

# NCC

## 低功率射頻器材型式試驗報告

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產品名稱: Cassia Bluetooth Router  
型號: X2000  
廠牌: CASSIA  
申請者: CASSIA NETWORKS INC  
申請者地址: 1840 Majestic Way San Jose, CA 95132  
測試標準: LP0002 (109 年版)  
參考法規: ANSI C63.10-2013  
測試結果: 符合  
接收日期: 2020.12.23  
測試日期: 2021.01.20 ~ 2021.03.02

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### 修訂紀錄

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## 1. 一般資訊

|           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 申請者       | CASSIA NETWORKS INC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 申請者地址     | 1840 Majestic Way San Jose, CA 95132                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 製造商       | CASSIA NETWORKS INC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 製造商地址     | 1840 Majestic Way San Jose, CA 95132                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 實驗室       | 台灣曼瑞檢測科技有限公司                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 實驗室地址     | 33377 台灣桃園市龜山區復興二路 38 號                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 實驗室資訊     | <ol style="list-style-type: none"> <li>1. MRT facility is a FCC registered ( Reg. No. 291082) test facility with the site description report on file and is designated by the FCC as an Accredited Test Firm.</li> <li>2. MRT facility is an IC registered (MRT Reg. No. 21723) test laboratory with the site description on file at Industry Canada.</li> <li>3. MRT Lab is accredited to ISO 17025 by the Taiwan Accreditation Foundation (TAF Cert. No. 3261) in EMC, Telecommunications and Radio testing for FCC, Industry Taiwan, EU and TELEC Rules.</li> </ol> |
| 實驗室測試環境條件 | 溫度 (°C) : 20-35 / 濕度 (%RH) : 30-65                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

## 2. 產品資訊

### 2.1. 待測物裝置資料

|            |                                                                                          |
|------------|------------------------------------------------------------------------------------------|
| 產品名稱       | Cassia Bluetooth Router                                                                  |
| 產品型號       | X2000                                                                                    |
| 待測物額定電壓    | 12Vdc 2.0A or 57Vdc 350mA (PoE)                                                          |
| 無線規格       | 802.11b/g/n                                                                              |
| 頻率範圍       | 802.11b/g/n-HT20: 2412 ~ 2462MHz                                                         |
| 通道數量       | 802.11b/g/n-HT20: 11                                                                     |
| 調變模式       | DSSS for IEEE 802.11b<br>OFDM for IEEE 802.11g/n                                         |
| Data Rate: | 802.11b: 1/2/5.5/11Mbps<br>802.11g: 6/9/12/18/24/36/48/54Mbps<br>802.11n: up to 72.2Mbps |
| 頻道控制       | Auto                                                                                     |

## 2.2. 通道清單

802.11b/g/n-HT20

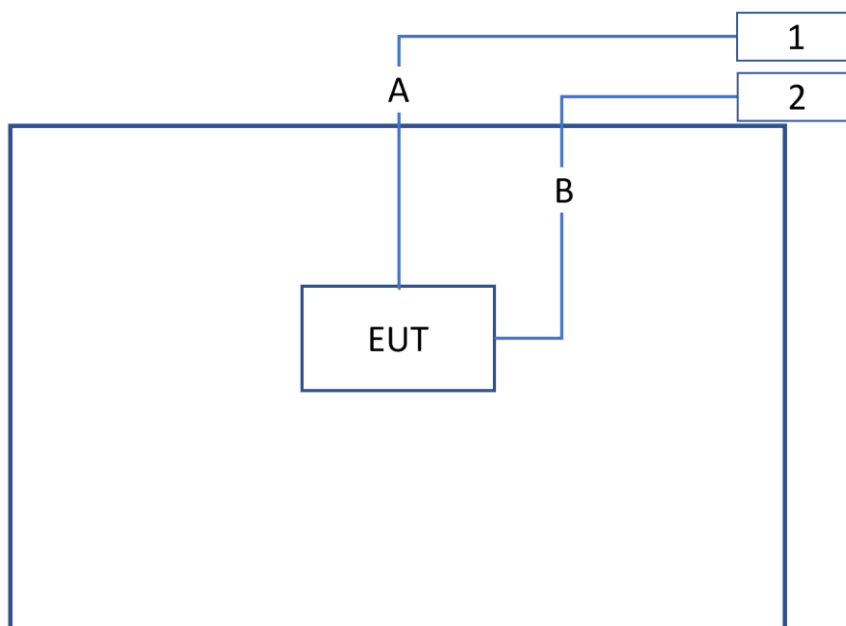
| Channel | Frequency | Channel | Frequency | Channel | Frequency |
|---------|-----------|---------|-----------|---------|-----------|
| 01      | 2412 MHz  | 02      | 2417 MHz  | 03      | 2422 MHz  |
| 04      | 2427 MHz  | 05      | 2432 MHz  | 06      | 2437 MHz  |
| 07      | 2442 MHz  | 08      | 2447 MHz  | 09      | 2452 MHz  |
| 10      | 2457 MHz  | 11      | 2462 MHz  | --      | --        |

## 2.3. 測試模式

Mode 1: 發射器 802.11b (1Mbps)  
Mode 2: 發射器 802.11g (6Mbps)  
Mode 3: 發射器 802.11n-HT20 (MCS0)  
Mode 4: 接收器

## 2.4. 測試系統組合圖

Connection Diagram – 輻射干擾測試 & 電源端點干擾測試(Mode 1~4)



| Cable Type |                   | Cable Description   |
|------------|-------------------|---------------------|
| A          | LAN Cable         | Non shielded, > 10m |
| B          | Serial port cable | Non-Shielded, ≥1.5m |

## 2.5. 測試周邊

| No. | 周邊名稱        | 廠牌   | 型號          | 電源線                |
|-----|-------------|------|-------------|--------------------|
| 1   | PoE Adapter | N/A  | N/A         | N/A                |
| 2   | Notebook    | DELL | Vostro 3300 | Non-Shielded, 1.8m |

## 2.6. 待測裝置測試時之典型操作程式

|    |                                               |
|----|-----------------------------------------------|
| 1. | Setup the EUT and simulators as shown on 2.4  |
| 2. | Turn on the power of all equipment.           |
| 3. | Execute “SecureCRT” program                   |
| 4. | Configure the test channel and the data rate. |
| 5. | Start test.                                   |

### 3. 量測不確定度

|                                                                                                            |
|------------------------------------------------------------------------------------------------------------|
| 電源傳導量測-電源線 (Conducted Emission- Power Line)                                                                |
| Measuring Uncertainty for a Level of Confidence of 95% ( $U=2U_c(y)$ ): 2.53dB                             |
| 電源傳導量測-通訊埠 (Conducted Emission- Impedance Stabilization Network Measurement )                              |
| Measuring Uncertainty for a Level of Confidence of 95% ( $U=2U_c(y)$ ): 3.96dB                             |
| 輻射干擾量測 (Radiated Spurious Emission)                                                                        |
| Measuring Uncertainty for a Level of Confidence of 95% ( $U=2U_c(y)$ ): 3.92dB (Below 30M)                 |
| Measuring Uncertainty for a Level of Confidence of 95% ( $U=2U_c(y)$ ): 4.25dB (30M~1G)                    |
| Measuring Uncertainty for a Level of Confidence of 95% ( $U=2U_c(y)$ ): 4.40dB (1G~18G)                    |
| Measuring Uncertainty for a Level of Confidence of 95% ( $U=2U_c(y)$ ): 4.45dB (18G~40G)                   |
| 頻率誤差量測 (Frequency Error)                                                                                   |
| Measuring Uncertainty for a Level of Confidence of 95% ( $U=2U_c(y)$ ): $\pm 78.4\text{Hz}$                |
| 傳導功率量測 (Conducted Power)                                                                                   |
| Measuring Uncertainty for a Level of Confidence of 95% ( $U=2U_c(y)$ ): $\pm 0.84\text{dB}$                |
| 傳導干擾量測 (Conducted Spurious Emission)                                                                       |
| Measuring Uncertainty for a Level of Confidence of 95% ( $U=2U_c(y)$ ): $\pm 2.65\text{ dB}$               |
| 佔用頻寬量測 (Occupied Bandwidth)                                                                                |
| Measuring Uncertainty for a Level of Confidence of 95% ( $U=2U_c(y)$ ): 3.3%                               |
| 溫度 / 濕度 (Temp. / Humidity)                                                                                 |
| Measuring Uncertainty for a Level of Confidence of 95% ( $U=2U_c(y)$ ): $\pm 0.82^\circ\text{C} / \pm 3\%$ |
| 直流電源 (DC Voltage)                                                                                          |
| Measuring Uncertainty for a Level of Confidence of 95% ( $U=2U_c(y)$ ): $\pm 0.3\%$                        |

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of  $k=2$ .

#### 4. 測試設備明細

##### 電源傳導 – SR2

| 儀器名稱               | 廠牌  | 型號     | 財產編號        | 校正年限   | 校正有效日期    |
|--------------------|-----|--------|-------------|--------|-----------|
| Two-Line V-Network | R&S | ENV216 | MRTTWA00019 | 1 year | 2022/3/26 |
| Two-Line V-Network | R&S | ENV216 | MRTTWA00020 | 1 year | 2022/4/24 |
| EMI Test Receiver  | R&S | ESR3   | MRTTWA00009 | 1 year | 2022/3/24 |

##### 輻射干擾 – AC1

| 儀器名稱                     | 廠牌          | 型號         | 財產編號        | 校正年限   | 校正有效日期    |
|--------------------------|-------------|------------|-------------|--------|-----------|
| Broadband TRILOG Antenna | SCHWARZBECK | VULB 9162  | MRTTWA00001 | 1 year | 2022/10/4 |
| EMI Test Receiver        | R&S         | ESR3       | MRTTWA00009 | 1 year | 2022/3/24 |
| Active Loop Antenna      | Schwarzbeck | FMZB 1519B | MRTTWA00002 | 1 year | 2022/5/6  |
| Broadband Horn antenna   | SCHWARZBECK | BBHA 9120D | MRTTWA00003 | 1 year | 2022/4/21 |
| Breitband Hornantenna    | Schwarzbeck | BBHA 9170  | MRTTWA00004 | 1 year | 2022/4/28 |
| Broadband Amplifier      | Schwarzbeck | BBV 9721   | MRTTWA00006 | 1 year | 2022/4/26 |
| Broadband Preamplifier   | SCHWARZBECK | BBV 9718   | MRTTWA00005 | 1 year | 2022/4/21 |
| Cable                    | HUBERSUHNER | SF106      | MRTTWE00010 | 1 year | 2022/6/28 |

##### 傳導量測試設備 –SR2

| 儀器名稱                                       | 廠牌       | 型號      | 財產編號        | 校正年限   | 校正有效日期     |
|--------------------------------------------|----------|---------|-------------|--------|------------|
| EXA Signal Analyzer                        | KEYSIGHT | N9010A  | MRTTWA00012 | 1 year | 2021/11/14 |
| EXA Signal Analyzer                        | KEYSIGHT | N9010B  | MRTTWA00074 | 1 year | 2022/7/19  |
| X-Series USB Peak and Average Power Sensor | KEYSIGHT | U2021XA | MRTTWA00015 | 1 year | 2022/3/24  |

##### EMI 測試軟體

| 軟體名稱 | 廠牌      | 版本        |
|------|---------|-----------|
| e3   | Audix   | 9.160520a |
| EMI  | Quietek | V3        |

## 5. 測試結果

產品名稱  
型號

Cassia Bluetooth Router  
X2000

| 章節             | 量測項目     | 限制值                                                             | 測試結果 | 測試數據     |
|----------------|----------|-----------------------------------------------------------------|------|----------|
| 3.3            | 電源傳導     | 低功率射頻器材技術規範 3.3 節                                               | 符合   | 第 5.1 章節 |
| 4.10.1.2       | 峰值傳導輸出功率 | $\leq 30.00\text{dBm}$                                          | 符合   | 第 5.2 章節 |
| 4.10.1.3       | 天線之要求    | 低功率射頻器材技術規範 4.10.1.3 節                                          | 符合   | 第 5.3 章節 |
| 4.10.1.5       | 帶外發射限制   | $\leq 30\text{dBc(Average)}$                                    | 符合   | 第 5.4 章節 |
| 3.6            | 輻射電場強度   | 低功率射頻器材技術規範 3.6 節                                               | 符合   | 第 5.5 章節 |
| 3.5            | 頻帶邊緣     | $\leq 74\text{dBuV/m(Peak)}$<br>$\leq 54\text{dBuV/m(Average)}$ | 符合   | 第 5.6 章節 |
| 4.10.1.6(2)(A) | 佔用頻寬     | $\geq 500\text{kHz}$                                            | 符合   | 第 5.7 章節 |
| 4.10.1.6(2)(B) | 功率頻譜密度   | $\leq 8\text{dBm}$                                              | 符合   | 第 5.8 章節 |

## 5.1. 電源端點干擾測試

### 5.1.1. 適用標準

依據國家通訊傳播委員會低功率射頻器材技術規範之第 3.3 節，以市電為電源之低功率射頻器材，其傳導回電源線上頻率自 150kHz 至 30MHz 之射頻電壓(在電源端子每一電源線對接地點)應小於或等於下表所列之限值。測量時應經過 50 微亨利( $\mu\text{H}$ )及 50 歐姆( $\Omega$ )之電源線阻抗模擬網路(LISN)。頻率重疊處，以較低限值為準。

| Frequency 頻率範圍<br>MHz | 傳導限制值(dBuV)          |                      |
|-----------------------|----------------------|----------------------|
|                       | 準尖峰值                 | 平均值                  |
| 0.15 - 0.50           | 66-56 <sup>(註)</sup> | 56-46 <sup>(註)</sup> |
| 0.50 - 5.0            | 56                   | 46                   |
| 5.0 - 30              | 60                   | 50                   |

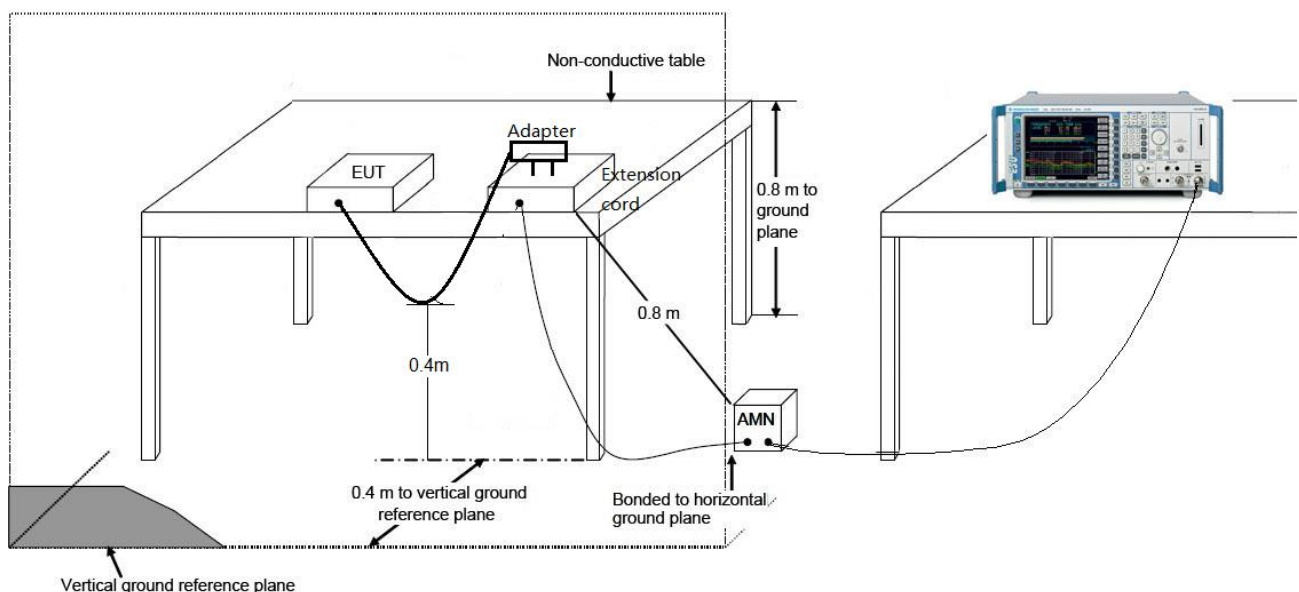
註:隨頻率之對數遞減

### 5.1.2. 量測方法

待測物置於高 80 公分之非導體桌面（落地型產品置於地上），將待測物之電源線接至電源阻抗網路器(LISN)，同時保持待測物至 LISN 距 80 公分，並將電源線多餘部份以 30 至 40 公分之八字形捆綁於電源線中央並離地 40cm，於在正常工作狀態下，執行待測物之火線(Line)及地線(neutral)各一次量測。電源端點場強之測量範圍由 0.15MHz -30MHz，所量測之讀值皆為準尖峰值(Quasi-Peak Value)及平均值(Average Value)。場強接收機之解析頻寬為 9kHz。

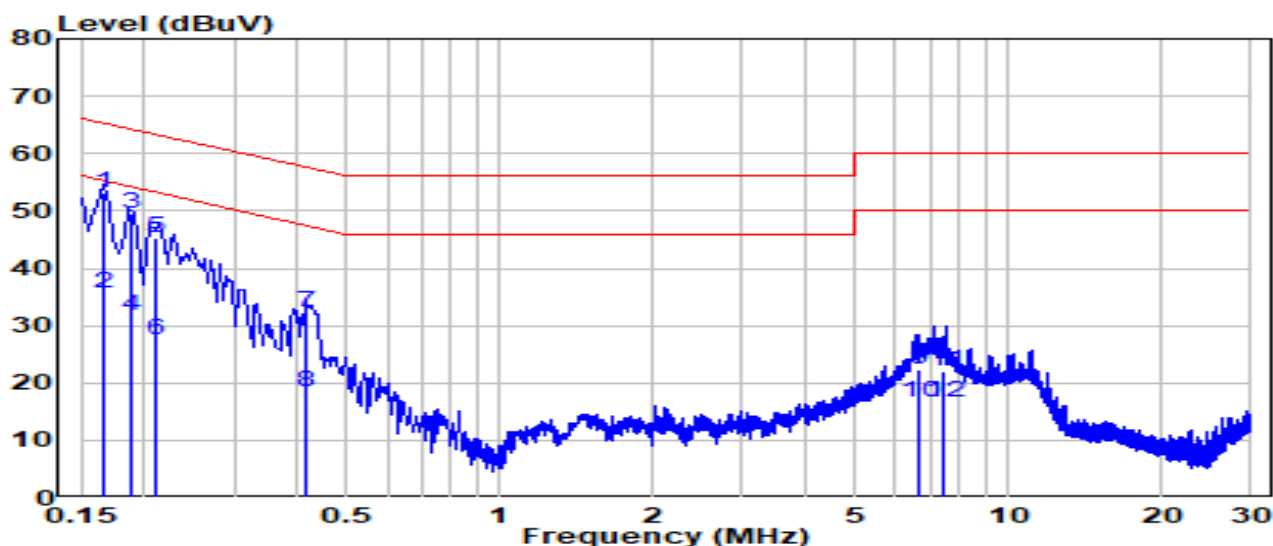
備 註: 經初測驗證過，電源端點干擾測試對測試頻道數並無差異，因此檢附其中一個測試頻道之測試數。

### 5.1.3. 測試架構圖



#### 5.1.4. 電源端點測試結果

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-02     |
| Factor    | CE_ENV216-L1 (Filter ON)               | Temp. / Humidity     | 20.3°C /42%    |
| Polarity  | Line1                                  | Site / Test Engineer | SR2 / Peter Xu |
| Test Mode | Transmit by 802.11b at channel 2412MHz | Test Voltage         | 110V/60Hz      |

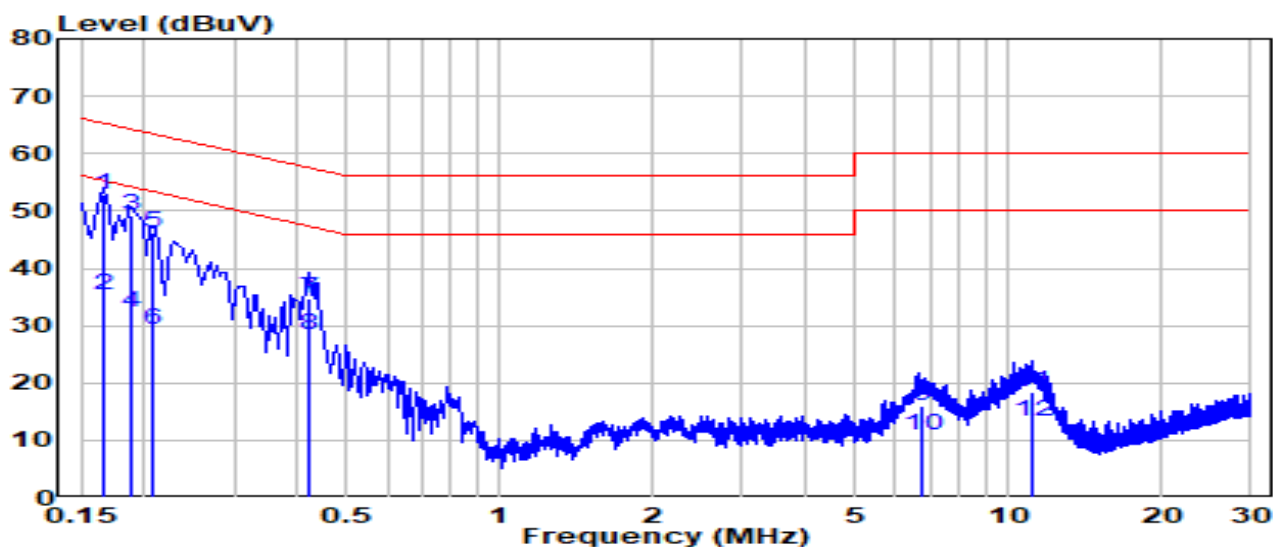


| No |   | Frequency (MHz) | Reading (dBuV) | C.F (dB) | Measurement (dBuV) | Margin (dB) | Limit (dBuV) | Remark (QP/PK/AV) |
|----|---|-----------------|----------------|----------|--------------------|-------------|--------------|-------------------|
| 1  | * | 0.166           | 43.61          | 9.61     | 53.22              | -11.94      | 65.16        | QP                |
| 2  |   | 0.166           | 26.01          | 9.61     | 35.62              | -19.54      | 55.16        | Average           |
| 3  |   | 0.188           | 39.92          | 9.61     | 49.53              | -14.61      | 64.15        | QP                |
| 4  |   | 0.188           | 22.22          | 9.61     | 31.83              | -22.31      | 54.15        | Average           |
| 5  |   | 0.211           | 35.63          | 9.61     | 45.24              | -17.91      | 63.15        | QP                |
| 6  |   | 0.211           | 17.83          | 9.61     | 27.44              | -25.71      | 53.15        | Average           |
| 7  |   | 0.417           | 22.56          | 9.63     | 32.18              | -25.33      | 57.51        | QP                |
| 8  |   | 0.417           | 8.76           | 9.63     | 18.38              | -29.13      | 47.51        | Average           |
| 9  |   | 6.652           | 12.45          | 9.79     | 22.24              | -37.76      | 60.00        | QP                |
| 10 |   | 6.652           | 6.95           | 9.79     | 16.74              | -33.26      | 50.00        | Average           |
| 11 |   | 7.471           | 12.26          | 9.81     | 22.07              | -37.93      | 60.00        | QP                |
| 12 |   | 7.471           | 6.86           | 9.81     | 16.67              | -33.33      | 50.00        | Average           |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = LISN Factor (dB)+ Cable Loss (dB).
3. Measurement(dBuV) = Reading(dBuV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-02     |
| Factor    | CE_ENV216-N (Filter ON)                | Temp. / Humidity     | 20.3°C /42%    |
| Polarity  | Neutral                                | Site / Test Engineer | SR2 / Peter Xu |
| Test Mode | Transmit by 802.11b at channel 2412MHz | Test Voltage         | 110V/60Hz      |



| No |   | Frequency (MHz) | Reading (dBuV) | C.F (dB) | Measurement (dBuV) | Margin (dB) | Limit (dBuV) | Remark (QP/PK/AV) |
|----|---|-----------------|----------------|----------|--------------------|-------------|--------------|-------------------|
| 1  | * | 0.165           | 43.19          | 9.62     | 52.81              | -12.38      | 65.19        | QP                |
| 2  |   | 0.165           | 25.79          | 9.62     | 35.41              | -19.78      | 55.19        | Average           |
| 3  |   | 0.188           | 39.50          | 9.62     | 49.13              | -15.02      | 64.14        | QP                |
| 4  |   | 0.188           | 22.60          | 9.62     | 32.23              | -21.92      | 54.14        | Average           |
| 5  |   | 0.208           | 36.51          | 9.62     | 46.13              | -17.16      | 63.29        | QP                |
| 6  |   | 0.208           | 19.71          | 9.62     | 29.33              | -23.96      | 53.29        | Average           |
| 7  |   | 0.421           | 25.04          | 9.64     | 34.67              | -22.76      | 57.43        | QP                |
| 8  |   | 0.421           | 18.84          | 9.64     | 28.47              | -18.96      | 47.43        | Average           |
| 9  |   | 6.747           | 6.33           | 9.80     | 16.13              | -43.87      | 60.00        | QP                |
| 10 |   | 6.747           | 1.03           | 9.80     | 10.83              | -39.17      | 50.00        | Average           |
| 11 |   | 11.110          | 8.37           | 9.91     | 18.28              | -41.72      | 60.00        | QP                |
| 12 |   | 11.110          | 3.27           | 9.91     | 13.18              | -36.82      | 50.00        | Average           |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = LISN Factor (dB)+ Cable Loss (dB).
3. Measurement(dBuV) = Reading(dBuV) + C.F (Correction Factor).

## 5.2. 峰值傳導輸出功率

### 5.2.1. 適用標準

依據國家通訊傳播委員會低功率射頻器材技術規範之第 4.10.1.2(1)(C)節，操作於 2400-2483.5 MHz 之數位調變的發射器材：1 瓦(W)(含)以下。

依據國家通訊傳播委員會低功率射頻器材技術規範之第 4.10.1.3 節，天線增益限制如下：

(1) 操作於 2400 MHz～2483.5 MHz 頻段：

(A) 進行固定式點對點操作時，其發射天線之方向性增益超過6 dBi，每超過3 dBi，最大傳導輸出功率限制值應降低1 dB。

(B) 除第(A)節外，如其發射天線之方向性增益超過6dBi，應依所超過之dB數等量降低最大傳導輸出功率。

(C) 天線以多向波束發射方式(含同時發射或循序發射)將訊號導向多個接收機或接收機群組時，應符合下列規定：

(a) 非同時發射多向波束者，所有載波或頻道傳輸至所有天線陣列或陣列群之總和傳導輸出功率應符合 4.10.1.2 之功率限制值。如天線/天線陣列群之方向性增益超過 6 dBi，每超過 3 dBi，總和傳導輸出功率限制值應降低 1 dB。方向性增益值應計算如下：

(i) 方向性增益值=  $10\log(\text{天線陣列之單元數目}) + \text{各單元中最高之方向性增益值}$ 。

(ii) 天線陣列間之遮蔽效應或波束干涉損失能充分佐證時，方向性增益得低於(i)計算數值。

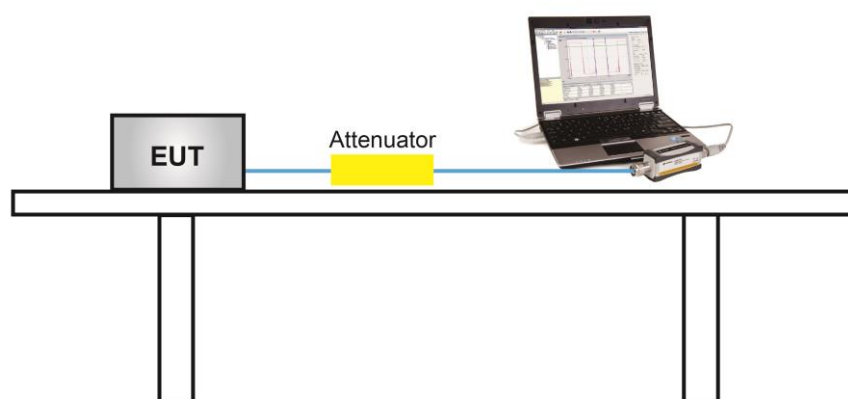
同時發射多向波束於相同或不同頻道者，其每一波束功率應符合(a)之功率限制值。如發射波束有重疊現象，功率應降低，以確保總和傳導輸出功率符合(a)之限制值。同時發射的所有波束總和傳導輸出功率不大於(a) 總和傳導輸出功率限制值加 8 dB。方向性增益值計算同(a)。

(c) 發射機之天線具備單向波束功能者，應符合(1)(A)及(3)後段之規定。

### 5.2.2. 量測方法

待測物之天線埠經由適當之衰減直接連至頻譜分析儀 RF 輸入端，設定頻譜分析儀之解析度頻寬大於 6dB 發射頻寬或使用峰值功率表。

### 5.2.3. 測試架構圖



#### 5.2.4. 峰值傳導輸出功率測試結果

|       |                         |      |            |
|-------|-------------------------|------|------------|
| 待測物名稱 | Cassia Bluetooth Router | 溫度   | 22 ~ 25°C  |
| 測試工程師 | Kevin Ker               | 濕度   | 46 ~ 56%   |
| 測試場地  | SR2                     | 測試日期 | 2021/02/08 |

| Test Mode    | Data Rate/<br>MCS | Channel No. | Freq.<br>(MHz) | Average<br>Power (dBm) | Limit<br>(dBm) | Result |
|--------------|-------------------|-------------|----------------|------------------------|----------------|--------|
| 802.11b      | 1Mbps             | 01          | 2412           | 24.05                  | ≤ 30.00        | Pass   |
| 802.11b      | 1Mbps             | 06          | 2437           | 24.23                  | ≤ 30.00        | Pass   |
| 802.11b      | 1Mbps             | 11          | 2462           | 24.27                  | ≤ 30.00        | Pass   |
| 802.11g      | 6Mbps             | 01          | 2412           | 23.05                  | ≤ 30.00        | Pass   |
| 802.11g      | 6Mbps             | 02          | 2417           | 24.24                  | ≤ 30.00        | Pass   |
| 802.11g      | 6Mbps             | 06          | 2437           | 24.22                  | ≤ 30.00        | Pass   |
| 802.11g      | 6Mbps             | 09          | 2452           | 23.09                  | ≤ 30.00        | Pass   |
| 802.11g      | 6Mbps             | 11          | 2462           | 24.26                  | ≤ 30.00        | Pass   |
| 802.11n-HT20 | MCS0              | 01          | 2412           | 24.26                  | ≤ 30.00        | Pass   |
| 802.11n-HT20 | MCS0              | 02          | 2417           | 24.05                  | ≤ 30.00        | Pass   |
| 802.11n-HT20 | MCS0              | 06          | 2437           | 24.23                  | ≤ 30.00        | Pass   |
| 802.11n-HT20 | MCS0              | 10          | 2457           | 24.27                  | ≤ 30.00        | Pass   |
| 802.11n-HT20 | MCS0              | 11          | 2462           | 23.05                  | ≤ 30.00        | Pass   |

### 5.3. 天線之要求

#### 5.3.1. 適用標準

低功率射頻器材之發射機或收發信機所使用之天線，應為全固定、半固定式或以獨特之耦合(unique coupling)方式連接機體。製造者可設計供使用者因損壞而替換之天線，但不得設計或使用原認證以外之天線或可供引接各類電纜之標準天線插座或電氣連接頭，如：BNC、F type、N type、M type、UG type、RCA、SMA、SMB...等及其他各類工業或通訊標準接頭。

### 5.3.2. 天線樣式

此Cassia Bluetooth Router為專業安裝設備，其天線參考下表（檢附天線規格書）

| Antenna Type             | Model No.           | Manufacturer                   | Frequency Band (MHz) | T <sub>x</sub> Paths | Ant Gain (dBi) |
|--------------------------|---------------------|--------------------------------|----------------------|----------------------|----------------|
| BLE (Internal Antenna)   |                     |                                |                      |                      |                |
| PCB                      | Q-24254M1-GHW-X2000 | HL Tronics (Kunshan) Co., Ltd. | 2402 ~ 2480          | 3                    | 7.72           |
| BLE (External Antenna)   |                     |                                |                      |                      |                |
| Directional              | DF24-30V14F         | DIPOLE COMMUNICATIONS LIMITED  | 2402 ~ 2480          | 1                    | 14.0           |
| Directional              | DB24-40V14A         |                                |                      |                      | 14.0           |
| Directional              | DB24-120VH14A       |                                |                      |                      | 14.0           |
| Directional              | DB24-65V12A         |                                |                      |                      | 12.0           |
| Directional              | DF24-60V12M         |                                |                      |                      | 12.0           |
| Directional              | DB24-90V11A         |                                |                      |                      | 11.5           |
| Directional              | DF24-90V11M         |                                |                      |                      | 11.0           |
| Directional              | DF24-110V10F        |                                |                      |                      | 10.0           |
| Directional              | DB24-120V10A        |                                |                      |                      | 10.0           |
| Directional              | DB24-120VH09A       |                                |                      |                      | 9.0            |
| Directional              | TDJ-2400BKC14       | Kenbotong Technology Co., Ltd. |                      |                      | 14.0           |
| Directional              | TDJ-2400BFE         |                                |                      |                      | 14.0           |
| Directional              | KBT120VP13-24RT0    |                                |                      |                      | 13.0           |
| Directional              | TDJ-2400BKCH70      |                                |                      |                      | 11.0           |
| Directional              | SPDG16T2            | SuperPass Company Inc.         |                      |                      | 12.2           |
| Directional              | OSCAR18             | Siretta Ltd                    |                      |                      | 10.0           |
| Wi-Fi (Internal Antenna) |                     |                                |                      |                      |                |
| PCB                      | N2420DTS            | Airgain                        | 2412 ~ 2462          | 1                    | 3.70           |
|                          |                     |                                | 5150 ~ 5725          | 1                    | 6.60           |
|                          |                     |                                | 5725 ~ 5850          | 1                    | 7.30           |

