FCC MPE Calculation (Portable Device)

EUT Description: Robot Cleaner
Company: Moneual INC.
Model: RYDIS MR6550
FCC ID: ZBTMR6550

Frequency: 2403-2479 MHz (11 channels)
Mid-Channel: 2.441 GHz (channel 39)
Mid-Channel Peak Power, Conducted: -0.06 dBm == 0.99 mW
Antenna Gain: G = -2.43 dBi

For devices intended for the **General Population** and used in an **uncontrolled** manner, routine evaluation (SAR) for this device is not required, because the source-based time-averaged power (average conducted power or average radiated EIRP, whichever is the highest).

Calculation:

Limit = 60/2.441 = 24.58 mW

$P_{radiated,\ max} = P_{conducted,\ dBm} + G_{dBi}$ = -0.06 dBm + -2.43 dBi == -2.49 dBm = 0.56 mW

Conclusion:

The emitted power appears to be (far) below the required limit, so PASS.

Note 1: f shall be the mid-band frequency expressed in GHz; the limit calculated with this mid-band frequency applies to all channels. For PTT with body-worn or face-held modes, d is the distance from the device case to a parson's body; for modules with antennas inside laptops, d is the distance from the antenna to the person's body.

Note 2: Average Power levels are always equal or below the measured Peak Power levels, which means that calculating the EIRP using the Peak power can be considered as worst case.)