

RE: OMRON Automotive Elect. Co. Ltd.
FCC ID: OUC22273285
IC: 850K-22273285
ATCB017686

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

1. Both the Block Diagram and the Operational Description reference a carrier frequency of 134.2 kHz, while the fundamental frequency is shown to be 134.9 kHz in (ACB) Form 731, the IC Test Report Cover Sheet, and the EMC test report. Please clarify.

Manufacturer declared frequency is 134.2 kHz. Measured frequency of the test sample was 134.9 kHz, and is thus the frequency of operation reported for certification.

2. The IC Test Report Cover Sheet lists AM modulation, but the Operational Description appears to reference FSK – please clarify.

The operational description references an FSK demodulator, used as part of the passive coil detection circuitry in the EUT. The EUT transmits an AM 134 kHz signal.

3. Section 1.1 of the EMC report references ANSI C63.4-2009. Please note that both Section 2.910(c)(1) and RSS-Gen Section 3 require the 2014 version of this Standard. If the procedures used to test the EUT comport with the requirements in the 2014 version, then the test report should be revised to indicate this. Please address.

The Test report has been updated.

4. Section 1.2 of the EMC report shows a Tektronix spectrum analyzer that is listed as being past its cal due date during the testing period, however, it appears that no data in the report was obtained with this spec an (the HP was apparently used). If this is the case, then the Tektronix spec an should be removed from the equipment list. Please clarify.

The equipment list has been corrected.

5. In Tables 5 and 6 in the EMC report, the pre-amp gain/CL values are listed as “.0” for each reading (at different frequencies) - please clarify.

Cable loss measured across the range of frequencies in the tables provided was less than 0.1 dB and was thus reported as 0.0 dB.

6. RSS-102 Section 2.5 requires that, when Annex C is submitted, information regarding how the EIRP or output level was determined (that was used to qualify the EUT for the exemption from routine evaluation) also be submitted (see Note 3 in the (ACB) IC Annex C document). Please submit this required information.

EIRP is permitted to be computed from the measured electric field strength of the EUT.

$EIRP (dBm) = E3m (dBuV/m) - 95.2 \text{ dB}$

$E3m (dBuV/m) = -27.5 \text{ dBuV/m (E300m)} + 114.6 \text{ dB (CF)} = 87.1 \text{ dBuV/m}$

$EIRP (dBm) = 87.1 \text{ dBuV/m} - 95.2 \text{ dB} = -8.1 \text{ dBm}$