備註：對於藍牙外置天線，由於所有天線下都會有相同的功率設定值，所以只選擇 directional antenna (DF24-30V14F) 用於測試。

## 5.4. 輻射干擾測試

### 5.4.1. 適用標準

依據國家通訊傳播委員會低功率射頻器材技術規範之第 4.10.1.5 節，使用頻帶範圍外之任意 100 千赫 (kHz) 內，發射器所產生的射頻功率相較於使用頻帶範圍中包含最高所需功率之 100 千赫 (kHz) 內的射頻功率，衰減值限制如下：

(1) 輸出功率以低功率射頻器材技術規範附件二之峰值輸出功率方式量測者，至少須衰減 20 dB，可使用射頻傳導或輻射方式測量。

(2) 輸出功率以低功率射頻器材技術規範 4.10.1(2)(2.3) 之最大傳導輸出功率量測方式者，至少須衰減 30 dB。

此外，落於第 3.5 節禁用頻段之輻射發射，應符合第 3.6 節之規定。

依據國家通訊傳播委員會低功率射頻器材技術規範之第 3.6 節，低功率射頻器材，除本規範各章節另有放寬規定者外，其電場強度不得超過下表之限值，且其不必要之發射皆不得大於主波發射強度。各頻段重疊處，以較嚴格之限制值為準。

| 頻率(f)<br>(MHz)            | 電場強度<br>(微伏特/公尺, $\mu\text{V/m}$ ) | 測距<br>(公尺) |
|---------------------------|------------------------------------|------------|
| $0.009 \leq f \leq 0.490$ | $2400/f(\text{kHz})$               | 300        |
| $0.490 < f \leq 1.705$    | $24000/f(\text{kHz})$              | 30         |
| $1.705 < f < 30$          | 30                                 | 30         |
| $30 \leq f \leq 88$       | 100                                | 3          |
| $88 < f \leq 216$         | 150                                | 3          |
| $216 < f \leq 960$        | 200                                | 3          |
| $960 < f$                 | 500                                | 3          |

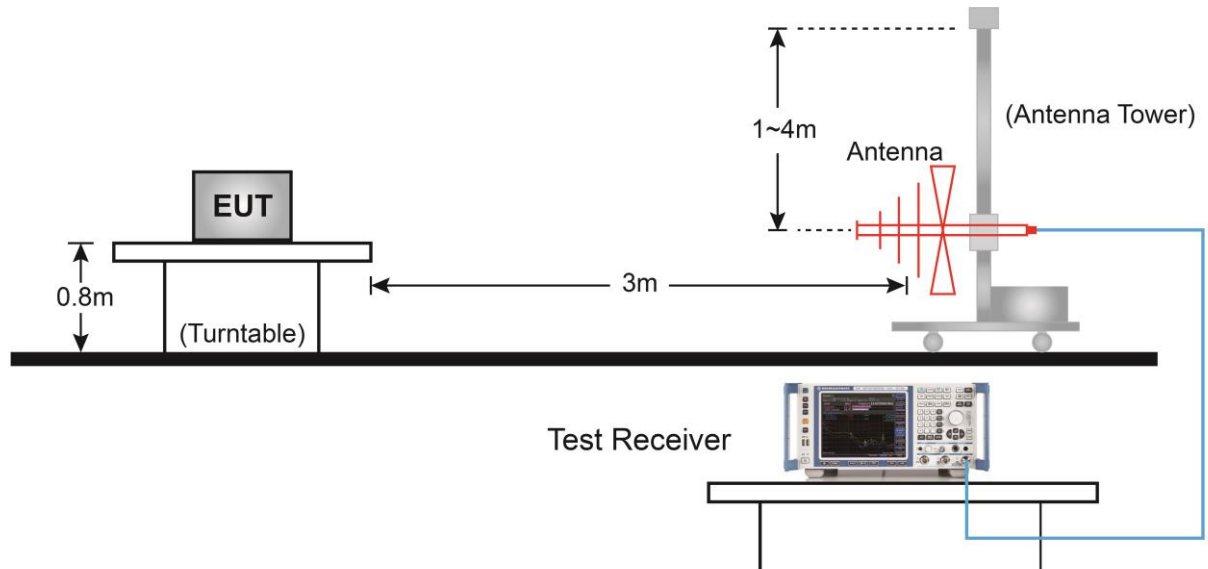
上表規定之電場強度，發射頻率在 9 kHz~90 kHz、110 kHz~490 kHz 及 1000MHz 以上者，其量測應以平均值檢波器為基準，且須符合低功率射頻器材技術規範第 6.14. 節之規定；其他發射頻率，應以 CISPR 準峰值(quasi-peak) 檢波器測量；非以上表所指定之距離測量時，應符合第 6.5 節之規定，而輻射發射之量測頻率範圍須符合低功率射頻器材技術規範第 6.12 節之規定。

### 5.4.2. 量測方法

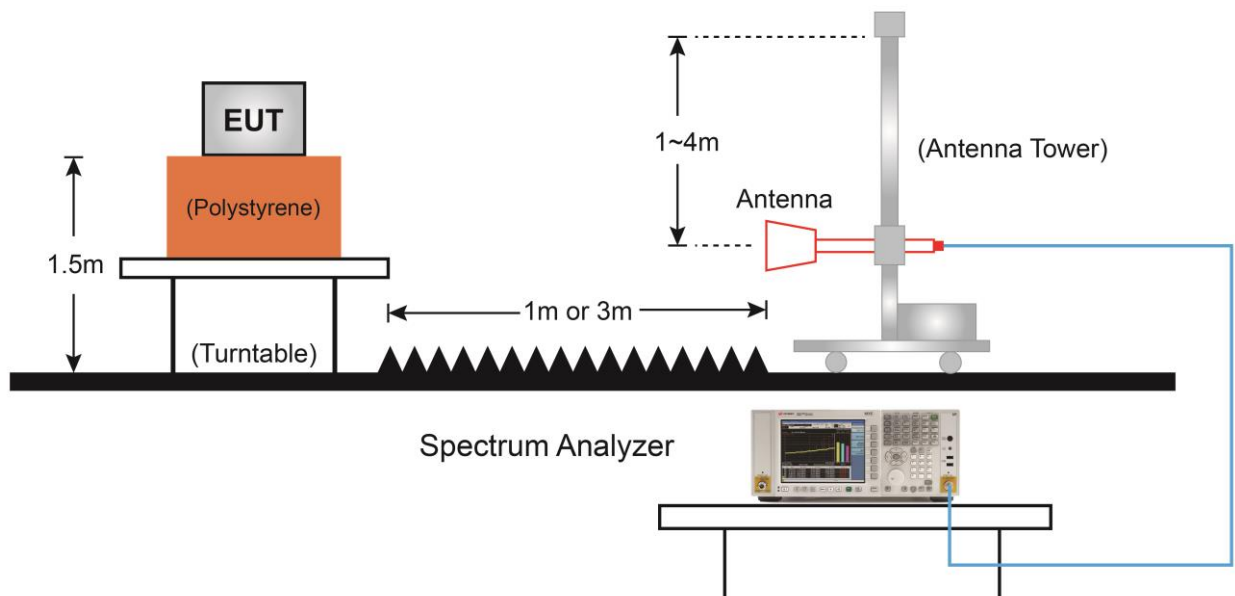
低頻待測物置於高 80 公分之非導體桌面（落地型產品置於地上），高頻待測物置於高 150 公分之非導體桌面，受測物與配件設備之電源線無須束綁，桌面上受測設備的所有電源線由桌子的後緣垂下沿旋轉桌表面接至交流插座。落地型設備的交流電源線可以方便的型態走線。桌面可 360 度旋轉，接收天線置於距待測物 3m 距離，高度可在 1 至 4 公尺間變動，以量測待測物之最大輻射電場強度。接收天線並應於水準及垂直極化方向各量測一次。

### 5.4.3. 測試架構圖

#### Below 1GHz Test Setup:

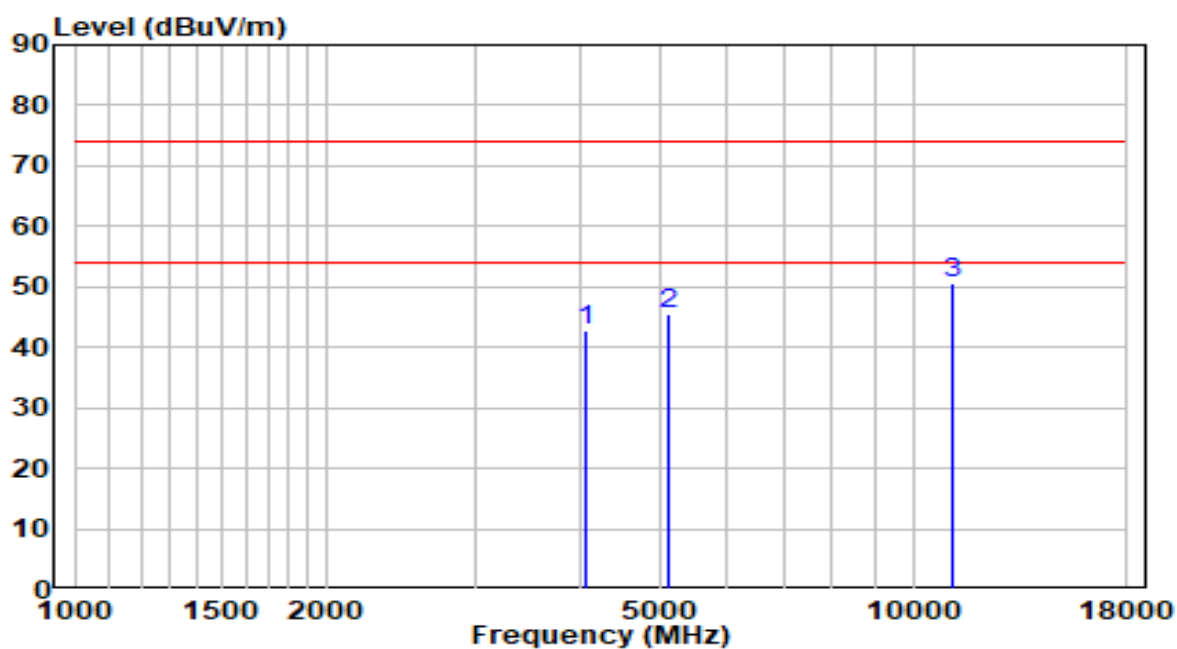


#### Above 1GHz Test Setup:



#### 5.4.4. 輻射干擾測試結果

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 20.9°C/36.3%   |
| Polarity  | Horizontal                             | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11b at Channel 2412MHz | Test Voltage         | 110V/60Hz      |

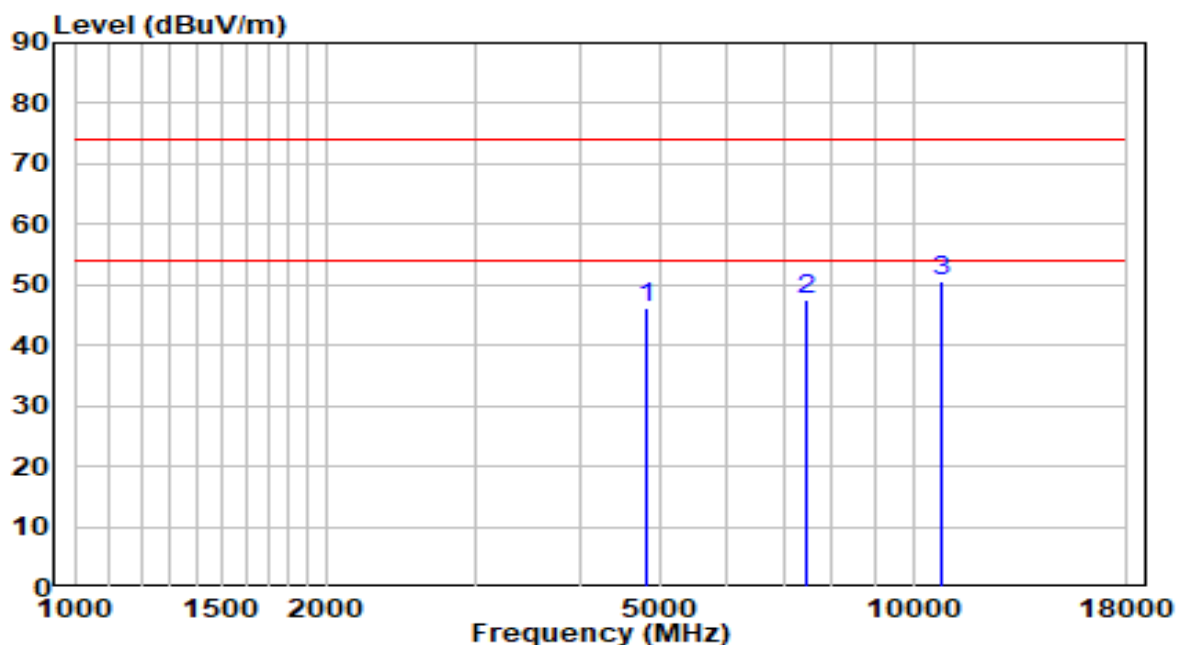


| No | Frequency (MHz) | Reading (dBuV) | C.F (dB) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|----------|----------------------|-------------|----------------|-------------------|
| 1  | 4068.500        | 41.63          | 1.11     | 42.73                | -31.27      | 74.00          | Peak              |
| 2  | 5097.000        | 41.64          | 3.85     | 45.49                | -28.51      | 74.00          | Peak              |
| 3  | * 11132.000     | 32.79          | 17.96    | 50.75                | -23.25      | 74.00          | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ Cable Loss (dB)– Preamplifier(dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 20.9°C/36.3%   |
| Polarity  | Vertical                               | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11b at Channel 2412MHz | Test Voltage         | 110V/60Hz      |

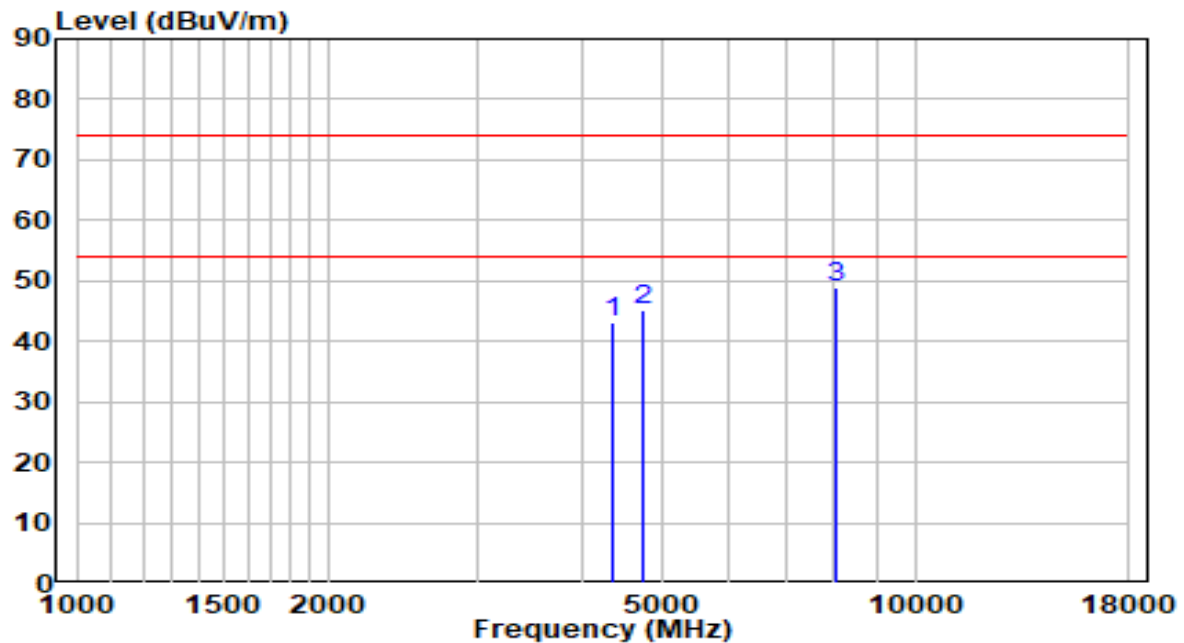


| No | Frequency (MHz) | Reading (dBUV) | C.F (dB) | Measurement (dBUV/m) | Margin (dB) | Limit (dBUV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|----------|----------------------|-------------|----------------|-------------------|
| 1  | 4825.000        | 42.76          | 3.33     | 46.09                | -27.91      | 74.00          | Peak              |
| 2  | 7460.000        | 36.05          | 11.60    | 47.65                | -26.35      | 74.00          | Peak              |
| 3  | * 10800.500     | 33.09          | 17.50    | 50.58                | -23.42      | 74.00          | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ Cable Loss (dB)– Preamplifier(dB).
3. Measurement(dBUV/m) = Reading(dBUV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 20.9°C/36.3%   |
| Polarity  | Horizontal                             | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11b at Channel 2437MHz | Test Voltage         | 110V/60Hz      |

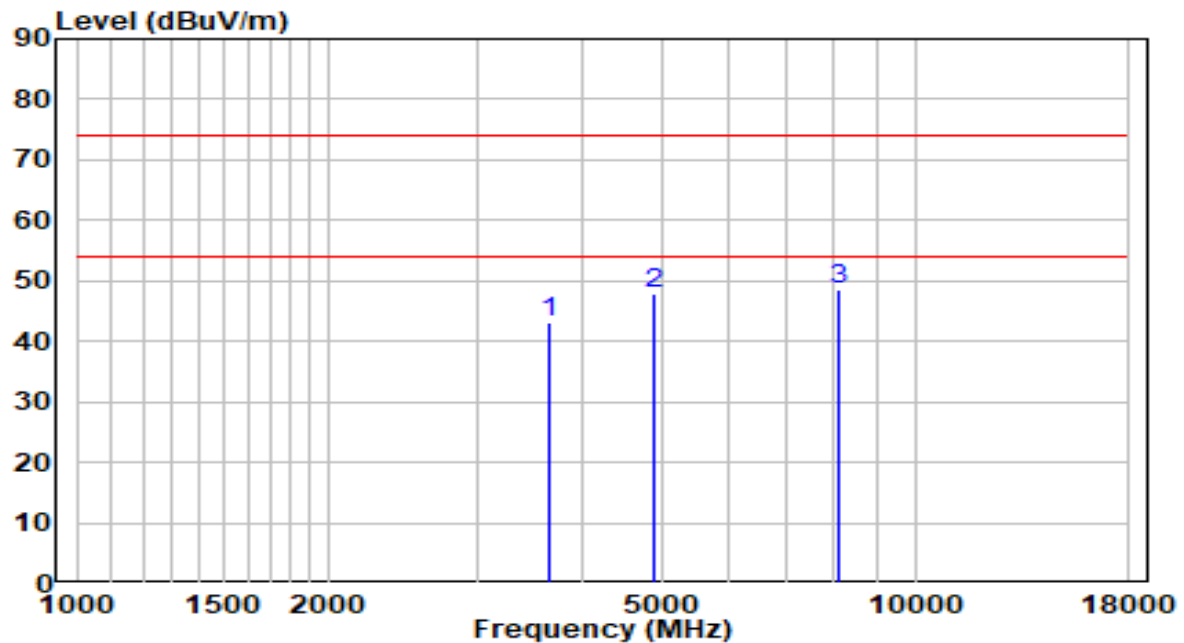


| No | Frequency (MHz) | Reading (dBuV) | C.F (dB) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|----------|----------------------|-------------|----------------|-------------------|
| 1  | 4357.500        | 41.14          | 2.07     | 43.21                | -30.79      | 74.00          | Peak              |
| 2  | 4723.000        | 42.04          | 3.09     | 45.13                | -28.87      | 74.00          | Peak              |
| 3  | * 8046.500      | 36.46          | 12.52    | 48.98                | -25.02      | 74.00          | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ Cable Loss (dB)– Preamplifier(dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 20.9°C/36.3%   |
| Polarity  | Vertical                               | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11b at Channel 2437MHz | Test Voltage         | 110V/60Hz      |

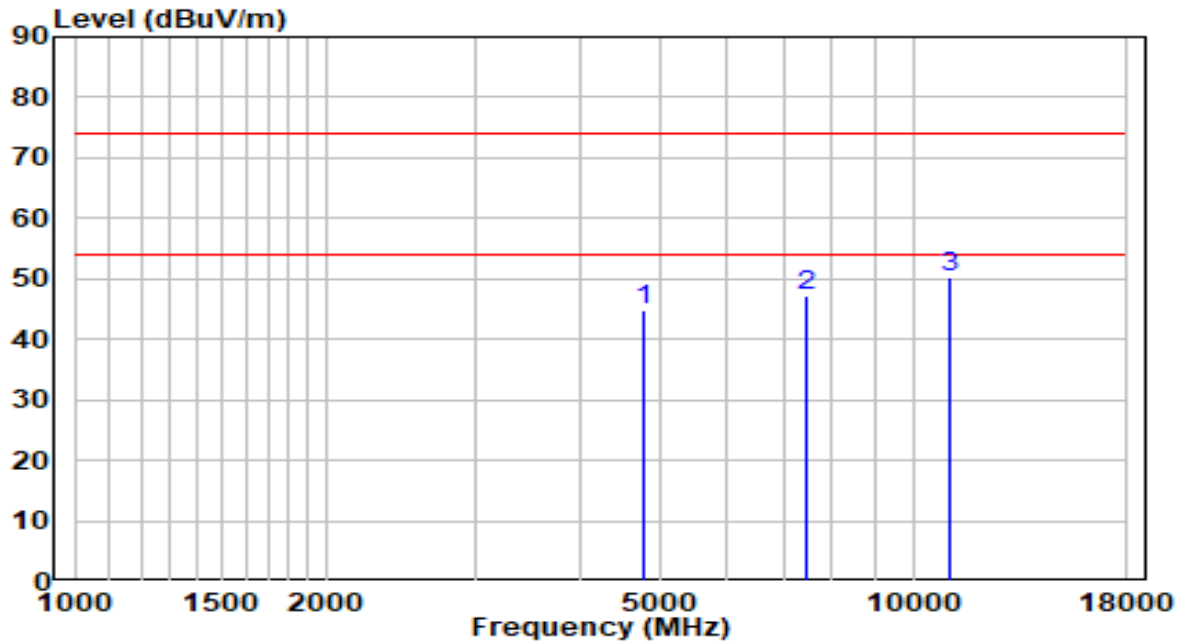


| No | Frequency (MHz) | Reading (dBuV) | C.F (dB) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|----------|----------------------|-------------|----------------|-------------------|
| 1  | 3652.000        | 43.54          | -0.32    | 43.22                | -30.78      | 74.00          | Peak              |
| 2  | 4876.000        | 44.56          | 3.45     | 48.01                | -25.99      | 74.00          | Peak              |
| 3  | * 8097.500      | 35.98          | 12.52    | 48.49                | -25.51      | 74.00          | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ Cable Loss (dB)– Preamplifier(dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 20.9°C/36.3%   |
| Polarity  | Horizontal                             | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11b at Channel 2462MHz | Test Voltage         | 110V/60Hz      |

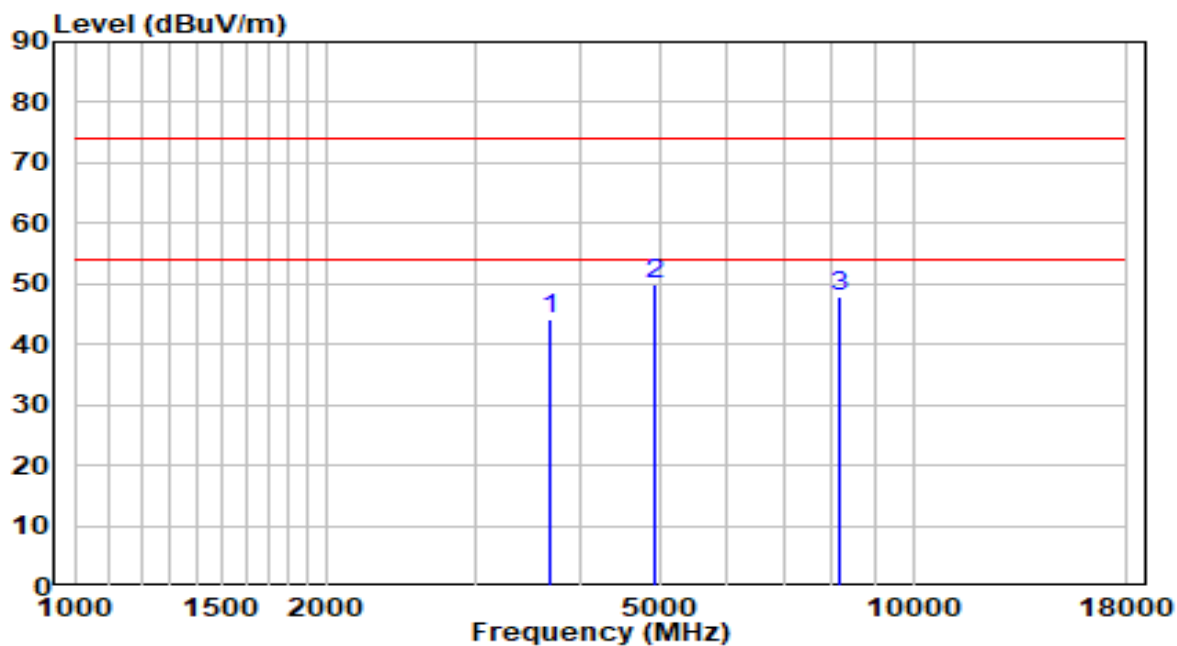


| No | Frequency (MHz) | Reading (dBuV) | C.F (dB) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|----------|----------------------|-------------|----------------|-------------------|
| 1  | 4774.000        | 41.75          | 3.21     | 44.96                | -29.04      | 74.00          | Peak              |
| 2  | 7468.500        | 35.68          | 11.63    | 47.31                | -26.69      | 74.00          | Peak              |
| 3  | * 11081.000     | 32.21          | 17.89    | 50.10                | -23.90      | 74.00          | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ Cable Loss (dB)– Preamplifier(dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 20.9°C/36.3%   |
| Polarity  | Vertical                               | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11b at Channel 2462MHz | Test Voltage         | 110V/60Hz      |

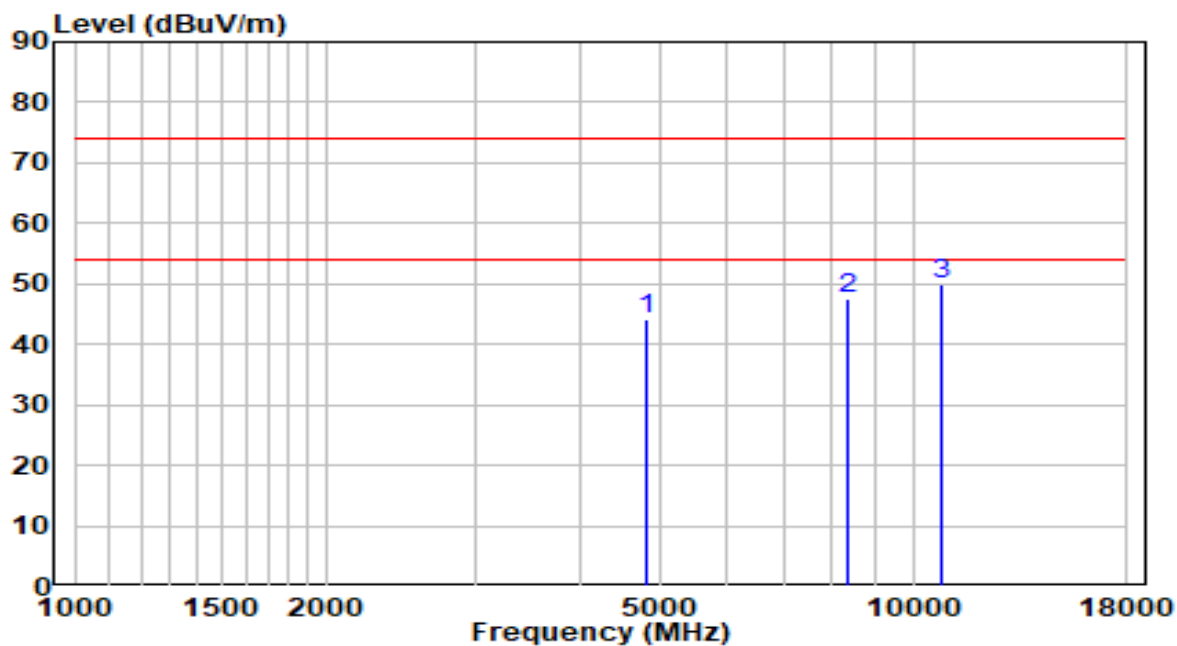


| No | Frequency (MHz) | Reading (dBuV) | C.F (dB) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|----------|----------------------|-------------|----------------|-------------------|
| 1  | 3694.500        | 44.28          | -0.17    | 44.11                | -29.89      | 74.00          | Peak              |
| 2  | * 4927.000      | 46.36          | 3.57     | 49.94                | -24.06      | 74.00          | Peak              |
| 3  | 8140.000        | 35.25          | 12.51    | 47.76                | -26.24      | 74.00          | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ Cable Loss (dB)– Preamplifier(dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 20.9°C/36.3%   |
| Polarity  | Horizontal                             | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11g at Channel 2412MHz | Test Voltage         | 110V/60Hz      |

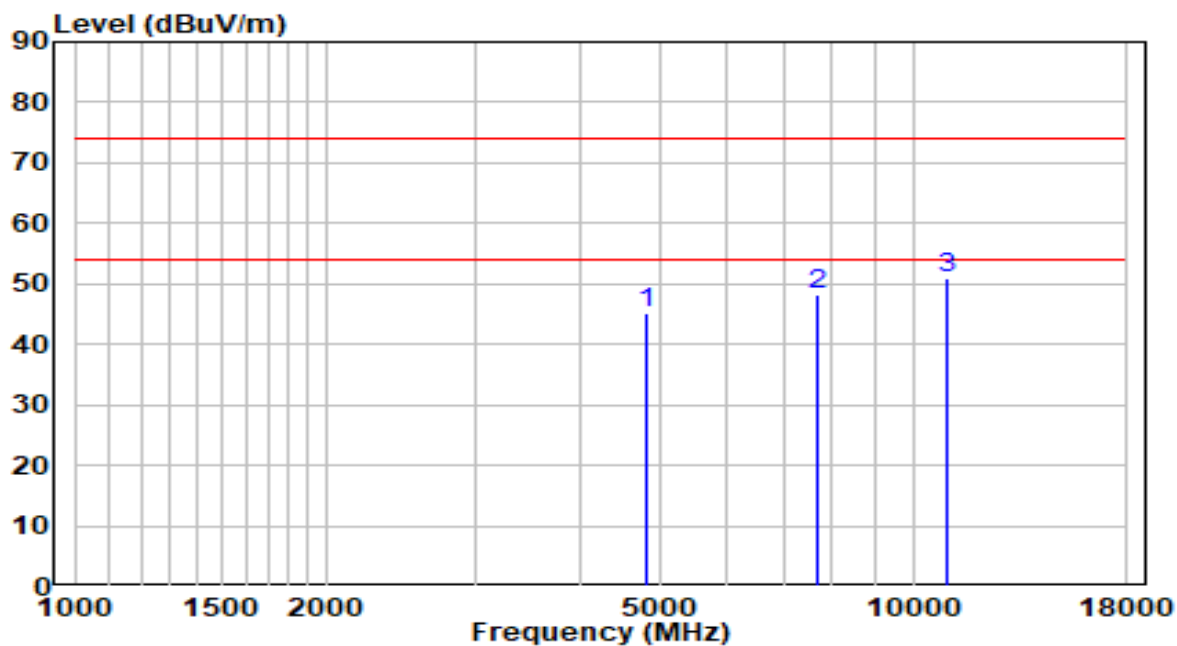


| No | Frequency (MHz) | Reading (dBuV) | C.F (dB) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|----------|----------------------|-------------|----------------|-------------------|
| 1  | 4799.500        | 40.97          | 3.27     | 44.24                | -29.76      | 74.00          | Peak              |
| 2  | 8344.000        | 35.17          | 12.48    | 47.65                | -26.35      | 74.00          | Peak              |
| 3  | * 10843.000     | 32.26          | 17.56    | 49.81                | -24.19      | 74.00          | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ Cable Loss (dB)– Preamplifier(dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 20.9°C/36.3%   |
| Polarity  | Vertical                               | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11g at Channel 2412MHz | Test Voltage         | 110V/60Hz      |

