



SAI Group
12 Industrial Way
Salem, NH 03079
603-421-0470

July 11, 2025

Melanie A. Bachman
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Notice of Exempt Modification – New Cingular Wireless PCS, LLC (AT&T)
56 Egypt Road, Somers, CT – Four Town Fair 2025
N 41.96138889
W 72.46194444

Dear Ms. Bachman:

AT&T intends to install a temporary cellular communications facility for service during the 2025 Four Town Fair. Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies § 16-50j-73, of construction that constitutes an exempt modification under R.C.S.A. § 16-50j-72(d). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to Somers First Selectman Tim Keeney and Zoning Enforcement Officer, Jennifer Roy as well as to the property owner.

AT&T operates under licenses issued by the Federal Communications Commission (FCC) to provide mobile communications service in Tolland County, which includes the area to be served by AT&T's proposed temporary installation. The proposed temporary facility would be installed on property owned by Union Agricultural Society, Inc. (Four Town Fairgrounds).

Proposed Temporary Facility

The proposed temporary cell site meets the criteria set forth in R.C.S.A § 16-50j-72(d) for temporary cellular service for events of statewide significance. The site is necessary to provide additional system capacity to accommodate increased communication needs during Four Town Fair 2025. This facility may include B2, B5, B17, B14, B29, B30, B66 & n77 hardware that is 4G(LTE) and/or 5GNR capable through remote software configuration and either or both services may be turned on or off at various times.

The Four Town Fair will be held in the area of Four Town Fairgrounds on September 11-14th, 2025.

The temporary cell site will be located at 56 Egypt Road in Somers on property owned by Union Agricultural Society. An e-mail from Union Agricultural Society authorizing AT&T's use of the property for this purpose is attached. Power and telephone connections will be provided from the existing utility services at the Fairgrounds. AT&T's equipment will be deployed to the property on or around August 25th. The site will begin on-air operations on September 10th and be removed on or around September 15th.

AT&T's temporary cell site will consist of radio equipment installed in a fully self-contained vehicle referred to as a Super COLT (Cell on Light Truck). The COLT carries three integrated pneumatic masts, which can be extended to a height of up to 59 ft above ground level. The proposed temporary cell site will not increase noise levels by six decibels or more.

The COLT will be fitted with (2) Kathrein 800-10966 and (1) Galtronics GP2406-06670 antenna at 60 feet, (3) Kathrein 840-10520 antennas at 55 feet above ground level and (3) Ericsson AIR6472 antennas at 50 feet.

Power Density Calculations

AT&T's temporary cell site will not result in a total radio frequency electromagnetic radiation power density, measured at six feet above ground level at the temporary tower location, at or above State or Federal standards. Please see attached Radio Frequency Emissions Report. The report shows that AT&T's temporary transmissions from the temporary cell site will result in a maximum cumulative percent of MPE that is calculated to be 24.27% of the FCC limit for general population / uncontrolled environments.

Conclusion

For the foregoing reasons, AT&T respectfully requests that the Council acknowledge AT&T's Notice of Exempt Modification for the temporary cell site to be operated during the 2025 Four Town Fair pursuant to R.C.S.A. § 16-50j-72(d).

Please feel free to call me at (860) 670-9068 with any questions regarding this Notice. Thank you for your consideration in this matter.

Sincerely,

Mark Roberts

Mark Roberts
Consultant for SAI
Mark.Roberts@QCDevelopment.net

Attachments

cc: First Selectman Tim Keeney – Elected Official
Jennifer Roy - Zoning Enforcement Officer
Union Agricultural Society, Inc. – Property Owner

56 EGYPT RD

Location	56 EGYPT RD	Mblu	02/ 13/ / /
Acct#	00061700	Owner	UNION AGRICULTURAL SOCIETY INC
Assessment	\$484,600	Appraisal	\$692,200
PID	3022	Building Count	5
Dev Lot		Dev Map	
Exempt Code	X		

Current Value

Appraisal			
Valuation Year	Improvements	Land	Total
2020	\$362,600	\$329,600	\$692,200
Assessment			
Valuation Year	Improvements	Land	Total
2020	\$253,900	\$230,700	\$484,600

Owner of Record

Owner	UNION AGRICULTURAL SOCIETY INC	Sale Price	\$0
Co-Owner	FOUR TOWN FAIRGROUNDS	Certificate	
Address	PO BOX 24	Book & Page	0033/0468
	SOMERS, CT 06071	Sale Date	09/13/1960
		Instrument	

Ownership History

Ownership History					
Owner	Sale Price	Certificate	Book & Page	Instrument	Sale Date
UNION AGRICULTURAL SOCIETY INC	\$0		0033/0468		09/13/1960

