

COMPLIANCE WORLDWIDE INC. TEST REPORT 260-25R1

In Accordance with the Requirements of
FCC Title 47 CFR Part 15.519, Subpart F
Technical Requirements for Handheld UWB Systems

Issued to

Racelogic Ltd
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Osier Way, Buckingham, MK18 1TB United Kingdom

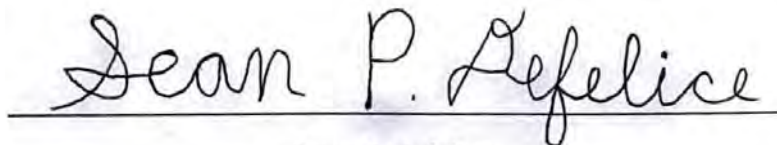
For the

VIPS Rover V6
Model: VIPS-R-V6

FCC ID: 2AU5C-VIPSR06

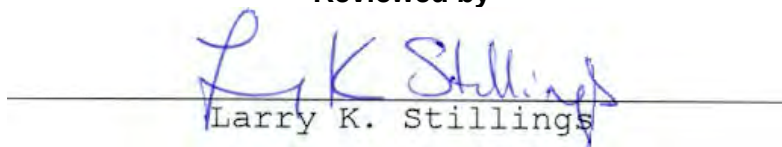
Report Issued on October 2, 2025
Revision R1 Issued on May 12, 2026

Tested by



Sean P. Defelice

Reviewed by



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1. Scope

This test report certifies that the Racelogic VIPS Rover V6 as tested, was evaluated against the FCC Part 15, Subpart F requirements. The scope of this test report is limited to the test sample provided by the client, only in as much as that sample represents other production units. If any significant changes are made to the unit, the changes shall be evaluated and a retest may be required. Measurement Uncertainty will not be applied to any of the measurement / testing results in this test report to determine pass/fail criteria per the Decision Rule as defined in ISO/IEC Guide 17025-2017 Clause 3.7. Revision R1 corrects the labels of the plots in Section 6.5 and adds the conducted emissions test data to Section 6.10 and test setup photos to Sections 8.8 and 8.9.

2. Product Details

2.1. Manufacturer:	Racelogic Ltd
2.2. Model Number:	VIPS-R-V6
2.3. Serial Number:	003
2.4. Description:	The VBOX Indoor Positioning System (VIPS) is a highly accurate way of measuring speed, position and attitude in areas where GNSS is not available. A network of independent beacons are placed around the edges of the test area, which communicate with a receiver (rover) mounted on the roof of a vehicle, using UWB.
2.5. Power Source:	5 VDC via USB
2.6. Hardware Version:	N/A
2.7. Software Revision:	N/A
2.8. Modulation Type:	Pulse Modulation, Frequency Hopping
2.9. Operating Frequencies:	4.5 GHz Center Frequency Nominal (Ch 3 – 500 MHz BW), 4.0 GHz Center Frequency Nominal (Ch 4 – 900 MHz BW), 6.5 GHz Center Frequency Nominal (Ch 7 – 900 MHz BW)
2.10. EMC Modifications:	None

3. Product Configuration

3.1 Operational Characteristics & Software

Hardware Setup:

Connect the VIPS-Rover V6 to the laptop to configure operation for either Channel 3 or Channel 4 or Channel 7 operation.

3. Product Configuration (cont.)

3.2. EUT Hardware

Device	Manufacturer	Manufacturer p/n	Serial No.
VIPS Rover V6	Racelogic	VIPS-R-V6	003

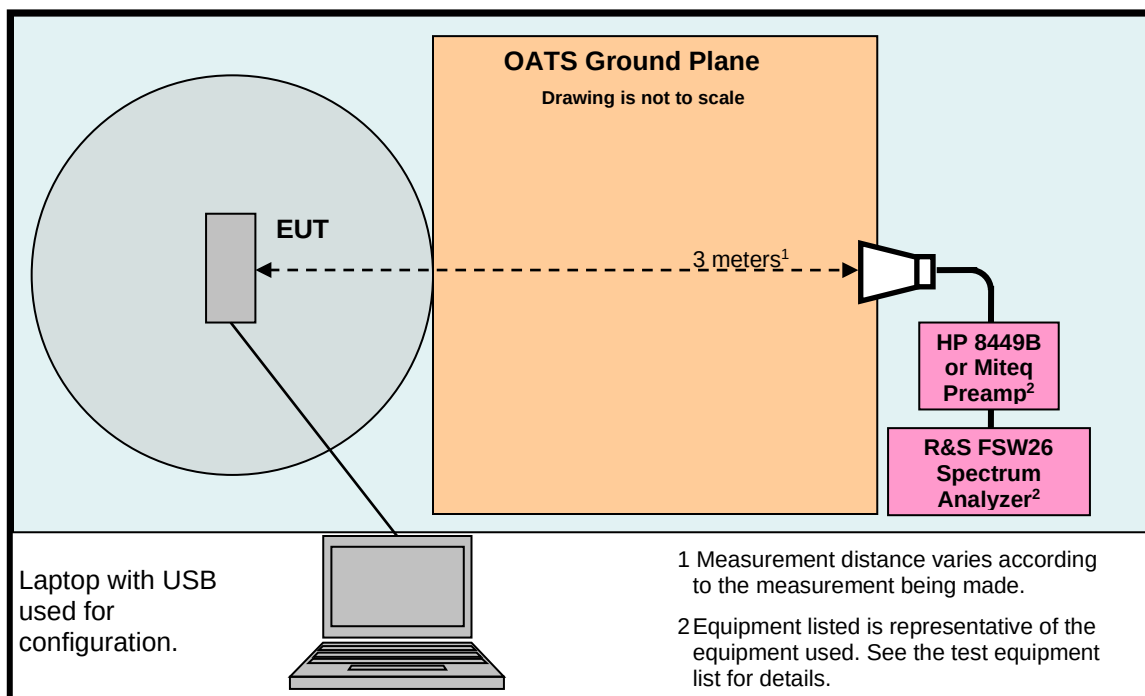
3.3. EUT Cables/Transducers

Cable Type	Length	Shield	From	To
Serial Cable	10M	No	EUT	RS-232 to USB Converter

3.4. Support Equipment

Device	Manufacturer	Model	Serial No.
Laptop	Lenovo	ThinkPad T440P	PB-031DX9
Power Supply	Lenovo	ADL135NLC3A	11S45N0365Z1ZX1D9937YT
Rover to USB	Racelogic	RLACS368	N/A

3.5. Test Setup Diagram



4. Measurements Parameters

4.1. Measurement Equipment Used to Perform Test

Device	Manufacturer	Model No.	Serial No.	Cal Due	Interval
EMI Test Receiver, 9 kHz – 7 GHz ¹	Rohde & Schwarz	ESR7	101156	10/25/2025	4 Years
EMI Test Receiver, 10 Hz – 7 GHz ¹	Rohde & Schwarz	ESR7	101770	7/23/2026	2 Years
EMI Test Receiver, 9 kHz – 26.5 GHz ¹	Rohde & Schwarz	ESR26	101693	6/26/2026	3 Years
Spectrum Analyzer, 2 Hz to 26.5 GHz ²	Rohde & Schwarz	FSW26	102057	7/19/2026	2 Years
Spectrum Analyzer, 9 kHz to 40 GHz ³	Rohde & Schwarz	FSV40	100899	6/27/2026	2 Years
Spectrum Analyzer 10 Hz – 40 GHz ⁴	Rohde & Schwarz	FSVR40	100909	9/18/2026	6 Years
Loop Antenna 9 kHz - 30 MHz	EMCO	6512	9309-1139	4/14/2026	4 Years
Biconilog Antenna, 30 MHz - 2 GHz	Sunol Sciences	JB1	A050913	7/1/2026	5 Years
Dbl Ridged Guide Antenna 1 - 18 GHz	ETS-Lindgren	3117	00143292	5/11/2026	4 Years
Dbl Ridged Guide Antenna 1 - 18 GHz	ETS-Lindgren	3117	00227631	4/21/2026	4 Years
Preamplifier 100 MHz to 7 GHz	Miteq	AFS3-00100200-10-15P-4	988773	9/28/2026	3 Years
Preamplifier 100 MHz to 18 GHz	Miteq	AMF-7D-00101800-30-10P	1953081	9/27/2026	3 Years
Preamplifier 2 to 12 GHz	JCA	JCA48-4111B1	7087S	9/28/2026	3 Years
Preamplifier 18 to 40 GHz	Miteq	JSD42-21004200-40-5P	649199/649219	9/27/2026	3 Years
Horn Antenna 18 to 40 GHz	Com Power	AH-840	101032	1/25/2026	4 Years
High Pass Filter 6.4 to 18 GHz	Micro-Tronics	HPM50112	014	2/27/2026	2 Years
High Pass Filter 7.2 to 18 GHz	Micro-Tronics	HPM50107	G036	2/27/2026	2 Years
Passband Filter 12 to 18.5 GHz	Wavecom	F2620A	16	2/27/2026	2 Years
LISN	EMCO	3825/2	9109-1860	4/17/2026	2 Years
Digital Barometer	Control Company	4195	ID236	3/15/2026	2 Years
Barometric Pressure/Humidity & Temp Datalogger	Extech Instruments	SD700	Q590483	4/4/2026	2 Years

¹ ESR7/26 Firmware revision: V3.48 SP3, Date installed: 09/30/2020

² FSW26 Firmware revision: V4.71 SP1, Date installed: 11/16/2020

³ FSV40 Firmware revision: V2.30 SP4, Date installed: 05/04/2016

⁴ FSVR40 Firmware revision: V2.23 SP1, Date installed: 08/19/2016

Previous V3.48 SP2, installed 07/23/2020.

Previous V4.61, installed 08/11/2020.

Previous V2.30 SP1, installed 10/22/2014.

Previous V2.23, installed 10/22/2014.

4. Measurements Parameters (continued)

4.2. Measurement & Equipment Setup

Test Dates:	9/19/2025, 9/22/2025, 9/23/2025, 9/30/2025, 10/1/2025, 10/17/2025
Test Engineers:	Sean Defelice
Normal Site Temperature (15 – 35 °C):	24
Relative Humidity (20 – 75 % RH):	40
Frequency Range:	30 MHz to 40 GHz
Measurement Distance:	3 Meters
EMI Receiver IF Bandwidth:	120 kHz - 30 MHz to 1 GHz 1 MHz - Above 1 GHz
EMI Receiver Avg Bandwidth:	>= 3 * RBW
Detector Function:	Peak, Quasi-Peak & Average
Antenna Height:	1 to 4 meters
Measurement Uncertainty 30 to 200 MHz:	± 4.76 dB (H), ± 4.88 dB (V)
Measurement Uncertainty 200 to 1 GHz:	± 5.01 dB (H), ± 5.00 dB (V)
Measurement Uncertainty 1 to 6 GHz:	± 5.17 dB
Measurement Uncertainty 6 to 18 GHz:	± 5.48 dB
Measurement Uncertainty 18 to 40 GHz:	± 5.49 dB

4.3. Measurement Procedure

Test measurements were made in accordance with FCC Part 15.519 Subpart F requirements.

The test methods used to generate the data in this test report is in accordance with ANSI C63.10:2020, American National Standard for Testing Unlicensed Wireless Devices.

4.4. Measurement Uncertainty

The following uncertainties are expressed for an expansion/coverage factor of K=2.

RF Frequency (out of band)	± 1x10 ⁻⁸
Radiated Emission of Transmitter to 100 GHz	± 4.55 dB
Radiated Emission of Receiver	± 4.55 dB
Temperature	± 0.91° C
Humidity	± 5%

5. Measurements Summary

Test Requirement	FCC Rule Requirement	Test Report Section	Result	Comment
Antenna Requirement	15.203	6.1	Compliant	
Operational Requirements	15.519 (a) (1)	6.2	Compliant	
UWB Bandwidth	15.503 (a) (d) 15.519 (b)	6.3	Compliant	
Radiated Emissions below 960 MHz	15.209	6.4	Compliant	
Radiated Emissions above 960 MHz	15.519 (c) 15.521 (d)	6.5	Compliant	
Radiated Emissions in GPS Bands	15.519 (d)	6.6	Compliant	
RMS Emissions of UWB Transmission in a 1 MHz Bandwidth	15.519 (c) 15.521 (d)	6.7	Compliant	
Peak Emissions in a 50 MHz Bandwidth	15.519 (e) 15.521 (g)	6.8	Compliant	
Conducted Emissions	15.207	6.9	N/A	

6. Measurement Data

6.1. Antenna Requirement (FCC Part 15.203)

Requirement: 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

Result: The antenna utilized by the device under test is a pcb mount conical type.

6. Measurement Data (continued)

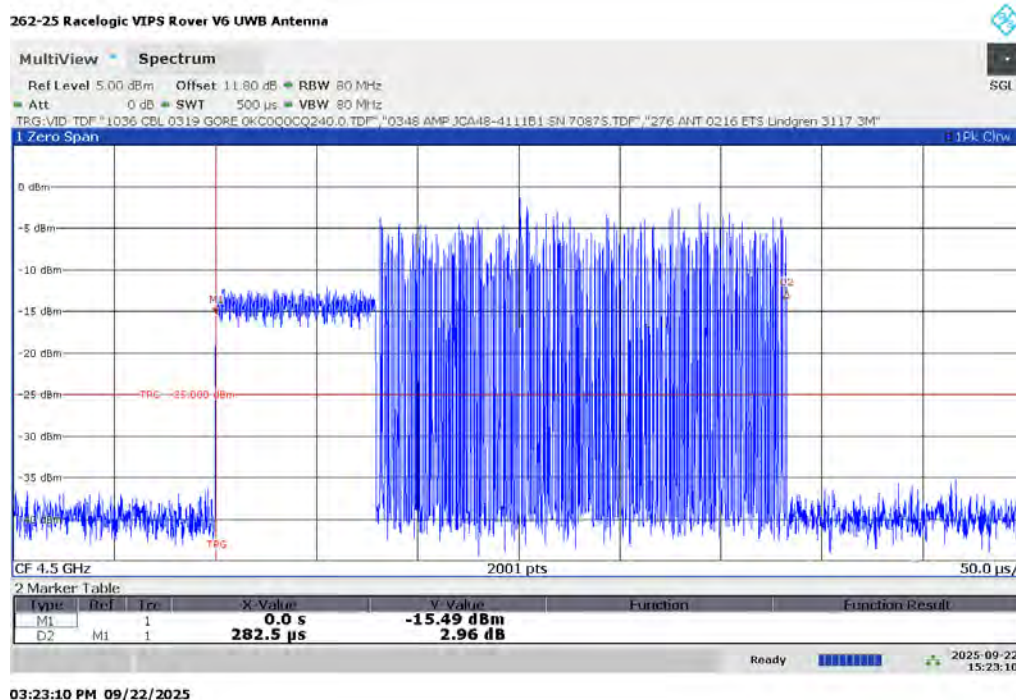
6.2. Operational Requirements of the Device under Test (15.519 (a) (1))

Requirement: UWB device operating under the provisions of this section must be hand held, i.e., they are relatively small device that are primarily hand held while being operated and do not employ a fixed infrastructure. UWB devices operating under the provisions of this section may operate indoors or outdoors.

A UWB device operating under the provisions of this section shall transmit only when it is sending information to an associated receiver. The UWB intentional radiator shall cease transmission within 10 seconds unless it receives an acknowledgement from the associated receiver that its transmission is being received. An acknowledgment of reception must continue to be received by the UWB intentional radiator at least every 10 seconds or the UWB device must cease transmitting.

Result: To facilitate testing, the EUT transmits a 282.5 μ S burst every 1.001 mS. When the device loses connection with an associated receiver, it tries to reconnect every 10.07 seconds.

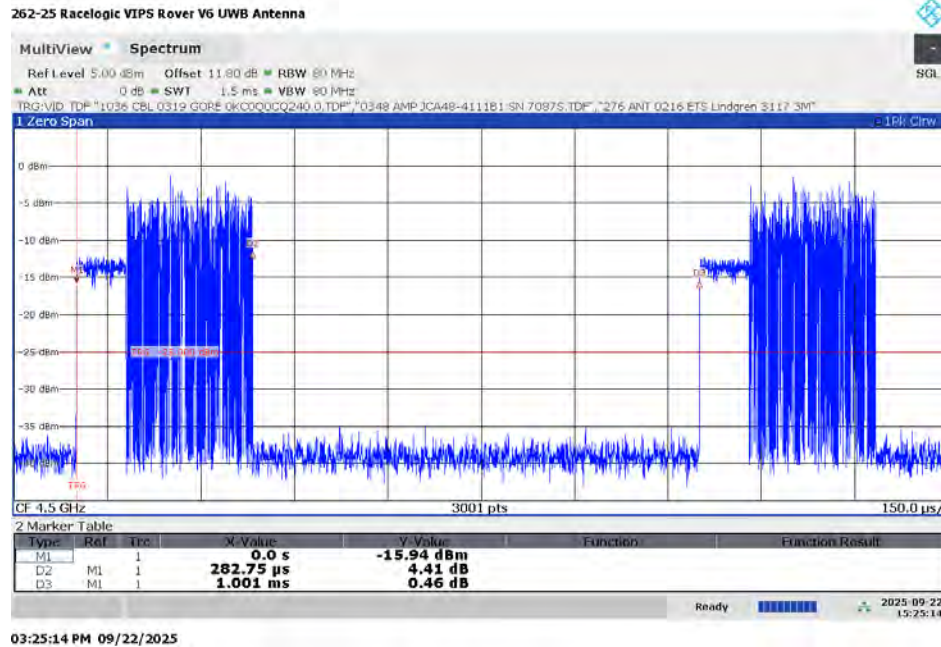
6.2.1 Plot of Transmission On-Time Channel 3



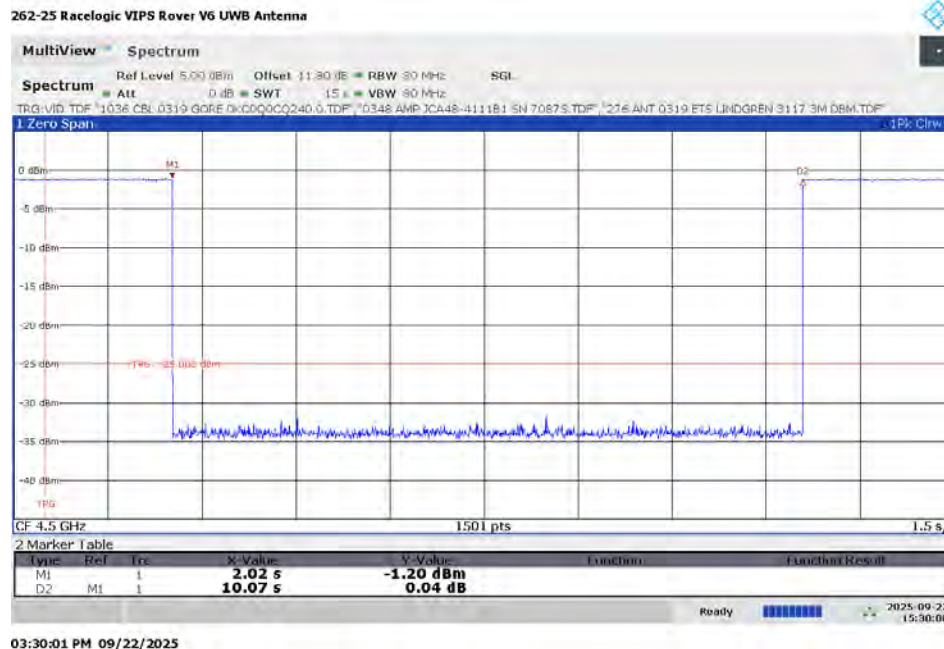
6. Measurement Data (continued)

6.2. Operational Requirements of the Device under Test (15.519 (a) (1))

6.2.2 Plot of Transmission Period – Channel 3



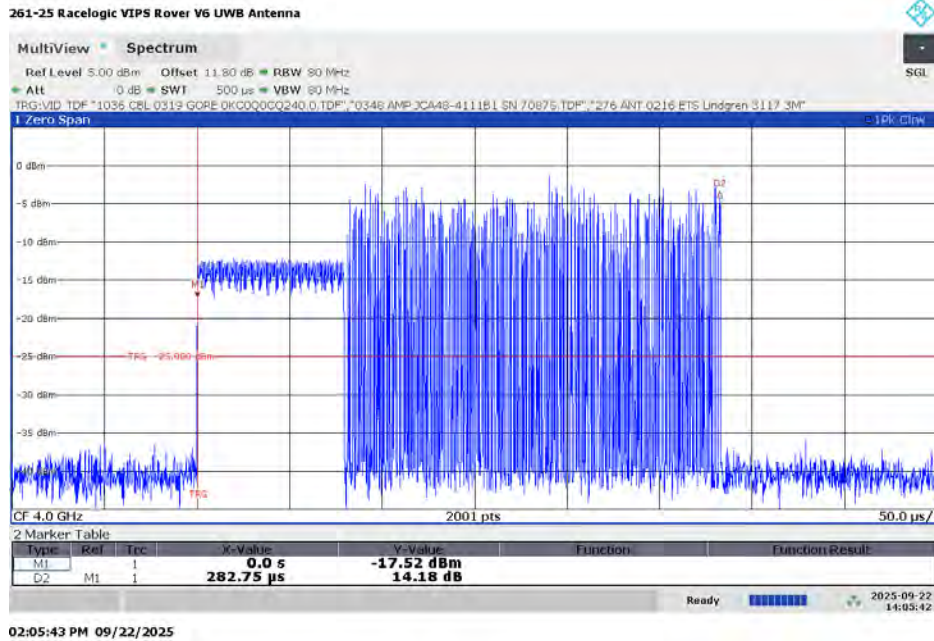
6.2.3 Plot of Reconnection signal – Channel 3



