MPE CALCULATION

APPLICANT:	EMBIT s.r.l EMBEDDED & WIRELESS SOLUTION
	Via Emilia Est, 911 – 41100 Modena (MO) Italy
	Tel. +39 059 371714
	Fax +39 059 3680498
	E-mail: marketing@embit.it
EUT DESCRIPTION	Radio Equipment ZigBee module
EUT TRADEMARK	EMBIT
EUT MODEL	EMB-PWO; EMB-Z2530PA; EMB-Z2530; EMB-Z253x (just different commercial type names)
TEST REPORT	MPETR_111254A-1
REFERENCE STANDARDS :	FCC RULES PART 22 and 24
DATE OF ISSUE	29/12/2011; REV.1 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_111254-2 issued on 17/02/2012 by Prima Ricerca & Sviluppo

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

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

	Controlled Environment	Uncontrolled Environment
Maximum Permissible Exposure (MPE)	5.005 mW/cm^2	1.005 mW/cm^2
Distance to Compliance From Centre of Antenna	0.1869 feet 0.057 metres	0.3562 feet 0.1086 metres
Does the Area of Interest Appear to be in Compliance	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 Interst	6.56 feet 1.999 metres
Frequency of Operation	2405 MHz
Are Ground reflections Calculated	Yes
Estimated RF Power Density	0.0155 mW/cm^2

	Controlled Environment	**Uncontrolled Environment**
Maximum Permissible Exposure (MPE)	5.005 mW/cm^2	1.005 mW/cm^2
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