

FCC SAR Exclusion Report

FCC ID: GDDMXU-270

Report No. : BTL-FCCP-4-2207T123
Equipment : CHERRY KW X ULP Keyboard
Model Name : MXU-270
Brand Name : CHERRY
Applicant : Cherry Europe GmbH
Address : Cherryst. Auerbach_OPf. Germany 91275

FCC Rule Part(s) : FCC Part 2, Subpart J (§2.1093)
KDB 447498 D01 General RF Exposure Guidance v063
FCC Guidelines for Human Exposure IEEE C95.1

Date of Receipt : 2022/8/2
Date of Test : 2022/8/2 ~ 2022/8/26
Issued Date : 2022/9/27

The above equipment has been tested and found in compliance with the requirement of the above standards by BTL Inc.

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REVISION HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-4-2207T123	R00	Original Report.	2022/9/27	Valid

According to KDB 447498 section 4.3.1 a), the 1-g SAR test exclusion thresholds at test separation distance ≤ 50 mm are determined by:

$$\{ [(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] * [\sqrt{f(\text{GHz})}] \} \leq 3.0$$

BLE:

The maximum tune up power is -0.5 dBm +/- 0.5 dB,

SRD:

The maximum tune up power is 0 dBm +/- 0.5 dB,

therefore the highest tune-up powers is

$$0.5 \text{ dBm} \quad (1.12 \text{ mW}) \quad @ \text{ 2403 MHz}$$

When the minimum test separation distance is < 50 mm, a distance of 5 mm according to e) in section 4.1 is applied to determine SAR test exclusion.

So,

$$(1.12\text{mW} / 5\text{mm}) * (2.403\text{GHz} ^{0.5}) = 0.3$$

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] * [\sqrt{f(\text{GHz})}] = 0.3 < 3.0$$

Therefore, standalone SAR measurements are not required for both head and body.

End of Test Report