



Advance Data Technology Corporation 誠信科技股份有限公司

13-1 Lane 19, Wen Shan 3rd St., Kweishan, Taoyuan, Taiwan, R.O.C.

桃園縣龜山鄉文三街 19 巷 13-1 號

<http://www.adt.com.tw/>

E-mail: [service@mail.adt.com.tw](mailto:service@mail.adt.com.tw)

TEL: 886-3-3270910

FAX: 886-3-3270892

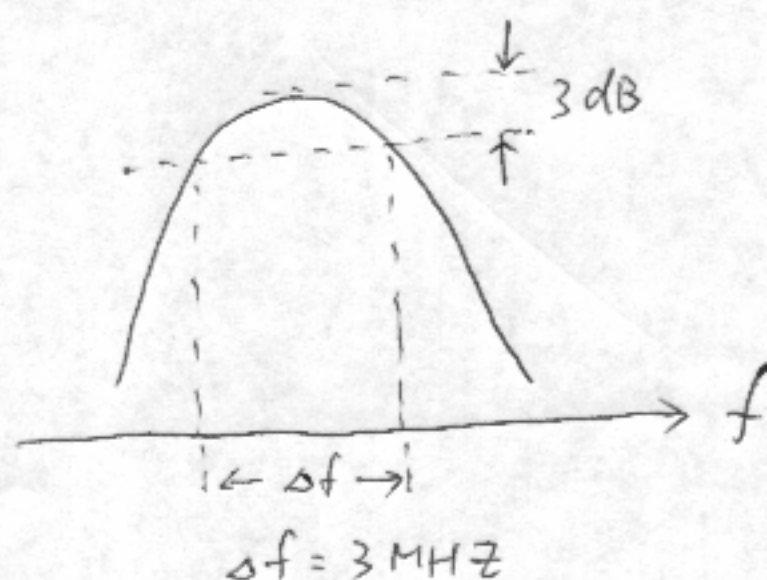
FCC ID: O7J-GL2411010700

731 Number: EA98545

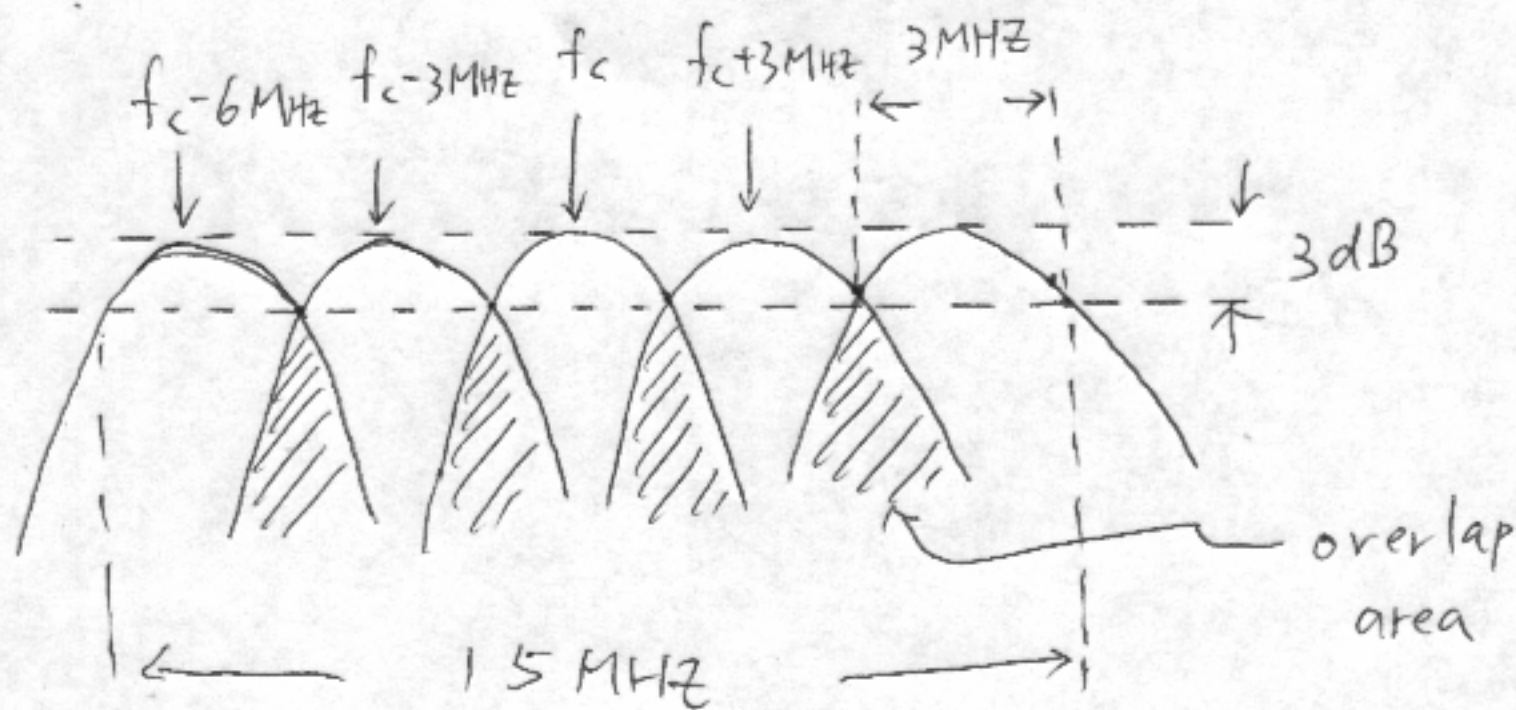
Ref. Number: 16817

### Measurement of Output Power

When the RB is set to 3 MHz, then the response of the RB filter should be



The filters arrangement of the 5 readings in our measurement.



服務項目

您產品開發的最佳伙伴

誠信確實 · 專業第一 · 顧客至上

EMC/ SAFETY/ RADIO CERTIFICATION · ID/ MECH. DESIGN · GRAPHICS/TECH. WRITING SERVICES

YOUR BEST PARTNER IN PRODUCT DEVELOPMENT

INTEGRITY · PROFESSIONALISM · CUSTOMER SATISFACTION

**FCC ID: O7J-GL2411010700****731 Number: EA98545****Ref. Number: 16817**

The duty cycle of the product under test is 100% which makes the peak power measured result very close average power measured one (peak is of course higher, HP application note 64).

In our measurement (with Maximum Hold Function of Spectrum Analyzer), when the RB of the spectrum analyzer is set to 3MHz, it means the 3dB bandwidth of the RB filter is 3 MHz. The reading is the total power passing the RB filter. So, when you plus reading on fc with that on fc+3MHz, then the overlap area shown on last page is recalculated, but this re-calculation is a compensation for the 3dB drop of the RB filter. In our