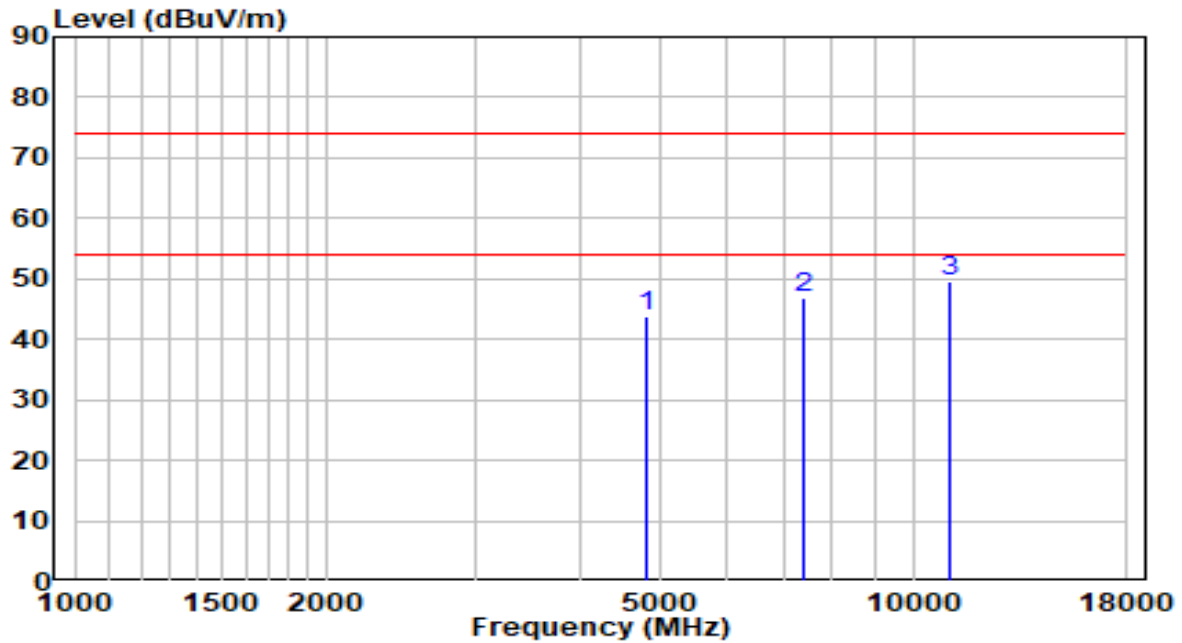


| No | Frequency (MHz) | Reading (dBuV) | C.F (dB) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|----------|----------------------|-------------|----------------|-------------------|
| 1  | 4825.000        | 41.76          | 3.33     | 45.09                | -28.91      | 74.00          | Peak              |
| 2  | 7715.000        | 36.08          | 12.07    | 48.15                | -25.85      | 74.00          | Peak              |
| 3  | * 10962.000     | 33.07          | 17.73    | 50.80                | -23.20      | 74.00          | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ Cable Loss (dB)– Preamplifier(dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 20.9°C/36.3%   |
| Polarity  | Horizontal                             | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11g at Channel 2437MHz | Test Voltage         | 110V/60Hz      |

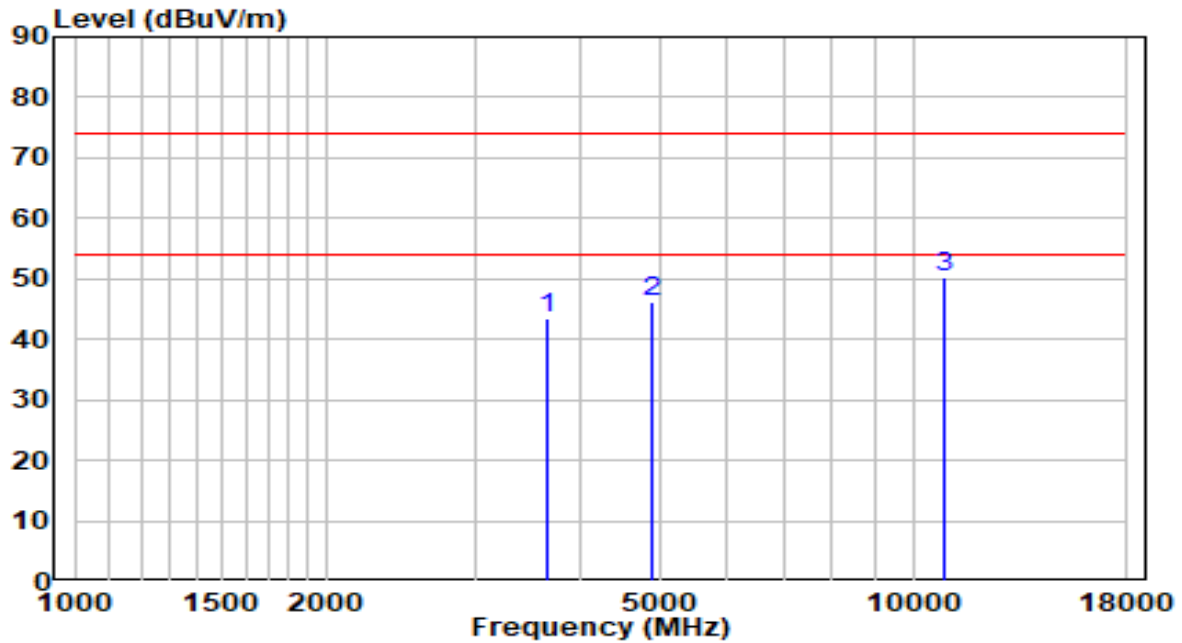


| No | Frequency (MHz) | Reading (dBuV) | C.F (dB) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|----------|----------------------|-------------|----------------|-------------------|
| 1  | 4791.000        | 40.68          | 3.25     | 43.93                | -30.07      | 74.00          | Peak              |
| 2  | 7409.000        | 35.38          | 11.46    | 46.84                | -27.16      | 74.00          | Peak              |
| 3  | * 11098.000     | 31.51          | 17.91    | 49.42                | -24.58      | 74.00          | Peak              |

Note:

- "\*", means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB)+ Cable Loss (dB)– Preamplifier(dB).
- Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 20.9°C/36.3%   |
| Polarity  | Vertical                               | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11g at Channel 2437MHz | Test Voltage         | 110V/60Hz      |

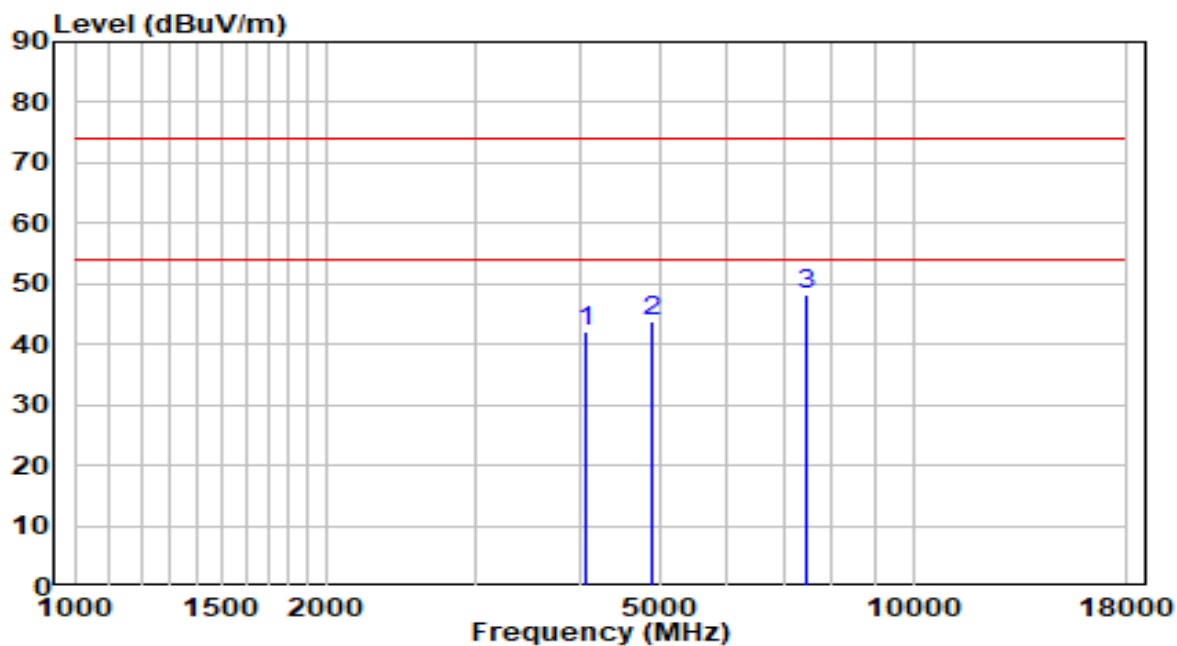


| No | Frequency (MHz) | Reading (dBuV) | C.F (dB) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|----------|----------------------|-------------|----------------|-------------------|
| 1  | 3652.000        | 43.75          | -0.32    | 43.43                | -30.57      | 74.00          | Peak              |
| 2  | 4876.000        | 42.81          | 3.45     | 46.27                | -27.73      | 74.00          | Peak              |
| 3  | * 10877.000     | 32.49          | 17.61    | 50.09                | -23.91      | 74.00          | Peak              |

Note:

- "\*", means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB)+ Cable Loss (dB)– Preamplifier(dB).
- Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 22.2°C/35.9%   |
| Polarity  | Horizontal                             | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11g at Channel 2462MHz | Test Voltage         | 110V/60Hz      |

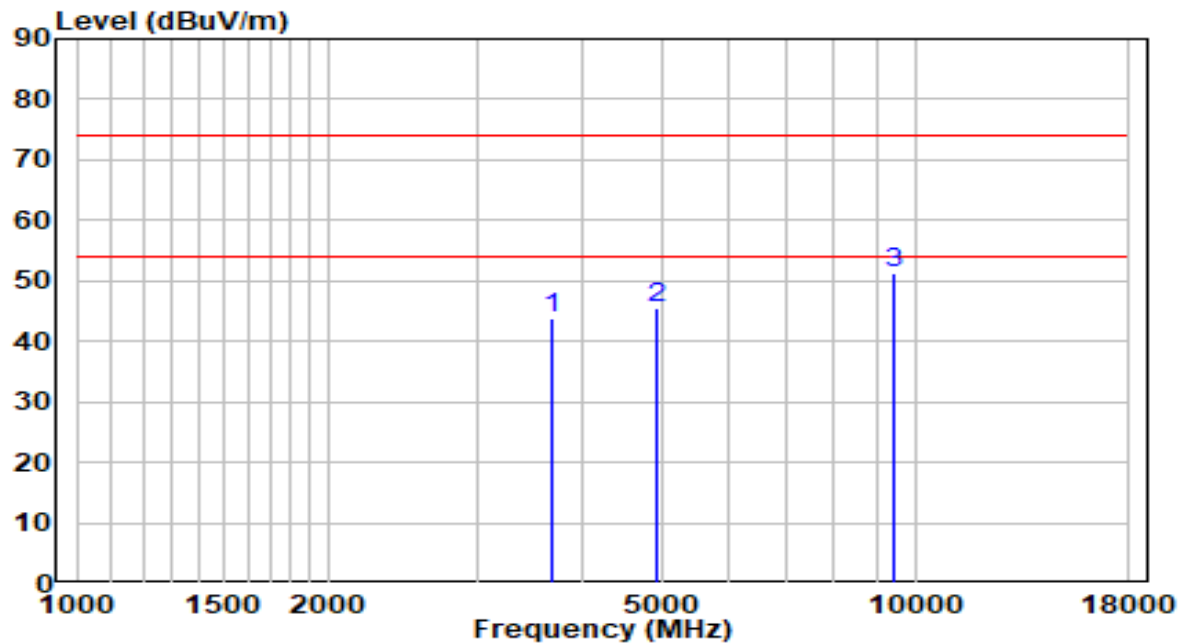


| No | Frequency (MHz) | Reading (dBuV) | C.F (dB) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|----------|----------------------|-------------|----------------|-------------------|
| 1  | 4068.500        | 40.89          | 1.11     | 42.00                | -32.00      | 74.00          | Peak              |
| 2  | 4867.500        | 40.35          | 3.43     | 43.78                | -30.22      | 74.00          | Peak              |
| 3  | * 7460.000      | 36.70          | 11.60    | 48.31                | -25.69      | 74.00          | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ Cable Loss (dB)– Preamplifier(dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 22.2°C/35.9%   |
| Polarity  | Vertical                               | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11g at Channel 2462MHz | Test Voltage         | 110V/60Hz      |

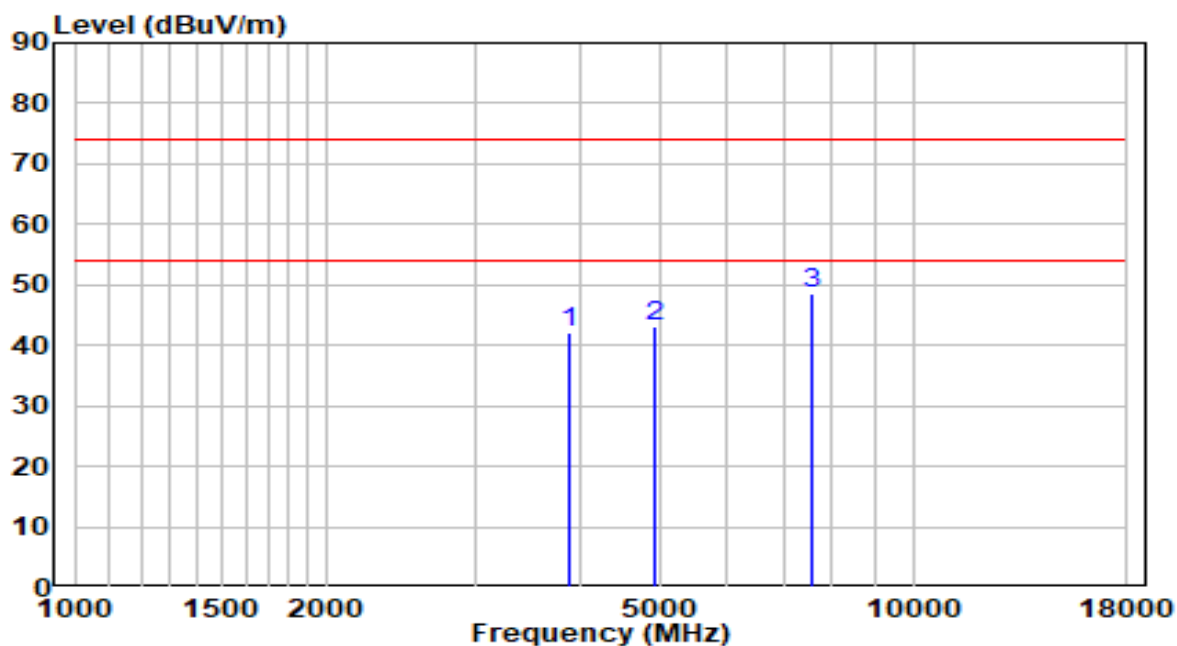


| No | Frequency (MHz) | Reading (dBuV) | C.F (dB) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|----------|----------------------|-------------|----------------|-------------------|
| 1  | 3694.500        | 43.90          | -0.17    | 43.72                | -30.28      | 74.00          | Peak              |
| 2  | 4927.000        | 41.92          | 3.57     | 45.50                | -28.50      | 74.00          | Peak              |
| 3  | * 9457.500      | 37.06          | 14.36    | 51.42                | -22.58      | 74.00          | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ Cable Loss (dB)– Preamplifier(dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                             |                      |                |
|-----------|---------------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                     | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                                  | Temp. / Humidity     | 22.2°C/35.9%   |
| Polarity  | Horizontal                                  | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11n-HT20 at Channel 2412MHz | Test Voltage         | 110V/60Hz      |

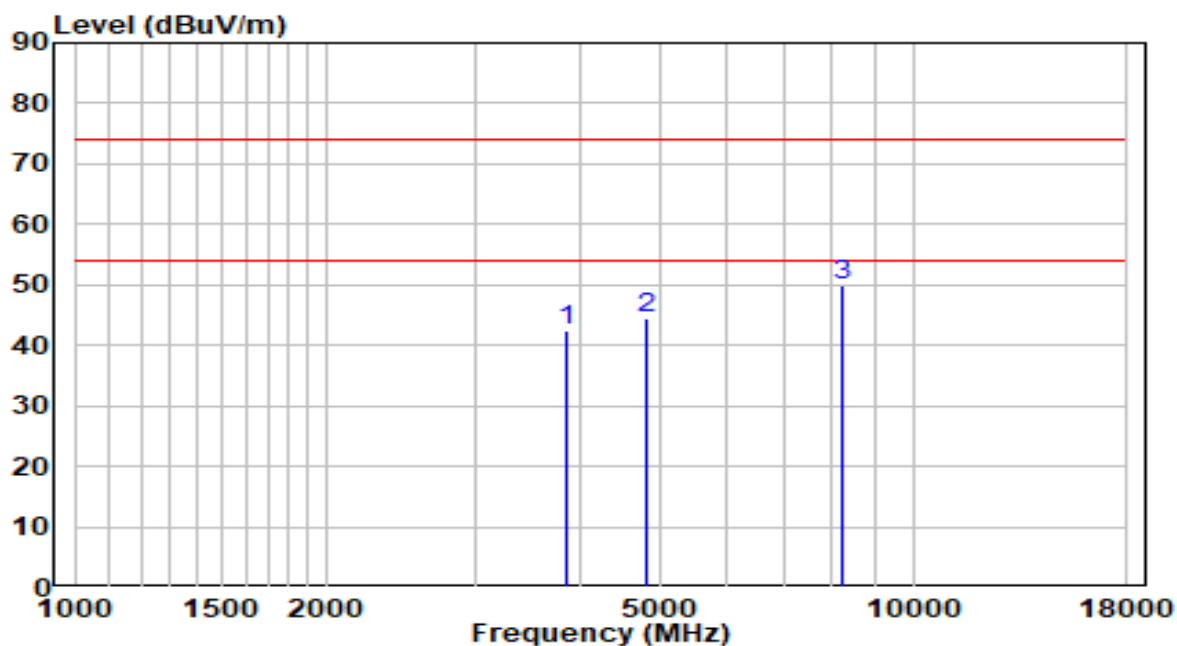


| No | Frequency (MHz) | Reading (dBuV) | C.F (dB) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|----------|----------------------|-------------|----------------|-------------------|
| 1  | 3890.000        | 41.68          | 0.50     | 42.18                | -31.82      | 74.00          | Peak              |
| 2  | 4935.500        | 39.48          | 3.60     | 43.08                | -30.92      | 74.00          | Peak              |
| 3  | * 7570.500      | 36.89          | 11.83    | 48.72                | -25.28      | 74.00          | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ Cable Loss (dB)– Preamplifier(dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                             |                      |                |
|-----------|---------------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                     | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                                  | Temp. / Humidity     | 22.2°C/35.9%   |
| Polarity  | Vertical                                    | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11n-HT20 at Channel 2412MHz | Test Voltage         | 110V/60Hz      |

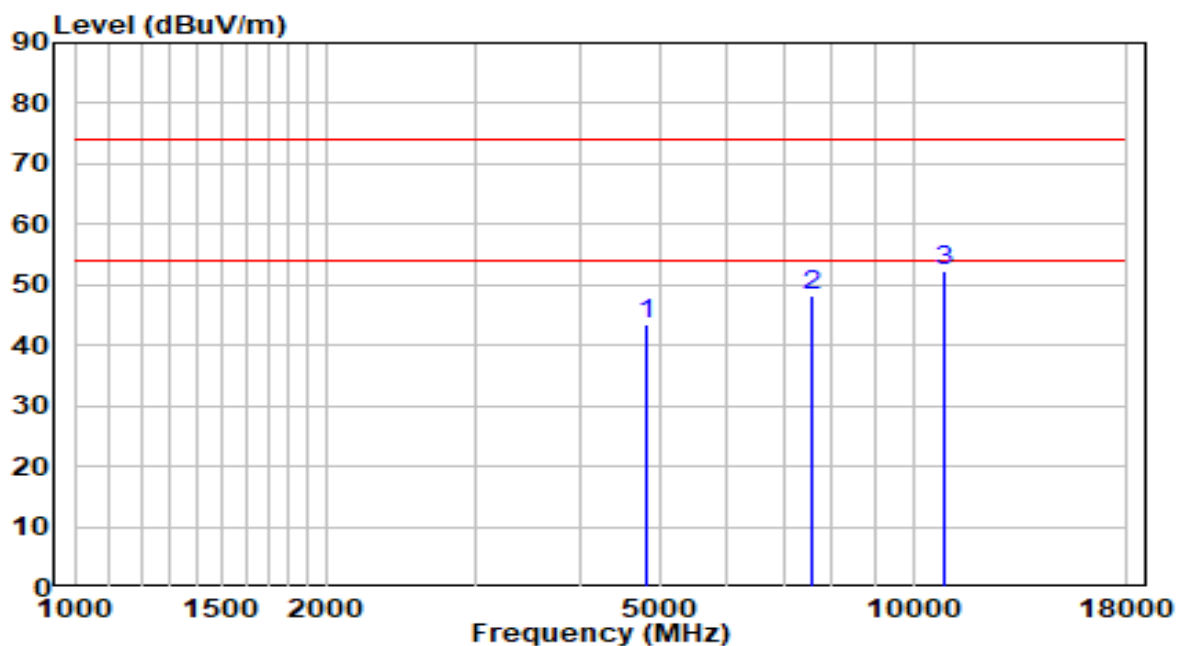


| No | Frequency (MHz) | Reading (dBuV) | C.F (dB) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|----------|----------------------|-------------|----------------|-------------------|
| 1  | 3873.000        | 42.07          | 0.44     | 42.51                | -31.49      | 74.00          | Peak              |
| 2  | 4825.000        | 41.09          | 3.33     | 44.42                | -29.58      | 74.00          | Peak              |
| 3  | * 8250.500      | 37.39          | 12.49    | 49.88                | -24.12      | 74.00          | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ Cable Loss (dB)– Preamplifier(dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                             |                      |                |
|-----------|---------------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                     | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                                  | Temp. / Humidity     | 22.2°C/35.9%   |
| Polarity  | Horizontal                                  | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11n-HT20 at Channel 2437MHz | Test Voltage         | 110V/60Hz      |

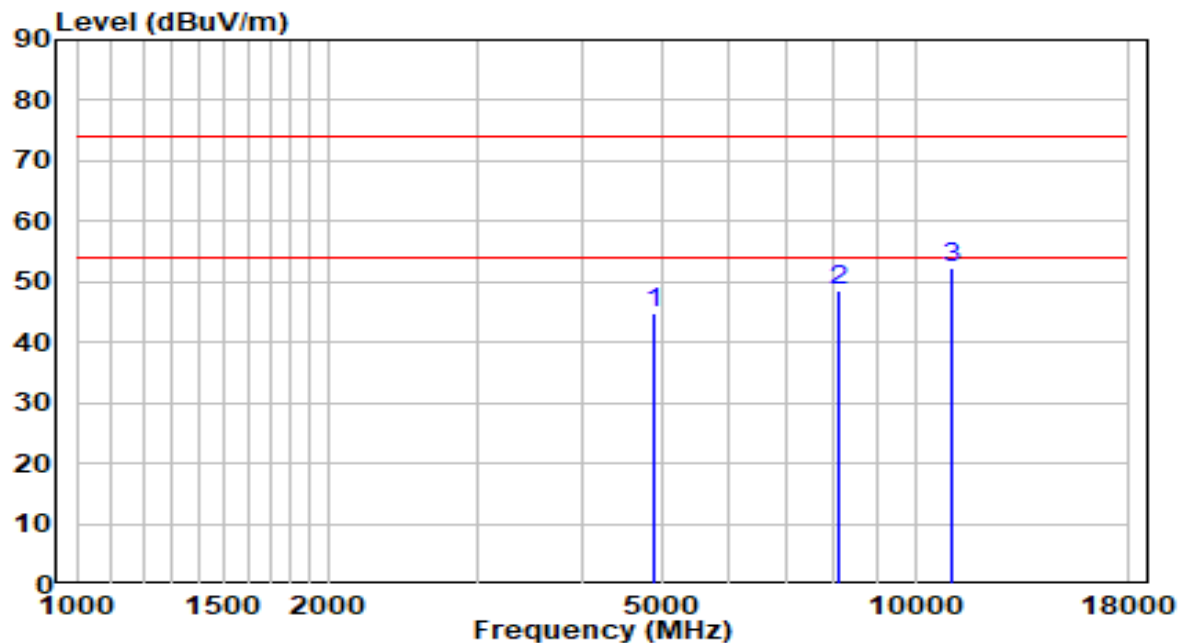


| No | Frequency (MHz) | Reading (dBuV) | C.F (dB) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|----------|----------------------|-------------|----------------|-------------------|
| 1  | 4808.000        | 40.24          | 3.29     | 43.53                | -30.47      | 74.00          | Peak              |
| 2  | 7562.000        | 36.29          | 11.82    | 48.11                | -25.89      | 74.00          | Peak              |
| 3  | * 10868.500     | 34.86          | 17.59    | 52.45                | -21.55      | 74.00          | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ Cable Loss (dB)– Preamplifier(dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                             |                      |                |
|-----------|---------------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                     | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                                  | Temp. / Humidity     | 22.2°C/35.9%   |
| Polarity  | Vertical                                    | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11n-HT20 at Channel 2437MHz | Test Voltage         | 110V/60Hz      |

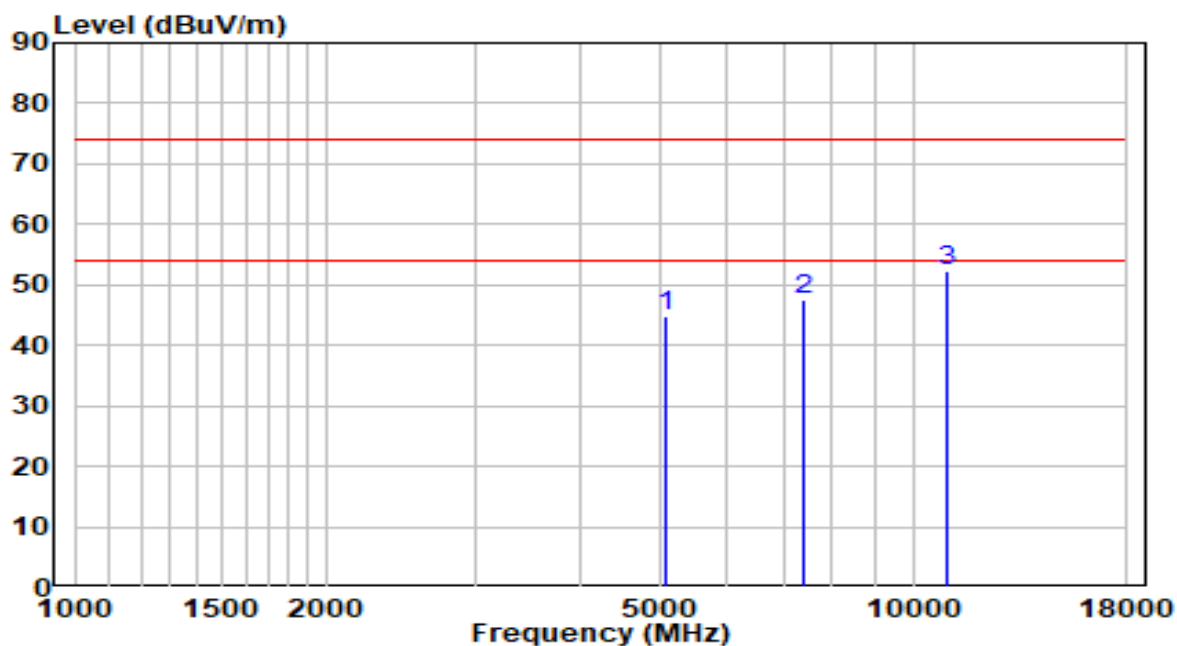


| No | Frequency (MHz) | Reading (dBuV) | C.F (dB) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|----------|----------------------|-------------|----------------|-------------------|
| 1  | 4876.000        | 41.39          | 3.45     | 44.84                | -29.16      | 74.00          | Peak              |
| 2  | 8106.000        | 36.13          | 12.51    | 48.65                | -25.35      | 74.00          | Peak              |
| 3  | * 11047.000     | 34.61          | 17.84    | 52.45                | -21.55      | 74.00          | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ Cable Loss (dB)– Preamplifier(dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                             |                      |                |
|-----------|---------------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                     | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                                  | Temp. / Humidity     | 22.2°C/35.9%   |
| Polarity  | Horizontal                                  | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11n-HT20 at Channel 2462MHz | Test Voltage         | 110V/60Hz      |

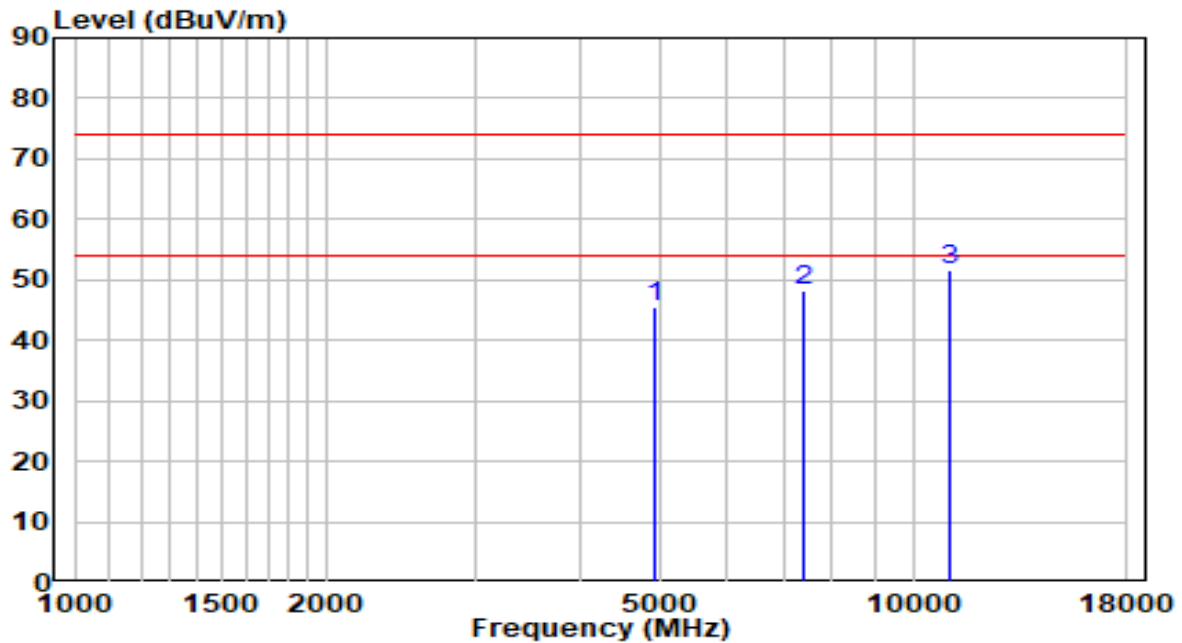


| No | Frequency (MHz) | Reading (dBuV) | C.F (dB) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|----------|----------------------|-------------|----------------|-------------------|
| 1  | 5054.500        | 41.19          | 3.81     | 45.00                | -29.00      | 74.00          | Peak              |
| 2  | 7383.500        | 36.26          | 11.39    | 47.65                | -26.35      | 74.00          | Peak              |
| 3  | * 10962.000     | 34.74          | 17.73    | 52.47                | -21.53      | 74.00          | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ Cable Loss (dB)– Preamplifier(dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                             |                      |                |
|-----------|---------------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                     | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                                  | Temp. / Humidity     | 22.2°C/35.9%   |
| Polarity  | Vertical                                    | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11n-HT20 at Channel 2462MHz | Test Voltage         | 110V/60Hz      |



