



Application for Certification For a Transmitter.

Netradyne Inc.
9171 Towne Centre Drive, Suite 110
San Diego, CA 92122

VDI3N001 Vehicle Data Logger

M/N: VDI3N001

FCC ID: 2AM8R-VDI3N
IC:23098-VDI3N

REPORT # UT56008B-003

This report was prepared in accordance with the requirements of the FCC Rules and Regulations Part 2, Subpart J, 2.1033, Part 15.247, RSS-247 Issue 4, and other applicable sections of the rules as indicated herein.

Prepared By:

DNB Engineering, Inc.
1100 E Chalk Creek Road
Coalville, UT 84017

1 Feb 2026

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Paragraph numbers in this report follow the application section numbers found in the FEDERAL COMMUNICATIONS COMMISSION Rules and Regulations, Part 2, Subpart J for Certification of electronic equipment.

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REVISION HISTORY				
Rev	Pgs	Init	Description	Date
001	All	LP	Original Release	15 Dec 2024
002	All	LP	Update and make corrections	10 Dec 2025
003	All	LP	Retake all plot measurements with Peal/Avg detectors	1 Feb 2026
003a	3,6	LP	Add correct ANSI C63 references and update rev pg	13 May 2026

General information:

This report shall not be reproduced without the written approval of DNB ENGINEERING, INC. Results contained in this report relate only to the item tested.

Note: This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. government.

This is a statement required by NVLAP in our ISO/IEC17025 accreditation process. What this means is the testing performed does not carry any governmental sponsorship. The efforts of the Accrediting Agency relate only to documented processes and not the actual test conduct. It in no way diminishes the validity or value of the test results. It only assigns ultimate responsibility for the result of testing to the test laboratory, not the U.S. government.

1.0 ADMINISTRATIVE DATA

1.1 Certifications and Qualifications

I certify that DNB Engineering, Inc conducted the tests performed in order to obtain the technical data presented in this application. Also, based on the results of the enclosed data, I have concluded that the equipment tested meets or exceeds the requirements of the Rules and Regulations governing this application.

1.2 Measurement Repeatability Information

The test data presented in this report has been acquired using the guidelines set forth in FCC Part 2.1031 through 2.1057, Part 15. The test results presented in this document are valid only for the equipment identified herein under the test conditions described. Repeatability of these test results will only be achieved with identical measurement conditions. These conditions include: The same test distance, EUT Height, Measurement Site Characteristics, and the same EUT System Components. The system must have the same Interconnecting Cables arranged in identical placement to that in the test set-up, with the system and/or EUT functioning in the identical mode of operation (i.e. software and so on) as on the date of the test. Any deviation from the test conditions and the environment on the date of the test may result in measurement repeatability difficulties.

All changes made to the EUT during the course of testing as identified in this test report must be incorporated into the EUT or identical models to ensure compliance with the FCC regulations.



C. L. Payne III (Para. 1.1)
Facility Manager
Coalville Facility.
DNB Engineering, Inc.
Tel. (435) 336-4433
FAX (435) 336-4436

1.3 Test Equipment List

TEST EQUIPMENT LIST - RADIATED EMISSIONS					
Description	Manufacturer	Model No.	Asset #	Serial #	Cal Due
Pre-Amplifier	Hewlett Packard	8447D	U-068	2727A06184	26 Jul 2026
Pre-Amplifier	DNB	S-21G	U-095	U-095-1	03 Aug 2026
DRG Horn Antenna	AH Systems	SAS-571	U-071	417	13 Dec 2026
BiConiLog Antenna	ETS	3142E	U-255	154973	1 Nov 2026
Spectrum Analyzer	Rhode & Schwarz	FSV30	U-248	101367	26 Apr 2026
TILE Software	ETS- Lindgern	3.4.11.13	U-317	8112006	26 Jul 2026
Site 1 Cable - Rad	DNB	DNB	U-400B	1.2	5 Dec 2026
HF Cable	TRU Corporation	210	U-066	TRU-21B1111-080M	13 Aug 2026

TEST EQUIPMENT LIST - ANTENNA CONDUCTED					
Description	Manufacturer	Model No.	Asset #	Serial #	Cal Due
Spectrum Analyzer	Rhode & Schwarz	FSV30	U-248	101367	26 Apr 2026
20dB Attenuator	Inmet	64671	U-316	U-316	25 Jul 2026