Building Information

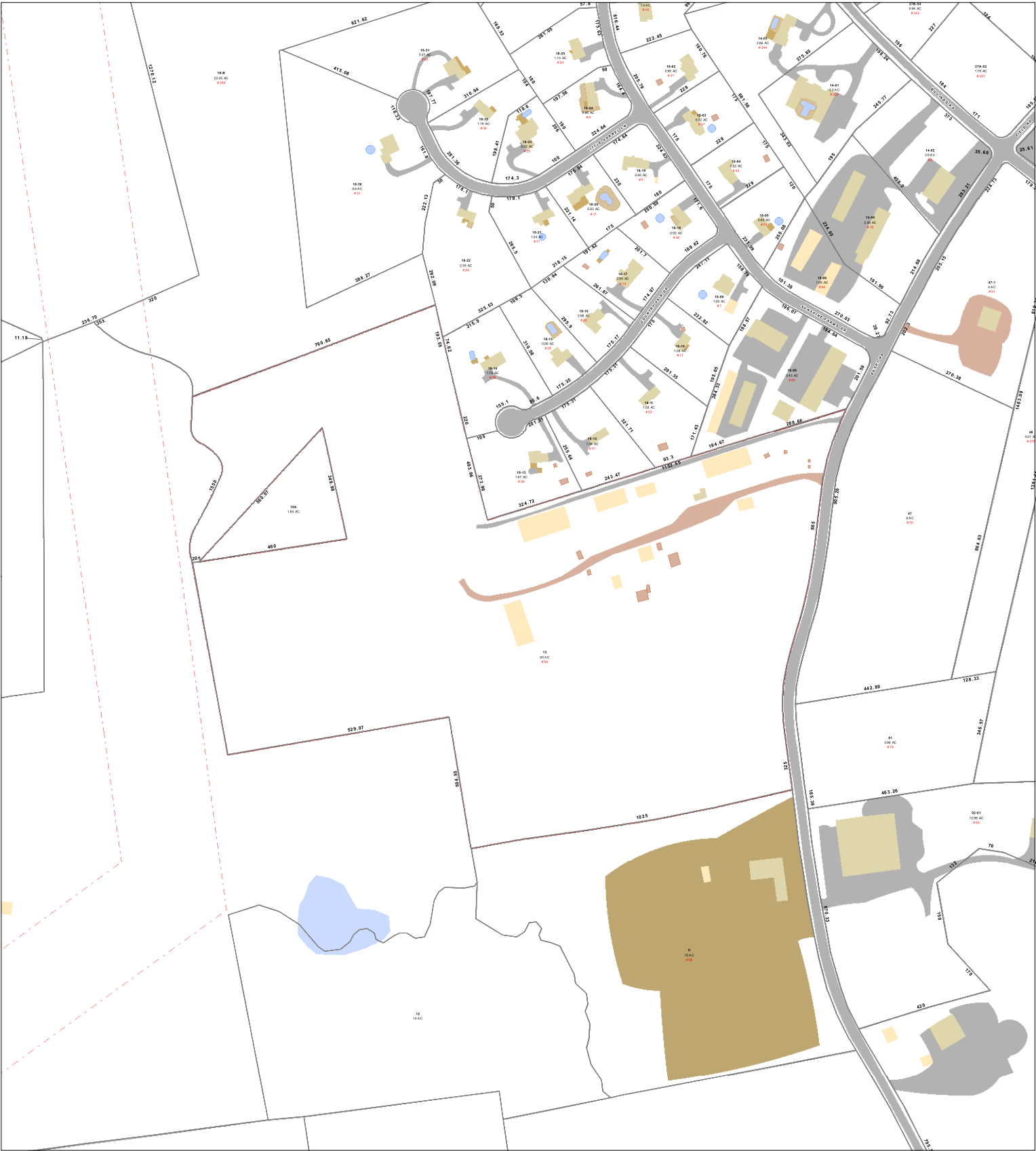
Building 1 : Section 1

Year Built: 1900

Town of Somers, Connecticut - Assessment Parcel Map

Parcel: 02-13

Address: 56 EGYPT RD



Approximate Scale: 1 inch = 400 feet

Disclaimer: This map is for informational purposes only. All information is subject to verification by any user. The Town of Somers and its mapping contractors assume no legal responsibility for the information contained herein.

Map Produced June 2025

From: [John Streiber](#)
To: [Mark Roberts](#)
Cc: [Ruth Phillips-Grant](#); [EDiscenza](#); [Jay Rich <jayrich4316@gmail.com>](#)
Subject: FOUR TOWN FAIR 2025 - AT&T TEMP SITE
Date: Tuesday, June 17, 2025 8:51:02 AM

This email authorizes AT&T Wireless and/or its authorized agent to file for all necessary federal state or local permits and approvals for the proposed temporary wireless telecommunications facility at the UNION AGRICULTURAL SOCIETY property located at 56 Egypt road, Somers, CT for the Four Towns Fair 2025.

John Streiber
Union Agricultural Society Board member & Lead Electrician
E-1.125319
Ellington Electrical Contractor LLC
P.O.Box 731
Ellington Connecticut 06029
H: 860-875-8800
C: 860-209-1692

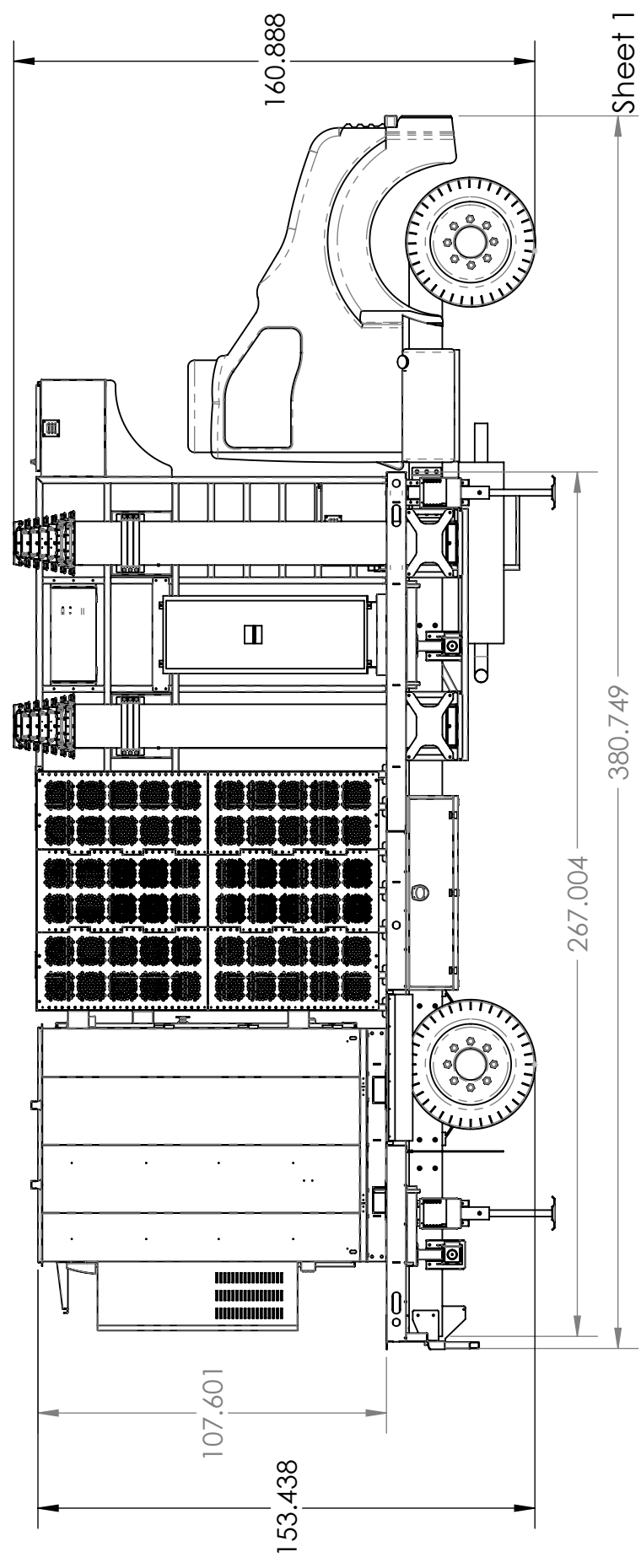
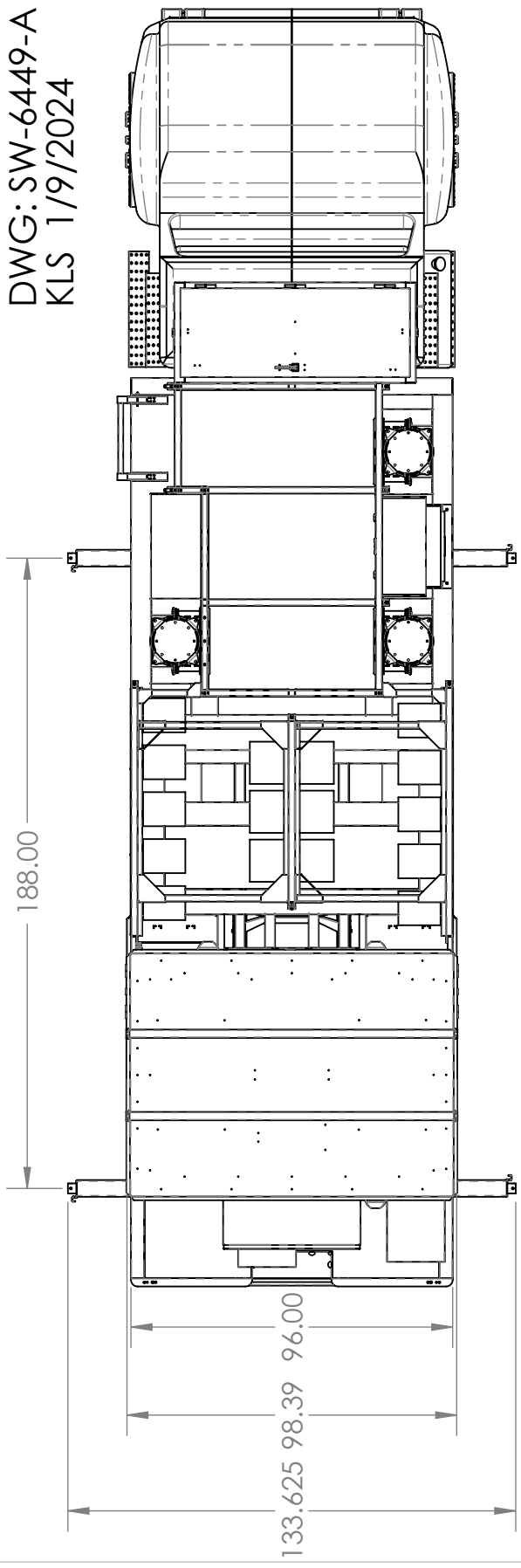
LOCATION OF AT&T TEMPORARY COLT – FOUR TOWN FAIR 2025



