RF Exposure

The equipment under test (EUT) is an 1:10 F1 RC Assortment in pallet (1:16 Off-Road R/C (2.4GHz) ~ 2023 Toyota Tacoma TRD PRO) operating at 2.4G Band. The EUT can be powered by DC 6.4V (1 x 6.4V rechargeable battery). And the RF function will be shut down and it can't transmit RF signals while charging. For more details information pls. refer to the user manual.

Antenna Type: Integral antenna.
Antenna Gain: 0dBi.
The normal radiated output power (e.i.r.p) is: -5.0dBm (tolerance: +/- 3dB).
The normal conducted output power is -5.0dBm (tolerance: +/- 3dB).
Modulation Type: GFSK.

According to the KDB 447498 V06:

The Maximum peak radiated emission for the EUT is 91.3dBμV/m at 3m in the frequency 2421MHz
The EIRP = [(FS*D) ^2 / 30] mW = -3.93dBm
which is within the production variation.

The Minimum peak radiated emission for the EUT is 88.4dBμV/m at 3m in the frequency 2478MHz
The EIRP = [(FS*D) ^2 / 30] mW = -6.83dBm
which is within the production variation.

The maximum conducted output power specified is -2.0dBm= 0.631mW
The source- based time-averaging conducted output power
=0.631mW

The SAR Exclusion Threshold Level:
= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (2.478) mW
= 9.53 mW

Since the source-based time-averaging conducted output power is well below the SAR low threshold level, so the EUT is considered to comply with SAR requirement without testing.