SAR Test Report
1900MHz In-Home Cellular Signal Enhancer
Model # BDA1900-2
FCC ID # OEUBDA1900-2

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RES Ltd. has reviewed the 1900MHz In-home Cellular Signal Enhancer System, FCC ID # OEUBDA1900-2, for the need to conduct SAR evaluation. Due to the design and installation of this product, it qualifies for the exclusion called out in 2.1091.

The system consists of two directional antennas, a donor antenna and a re-rad antenna with a bi-directional amplifier between them. The donor antenna is mounted to a window, and it's radiation pattern is directed towards the outside of the house. Due to the suction cups being used to mount the antenna, it is impossible to mount it backwards, so there is little concern regarding the donor antenna proposing any danger regarding exposure levels. The re-rad antenna can be set on the floor, or placed on top of a desk, shelf, or window sill, and its radiation pattern is directed towards the inside of the house. Transmitting devices that can be easily re-located such as the 1900MHz In-Home Repeater are considered mobile devices if they meet the 20cm separation requirement. The system antennas should be more than 20cm from the end user, as referenced in the Users / Installation manual.

The 1900MHz In-Home Repeater has a maximum transmitted conducted power of 0.1W (+20dBm) in both directions. The antennas used in both the donor and re-rad units have a maximum gain of 9dBi. The cable loss to the donor antenna is 4dB, resulting in a total ERP of 0.32W (+25dBm). The cable loss to the re-rad is 0.3dB, resulting in a total ERP of 0.75W (+28.7dBm).