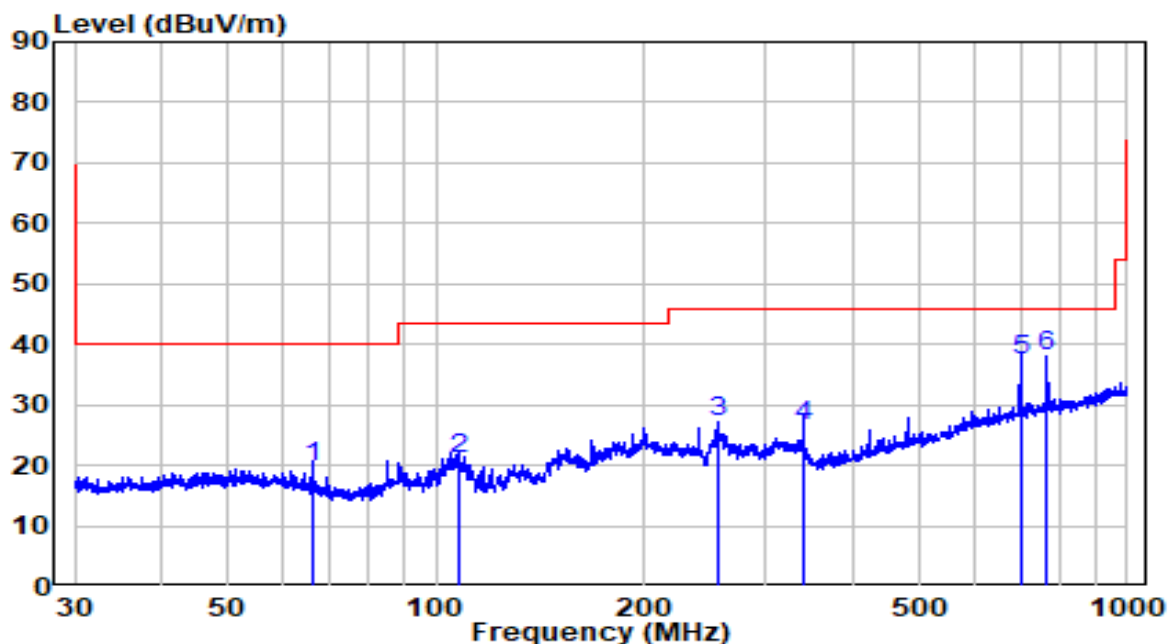
| No | Frequency (MHz) | Reading (dBuV) | C.F (dB) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|----------|----------------------|-------------|----------------|-------------------|
| 1  | 4918.500        | 41.87          | 3.55     | 45.43                | -28.57      | 74.00          | Peak              |
| 2  | 7383.500        | 36.80          | 11.39    | 48.19                | -25.81      | 74.00          | Peak              |
| 3  | * 11081.000     | 33.89          | 17.89    | 51.78                | -22.22      | 74.00          | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB)+ Cable Loss (dB)– Preamplifier(dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

### The Worst Case of Radiated Emission below 1GHz:

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-02     |
| Factor    | VULB 9162                              | Temp. / Humidity     | 21.3°C /55%    |
| Polarity  | Horizontal                             | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11b at channel 2412MHz | Test Voltage         | 110V/60Hz      |

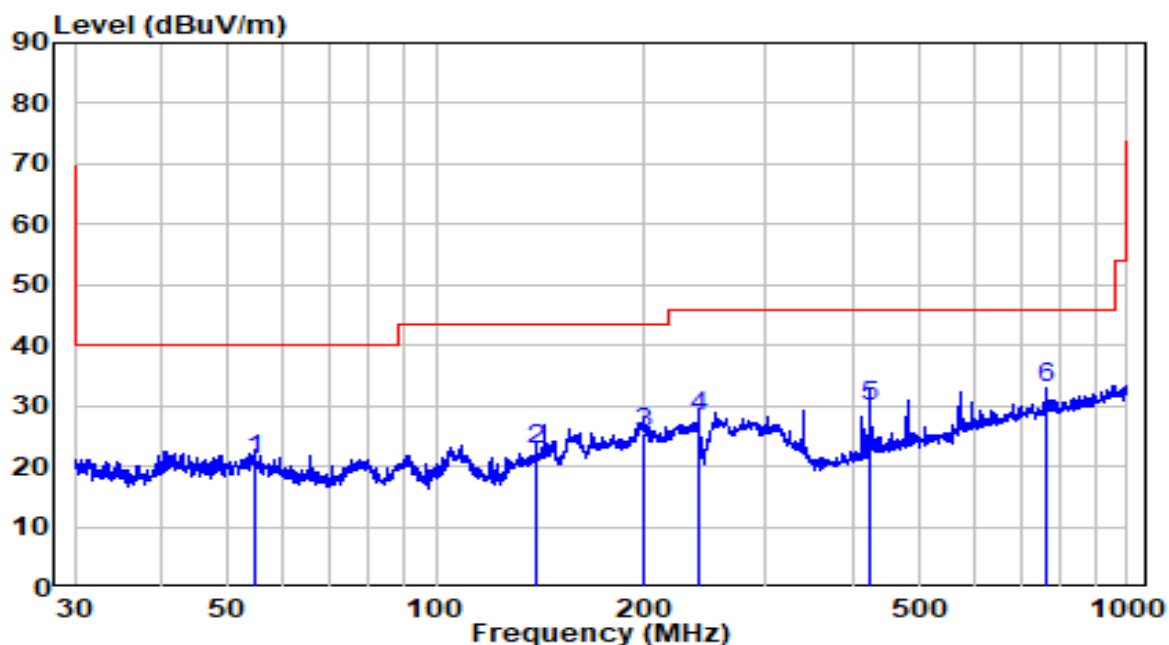


| No | Frequency (MHz) | Reading (dBuV) | C.F (dB) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|----------|----------------------|-------------|----------------|-------------------|
| 1  | 66.382          | 1.52           | 18.14    | 19.66                | -20.34      | 40.00          | QP                |
| 2  | 107.699         | 2.27           | 18.82    | 21.09                | -22.41      | 43.50          | QP                |
| 3  | 255.175         | 6.56           | 20.56    | 27.12                | -18.88      | 46.00          | QP                |
| 4  | 340.185         | 3.68           | 22.89    | 26.57                | -19.43      | 46.00          | QP                |
| 5  | 700.532         | 8.00           | 29.33    | 37.33                | -8.67       | 46.00          | QP                |
| 6  | * 766.057       | 7.94           | 30.24    | 38.18                | -7.82       | 46.00          | QP                |

#### Note:

- "\*", means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
- Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- The amplitude of Radiated emissions (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 25GHz), is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value. Therefore, the data is not presented in the report.

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-02     |
| Factor    | VULB 9162                              | Temp. / Humidity     | 21.3°C /55%    |
| Polarity  | Vertical                               | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11b at channel 2412MHz | Test Voltage         | 110V/60Hz      |



| No | Frequency (MHz) | Reading (dBuV) | C.F (dB) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|----------|----------------------|-------------|----------------|-------------------|
| 1  | 54.643          | -0.21          | 21.20    | 20.99                | -19.01      | 40.00          | QP                |
| 2  | 139.606         | 6.58           | 16.04    | 22.62                | -20.88      | 43.50          | QP                |
| 3  | 200.337         | 6.31           | 19.23    | 25.54                | -17.96      | 43.50          | QP                |
| 4  | 239.987         | 7.88           | 20.20    | 28.08                | -17.92      | 46.00          | QP                |
| 5  | 425.028         | 5.50           | 24.48    | 29.98                | -16.02      | 46.00          | QP                |
| 6  | * 766.057       | 2.58           | 30.24    | 32.82                | -13.18      | 46.00          | QP                |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

5.The amplitude of Radiated emissions (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 25GHz), is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value. Therefore, the data is not presented in the report.

## 5.5. 混附發射之 RF 傳導發射

### 5.5.1. 適用標準

依據國家通訊傳播委員會低功率射頻器材技術規範之第 4.10.1.5 節，使用頻帶範圍外之任意 100 千赫 (kHz) 內，發射機所產生的射頻功率相較於使用頻帶範圍中包含最高所需功率之 100 千赫 (kHz) 內的射頻功率，至少須衰減 20 dB，以射頻傳導或輻射方式測量。如發射機以本節 4.10.1(2)(2.3) 之峰值傳導輸出功率量測方式者，至少須衰減 30 dB。此外，落於第 3.5 節禁用頻段之輻射發射，應符合第 3.6 節之規定。

#### 備註

解析頻寬設置為 1.3 MHz 是為了提供量測速度。使用限值還是法規定義的基於解析頻寬 100 kHz 情形下主波下降 20dB，如果量測波形接近限值，我們會使用降低解析頻寬方式作驗證。

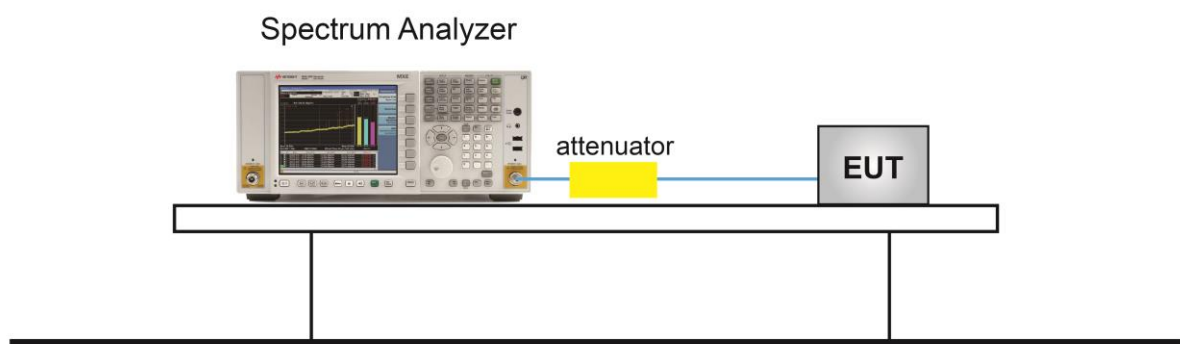
### 5.5.2. 量測方法

依據國家通訊傳播委員會低功率射頻器材技術規範之附件三，頻率跳頻展頻系統檢測之參考程式七 混附發射之 RF 傳導發射：

(一) 頻譜分析儀設定如下：

1. 頻率掃描範圍足以檢測頻帶內的發射波峰位準以及由受測物產生之最低頻率到第 10 次諧波的所有混附發射，通常需要分幾段以涵蓋全部頻率範圍。
2. 解析頻寬為 100kHz，視訊頻寬不小於解析頻寬。
3. 掃描時間為自動，檢波功能為峰值，訊號軌跡為最大保留 (Max Hold)。
4. 將標記設定於任何欲紀錄之波峰上，所顯示之位準值必須符合指定之限制值。

### 5.5.3. 測試架構圖



#### 5.5.4. 混附發射之 RF 傳導發射測試結果

|       |                         |      |            |
|-------|-------------------------|------|------------|
| 待測物名稱 | Cassia Bluetooth Router | 溫度   | 23 ~ 25°C  |
| 測試工程師 | Kevin Ker               | 濕度   | 46 ~ 54%   |
| 測試場地  | SR2                     | 測試日期 | 2021/02/24 |

| Test Mode    | Data Rate<br>/ MCS | Channel No. | Frequency<br>(MHz) | Limit<br>(dBc) | Result |
|--------------|--------------------|-------------|--------------------|----------------|--------|
| 802.11b      | 1Mbps              | 01          | 2412               | ≤ 30           | Pass   |
| 802.11b      | 1Mbps              | 06          | 2437               | ≤ 30           | Pass   |
| 802.11b      | 1Mbps              | 11          | 2462               | ≤ 30           | Pass   |
| 802.11g      | 6Mbps              | 01          | 2412               | ≤ 30           | Pass   |
| 802.11g      | 6Mbps              | 06          | 2437               | ≤ 30           | Pass   |
| 802.11g      | 6Mbps              | 11          | 2462               | ≤ 30           | Pass   |
| 802.11n-HT20 | MCS0               | 01          | 2412               | ≤ 30           | Pass   |
| 802.11n-HT20 | MCS0               | 06          | 2437               | ≤ 30           | Pass   |
| 802.11n-HT20 | MCS0               | 11          | 2462               | ≤ 30           | Pass   |

## 802.11b Out-of-Band Emissions

### Channel 01 (2412MHz)

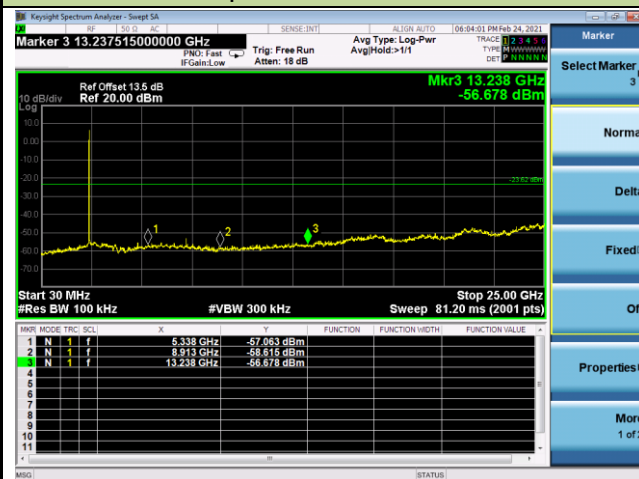
#### 100kHz PSD reference Level



#### Low Band Edge



#### Spurious Emission

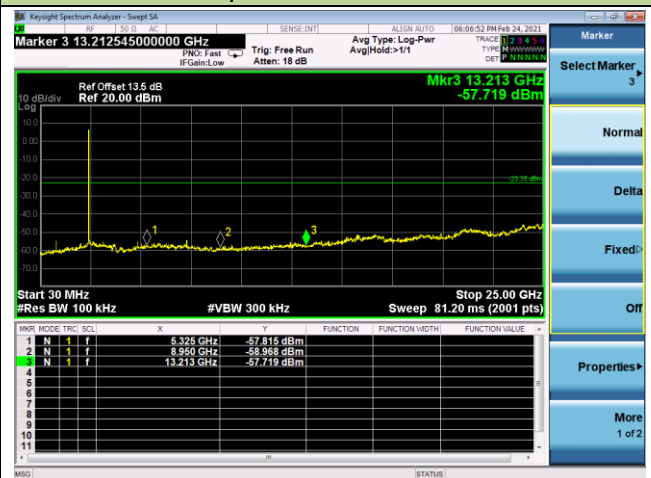


### Channel 06 (2437MHz)

#### 100kHz PSD reference Level



#### Spurious Emission



## 802.11b Out-of-Band Emissions

### Channel 11 (2462MHz)

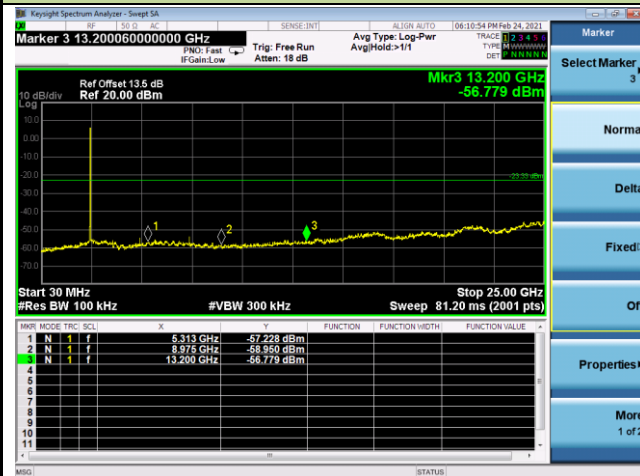
#### 100kHz PSD reference Level



#### High Band Edge



#### Spurious Emission



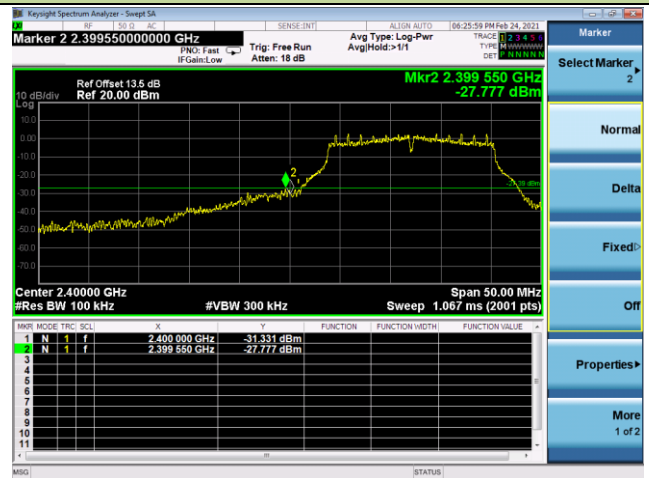
## 802.11g Out-of-Band Emissions

### Channel 01 (2412MHz)

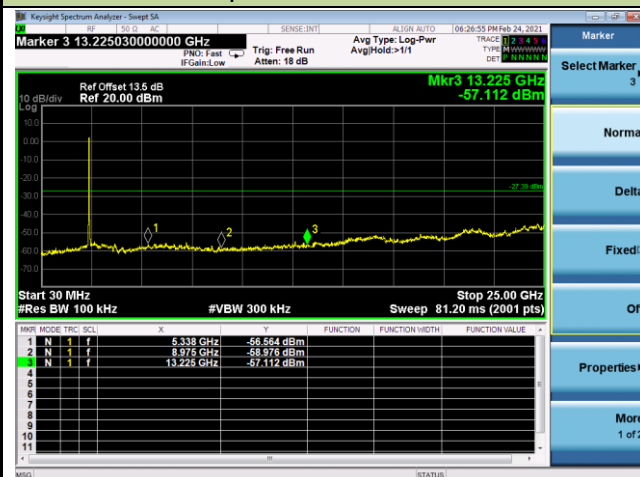
#### 100kHz PSD reference Level



#### Low Band Edge

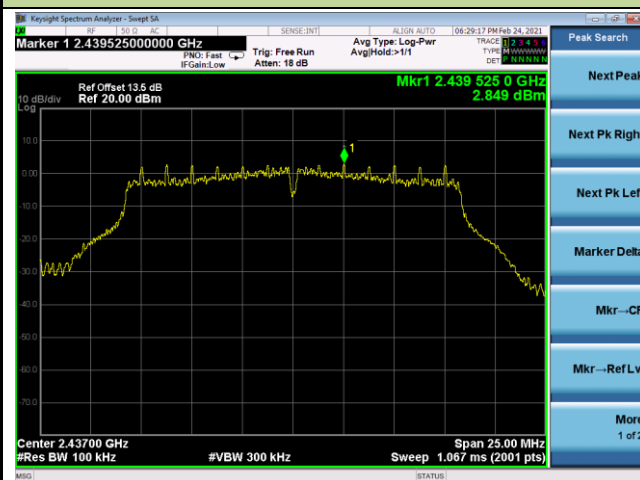


#### Spurious Emission

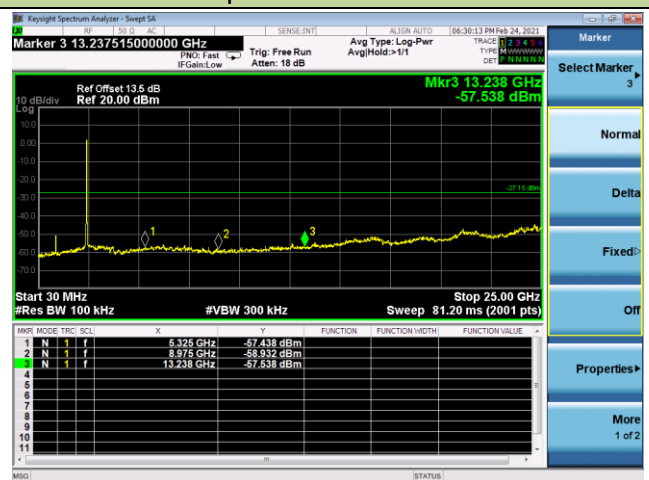


### Channel 06 (2437MHz)

#### 100kHz PSD reference Level



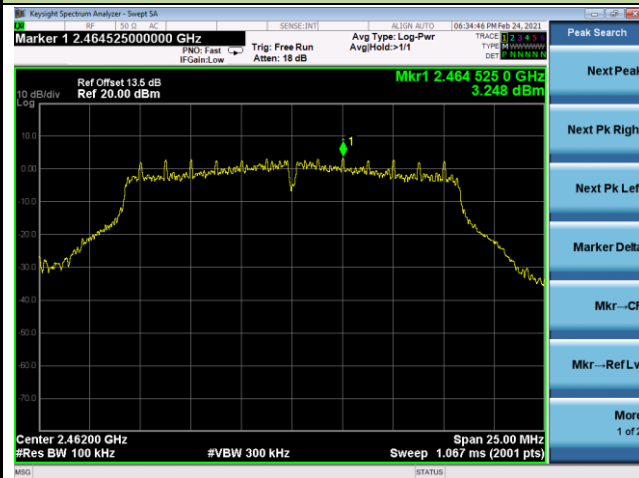
#### Spurious Emission



## 802.11g Out-of-Band Emissions

### Channel 11 (2462MHz)

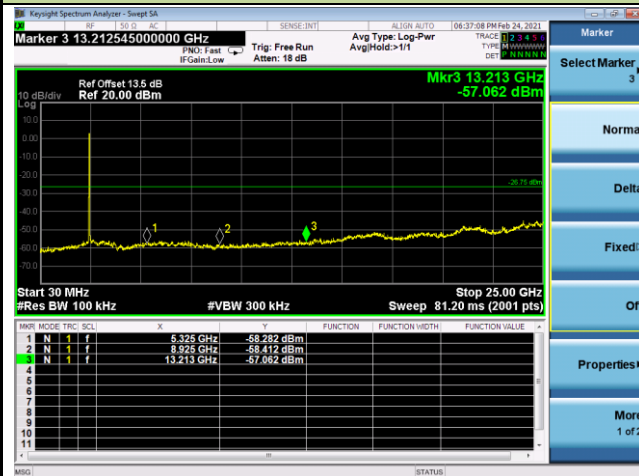
#### 100kHz PSD reference Level



#### High Band Edge



#### Spurious Emission



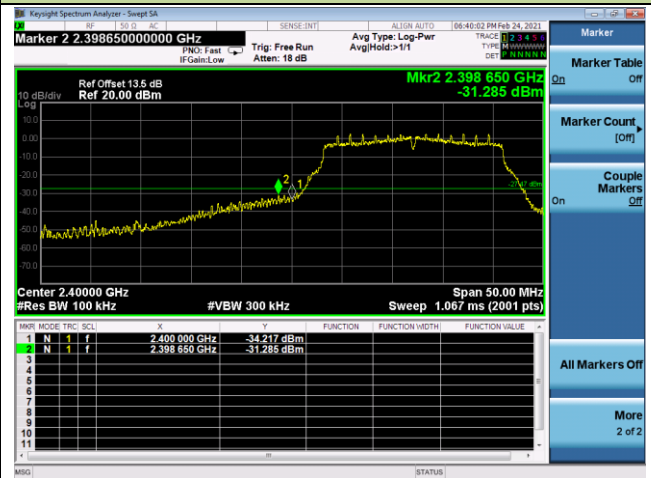
## 802.11n-HT20 Out-of-Band Emissions

### Channel 01 (2412MHz)

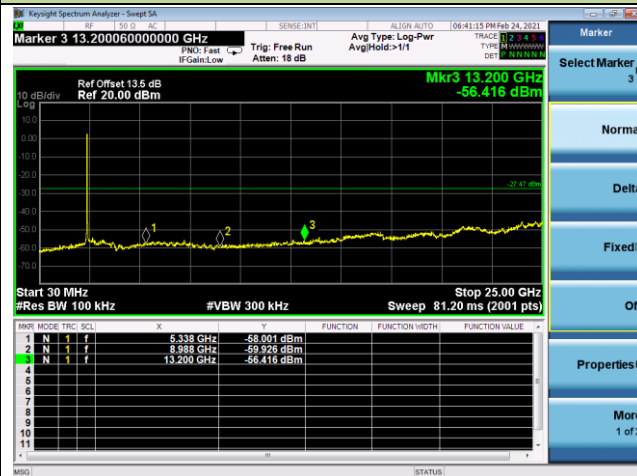
#### 100kHz PSD reference Level



#### Low Band Edge

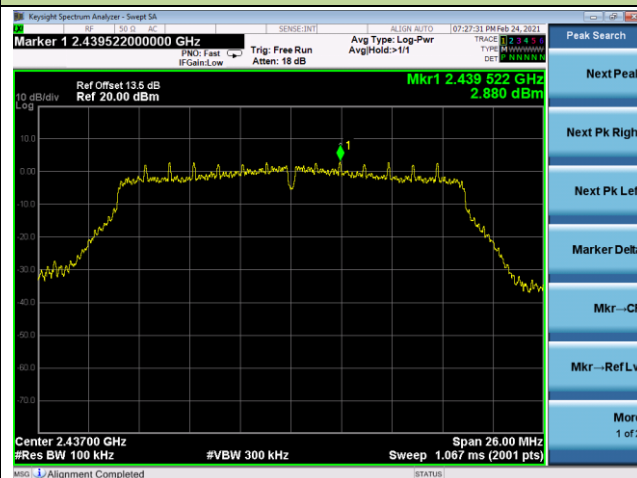


#### Spurious Emission

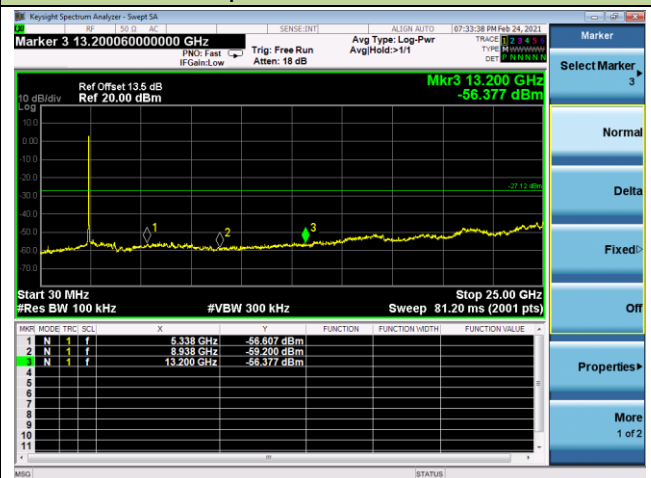


### Channel 06 (2437MHz)

#### 100kHz PSD reference Level



#### Spurious Emission



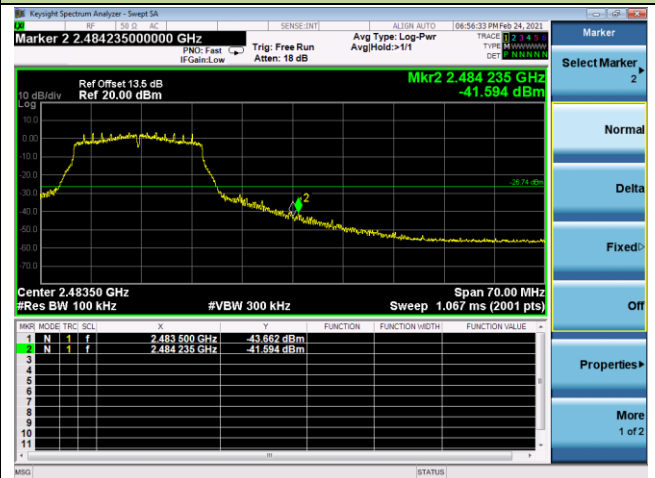
## 802.11 n-HT20 Out-of-Band Emissions

## Channel 11 (2462MHz)

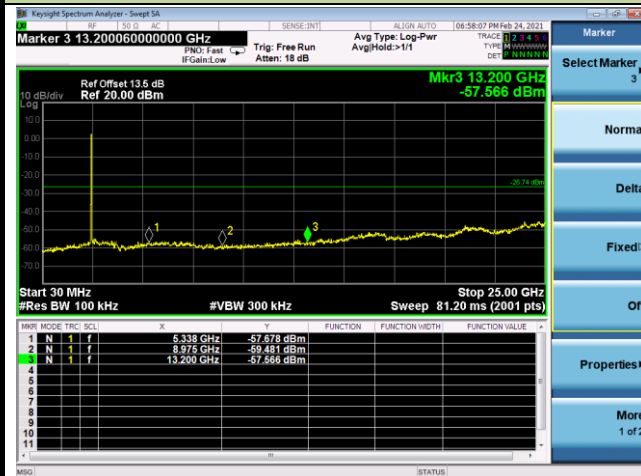
## 100kHz PSD reference Level



## High Band Edge



## Spurious Emission



## 5.6. 開放頻帶邊緣之不必要幅射要求

### 5.6.1. 適用標準

依據國家通訊傳播委員會低功率射頻器材技術規範之第 4.10.1.5 節，使用頻帶範圍外之任意 100 千赫 (kHz) 內，發射器所產生的射頻功率相較於使用頻帶範圍中包含最高所需功率之 100 千赫 (kHz) 內的射頻功率，衰減值限制如下：

(1) 輸出功率以低功率射頻器材技術規範附件二之峰值輸出功率方式量測者，至少須衰減 20 dB，可使用射頻傳導或輻射方式測量。

(2) 輸出功率以低功率射頻器材技術規範 4.10.1(2)(2.3) 之最大傳導輸出功率量測方式者，至少須衰減 30 dB。

此外，落於第 3.5 節禁用頻段之輻射發射，應符合第 3.6 節之規定(限制要求如下)：

發射依據國家通訊傳播委員會低功率射頻器材技術規範之第 3.6 節，低功率射頻器材，除本規範各章節另有放寬規定者外，其電場強度不得超過下表之限值，且其不必要之發射皆不得大於主波發射強度。各頻段重疊處，以較嚴格之限制值為準。

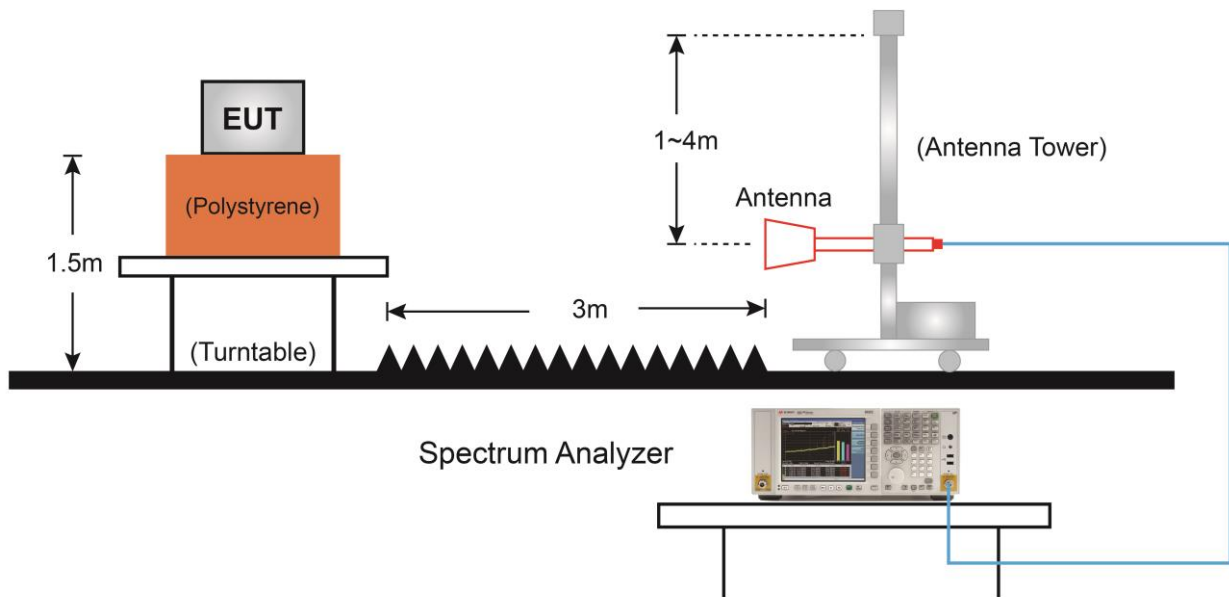
| 頻率(f)<br>(MHz)            | 電場強度<br>(微伏特/公尺, $\mu\text{V/m}$ ) | 測距<br>(公尺) |
|---------------------------|------------------------------------|------------|
| $0.009 \leq f \leq 0.490$ | $2400/f(\text{kHz})$               | 300        |
| $0.490 < f \leq 1.705$    | $24000/f(\text{kHz})$              | 30         |
| $1.705 < f < 30$          | 30                                 | 30         |
| $30 \leq f \leq 88$       | 100                                | 3          |
| $88 < f \leq 216$         | 150                                | 3          |
| $216 < f \leq 960$        | 200                                | 3          |
| $960 < f$                 | 500                                | 3          |

上表規定之電場強度，發射頻率在 9 kHz~90 kHz、110 kHz~490 kHz 及 1000MHz 以上者，其量測應以平均值檢波器為基準，且須符合低功率射頻器材技術規範第 6.14.節之規定；其他發射頻率，應以 CISPR 準峰值(quasi-peak) 檢波器測量；非以上表所指定之距離測量時，應符合第 6.5 節之規定，而輻射發射之量測頻率範圍須符合低功率射頻器材技術規範第 6.12 節之規定。

### 5.6.2. 量測方法

待測物置於高 80 公分之非導體桌面（落地型產品置於地上），受測物與配件設備之電源線無須束綁，桌面上受測設備的所有電源線由桌子的後緣垂下沿旋轉桌表面接至交流插座。落地型設備的交流電源線可以方便的型態走線。桌面可 360 度旋轉，接收天線置於距待測物 3m 距離，高度可在 1 至 4 公尺間變動，以量測待測物之最大輻射電場強度。接收天線並應於水準及垂直極化方向各量測一次。