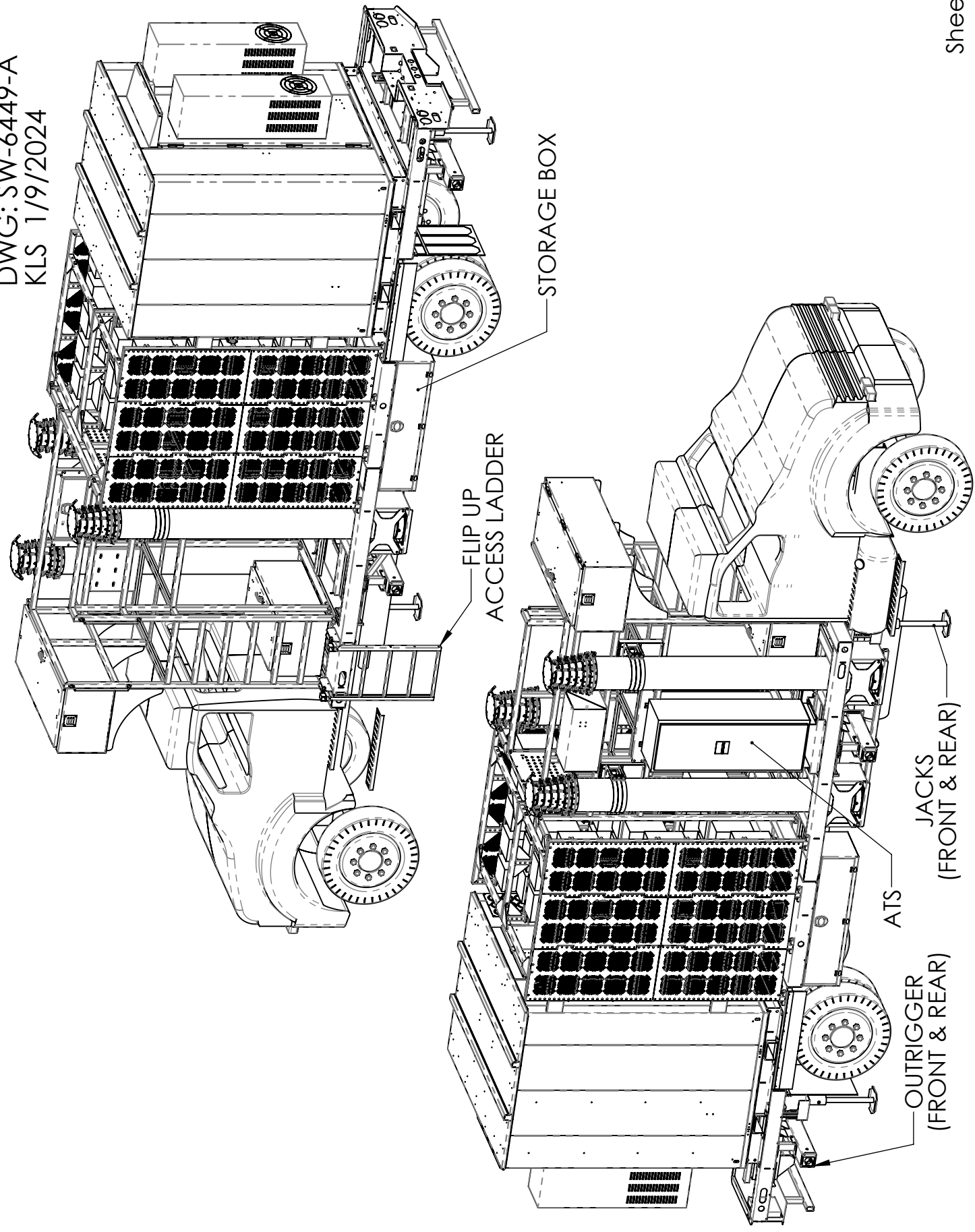
AT&T CELL ON LIGHT TRUCK (COLT)



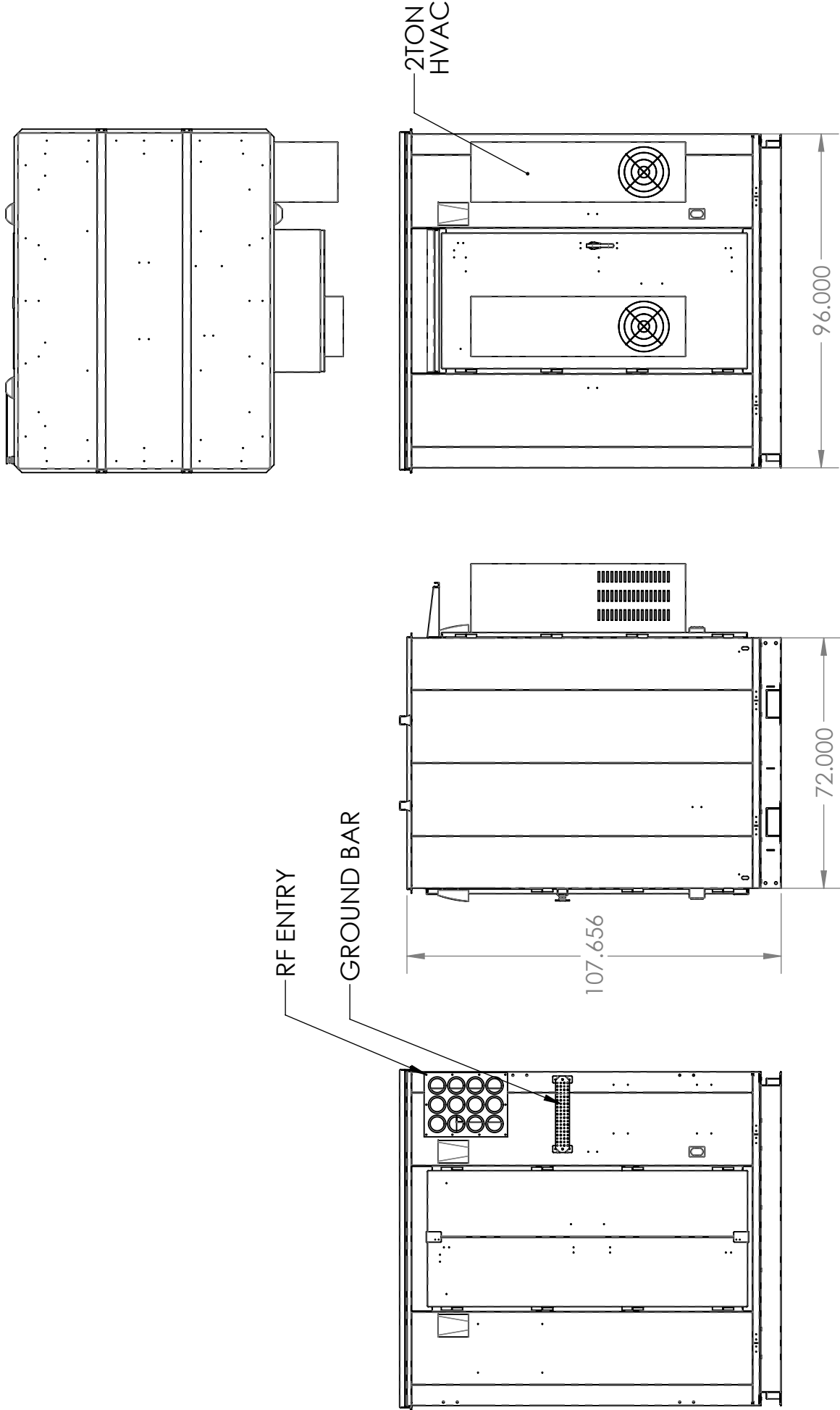
NAME: AT&T Non-CDL Colt
DWG: SW-6449-A
KLS 1/9/2024



