RF Exposure Statement: 50001232 002

Client:	**Hitachi Automotive Systems, Ltd.** 2520 Takaba Hitachinaka-shi, Ibaraki 312-8503 Japan
Test item:	**CAN GW**
Identification:	**SIB01-001A**

FCC Requirement

According to FCC 2.1091, mobile equipment must comply with the following applicable limit for maximum permissible exposure (MPE) specified in FCC 1.1310:

Equipment Use	Frequency Range	Power Density [mW/cm^2]	Average Time [min]
General Population / Uncontrolled Exposure	1.5 – 100GHz	1	30

IC Requirement

According to RSS-102 (Issue 4), clause 2.5.2, no routine RF exposure evaluation is required if the transmitter has a minimum separation distance to the user greater than 20cm and has an output power (e.i.r.p.) below the following threshold:

Frequency Range	RF Exp. Evaluation Threshold [W]
Above 1.5GHz	5

Measurement Result

The maximum measured transmitter power is given in the following table:

Conducted Output Power P_{out} [mW]	Maximum Antenna Gain [dBi]	EIRP Output Power [mW]	Power Density at 20cm [mW/cm^2]
1.50	0.1	1.53	$3.05*10^{-4}$

Note:

The power density S in mW/cm^2 is calculated according to the Friis formula: $S = (P_{out} \cdot G) / (4\pi \cdot D^2)$, where
P_{out} = antenna conducted output power in mW,
G = antenna gain in linear scale (here: 0.1dBi = 1.023 linear),
D = distance between observation point and radiating structure in cm (here: 20cm).

Conclusion

The EUT is a mobile product specified by customer.
The device complies with the FCC and IC RF exposure requirements since the maximum transmitter power density is below the FCC limit and the e.i.r.p. output power is below the IC RF exposure evaluation exemption threshold.

Refer to test report 50001232 001 for more details.