

| UPLINK BEAM INFORMATION | | | | |
|---|---------------------|---------------------|---------------------|---------------------|
| Uplink Beam Name | Mexico 1 | Mexico 1 | Mexico 1 | Mexico 1 |
| Uplink Frequency (GHz) | 13.75-14.5 | 13.75-14.5 | 13.75-14.5 | 13.75-14.5 |
| Uplink Beam Polarization | Horizontal/Vertical | Horizontal/Vertical | Horizontal/Vertical | Horizontal/Vertical |
| Uplink Beam Peak G/T (dB/K) | 11.0 | 11.0 | 11.0 | 11.0 |
| Uplink Beam Peak SFD (dBW/m2) | -94.3 | -83.3 | -83.3 | -83.3 |
| Uplink Relative Contour Level (dB) | -6 | -6 | -6 | -6 |
| DOWNLINK BEAM INFORMATION | | | | |
| Downlink Beam Name | Mexico 1 | Mexico 1 | Mexico 1 | Mexico 1 |
| Downlink Frequency (GHz) | 11.7-12.2 | 11.7-12.2 | 11.7-12.2 | 11.7-12.2 |
| Downlink Beam Polarization | Horizontal/Vertical | Horizontal/Vertical | Horizontal/Vertical | Horizontal/Vertical |
| Downlink Beam Peak EIRP (dBW) | 55.1 | 55.1 | 55.1 | 55.1 |
| Downlink Relative Contour Level (dB) | -6 | -6 | -6 | -6 |
| ADJACENT SATELLITE 1 | | | | |
| Satellite Name | AMC-2 | AMC-2 | AMC-2 | AMC-2 |
| Orbital Location | 80.8W | 80.8W | 80.8W | 80.8W |
| Uplink Power Density (dBW/Hz) | -50.0 | -50.0 | -50.0 | -50.0 |
| Beam Peak Downlink EIRP Density (dBW/Hz) | -26.0 | -26.0 | -26.0 | -26.0 |
| ADJACENT SATELLITE 2 | | | | |
| Satellite Name | HYP 77W | HYP 77W | HYP 77W | HYP 77W |
| Orbital Location | 77.0W | 77.0W | 77.0W | 77.0W |
| Uplink Power Density (dBW/Hz) | -50.0 | -50.0 | -50.0 | -50.0 |
| Beam Peak Downlink EIRP Density (dBW/Hz) | -26.0 | -26.0 | -26.0 | -26.0 |
| CARRIER INFORMATION | | | | |
| Carrier ID | 36M0G7W | 8M25G7W | 1M54G7W | 222KG7W |
| Carrier Modulation | QPSK | QPSK | QPSK | QPSK |
| Information Rate(kbps) | 36860 | 8.448 | 1024 | 256 |
| Code Rate | 3/4x188/203 | 3/4 | 1/2 | 3/4 |
| Occupied Bandwidth(kHz) | 26664.7 | 6111.3 | 1232.9 | 170.7 |
| Allocated Bandwidth(kHz) | 36000 | 8250.5 | 1541.5 | 239 |
| Minimum C/N, Rain (dB) | 7.3 | 7.3 | 1.6 | 4.6 |
| UPLINK EARTH STATION | | | | |
| Earth Station Diameter (meters) | 1.2 | 1.2 | 1.2 | 1.2 |
| Earth Station Gain (dBi) | 42.6 | 42.6 | 42.6 | 42.6 |
| DOWNLINK EARTH STATION | | | | |
| Earth Station Diameter (meters) | 1.8 | 1.8 | 1.2 | 1.2 |
| Earth Station Gain (dBi) | 44.5 | 44.5 | 40.9 | 40.9 |
| Earth Station G/T (dB/K) | 23.3 | 23.3 | 19.8 | 19.8 |
| UPLINK PERFORMANCE | | | | |
| Uplink Earth Station EIRP (dBW) | 64.8 | 59.6 | 52.6 | 44.1 |
| Uplink Path Loss, Clear Sky (dB) | -207.1 | -207.1 | -207.1 | -207.1 |
| Satellite G/T(dB/K) | 5.1 | 5.1 | 5.1 | 5.1 |
| Boltzman Constant(dBW/K-Hz) | 228.6 | 228.6 | 228.6 | 228.6 |
| Carrier Noise Bandwidth (MHz) | 26.7 | 6.1 | 1.2 | 0.2 |
| Uplink Thermal C/N(dB) | 17.1 | 18.3 | 18.3 | 18.4 |
| DOWNLINK PERFORMANCE | | | | |
