

Wireless Communications Antenna Tags



1. Scope

This standard covers the requirements for wireless communications antenna tags applied to wood utility poles, metal streetlight poles, and communications enclosures.

A wireless communications antenna is any radio frequency (RF)-emitting device or equipment required to comply with all provisions and guidelines of the latest revision of the Federal FCC OET Bulletin 65.

For more information about installation and placement of wireless communications antenna tags, see the SCL 0095-series construction standards.

2. Application

This standard is intended for use by:

- SCL engineers who review wireless communications antenna installations
- Communications providers (customers) who install wireless communications antennas

Tags described in this standard provide visual and informational awareness to the occupational worker of the presence of a wireless communications antenna on the pole. See Work Practice 0095.04, "Working in the Vicinity of Wireless Communications Antennas."

3. Requirements

Three types of tags are described in this standard:

- Antenna owner identification (ID) tags
- RF Caution tags
- RF Notice tags

RF Caution and ID tags shall be mounted to a fixed surface, such as a pole or a communications enclosure, that cannot be easily moved to another location.

RF Notice tags are installed on wireless communications antenna support strands.

Application and installation requirements for each tag are discussed in the following subsections.

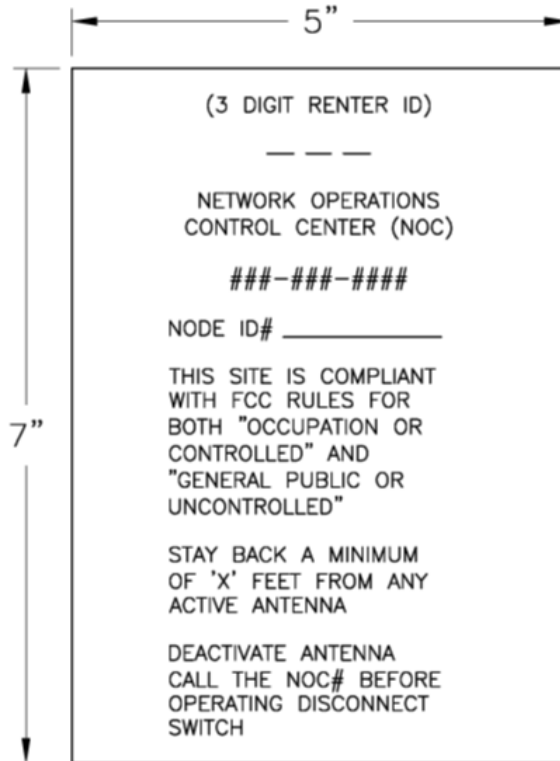
3.1 Antenna Owner Information (ID) Tags

ID tags are used to identify the owner-operator of the wireless communications antenna, their contact phone number, and additional information specific to the RF emitting site. See Figure 3.1 for an example of an ID tag.

ID tags shall have the following attributes:

- Text clearly visible from the ground
- White with black lettering
- Dimensions: 5 in by 7 in
- A unique renter ID number per SCL 0093.12
- A 24-hour Network Operation Control Center (NOC) contact phone number for deactivation or notification of work
- A node ID number (renter site location number)
- Statements, including:
 - “This site is compliant with FCC rules for both “Occupation or Controlled” and “General Public or Controlled”
 - “Stay back a minimum of ‘X’ feet from any active antenna”, where ‘X’ = safe approach distance for occupational worker”
 - “Deactivate antenna call the NOC# before operating disconnect switch”

Figure 3.1. Antenna Owner ID Tag, Example



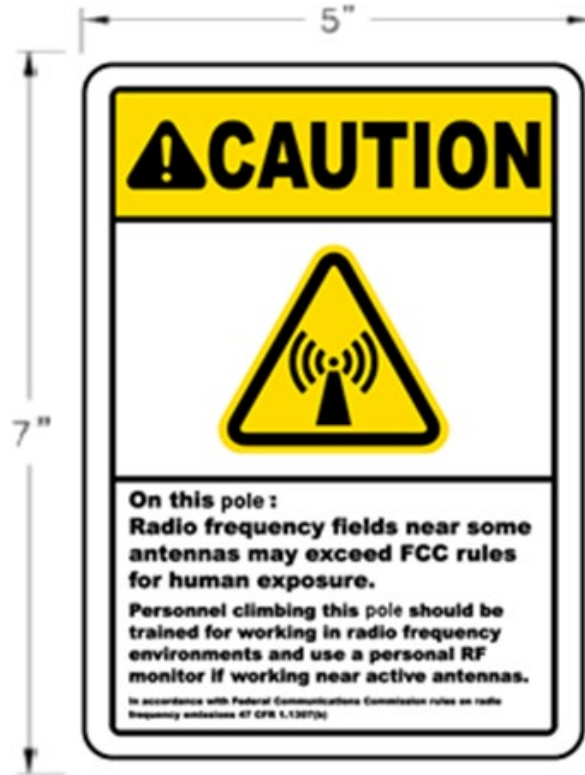
3.2 RF Caution Tags

RF Caution tags are used to indicate a potentially hazardous situation that, if not avoided, could result in minor or moderate injury. See Figure 3.2 for an example of a caution tag.

