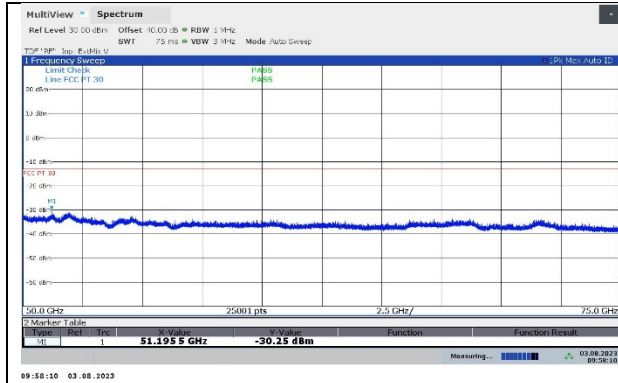
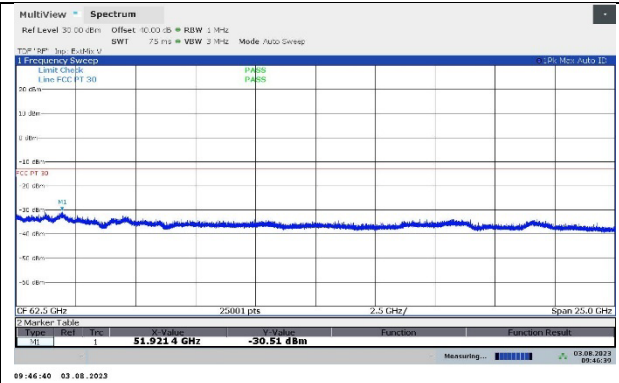


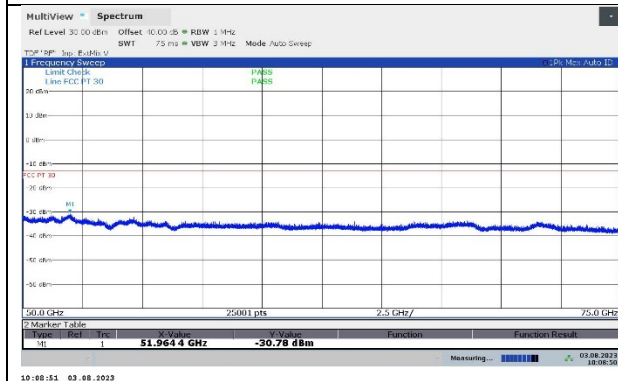
8.7.8. RADIATED EMISSIONS 50-75 GHz



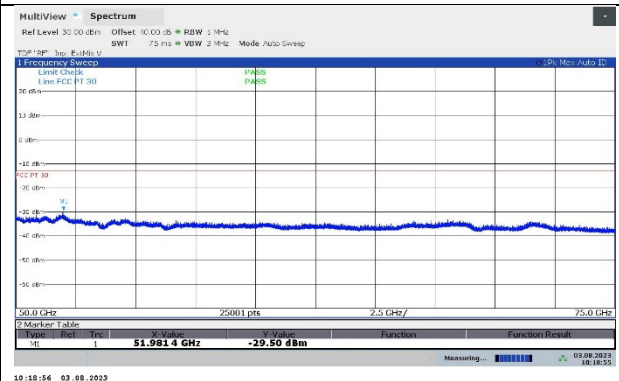
Low Channel, 160 MHz Bandwidth,
 Horizontal



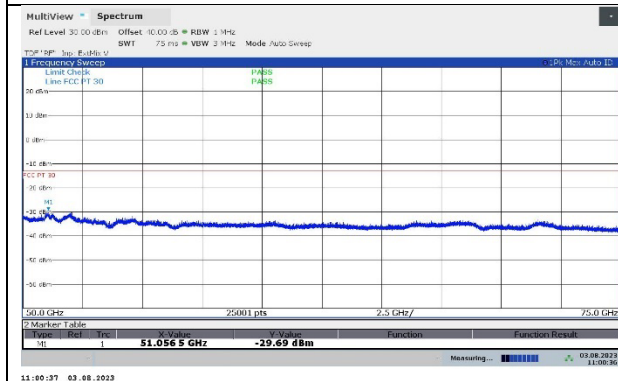
Low Channel, 160 MHz Bandwidth,
 Vertical



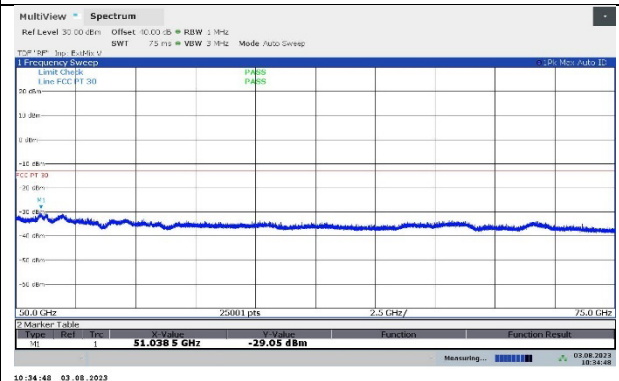
Mid Channel, 160 MHz Bandwidth,
 Horizontal



