

FCC RF Exposure Report

FCC ID	:	SQG-PINNACLE1
Equipment	:	LTE Modem
Model No.	:	Pinnacle 100
Brand Name	:	Laird Connectivity
Applicant	:	Laird Connectivity, Inc.
Address	:	W66N220 Commerce Court, Cedarburg, Wisconsin 53012, USA
Standard	:	47 CFR FCC Part 2.1091
Received Date	:	Jun. 24, 2020
Tested Date	:	Nov. 05 ~ Nov. 24, 2020

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.

Reviewed by:

Approved by:

ong Cher





Along Chen / Assistant Manager Gary Chang / Manager



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Release Record

Report No.	Version	Description	Issued Date
FA950303-02	Rev. 01	Initial issue	Dec. 11, 2020



1 MPE EVALUATION OF MOBILE DEVICES

1.1 LIMITS FOR GENERAL POPULATION/UNCONTROLLED EXPOSURE

Frequency Range (MHz)	Power Density (mW /cm ²)	Averaging Time (minutes)
300~1500	F/1500	30
1500~100000	1.0	30

1.2 MPE EVALUATION FORMULA

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

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

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. 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.



1.5 MPE EVALUATION RESULTS

Frequency Range (MHz)	Maximum Conducted Power (dBm)	Rated Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm²)	Limit (mW/cm²)	Ratio*	Pass / Fail
1850 ~ 1910	23.31	24.5	3.7	20	0.131	1.000	0.131	Pass
1710 ~ 1755	23.15	24.5	4.1	20	0.144	1.000	0.144	Pass
824 ~ 849	22.68	24.5	2.7	20	0.104	0.549	0.190	Pass
699 ~ 716	23.96	24.5	2.5	20	0.100	0.466	0.214	Pass
777 ~ 787	22.92	24.5	2.5	20	0.100	0.518	0.192	Pass

*Ratio = Power density / Limit.

Frequency Range (MHz)	Maximum Conducted Power (dBm)	Rated Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm²)	Limit (mW/cm²)	Ratio*	Pass / Fail
2402 ~ 2480	6.37	6.5	2.6	20	0.002	1	0.002	Pass

Note 1: MPE value of BT LE is from original report, FA950303

Note 2: Ratio = Power density / Limit.

1.6 MPE EVALUATION OF SIMULTANEOUS TRANSMISSION

Mode	Max Ratio of Each Mode
LTE	0.214
BT LE*	0.002
Sum (WWAN 4G + BT LE)	0.216
Limit	1
Pass / Fail	Pass



2 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 <u>http://www.icertifi.com.tw</u>.

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

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