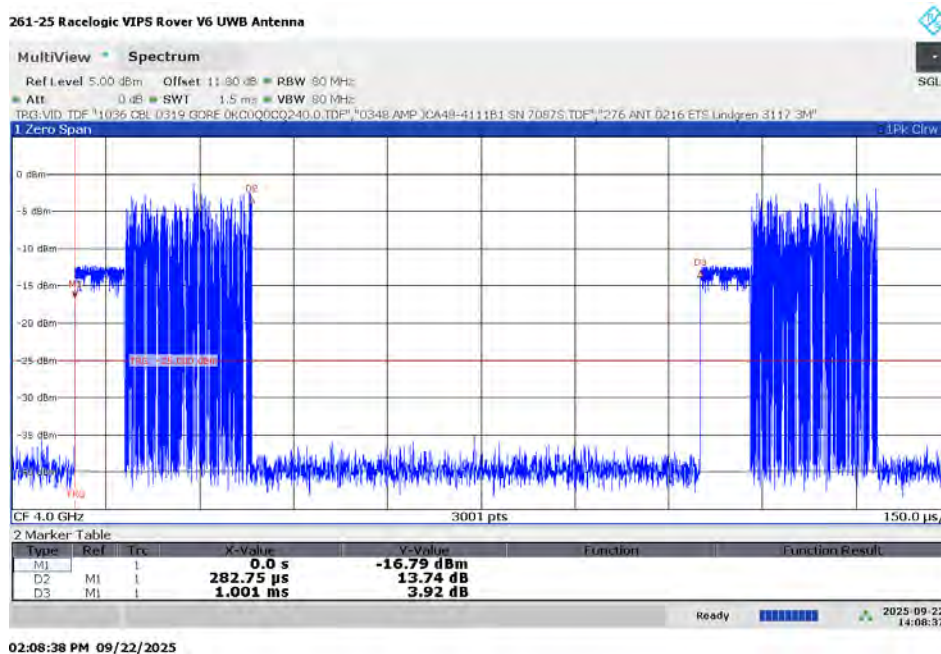
6. Measurement Data (continued)

6.2. Operational Requirements of the Device under Test (15.519 (a) (1))

6.2.4 Plot of Transmission On-Time Channel 4



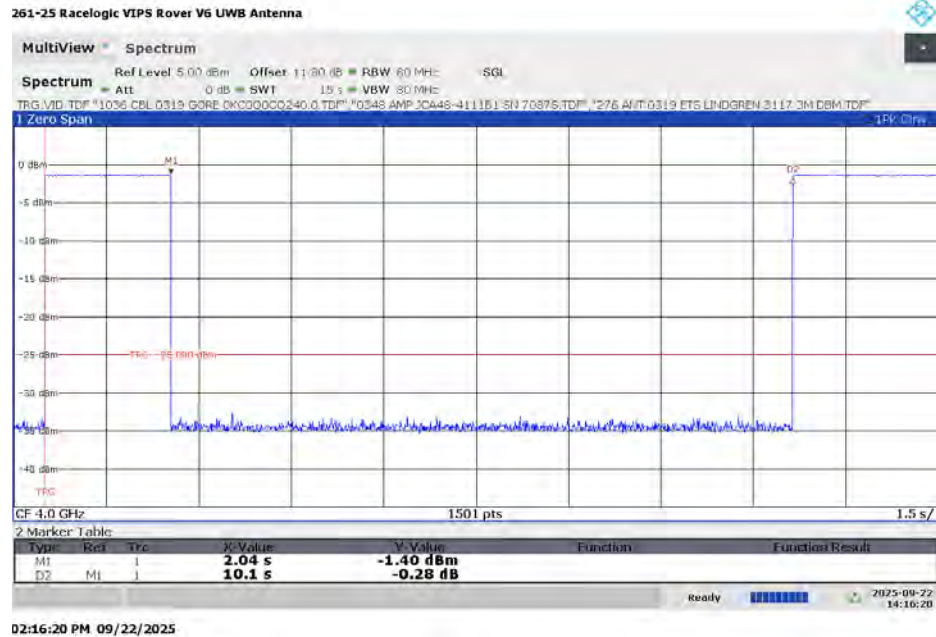
6.2.5 Plot of Transmission Period – Channel 4



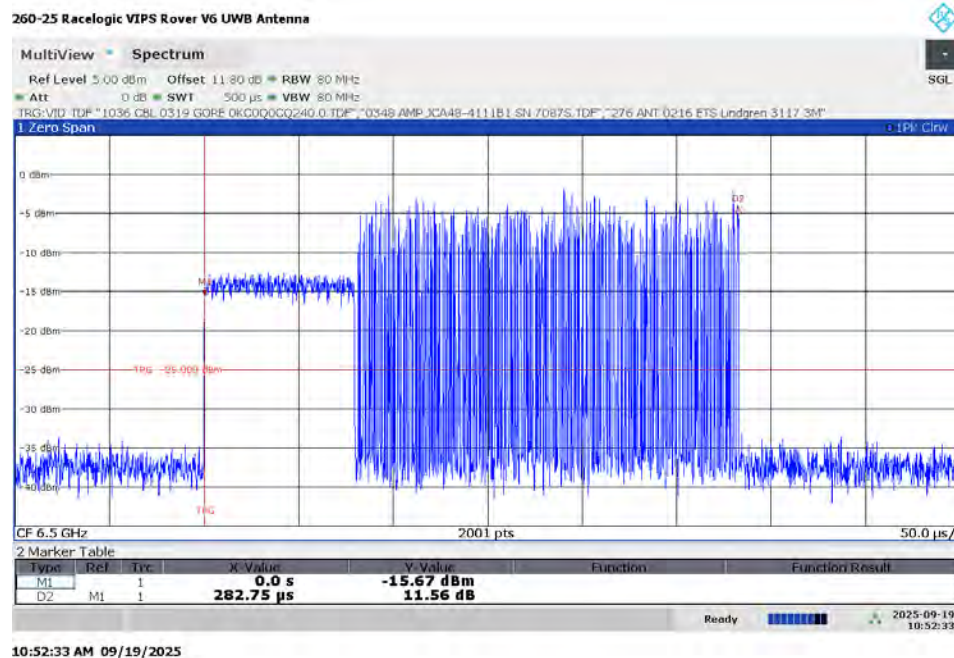
6. Measurement Data (continued)

6.2. Operational Requirements of the Device under Test (15.519 (a) (1))

6.2.6 Plot of Reconnection signal – Channel 4



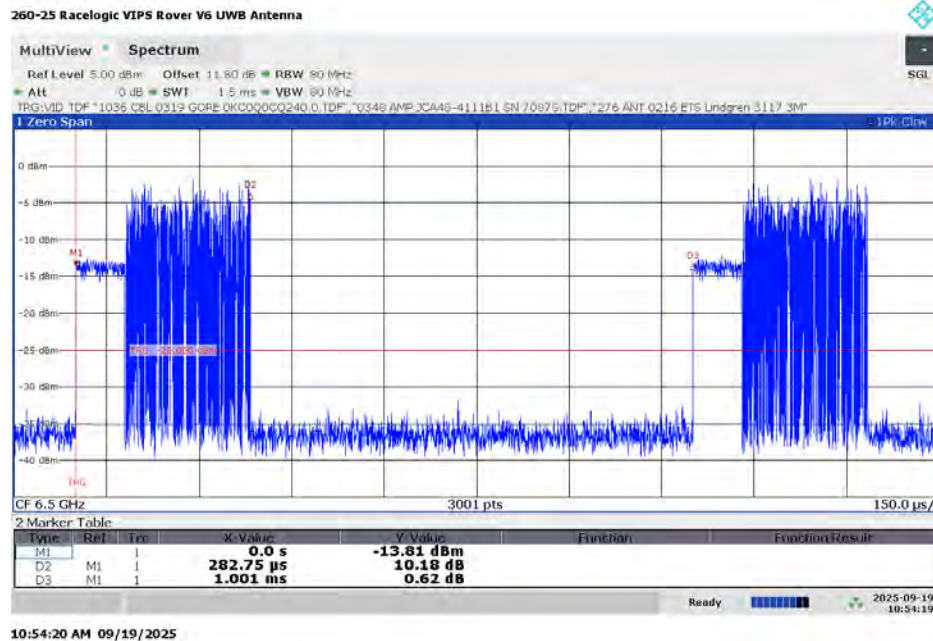
6.2.7 Plot of Transmission Period – Channel 7



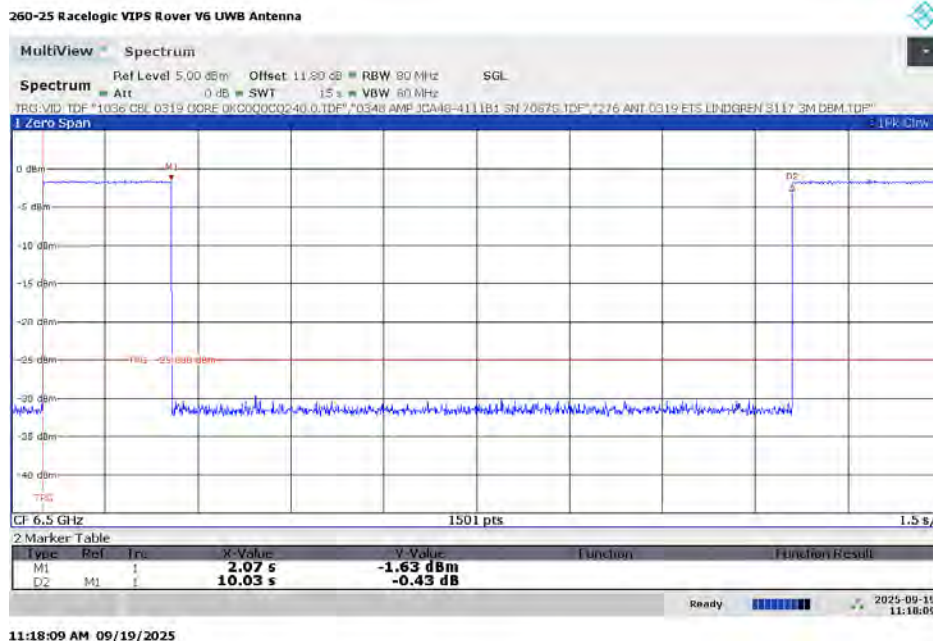
6. Measurement Data (continued)

6.2. Operational Requirements of the Device under Test (15.519 (a) (1))

6.2.8 Plot of Transmission Period – Channel 7



6.2.9 Plot of Transmission Period – Channel 7



6. Measurement Data (continued)

6.3. UWB Bandwidth (15.503 (a) (d), 15.519 (b))

Requirement: The UWB bandwidth of a device operating under the provisions of this section shall be contained between 3,100 MHz and 10,600 MHz and at any point in time and has a fractional bandwidth equal to or greater than 0.20 or has a UWB bandwidth equal to or greater than 500 MHz, regardless of the fractional bandwidth.

6.3.1. Measurement Data – Values in GHz – Channel 3

f_M	The highest emission peak	4.4960
f_L	10 dB below the highest peak	4.2872
f_H	10 dB above the highest peak	4.7957
f_C	Calculated: $(f_H + f_L) / 2$	4.5415
Bandwidth	Calculated: $(f_H - f_L)$	0.5085
Fractional BW	Calculated: $2*(f_H - f_L) / (f_H + f_L)$	0.1120

6.3.2. Measurement Plot of 10 dB frequencies – Channel 3



6. Measurement Data (continued)

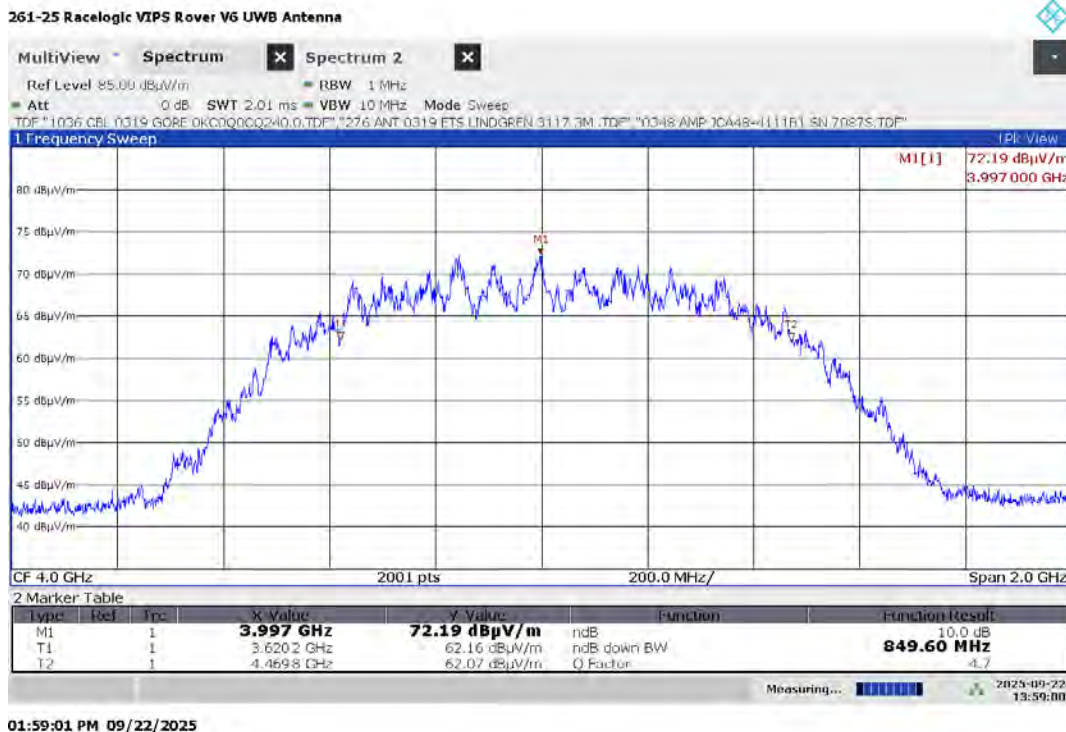
6.3. UWB Bandwidth (15.503 (a) (d), 15.519 (b))

Requirement: The UWB bandwidth of a device operating under the provisions of this section shall be contained between 3,100 MHz and 10,600 MHz and at any point in time and has a fractional bandwidth equal to or greater than 0.20 or has a UWB bandwidth equal to or greater than 500 MHz, regardless of the fractional bandwidth.

6.3.3. Measurement Data – Values in GHz – Channel 4

f_M	The highest emission peak	3.9970
f_L	10 dB below the highest peak	3.6202
f_H	10 dB above the highest peak	4.4698
f_C	Calculated: $(f_H + f_L) / 2$	4.0450
Bandwidth	Calculated: $(f_H - f_L)$	0.8496
Fractional BW	Calculated: $2*(f_H - f_L) / (f_H + f_L)$	0.2100

6.3.4. Measurement Plot of 10 dB frequencies – Channel 4



6. Measurement Data (continued)

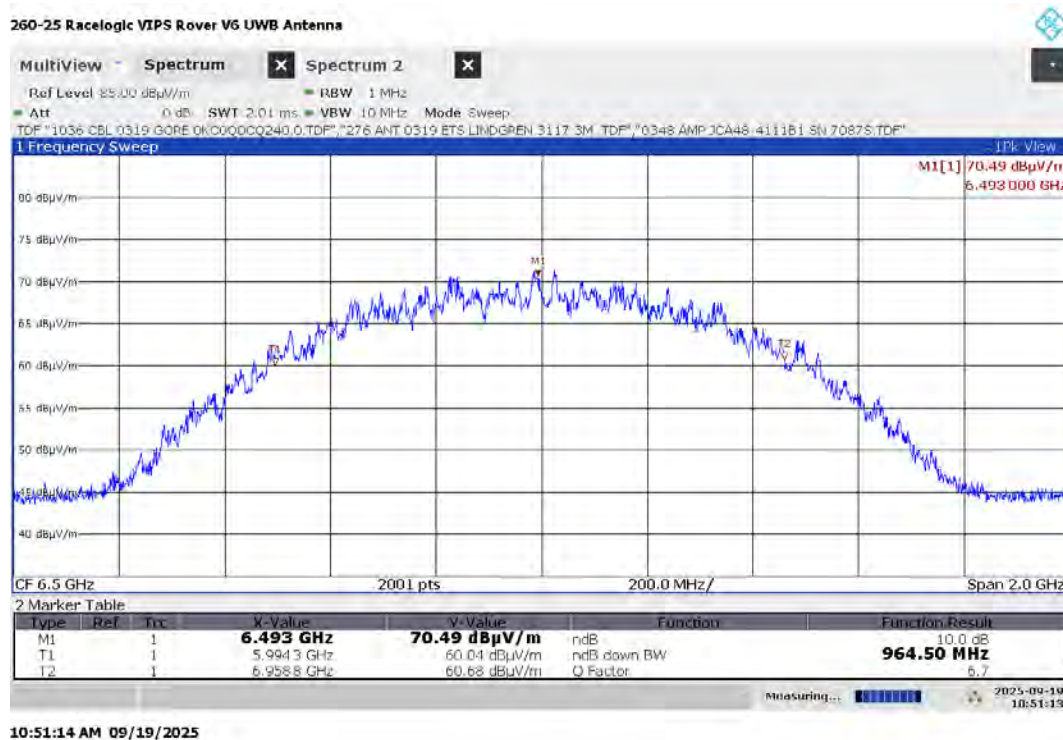
6.3. UWB Bandwidth (15.503 (a) (d), 15.519 (b))

Requirement: The UWB bandwidth of a device operating under the provisions of this section shall be contained between 3,100 MHz and 10,600 MHz and at any point in time and has a fractional bandwidth equal to or greater than 0.20 or has a UWB bandwidth equal to or greater than 500 MHz, regardless of the fractional bandwidth.

6.3.5. Measurement Data – Values in GHz – Channel 7

f_M	The highest emission peak	6.4930
f_L	10 dB below the highest peak	5.9943
f_H	10 dB above the highest peak	6.9588
f_C	Calculated: $(f_H + f_L) / 2$	6.4766
Bandwidth	Calculated: $(f_H - f_L)$	0.9645
Fractional BW	Calculated: $2*(f_H - f_L) / (f_H + f_L)$	0.1489

6.3.6. Measurement Plot of 10 dB frequencies – Channel 7



6. Measurement Data (continued)

6.4. Spurious Radiated Emissions below 960 MHz (15.519 (c), 15.209)

Requirement: The radiated emissions at or below 960 MHz from a device operating under the provisions of this section shall not exceed the emission levels in Section 15.209.

Radiated Emissions Field Strength Limits at 3 Meters (Section 15.209)

Frequency (MHz)	Field Strength ($\mu\text{V/m}$)	Field Strength ($\text{dB}\mu\text{V/m}$)
0.009 to 0.490	2,400/F (F in kHz)	128.5 to 93.8
0.490 to 1.705	24,000/F (F in kHz)	73.8 to 63
1.705 - 30	30	69.5
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46

Test Notes: Refer to Section 4.1 for the test equipment used.

Frequency Range:	30 kHz to 960 MHz
Measurement Distance:	3 Meters
EMI Receiver IF Bandwidth:	200 Hz – 30 kHz to 150 kHz 9 kHz – 150 kHz to 30 MHz 120 kHz - 30 MHz to 960 MHz
EMI Receiver Avg Bandwidth:	$\geq 3 * \text{RBW or IF(BW)}$
Detector Function:	Peak, Quasi-Peak & CISPR Average

Sample Calculation: Final Result ($\text{dB}\mu\text{V/m}$) = Measurement Value ($\text{dB}\mu\text{V}$) + Antenna Factor (dB/m) + Cable Loss (dB) – Pre-amplifier Gain (dB) Internal or External.

Note: All correction factors are loaded into the measurement instrument prior to testing to determine the final result.