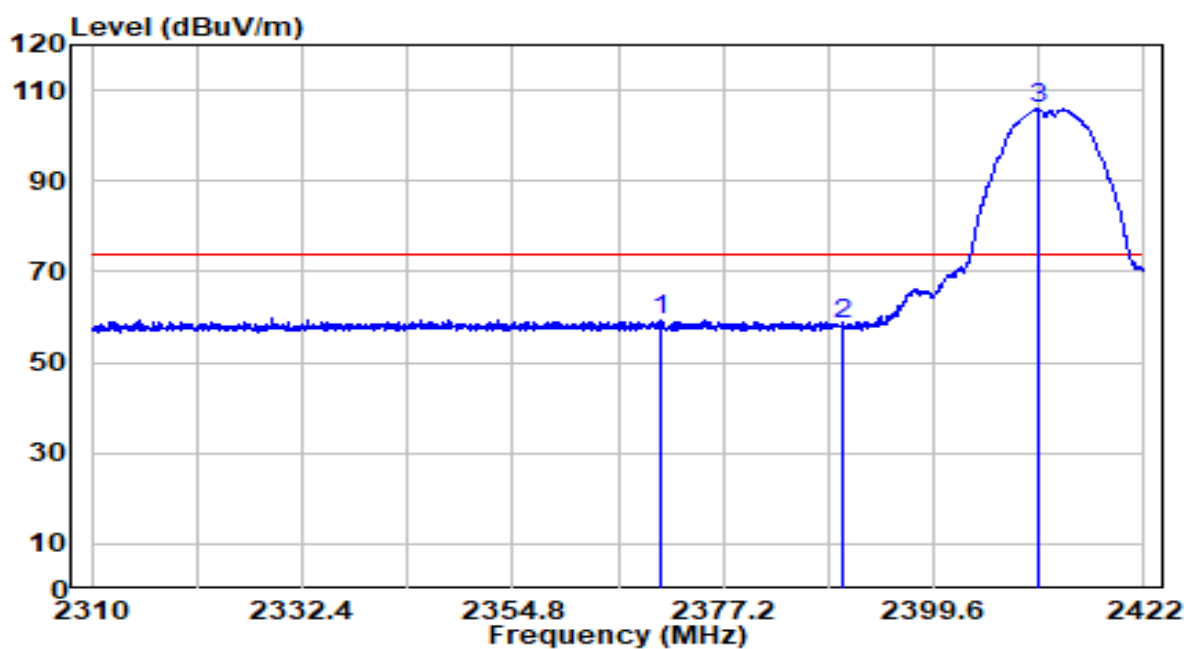
### 5.6.3. 測試架構圖



備 註: 使用頻率範圍外之任意 100 千赫雜訊, 使用輻射方式測量, 6 dB 頻寬使用 1MHz 遠大於 100kHz 仍可 PASS, 檢附其測試數據。

#### 5.6.4. 測試結果

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Horizontal                             | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11b at Channel 2412MHz | Test Voltage         | 110V/60Hz      |

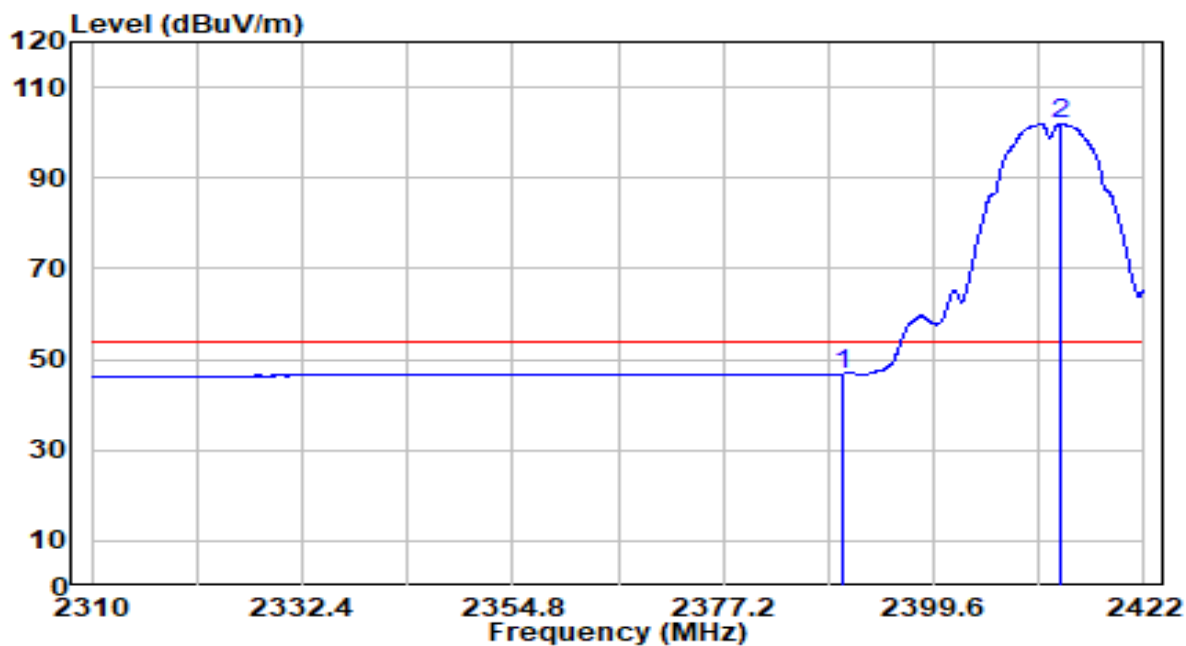


| No | Frequency (MHz) | Reading (dBuV) | C.F (dB/m) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  | 2370.424        | 27.29          | 32.21      | 59.50                | -14.50      | 74.00          | Peak              |
| 2  | 2390.000        | 26.09          | 32.30      | 58.39                | -15.61      | 74.00          | Peak              |
| 3  | * 2410.744      | 73.41          | 32.39      | 105.80               | N/A         | N/A            | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Horizontal                             | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11b at Channel 2412MHz | Test Voltage         | 110V/60Hz      |

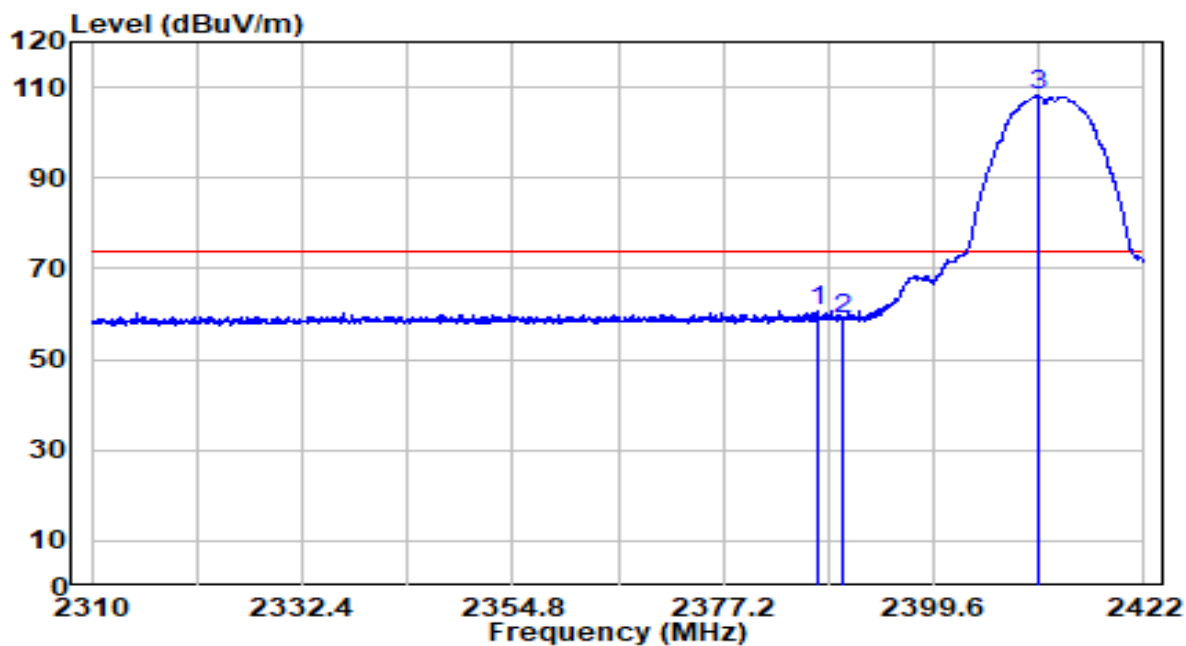


| No | Frequency (MHz) | Reading (dBuV) | C.F (dB/m) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  | 2390.000        | 14.56          | 32.30      | 46.86                | -7.14       | 54.00          | Average           |
| 2  | * 2413.208      | 69.46          | 32.40      | 101.86               | N/A         | N/A            | Average           |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Vertical                               | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11b at Channel 2412MHz | Test Voltage         | 110V/60Hz      |

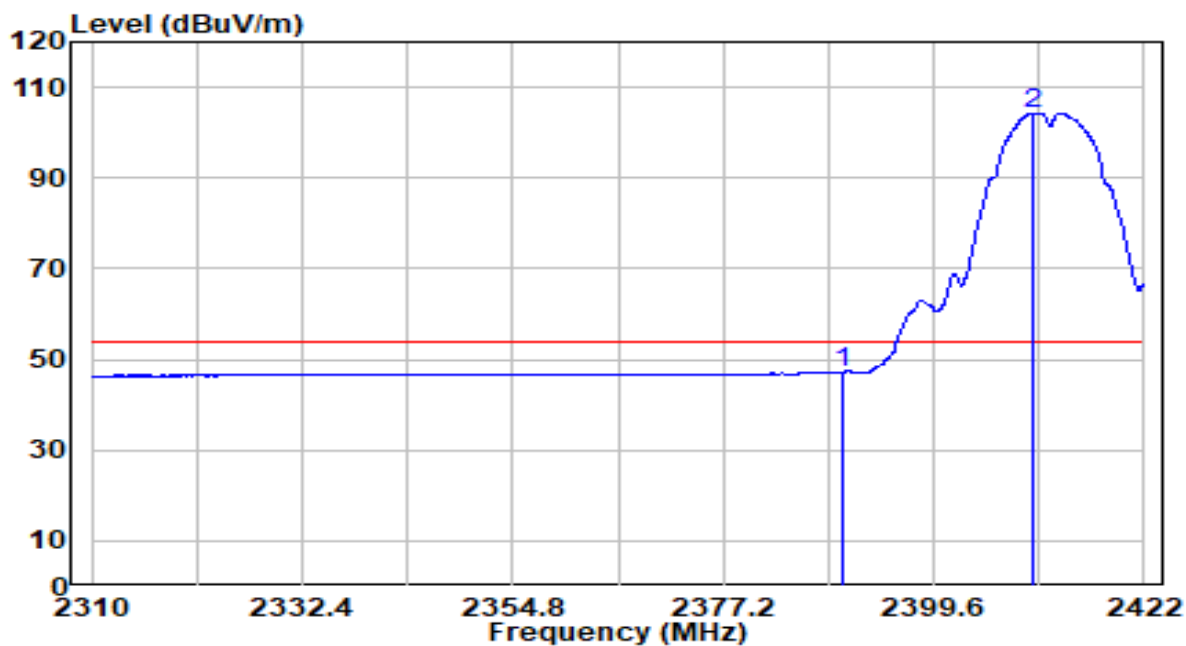


| No | Frequency (MHz) | Reading (dBuV) | C.F (dB/m) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  | 2387.280        | 28.46          | 32.28      | 60.74                | -13.26      | 74.00          | Peak              |
| 2  | 2390.000        | 26.63          | 32.30      | 58.93                | -15.07      | 74.00          | Peak              |
| 3  | * 2410.632      | 75.64          | 32.39      | 108.03               | N/A         | N/A            | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Vertical                               | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11b at Channel 2412MHz | Test Voltage         | 110V/60Hz      |

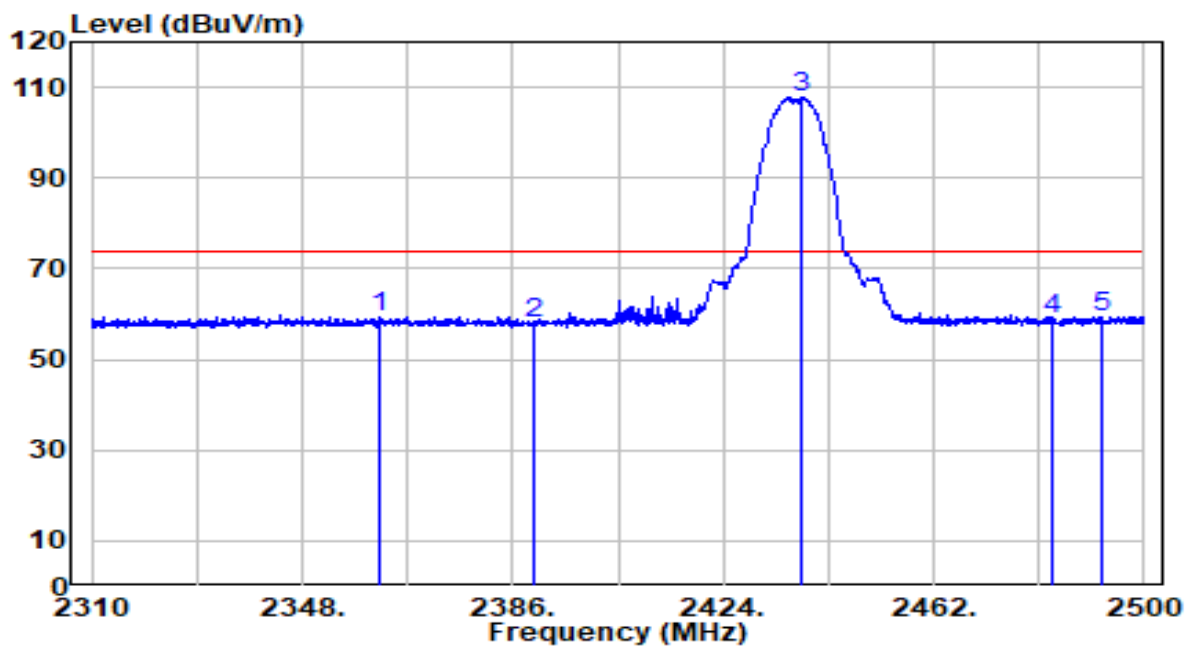


| No | Frequency (MHz) | Reading (dBuV) | C.F (dB/m) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  | 2390.000        | 14.98          | 32.30      | 47.28                | -6.72       | 54.00          | Average           |
| 2  | * 2410.184      | 71.92          | 32.38      | 104.30               | N/A         | N/A            | Average           |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Horizontal                             | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11b at Channel 2437MHz | Test Voltage         | 110V/60Hz      |

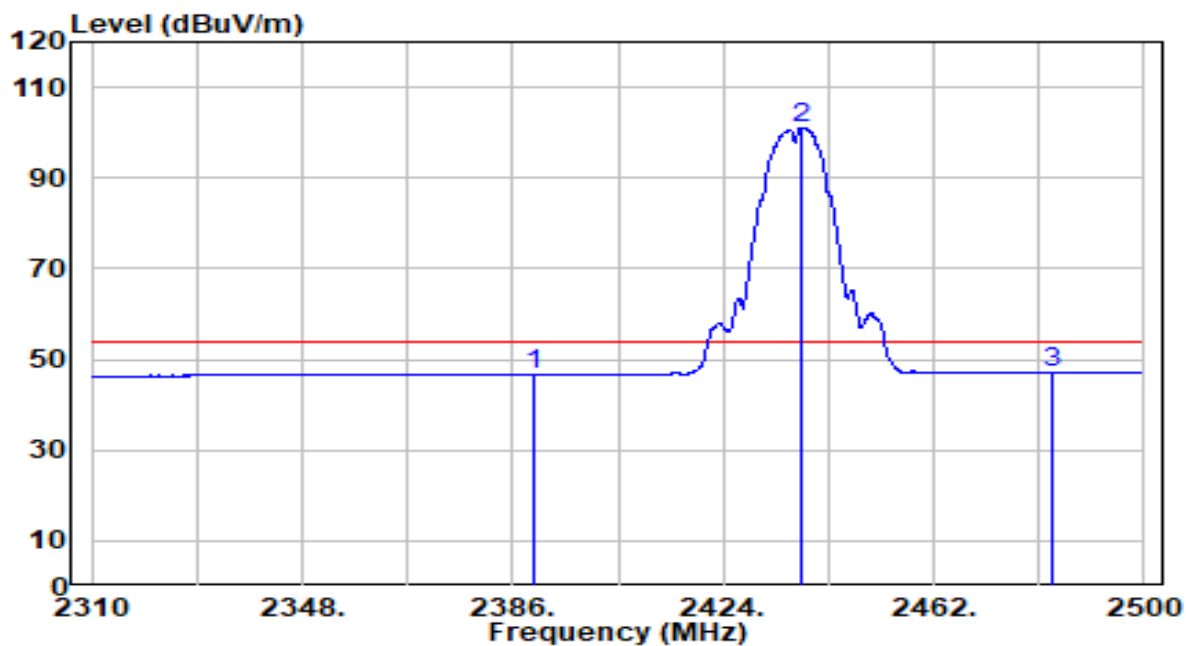


| No | Frequency (MHz) | Reading (dBuV) | C.F (dB/m) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  | 2361.870        | 27.21          | 32.17      | 59.38                | -14.62      | 74.00          | Peak              |
| 2  | 2390.000        | 25.62          | 32.30      | 57.91                | -16.09      | 74.00          | Peak              |
| 3  | * 2438.345      | 75.30          | 32.51      | 107.81               | N/A         | N/A            | Peak              |
| 4  | 2483.500        | 26.04          | 32.71      | 58.75                | -15.25      | 74.00          | Peak              |
| 5  | 2492.400        | 26.65          | 32.75      | 59.39                | -14.61      | 74.00          | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Horizontal                             | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11b at Channel 2437MHz | Test Voltage         | 110V/60Hz      |

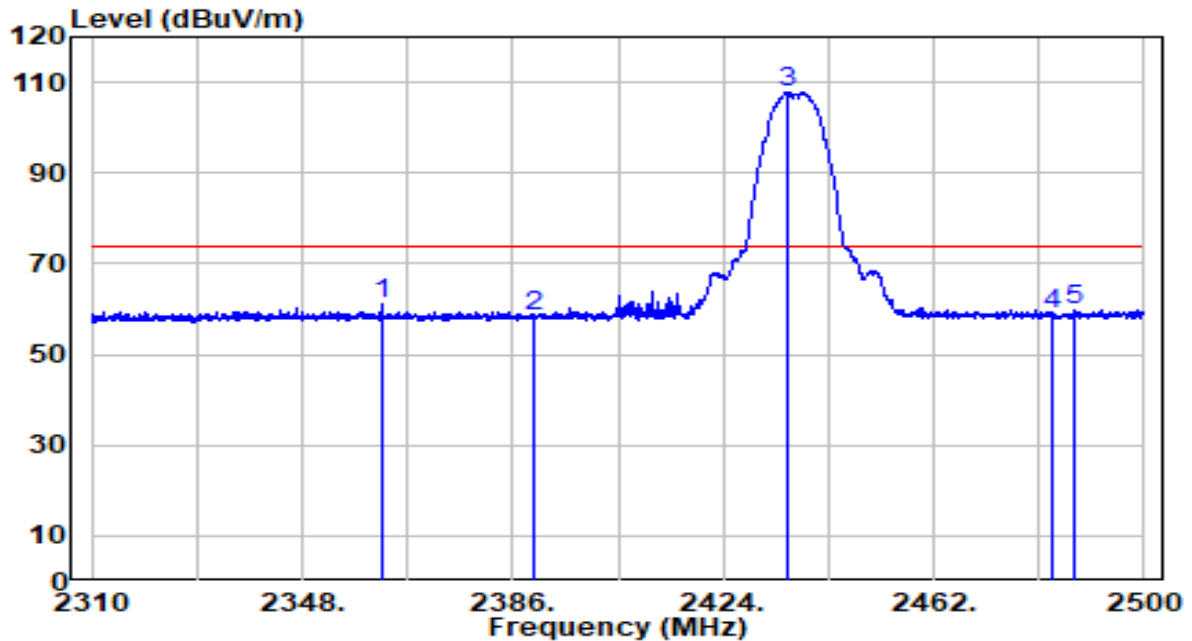


| No | Frequency (MHz) | Reading (dBuV) | C.F (dB/m) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  | 2390.000        | 14.35          | 32.30      | 46.65                | -7.35       | 54.00          | Average           |
| 2  | * 2438.250      | 68.48          | 32.51      | 100.99               | N/A         | N/A            | Average           |
| 3  | 2483.500        | 14.26          | 32.71      | 46.97                | -7.03       | 54.00          | Average           |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Vertical                               | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11b at Channel 2437MHz | Test Voltage         | 110V/60Hz      |

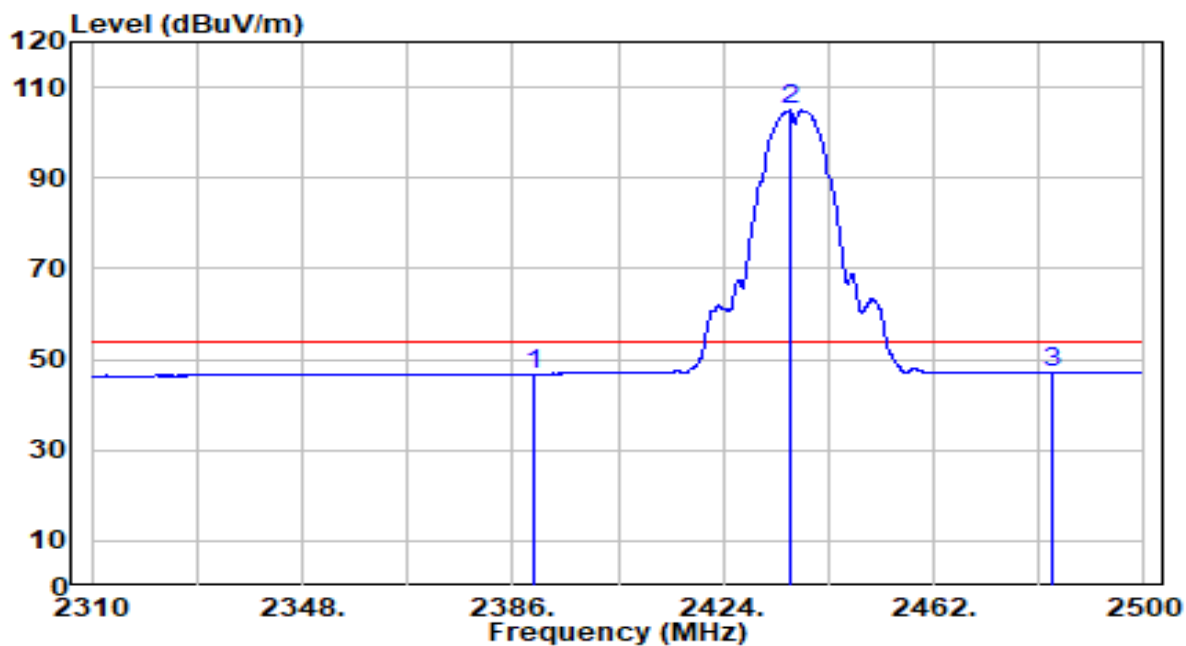


| No | Frequency (MHz) | Reading (dBUV) | C.F (dB/m) | Measurement (dBUV/m) | Margin (dB) | Limit (dBUV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  | 2362.535        | 29.04          | 32.18      | 61.21                | -12.79      | 74.00          | Peak              |
| 2  | 2390.000        | 26.21          | 32.30      | 58.51                | -15.49      | 74.00          | Peak              |
| 3  | * 2435.685      | 75.34          | 32.50      | 107.84               | N/A         | N/A            | Peak              |
| 4  | 2483.500        | 26.04          | 32.71      | 58.75                | -15.25      | 74.00          | Peak              |
| 5  | 2487.365        | 26.92          | 32.72      | 59.64                | -14.36      | 74.00          | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBUV/m) = Reading(dBUV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Vertical                               | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11b at Channel 2437MHz | Test Voltage         | 110V/60Hz      |

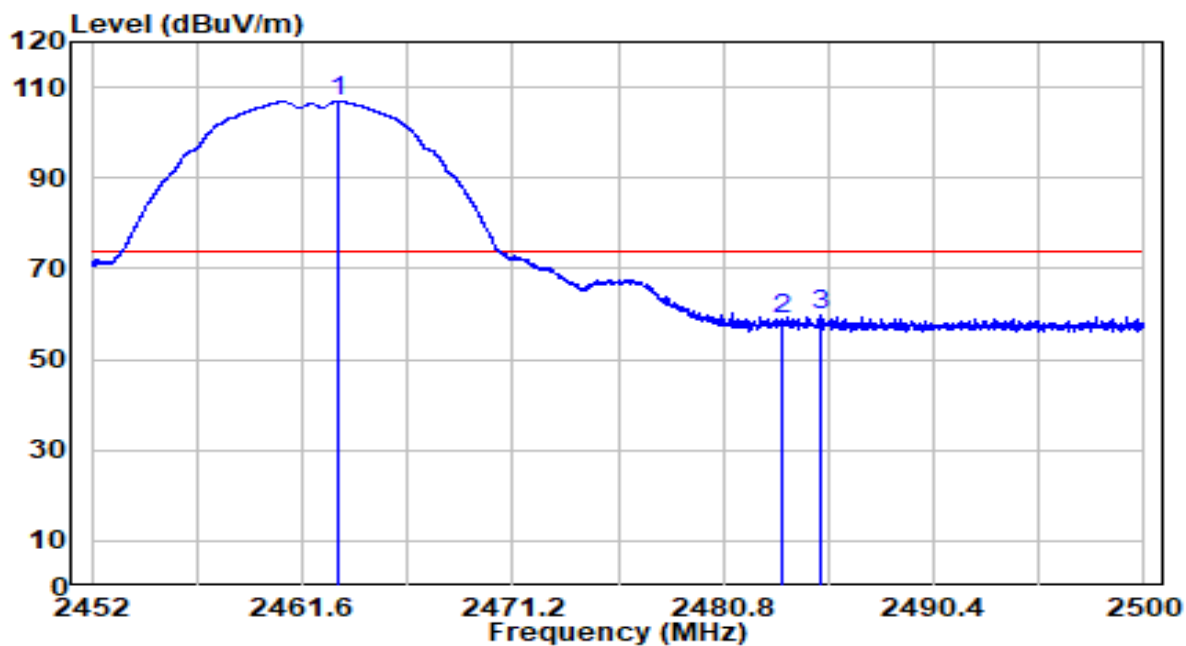


| No | Frequency (MHz) | Reading (dBuV) | C.F (dB/m) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  | 2390.000        | 14.54          | 32.30      | 46.83                | -7.17       | 54.00          | Average           |
| 2  | * 2436.065      | 72.36          | 32.50      | 104.85               | N/A         | N/A            | Average           |
| 3  | 2483.500        | 14.39          | 32.71      | 47.10                | -6.90       | 54.00          | Average           |

Note:

- "\*", means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
- Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Horizontal                             | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11b at Channel 2462MHz | Test Voltage         | 110V/60Hz      |

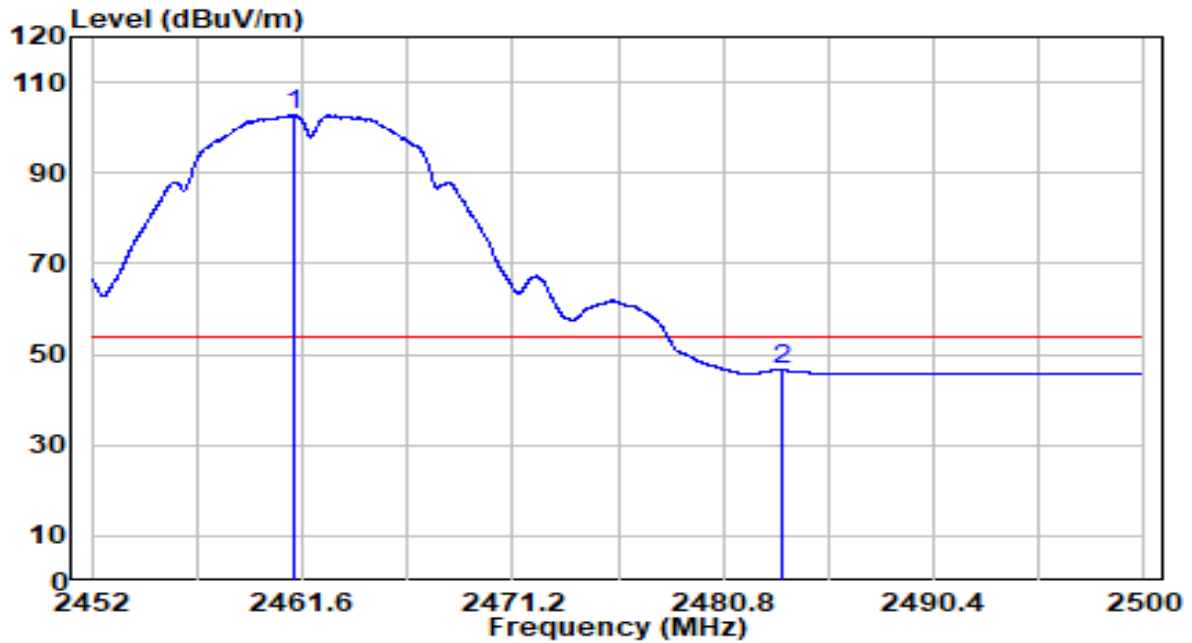


| No |   | Frequency (MHz) | Reading (dBuV) | C.F (dB/m) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|---|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  | * | 2463.184        | 74.16          | 32.62      | 106.77               | N/A         | N/A            | Peak              |
| 2  |   | 2483.500        | 26.04          | 32.71      | 58.74                | -15.26      | 74.00          | Peak              |
| 3  |   | 2485.216        | 26.91          | 32.71      | 59.62                | -14.38      | 74.00          | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Horizontal                             | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11b at Channel 2462MHz | Test Voltage         | 110V/60Hz      |

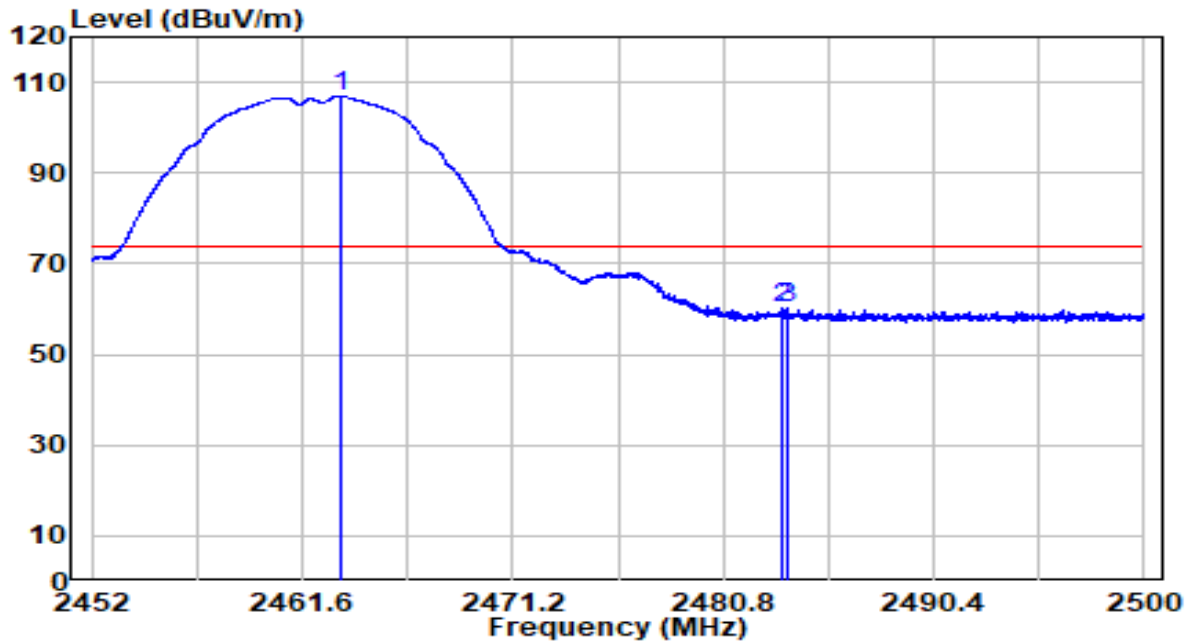


| No |   | Frequency (MHz) | Reading (dBuV) | C.F (dB/m) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|---|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  | * | 2461.216        | 70.25          | 32.61      | 102.85               | N/A         | N/A            | Average           |
| 2  |   | 2483.500        | 13.80          | 32.71      | 46.51                | -7.49       | 54.00          | Average           |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Vertical                               | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11b at Channel 2462MHz | Test Voltage         | 110V/60Hz      |