| Downlink EIRP per Carrier (dBW) | 42.6 | 36.4 | 29.4 | 20.8 |
| Downlink Path Loss, Clear Sky (dB) | -205.5 | -205.5 | -205.5 | -205.5 |
| Downlink Earth Station G/T (dB/K) | 23.3 | 23.3 | 19.8 | 19.8 |
| Boltzman Constant(dBW/K-Hz) | 228.6 | 228.6 | 228.6 | 228.6 |
| Carrier Noise Bandwidth (MHz) | 26.7 | 6.1 | 1.2 | 0.2 |
| Downlink Thermal C / N(dB) | 14.7 | 14.9 | 11.4 | 11.4 |
| COMPOSITE LINK PERFORMANCE | | | | |
| Uplink Earth Station HPA Intermodulation C/N (dB) | 27.0 | 28.2 | 28.1 | 28.1 |
| C/N Thermal Uplink (dB) | 17.1 | 18.3 | 18.3 | 18.4 |

| | | | | |
|---|-------|-------|-------|-------|
| Uplink Interference C/I (dB) | 24.2 | 26.5 | 22.8 | 22.8 |
| Uplink Adjacent Satellite C/I (dB) | 15.4 | 16.6 | 16.5 | 16.5 |
| Intermodulation C/IM (dB) | 200.0 | 39.9 | 40.7 | 41.8 |
| Downlink Thermal C/N (dB) | 14.7 | 14.9 | 11.4 | 11.4 |
| Downlink Interference C/I (dB) | 28.8 | 24.4 | 22.7 | 23.1 |
| Downlink Adjacent Satellite C/I (dB) | 13.7 | 13.9 | 9.3 | 9.2 |
| | | | | |
| Subtotal C/N (dB) | 8.9 | 9.4 | 6.2 | 6.2 |
| Antenna Mispointing and Other Losses (dB) | 1.5 | 1.5 | 1.5 | 1.5 |
| Total C/N (dB) | 7.4 | 7.9 | 4.7 | 4.7 |
| Minimum Required C/N (dB) | 7.3 | 7.3 | 1.6 | 4.6 |
| Number of Carriers | 1 | 4 | 23 | 151 |
| CARRIER DENSITY LEVELS | | | | |
| Uplink Power Density (dBW/Hz) | -52.1 | -50.9 | -50.9 | -50.8 |
| Downlink EIRP Density At Beam Peak (dBW/Hz) | -26.2 | -26.0 | -26.0 | -26.0 |

| UPLINK BEAM INFORMATION | | | | |
|---|-------------|------------|------------|------------|
| Uplink Beam Name | Mexico 1 | Mexico 1 | Mexico 1 | Mexico 1 |
| Uplink Frequency (GHz) | 13.75-14.5 | 13.75-14.5 | 13.75-14.5 | 13.75-14.5 |
| Uplink Beam Polarization | Horizontal | Horizontal | Horizontal | Horizontal |
| Uplink Beam Peak G/T (dB/K) | 11.0 | 11.0 | 11.0 | 11.0 |
| Uplink Beam Peak SFD (dBW/m2) | -91.3 | -85.3 | -85.3 | -85.3 |
| Uplink Relative Contour Level (dB) | -6 | -6 | -6 | -6 |
| DOWNLINK BEAM INFORMATION | | | | |
| Downlink Beam Name | Mexico 2 | Mexico 2 | Mexico 2 | Mexico 2 |
| Downlink Frequency (GHz) | 11.7-12.2 | 11.7-12.2 | 11.7-12.2 | 11.7-12.2 |
| Downlink Beam Polarization | Vertical | Vertical | Vertical | Vertical |
| Downlink Beam Peak EIRP (dBW) | 57.5 | 57.5 | 57.5 | 57.5 |
| Downlink Relative Contour Level (dB) | -6 | -6 | -6 | -6 |
| ADJACENT SATELLITE 1 | | | | |
| Satellite Name | AMC-2 | AMC-2 | AMC-2 | AMC-2 |
| Orbital Location | 80.8W | 80.8W | 80.8W | 80.8W |
| Uplink Power Density (dBW/Hz) | -50.0 | -50.0 | -50.0 | -50.0 |
| Beam Peak Downlink EIRP Density (dBW/Hz) | -26.0 | -26.0 | -26.0 | -26.0 |
| ADJACENT SATELLITE 2 | | | | |
| Satellite Name | HYP 77W | HYP 77W | HYP 77W | HYP 77W |
| Orbital Location | 77.0W | 77.0W | 77.0W | 77.0W |
