | -196.3 | -196.3 |
| Downlink Rain Attenuation | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Earth Station G/T (dB/K) | 28.4 | 21.0 | 26.2 | 26.2 | 20.9 |
| Boltzman Constant(dBW / K - Hz) | 228.6 | 228.6 | 228.6 | 228.6 | 228.6 |
| Carrier Noise Bandwidth (dB-Hz) | -75.6 | -74.8 | -68.3 | -48.8 | -75.3 |
| Downlink C / N(dB) | 19.2 | 12.6 | 14.7 | 14.2 | 12.0 |
| COMPOSITE LINK PERFORMANCE | | | | | |
| C/N Uplink (dB) | 20.4 | 16.2 | 13.2 | 12.6 | 15.7 |
| C/N Downlink (dB) | 19.2 | 12.6 | 14.7 | 14.2 | 12.0 |
| C/I Intermodulation (dB) | N/A | N/A | 17.4 | 16.8 | N/A |
| C/I Uplink Co-Channel (dB)* | 27.6 | 27.6 | 27.0 | 27.0 | 27.0 |
| C/I Downlink Co-Channel (dB)* | 27.6 | 27.6 | 27.0 | 27.0 | 27.0 |
| C/I Uplink Adjacent Satellite 1 (dB) | 19.7 | 15.5 | 12.5 | 11.9 | 15.0 |
| C/I Downlink Adjacent Satellite 1 (dB) | 18.1 | 8.1 | 12.8 | 12.2 | 9.3 |
| C/I Uplink Adjacent Satellite 2 (dB) | 19.7 | 15.5 | 12.5 | 11.9 | 15.0 |
| C/I Downlink Adjacent Satellite 2 (dB) | 19.5 | 12.9 | 14.6 | 14.1 | 12.4 |
| C/(N+I) Composite (dB) | 11.4 | 4.6 | 5.2 | 4.6 | 4.8 |
| Required System Margin (dB) | -1.0 | -1.0 | -1.0 | -1.0 | -1.0 |
| Net C/(N+I) Composite (dB) | 10.4 | 3.6 | 4.2 | 3.6 | 3.8 |
| Minimum Required C/N (dB) | -10.0 | -3.4 | -3.9 | -3.0 | -3.4 |
| Excess Link Margin (dB) | 0.4 | 0.2 | 0.3 | 0.6 | 0.4 |
| Number of Carriers | 1 | 1 | 4 | 410 | 1 |
| CARRIER DENSITY LEVELS | | | | | |
| Uplink Power Density (dBW/Hz) | -52.4 | -50.6 | -46.1 | -46.7 | -52.7 |
| Downlink EIRP Density At Beam Peak (dBW/Hz) | -37.0 | -36.2 | -39.3 | -39.8 | -36.7 |

C-Band Global Uplink/Hemi Downlink

| UPLINK BEAM INFORMATION | | | | |
|---|-----------|-------------|-------------|-------------|
| Uplink Beam Name | GLOBAL | GLOBAL | GLOBAL | GLOBAL |
| Uplink Frequency (GHz) | 6.175 | 6.175 | 6.175 | 6.175 |
| Uplink Beam Polarization | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR |
| Uplink Relative Contour Level (dB) | -4 | -4 | -4 | -4 |
| Uplink Contour G/T (dB/K) | -11 | -11 | -11 | -11 |
| Uplink SFD (dBW/m2) | -83.3 | -89.3 | -83.3 | -83.3 |
| Rain Rate (mm/hr) | 42 | 42 | 42 | 42 |
| DOWNLINK BEAM INFORMATION | | | | |
| Downlink Beam Name | HEMI | HEMI | HEMI | HEMI |
| Downlink Frequency (GHz) | 3.95 | 3.95 | 3.95 | 3.95 |
| Downlink Beam Polarization | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR |
| Downlink Relative Contour Level (dB) | -6 | -6 | -6 | -6 |
| Downlink Contour EIRP (dBW) | 31.5 | 31.5 | 31.5 | 31.5 |
| Rain Rate (mm/hr) | 42 | 42 | 42 | 42 |
| ADJACENT SATELLITE 1 | | | | |
| Satellite 1 Orbital Location | 30.9E | 30.9E | 30.9E | 30.9E |
| Uplink Power Density (dBW/Hz) | -38.7 | -38.7 | -38.7 | -38.7 |
| Uplink Polarization Advantage (dB) | 0 | 0 | 0 | 0 |
| Downlink EIRP Density (dBW/Hz) | -32.0 | -32.0 | -32.0 | -32.0 |
| Downlink Polarization Advantage (dB) | 0 | 0 | 0 | 0 |
| ADJACENT SATELLITE 2 | | | | |
| Satellite 1 Orbital Location | 34.9E | 34.9E | 34.9E | 34.9E |
| Uplink Power Density (dBW/Hz) | -38.7 | -38.7 | -38.7 | -38.7 |
| Uplink Polarization Advantage (dB) | 0 | 0 | 0 | 0 |
| Downlink EIRP Density (dBW/Hz) | -32.0 | -32.0 | -32.0 | -32.0 |
| Downlink Polarization Advantage (dB) | 0 | 0 | 0 | 0 |
| CARRIER INFORMATION | | | | |
| Carrier ID | 36M0F3F | 36M0G7W | 10M3G7W | 100KG7W |
| Carrier Modulation | TV/FM | QPSK | QPSK | QPSK |
| Peak to Peak Bandwidth of EDS (MHz) | 4 | N/A | N/A | N/A |
| Information Rate(kbps) | N/A | 24575 | 6000 | 64 |
| Code Rate | N/A | 1/2x188/204 | 1/2x188/204 | 1/2x239/256 |
| Occupied Bandwidth(kHz) | 36000 | 30133 | 6771.1 | 75.4 |
| Allocated Bandwidth(kHz) | 36000 | 36000 | 10300 | 100 |
| Minimum C/N, Clear Sky (dB) | 10 | 3.36 | 3.87 | 2.99 |
| Minimum C/N, Rain (dB) | 10 | 3.36 | 3.57 | 2.79 |
| UPLINK EARTH STATION | | | | |
| Earth Station Diameter (meters) | 13.0 | 7.0 | 2.4 | 2.4 |
| Earth Station Gain (dBi) | 56.4 | 51.0 | 41.9 | 41.9 |
| Earth Station Elevation Angle | 20 | 20 | 20 | 20 |
| DOWNLINK EARTH STATION | | | | |
| Earth Station Diameter (meters) | 11.0 | 4.5 | 8.1 | 8.1 |
| Earth Station Gain (dBi) | 51.9 | 43.9 | 49.3 | 49.3 |
| Earth Station G/T (dB/K) | 31.0 | 23.6 | 28.4 | 28.4 |
| Earth Station Elevation Angle | 20 | 20 | 20 | 20 |
| LINK FADE TYPE | | | | |
| | Clear Sky | Clear Sky | Clear Sky | Clear Sky |
| UPLINK PERFORMANCE | | | | |
| Uplink Earth Station EIRP (dBW) | 79.6 | 73.6 | 65.8 | 45 |
| Uplink Path Loss, Clear Sky (dB) | -200.2 | -200.2 | -200.2 | -200.2 |
| Uplink Rain Attenuation | 0.0 | 0.0 | 0.0 | 0.0 |
| Satellite G/T(dB/K) | -11.0 | -11.0 | -11.0 | -11.0 |
| Boltzman Constant(dBW/K-Hz) | 228.6 | 228.6 | 228.6 | 228.6 |
| Carrier Noise Bandwidth (dB-Hz) | -75.6 | -74.8 | -68.3 | -48.8 |
| Uplink C/N(dB) | 21.4 | 16.2 | 14.9 | 13.7 |
| DOWNLINK PERFORMANCE | | | | |
| Downlink EIRP per Carrier (dBW) | 31.5 | 31.5 | 21.7 | 0.9 |
| Antenna Pointing Error (dB) | -0.5 | -0.5 | -0.5 | -0.5 |
| Downlink Path Loss, Clear Sky (dB) | -196.3 | -196.3 | -196.3 | -196.3 |
| Downlink Rain Attenuation | 0.0 | 0.0 | 0.0 | 0.0 |
| Earth Station G/T (dB/K) | 31.0 | 23.6 | 28.4 | 28.4 |
| Boltzman Constant(dBW / K - Hz) | 228.6 | 228.6 | 228.6 | 228.6 |
| Carrier Noise Bandwidth (dB-Hz) | -75.6 | -74.8 | -68.3 | -48.8 |
| Downlink C / N(dB) | 18.7 | 12.1 | 13.6 | 12.3 |
| COMPOSITE LINK PERFORMANCE | | | | |
| C/N Uplink (dB) | 21.4 | 16.2 | 14.9 | 13.7 |
| C/N Downlink (dB) | 18.7 | 12.1 | 13.6 | 12.3 |
| C/I Intermodulation (dB) | N/A | N/A | 22.1 | 20.9 |
| C/I Uplink Co-Channel (dB)* | 27.0 | 27.0 | 27.7 | 27.0 |
| C/I Downlink Co-Channel (dB)* | 27.0 | 27.0 | 27.7 | 27.0 |
| C/I Uplink Adjacent Satellite 1 (dB) | 20.7 | 15.5 | 14.2 | 13 |
| C/I Downlink Adjacent Satellite 1 (dB) | 17.8 | 9.8 | 12.5 | 11.2 |
| C/I Uplink Adjacent Satellite 2 (dB) | 20.7 | 15.5 | 14.2 | 13 |
| C/I Downlink Adjacent Satellite 2 (dB) | 18.8 | 12.3 | 13.8 | 12.6 |
| C/(N+I) Composite (dB) | 11.5 | 5.1 | 5.9 | 4.6 |
| Required System Margin (dB) | -1.0 | -1.0 | -1.0 | -1.0 |
| Net C/(N+I) Composite (dB) | 10.5 | 4.1 | 4.9 | 3.6 |
| Minimum Required C/N (dB) | -10.0 | -3.4 | -3.9 | -3.0 |
| Excess Link Margin (dB) | 0.5 | 0.7 | 1.0 | 0.6 |
| Number of Carriers | 1 | 1 | 3 | 360 |
| CARRIER DENSITY LEVELS | | | | |
| Uplink Power Density (dBW/Hz) | -52.4 | -52.2 | -44.4 | -45.6 |
| Downlink EIRP Density At Beam Peak (dBW/Hz) | -38.1 | -37.3 | -40.6 | -41.9 |