Mid Channel, 160 MHz Bandwidth,
 Vertical

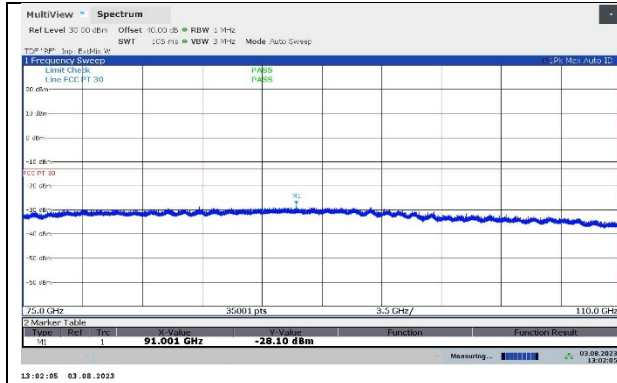


High Channel, 160 MHz Bandwidth,
 Horizontal

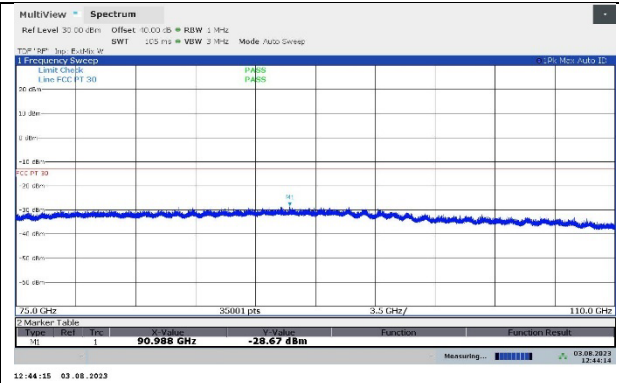


High Channel, 160 MHz Bandwidth,
 Vertical

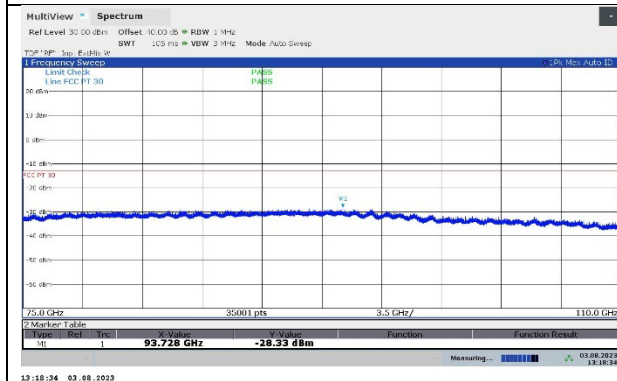
8.7.9. RADIATED EMISSIONS 75-110 GHz



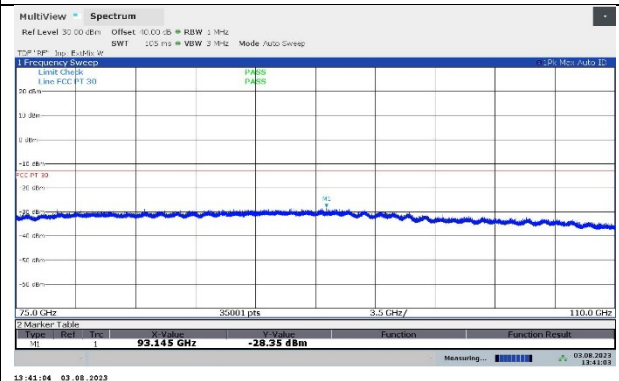
Low Channel, 160 MHz Bandwidth,
Horizontal



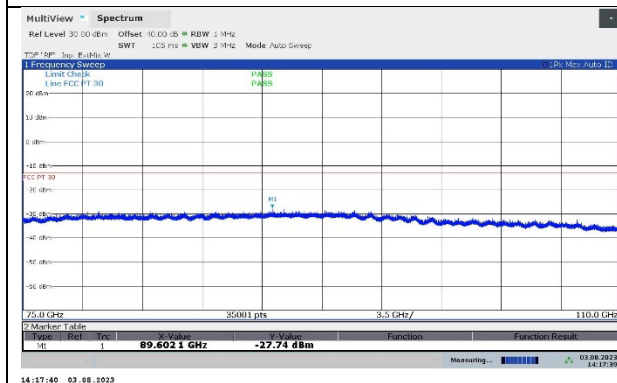
Low Channel, 160 MHz Bandwidth,
Vertical



