RF Exposure Report

FCC ID: 2BHMZ-P743

The EUT is Car Carplay Smart Screen in the 2402 ~ 2480MHz frequency band.

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

(A) Limits for Occupational / Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm^2)	Averaging Time $\|E\|^2$,$\|H\|^2$or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f)*	6
30-300	61.4	0.163	1.0	6
300-1500			f/300	6
1500-100,000			5	6

(B) Limits for General Population / Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm^2)	Averaging Time $\|E\|^2$,$\|H\|^2$ or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			f/1500	30
1500-100,000			1.0	30

Note: f = frequency in MHz

MPE calculation method

Calculation Method of RF Safety Distance:

$$S = \frac{\mathrm{PG}}{4\pi r^2}$$

S: power density mW/ cm^2;
P: power input to the antenna in mW;
g: numeric gain of antenna;
r: distance to centre of radiation in cm

Unit dbuv/m@3m to mW calculation method

E=EIRP-20log(d)+104.8

E: is the electric field strength in dBuv/m;

EIRP: is the equivalent is otropically radiated power in dBm;

d: is the specified measurement distance in m

Calculated result

Mode	Max. Peak output power (dBm)	Max. Peak output power (mW)	Antenna Gain (numeric)	Power Density (S) (mW/ cm^2)	Limit of Power Density (S) (mW/ cm^2)
BT	-7.987	0.158	1.318	0.000041	1

For BT mode

Field strength =87.27dBuV/m @3m

EIRP=E+20log(d)-104.8=87.27+20log3-104.8=-7.987dbm =0.158mW

Note1: the antenna gain is 1.2dBi;

Note2: Calculated distance is 20cm, which is declared by the manufacture.