C-Band Spot Uplink/C-Band Spot Downlink

| UPLINK BEAM INFORMATION | | | | | |
|---|-----------|-------------|-------------|-------------|-------------|
| Uplink Beam Name | CSPOT | CSPOT | CSPOT | CSPOT | CSPOT |
| Uplink Frequency (GHz) | 6.175 | 6.175 | 6.175 | 6.175 | 6.175 |
| Uplink Beam Polarization | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR |
| Uplink Relative Contour Level (dB) | -4 | -4 | -4 | -4 | -4 |
| Uplink Contour G/T (dB/K) | -1 | -1 | -1 | -1 | -1 |
| Uplink SFD (dBW/m2) | -88.3 | -92.3 | -87.3 | -87.3 | -92.3 |
| Rain Rate (mm/hr) | 42 | 42 | 42 | 42 | 42 |
| DOWNLINK BEAM INFORMATION | | | | | |
| Downlink Beam Name | CSPOT | CSPOT | CSPOT | CSPOT | CSPOT |
| Downlink Frequency (GHz) | 3.95 | 3.95 | 3.95 | 3.95 | 3.95 |
| Downlink Beam Polarization | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR |
| Downlink Relative Contour Level (dB) | -4 | -4 | -4 | -4 | -4 |
| Downlink Contour EIRP (dBW) | 34.6 | 34.6 | 34.6 | 34.6 | 34.6 |
| Rain Rate (mm/hr) | 42 | 42 | 42 | 42 | 43 |
| ADJACENT SATELLITE 1 | | | | | |
| Satellite 1 Orbital Location | 30.9E | 30.9E | 30.9E | 30.9E | 30.9E |
| Uplink Power Density (dBW/Hz) | -38.7 | -38.7 | -38.7 | -38.7 | -38.7 |
| Uplink Polarization Advantage (dB) | 0 | 0 | 0 | 0 | 0 |
| Downlink EIRP Density (dBW/Hz) | -32.0 | -32.0 | -32.0 | -32.0 | -32.0 |
| Downlink Polarization Advantage (dB) | 0 | 0 | 0 | 0 | 0 |
| ADJACENT SATELLITE 2 | | | | | |
| Satellite 1 Orbital Location | 34.9E | 34.9E | 34.9E | 34.9E | 34.9E |
| Uplink Power Density (dBW/Hz) | -38.7 | -38.7 | -38.7 | -38.7 | -38.7 |
| Uplink Polarization Advantage (dB) | 0 | 0 | 0 | 0 | 0 |
| Downlink EIRP Density (dBW/Hz) | -32.0 | -32.0 | -32.0 | -32.0 | -32.0 |
| Downlink Polarization Advantage (dB) | 0 | 0 | 0 | 0 | 0 |
| CARRIER INFORMATION | | | | | |
| Carrier ID | 36M0F3F | 36M0G7W | 10M3G7W | 100KG7W | 41M0G7W |
| Carrier Modulation | TV/FM | QPSK | QPSK | QPSK | QPSK |
| Peak to Peak Bandwidth of EDS (MHz) | 4 | N/A | N/A | N/A | N/A |
| Information Rate(kbps) | N/A | 24575 | 6000 | 64 | 31490 |
| Code Rate | N/A | 1/2x188/204 | 1/2x188/204 | 1/2x239/256 | 1/2x188/204 |
| Occupied Bandwidth(kHz) | 36000 | 30133 | 6771.1 | 75.4 | 34170.0 |
| Allocated Bandwidth(kHz) | 36000 | 36000 | 10300 | 100 | 41000 |
| Minimum C/N, Clear Sky (dB) | 10 | 3.36 | 3.87 | 2.99 | 3.4 |
| Minimum C/N, Rain (dB) | 10 | 3.36 | 3.57 | 2.79 | 3.4 |
| UPLINK EARTH STATION | | | | | |
| Earth Station Diameter (meters) | 7.0 | 4.5 | 2.4 | 2.4 | 5.0 |
| Earth Station Gain (dBi) | 51 | 46.5 | 41.9 | 41.9 | 47.5 |
| Earth Station Elevation Angle | 20 | 20 | 20 | 20 | 20 |
| DOWNLINK EARTH STATION | | | | | |
| Earth Station Diameter (meters) | 13.1 | 3.7 | 9.2 | 9.2 | 4.5 |
| Earth Station Gain (dBi) | 53.5 | 41.2 | 50.3 | 50.3 | 43.9 |
| Earth Station G/T (dB/K) | 33.0 | 20.9 | 29.4 | 29.4 | 23.6 |
| Earth Station Elevation Angle | 20 | 20 | 20 | 20 | 20 |
| LINK FADE TYPE | | | | | |
| | Clear Sky | Clear Sky | Clear Sky | Clear Sky | Clear Sky |
| UPLINK PERFORMANCE | | | | | |
| Uplink Earth Station EIRP (dBW) | 74.6 | 70.6 | 61.1 | 41.0 | 70.6 |
| Uplink Path Loss, Clear Sky (dB) | -200.2 | -200.2 | -200.2 | -200.2 | -200.2 |
| Uplink Rain Attenuation | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Satellite G/T(dB/K) | -1.0 | -1.0 | -1.0 | -1.0 | -1.0 |
| Boltzman Constant(dBW/K-Hz) | 228.6 | 228.6 | 228.6 | 228.6 | 228.6 |
| Carrier Noise Bandwidth (dB-Hz) | -75.6 | -74.8 | -68.3 | -48.8 | -75.3 |
| Uplink C/N(dB) | 26.4 | 23.2 | 20.2 | 19.6 | 22.7 |
| DOWNLINK PERFORMANCE | | | | | |
| Downlink EIRP per Carrier (dBW) | 34.6 | 34.6 | 25.1 | 4.9 | 34.6 |
| Antenna Pointing Error (dB) | -0.5 | -0.5 | -0.5 | -0.5 | -0.5 |
| Downlink Path Loss, Clear Sky (dB) | -196.3 | -196.3 | -196.3 | -196.3 | -196.3 |
| Downlink Rain Attenuation | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Earth Station G/T (dB/K) | 33.0 | 20.9 | 29.4 | 29.4 | 23.6 |
| Boltzman Constant(dBW / K - Hz) | 228.6 | 228.6 | 228.6 | 228.6 | 228.6 |
| Carrier Noise Bandwidth (dB-Hz) | -75.6 | -74.8 | -68.3 | -48.8 | -75.3 |
| Downlink C / N(dB) | 23.8 | 12.5 | 17.9 | 17.4 | 14.7 |
| COMPOSITE LINK PERFORMANCE | | | | | |
| C/N Uplink (dB) | 26.4 | 23.2 | 20.2 | 19.6 | 22.7 |
| C/N Downlink (dB) | 23.8 | 12.5 | 17.9 | 17.4 | 14.7 |
| C/I Intermodulation (dB) | N/A | N/A | 17.4 | 16.8 | N/A |
| C/I Uplink Co-Channel (dB)* | 27.6 | 27.6 | 27.0 | 27.0 | 27.0 |
| C/I Downlink Co-Channel (dB)* | 27.6 | 27.6 | 27.0 | 27.0 | 27.0 |
| C/I Uplink Adjacent Satellite 1 (dB) | 15.7 | 12.5 | 9.5 | 8.9 | 12.0 |
| C/I Downlink Adjacent Satellite 1 (dB) | 22.6 | 9.9 | 16.9 | 16.3 | 12.3 |
| C/I Uplink Adjacent Satellite 2 (dB) | 15.7 | 12.5 | 9.5 | 8.9 | 12.0 |
| C/I Downlink Adjacent Satellite 2 (dB) | 23.4 | 12.9 | 18.2 | 17.6 | 14.8 |
| C/(N+I) Composite (dB) | 11.4 | 4.8 | 5.1 | 4.5 | 5.8 |
| Required System Margin (dB) | -1.0 | -1.0 | -1.0 | -1.0 | -1.0 |
| Net C/(N+I) Composite (dB) | 10.4 | 3.8 | 4.1 | 3.5 | 4.8 |
| Minimum Required C/N (dB) | -10.0 | -3.4 | -3.9 | -3.0 | -3.4 |
| Excess Link Margin (dB) | 0.4 | 0.4 | 0.2 | 0.5 | 1.4 |
| Number of Carriers | 1 | 1 | 4 | 410 | 1 |
| CARRIER DENSITY LEVELS | | | | | |
| Uplink Power Density (dBW/Hz) | -52.0 | -50.7 | -49.1 | -49.7 | -52.2 |
| Downlink EIRP Density At Beam Peak (dBW/Hz) | -37.0 | -36.2 | -39.3 | -39.8 | -36.7 |