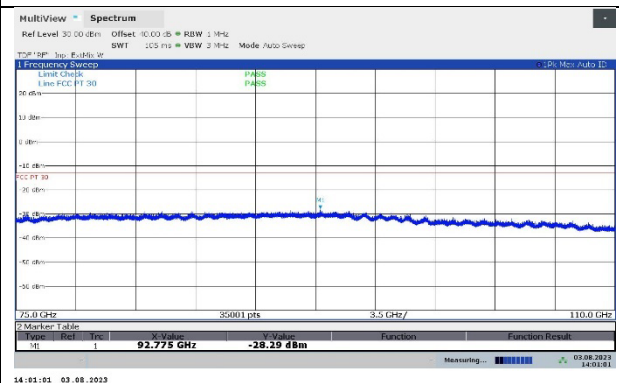
Mid Channel, 160 MHz Bandwidth,
Horizontal



Mid Channel, 160 MHz Bandwidth,
Vertical

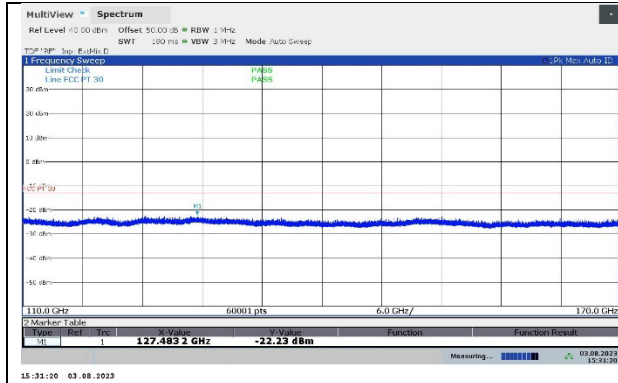


High Channel, 160 MHz Bandwidth,
Horizontal

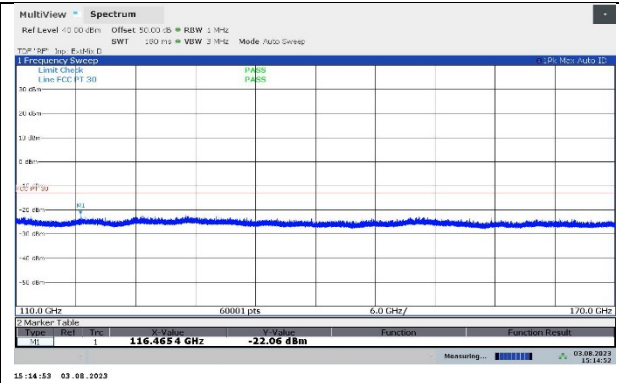


High Channel, 160 MHz Bandwidth,
Vertical

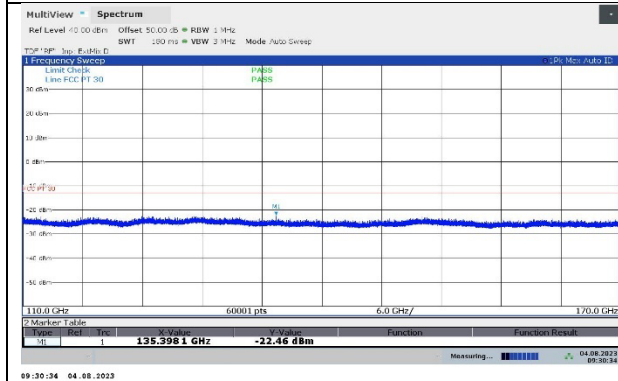
8.7.10. RADIATED EMISSIONS 110-170 GHz



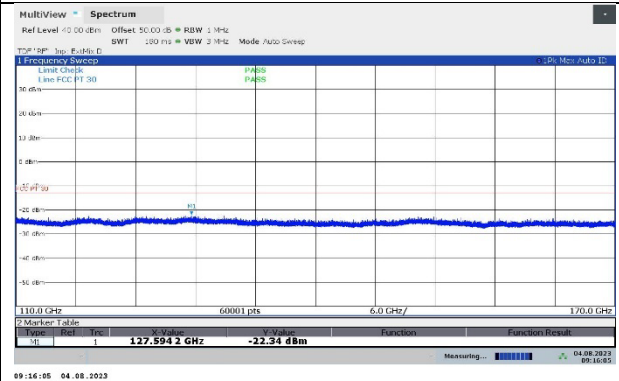
Low Channel, 160 MHz Bandwidth, Horizontal



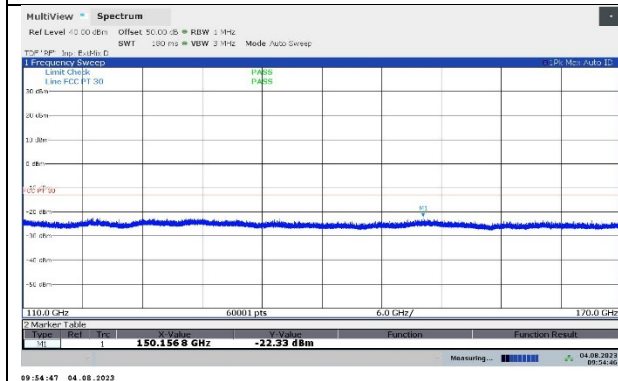
Low Channel, 160 MHz Bandwidth, Vertical