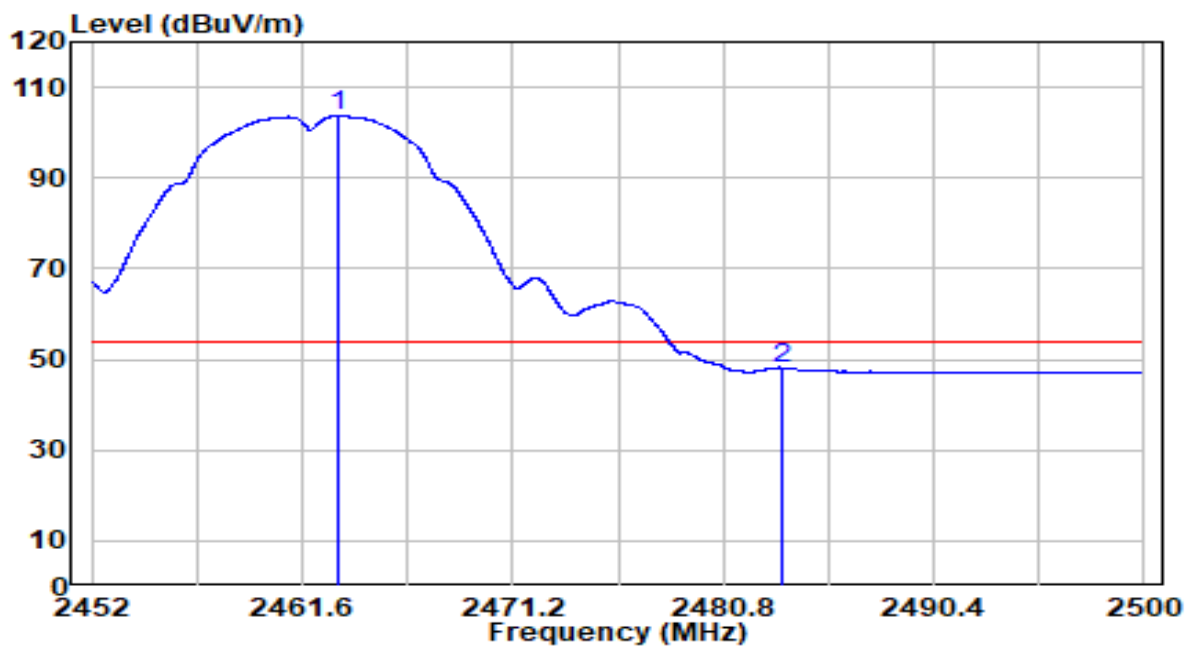


| No |   | Frequency (MHz) | Reading (dBuV) | C.F (dB/m) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|---|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  | * | 2463.352        | 74.17          | 32.62      | 106.79               | N/A         | N/A            | Peak              |
| 2  |   | 2483.500        | 27.34          | 32.71      | 60.05                | -13.95      | 74.00          | Peak              |
| 3  |   | 2483.704        | 27.74          | 32.71      | 60.45                | -13.55      | 74.00          | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Vertical                               | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11b at Channel 2462MHz | Test Voltage         | 110V/60Hz      |

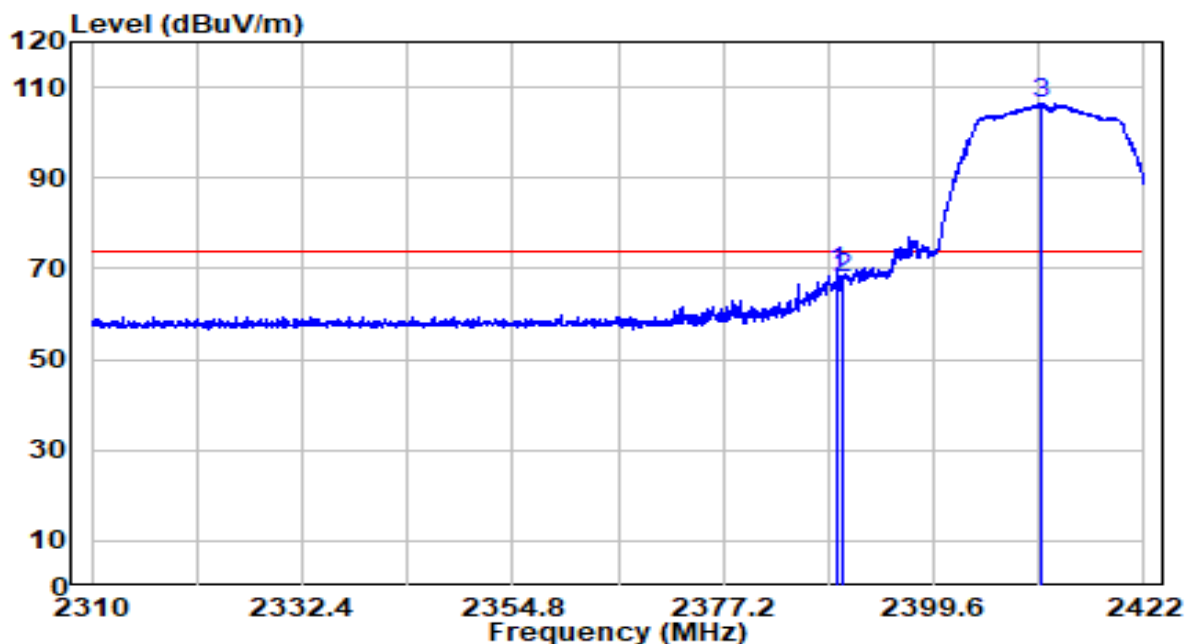


| No |   | Frequency (MHz) | Reading (dBuV) | C.F (dB/m) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|---|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  | * | 2463.232        | 70.98          | 32.62      | 103.60               | N/A         | N/A            | Average           |
| 2  |   | 2483.500        | 15.47          | 32.71      | 48.18                | -5.82       | 54.00          | Average           |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Horizontal                             | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11g at Channel 2412MHz | Test Voltage         | 110V/60Hz      |

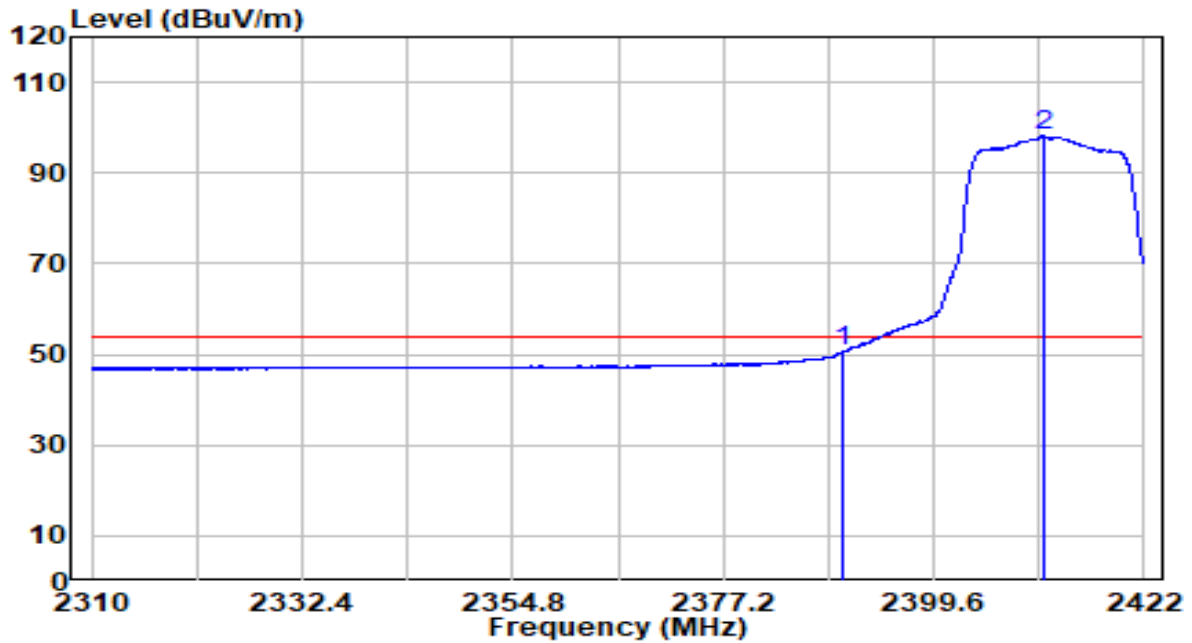


| No | Frequency (MHz) | Reading (dBuV) | C.F (dB/m) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  | 2389.464        | 36.78          | 32.29      | 69.08                | -4.92       | 74.00          | Peak              |
| 2  | 2390.000        | 35.55          | 32.30      | 67.84                | -6.16       | 74.00          | Peak              |
| 3  | * 2411.136      | 74.10          | 32.39      | 106.49               | N/A         | N/A            | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Horizontal                             | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11g at Channel 2412MHz | Test Voltage         | 110V/60Hz      |

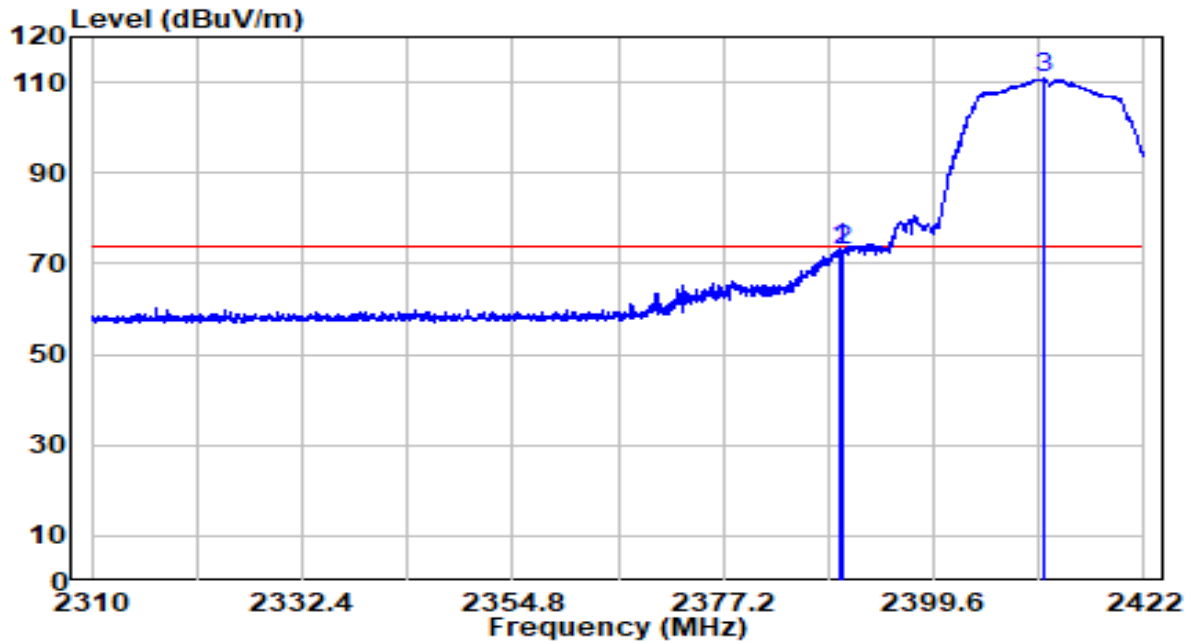


| No | Frequency (MHz) | Reading (dBuV) | C.F (dB/m) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  | 2390.000        | 18.34          | 32.30      | 50.63                | -3.37       | 54.00          | Average           |
| 2  | * 2411.360      | 65.83          | 32.39      | 98.22                | N/A         | N/A            | Average           |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Vertical                               | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11g at Channel 2412MHz | Test Voltage         | 110V/60Hz      |

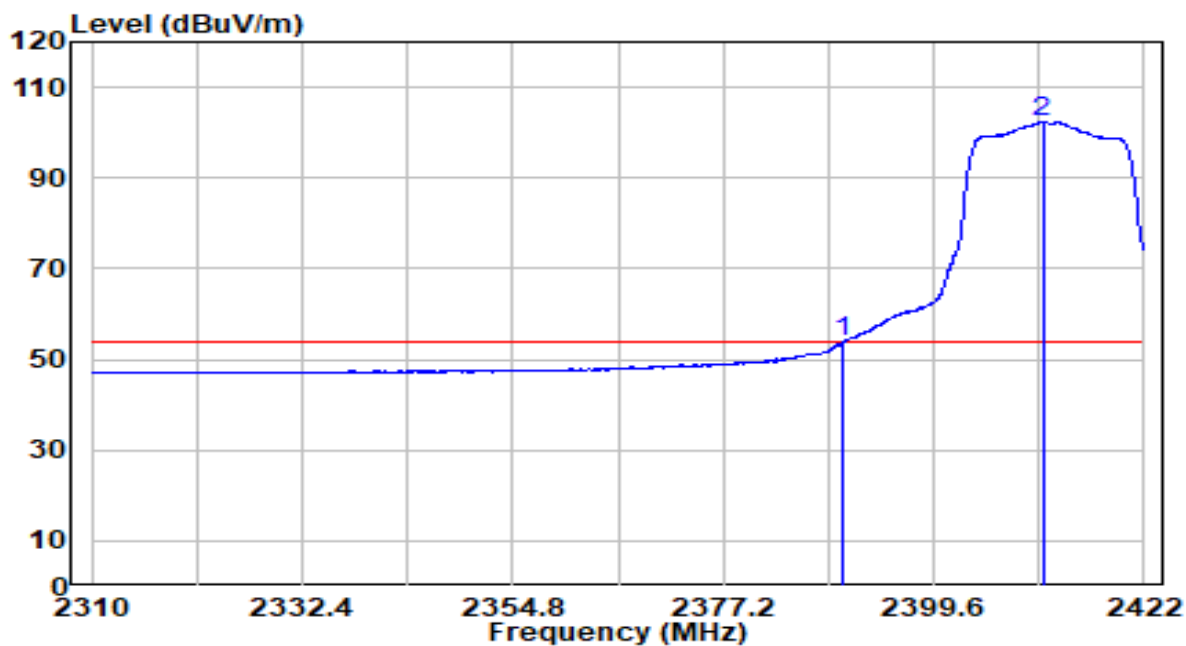


| No | Frequency (MHz) | Reading (dBuV) | C.F (dB/m) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  | 2389.744        | 40.87          | 32.29      | 73.16                | -0.84       | 74.00          | Peak              |
| 2  | 2390.000        | 40.53          | 32.30      | 72.83                | -1.17       | 74.00          | Peak              |
| 3  | * 2411.248      | 78.44          | 32.39      | 110.83               | N/A         | N/A            | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Vertical                               | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11g at Channel 2412MHz | Test Voltage         | 110V/60Hz      |

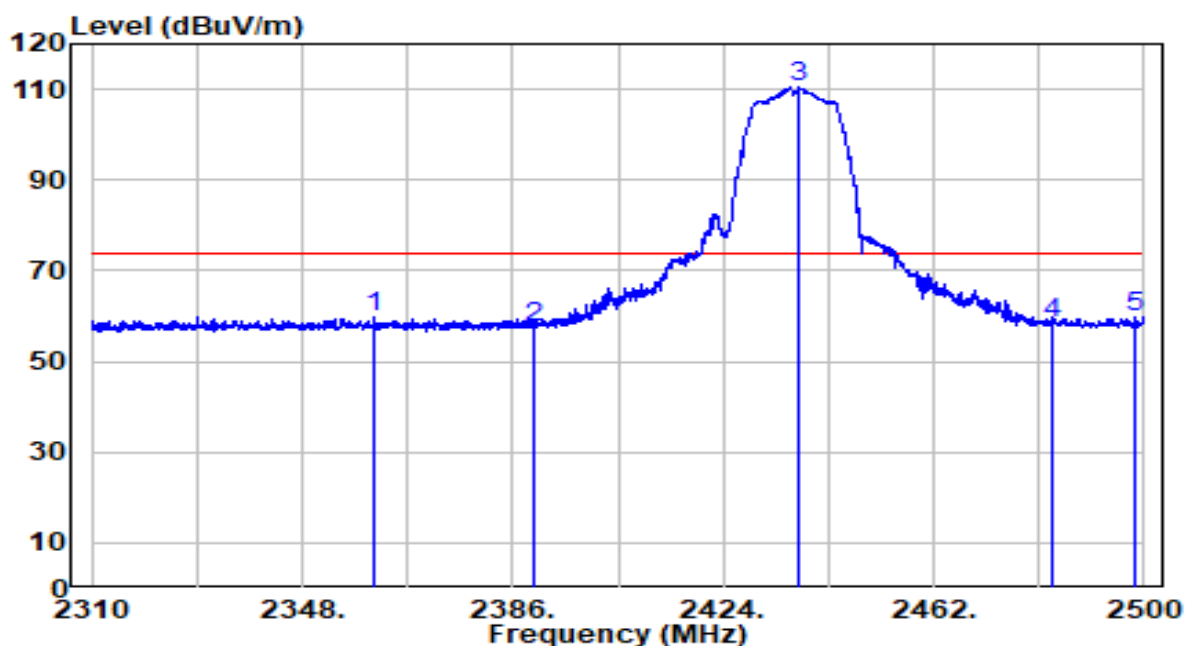


| No | Frequency (MHz) | Reading (dBuV) | C.F (dB/m) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  | 2390.000        | 21.42          | 32.30      | 53.72                | -0.28       | 54.00          | Average           |
| 2  | * 2411.192      | 70.12          | 32.39      | 102.51               | N/A         | N/A            | Average           |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Horizontal                             | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11g at Channel 2437MHz | Test Voltage         | 110V/60Hz      |

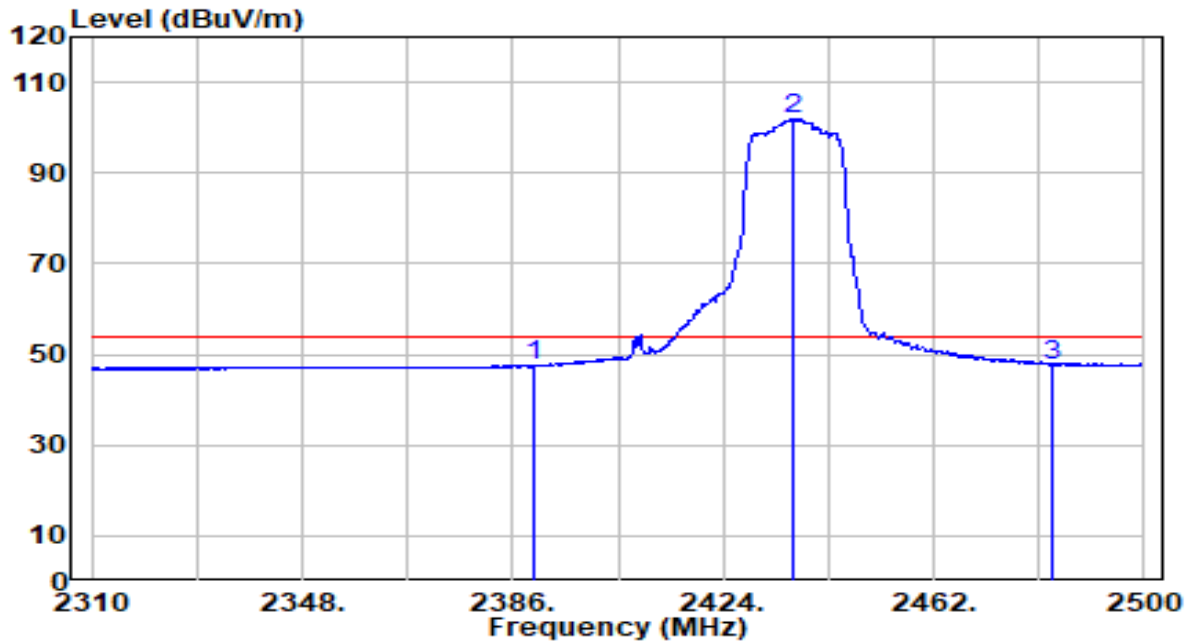


| No |   | Frequency (MHz) | Reading (dBuV) | C.F (dB/m) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|---|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  |   | 2360.920        | 27.42          | 32.17      | 59.59                | -14.41      | 74.00          | Peak              |
| 2  |   | 2390.000        | 25.24          | 32.30      | 57.54                | -16.46      | 74.00          | Peak              |
| 3  | * | 2437.585        | 77.98          | 32.51      | 110.48               | N/A         | N/A            | Peak              |
| 4  |   | 2483.500        | 25.81          | 32.71      | 58.52                | -15.48      | 74.00          | Peak              |
| 5  |   | 2498.290        | 27.14          | 32.77      | 59.92                | -14.08      | 74.00          | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Horizontal                             | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11g at Channel 2437MHz | Test Voltage         | 110V/60Hz      |

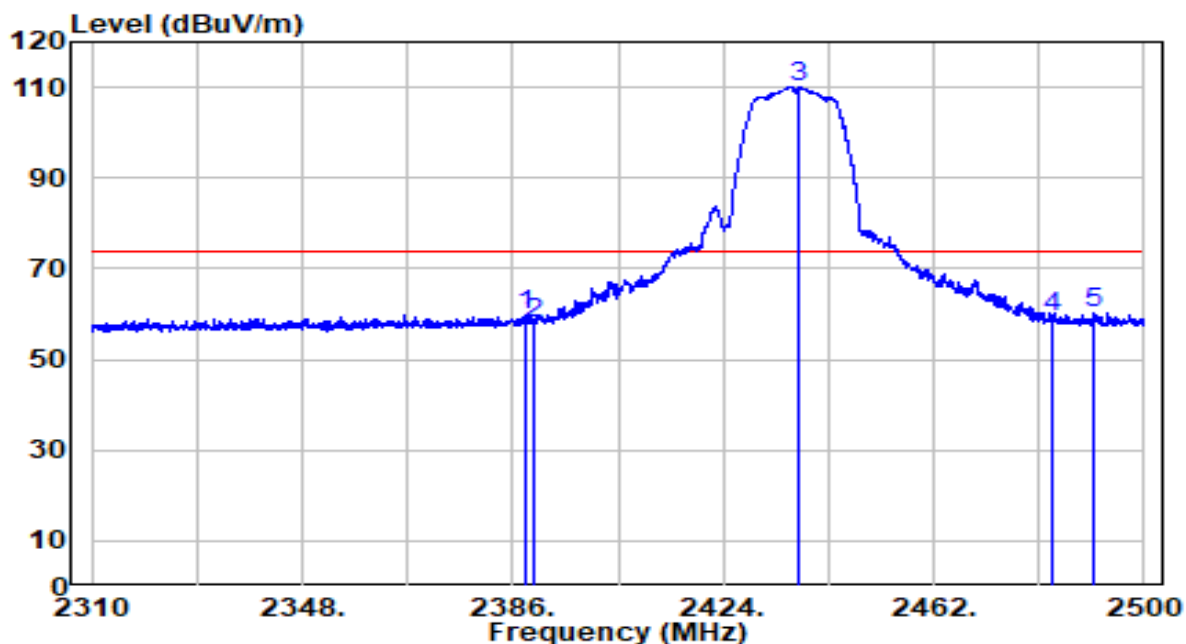


| No | Frequency (MHz) | Reading (dBuV) | C.F (dB/m) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  | 2390.000        | 15.10          | 32.30      | 47.40                | -6.60       | 54.00          | Average           |
| 2  | * 2436.730      | 69.30          | 32.50      | 101.80               | N/A         | N/A            | Average           |
| 3  | 2483.500        | 15.04          | 32.71      | 47.75                | -6.25       | 54.00          | Average           |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Vertical                               | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11g at Channel 2437MHz | Test Voltage         | 110V/60Hz      |

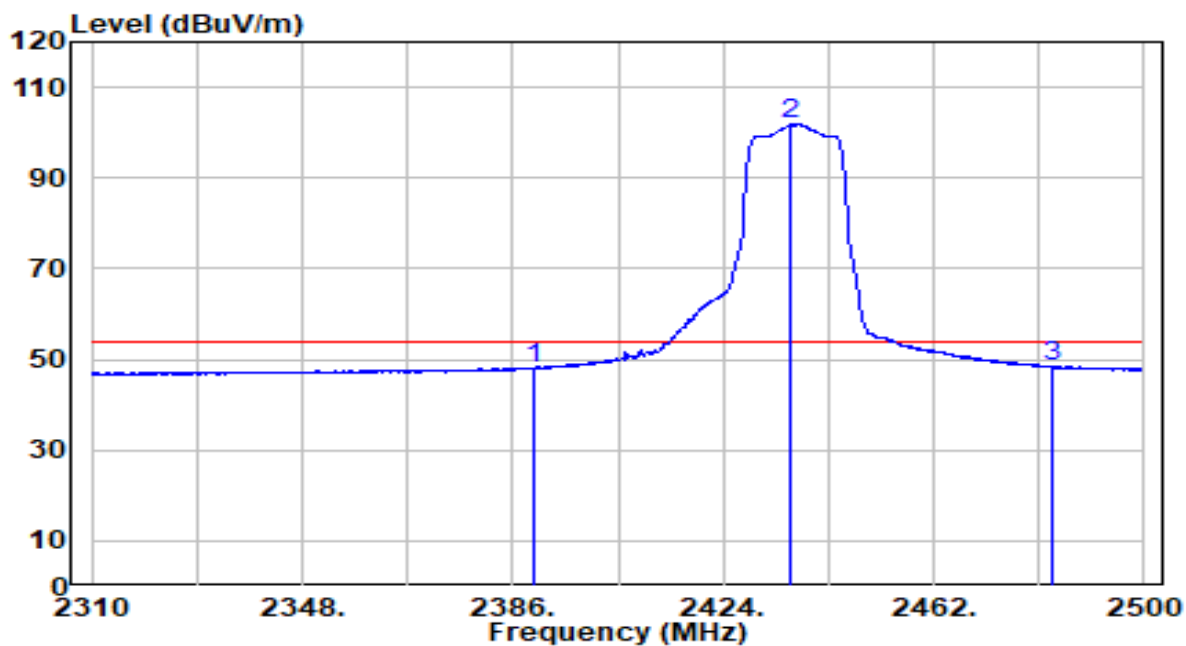


| No |   | Frequency (MHz) | Reading (dBUV) | C.F (dB/m) | Measurement (dBUV/m) | Margin (dB) | Limit (dBUV/m) | Remark (QP/PK/AV) |
|----|---|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  |   | 2388.280        | 27.40          | 32.29      | 59.69                | -14.31      | 74.00          | Peak              |
| 2  |   | 2390.000        | 25.84          | 32.30      | 58.14                | -15.86      | 74.00          | Peak              |
| 3  | * | 2437.680        | 77.73          | 32.51      | 110.24               | N/A         | N/A            | Peak              |
| 4  |   | 2483.500        | 26.60          | 32.71      | 59.31                | -14.69      | 74.00          | Peak              |
| 5  |   | 2491.070        | 27.59          | 32.74      | 60.33                | -13.67      | 74.00          | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBUV/m) = Reading(dBUV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Vertical                               | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11g at Channel 2437MHz | Test Voltage         | 110V/60Hz      |

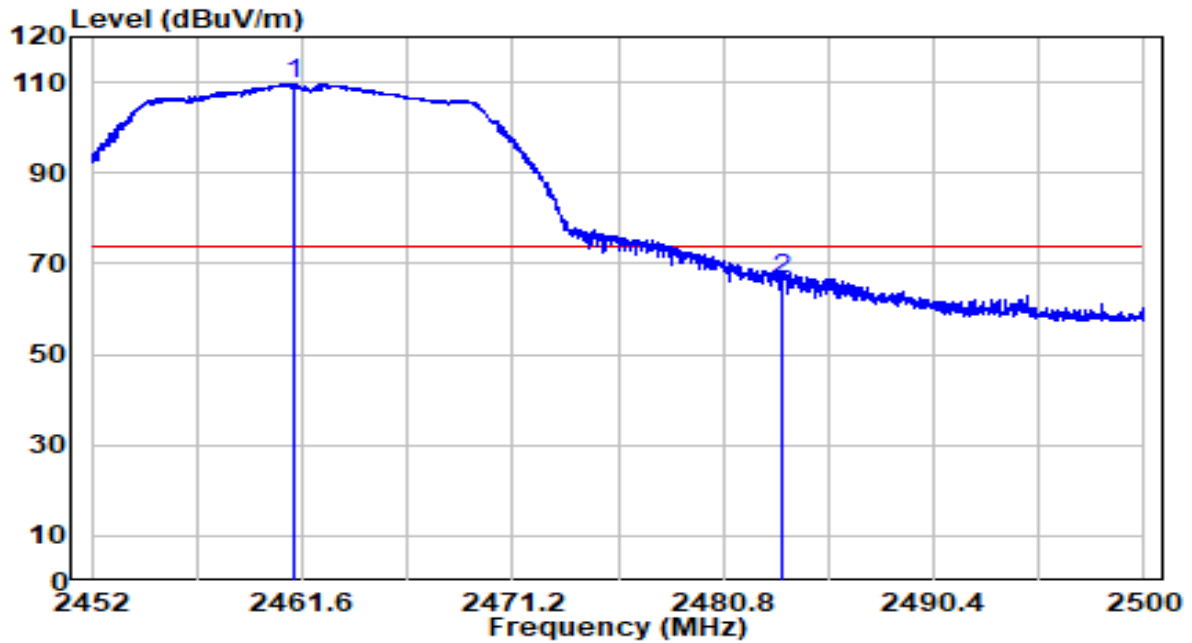


| No | Frequency (MHz) | Reading (dBuV) | C.F (dB/m) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  | 2390.000        | 15.91          | 32.30      | 48.20                | -5.80       | 54.00          | Average           |
| 2  | * 2436.350      | 69.44          | 32.50      | 101.94               | N/A         | N/A            | Average           |
| 3  | 2483.500        | 15.59          | 32.71      | 48.30                | -5.70       | 54.00          | Average           |

Note:

- "\*", means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
- Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Horizontal                             | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11g at Channel 2462MHz | Test Voltage         | 110V/60Hz      |

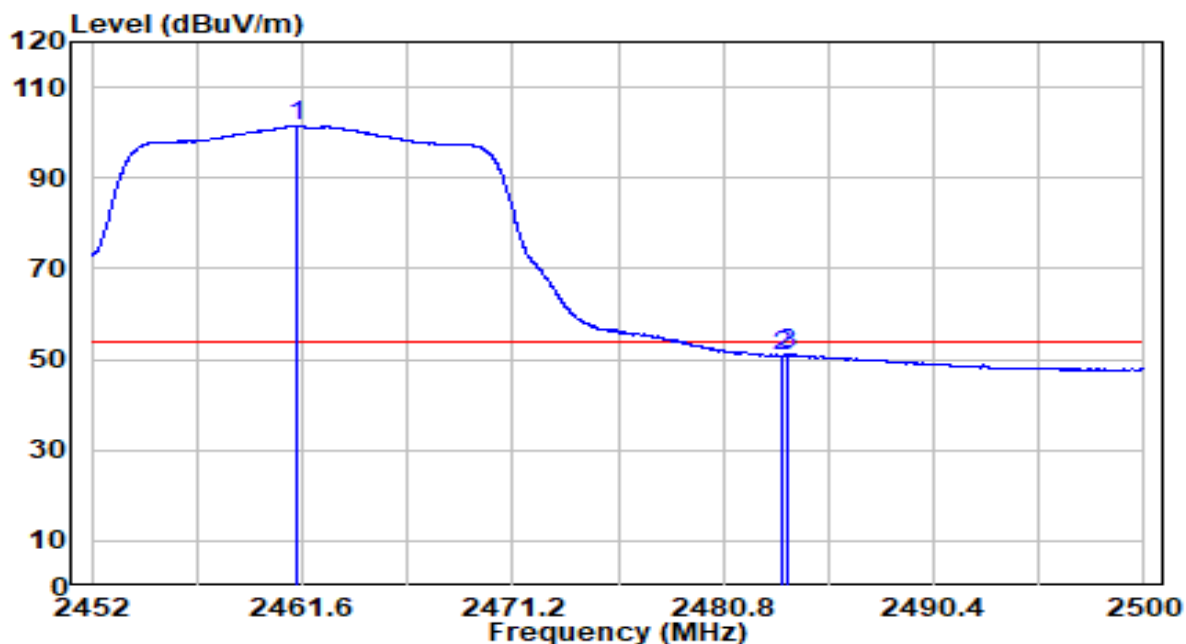


| No |   | Frequency (MHz) | Reading (dBuV) | C.F (dB/m) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|---|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  | * | 2461.168        | 77.07          | 32.61      | 109.68               | N/A         | N/A            | Peak              |
| 2  |   | 2483.500        | 33.97          | 32.71      | 66.68                | -7.32       | 74.00          | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Horizontal                             | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11g at Channel 2462MHz | Test Voltage         | 110V/60Hz      |

