

Underground.nec

CM Underground Model
CM 340-meter URD, center fed, primary distribution-type
CM Center live with three surrounding grounded neutral wires
CM Single phase
CM Driven by excitation in wire-mesh pad-mounted
CM Transformer structure (above ground)
CM Note: No meaningful result from AGT at 22 MHz.
CM Experimental slight lengthening and shortening
CM of long wires (+/- 0.5 m) resulted in good
CM AGT values with minimal (+/- .01 dB) change in
CM radiated power, field and gain values calculated at
CM 22 MHz with standard (170 m) model wire lengths.
CM NTIA 2004

CE
GW 1 3 -0.5 0.5 0.5 -0.25 0.5 0.5 0.002
GW 2 3 -0.25 0.5 0.5 0.0 0.5 0.5 0.002
GW 3 3 0.0 0.5 0.5 0.25 0.5 0.5 0.002
GW 4 3 0.25 0.5 0.5 0.5 0.5 0.5 0.002
GW 5 3 -0.5 0.5 0.375 -0.25 0.5 0.375 0.002
GW 6 3 -0.25 0.5 0.375 0.0 0.5 0.375 0.002
GW 7 3 0.0 0.5 0.375 0.25 0.5 0.375 0.002
GW 8 3 0.25 0.5 0.375 0.5 0.5 0.375 0.002
GW 9 3 -0.5 0.5 0.25 -0.25 0.5 0.25 0.002
GW 10 3 -0.25 0.5 0.25 0.0 0.5 0.25 0.002
GW 11 3 0.0 0.5 0.25 0.25 0.5 0.25 0.002
GW 12 3 0.25 0.5 0.25 0.5 0.5 0.25 0.002
GW 13 3 -0.5 0.5 0.125 -0.25 0.5 0.125 0.002
GW 14 3 -0.25 0.5 0.125 0.0 0.5 0.125 0.002
GW 15 3 0.0 0.5 0.125 0.25 0.5 0.125 0.002
GW 16 3 0.25 0.5 0.125 0.5 0.5 0.125 0.002
GW 17 1 -0.25 0.5 0.5 -0.25 0.5 0.375 0.002
GW 18 1 -0.25 0.5 0.375 -0.25 0.5 0.25 0.002
GW 19 1 -0.25 0.5 0.25 -0.25 0.5 0.125 0.002
GW 20 1 -0.25 0.5 0.125 -0.25 0.5 0.0 0.002
GW 21 1 0.0 0.5 0.5 0.0 0.5 0.375 0.002
GW 22 1 0.0 0.5 0.375 0.0 0.5 0.25 0.002
GW 23 1 0.0 0.5 0.25 0.0 0.5 0.125 0.002
GW 24 1 0.0 0.5 0.125 0.0 0.5 0.0 0.002
GW 25 1 0.25 0.5 0.5 0.25 0.5 0.375 0.002
GW 26 1 0.25 0.5 0.375 0.25 0.5 0.25 0.002
GW 27 1 0.25 0.5 0.25 0.25 0.5 0.125 0.002
GW 28 1 0.25 0.5 0.125 0.25 0.5 0.0 0.002
GW 29 3 -0.5 -0.5 0.5 -0.25 -0.5 0.5 0.002
GW 30 3 -0.25 -0.5 0.5 0.0 -0.5 0.5 0.002
GW 31 3 0.0 -0.5 0.5 0.25 -0.5 0.5 0.002
GW 32 3 0.25 -0.5 0.5 0.5 -0.5 0.5 0.002
GW 33 3 -0.5 -0.5 0.375 -0.25 -0.5 0.375 0.002
GW 34 3 -0.25 -0.5 0.375 0.0 -0.5 0.375 0.002
GW 35 3 0.0 -0.5 0.375 0.25 -0.5 0.375 0.002
GW 36 3 0.25 -0.5 0.375 0.5 -0.5 0.375 0.002
GW 37 3 -0.5 -0.5 0.25 -0.25 -0.5 0.25 0.002
GW 38 3 -0.25 -0.5 0.25 0.0 -0.5 0.25 0.002
GW 39 3 0.0 -0.5 0.25 0.25 -0.5 0.25 0.002
GW 40 3 0.25 -0.5 0.25 0.5 -0.5 0.25 0.002
GW 41 3 -0.5 -0.5 0.125 -0.25 -0.5 0.125 0.002
GW 42 3 -0.25 -0.5 0.125 0.0 -0.5 0.125 0.002
GW 43 3 0.0 -0.5 0.125 0.25 -0.5 0.125 0.002
GW 44 3 0.25 -0.5 0.125 0.5 -0.5 0.125 0.002
GW 45 1 -0.25 -0.5 0.5 -0.25 -0.5 0.375 0.002
GW 46 1 -0.25 -0.5 0.375 -0.25 -0.5 0.25 0.002
GW 47 1 -0.25 -0.5 0.25 -0.25 -0.5 0.125 0.002
GW 48 1 -0.25 -0.5 0.125 -0.25 -0.5 0.0 0.002
GW 49 1 0.0 -0.5 0.5 0.0 -0.5 0.375 0.002

