Maximum Permissible Exposure (MPE) Compliance

BDA-PS7/PS8-2/2W-80-A
FCC ID Q8KPS7PS82W80

At the maximum operating frequency of 764MHz (Downlink) and 794MHz (Uplink) the MPE limit for the General Population/Uncontrolled Exposure is as follows: Downlink = 0.51mW/cm2 (f/1500mW/cm2) and Uplink = 0.53mW/cm2 (f/1500mW/cm2).

The analysis is provided below.

Power Density (S) = EIRP/(4πR²), Therefore, R≥√EIRP/S x 4π

From the above calculations, with:

Downlink Maximum Antenna Gain = 2 dBi	Uplink Maximum Antenna Gain = 13dBi
Downlink Minimum Cable Loss = -2 dB	Uplink Minimum Cable Loss = -2 dB
Downlink Maximum output power = 26dBm	Uplink Maximum output power = 26dBm
S = 0.51 mW/cm2	S = 0.53 mW/cm2
EIRP = 26dBm or 0.398 W (worst case)	EIRP = 37dBm or 5.0 W (worst case)

Therefore,
R= 7.88cm (Downlink)   R= 27.4cm (Uplink)

These are the minimum safe distances for the general population for each antenna.