

## 1 最大暴露允許值 (MAXIMUM PERMISSIBLE EXPOSURE, MPE)

### 1.1 規範要求

依據 NCC 低功率射頻電機技術規範之 5.20.2，其發射機距離人體 20 公分以上者，需證明其符合電波暴露量之要求，限制值如下：

#### (1) 職業性/可控制之暴露

| 頻率範圍<br>(MHz) | 電場強度<br>(V/m) | 磁場強度<br>(A/m) | 功率密度<br>(mW/cm <sup>2</sup> ) | 平均時間<br>(minutes) |
|---------------|---------------|---------------|-------------------------------|-------------------|
| 0.3-3.0       | 614           | 1.63          | *100                          | 6                 |
| 3-30          | 1842/f        | 4.89/f        | *900/f <sup>2</sup>           | 6                 |
| 30-300        | 61.4          | 0.163         | 1.0                           | 6                 |
| 300-1,500     | -----         | -----         | f/300                         | 6                 |
| 1,500-100,000 | -----         | -----         | 5.0                           | 6                 |

註 1：標記\*表平面波等效功率密度。

註 2：f 表測試頻率，單位：百萬赫(MHz)。

#### (2) 一般人/不可控制之暴露

| 頻率範圍<br>(MHz) | 電場強度<br>(V/m) | 磁場強度<br>(A/m) | 功率密度<br>(mW/cm <sup>2</sup> ) | 平均時間<br>(minutes) |
|---------------|---------------|---------------|-------------------------------|-------------------|
| 0.3-3.0       | 614           | 1.63          | *100                          | 30                |
| 3-30          | 1842/f        | 4.89/f        | *180/f <sup>2</sup>           | 30                |
| 30-300        | 27.5          | 0.073         | 1.0                           | 30                |
| 300-1,500     | -----         | -----         | f/1500                        | 30                |
| 1,500-100,000 | -----         | -----         | 1.0                           | 30                |

註 1：標記\*表平面波等效功率密度。

註 2：f 表測試頻率，單位：百萬赫(MHz)。

### 1.2 適用種類

此待測物，為一般市面上販售，固適用表 2)之限制值

### 1.3 最大暴露允許值之評估

僅以最差模式進行評估，評估結果請見下頁。

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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## SISO (最差模式)

### 802.11n\_HT20\_Ch0

| CH  | Freq. (MHz) | Data Rate | TOTAL POWER (dBm) | REQUIRED LIMIT (dBm) | RESULT |
|-----|-------------|-----------|-------------------|----------------------|--------|
| 36  | 5180        | MCS0      | 16.33             | 30                   | PASS   |
| 44  | 5220        | MCS0      | 16.25             | 30                   | PASS   |
| 48  | 5240        | MCS0      | 16.30             | 30                   | PASS   |
| 149 | 5745        | MCS0      | <b>19.90</b>      | 30                   | PASS   |
| 157 | 5785        | MCS0      | 19.42             | 30                   | PASS   |
| 165 | 5825        | MCS0      | 18.91             | 30                   | PASS   |

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

S = 功率密度 P = 傳導功率 G = 天線增益值 R = 人體與天線之距離

|                                                                                                                                         |            |                       |
|-----------------------------------------------------------------------------------------------------------------------------------------|------------|-----------------------|
| Max. output power including tune-up tolerancel:                                                                                         | 19.90      | (dBm)                 |
| Max. output power including tune-up tolerancel:                                                                                         | 97.7237221 | (mW)                  |
| Duty cycle:                                                                                                                             | 95.75      | (%)                   |
| Maximum Pav :                                                                                                                           | 93.5704639 | (mW)                  |
| Peak Antenna gain (Maximum):                                                                                                            | 3.01       | (dBi)                 |
| Peak Antenna gain (linear):                                                                                                             | 1.99986187 | (numeric)             |
| Prediction distance:                                                                                                                    | 20         | (cm)                  |
| Prediction frequency:                                                                                                                   | 5745       | (MHz)                 |
| MPE limit for uncontrolled exposure at prediction frequency:                                                                            | 1          | (mW/cm <sup>2</sup> ) |
| Power density at predication frequency at 20 (cm) distance                                                                              | 0.0372     | (mW/cm <sup>2</sup> ) |
| <b>運算之結果:</b><br>當功率密度在 20 cm · 其最大暴露值為 0.0372 mW/cm <sup>2</sup> .<br>註:工作頻率為頻率範圍1,500-100,000 (MHz), 固其對應之限制值為1.0mW/cm <sup>2</sup> . |            |                       |

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