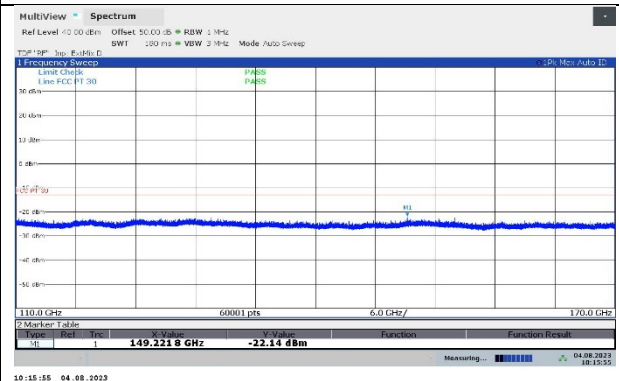
Mid Channel, 160 MHz Bandwidth, Horizontal



Mid Channel, 160 MHz Bandwidth, Vertical

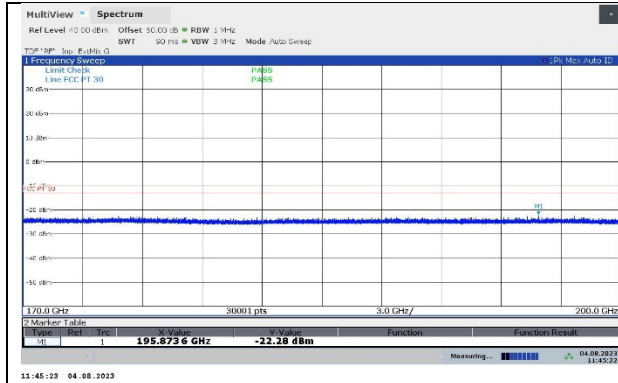


High Channel, 160 MHz Bandwidth, Horizontal



High Channel, 160 MHz Bandwidth, Vertical

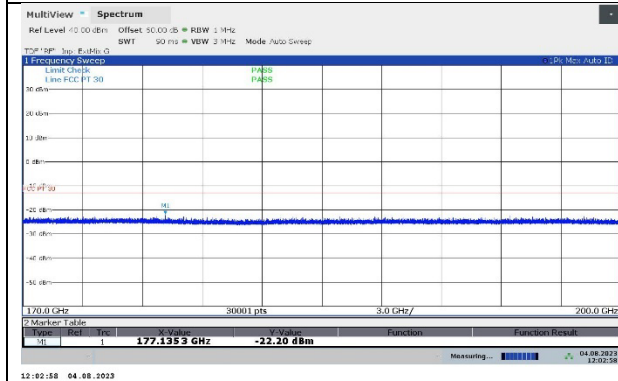
8.7.11. RADIATED EMISSIONS 170-200 GHz



Low Channel, 160 MHz Bandwidth,
Horizontal



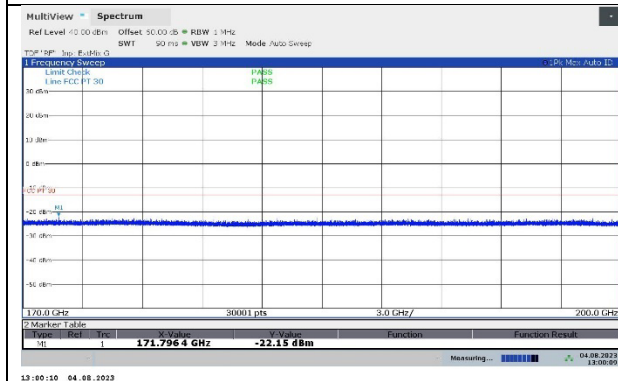
Low Channel, 160 MHz Bandwidth,
Vertical



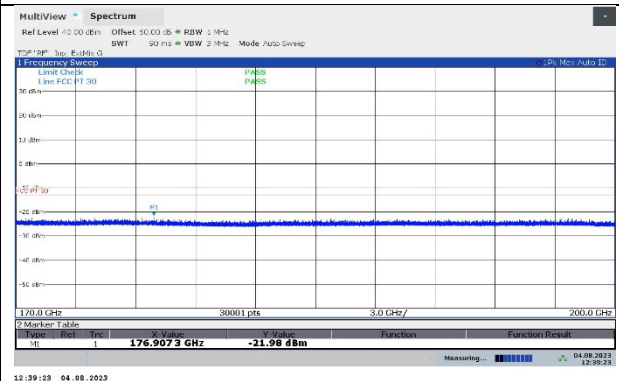
Mid Channel, 160 MHz Bandwidth,
Horizontal



