RF Exposure Statement

1. LIMITS

According to §1.1310 and §2.1091 RF exposure is calculated.

(B) Limits for General Population/Uncontrolled Exposures

Frequency range (MHz)	Electric field Strength (V/m)	Magnetic field Strength (A/m)	Power density (mW/cm²)	Averaging time (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

2. MAXIMUM PERMISSIBLE EXPOSURE Prediction

Prediction of MPE limit at a given distance

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

S = Power density
P = power input to 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

3. RESULTS

***. LTE 5MHz Mode**

Max Peak output Power at antenna input terminal	34.150	dBm
Max Peak output Power at antenna input terminal	2600.160	mW
Prediction distance	250.000	cm
Prediction frequency	1912.500	MHz
Antenna Gain(typical)	21.000	dBi
Antenna Gain(numeric)	125.893	-
Power density at prediction frequency(S)	0.417	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	1.000	mW/cm^2

***. LTE 10MHz Mode**

Max Peak output Power at antenna input terminal	34.340	dBm
Max Peak output Power at antenna input terminal	2716.439	mW
Prediction distance	250.000	cm
Prediction frequency	1910.000	MHz
Antenna Gain(typical)	21.000	dBi
Antenna Gain(numeric)	125.893	-
Power density at prediction frequency(S)	0.435	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	1.000	mW/cm^2

***. CDMA Mode**

Max Peak output Power at antenna input terminal	33.660	dBm
Max Peak output Power at antenna input terminal	2322.737	mW
Prediction distance	250.000	cm
Prediction frequency	1913.750	MHz
Antenna Gain(typical)	21.000	dBi
Antenna Gain(numeric)	125.893	-
Power density at prediction frequency(S)	0.372	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	1.000	mW/cm^2

[Module] FCC ID: N7NMC7355

***. LTE Mode**

Max Peak output Power at antenna input terminal	24.00	dBm
Max Peak output Power at antenna input terminal	251.189	mW
Prediction distance	20.00	cm
Prediction frequency	1850	MHz
Antenna Gain(typical)	3.000	dBi
Antenna Gain(numeric)	1.995	-
Power density at prediction frequency(S)	0.100	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	1.000	mW/cm^2

***. CDMA Mode**

Max Peak output Power at antenna input terminal	25.00	dBm
Max Peak output Power at antenna input terminal	316.228	mW
Prediction distance	20.00	cm
Prediction frequency	1850	MHz
Antenna Gain(typical)	3.000	dBi
Antenna Gain(numeric)	1.995	-
Power density at prediction frequency(S)	0.126	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	1.000	mW/cm^2

[Booster]

1. **The power density level at 250 cm is 0.435 mW/cm^2 , which is below the uncontrolled exposure limit of 1.0 mW/cm^2 at LTE 10MHz**

2. **The power density level at 250 cm is 0.372 mW/cm^2 , which is below the uncontrolled exposure limit of 1.0 mW/cm^2 at CDMA**

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1. **The power density level with 3 dBi antenna gain / max power 24 dBm is 0.100 mW/cm^2 , which is below the uncontrolled exposure limit of 1.0 mW/cm^2 at LTE.**

2. **The power density level with 3 dBi antenna gain / max power 25 dBm is 0.126 mW/cm^2, which is below the uncontrolled exposure limit of 1.0 mW/cm^2 at CDMA**

⇨ **Simultaneous MPE for booster and module(LTE) is (0.435/1.0) +(0.372/1.0) + (0.100/1.0) = 0.907 < 1**

⇨ **Simultaneous MPE for booster and module(CDMA) is (0.435/1.0) +(0.372/1.0) + (0.126/1.0) = 0.933 < 1**