



Security Systems

**BOSCH**

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TUV America, Inc. FCB  
10040 Mesa Rim Road  
San Diego, CA 92121 USA

Dear Sir or Madam:

The following is the SAR calculation for the Bosch ISC-PDL1-W18G Motion Detector using the system's maximum RF emission. The calculation is based on FCC 47CFR Part 2 and OET 65.

Per OET 65:

Maximum Permissible Exposure is  $\text{Freq. (MHz)} / 1500 = \text{MOE mW/cm}^2$

$10525 \text{ MHz} / 1500 = 7.016666667 \text{ mW/cm}^2$

The following equation determines the distance from the antenna that power density is  $= 7.016666667 \text{ mW/cm}^2$ .

$\text{Radius (cm)} = \text{SQRT} ((\text{antenna gain} \times \text{output power in mW}) / (4 \times \pi \times (\text{frequency in MHz} / 1500)))$

Transmitter Power (Max) = 5 mW

Device Antenna Gain = 7 dB

Device Antenna Gain (Linear) = 5.011872336

Device Frequency = 10525 MHz

MPE ( $\text{mW/cm}^2$ ) = 10525

$\text{Radius (CM)} = \text{SQRT} (5 \text{ mW} \times 5) / (4 \times \pi \times (10525 / 1500)) = 0.5331073 \text{ cm or } .00533 \text{ m}$

The ISC-PDL1-W18G is a permanently installed product meant to go in a fixed location on consumer's walls at height of between 7 to 10 foot levels. When properly installed, this unit should pose no dangers from the product's RF emissions. Copies of this letter will be provided at consumer's request.

Sincerely,

Jon C. Wolski

Regulatory Compliance Coordinator

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