Mid Channel, 160 MHz Bandwidth,
Vertical

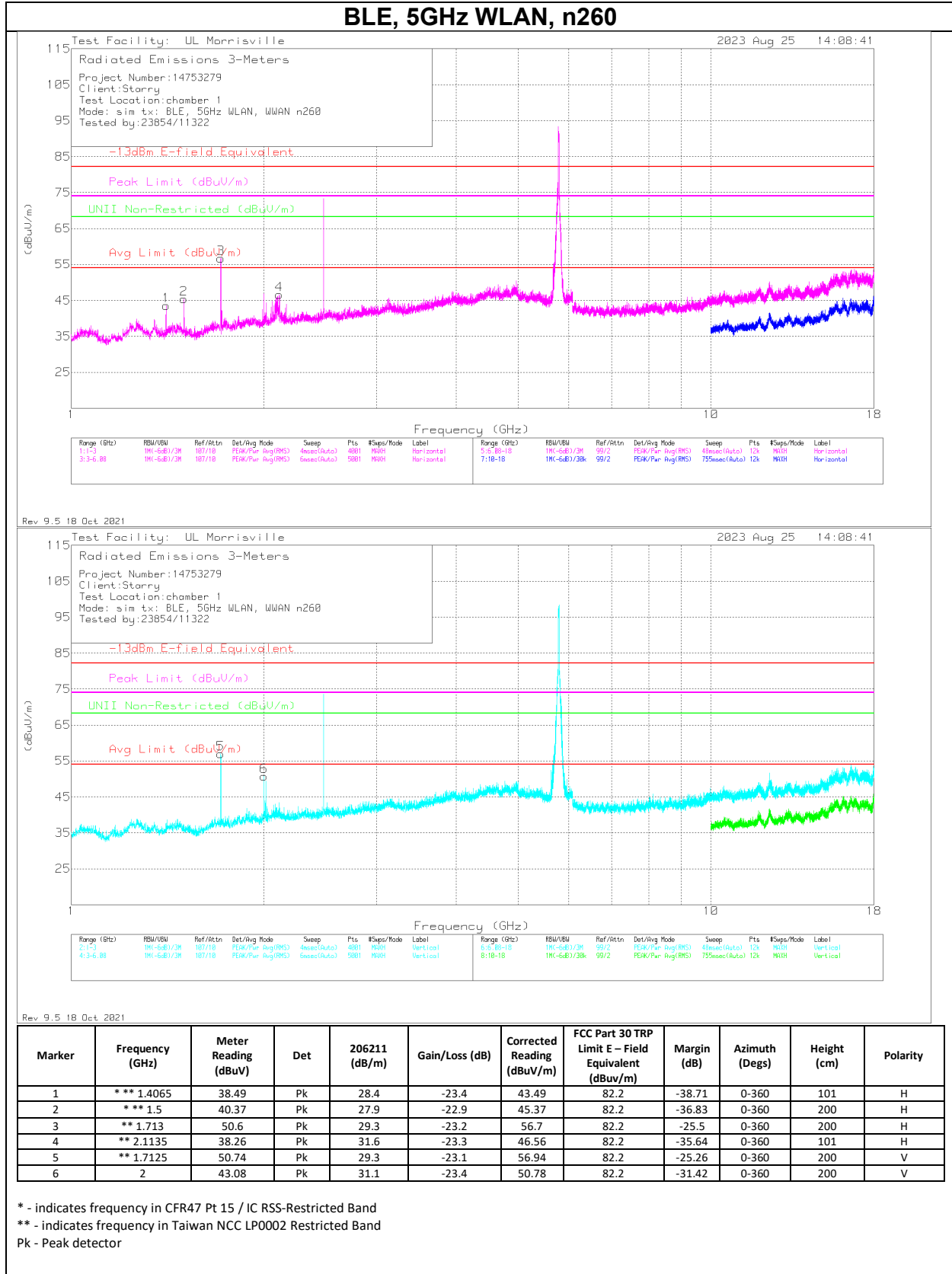


High Channel, 160 MHz Bandwidth,
Horizontal



High Channel, 160 MHz Bandwidth,
Vertical

8.7.12. SIMULTANEOUS TRANSMISSION



8.8. FREQUENCY STABILITY

RULE PART(S)

FCC: §2.1055

LIMIT

For reporting purposes only

TEST PROCEDURES

KDB 842590 D01 Upper Microwave Flexible Use Service v01 Section 4.5
ANSI C63.26-2015 Section 5.6

Test procedures for temperature variation:

- a. Position the EUT in temperature/humidity chamber with power off.
 - b. Set chamber temperature to -30°C and stabilize the EUT for at least 30 minutes.
 - c. Record maximum change in frequency within one minute after powering the EUT.
 - d. Increase chamber temperature at 10°C intervals from -30°C to 50°C. Record maximum change in frequency at each temperature.
 - e. A period of at least 30 minutes is provided to allow stabilization of the equipment at each temperature level.
- Temp. = -30°C to +50°C

Test procedures for voltage variation:

- a. Position the EUT in temperature/humidity chamber with power off.
 - b. Set chamber temperature to 20°C.
 - c. Record maximum frequency change within one minute after powering the EUT.
 - d. The primary supply voltage is varied from 85% to 115% of the nominal value for hand-carried, battery-powered equipment. primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.
- Voltage = (85% - 115%)
Nominal: 56.0 VDC; Low: 47.6 VDC; High: 64.4 VDC.