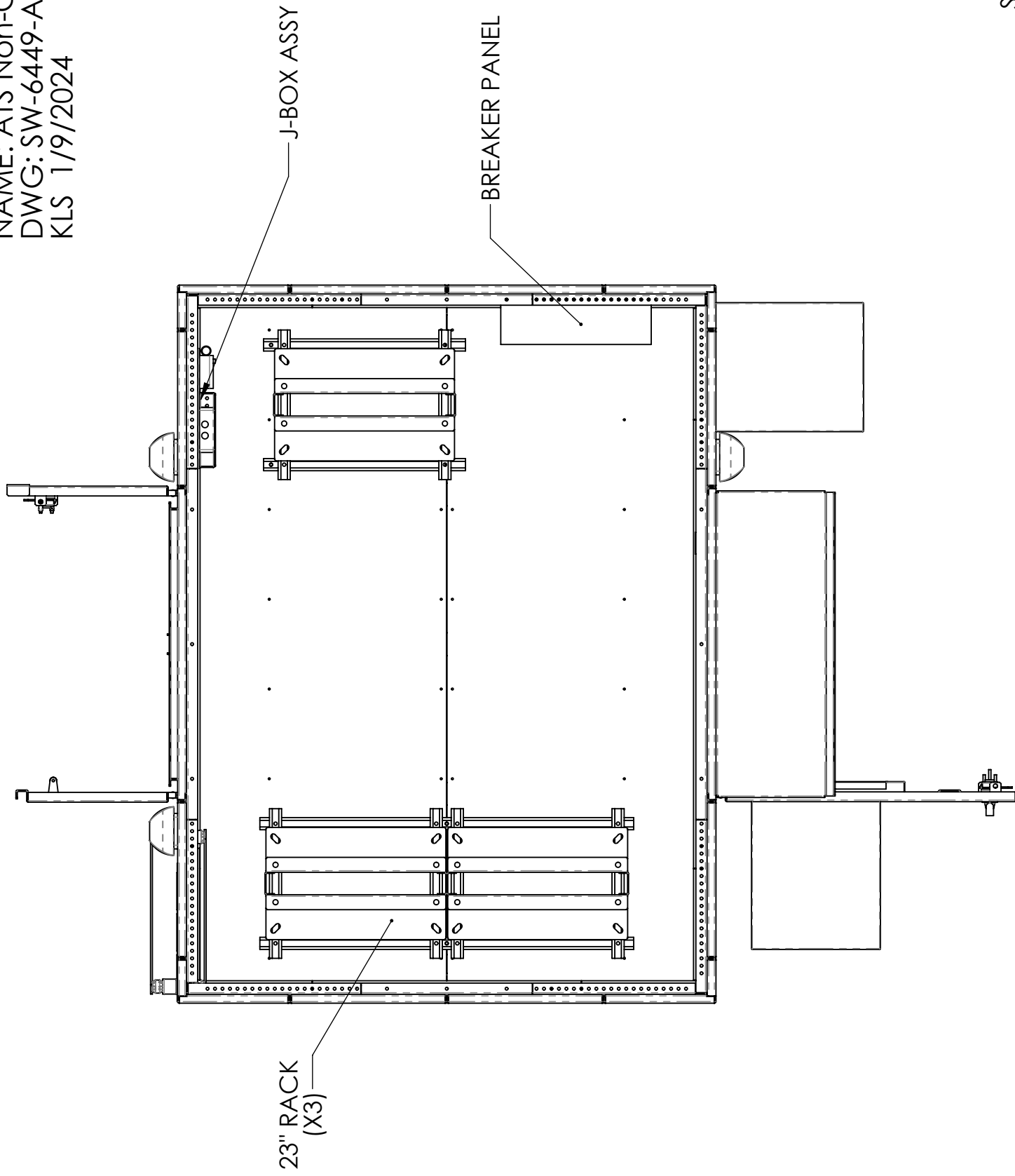
NAME: AT&T Non-CDL Colt
DWG: SW-6449-A
KLS 1/9/2024



NAME: ATS Non-CDL Colt
DWG: SW-6449-A
KLS 1/9/2024



NAME: ATS Non-CDL Colt
DWG: SW-6449-A
KLS 1/9/2024





C Squared Systems, LLC
65 Dartmouth Drive
Auburn, NH 03032
(603) 644-2800

support@csquaredsystems.com

Calculated Radio Frequency Emissions Report



CT6540

56 Egypt Road, Somers, CT

June 20, 2025

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1. Introduction

The purpose of this report is to investigate compliance with applicable FCC regulations for the proposed temporary deployment of AT&T antenna arrays mounted at 50', 55', 60' AGL on top of the CoW (Cell On Wheels) located on 56 Egypt Road for the 2025 Four Town Fair in Somers, CT. The coordinates of the CoW are 41° 57' 41.0" N, 72° 27' 43.0" W.

AT&T is proposing to deploy nine (9) directional antennas (three sectors, three antennas per sector) to support its 4G LTE and 5G NR networks as well as the FirstNet National Public Safety Broadband Network ("NPSBN") during the 2025 Four Town Fair in Somers, CT.

This report considers the proposed antenna configuration for AT&T to calculate the resulting % Maximum Permissible Exposure (MPE) at ground level around the facility.

2. FCC Guidelines for Evaluating RF Radiation Exposure Limits

In 1985, the FCC established rules to regulate radio frequency (RF) exposure from FCC licensed antenna facilities. In 1996, the FCC updated these rules, which were further amended in August 1997 by OET Bulletin 65 Edition 97-01. These new rules include Maximum Permissible Exposure (MPE) limits for transmitters operating between 300 kHz and 100 GHz. The FCC MPE limits are based upon those recommended by the National Council on Radiation Protection and Measurements (NCRP), developed by the Institute of Electrical and Electronics Engineers, Inc., (IEEE) and adopted by the American National Standards Institute (ANSI).

The FCC general population/uncontrolled limits set the maximum exposure to which most people may be subjected. 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.

Public exposure to radio frequencies is regulated and enforced in units of milliwatts per square centimeter (mW/cm²). The general population exposure limits for the various frequency ranges are defined in the documents referenced in Attachment A of this report.

Higher exposure limits are permitted under the occupational/controlled exposure category, but only for persons who are exposed as a consequence of their employment and who have been made fully aware of the potential for exposure, and they must be able to exercise control over their exposure. General population/uncontrolled limits are five times more stringent than the levels that are acceptable for occupational, or radio frequency trained individuals. Attachment B contains excerpts from OET Bulletin 65 and defines the Maximum Exposure Limit.

