SiteSafe®
A Quality Company

8618 Westwood Center Drive, Suite 315, Vienna, VA
22182 703.276.1100 • 703.276.1169 fax
info@sitesafe.com • www.sitesafe.com

RF EMISSIONS COMPLIANCE REPORT

J5 Infrastructure on behalf of AT&T Mobility, LLC

Site FA: 14641286

Site USID: 291228

Site ID: WL4557

Site Name: WALLA WALLA MILL CREEK

Site Address: 928 Strum Avenue
Walla Walla, WA 99362

Report generated date: 02/16/2023

Report Status:

AT&T Mobility, LLC is Compliant

HUGO WILLIAM JUSTINIANO
STATE OF WASHINGTON
56049
REGISTERED
PROFESSIONAL ENGINEER

2/17/23

EXPIRES: 10/25/24

Engineering Statement in Re: Electromagnetic Energy Analysis

My signature on the cover of this document indicates:

That I am registered as a Professional Engineer in the jurisdiction indicated; and That I have extensive professional experience in the wireless communications engineering industry; and

That I am an employee of QualTek Wireless, LLC, sister company to Site Safe, LLC (both under the parent company QualTek), in Vienna, Virginia, at which place the staff provides RF compliance services to clients in the wireless communications industry; and

That I am thoroughly familiar with the Rules and Regulations of the Federal Communications Commission ("the FCC" and "the FCC Rules") both in general and specifically as they apply to the FCC's Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields; and

That the technical information serving as the basis for this report was supplied by J5 Infrastructure on behalf of AT&T Mobility, LLC (see attached Site Summary and Carrier documents) and that AT&T Mobility, LLC's installation involves communications equipment, antennas and associated technical equipment at a location referred to as "WALLA WALLA MILL CREEK" ("the site"); and

That J5 Infrastructure on behalf of AT&T Mobility, LLC proposes to operate at the site with transmit antennas listed in the Equipment Installed at this Site section and with a maximum effective radiated power as specified by J5 Infrastructure on behalf of AT&T Mobility, LLC and shown on the worksheet. AT&T Mobility, LLC MPE Calculations are modeled with 75% Down-link Duty Cycle for LTE and 5G; and

That at this time, the FCC requires that certain licensees address specific levels of radio frequency energy to which workers or members of the public might possibly be exposed (at §1.1307(b) of the FCC Rules); and

That such consideration of possible exposure of humans to radio frequency energy must utilize the standards set by the FCC, which is the federal agency having jurisdiction over communications facilities; and

That the FCC rules define two tiers of permissible exposure guidelines: 1) "uncontrolled environments," which defines situations in which persons may not be aware of (the "general public"), or may not be able to control their exposure to a transmission facility; and 2) "controlled environments," which defines situations in which persons are aware of their potential for exposure (industry personnel); and

That this statement specifically addresses the uncontrolled environment (which is more conservative than the controlled environment) and the limit set forth in the FCC rules for licensees of AT&T Mobility, LLC's operating frequencies as shown on the attached antenna worksheet; and

That when applying the uncontrolled environment standards, the predicted Maximum Power Density at six feet above ground level from the proposed AT&T Mobility, LLC operation is no more than 0.2515% of the maximum permissible exposure limits in any accessible area on the ground; and

That it is understood per FCC Guidelines and OET 65 Appendix A, that regardless of the existent radio frequency environment, only those licensees whose contributions exceed 5% of the exposure limit pertinent to their operation(s) bear any responsibility for bringing any non-compliant area(s) into compliance; and

That when applying the uncontrolled environment standards, the cumulative predicted energy density from the proposed operation is no more than 0.2515% of the maximum in any accessible area up to six feet above the ground per OET 65; and

That the calculations provided in this report are based on data provided by the client and antenna pattern data supplied by the antenna manufacturer, in accordance with FCC guidelines listed in OET 65. Horizontal and vertical antenna patterns are combined for modeling purposes to accurately reflect the energy six feet above ground level where on-axis energy refers to maximum energy six feet above the ground along the azimuth of the antenna and where area energy refers to the maximum energy anywhere six feet above the ground regardless of the antenna azimuth, accounting for cumulative energy from multiple antennas for the carrier(s) and frequency range(s) indicated; and

That the Occupational Safety and Health Administration has policies in place which address worker safety in and around communications sites, thus individual companies will be responsible for their employees' training regarding radio frequency safety; and

In summary, it is stated here that the proposed operation at the site will not result in exposure of the public to excessive levels of radio frequency energy as defined in the FCC Rules and Regulations, specifically 47 CFR 1.1307(b), and that AT&T Mobility, LLC's proposed operation is completely compliant.

