

# RFI Test - NETGEAR GS110T

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## 1 Introduction

This document shows RFI test info and results for the NETGEAR ProSafe GS110T and its power supply, Figures 1 and 2 respectively. Both devices were tested separately with the electric field probe 904 only. This test was requested by Jorge Rodriguez.



Figure 1: NETGEAR ProSafe GS110T.



Figure 2: GS110T 12VDC Power Supply.

## 2 Test Equipment

Agilent E4445A Spectrum Analyzer:

- Trace 1: Clear Write, Average ON, 20 spec.
- Trace 2: Max Hold.
- Trace 3: Min Hold.
- 8192 points per spec.
- Internal Amplifier ON.
- 6dB Attenuation.
- SCPI Commands from Python.

ETS Model 7405[1] probe No.904:

- Electric field.
- Res. Freq. >1.0GHz.
- H/E Rejection 30dB.
- Performance: Fig. 3.
- + 15ft coax cable

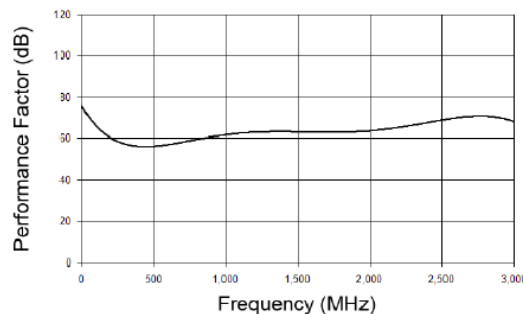


Figure 3: Probe No. 904 Performance.

## 3 Test Procedure

- NETGEAR ProSafe GS110T with fiber module Linksys 1GbE SX Mini-GBIC SFP, no fiber connected. Port 8 connected to AO NET. Electric probe located in the front panel, close to Port 8. Results in Fig. 1.
- Power supply tested separately with load (switch) for electric emissions (Fig. 2).
- Agilent E4445A Spectrum Analyzer preheated for more than 1hour.
- Thirty (30) 100MHz bandwidth scans (12.207kHz per channel), from 0 to 3000MHz, electric and magnetic field.
- Twenty (20) seconds “integration” time.
- Screen/shielded room front door closed. Fluorescent lights OFF.
- A/C ON, eth. switch ON, 10MHz buffer OFF, 10MHz ref. cable disconnected.
- 430MHz and S-band transmitters OFF.

## References

- [1] ETS LINDGREN, *ETS Near-Field Probe Set Model 7405*.