The measurements were performed using the normal transmission mode supported by the EUT.

RESULTS

See the following page.

TESTED BY

Employee IDs: 23854
Test Dates: 2023-07-09 to 2023-07-10
Test Location: Conducted 1

RESULTS

Nominal Frequency:	38.5	GHz		
Nominal Voltage:	56	Vdc		
Temperature (°C)	Voltage (V)	Measured Frequency (GHz)	Measured Frequency (MHz)	Delta (MHz)
-30	56	38.500089356	38500.089	0.455522000
-20	56	38.500068366	38500.068	0.434532000
-10	56	38.499798152	38499.798	0.164318000
0	56	38.499639419	38499.639	0.005585000
10	56	38.499418969	38499.419	-0.214865000
20	56	38.499633834	38499.634	Reference
20	47.6	38.500022808	38500.023	0.388974000
20	64.4	38.499881198	38499.881	0.247364000
30	56	38.499515491	38499.515	-0.118343000
40	56	38.491240440	38491.240	-8.393394000
50	56	38.499708079	38499.708	0.074245000

9. SETUP PHOTOS

Please refer to report R14753279-EP2 for setup photos.

APPENDIX A

DOWNCONVERTER CERTIFICATE OF CONFORMANCE



Virginia Diodes, Inc
979 2nd St. SE
Suite 309
Charlottesville, VA 22902
Phone: 434-297-3257
Fax: 434-297-3258

Certificate of Conformance

To: UL LLC
2800 Perimeter Park Drive
Suite B
Morrisville, NC 27560
United States

From: Virginia Diodes, Inc
979 2nd St. SE
Suite 309
Charlottesville, VA 22902

Packing List No: 231573
Shipping Date: 4/10/2023

Today's Date: 04/11/2023
PO Number: 7202160444

<u>Quantity Shipped</u>	<u>Unit</u>	<u>Description</u>	<u>Order-Job Number</u>
1	EA	RETEST-WR15SAX-F - WR15SAX-F / SN: SAX 820	230103A-01
1	EA	RETEST-WR10SAX-F - WR10SAX-F / SN: SAX 821	230103A-02
1	EA	RETEST-WR6.5SAX-F - WR6.5SAX-F / SN: SAX 822	230103A-03
1	EA	RETEST-WR4.3SAX-F - WR4.3SAX-F / SN: SAX 823	230103A-04

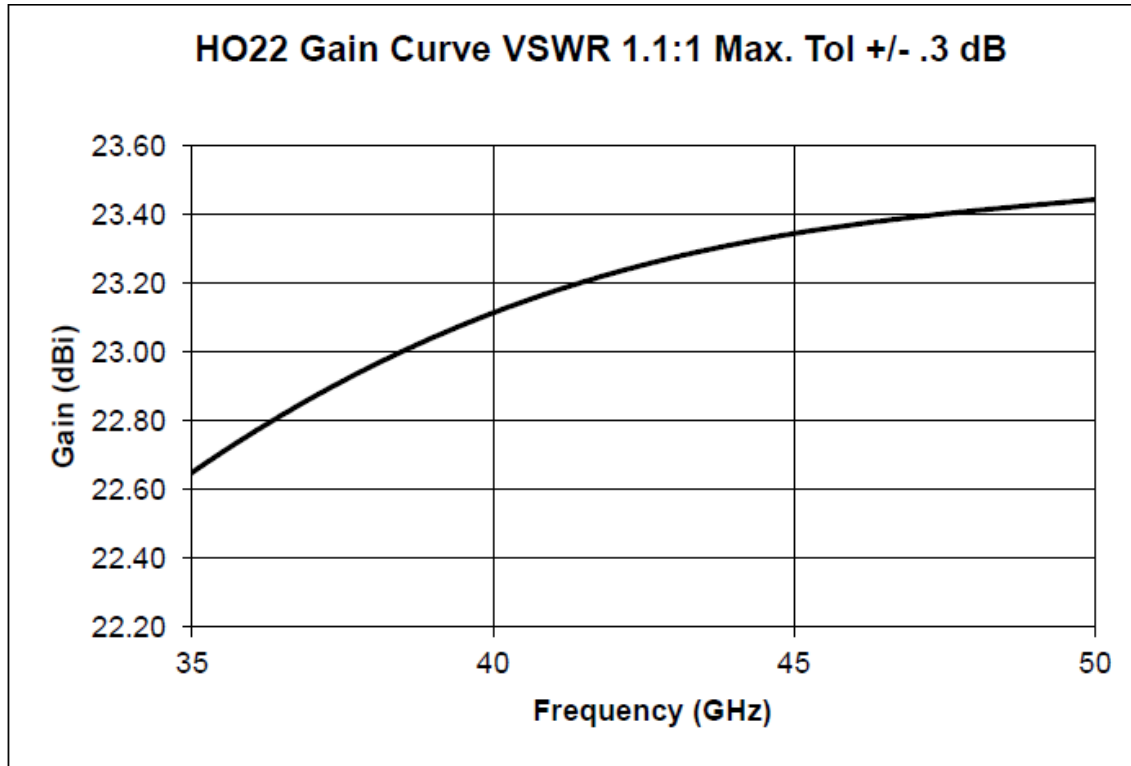
The VDI product(s) in this shipment meet(s) the guidelines for performance specifications established in accordance with the corresponding Purchase Order. Data presented in the User Guide, where applicable, has been obtained in accordance with VDI's Quality Management System. All instruments, used to obtain data, which require calibration have been calibrated with equipment traceable to the National Institute of Standards and Technology (NIST) and through NIST to the International System of Units (SI).

