# Maximum Permissible Exposure report

For

SHENZHEN DIT SECURITY&SURVEILLANCE TECHNOLOGY CO.LTD

2-3F, Building 6 th,Wandaiheng High-Tech park Guangming Shenzhen

**FCC ID: 2ACAQN7514JV**

Model Number: N7514JV

| This Report Concerns: | Equipment Type: |
|---|---|
| Original Report | IPC |

| | |
|---|---|
| Test Engineer: | Lisa Chen |
| Report No.: | BSL14040917Y-1ER-6 |
| Receive EUT | April 16, 2014 / |
| Date/Test Date: | April 16-24, 2014 |
| Reviewed By: | Sky Zhang |
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## 1.§ 15.247 (i) and §1.1307 (b) (1) – Maximum Permissible exposure (MPE)

### 1.1 Standard Applicable

According to subpart 15.247 (i) and subpart 1.1307 (b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures the public is not exposed to RF energy level in excess of the communication guidelines.

Limits for General Population/Uncontrolled Exposure

| Frequency Range (MHz) | Electric Field Strength (V/m) | Magnetic Field Strength (A/m) | Power Density ($mW/cm^2$) | Averaging Time (minute) |
|---|---|---|---|---|
| **Limits for General Population/Uncontrolled Exposure** | | | | |
| 0.3–3.0 | 614 | 1.63 | *(100) | 30 |
| 3.0–30 | 824/f | 2.19/f | *(180/f2) | 30 |
| 30–300 | 27.5 | 0.073 | 0.2 | 30 |
| 300–1500 | / | / | f/1500 | 30 |
| 1500–100,000 | / | / | 1.0 | 30 |

f = frequency in MHz
* = Plane-wave equivalent power density

### 1.2 Test Data

Prediction of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

$S = PG/4\pi R^2$

S: Power density, in $mW/cm^2$

P: Power input to the antenna, in mW
G: numeric gain of the antenna
R: distance to the center of the antenna, in cm

### 802.11b Mode

| | |
|---|---|
| Maximum peak output power at antenna input terminal (dBm): | 9.60 |
| Maximum peak output power at antenna input terminal (mW): | 9.12 |
| Prediction distance (cm): | 20 |
| Prediction frequency (MHz): | 2462 |
| Antenna Gain, typical (dBi): | 1 |
| Maximum Antenna Gain (numeric): | 1.26 |
| Power density at predication frequency and distance ($mW/cm^2$): | 0.00229 |
| MPE limit for Occupational exposure at predication frequency ($mW/cm^2$): | 1.0 |

### 802.11g Mode

| | |
|---|---|
| Maximum peak output power at antenna input terminal (dBm): | 9.62 |
| Maximum peak output power at antenna input terminal (mW): | 9.16 |
| Prediction distance (cm): | 20 |
| Prediction frequency (MHz): | 2462 |
| Antenna Gain, typical (dBi): | 1 |
| Maximum Antenna Gain (numeric): | 1.26 |
| Power density at predication frequency and distance ($mW/cm^2$): | 0.00230 |
| MPE limit for Occupational exposure at predication frequency ($mW/cm^2$): | 1.0 |

### 802.11n Mode

| | |
|---|---|
| Maximum peak output power at antenna input terminal (dBm): | 9.65 |
| Maximum peak output power at antenna input terminal (mW): | 9.226 |
| Prediction distance (cm): | 20 |
| Prediction frequency (MHz): | 2462 |
| Antenna Gain, typical (dBi): | 1 |
| Maximum Antenna Gain (numeric): | 1.26 |
| Power density at predication frequency and distance ($mW/cm^2$): | 0.00231 |
| MPE limit for Occupational exposure at predication frequency ($mW/cm^2$): | 1.0 |

## 1.3 Test Result

The device is compliant with the requirement MPE limit of General Population/Uncontrolled Exposure at predication frequency 1.0 mW/cm2 .And the precaution is outlined in the user's manual to prevent to high level of RF energy.