Finally, it should be noted that the MPE limits adopted by the FCC for both general population/uncontrolled exposure and for occupational/controlled exposure incorporate a substantial margin of safety and have been established to be well below levels generally accepted as having the potential to cause adverse health effects.

3. RF Exposure Prediction Methods

The results displayed in the following figures were generated using the following formula as outlined in FCC bulletin OET 65:

$$\text{Power Density} = \left(\frac{GRF^2 \times \text{EIRP}}{4\pi \times R^2} \right) \times \text{Off Beam Loss}$$

Where:

EIRP = Effective Isotropic Radiated Power

$R = \text{Radial Distance} = \sqrt{H^2 + V^2}$

H = Horizontal Distance from antenna

V = Vertical Distance from radiation center of antenna

Off Beam Loss is determined by the selected antenna patterns

GRF = Ground reflection factor of 1.6

These calculations assume that the antennas are operating at full power and 100 percent capacity, and that all antenna channels are transmitting simultaneously. Obstructions (trees, buildings, etc.) that would normally attenuate the signal are not considered. The calculations assume level terrain in the area of study and do not account for actual terrain elevations which could attenuate the signal. As a result, the calculated power density and corresponding % MPE levels reported below are much higher than the actual signal levels will be from the final installation.

The percent of MPE values presented in this report reflect levels that one may encounter from one sector of a carrier's antennas. Most carriers use 3 or 4 sectors per site with azimuths approximately 90 or 120 degrees apart, respectively; therefore, one could not be standing in the main beam of all sectors at the same time. In cases where antenna models are not uniform across all sectors, the antenna model with the highest gain was used for the calculations. This results in a conservative or "worst case" assumption for percent of MPE calculations.

4. Antenna Inventory

Table 1 below outlines AT&T's proposed antenna configuration for the site. The associated data model and antenna patterns for these specific antenna models are included in Attachment C.

Operator	Sector / Azimuth	TX Freq (MHz)	Power at Antenna (Watts)	Ant Gain (dBi)	Power EIRP (Watts)	Antenna Model	Beam Width	Mech. Tilt	Length (ft)	Antenna Centerline Height (ft)
AT&T	Alpha / 30°	763	160	10.8	1924	840-10520	72	0	2	55
		1900	160	15.5	5677	GP2406-06670	32.4	6	2	60
		2100	240	15.5	8516		32.4			
		739	160	12.6	2912		39.6			
		850	160	16.4	3192		31.7			
		2300	100	18.3	3981		24.2			
		3500	200	19.1	16257	AIR6472	±60	0	3	50
		3700	200	18.9	15525					
	Beta / 150°	763	160	10.8	1924	840-10520	72	0	2	55
		1900	160	15.5	5677	80010966	32.4	6	2	60
		2100	240	15.5	8516		32.4			
		739	160	12.6	2912		39.6			
		850	160	16.4	3192		31.7			
		2300	100	18.3	3981		24.2			
		3500	200	19.1	16257	AIR6472	±60	0	3	50
		3700	200	18.9	15525					
	Gamma / 270°	763	160	10.8	1924	840-10520	72	0	2	55
		1900	160	15.5	5677	80010966	32.4	6	2	60
		2100	240	15.5	8516		32.4			
		739	160	12.6	2912		39.6			
		850	160	16.4	3192		31.7			
		2300	100	18.3	3981		24.2			
		3500	200	19.1	16257	AIR6472	±60	0	3	50
		3700	200	18.9	15525					

Table 1: Proposed Antenna Inventory^{1,2}

¹ Antenna configuration is in reference to AT&T's Radio Frequency Design Sheet dated 6/4/2025.

² Transmit power assumes 0 dB of cable loss.

5. Calculation Results

The calculated % MPE results for the proposed antenna configuration are shown in Figure 1 below. Each frequency band and technology is calculated as well as the resulting cumulative percent of MPE. For completeness, the calculations for this analysis range from 0 feet horizontal distance (directly below the antennas) to a value of 3,000 feet horizontal distance from the site. In addition to the other worst-case scenario considerations that were previously mentioned, the power density calculations to each horizontal distance point away from the antennas was completed using a local maximum off beam antenna gain (within ± 5 degrees of the true mathematical angle) to incorporate a realistic worst-case scenario.

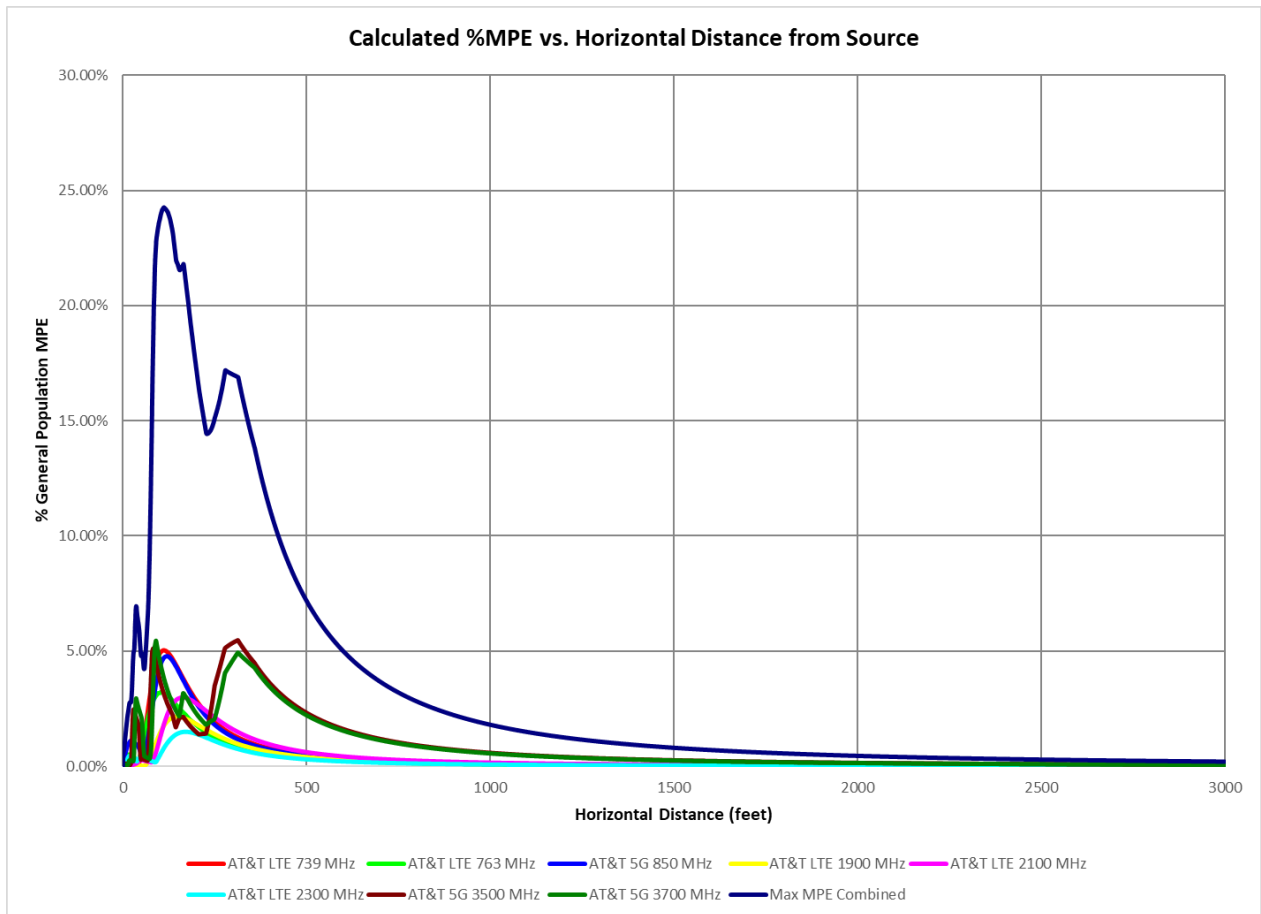


Figure 1: Graph of General Population % MPE vs. Distance

The highest percent of MPE (**24.27% of the General Population limit**) is calculated to occur at a horizontal distance of 111 feet from antennas. Please note that the percent of MPE calculations close to the site consider off beam loss, which is determined from the vertical pattern of the antennas used. Therefore, RF power density levels may increase as the distance from the site increases. At distances of approximately 400 feet and beyond, one would now be in the main beam of the antenna patterns and off beam loss is no longer considered. Beyond this point, power density levels vary based on distance from the site and the percent of MPE decreases significantly as distance from the site increases.

