CITY OF NEWTON

IN BOARD OF ALDERMEN

PUBLIC FACILITIES COMMITTEE REPORT

WEDNESDAY, OCTOBER 19, 2011

Present: Ald. Schnipper, Lennon, Albright, Salvucci, Crossley, Danberg, and Lappin
Absent: Ald. Gentile
Also present: Ald. Blazar, Fischman, Hess-Mahan, Merrill, Rice, and Sangiolo
City staff present: Marc Welch (Director of Urban Forestry; Parks and Recreation Department), Robert Rooney (Chief Operating Officer), David Turocy (Commissioner of Public Works), Lou Taverna (City Engineer), Ouida Young (Assistant City Solicitor), and Julie Ross (Associate City Solicitor)

#266-11 NATIONAL GRID petitioning for a grant of location to install and maintain 80' ± of 4" gas main in RUANE ROAD from the existing 4" gas main at 74 Ruane Road in an easterly direction to #69 Ruane Road. (Ward 3) [09/12/11 @ 11:59 AM]

ACTION: APPROVED 6-0 (Lennon not voting)

NOTE: Ben Doherty, National Grid Permit Representative, presented the petition to install 80' of gas main in Ruane Road to provide gas service to 69 Ruane Road. National Grid has notified all the households that do not have gas service to see if they wish to get gas service. National Grid has not received any responses to the inquiries. The Department of Public Works has reviewed the petition and recommended approval with the standard conditions for the street opening permit.

The public hearing was opened and Alex White, 69 Ruane Road, stated that he is the property owner that requested the service and he supports the petition. Ald. Lappin moved approval, which carried unanimously.

REFERRED TO PROG & SERV AND PUBLIC FACILITIES COMMITTEES

#245-10 ALD. SCHNIPPER AND SANGIOLO requesting discussion with National Grid regarding the possible damage to trees as a result of gas leaks. [09/01/10 4:00 PM]

PROGRAMS & SERVICES HELD 6-0 on 10-19-11

ACTION: PUBLIC FACILITIES HELD 7-0

NOTE: Director of Urban Forestry Marc Welch reviewed the results of a survey and assessment conducted by a non-profit organization known as the Massachusetts Public Shade Tree Trust to determine and document gas leaks that have damaged the City's trees. The survey took place between 2009 and 2010 and results were given to the City in the winter of 2011. Trees along public ways were tested for the presence of gas venting from below the surface. The tests were also performed at locations where trees were removed in 2008, 2009 and 2010 to determine if gas was present at those locations.

Three hundred seventy-eight leaks that impacted about 600 tree sites were identified and classified. A list of gas leak locations with a map is available on the Newton Tree Conservancy website. The classification was done using industry standards and the Department of Transportation leak classification guide, which ranks leaks as grade 1, 2 or 3. Grade 1 leaks are considered to be existing or probable hazards to people or property and require the immediate action of the company supplying the gas. Grade 2 leaks are non-hazardous when discovered but are likely to be a future hazard and should be repaired within 15 months of discovery. A grade 3 leak is none hazardous and can be expected to remain non-hazardous, which should be reevaluated within 15 months of being reported.

It is estimated that the City has lost approximately 200 trees and 190 trees require some type of remedial action due to leaks. Mr. Welch clarified that the City lost approximately 2,500 trees in the same three to four year period due to other causes. The City began negotiations with the gas company in March and discussions regarding restitution for the lost and damaged trees are ongoing.

Every leak discovered was reported to the gas company and the gas company did its own inspection. The gas company identified approximately 320 leaks during their inspection and at this point has repaired 60 of those leaks. The soil in the area of a leak rebounds in about a month and there is no further damage to trees. The gas company is working with the Mr. Welch in good faith. They have agreed to repair grade 2 and 3 leaks in the vicinity of public trees before areas without trees. The gas company is looking at their capital plan to modify it to address areas with trees. They expect to make 1/3 of the reported repairs over the winter.

The gas company is also informing Mr. Welch when and where they are working on a daily basis. They are also working on a tree protection policy and providing training to employees working near trees. The gas company has also agreed to do a pre-tree planting inspection to ensure that there are no leaks in the area.

Mr. Welch expects that all negotiations will be done by spring 2012. If the gas company is not willing to provide restitution to replant and prune damaged trees, the City will need to look at different options. Both Committees asked that Mr. Welch report back to the Committees at the conclusion of the negotiations with the gas company. Therefore, motions to hold in both Committees carried unanimously.

#280-11 ALD. SALVUCCI AND LINSKY requesting an amendment to Section 26-51 of the City of Newton Ordinances, 2007 – Public way improvements constituting specific repairs, to add the following design change text to paragraph 9a): "or any adjustment of the curbing that causes an intrusion into the roadway." [09/20/11 @ 10:38 AM]

ACTION: HELD 7-0

NOTE: The item was docketed in response to changes in traffic flow at Washington Street and Lowell Avenue. The Department of Public Works constructed bump-outs at the intersection corners, as part of a Community Development Block Grant (CDBG) project. Funding for the project was provided by CDBG and State Chapter 90 funds. The project was done in order to make the access ramps on the south corner of Washington Street and Lowell Avenue compliant with the Architectural Access Board's standards and to create a safer pedestrian crossing.

The changes to the intersection narrowed Washington Street that eliminated a non-designated turning lane, which allowed drivers to take a right on red onto Lowell Avenue. Washington Street now becomes very congested and many drivers have to sit through at least one light-cycle to take the right. There was also concern that the bump-outs create a hazard to bicyclists.

The Ward Aldermen have received a number of calls regarding the changes to the intersection. People were unaware that the intersection was to be modified. Although the Newtonville Advisory Committee noticed the neighborhood of the meetings to discuss the construction, people were unaware of the changes. There are real concerns regarding the design of the intersection.

The docketors would like these types of projects to come before the Board of Aldermen for review and approval. The current ordinance does not require curb line adjustments com before the Board of Aldermen. The new language would require any adjustment of the curbing that causes an intrusion into the roadway to come before the Board of Aldermen for approval.

Several Committee members voiced concern that the language was too broad and would result in requiring every roadway project get approval by the Board of Aldermen, such as road reconstructions, modifications to accessible ramps, and changes in driveway openings. Commissioner of Public Works David Turocy agreed that it would be helpful to have some oversight from the Board of Aldermen on large bump out projects. However, the proposed language would capture many minor modifications that often occur during construction. Committee members were in favor of the concept but felt that the language should be more specific to capture larger scale projects and not minor modifications. It was suggested that it would be helpful to use the City's roadway classification to define which projects should be brought to the Board of Aldermen for approval. The Committee asked that the Law Department work on new language. With that, Ald. Lappin moved hold, which carried unanimously.

Public hearing continued from September 21, 2011:

#259-11 NextG NETWORKS OF NY, INC. petitioning for a grant of location to install 295' ± of underground conduit in SUMNER STREET on the easterly side approximately 58' from Alden Street in a southerly direction to the intersection of Rice Street and attach aerial fiber and related equipment to existing utility poles at the following locations:

Aerial Locations

Centre Street - 2,140' of aerial fiber attachment to exiting poles
Alden Street - 485' of aerial fiber attachment to existing poles
Sumner Street - 2,460' of aerial fiber attachment to existing poles
Ward Street - 1,050' of aerial fiber attachment to existing poles
Westbourne Road – 790' of aerial fiber attachment to existing poles
Everett Street 935' of aerial fiber attachment to existing poles
Dalton Road – 435' of aerial fiber attachment to existing poles
Grant Avenue – 530' of aerial fiber attachment to existing poles
Beacon Street – 1,925' of aerial fiber attachment to existing poles
Langley Road – 530' of aerial fiber attachment to existing poles
Braeland Avenue - 1.095' of aerial fiber attachment to existing poles
Cypress Street – 410' of aerial fiber attachment to existing poles
[07/28/11 @ 3:36 PM]

ACTION: PUBLIC HEARING CONTINUED

NOTE: The continuation of the public hearing began with Peter Heimdahl of NextG Networks stating that it seemed the main concerns raised at the public hearing on September 21, 2011 were related to the safety of the equipment and radio frequency generated by the antennas. Mr. Heimdahl introduced an expert hired by NextG Networks to provide information on safety. Mr. Dan Collins is the Chief Technical Officer at Pinnacle Telecom Group and is a veteran in the telecommunications field. He is an expert in radio frequency exposure and Federal Communication Commission's radio frequency regulations. Mr. Collins reviewed the "CMX Maximum Permissible Exposure (MPE) Calculations for NextG Networks" report that was previously submitted and attached to the September 21, 2011 Public Facilities Report. Mr. Collins evaluated the data contained in the report and reached the same conclusions regarding radio frequency exposure levels. The report is based on the worst-case scenarios of radio frequency levels related to NextG Network equipment. The frequency levels will always be below the allowable exposure levels. Mr. Collins pointed out that homes have higher radio frequency levels than what is generated by the NextG equipment. The levels are significantly below the FCC's limits. If the radio frequency emission levels were to exceed the limits, the FCC would negate NextG Network's license.

Mr. Collins addressed the concern raised on September 21, 2011 related to pacemaker interference from radio frequency emissions. The standard in electronic manufacturing is to design equipment to work unaffected even with a certain level of interference. Newer pacemakers manufactured after the late seventies are designed to handle radio frequency emissions. There have been no reports of pacemaker interference as a result of the installation of NextG Networks' equipment. There were issues with pacemaker interference due to close proximity, approximately 8", to analog cell phones. The interference is no longer much of an issue as analog cell phones are outdated. Mr. Heimdahl provided the attached independent report from a consultant hired by Garden City, New York to provide data on radio frequency safety.

Mr. Heimdahl explained that NextG sells the rights to use their antenna system to end wireless providers. Essentially, NextG enters into an agreement with a wireless carrier to infill any coverage gaps and dead spots in their macro networks. NextG customers are looking to enhance their wireless network, bolster their coverage, and/or boost their capacity because of strain on their infrastructure related to increased demand in an area. There was some concern that another company may put in similar devices in the same area. It is possible but unlikely that this type of overlap would occur. Wireless providers are more likely to use established equipment locations to provide service. The locations of the NextG antennas and equipment are driven by the customer's needs for service.

There are still zoning aspects of the project that need to be addressed. NextG Networks and the City's Law Department are in conversation to determine how to resolve the zoning issues. Wireless providers have significant rights at both the State and Federal level to build their infrastructure, although there must be a market or demand for the service.

One of the poles that NextG Networks proposed for an equipment and antenna location is owned by the City. It is located at 920 Centre Street, in front of a residence and NextG is willing to look at an alternate location, as it would be preferable to move the equipment away from the private residence. NextG Networks and the City are still exploring alternate sites for the

location. In addition to that location, it appears that NextG Networks, Inc. intends to locate equipment on a double pole. Mr. Heimdahl explained that NextG Networks, Inc. could not locate its equipment on a double pole and would require the removal of the double pole before attaching equipment. NextG Networks, Inc. would work with the utility to get the double pole removed.

Mr. Heimdahl invited the Committee to visit an antenna and equipment located on a utility pole in Brookline. The pole is located close to the intersection of Heath Street and Hammond Pond Parkway. Representatives of NextG Network are willing to meet committee members at the location to answer any questions.

Robert Rosenthal, 428 Ward Street, asked what the residents in the area of the NextG Network installation gain from it. Mr. Heimdahl explained that the immediate benefit is to Metro PCS customers but in the long term it fosters competition between wireless carriers and it encourages other wireless providers to provide improved service.

Steve Grabow, 436 Ward Street, inquired how Metro PCS is providing service in other areas. Mr. Heimdahl responded that service is provided through towers in commercial areas. The NextG installation is to enhance service for Metro PCS customers in an area with less reliable service. Mr. Grabow added that he was concerned that many of his neighbors were unaware of the meeting. The Chairman explained that she announced that the meeting would be continued to October 19, 2011 at the meeting of September 21, 2011.

The Committee asked Associate City Solicitor Ouida Young if the Board of Aldermen had any authority over the installation. Ms. Young stated that the Board of Aldermen has the opportunity to condition the grant of location. She would expect that the conditions would address noise levels, equipment removal, and advances in technology relative to the size of the equipment among other things. A draft Board Order can be provided to the Committee for review. With that, it was suggested that the item be held to allow a site visit to the Brookline location and to get a draft Board Order. The draft Board Order should be available for review by the next scheduled Public Facilities Committee meeting on November 9, 2011. The Committee decided to continue the public hearing until November 9, 2011.

REFERRED TO PUB. FACIL., PROG. & SERV., AND FINANCE COMMITTEES

#8-09 ALD. HESS-MAHAN LINSKY, ALBRIGHT, FREEDMAN, MANSFIELD, JOHNSON, HARNEY & VANCE proposing an ordinance requiring that the installation of synthetic in-filled turf athletic fields on city-owned property shall use sustainable, recyclable, lead-free, non-toxic products to the maximum extent feasible. [12/30/08 @9:55 AM]

PROGRAMS & SERVICES APPROVED 7-0 on 03/09/11

ACTION: PUBLIC FACILITIES APPROVED 5-0(Lappin and Lennon not voting)

NOTE: Ald. Hess-Mahan joined the Committee and explained that the item was docketed to improve the standards of the materials that the City uses for artificial turf. The Commissioner of Parks and Recreation supports the proposed ordinance and the Parks and Recreation Commission voted to approve the proposed ordinance. It is the expectation that the artificial turf fields will require replacement in 10 to 15 years. It would be good to use the least harmful products for the replacement. The cost of sustainable, recyclable, lead-free, non-toxic turf in-fill

products are no longer cost prohibitive and many companies now produce it. The Committee felt that the proposed ordinance would be beneficial to the City and voted unanimously to support it.

#279-11 ALD. YATES requesting a report from the Chief Administrative Officer as to when the topsoil stored at the Department of Public Works Elliot Street Yard will be used at the Newton North High School fields. [09/26/11 @2:37 PM]
ACTION: NO ACTION NECESSARY 6-0 (Lennon not voting)

NOTE: The topsoil stored at the Elliot Street Public Works Yard is currently being transported and used for the construction of the fields at Newton North High School. The topsoil should be entirely relocated in the next week or two; therefore, the Committee voted unanimously in support of a motion for no action necessary.

#385-07 ALD. SCHNIPPER AND GENTILE updating the Public Facilities Committee on the progress of the Newton North High School Project. [11/21/07 @ 10:23 AM]
ACTION: HELD 6-0 (Lennon not voting)

NOTE: The project will be completed by Thanksgiving. The ball fields and parking lot adjacent to Lowell Avenue are in process and without any issues. The fields are being seeded for grass as the soil is being laid and the loam will be spread on the fields next week. The parking lot on Lowell Avenue is expected to be paved next week. There is ongoing discussion surrounding what type of fencing should be used to protect cars and the Lowell Avenue abutters located behind the ball fields. When a decision on fencing is reached, it will be reported to the Committee.

The work on solving the drainage issues in a small section of the soccer field is ongoing. The trench located around the soccer field has been re-sodded and the drainage pipe repaired. The soccer field is being drilled and the holes filled with sand to address the previously reported compaction issues associated with the soccer field. The experts consulted on this issue believe that the work should resolve the compaction problems.

Four spruces have been planted on Walnut Street to replace the four dead trees located there. There are additional plantings available for use on the site; however, there are still some areas of the site that have not been planted. The fencing along Hull Street is being removed but there is some question on whether it should be replaced. There is some concern that the steep hillside would be used for sledding. There is safety issued related to the sledding, due to the large number of trees located there and the likelihood of collision. Currently, the fence is not being replaced but that may change if it is deemed necessary to improve safety.

The City Engineer informed the Committee that the relocation and acceptance of Elm Road is almost ready to be presented to the Board of Aldermen. The road needs to be taken as a public way, as discussed during the planning for the new high school.

Ald. Crossley requested an update from the Public Building Department on energy consumption at the new school. The Chairman agreed to invite a representative of the Public Buildings Department and the person who was recently hired by the School Department to oversee the mechanical systems at the schools to update the Committee. A motion to hold the item was made and approved unanimously.

REFERRED TO PROG & SERV, PUB. FAC. AND FINANCE COMMITTEES

#130-11 PAUL COLETTI, ALD. SANGIOLO, DANBERG, & JOHNSON requesting Home Rule Legislation to create a Capital Preservation Fund for the City of Newton modeled on the Community Preservation Fund to address the capital needs of the City. [04/11/11 @9:42 PM]
FINANCE VOTED NO ACTION NECESSARY 7-0 on 10-12-11

ACTION: NO ACTION NECESSARY 6-0 (Lennon not voting)

NOTE: Ald. Danberg explained that she is prepared to make a motion for no action necessary on the item. Additional work and language for the Home Rule Petition need to be discussed before the item can move forward. Therefore, after the additional work is completed the item will be refiled.

Respectfully submitted,

Sydra Schnipper, Chairman

VitaTech Engineering, LLC

Site RF Exposure Compliance Report

NextG Networks
Garden City, NY

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Fredericksburg, VA 24406
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Table of Contents

1. Purpose

The purpose of this report is to document the NextG Distributed Antenna node sites to demonstrate compliance with RF Exposure Guidelines at each node site with FCC and OSHA regulations and was commissioned by the Village of Garden City This report also provides guidance to personnel who MUST access the site. This report can be used in conjunction with other site guidelines as a comprehensive RF Safety Plan for site personnel.

2. Site Description

The 9 (nine) sites are a Distributed Antenna System (DAS) network for NextG Communications. The sites are located as follows:

Node #	Scheduled/ Actual Construction Date	Property Addresses surrounding node
NYD7111	TBD	116 Sackville Rd
NYD7112	7/1/10	123 Stewart Ave
NYD7113	7/6/10	28 Edgemere Rd
NYD7114	9/14/10	89 Newmarket Rd
NYD7115	7/8/10	81 Brompton Rd
NYD7119	8/18/10	128 Wethersfield Rd
NYD7120	7/14/10	248 12th St
NYD7121	9/15/10	220 Clinton Road
NYD7122	8/2/10	31 Maxwell Rd

73°40'27.641"W
40°43'30.659"N

73°40'22.242"W
40°43'15.724"N

73°39'57.841"W
40°43'49.254"N

73°39'18.735"W
40°43'27.177"N

73°37'30.191"W
40°43'54.722"N

73°37'54.253"W
40°43'54.715"N

73°37'11.269"W
40°43'58.547"N

73°37'26.485"W
40°44'17.825"N

Locality: Village of Garden City
Description: Pole-mounted DAS nodes
Address: (note table above)

This site appears to have the following services collocated:
Cellular + PCS

3. Quick Look

1. Identified Hazard Zones

RF exposure risk for this site is as follows:
General Public: LOW
Occupational: MEDIUM

*Quick Look is a qualitative assessment of the likelihood excessive exposure for those accessing the site. The exposure Maps detailed in Appendix-A give a more precise worst-case analysis of specific exposure potential at specific locations at the site.

2. Occupational RF Safety Procedures

- Follow the specific guidance of the RF Safety Plan
- Read and obey all posted safety signs
- Wear an RF Monitor if possible around RF sources
- NEVER directly touch antennas
- Maintain as much distance as reasonably possible between workers and RF Sources (ALARA – As Low As Reasonably Achievable)
- Be Aware of the "Safe" area(s) at the site where RF exposure is below General Public/Uncontrolled limits for Cool down purposes
- Follow the guidelines in the Time Exposure Analysis when you must work in RF active areas of this site.

3. General Public RF Safety Procedures

- Read and obey all posted safety signs
- Do not attempt to access the DAS node poles

4. General Public Areas of Concern

Based on simulations, there are no areas of concern for exceeding FCC guidelines for RF exposure for residences in the vicinity or other members of the General Public.

Based on worst-case simulations, backyard areas of residences near the DAS poles will have less than 2 percent of the FCC RF exposure limits for the General Public, the most stringent exposure class. The maximum exposure areas around the DAS nodes are the second storey areas of residences, nonetheless, these areas still fall well below the FCC limits for General Public RF exposure, and mitigation measures are not recommended. Measurements of as-installed configurations are lower than simulated RF fields (likely because Measurements measured actual power, which was less than maximum, and simulations utilized maximum output power. These measurements are documented in Appendix A.

5. Use/Application of this Report

There are generally many operational RF emitters or carriers operating at a site. Some may use common antennas, or be camouflaged ("stealth") or otherwise not be obvious. These systems may not always be on or may only be operating at a fraction of their maximum power. For safety purposes, the maps shown indicate the worst-case environment with all emitters operating at their known, or if not provided, presumed maximum power based on application and service type. For this study, 100 watts and 10dBi Gain isotropic antennas were used. Measured RF field levels may be significantly lower at any given point in time. The maps in this report are used to show the areas that could be a hazard – and no areas are shown as hazardous in any of the analyses.

GENERAL PUBLIC
The FCC defines two levels of RF exposure "General Public" and "Occupational". For the general public this report contains a "General Public" map. Areas shown in **Red** indicate potential exposure exceeding that allowed without the person being aware of the risk and being able to take action to maintain their safety. As a member of the general public class, you must read and understand this report, use caution, be aware of your surroundings, and DO NOT enter areas that exceed General Public exposure of 100% (See the General Public Exposure Map) without further training.

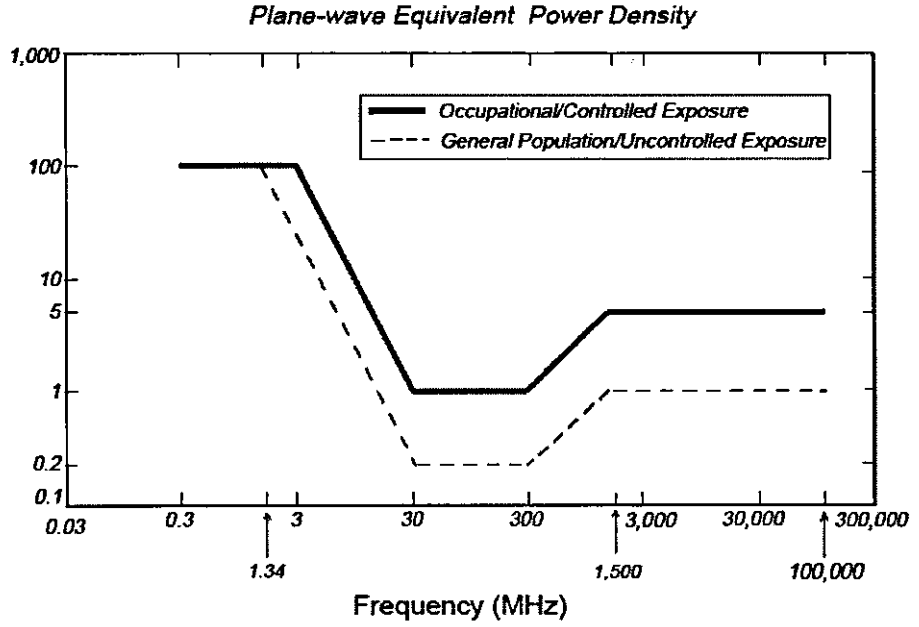
OCCUPATIONAL
The FCC defines two levels of exposure "General Public" and "Occupational". Occupational workers have received RF Safety Awareness training to aid them in working in RF environments. The Occupation Map would show in Red, those areas which require additional caution (there are none at ground-level), since they have the potential of exceeding occupational exposure levels (100%). The

Time Exposure Map defines the amount of time you can safely work in these areas (had any been defined) before 'Cooling down' in a low exposure area for 6 minutes. If you have an RF monitor the time defined can be used in conjunction with the monitor (proper use of the RF monitor is important, read your Users Manual). The Occupational and TEA maps were left out of this report as they are implied as unnecessary since less-stringent general public levels were not exceeded.

4. FCC Limits

This figure is from FCC OET-65 (note that left axis not indicated and is in milliwatts per square centimeter):

Figure 1. FCC Limits for Maximum Permissible Exposure (MPE)



NextG transmitters, as presently installed, are operating at 2100MHz, which corresponds to 1mW/cm^2

NOTE 1: **Occupational/controlled** limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

NOTE 2: **General population/uncontrolled** exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their

employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.
*Workers needing access to this site may need to have received RF Safety training.