measurement, we summarized the 5 neighboring readings with center reading on peak power frequency. This summation covers the power in totally 15MHz bandwidth which is wider than 6dB bandwidth. And also this summation covers 4 overlapping areas which means the compensation on the 3dB drop point will make the measured power very close the real power.

Of course, the power outside this 15MHz band is not considered in our measurement, which is the only difference between peak power meter and our measurement. But outside this 15MHz band, the power is small compare to the center frequency power which have very very limited influence on the total power measured.

The following Tables show the comparison as you request. Please be informed, this is a new measurement, the deviation with that shown in test report is within 1dB.

Channel 1, fc (peak power frequency) = 2412.20MHz							
Freq.	fc-6MHz	fc-3MHz	fc	fc+3MHz	fc+6MHz	Sum	Power Meter
power	7.9mW	9.7mW	25.6mW	11.8mW	7.4mW	17.9dBm	18.3dBm

Channel 6, fc (peak power frequency) = 2436.46MHz							
Freq.	fc-6MHz	fc-3MHz	fc	fc+3MHz	fc+6MHz	Sum	Power Meter
power	10.0mW	17.6mW	37.8mW	18.1mW	9.5mW	19.7dBm	20.2dBm

Channel 11, fc (peak power frequency) = 2461.46MHz							
Freq.	fc-6MHz	fc-3MHz	fc	fc+3MHz	fc+6MHz	Sum	Power Meter
power	10.0mW	12.5mW	31.4mW	15.1mW	7.9mW	18.8dBm	19.5dBm

The total power measured by Peak Power Meter is maximumly only 0.7dB higher than that of our method, which have little influence on the RF exposure information.