C-Band Spot Uplink/Global Downlink

| UPLINK BEAM INFORMATION | | | | | |
|---|-----------|-------------|-------------|-------------|-------------|
| Uplink Beam Name | CSPOT | CSPOT | CSPOT | CSPOT | CSPOT |
| Uplink Frequency (GHz) | 6.175 | 6.175 | 6.175 | 6.175 | 6.175 |
| Uplink Beam Polarization | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR |
| Uplink Relative Contour Level (dB) | -4 | -4 | -4 | -4 | -4 |
| Uplink Contour G/T (dB/K) | -1 | -1 | -1 | -1 | -1 |
| Uplink SFD (dBW/m2) | -85.3 | -92.3 | -86.3 | -86.3 | -92.3 |
| Rain Rate (mm/hr) | 42 | 42 | 42 | 42 | 42 |
| DOWNLINK BEAM INFORMATION | | | | | |
| Downlink Beam Name | GLOBAL | GLOBAL | GLOBAL | GLOBAL | GLOBAL |
| Downlink Frequency (GHz) | 3.95 | 3.95 | 3.95 | 3.95 | 3.95 |
| Downlink Beam Polarization | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR |
| Downlink Relative Contour Level (dB) | -4 | -4 | -4 | -4 | -4 |
| Downlink Contour EIRP (dBW) | 27.6 | 27.6 | 27.6 | 27.6 | 27.6 |
| Rain Rate (mm/hr) | 42 | 42 | 42 | 42 | 43 |
| ADJACENT SATELLITE 1 | | | | | |
| Satellite 1 Orbital Location | 30.9E | 30.9E | 30.9E | 30.9E | 30.9E |
| Uplink Power Density (dBW/Hz) | -38.7 | -38.7 | -38.7 | -38.7 | -38.7 |
| Uplink Polarization Advantage (dB) | 0 | 0 | 0 | 0 | 0 |
| Downlink EIRP Density (dBW/Hz) | -32.0 | -32.0 | -32.0 | -32.0 | -32.0 |
| Downlink Polarization Advantage (dB) | 0 | 0 | 0 | 0 | 0 |
| ADJACENT SATELLITE 2 | | | | | |
| Satellite 1 Orbital Location | 34.9E | 34.9E | 34.9E | 34.9E | 34.9E |
| Uplink Power Density (dBW/Hz) | -38.7 | -38.7 | -38.7 | -38.7 | -38.7 |
| Uplink Polarization Advantage (dB) | 0 | 0 | 0 | 0 | 0 |
| Downlink EIRP Density (dBW/Hz) | -32.0 | -32.0 | -32.0 | -32.0 | -32.0 |
| Downlink Polarization Advantage (dB) | 0 | 0 | 0 | 0 | 0 |
| CARRIER INFORMATION | | | | | |
| Carrier ID | 36M0F3F | 36M0G7W | 10M3G7W | 100KG7W | 41M0G7W |
| Carrier Modulation | TV/FM | QPSK | QPSK | QPSK | QPSK |
| Peak to Peak Bandwidth of EDS (MHz) | 4 | N/A | N/A | N/A | N/A |
| Information Rate(kbps) | N/A | 24575 | 6000 | 64 | 31490 |
| Code Rate | N/A | 1/2x188/204 | 1/2x188/204 | 1/2x239/256 | 1/2x188/204 |
| Occupied Bandwidth(kHz) | 36000 | 30133 | 6771.1 | 75.4 | 34170.0 |
| Allocated Bandwidth(kHz) | 36000 | 36000 | 10300 | 100 | 41000 |
| Minimum C/N, Clear Sky (dB) | 10 | 3.36 | 3.87 | 2.99 | 3.4 |
| Minimum C/N, Rain (dB) | 10 | 3.36 | 3.57 | 2.79 | 3.4 |
| UPLINK EARTH STATION | | | | | |
| Earth Station Diameter (meters) | 10.0 | 4.6 | 2.4 | 2.4 | 4.6 |
| Earth Station Gain (dBi) | 54.1 | 46.9 | 41.9 | 41.9 | 46.9 |
| Earth Station Elevation Angle | 20 | 20 | 20 | 20 | 20 |
| DOWNLINK EARTH STATION | | | | | |
| Earth Station Diameter (meters) | 18.3 | 8.1 | 18.3 | 15.2 | 8.1 |
| Earth Station Gain (dBi) | 56 | 49.3 | 56.0 | 55.0 | 49.3 |
| Earth Station G/T (dB/K) | 35.5 | 28.4 | 35.5 | 34.5 | 28.4 |
| Earth Station Elevation Angle | 20 | 20 | 20 | 20 | 20 |
| LINK FADE TYPE | | | | | |
| | Clear Sky | Clear Sky | Clear Sky | Clear Sky | Clear Sky |
| UPLINK PERFORMANCE | | | | | |
| Uplink Earth Station EIRP (dBW) | 77.6 | 70.6 | 61.6 | 41.5 | 70.6 |
| Uplink Path Loss, Clear Sky (dB) | -200.2 | -200.2 | -200.2 | -200.2 | -200.2 |
| Uplink Rain Attenuation | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Satellite G/T(dB/K) | -1.0 | -1.0 | -1.0 | -1.0 | -1.0 |
| Boltzman Constant(dBW/K-Hz) | 228.6 | 228.6 | 228.6 | 228.6 | 228.6 |
| Carrier Noise Bandwidth (dB-Hz) | -75.6 | -74.8 | -68.3 | -48.8 | -75.3 |
| Uplink C/N(dB) | 29.4 | 23.2 | 20.7 | 20.1 | 22.7 |
| DOWNLINK PERFORMANCE | | | | | |
| Downlink EIRP per Carrier (dBW) | 27.6 | 27.6 | 17.5 | -2.6 | 27.6 |
| Antenna Pointing Error (dB) | -0.5 | -0.5 | -0.5 | -0.5 | -0.5 |
| Downlink Path Loss, Clear Sky (dB) | -196.3 | -196.3 | -196.3 | -196.3 | -196.3 |
| Downlink Rain Attenuation | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Earth Station G/T (dB/K) | 35.5 | 28.4 | 35.5 | 34.5 | 28.4 |
| Boltzman Constant(dBW / K - Hz) | 228.6 | 228.6 | 228.6 | 228.6 | 228.6 |
| Carrier Noise Bandwidth (dB-Hz) | -75.6 | -74.8 | -68.3 | -48.8 | -75.3 |
| Downlink C / N(dB) | 19.3 | 13.0 | 16.5 | 14.9 | 12.5 |
| COMPOSITE LINK PERFORMANCE | | | | | |
| C/N Uplink (dB) | 29.4 | 23.2 | 20.7 | 20.1 | 22.7 |
| C/N Downlink (dB) | 19.3 | 13.0 | 16.5 | 14.9 | 12.5 |
| C/I Intermodulation (dB) | N/A | N/A | 18.9 | 18.3 | N/A |
| C/I Uplink Co-Channel (dB)* | 27.6 | 27.6 | 27.0 | 27.0 | 27.0 |
| C/I Downlink Co-Channel (dB)* | 27.6 | 27.6 | 27.0 | 27.0 | 27.0 |
| C/I Uplink Adjacent Satellite 1 (dB) | 18.7 | 12.5 | 10.0 | 9.4 | 12.0 |
| C/I Downlink Adjacent Satellite 1 (dB) | 18.2 | 11.9 | 15.4 | 13.8 | 11.4 |
| C/I Uplink Adjacent Satellite 2 (dB) | 18.7 | 12.5 | 10.0 | 9.4 | 12.0 |
| C/I Downlink Adjacent Satellite 2 (dB) | 18.8 | 13.3 | 16.0 | 14.5 | 12.7 |
| C/(N+I) Composite (dB) | 11.5 | 5.5 | 5.2 | 4.3 | 5.0 |
| Required System Margin (dB) | -1.0 | -1.0 | -1.0 | -1.0 | -1.0 |
| Net C/(N+I) Composite (dB) | 10.5 | 4.5 | 4.2 | 3.3 | 4.0 |
| Minimum Required C/N (dB) | -10.0 | -3.4 | -3.9 | -3.0 | -3.4 |
| Excess Link Margin (dB) | 0.5 | 1.1 | 0.3 | 0.3 | 0.6 |
| Number of Carriers | 1 | 1 | 4 | 410 | 1 |
| CARRIER DENSITY LEVELS | | | | | |
| Uplink Power Density (dBW/Hz) | -52.1 | -51.1 | -48.6 | -49.2 | -51.6 |
| Downlink EIRP Density At Beam Peak (dBW/Hz) | -44.0 | -43.2 | -46.8 | -47.4 | -43.7 |

C-Band Spot Uplink/Hemi Downlink

| UPLINK BEAM INFORMATION | | | | |
|---|-----------|-------------|-------------|-------------|
| Uplink Beam Name | CSPOT | CSPOT | CSPOT | CSPOT |
| Uplink Frequency (GHz) | 6.175 | 6.175 | 6.175 | 6.175 |
| Uplink Beam Polarization | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR |
| Uplink Relative Contour Level (dB) | -4 | -4 | -4 | -4 |
| Uplink Contour G/T (dB/K) | -1 | -1 | -1 | -1 |
| Uplink SFD (dBW/m2) | -87.3 | -92.3 | -88.3 | -88.3 |
| Rain Rate (mm/hr) | 42 | 42 | 42 | 42 |
| DOWNLINK BEAM INFORMATION | | | | |
| Downlink Beam Name | HEMI | HEMI | HEMI | HEMI |
| Downlink Frequency (GHz) | 3.95 | 3.95 | 3.95 | 3.95 |
| Downlink Beam Polarization | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR |
| Downlink Relative Contour Level (dB) | -6 | -6 | -6 | -6 |
| Downlink Contour EIRP (dBW) | 31.5 | 31.5 | 31.5 | 31.5 |
| Rain Rate (mm/hr) | 42 | 42 | 42 | 42 |
| ADJACENT SATELLITE 1 | | | | |
| Satellite 1 Orbital Location | 30.9E | 30.9E | 30.9E | 30.9E |
| Uplink Power Density (dBW/Hz) | -38.7 | -38.7 | -38.7 | -38.7 |
| Uplink Polarization Advantage (dB) | 0 | 0 | 0 | 0 |
| Downlink EIRP Density (dBW/Hz) | -32.0 | -32.0 | -32.0 | -32.0 |
| Downlink Polarization Advantage (dB) | 0 | 0 | 0 | 0 |
| ADJACENT SATELLITE 2 | | | | |
| Satellite 1 Orbital Location | 34.9E | 34.9E | 34.9E | 34.9E |
| Uplink Power Density (dBW/Hz) | -38.7 | -38.7 | -38.7 | -38.7 |
| Uplink Polarization Advantage (dB) | 0 | 0 | 0 | 0 |
| Downlink EIRP Density (dBW/Hz) | -32.0 | -32.0 | -32.0 | -32.0 |
| Downlink Polarization Advantage (dB) | 0 | 0 | 0 | 0 |
| CARRIER INFORMATION | | | | |
| Carrier ID | 36M0F3F | 36M0G7W | 10M3G7W | 100KG7W |
| Carrier Modulation | TV/FM | QPSK | QPSK | QPSK |
| Peak to Peak Bandwidth of EDS (MHz) | 4 | N/A | N/A | N/A |
| Information Rate(kbps) | N/A | 24575 | 6000 | 64 |
| Code Rate | N/A | 1/2x188/204 | 1/2x188/204 | 1/2x239/256 |
| Occupied Bandwidth(kHz) | 36000 | 30133 | 6771.1 | 75.4 |
| Allocated Bandwidth(kHz) | 36000 | 36000 | 10300 | 100 |
| Minimum C/N, Clear Sky (dB) | 10 | 3.36 | 3.87 | 2.99 |
| Minimum C/N, Rain (dB) | 10 | 3.36 | 3.57 | 2.79 |
| UPLINK EARTH STATION | | | | |
| Earth Station Diameter (meters) | 8.1 | 4.5 | 2.4 | 2.4 |
| Earth Station Gain (dBi) | 52.8 | 46.5 | 41.9 | 41.9 |
| Earth Station Elevation Angle | 20 | 20 | 20 | 20 |
| DOWNLINK EARTH STATION | | | | |
| Earth Station Diameter (meters) | 18.3 | 4.5 | 9.2 | 13.1 |
| Earth Station Gain (dBi) | 56.0 | 43.9 | 50.3 | 53.5 |
| Earth Station G/T (dB/K) | 35.5 | 23.6 | 29.4 | 33.0 |
| Earth Station Elevation Angle | 20 | 20 | 20 | 20 |
| LINK FADE TYPE | | | | |
| | Clear Sky | Clear Sky | Clear Sky | Clear Sky |
| UPLINK PERFORMANCE | | | | |
| Uplink Earth Station EIRP (dBW) | 75.6 | 70.6 | 61.3 | 40.5 |
| Uplink Path Loss, Clear Sky (dB) | -200.2 | -200.2 | -200.2 | -200.2 |
| Uplink Rain Attenuation | 0.0 | 0.0 | 0.0 | 0.0 |
| Satellite G/T(dB/K) | -1.0 | -1.0 | -1.0 | -1.0 |
| Boltzman Constant(dBW/K-Hz) | 228.6 | 228.6 | 228.6 | 228.6 |
| Carrier Noise Bandwidth (dB-Hz) | -75.6 | -74.8 | -68.3 | -48.8 |
| Uplink C/N(dB) | 27.4 | 23.2 | 20.4 | 19.2 |
| DOWNLINK PERFORMANCE | | | | |
| Downlink EIRP per Carrier (dBW) | 31.5 | 31.5 | 23.2 | 2.4 |
| Antenna Pointing Error (dB) | -0.5 | -0.5 | -0.5 | -0.5 |
| Downlink Path Loss, Clear Sky (dB) | -196.3 | -196.3 | -196.3 | -196.3 |
| Downlink Rain Attenuation | 0.0 | 0.0 | 0.0 | 0.0 |
| Earth Station G/T (dB/K) | 35.5 | 23.6 | 29.4 | 33.0 |
| Boltzman Constant(dBW / K - Hz) | 228.6 | 228.6 | 228.6 | 228.6 |
| Carrier Noise Bandwidth (dB-Hz) | -75.6 | -74.8 | -68.3 | -48.8 |
| Downlink C / N(dB) | 23.2 | 12.1 | 16.1 | 18.4 |
| COMPOSITE LINK PERFORMANCE | | | | |
| C/N Uplink (dB) | 27.4 | 23.2 | 20.4 | 19.2 |
| C/N Downlink (dB) | 23.2 | 12.1 | 16.1 | 18.4 |
| C/I Intermodulation (dB) | N/A | N/A | 18.1 | 16.8 |
| C/I Uplink Co-Channel (dB)* | 27.0 | 27.0 | 27.7 | 27.0 |
| C/I Downlink Co-Channel (dB)* | 27.0 | 27.0 | 27.7 | 27.0 |
| C/I Uplink Adjacent Satellite 1 (dB) | 16.7 | 12.5 | 9.7 | 8.5 |
| C/I Downlink Adjacent Satellite 1 (dB) | 22.1 | 9.8 | 15.1 | 17.2 |
| C/I Uplink Adjacent Satellite 2 (dB) | 16.7 | 12.5 | 9.7 | 8.5 |
| C/I Downlink Adjacent Satellite 2 (dB) | 22.7 | 12.3 | 16.3 | 18.0 |
| C/(N+I) Composite (dB) | 11.9 | 4.6 | 4.9 | 4.3 |
| Required System Margin (dB) | -1.0 | -1.0 | -1.0 | -1.0 |
| Net C/(N+I) Composite (dB) | 10.9 | 3.6 | 3.9 | 3.3 |
| Minimum Required C/N (dB) | -10.0 | -3.4 | -3.9 | -3.0 |
| Excess Link Margin (dB) | 0.9 | 0.2 | 0.0 | 0.3 |
| Number of Carriers | 1 | 1 | 3 | 360 |
| CARRIER DENSITY LEVELS | | | | |
| Uplink Power Density (dBW/Hz) | -52.8 | -50.7 | -48.9 | -50.1 |
| Downlink EIRP Density At Beam Peak (dBW/Hz) | -38.1 | -37.3 | -39.1 | -40.4 |