Finally, it is stated that access to the tower should be restricted to communication industry professionals and approved contractor personnel trained in radio frequency safety and that this instant analysis addresses exposure levels at six feet above ground level and does not address exposure levels on the tower or in the immediate proximity of the antennas.

If you have any questions or comments in regard to this report, please do not hesitate to contact Sitesafe's Customer Support Department at (703) 276-1100.

This RF Exposure assessment is based on power density modelling and a comparison with whole body exposure limits set by the Federal Communications Commission (FCC), as addressed most recently in 2019[1], and codified in their rules0F[2]. FCC Maximum Permissible Exposure (MPE) limits for RF are expressed in units of power density.

RF power density levels are calculated using the IXUS Modeler1F[3] a sound engineering practice as described in OET-65[4]. IXUS employs a synthetic ray tracing method for panel and omnidirectional antennas and a conservative cylindrical envelope method for microwave dish (parabolic reflector / aperture) antennas, both described in IEC 622322F[5].

To calculate exposure levels, power density from each source is divided by the appropriate exposure limit, creating an exposure ratio. The exposure ratios from all sources are summed into a total exposure ratio and compared to the appropriate FCC MPE limit.

---

[1] FCC-19-126 *Proposed Changes in the Commission's Rules Regarding Human Exposure to Radiofrequency Electromagnetic Fields; Reassessment of Federal Communications Commission Radiofrequency Exposure Limits and Policies*

[2] 47 CFR § 1.1310 Radiofrequency radiation exposure limits, US Code of Federal Regulations

[3] IXUS EMF Compliance Management Software provided by Alphawave Mobile Network Products http://www.ixusapp.com.

[4] FCC Office of Engineering and Technology Bulletin OET-65 Edition 97-01 *Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields,* August 1997