Table 2 below lists percent of MPE values as well as the associated parameters that were included in the calculations. As stated in Section 3, all calculations assume that the antennas are operating at 100 percent capacity, and that all antenna channels are transmitting simultaneously. Obstructions (trees, buildings etc.) that would normally attenuate the signal are not taken into account. Additionally, a six-foot height offset was considered in this analysis to account for the height of a person standing at ground level. As a result, the calculated % MPE levels are significantly higher than the actual signal levels will be from the final installation. The results presented in Figure 1 and Table 2 assume level ground elevation from the base of the site out to the horizontal distances calculated.

Carrier	Number of Transmitters	Power out of Base Station Per Transmitter (Watts)	Antenna Height (Feet)	Distance to the Base of Antennas (Feet)	Power Density (mW/cm ²)	Limit (mW/cm ²)	% MPE
AT&T 5G 3500 MHz	1	200.0	50.0	111	0.031696	1.000	3.17%
AT&T 5G 3700 MHz	1	200.0	50.0	111	0.038637	1.000	3.86%
AT&T 5G 850 MHz	1	160.0	60.0	111	0.026633	0.567	4.70%
AT&T LTE 1900 MHz	1	160.0	60.0	111	0.017427	1.000	1.74%
AT&T LTE 2100 MHz	1	240.0	60.0	111	0.017842	1.000	1.78%
AT&T LTE 2300 MHz	1	100.0	60.0	111	0.007725	1.000	0.77%
AT&T LTE 739 MHz	1	160.0	60.0	111	0.024829	0.493	5.04%
AT&T LTE 763 MHz	1	160.0	55.0	111	0.016247	0.509	3.19%
Total							24.27%

Table 2: Maximum Percent of General Population Exposure Values^{3 4}

³ Frequencies listed are representative of the operating band and are not the specific operating frequency.

⁴ The total % MPE listed is a summation of each unrounded contribution. Therefore, summing each rounded value may not reflect the total value listed in the table.

6. Conclusion

The above analysis concludes that RF exposure levels from the site with AT&T's proposed antenna configuration will be well below the maximum permissible levels as outlined by the FCC in the OET Bulletin 65 Ed. 97-01. Using the conservative calculation methods and parameters detailed above, the maximum cumulative percent of MPE is calculated to be **24.27% of the FCC limit (General Population/Uncontrolled)**. This maximum cumulative percent of MPE value is calculated to occur 111 feet away from the site.

7. Statement of Certification

I certify to the best of my knowledge that the statements in this report are true and accurate. The calculations follow guidelines set forth in ANSI/IEEE Std. C95.1, ANSI/IEEE Std. C95.3, and FCC OET Bulletin 65 Edition 97-01.



June 19, 2025

Report Prepared By: _____
Cory Goulet
RF Engineer
C Squared Systems, LLC

Date



June 20, 2025

Reviewed/Approved By: _____
Martin Lavin
Senior RF Engineer
C Squared Systems, LLC

Date

Attachment A: References

OET Bulletin 65 - Edition 97-01 - August 1997 Federal Communications Commission Office of Engineering & Technology

IEEE C95.1-2019, IEEE Standard Safety Levels With Respect to Human Exposure to Electric, Magnetic, and Electromagnetic Fields, 0 Hz to 300 GHz IEEE-SA Standards Board

IEEE C95.3-2021, IEEE Recommended Practice for Measurements and Computations of Electric, Magnetic, and Electromagnetic Fields With Respect to Human Exposure to Such Fields, 0 Hz to 300 GHz IEEE-SA Standards Board

Attachment B: FCC Limits for Maximum Permissible Exposure (MPE)

(A) Limits for Occupational/Controlled Exposure⁵

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (E) (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

(B) Limits for General Population/Uncontrolled Exposure⁶

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (E) (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

Table 3: FCC Limits for Maximum Permissible Exposure

⁵ 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.

⁶ 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.

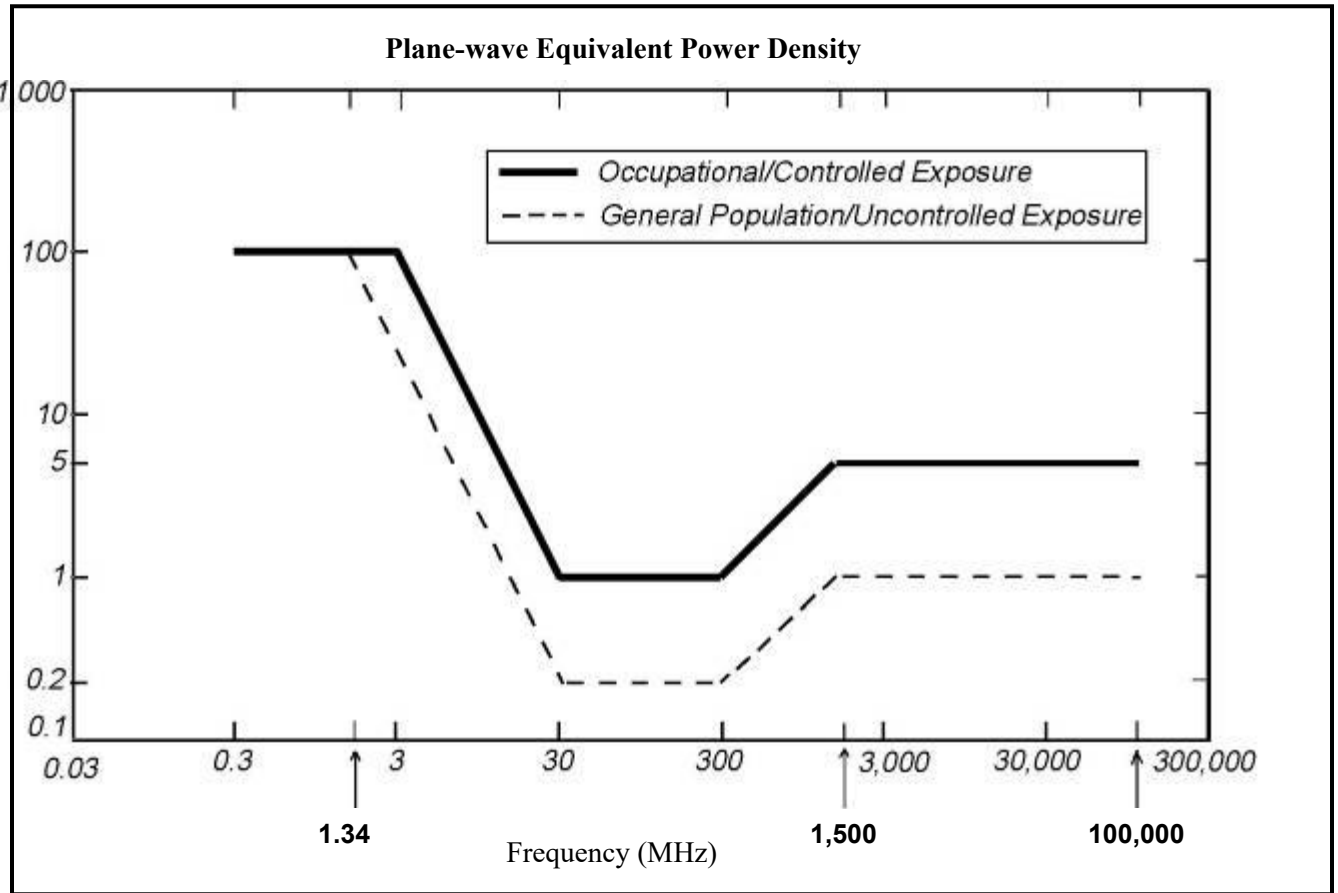
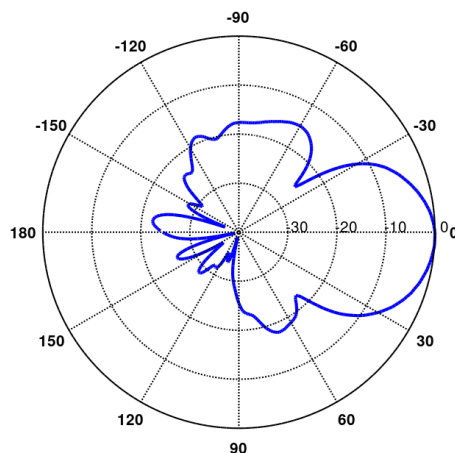