C-Band Hemi Uplink/Hemi Downlink

| UPLINK BEAM INFORMATION | | | | | |
|---|-----------|-------------|-------------|-------------|-------------|
| Uplink Beam Name | HEMI | HEMI | HEMI | HEMI | HEMI |
| Uplink Frequency (GHz) | 6.175 | 6.175 | 6.175 | 6.175 | 6.175 |
| Uplink Beam Polarization | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR |
| Uplink Relative Contour Level (dB) | -6 | -6 | -6 | -6 | -6 |
| Uplink Contour G/T (dB/K) | -7.5 | -7.5 | -7.5 | -7.5 | -7.5 |
| Uplink SFD (dBW/m2) | -86.0 | -88.0 | -81.0 | -81.0 | -89.0 |
| Rain Rate (mm/hr) | 42 | 42 | 42 | 42 | 42 |
| DOWNLINK BEAM INFORMATION | | | | | |
| Downlink Beam Name | HEMI | HEMI | HEMI | HEMI | HEMI |
| Downlink Frequency (GHz) | 3.95 | 3.95 | 3.95 | 3.95 | 3.95 |
| Downlink Beam Polarization | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR |
| Downlink Relative Contour Level (dB) | -6 | -6 | -6 | -6 | -6 |
| Downlink Contour EIRP (dBW) | 31.5 | 31.5 | 31.5 | 31.5 | 31.5 |
| Rain Rate (mm/hr) | 42 | 42 | 42 | 42 | 43 |
| ADJACENT SATELLITE 1 | | | | | |
| Satellite 1 Orbital Location | 30.9E | 30.9E | 30.9E | 30.9E | 30.9E |
| Uplink Power Density (dBW/Hz) | -38.7 | -38.7 | -38.7 | -38.7 | -38.7 |
| Uplink Polarization Advantage (dB) | 0 | 0 | 0 | 0 | 0 |
| Downlink EIRP Density (dBW/Hz) | -38.0 | -38.0 | -38.0 | -38.0 | -38.0 |
| Downlink Polarization Advantage (dB) | 0 | 0 | 0 | 0 | 0 |
| ADJACENT SATELLITE 2 | | | | | |
| Satellite 1 Orbital Location | 34.9E | 34.9E | 34.9E | 34.9E | 34.9E |
| Uplink Power Density (dBW/Hz) | -38.7 | -38.7 | -38.7 | -38.7 | -38.7 |
| Uplink Polarization Advantage (dB) | 0 | 0 | 0 | 0 | 0 |
| Downlink EIRP Density (dBW/Hz) | -38.0 | -38.0 | -38.0 | -38.0 | -38.0 |
| Downlink Polarization Advantage (dB) | 0 | 0 | 0 | 0 | 0 |
| CARRIER INFORMATION | | | | | |
| Carrier ID | 36M0F3F | 36M0G7W | 10M3G7W | 100KG7W | 77M0G7W |
| Carrier Modulation | TV/FM | QPSK | QPSK | QPSK | QPSK |
| Peak to Peak Bandwidth of EDS (MHz) | 4 | N/A | N/A | N/A | N/A |
| Information Rate(kbps) | N/A | 24575 | 6000 | 64 | 52563 |
| Code Rate | N/A | 1/2x188/204 | 1/2x188/204 | 1/2x239/256 | 1/2x188/204 |
| Occupied Bandwidth(kHz) | 36000 | 30133 | 6771.1 | 75.4 | 64451 |
| Allocated Bandwidth(kHz) | 36000 | 36000 | 10300 | 100 | 77000 |
| Minimum C/N, Clear Sky (dB) | 10 | 3.36 | 3.87 | 2.99 | 3.36 |
| Minimum C/N, Rain (dB) | 10 | 3.36 | 3.57 | 2.79 | 3.36 |
| UPLINK EARTH STATION | | | | | |
| Earth Station Diameter (meters) | 9.0 | 4.5 | 2.4 | 2.4 | 7.0 |
| Earth Station Gain (dBi) | 53.4 | 46.5 | 41.9 | 41.9 | 51.0 |
| Earth Station Elevation Angle | 20 | 20 | 20 | 20 | 20 |
| DOWNLINK EARTH STATION | | | | | |
| Earth Station Diameter (meters) | 13.1 | 7.0 | 13.1 | 13.1 | 6.1 |
| Earth Station Gain (dBi) | 53.5 | 47.5 | 53.5 | 53.5 | 46.5 |
| Earth Station G/T (dB/K) | 33.0 | 26.6 | 33.0 | 33.0 | 26.2 |
| Earth Station Elevation Angle | 20 | 20 | 20 | 20 | 20 |
| LINK FADE TYPE | | | | | |
| | Clear Sky | Clear Sky | Clear Sky | Clear Sky | Clear Sky |
| UPLINK PERFORMANCE | | | | | |
| Uplink Earth Station EIRP (dBW) | 76.9 | 69.9 | 63.4 | 43.0 | 73.9 |
| Uplink Path Loss, Clear Sky (dB) | -200.2 | -200.2 | -200.2 | -200.2 | -200.2 |
| Uplink Rain Attenuation | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Satellite G/T(dB/K) | -7.5 | -7.5 | -7.5 | -7.5 | -7.5 |
| Boltzman Constant(dBW/K-Hz) | 228.6 | 228.6 | 228.6 | 228.6 | 228.6 |
| Carrier Noise Bandwidth (dB-Hz) | -75.6 | -74.8 | -68.3 | -48.8 | -78.1 |
| Uplink C/N(dB) | 22.2 | 16.0 | 16.0 | 15.1 | 16.7 |
| DOWNLINK PERFORMANCE | | | | | |
| Downlink EIRP per Carrier (dBW) | 31.5 | 28.7 | 18.0 | -2.4 | 31.5 |
| Antenna Pointing Error (dB) | -0.5 | -0.5 | -0.5 | -0.5 | -0.5 |
| Downlink Path Loss, Clear Sky (dB) | -196.3 | -196.3 | -196.3 | -196.3 | -196.3 |
| Downlink Rain Attenuation | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Earth Station G/T (dB/K) | 33.0 | 26.6 | 33.0 | 33.0 | 26.2 |
| Boltzman Constant(dBW / K - Hz) | 228.6 | 228.6 | 228.6 | 228.6 | 228.6 |
| Carrier Noise Bandwidth (dB-Hz) | -75.6 | -74.8 | -68.3 | -48.8 | -78.1 |
| Downlink C / N(dB) | 20.7 | 12.3 | 14.5 | 13.6 | 11.4 |
| COMPOSITE LINK PERFORMANCE | | | | | |
| C/N Uplink (dB) | 22.2 | 16.0 | 16.0 | 15.1 | 16.7 |
| C/N Downlink (dB) | 20.7 | 12.3 | 14.5 | 13.6 | 11.4 |
| C/I Intermodulation (dB) | N/A | N/A | 21.8 | 20.9 | N/A |
| C/I Uplink Co-Channel (dB)* | 30.3 | 30.3 | 27.3 | 27.0 | 27.0 |
| C/I Downlink Co-Channel (dB)* | 30.3 | 30.3 | 27.3 | 27.0 | 27.0 |
| C/I Uplink Adjacent Satellite 1 (dB) | 16.0 | 9.8 | 9.8 | 9.0 | 10.5 |
| C/I Downlink Adjacent Satellite 1 (dB) | 25.5 | 17.1 | 19.3 | 18.4 | 15.4 |
| C/I Uplink Adjacent Satellite 2 (dB) | 16.0 | 9.8 | 9.8 | 9.0 | 10.5 |
| C/I Downlink Adjacent Satellite 2 (dB) | 26.3 | 18.7 | 20.1 | 19.2 | 17.3 |
| C/(N+I) Composite (dB) | 11.5 | 4.8 | 5.2 | 4.4 | 4.9 |
| Required System Margin (dB) | -1.0 | -1.0 | -1.0 | -1.0 | -1.0 |
| Net C/(N+I) Composite (dB) | 10.5 | 3.8 | 4.2 | 3.4 | 3.9 |
| Minimum Required C/N (dB) | -10.0 | -3.4 | -3.9 | -3.0 | -3.4 |
| Excess Link Margin (dB) | 0.5 | 0.4 | 0.3 | 0.4 | 0.5 |
| Number of Carriers | 1 | 1 | 7 | 770 | 1 |
| CARRIER DENSITY LEVELS | | | | | |
| Uplink Power Density (dBW/Hz) | -52.1 | -51.4 | -46.8 | -47.6 | -55.2 |
| Downlink EIRP Density At Beam Peak (dBW/Hz) | -38.1 | -40.1 | -44.3 | -45.2 | -40.6 |

