

MPE ESTIMATION

FCC ID: 2BPI7-FCV5002

1, According to §1.1310, Limit for General Population/ Uncontrolled Exposures

Frequency	Power density (mW/ cm ²)	Averaging time(minutes)
1.34M---30M	*(180/F ²)	30
300MHz----1.5GHz	F/1500	30
1.5GHz---100GHz	1.0	30

Note: F= Frequency in MHz

2, Estimation Result

	Frequency (MHz)	Max PK Output power(dBm)	Tune Up Power(dBm)	Max Tune Up power(mW)	Antenna Gain(dBi)	Antenna Gain (numerical)	MPE (mW/cm ²)	Limit (mW/cm ²)
BT	2480	0.91	0±1(1)	1.26	-1.59	0.69	0.00017	1.0
NFC	13.56	-65.16	-66±1(-65)	0.00000032	0	1.00	0.0000000001	0.98

Note: Max PK Output power(dBm)= 30.04(dBuV/m) - 95.2 = -65.16(dBm)

$$Pd = \frac{P_{out} * G}{4\pi r^2} ;$$

Note:

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power in mW.

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 in cm

Conducted power see the test report **HK2601050011-1E/2E**,

BT antenna gain=-1.59dBi, NFC antenna gain=0dBi.

Synchronous launch evaluation: BT+NFC=0.00017/1.0+0.0000000001/0.98=0.00017.

When the minimum test separation distance is >20 cm, a distance of 20 cm is applied to determine RF Exposure test exclusion. The test exclusion threshold is 0.00017 which is< 1.0, RF Exposure testing is not required.

-----The End-----