SCS Corporation
FCC ID: MKRU519
RF Identification Transceiver

Table 1 of CFR 1.1310 states the MPE for Occupational/Controlled Exposure is f/300 mW/cm2 in the 300-1500 MHz range.

MPE=	f/300	mW/cm2	where f=902 MHz minimum
=	902/300	mW/cm2	
=	3.01	mW/cm2	
=	30.10	W/m2	

In order to calculate the range at which the power density (Pd) is 3.01 mW/cm2, the following equation is used.

$$Pd= (Pt*Gt)/(4*PI*R^2)$$

where: Pt= transmitted power= 0.708 Watt
Gt= gain of transmitting antenna= 5.62
PI= 3.14
R= Distance from antenna

Solving for R yields:

$$R= [(Pt*Gt)/(4*PI*Pd)]^{0.5}$$
= [(.708*5.62)/(4*3.14*30.1)]^0.5
= [(3.98)/(378.25)]^0.5
= [0.0105]^0.5
= 0.103   meters
= 4.04   inches

In conclusion, the range at which the power density of the MKRU519 tranceiver is 3.01 mW/cm2, is 4.04 inches. This information will be placed in the MKRU519 operation manual.