| Uplink Power Density (dBW/Hz) | -50.0 | -50.0 | -50.0 | -50.0 |
| Beam Peak Downlink EIRP Density (dBW/Hz) | -26.0 | -26.0 | -26.0 | -26.0 |
| CARRIER INFORMATION | | | | |
| Carrier ID | 36M0G7W | 8M25G7W | 1M54G7W | 222KG7W |
| Carrier Modulation | QPSK | QPSK | QPSK | QPSK |
| Information Rate(kbps) | 36860 | 8.448 | 1024 | 256 |
| Code Rate | 3/4x188/203 | 3/4 | 1/2 | 3/4 |
| Occupied Bandwidth(kHz) | 26664.7 | 6111.3 | 1232.9 | 170.7 |
| Allocated Bandwidth(kHz) | 36000 | 8250.5 | 1541.5 | 239 |
| Minimum C/N, Rain (dB) | 7.3 | 7.3 | 1.6 | 4.6 |
| UPLINK EARTH STATION | | | | |
| Earth Station Diameter (meters) | 1.2 | 1.8 | 1.8 | 2.4 |
| Earth Station Gain (dBi) | 42.6 | 46.2 | 46.2 | 48.7 |
| DOWNLINK EARTH STATION | | | | |
| Earth Station Diameter (meters) | 1.8 | 1.8 | 1.2 | 1.2 |
| Earth Station Gain (dBi) | 44.5 | 44.5 | 40.9 | 40.9 |
| Earth Station G/T (dB/K) | 23.3 | 23.3 | 19.8 | 19.8 |
| UPLINK PERFORMANCE | | | | |
| Uplink Earth Station EIRP (dBW) | 64.7 | 64.1 | 57.1 | 48.9 |
| Uplink Path Loss, Clear Sky (dB) | -207.1 | -207.1 | -207.1 | -207.1 |
| Satellite G/T(dB/K) | 5.1 | 5.1 | 5.1 | 5.1 |
| Boltzman Constant(dBW/K-Hz) | 228.6 | 228.6 | 228.6 | 228.6 |
| Carrier Noise Bandwidth (MHz) | 26.7 | 6.1 | 1.2 | 0.2 |
| Uplink Thermal C/N(dB) | 17.0 | 22.8 | 22.8 | 23.2 |
| DOWNLINK PERFORMANCE | | | | |
| Downlink EIRP per Carrier (dBW) | 42.5 | 36.0 | 29.0 | 20.8 |
| Downlink Path Loss, Clear Sky (dB) | -205.5 | -205.5 | -205.5 | -205.5 |
| Downlink Earth Station G/T (dB/K) | 23.3 | 23.3 | 19.8 | 19.8 |
| Boltzman Constant(dBW/K-Hz) | 228.6 | 228.6 | 228.6 | 228.6 |
| Carrier Noise Bandwidth (MHz) | 26.7 | 6.1 | 1.2 | 0.2 |
| Downlink Thermal C / N(dB) | 14.6 | 14.5 | 11.0 | 11.4 |
| COMPOSITE LINK PERFORMANCE | | | | |
| Uplink Earth Station HPA Intermodulation C/N (dB) | 26.9 | 32.7 | 32.6 | 33.0 |
| C/N Thermal Uplink (dB) | 17.0 | 22.8 | 22.8 | 23.2 |

| | | | | |
|---|-------|-------|-------|-------|
| Uplink Interference C/I (dB) | 31.4 | 38.6 | 34.1 | 34.4 |
| Uplink Adjacent Satellite C/I (dB) | 15.2 | 21.0 | 20.9 | 21.3 |
| Intermodulation C/IM (dB) | 200.0 | 34.3 | 35.9 | 36.4 |
| Downlink Thermal C/N (dB) | 14.6 | 14.5 | 10.6 | 11.4 |
| Downlink Interference C/I (dB) | 27.5 | 24.0 | 21.9 | 22.4 |
| Downlink Adjacent Satellite C/I (dB) | 13.5 | 13.4 | 8.0 | 8.4 |
| | | | | |
| Subtotal C/N (dB) | 8.8 | 10.1 | 5.7 | 6.3 |
| Antenna Mispointing and Other Losses (dB) | 1.5 | 1.5 | 1.5 | 1.5 |
| Total C/N (dB) | 7.3 | 8.6 | 4.2 | 4.8 |
| Minimum Required C/N (dB) | 7.3 | 7.3 | 1.6 | 4.6 |
| Number of Carriers | 1 | 4 | 23 | 151 |
| CARRIER DENSITY LEVELS | | | | |
| Uplink Power Density (dBW/Hz) | -52.2 | -50.0 | -50.0 | -52.1 |
| Downlink EIRP Density At Beam Peak (dBW/Hz) | -26.3 | -26.4 | -26.4 | -26.0 |