FCC RF Exposure

EUT Description: LiFePO4 battery Model No.: ECO-LFP4810001 FCC ID: 2BAJ5ECO-LFP4810001

1. Limits

According to KDB 447498 D01 General RF Exposure Guidance v06 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)]·[$\sqrt{f(GHz)}$]≤3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR

Where:

Result=P/D*√F

F= the RF channel transmit frequency in GHz

P= Maximum turn-up power in mw

D= Min. test separation distance in mm

2. Test Result of RF Exposure Evaluation

Frequency	Output	Tune Up	Max Tune	Min test	Result	Limit	SAR Test
(MHz)	power	Power	Up power	separation		(mW/cm ²)	Exclusion
	(dBm)	(dBm)	(dBm/mW)	distance			
				(mm)			
2480	2.93	3±1(4)	2.512	5	0.791	3.0	Pass

Note:

PK Output power= conducted power.

Conducted power see the test report HK2410115930-E, antenna gain=2.85dBi

Per KDB 447498 D01, when the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine RF Exposure test exclusion. The test exclusion threshold is 0.791 which is≤ 3, RF Exposure testing is not required.

Note: Exclusion Thresholds Results= $[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] <math>\cdot [\sqrt{f_{(GHz)}}]$

 $f_{(GHz)}$ is the RF channel transmit frequency in GHz

Distance=5mm