

RE-21-D592-DAV-8-A Ed. 0

MPE test report

According to the standard:
CFR 47 FCC PART 15

Equipment under test:
900 MHz RF Module

FCC ID: 2AUQC-XB900HP

Company:
DAVEY BICKFORD

Distribution: Mrs STOJANOVIC

(Company: DAVEY BICKFORD)

Number of pages: 6 with 1 appendix

Ed.	Date	Modified Page(s)	Technical Verification and Quality Approval	
			Name and Function	Visa
0	13-Dec-22	Creation	M. DUMESNIL, Radio Laboratory Manager	

Duplication of this document is only permitted for an integral photographic facsimile. It includes the number of pages referenced here above. This document is the result of testing a specimen or a sample of the product submitted. It does not imply an assessment of the conformity of the whole manufactured products of the tested sample. Information in italics are declared by the manufacturer/customer and are under his responsibility



DESIGNATION OF PRODUCT: *900 MHz RF Module*

Serial number (S/N): /

Reference / model (P/N): *XBEE PROS3B*

Software version: /

MANUFACTURER: *DAVEY BICKFORD*

COMPANY SUBMITTING THE PRODUCT:

Company: DAVEY BICKFORD

Address: LE MOULIN GASPARD
CHEMIN DE LA PYROTECHNIE
89550 HERY
FRANCE

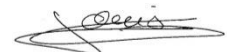
Responsible: Mrs STOJANOVIC

DATES OF TEST: /

TESTING LOCATION: EMITECH ANGERS laboratory at JUIGNE SUR LOIRE (49) FRANCE
FCC Accredited under US-EU MRA Designation Number: FR0009
Test Firm Registration Number: 873677

TESTED BY: S. LOUIS

VISA:



WRITTEN BY: S. LOUIS

CONTENTS

TITLE	PAGE
1. INTRODUCTION.....	4
2. PRODUCT DESCRIPTION.....	4
3. NORMATIVE REFERENCE.....	4
4. RF EXPOSURE.....	5
APPENDIX 1: MINIMUM DISTANCE FOR NORMAL USE.....	6

REVISIONS HISTORY

Revision	Date	Modified pages	Modifications
0	13-Dec-22	/	Creation

1. INTRODUCTION

This report presents the results of radio test carried out on the following radio equipment: 900 MHz RF Module, in accordance with normative reference.

2. PRODUCT DESCRIPTION

Category of equipment (ISED): I

Antenna type and gain: 5.1 dBi / Whip antenna

Operating frequency range: From 902 MHz to 928 MHz

Number of channels: 64 (Hopping Mode)

Channel spacing: Not concerned

Modulation: FSK

3. NORMATIVE REFERENCE

The standards and testing methods related throughout this report are those listed below.

They are applied on the whole test report even though the extensions (version, date and amendment) are not repeated.

CFR 47 (2022) Radio Frequency Devices

ANSI C63.10 2013
Procedures for Compliance Testing of Unlicensed Wireless Devices.

447498 D04 Interim General RF Exposure Procedures and Equipment Authorization Policies for Mobile and Portable Devices
RF Exposure Guidance v01

4. RF EXPOSURE

In accordance with KDB 447498 D04 Interim General RF Exposure Guidance v01, Paragraph 4.3.1.

SAR-Based Exemption according paragraph 2.1.3

The test separation distance measured is 60 mm (with a minimum value of 5 mm) – see appendix 1.

According §1.1307, at frequency 902 MHz for this distance, the ERP exemption threshold is **316 mW ERP**

According §2.1.1 of KDB 447498 D04 Interim General RF Exposure Guidance v01, this exemption threshold is based on a threshold for exposure for 1-g SAR (head and body). For a threshold corresponding to a 10-g extremity SAR exposure, it is necessary to apply a factor of 2.5 to the determined exemption threshold.

Therefore, 10-g extremity SAR IS $316 \text{ mW ERP} \times 2.5 = \mathbf{789 \text{ mW ERP}}$

According grant, the conducted power of the module FCC ID: MCQ-XB900HP is 298 mW.

The antenna gain declared is 5.1 dBi.

The applicant declares a maximum duty cycle of 33 % on a time period of 30 minutes ($T_{on} = 620\text{ms}$ every 1,851s)

According §3.1.2 of KDB 447498 D04 Interim General RF Exposure Guidance v01, the maximum time-averaged power level resulting is **197 mW ERP**.

The maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold P_{th} (mW).

The equipment fulfils the requirements on SAR-Based Exemption according §1.1307(b)(3)(i)(B).

End of report, 1 appendix to be forwarded

APPENDIX 1: Minimum distance for normal use inside host product