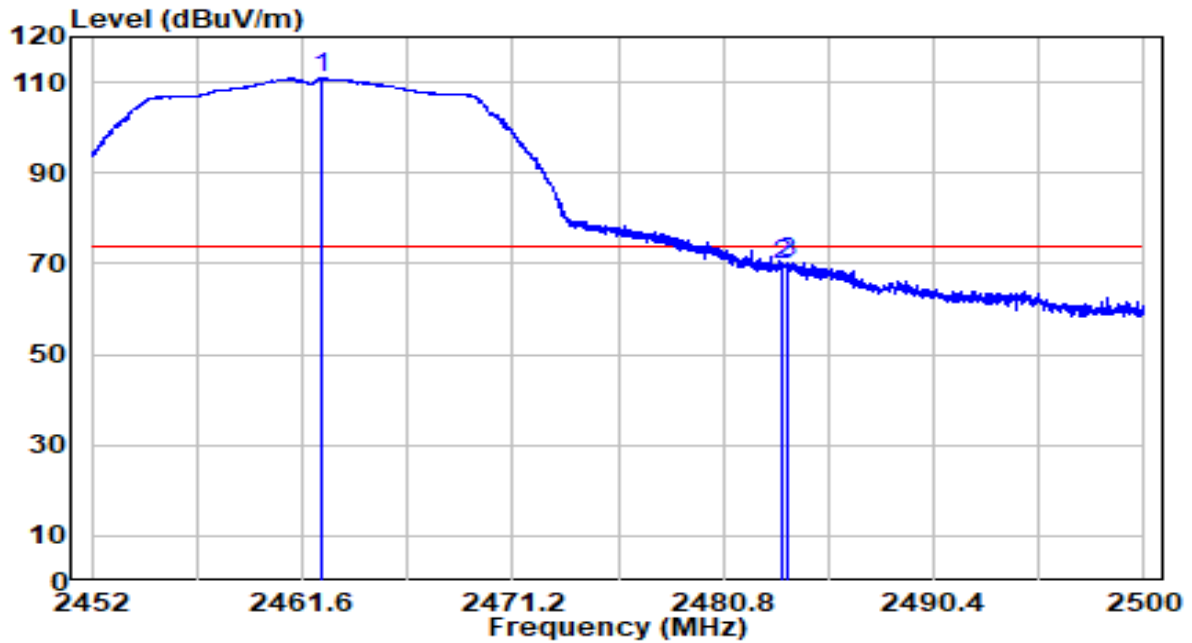


| No |   | Frequency (MHz) | Reading (dBuV) | C.F (dB/m) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|---|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  | * | 2461.384        | 68.88          | 32.61      | 101.49               | N/A         | N/A            | Average           |
| 2  |   | 2483.500        | 18.17          | 32.71      | 50.87                | -3.13       | 54.00          | Average           |
| 3  |   | 2483.752        | 18.32          | 32.71      | 51.03                | -2.97       | 54.00          | Average           |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Vertical                               | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11g at Channel 2462MHz | Test Voltage         | 110V/60Hz      |

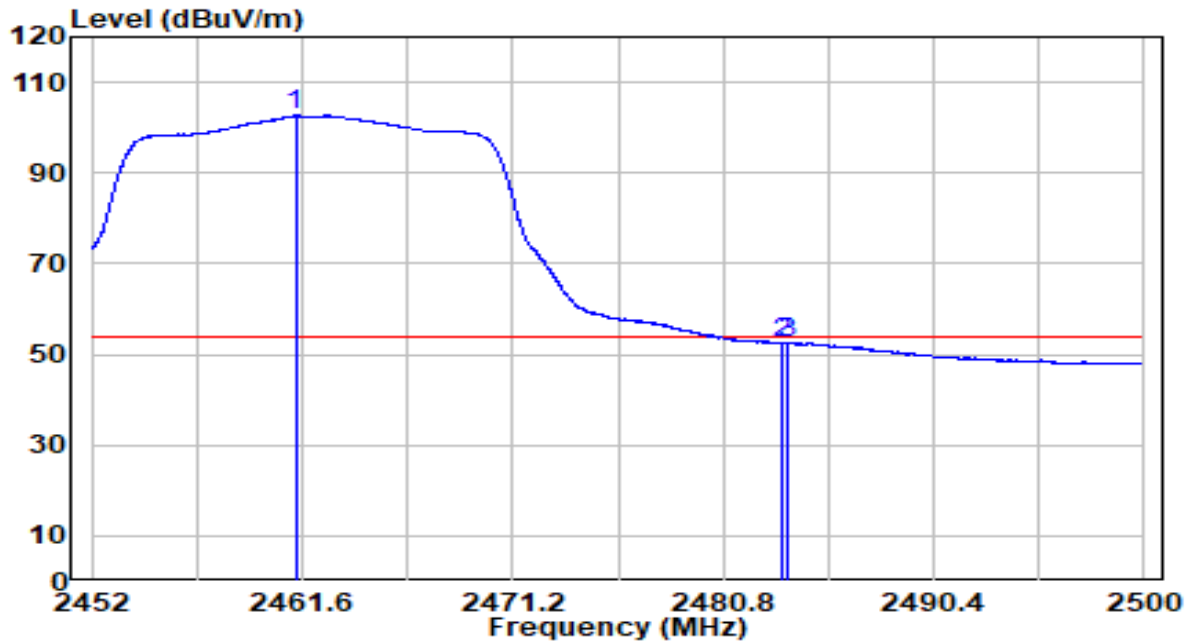


| No |   | Frequency (MHz) | Reading (dBuV) | C.F (dB/m) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|---|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  | * | 2462.536        | 78.40          | 32.62      | 111.01               | N/A         | N/A            | Peak              |
| 2  |   | 2483.500        | 37.13          | 32.71      | 69.84                | -4.16       | 74.00          | Peak              |
| 3  |   | 2483.752        | 37.64          | 32.71      | 70.35                | -3.65       | 74.00          | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                        |                      |                |
|-----------|----------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                             | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Vertical                               | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11g at Channel 2462MHz | Test Voltage         | 110V/60Hz      |

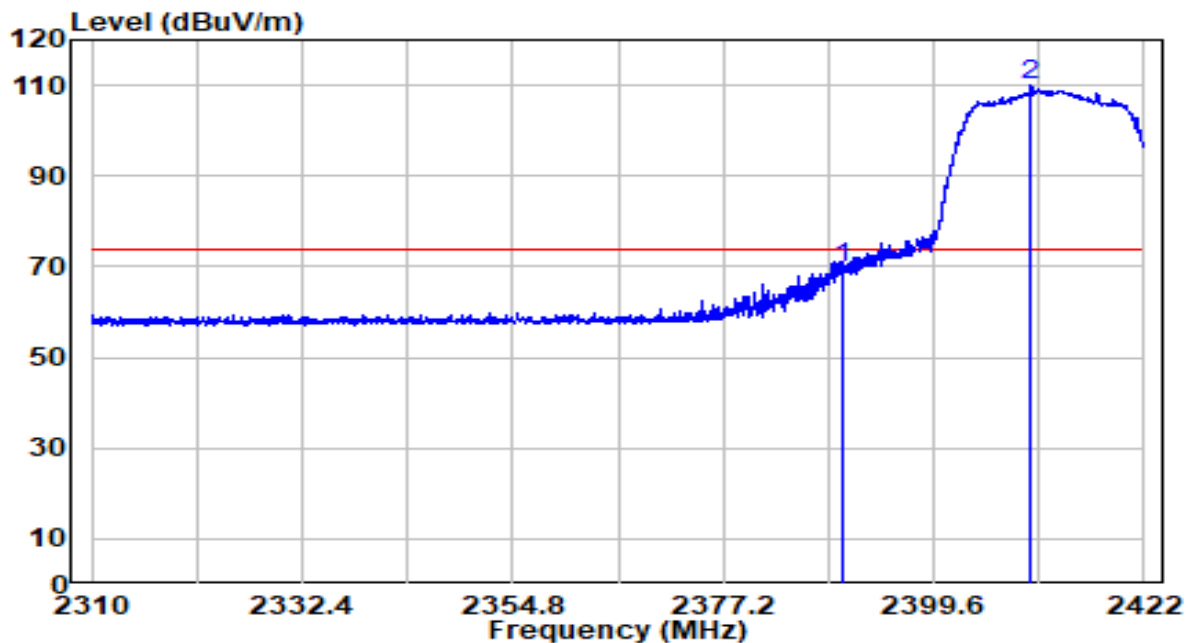


| No |   | Frequency (MHz) | Reading (dBuV) | C.F (dB/m) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|---|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  | * | 2461.288        | 70.00          | 32.61      | 102.61               | N/A         | N/A            | Average           |
| 2  |   | 2483.500        | 19.91          | 32.71      | 52.61                | -1.39       | 54.00          | Average           |
| 3  |   | 2483.752        | 19.88          | 32.71      | 52.58                | -1.42       | 54.00          | Average           |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                             |                      |                |
|-----------|---------------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                     | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                                  | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Horizontal                                  | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11n-HT20 at Channel 2412MHz | Test Voltage         | 110V/60Hz      |

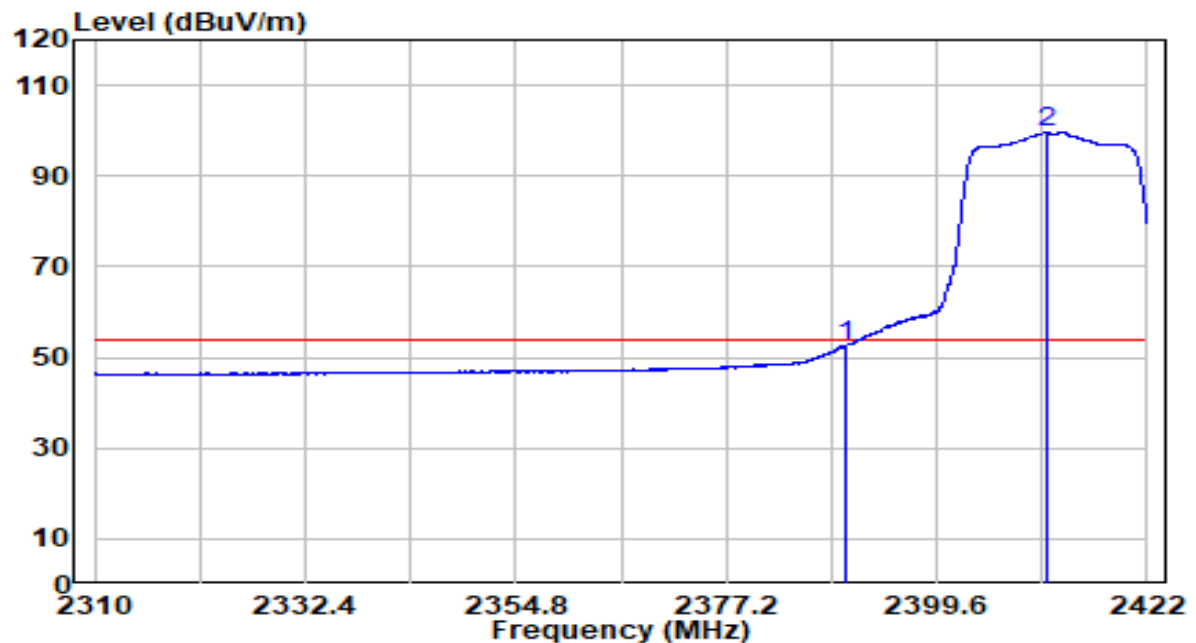


| No |   | Frequency (MHz) | Reading (dBuV) | C.F (dB/m) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|---|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  |   | 2390.000        | 37.61          | 32.30      | 69.91                | -4.09       | 74.00          | Peak              |
| 2  | * | 2409.848        | 77.84          | 32.38      | 110.22               | N/A         | N/A            | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                             |                      |                |
|-----------|---------------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                     | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                                  | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Horizontal                                  | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11n-HT20 at Channel 2412MHz | Test Voltage         | 110V/60Hz      |

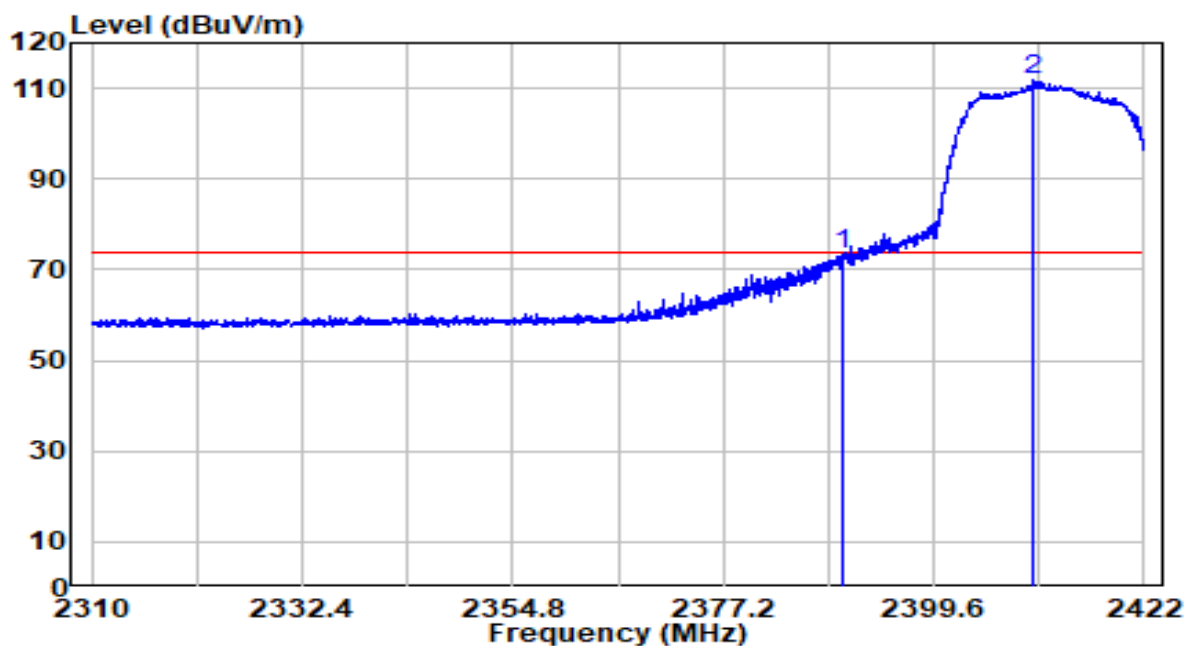


| No | Frequency (MHz) | Reading (dBuV) | C.F (dB/m) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  | 2390.000        | 20.26          | 32.47      | 52.73                | -1.27       | 54.00          | Average           |
| 2  | * 2411.248      | 67.04          | 32.59      | 99.63                | N/A         | N/A            | Average           |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                             |                      |                |
|-----------|---------------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                     | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                                  | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Vertical                                    | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11n-HT20 at Channel 2412MHz | Test Voltage         | 110V/60Hz      |

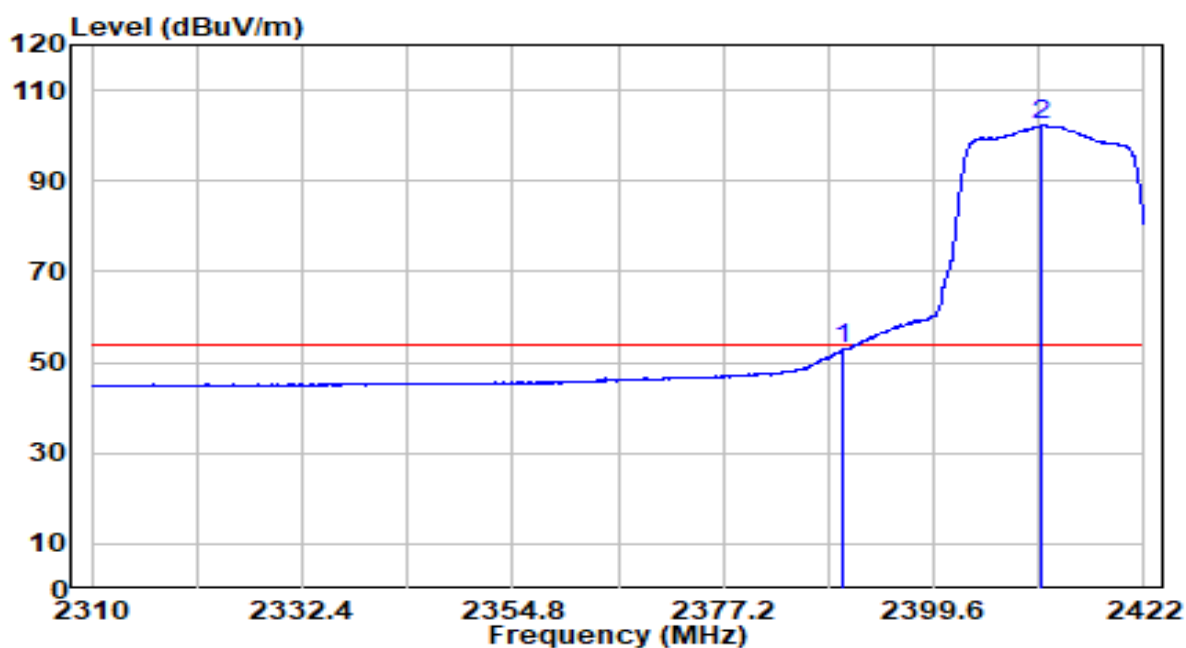


| No |   | Frequency (MHz) | Reading (dBuV) | C.F (dB/m) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|---|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  |   | 2390.000        | 41.27          | 32.30      | 73.57                | -0.43       | 74.00          | Peak              |
| 2  | * | 2410.296        | 79.56          | 32.39      | 111.94               | N/A         | N/A            | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                             |                      |                |
|-----------|---------------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                     | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                                  | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Vertical                                    | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11n-HT20 at Channel 2412MHz | Test Voltage         | 110V/60Hz      |

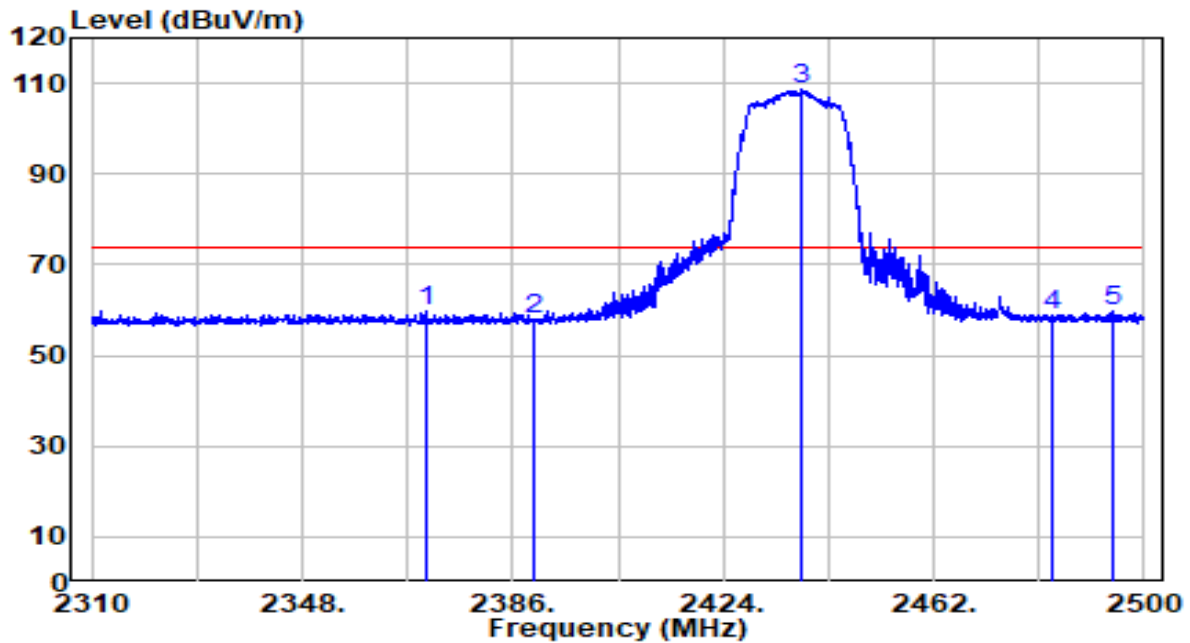


| No |   | Frequency (MHz) | Reading (dBuV) | C.F (dB/m) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|---|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  |   | 2390.000        | 20.46          | 32.30      | 52.76                | -1.24       | 54.00          | Average           |
| 2  | * | 2411.136        | 69.87          | 32.39      | 102.26               | N/A         | N/A            | Average           |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                             |                      |                |
|-----------|---------------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                     | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                                  | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Horizontal                                  | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11n-HT20 at Channel 2437MHz | Test Voltage         | 110V/60Hz      |

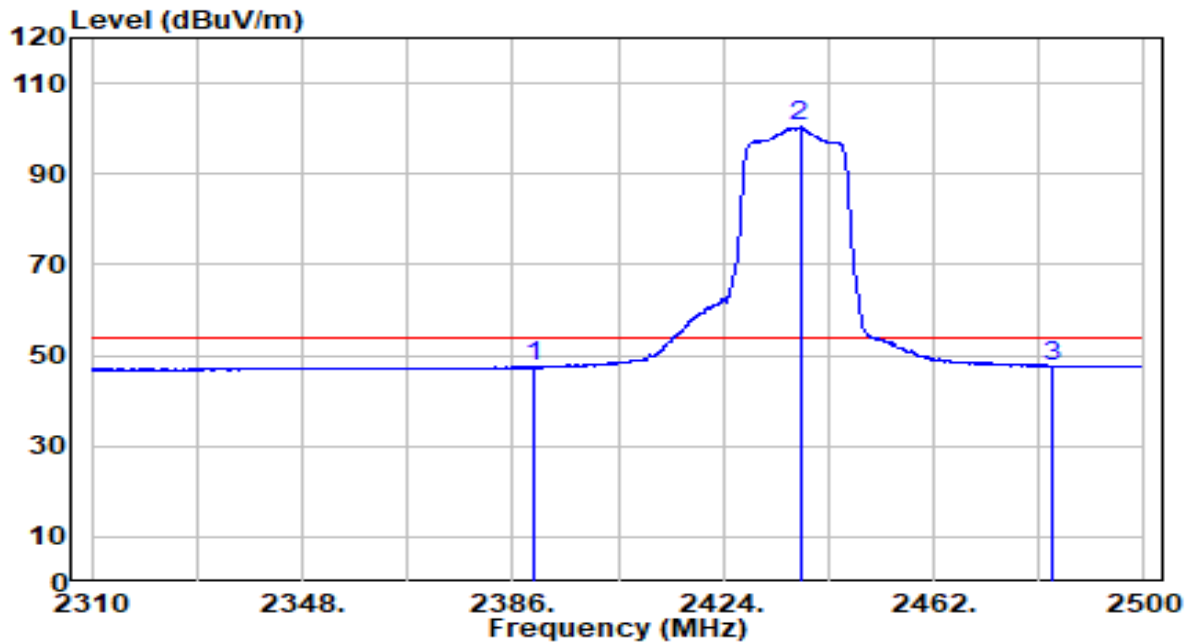


| No |   | Frequency (MHz) | Reading (dBUV) | C.F (dB/m) | Measurement (dBUV/m) | Margin (dB) | Limit (dBUV/m) | Remark (QP/PK/AV) |
|----|---|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  |   | 2370.230        | 27.46          | 32.21      | 59.67                | -14.33      | 74.00          | Peak              |
| 2  |   | 2390.000        | 25.70          | 32.30      | 58.00                | -16.00      | 74.00          | Peak              |
| 3  | * | 2438.345        | 75.95          | 32.51      | 108.46               | N/A         | N/A            | Peak              |
| 4  |   | 2483.500        | 26.06          | 32.71      | 58.77                | -15.23      | 74.00          | Peak              |
| 5  |   | 2494.205        | 26.80          | 32.75      | 59.56                | -14.44      | 74.00          | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBUV/m) = Reading(dBUV) + C.F (Correction Factor).

|           |                                             |                      |                |
|-----------|---------------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                     | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                                  | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Horizontal                                  | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11n-HT20 at Channel 2437MHz | Test Voltage         | 110V/60Hz      |

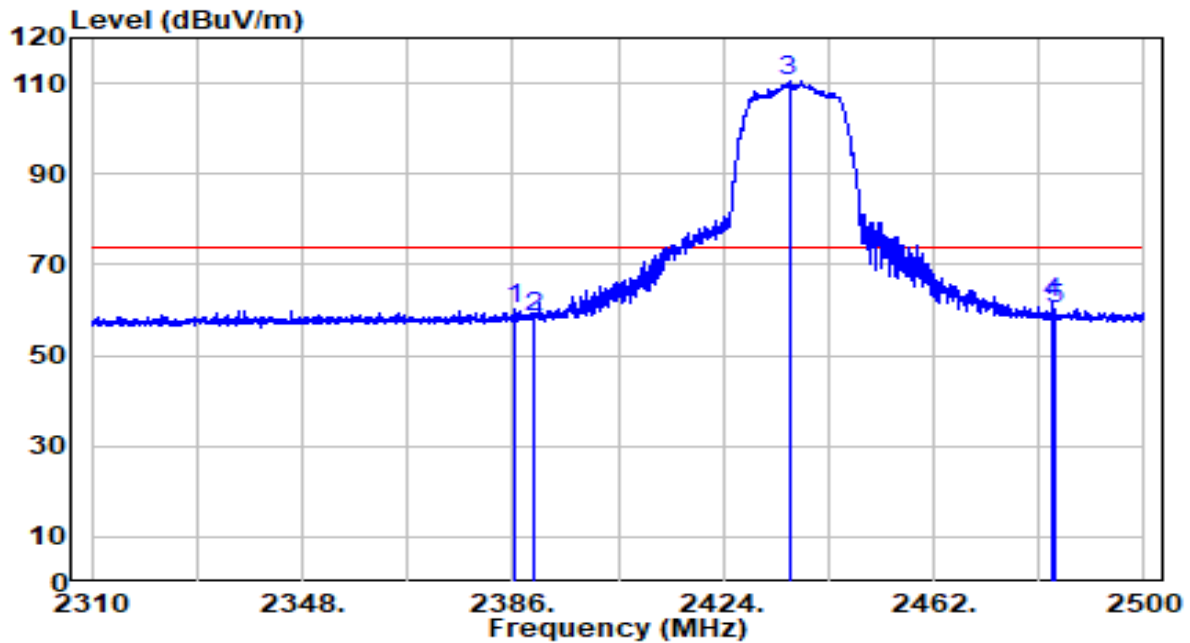


| No | Frequency (MHz) | Reading (dBuV) | C.F (dB/m) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  | 2390.000        | 15.18          | 32.30      | 47.48                | -6.52       | 54.00          | Average           |
| 2  | * 2437.870      | 67.84          | 32.51      | 100.35               | N/A         | N/A            | Average           |
| 3  | 2483.500        | 14.83          | 32.71      | 47.54                | -6.46       | 54.00          | Average           |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                             |                      |                |
|-----------|---------------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                     | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                                  | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Vertical                                    | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11n-HT20 at Channel 2437MHz | Test Voltage         | 110V/60Hz      |

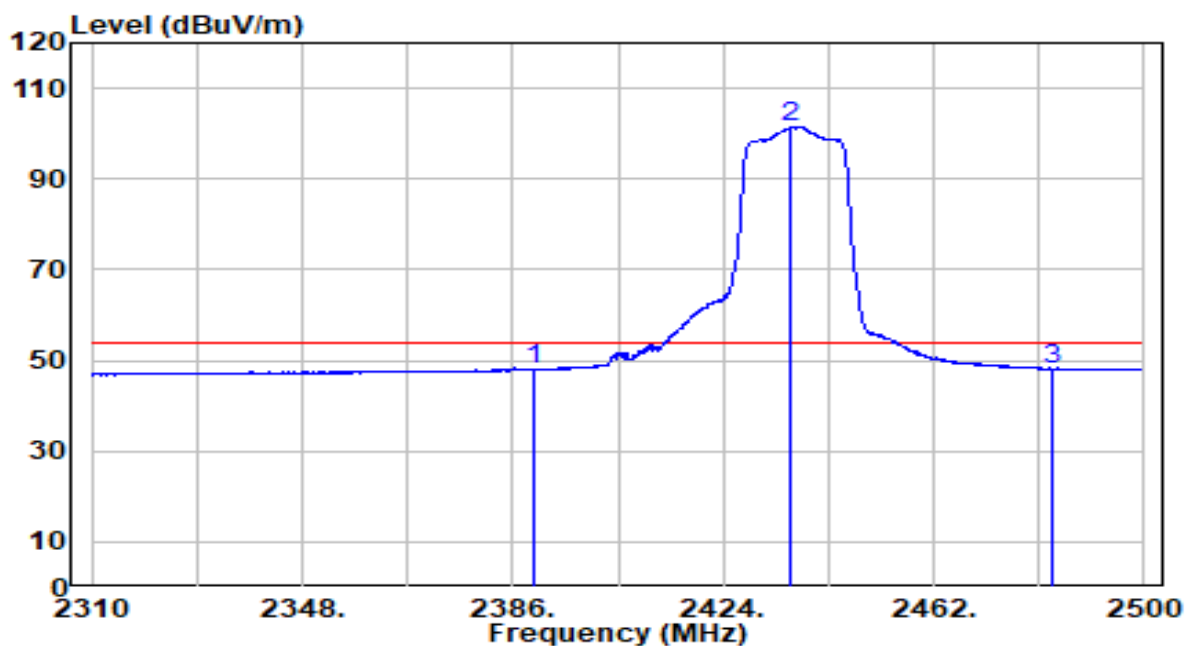


| No |   | Frequency (MHz) | Reading (dBuV) | C.F (dB/m) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|---|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  |   | 2386.380        | 27.81          | 32.28      | 60.09                | -13.91      | 74.00          | Peak              |
| 2  |   | 2390.000        | 26.33          | 32.30      | 58.63                | -15.37      | 74.00          | Peak              |
| 3  | * | 2435.875        | 78.09          | 32.50      | 110.58               | N/A         | N/A            | Peak              |
| 4  |   | 2483.500        | 28.70          | 32.71      | 61.40                | -12.60      | 74.00          | Peak              |
| 5  |   | 2483.945        | 27.38          | 32.71      | 60.08                | -13.92      | 74.00          | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                             |                      |                |
|-----------|---------------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                     | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                                  | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Vertical                                    | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11n-HT20 at Channel 2437MHz | Test Voltage         | 110V/60Hz      |

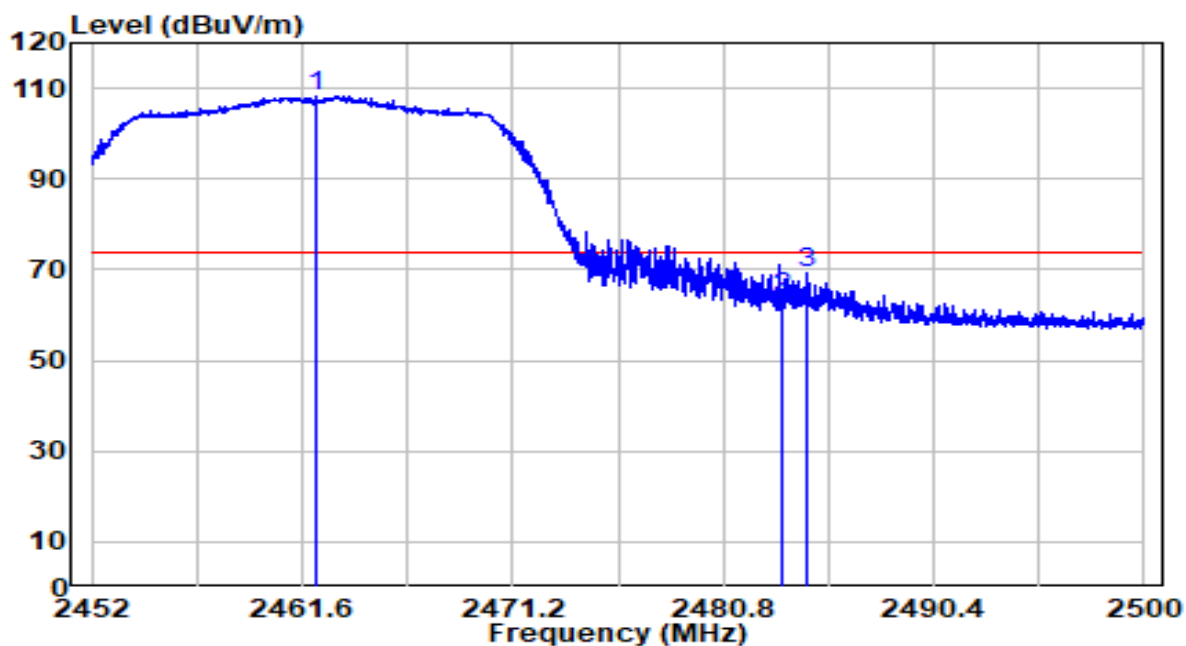


| No |   | Frequency (MHz) | Reading (dBuV) | C.F (dB/m) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|---|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  |   | 2390.000        | 15.66          | 32.30      | 47.95                | -6.05       | 54.00          | Average           |
| 2  | * | 2436.255        | 69.04          | 32.50      | 101.54               | N/A         | N/A            | Average           |
| 3  |   | 2483.500        | 15.41          | 32.71      | 48.11                | -5.89       | 54.00          | Average           |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                             |                      |                |
|-----------|---------------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                     | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                                  | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Horizontal                                  | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11n-HT20 at Channel 2462MHz | Test Voltage         | 110V/60Hz      |