Underground.nec

CM Underground Model
CM 340-meter URD, center fed, primary distribution-type
CM Center live with three surrounding grounded neutral wires
CM Single phase
CM Driven by excitation in wire-mesh pad-mounted
CM Transformer structure (above ground)
CM Note: No meaningful result from AGT at 22 MHz.
CM Experimental slight lengthening and shortening
CM of long wires (+/- 0.5 m) resulted in good
CM AGT values with minimal (+/- .01 dB) change in
CM radiated power, field and gain values calculated at
CM 22 MHz with standard (170 m) model wire lengths.
CM NTIA 2004

CE
GW 1 3 -0.5 0.5 0.5 -0.25 0.5 0.5 0.002
GW 2 3 -0.25 0.5 0.5 0.0 0.5 0.5 0.002
GW 3 3 0.0 0.5 0.5 0.25 0.5 0.5 0.002
GW 4 3 0.25 0.5 0.5 0.5 0.5 0.5 0.002
GW 5 3 -0.5 0.5 0.375 -0.25 0.5 0.375 0.002
GW 6 3 -0.25 0.5 0.375 0.0 0.5 0.375 0.002
GW 7 3 0.0 0.5 0.375 0.25 0.5 0.375 0.002
GW 8 3 0.25 0.5 0.375 0.5 0.5 0.375 0.002
GW 9 3 -0.5 0.5 0.25 -0.25 0.5 0.25 0.002
GW 10 3 -0.25 0.5 0.25 0.0 0.5 0.25 0.002
GW 11 3 0.0 0.5 0.25 0.25 0.5 0.25 0.002
GW 12 3 0.25 0.5 0.25 0.5 0.5 0.25 0.002
GW 13 3 -0.5 0.5 0.125 -0.25 0.5 0.125 0.002
GW 14 3 -0.25 0.5 0.125 0.0 0.5 0.125 0.002
GW 15 3 0.0 0.5 0.125 0.25 0.5 0.125 0.002
GW 16 3 0.25 0.5 0.125 0.5 0.5 0.125 0.002
GW 17 1 -0.25 0.5 0.5 -0.25 0.5 0.375 0.002
GW 18 1 -0.25 0.5 0.375 -0.25 0.5 0.25 0.002
GW 19 1 -0.25 0.5 0.25 -0.25 0.5 0.125 0.002
GW 20 1 -0.25 0.5 0.125 -0.25 0.5 0.0 0.002
GW 21 1 0.0 0.5 0.5 0.0 0.5 0.375 0.002
GW 22 1 0.0 0.5 0.375 0.0 0.5 0.25 0.002
GW 23 1 0.0 0.5 0.25 0.0 0.5 0.125 0.002
GW 24 1 0.0 0.5 0.125 0.0 0.5 0.0 0.002
GW 25 1 0.25 0.5 0.5 0.25 0.5 0.375 0.002
GW 26 1 0.25 0.5 0.375 0.25 0.5 0.25 0.002
GW 27 1 0.25 0.5 0.25 0.25 0.5 0.125 0.002
GW 28 1 0.25 0.5 0.125 0.25 0.5 0.0 0.002
GW 29 3 -0.5 -0.5 0.5 -0.25 -0.5 0.5 0.002
GW 30 3 -0.25 -0.5 0.5 0.0 -0.5 0.5 0.002
GW 31 3 0.0 -0.5 0.5 0.25 -0.5 0.5 0.002
GW 32 3 0.25 -0.5 0.5 0.5 -0.5 0.5 0.002
GW 33 3 -0.5 -0.5 0.375 -0.25 -0.5 0.375 0.002
GW 34 3 -0.25 -0.5 0.375 0.0 -0.5 0.375 0.002
GW 35 3 0.0 -0.5 0.375 0.25 -0.5 0.375 0.002
GW 36 3 0.25 -0.5 0.375 0.5 -0.5 0.375 0.002
GW 37 3 -0.5 -0.5 0.25 -0.25 -0.5 0.25 0.002
GW 38 3 -0.25 -0.5 0.25 0.0 -0.5 0.25 0.002
GW 39 3 0.0 -0.5 0.25 0.25 -0.5 0.25 0.002
GW 40 3 0.25 -0.5 0.25 0.5 -0.5 0.25 0.002
GW 41 3 -0.5 -0.5 0.125 -0.25 -0.5 0.125 0.002
GW 42 3 -0.25 -0.5 0.125 0.0 -0.5 0.125 0.002
GW 43 3 0.0 -0.5 0.125 0.25 -0.5 0.125 0.002
GW 44 3 0.25 -0.5 0.125 0.5 -0.5 0.125 0.002
GW 45 1 -0.25 -0.5 0.5 -0.25 -0.5 0.375 0.002
GW 46 1 -0.25 -0.5 0.375 -0.25 -0.5 0.25 0.002
GW 47 1 -0.25 -0.5 0.25 -0.25 -0.5 0.125 0.002
GW 48 1 -0.25 -0.5 0.125 -0.25 -0.5 0.0 0.002
GW 49 1 0.0 -0.5 0.5 0.0 -0.5 0.375 0.002