UT56008B-003a - Single page update

1.4 Test Summary Cross Reference

Test Item	FCC Requirement	IC Requirement	Test Method	Result
Antenna Requirement	15.203/15.247	RSS-Gen 6.8	---	Pass
Conducted Emissions (General Provisions)	15.207	RSS-Gen 8.8	ANSI C63.10-2020	N/A
Radiated Emissions (General Provisions)	15.209	RSS-Gen 8.9	ANSI C63.10-2020	Pass
Output Power (DTS)	15.247 (b,2)	RSS-247 6.3.2	ANSI C63.10-2020 Clause 11.9.1.1	Pass
Power Spectral Density	15.247 (e)	RSS-247 6.3.1 a	ANSI C63.10-2020 Clause 11.10.2	Pass
Band-edge RF Conducted	15.247 (d)	RSS-247 6.6	ANSI C63.10-2020 Clause 11.13.2	Pass
DTS Bandwidth	15.247 (a,2)	RSS-247 6.3.1 b	ANSI C63.10-2020 Clause 11.8.1	Pass
Conducted Spurious	15.247 (d)	RSS-247 6.6	ANSI C63.10-2020 Clause 11.11.3	Pass
Radiated Spurious Emissions	15.247 (d)	RSS-247 6.6	ANSI C63.10-2020 Clause 11.12.2.7	Pass
Restricted Bands	15.247 (d)	RSS-Gen 8.10	ANSI C63.10-2020 Clause 11.12.2.2	Pass

ANSI C63.10-2020 + Cor.1-2023 + C63.10a-2024

RSS-GEN Issue 5 Feb 2021

RSS-247 Issue 4 Jul 2025

Preliminary scans were performed to determine worst case modulation, packet length, and data rates. Only worst case data has been recorded within the body of the test report.

1.5 Measurement Uncertainty

Measurement Type	Uncertainty
AC Conducted Emissions	± 1.67 dB
OATS - Radiated Emissions - Vertical Biconical (30-300MHz)	± 4.17 dB
OATS - Radiated Emissions - Horizontal Biconical (30-300MHz)	± 4.22 dB
OATS - Radiated Emissions - Vertical Log Periodic (300-100MHz)	± 4.92 dB
OATS - Radiated Emissions - Horizontal Log Periodic (300-1000MHz)	± 4.79 dB
OATS - Radiated Emissions - Vertical DRG Horn (> 1GHz)	± 5.74 dB
OATS - Radiated Emissions - Horizontal DRG Horn (>1GHz)	± 5.80 dB
Antenna Conducted Measurements	± 1.96 dB

2.1033 (b) (1) Application for Certification

Name of Applicant: Netradyne Inc.
9171 Towne Centre Drive, Suite 110
San Diego, CA 92122

FRN Number: 0026737700

Name of Manufacturer : IOSix LLC
1161 Oak Valley Dr
Ann Arbor, MI 48108

Description: VDI3N001 Vehicle Data Logger

Model Number(s): VDI3N001

Anticipated Production Quantity: Multiple Units

Frequency Band: 2412 - 2462 MHz

Rated Output Power: (Conducted)	802.11b	12.11 dBm	(16.26 mW)
	802.11g	16.40 dBm	(43.65 mW)
	802.11n20	16.50 dBm	(44.67 mW)

Type of Signal: Digital Transmission System (DTS)

Modulation Types:	802.11b	1M	2M	5.5M	11M					
	802.11g	6M	9M	12M	18M	24M	36M	48M	54M	
	802.11n20	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	

Antenna Type: Internal - Monopole - Meander

Antenna Gain: 1.95 dBi

2.1033 (b,2) FCC Identifier

Model Number:	VDI3N001
FCC ID:	2AM8R-VDI3N
IC:	23098-VDI3N

Label is Fiber Laser Etched using Monoport GM2
Font is Sans Serif



2.1033 (b,3)	Installation and Operating Instructions -	Supplied separately.
2.1033 (b,4)	Brief Description of Circuit Function -	Supplied separately.
2.1033 (b,5)	Block Diagram -	Supplied separately.
2.1033 (b,7)	Equipment Photographs -	Supplied separately.

2.1033 (b,6) Report of Measurements

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, §15.213, §15.217, §15.219, or §15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

Pass - Antenna gain is equal to or less than 1.95 dBi

Pass - Antenna is an internal meander antenna (Monopole)

15.207

Conducted Emissions - Not Applicable

Not Applicable EUT is intended to be installed in a vehicle and is connected to the vehicle battery. There is no direct or indirect connection to the AC Mains.

Test Procedure: ANSI C63.10-2020

The EUT was measured on an open area test site (OATS).

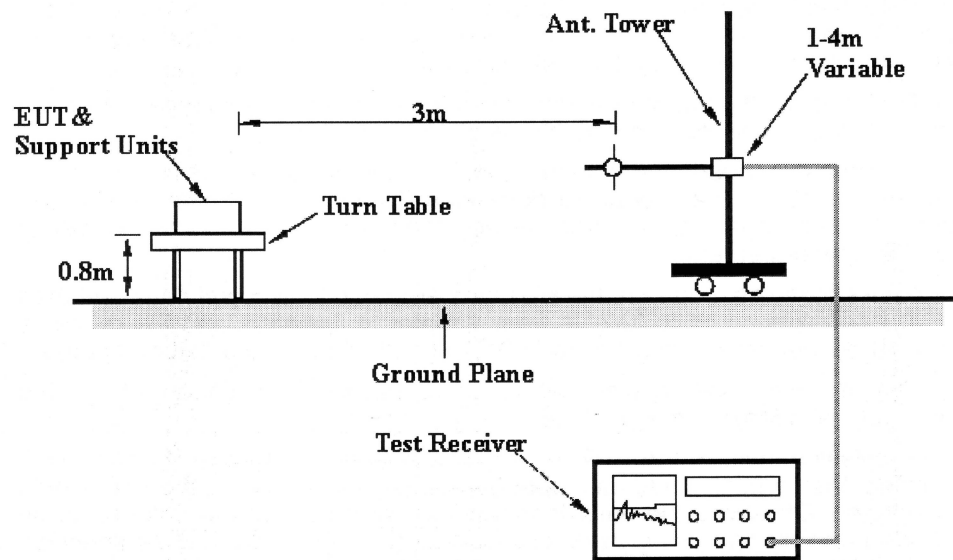
A measuring distance of at least 3 m shall be used for measurements at frequencies up to 1 GHz. For frequencies above 1 GHz, any suitable measuring distance may be used. The equipment size (excluding the antenna) shall be less than 20 % of the measuring distance.