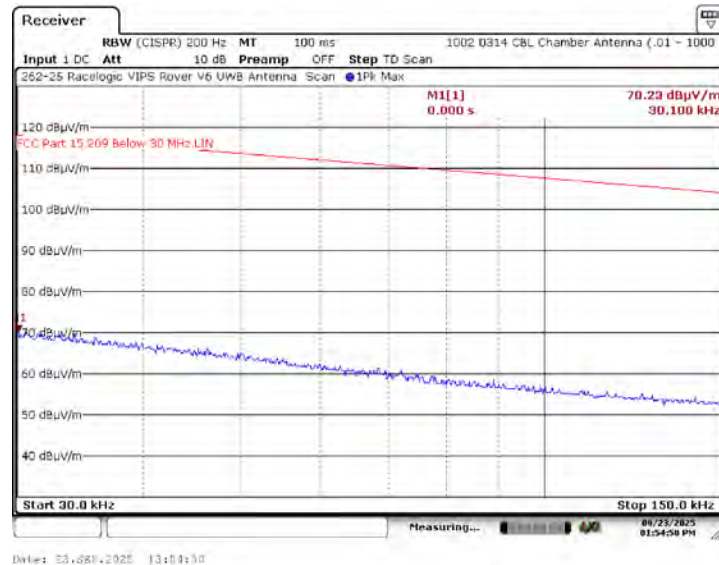
6. Measurement Data (continued)

6.4. Spurious Radiated Emissions (15.209, continued)

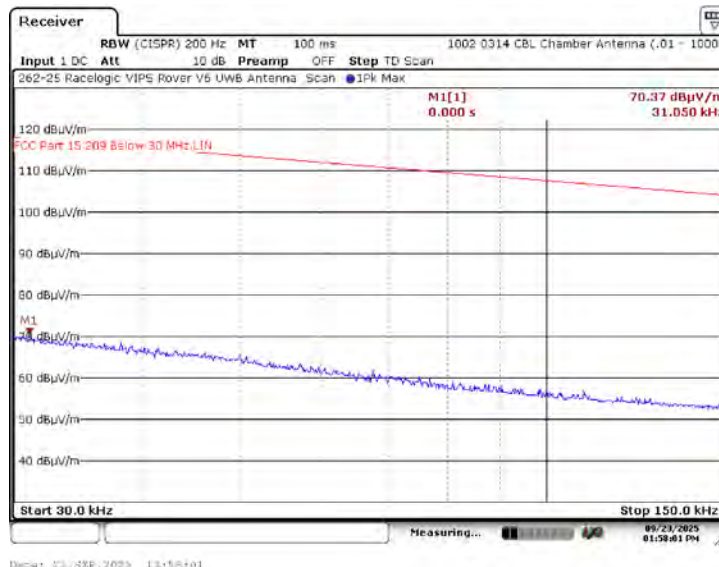
6.4.1. 30 kHz to 960 MHz, measured at 3 Meters

The device was prescreened in our 3 Meter Semi-Anechoic Chamber. There were no measurable emissions below 960 MHz on our 3 Meter OATS.

6.4.1.1 Parallel Measurement Antenna – 30 to 150 kHz, CH3



6.4.1.2 Perpendicular Measurement Antenna – 30 to 150 kHz, CH3



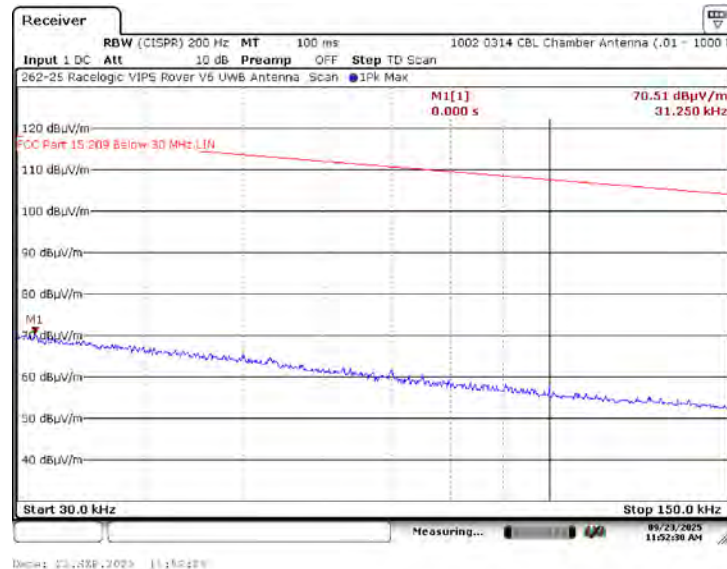
6. Measurement Data (continued)

6.4. Spurious Radiated Emissions (15.209, continued)

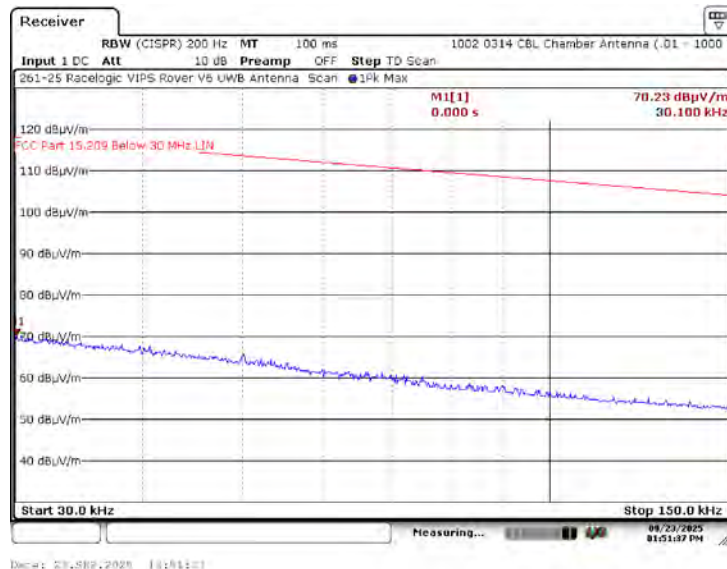
6.4.1. 30 kHz to 960 MHz, measured at 3 Meters

The device was prescreened in our 3 Meter Semi-Anechoic Chamber. There were no measurable emissions below 960 MHz on our 3 Meter OATS.

6.4.1.3 Ground Parallel Measurement Antenna – 30 to 150 kHz, CH3



6.4.1.4 Parallel Measurement Antenna – 30 to 150 kHz, CH4



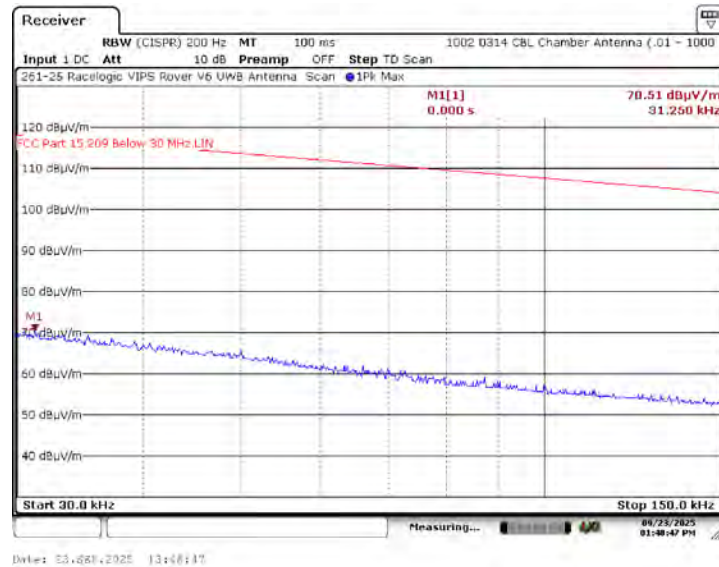
6. Measurement Data (continued)

6.4. Spurious Radiated Emissions (15.209, continued)

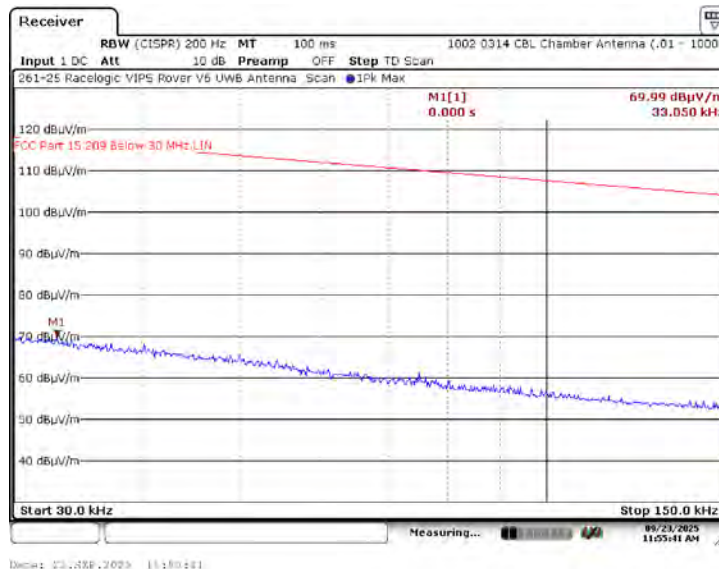
6.4.1. 30 kHz to 960 MHz, measured at 3 Meters

The device was prescreened in our 3 Meter Semi-Anechoic Chamber. There were no measurable emissions below 960 MHz on our 3 Meter OATS.

6.4.1.5 Perpendicular Measurement Antenna – 30 to 150 kHz, CH4



6.4.1.6 Ground Parallel Measurement Antenna – 30 to 150 kHz, CH4



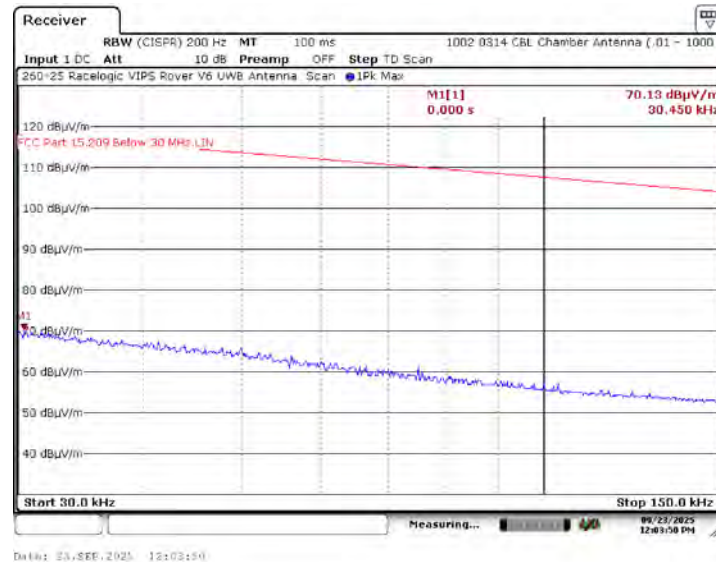
6. Measurement Data (continued)

6.4. Spurious Radiated Emissions (15.209, continued)

6.4.1. 30 kHz to 960 MHz, measured at 3 Meters

The device was prescreened in our 3 Meter Semi-Anechoic Chamber. There were no measurable emissions below 960 MHz on our 3 Meter OATS.

6.4.1.7 Parallel Measurement Antenna – 30 to 150 kHz, CH7



6.4.1.8 Perpendicular Measurement Antenna – 30 to 150 kHz, CH7



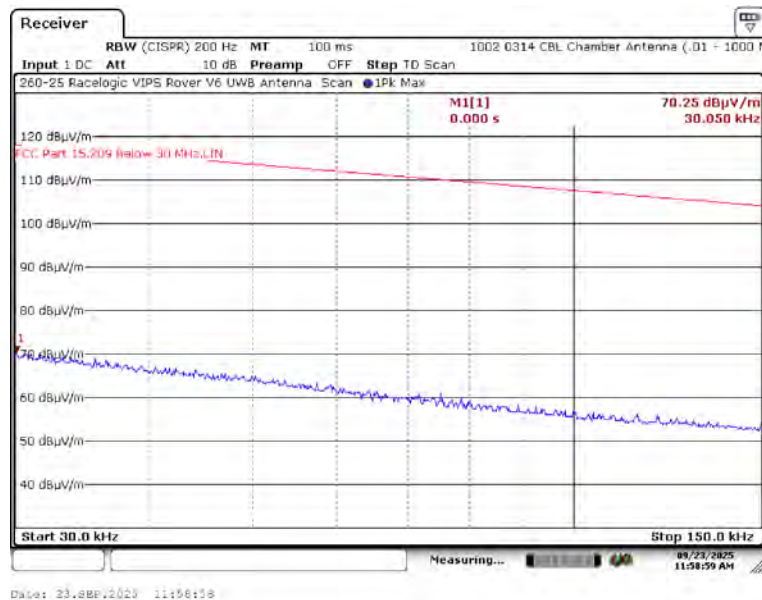
6. Measurement Data (continued)

6.4. Spurious Radiated Emissions (15.209, continued)

6.4.1. 30 kHz to 960 MHz, measured at 3 Meters

The device was prescreened in our 3 Meter Semi-Anechoic Chamber. There were no measurable emissions below 960 MHz on our 3 Meter OATS.

6.4.1.9 Ground Parallel Measurement Antenna – 30 to 150 kHz, CH7



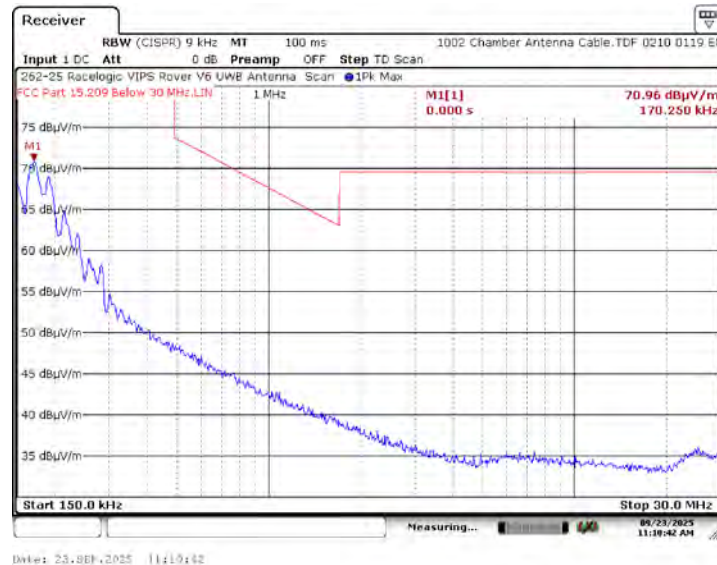
6. Measurement Data (continued)

6.4. Spurious Radiated Emissions (15.209 continued)

6.4.1. 30 kHz to 960 MHz, measured at 3 Meters

The device was prescreened in our 3 Meter Semi-Anechoic Chamber. There were no measurable emissions below 960 MHz on our 3 Meter OATS.

6.4.1.10 Parallel Measurement Antenna – 150 kHz to 30 MHz, CH3



6.4.1.11 Perpendicular Measurement Antenna – 150 kHz to 30 MHz, CH3



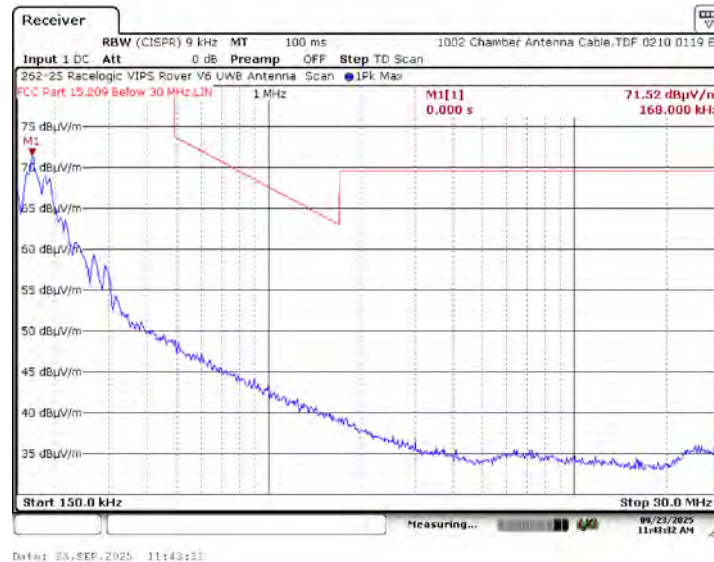
6. Measurement Data (continued)

6.4. Spurious Radiated Emissions (15.209 continued)

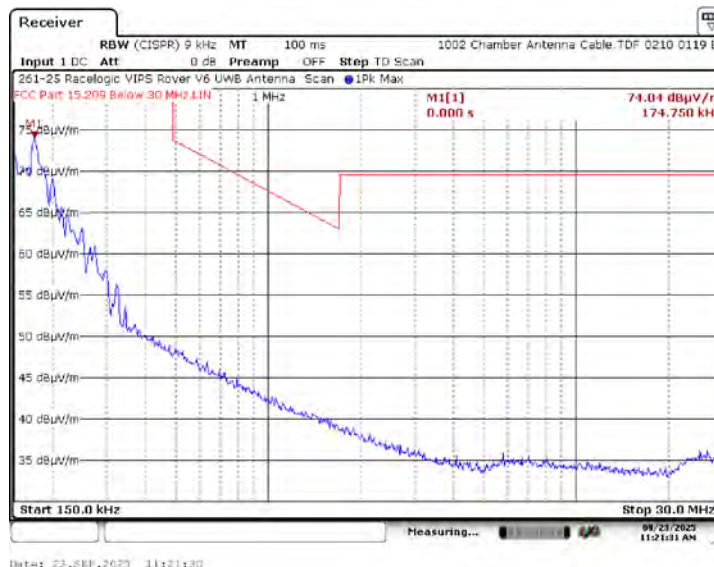
6.4.1. 30 kHz to 960 MHz, measured at 3 Meters

The device was prescreened in our 3 Meter Semi-Anechoic Chamber. There were no measurable emissions below 960 MHz on our 3 Meter OATS.

6.4.1.12 Ground Parallel Measurement Antenna – 150 kHz to 30 MHz, CH3



6.4.1.13 Parallel Measurement Antenna – 150 kHz to 30 MHz, CH4



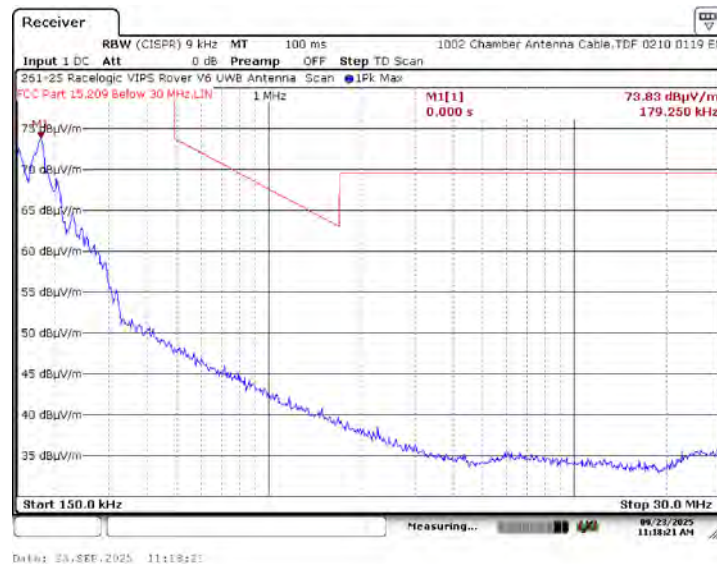
6. Measurement Data (continued)

6.4. Spurious Radiated Emissions (15.209 continued)

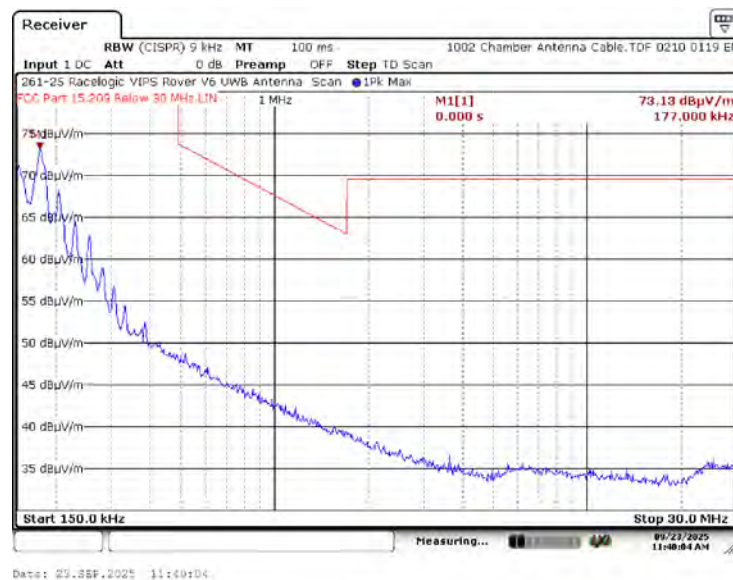
6.4.1. 30 kHz to 960 MHz, measured at 3 Meters

The device was prescreened in our 3 Meter Semi-Anechoic Chamber. There were no measurable emissions below 960 MHz on our 3 Meter OATS.

6.4.1.14 Perpendicular Measurement Antenna – 150 kHz to 30 MHz, CH4



6.4.1.15 Ground Parallel Measurement Antenna – 150 kHz to 30 MHz, CH4



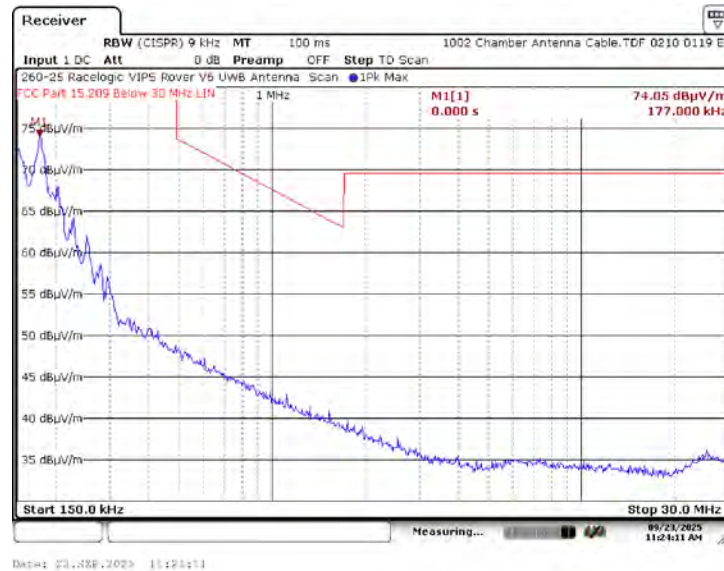
6. Measurement Data (continued)

6.4. Spurious Radiated Emissions (15.209 continued)

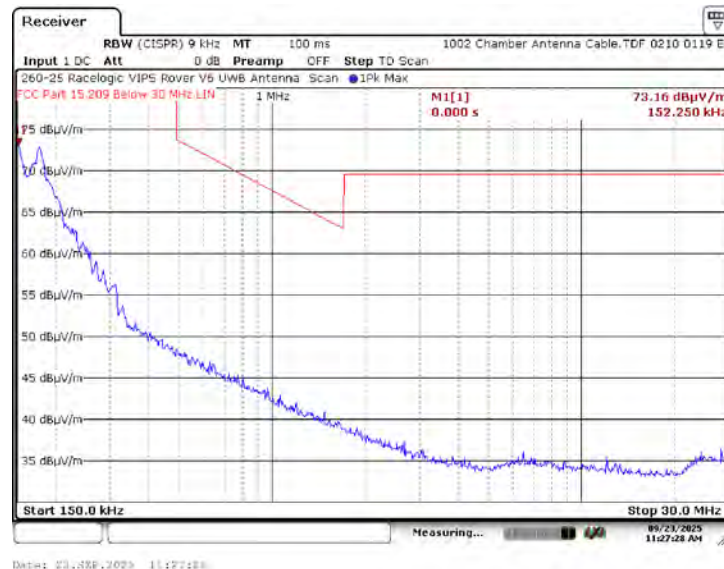
6.4.1. 30 kHz to 960 MHz, measured at 3 Meters

The device was prescreened in our 3 Meter Semi-Anechoic Chamber. There were no measurable emissions below 960 MHz on our 3 Meter OATS.