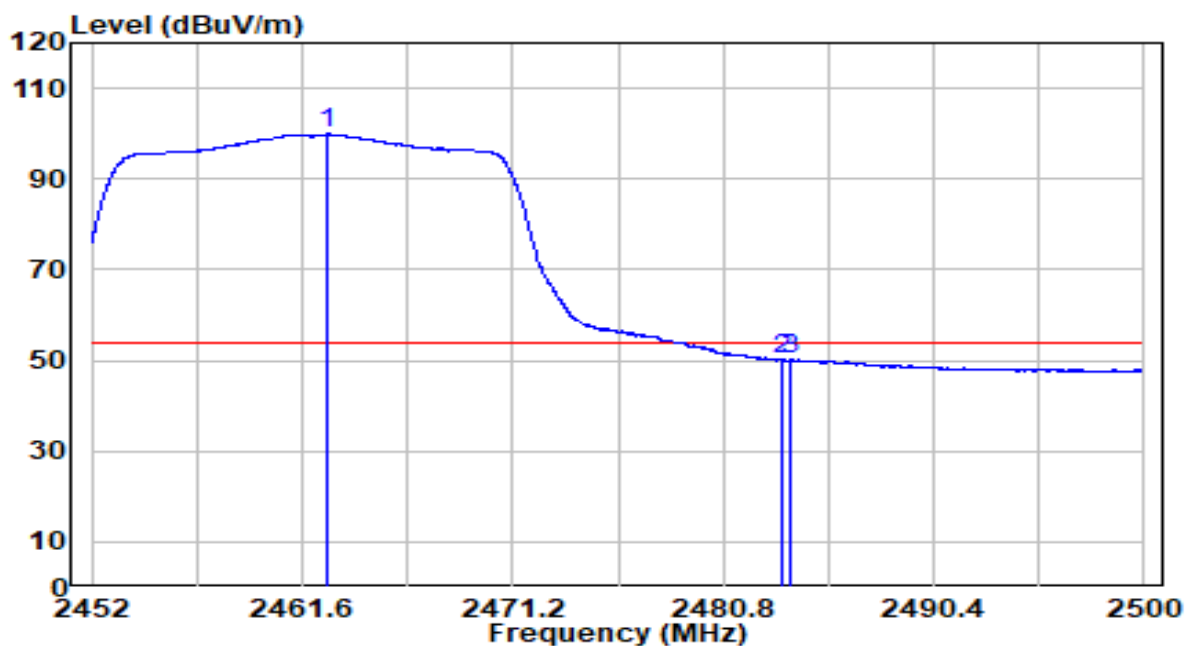


| No |   | Frequency (MHz) | Reading (dBuV) | C.F (dB/m) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|---|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  | * | 2462.224        | 75.76          | 32.61      | 108.38               | N/A         | N/A            | Peak              |
| 2  |   | 2483.500        | 31.16          | 32.71      | 63.86                | -10.14      | 74.00          | Peak              |
| 3  |   | 2484.664        | 36.58          | 32.71      | 69.29                | -4.71       | 74.00          | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                             |                      |                |
|-----------|---------------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                     | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                                  | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Horizontal                                  | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11n-HT20 at Channel 2462MHz | Test Voltage         | 110V/60Hz      |

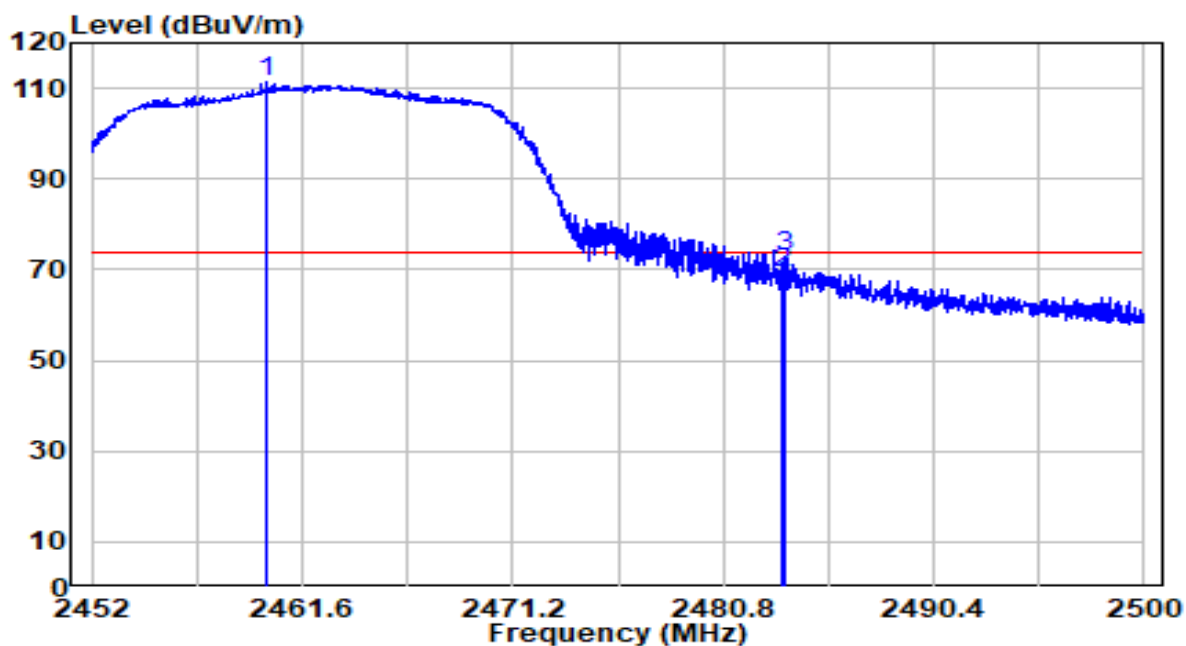


| No |   | Frequency (MHz) | Reading (dBuV) | C.F (dB/m) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|---|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  | * | 2462.776        | 67.31          | 32.62      | 99.92                | N/A         | N/A            | Average           |
| 2  |   | 2483.500        | 17.35          | 32.71      | 50.06                | -3.94       | 54.00          | Average           |
| 3  |   | 2483.896        | 17.48          | 32.71      | 50.19                | -3.81       | 54.00          | Average           |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                             |                      |                |
|-----------|---------------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                     | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                                  | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Vertical                                    | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11n-HT20 at Channel 2462MHz | Test Voltage         | 110V/60Hz      |

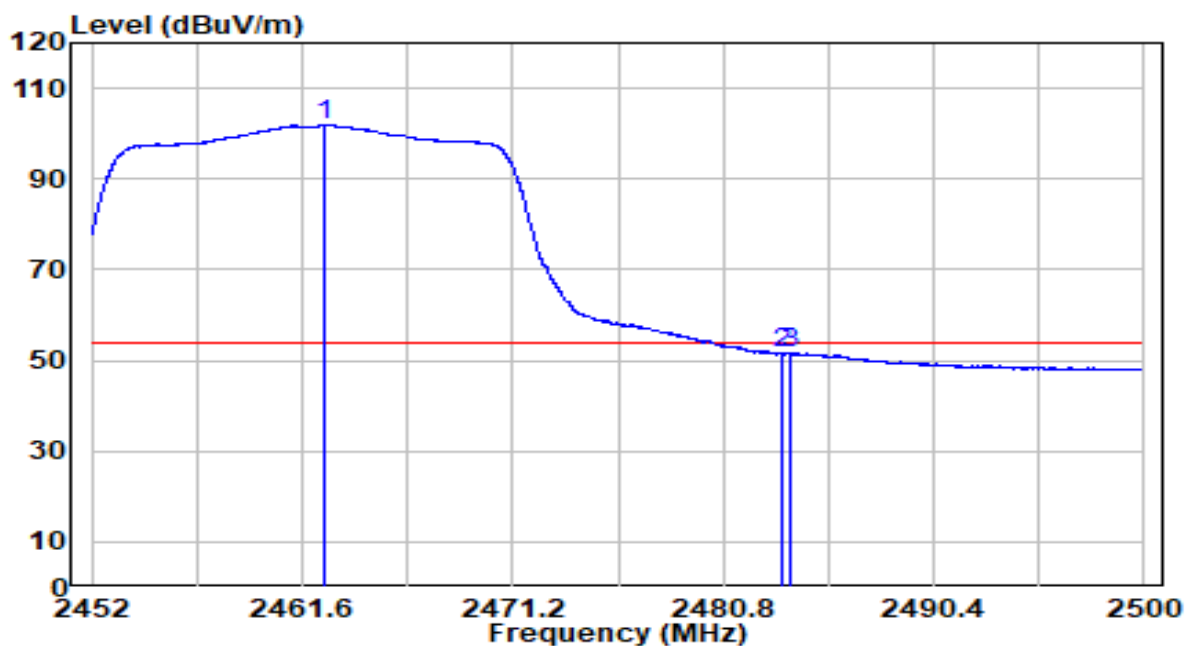


| No |   | Frequency (MHz) | Reading (dBuV) | C.F (dB/m) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|---|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  | * | 2459.968        | 78.81          | 32.60      | 111.41               | N/A         | N/A            | Peak              |
| 2  |   | 2483.500        | 36.50          | 32.71      | 69.21                | -4.79       | 74.00          | Peak              |
| 3  |   | 2483.560        | 40.01          | 32.71      | 72.72                | -1.28       | 74.00          | Peak              |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

|           |                                             |                      |                |
|-----------|---------------------------------------------|----------------------|----------------|
| EUT       | Cassia Bluetooth Router                     | Date of Test         | 2021-03-01     |
| Factor    | BBHA 9120D                                  | Temp. / Humidity     | 21.8°C/38.2%   |
| Polarity  | Vertical                                    | Site / Test Engineer | AC1 / Jay Chou |
| Test Mode | Transmit by 802.11n-HT20 at Channel 2462MHz | Test Voltage         | 110V/60Hz      |



| No |   | Frequency (MHz) | Reading (dBuV) | C.F (dB/m) | Measurement (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Remark (QP/PK/AV) |
|----|---|-----------------|----------------|------------|----------------------|-------------|----------------|-------------------|
| 1  | * | 2462.584        | 69.22          | 32.62      | 101.84               | N/A         | N/A            | Average           |
| 2  |   | 2483.500        | 18.88          | 32.71      | 51.59                | -2.41       | 54.00          | Average           |
| 3  |   | 2483.872        | 19.03          | 32.71      | 51.73                | -2.27       | 54.00          | Average           |

Note:

1. " \*", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement(dBuV/m) = Reading(dBuV) + C.F (Correction Factor).

## 5.7. 佔用頻道寬度

### 5.7.1. 適用標準

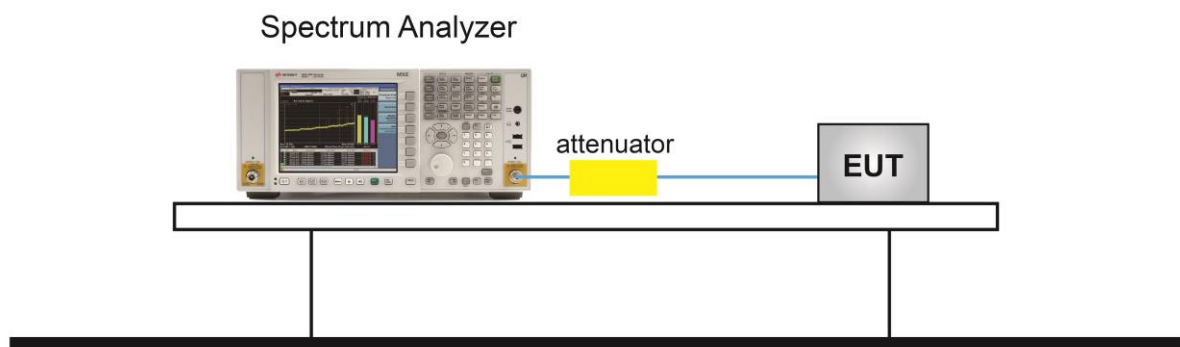
依據國家通訊傳播委員會低功率射頻器材技術規範之第 4.10.1.6(2)(A)節之要求，6dB 頻寬至少應有 500kHz。

### 5.7.2. 量測方法

待測物之天線埠經由適當之衰減直接連至頻譜分析儀 RF 輸入端，設定頻譜分析儀之解析度頻寬為 100kHz，視訊頻寬不小於解析度頻寬，頻率掃瞄範圍(SPAN)遠大於解析度頻寬。

待測物應在正常發射狀態下量測。

### 5.7.3. 測試架構圖



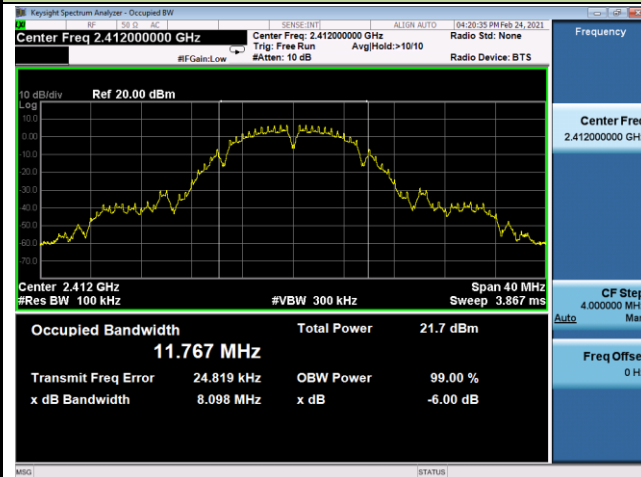
#### 5.7.4. 佔用頻帶寬度測試結果

|       |                         |      |            |
|-------|-------------------------|------|------------|
| 待測物名稱 | Cassia Bluetooth Router | 溫度   | 23 ~ 25°C  |
| 測試工程師 | Eric Lin                | 濕度   | 46 ~ 54%   |
| 測試場地  | SR2                     | 測試日期 | 2021/02/24 |

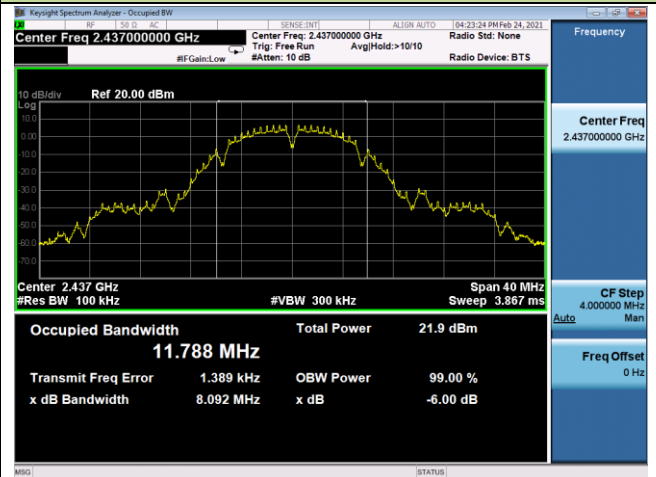
| Test Mode    | Data Rate / MCS | Channel No. | Frequency (MHz) | 6dB Bandwidth (MHz) | Limit (MHz) | Result |
|--------------|-----------------|-------------|-----------------|---------------------|-------------|--------|
| 802.11b      | 1Mbps           | 01          | 2412            | 8.10                | ≥ 0.5       | Pass   |
| 802.11b      | 1Mbps           | 06          | 2437            | 8.10                | ≥ 0.5       | Pass   |
| 802.11b      | 1Mbps           | 11          | 2462            | 8.57                | ≥ 0.5       | Pass   |
| 802.11g      | 6Mbps           | 01          | 2412            | 16.32               | ≥ 0.5       | Pass   |
| 802.11g      | 6Mbps           | 06          | 2437            | 16.32               | ≥ 0.5       | Pass   |
| 802.11g      | 6Mbps           | 11          | 2462            | 16.06               | ≥ 0.5       | Pass   |
| 802.11n-HT20 | MCS0            | 01          | 2412            | 17.31               | ≥ 0.5       | Pass   |
| 802.11n-HT20 | MCS0            | 06          | 2437            | 17.05               | ≥ 0.5       | Pass   |
| 802.11n-HT20 | MCS0            | 11          | 2462            | 16.91               | ≥ 0.5       | Pass   |

## 802.11b 6dB Bandwidth

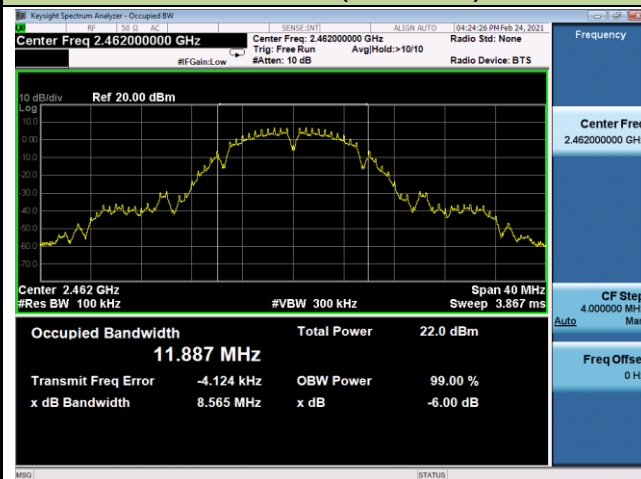
## Channel 01 (2412MHz)



## Channel 06 (2437MHz)

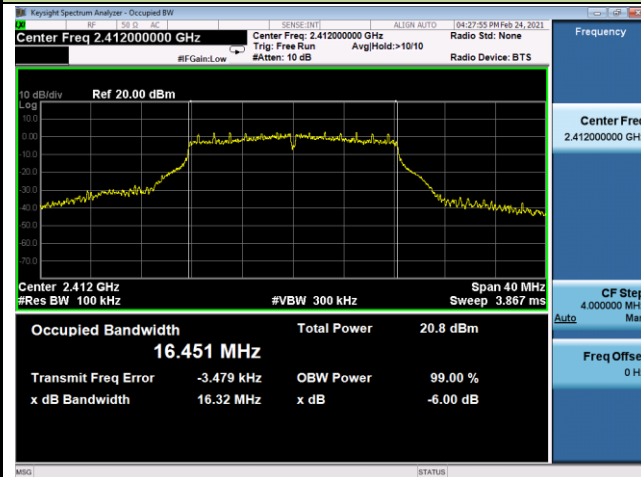


## Channel 11 (2462MHz)

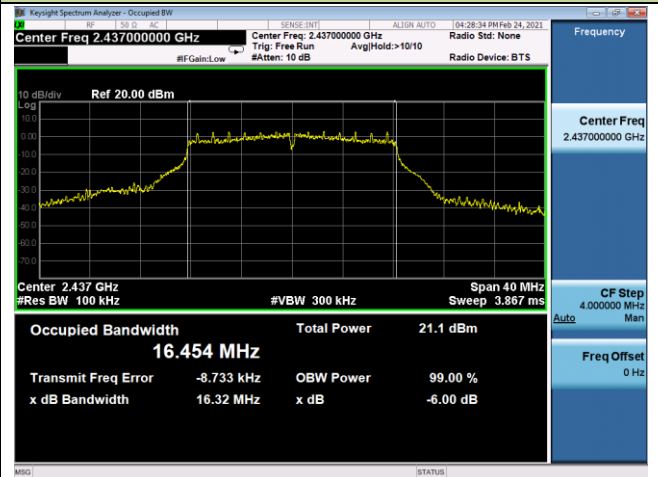


## 802.11g 6dB Bandwidth

## Channel 01 (2412MHz)



## Channel 06 (2437MHz)

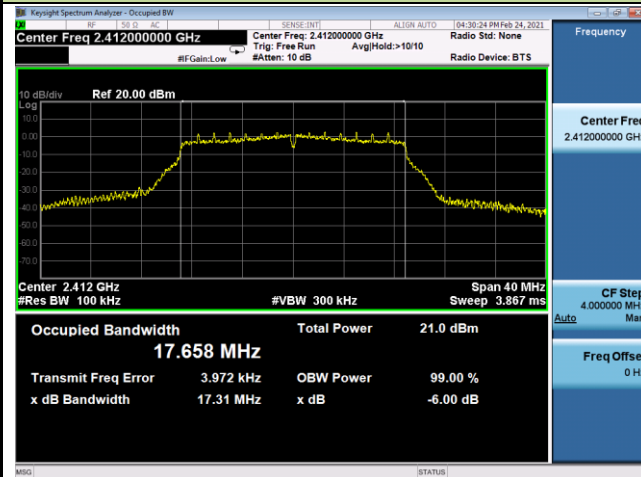


## Channel 11 (2462MHz)

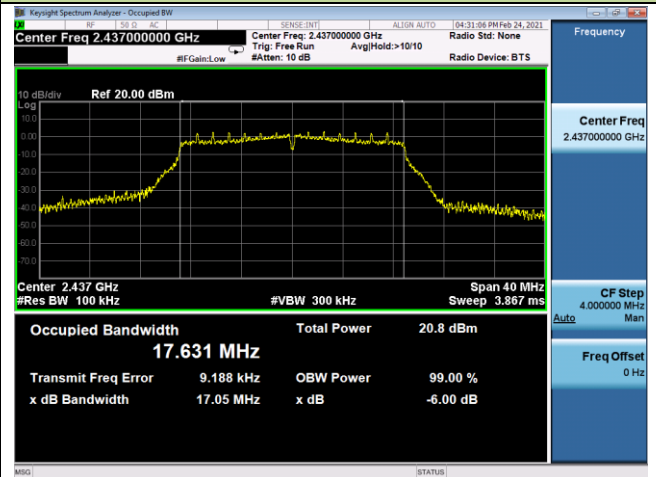


## 802.11n-HT20 6dB Bandwidth

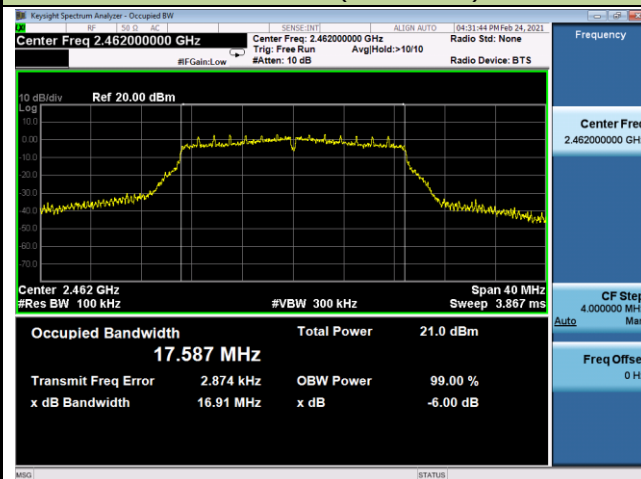
## Channel 01 (2412MHz)



## Channel 06 (2437MHz)



## Channel 11 (2462MHz)



## 5.8. 發射電功率密度

### 5.8.1. 適用標準

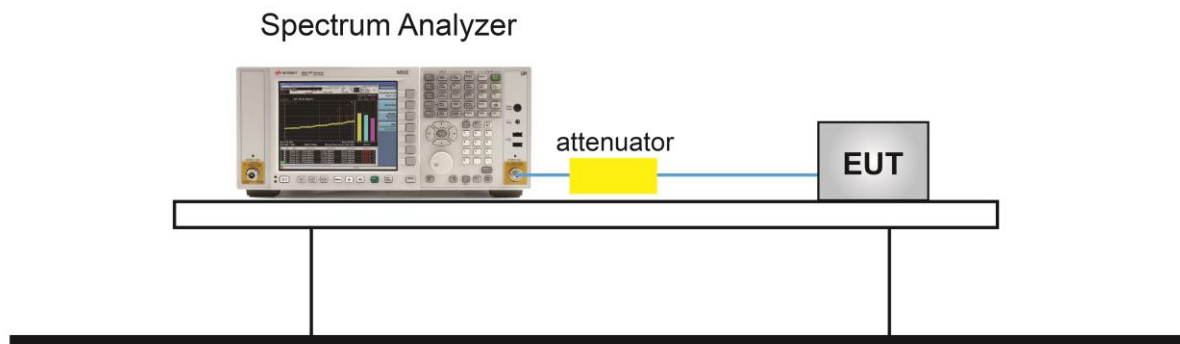
依據國家通訊傳播委員會低功率射頻器材技術規範之第 4.10.1.6(2)(B)節，在使用頻率範圍之任意 3 千赫(kHz)頻寬內，由發射機傳導至天線之峰值發射電功率密度在任意期間內，皆不得大於 8dBm。

### 5.8.2. 量測方法

待測物之天線埠經由適當之衰減直接連至頻譜分析儀 RF 輸入端。找出發射峰值並擴展於通帶內，設定頻譜分析儀之解析度頻寬為 3kHz，視訊頻寬大於解析度頻寬，掃瞄時間為頻率掃瞄範圍除以 3kHz。  
( $\text{SWEEP TIME} = \text{SPAN}/3\text{kHz}$ )。

待測物應在正常發射狀態下量測。

### 5.8.3. 測試架構圖



#### 5.8.4. 功率密度量測結果

|       |                         |      |            |
|-------|-------------------------|------|------------|
| 待測物名稱 | Cassia Bluetooth Router | 溫度   | 23 ~ 25°C  |
| 測試工程師 | Kevin Ker               | 濕度   | 46 ~ 54%   |
| 測試場地  | SR1                     | 測試日期 | 2021/02/24 |

| Test Mode | Data Rate/<br>MCS | Channel<br>No. | Frequency<br>(MHz) | AVG PSD<br>(dBm/ 10kHz) | Duty Cycle<br>(%) | 10*log<br>(1/x) | Total PSD<br>(dBm/ 10kHz) | Limit<br>(dBm / 3kHz) | Result |
|-----------|-------------------|----------------|--------------------|-------------------------|-------------------|-----------------|---------------------------|-----------------------|--------|
| 11b       | 1Mbps             | 01             | 2412               | -11.71                  | 98.79             | 0.05            | -11.66                    | ≤ 8.0                 | Pass   |
| 11b       | 1Mbps             | 06             | 2437               | -11.32                  | 98.79             | 0.05            | -11.27                    | ≤ 8.0                 | Pass   |
| 11b       | 1Mbps             | 11             | 2462               | -11.07                  | 98.79             | 0.05            | -11.02                    | ≤ 8.0                 | Pass   |
| 11g       | 6Mbps             | 01             | 2412               | -11.93                  | 93.34             | 0.30            | -11.63                    | ≤ 8.0                 | Pass   |
| 11g       | 6Mbps             | 06             | 2437               | -11.51                  | 93.34             | 0.30            | -11.21                    | ≤ 8.0                 | Pass   |
| 11g       | 6Mbps             | 11             | 2462               | -11.46                  | 93.34             | 0.30            | -11.16                    | ≤ 8.0                 | Pass   |
| 11n-HT20  | MCS0              | 01             | 2412               | -13.51                  | 92.71             | 0.33            | -13.18                    | ≤ 8.0                 | Pass   |
| 11n-HT20  | MCS0              | 06             | 2437               | -13.47                  | 92.71             | 0.33            | -13.14                    | ≤ 8.0                 | Pass   |
| 11n-HT20  | MCS0              | 11             | 2462               | -13.13                  | 92.71             | 0.33            | -12.80                    | ≤ 8.0                 | Pass   |

Note:

EUT duty cycle ≥ 98%, Total AVGPSD = AVG PSD

EUT duty cycle ≤ 98%, Total AVGPSD = AVG PSD+ 10\*log (1/Duty Cycle).

## 802.11b AVGPSP

## Channel 01 (2412MHz)



## Channel 06 (2437MHz)

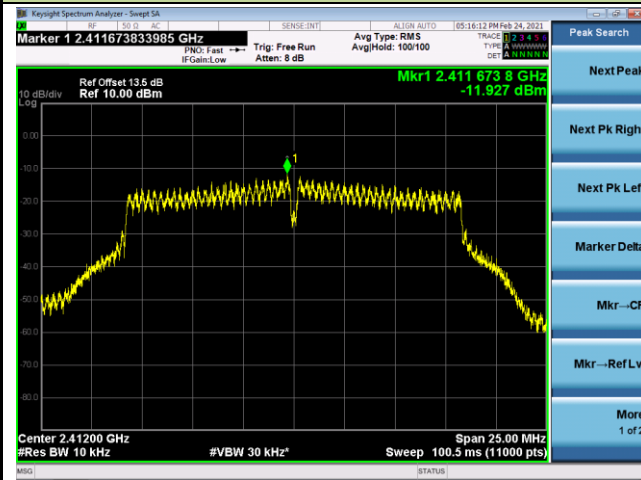


## Channel 11 (2462MHz)

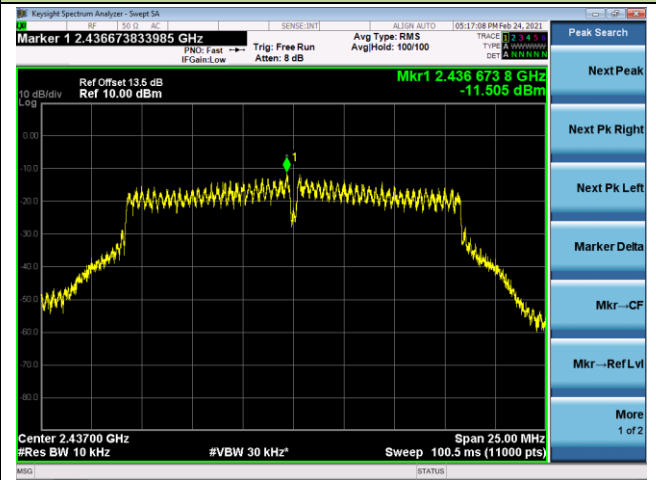


## 802.11g AVGPSPD

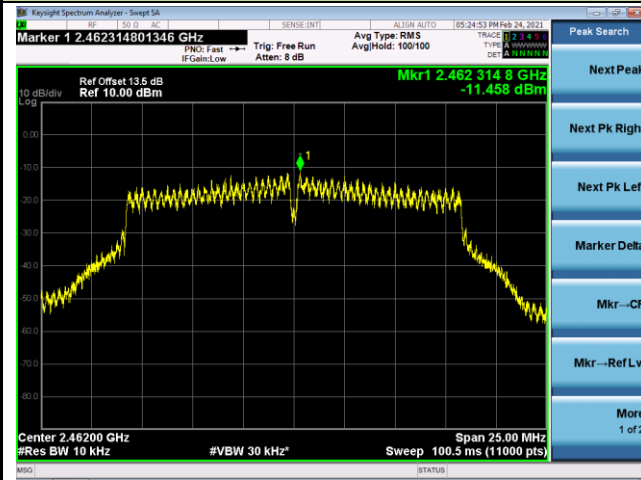
## Channel 01 (2412MHz)



## Channel 06 (2437MHz)

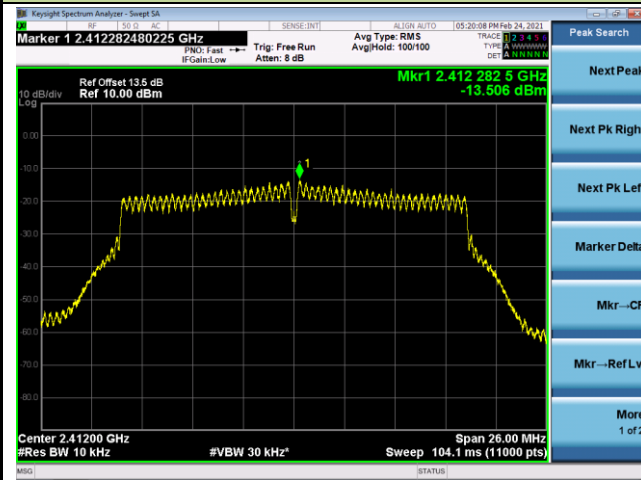


## Channel 11 (2462MHz)

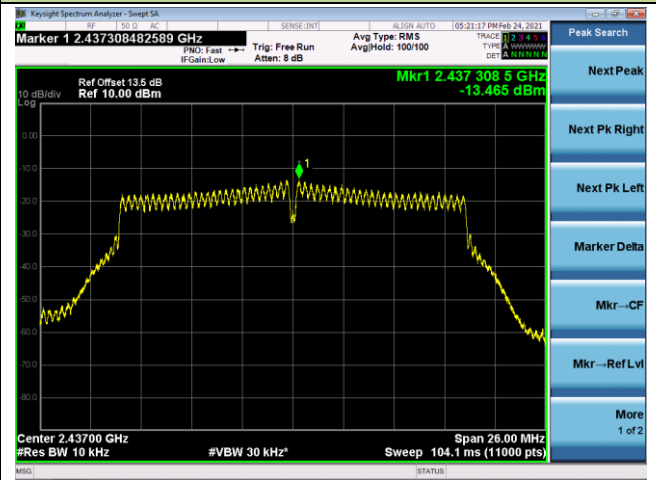


## 802.11n-HT20 AVGPSPD

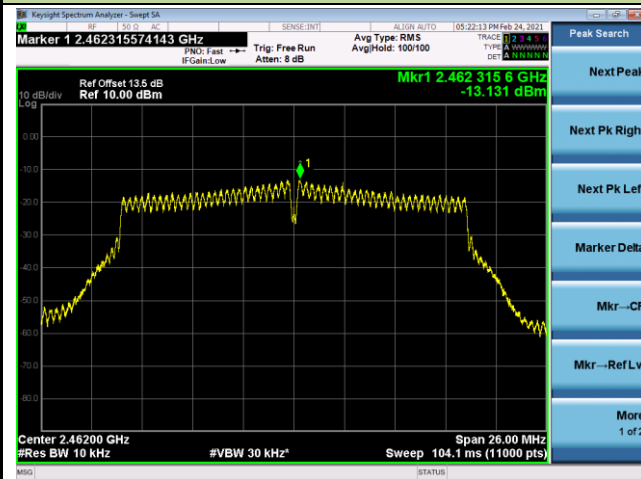
## Channel 01 (2412MHz)



## Channel 06 (2437MHz)



## Channel 11 (2462MHz)



The End