RF Exposure Evaluation

Product:	Remote controller	
Model no.:	C51054W, C51101W, C61023W, C61024W, C61025W, C61026W, C61027W, C61028W, C61029W, C61030W, C61031W, C61032W, C61033W, C61034W, C61035W, C61036W, C61037W, C61038W, C61039W, C61040W, C61041W, C61042W, C61043W, C61045W, C61049W, C61050W, C61051W, C61071W, C61081W, C66001W, C71001W, C71002W, C71003W, C71004W, C71005W, C71006W, C71007W, C71008W, C71009W, C71010W, C71012W, C81001W, C81002W, C81003W, C81004W, C81005W, C81006W, C81007W, C81008W, C81009W, C81010W, C81011W, C81012W, C81013W, C81014W, C81015W, C81016W, C81017W, C81018W, C81019W, C81020W, C81021W, C81022W, C91056W, C91058W, D001-003, D002-003, D003-003, D004-003, D005-003, D006-003, D007-003, D008-003, D009-003, D010-003, S054-003, S059-003	
FCC ID:	2AAFASY-C51054W-03	
Rating:	2 x 1.5VDC AAA size battery (for remote controller)	
RF Transmission Frequency:	2402MHz-2480MHz	
Modulation:	GFSK	
Antenna Type:	Integrated Antenna	
Max Antenna Gain:	0 dBi	
Description of the EUT:	The product is remote controller operated with 2.4GHz wireless function, the transmitting frequency range is 2402MHz - 2480MHz.	
Reference Report	68.940.22.0035.01	

1. Limit and Guidelines on Exposure to Electromagnetic Fields

According to 447498 D04 Interim General RF Exposure Guidance v01 and §1.1307(b)(3)(i)(A), a single RF source is exempt RF device (from the requirement to show data demonstrating compliance to RF exposure limits, as previously mentioned) if the available maximum time-averaged power is no more than 1 mW, regardless of separation distance. This exemption applies to all operating configurations and exposure conditions, for the frequency range 100 kHz to 100 GHz, regardless of fixed, mobile, or portable device exposure conditions. This is a standalone exemption.

2. Calculation method

According to ANSI C63.10-2013 (9.5 Equations to calculate EIRP),

Calculate the EIRP from the radiated field strength in the far field using Equation (22):

$$\text{EIRP} = E_{\text{Meas}} + 20\log(d_{\text{Meas}}) - 104.7$$

where

EIRP	is the equivalent isotropically radiated power, in dBm
E_{Meas}	is the field strength of the emission at the measurement distance, in $dB\mu V/m$
d_{Meas}	is the measurement distance, in m

NOTE—Because this equation yields the identical result whether the field strength is extrapolated using the default 20 dB/decade of distance extrapolation factor, or the field strength is not extrapolated for distance, this equation can generally be applied directly (with no further correction) to determine EIRP. In some cases, a different distance correction factor may be required; see 9.1.

Field Strength (E _{Meas}):	94.37 (dBuV/m) (f=2.480 GHz)
Measurement Distance(d _{Meas}):	3 (m)
Equivalent Isotropically Radiated Power(EIRP):	0.83 (mW)

The max output power of the product is 0.83 mW, which is less than 1 mW.

Result: Compliance

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Date: 2022-06-06

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