Subject: AN04T4341 FCC ID: SDGGKB7U-360 Receiver I of Wireless 2-way Intelligent Control System

Assessment Number: AN04T4341

Question #1:

The user information required in FCC15.21 had been added in the user manual.

Question #2:

Please see the document named *AN04T4341 setup photos FCC2004-0007*.

Question #3, #8 and #9:

The component used as oscillator is CC1000, you can see it in the top right corner of the Schematic Diagram. The CC1000 is an ultra-low-power single-chip RF transceiver, it is used for short-range wireless communication. The key features of CC1000 component are: single-chip RF transceiver, single-port antenna connection (pin 8), programmable frequency and output power. The pins (PALE, PDATA and PCLK) are connected to microprocessor MSF430, the pin connected to PDATA of CC1000 must be bi-directional for transmitting and receiving functions.

The statement describing how the device operates please see the file named *AN04T4341 Functional Block Diagram*.

Question #4:

Power Line conducted emission testing had been done with Neutual line and Hot line. During testing, ESH3-Z5 LISN and ESCS30 testing receiver were used, phase L1, phase N and PE ground are used for the final measurement. We have modified our test report and added two columns of phase in the tables on page 8 and 10.

Question #5:

One column indicating calibration date of each test equipment in Appendix A on the last page of the test report had been added.

Question #6:

Thank you for your suggestion, we'll use the unit dBuV/m instead uV/m next time and list frequencies, actual readings and results in the test tables. But I think that it is not necessary to list antenna factors and cable factors in the test table. Because test receiver ESCS30 and ESI26 can calculate the transducer factor on the basis of sampling points, which are defined by frequency and transducer factor and the unit that determines the unit of the level display. For frequency between the known sampling points the transducer factor is approximated using modified spline interpolation. The test results listed in the test tables and displayed in the scan graphs have been amended by the testing instrument, so the test engineer needn't recalculated the test results. Is that OK?

Question #7:
Thank you again.

Question #10:
Class/Severity on page 7 of the test report had been taken out.

Question #11:
The duty cycle plot and duty cycle correction are on page 19 of the test report named *AN04T4341 test report FCC2004-0007*. You can see the entire period of pulse train, the number of pulses and the length of the pulse in this plot. The calculation is above the plot.

If you have any other questions, please let me known immediately.
Thank you for your cooperation.

Best wishes,
Wang Xiaoyan
EMC Testing Dept. of GTIHEA

Helen Zhao

From: Helen Zhao **Sent:** Tue 11/16/2004 4:38 PM
To: Xinlu Yu (GTIHEA) (E-mail)
Cc:
Subject: FW: GUANGZHOU GKB ELECTRIC CO., LTD., FCC ID: SDGGKB7U-360, Assessment NO.: AN04T4341, Notice#1
Attachments:

Dear Mr. Yu,

Please kindly address the following questions regarding FCC ID: SDGGKB7U-360.

Thank you,
Helen

-----Original Message-----
From: Compliance Certification Services [mailto:hzhao@ccsemc.com]
Sent: Tuesday, November 16, 2004 4:04 PM
To: Helen Zhao
Subject: GUANGZHOU GKB ELECTRIC CO., LTD., FCC ID: SDGGKB7U-360, Assessment NO.: AN04T4341, Notice#1

Question #1: The user manual does not contain user information required in FCC15.21. Please add the following statement into the user manual: "Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment."

Question #2: Please provide setup photos of both front view and rear view.

Question #3: The user manual said the device is one part of Wireless 2-Way Intelligent Control System. Please explain what kind of signals the receiver will send to the control panel. Please explain why the test report said the device is an intentional radiator, however fundamental field strength is reported undetectable. If the device is a receiver only, without transmission function, please remove 15.231 test data including duty-cycle and 20dB bandwidth measurements from the test report, but keep the data per 15.107 and 15.109 requirements.

Question #4: Based upon ANSI C63.4, Power Line conducted emission testing must be done with Neutual line and hot line. But the test report does not indicate clearly that both lines have been investiaged.

Question #5: Please add one more column to indicate calibration date of each Test Equipment listed on the last page of the test report.

Question #6: It's suggested in future, on the test tables, you list frequencies, actual readings, Antenna factors, cable factors, duty cycle factors, results(after calculation), compared with FCC limits. (If the limit is in the unit of dBuV/m, please just use the same unit, do not use uV/m for instance.)

Question #7: This is for your information, for two-way devices, since they can transmit and receive at the same time, the proper "Equipment of Class" should be "DSR - Part 15, Remote Control/Security Device transceiver" instead of "DSC - Part 15, Security/Remote Control Transmitter." For receiver only device, the proper "Equipment of Class" should be "CRR - Part 15, Superregenerated receiver" if it is a Superregenerated receiver or "CYY - Part 15 Communication Receiver used w/Part 15 TX" if it it is not a superregenerative receiver.

Please answer the following questions only when the device is a transceiver(can transmit and receive at the same time):

Question #8: Please provide Functional Block Diagram showing frequency of all oscillators in the device.

Question #9: Please provide Operational Description to brief describe the circuit functions of the device along with a statement describing how the device operates.

Question #10: Page 7 of the test report indicates Class B as Class/Severity. Please take it out since Class B is not applied to

intentional radiators.

Question #11: It shows the duty cycle correction factor is -22.4dB, but there are no enough plots to support it. Please provide additional duty cycle plot to show the entire period of pulse train, the nujber of pulses, and the length of the pulse.

Best regards,
Helen Zhao

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.

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