

Omni-Express Antenna Testing (TCU II)
Centurion GT antenna uses MIL-C17 RG-316 cable (6" length for test)
Measured Sept 1 & 2, 2004
QCOM Large Chamber, L-513

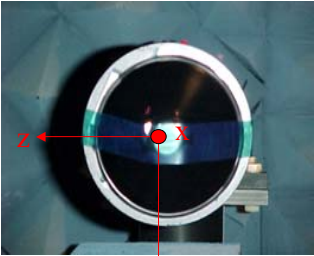
Peak Antenna Gain(dBi), w/o external ground plane						
	1850	1880	1910	1930	1960	1990
Centurion T2 Antenna (CV90-J6595), Sample 1	2.9	3.2	3.6	3.7	3.9	4
Centurion T2 Antenna (CV90-J6595), Sample 2	2.6	3	3.5	3.6	3.9	4
Omni-Express Antenna (CV90-53293)	1	1.5	1.8	1.9	1.9	1.6
Min	1.00	1.50	1.80	1.90	1.90	1.60
Max	2.90	3.20	3.60	3.70	3.90	4.00

Efficiency Loss (dB), w/o external ground plane						
	1850	1880	1910	1930	1960	1990
Centurion T2 Antenna (CV90-J6595), Sample 1	-1.5	-1.3	-1	-0.8	-0.8	-0.9
Centurion T2 Antenna (CV90-J6595), Sample 2	-1.6	-1.3	-1	-0.9	-0.8	-0.8
Omni-Express Antenna (CV90-53293)	-1.4	-1.1	-0.8	-0.6	-0.6	-0.8
Min	-1.60	-1.30	-1.00	-0.90	-0.80	-0.90
Max	-1.40	-1.10	-0.80	-0.60	-0.60	-0.80

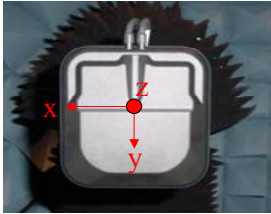
Average Gain (dBi), Horizon to +45 Deg in Elevation w/o external ground plane						
	1850	1880	1910	1930	1960	1990
Centurion T2 Antenna (CV90-J6595), Sample 1	-0.5	-0.3	0.1	0.2	0.3	0.1
Centurion T2 Antenna (CV90-J6595), Sample 2	-0.6	-0.3	0	0.2	0.3	0.2
Omni-Express Antenna (CV90-53293)	-0.2	0.2	0.5	0.7	0.8	0.6
Min	-0.60	-0.30	0.00	0.20	0.30	0.10
Max	-0.20	0.20	0.50	0.70	0.80	0.60

RECEIVE MODE

GPS (1575 MHz), w/o external ground plane						
	LNA Gain	Peak Ant Gain	Peak Gain w/ LNA	Avg Gain w/ LNA	Avg Gain w/o LNA	Axial Ratio
Centurion T2 Antenna (CV90-J6595), Sample 1	24	2.5	25	21.8	-2.2	3
Centurion T2 Antenna (CV90-J6595), Sample 2	24	2.5	25.5	22	-2	3
Omni-Express Antenna (CV90-53293)	26	2.5	31.2	27.3	1.3	1.8
Min	24.00	2.50	25.00	21.80	-2.20	1.80
Max	26.00	2.50	31.20	27.30	1.30	3.00
CV90-53293 Spec	> 20dB	n/a	>25	n/a	n/a	n/a
* data supplied by mfr						



Omni-Express
w/o external ground plane



Centurion Antenna
w/o external ground plane