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FCC ID:T62-ULTERRAIP15

IC:4397A-ULTERRAIP15

Maximum exposure limits from CFR 47, FCC Part 1.1310:

Table 1—Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
<b>(A) Limits for Occupational/Controlled Exposure</b>				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f <sup>2</sup>	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			5	6
<b>(B) Limits for General Population/Uncontrolled Exposure</b>				
0.3-1.34	614	1.63	*100	30
1.34-30	824/f	2.19/f	*180/f <sup>2</sup>	30
30-300	27.5	0.073	0.2	30
300-1,500			f/1500	30
1,500-100,000			1.0	30

The power density is calculated as shown below:

$$S = (P \times G)/(4 \times \pi \times d^2) - \text{used to calculate exposure at 20 cm}$$

S= power density

P = transmitter conducted power (in mW)

G = antenna numeric gain

D = distance to radiation center (20 cm)

Table 2 – Power Density Calculations

Transmitter	Frequency	Antenna Gain	EIRP	Power Density	Limit	% of limit
	MHz	numerical	mW	mW/cm <sup>2</sup>	mW/cm <sup>2</sup>	
1	915	1	0.38	0.0000756	0.0610	0.12%
1	918	1	0.38	0.0000756	0.0612	0.12%
1	921	1	0.41*	0.0000816	0.0614	0.13%
2	915	1	0.80	0.0001592	0.0610	0.26%
2	918	1	0.65	0.0001294	0.0612	0.21%
2	921	1	0.69*	0.0001373	0.0614	0.22%
3	2452	1	5.82*	0.0011584	1.0000	0.12%
3	2457	1	5.71	0.0011365	1.0000	0.11%
3	2462	1	4.82	0.0009594	1.0000	0.10%

Note: This equipment is not intended to be operated by hand, and instead is operated by a separate handheld remote. It is expected that a 20cm separation will be maintained at all times.

All EIRP values were taken from the maximum field strength measurements in the test reports.

\*Maximum values for each radio are indicated by an asterisk

If all three radios are operating simultaneously on the highest output channel, It would be:

$0.13\% + 0.26\% + 0.12\% = 0.51\%$  of the maximum allowed power density.

Radio 1 = Main board

Radio 2 = trim board

Radio 3 = iPilot standard