

**From:** Bruno Clavier [bruno@timcoengr.com]

**Sent:** Wednesday, August 30, 2006 8:28 AM

**To:** tei@timcoengr.com

**Subject:** FW: TIMCO-TCB/Request for additional info - COILER CORPORATION - FCC ID: UG8C-2024-19

**Importance:** High

-----Original Message-----

**From:** ??? [mailto:jonest sai@sport on.com.tw]

**Sent:** Wednesday, August 30, 2006 4:37 AM

**To:** Bruno Clavier

**Cc:** Ivonne Wu (???); Daniel Lee (???); roy; Jim Tsai (???); Jay zhong (??)

**Subject:** Fw: TIMCO-TCB/Request for additional info - COILER CORPORATION - FCC ID: UG8C-2024-19

**Importance:** High

Dear Bruno,

Pls find the answers as below .

1. Intermodulation spurious emissions: This device is a bi-directional booster/repeater transmitting and receiving uplink and downlink signals using radiated emissions.

Therefore, Intermodulation test data are required.

The data provided are missing information. Please describe in the test report which method was used to test IM emissions (i.e. 2 or 3 signal method, etc.). It would be expected a plot for uplink and downlink band showing the two (or three) signals on each plots , etc. What was the amplitude of the input signals? The black and blue signals have different amplitude - please explain the two traces.

The method was adopted by two tests(high-,low-band edge) with two tones including a CW and CDMA signal , and the band edges and conducted spurious up to the 10th harmonics were measured for the intermodulation .

From page 53 to page 64 , those plots show the results of band edge and conducted spurious when two tones (GSM and CW) inputted.

The signal of CDMA and GSM simultaneous input was same as above procedures and allocated from page 69 to 80 .

Before testing intermodulation, we checked the input and output signal level as shown in page 49 (For CW) and page 65 (For CDMA)

That's why you saw the different amplitude in each plots. I summarized those results as attachment, Coiler Repeater Intermodulation.

2. Occupied bandwidth data – In/out bandwidth: Please indicate which signal is the Input. FYI - The FCC document states that “ The spectral shape of the output should look similar to input for all modulations.” It is difficult to determine whether the shapes are similar based on the plots provided. In the test setup, you should have included an attenuator (loss) of the value of the Gain at that frequency, so as to overlay the input and output signal when you remove the amplifier.

In the report page No9 of 122, the input GSM signal was in Black color .

I compared the input and out signal and approved that they are similar, please find the enclosed file, occupied bandwidth data .

Thanks for your help .

Jones Tsai

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