Underground.nec

GW 50 1 0.0 -0.5 0.375 0.0 -0.5 0.25 0.002
 GW 51 1 0.0 -0.5 0.25 0.0 -0.5 0.125 0.002
 GW 52 1 0.0 -0.5 0.125 0.0 -0.5 0.0 0.002
 GW 53 1 0.25 -0.5 0.5 0.25 -0.5 0.375 0.002
 GW 54 1 0.25 -0.5 0.375 0.25 -0.5 0.25 0.002
 GW 55 1 0.25 -0.5 0.25 0.25 -0.5 0.125 0.002
 GW 56 1 0.25 -0.5 0.125 0.25 -0.5 0.0 0.002
 GW 57 3 -0.5 -0.5 0.5 -0.5 -0.25 0.5 0.002
 GW 58 3 -0.5 -0.25 0.5 -0.5 0.0 0.5 0.002
 GW 59 3 -0.5 0.0 0.5 -0.5 0.25 0.5 0.002
 GW 60 3 -0.5 0.25 0.5 -0.5 0.5 0.5 0.002
 GW 61 3 -0.5 -0.5 0.375 -0.5 -0.25 0.375 0.002
 GW 62 3 -0.5 -0.25 0.375 -0.5 0.0 0.375 0.002
 GW 63 3 -0.5 0.0 0.375 -0.5 0.25 0.375 0.002
 GW 64 3 -0.5 0.25 0.375 -0.5 0.5 0.375 0.002
 GW 65 3 -0.5 -0.5 0.25 -0.5 -0.25 0.25 0.002
 GW 66 3 -0.5 -0.25 0.25 -0.5 0.0 0.25 0.002
 GW 67 3 -0.5 0.0 0.25 -0.5 0.25 0.25 0.002
 GW 68 3 -0.5 0.25 0.25 -0.5 0.5 0.25 0.002
 GW 69 3 -0.5 -0.5 0.125 -0.5 -0.25 0.125 0.002
 GW 70 3 -0.5 -0.25 0.125 -0.5 0.0 0.125 0.002
 GW 71 3 -0.5 0.0 0.125 -0.5 0.25 0.125 0.002
 GW 72 3 -0.5 0.25 0.125 -0.5 0.5 0.125 0.002
 GW 73 1 -0.5 -0.5 0.5 -0.5 -0.5 0.375 0.002
 GW 74 1 -0.5 -0.5 0.375 -0.5 -0.5 0.25 0.002
 GW 75 1 -0.5 -0.5 0.25 -0.5 -0.5 0.125 0.002
 GW 76 1 -0.5 -0.5 0.125 -0.5 -0.5 0.0 0.002
 GW 77 1 -0.5 -0.25 0.5 -0.5 -0.25 0.375 0.002
 GW 78 1 -0.5 -0.25 0.375 -0.5 -0.25 0.25 0.002
 GW 79 1 -0.5 -0.25 0.25 -0.5 -0.25 0.125 0.002
 GW 80 1 -0.5 -0.25 0.125 -0.5 -0.25 0.0 0.002