C-Band Hemi Uplink/Zone Downlink

| UPLINK BEAM INFORMATION | | | | | |
|---|-----------|-------------|-------------|-------------|-------------|
| Uplink Beam Name | HEMI | HEMI | HEMI | HEMI | HEMI |
| Uplink Frequency (GHz) | 6.175 | 6.175 | 6.175 | 6.175 | 6.175 |
| Uplink Beam Polarization | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR |
| Uplink Relative Contour Level (dB) | -6 | -6 | -6 | -6 | -6 |
| Uplink Contour G/T (dB/K) | -7.5 | -7.5 | -7.5 | -7.5 | -7.5 |
| Uplink SFD (dBW/m2) | -73.0 | -83.0 | -81.0 | -81.0 | -89.0 |
| Rain Rate (mm/hr) | 42 | 42 | 42 | 42 | 42 |
| DOWNLINK BEAM INFORMATION | | | | | |
| Downlink Beam Name | ZONE | ZONE | ZONE | ZONE | ZONE |
| Downlink Frequency (GHz) | 3.95 | 3.95 | 3.95 | 3.95 | 3.95 |
| Downlink Beam Polarization | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR |
| Downlink Relative Contour Level (dB) | -6 | -6 | -6 | -6 | -6 |
| Downlink Contour EIRP (dBW) | 30.9 | 30.9 | 30.9 | 30.9 | 30.9 |
| Rain Rate (mm/hr) | 42 | 42 | 42 | 42 | 43 |
| ADJACENT SATELLITE 1 | | | | | |
| Satellite 1 Orbital Location | 30.9E | 30.9E | 30.9E | 30.9E | 30.9E |
| Uplink Power Density (dBW/Hz) | -38.7 | -38.7 | -38.7 | -38.7 | -38.7 |
| Uplink Polarization Advantage (dB) | 0 | 0 | 0 | 0 | 0 |
| Downlink EIRP Density (dBW/Hz) | -38.0 | -38.0 | -38.0 | -38.0 | -38.0 |
| Downlink Polarization Advantage (dB) | 0 | 0 | 0 | 0 | 0 |
| ADJACENT SATELLITE 2 | | | | | |
| Satellite 1 Orbital Location | 34.9E | 34.9E | 34.9E | 34.9E | 34.9E |
| Uplink Power Density (dBW/Hz) | -38.7 | -38.7 | -38.7 | -38.7 | -38.7 |
| Uplink Polarization Advantage (dB) | 0 | 0 | 0 | 0 | 0 |
| Downlink EIRP Density (dBW/Hz) | -38.0 | -38.0 | -38.0 | -38.0 | -38.0 |
| Downlink Polarization Advantage (dB) | 0 | 0 | 0 | 0 | 0 |
| CARRIER INFORMATION | | | | | |
| Carrier ID | 36M0F3F | 36M0G7W | 10M3G7W | 100KG7W | 77M0G7W |
| Carrier Modulation | TV/FM | QPSK | QPSK | QPSK | QPSK |
| Peak to Peak Bandwidth of EDS (MHz) | 4 | N/A | N/A | N/A | N/A |
| Information Rate(kbps) | N/A | 24575 | 6000 | 64 | 52563 |
| Code Rate | N/A | 1/2x188/204 | 1/2x188/204 | 1/2x239/256 | 1/2x188/204 |
| Occupied Bandwidth(kHz) | 36000 | 30133 | 6771.1 | 75.4 | 64451 |
| Allocated Bandwidth(kHz) | 36000 | 36000 | 10300 | 100 | 77000 |
| Minimum C/N, Clear Sky (dB) | 10 | 3.36 | 3.87 | 2.99 | 3.36 |
| Minimum C/N, Rain (dB) | 10 | 3.36 | 3.57 | 2.79 | 3.36 |
| UPLINK EARTH STATION | | | | | |
| Earth Station Diameter (meters) | 11.0 | 4.5 | 2.4 | 2.4 | 7.0 |
| Earth Station Gain (dBi) | 55.4 | 46.5 | 41.9 | 41.9 | 51.0 |
| Earth Station Elevation Angle | 20 | 20 | 20 | 20 | 20 |
| DOWNLINK EARTH STATION | | | | | |
| Earth Station Diameter (meters) | 18.3 | 13.1 | 13.1 | 13.1 | 6.1 |
| Earth Station Gain (dBi) | 56.0 | 53.5 | 53.5 | 53.5 | 46.5 |
| Earth Station G/T (dB/K) | 35.5 | 33.0 | 33.0 | 33.0 | 26.2 |
| Earth Station Elevation Angle | 20 | 20 | 20 | 20 | 20 |
| LINK FADE TYPE | | | | | |
| | Clear Sky | Clear Sky | Clear Sky | Clear Sky | Clear Sky |
| UPLINK PERFORMANCE | | | | | |
| Uplink Earth Station EIRP (dBW) | 79.4 | 69.4 | 63.4 | 43.0 | 73.9 |
| Uplink Path Loss, Clear Sky (dB) | -200.2 | -200.2 | -200.2 | -200.2 | -200.2 |
| Uplink Rain Attenuation | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Satellite G/T(dB/K) | -7.5 | -7.5 | -7.5 | -7.5 | -7.5 |
| Boltzman Constant(dBW/K-Hz) | 228.6 | 228.6 | 228.6 | 228.6 | 228.6 |
| Carrier Noise Bandwidth (dB-Hz) | -75.6 | -74.8 | -68.3 | -48.8 | -78.1 |
| Uplink C/N(dB) | 24.7 | 15.5 | 16.0 | 15.1 | 16.7 |
| DOWNLINK PERFORMANCE | | | | | |
| Downlink EIRP per Carrier (dBW) | 25.3 | 25.3 | 17.4 | -3.0 | 30.9 |
| Antenna Pointing Error (dB) | -0.5 | -0.5 | -0.5 | -0.5 | -0.5 |
| Downlink Path Loss, Clear Sky (dB) | -196.3 | -196.3 | -196.3 | -196.3 | -196.3 |
| Downlink Rain Attenuation | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Earth Station G/T (dB/K) | 35.5 | 33.0 | 33.0 | 33.0 | 26.2 |
| Boltzman Constant(dBW / K - Hz) | 228.6 | 228.6 | 228.6 | 228.6 | 228.6 |
| Carrier Noise Bandwidth (dB-Hz) | -75.6 | -74.8 | -68.3 | -48.8 | -78.1 |
| Downlink C / N(dB) | 17.0 | 15.3 | 13.9 | 13.0 | 10.8 |
| COMPOSITE LINK PERFORMANCE | | | | | |
| C/N Uplink (dB) | 24.7 | 15.5 | 16.0 | 15.1 | 16.7 |
| C/N Downlink (dB) | 17.0 | 15.3 | 13.9 | 13.0 | 10.8 |
| C/I Intermodulation (dB) | N/A | N/A | 21.8 | 20.9 | N/A |
| C/I Uplink Co-Channel (dB)* | 27.3 | 27.3 | 27.3 | 27.0 | 27.0 |
| C/I Downlink Co-Channel (dB)* | 27.3 | 27.3 | 27.3 | 27.0 | 27.0 |
| C/I Uplink Adjacent Satellite 1 (dB) | 18.5 | 9.3 | 9.8 | 9.0 | 10.5 |
| C/I Downlink Adjacent Satellite 1 (dB) | 21.9 | 20.1 | 18.7 | 17.8 | 14.8 |
| C/I Uplink Adjacent Satellite 2 (dB) | 18.5 | 9.3 | 9.8 | 9.0 | 10.5 |
| C/I Downlink Adjacent Satellite 2 (dB) | 22.6 | 20.9 | 19.5 | 18.6 | 16.7 |
| C/(N+I) Composite (dB) | 11.7 | 5.0 | 5.1 | 4.2 | 4.7 |
| Required System Margin (dB) | -1.0 | -1.0 | -1.0 | -1.0 | -1.0 |
| Net C/(N+I) Composite (dB) | 10.7 | 4.0 | 4.1 | 3.2 | 3.7 |
| Minimum Required C/N (dB) | -10.0 | -3.4 | -3.9 | -3.0 | -3.4 |
| Excess Link Margin (dB) | 0.7 | 0.6 | 0.2 | 0.2 | 0.3 |
| Number of Carriers | 2 | 2 | 7 | 770 | 1 |
| CARRIER DENSITY LEVELS | | | | | |
| Uplink Power Density (dBW/Hz) | -51.6 | -51.9 | -46.8 | -47.6 | -55.2 |
| Downlink EIRP Density At Beam Peak (dBW/Hz) | -44.3 | -43.5 | -44.9 | -45.8 | -41.2 |