6.4.1.16 Parallel Measurement Antenna – 150 kHz to 30 MHz, CH7



6.4.1.17 Perpendicular Measurement Antenna – 150 kHz to 30 MHz, CH7



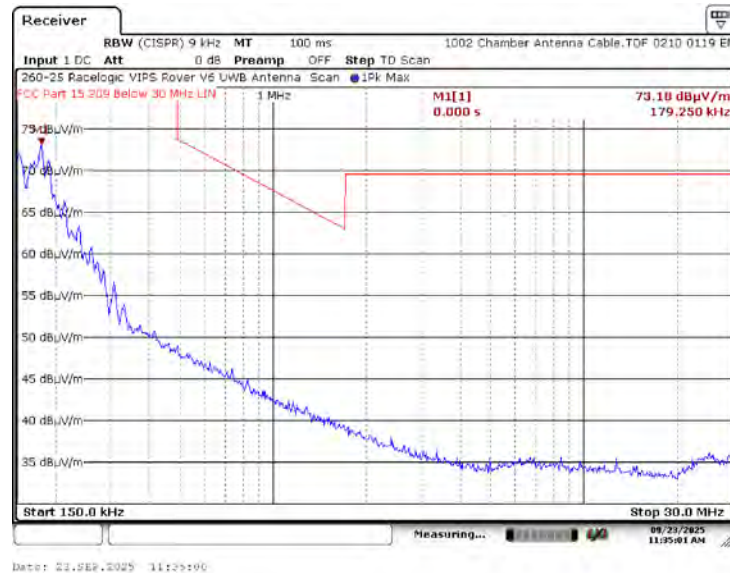
6. Measurement Data (continued)

6.4. Spurious Radiated Emissions (15.209 continued)

6.4.1. 30 kHz to 960 MHz, measured at 3 Meters

The device was prescreened in our 3 Meter Semi-Anechoic Chamber. There were no measurable emissions below 960 MHz on our 3 Meter OATS.

6.4.1.18 Ground Parallel Measurement Antenna – 150 kHz to 30 MHz, CH7



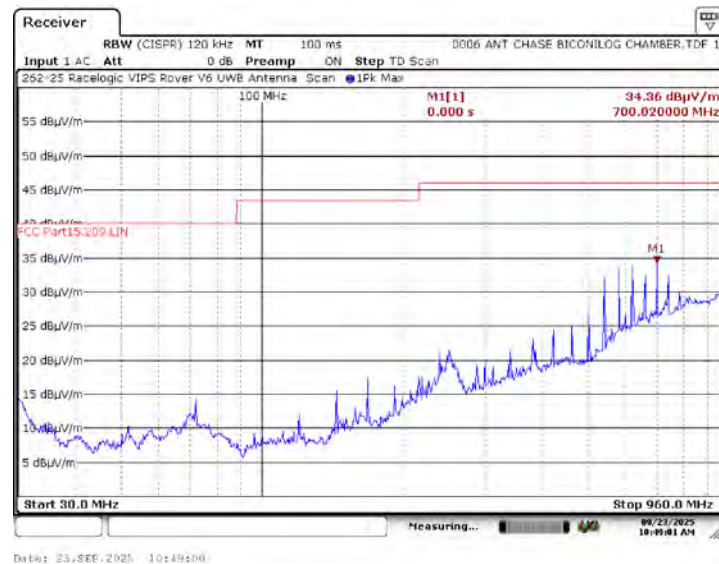
6. Measurement Data (continued)

6.4. Spurious Radiated Emissions (15.209, continued)

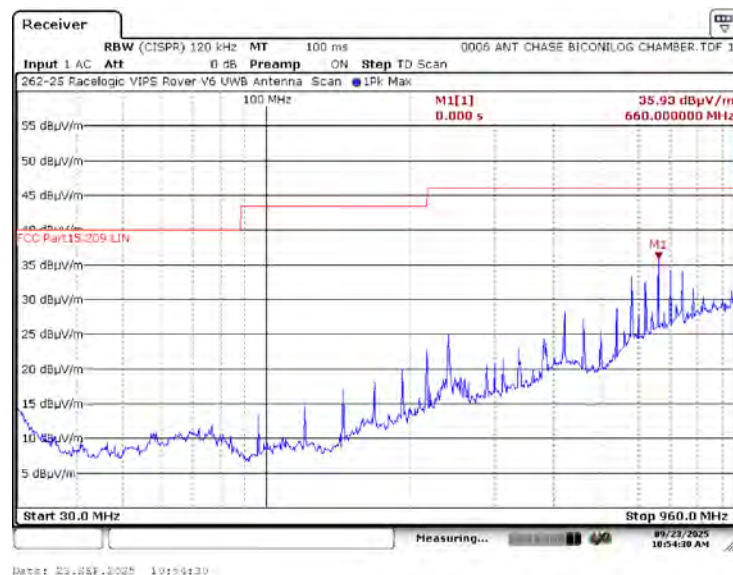
6.4.1. 30 MHz to 960 MHz, measured at 3 Meters

The device was prescreened in our 3 Meter Semi-Anechoic Chamber. There were no measurable emissions below 960 MHz on our 3 Meter OATS.

6.4.1.19 Horizontal Polarity – 30 to 960 MHz – Channel 3



6.4.1.20 Vertical Polarity – 30 to 960 MHz – Channel 3



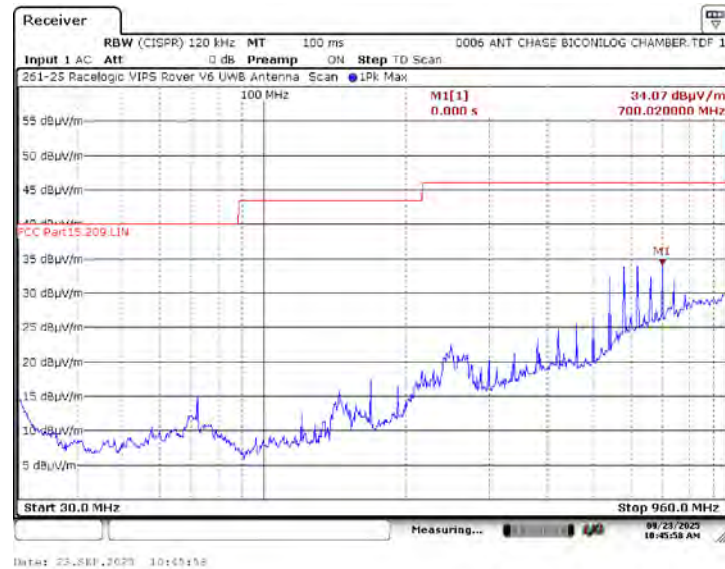
6. Measurement Data (continued)

6.4. Spurious Radiated Emissions (15.209, continued)

6.4.1. 30 MHz to 960 MHz, measured at 3 Meters

The device was prescreened in our 3 Meter Semi-Anechoic Chamber. There were no measurable emissions below 960 MHz on our 3 Meter OATS.

6.4.1.21 Horizontal Polarity – 30 to 960 MHz – Channel 4



6.4.1.22 Vertical Polarity – 30 to 960 MHz – Channel 4



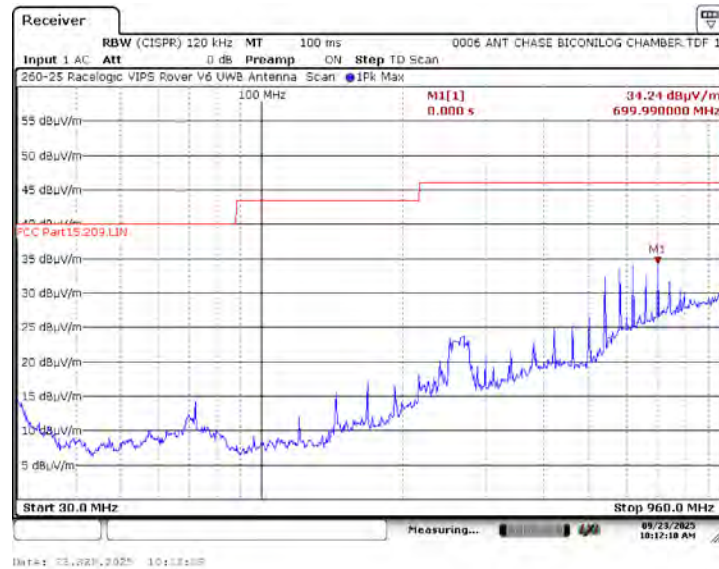
6. Measurement Data (continued)

6.4. Spurious Radiated Emissions (15.209, continued)

6.4.1. 30 MHz to 960 MHz, measured at 3 Meters

The device was prescreened in our 3 Meter Semi-Anechoic Chamber. There were no measurable emissions below 960 MHz on our 3 Meter OATS.

6.4.1.23 Horizontal Polarity – 30 to 960 MHz – Channel 7



6.4.1.24 Vertical Polarity – 30 to 960 MHz – Channel 7



6. Measurement Data (continued)

6.5. Spurious Radiated Emissions above 960 MHz (15.519 (c), 15.521 (d))

Requirement: The radiated emissions above 960 MHz from a device operating under the provisions of this section shall not exceed the following average limits when measured using a resolution bandwidth of 1 MHz:

The RMS average measurement is based on the use of a spectrum analyzer with a resolution bandwidth of 1 MHz, an RMS detector, and a 1 millisecond or less averaging time.

The EIRP in terms of dBm, can be converted to a field strength, in dBμV/m at 3 Meters by adding 95.2.

Frequency (MHz)	EIRP (dBm)	EIRP at 3 Meters (dBμV/m)
960 - 1610	-75.3	19.9
1610 - 1990	-63.3	31.9
1990 - 3100	-61.3	33.9
3100 - 10600	-41.3	53.9
Above 10600	-61.3	33.9

Frequency Range: 960 MHz to 40 GHz
 Measurement Distance: 1 Meter and 0.3 Meter
 EMI Receiver IF Bandwidth: 1 MHz
 EMI Receiver Avg Bandwidth: 10 MHz
 Detector Function: RMS 1 mS Average as defined in 15.521(d)

Notes: Measurements made from 960 MHz to 18 GHz were made in a semi-anechoic chamber at 1 Meter using a -9.54 dB distance offset was programmed into the spectrum analyzer.

There were no broadband emissions related to the UWB transmitter above the limits. Narrowband spikes are related to digital circuitry and not subject to the 15.519 (d) limits and are only required to be below the limits of 15.209 see 15.521(c).

Measurements made from 8 to 18 GHz were done with the aid of a High Pass Filter before the low noise amplifier.

Measurements made from 18 to 40 GHz were done at 0.3 meters and a -20.00 dB distance offset was programmed into the spectrum analyzer.

Sample Calculation: Final Result (dBμV/m) = Measurement Value (dBμV) + Antenna Factor (dB/m) + Cable Loss (dB) – Pre-amplifier Gain (dB) Internal or External.

Note: All correction factors are loaded into the measurement instrument prior to testing to determine the final result.

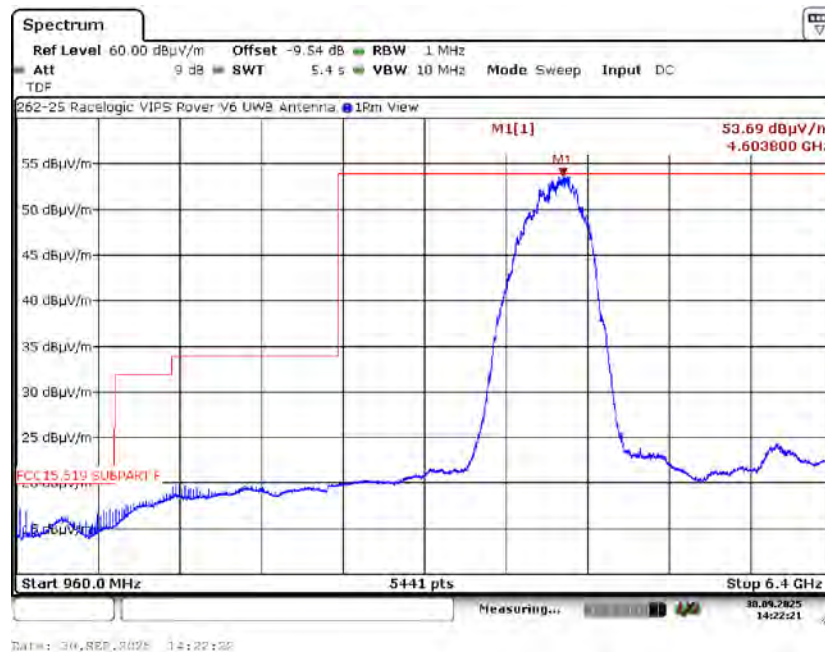
6. Measurement Data (continued)

6.5. Spurious Radiated Emissions (15.519 (c) continued)

6.5.1. 960 MHz to 6.4 GHz Horizontal at 1 Meter – Channel 3



6.5.2. 960 MHz to 6.4 GHz Vertical at 1 Meter – Channel 3



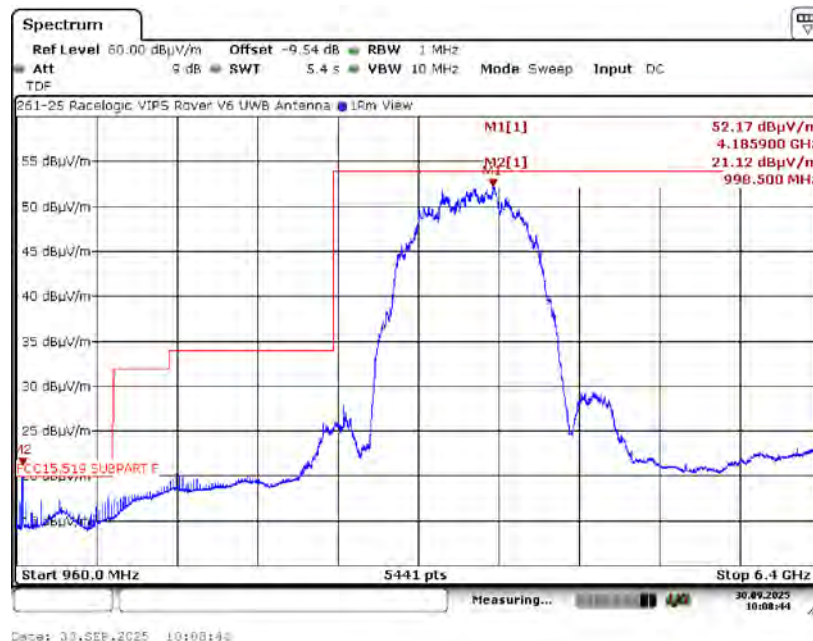
6. Measurement Data (continued)

6.5. Spurious Radiated Emissions (15.519 (c) continued)

6.5.3. 960 MHz to 6.4 GHz Horizontal at 1 Meter – Channel 4



6.5.4. 960 MHz to 6.4 GHz Vertical at 1 Meter – Channel 4



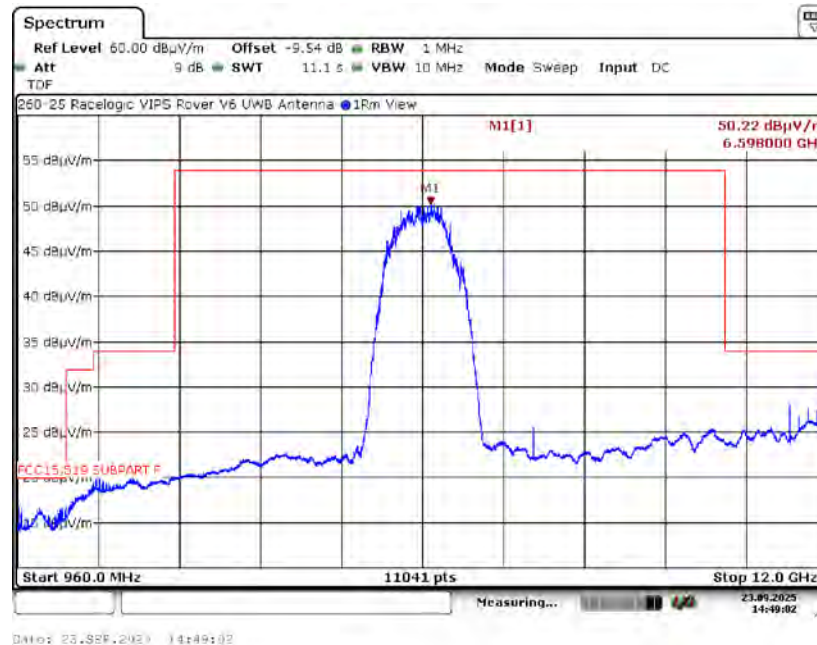
6. Measurement Data (continued)

6.5. Spurious Radiated Emissions (15.519 (c) continued)

6.5.5. 960 MHz to 12 GHz Horizontal at 1 Meter – Channel 7



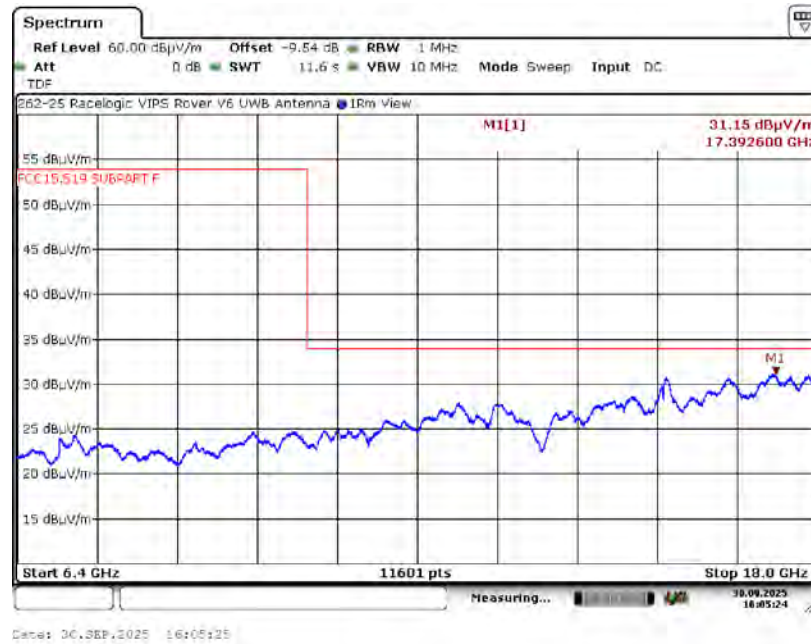
6.5.6. 960 MHz to 12 GHz Vertical at 1 Meter – Channel 7



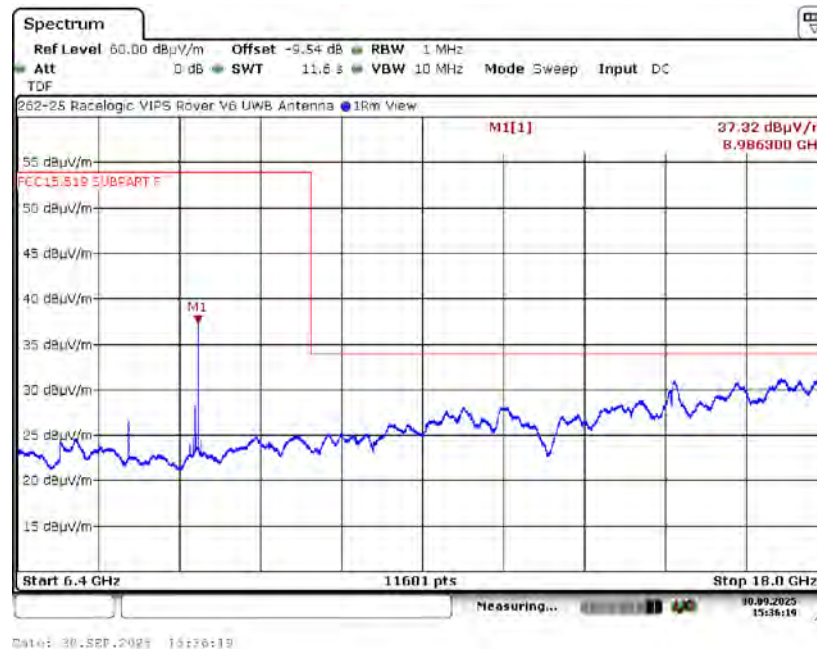
6. Measurement Data (continued)