 GW 81 1 -0.5 0.0 0.5 -0.5 0.0 0.375 0.002
 GW 82 1 -0.5 0.0 0.375 -0.5 0.0 0.25 0.002
 GW 83 1 -0.5 0.0 0.25 -0.5 0.0 0.125 0.002
 GW 84 1 -0.5 0.0 0.125 -0.5 0.0 0.0 0.002
 GW 85 1 -0.5 0.25 0.5 -0.5 0.25 0.375 0.002
 GW 86 1 -0.5 0.25 0.375 -0.5 0.25 0.25 0.002
 GW 87 1 -0.5 0.25 0.25 -0.5 0.25 0.125 0.002
 GW 88 1 -0.5 0.25 0.125 -0.5 0.25 0.0 0.002
 GW 89 1 -0.5 0.5 0.5 -0.5 0.5 0.375 0.002
 GW 90 1 -0.5 0.5 0.375 -0.5 0.5 0.25 0.002
 GW 91 1 -0.5 0.5 0.25 -0.5 0.5 0.125 0.002
 GW 92 1 -0.5 0.5 0.125 -0.5 0.5 0.0 0.002
 GW 93 3 0.5 -0.5 0.5 0.5 -0.25 0.5 0.002
 GW 94 3 0.5 -0.25 0.5 0.5 0.0 0.5 0.002
 GW 95 3 0.5 0.0 0.5 0.5 0.25 0.5 0.002
 GW 96 3 0.5 0.25 0.5 0.5 0.5 0.5 0.002
 GW 97 3 0.5 -0.5 0.375 0.5 -0.25 0.375 0.002
 GW 98 3 0.5 -0.25 0.375 0.5 0.0 0.375 0.002
 GW 99 3 0.5 0.0 0.375 0.5 0.25 0.375 0.002
 GW 100 3 0.5 0.25 0.375 0.5 0.5 0.375 0.002
 GW 101 3 0.5 -0.5 0.25 0.5 -0.25 0.25 0.002
 GW 102 3 0.5 -0.25 0.25 0.5 0.0 0.25 0.002
 GW 103 3 0.5 0.0 0.25 0.5 0.25 0.25 0.002
 GW 104 3 0.5 0.25 0.25 0.5 0.5 0.25 0.002
 GW 105 3 0.5 -0.5 0.125 0.5 -0.25 0.125 0.002
 GW 106 3 0.5 -0.25 0.125 0.5 0.0 0.125 0.002
 GW 107 3 0.5 0.0 0.125 0.5 0.25 0.125 0.002
 GW 108 3 0.5 0.25 0.125 0.5 0.5 0.125 0.002
 GW 109 1 0.5 -0.5 0.5 0.5 -0.5 0.375 0.002
 GW 110 1 0.5 -0.5 0.375 0.5 -0.5 0.25 0.002
 GW 111 1 0.5 -0.5 0.25 0.5 -0.5 0.125 0.002
 GW 112 1 0.5 -0.5 0.125 0.5 -0.5 0.0 0.002