Sufficient precautions shall be taken to ensure that reflections from extraneous objects adjacent to the site do not degrade the measurement results, in particular:

- no extraneous conducting objects having any dimension in excess of a quarter wavelength of the highest frequency tested shall be in the immediate vicinity of the site;
- all cables shall be as short as possible; as much of the cables as possible shall be on the ground plane or preferably below; and the low impedance cables shall be screened.
- EUT was positioned in three orthogonal axis - only the worst case data (X-Axis) has been recorded

The EUT shall be placed upon a non-conductive table (wooden for below 1GHz and styrene above 1GHz) 0.80 meters above the ground plane for frequencies from 30 to 1000MHz and 1.5 meters above the ground plane above 1 GHz and shall be placed in the “worst case” transmitting mode. The EUT shall be rotated 360 degrees to find the azimuth maxima. The receive antenna shall then be raised and lowered between 1 to 4 meters to find the maximum signal emanating from the EUT. This signal strength is then recorded on the data sheets.

Frequency (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measurement Distance (meters)
.0009 - 0.490	2400/F(kHz)	20*(Log ₁₀ (2400/F(kHz)))	300
0.490 - 1.705	24000/F(kHz)	20*(Log ₁₀ (24000/F(kHz)))	30
1.705 - 30.0	30	29.5	30
30 - 88	100	40.0	3
88 - 216	150	43.5	3
216 - 960	200	46.0	3
Above 960	500	54.0	3



		1100 E Chalk Creek Road Coalville, UT 84017 (435) 336-4433 FAX (435) 336-4436		Radiated Emissions (General)								
DNB Job Number:		56008		Date:		21 Oct 2025		Specification [X] 15.209 [X] ANSI C63.10-2020				
Customer:		Netradyne Inc.										
Model Number:		VDI3N001										
Description:		VDI3N001 Vehicle Data Logger										
EUT is in conformance with FCC 15.209				X	YES		NO	Signed		CL Payne		
Radiated Emissions												
FREQ (Mhz)	S/A Reading (dBuV/m)	Correction Factors (dB)			dBuV/m			Positions				
		Amp	Cbl	Ant	Corr	Lim	Delta	Typ	Tbl	Pl	Hgt	Axis
77.842	41.05	26.61	1.36	10.99	26.78	40.01	-13.23	QP	83	Horz	2.00	X-Axis
96.134	41.32	26.52	1.50	11.86	28.16	43.51	-15.35	QP	267	Horz	2.00	X-Axis
91.587	41.11	26.65	1.50	11.22	27.18	43.51	-16.33	QP	0	Vert	1.00	X-Axis
195.591	40.09	26.00	2.10	14.46	30.65	43.51	-12.86	QP	0	Vert	1.00	X-Axis
42.467	31.46	26.70	0.95	13.27	18.97	40.01	-21.03	QP	0	Vert	1.00	X-Axis
93.450	38.89	26.60	1.50	11.48	25.28	43.51	-18.23	QP	85	Horz	2.01	X-Axis
98.946	42.37	26.43	1.50	12.25	29.69	43.51	-13.82	QP	256	Horz	2.00	Y-Axis
195.558	39.13	26.00	2.10	14.46	29.69	43.51	-13.82	QP	256	Horz	2.00	Y-Axis
92.944	38.14	26.61	1.50	11.41	24.44	43.51	-19.07	QP	0	Vert	1.00	Y-Axis
91.543	38.68	26.65	1.50	11.22	24.74	43.51	-18.76	QP	0	Vert	1.00	Y-Axis
70.497	38.97	26.32	1.21	11.28	25.14	40.01	-14.86	QP	295	Vert	1.00	Y-Axis
92.688	33.66	26.62	1.50	11.38	19.92	43.51	-23.59	QP	336	Vert	1.00	Z-Axis
91.682	36.70	26.65	1.50	11.24	22.78	43.51	-20.73	QP	336	Vert	1.00	Z-Axis
196.134	40.32	26.00	2.10	14.46	30.88	43.51	-12.63	QP	77	Vert	1.00	Z-Axis
88.038	42.55	26.70	1.48	10.98	28.32	43.51	-15.19	QP	318	Vert	1.00	Z-Axis

11.9.1 Maximum peak conducted output power**11.9.1.1 $RBW \geq DTS$ bandwidth**

The following procedure shall be used when an instrument with a resolution bandwidth that is greater than the DTS bandwidth is available to perform the measurement:

- a) Set the $RBW \geq DTS$ bandwidth.
- b) Set $VBW \geq [3 \times RBW]$.
- c) Set span $\geq [3 \times RBW]$.
- d) Sweep time = auto couple.
- e) Detector = peak.
- f) Trace mode = max hold.
- g) Allow trace to fully stabilize.
- h) Use peak marker function to determine the peak amplitude level.

