

<b>UPLINK BEAM INFORMATION</b>				
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
<b>DOWNLINK BEAM INFORMATION</b>				
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
<b>ADJACENT SATELLITE 1</b>				
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
<b>ADJACENT SATELLITE 2</b>				
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
<b>CARRIER INFORMATION</b>				
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
<b>UPLINK EARTH STATION</b>				
Earth Station Diameter (meters)	1.2	1.2	1.2	1.2
Earth Station Gain (dBi)	42.6	42.6	42.6	42.6
<b>DOWNLINK EARTH STATION</b>				
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
<b>UPLINK PERFORMANCE</b>				
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
<b>DOWNLINK PERFORMANCE</b>				
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
<b>COMPOSITE LINK PERFORMANCE</b>				
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
<b>CARRIER DENSITY LEVELS</b>				
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

<b>UPLINK BEAM INFORMATION</b>				
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
<b>DOWNLINK BEAM INFORMATION</b>				
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
<b>ADJACENT SATELLITE 1</b>				
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
<b>ADJACENT SATELLITE 2</b>				
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
<b>CARRIER INFORMATION</b>				
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
<b>UPLINK EARTH STATION</b>				
Earth Station Diameter (meters)	1.2	1.8	1.8	2.4
Earth Station Gain (dBi)	42.6	46.2	46.2	48.7
<b>DOWNLINK EARTH STATION</b>				
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
<b>UPLINK PERFORMANCE</b>				
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
<b>DOWNLINK PERFORMANCE</b>				
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
<b>COMPOSITE LINK PERFORMANCE</b>				
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
<b>CARRIER DENSITY LEVELS</b>				
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