5. Recommendations

a. Signage

Warning Signs on pole or poles within 20 feet advising of the RF Hazard should personnel climb or access the equipment on the pole

Signage should be posted at eye level where possible, and should be clearly visible to anyone in the immediate area. Proper signage was observed on poles.

b. Access Control

All areas around the DAS node poles (at ground level) can be accessed with no further precautions

c. General Public Exposure Mitigation

VitaTech does not recommend any further RF Safety mitigation measures for General Public exposure on any accessible areas around the DAS nodes.

d. Occupational Exposure Mitigation

Use of an RF personal monitor is encouraged if one is available. Time Exposure Averaging should be used if work must be accomplished in an identified exposure zone. Cool off time in a low exposure area is required when working exposure areas above occupational level. This does not apply to ground level at any of the assessed sites.

e. Maintenance Technician Exposure Mitigation

RF Safety Training should be considered for technicians at this site. Use appropriate Lock Out/Tag Out procedures while working on equipment. Do not operate antennas in an enclosed area, or with shielding removed. An RF personal monitor is strongly recommended when working near antennas. Significant changes or upgrades may require the creation of a new RF Safety Plan.

f. Construction/Modification Exposure Mitigation

For site modification changes notify the RF Site Contact. Site modification may require a new Safety Plan and power down of equipment. Use appropriate Lock Out/Tag Out procedures as needed.

6. Disclaimer

This report is based on information provided to VitaTech, information gathered at the site and prior experience when complete information is unavailable. Should the site change or more accurate information become available, contact VitaTech to create a new RF Safety plan. Recommendations in this report can be materially affected by inaccuracies and changes in the RF environment at the site.

This report is related only to RF Safety Issues. If the recommendations in this report conflict with any other safety procedures, or regulations, contact VitaTech and the party responsible for the conflicting procedures so that they can be resolved and a confusing conflict does not arise for personnel at the site.

VitaTech cannot assume responsibility for failure to properly follow the essential elements of a comprehensive RF safety program, but VitaTech can assist you in implementing all elements a comprehensive RF safety program for all your sites, as recommended by OSHA below:

From Robert A. Curtis, Director US DOL/OSHA Health Response Team:

Element 1: Utilization of RF source equipment which meet applicable RF and other safety standards when new and during the time of use, including after any modifications.

Element 2: RF hazard identification and periodic surveillance by a competent person who can effectively assess RF exposures.

Element 3: Identification and Control of RF Hazard Areas.

Element 4: Implementation of controls to reduce RF exposures to levels in compliance with applicable guidelines (e.g., ANSI, ICNIRP), including the establishment of safe work practice procedures.

Element 5: RF safety and health training to ensure that all employees understand the RF hazards to which they may be exposed and the means by which the hazards are controlled.

Element 6: Employee involvement in the structure and operation of the program and in decisions that affect their safety and health, to make full use of their insight and to encourage their understanding and commitment to the safe work practices established.

Element 7: Implementation of an appropriate medical surveillance program.

Element 8: Periodic (e.g., annual) reviews of the effectiveness of the program so that deficiencies can be identified and resolved.

Element 9: Assignment of responsibilities, including the necessary authority and resources to implement and enforce all aspects of the RF protection program.

7. Report Updates

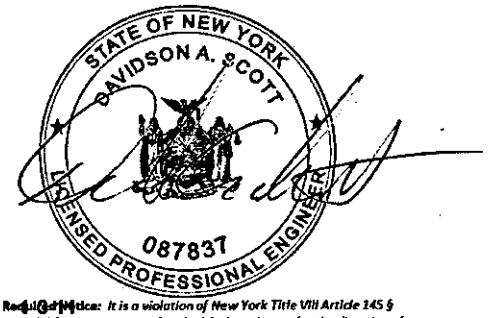
For updates of this report, contact VitaTech Engineering (540-286-1984) or dscott@vitatech.net.

8. Engineering Statement

This report has been generated utilizing customer-supplied data, 3rd party sources, and site survey information as needed using sound engineering practice and is believed to be the best available for this site. The RF modeling used to generate the plots and other data regarding the RF environment of this site meets or exceeds the FCC modeling methodology as listed in OET-65 for both General Public and Occupational exposure levels.

The results and recommendations listed in this report are believed to be true and correct as of the date of this analysis. A method for updating this report to the latest available has been supplied.

Any questions about this report should be directed to VitaTech Engineering (540-286-1984) or dscott@vitatech.net).



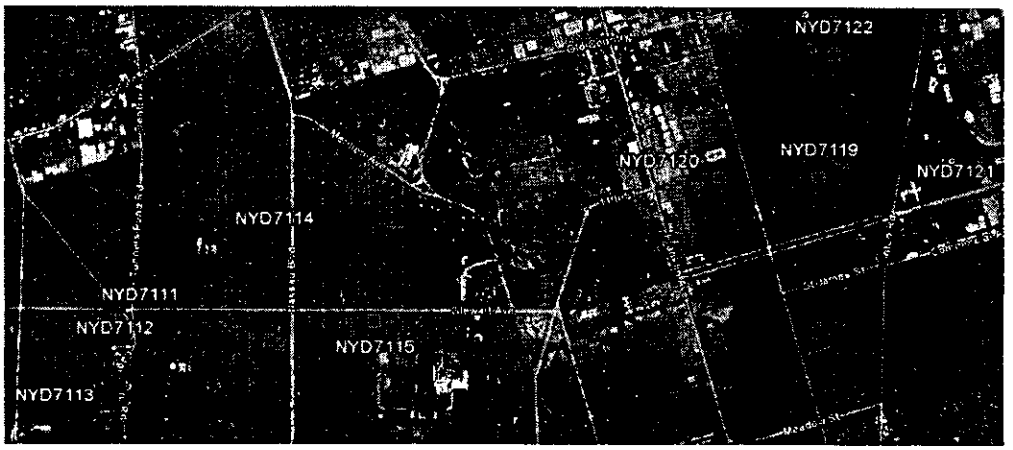
Notice: It is a violation of New York Title VIII Article 145 § 7209 (2) for any person, unless he/she is acting under the direction of a licensed professional engineer to alter this document in any way.

Davidson A. Scott, P.E.
Vice-President, Engineering
VitaTech Engineering
dscott@vitatech.net

9. Appendix - A

a. Measurement Conditions

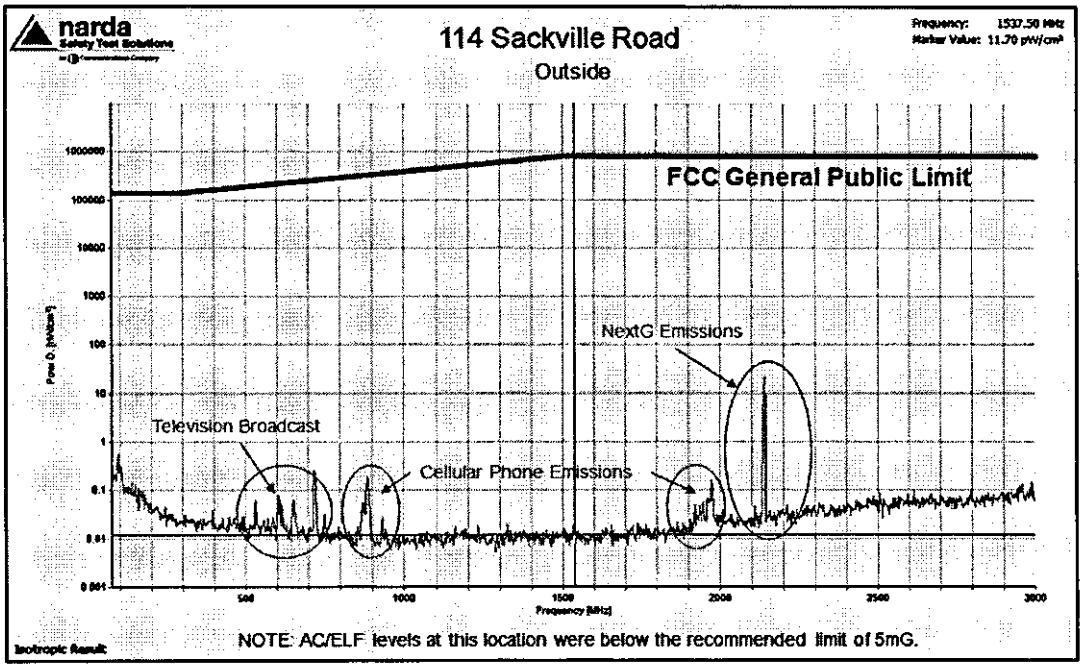
Vitatech Engineering utilized a Narda SRM-3000 frequency-aware RF Safety Probe. Measurements were taken in the following indicated areas:

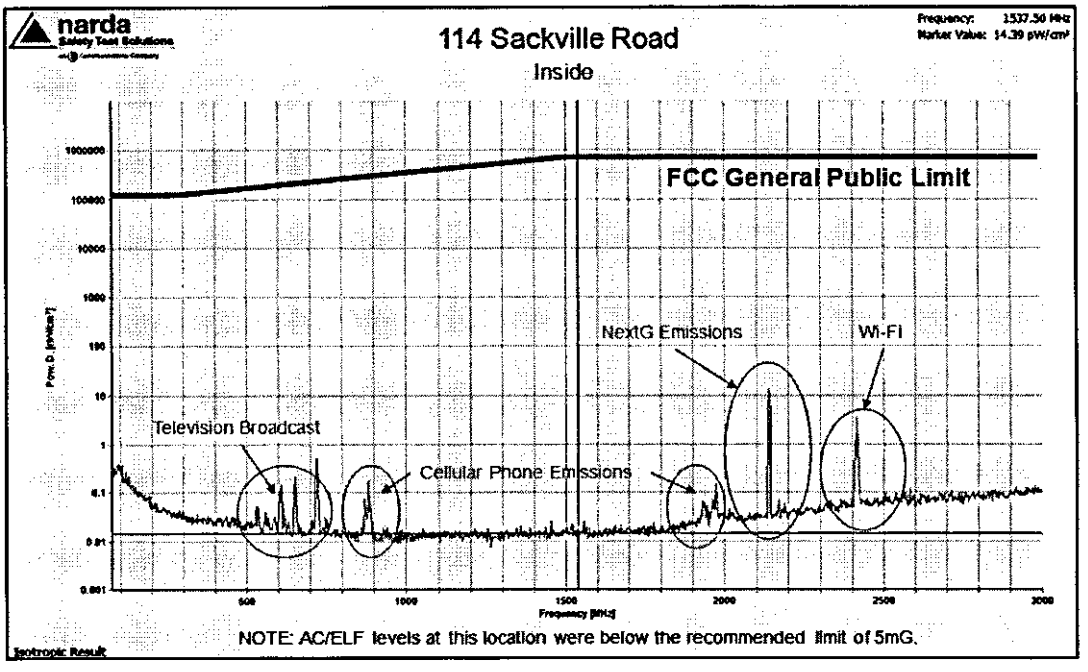


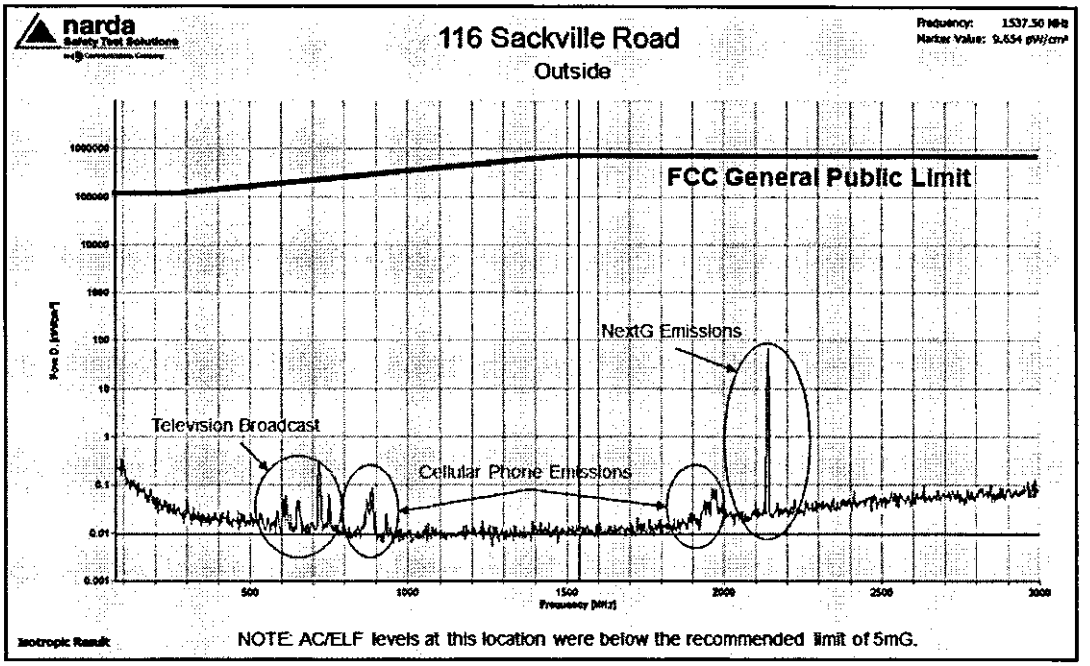
Map 2. Measurement Areas

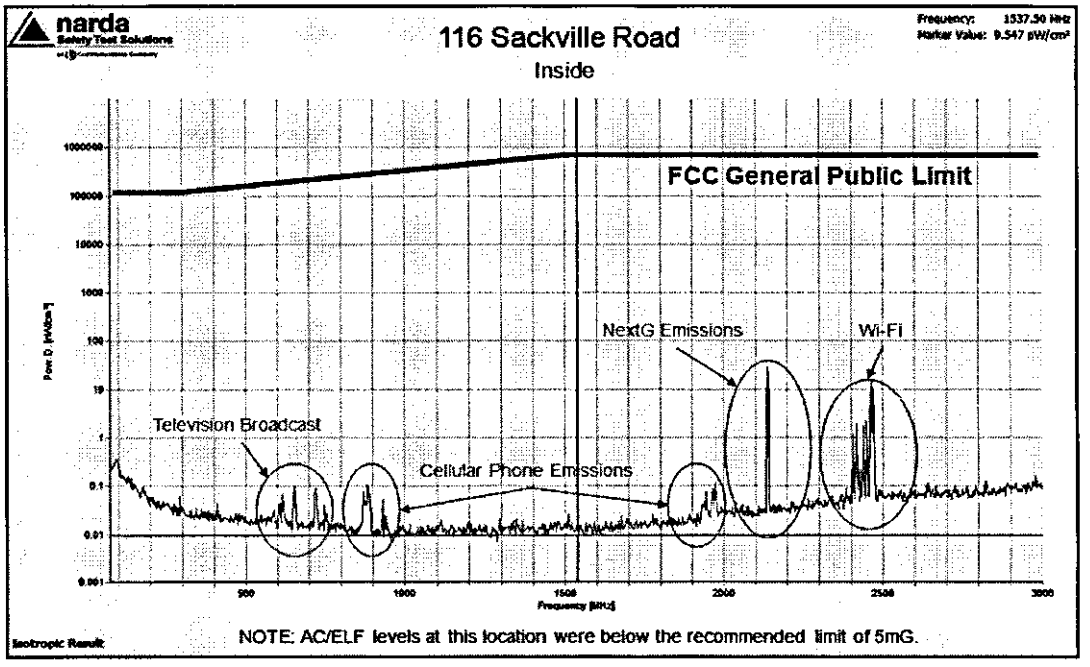
The areas scanned indicate independent data sets that represent peak measurements taken over time. It is possible for intermittent transmissions to be not captured, but the data represents best available measurements at the time of the survey.

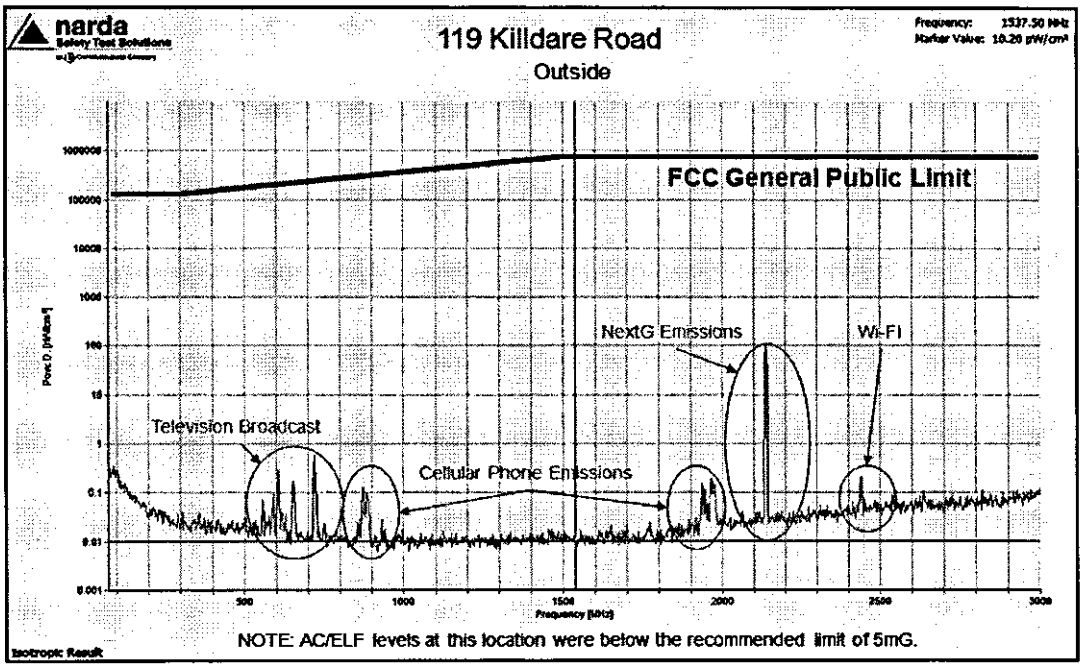
Measurement parameters:
Node NYD-7111

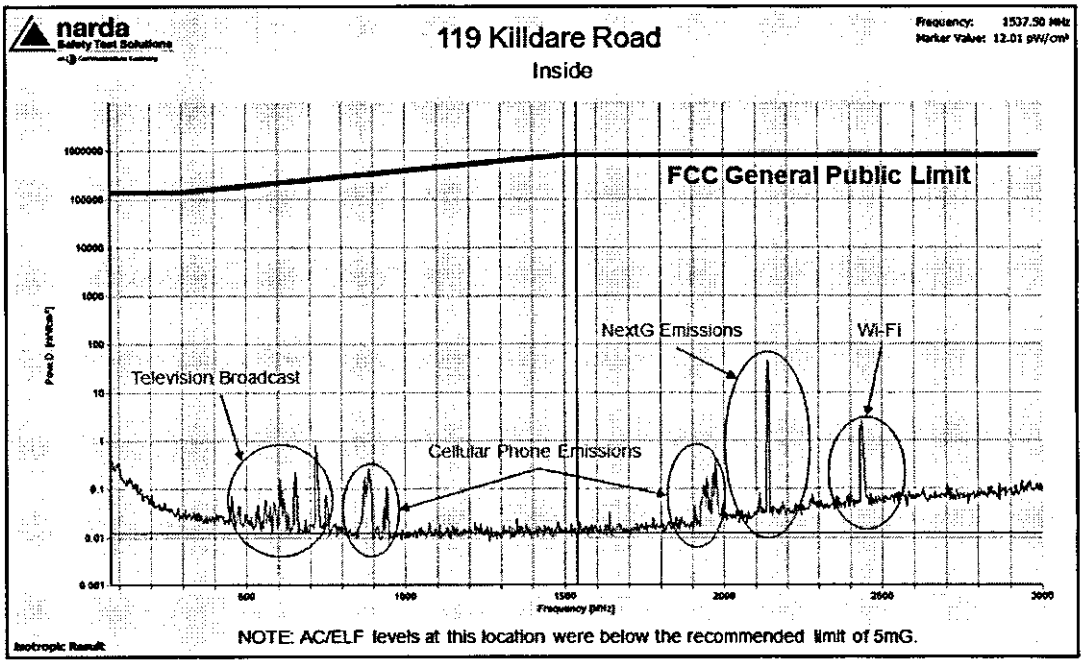


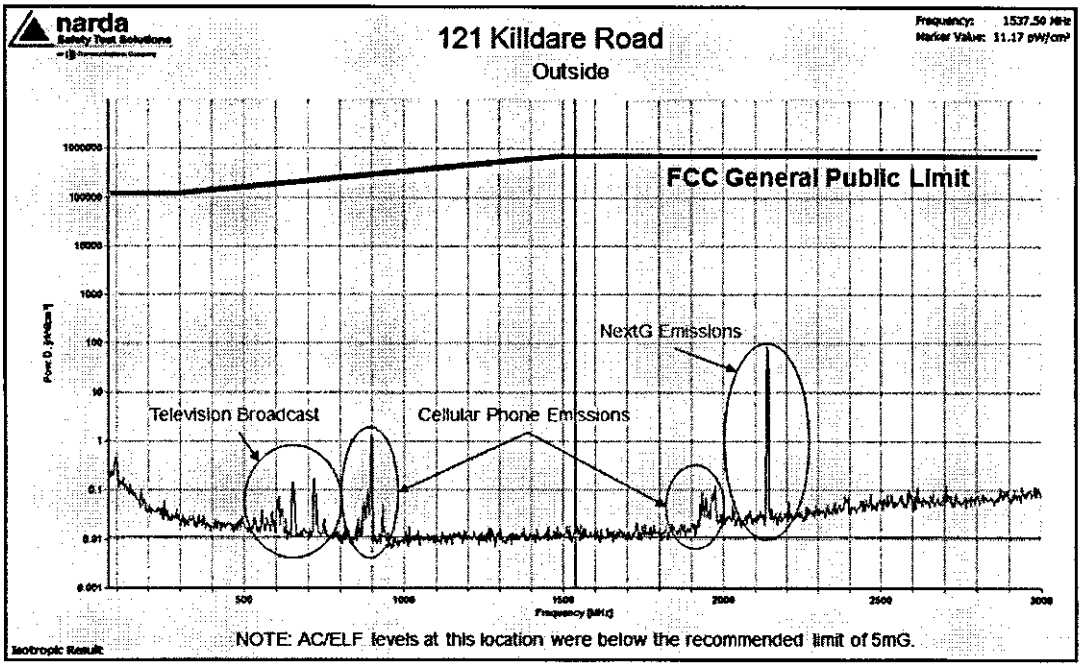


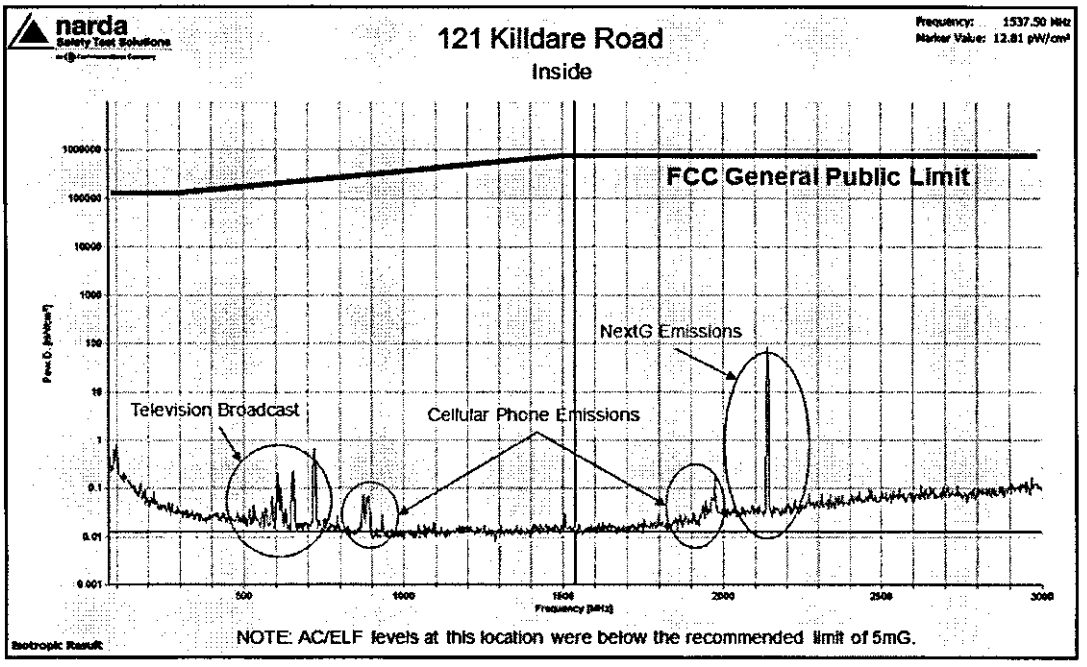

narda
116 Sackville Road
Outside
FCC General Public Limit
NextG Emissions
Television Broadcast
Cellular Phone Emissions
Isotropic Result
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.


narda
116 Sackville Road
Inside
FCC General Public Limit
NextG Emissions
Wi-Fi
Television Broadcast
Cellular Phone Emissions
Isotropic Result
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.