Requirement: FCC Part 15.247 Clause (b,3)

15.247 Operation within the bands 2400-2483.5 MHz.

- (b) The maximum peak conducted output power of the intentional radiator shall not exceed the following:
- (3) For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.

Limit : 1 watt or 30dBm

Client: Netradyne Inc.

Date: 30 Jan 2026

DNB Job: 56008

EUT: VDI3N001 Vehicle Data Logger

Model No: VDI3N001

Requirement ≤ 1 Watt or 30dBm

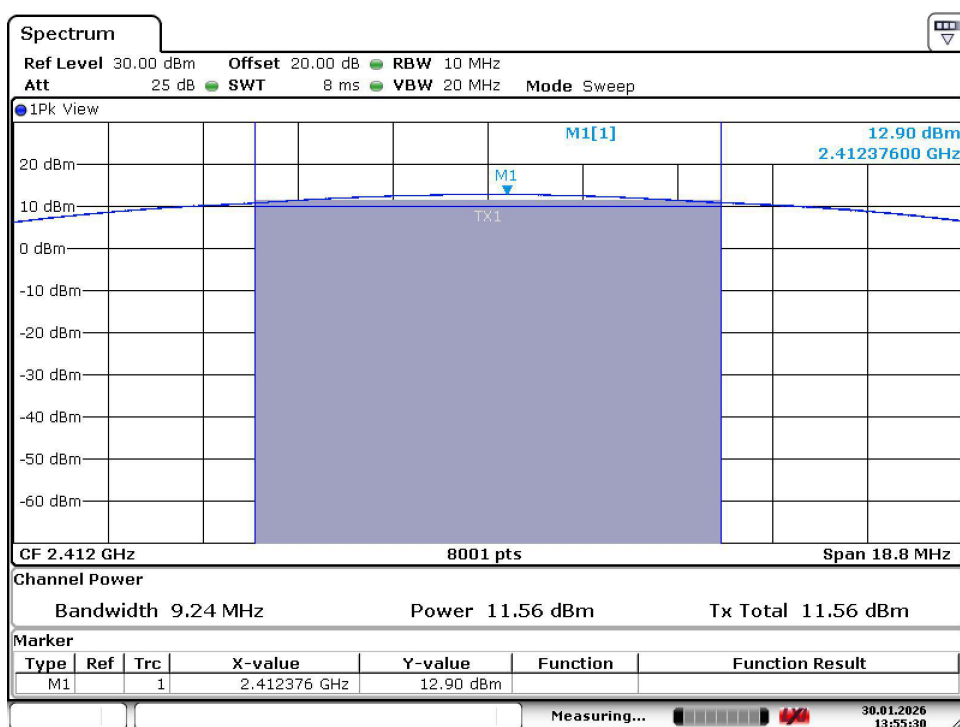
Tech: CL Payne

Modulation: 802.11b

Low Channel: 2412 MHz

Power: 11.56 dBm

Result: Pass



Date: 30.JAN.2026 13:55:31

Client: Netradyn Inc.

