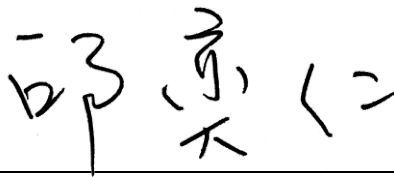


MPE REPORT

案 號： 1908C154
產 品 名 稱： WIFI+BT Module
型 號： WCT54M2001
申請廠商（名稱）： 惠州高盛達科技有限公司
申請廠商（地址）： 惠州仲愷高新區華星路2號

According to : LP0002 第 5.20.2 節

報告簽署人：



發行日期： 108 年 09 月 16 日

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報告發行歷史紀錄

報告版本	內容	發行日期
R00	初始報告。	108年09月16日

MPE CALCULATION METHOD:

Calculation Method of RF Safety Distance:

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

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:

For 2.4GHz:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain(dBi)
1		N/A	PIFA	N/A	4.74
2		N/A	PIFA	N/A	4.74

Note: Antenna Gain=4.74 dBi. This EUT supports MIMO 2X2, any transmit signals are correlated with each other, so Directional gain = $G_{ANT} + 10\log(N)$ dBi, that is Directional gain=4.74+10log(2)dBi=7.75. So, the output power limit is 30-(7.75-6)=28.25, the power spectral density limit is 8-(7.75-6)=6.25.

For 5GHz:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1		N/A	PIFA	N/A	2.07
2		N/A	PIFA	N/A	2.07

Note: Antenna Gain=2.07 dBi. This EUT supports MIMO 2X2, any transmit signals are correlated with each other, so Directional gain = $G_{Ant.} + 10\log(N)$ dBi, that is Directional gain=2.07+10log(2)dBi=5.08.

TEST RESULTS:

For 2.4GHz:

測試頻道: IEEE 802.11n (HT20)

測試模式: 發射

檢 測 器: Peak

測試日期: 108/09/04

環境溫度: 24°C

環境濕度: 60%

Directional gain (dBi)	Directional gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
7.75	5.9566	27.57	571.4786	0.67756	1	Complies

For 5GHz:

測試頻道: IEEE 802.11n (HT40) /
5.2 GHz 頻帶

測試模式: 發射

檢 測 器: RMS

測試日期: 108/09/05

環境溫度: 24°C

環境濕度: 60%

Directional gain (dBi)	Directional gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
5.08	3.2211	16.66	46.3447	0.02971	1	Complies

測試頻道: IEEE 802.11n (HT20) /
5.8 GHz 頻帶

測試模式: 發射

檢 測 器: RMS

測試日期: 108/09/05

環境溫度: 24°C

環境濕度: 60%

Directional gain (dBi)	Directional gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
5.08	3.2211	16.84	48.3059	0.03097	1	Complies

Note: The evaluated distance is 20cm.

結束