

Test Report

Prepared for: ITERIS, Inc

Model: DENSO-BT-RSU-SPECTRA

Description: C-V2X Road Side Unit (RSU)

Project #: p2580009

Test Results: Pass

FCC ID: OVH-BTSPCV2X54940

To

FCC Part 1.1310

Date of Issue: November 5, 2025

On the behalf of the applicant:

Iteris, Inc
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Attention of:

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ISED Site Reg. #2044A-2

Reviewed / Authorized By:



Madhava Gooduru
EMC RF Test Engineer

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Test Report Revision History

Revision	Date	Revised By	Reason for Revision
Rev 1.0	11/5/2025	Madhava Gooduru	Original Document

ANAB

Compliance Testing, LLC, has been accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to the joint ISO-ILAC-IAF Communiqué dated January 2009).

The tests results contained within this test report all fall within our scope of accreditation, unless noted below.

Please refer to <http://www.compliancetesting.com/labscope.html> for current scope of accreditation.



EUT Description

Model:	DENSO-BT-RSU-SPECTRA
Serial:	A00250840661
Firmware:	SPECTRA-1040__DENSO-0.3.03_rc2
Software:	DNA
HVIN	SPECTRA-HW04.00.06__DENSO-PCBA-HW5940.MP1.0
PMN	SPECTRA_DENSO5940_RSU
UPN	DNA
FVIN	SPECTRA-FW1040__DENSO-FWv0.3.03_rc2
Description:	Road Side Unit – Bluetooth Detector/CV2X
Additional Information:	The EUT is a Road Side Unit transmitting the 5905-5925 MHz frequency band using 10 MHz bandwidth per channel. It supports transmission and reception on 2 antennas simultaneously (Tx/Rx antenna diversity). Supported channels: 183
Antenna	6dBi external omni directional Antenna with N-Female connector
Power	48VDC thru POE
Receipt of Sample(s):	9/10/2025
EUT Condition:	Visual Damage No State of Development Production/Production Equivalent

MPE Evaluation

The EUT is a fixed device used in an Uncontrolled Exposure environment.

Limits Uncontrolled Exposure 47 CFR 1.1310 Table 1, (ii)

0.3-1.34 MHz:	Limit [mW/cm ²] = 100
1.34-30 MHz:	Limit [mW/cm ²] = (180/f ²)
30-300 MHz:	Limit [mW/cm ²] = 0.2
300-1500 MHz:	Limit [mW/cm ²] = f/1500
1500-100,000 MHz	Limit [mW/cm ²] = 1.0

Note:

Worst case RF exposure calculations were calculated using the highest gain antenna and the highest of the measured output power.

The limit for this frequency range is independent of the test frequency.

The Bluetooth (BT) module (Brand: Feasycm Model: FSC-BT909C; FCC ID: 2AMWOFSC-BT909C, Antenna gain=2dBi, Antenna type= dipole) is co-located in this EUT.

MPE Calculation formula
$S = \frac{P * G}{4\pi r^2}$
Power Density (S) mW/cm ²

MPE Calculation for Standalone operation

EUT (C-V2X module)

Test Frequency, MHz	5915
Power,EIRP mW (P)	1644.37
Antenna Gain Isotropic	6 dBi
Antenna Gain Numeric (G)	3.98
Antenna Type	dipole
Distance (R)	20 cm

Calculated Power Density (S) = 0.327 mW/cm²
Limit = (from above table 1) = 1 mW/cm ²

BT Module (from FCC ID: 2AMWOFSC-BT909C)

Test Frequency, MHz	2480
Power,EIRP mW (P)	19.498
Antenna Gain Isotropic	2 dBi
Antenna Gain Numeric (G)	1.58
Antenna Type	dipole
Distance (R)	20 cm

Calculated Power Density (S) = 0.00613 mW/cm²
Limit = (from above table 1) = 1 mW/cm ²

MPE calculation for Simultaneous Transmission

As per 47 CFR 1.1307 paragraph (b)(3)(ii)(B), The formula for the calculated MPE is as below when C-V2X and BT transmit simultaneously

$$\sum_{i=1}^a \frac{P_i}{P_{th,i}} + \sum_{j=1}^b \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^c \frac{Evaluated_k}{Exposure Limit_k} \leq 1$$

Transmission Type	MPE _{calculated} /MPE _{Limit}
C-V2X	0.327
BT	0.00613
Simultaneous Transmission	0.33313

The calculated sum of standalone Transmissions is **0.33313** which is less than 1.

Result: **Pass**

END OF TEST REPORT