Underground.nec

GW 113	1	0.5	-0.25	0.5	0.5	-0.25	0.375	0.002
GW 114	1	0.5	-0.25	0.375	0.5	-0.25	0.25	0.002
GW 115	1	0.5	-0.25	0.25	0.5	-0.25	0.125	0.002
GW 116	1	0.5	-0.25	0.125	0.5	-0.25	0.0	0.002
GW 117	1	0.5	0.0	0.5	0.5	0.0	0.375	0.002
GW 118	1	0.5	0.0	0.375	0.5	0.0	0.25	0.002
GW 119	1	0.5	0.0	0.25	0.5	0.0	0.125	0.002
GW 120	1	0.5	0.0	0.125	0.5	0.0	0.0	0.002
GW 121	1	0.5	0.25	0.5	0.5	0.25	0.375	0.002
GW 122	1	0.5	0.25	0.375	0.5	0.25	0.25	0.002
GW 123	1	0.5	0.25	0.25	0.5	0.25	0.125	0.002
GW 124	1	0.5	0.25	0.125	0.5	0.25	0.0	0.002
GW 125	1	0.5	0.5	0.5	0.5	0.5	0.375	0.002
GW 126	1	0.5	0.5	0.375	0.5	0.5	0.25	0.002
GW 127	1	0.5	0.5	0.25	0.5	0.5	0.125	0.002
GW 128	1	0.5	0.5	0.125	0.5	0.5	0.0	0.002
GW 129	3	-0.5	-0.25	0.5	-0.25	-0.25	0.5	0.002
GW 130	3	-0.25	-0.25	0.5	0.0	-0.25	0.5	0.002
GW 131	3	0.0	-0.25	0.5	0.25	-0.25	0.5	0.002
GW 132	3	0.25	-0.25	0.5	0.5	-0.25	0.5	0.002
GW 133	3	-0.5	0.0	0.5	-0.25	0.0	0.5	0.002
GW 134	3	-0.25	0.0	0.5	0.0	0.0	0.5	0.002
GW 135	3	0.0	0.0	0.5	0.25	0.0	0.5	0.002
GW 136	3	0.25	0.0	0.5	0.5	0.0	0.5	0.002
GW 137	3	-0.5	0.25	0.5	-0.25	0.25	0.5	0.002
GW 138	3	-0.25	0.25	0.5	0.0	0.25	0.5	0.002
GW 139	3	0.0	0.25	0.5	0.25	0.25	0.5	0.002
GW 140	3	0.25	0.25	0.5	0.5	0.25	0.5	0.002
GW 141	3	-0.25	-0.5	0.5	-0.25	-0.25	0.5	0.002
GW 142	3	-0.25	-0.25	0.5	-0.25	0.0	0.5	0.002
GW 143	3	-0.25	0.0	0.5	-0.25	0.25	0.5	0.002
GW 144	3	-0.25	0.25	0.5	-0.25	0.5	0.5	0.002
GW 145	3	0.0	-0.5	0.5	0.0	-0.25	0.5	0.002
GW 146	3	0.0	-0.25	0.5	0.0	0.0	0.5	0.002
GW 147	3	0.0	0.0	0.5	0.0	0.25	0.5	0.002
GW 148	3	0.0	0.25	0.5	0.0	0.5	0.5	0.002
GW 149	3	0.25	-0.5	0.5	0.25	-0.25	0.5	0.002
GW 150	3	0.25	-0.25	0.5	0.25	0.0	0.5	0.002
GW 151	3	0.25	0.0	0.5	0.25	0.25	0.5	0.002
GW 152	3	0.25	0.25	0.5	0.25	0.5	0.5	0.002
GW 153	1	-0.25	0.5	0.0	-0.25	0.5	-0.125	0.002
GW 154	1	0.0	0.5	0.0	0.0	0.5	-0.125	0.002
GW 155	1	-0.25	-0.5	0.0	-0.25	-0.5	-0.125	0.002
GW 156	1	0.0	-0.5	0.0	0.0	-0.5	-0.125	0.002
GW 157	1	0.25	-0.5	0.0	0.25	-0.5	-0.125	0.002
GW 158	1	-0.5	-0.5	0.0	-0.5	-0.5	-0.125	0.002
GW 159	1	-0.5	-0.25	0.0	-0.5	-0.25	-0.125	0.002
GW 160	1	-0.5	0.0	0.0	-0.5	0.0	-0.125	0.002
GW 161	1	-0.5	0.25	0.0	-0.5	0.25	-0.125	0.002
GW 162	1	-0.5	0.5	0.0	-0.5	0.5	-0.125	0.002
GW 163	1	0.5	-0.5	0.0	0.5	-0.5	-0.125	0.002
GW 164	1	0.5	-0.25	0.0	0.5	-0.25	-0.125	0.002
GW 165	1	0.5	0.0	0.0	0.5	0.0	-0.125	0.002
GW 166	1	0.5	0.25	0.0	0.5	0.25	-0.125	0.002
GW 167	1	0.5	0.5	0.0	0.5	0.5	-0.125	0.002
GW 168	1	0.25	0.5	0.0	0.25	0.5	-0.125	0.002
GW 169	830	-2.0	-0.01	-0.994	-170.0	-0.01	-0.994	0.001
GW 170	830	-2.0	0.0	-1.012	-170.0	0.0	-1.012	0.001
GW 171	830	170.0	0.01	-0.994	2.0	0.01	-0.994	0.001
GW 172	830	170.0	-0.01	-0.994	2.0	-0.01	-0.994	0.001
GW 173	830	170.0	0.0	-1.012	2.0	0.0	-1.012	0.001
GW 174	830	-2.0	0.0	-1.0	-170.0	0.0	-1.0	0.005
GW 175	830	-170.0	0.01	-0.994	-2.0	0.01	-0.994	0.001

