

Antenna Test Report – NextMeter

10/16/22

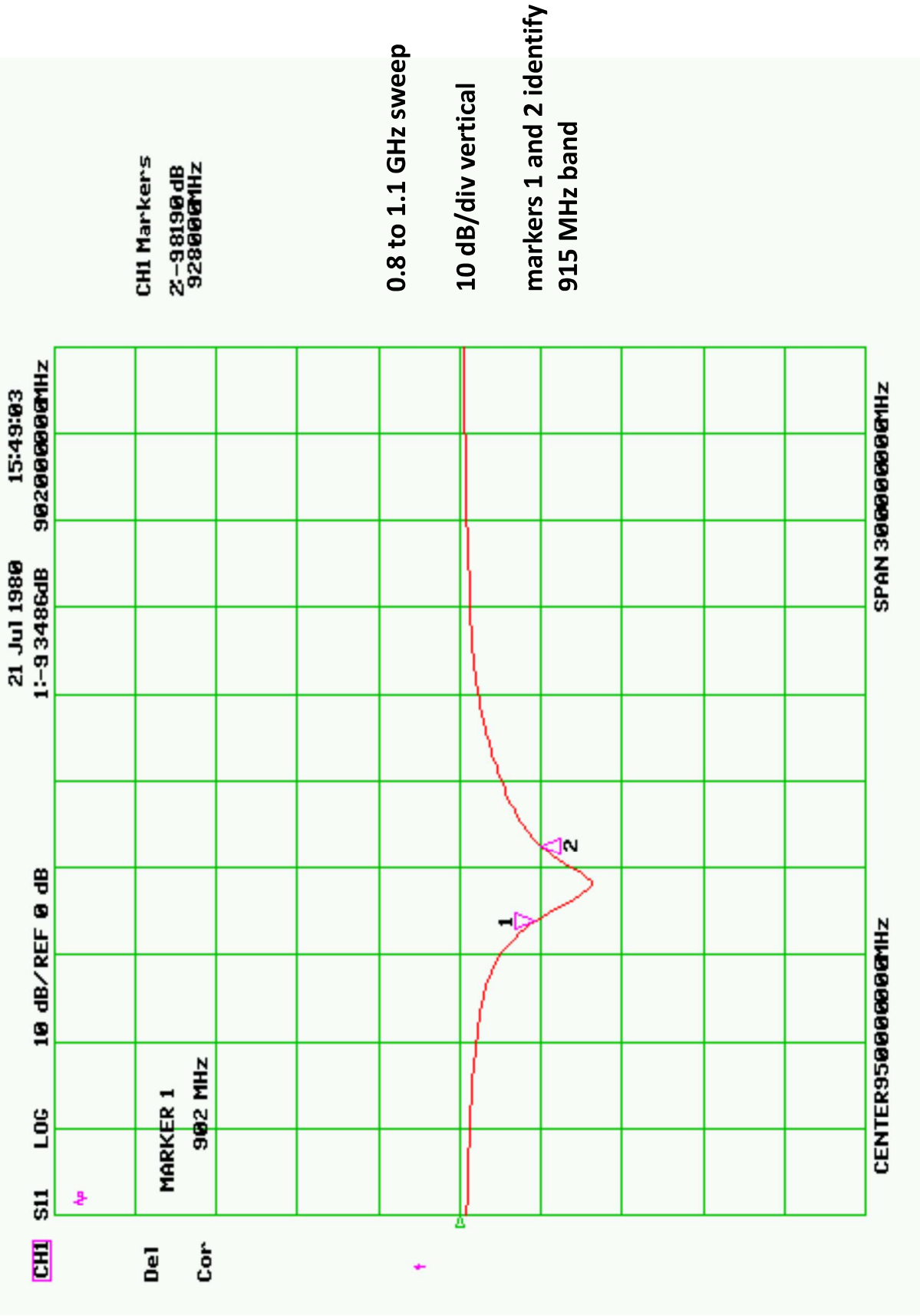
Return Loss and Radiation Efficiency were measured.

Gain and radiation patterns were measured the 900 MHz (3 frequencies) in three orthogonal planes in both V and H polarization at 10 deg increments for a total of 6 pattern cuts per frequency. From the 6 orthogonal pattern cuts, radiation efficiency was estimated.

Summary: The Return Loss of the antenna is good. The hinged lid has little effect on the tuning or the radiation efficiency.

Radiation Efficiency and Peak Gain are typical for this type of printed embedded antenna.

Return Loss; 915 MHz Band; Lid Closed



Estimated Radiation Efficiency; 915 MHz Band

Complete Unit with Lid Closed

	Radiation Efficiency (%)	Radiation Efficiency (dB)
902 MHz	54.2	-2.7
915 MHz	57.8	-2.4
928 MHz	60.6	-2.2

Complete Unit with Lid Open

	Radiation Efficiency (%)	Radiation Efficiency (dB)
902 MHz	54.7	-2.6
915 MHz	58.4	-2.3
928 MHz	60.1	-2.2

Peak Gain (from 6 orthogonal pattern cuts, V and Hpol)

902 MHz: +0.7 dBi

915 MHz: +0.2 dBi

928 MHz: -0.3 dBi