



11/15/2021

Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Subject: Model(s) differences explanation
Curiouser Products Inc.
FCC ID: 2AOSD-MCW3

Certified Models:

Model Name	Product type / Description	Note
MCWD10	Connected Weights	
MCWD15	Connected Weights	
MCWD20	Connected Weights	
MCWD25	Connected Weights	
MCWD30	Connected Weights	
MCWD35	Connected Weights	

To Whom It May Concern:

The listed above models are very similar with identical electrical schematics. Further details regarding the similarities and differences are below.

Similarities:

All models radio operation, schematics, and BOM are identical. All models use a printed PCB trace antenna in the form of a meandered, inverted-F antenna (MIFA) design provided by Texas Instruments and detailed in application note AN043. The Bluetooth radio IC is a Texas Instruments FRE014RHB.

Differences:

MCWD35: The MCWD35 PCBA may be considered the base design. The PCB outline is rectangular and measures 53.50mm x 51.00mm. The MCWD35 supports a single AA battery power input. The antenna design directly matches the reference design. The battery and reset connections enter the PCBA through a 3 pin connector, and a 5 pin connector provides connection to the passive second side LED PCBA for lighting the opposite side logo. Each PCBA utilizes 12 LEDs.

MCWD30: The MCWD30 uses exactly the same PCBA as the MCWD35.

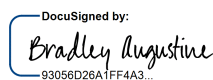
MCWD25: The MCWD25 uses exactly the same PCBA as the MCWD35.

MCWD20: The MCWD20 weight uses a nearly identical PCBA to the MCWD35, but with a slightly modified outline. The dimensions of the MCWD20 are 57.13mm x 49.50mm.

MCWD15: The MCWD15 PCBA is nearly identical to the board in the MCWD20, but has slightly reduced dimensions which are 44.97mm x 46.81mm.

MCWD10: The MCWD10 PCBA is nearly identical to the PCBA in the MCWD15, but has slightly reduced dimensions which are 43.57mm x 43.58mm. The power input connector, CON2 is also moved to support different cable routing within the mechanical design.

Sincerely,

DocuSigned by:

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Bradley Augustine
VP of Hardware