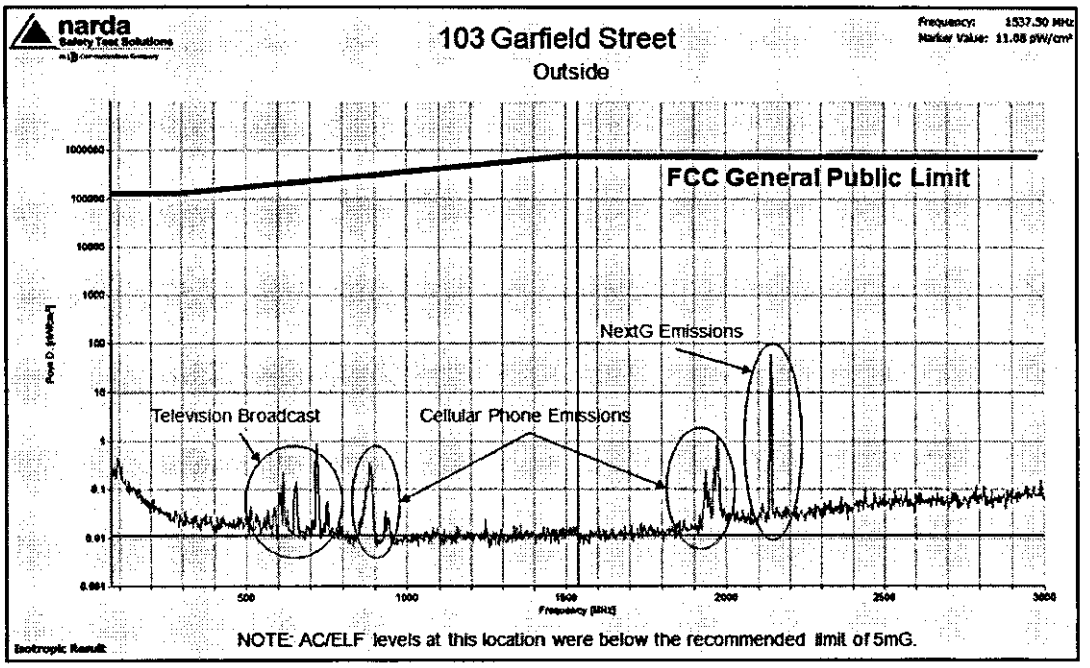

narda
119 Killdare Road
Outside
FCC General Public Limit
NextG Emissions
Wi-Fi
Television Broadcast
Cellular Phone Emissions
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.

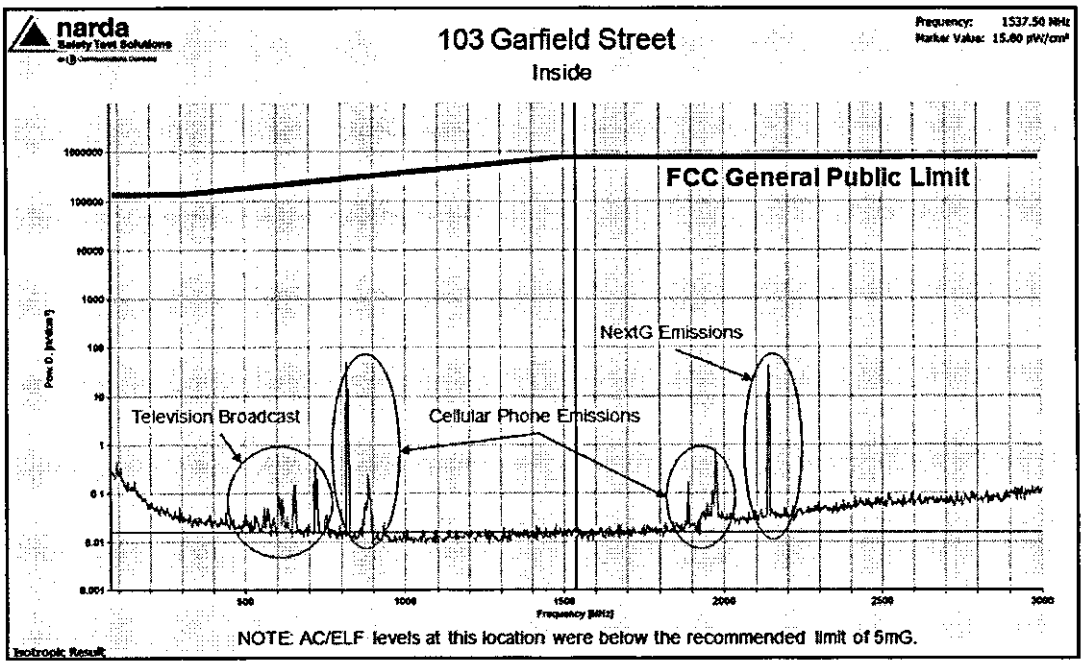

narda
119 Killdare Road
Inside
FCC General Public Limit
NextG Emissions
Wi-Fi
Television Broadcast
Cellular Phone Emissions
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.

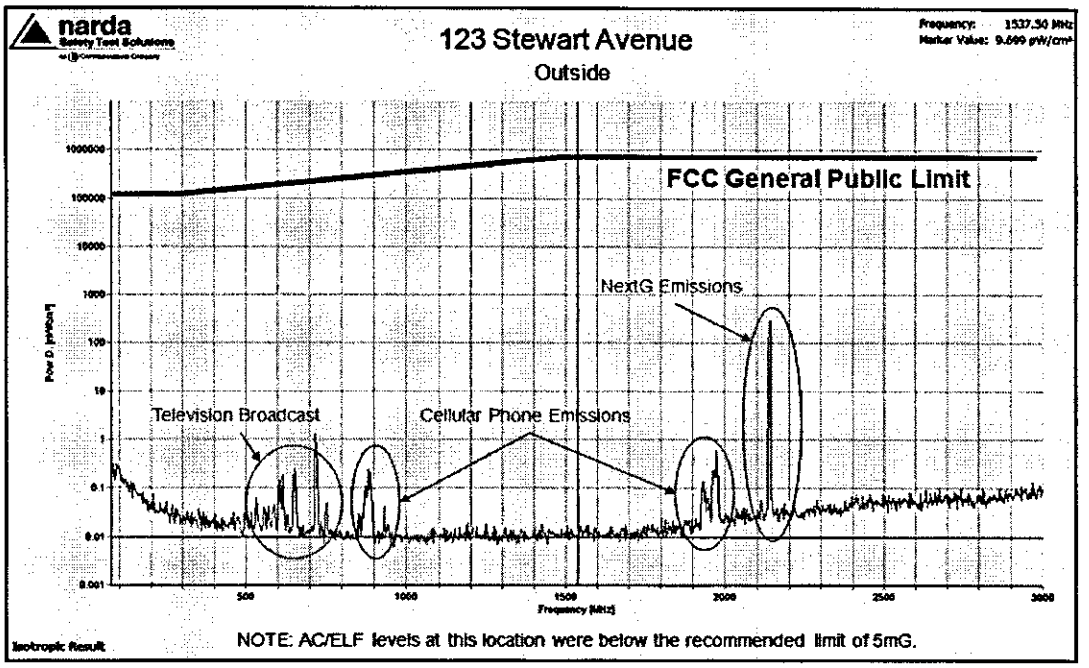

narda
121 Killdare Road
Outside
FCC General Public Limit
NextG Emissions
Television Broadcast
Cellular Phone Emissions
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.

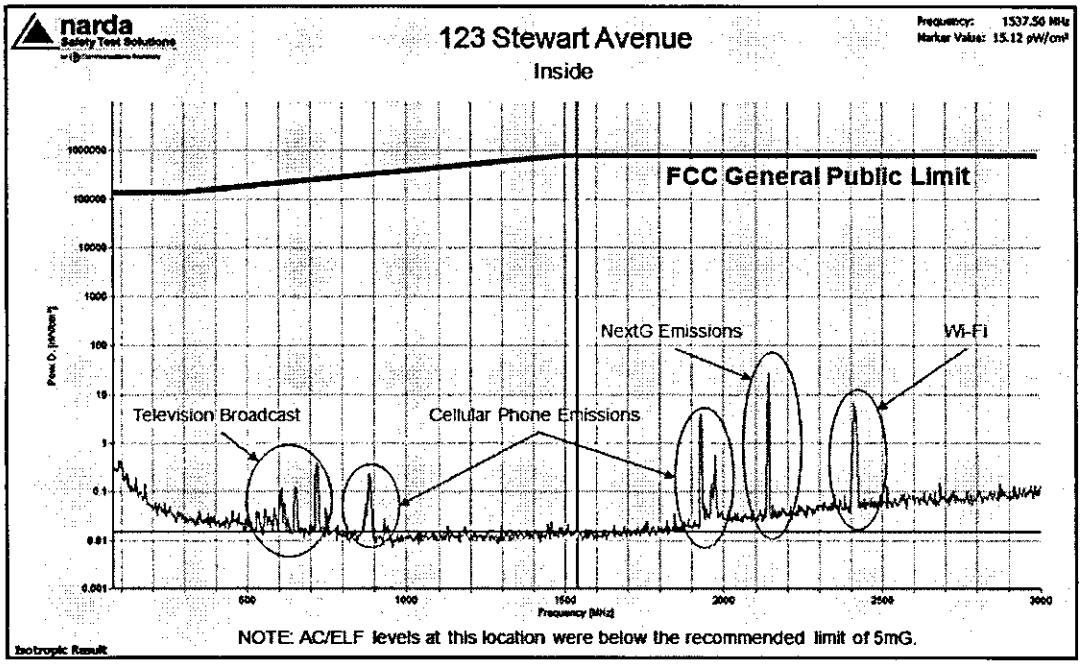

narda
121 Killdare Road
Inside
FCC General Public Limit
NextG Emissions
Television Broadcast
Cellular Phone Emissions
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.

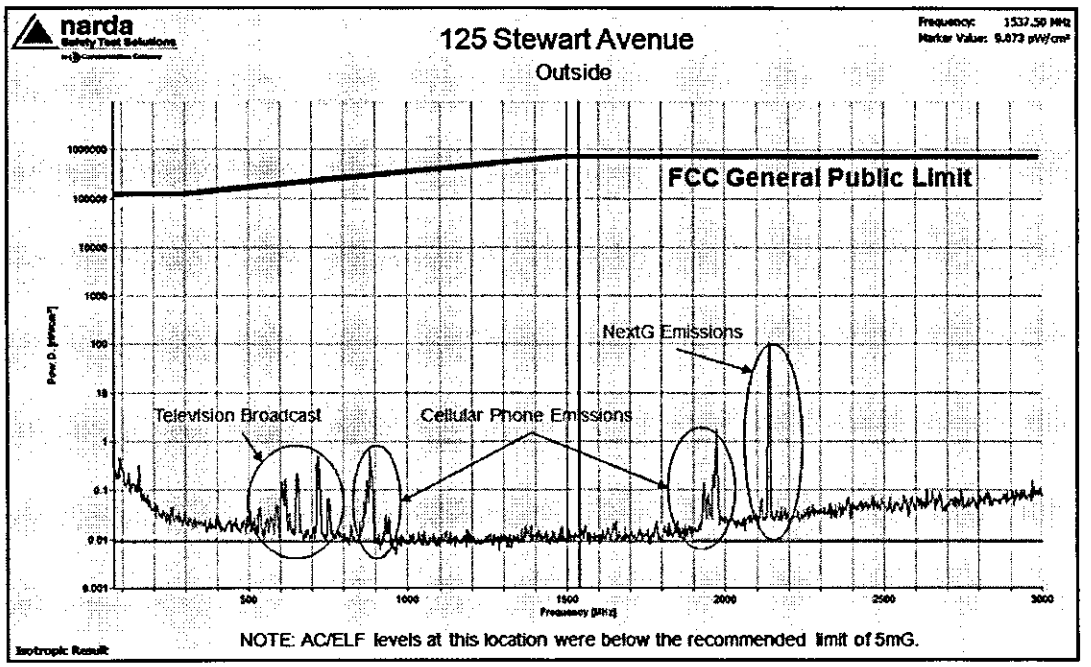
Node NYD-7112

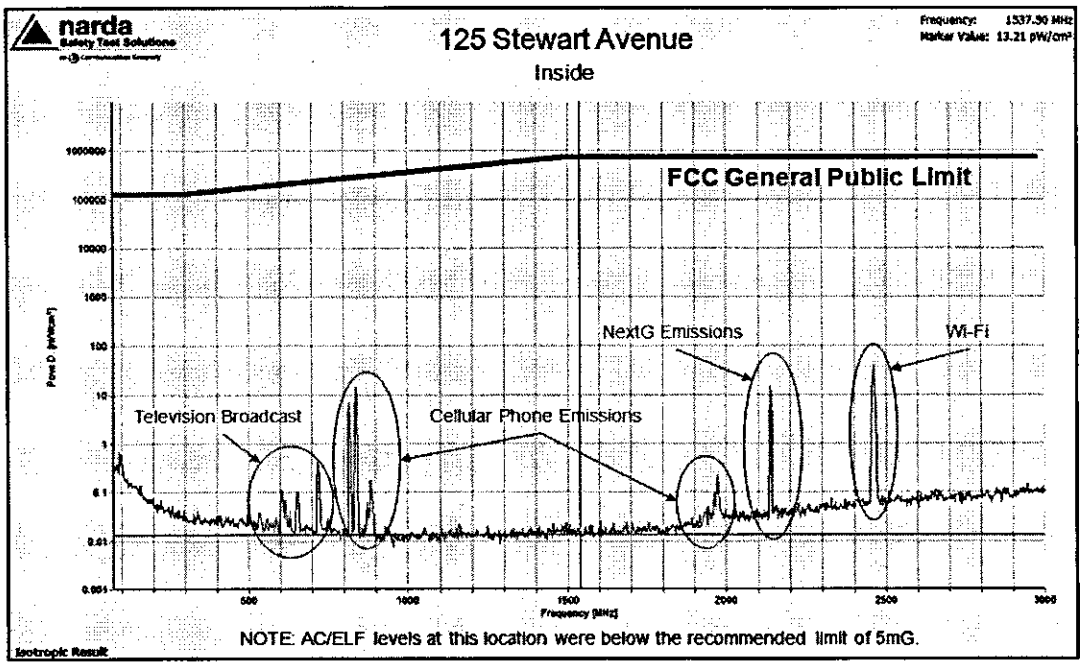




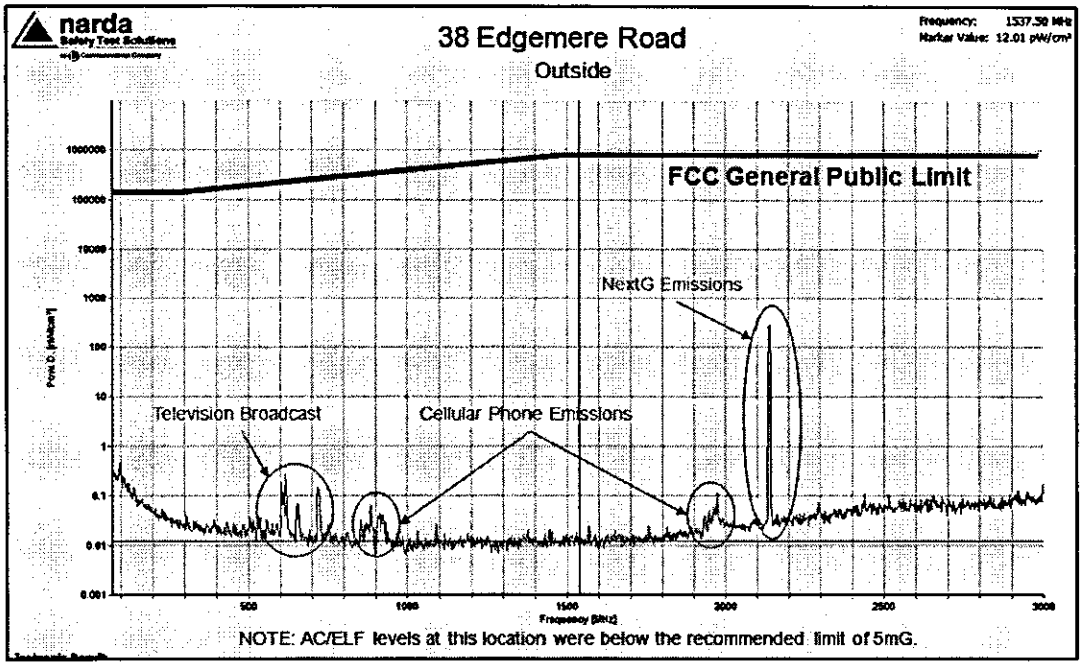

narda
123 Stewart Avenue
Outside
FCC General Public Limit
NextG Emissions
Television Broadcast
Cellular Phone Emissions
Isotropic Result
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.

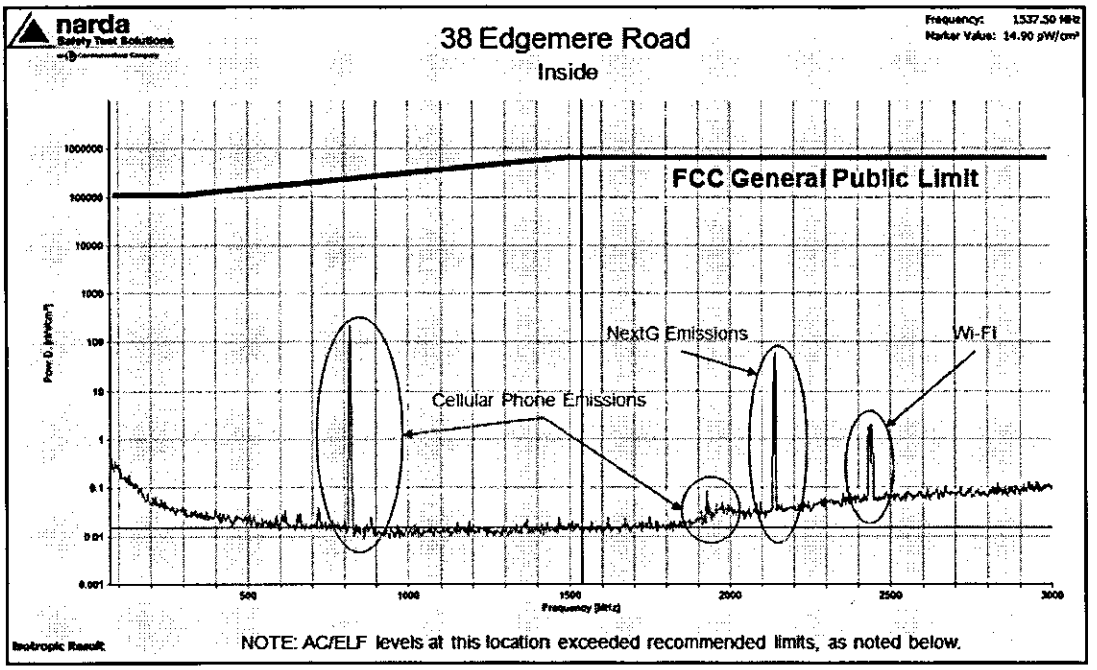

narda
123 Stewart Avenue
Inside
FCC General Public Limit
NextG Emissions
Wi-Fi
Television Broadcast
Cellular Phone Emissions
Isotropic Result
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.


narda
125 Stewart Avenue
Outside
FCC General Public Limit
NextG Emissions
Television Broadcast
Cellular Phone Emissions
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.

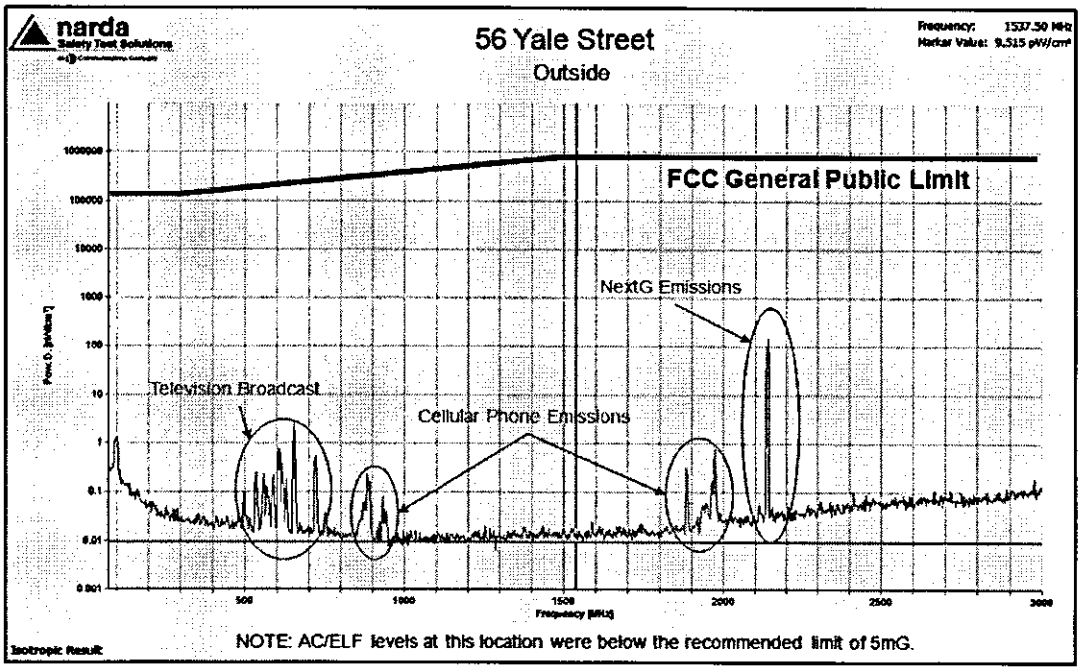

narda
125 Stewart Avenue
Inside
FCC General Public Limit
NextG Emissions
Wi-Fi
Television Broadcast
Cellular Phone Emissions
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.