6.5. Spurious Radiated Emissions (15.519 (c) continued)

6.5.7. 6.4 to 18 GHz Horizontal at 1 Meter – Channel 3



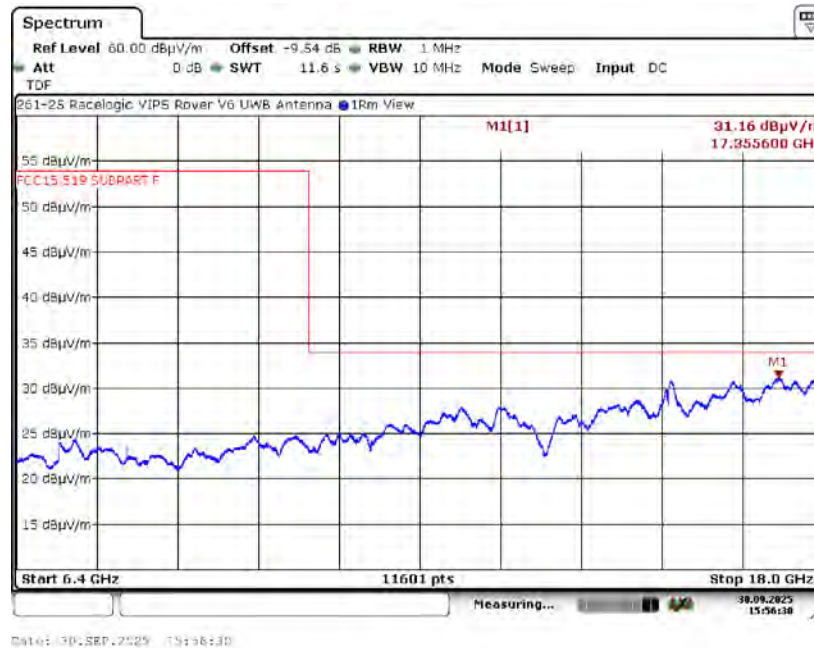
6.5.8. 6.4 to 18 GHz Vertical at 1 Meter – Channel 3



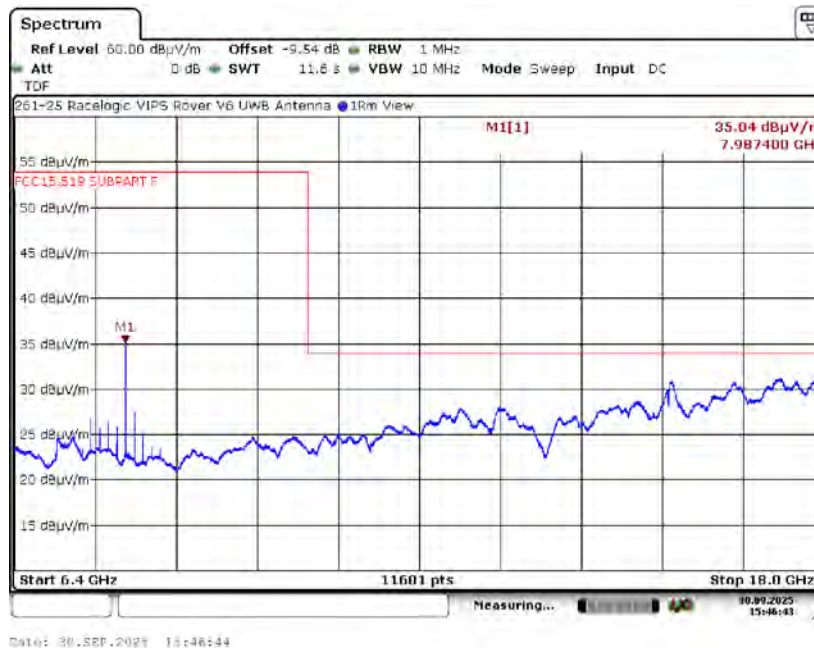
6. Measurement Data (continued)

6.5. Spurious Radiated Emissions (15.519 (c) continued)

6.5.9. 6.4 to 18 GHz Horizontal at 1 Meter – Channel 4



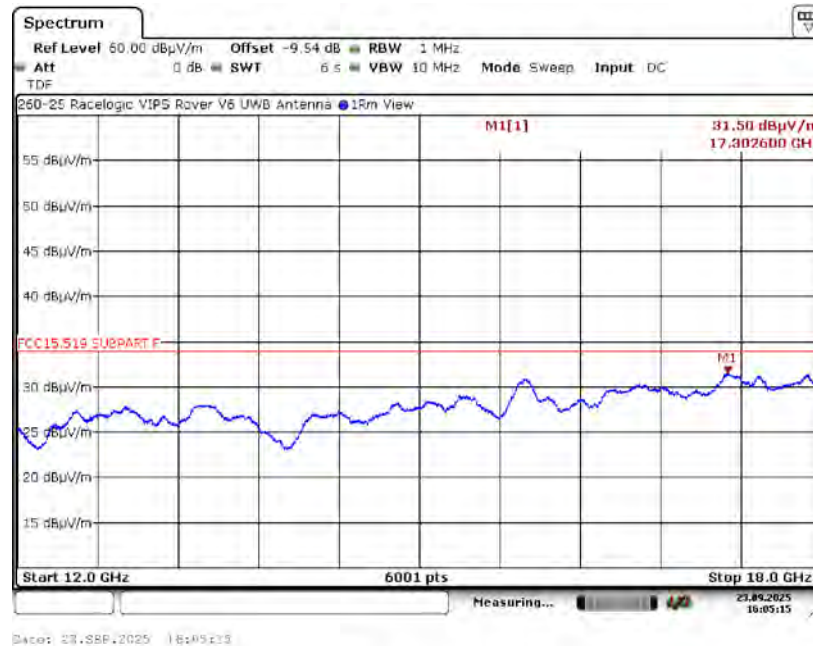
6.5.10. 6.4 to 18 GHz Vertical at 1 Meter – Channel 4



6. Measurement Data (continued)

6.5. Spurious Radiated Emissions (15.519 (c) continued)

6.5.11. 12 to 18 GHz Horizontal at 1 Meter – Channel 7



6.5.12. 12 to 18 GHz Vertical at 1 Meter – Channel 7



6. Measurement Data (continued)

6.5. Spurious Radiated Emissions (15.519 (c) continued)

6.5.13. 18 to 40 GHz Horizontal at 0.3 Meter – Channel 3



6.5.14. 18 to 40 GHz Vertical at 0.3 Meter – Channel 3



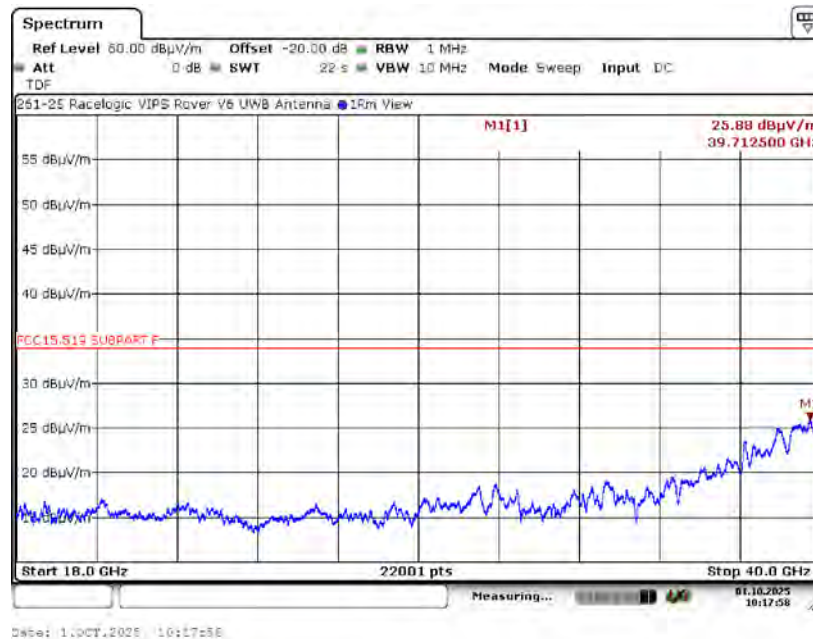
6. Measurement Data (continued)

6.5. Spurious Radiated Emissions (15.519 (c) continued)

6.5.15. 18 to 40 GHz Horizontal at 0.3 Meter – Channel 4



6.5.16. 18 to 40 GHz Vertical at 0.3 Meter – Channel 4



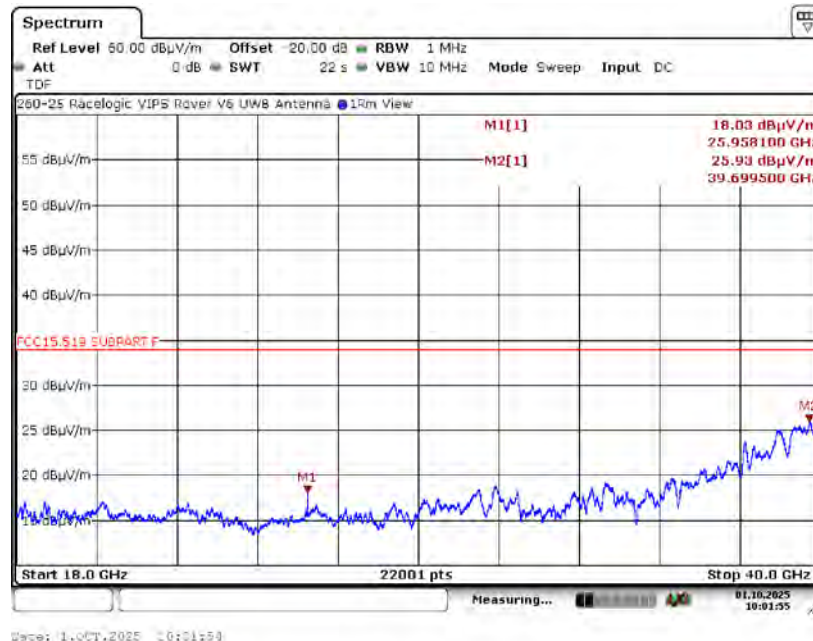
6. Measurement Data (continued)

6.5. Spurious Radiated Emissions (15.519 (c) continued)

6.5.17. 18 to 40 GHz Horizontal at 0.3 Meter – Channel 7



6.5.18. 18 to 40 GHz Vertical at 0.3 Meter – Channel 7



6. Measurement Data (continued)

6.6. Spurious Radiated Emissions in GPS Bands (15.519 (d))

Requirement: In addition to the radiated emission limits specified in the table in paragraph (d) of this section, UWB transmitters operating under the provisions of this section shall not exceed the following average limits when measured using a resolution bandwidth of no less than 1 kHz:

Frequency (MHz)	EIRP (dBm)	EIRP at 3 Meters (dBμV/m)
1164 - 1240	-85.3	9.9
1559 - 1610	-85.3	9.9

6.6.1. Measurement & Equipment Setup

EMI Receiver IF Bandwidth: 1 kHz
EMI Receiver Avg Bandwidth: 10 kHz
Detector Functions: RMS Average, 1mS / point

6.6.2. 1164 to 1240 MHz & 1559 to 1610 MHz

Measurements were made at 1.0 Meter with a -9.54 dB distance correction factor. The -85.3 dBm limit was converted to a field strength limit of 9.9 dBuV/m using a factor of 95.2.

Sample Calculation: Final Result (dBμV/m) = Measurement Value (dBμV) + Antenna Factor (dB/m) + Cable Loss (dB) – Pre-amplifier Gain (dB) Internal or External.

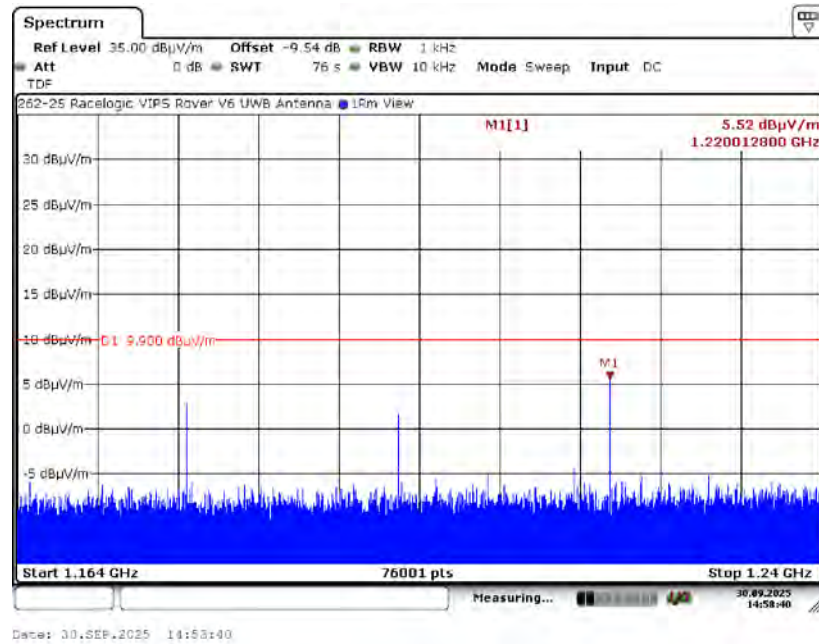
Note: All correction factors are loaded into the measurement instrument prior to testing to determine the final result.

Note: There were no broadband emissions related to the UWB transmitter. Narrowband spikes are related to digital circuitry and not subject to the 15.519 (d) limits and are only required to be below the limits of 15.209 see 15.521(c).

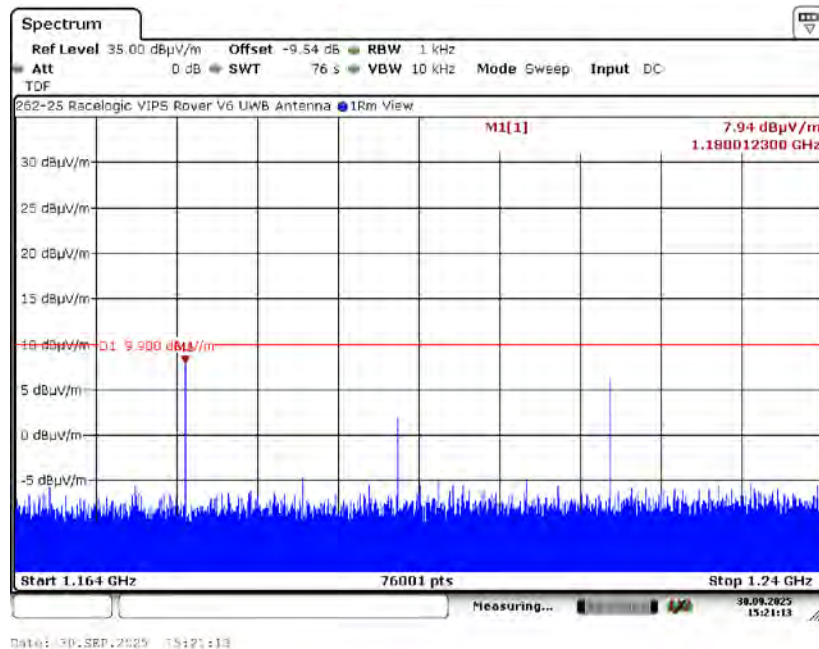
6. Measurement Data (continued)

6.6. Spurious Radiated Emissions in GPS Bands (15.519 (d) continued)

6.6.3.1 Horizontal Measurement Polarity 1164 to 1240 MHz – Channel 3



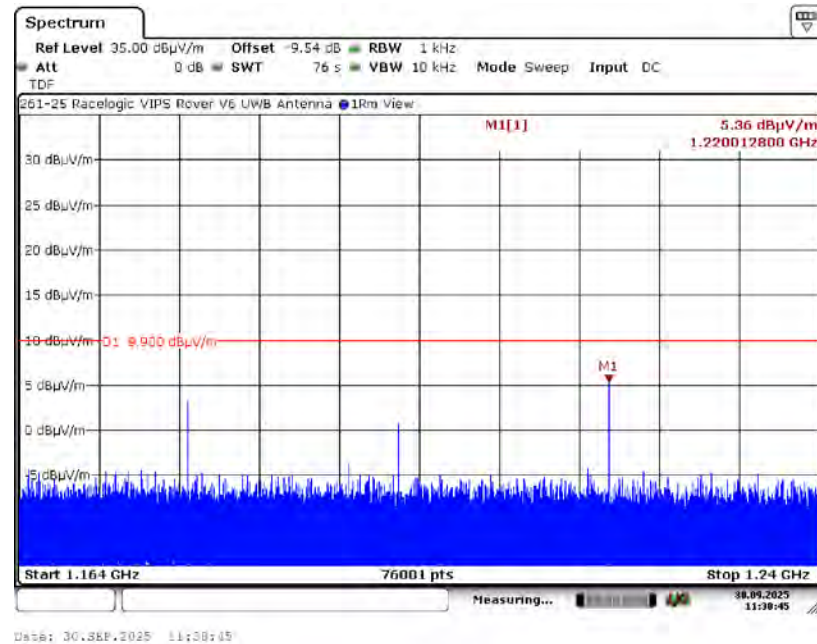
6.6.3.2 Vertical Measurement Polarity 1164 to 1240 MHz – Channel 3



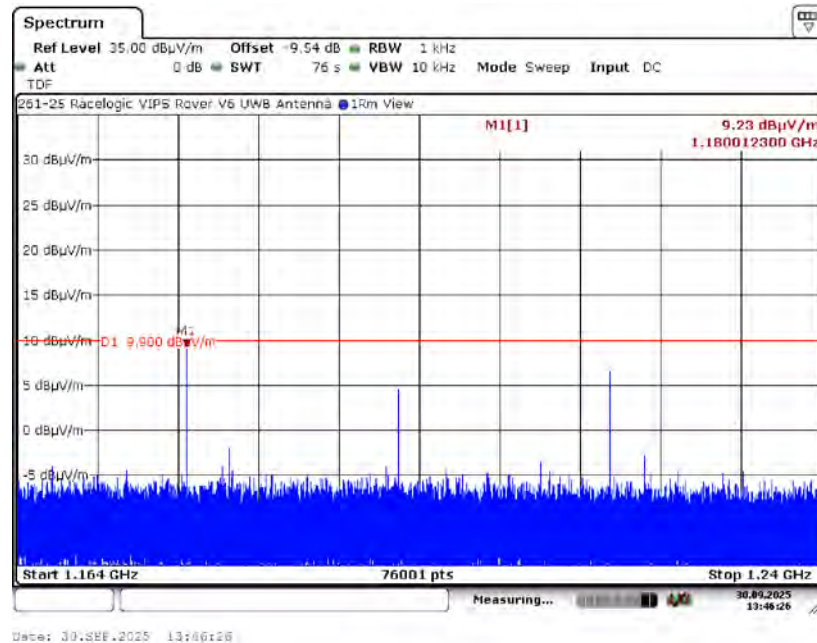
6. Measurement Data (continued)

6.6. Spurious Radiated Emissions in GPS Bands (15.519 (d) continued)

6.6.3.3 Horizontal Measurement Polarity 1164 to 1240 MHz – Channel 4



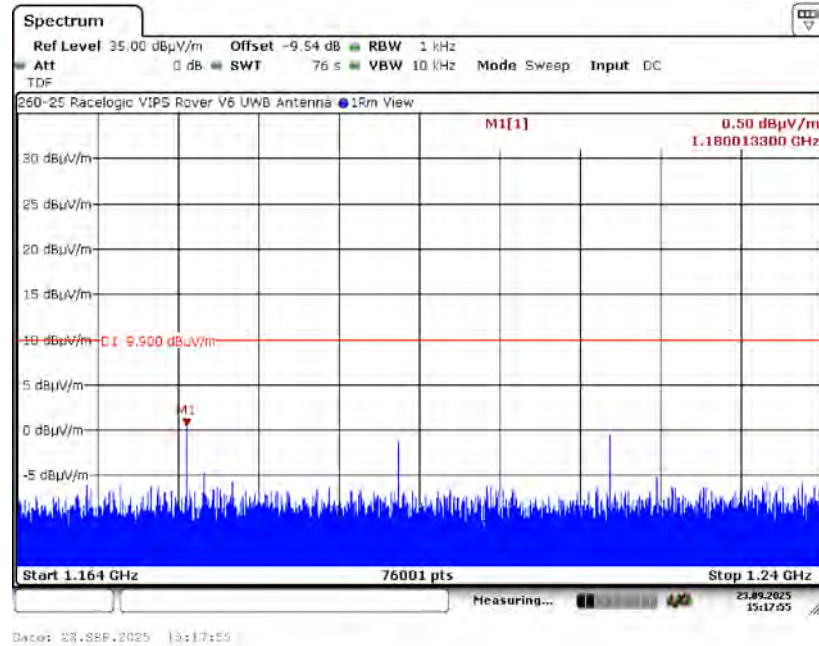
6.6.3.4 Vertical Measurement Polarity 1164 to 1240 MHz – Channel 4