DocuSigned by:

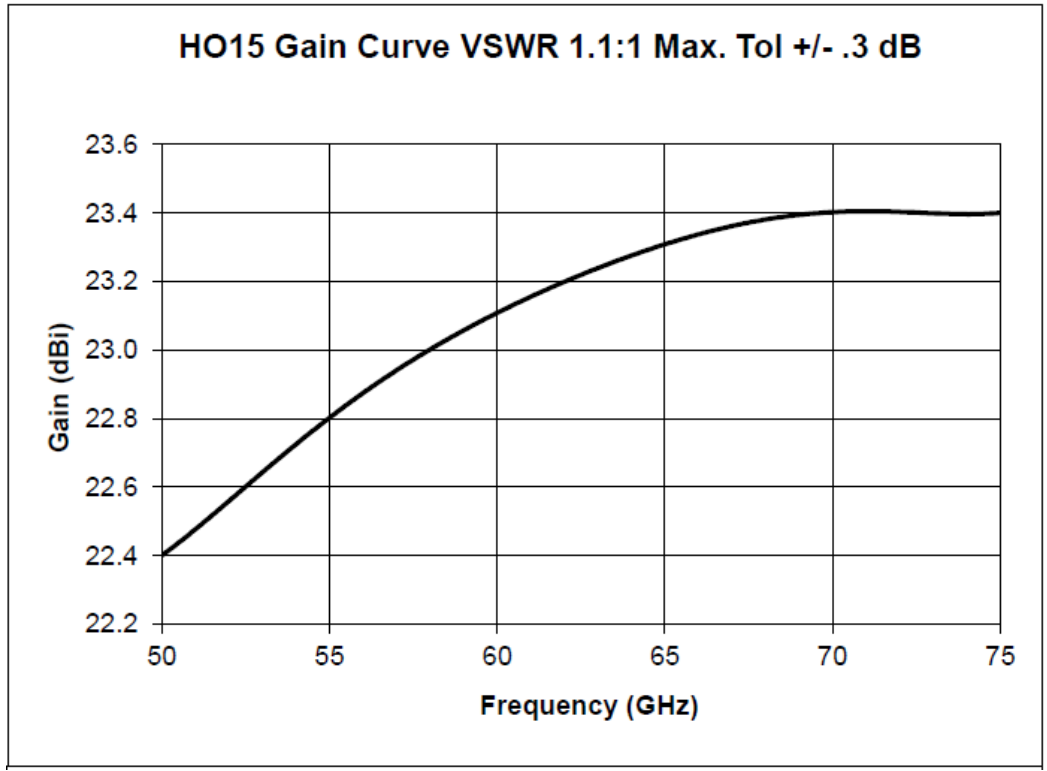
82D411A1AE5647A...
Authorized Signature
Virginia Diodes, Inc



