

Company: iControl Incorporated

Assessment of: iControl iCHIME3.3

To: FCC CFR 47 Part 15 RF Exposure requirements  
Industry Canada RSS-102

No.: ICON12 – iCHIME3.3 MPE

## MPE TEST REPORT





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to

To: FCC CFR 47 Part 15 RF Exposure requirements  
Industry Canada RSS-102

Test Report Serial No.: ICON12 – iCHIME3.3 MPE

This report supersedes: NONE

Applicant: iControl Incorporated  
3235 Kifer Rd, Suite 260  
Santa Clara, 95051  
USA

Product Function: Asset Tracking

Issue Date: 28th August 2015

**This Test Report is Issued Under the Authority of:**

**MiCOM Labs, Inc.**  
575 Boulder Court  
Pleasanton California 94566  
USA  
Phone: +1 (925) 462-0304  
Fax: +1 (925) 462-0306  
[www.micomlabs.com](http://www.micomlabs.com)



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## 1. MAXIMUM PERMISSABLE EXPOSURE

### Calculations for Maximum Permissible Exposure Levels

Power Density =  $P_d$  (mW/cm<sup>2</sup>) =  $EIRP / (4 * \pi * d^2)$

$EIRP = P * G$

$P$  = Peak output power (mW)

$G$  = Antenna numeric gain (numeric)

$d$  = Separation distance (cm)

Numeric Gain =  $10^{(G \text{ (dBi)} / 10)}$

Because the EUT belongs to the General Population/Uncontrolled Exposure the limit of power density is 1.0 mW/cm<sup>2</sup>

The calculations in the table below use the highest conducted power values together with the lowest antenna gain specified for the EUT. These calculations represent worst case in terms of the exposure levels.

Freq. Band (MHz)	Ant Gain (dBi)	Numeric Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Calculated Safe Distance (cm) @ 1mW/cm <sup>2</sup>	Calculated Power Density (mW/cm <sup>2</sup> ) @ 20cm	Minimum Separation Distance (cm)
2400.0 - 2483.5	3.50	2.24	4.70	2.95	0.72	0.001	20.00

**Note:** for mobile or fixed location transmitters the minimum separation distance is 20cm, even if calculations indicate the MPE distance to be less.



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**Specification**  
**Maximum Permissible Exposure Limits**

**FCC §1.1310** Limit =  $1\text{mW} / \text{cm}^2$  from 1.310 Table 1

**RSS-Gen §3.2** In addition to RSS-Gen, the requirements in Radio Standards Specification RSS-102 shall be met.

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575 Boulder Court  
Pleasanton, California 94566, USA  
Tel: +1 (925) 462 0304  
Fax: +1 (925) 462 0306  
[www.micomlabs.com](http://www.micomlabs.com)