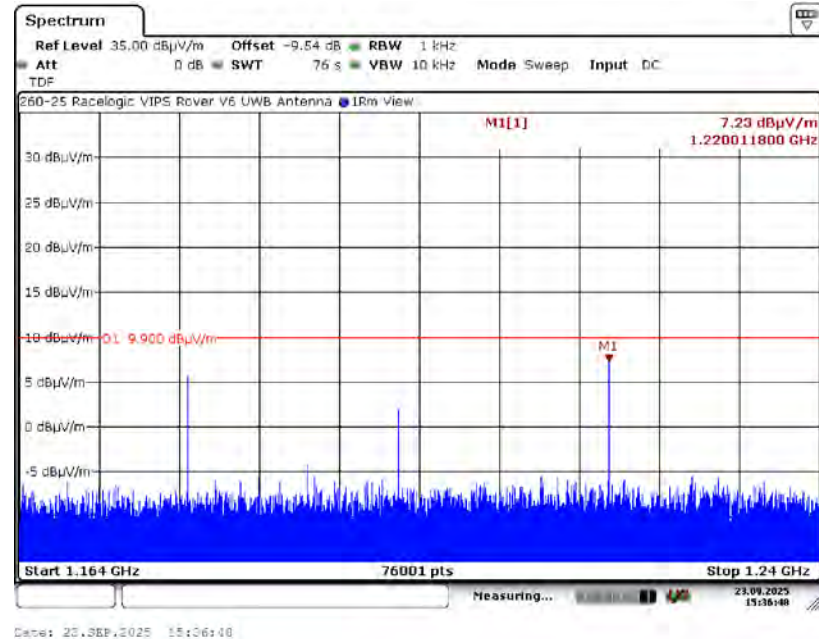
6. Measurement Data (continued)

6.6. Spurious Radiated Emissions in GPS Bands (15.519 (d) continued)

6.6.3.5 Horizontal Measurement Polarity 1164 to 1240 MHz – Channel 7



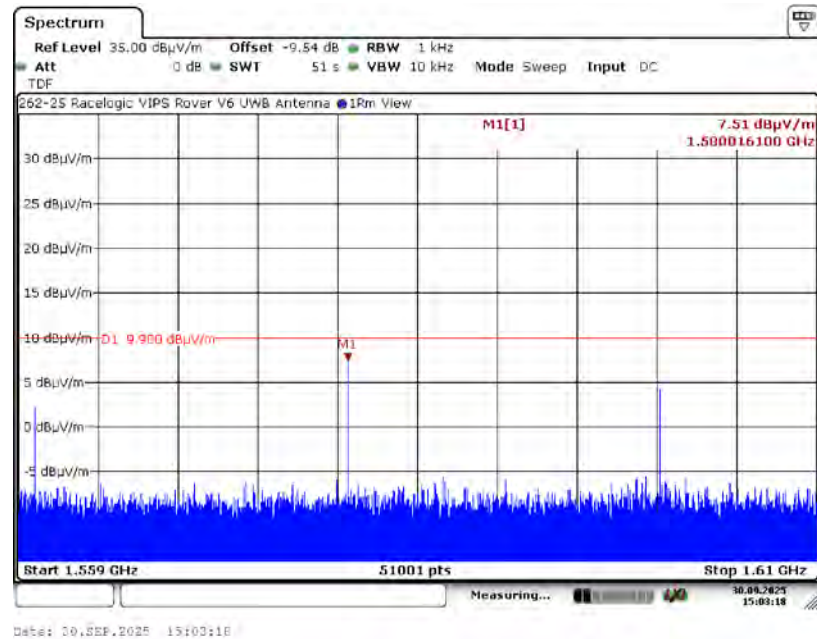
6.6.3.6 Vertical Measurement Polarity 1164 to 1240 MHz – Channel 7



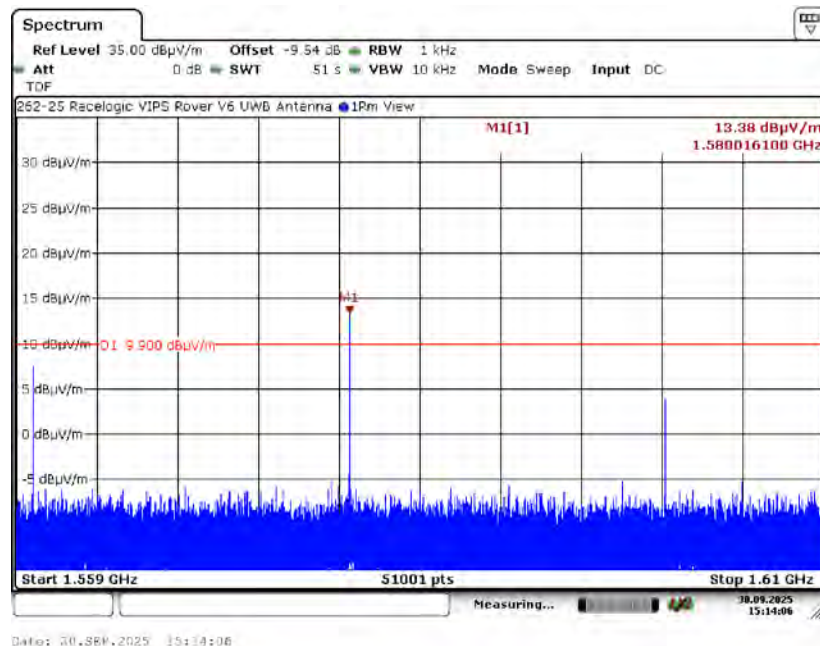
6. Measurement Data (continued)

6.6. Spurious Radiated Emissions in GPS Bands (15.519 (d) continued)

6.6.3.7 Horizontal Measurement Polarity 1559 to 1610 MHz – Channel 3



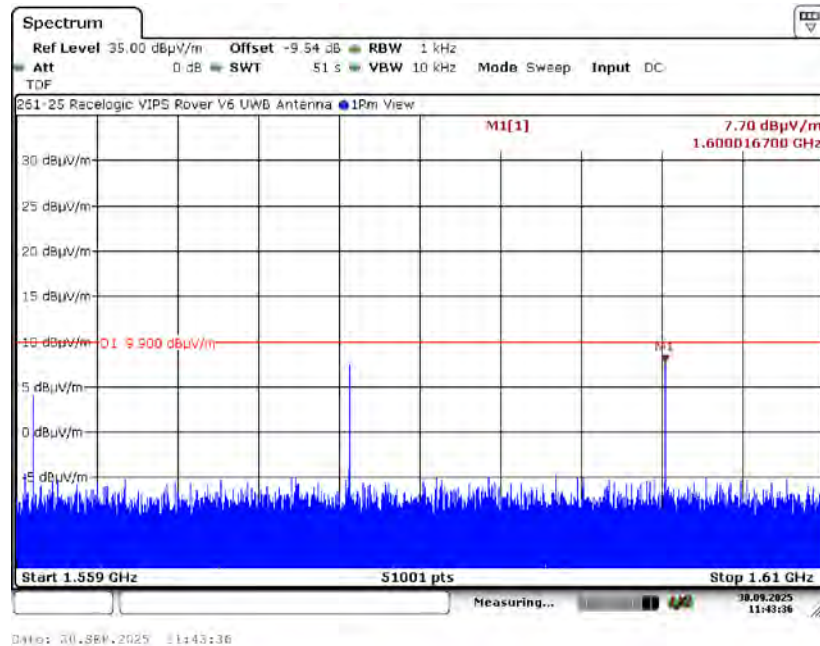
6.6.3.8 Vertical Measurement Polarity 1559 to 1610 MHz – Channel 3



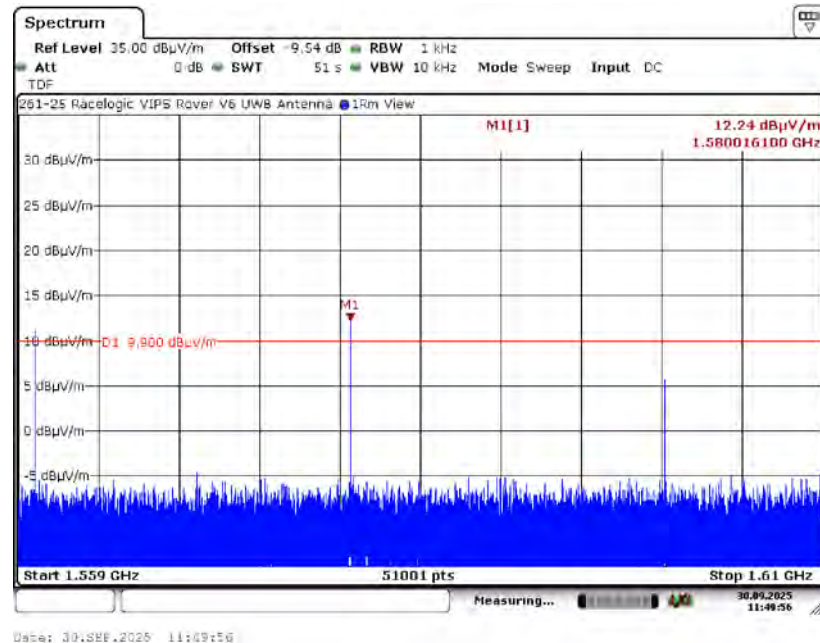
6. Measurement Data (continued)

6.6. Spurious Radiated Emissions in GPS Bands (15.519 (d) continued)

6.6.3.9 Horizontal Measurement Polarity 1559 to 1610 MHz – Channel 4



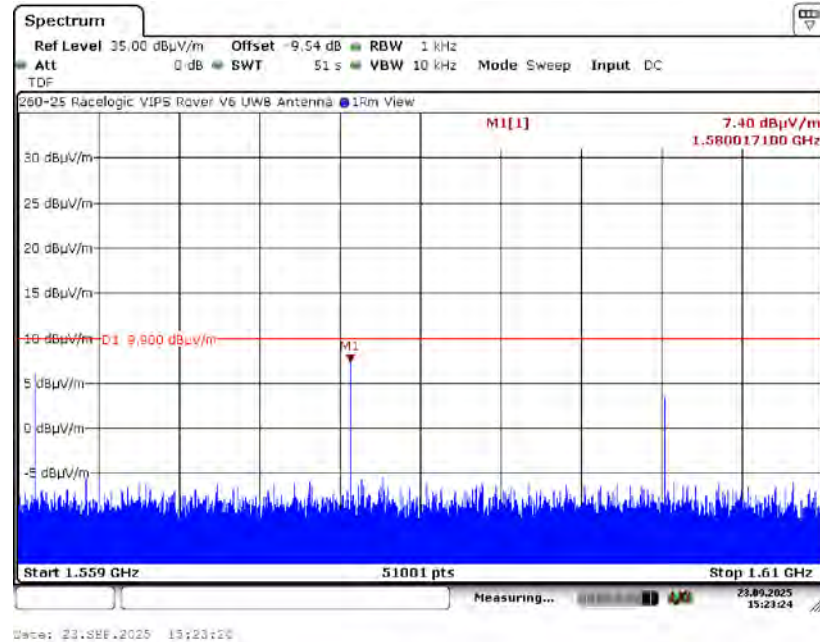
6.6.3.10 Vertical Measurement Polarity 1559 to 1610 MHz – Channel 4



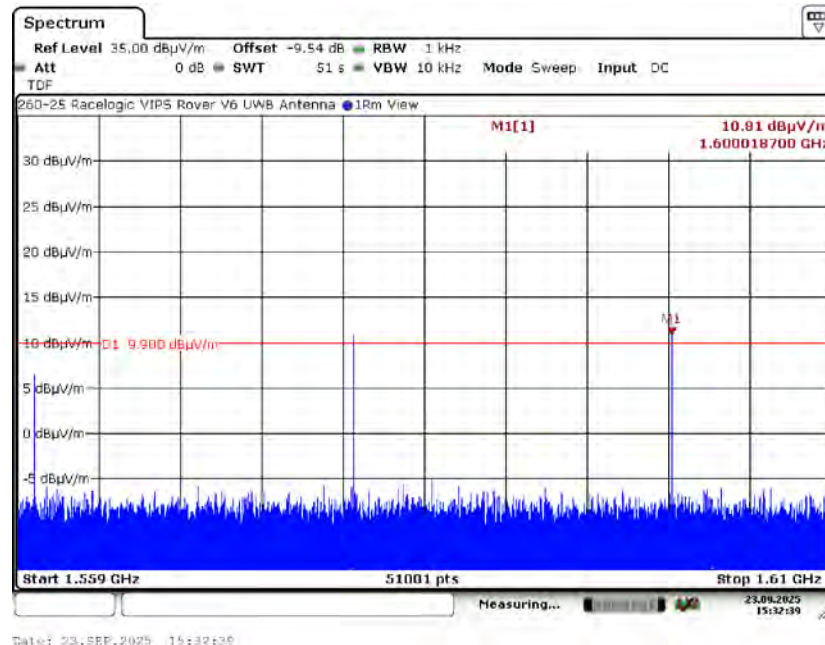
6. Measurement Data (continued)

6.6. Spurious Radiated Emissions in GPS Bands (15.519 (d) continued)

6.6.3.11 Horizontal Measurement Polarity 1559 to 1610 MHz – Channel 7



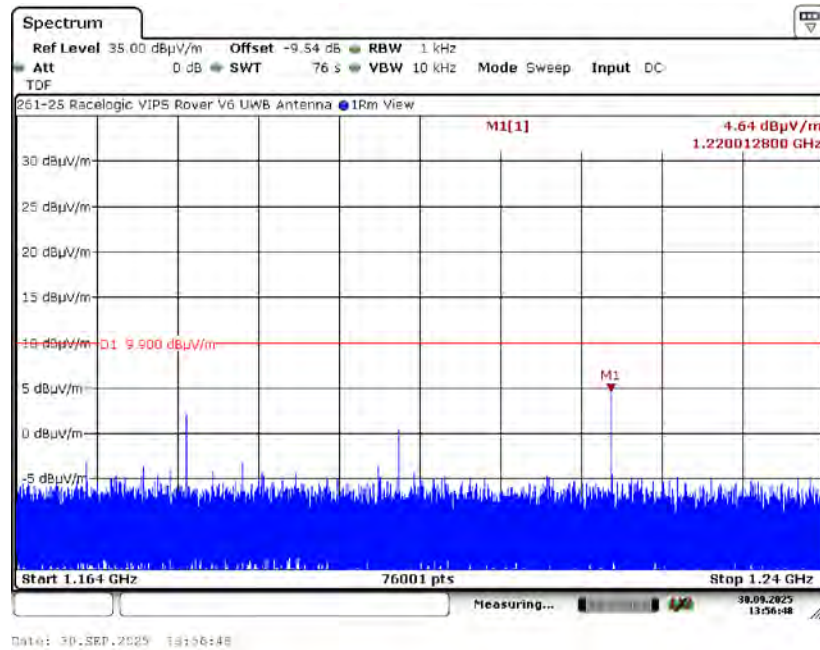
6.6.3.12 Vertical Measurement Polarity 1559 to 1610 MHz – Channel 7



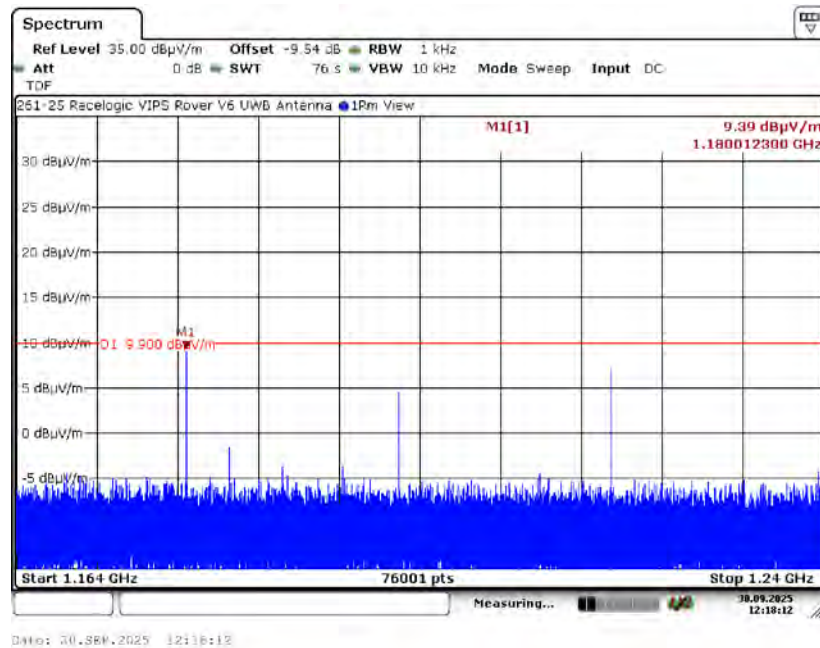
6. Measurement Data (continued)

6.6. Spurious Radiated Emissions in GPS Bands (15.519 (d) continued)

6.6.3.13 Horizontal Measurement Polarity 1164 to 1240 MHz – Tx Off



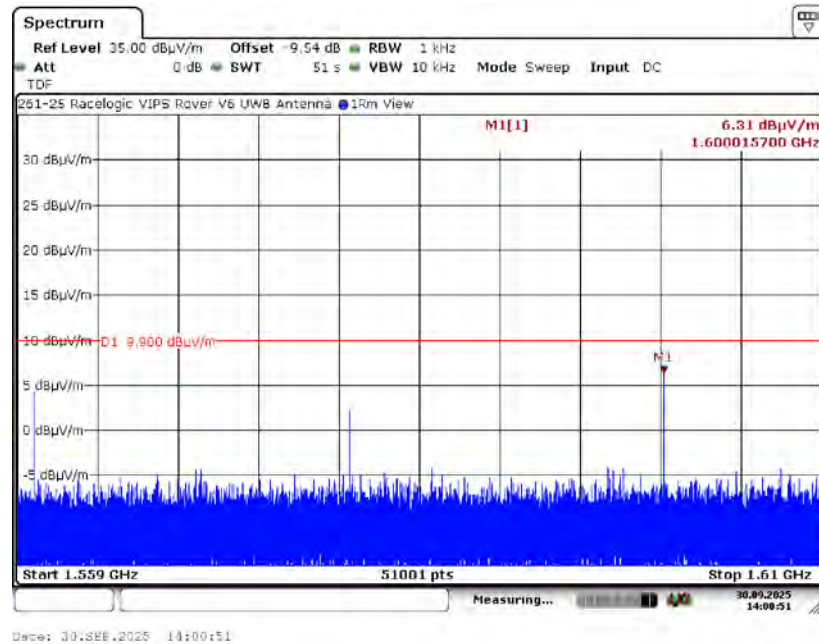
6.6.3.14 Vertical Measurement Polarity 1164 to 1240 MHz – Tx Off



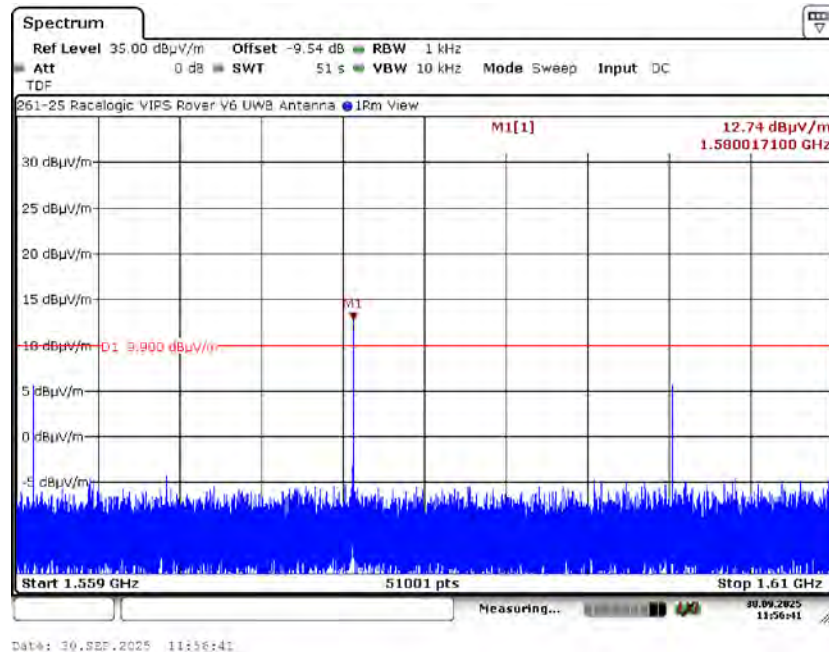
6. Measurement Data (continued)

6.6. Spurious Radiated Emissions in GPS Bands (15.519 (d) continued)

6.6.3.15 Horizontal Measurement Polarity 1559 to 1610 MHz – Tx Off



6.6.3.16 Vertical Measurement Polarity 1559 to 1610 MHz – Tx Off



6. Measurement Data (continued)

6.7. Radiated Emissions of UWB Transmission (15.519 (c), 15.521 (d))

Requirement: The radiated emissions above 960 MHz from a device operating under the provisions of this section shall not exceed the following average limits when measured using a resolution bandwidth of 1 MHz:

The RMS average measurement is based on the use of a spectrum analyzer with a resolution bandwidth of 1 MHz, an RMS detector, and a 1 millisecond or less averaging time.

The EIRP in terms of dBm, can be converted to a field strength, in dB μ V/m at 3 Meters by adding 95.3.