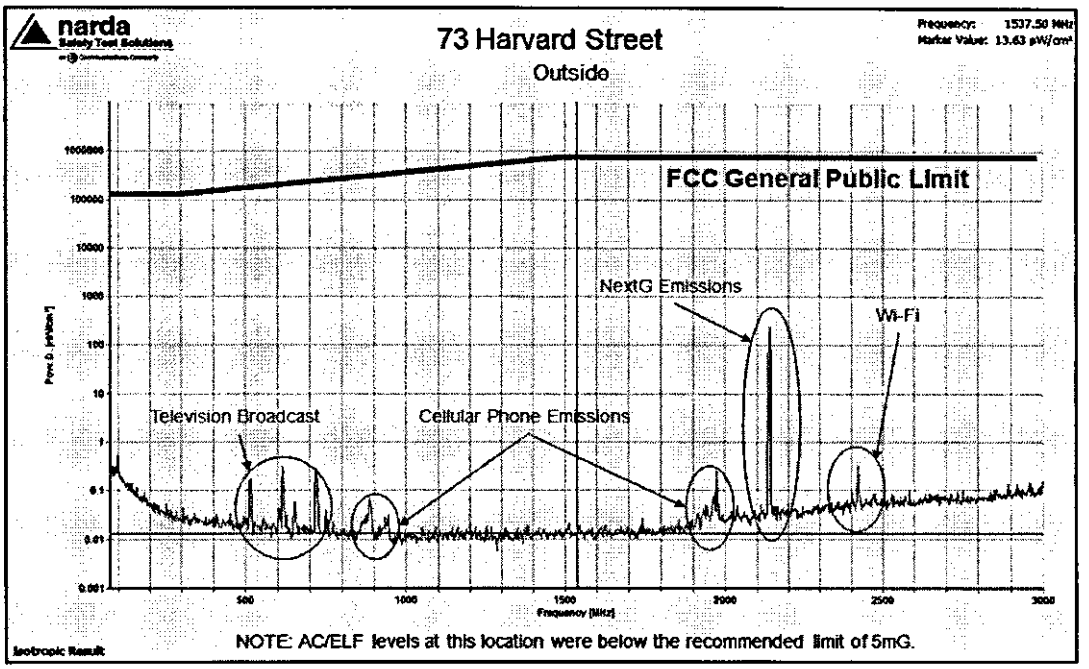
Node NYD-7113



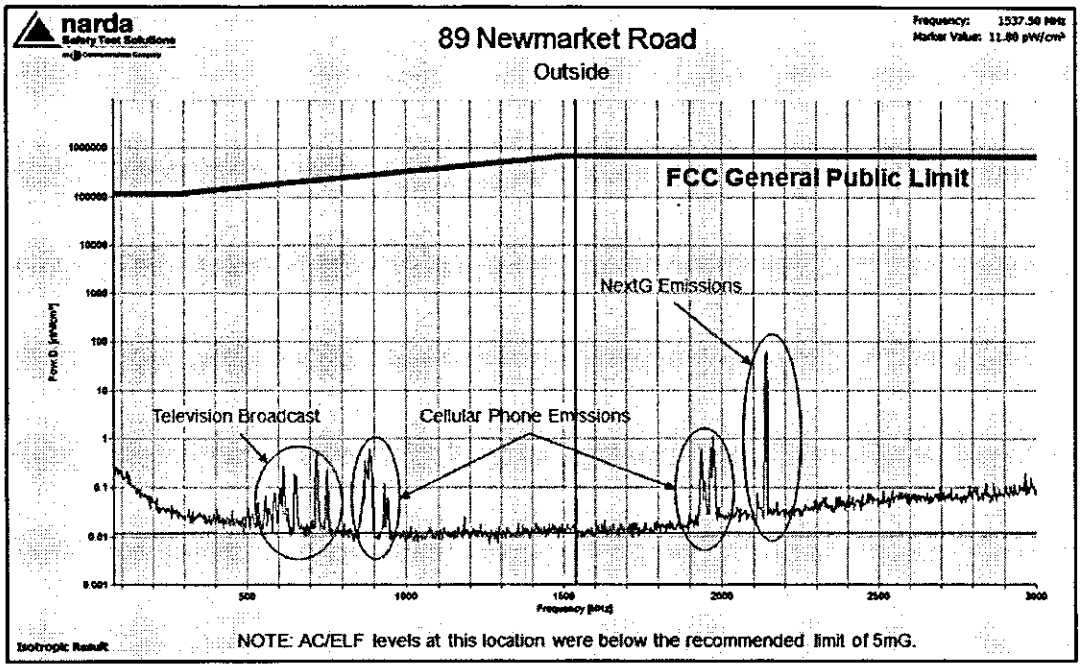


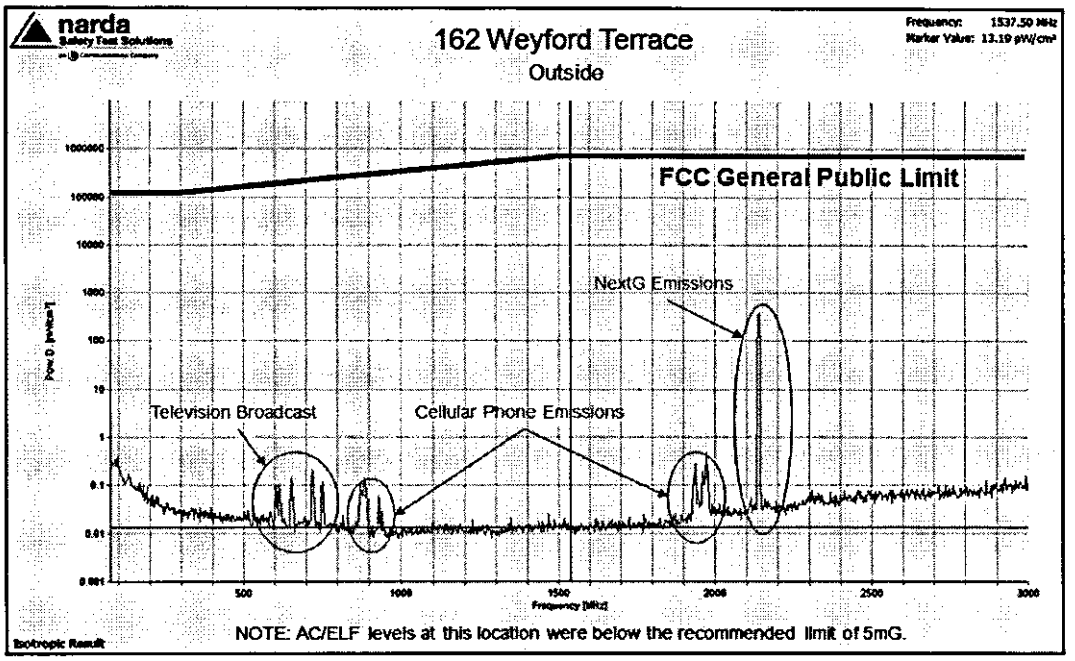
AC/ELF Fields exceeding 5mG were detected. Owners were advised to modify sleeping arrangements away from power panel.

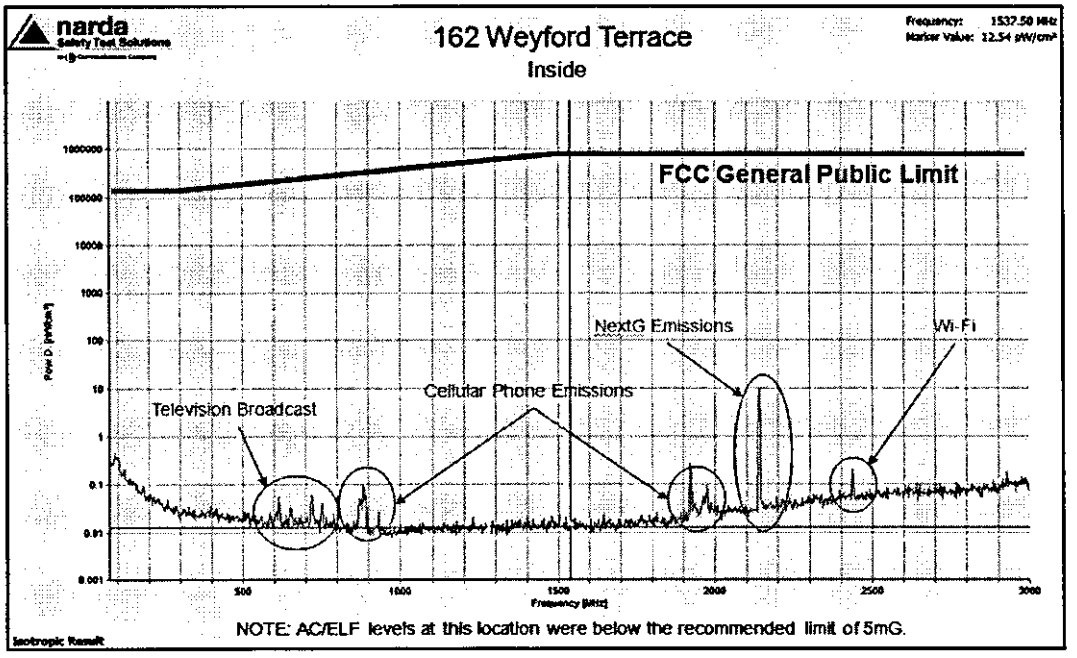

narda
56 Yale Street
Outside
FCC General Public Limit
NextG Emissions
Television Broadcast
Cellular Phone Emissions
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.

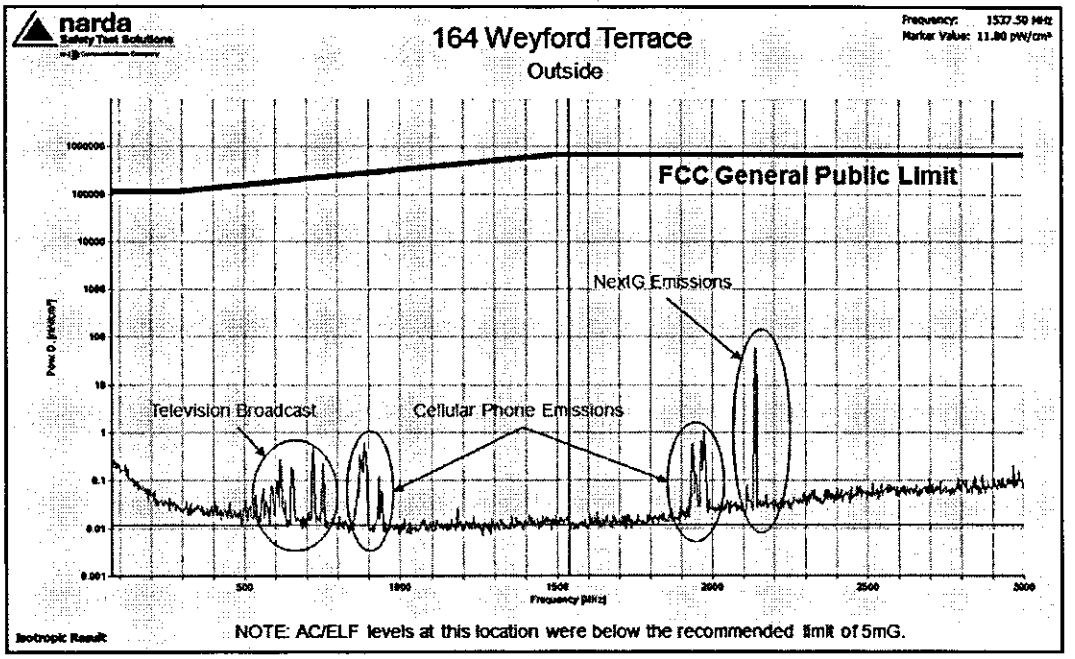

narda
73 Harvard Street
Outside
Frequency: 1537.50 MHz
Marker Value: 13.63 µW/cm²
FCC General Public Limit
NextG Emissions
Wi-Fi
Television Broadcast
Cellular Phone Emissions
Frequency [MHz]
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.

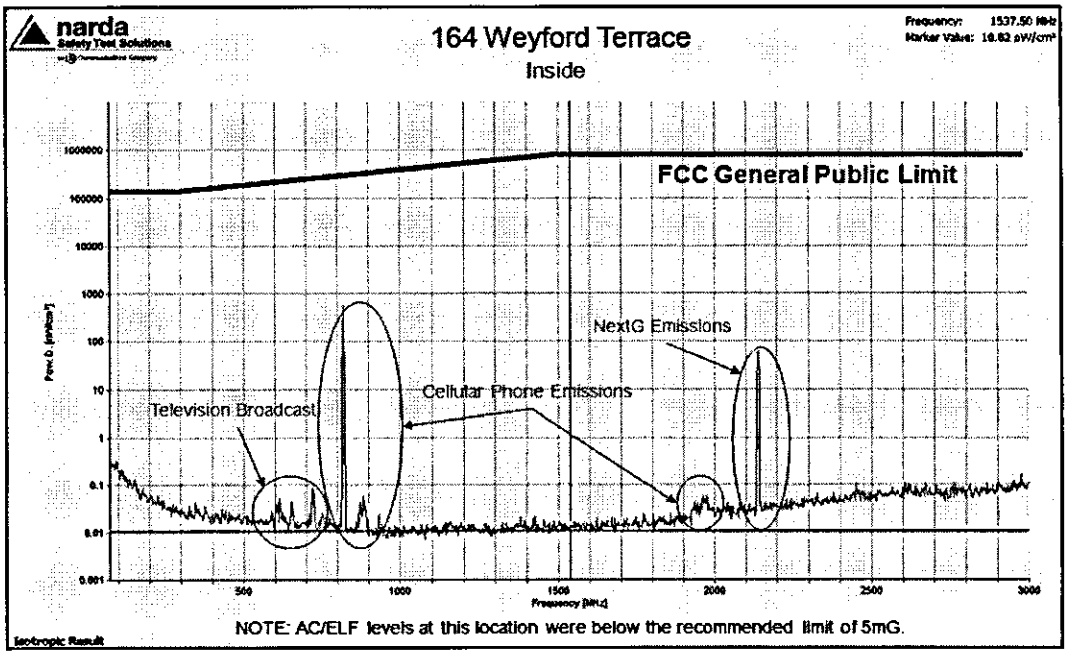
Node NYD-7114



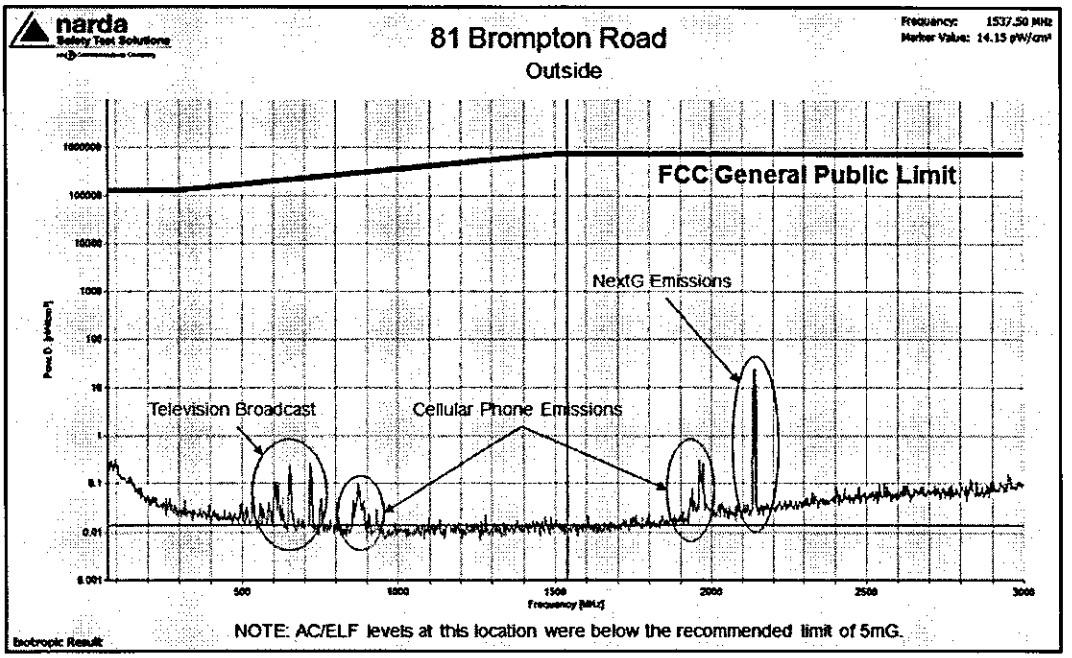

narda
Safety Test Solutions
162 Weyford Terrace
Outside
Frequency: 1537.50 MHz
Marker Value: 13.19 pW/cm²
FCC General Public Limit
NextG Emissions
Television Broadcast
Cellular Phone Emissions
Pow D [pW/cm²]
Frequency [MHz]
Isotropic Result
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.

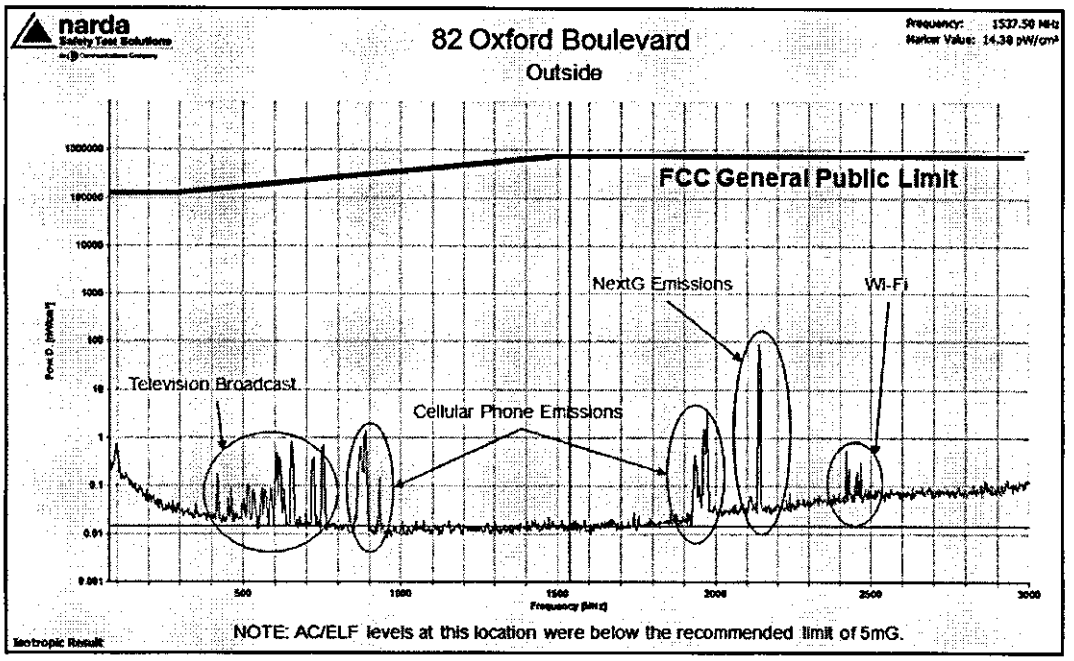

narda
Safety Test Solutions
162 Weyford Terrace
Inside
Frequency: 1537.50 MHz
Marker Value: 12.54 pW/cm²
FCC General Public Limit
NextG Emissions
Wi-Fi
Cellular Phone Emissions
Television Broadcast
Pow D [pW/cm²]
Frequency [MHz]
Isotropic Result
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.

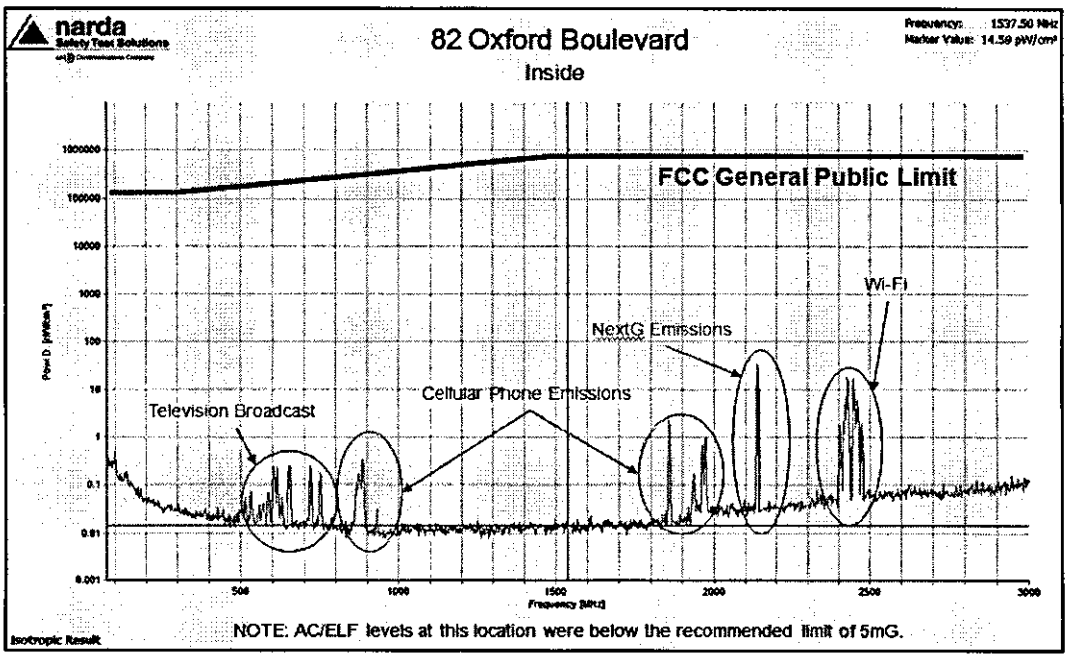

narda
Safety Test Solutions
164 Weyford Terrace
Outside
FCC General Public Limit
NextG Emissions
Television Broadcast
Cellular Phone Emissions
Isotropic Result
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.

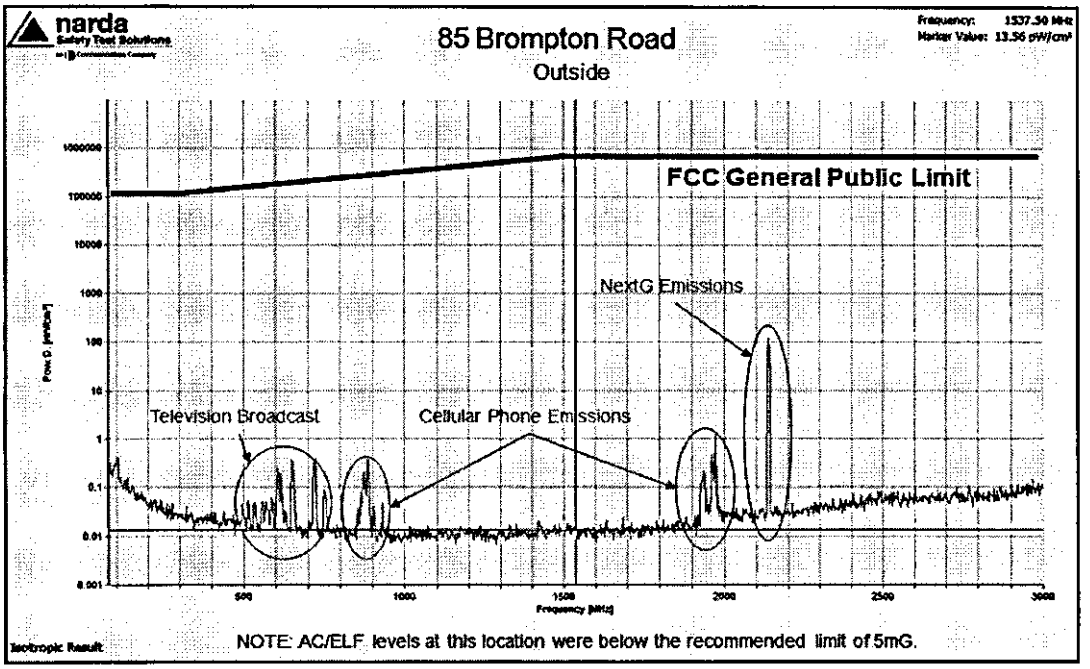

narda
Safety Test Solutions
164 Weyford Terrace
Inside
FCC General Public Limit
NextG Emissions
Cellular Phone Emissions
Television Broadcast
Isotropic Result
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.

