RF EXPOSURE EVALUATION

1. PRODUCT INFORMATION

Product Description	Alert system
Model Name	HU-100
FCC ID	KUTHU100

2. EVALUATION METHOD

According to 447498 D01 General RF Exposure Guidance v05
The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:
[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] ·[√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR.
Where f(GHz) is the RF channel transmit frequency in GHz
Power and distance are rounded to the nearest mW and mm before calculation

3. CALCULATION

According to the follow transmitter output power (P_t) formula :
$P_t = (E \times d)^2 / (30 \times g_t)$
P_t=transmitter output power in watts
g_t=numeric gain of the transmitting antenna (unitess)
E=electric field strength in V/m
d=measurement distance in meters (m)

According to the report CGZ3150210-00171-EF,
E_{max}=72.58dBuV/m=0.0043V/m, d=3m,g_t=1
$P_t = (E \times d)^2 / (30 \times g_t) = 0.0000054W = 0.0054mW$

The result for RF exposure evaluation
SAR= (0.0054mW /5mm) .[√0.43392(GHz)]= 0.00071<3.0 for 1-g SAR

Note: The transmitter operated at 433.92MHz which is the worst case for RF exposure evaluation.

4. CONCLUSION

The SAR evaluation is not required.