

## Chris Harvey

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**From:** Thu Chan [thu.chan@ccsemc.com]  
**Sent:** Tuesday, August 19, 2008 10:37 PM  
**To:** charvey@ieee.org; Chris Harvey -TCB  
**Cc:** Mike Kuo; Mika Kaneko; Claire Hoque; Thu Chan  
**Subject:** RE: 08J11955 TCB questions: GIKEN SEISAKUSHO CO., LTD., FCC ID: WIF-GR-24D, Assessment NO.: AN08T8231, Notice#1

**Attachments:** Theory of Operation\_R.pdf



Theory of  
peration\_R.pdf (45

Hi Chris,

Please see attached file and answer below to address your question.

<Answer>

The source based duty cycle of this EUT is 15%. Please refer to the page 2 of the revised Theory of Operation attached. In this case, -8.24dB is applied to the peak maximum output power, thus, this device is not subject to SAR.

Thanks & Regards,  
Thu

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

From: Chris Harvey [mailto:charvey@ieee.org]  
Sent: Tuesday, August 19, 2008 2:14 PM  
To: Thu Chan; Chris Harvey  
Cc: Mika Kaneko; Mike Kuo; Claire Hoque  
Subject: RE: 08J11955 TCB questions: GIKEN SEISAKUSHO CO., LTD., FCC ID: WIF-GR-24D, Assessment NO.: AN08T8231, Notice#1

Thu, thank you for your response. I have reviewed the answers and the additional exhibits submitted. The response to question # 4 about the RF Exposure compliance now indicates that the intended operation of this device is near the body (waist bracket with metal and 3cm spacing).

Please submit RF Exposure SAR compliance documentation for this device which operates at a revised power of 46.88mW with -2.61dBi antenna gain.

The 60/f(GHz) for 2.4GHz is 24.2mW, therefore this device operates at power >60/f(GHz). According to KDB 447498, this device is subject to SAR.

Please note that the operation using the bracket spacing of 3cm is new to this applications, which was originally filed as a hand-held and Mobile transmitter.

Please contact me with further clarification or if you have any questions.

Best regards,

Chris Harvey

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

From: Thu Chan [mailto:thu.chan@ccsemc.com]  
Sent: Tuesday, August 19, 2008 12:53 PM  
To: Chris Harvey -TCB; Chris Harvey  
Cc: Mika Kaneko; Mike Kuo; Claire Hoque; Thu Chan  
Subject: RE: 08J11955 TCB questions: GIKEN SEISAKUSHO CO., LTD., FCC ID: WIF-GR-24D, Assessment NO.: AN08T8231, Notice#1  
Importance: High

Hi Chris,

Please find all the attached documents and answers to address your questions below.

P.S. Since Claire is out of office in this week.

Thanks & Regards,

Thu Chan  
Compliance Certification Services  
47173 Benicia Street  
Fremont, CA 94538, USA  
Tel: (510) 771-1122  
Fax: (510) 661-0888

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1. Although it is difficult to tell it appears as though the FCC ID Label is etched inside the Battery compartment (or on the battery door). Please confirm exactly where the label is to be located. If this is inside the battery door, please describe how the user will be able to see the FCC ID label before the first use of the transmitter. If you intend to place this on the removable battery door, please note that the FCC does not allow the label to be placed on removable pieces.

<Answer #1>

FCC ID Label is located in the battery compartment, not on the removable battery door. See attached label location photo. The battery is installed by the user before first use of this product, therefore, FCC ID Label will be visible to the user before first use. Attached please find the declaratoin letter from the applicant.

2. The Internal Photographs, Block Diagram and the schematic diagram show 2 (identical?) RF circuits each with an antenna. The Block Diagram has a lined-in area that indicated in Katakana characters "daibashitei" (translated as "diversity"). The Theory of Operation confirms that this has 2 identical transmitters that use diversity and do not transmit simultaneously. It appears as though each transmitter can be configured to transmit, but not at the same time. Please confirm the each transmitter can be configured to transmit separately and if yes please confirm what was done to investigate or test both transmitters.

<Answer #2>

The each transmitter can be configured to transmit separately. During testing, we did the initial investigation and picked the transmitter with higher power as worst-case.

3. The RF test report documents a 6dB Bandwidth as wide as 1.1MHz, but uses a 1MHz RBW to measure the conducted RF power. Please explain or re-measure the power with a Resolution Bandwidth wider than the Occupied Bandwidth.

<Answer #3>

Re-measured Output power, see attached revised test report.

4. The Users Manual should contain a statement to the User to maintain at least 20 cm separation during use, excluding hands, wrists, feet and ankles.

<Answer #4>

This product is used with "Transmitter Bracket" during operation. The distance between human body and transmitter (antenna) is more than 3cm, see attached "Transmitter Bracket photos." The maximum peak power is 46.88mW from the test report, thus, the product with "Transmitter Bracket" comply with FCC RF exposure compliance requirement. User manual page 7 has been revised to include such compliance statement.

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

From: Chris Harvey  
Sent: Thursday, August 14, 2008 11:14 AM  
To: Thu Chan  
Cc: Chris Harvey; Claire Hoque  
Subject: GIKEN SEISAKUSHO CO., LTD., FCC ID: WIF-GR-24D, Assessment NO.: AN08T8231, Notice#1

Dear Thu Chan and Claire Hoque,

You are listed as the Technical Contact for the above referenced TCB application. The following item(s) need(s) to be resolved before the review can be continued:

1. Although it is difficult to tell it appears as though the FCC ID Label is etched inside the Battery compartment (or on the battery door). Please confirm exactly where the label is to be located. If this is inside the battery door, please describe how the user will be able to see the FCC ID label before the first use of the transmitter. If you intend to place this on the removable battery door, please note that the FCC does not allow the label to be placed on removable pieces.
2. The Internal Photographs, Block Diagram and the schematic diagram show 2 (identical?) RF circuits each with an antenna. The Block Diagram has a lined-in area that indicated in Katakana characters "daibashitei" (translated as "diversity"). The Theory of Operation confirms that this has 2 identical transmitters that use diversity and do not transmit simultaneously. It appears as though each transmitter can be configured to transmit, but not at the same time. Please confirm the each transmitter can be configured to transmit separately and if yes please confirm what was done to investigate or test both transmitters.
3. The RF test report documents a 6dB Bandwidth as wide as 1.1MHz, but uses a 1MHz RBW to measure the conducted RF power. Please explain or re-measure the power with a Resolution Bandwidth wider than the Occupied Bandwidth.
4. The Users Manual should contain a statement to the User to maintain at least 20 cm separation during use, excluding hands, wrists, feet and ankles.

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information within 30 days of the original e-mail date may result in application dismissal and forfeiture of the filing fee. Also, please note that partial responses increase processing time and should not be submitted. Any questions about the content of this correspondence should be directed to the e-mail address listed below the name of the sender.

Best regards,

Chris Harvey  
Charvey-tcb@ccsemc.com