C-Band Hemi Uplink/Global Downlink

| UPLINK BEAM INFORMATION | | | | |
|---|-----------|-------------|-------------|-------------|
| Uplink Beam Name | HEMI | HEMI | HEMI | HEMI |
| Uplink Frequency (GHz) | 6.175 | 6.175 | 6.175 | 6.175 |
| Uplink Beam Polarization | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR |
| Uplink Relative Contour Level (dB) | -6 | -6 | -6 | -6 |
| Uplink Contour G/T (dB/K) | -7.5 | -7.5 | -7.5 | -7.5 |
| Uplink SFD (dBW/m2) | -83.0 | -89.0 | -84.0 | -84.0 |
| Rain Rate (mm/hr) | 42 | 42 | 42 | 42 |
| DOWNLINK BEAM INFORMATION | | | | |
| Downlink Beam Name | GLOBAL | GLOBAL | GLOBAL | GLOBAL |
| Downlink Frequency (GHz) | 3.95 | 3.95 | 3.95 | 3.95 |
| Downlink Beam Polarization | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR |
| Downlink Relative Contour Level (dB) | -4 | -4 | -4 | -4 |
| Downlink Contour EIRP (dBW) | 27.6 | 27.6 | 27.6 | 27.6 |
| Rain Rate (mm/hr) | 42 | 42 | 42 | 42 |
| ADJACENT SATELLITE 1 | | | | |
| Satellite 1 Orbital Location | 30.9E | 30.9E | 30.9E | 30.9E |
| Uplink Power Density (dBW/Hz) | -38.7 | -38.7 | -38.7 | -38.7 |
| Uplink Polarization Advantage (dB) | 0 | 0 | 0 | 0 |
| Downlink EIRP Density (dBW/Hz) | -32.0 | -32.0 | -32.0 | -32.0 |
| Downlink Polarization Advantage (dB) | 0 | 0 | 0 | 0 |
| ADJACENT SATELLITE 2 | | | | |
| Satellite 1 Orbital Location | 34.9E | 34.9E | 34.9E | 34.9E |
| Uplink Power Density (dBW/Hz) | -38.7 | -38.7 | -38.7 | -38.7 |
| Uplink Polarization Advantage (dB) | 0 | 0 | 0 | 0 |
| Downlink EIRP Density (dBW/Hz) | -32.0 | -32.0 | -32.0 | -32.0 |
| Downlink Polarization Advantage (dB) | 0 | 0 | 0 | 0 |
| CARRIER INFORMATION | | | | |
| Carrier ID | 36M0F3F | 36M0G7W | 10M3G7W | 100KG7W |
| Carrier Modulation | TV/FM | QPSK | QPSK | QPSK |
| Peak to Peak Bandwidth of EDS (MHz) | 4 | N/A | N/A | N/A |
| Information Rate(kbps) | N/A | 24575 | 6000 | 64 |
| Code Rate | N/A | 1/2x188/204 | 1/2x188/204 | 1/2x239/256 |
| Occupied Bandwidth(kHz) | 36000 | 30133 | 6771.1 | 75.4 |
| Allocated Bandwidth(kHz) | 36000 | 36000 | 10300 | 100 |
| Minimum C/N, Clear Sky (dB) | 10 | 3.36 | 3.87 | 2.99 |
| Minimum C/N, Rain (dB) | 10 | 3.36 | 3.57 | 2.79 |
| UPLINK EARTH STATION | | | | |
| Earth Station Diameter (meters) | 13.0 | 7.0 | 2.4 | 2.4 |
| Earth Station Gain (dBi) | 56.4 | 51.0 | 41.9 | 41.9 |
| Earth Station Elevation Angle | 20 | 20 | 20 | 20 |
| DOWNLINK EARTH STATION | | | | |
| Earth Station Diameter (meters) | 18.3 | 7.0 | 13.1 | 13.1 |
| Earth Station Gain (dBi) | 56.0 | 47.5 | 53.5 | 53.5 |
| Earth Station G/T (dB/K) | 35.5 | 26.6 | 33.0 | 33.0 |
| Earth Station Elevation Angle | 20 | 20 | 20 | 20 |
| LINK FADE TYPE | | | | |
| | Clear Sky | Clear Sky | Clear Sky | Clear Sky |
| UPLINK PERFORMANCE | | | | |
| Uplink Earth Station EIRP (dBW) | 79.9 | 73.9 | 65.1 | 44.3 |
| Uplink Path Loss, Clear Sky (dB) | -200.2 | -200.2 | -200.2 | -200.2 |
| Uplink Rain Attenuation | 0.0 | 0.0 | 0.0 | 0.0 |
| Satellite G/T(dB/K) | -7.5 | -7.5 | -7.5 | -7.5 |
| Boltzman Constant(dBW/K-Hz) | 228.6 | 228.6 | 228.6 | 228.6 |
| Carrier Noise Bandwidth (dB-Hz) | -75.6 | -74.8 | -68.3 | -48.8 |
| Uplink C/N(dB) | 25.2 | 20.0 | 17.7 | 16.5 |
| DOWNLINK PERFORMANCE | | | | |
| Downlink EIRP per Carrier (dBW) | 27.6 | 27.6 | 18.8 | -2.0 |
| Antenna Pointing Error (dB) | -0.5 | -0.5 | -0.5 | -0.5 |
| Downlink Path Loss, Clear Sky (dB) | -196.3 | -196.3 | -196.3 | -196.3 |
| Downlink Rain Attenuation | 0.0 | 0.0 | 0.0 | 0.0 |
| Earth Station G/T (dB/K) | 35.5 | 26.6 | 33.0 | 33.0 |
| Boltzman Constant(dBW / K - Hz) | 228.6 | 228.6 | 228.6 | 228.6 |
| Carrier Noise Bandwidth (dB-Hz) | -75.6 | -74.8 | -68.3 | -48.8 |
| Downlink C / N(dB) | 19.3 | 11.2 | 15.3 | 14.0 |
| COMPOSITE LINK PERFORMANCE | | | | |
| C/N Uplink (dB) | 25.2 | 20.0 | 17.7 | 16.5 |
| C/N Downlink (dB) | 19.3 | 11.2 | 15.3 | 14.0 |
| C/I Intermodulation (dB) | N/A | N/A | 19.6 | 18.3 |
| C/I Uplink Co-Channel (dB)* | 27.0 | 27.0 | 27.7 | 27.0 |
| C/I Downlink Co-Channel (dB)* | 27.0 | 27.0 | 27.7 | 27.0 |
| C/I Uplink Adjacent Satellite 1 (dB) | 19.0 | 13.8 | 11.5 | 10.3 |
| C/I Downlink Adjacent Satellite 1 (dB) | 18.2 | 10.0 | 14.0 | 12.8 |
| C/I Uplink Adjacent Satellite 2 (dB) | 19.0 | 13.8 | 11.5 | 10.3 |
| C/I Downlink Adjacent Satellite 2 (dB) | 18.8 | 11.6 | 14.9 | 13.6 |
| C/(N+I) Composite (dB) | 11.4 | 4.7 | 5.6 | 4.4 |
| Required System Margin (dB) | -1.0 | -1.0 | -1.0 | -1.0 |
| Net C/(N+I) Composite (dB) | 10.4 | 3.7 | 4.6 | 3.4 |
| Minimum Required C/N (dB) | -10.0 | -3.4 | -3.9 | -3.0 |
| Excess Link Margin (dB) | 0.4 | 0.3 | 0.7 | 0.4 |
| Number of Carriers | 1 | 1 | 3 | 360 |
| CARRIER DENSITY LEVELS | | | | |
| Uplink Power Density (dBW/Hz) | -52.1 | -51.9 | -45.1 | -46.3 |
| Downlink EIRP Density At Beam Peak (dBW/Hz) | -44.0 | -43.2 | -45.5 | -46.8 |

