RF Exposure for Mobile use

No.: 25LE0018-YK-1

Applicant: **BUFFALO** Inc

Type of Equipment: High Speed wireless Router

Model No. : WHR-HP-G54 FCC ID : FDI-0910577-0

BUFFALO Inc declares that Model: High Speed wireless Router complies with FCC radiation exposure requirement specified in the FCC Rules 2.1091. The "WHR-HP-G54" has 380.19 mW of conducted Peak Output power and 602.56 mW of EIRP. The Following calculation is the reference data for 20cm distance for mobile use.

RF Exposure Calculations:

The following information provides the minimum separation distance for the highest gain antenna provided with the "WHR-HP-G54" as calculated from FCC OET Bulletin 65 Appendix A, Table (B) Limits for General Population / Uncontrolled Exposure. This calculation is based on the highest EIRP possible from the system, considering maximum power and antenna gain, and considering a 1.0mW/cm^2 uncontrolled exposure limit. The Friis formula used was:

$$S = (P * G) / (4 * \pi * r^2)$$

Where

P = 380.19 mW (Maximum peak output power)

G = 1.58 Numerical Antenna gain; equal 2.00 dBi

r = 20.0 cm

For: WHR-HP-G54 $S = 0.11988 \text{ mW/cm}^2$