175 WL	**Forward Link : Feeder to Consumer**				
From Los Angeles Feeder to:					
Honolulu					
		Clear	Rain-	Rain-	Rain-
Uplink at 17.8 GHz			up	down	both
Feederlink EIRP	dBW	79.4	83.7	79.4	83.7
Transmit antenna pointing loss	dB	-0.5	-0.5	-0.5	-0.5
Path loss	dB	-209.4	-209.4	-209.4	-209.4
Atmospheric loss	dB	-0.2	-0.2	-0.2	-0.2
Rain loss	dB	0.0	-4.9	0.0	-4.9
Sat receive antenna gain	dB	36.47	36.47	36.47	36.47
Edge of coverage loss	dB	-3.00	-3.00	-3.00	-3.00
Received power	dBW	-97.24	-97.86	-97.24	-97.86
Data rate	dB-Hz	76.02	76.02	76.02	76.02
Eb	dBW/Hz	-173.26	-173.88	-173.26	-173.88
No (thermal)	dBW/Hz	-197.87	-197.87	-197.87	-197.87
Uplink Eb/No	dB	24.6	24.0	24.6	24.0
Downlink at 12.7 GHz - E.S. ant. Diam. =		**40**	**cm. : Elev. Angle =**		**58.4**
Satellite EIRP	dBW	56.7	56.7	56.7	56.7
Edge of coverage loss	dB	-3.0	-3.0	-3.0	-3.0
Path loss	dB	-205.8	-205.8	-205.8	-205.8
Atmospheric loss	dB	-0.10	-0.10	-0.10	-0.10
Rain loss	dB	0.00	0.00	-1.60	-1.60
E.S pointing+other losses	dB	-0.66	-0.66	-0.66	-0.66
E.S. receive antenna gain	dB	32.65	32.65	32.65	32.65
Received power	dBW	-120.2	-120.2	-121.8	-121.8
Data rate	dB-Hz	76.02	76.02	76.02	76.02
Eb	dBW/Hz	-196.26	-196.26	-197.86	-197.86
No (thermal)	dBW/Hz	-207.08	-207.08	-205.44	-205.44
Downlink Eb/No (thermal)	dB	10.82	10.82	7.58	7.58
Downlink Eb/Io (interbeam)	dB	20.0	20.0	20.0	20.0
Downlink Eb/(No+Io)	dB	10.3	10.3	7.3	7.3
Totals					
Uplink Eb/No	dB	24.61	23.99	24.61	23.99
Downlink Eb/(No+Io)	dB	10.33	10.33	7.34	7.34
C/IM (Intermodulation)	dB	30.00	30.00	30.00	30.00
Total Eb/(No+Io)	dB	10.12	10.10	7.23	7.22
Required Eb/No	dB	3.10	3.10	3.10	3.10
Margin	dB	7.02	7.00	4.13	4.12