

## **MPE CALCULATION**

**APPLICANT:** POWER-ONE ITALY SPA  
Via San Giorgio 642 – 52028 Terranuova Bracciolini – AR  
– Italy  
Tel. +39 055 91951  
E-mail: gianfranco.iannuzzi@power-one.com

**EUT DESCRIPTION** Radiomodule Equipment (IEEE 802.15.4 Protocol)

**EUT TRADEMARK** P-1 (Power-One logo)

**EUT MODEL** EMB-PWO

**TEST REPORT** MPETR\_111254C-0

**REFERENCE STANDARDS :** FCC RULES PART 22 and 24

**DATE OF ISSUE** 17/02/2012

**LABORATORY** Prima Ricerca & Sviluppo S.r.l.  
Via Campagna, 92 -22020 Faloppio (Co) –Italy

**ISSUED BY** Giacomo Armellini  


**VERIFIED BY** Vincenzo La Fragola  


|| The calculation results reported in this document shall refer only to Test Report above indicated and relevant tested sample

Test Report Reference

- ▶ FCCTR\_111254B-2 issued on 24/02/2012 by Prima Ricerca & Sviluppo

**External Antenna: EMB-AN24-55RDD RUBBER DUCK – DIPOLE ANTENNA**

	<b>Calculation Results</b>
<b>Power at the Antenna Connector</b>	0.1205 W
<b>Antenna Gain in dB</b>	5.5 dBi
<b>Distance to the Area of Interest</b>	0.656 feet 0.1999 metres
<b>Frequency of Operation</b>	2405 MHz
<b>Are Ground reflections Calculated</b>	Yes
<b>Estimated RF Power Density</b>	0.2179 mW/cm <sup>2</sup>

	<b>Controlled Environment</b>	<b>Uncontrolled Environment</b>
<b>Maximum Permissible Exposure (MPE)</b>	5.005 mW/cm <sup>2</sup>	1.005 mW/cm <sup>2</sup>
<b>Distance to Compliance From Centre of Antenna</b>	0.1869 feet 0.057 metres	0.3562 feet 0.1086 metres
<b>Does the Area of Interest Appear to be in Compliance</b>	yes	yes



**External Antenna: EMB-AN24-14YA – YAGI ANTENNA**

	Calculation Results
Power at the Antenna Connector	0.1205 W
Antenna Gain in dB	14 dBi
Distance to the Area of Interest	6.56 feet 1.999 metres
Frequency of Operation	2405 MHz
Are Ground reflections Calculated	Yes
Estimated RF Power Density	0.0155 mW/cm <sup>2</sup>

	Controlled Environment	Uncontrolled Environment
Maximum Permissible Exposure (MPE)	5.005 mW/cm <sup>2</sup>	1.005 mW/cm <sup>2</sup>
Distance to Compliance From Centre of Antenna	0.4143 feet 0.1263 metres	0.8647 feet 0.2636 metres
Does the Area of Interest Appear to be in Compliance	yes	yes

**PHOTO 1 – E.U.T. IDENTIFICATION**