Date: 30 Jan 2026

DNB Job: 56008

EUT: VDI3N001 Vehicle Data Logger

Model No: VDI3N001

Requirement ≤ 1 Watt or 30dBm

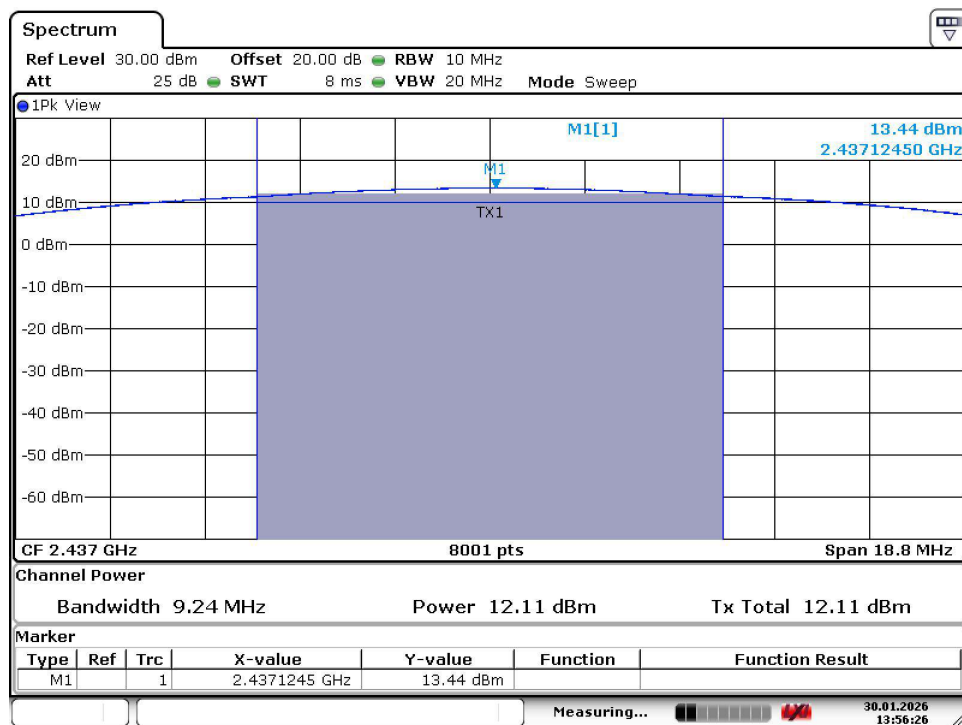
Tech: CL Payne

Modulation: 802.11b

Mid Channel: 2437 MHz

Power: 12.11 dBm

Result: Pass



Date: 30.JAN.2026 13:56:27

Client: Netradyn Inc.

Date: 30 Jan 2026

DNB Job: 56008

EUT: VDI3N001 Vehicle Data Logger

Model No: VDI3N001

Requirement ≤ 1 Watt or 30dBm

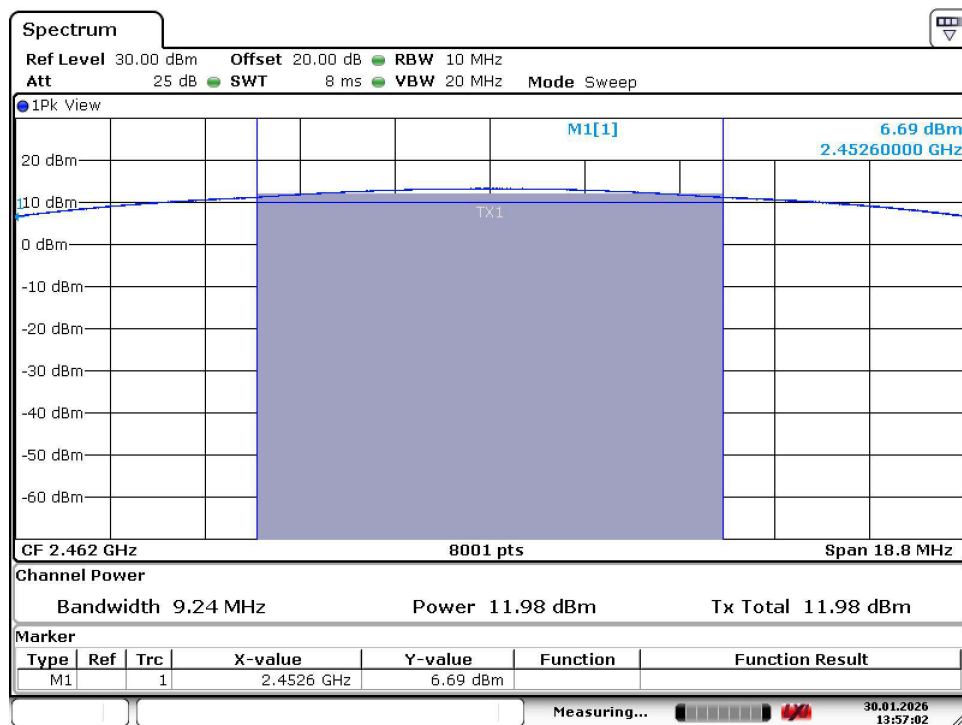
Tech: CL Payne

Modulation: 802.11b

High Channel 2462 MHz

Power: 11.98 dBm

Result: Pass



Date: 30.JAN.2026 13:57:03

Client: Netradyne Inc.