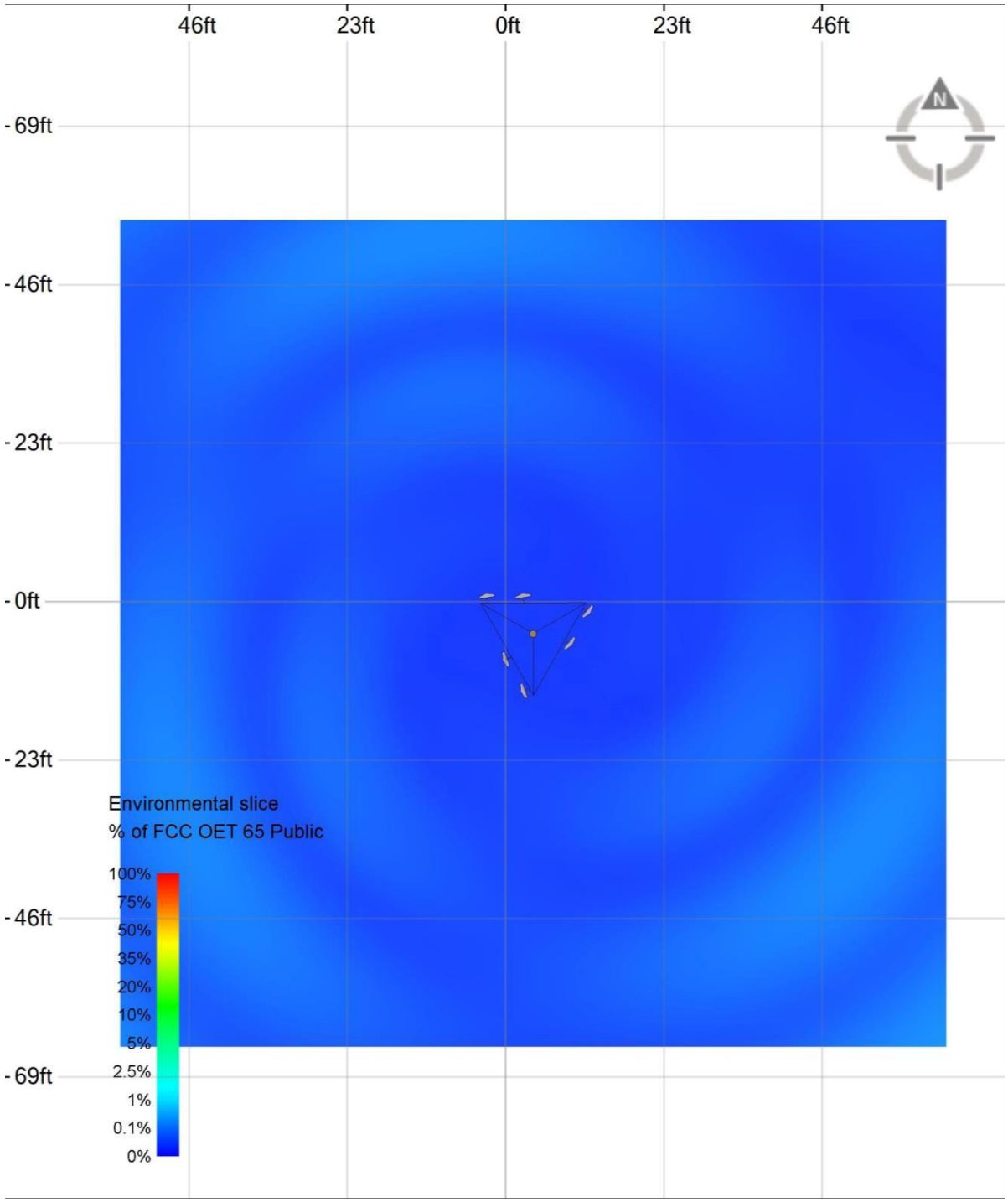
[5] IEC 62232:2022, Determination of RF field strength and SAR in the vicinity of radiocommunication base stations for the purpose of evaluating human exposure, International Electrotechnical Commission, Geneva.

Emissions on Ground level

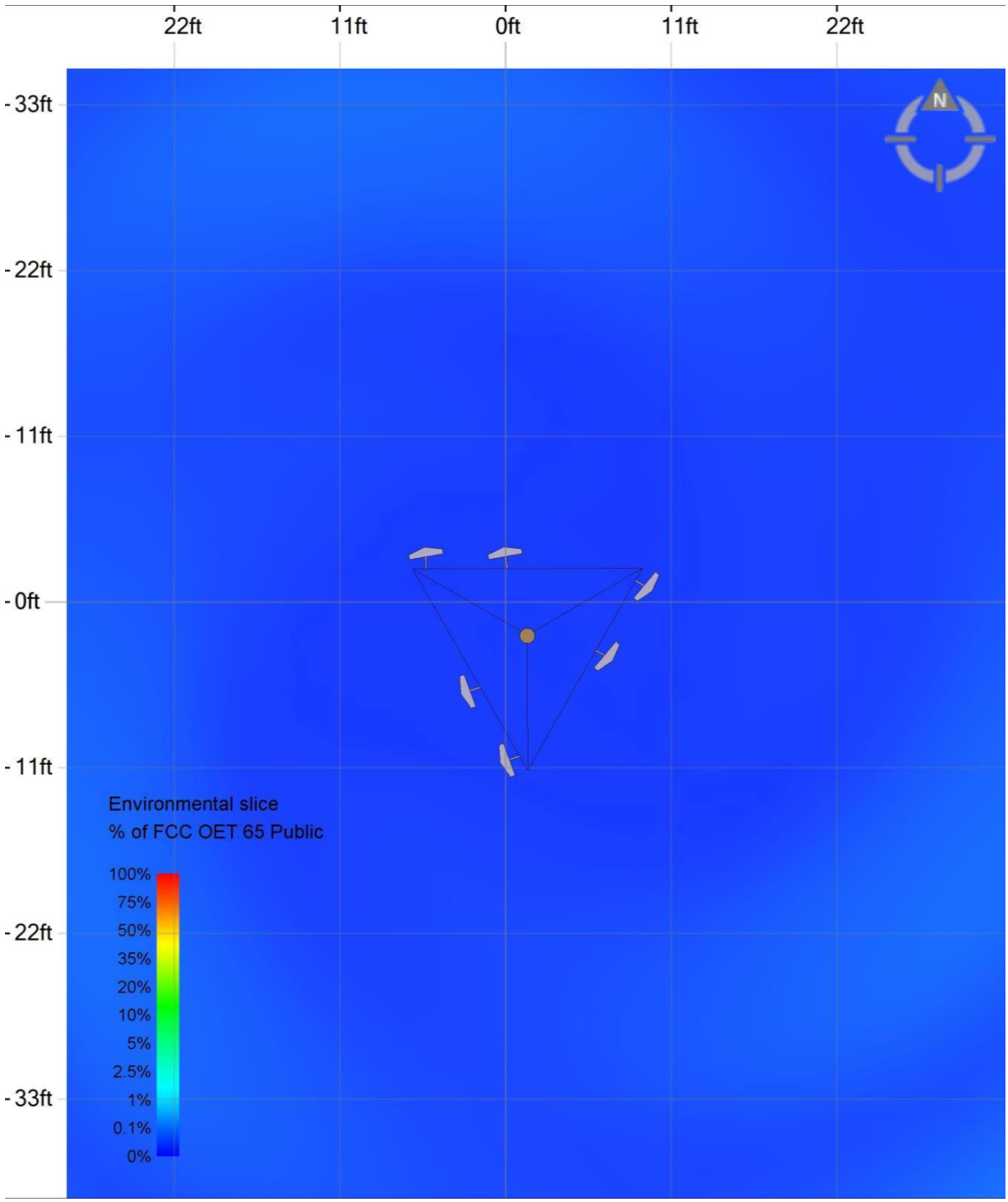
Maximum total (All) and operator contribution values (% of FCC OET 65 general public limit)	
The following are maximum values found in the area immediately surrounding the site; Spatially averaged from zero to six feet.	
Composite Contribution	0.2515%
AT&T Mobility, LLC Contribution	0.2515%