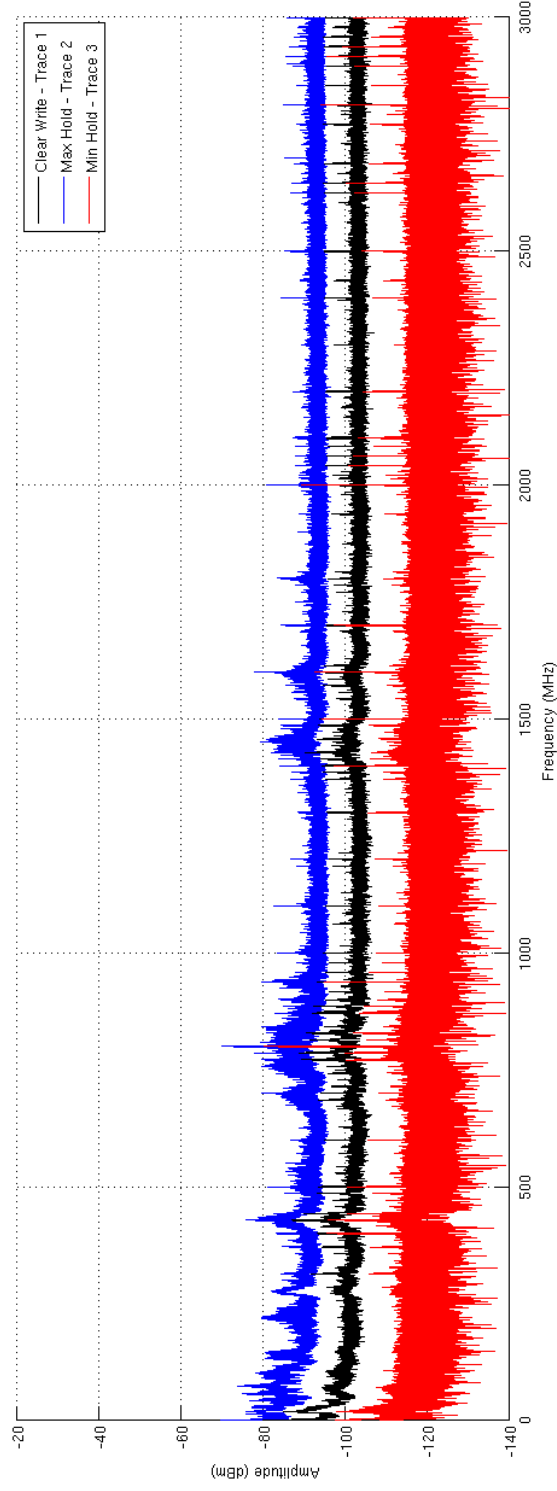
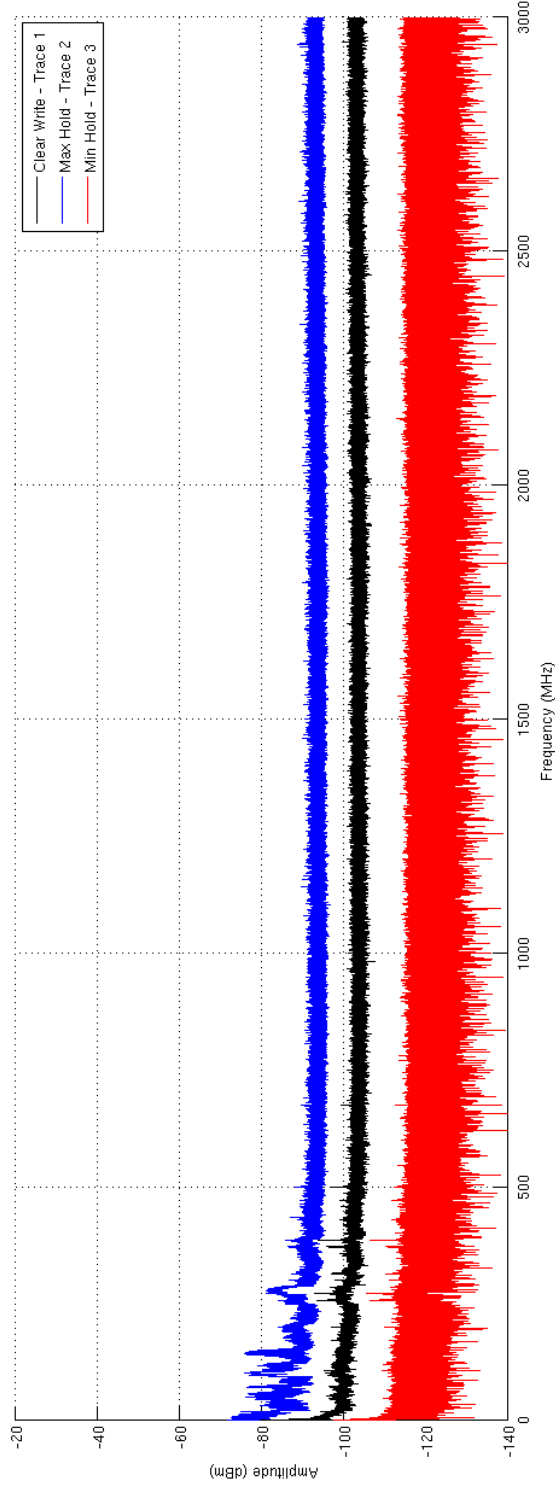


Figure 4: Test Results. Top: Power Supply; Bottom: Ethernet Switch.