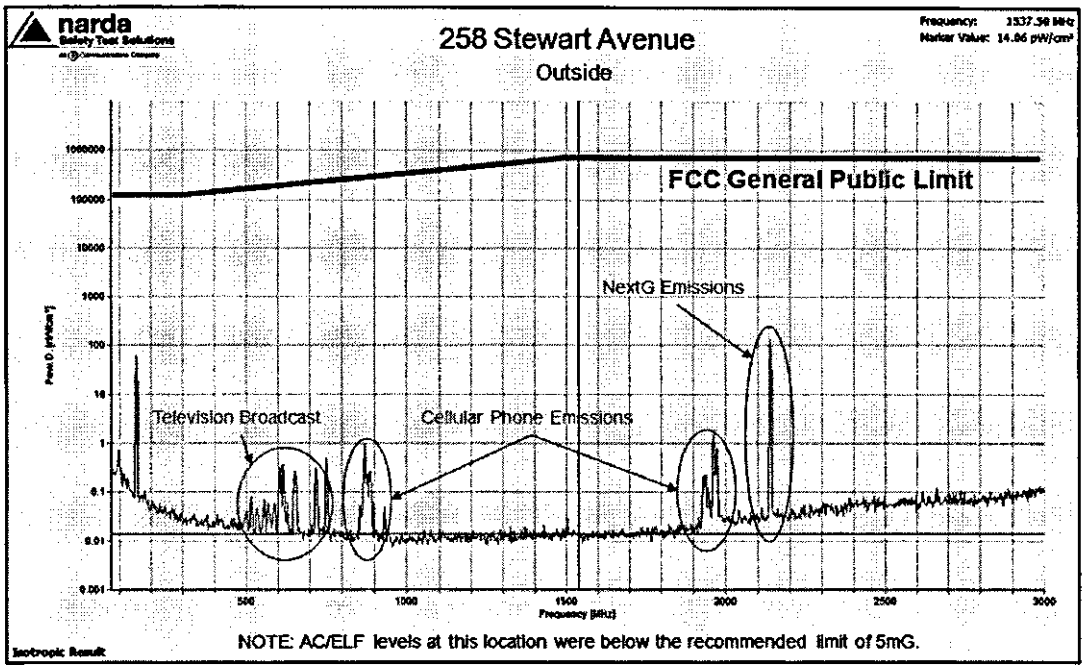
Node NYD-7115



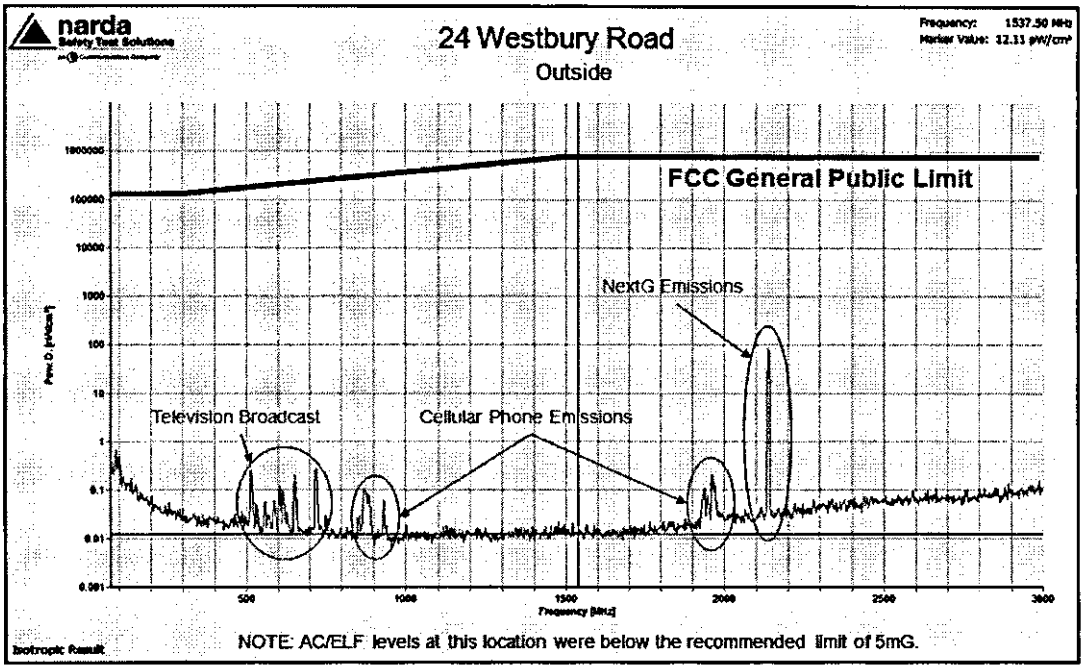

narda
82 Oxford Boulevard
Outside
FCC General Public Limit
NextG Emissions
Wi-Fi
Television Broadcast
Cellular Phone Emissions
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.

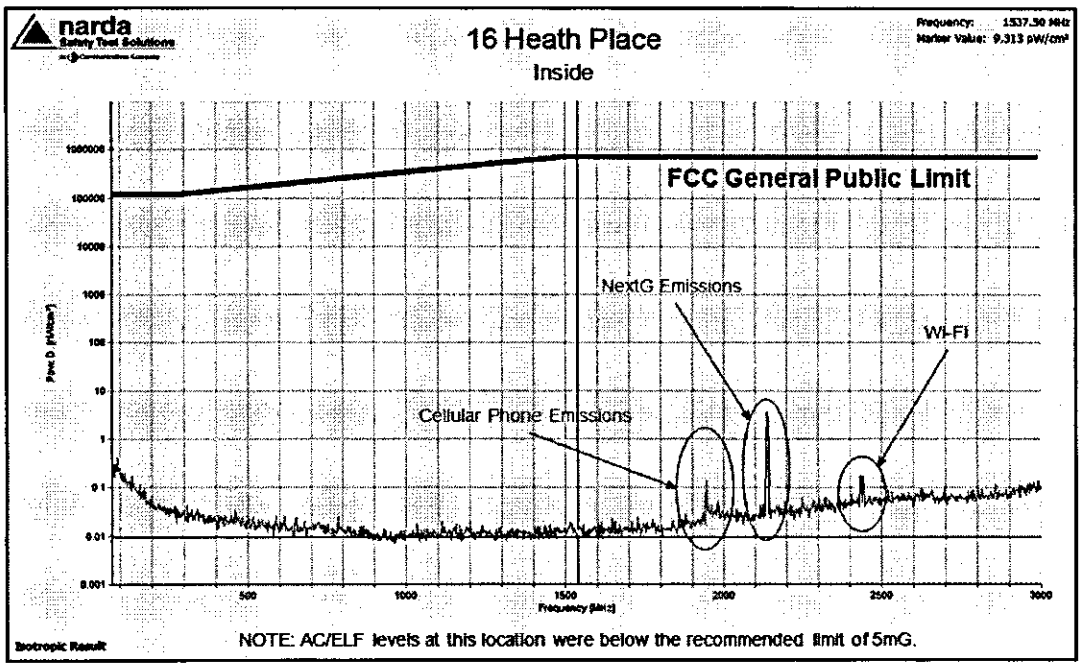

narda
82 Oxford Boulevard
Inside
FCC General Public Limit
Wi-Fi
NextG Emissions
Cellular Phone Emissions
Television Broadcast
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.

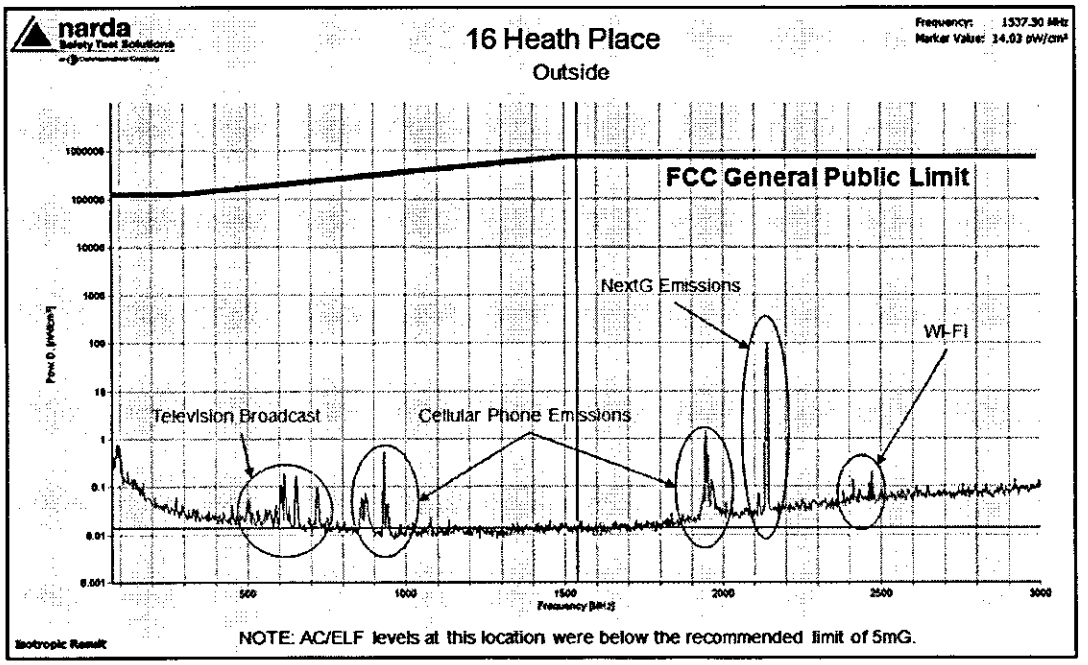

narda
85 Brompton Road
Outside
FCC General Public Limit
NextG Emissions
Television Broadcast
Cellular Phone Emissions
Frequency [MHz]
Isotropic Result
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.


narda
258 Stewart Avenue
Outside
FCC General Public Limit
NextG Emissions
Television Broadcast
Cellular Phone Emissions
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.

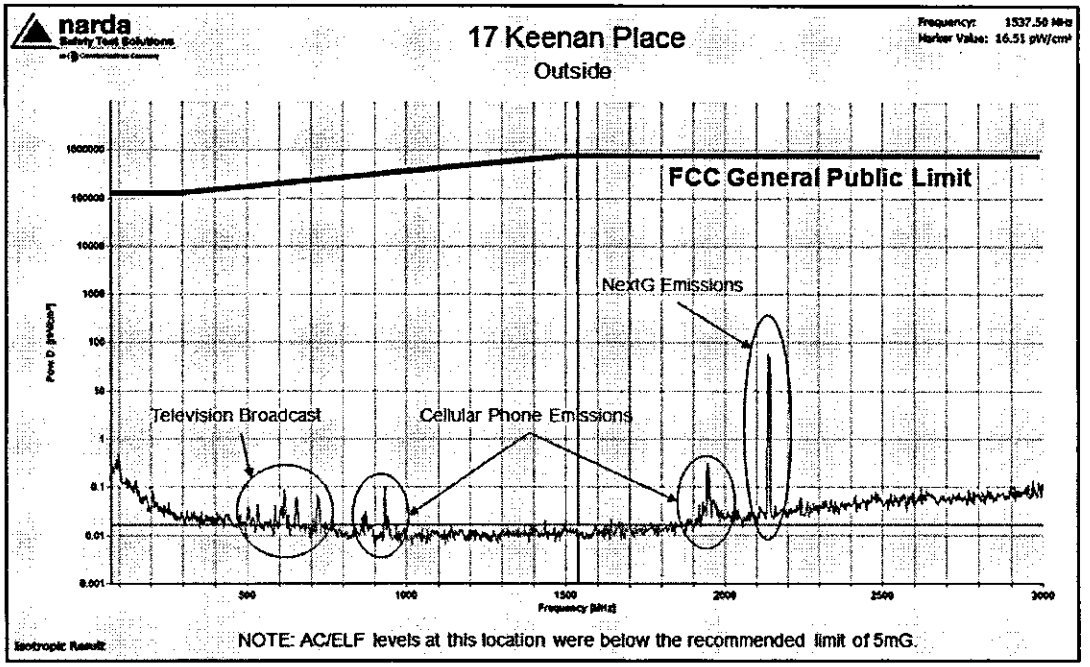
Node NYD-7119

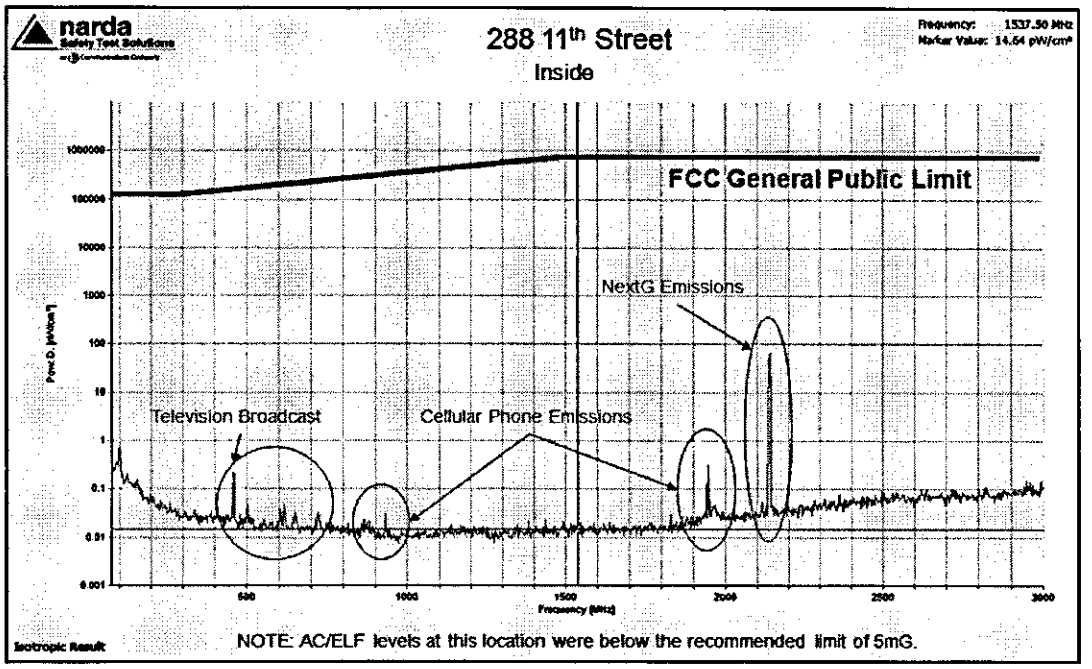


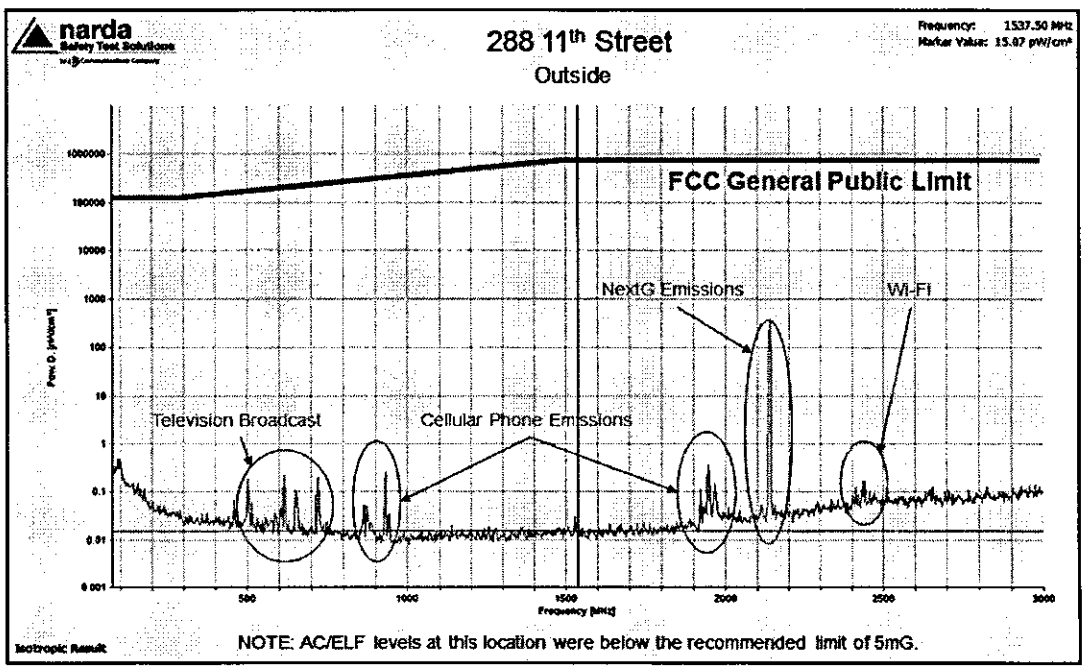

narda
16 Heath Place
Inside
FCC General Public Limit
NextG Emissions
Wi-Fi
Cellular Phone Emissions
Isotropic Result
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.

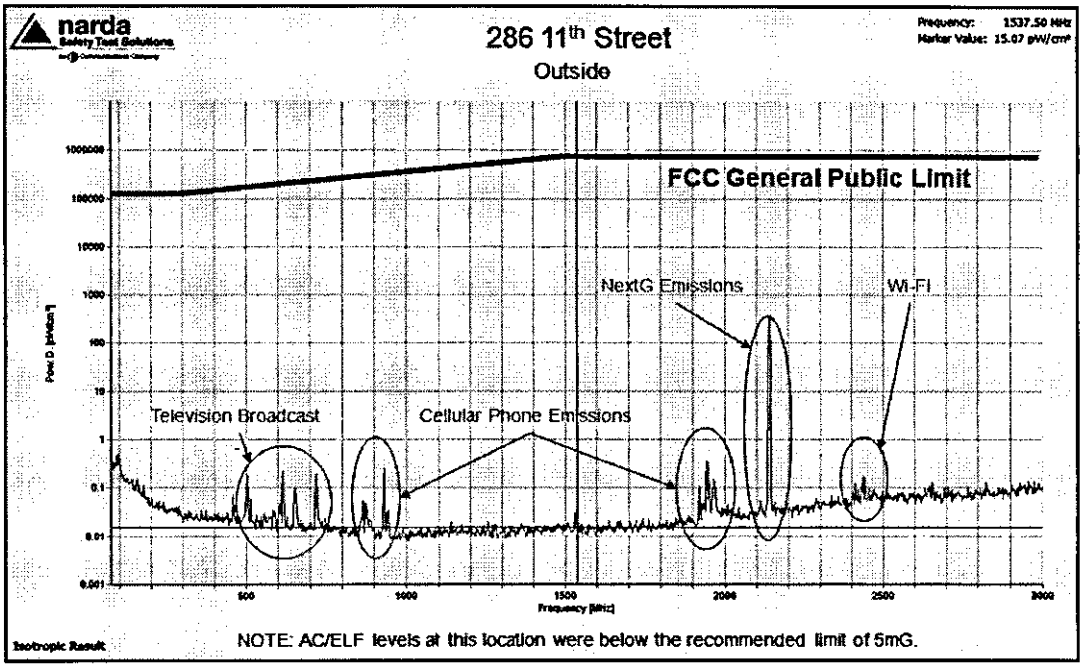

narda
16 Heath Place
Outside
FCC General Public Limit
NextG Emissions
Wi-Fi
Television Broadcast
Cellular Phone Emissions
Isotropic Result
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.

Node NYD-7120

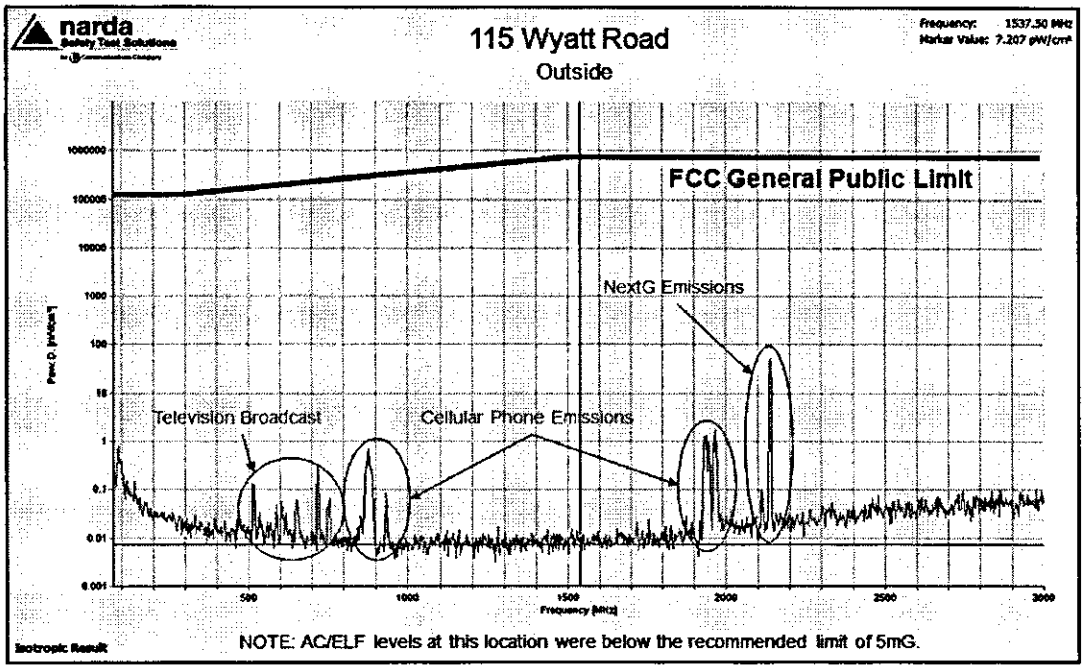


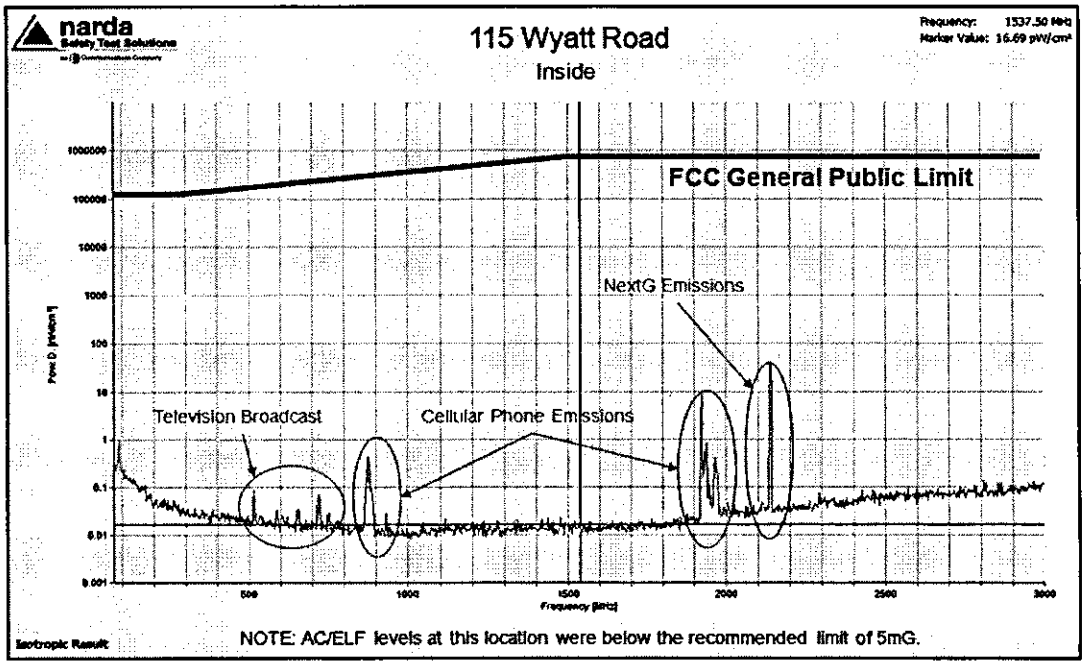

narda
288 11th Street
Inside
Frequency: 1537.50 MHz
Marker Value: 14.64 pW/cm²
FCC General Public Limit
NextG Emissions
Television Broadcast
Cellular Phone Emissions
Pow D. [pW/cm²]
Frequency [MHz]
Isotropic Result
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.