Figure 2: Graph of FCC Limits for Maximum Permissible Exposure (MPE)

Attachment C: AT&T Mobility Antenna Model Data Sheets and Electrical Patterns

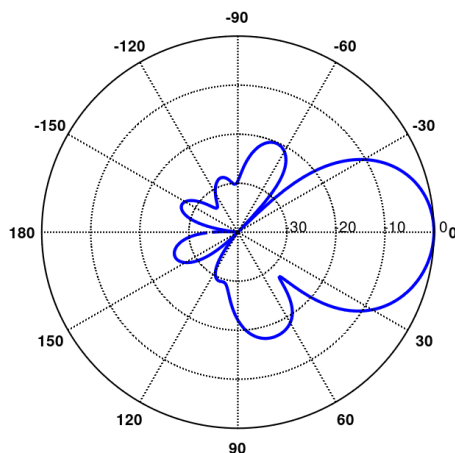
763 MHz

Manufacturer: Katherin
 Model #: 840-10520
 Frequency Band: 698-894 MHz
 Gain: 10.8 dBi
 Vertical Beamwidth: 36°
 Horizontal Beamwidth: 72°
 Polarization: $\pm 45^\circ$
 Size L x W x D: 23.3" x 10.6" x 6.2"



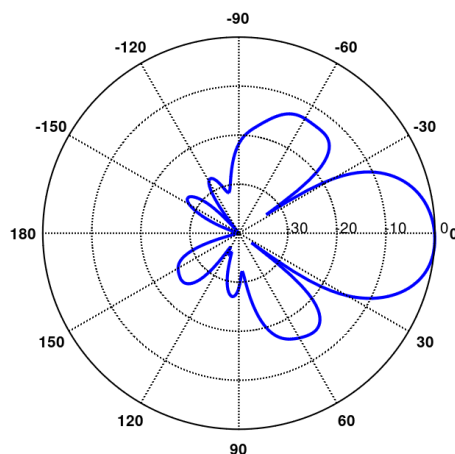
739 MHz

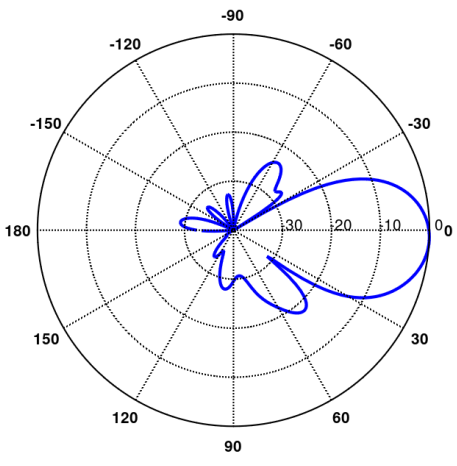
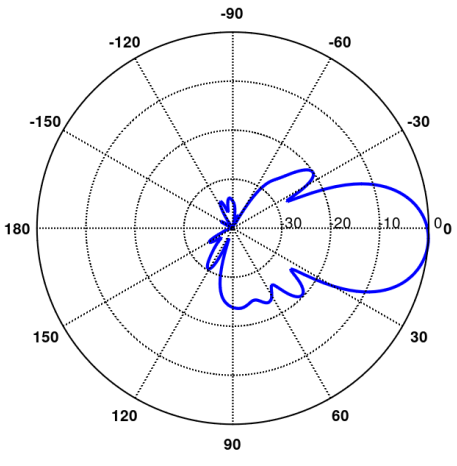
Manufacturer: Galtronics
 Model #: GP2406-06670
 Frequency Band: 698-806 MHz
 Gain: 12.6 dBi
 Vertical Beamwidth: 36.3°
 Horizontal Beamwidth: 39.6°
 Polarization: Dual slant 45° ($\pm 45^\circ$)
 Size L x W x D: 23.3" x 23.3" x 6.0"