Underground.nec

GW 176 830 170.0 0.0 -1.0 2.0 0.0 -1.0 0.005
GW 177 5 -0.225 0.0 0.0 -0.225 0.0 0.2 0.005
GW 178 11 -0.225 0.0 0.2 0.225 0.0 0.2 0.005
GW 179 5 0.225 0.0 0.2 0.225 0.0 0.0 0.005
GW 180 24 2.0 0.0 -1.0 1.04 0.0 -1.0 0
GC 2 0 0 .005 .005 .2 .04
GW 181 24 2.0 0.0 -1.012 1.04 0.0 -1.012 0
GC 2 0 0 .001 .001 .2 .04
GW 182 24 2.0 0.01 -0.994 1.04 0.01 -0.994 0
GC 2 0 0 .001 .001 .2 .04
GW 183 24 2.0 -0.01 -0.994 1.04 -0.01 -0.994 0
GC 2 0 0 .001 .001 .2 .04
GW 184 1 1.04 0.0 -1.012 0.9943 0.0 -1.012 0.001
GW 185 1 1.04 0.01 -0.994 1.003 0.01 -0.994 0.001
GW 186 1 1.04 -0.01 -0.994 1.003 -0.01 -0.994 0.001
GW 187 24 -2.0 0.0 -1.0 -1.04 0.0 -1.0 0
GC 2 0 0 .005 .005 .2 .04
GW 188 24 -2.0 0.0 -1.012 -1.04 0.0 -1.012 0
GC 2 0 0 .001 .001 .2 .04
GW 189 24 -2.0 -0.01 -0.994 -1.04 -0.01 -0.994 0
GC 2 0 0 .001 .001 .2 .04
GW 190 24 -2.0 0.01 -0.994 -1.04 0.01 -0.994 0
GC 2 0 0 .001 .001 .2 .04
GW 191 31 -1.0 0.0 -1.0 -0.249 0.0 -0.032 0.005
GW 192 31 -0.994 0.0 -1.012 -0.243 0.0 -0.044 0.001
GW 193 1 -1.04 0.0 -1.012 -0.994 0.0 -1.012 0.001
GW 194 1 -1.04 -0.01 -0.994 -1.003 -0.01 -0.994 0.001
GW 195 1 -1.04 0.01 -0.994 -1.003 0.01 -0.994 0.001
GW 196 1 1.04 0.0 -1.0 1.0 0.0 -1.0 0.005
GW 197 1 -1.04 0.0 -1.0 -1.0 0.0 -1.0 0.005
GW 198 1 -0.249 0.0 -0.032 -0.225 0.0 0.0 0.005
GW 199 1 -0.252 -0.01 -0.026 -0.232 -0.01 0.0 0.001
GW 200 1 -0.243 0.0 -0.044 -0.209 0.0 0.0 0.001
GW 201 1 -0.252 0.01 -0.026 -0.232 0.01 0.0 0.001
GW 202 31 1.0 0.0 -1.0 0.2494 0.0 -0.032 0.005
GW 203 31 0.9943 0.0 -1.012 0.2433 0.0 -0.044 0.001
GW 204 31 1.003 0.01 -0.994 0.2521 0.01 -0.026 0.001
GW 205 31 1.003 -0.01 -0.994 0.2521 -0.01 -0.026 0.001
GW 206 1 0.2494 0.0 -0.032 0.225 0.0 0.0 0.005
GW 207 1 0.2521 0.01 -0.026 0.232 0.01 0.0 0.001
GW 208 1 0.2433 0.0 -0.044 0.2092 0.0 0.0 0.001
GW 209 1 0.2521 -0.01 -0.026 0.232 -0.01 0.0 0.001
GW 210 31 -1.003 -0.01 -0.994 -0.252 -0.01 -0.026 0.001
GW 211 31 -1.003 0.01 -0.994 -0.252 0.01 -0.026 0.001
GE -1
GN 2 0 0 0 13 .005
LD 5 0 0 0 58000000 0
LD 5 1 0 0 1390000 0
LD 5 2 0 0 1390000 0
LD 5 3 0 0 1390000 0
LD 5 4 0 0 1390000 0
LD 5 5 0 0 1390000 0
LD 5 6 0 0 1390000 0
LD 5 7 0 0 1390000 0
LD 5 8 0 0 1390000 0
LD 5 9 0 0 1390000 0
LD 5 10 0 0 1390000 0
LD 5 11 0 0 1390000 0
LD 5 12 0 0 1390000 0
LD 5 13 0 0 1390000 0
LD 5 14 0 0 1390000 0
LD 5 15 0 0 1390000 0
LD 5 16 0 0 1390000 0