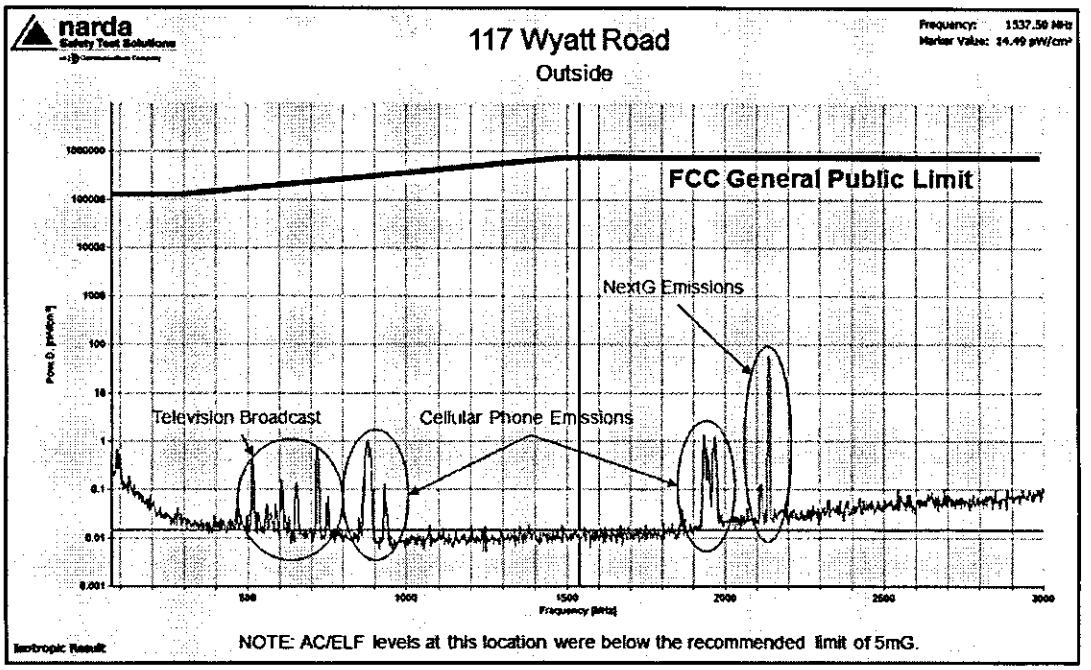

narda
288 11th Street
Outside
Frequency: 1537.50 MHz
Marker Value: 15.07 pW/cm²
FCC General Public Limit
NextG Emissions
Wi-Fi
Television Broadcast
Cellular Phone Emissions
Pow D. [pW/cm²]
Frequency [MHz]
Isotropic Result
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.

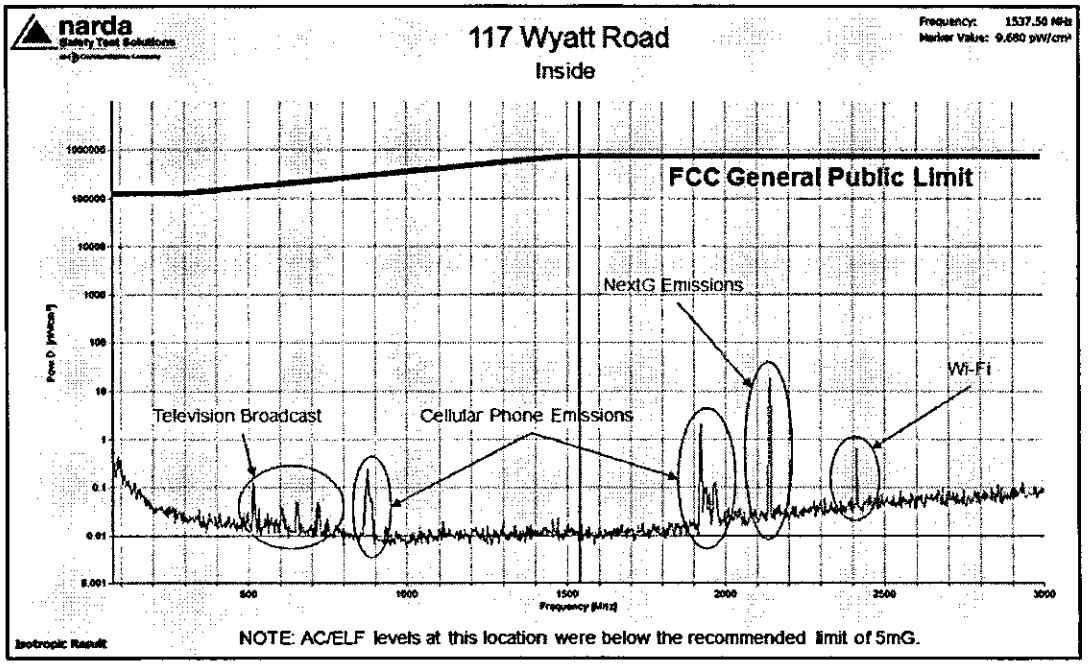

narda
286 11th Street
Outside
Frequency: 1537.50 MHz
Marker Value: 15.07 pW/cm²
FCC General Public Limit
NextG Emissions
Wi-Fi
Television Broadcast
Cellular Phone Emissions
Pow D [pW/cm²]
Frequency [MHz]
Isotropic Result
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.

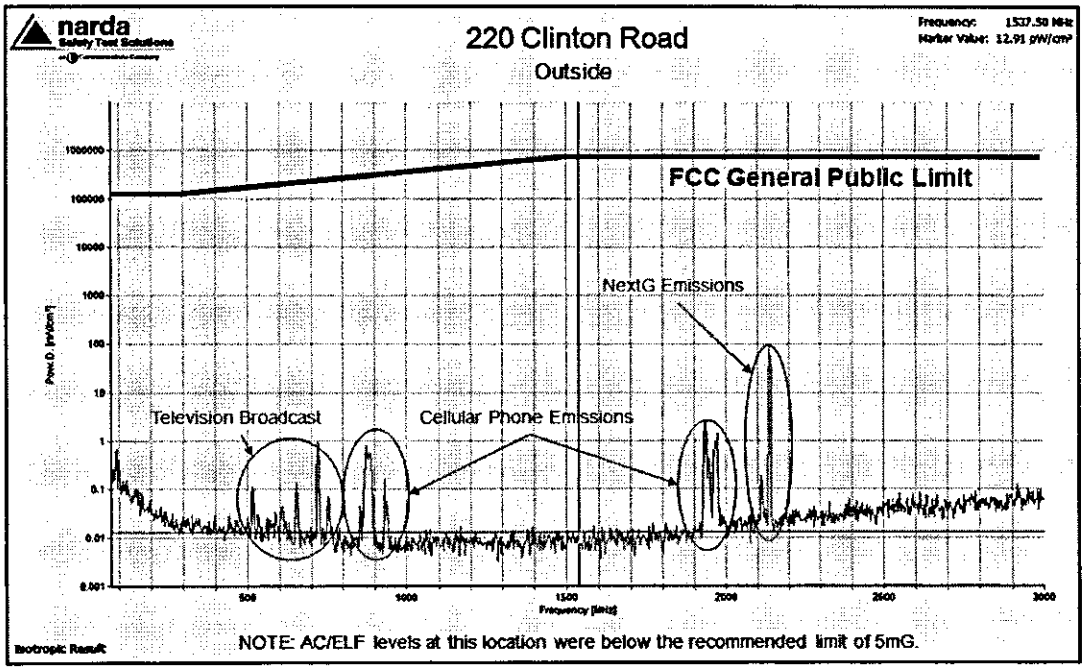
Node NYD-7121



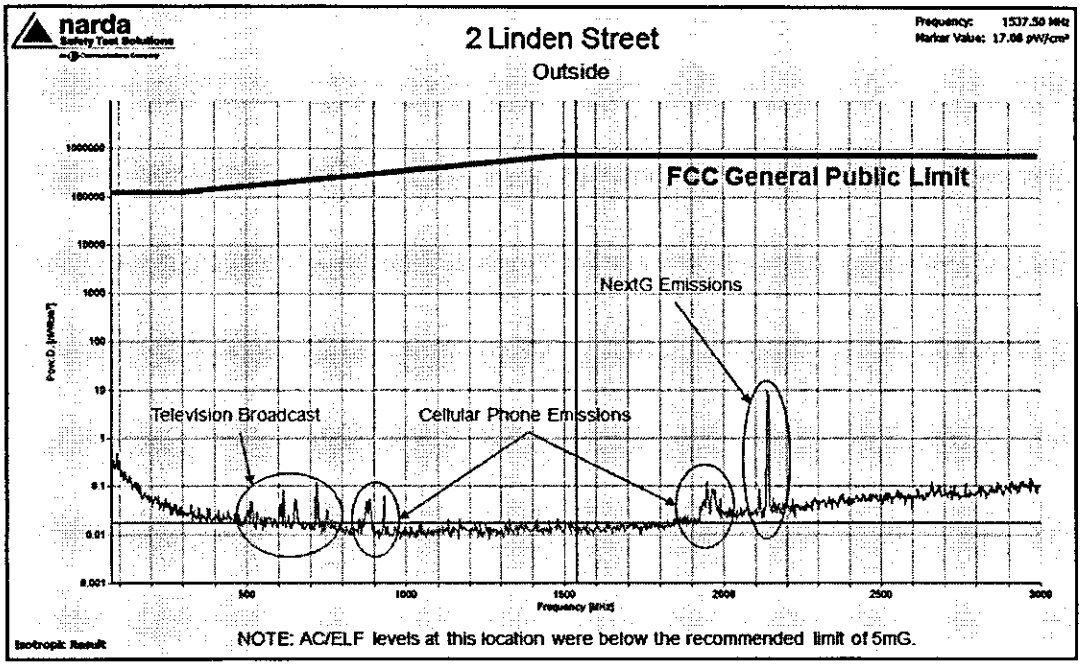


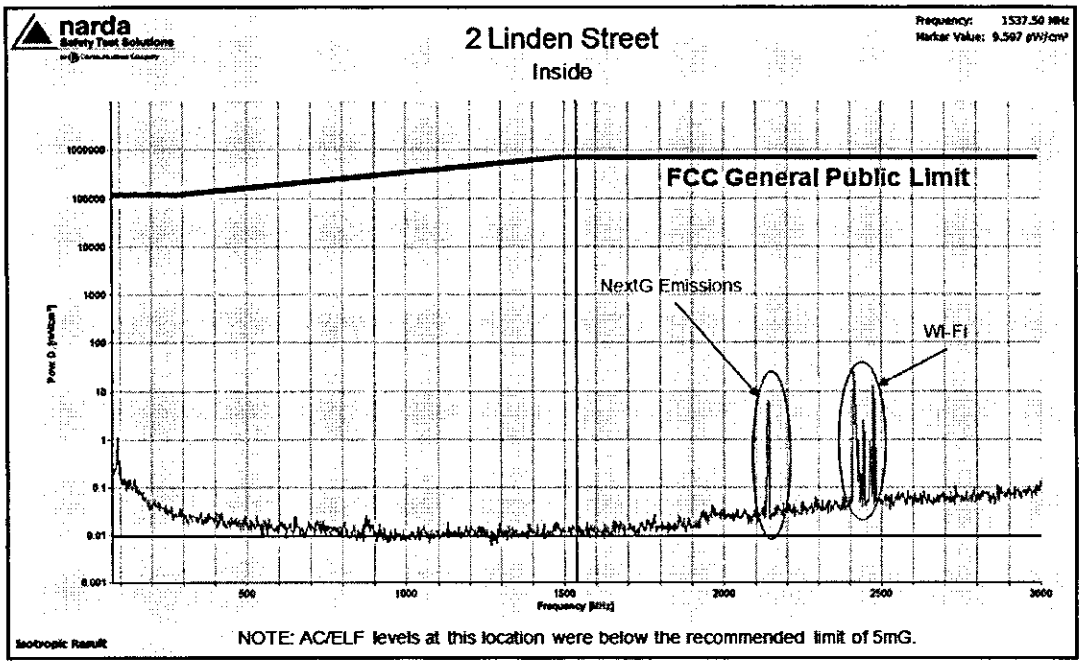

narda
117 Wyatt Road
Outside
FCC General Public Limit
NextG Emissions
Television Broadcast
Cellular Phone Emissions
Isotropic Result
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.

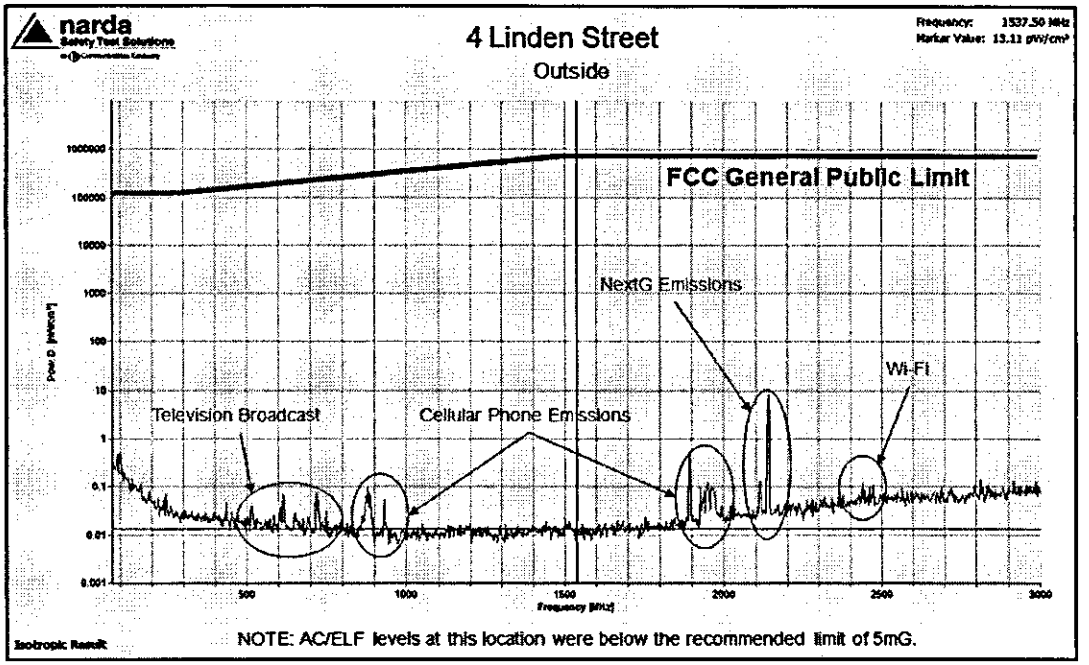

narda
117 Wyatt Road
Inside
FCC General Public Limit
NextG Emissions
Wi-Fi
Television Broadcast
Cellular Phone Emissions
Isotropic Result
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.

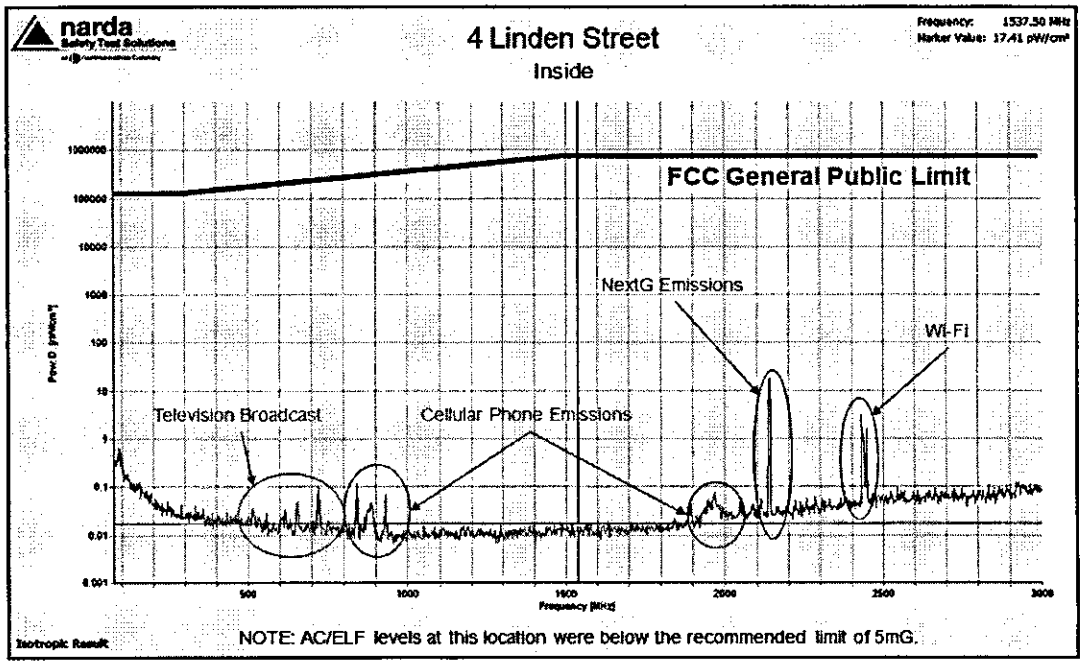

narda
220 Clinton Road
Outside
FCC General Public Limit
NextG Emissions
Television Broadcast
Cellular Phone Emissions
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.

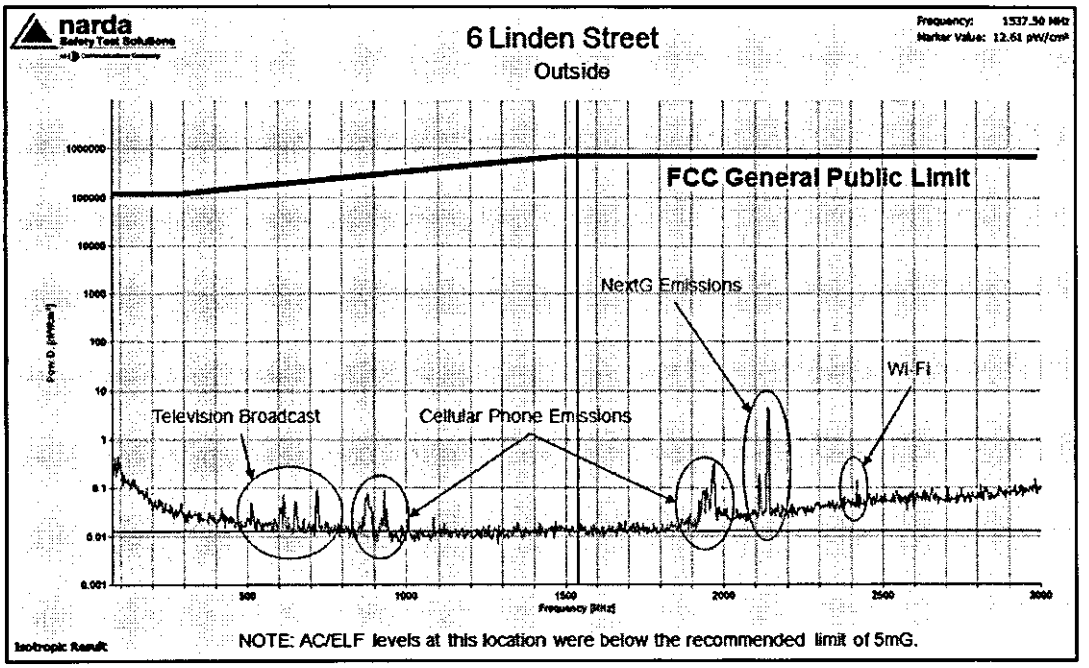
Node NYD-7122

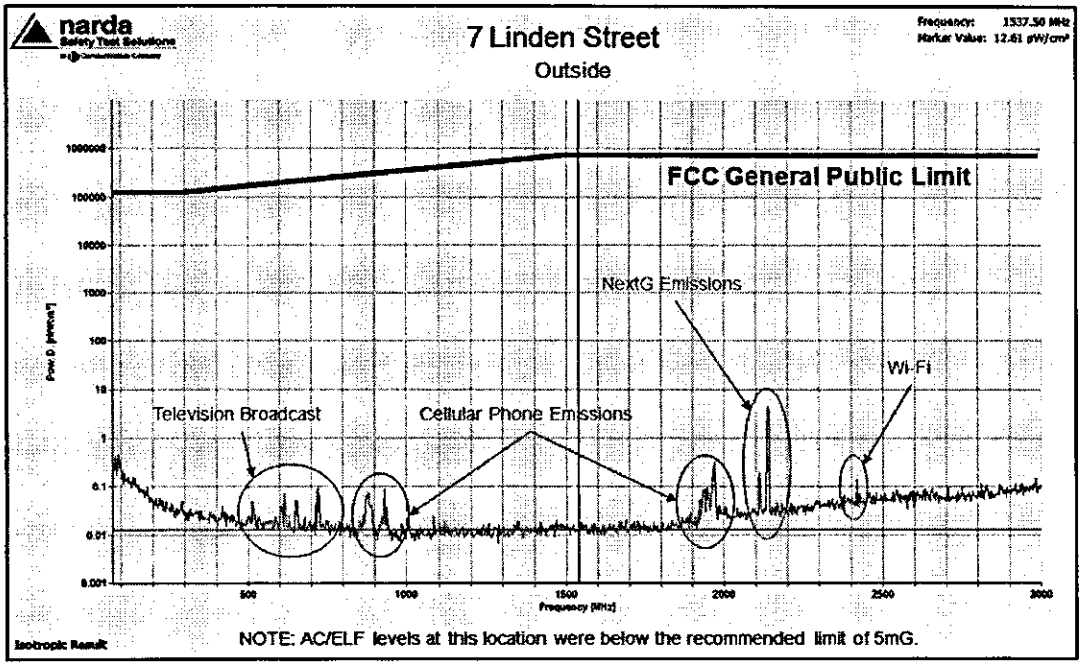


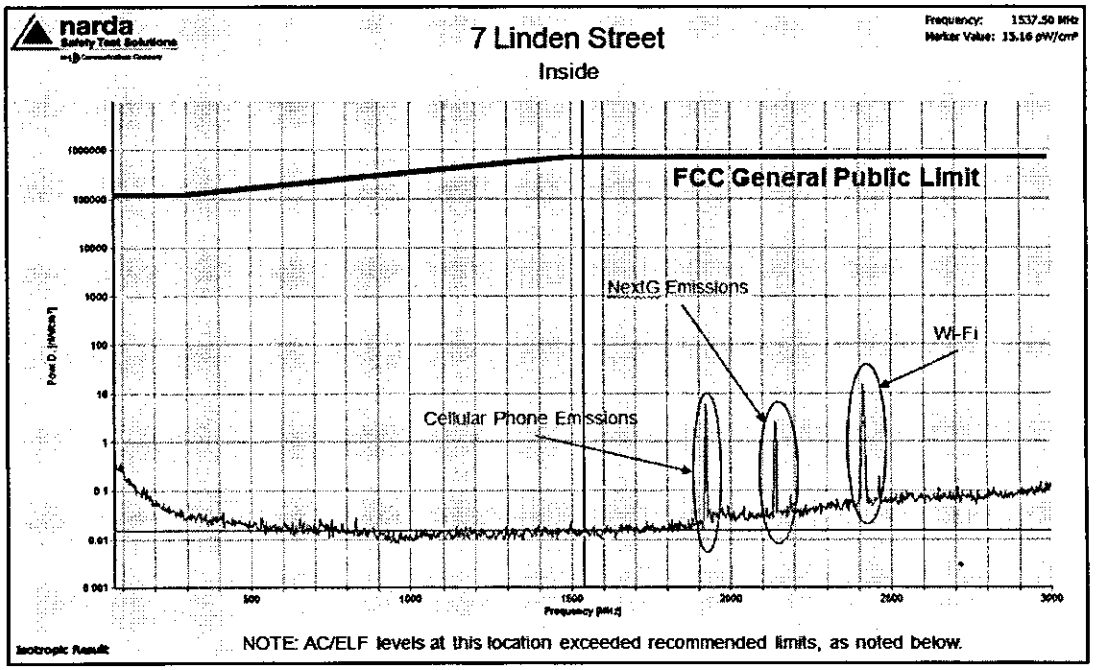



narda
4 Linden Street
Outside
FCC General Public Limit
NextG Emissions
Wi-Fi
Television Broadcast
Cellular Phone Emissions
Isotropic Result
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.

