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CERTIFICATION TEST REPORT

Manufacturer: WaveFlex, Inc.
5480 Roesland Dr.
Galena, OH 43021 USA

Applicant: Same as Above

Product Name: Quantum Picocell Gateway Radio

Product Description: Picocell gateway radio with USB connector provides simultaneous communication on 8 LoRa channels.

Model: MASM-100-1003-00: Quantum Picocell Gateway Radio

FCC ID: 2ASYA-1001003

Testing Commenced: July 17, 2018

Testing Ended: July 23, 2018

Test Results: In Compliance

The EUT complies with the EMC requirements when manufactured identically as the unit tested in this report, including any required modifications. Any changes to the design or build of this unit subsequent to this testing may deem it non-compliant.

Standards:

- KDB447498



Order Number: F2P19086C

Client: WaveFlex, Inc.
Model: MASM-100-1003-00

Evaluation Conducted by:

Julius Chiller, EMC/Wireless Engineer

Report Reviewed by:

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1 ADMINISTRATIVE INFORMATION

1.1 Measurement Location:

F2 Labs in Middlefield, Ohio. Site description and attenuation data are on file with the FCC's Sampling and Measurement Branch at the FCC Laboratory in Columbia, MD.

1.2 Measurement Procedure:

All measurements were performed according to KDB558074.

1.4 Document History

Document Number	Description	Issue Date	Approved By
F2P19086C-10E	First Issue	Aug. 16, 2019	K. Littell



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2 SUMMARY OF TEST RESULTS

Test Name	Standard(s)	Results
RF Exposure for Device >20cm from Human	KDB447498	Complies

Modifications Made to the Equipment
None



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3 ENGINEERING STATEMENT

This report has been prepared on behalf of WaveFlex, Inc., to provide documentation for the testing described herein. This equipment has been tested and found to comply with KDB447498. The test results found in this test report relate only to the item(s) tested.



4 EUT INFORMATION AND DATA

4.1 Equipment Under Test:

Product: Quantum Picocell Gateway Radio
Model: MASM-100-1003-00
Serial No.: None Specified
FCC ID: **2ASYA-1001003**

4.2 Trade Name:

WaveFlex, Inc.

4.3 Power Supply:

USB from Interface Power Supply

4.4 Applicable Rules:

- KDB447498

4.5 Equipment Category:

Radio Transmitter-DTS

4.6 Antenna:

2.2dBi Whip

4.7 Accessories:

Raspberry Interface

4.8 Test Item Condition:

The equipment to be tested was received in good condition.



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5. RF EXPOSURE FOR DEVICE >20cm FROM HUMAN

5.1 Requirements:

Limit: 1mW/cm²

Formula used for result:
$$\frac{\text{E.I.R.P.}}{4 \pi R^2}$$

Results: E.I.R.P. = 1000mW

1000mW at the 923.3 MHz Low Channel
which is the highest.

$$\frac{1000\text{mW}}{4 \pi R^2} = \frac{1000\text{mW}}{5026.55} = 0.199\text{mW/cm}^2$$