Model Information	
FCC ID:	NZLMUAHL6
Model:	MUAHL6
# of Transmitters Simultaneously Transmitting	3
Distance to User (cm)	20
Mobile or Portable	Mobile
Field Strength or Worse Case Output Power	
Radiated Field Strength - 288MHz(dBuV/m)	81.82
Radiated Field Strength - 310MHz(dBuV/m)	83.25
Radiated Field Strength - 365MHz(dBuV/m)	83.11
Radiated Field Strength - 430MHz(dBuV/m)	85.63
Worse Case Output Power - 902-928MHz (dBm)	2.331
Worse Case Output Power - BLE - 2.4GHz (dBm)	6.25
Antenna Gain	
Worse Case Antenna Gain - HL 288MHz (dBd)	-35.1
Worse Case Antenna Gain - HL 310MHz (dBd)	-37.68
Worse Case Antenna Gain - HL 365MHz (dBd)	-31.21
Worse Case Antenna Gain - HL 430MHz (dBd)	-23.57
Worse Case Antenna Gain - HL High Band (dBi)	0.26
Worse Case Antenna Gain - BLE (dBi)	3.83

Requirements	
Distance to User (cm):	d≥20
Exposure Condition:	Mobile
Model Information	
Frequency (MHz):	288
Measured Field Strength (dBuV/m):	81.82
Distance to User (cm):	20
dBuV/m to V/m	0.012
Worst Case EIRP (mW)	0.045616
Power Density (mW/cm^2)	0.000009
Power Density Limit (mW/cm^2)	0.2
Ratio	4.53755E-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

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):	83.25
Distance to User (cm):	20
dBuV/m to V/m	0.015
Worst Case EIRP (mW)	0.063405
Power Density (mW/cm^2)	0.000013
Power Density Limit (mW/cm^2)	0.206666667
Ratio	6.10353E-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):	365
Measured Field Strength (dBuV/m):	83.11
Distance to User (cm):	20
dBuV/m to V/m	0.014
Worst Case EIRP (mW)	0.061393
Power Density (mW/cm^2)	0.000012
Power Density Limit (mW/cm^2)	0.243333333
Ratio	5.01938E-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

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):	85.63
Distance to User (cm):	20
dBuV/m to V/m	0.019
Worst Case EIRP (mW)	0.109678
Power Density (mW/cm^2)	0.000022
Power Density Limit (mW/cm^2)	0.286666667
Ratio	7.61157E-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

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
Distance to User (cm):	20
Worse Case Output Power (dBm):	2.33
Distance to User (cm):	20.1
Antenna Gain (dBi)	0.26
Numerical Antenna Gain	1.061695557
Tune Up Adjustment (dB)	1
Worse Case Output Power with tune up tolerance (dBm):	3.33
Worse Case Output Power with tune up tolerance (mW):	2.153
EIRP (mW)	2.286125
Power Density (mW/cm^2)	0.000455
Power Density Limit (mW/cm^2)	0.601333333
Ratio	0.00075672

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

ı 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):	2402
Distance to User (cm):	20
Worse Case Output Power (dBm):	6.25
Distance to User (cm):	20
Antenna Gain (dBi)	3.83
Numerical Antenna Gain	2.415460834
Tune Up Adjustment (dB)	1
Worse Case Output Power with tune up tolerance (dBm):	7.25
Worse Case Output Power with tune up tolerance (mW):	5.309
EIRP (mW)	12.823306
Power Density (mW/cm^2)	0.002552
Power Density Limit (mW/cm^2)	1
Ratio	0.00255241

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

ı 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	0.000076
15.247 - 902-928MHz	0.000757
15.247 - 2.4GHz (BLE)	0.002552
Total Exposure Ratio=	0.003796 <1

According to KDB447498: All transmitters and antennas in the host must be either evaluated for MPE compliance, by measurement or computational modeling, or qualify for the standalone MPE test exclusion in section 7.1. Simultaneous transmission MPE test exclusion applies when the sum of the MPE ratios for all simultaneous transmitting antennas incorporated in a host device, based on the calculated/estimated, numerically modeled or measured field strengths or power density, is ≤ 1.0.