

Model Information	
FCC ID:	NZLIECHL6A
Model:	IECHL6A
# 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)	77.71
Radiated Field Strength - 310MHz(dBuV/m)	81.85
Radiated Field Strength - 365MHz(dBuV/m)	85.64
Radiated Field Strength - 430MHz(dBuV/m)	86.69
Worse Case Output Power - 902-928MHz (dBm)	-8.422
Worse Case Output Power - BLE - 2.4GHz (dBm)	4.04
Antenna Gain	
Worse Case Antenna Gain - HL High Band (dBi)	-10.6
Worse Case Antenna Gain - BLE (dBi)	-3.63

Requirements	
Distance to User (cm):	d≥20
Exposure Condition:	Mobile
Model Information	
Frequency (MHz):	288
Measured Field Strength (dBuV/m):	77.71
Distance to User (cm):	20
dBuV/m to V/m	0.008
Worst Case EIRP (mW)	0.017706
Power Density (mW/cm²)	0.000004
Power Density Limit (mW/cm²)	0.2
Ratio	1.76125E-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

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm²)	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/f²)	<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.

Permissible Exposure (MPE)

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):	81.85
Distance to User (cm):	20
dBuV/m to V/m	0.012
Worst Case EIRP (mW)	0.045933
Power Density (mW/cm²)	0.000009
Power Density Limit (mW/cm²)	0.206666667
Ratio	4.42162E-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/cm²)	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/f²)	<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):	85.64
Distance to User (cm):	20
dBuV/m to V/m	0.019
Worst Case EIRP (mW)	0.109931
Power Density (mW/cm²)	0.000022
Power Density Limit (mW/cm²)	0.243333333
Ratio	8.98773E-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

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm²)	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/f²)	<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.

missible Exposure (MPE)

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):	86.69
Distance to User (cm):	20
dBuV/m to V/m	0.022
Worst Case EIRP (mW)	0.139998
Power Density (mW/cm²)	0.000028
Power Density Limit (mW/cm²)	0.286666667
Ratio	9.7157E-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

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm²)	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/f²)	<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.

missible Exposure (MPE)

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):	$d \geq 20$
Exposure Condition:	Mobile
Model Information	
Frequency (MHz):	902
Distance to User (cm):	20
Worse Case Output Power (dBm):	-8.42
Distance to User (cm):	20.1
Antenna Gain (dBi)	-10.6
Numerical Antenna Gain	0.087096359
Tune Up Adjustment (dB)	1
Worse Case Output Power with tune up tolerance (dBm):	-7.42
Worse Case Output Power with tune up tolerance (mW):	0.181
EIRP (mW)	0.015769
Power Density (mW/cm^2)	0.000036
Power Density Limit (mW/cm^2)	0.601333333
Ratio	5.99287E-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

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)	Permissible Exposure (MPE)
(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):	$d \geq 20$
Exposure Condition:	Mobile
Model Information	
Frequency (MHz):	2402
Distance to User (cm):	20
Worse Case Output Power (dBm):	4.04
Distance to User (cm):	20
Antenna Gain (dBi)	-3.63
Numerical Antenna Gain	0.433510878
Tune Up Adjustment (dB)	1
Worse Case Output Power with tune up tolerance (dBm):	5.04
Worse Case Output Power with tune up tolerance (mW):	3.192
EIRP (mW)	1.383566
Power Density (mW/cm^2)	0.000635
Power Density Limit (mW/cm^2)	1
Ratio	0.000635258

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	0.000097
15.247 - 902-928MHz	0.000060
15.247 - 2.4GHz (BLE)	0.000635
Total Exposure Ratio=	0.001203