

# FCC RF Exposure Report

**FCC ID: P27SZPIR04N**

**Project No.** : 1610136  
**Equipment** : ZigBee Motion Sensor  
**Model** : SZ-PIR04N, SZ-PIR04  
**Applicant** : Sercomm Corporation  
**Address** : 8F, No. 3-1, YuanQu St., NanKang, Taipei, Taiwan  
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**According:** : FCC Guidelines for Human Exposure IEEE C95.1

**Technical Manager** :



(Herbert Liu)

**B T L I N C .**

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## MPE CALCULATION METHOD:

Calculation Method of RF Safety Distance:

$$S = \frac{PG}{4\pi r^2} = \frac{EIRP}{4\pi r^2}$$

where:

S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	Sercomm	SZ-PIR04N	Printed	N/A	1.40

## CACULATION:

Test Mode :	TX Mode
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Frequency (MHz)	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
2405	1.40	1.3804	17.93	62.0869	0.01705887	1	Complies
2425	1.40	1.3804	18.08	64.2688	0.01765836	1	Complies
2440	1.40	1.3804	18.05	63.8263	0.01753680	1	Complies
2445	1.40	1.3804	17.96	62.5173	0.01717712	1	Complies
2450	1.40	1.3804	17.94	62.2300	0.01709820	1	Complies
2475	1.40	1.3804	13.33	21.5278	0.00591494	1	Complies
2480	1.40	1.3804	-38.43	0.0001	0.00000004	1	Complies

Note: the calculated distance is 20 cm.