Emissions Visualized

Composite View



Detailed View



Equipment Installed at this Site

Report Ref	Owner	Type/Make/Model	h (ft)	Az (°)	System/ Frequency	Power (Watts)
A1	AT&T	Panel/CellMax/CMA-UBTULBULBHH-6517-17-21-21	55	130	LTE 737	120
A1	AT&T	Panel/CellMax/CMA-UBTULBULBHH-6517-17-21-21	55	130	LTE 763	120
A1	AT&T	Panel/CellMax/CMA-UBTULBULBHH-6517-17-21-21	55	130	LTE 1900	120
A1	AT&T	Panel/CellMax/CMA-UBTULBULBHH-6517-17-21-21	55	130	LTE 2100	120
A2	AT&T	Panel/CellMax/CMA-UBTULBULBHH-6517-17-21-21	55	130	LTE 2300	75
A3	AT&T	Panel/CellMax/CMA-UBTULBULBHH-6517-17-21-21	55	250	LTE 737	120
A3	AT&T	Panel/CellMax/CMA-UBTULBULBHH-6517-17-21-21	55	250	LTE 763	120
A3	AT&T	Panel/CellMax/CMA-UBTULBULBHH-6517-17-21-21	55	250	LTE 1900	120
A3	AT&T	Panel/CellMax/CMA-UBTULBULBHH-6517-17-21-21	55	250	LTE 2100	120
A4	AT&T	Panel/CellMax/CMA-UBTULBULBHH-6517-17-21-21	55	250	LTE 2300	75
A5	AT&T	Panel/CellMax/CMA-UBTULBULBHH-6517-17-21-21	55	350	LTE 737	120
A5	AT&T	Panel/CellMax/CMA-UBTULBULBHH-6517-17-21-21	55	350	LTE 763	120
A5	AT&T	Panel/CellMax/CMA-UBTULBULBHH-6517-17-21-21	55	350	LTE 1900	120
A5	AT&T	Panel/CellMax/CMA-UBTULBULBHH-6517-17-21-21	55	350	LTE 2100	120
A6	AT&T	Panel/CellMax/CMA-UBTULBULBHH-6517-17-21-21	55	350	LTE 2300	75