C-Band Hemi Uplink/C-Band Spot Downlink

| UPLINK BEAM INFORMATION | | | | |
|---|-----------|-------------|-------------|-------------|
| Uplink Beam Name | HEMI | HEMI | HEMI | HEMI |
| Uplink Frequency (GHz) | 6.175 | 6.175 | 6.175 | 6.175 |
| Uplink Beam Polarization | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR |
| Uplink Relative Contour Level (dB) | -6 | -6 | -6 | -6 |
| Uplink Contour G/T (dB/K) | -7.5 | -7.5 | -7.5 | -7.5 |
| Uplink SFD (dBW/m2) | -85.0 | -89.0 | -84.0 | -84.0 |
| Rain Rate (mm/hr) | 42 | 42 | 42 | 42 |
| DOWNLINK BEAM INFORMATION | | | | |
| Downlink Beam Name | CSPOT | CSPOT | CSPOT | CSPOT |
| Downlink Frequency (GHz) | 3.95 | 3.95 | 3.95 | 3.95 |
| Downlink Beam Polarization | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR |
| Downlink Relative Contour Level (dB) | -4 | -4 | -4 | -4 |
| Downlink Contour EIRP (dBW) | 34.6 | 34.6 | 34.6 | 34.6 |
| Rain Rate (mm/hr) | 42 | 42 | 42 | 42 |
| ADJACENT SATELLITE 1 | | | | |
| Satellite 1 Orbital Location | 30.9E | 30.9E | 30.9E | 30.9E |
| Uplink Power Density (dBW/Hz) | -38.7 | -38.7 | -38.7 | -38.7 |
| Uplink Polarization Advantage (dB) | 0 | 0 | 0 | 0 |
| Downlink EIRP Density (dBW/Hz) | -32.0 | -32.0 | -32.0 | -32.0 |
| Downlink Polarization Advantage (dB) | 0 | 0 | 0 | 0 |
| ADJACENT SATELLITE 2 | | | | |
| Satellite 1 Orbital Location | 34.9E | 34.9E | 34.9E | 34.9E |
| Uplink Power Density (dBW/Hz) | -38.7 | -38.7 | -38.7 | -38.7 |
| Uplink Polarization Advantage (dB) | 0 | 0 | 0 | 0 |
| Downlink EIRP Density (dBW/Hz) | -32.0 | -32.0 | -32.0 | -32.0 |
| Downlink Polarization Advantage (dB) | 0 | 0 | 0 | 0 |
| CARRIER INFORMATION | | | | |
| Carrier ID | 36M0F3F | 36M0G7W | 10M3G7W | 100KG7W |
| Carrier Modulation | TV/FM | QPSK | QPSK | QPSK |
| Peak to Peak Bandwidth of EDS (MHz) | 4 | N/A | N/A | N/A |
| Information Rate(kbps) | N/A | 24575 | 6000 | 64 |
| Code Rate | N/A | 1/2x188/204 | 1/2x188/204 | 1/2x239/256 |
| Occupied Bandwidth(kHz) | 36000 | 30133 | 6771.1 | 75.4 |
| Allocated Bandwidth(kHz) | 36000 | 36000 | 10300 | 100 |
| Minimum C/N, Clear Sky (dB) | 10 | 3.36 | 3.87 | 2.99 |
| Minimum C/N, Rain (dB) | 10 | 3.36 | 3.57 | 2.79 |
| UPLINK EARTH STATION | | | | |
| Earth Station Diameter (meters) | 10.0 | 7.0 | 2.4 | 2.4 |
| Earth Station Gain (dBi) | 54.1 | 51 | 41.9 | 41.9 |
| Earth Station Elevation Angle | 20 | 20 | 20 | 20 |
| DOWNLINK EARTH STATION | | | | |
| Earth Station Diameter (meters) | 11.0 | 3.7 | 6.1 | 6.1 |
| Earth Station Gain (dBi) | 51.9 | 41.2 | 46.5 | 46.5 |
| Earth Station G/T (dB/K) | 31.0 | 20.9 | 26.2 | 26.2 |
| Earth Station Elevation Angle | 20 | 20 | 20 | 20 |
| LINK FADE TYPE | | | | |
| | Clear Sky | Clear Sky | Clear Sky | Clear Sky |
| UPLINK PERFORMANCE | | | | |
| Uplink Earth Station EIRP (dBW) | 77.9 | 73.9 | 65.6 | 44.8 |
| Uplink Path Loss, Clear Sky (dB) | -200.2 | -200.2 | -200.2 | -200.2 |
| Uplink Rain Attenuation | 0.0 | 0.0 | 0.0 | 0.0 |
| Satellite G/T(dB/K) | -7.5 | -7.5 | -7.5 | -7.5 |
| Boltzman Constant(dBW/K-Hz) | 228.6 | 228.6 | 228.6 | 228.6 |
| Carrier Noise Bandwidth (dB-Hz) | -75.6 | -74.8 | -68.3 | -48.8 |
| Uplink C/N(dB) | 23.2 | 20.0 | 18.2 | 17.0 |
| DOWNLINK PERFORMANCE | | | | |
| Downlink EIRP per Carrier (dBW) | 34.6 | 34.6 | 26.3 | 5.5 |
| Antenna Pointing Error (dB) | -0.5 | -0.5 | -0.5 | -0.5 |
| Downlink Path Loss, Clear Sky (dB) | -196.3 | -196.3 | -196.3 | -196.3 |
| Downlink Rain Attenuation | 0.0 | 0.0 | 0.0 | 0.0 |
| Earth Station G/T (dB/K) | 31.0 | 20.9 | 26.2 | 26.2 |
| Boltzman Constant(dBW / K - Hz) | 228.6 | 228.6 | 228.6 | 228.6 |
| Carrier Noise Bandwidth (dB-Hz) | -75.6 | -74.8 | -68.3 | -48.8 |
| Downlink C / N(dB) | 21.8 | 12.5 | 16.0 | 14.7 |
| COMPOSITE LINK PERFORMANCE | | | | |
| C/N Uplink (dB) | 23.2 | 20.0 | 18.2 | 17.0 |
| C/N Downlink (dB) | 21.8 | 12.5 | 16.0 | 14.7 |
| C/I Intermodulation (dB) | N/A | N/A | 18.1 | 16.8 |
| C/I Uplink Co-Channel (dB)* | 27.0 | 27.0 | 27.7 | 27.0 |
| C/I Downlink Co-Channel (dB)* | 27.0 | 27.0 | 27.7 | 27.0 |
| C/I Uplink Adjacent Satellite 1 (dB) | 17.0 | 13.8 | 12.0 | 10.8 |
| C/I Downlink Adjacent Satellite 1 (dB) | 20.9 | 9.9 | 14.0 | 12.8 |
| C/I Uplink Adjacent Satellite 2 (dB) | 17.0 | 13.8 | 12.0 | 10.8 |
| C/I Downlink Adjacent Satellite 2 (dB) | 21.9 | 12.9 | 15.9 | 14.6 |
| C/(N+I) Composite (dB) | 11.6 | 5.1 | 6.0 | 4.8 |
| Required System Margin (dB) | -1.0 | -1.0 | -1.0 | -1.0 |
| Net C/(N+I) Composite (dB) | 10.6 | 4.1 | 5.0 | 3.8 |
| Minimum Required C/N (dB) | -10.0 | -3.4 | -3.9 | -3.0 |
| Excess Link Margin (dB) | 0.6 | 0.7 | 1.1 | 0.8 |
| Number of Carriers | 1 | 1 | 3 | 360 |
| CARRIER DENSITY LEVELS | | | | |
| Uplink Power Density (dBW/Hz) | -51.8 | -51.9 | -44.6 | -45.8 |
| Downlink EIRP Density At Beam Peak (dBW/Hz) | -37.0 | -36.2 | -38.0 | -39.3 |

C-Band Zone Uplink/Zone Downlink

| UPLINK BEAM INFORMATION | | | | | |
|---|-----------|-------------|-------------|-------------|-------------|
| Uplink Beam Name | ZONE | ZONE | ZONE | ZONE | ZONE |
| Uplink Frequency (GHz) | 6.175 | 6.175 | 6.175 | 6.175 | 6.175 |
| Uplink Beam Polarization | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR |
| Uplink Relative Contour Level (dB) | -6 | -6 | -6 | -6 | -6 |
| Uplink Contour G/T (dB/K) | -5.6 | -5.6 | -5.6 | -5.6 | -5.6 |
| Uplink SFD (dBW/m2) | -73.9 | -80.9 | -80.9 | -80.9 | -86.9 |
| Rain Rate (mm/hr) | 42 | 42 | 42 | 42 | 42 |
| DOWNLINK BEAM INFORMATION | | | | | |
| Downlink Beam Name | ZONE | ZONE | ZONE | ZONE | ZONE |
| Downlink Frequency (GHz) | 3.95 | 3.95 | 3.95 | 3.95 | 3.95 |
| Downlink Beam Polarization | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR |
| Downlink Relative Contour Level (dB) | -6 | -6 | -6 | -6 | -6 |
| Downlink Contour EIRP (dBW) | 30.9 | 30.9 | 30.9 | 30.9 | 30.9 |
| Rain Rate (mm/hr) | 42 | 42 | 42 | 42 | 42 |
| ADJACENT SATELLITE 1 | | | | | |
| Satellite 1 Orbital Location | 30.9E | 30.9E | 30.9E | 30.9E | 30.9E |
| Uplink Power Density (dBW/Hz) | -38.7 | -38.7 | -38.7 | -38.7 | -38.7 |
| Uplink Polarization Advantage (dB) | 0 | 0 | 0 | 0 | 0 |
| Downlink EIRP Density (dBW/Hz) | -38.0 | -38.0 | -38.0 | -38.0 | -38.0 |
| Downlink Polarization Advantage (dB) | 0 | 0 | 0 | 0 | 0 |
| ADJACENT SATELLITE 2 | | | | | |
| Satellite 1 Orbital Location | 34.9E | 34.9E | 34.9E | 34.9E | 34.9E |
| Uplink Power Density (dBW/Hz) | -38.7 | -38.7 | -38.7 | -38.7 | -38.7 |
| Uplink Polarization Advantage (dB) | 0 | 0 | 0 | 0 | 0 |
| Downlink EIRP Density (dBW/Hz) | -38.0 | -38.0 | -38.0 | -38.0 | -38.0 |
| Downlink Polarization Advantage (dB) | 0 | 0 | 0 | 0 | 0 |
| CARRIER INFORMATION | | | | | |
| Carrier ID | 36M0F3F | 36M0G7W | 10M3G7W | 100KG7W | 77M0G7W |
| Carrier Modulation | TV/FM | QPSK | QPSK | QPSK | QPSK |
| Peak to Peak Bandwidth of EDS (MHz) | 4 | N/A | N/A | N/A | N/A |
| Information Rate(kbps) | N/A | 24575 | 6000 | 64 | 52563 |
| Code Rate | N/A | 1/2x188/204 | 1/2x188/204 | 1/2x239/256 | 1/2x188/204 |
| Occupied Bandwidth(kHz) | 36000 | 30133 | 6771.1 | 75.4 | 64451 |
| Allocated Bandwidth(kHz) | 36000 | 36000 | 10300 | 100 | 77000 |
| Minimum C/N, Clear Sky (dB) | 10 | 3.36 | 3.87 | 2.99 | 3.36 |
| Minimum C/N, Rain (dB) | 10 | 3.36 | 3.57 | 2.79 | 3.36 |
| UPLINK EARTH STATION | | | | | |
| Earth Station Diameter (meters) | 11.0 | 4.5 | 2.4 | 2.4 | 15.2 |
| Earth Station Gain (dBi) | 55.4 | 46.5 | 41.9 | 41.9 | 58.4 |
| Earth Station Elevation Angle | 20 | 20 | 20 | 20 | 20 |
| DOWNLINK EARTH STATION | | | | | |
| Earth Station Diameter (meters) | 18.3 | 13.1 | 15.2 | 15.2 | 6.1 |
| Earth Station Gain (dBi) | 56.0 | 53.5 | 55.0 | 55.0 | 46.5 |
| Earth Station G/T (dB/K) | 35.5 | 33.0 | 34.5 | 34.5 | 26.2 |
| Earth Station Elevation Angle | 20 | 20 | 20 | 20 | 20 |
| LINK FADE TYPE | | | | | |
| | Clear Sky | Clear Sky | Clear Sky | Clear Sky | Clear Sky |
| UPLINK PERFORMANCE | | | | | |
| Uplink Earth Station EIRP (dBW) | 78.5 | 69.5 | 63.5 | 43.1 | 76.0 |
| Uplink Path Loss, Clear Sky (dB) | -200.2 | -200.2 | -200.2 | -200.2 | -200.2 |
| Uplink Rain Attenuation | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Satellite G/T(dB/K) | -5.6 | -5.6 | -5.6 | -5.6 | -5.6 |
| Boltzman Constant(dBW/K-Hz) | 228.6 | 228.6 | 228.6 | 228.6 | 228.6 |
| Carrier Noise Bandwidth (dB-Hz) | -75.6 | -74.8 | -68.3 | -48.8 | -78.1 |
| Uplink C/N(dB) | 25.7 | 17.5 | 18.0 | 17.1 | 20.7 |
| DOWNLINK PERFORMANCE | | | | | |
| Downlink EIRP per Carrier (dBW) | 25.3 | 25.3 | 17.4 | -3.0 | 30.9 |
| Antenna Pointing Error (dB) | -0.5 | -0.5 | -0.5 | -0.5 | -0.5 |
| Downlink Path Loss, Clear Sky (dB) | -196.3 | -196.3 | -196.3 | -196.3 | -196.3 |
| Downlink Rain Attenuation | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Earth Station G/T (dB/K) | 35.5 | 33.0 | 34.5 | 34.5 | 26.2 |
| Boltzman Constant(dBW / K - Hz) | 228.6 | 228.6 | 228.6 | 228.6 | 228.6 |
| Carrier Noise Bandwidth (dB-Hz) | -75.6 | -74.8 | -68.3 | -48.8 | -78.1 |
| Downlink C / N(dB) | 17.0 | 15.3 | 15.4 | 14.5 | 10.8 |
| COMPOSITE LINK PERFORMANCE | | | | | |
| C/N Uplink (dB) | 25.7 | 17.5 | 18.0 | 17.1 | 20.7 |
| C/N Downlink (dB) | 17.0 | 15.3 | 15.4 | 14.5 | 10.8 |
| C/I Intermodulation (dB) | N/A | N/A | 21.8 | 20.9 | N/A |
| C/I Uplink Co-Channel (dB)* | 27.3 | 27.3 | 27.3 | 27.0 | 27.0 |
| C/I Downlink Co-Channel (dB)* | 27.3 | 27.3 | 27.3 | 27.0 | 27.0 |
| C/I Uplink Adjacent Satellite 1 (dB) | 17.6 | 9.4 | 9.9 | 9.1 | 12.6 |
| C/I Downlink Adjacent Satellite 1 (dB) | 21.9 | 20.1 | 20.2 | 19.4 | 14.8 |
| C/I Uplink Adjacent Satellite 2 (dB) | 17.6 | 9.4 | 9.9 | 9.1 | 12.6 |
| C/I Downlink Adjacent Satellite 2 (dB) | 22.6 | 20.9 | 21.0 | 20.1 | 16.7 |
| C/(N+I) Composite (dB) | 11.4 | 5.2 | 5.6 | 4.7 | 5.9 |
| Required System Margin (dB) | -1.0 | -1.0 | -1.0 | -1.0 | -1.0 |
| Net C/(N+I) Composite (dB) | 10.4 | 4.2 | 4.6 | 3.7 | 4.9 |
| Minimum Required C/N (dB) | -10.0 | -3.4 | -3.9 | -3.0 | -3.4 |
| Excess Link Margin (dB) | 0.4 | 0.8 | 0.7 | 0.7 | 1.5 |
| Number of Carriers | 2 | 2 | 7 | 770 | 1 |
| CARRIER DENSITY LEVELS | | | | | |
| Uplink Power Density (dBW/Hz) | -52.5 | -51.8 | -46.7 | -47.5 | -60.5 |
| Downlink EIRP Density At Beam Peak (dBW/Hz) | -44.3 | -43.5 | -44.9 | -45.8 | -41.2 |

