EMWIN-N Document 1

EMWIN-N Signal Specification

Downlink Frequency: 1692.700 MHz Modulation: BPSK, NRZ-L

User Data Rate: 9.6 kbps RF Symbol Rate: 22.080 kbps

Pulse Shape Filter: Close approximation to a square root raised cosine filter with

excess bandwidth factor of 1.0

Satellite Transmit EIRP: 44.8 dBmi (minimum)

FEC Code: Inner Convolutional code rate ½ concatenated with an outer Reed

Solomon (255, 223) code. (I = 4, K = 7, NO G2 inversion)

Block (CADU) Size: 8192 bits (including ASM)

Attached Sync Marker: 32 bits (Hexadecimal '1ACFFC1D')

Randomization: $h(x) = x^8 + x^7 + x^5 + x^3 + 1$ (initialized to all 1s)