Date: 30 Jan 2026

DNB Job: 56008

EUT: VDI3N001 Vehicle Data Logger

Model No: VDI3N001

Requirement ≤ 1 Watt or 30dBm

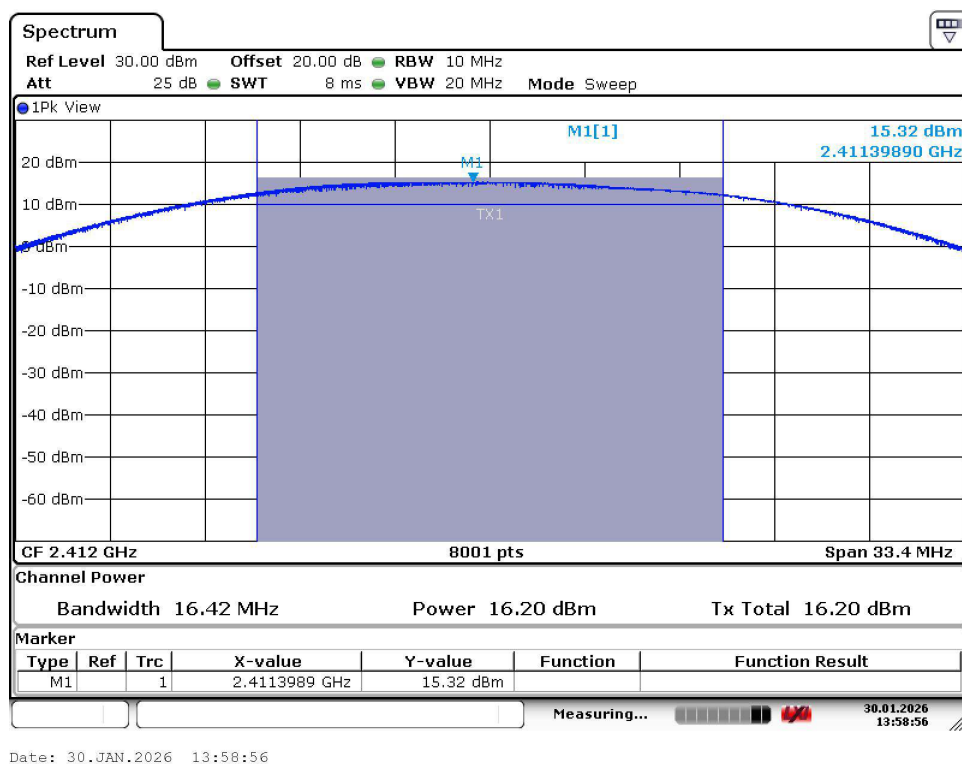
Tech: CL Payne

Modulation: 802.11g

Low Channel: 2412 MHz

Power: 16.20 dBm

Result: Pass



Client: Netradyne Inc.

Date: 30 Jan 2026

DNB Job: 56008

EUT: VDI3N001 Vehicle Data Logger

Model No: VDI3N001

Requirement ≤ 1 Watt or 30dBm

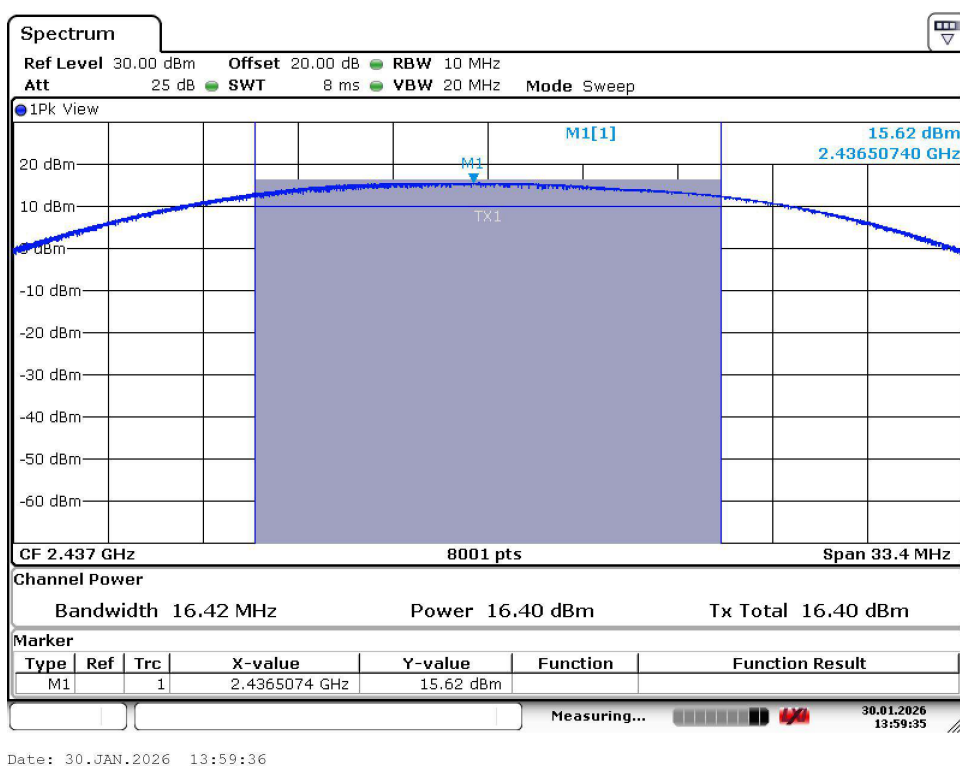
Tech: CL Payne

Modulation: 802.11g

Mid Channel: 2437 MHz

Power: 16.40 dBm

Result: Pass



Client: Netradyne Inc.

