

FCC ID: XCO-CEXUT2 IC: 7756A-CEXUT2

Statement of compliance to Maximum Permissible Exposure (MPE)

Equipment : CEX wireless range extender

Type/Model : Sonab CEX unit 2

Applicant : Hansong(Nanjing) Technology Ltd.

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Here assuming a worst-case prediction of power density (100% reflection), then

 $S = 4P_{EIRP} / (4\pi R^2) = P_{EIRP} / (\pi R^2).$

Where $S = power density in mW/cm^2$

 $P_{EIRP} = EIRP \text{ in mW}$ R = distance (cm)

As we can see from the test report SH11110050-002:

The maximum P_{EIRP} of 2.4GHz transmitter = 15.95dBm + 1.0dBi = 16.95dBm = 49.56mW The maximum P_{EIRP} of 5.8GHz transmitter = 13.30dBm + 1.0dBi = 14.30dBm = 26.92mW

For the two transmitters work simultaneously, the worst total $P_{EIRP} = 49.56 + 26.92 = 76.48 \text{mW}$

Here R is chosen to be 20cm,

 $S = P_{EIRP} / (\pi R^2) = 76.48 / (3.14 * 20 * 20) = 0.06 \text{mW/cm}^2$

This level is below the 1 mW/cm² MPE for General Population / Uncontrolled Exposure as stated in OET BULLETIN 65 Edition 97-01.

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Appendix I

Definition below must be outlined in the User Manual:

To satisfy FCC RF exposure requirements, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during device operation. To ensure compliance, operations at closer than this distance is not recommended.