FCC

Frequency (MHz)	EIRP (dBm)	EIRP at 3 Meters (dBμV/m)
3100 – 10,600	-41.3	54.0

Frequency Range:	3 to 5 GHz, 3.5 to 4.5 GHz, 5.5 to 7.5 GHz
Measurement Distance:	3 Meters
EMI Receiver IF Bandwidth:	1 MHz
EMI Receiver Avg Bandwidth	10 MHz
Detector Function:	RMS 1 mS Average as defined in 15.521(d)

6. Measurement Data (continued)

6.7. Spurious Radiated Emissions (15.519 (c), 15.521(d))

6.7.1. Plot of RMS Power at 3 Meters – Channel 3

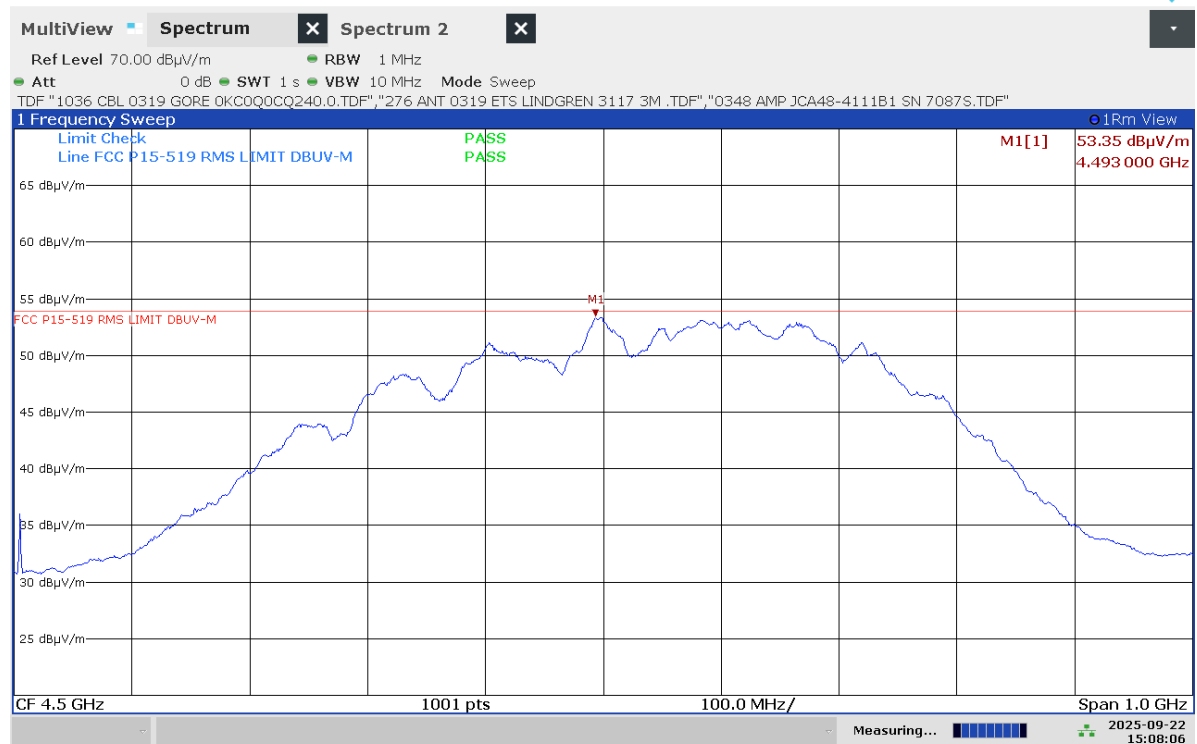
Frequency (GHz)	Amplitude ¹	Limit	Margin	Ant Polarity	Ant Height	Turntable Azimuth	Result
	(dBμV/m)	(dBμV/m)	(dB)	H/V	cm	Deg	
4.493	53.35	54.00	-0.65	V	242	328	Compliant

Notes: ¹ Antenna Factor (AF), Cable Factor (CF) and External Preamplifier Gain (PAG) have been entered into the analyzer as transducer factors.

EIRP (dBm) = E_{meas} (dBμV/m) – 95.3, Equation 33 from ANSI C63.10:2020

Frequency (GHz)	Amplitude ¹ (dBm)	Limit (dBm)	Margin	Ant Polarity	Ant Height	Turntable Azimuth	Result
	EIRP	EIRP	(dB)	H/V	cm	Deg	
4.493	-41.95	-41.30	-0.65	V	242	328	Compliant

262-25 Racelogic VIPs Rover V6 UWB Antenna



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6. Measurement Data (continued)

6.7. Spurious Radiated Emissions (15.519 (c), 15.521(d))

6.7.2. Plot of RMS Power at 3 Meters – Channel 4

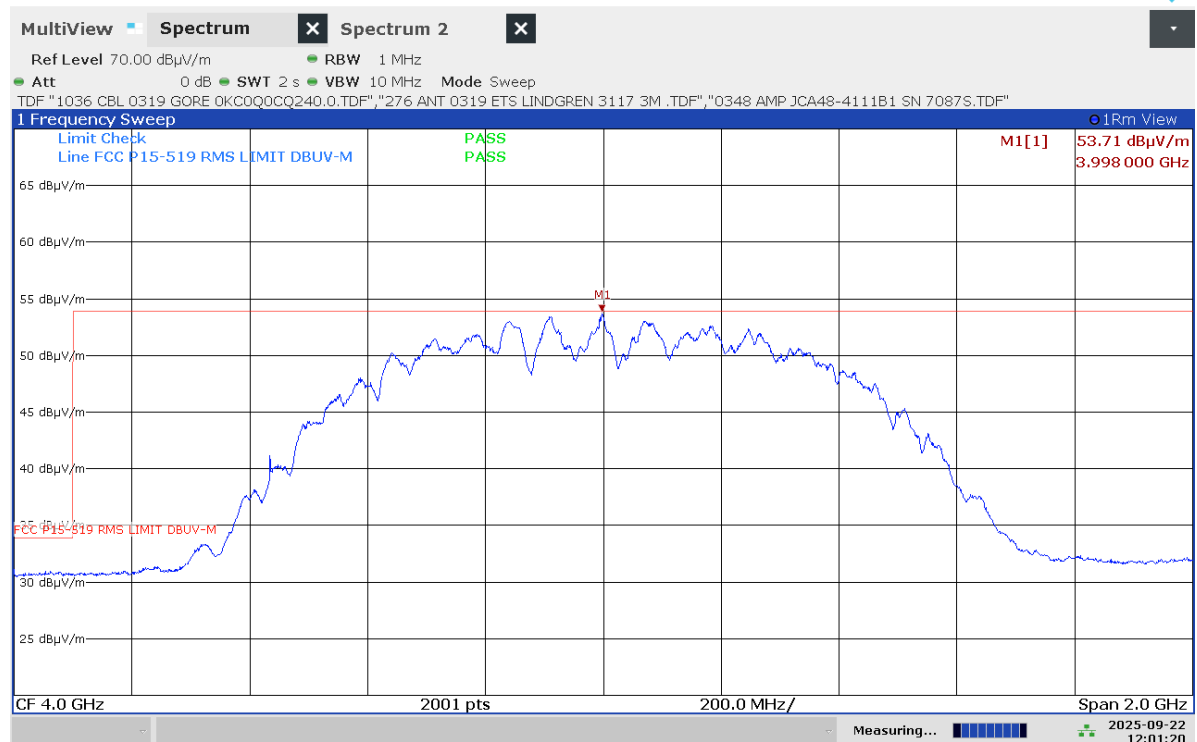
Frequency (GHz)	Amplitude ¹	Limit	Margin	Ant Polarity	Ant Height	Turntable Azimuth	Result
	(dBμV/m)	(dBμV/m)	(dB)	H/V	cm	Deg	
3.998	53.71	54.00	-0.29	V	246	0	Compliant

Notes: ¹ Antenna Factor (AF), Cable Factor (CF) and External Preamplifier Gain (PAG) have been entered into the analyzer as transducer factors.

EIRP (dBm) = E_{meas} (dBμV/m) – 95.3, Equation 33 from ANSI C63.10:2020

Frequency (GHz)	Amplitude ¹ (dBm)	Limit (dBm)	Margin	Ant Polarity	Ant Height	Turntable Azimuth	Result
	EIRP	EIRP	(dB)	H/V	cm	Deg	
3.998	-41.59	-41.30	-0.29	V	246	0	Compliant

261-25 Racelogic VIPs Rover V6 UWB Antenna



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6. Measurement Data (continued)

6.7. Spurious Radiated Emissions (15.519 (c), 15.521(d))

6.7.3. Plot of RMS Power at 3 Meters – Channel 7

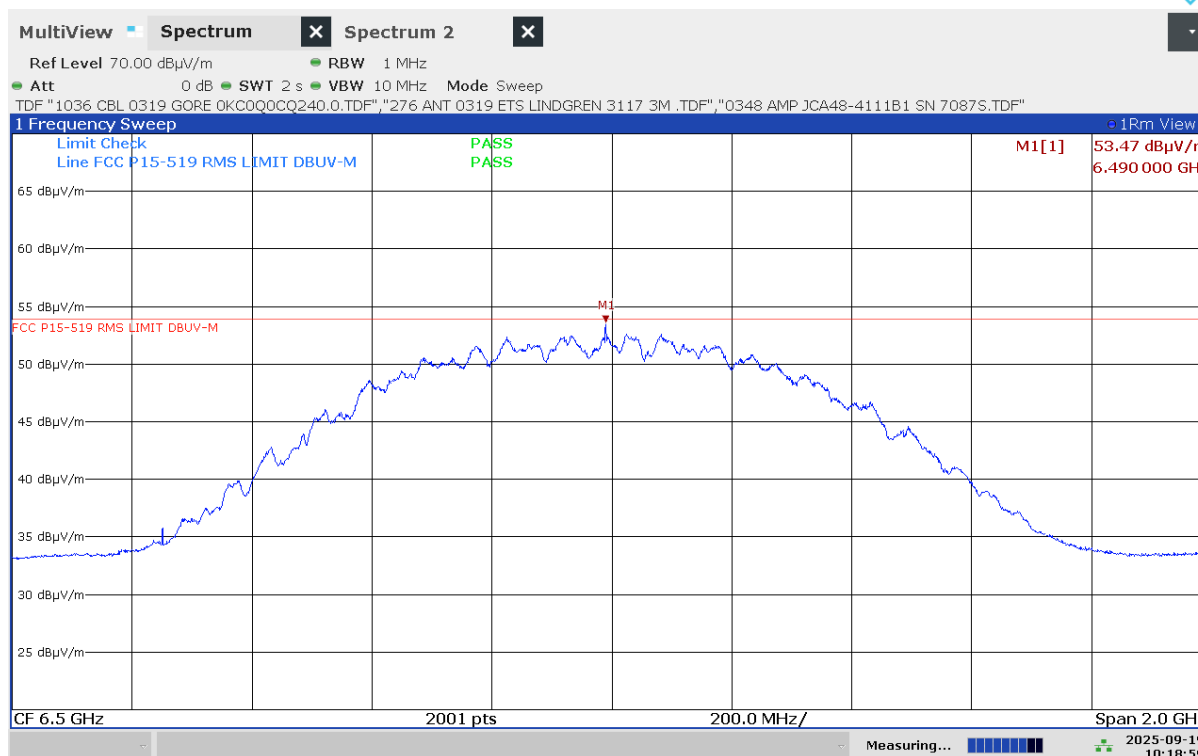
Frequency (GHz)	Amplitude ¹	Limit	Margin	Ant Polarity	Ant Height	Turntable Azimuth	Result
	(dBμV/m)	(dBμV/m)	(dB)	H/V	cm	Deg	
6.490	53.47	54.00	-0.53	V	228	42	Compliant

Notes: ¹ Antenna Factor (AF), Cable Factor (CF) and External Preamplifier Gain (PAG) have been entered into the analyzer as transducer factors.

$$\text{EIRP (dBm)} = E_{\text{meas}} (\text{dB}\mu\text{V/m}) - 95.3, \text{ Equation 33 from ANSI C63.10:2020}$$

Frequency (GHz)	Amplitude ¹ (dBm)	Limit (dBm)	Margin	Ant Polarity	Ant Height	Turntable Azimuth	Result
	EIRP	EIRP	(dB)	H/V	cm	Deg	
6.490	-41.83	-41.30	-0.53	V	228	42	Compliant

260-25 Racelogic VIPs Rover V6 UWB Antenna



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6. Measurement Data (continued)

6.8. Peak Emissions in a 50 MHz Bandwidth (15.519 (e), 15.521 (g))

Requirement: There is a limit on the peak level of the emissions contained within a 50 MHz bandwidth centered on the frequency at which the highest radiated emission occurs, f_M . That limit is 0 dBm EIRP.

The EIRP in terms of dBm, can be converted to a field strength, in dB μ V/m at 3 Meters by adding 95.3. As used in this subpart, EIRP refers to the highest signal strength measured in any direction and at any frequency from the UWB device.

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Frequency (MHz)	EIRP (dBm)	EIRP at 3 Meters (dB μ V/m)
3100 – 10,600	0	95.3

Frequency Range:	3 to 5 GHz, 3.5 to 4.5 GHz, 5.5 to 7.5 GHz
Measurement Distance:	3 Meters
EMI Receiver IF Bandwidth:	50 MHz
EMI Receiver Avg Bandwidth	80 MHz
Detector Function:	Peak, Max Held

6. Measurement Data (continued)

6.8. Peak Emissions in a 50 MHz Bandwidth (15.519 (e), 15.521 (g) continued)

6.8.1 Plot of Peak Power at 3 Meters – Channel 3

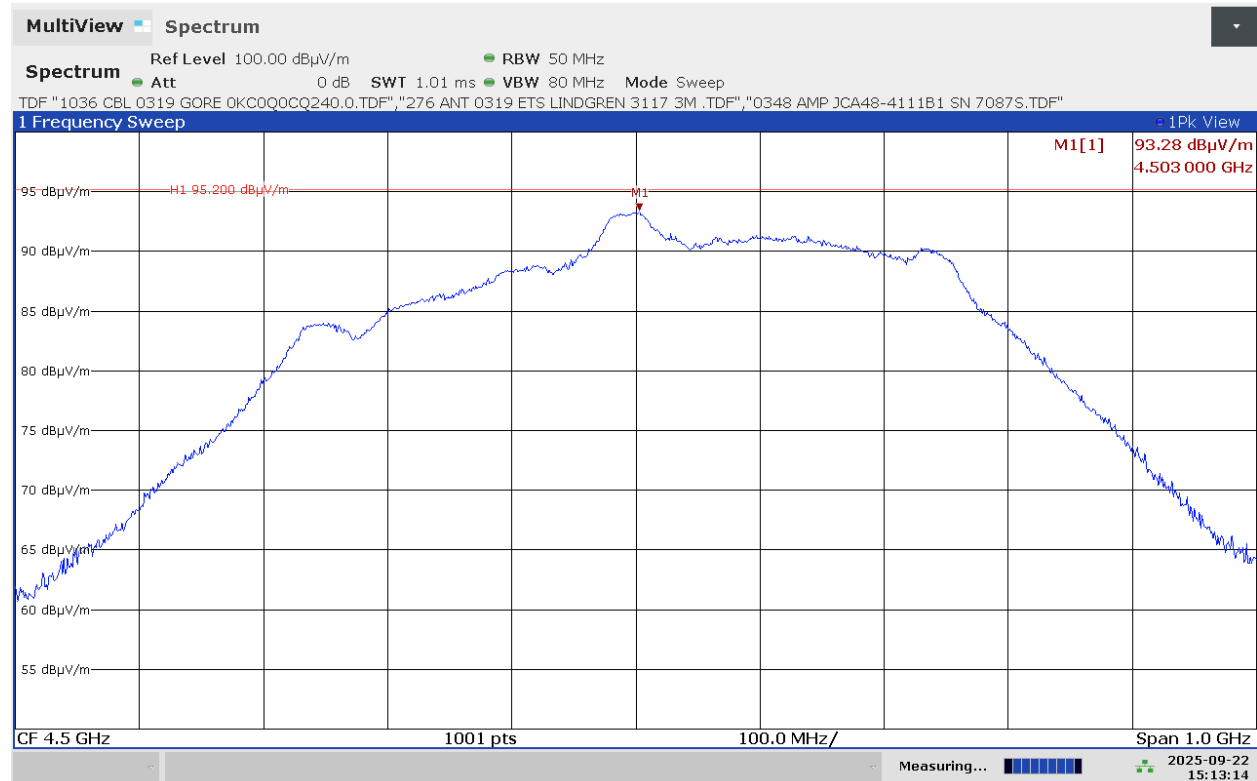
Frequency (GHz)	Amplitude ¹	Limit	Margin	Ant Polarity	Ant Height	Turntable Azimuth	Result
	(dBμV/m)	(dBμV/m)	(dB)	H/V	cm	Deg	
4.503	93.28	95.30	-2.02	V	242	328	Compliant

Notes: ¹ Antenna Factor (AF), Cable Factor (CF) and External Preamplifier Gain (PAG) have been entered into the analyzer as transducer factors.

$$\text{EIRP (dBm)} = E_{\text{meas}} (\text{dB}\mu\text{V/m}) - 95.3, \text{ Equation 33 from ANSI C63.10:2020}$$

Frequency (GHz)	Amplitude ¹ (dBm)	Limit (dBm)	Margin	Ant Polarity	Ant Height	Turntable Azimuth	Result
	EIRP	EIRP	(dB)	H/V	cm	Deg	
4.503	-2.02	0.00	-2.02	V	242	328	Compliant

262-25 Racelogic VIPS Rover V6 UWB Antenna



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6. Measurement Data (continued)

6.8. Peak Emissions in a 50 MHz Bandwidth (15.519 (e), 15.521 (g) continued)

6.8.2 Plot of Peak Power at 3 Meters – Channel 4

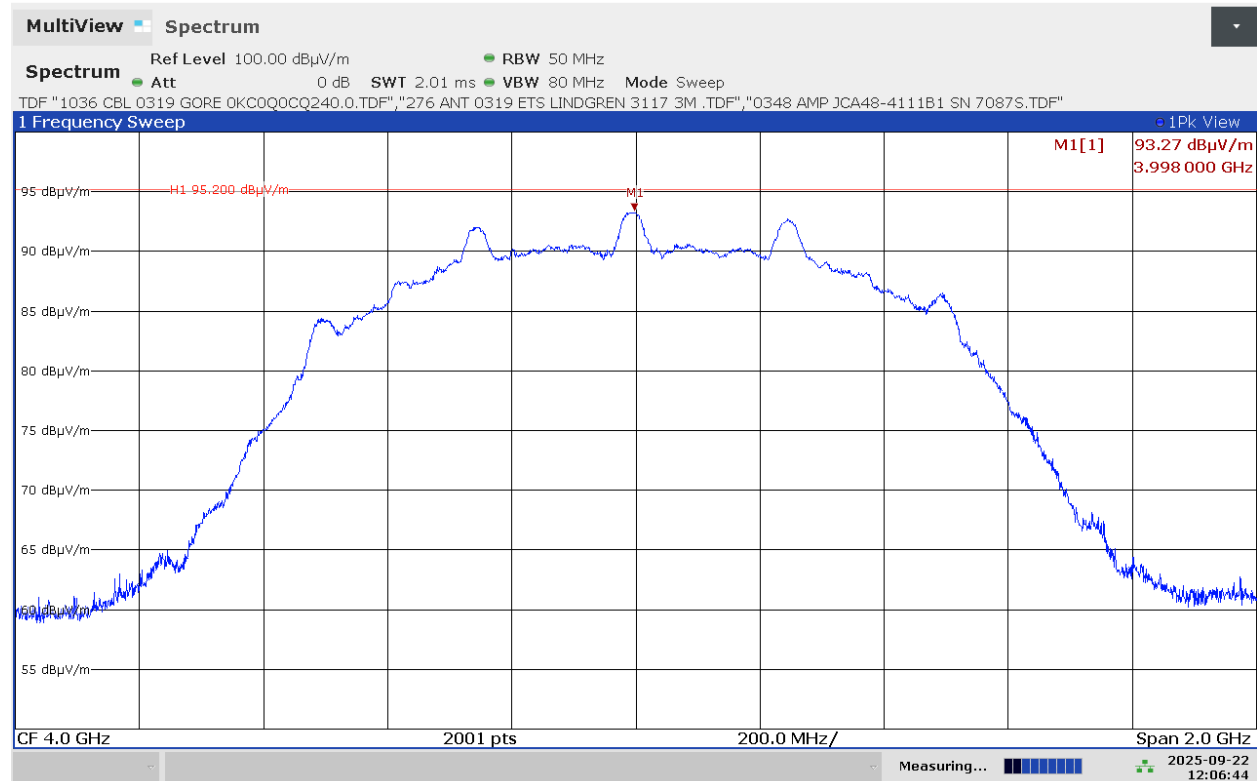
Frequency (GHz)	Amplitude ¹	Limit	Margin	Ant Polarity	Ant Height	Turntable Azimuth	Result
	(dBμV/m)	(dBμV/m)	(dB)	H/V	cm	Deg	
3.998	93.27	95.30	-2.03	V	246	0	Compliant

Notes: ¹ Antenna Factor (AF), Cable Factor (CF) and External Preamplifier Gain (PAG) have been entered into the analyzer as transducer factors.

$$\text{EIRP (dBm)} = E_{\text{meas}} (\text{dB}\mu\text{V/m}) - 95.3, \text{ Equation 33 from ANSI C63.10:2020}$$

Frequency (GHz)	Amplitude ¹ (dBm)	Limit (dBm)	Margin	Ant Polarity	Ant Height	Turntable Azimuth	Result
	EIRP	EIRP	(dB)	H/V	cm	Deg	
3.998	-2.03	0.00	-2.03	V	246	0	Compliant