Date: 30 Jan 2026

DNB Job: 56008

EUT: VDI3N001 Vehicle Data Logger

Model No: VDI3N001

Requirement ≤ 1 Watt or 30dBm

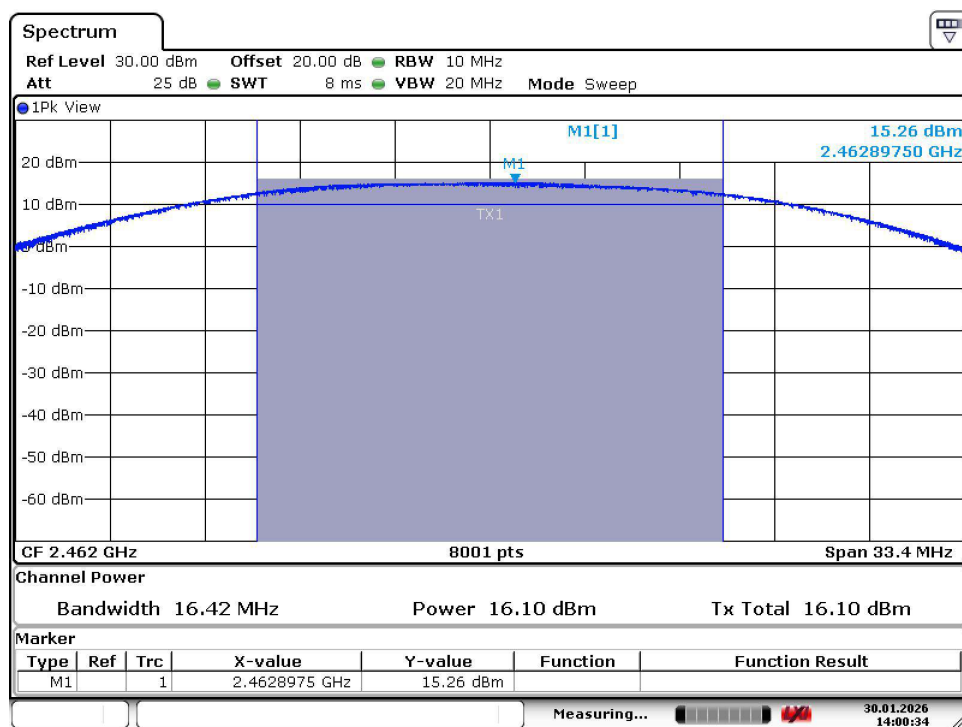
Tech: CL Payne

Modulation: 802.11g

High Channel: 2462 MHz

Power: 16.10 dBm

Result: Pass



Date: 30.JAN.2026 14:00:35

Client: Netradyme Inc.

Date: 30 Jan 2026

DNB Job: 56008

EUT: VDI3N001 Vehicle Data Logger

Model No: VDI3N001

Requirement ≤ 1 Watt or 30dBm

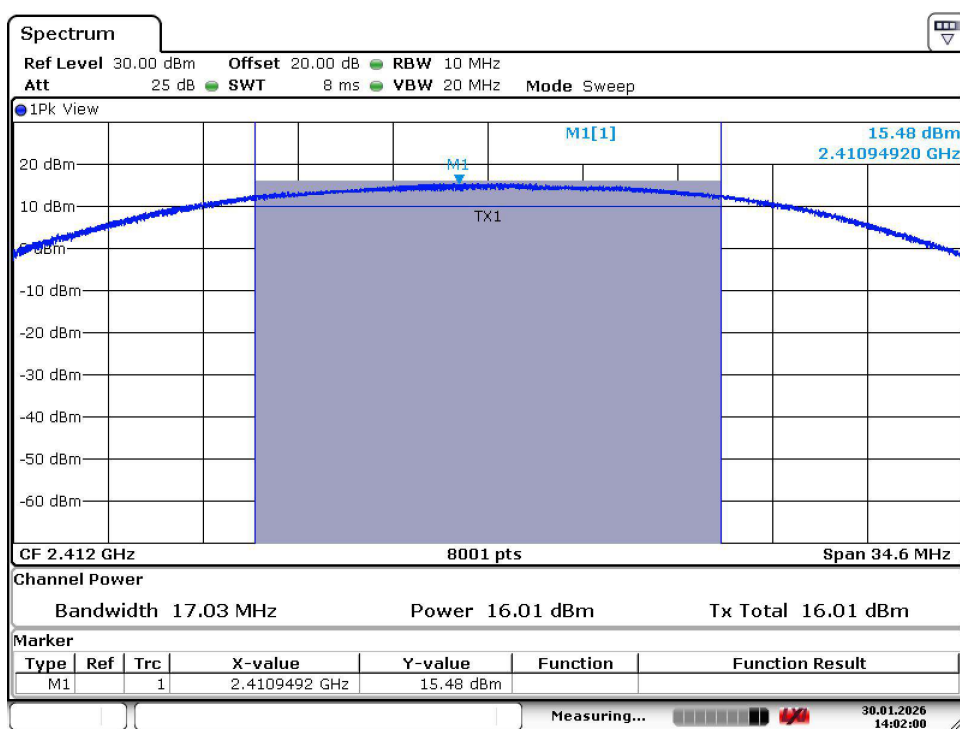
Tech: CL Payne

Modulation: 802.11n

Low Channel: 2412 MHz

Power: 16.01 dBm

Result: Pass



Date: 30.JAN.2026 14:02:01

Client: Netradyne Inc.