Underground.nec

LD 5 17 0 0 1390000 0
LD 5 18 0 0 1390000 0
LD 5 19 0 0 1390000 0
LD 5 20 0 0 1390000 0
LD 5 21 0 0 1390000 0
LD 5 22 0 0 1390000 0
LD 5 23 0 0 1390000 0
LD 5 24 0 0 1390000 0
LD 5 25 0 0 1390000 0
LD 5 26 0 0 1390000 0
LD 5 27 0 0 1390000 0
LD 5 28 0 0 1390000 0
LD 5 29 0 0 1390000 0
LD 5 30 0 0 1390000 0
LD 5 31 0 0 1390000 0
LD 5 32 0 0 1390000 0
LD 5 33 0 0 1390000 0
LD 5 34 0 0 1390000 0
LD 5 35 0 0 1390000 0
LD 5 36 0 0 1390000 0
LD 5 37 0 0 1390000 0
LD 5 38 0 0 1390000 0
LD 5 39 0 0 1390000 0
LD 5 40 0 0 1390000 0
LD 5 41 0 0 1390000 0
LD 5 42 0 0 1390000 0
LD 5 43 0 0 1390000 0
LD 5 44 0 0 1390000 0
LD 5 45 0 0 1390000 0
LD 5 46 0 0 1390000 0
LD 5 47 0 0 1390000 0
LD 5 48 0 0 1390000 0
LD 5 49 0 0 1390000 0
LD 5 50 0 0 1390000 0
LD 5 51 0 0 1390000 0
LD 5 52 0 0 1390000 0
LD 5 53 0 0 1390000 0
LD 5 54 0 0 1390000 0
LD 5 55 0 0 1390000 0
LD 5 56 0 0 1390000 0
LD 5 57 0 0 1390000 0
LD 5 58 0 0 1390000 0
LD 5 59 0 0 1390000 0
LD 5 60 0 0 1390000 0
LD 5 61 0 0 1390000 0
LD 5 62 0 0 1390000 0
LD 5 63 0 0 1390000 0
LD 5 64 0 0 1390000 0
LD 5 65 0 0 1390000 0
LD 5 66 0 0 1390000 0
LD 5 67 0 0 1390000 0
LD 5 68 0 0 1390000 0
LD 5 69 0 0 1390000 0
LD 5 70 0 0 1390000 0
LD 5 71 0 0 1390000 0
LD 5 72 0 0 1390000 0
LD 5 73 0 0 1390000 0
LD 5 74 0 0 1390000 0
LD 5 75 0 0 1390000 0
LD 5 76 0 0 1390000 0
LD 5 77 0 0 1390000 0
LD 5 78 0 0 1390000 0
LD 5 79 0 0 1390000 0

