

FCC RF Exposure Report

FCC ID **2AXBO-UPIDO-BASIC**

UPIDO® **Equipment**

Model No. **Basic**

Brand Name

engie

Applicant : UnaBiz Co., Ltd.

: 10F., No. 618, Ruiguang Rd., Neihu Dist., **Address**

Taipei City 114, Taiwan (R.O.C.)

Standard : 47 CFR FCC Part 2.1091 & 2.1093

Received Date : Jul. 17, 2020

: Aug. 12 ~ Aug. 17, 2020 **Tested Date**

We, International Certification Corp., would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It may be duplicated completely for legal use with the approval of the applicant. It shall not be reproduced except in full without the written approval of our laboratory.

Approved by: Reviewed by:

Along Chen // Assistant Manager Gary Chang / Manager

Page: 1 of 8

2732

Report No.: FA071705



Table of Contents

1	MPE EVALUATION OF MOBILE DEVICES	4
1.1	LIMITS FOR GENERAL POPULATION/UNCONTROLLED EXPOSURE	4
1.2	MPE EVALUATION FORMULA	
1.3	DEVIATION FROM TEST STANDARD AND MEASUREMENT PROCEDURE	4
1.4	MEASUREMENT UNCERTAINTY	4
1.5	MPE EVALUATION RESULTS	5
2	EXPOSURE EVALUATION OF PORTABLE DEVICES	6
2.1	SAR TEST EXCLUSION THRESHOLD FOR 100MHz to 6GHz and ≤ 50mm	6
2.2	DEVIATION FROM TEST STANDARD AND MEASUREMENT PROCEDURE	
2.3	MEASUREMENT UNCERTAINTY	
2.4	EVALUATION RESULTS	7
3	TEST LABORATORY INFORMATION	8



Release Record

Report No.	Version	Description	Issued Date
FA071705	Rev. 01	Initial issue	Sep. 22, 2020

Report No.: FA071705 Page: 3 of 8



1 MPE EVALUATION OF MOBILE DEVICES

1.1 LIMITS FOR GENERAL POPULATION/UNCONTROLLED EXPOSURE

Frequency Range (MHz)	Power Density (mW /cm²)	Averaging Time (minutes)		
300~1500	F/1500	30		
1500~100000	1.0	30		

1.2 MPE EVALUATION FORMULA

$$Pd = \frac{Pt}{4 * Pi * R^2}$$

Where

Pd= Power density in mW/cm²

Pt= EIRP in mW Pi= 3.1416

R= Measurement distance

1.3 DEVIATION FROM TEST STANDARD AND MEASUREMENT PROCEDURE

None

1.4 MEASUREMENT UNCERTAINTY

The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)).

Parameters	Uncertainty		
Conducted power	±0.808 dB		

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Report No.: FA071705 Page: 4 of 8



1.5 MPE EVALUATION RESULTS

Frequency Range (MHz)	Rated Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm²)	Pass/Fail
920 ~ 923	24	-0.21	20	0.048	0.613	Pass

Report No.: FA071705 Page: 5 of 8



2 EXPOSURE EVALUATION OF PORTABLE DEVICES

2.1 SAR TEST EXCLUSION THRESHOLD FOR 100MHz to 6GHz and \leq 50mm

Frequency (MHz)	5	10	15	20	25	Separation distance (mm)
150	39	77	116	155	194	
300	27	55	82	110	137	
450	22	45	67	89	112	
835	16	33	49	66	82	
900	16	32	47	63	79	
1500	12	24	37	49	61	SAR Test Exclusion
1900	11	22	33	44	54	Threshold (mW)
2450	10	19	29	38	48	
3600	8	16	24	32	40	
5200	7	13	20	26	33	
5400	6	13	19	26	32	
5800	6	12	19	25	31	

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] $\cdot [\sqrt{f(GHz)}] \le 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

- •f(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

2.2 DEVIATION FROM TEST STANDARD AND MEASUREMENT PROCEDURE

None

Report No.: FA071705 Page: 6 of 8



2.3 MEASUREMENT UNCERTAINTY

The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)

Parameters	Uncertainty		
Conducted power	±0.808 dB		

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

2.4 EVALUATION RESULTS

Frequency (MHz)	Average Conducte d Power (dBm)	Rated Power (dBm)	Duty factor (dB)	Rated Power with duty factor (dBm)	Rated Power with duty factor (mW)	SAR Test Exclusion Thresholds (mW@5mm)
920.1375	22.57	24	-27.52	-3.52	0.44	15.87
922.6625	22.69	24	-27.52	-3.52	0.44	15.85

Conclusion:

SAR test is excluded since the rated power less than SAR test exclusion thresholds

Report No.: FA071705 Page: 7 of 8



3 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corp (EMC and Wireless Communication Laboratory), it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan District. Location map can be found on our website http://www.icertifi.com.tw.

Linkou

Tel: 886-2-2601-1640 No. 30-2, Ding Fwu Tsuen, Lin Kou District, New Taipei City, Taiwan, R.O.C.

Kwei Shan

Tel: 886-3-271-8666 No. 3-1, Lane 6, Wen San 3rd St., Kwei Shan District, Tao Yuan City 333, Taiwan, R.O.C.

Kwei Shan Site II

Tel: 886-3-271-8640

No. 14-1, Lane 19, Wen San 3rd St., Kwei Shan District, Tao Yuan City 333, Taiwan, R.O.C..

If you have any suggestion, please feel free to contact us as below information

Tel: 886-3-271-8666 Fax: 886-3-318-0155

Email: ICC_Service@icertifi.com.tw

___END___

Report No.: FA071705 Page: 8 of 8