Date: 30 Jan 2026

DNB Job: 56008

EUT: VDI3N001 Vehicle Data Logger

Model No: VDI3N001

Requirement ≤ 1 Watt or 30dBm

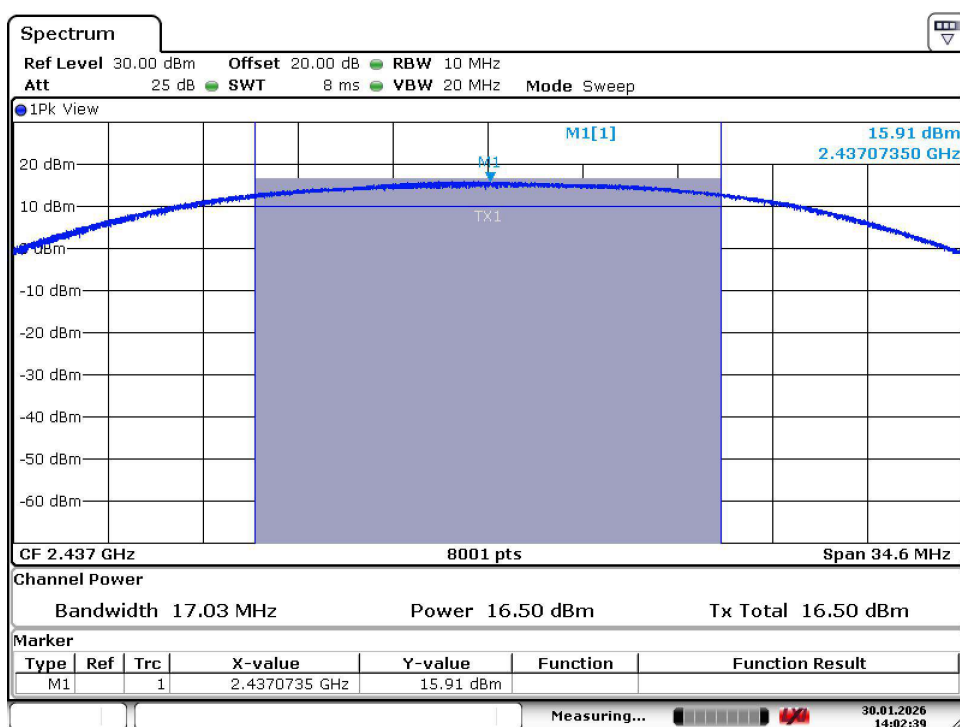
Tech: CL Payne

Modulation: 802.11n

Mid Channel: 2437 MHz

Power: 16.50 dBm

Result: Pass



Date: 30.JAN.2026 14:02:40

Client: Netradyn Inc.

Date: 30 Jan 2026

DNB Job: 56008

EUT: VDI3N001 Vehicle Data Logger

Model No: VDI3N001

Requirement ≤ 1 Watt or 30dBm

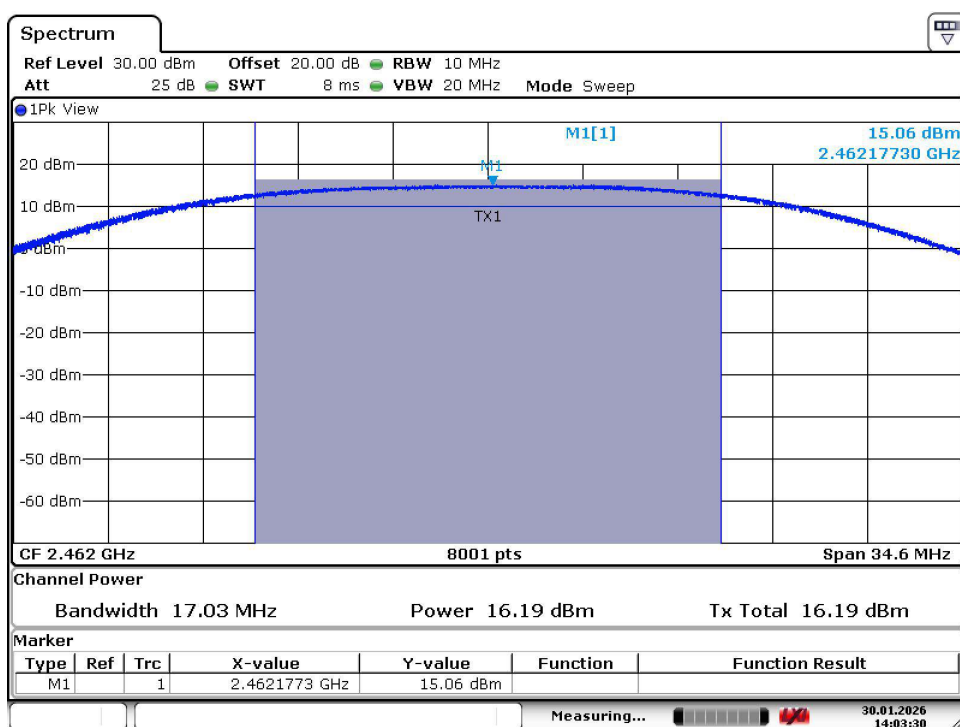
Tech: CL Payne

Modulation: 802.11n

High Channel: 2462 MHz

Power: 16.19 dBm

Result: Pass



Date: 30.JAN.2026 14:03:31