RF Caution tags shall have the following attributes:

- A yellow-filled "CAUTION" bar with an exclamation point symbol and black lettering
- Black main body lettering on white background
- Dimensions: 5 in by 7 in
- An RF radiating antenna triangle advisory symbol
- A statement that reads, "On this pole: Radio frequency fields near some antennas may exceed FCC rules for human exposure. Personnel climbing this pole should be trained for working in radio frequency environments and use a personal RF monitor if working near active antennas."

Figure 3.2. RF Caution Tag, Example



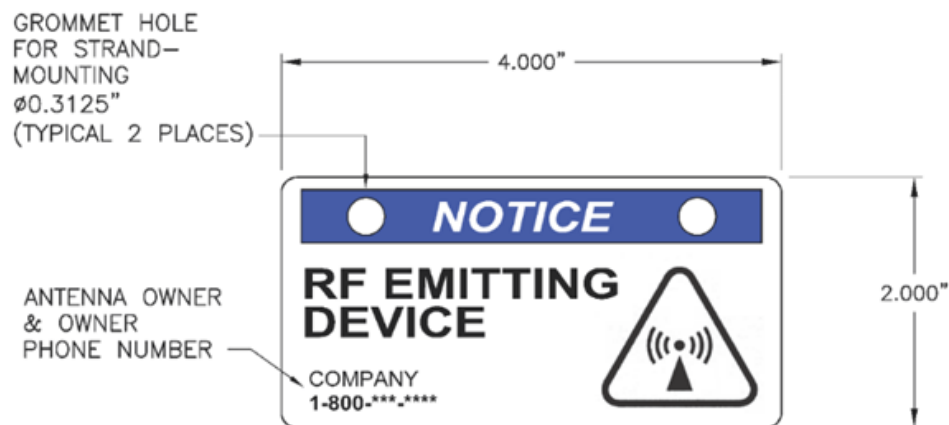
3.3 RF Notice Tags

RF Notice tags are used solely near or around strand-mount wireless communications antennas. RF Notice tags provide visual and informational awareness to the occupational worker of the presence of a wireless communications antenna near the pole. See Figure 3.3 for an example of an RF Notice tag.

RF Notice tags shall have the following attributes:

- A blue-filled “NOTICE” bar with white lettering
- Black main body lettering on a white background
- Dimensions: 4 in by 2 in
- An RF radiating antenna triangle advisory symbol
- Company name and a 24-hour contact phone number
- A statement that reads, “RF EMITTING DEVICE”

Figure 3.3. RF Notice Tag, Example



3.4 Review and Approval

Any variance to RF Notice, RF Caution, or ID tags shall be pre-approved by Joint Use Engineering prior to installation.

SCL reserves the right to refuse tags that do not meet the requirements of this standard.

4. References

Federal Communications Commission Office of Engineering and Technology (FCC OET) Bulletin 65; Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields

SCL Construction Standard 0093.12; “Pole Attachments, Identification and Tagging”

SCL Work Practice 0095.04; “Working in the Vicinity of Wireless Communications Antennas”

5. Sources

ANSI Z535.1-2011; American National Standard for Safety Colors

ANSI Z535.2-2011; American National Standard for Environmental and Facility Safety Signs

ANSI Z535.3-2011; American National Standard for Criteria for Safety Symbols

Haberman, Douglas; SCL Joint Use Strategic Advisor and subject matter expert for 0095.08

Neuansourinh, Ponet; SCL Standard Engineer, originator and subject matter expert for 0095.08

SCL Construction Standard 0095.06; "NIER Report Requirements"

IEEE 1654-2009; "IEEE Guide for RF Protection of Personnel Working in the Vicinity of Wireless Communications Antennas Attached to Electric Power Line Structures"

IEEE C95.1-2019; "Standard for Safety Levels with Respect to Human Exposure to Electric, Magnetic, and Electromagnetic Fields, 0 Hz to 300 GHz"

IEEE C95.2-2018; "Standard for Radio-Frequency Energy and Current-Flow Symbols"

IEEE C95.7-2014; "Recommended Practice for Radio Frequency Safety Program, 3 kHz to 300 GHz"

National Electrical Safety Code (NESC), C2-2017 Edition; Institute of Electrical and Electronics Engineers (IEEE) Inc., New York, NY