261-25 Racelogic VIPS Rover V6 UWB Antenna



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6. Measurement Data (continued)

6.8. Peak Emissions in a 50 MHz Bandwidth (15.519 (e), 15.521 (g) continued)

6.8.3 Plot of Peak Power at 3 Meters – Channel 7

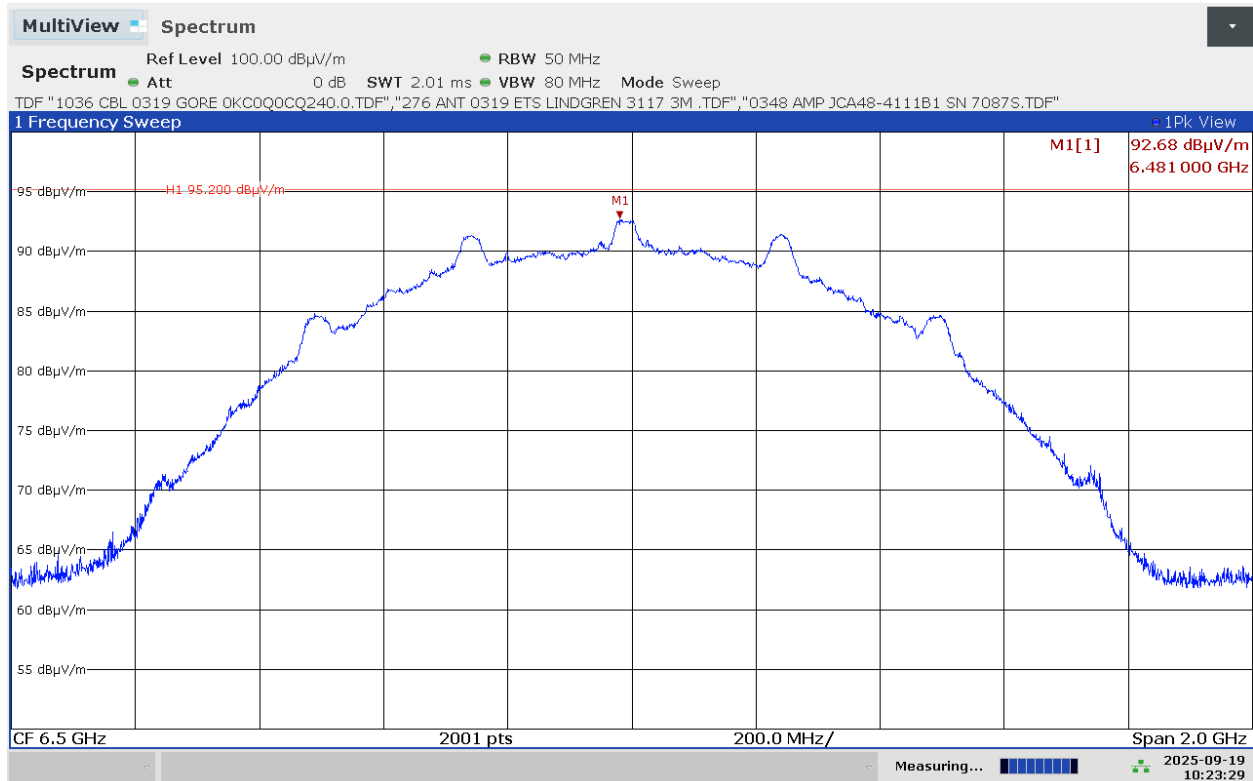
Frequency (GHz)	Amplitude ¹	Limit	Margin	Ant Polarity	Ant Height	Turntable Azimuth	Result
	(dBμV/m)	(dBμV/m)	(dB)	H/V	cm	Deg	
6.481	92.68	95.30	-2.62	V	228	42	Compliant

Notes: ¹ Antenna Factor (AF), Cable Factor (CF) and External Preamplifier Gain (PAG) have been entered into the analyzer as transducer factors.

$$\text{EIRP (dBm)} = E_{\text{meas}} (\text{dB}\mu\text{V/m}) - 95.3, \text{ Equation 33 from ANSI C63.10:2020}$$

Frequency (GHz)	Amplitude ¹ (dBm)	Limit (dBm)	Margin	Ant Polarity	Ant Height	Turntable Azimuth	Result
	EIRP	EIRP	(dB)	H/V	cm	Deg	
6.481	-2.62	0.00	-2.62	V	228	42	Compliant

260-25 Racelogic VIPS Rover V6 UWB Antenna



10:23:29 AM 09/19/2025

6. Measurement Data (continued)

6.9 Conducted Emissions Test Setup (FCC Part 15.207)

Requirement: For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal.

Frequency Range (MHz)	Limits (dB μ V)	
	Quasi-Peak	Average
0.15 to 0.50	66 to 56*	56 to 46*
0.50 to 5.0	56	46
5.0 to 30.0	60	50

* Decreases with the logarithm of the frequency.

Procedure: Test measurements were made in accordance with ANSI C63.10-2020, Section 6.2: Standard test method for ac powerline conducted emissions from unlicensed wireless devices.

Notes: Tested

Results: The device under test meets the FCC Part 15.207 conducted emissions requirements.

Sample Calculation: Final Result (dB μ V) = Measurement Value (dB μ V) + LISN Insertion Loss (dB) + Cable Loss (dB).

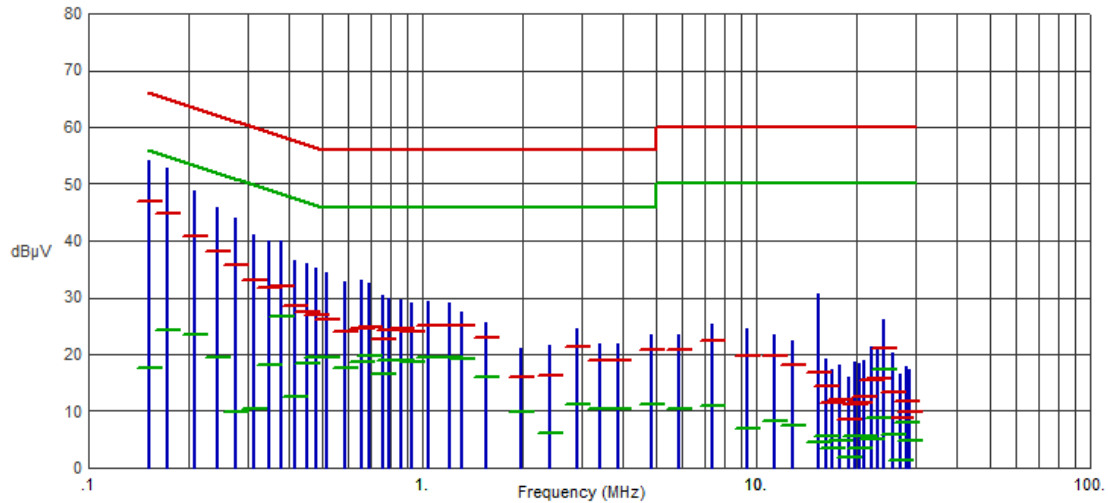
Note: All correction factors are loaded into the measurement instrument prior to testing to determine the final result.

6. Conducted Emissions Test Results

6.10.1. 120 Volts, 60 Hz Phase

Test No.: 260-25, 120 Volts, 60 Hz Phase

FCC, Class B



Frequency (MHz)	Pk Amp (dBμV)	QP Amp (dBμV)	QP Limit (dBμV)	QP Margin (dB)	Avg Amp (dBμV)	Avg Limit (dBμV)	Avg Margin (dB)	Comments
.1523	54.16	47.05	65.87	-18.82	17.69	55.87	-38.18	
.1725	52.73	44.82	64.84	-20.02	24.35	54.84	-30.49	
.2085	48.78	40.92	63.26	-22.34	23.40	53.26	-29.86	
.2423	46.00	38.09	62.02	-23.93	19.59	52.02	-32.43	
.2760	44.12	35.77	60.94	-25.17	9.92	50.94	-41.02	
.3120	41.15	32.97	59.92	-26.95	10.38	49.92	-39.54	
.3458	40.01	31.65	59.06	-27.41	18.16	49.06	-30.90	
.3795	39.94	32.03	58.29	-26.26	26.55	48.29	-21.74	
.4133	36.62	28.52	57.58	-29.06	12.60	47.58	-34.98	
.4493	35.98	27.56	56.89	-29.33	18.28	46.89	-28.61	
.4830	35.25	26.92	56.29	-29.37	19.56	46.29	-26.73	
.5190	34.40	26.01	56.00	-29.99	19.34	46.00	-26.66	
.5888	32.69	24.08	56.00	-31.92	17.66	46.00	-28.34	
.6585	32.99	24.43	56.00	-31.57	18.70	46.00	-27.30	
.6923	32.41	24.85	56.00	-31.15	19.69	46.00	-26.31	
.7620	30.31	22.58	56.00	-33.42	16.40	46.00	-29.60	
.7935	29.90	24.17	56.00	-31.83	18.99	46.00	-27.01	
.8633	29.63	24.42	56.00	-31.58	18.99	46.00	-27.01	
.9330	28.96	24.11	56.00	-31.89	18.64	46.00	-27.36	
1.0388	29.21	24.97	56.00	-31.03	19.54	46.00	-26.46	
1.2120	29.01	25.17	56.00	-30.83	19.42	46.00	-26.58	
1.3155	27.59	25.13	56.00	-30.87	19.17	46.00	-26.83	
1.5585	25.52	22.85	56.00	-33.15	16.04	46.00	-29.96	
1.9725	21.09	15.92	56.00	-40.08	9.75	46.00	-36.25	
2.4158	21.60	16.34	56.00	-39.66	6.19	46.00	-39.81	
2.9018	24.60	21.44	56.00	-34.56	11.12	46.00	-34.88	
3.3900	21.90	19.00	56.00	-37.00	10.49	46.00	-35.51	
3.8715	21.75	19.03	56.00	-36.97	10.35	46.00	-35.65	
4.8728	23.50	20.79	56.00	-35.21	11.21	46.00	-34.79	

6. Conducted Emissions Test Results

6.10.1. 120 Volts, 60 Hz Phase (continued)

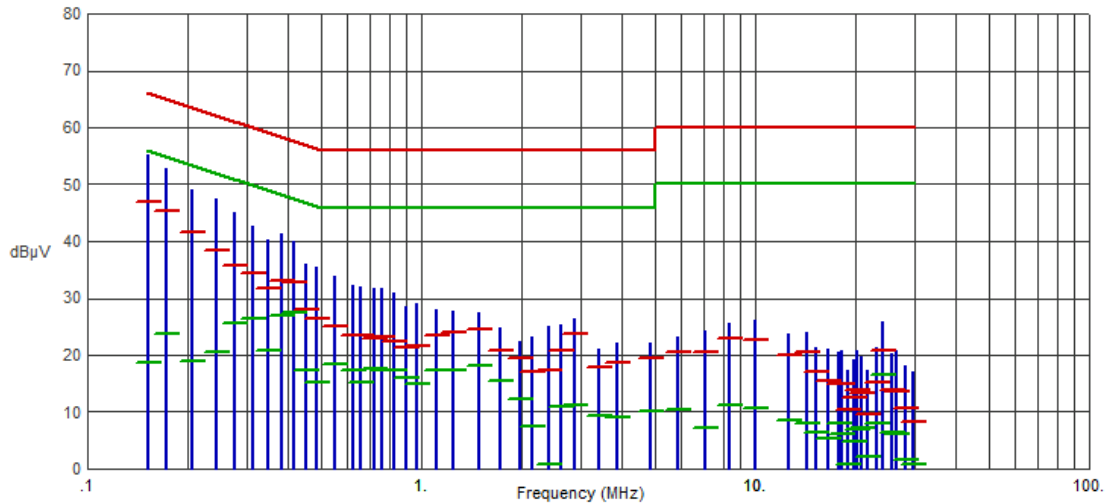
Frequency (MHz)	Pk Amp (dBμV)	QP Amp (dBμV)	QP Limit (dBμV)	QP Margin (dB)	Avg Amp (dBμV)	Avg Limit (dBμV)	Avg Margin (dB)	Comments
7.3680	25.46	22.39	60.00	-37.61	10.83	50.00	-39.17	
9.3548	24.54	19.60	60.00	-40.40	7.06	50.00	-42.94	
11.2898	23.40	19.67	60.00	-40.33	8.23	50.00	-41.77	
12.8108	22.34	18.14	60.00	-41.86	7.53	50.00	-42.47	
15.4365	30.59	16.91	60.00	-43.09	4.54	50.00	-45.46	
16.1655	19.09	14.41	60.00	-45.59	5.65	50.00	-44.35	
16.9035	17.27	11.59	60.00	-48.41	3.44	50.00	-46.56	
17.6910	18.15	12.08	60.00	-47.92	4.82	50.00	-45.18	
18.9173	16.00	8.51	60.00	-51.49	1.87	50.00	-48.13	
19.7093	18.74	11.14	60.00	-48.86	5.55	50.00	-44.45	
20.3168	18.29	11.52	60.00	-48.48	3.58	50.00	-46.42	
21.1133	18.86	12.42	60.00	-47.58	5.62	50.00	-44.38	
22.2495	21.36	15.52	60.00	-44.48	5.12	50.00	-44.88	
23.1293	20.93	15.86	60.00	-44.14	8.89	50.00	-41.11	
24.0000	26.10	21.11	60.00	-38.89	17.37	50.00	-32.63	
25.6965	20.34	13.33	60.00	-46.67	5.96	50.00	-44.04	
27.1545	16.59	8.90	60.00	-51.10	1.34	50.00	-48.66	
28.1310	17.84	11.64	60.00	-48.36	8.03	50.00	-41.97	
28.6845	17.33	9.84	60.00	-50.16	4.80	50.00	-45.20	

6. Conducted Emissions Test Results (continued)

6.10.2. 120 Volts, 60 Hz Neutral

Test No.: 260-25, 120 Volts, 60 Hz Neutral

FCC, Class B



Frequency (MHz)	Pk Amp (dBμV)	QP Amp (dBμV)	QP Limit (dBμV)	QP Margin (dB)	Avg Amp (dBμV)	Avg Limit (dBμV)	Avg Margin (dB)	Comments
.1523	55.13	47.02	65.87	-18.85	18.60	55.87	-37.27	
.1725	52.82	45.29	64.84	-19.55	23.62	54.84	-31.22	
.2063	49.05	41.53	63.35	-21.82	18.94	53.35	-34.41	
.2423	47.58	38.47	62.02	-23.55	20.42	52.02	-31.60	
.2760	45.14	35.80	60.94	-25.14	25.54	50.94	-25.40	
.3120	42.54	34.41	59.92	-25.51	26.36	49.92	-23.56	
.3458	40.27	31.77	59.06	-27.29	20.93	49.06	-28.13	
.3818	41.27	33.14	58.24	-25.10	26.82	48.24	-21.42	
.4155	40.00	32.80	57.54	-24.74	27.54	47.54	-20.00	
.4493	35.90	28.06	56.89	-28.83	17.28	46.89	-29.61	
.4853	35.47	26.53	56.25	-29.72	15.24	46.25	-31.01	
.5528	33.82	25.06	56.00	-30.94	18.50	46.00	-27.50	
.6225	32.20	23.53	56.00	-32.47	17.40	46.00	-28.60	
.6585	32.11	23.51	56.00	-32.49	15.25	46.00	-30.75	
.7260	31.75	22.93	56.00	-33.07	17.51	46.00	-28.49	
.7620	31.67	23.24	56.00	-32.76	17.38	46.00	-28.62	
.8295	30.83	22.49	56.00	-33.51	17.42	46.00	-28.58	
.8993	28.63	21.39	56.00	-34.61	16.05	46.00	-29.95	
.9713	29.00	21.53	56.00	-34.47	14.81	46.00	-31.19	
1.1085	28.00	23.46	56.00	-32.54	17.22	46.00	-28.78	
1.2480	27.86	23.99	56.00	-32.01	17.39	46.00	-28.61	
1.4888	27.51	24.43	56.00	-31.57	18.20	46.00	-27.80	
1.7295	24.77	20.76	56.00	-35.24	15.35	46.00	-30.65	
1.9680	22.49	19.44	56.00	-36.56	12.29	46.00	-33.71	
2.1503	23.12	17.19	56.00	-38.81	7.56	46.00	-38.44	
2.4090	25.15	17.23	56.00	-38.77	.69	46.00	-45.31	
2.6295	25.35	20.77	56.00	-35.23	11.06	46.00	-34.94	
2.8703	26.34	23.83	56.00	-32.17	11.21	46.00	-34.79	
3.3900	20.95	17.79	56.00	-38.21	9.31	46.00	-36.69	

6. Conducted Emissions Test Results (continued)

6.10.2. 120 Volts, 60 Hz Neutral (continued)

Frequency (MHz)	Pk Amp (dBμV)	QP Amp (dBμV)	QP Limit (dBμV)	QP Margin (dB)	Avg Amp (dBμV)	Avg Limit (dBμV)	Avg Margin (dB)	Comments
3.8760	22.13	18.62	56.00	-37.38	9.12	46.00	-36.88	
4.8750	22.04	19.39	56.00	-36.61	10.14	46.00	-35.86	
5.8785	23.17	20.57	60.00	-39.43	10.49	50.00	-39.51	
7.0755	24.33	20.65	60.00	-39.35	7.25	50.00	-42.75	
8.3670	25.67	22.84	60.00	-37.16	11.27	50.00	-38.73	
10.0523	26.06	22.77	60.00	-37.23	10.63	50.00	-39.37	
12.5295	23.63	20.02	60.00	-39.98	8.63	50.00	-41.37	
14.3340	24.01	20.63	60.00	-39.37	7.89	50.00	-42.11	
15.2678	21.23	16.94	60.00	-43.06	6.27	50.00	-43.73	
16.4468	21.11	15.56	60.00	-44.44	5.36	50.00	-44.64	
17.6910	20.66	14.85	60.00	-45.15	8.05	50.00	-41.95	
18.2423	20.87	15.00	60.00	-45.00	6.15	50.00	-43.85	
18.9038	17.31	10.45	60.00	-49.55	.67	50.00	-49.33	
19.7115	19.15	12.58	60.00	-47.42	4.71	50.00	-45.29	
20.2583	20.91	13.92	60.00	-46.08	6.81	50.00	-43.19	
20.8095	19.72	13.41	60.00	-46.59	7.21	50.00	-42.79	
21.6645	17.42	9.60	60.00	-50.40	2.20	50.00	-47.80	
23.1293	21.23	15.14	60.00	-44.86	8.13	50.00	-41.87	
24.0023	25.76	20.79	60.00	-39.21	16.53	50.00	-33.47	
25.6965	20.30	13.88	60.00	-46.12	6.30	50.00	-43.70	
26.4885	20.78	13.57	60.00	-46.43	6.19	50.00	-43.81	
28.1288	18.26	10.63	60.00	-49.37	1.52	50.00	-48.48	
29.6723	17.16	8.30	60.00	-51.70	.72	50.00	-49.28	

7. Test Site Description

Compliance Worldwide is located at 357 Main Street in Sandown, New Hampshire. The test sites at Compliance Worldwide are used for conducted and radiated emissions testing in accordance with the Federal Communications Commission (FCC) and Industry Canada standards. Through our American Association for Laboratory Accreditation (A2LA) ISO Guide 17025 Accreditation our test sites are designated with the FCC (designation number **US1091**) and Industry Canada (file number **IC 3023A-1**).

Compliance Worldwide is also designated as a Phase 1 CAB under APEC-MRA (US0132) for Australia/New Zealand AS/NZS CISPR 11, AS/NZS CISPR 14-1, AS/NZS CISPR 15, AS/NZS CISPR 32, Chinese-Taipei (Taiwan) BSMI CNS 15936 and Korea (RRA) KS C 9811, KS C 9814-1, KS C 9815, KS C 9832, KS C 9610-6-3 & KS C 9610-6-4.

The radiated emissions test site is a 3- and 10-meter enclosed open area test site (OATS). Personnel, support equipment and test equipment are located in the basement beneath the OATS ground plane.

The conducted emissions site is part of a 16' x 20' x 12' ferrite tile chamber and uses one of the walls for the vertical ground plane. A second conducted emissions site is also located in the basement of the OATS site with a 2.3 x 2.5-meter ground plane and a 2.4 x 2.4-meter vertical wall.

The radiated emissions test site for measurements above 1GHz is a 3 Meter open area test site (OATS) with a 3.6 by 3.6-meter anechoic absorber floor patch to achieve a quasi-free space measurement environment per ANSI C63.4/C63.10 and CISPR 16-1-4 standards.

The sites are designed to test products or systems 1.5 meters W x 1.5 meters L x 2.0 meters H, floor standing or tabletop.

8. Test Images

8.1. Spurious and Harmonic Emissions – 30 kHz to 30 MHz Front



8. Test Images

8.2. Spurious and Harmonic Emissions – 30 kHz to 30 MHz Rear



8. Test Images

8.3. Spurious and Harmonic Emissions – 30 MHz to 960 MHz Front



8. Test Images

8.4. Spurious and Harmonic Emissions – 30 MHz to 960 MHz Rear



8. Test Images

8.5. Spurious and Harmonic Emissions – 960 MHz to 18 GHz Front



8. Test Images

8.6. Spurious and Harmonic Emissions – 960 MHz to 18 GHz Rear



8. Test Images

8.7. Spurious and Harmonic Emissions – 18 to 40 GHz Side View



8. Test Images (continued)

8.8. Conducted Emissions, Front View



8. Test Images (continued)

8.9. Conducted Emissions, Rear View

