

October 20, 2010

RE: ATCB009142 – Original Equipment & Single Certification Applications (model UHR2)

FCC ID: KOBGTE10A & IC: 3521A-GTE10A for Lear Corporation

The following is in response to the comments made on the above referenced application.

1. This device does not appear to meet the requirements in KDB 926416 in two modes of operation as follows: (1) the programming mode and (2) normal operating mode when transmitting a rolling code signal. As the operational description states, during the programming mode for fixed code operation, multiple signals are transmitted until the button is released. This type operation is not addressed by KDB 926416. Also in the normal operating mode a 390 and 315 MHz signal are transmitted sequentially when transmitting a rolling code. There will probably be instances where either the 390 or 315 MHz signal are not used by an accompanying receiver. The second paragraph of KDB 926416 states "All frequencies transmitted must operate with a receiver (or receivers) as part of an operating system that makes use of all the frequencies transmitted. A system that transmits on multiple frequencies when a set of the frequencies is not utilized by a receiver (or receivers) as part of an operating system is not permitted. For a system that can use different combinations or sets of multiple frequencies depending on different installed configurations, the applicant must demonstrate how they ensure that the installed configuration only employs frequencies operating with a receiver (or receivers) as part of an operating system."

Please contact the FCC directly to have them determine whether this system meets the requirements of KDB 936416 in the programming mode and in the normal mode transmitting a rolling code. As a TCB, I cannot interpret the FCC Rules or policies. Please provide me a copy of any response received from the FCC regarding this device.

The FCC approval for moving forward has been uploaded.

2. In the submitted test report, the 318 MHz data for TM #2 with a duty factor of - 4.4 dB uses different amplifier gain factors below 956 MHz than are used for TM #1. For the 636 MHz emission, if the amplifier gain factors are used from TM #1 on the results for TM #2, this emission is over the FCC limit. Please address this discrepancy and apparent non-compliance with the FCC Rules. (I note other minor differences in antenna or amplifier gain factors but they are only +/- 0.1 dB. The amplifier factors for the 318 MHz TM #2 are different by +/- 1.0 dB and when the compliance margin is - 0.3 dB, it makes a difference).

Amplifier gain (which in our tables includes cable loss) is measured separately for each round of measurements. If weather conditions change significantly over the course of one or more days, the cable loss and amplifier gain can be impacted. Thus, we take care to measure our cable loss + amplifier gain at the time measurements are performed.

3. In the submitted test report, Figure 6.1(i) at the top of the page 23 of 27 shows a constant modulation envelope, in other words, no pulse modulation. Without a plot showing the complete pulse train, the duty cycle correction factor cannot be verified. Please address this discrepancy.

Please note that the encoding employed (as demonstrated in the second two plots of this figure) has a repetition period of 48.5 microseconds. At that repetition rate, the spectrum analyzer peak detects the "on" signal in all of its 401 bins in the first plot demonstrating the device's response in a 100 ms sweep time. The data presented clearly demonstrates that the device operates with a duty cycle of 25.5 us / 48.5 us in a worst case 100 ms window.