

RF Exposure Evaluation Declaration

Product Name : Electric Vehicle (EV) Supply Equipment
Brand Name : DELTA ELECTRONICS, INC.
Model No. : EIAW-U11KSSU7A04, EIAW-U19KSSU7A04
FCC ID : H79EIAWU19KSS

Applicant : Delta Electronics Incorporated
Address : 3 Tungyuan Road Chungli Industrial Zone, Taoyuan County,
32063, Taiwan

Date of Receipt : Oct. 19, 2021
Issued Date : Dec. 23, 2021
Report No. : 21A0519R-RFUSMPEV02-A
Report Version : V1.0



The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

This report must not be used to claim product endorsement by TAF or any agency of the government.

Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

The test report shall not be reproduced except in full without the written approval of DEKRA Testing and Certification Co., Ltd.

Test Result for Inspection



Product Name : Electric Vehicle (EV) Supply Equipment
Applicant : Delta Electronics Incorporated
Address : 3 Tungyuan Road Chungli Industrial Zone, Taoyuan County,
32063, Taiwan
Manufacturer : Delta Electronics Incorporated
Address : 3 Tungyuan Road Chungli Industrial Zone, Taoyuan County,
32063, Taiwan
Brand Name : DELTA ELECTRONICS, INC.
Model No. : EIAW-U11KSSU7A04, EIAW-U19KSSU7A04
FCC ID : H79EIAWU19KSS
EUT Voltage : AC 208~240V
Testing Voltage : AC 220V/60Hz
Applicable Standard : FCC 47 CFR Part 2.1091 Radiofrequency radiation exposure
evaluation: mobile devices.
Test Lab : Hsin Chu Laboratory
Address : No.372-2, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu
County 310, Taiwan, R.O.C.
TEL: +886-3-582-8001 / FAX: +886-3-582-8958
Test Result : Complied

Documented By :



(Hailey Peng / Senior Engineer)

Approved By :



(Louis Hsu / Deputy Manager)

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Revision History

Version	Description	Issued Date
V1.0	Initial issue of report	Dec. 23, 2021

1. General Information

1.1. EUT General Information

RF General Information			
Evaluation Mode	Frequency Range (MHz)	Operating Frequency (MHz)	Modulation Type
WLAN 2.4 GHz	2400 ~ 2483.5	2412 ~ 2462	802.11b: DSSS 802.11g/n: OFDM
RFID	13.553 ~ 13.567	13.56	ASK

The difference for each model is shown as below:

Model No.	Rating
EIAW-U11KSSU7A04	208-240Vac, 1P48A, 60Hz
EIAW-U19KSSU7A04	208-240Vac, 1P80A, 60Hz

From the above models, model: EIAW-U19KSSU7A04 was selected as representative model for the test and its data was recorded in this report.

Note: The above EUT information is declared by the manufacturer.

1.2. Test Facility

Laboratory Information

USA : **FCC Registration Number: TW3024**
Canada : **CAB identifier : TW3024**

The address and introduction of DEKRA Testing and Certification Co., Ltd. laboratories can be founded in our Web site: <http://www.dekra.com.tw>

If you have any comments, please don't hesitate to contact us. Our test sites as below:

Test Laboratory	DEKRA Testing and Certification Co., Ltd.
Address	1. No.372-2, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 31061, Taiwan, R.O.C. 2. No.372, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 31061, Taiwan, R.O.C.
Phone number	1. +886-3-582-8001 2. +886-3-582-8001
Fax number	1. +886-3-582-8958 2. +886-3-582-8958
E mail address	info.tw@dekra.com
Website	http://www.dekra.com.tw
Note: Test site number for address 1 includes SR2-H. Test site number for address 2 includes CB2-H, CB3-H, CB4-H, SR10-H and SR12-H.	

2. RF Exposure Evaluation

2.1. Test Limit

(A) Test Limit for Occupational / Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-3.0	614	1.63	*(100)	<6
3.0-30	1842/f	4.89/f	*(900/f ²)	<6
30-300	61.4	0.163	1.0	<6
300-1500	-	-	f/300	<6
1500-100,000	-	-	5	<6

(B) Test Limit for General Population / Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-1.34	614	1.63	*(100)	<30
1.34-30	824/f	2.19/f	*(180/f ²)	<30
30-300	27.5	0.073	0.2	<30
300-1500	-	-	f/1500	<30
1500-100,000	-	-	1.0	<30

Note: f = frequency in MHz; *Plane-wave equivalent power density

Power Density (S) is calculated by the following formula:

$$S=(P*G) /4\pi R^2$$

where:

S = power density (in appropriate units, e.g. mW/ cm²)

P = power input to the antenna (in appropriate units, e.g., mW)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

π = 3.1416

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

2.2. Test Result of RF Exposure Evaluation

Exposure Environment: General Population / Uncontrolled Exposure

Evaluation Mode	E.I.R.P (dBm)		E.I.R.P (mW)	Power Density (mW/cm ²)	Limit (mW/cm ²)	Test Result (PASS/FAIL)
WLAN 2.4 GHz	18.830		76.384	0.015	1.000	PASS
Evaluation Mode	Field Strength (dBuV/m@30m)	E.I.R.P (dBm)	E.I.R.P (mW)	Power Density (mW/cm ²)	Limit (mW/cm ²)	Test Result (PASS/FAIL)
RFID	15.95	-39.25	0.0001	0.00000002	0.9789	PASS

For RFID: E.I.R.P (dBm) = Field Strength (dBuV/m@30m) + (40*log (30/3)) - 95.2

Distance (cm): 20 for Maximum Permissible Exposure.

Note:

1. The above EUT information is declared by the manufacturer.
2. The results are evaluated using the maximum power.
3. The EUT does not support co-location function, all of these RF modules will not transmit simultaneously. Therefore, there is no need to calculate Co-location Maximum Permissible Exposure.