C-Band Zone Uplink/Hemi Downlink

| UPLINK BEAM INFORMATION | | | | | |
|---|-----------|-------------|-------------|-------------|-------------|
| Uplink Beam Name | ZONE | ZONE | ZONE | ZONE | ZONE |
| Uplink Frequency (GHz) | 6.175 | 6.175 | 6.175 | 6.175 | 6.175 |
| Uplink Beam Polarization | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR |
| Uplink Relative Contour Level (dB) | -6 | -6 | -6 | -6 | -6 |
| Uplink Contour G/T (dB/K) | -5.6 | -5.6 | -5.6 | -5.6 | -5.6 |
| Uplink SFD (dBW/m2) | -73.9 | -82.9 | -80.9 | -80.9 | -86.9 |
| Rain Rate (mm/hr) | 42 | 42 | 42 | 42 | 42 |
| DOWNLINK BEAM INFORMATION | | | | | |
| Downlink Beam Name | HEMI | HEMI | HEMI | HEMI | HEMI |
| Downlink Frequency (GHz) | 3.95 | 3.95 | 3.95 | 3.95 | 3.95 |
| Downlink Beam Polarization | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR | CIRCULAR |
| Downlink Relative Contour Level (dB) | -6 | -6 | -6 | -6 | -6 |
| Downlink Contour EIRP (dBW) | 31.5 | 31.5 | 31.5 | 31.5 | 31.5 |
| Rain Rate (mm/hr) | 42 | 42 | 42 | 42 | 42 |
| ADJACENT SATELLITE 1 | | | | | |
| Satellite 1 Orbital Location | 30.9E | 30.9E | 30.9E | 30.9E | 30.9E |
| Uplink Power Density (dBW/Hz) | -38.7 | -38.7 | -38.7 | -38.7 | -38.7 |
| Uplink Polarization Advantage (dB) | 0 | 0 | 0 | 0 | 0 |
| Downlink EIRP Density (dBW/Hz) | -38.0 | -38.0 | -38.0 | -38.0 | -38.0 |
| Downlink Polarization Advantage (dB) | 0 | 0 | 0 | 0 | 0 |
| ADJACENT SATELLITE 2 | | | | | |
| Satellite 1 Orbital Location | 34.9E | 34.9E | 34.9E | 34.9E | 34.9E |
| Uplink Power Density (dBW/Hz) | -38.7 | -38.7 | -38.7 | -38.7 | -38.7 |
| Uplink Polarization Advantage (dB) | 0 | 0 | 0 | 0 | 0 |
| Downlink EIRP Density (dBW/Hz) | -38.0 | -38.0 | -38.0 | -38.0 | -38.0 |
| Downlink Polarization Advantage (dB) | 0 | 0 | 0 | 0 | 0 |
| CARRIER INFORMATION | | | | | |
| Carrier ID | 36M0F3F | 36M0G7W | 10M3G7W | 100KG7W | 77M0G7W |
| Carrier Modulation | TV/FM | QPSK | QPSK | QPSK | QPSK |
| Peak to Peak Bandwidth of EDS (MHz) | 4 | N/A | N/A | N/A | N/A |
| Information Rate(kbps) | N/A | 24575 | 6000 | 64 | 52563 |
| Code Rate | N/A | 1/2x188/204 | 1/2x188/204 | 1/2x239/256 | 1/2x188/204 |
| Occupied Bandwidth(kHz) | 36000 | 30133 | 6771.1 | 75.4 | 64451 |
| Allocated Bandwidth(kHz) | 36000 | 36000 | 10300 | 100 | 77000 |
| Minimum C/N, Clear Sky (dB) | 10 | 3.36 | 3.87 | 2.99 | 3.36 |
| Minimum C/N, Rain (dB) | 10 | 3.36 | 3.57 | 2.79 | 3.36 |
| UPLINK EARTH STATION | | | | | |
| Earth Station Diameter (meters) | 10.0 | 4.5 | 2.4 | 2.4 | 8.1 |
| Earth Station Gain (dBi) | 54.1 | 46.5 | 41.9 | 41.9 | 52.8 |
| Earth Station Elevation Angle | 20 | 20 | 20 | 20 | 20 |
| DOWNLINK EARTH STATION | | | | | |
| Earth Station Diameter (meters) | 18.3 | 11.0 | 11.0 | 13.1 | 4.5 |
| Earth Station Gain (dBi) | 56.0 | 51.9 | 51.9 | 53.5 | 43.9 |
| Earth Station G/T (dB/K) | 35.5 | 31.0 | 31.0 | 33.0 | 23.6 |
| Earth Station Elevation Angle | 20 | 20 | 20 | 20 | 20 |
| LINK FADE TYPE | | | | | |
| | Clear Sky | Clear Sky | Clear Sky | Clear Sky | Clear Sky |
| UPLINK PERFORMANCE | | | | | |
| Uplink Earth Station EIRP (dBW) | 78.5 | 69.5 | 63.5 | 43.1 | 76.0 |
| Uplink Path Loss, Clear Sky (dB) | -200.2 | -200.2 | -200.2 | -200.2 | -200.2 |
| Uplink Rain Attenuation | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Satellite G/T(dB/K) | -5.6 | -5.6 | -5.6 | -5.6 | -5.6 |
| Boltzman Constant(dBW/K-Hz) | 228.6 | 228.6 | 228.6 | 228.6 | 228.6 |
| Carrier Noise Bandwidth (dB-Hz) | -75.6 | -74.8 | -68.3 | -48.8 | -78.1 |
| Uplink C/N(dB) | 25.7 | 17.5 | 18.0 | 17.1 | 20.7 |
| DOWNLINK PERFORMANCE | | | | | |
| Downlink EIRP per Carrier (dBW) | 25.9 | 25.9 | 18.0 | -2.4 | 31.5 |
| Antenna Pointing Error (dB) | -0.5 | -0.5 | -0.5 | -0.5 | -0.5 |
| Downlink Path Loss, Clear Sky (dB) | -196.3 | -196.3 | -196.3 | -196.3 | -196.3 |
| Downlink Rain Attenuation | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Earth Station G/T (dB/K) | 35.5 | 31.0 | 31.0 | 33.0 | 23.6 |
| Boltzman Constant(dBW / K - Hz) | 228.6 | 228.6 | 228.6 | 228.6 | 228.6 |
| Carrier Noise Bandwidth (dB-Hz) | -75.6 | -74.8 | -68.3 | -48.8 | -78.1 |
| Downlink C / N(dB) | 17.6 | 13.9 | 12.5 | 13.6 | 8.8 |
| COMPOSITE LINK PERFORMANCE | | | | | |
| C/N Uplink (dB) | 25.7 | 17.5 | 18.0 | 17.1 | 20.7 |
| C/N Downlink (dB) | 17.6 | 13.9 | 12.5 | 13.6 | 8.8 |
| C/I Intermodulation (dB) | N/A | N/A | 21.8 | 20.9 | N/A |
| C/I Uplink Co-Channel (dB)* | 27.3 | 27.3 | 27.3 | 27.0 | 27.0 |
| C/I Downlink Co-Channel (dB)* | 27.3 | 27.3 | 27.3 | 27.0 | 27.0 |
| C/I Uplink Adjacent Satellite 1 (dB) | 17.6 | 9.4 | 9.9 | 9.1 | 12.6 |
| C/I Downlink Adjacent Satellite 1 (dB) | 22.5 | 19.0 | 17.6 | 18.4 | 12.5 |
| C/I Uplink Adjacent Satellite 2 (dB) | 17.6 | 9.4 | 9.9 | 9.1 | 12.6 |
| C/I Downlink Adjacent Satellite 2 (dB) | 23.2 | 20.0 | 18.6 | 19.2 | 15.0 |
| C/(N+I) Composite (dB) | 11.6 | 5.0 | 5.0 | 4.6 | 4.7 |
| Required System Margin (dB) | -1.0 | -1.0 | -1.0 | -1.0 | -1.0 |
| Net C/(N+I) Composite (dB) | 10.6 | 4.0 | 4.0 | 3.6 | 3.7 |
| Minimum Required C/N (dB) | -10.0 | -3.4 | -3.9 | -3.0 | -3.4 |
| Excess Link Margin (dB) | 0.6 | 0.6 | 0.1 | 0.6 | 0.3 |
| Number of Carriers | 2 | 2 | 7 | 770 | 1 |
| CARRIER DENSITY LEVELS | | | | | |
| Uplink Power Density (dBW/Hz) | -51.2 | -51.8 | -46.7 | -47.5 | -54.9 |
| Downlink EIRP Density At Beam Peak (dBW/Hz) | -43.7 | -42.9 | -44.3 | -45.2 | -40.6 |