

## **RF Exposure / SAR Statement**

**No. : 26IE0265-HO-A**

**Applicant : KEYENCE CORPORATION**  
**Type of Equipment : Wireless Hand-held Barcode Reader (Scanner)**  
**Model No. : BL-N90**  
**FCC ID : RF40823A**

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KEYENCE CORPORATION declares that Model : BL-N90  
complies with FCC radiation exposure requirement specified in the FCC Rules 2.1093(for portable)/2.1091 (for mobile).

The "BL-N90" has 1.48 mW of conducted Peak Output power and 2.94 mW of EIRP.  
This kind of equipment is below 60/frequency[GHz] mW(TCB Exclusion List)  
so that SAR testing is excluded. The Following calculation is the reference data for 20cm distance.

### **RF Exposure Calculations:**

The following information provides the minimum separation distance for the highest gain antenna provided with the "BL-N90" 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<sup>2</sup> uncontrolled exposure limit. The Friis formula used was:

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

Where

**P = 1.48 mW (Maximum peak output power)**  
**G = 2.00 Numerical Antenna gain; equal 3.00 dBi**  
**r = 20.0 cm**

**For: BL-N90**

$$S = 0.00059 \text{ mW/cm}^2$$

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