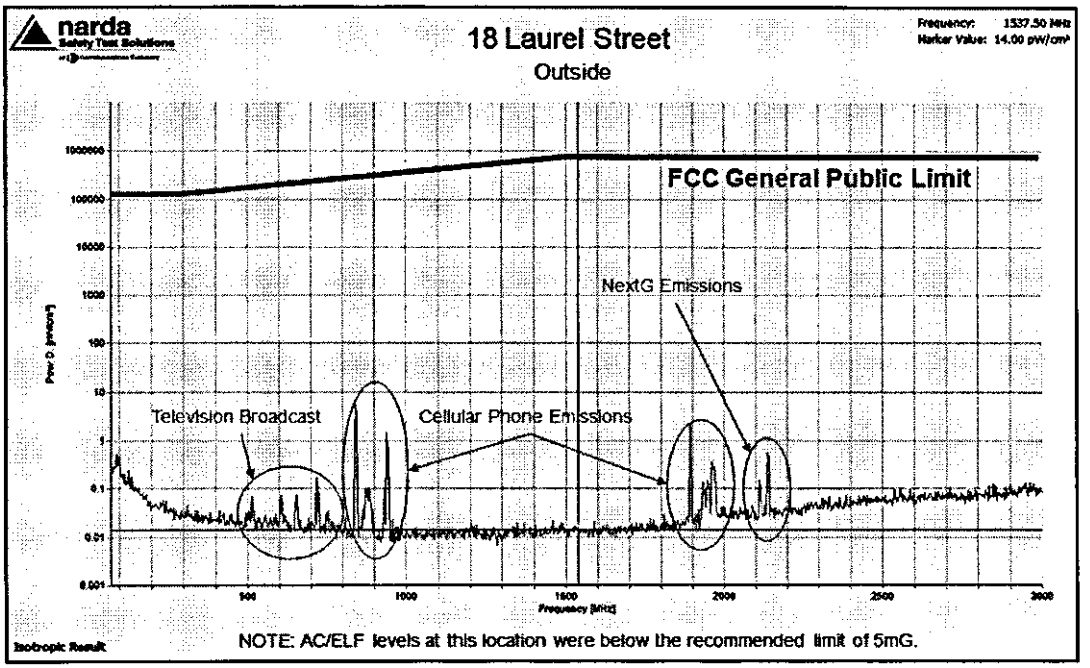

narda
4 Linden Street
Inside
FCC General Public Limit
NextG Emissions
Wi-Fi
Television Broadcast
Cellular Phone Emissions
Isotropic Result
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.

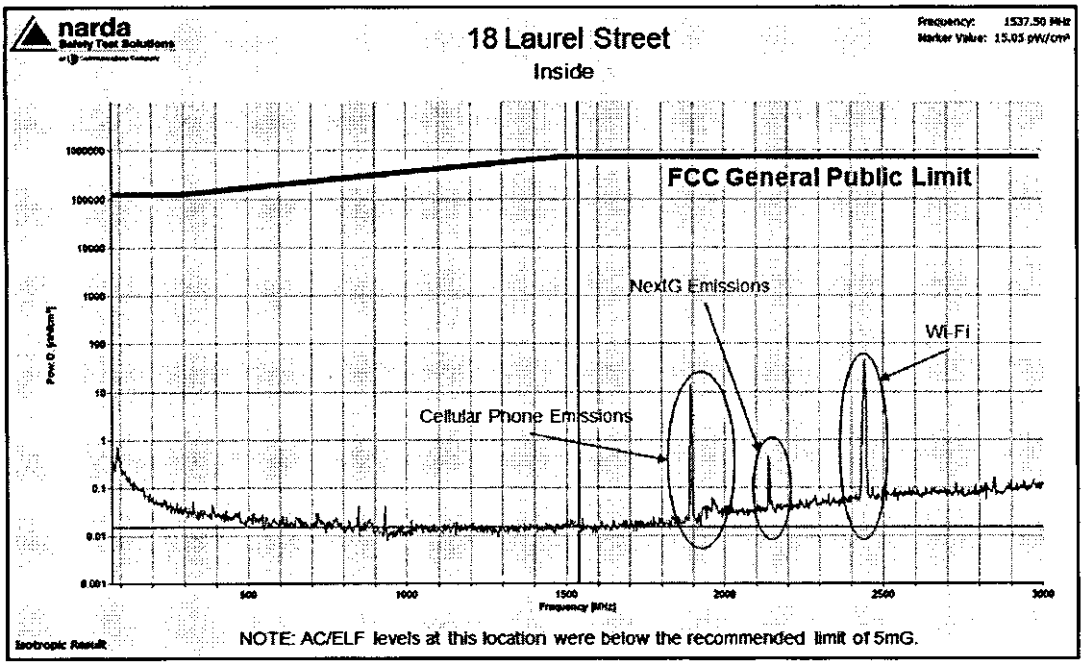

narda
6 Linden Street
Outside
FCC General Public Limit
NextG Emissions
Wi-Fi
Television Broadcast
Cellular Phone Emissions
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.

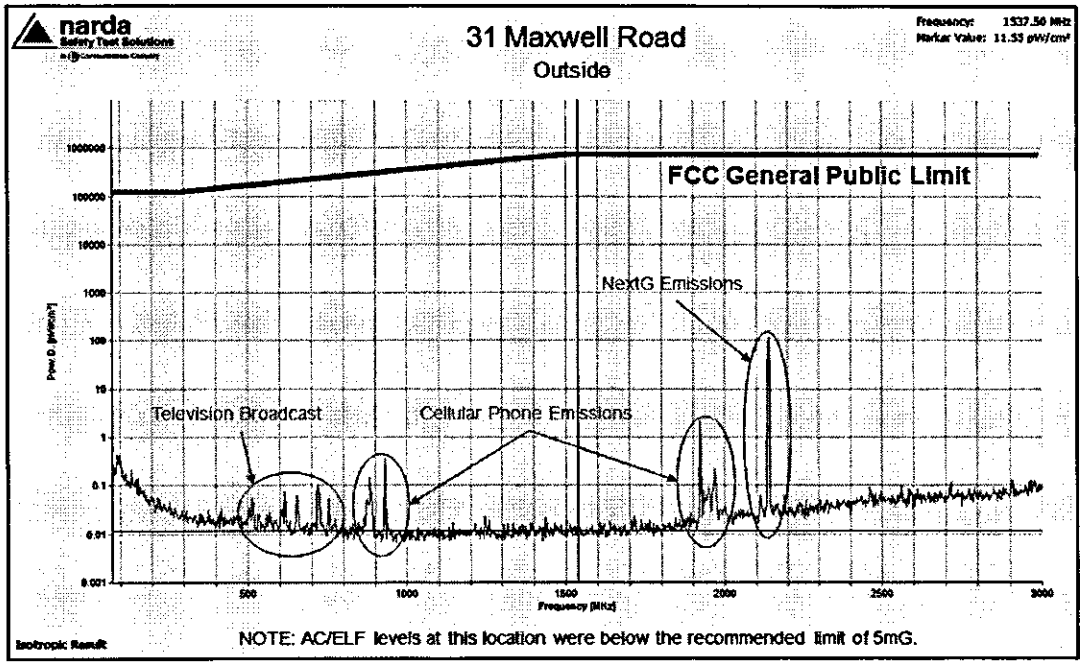


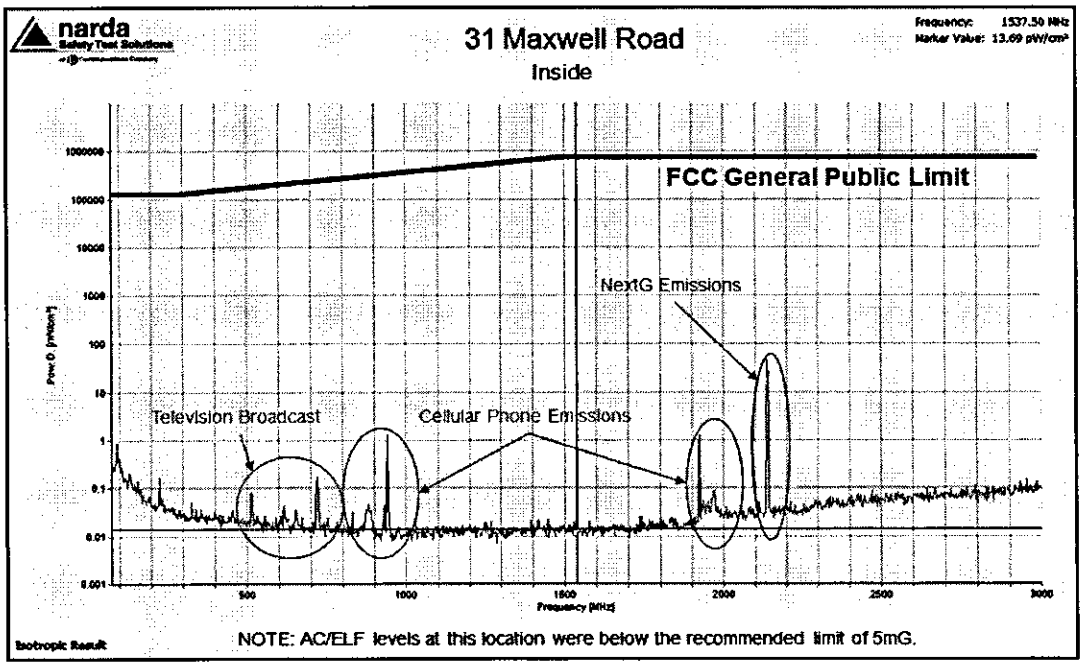


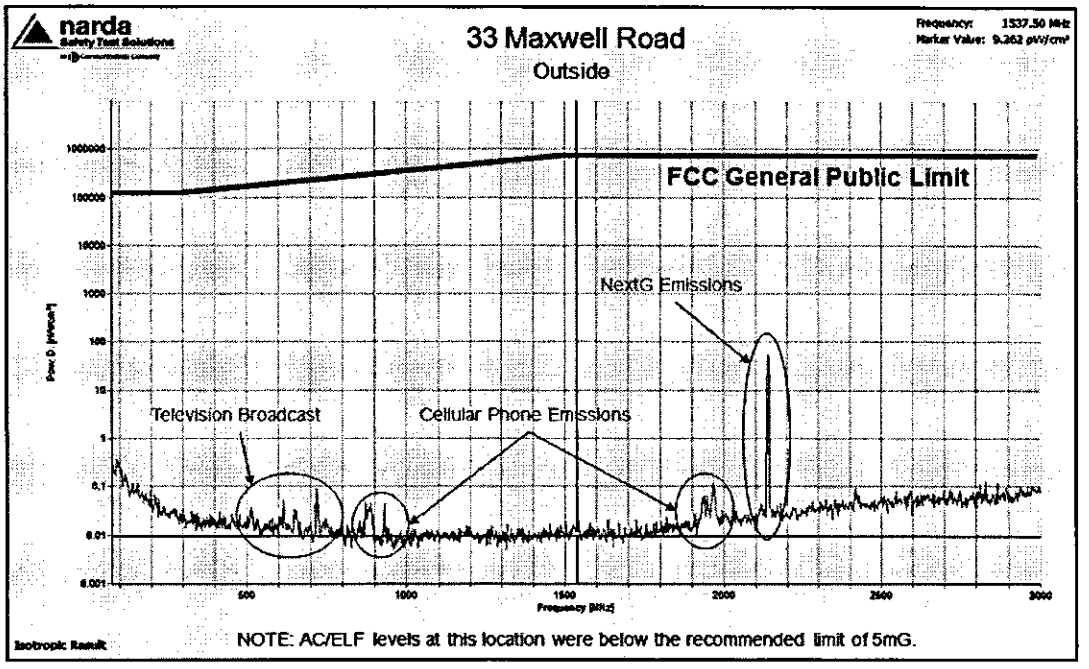
AC/ELF Fields exceeding 5mG were noted on Copper Water pipes. Owners were referred to electrician.

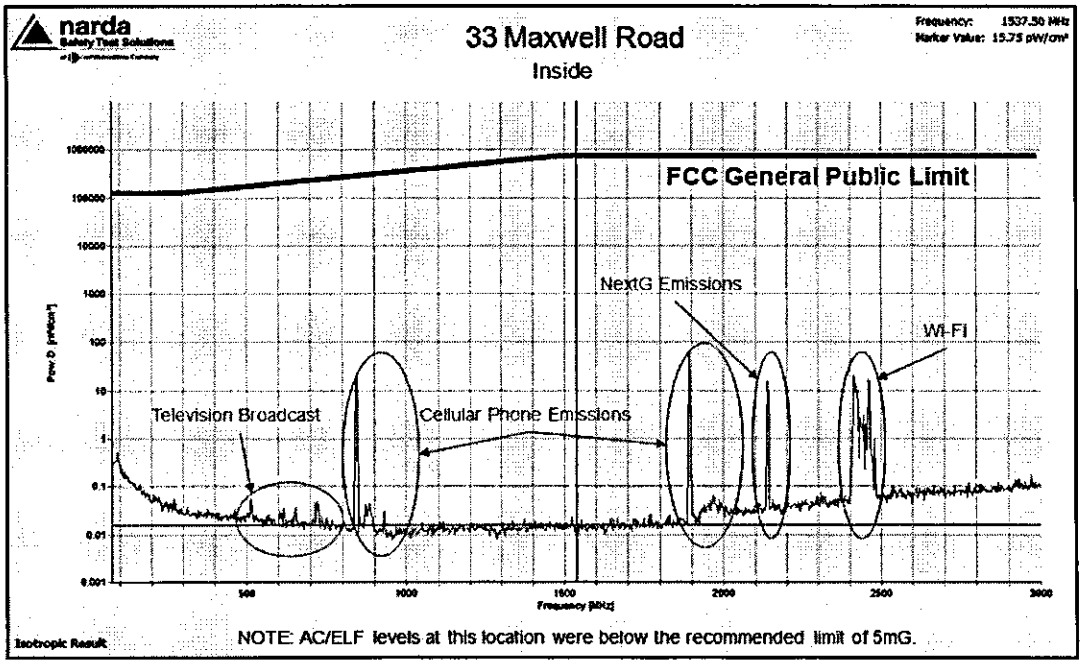

narda
18 Laurel Street
Outside
FCC General Public Limit
NextG Emissions
Television Broadcast
Cellular Phone Emissions
Frequency [MHz]
Isotropic Result
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.

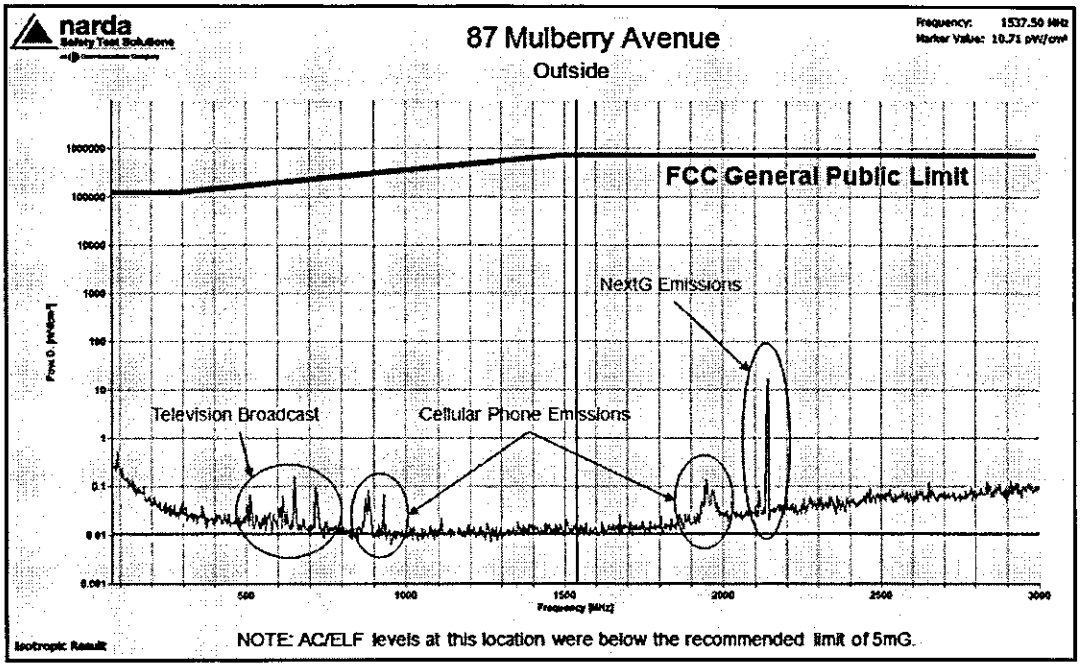

narda
18 Laurel Street
Inside
FCC General Public Limit
NextG Emissions
Wi-Fi
Cellular Phone Emissions
Frequency [MHz]
Isotropic Result
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.


narda
31 Maxwell Road
Outside
FCC General Public Limit
NextG Emissions
Television Broadcast
Cellular Phone Emissions
Isotropic Result
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.


narda
31 Maxwell Road
Inside
FCC General Public Limit
NextG Emissions
Television Broadcast
Cellular Phone Emissions
Isotropic Result
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.


narda
33 Maxwell Road
Outside
FCC General Public Limit
NextG Emissions
Television Broadcast
Cellular Phone Emissions
Isotropic Result
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.


narda
33 Maxwell Road
Inside
FCC General Public Limit
NextG Emissions
WI-FI
Television Broadcast
Cellular Phone Emissions
Isotropic Result
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.


narda
87 Mulberry Avenue
Outside
FCC General Public Limit
NextG Emissions
Television Broadcast
Cellular Phone Emissions
NOTE: AC/ELF levels at this location were below the recommended limit of 5mG.

b. Measurement Results

No Areas around NextG nodes or within residences proximate to these nodes showed RF fields that exceeded FCC OET-65 Guidelines for General Public Exposure limits.

c. Modeling Conditions

The FCC, in OET-65, defined a number of equations for use in evaluating RF Exposure at transmission sites. These equations form the basis for the modeling used in this analysis. Additionally, the NextG sites were modeled for their maximum power condition – even though as installed, full power is not utilized, according the NextG.

The VitaTech Engineering site analysis produced the following analysis plots of the site(s):

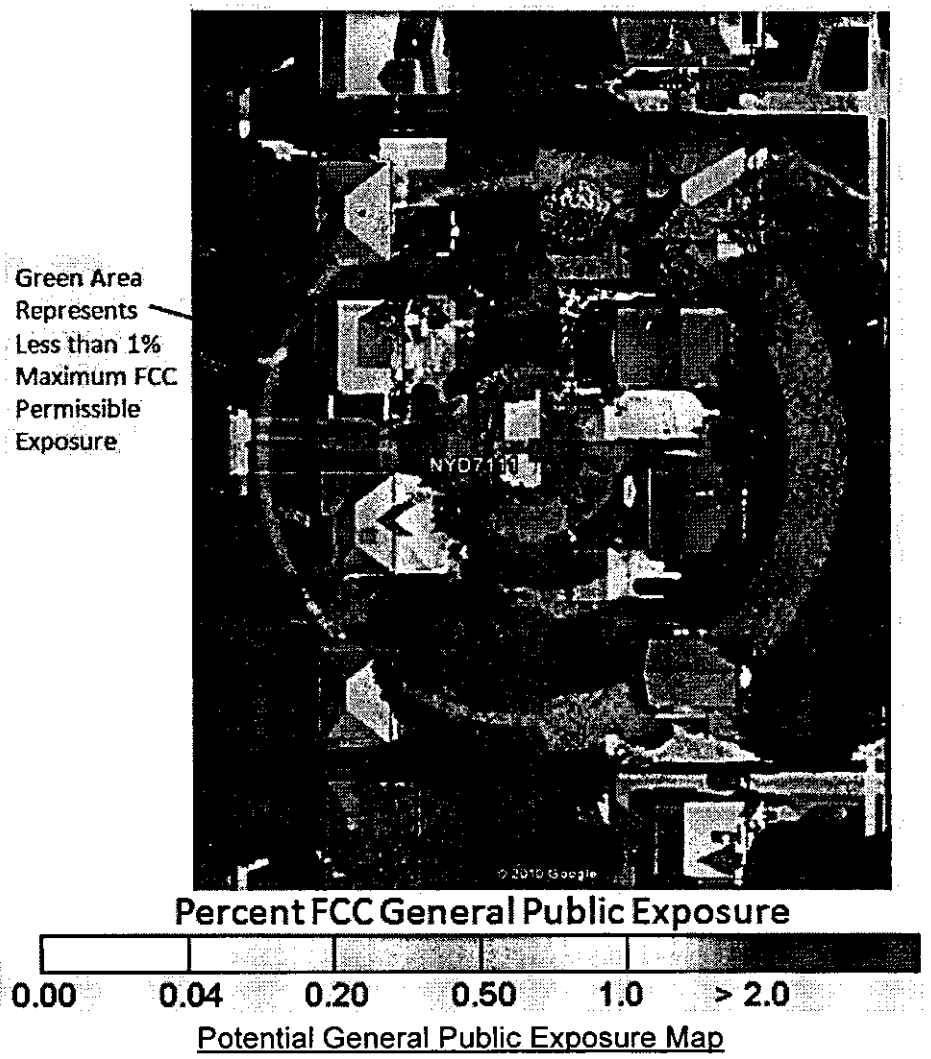
1) A General Public level Analysis Map defining those areas may exceed (greater than 100%) the level deemed safe for those not trained in RF Safety Awareness.

