



**Neutron Engineering Inc.**

# FCC RF EXPOSURE REPORT

**FCC ID: YT2SDSWITX2010**

**Project No.** : 1009C122  
**Equipment** : Wireless Transmitter  
**Model** : SDSWiTX  
**Applicant** : Elan Home Systems, LLC  
**Address** : 1300 East New Circle Road, Suite 150 Lexington,  
KY 40505-4259, United States  
**According:** : FCC Guidelines for Human Exposure IEEE C95.1

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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

Ant.	Brand name	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	PCB Antenna	N/A	3.30

## TEST RESULTS

EUT:	Wireless Transmitter	Model Name :	SDSWiT
Temperature:	25 °C	Relative Humidity:	60 %
Pressure:	1012 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	CH00/ CH19 /CH37		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
3.3	2.1380	14.48	28.0543	0.01193852	1	Complies
<b>3.3</b>	<b>2.1380</b>	<b>14.49</b>	<b>28.1190</b>	<b>0.01196604</b>	<b>1</b>	<b>Complies</b>
3.3	2.1380	13.11	20.4644	0.00870864	1	Complies

The MPE is calculated as **0.01196604**mW / c m<sup>2</sup> < limit 1 mW / c m<sup>2</sup>. So, RF exposure limit warning or SAR test are not required.

For 2403.328~2479.104 MHz, the EUT will only be used with a separation of 20cm or greater between the antenna and nearby persons and can therefore be considered a mobile transmitter per 47CFR2.1091 (b).

The RF Exposure Information page from the manual is included here for reference.