

Radio Frequency Emission Compliance Report

GCB Services



Delivering solutions for your success

Site Name: CXL00733

Site Address: 2118 W. COLLINS AVE. ORANGE, CA 92867

USID: 503046

FA Location: 16677739

Site Type: MONOPOLE

Latitude & Longitude: 33.798639, -117.877046

Report Date: 10/30/2025



Report Preparer

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Signed 10/31/2025
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1. Executive Summary

AT&T has contracted with GCB Services, an independent Radio Frequency consulting firm, to conduct a Radio Frequency Exposure (RFE) Compliance Assessment of the **CXL00733** cell site. The following report contains a detailed summary of the Radio Frequency environment as it relates to the Federal Communications Commission (FCC) and Occupational Safety & Health Administration (OSHA) Rules and Regulations for all individuals.

In this report, it is assumed that all antennas are operating at full power at all times. Software modeling was performed for all transmitting antennas located on the site. GCB Services believes this to be a worst-case analysis, based on best available data.

Radio Frequency Emissions: Modifications to existing facilities shall submit a completed radio frequency (RF) emissions exposure guidelines checklist contained in Appendix A of the FCC's "A Local Government Official's Guide to Transmitting Antenna RF Emission Safety" to determine if the facility is categorically excluded.

This report utilizes the following for predictive modeling of the ambient RF environment:

MPE Modeling Program: IXUS 2025.1 (Modeller version: 4.15.1 and Manager version: 4.15.1).

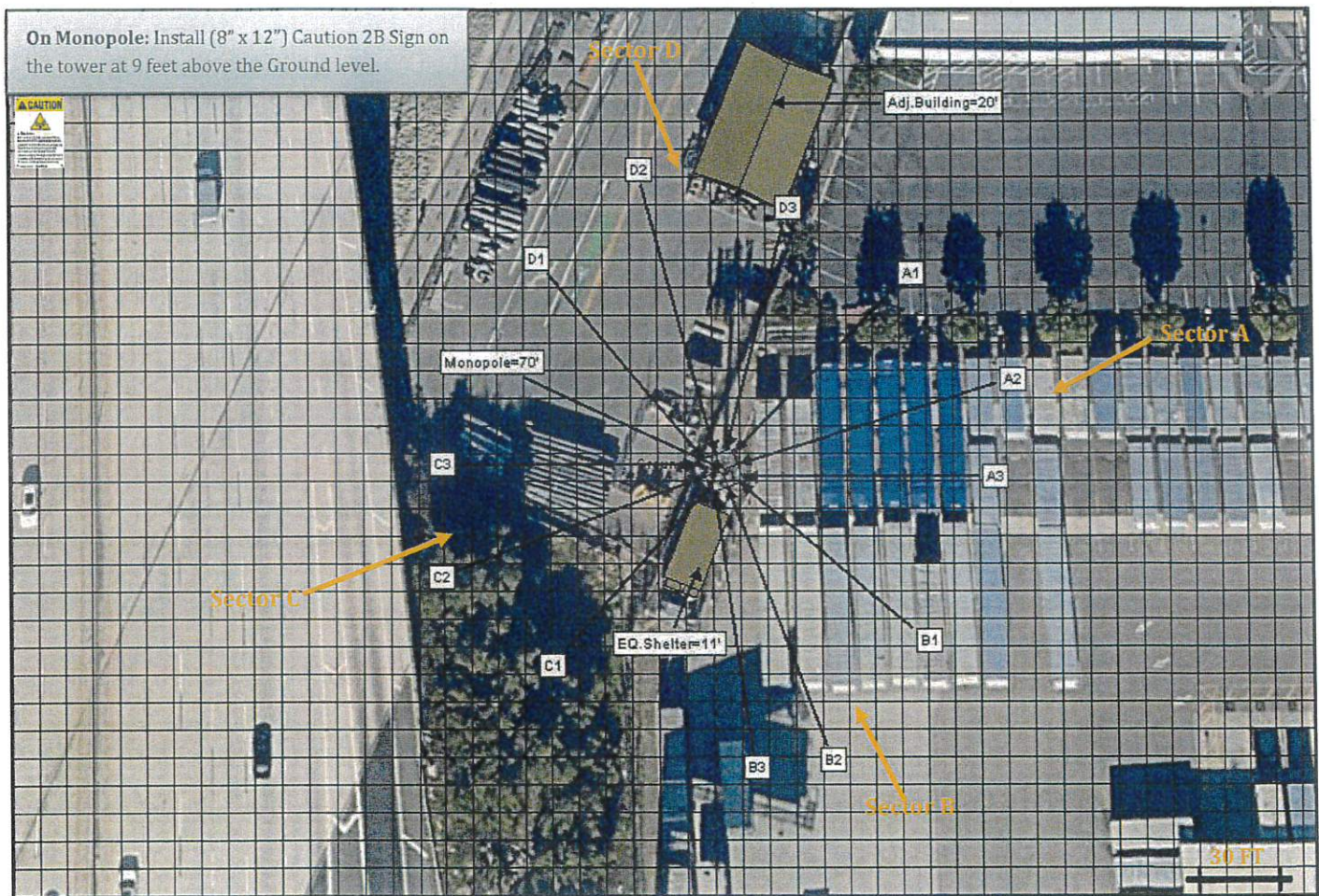
The simulation plots show the spatial predicted power exposure as a percentage of the General Population Standard. Please note that 100% MPE of the General Population corresponds to 20% of the Occupational Standard.