Modeling represents 'normal' activity around the site at or near ground level. Personnel accessing areas near panel antennas via ladders or other means should seek further guidance.

d. Transmitters

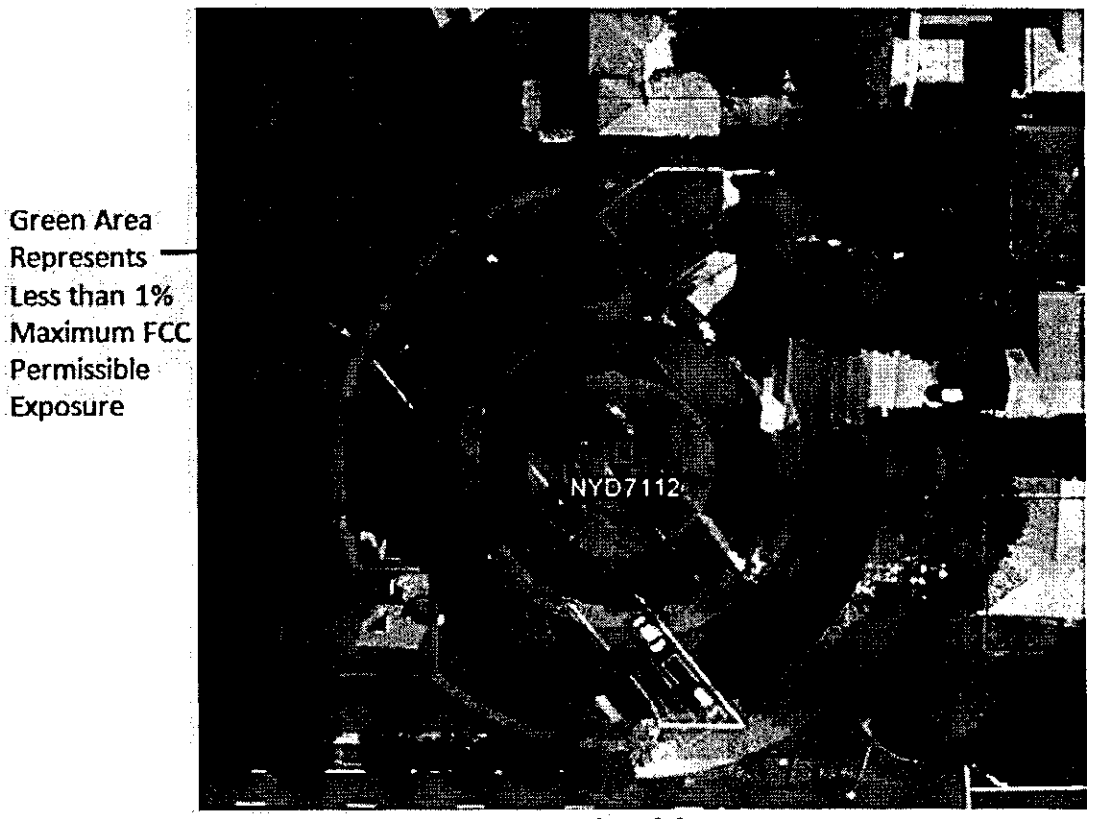
Emitter	Type	X (ft)	Y (ft)	Z (ft)	Frequency (MHz)	Input (watts)	EIRP (watts)	Gain (dBi)	Horiz BW (deg)	Vert BW (deg)	Azimuth (degrees)	Downtilt	Description
1	Omni	0	0	20	1965	100	1000	10	360	8	0	0	NextG DAS Node

e. General Public Exposure Results [Site NYD7111: 116 Sackville Rd]



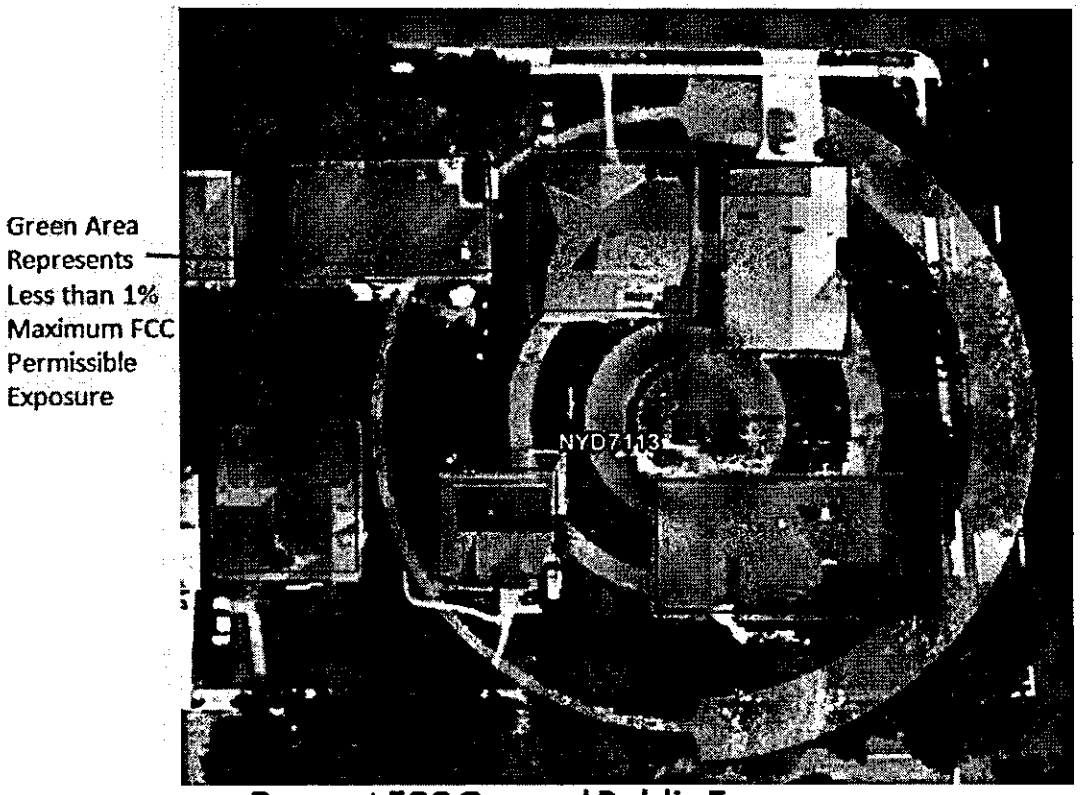
Potential General Public Exposure Map

f. General Public Exposure Results [Site NYD7112: 123 Stewart Ave]



Potential General Public Exposure Map

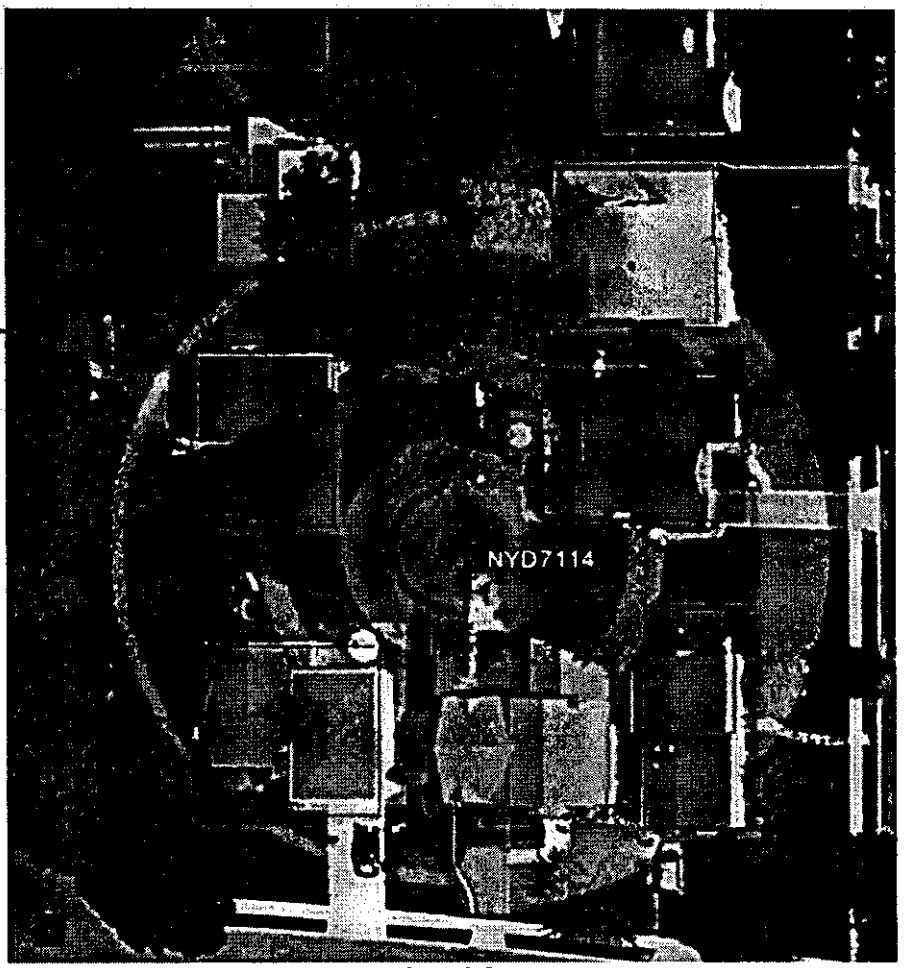
g. General Public Exposure Results [Site NYD7113: 38 Edgemere Rd]



Potential General Public Exposure Map

h. General Public Exposure Results [Site NYD7114: 89 Newmarket Rd]

Green Area Represents Less than 1% Maximum FCC Permissible Exposure

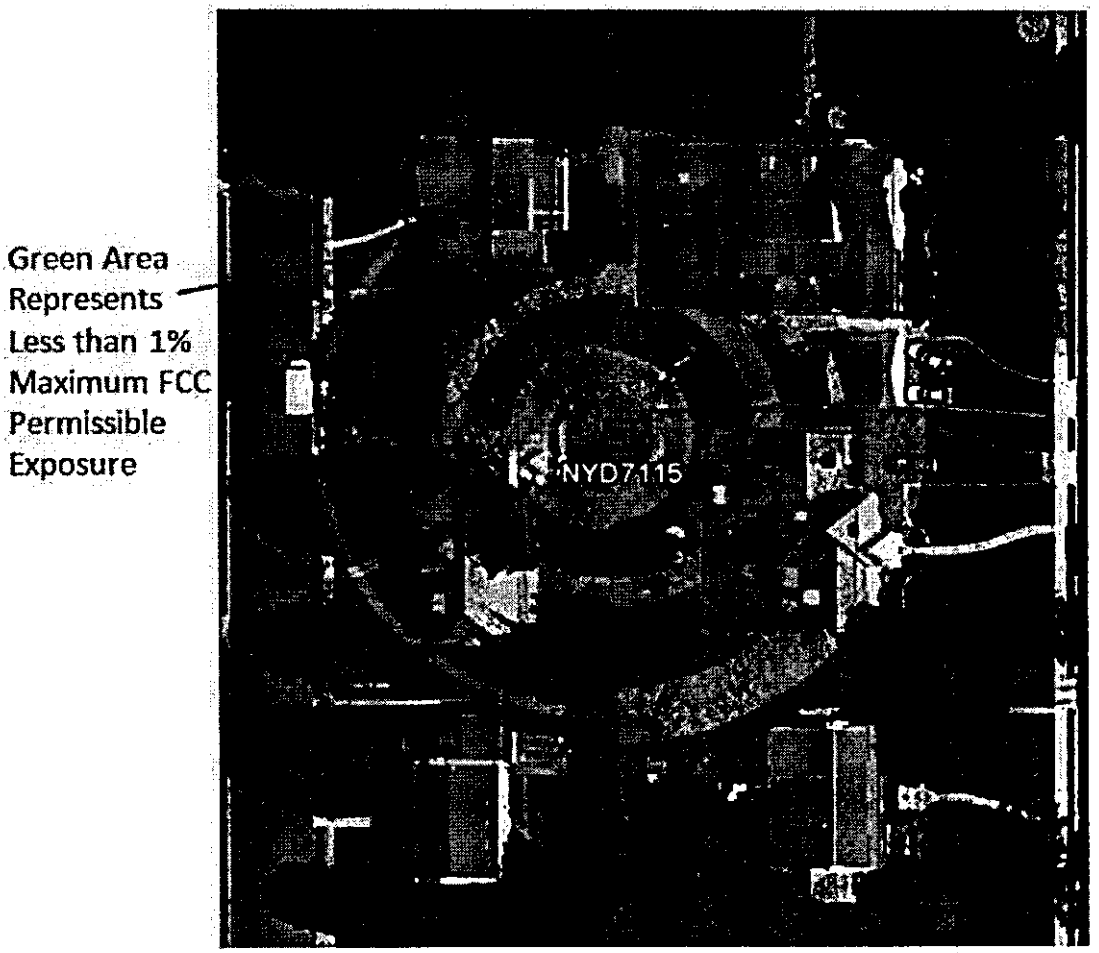


Percent FCC General Public Exposure

0.00 0.04 0.20 0.50 1.0 > 2.0

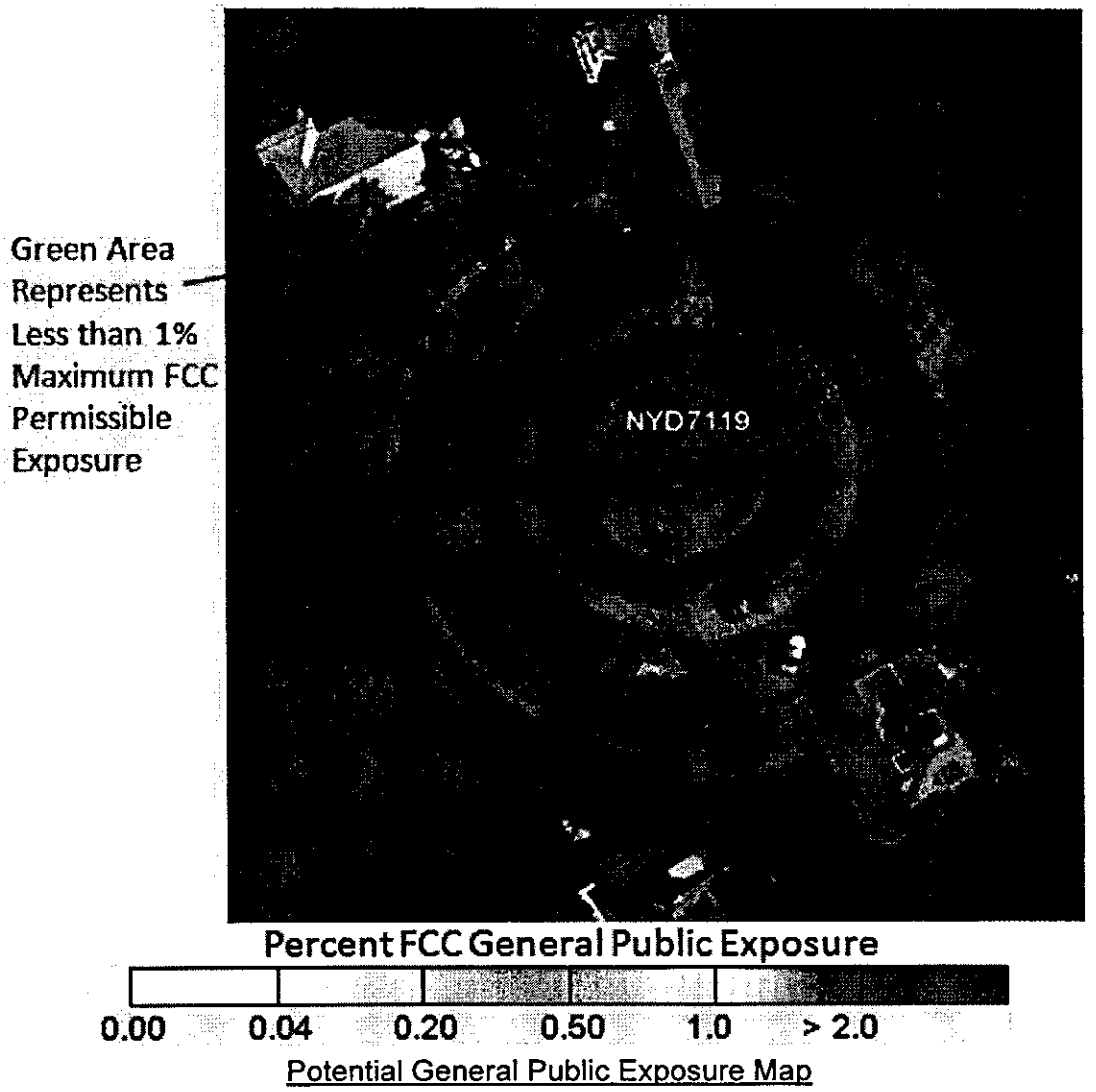
Potential General Public Exposure Map

i. General Public Exposure Results [Site NYD7115: 81 Brompton Rd]



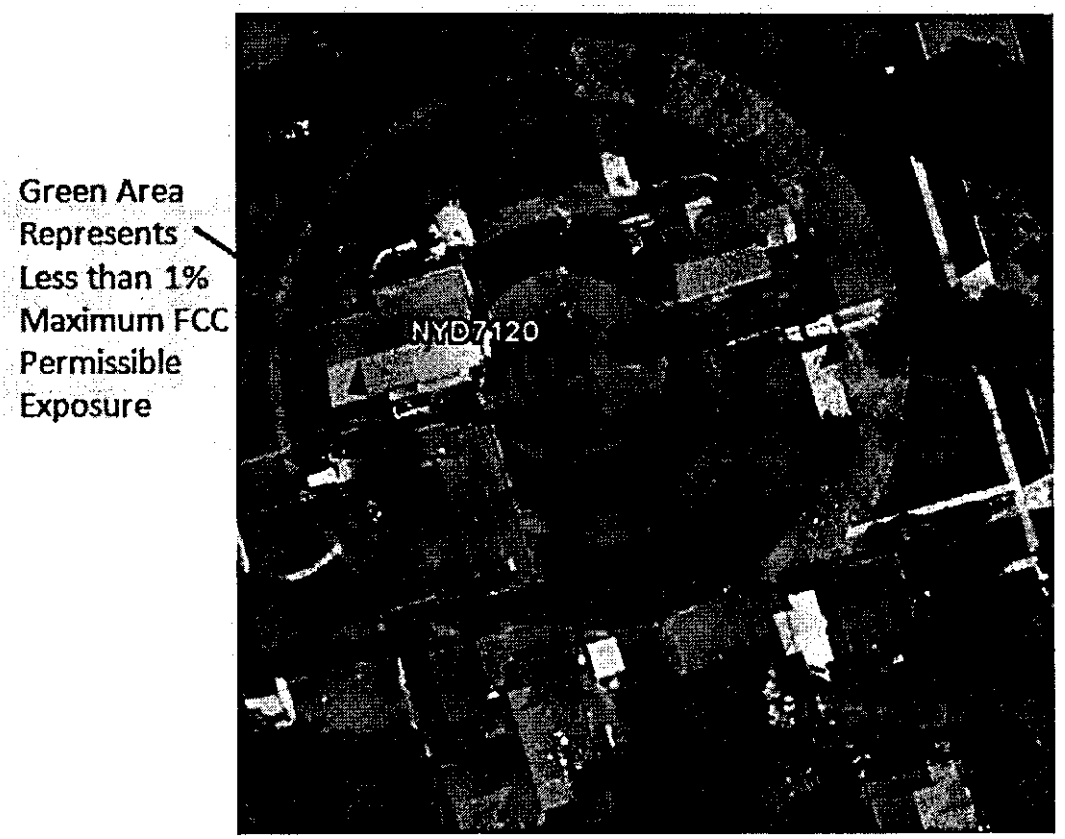
Potential General Public Exposure Map

j. General Public Exposure Results [Site NYD7119: 128 Wetherill Rd]



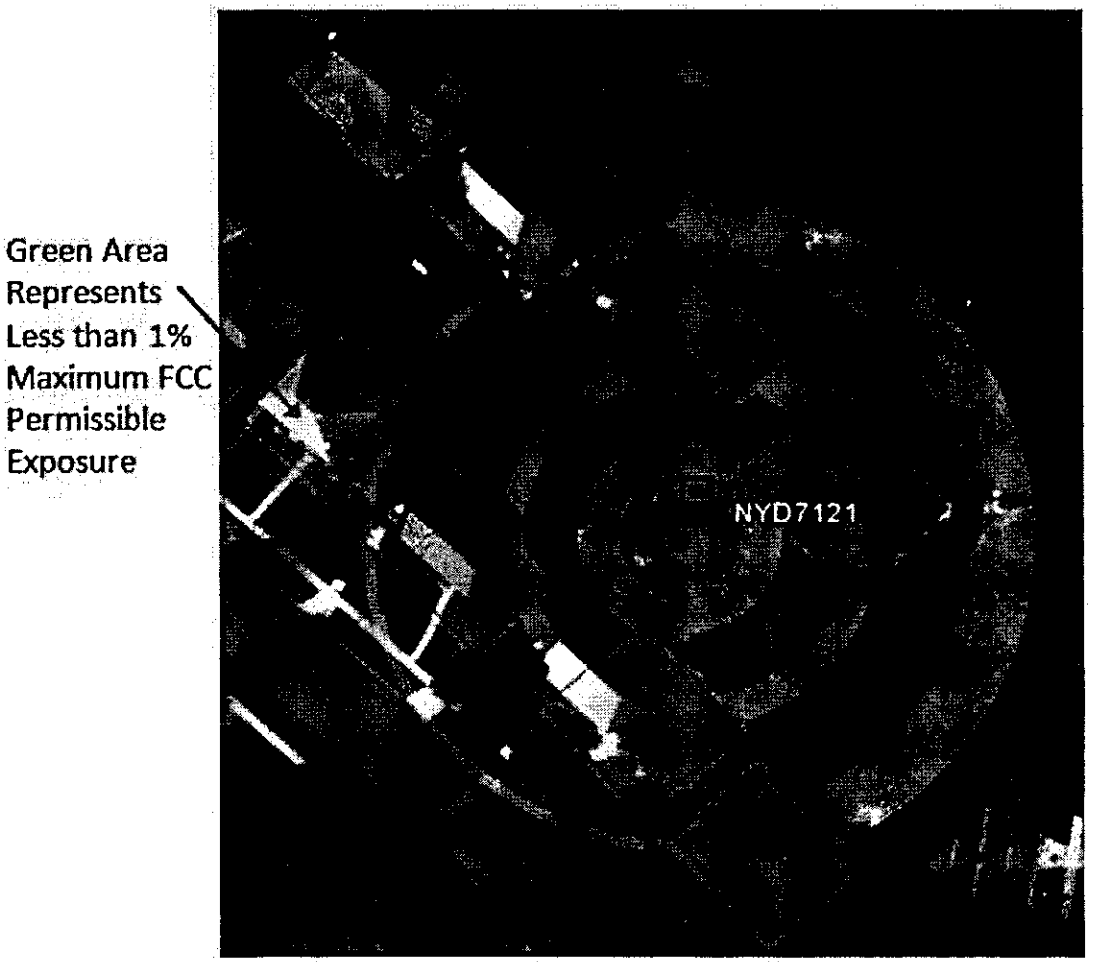
Potential General Public Exposure Map

k. General Public Exposure Results [Site NYD7120: 288 11th St]



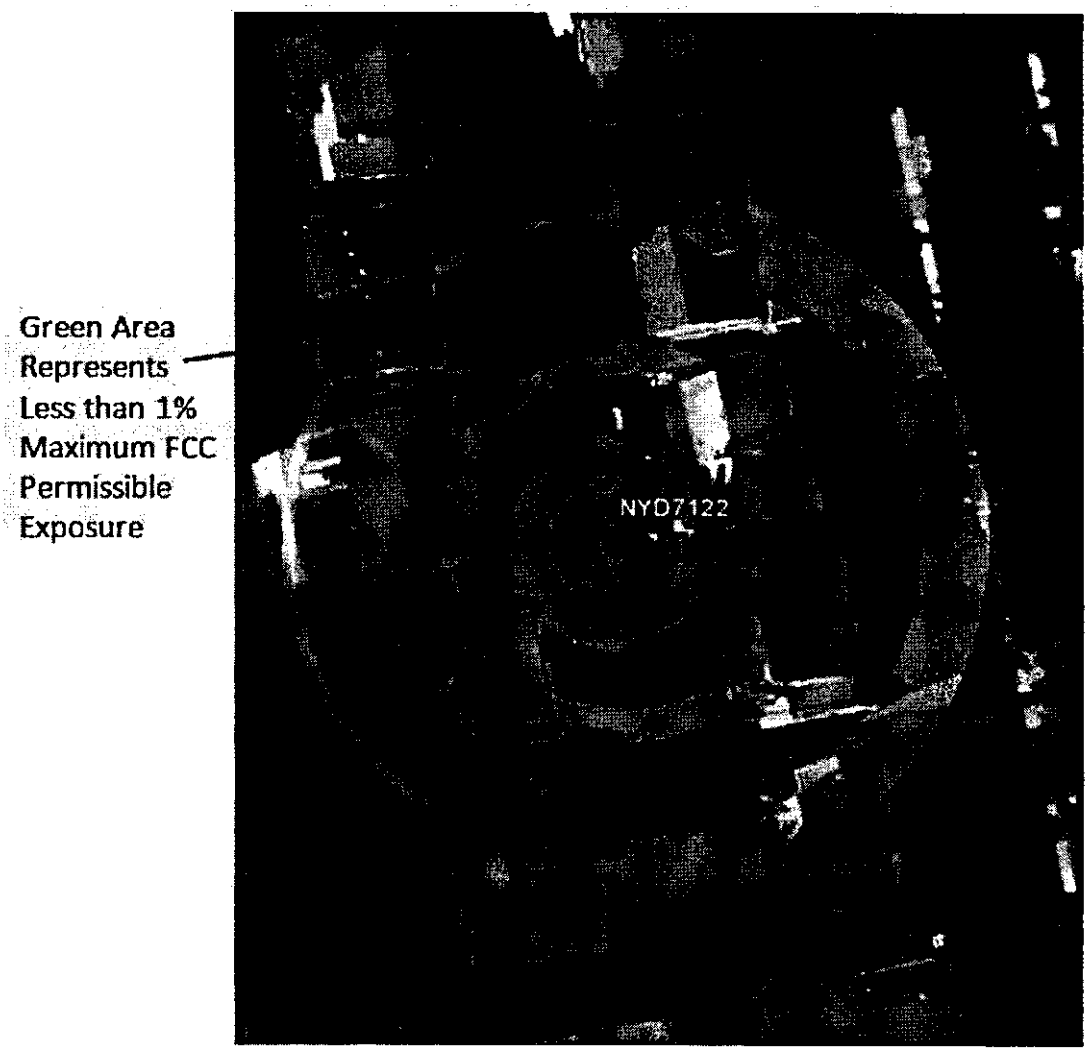
Potential General Public Exposure Map

I. General Public Exposure Results [Site NYD7121: 220 Clinton Rd]



Potential General Public Exposure Map

m. General Public Exposure Results [Site NYD7122: 31 Maxwell Rd]



Potential General Public Exposure Map