

Model Information	
FCC ID:	NZLUAHLST
Model:	UAHLST
# of Transmitters Simultaneously Transmitting	2
Distance to User (cm)	20
Mobile or Portable	Mobile
Field Strength or Worse Case Output Power	
Radiated Field Strength - 288MHz(dBuV/m)	83.04
Radiated Field Strength - 310MHz(dBuV/m)	83.95
Radiated Field Strength - 365MHz(dBuV/m)	84.67
Radiated Field Strength - 430MHz(dBuV/m)	89.22
Worse Case Output Power - 902-928MHz (dBm)	-3.234
Antenna Gain	
Worse Case Antenna Gain - HL 288MHz (dBi)	-16.94
Worse Case Antenna Gain - HL 310MHz (dBi)	-16.34
Worse Case Antenna Gain - HL 365MHz (dBi)	-8.09
Worse Case Antenna Gain - HL 430MHz (dBi)	0.152
Worse Case Antenna Gain - HL High Band (dBi)	2.76

Requirements	
Distance to User (cm):	d>20
Exposure Condition:	Mobile
Model Information	
Frequency (MHz):	288
Measured Field Strength (dBuV/m):	83.04
Distance to User (cm):	20
dBuV/m to V/m	0.014
Worst Case EIRP (mW)	0.060412
Power Density (mW/cm ²)	0.000012
Power Density Limit (mW/cm ²)	0.2
Ratio	6.00927E-05

Exposure Evaluation

Equation from page 18 of OET Bulletin 65, Edition 97-01

$S=(PG)/4\pi R^2$

Where S: power density

P: power input to the antenna

G: power gain of the antenna in the direction of interest relative to an isotropic radiator.

R: distance to the center of radiation of the antenna

Table 1 from 47 CFR 1.1310—Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(ii) Limits for General Population/Uncontrolled Exposure				
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
300-1,500			f/1500	<30
1,500-100,000			1.0	<30

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

According to KDB447498 Section 3, the RF exposure guidelines adopted by the FCC are based on SAR and MPE limits. The basic restrictions for human exposure is defined by SAR limits. MPE limits are derived from the SAR limits, in terms of free-space field strength and power density.

Requirements	
Distance to User (cm):	d>20
Exposure Condition:	Mobile
Model Information	
Frequency (MHz):	310
Measured Field Strength (dBuV/m):	83.95
Distance to User (cm):	20
dBuV/m to V/m	0.016
Worst Case EIRP (mW)	0.074494
Power Density (mW/cm ²)	0.000015
Power Density Limit (mW/cm ²)	0.206666667
Ratio	7.17102E-05

Exposure Evaluation

Equation from page 18 of OET Bulletin 65, Edition 97-01

$S=(PG)/4\pi R^2$

Where S: power density

P: power input to the antenna

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R: distance to the center of radiation of the antenna

Table 1 from 47 CFR 1.1310—Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(ii) Limits for General Population/Uncontrolled Exposure				
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
300-1,500			f/1500	<30
1,500-100,000			1.0	<30

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

According to KDB447498 Section 3, the RF exposure guidelines adopted by the FCC are based on SAR and MPE limits. The basic restrictions for human exposure is defined by SAR limits. MPE limits are derived from the SAR limits, in terms of free-space field strength and power density.

Requirements	
Distance to User (cm):	d>20
Exposure Condition:	Mobile
Model Information	
Frequency (MHz):	365
Measured Field Strength (dBuV/m):	84.67
Distance to User (cm):	20
dBuV/m to V/m	0.017
Worst Case EIRP (mW)	0.087927
Power Density (mW/cm ²)	0.000017
Power Density Limit (mW/cm ²)	0.243333333
Ratio	7.18869E-05

Exposure Evaluation

Equation from page 18 of OET Bulletin 65, Edition 97-01

$S=(PG)/4\pi R^2$

Where S: power density

P: power input to the antenna

G: power gain of the antenna in the direction of interest relative to an isotropic radiator.

R: distance to the center of radiation of the antenna

Table 1 from 47 CFR 1.1310—Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(ii) Limits for General Population/Uncontrolled Exposure				
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
300-1,500			f/1500	<30
1,500-100,000			1.0	<30

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

According to KDB447498 Section 3, the RF exposure guidelines adopted by the FCC are based on SAR and MPE limits. The basic restrictions for human exposure is defined by SAR limits. MPE limits are derived from the SAR limits, in terms of free-space field strength and power density.

Requirements	
Distance to User (cm):	d>20
Exposure Condition:	Mobile
Model Information	
Frequency (MHz):	430
Measured Field Strength (dBuV/m):	89.22
Distance to User (cm):	20
dBuV/m to V/m	0.029
Worst Case EIRP (mW)	0.250681
Power Density (mW/cm ²)	0.000050
Power Density Limit (mW/cm ²)	0.286666667
Ratio	0.00017397

Exposure Evaluation

Equation from page 18 of OET Bulletin 65, Edition 97-01

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Where S: power density

P: power input to the antenna

G: power gain of the antenna in the direction of interest relative to an isotropic radiator.

R: distance to the center of radiation of the antenna

Table 1 from 47 CFR 1.1310—Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(ii) Limits for General Population/Uncontrolled Exposure				
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
300-1,500			f/1500	<30
1,500-100,000			1.0	<30

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

According to KDB447498 Section 3, the RF exposure guidelines adopted by the FCC are based on SAR and MPE limits. The basic restrictions for human exposure is defined by SAR limits. MPE limits are derived from the SAR limits, in terms of free-space field strength and power density.

Requirements	
Distance to User (cm):	d>20
Exposure Condition:	Mobile
Model Information	
Frequency (MHz):	902.25
Distance to User (cm):	20
Worse Case Output Power (dBm):	-3.23
Distance to User (cm):	20
Antenna Gain (dBi)	2.76
Numerical Antenna Gain	1.887991349
Tune Up Adjustment (dB)	1
Worse Case Output Power with tune up tolerance (dBm):	-2.23
Worse Case Output Power with tune up tolerance (mW):	0.598
EIRP (mW)	1.128756
Power Density (mW/cm ²)	0.000225
Power Density Limit (mW/cm ²)	0.6015
Ratio	0.000373521

Exposure Evaluation

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = (PG) / 4\pi R^2$$

Where S: power density

P: power input to the antenna

G: power gain of the antenna in the direction of interest relative to an isotropic radiator.

R: distance to the center of radiation of the antenna

Table 1 from 47 CFR 1.1310—Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(ii) Limits for General Population/Uncontrolled Exposure				
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
300-1,500			f/1500	<30
1,500-100,000			1.0	<30

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

According to KDB447498 Section 3, the RF exposure guidelines adopted by the FCC are based on SAR and MPE limits. The basic restrictions for human exposure is defined by SAR limits. MPE limits are derived from the SAR limits, in terms of free-space field strength and power density.

FCC Total Exposure Ratio	
Specification/Frequency Band	Worse Case
15.231 - 286-440MHz	0.000174
15.247 - 902-928MHz	0.000374
Total Exposure Ratio=	0.000547