



November 27, 2018

UL LLC
12 Laboratory Dr
RTP, NC 27709, USA

To whom it may concern:

In the design of the referenced device, P&G made intentional design choices which we understood would impact the efficiency for Band 5 and GSM 850. We note the follow construction features which caused this impact:

- Antenna, marked in blue, assembled on the base PCB (top) requires the area free of any components on the opposite side of the PCB (bottom), marked in yellow. However, it was not possible to keep this zone absolutely free of any components
- The following aspects affect the antenna efficiency negatively:
 - Two magnets “touching” the free zone
 - The magnetic field of the magnets
 - 3x wires soldered on the pins above the antenna (wires are not represented in 3D)
 - Docked handle (not shown in 3D)
 - Internal tests of the antenna without the housing and handle got better results, thus indicating that the poor efficiency is caused by the mechanical parts in the near environment of the antenna.

Sincerely Yours,

A handwritten signature in black ink, appearing to read "Robert Schick", is positioned above the typed name.

Robert Schick
Senior Engineer
The Procter & Gamble Co.