Underground.nec

LD 5 80 0 0 1390000 0
LD 5 81 0 0 1390000 0
LD 5 82 0 0 1390000 0
LD 5 83 0 0 1390000 0
LD 5 84 0 0 1390000 0
LD 5 85 0 0 1390000 0
LD 5 86 0 0 1390000 0
LD 5 87 0 0 1390000 0
LD 5 88 0 0 1390000 0
LD 5 89 0 0 1390000 0
LD 5 90 0 0 1390000 0
LD 5 91 0 0 1390000 0
LD 5 92 0 0 1390000 0
LD 5 93 0 0 1390000 0
LD 5 94 0 0 1390000 0
LD 5 95 0 0 1390000 0
LD 5 96 0 0 1390000 0
LD 5 97 0 0 1390000 0
LD 5 98 0 0 1390000 0
LD 5 99 0 0 1390000 0
LD 5 100 0 0 1390000 0
LD 5 101 0 0 1390000 0
LD 5 102 0 0 1390000 0
LD 5 103 0 0 1390000 0
LD 5 104 0 0 1390000 0
LD 5 105 0 0 1390000 0
LD 5 106 0 0 1390000 0
LD 5 107 0 0 1390000 0
LD 5 108 0 0 1390000 0
LD 5 109 0 0 1390000 0
LD 5 110 0 0 1390000 0
LD 5 111 0 0 1390000 0
LD 5 112 0 0 1390000 0
LD 5 113 0 0 1390000 0
LD 5 114 0 0 1390000 0
LD 5 115 0 0 1390000 0
LD 5 116 0 0 1390000 0
LD 5 117 0 0 1390000 0
LD 5 118 0 0 1390000 0
LD 5 119 0 0 1390000 0
LD 5 120 0 0 1390000 0
LD 5 121 0 0 1390000 0
LD 5 122 0 0 1390000 0
LD 5 123 0 0 1390000 0
LD 5 124 0 0 1390000 0
LD 5 125 0 0 1390000 0
LD 5 126 0 0 1390000 0
LD 5 127 0 0 1390000 0
LD 5 128 0 0 1390000 0
LD 5 129 0 0 1390000 0
LD 5 130 0 0 1390000 0
LD 5 131 0 0 1390000 0
LD 5 132 0 0 1390000 0
LD 5 133 0 0 1390000 0
LD 5 134 0 0 1390000 0
LD 5 135 0 0 1390000 0
LD 5 136 0 0 1390000 0
LD 5 137 0 0 1390000 0
LD 5 138 0 0 1390000 0
LD 5 139 0 0 1390000 0
LD 5 140 0 0 1390000 0
LD 5 141 0 0 1390000 0
LD 5 142 0 0 1390000 0

Underground.nec

```
LD 5 143 0 0 1390000 0
LD 5 144 0 0 1390000 0
LD 5 145 0 0 1390000 0
LD 5 146 0 0 1390000 0
LD 5 147 0 0 1390000 0
LD 5 148 0 0 1390000 0
LD 5 149 0 0 1390000 0
LD 5 150 0 0 1390000 0
LD 5 151 0 0 1390000 0
LD 5 152 0 0 1390000 0
LD 5 153 0 0 1390000 0
LD 5 154 0 0 1390000 0
LD 5 155 0 0 1390000 0
LD 5 156 0 0 1390000 0
LD 5 157 0 0 1390000 0
LD 5 158 0 0 1390000 0
LD 5 159 0 0 1390000 0
LD 5 160 0 0 1390000 0
LD 5 161 0 0 1390000 0
LD 5 162 0 0 1390000 0
LD 5 163 0 0 1390000 0
LD 5 164 0 0 1390000 0
LD 5 165 0 0 1390000 0
LD 5 166 0 0 1390000 0
LD 5 167 0 0 1390000 0
LD 5 168 0 0 1390000 0
IS 0 174 0 0 2.2 .0625 .011
IS 0 176 0 0 2.2 .0625 .011
IS 0 191 0 0 2.2 .0625 .011
IS 0 196 0 0 2.2 .0625 .011
IS 0 197 0 0 2.2 .0625 .011
IS 0 198 0 0 2.2 .0625 .011
IS 0 202 0 0 2.2 .0625 .011
IS 0 206 0 0 2.2 .0625 .011
FR 0 1 0 0 30 0
EX 0 178 6 0 1 0
EN
```