Proposed Mitigation:

On Monopole Tower: Install (8" x 12") Caution 2B Sign on the tower at 9 feet above the Ground level.

2. Compliance Statement

AT&T Mobility Compliance Statement: Based on the information collected, AT&T Mobility will be Compliant with FCC Rules and Regulations at the nearest walking surface if recommendations in the Compliance Summary are implemented.



3. Appendix

3.1 FCC LIMITS FOR MPE

The FCC's MPE limits are based on exposure limits over a wide range of frequencies recommended by the NCRP and the exposure limits developed by the IEEE and adopted by the American National Standards Institute ("ANSI") to replace the 1982 ANSI guidelines. The limits for localized absorption are based on the recommendations of both the ANSI/IEEE and the NCRP. The potential hazard associated with the RF electromagnetic fields is discussed in OET Bulletin No. 65 "Questions and Answers about the Biological Effects and Potential Hazards of RF Electromagnetic Fields". This document can be obtained on the FCC website at <http://www.fcc.gov>.

Limits for Occupational /Controlled Exposure:

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f ²)*	6
30-300	61.4	0.163	1.0	6
300-1500	–	–	f/300	6
1500-100,000	–	–	5	6

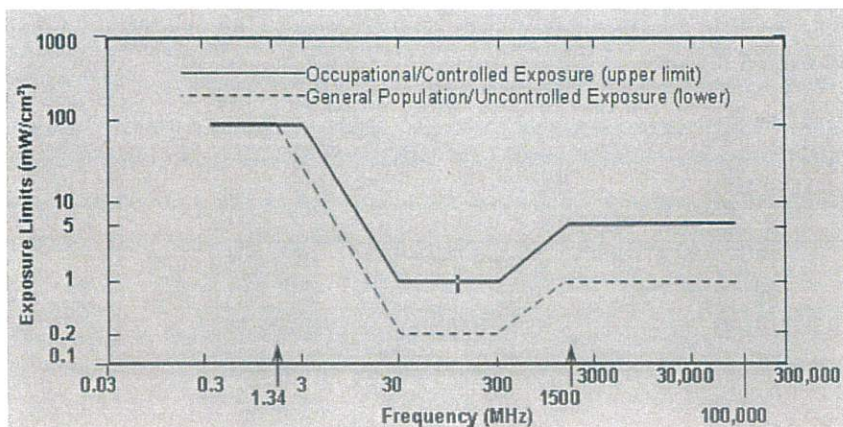
Limits for General Population /Uncontrolled Exposure:

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f ²)*	30
30-300	27.5	0.073	0.2	30
300-1500	–	–	f/1500	30
1500-100,000	–	–	1.0	30

f = frequency in MHz *Plane-wave equivalent power density

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.



3.2 ANALYSIS AND COMPUTATION

Power density is calculated by dividing the surface area of the sphere or the unit area normal to the direction of the propagation. This information is usually shown in units of microwatts per square centimeter (uW/cm²), mill watt per square centimeters (mW/cm²), or watts per square meter (W/m²).

$$S = \frac{(P \times KFact)}{(2\pi R h)}$$

where :

S = power density (mW/cm²)

P = total power input to the antenna (mW)

K = antenna correction factor / numeric factor for antenna discrimination

R = straight line distance of the antenna from a 6 ft. human (cm)

h = distance between the roof level and the bottom of the antenna (cm) or the vertical distance from the tip of the antenna to the roof level where a 6 ft. human being is assumed standing directly from the antenna (also equal to R at 0)

MPE% = Calculated exposure level, as a percentage of the FCC MPE limit for continuous exposure of the general population