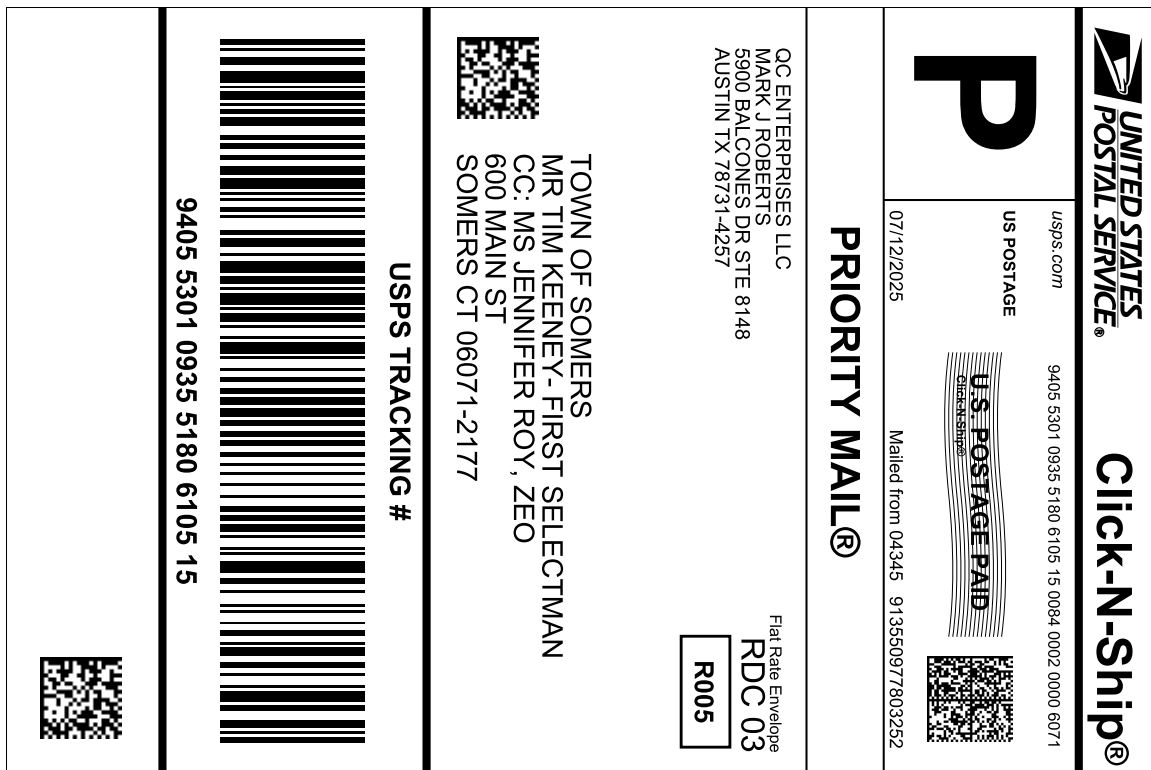


850 MHz

Manufacturer: Galtronics
 Model #: GP2406-06670
 Frequency Band: 806-896 MHz
 Gain: 13.0 dBi
 Vertical Beamwidth: 31.7°
 Horizontal Beamwidth: 33.9°
 Polarization: Dual slant 45° ($\pm 45^\circ$)
 Size L x W x D: 23.3" x 23.3" x 6.0"



<p>1900 MHz</p> <p>Manufacturer: Galtronics Model #: GP2406-06670 Frequency Band: 1695-2180 MHz Gain: 15.5 dBi Vertical Beamwidth: 37.2° Horizontal Beamwidth: 32.4° Polarization: Dual slant 45° (±45°) Size L x W x D: 23.3" x 23.3" x 6.0"</p>	
<p>2100 MHz</p> <p>Manufacturer: Galtronics Model #: GP2406-06670 Frequency Band: 1695-2180 MHz Gain: 15.5 dBi Vertical Beamwidth: 37.2° Horizontal Beamwidth: 32.4° Polarization: Dual slant 45° (±45°) Size L x W x D: 23.3" x 23.3" x 6.0"</p>	
<p>3500/3700 MHz</p> <p>Manufacturer: ERICSSON Model #: AIR 6472 B77G B77M Frequency Band: 3450-3550 MHz 3840-3980 MHz Gain: 19.1/18.9 dBi Vertical Beamwidth: 87-105° Horizontal Beamwidth: 60° Polarization: N/A° Dimensions (L x W x D): 36.3" x 15.83" x 7.4"</p>	<p>N/A</p>



 **UNITED STATES POSTAL SERVICE®** Thank you for shipping with the United States Postal Service!
Check the status of your shipment on the USPS Tracking® page at usps.com

Tracking Number:
4200607121779405530109355180610515


 Copy  Add to Informed Delivery

Expected Delivery by

WEDNESDAY
16 July 2025 ⓘ by **9:00pm** ⓘ

Your package is moving within the USPS network and is on track to be delivered by the expected delivery date. It is currently in transit to the next facility.

Get More Out of USPS Tracking:

 USPS Tracking Plus®

Delivered

Out for Delivery

Preparing for Delivery

Moving Through Network

In Transit to Next Facility, Arriving On Time

July 13, 2025

Departed Post Office

GARDINER, ME 04345

July 12, 2025, 5:02 pm

USPS in possession of item

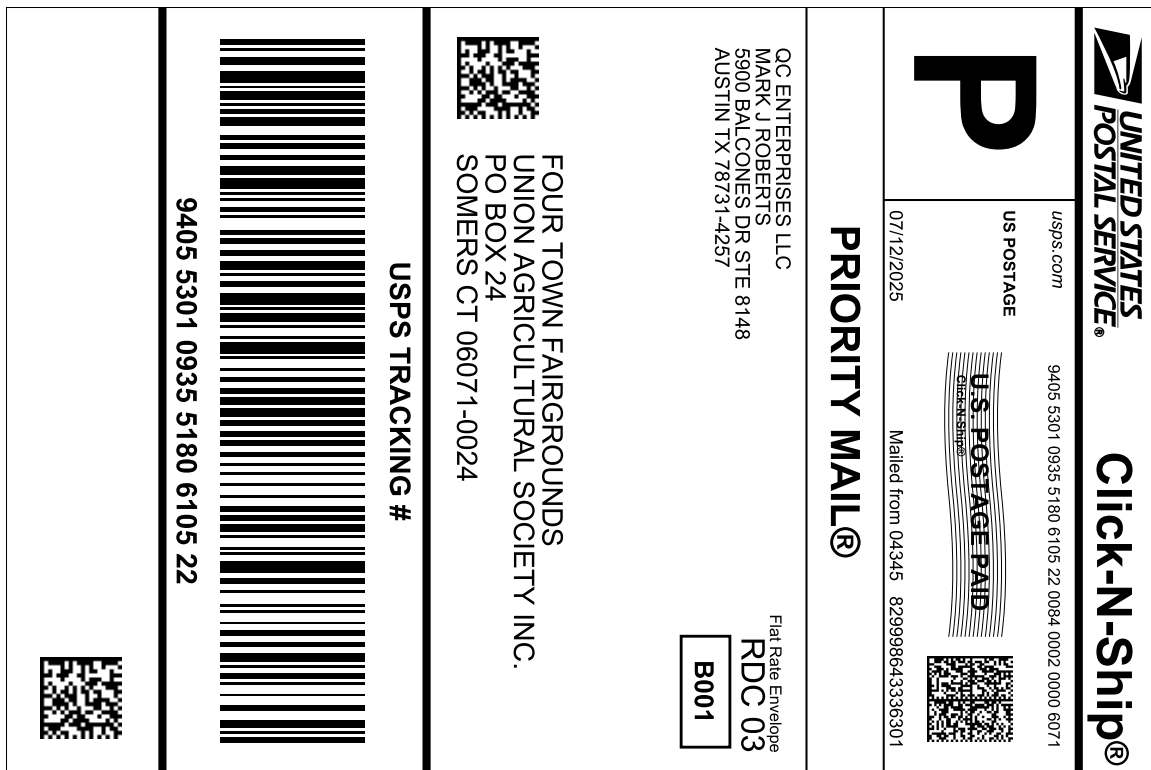
GARDINER, ME 04345

July 12, 2025, 12:11 pm

Shipping Label Created, USPS Awaiting Item

AUSTIN, TX 78731

July 11, 2025, 5:31 pm



Cut on dotted line.

Tracking Number:
4200607100249405530109355180610522

 Copy  Add to Informed Delivery

Expected Delivery by

WEDNESDAY

16


July 2025 ⓘ

by

9:00pm ⓘ

Your package is moving within the USPS network and is on track to be delivered by the expected delivery date. It is currently in transit to the next facility.

Get More Out of USPS Tracking:

 USPS Tracking Plus®

- Delivered

Out for Delivery

Preparing for Delivery

Moving Through Network

In Transit to Next Facility, Arriving On Time

July 13, 2025

Departed Post Office

GARDINER, ME 04345

July 12, 2025, 5:02 pm

USPS in possession of item

GARDINER, ME 04345

July 12, 2025, 12:11 pm

Shipping Label Created, USPS Awaiting Item

AUSTIN, TX 78731

July 11, 2025, 5:31 pm