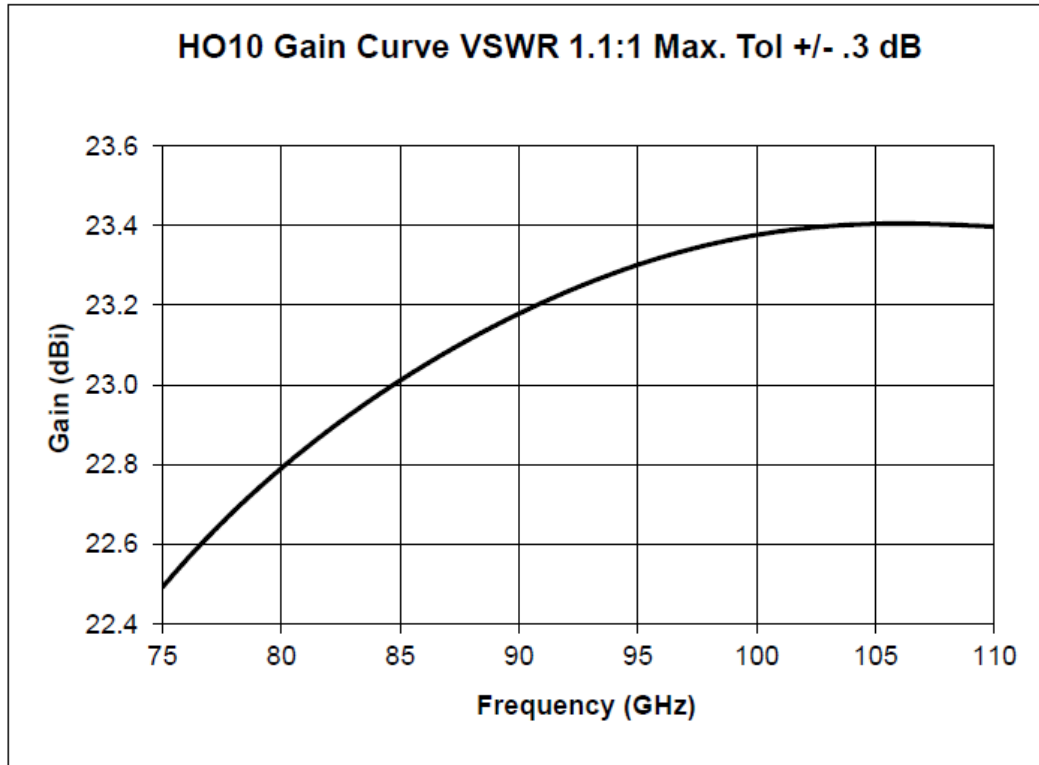
35-50 GHz CMI HO22R HORN ANTENNA



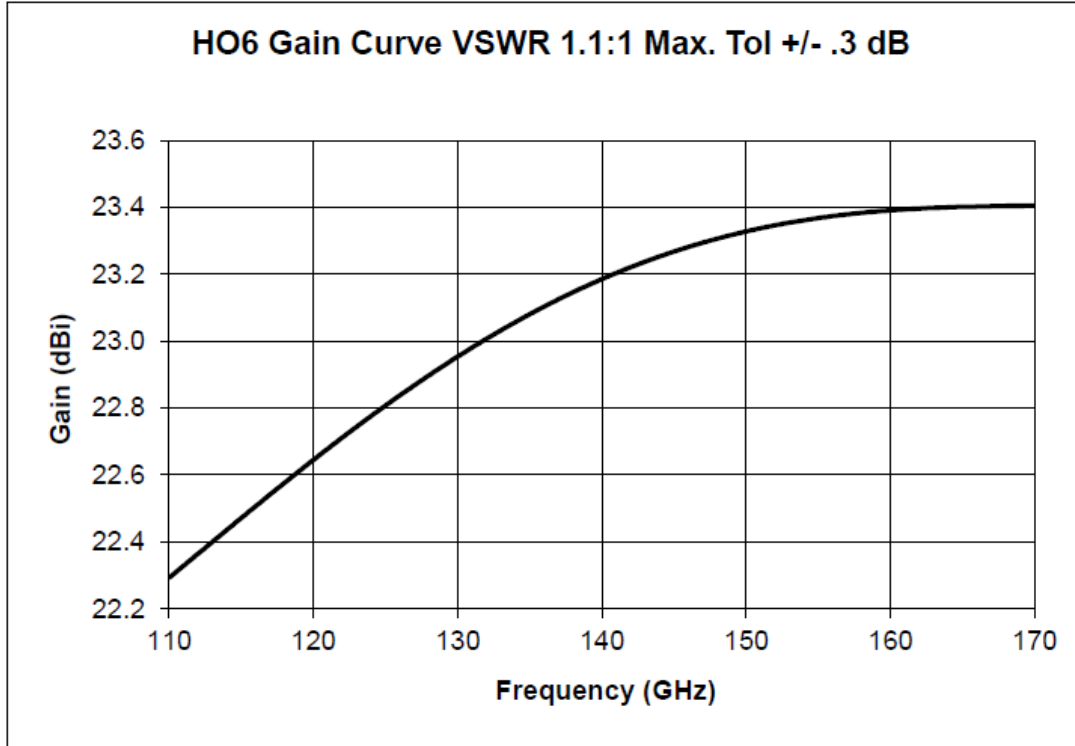
50-75 GHz CMI HO15R HORN ANTENNA



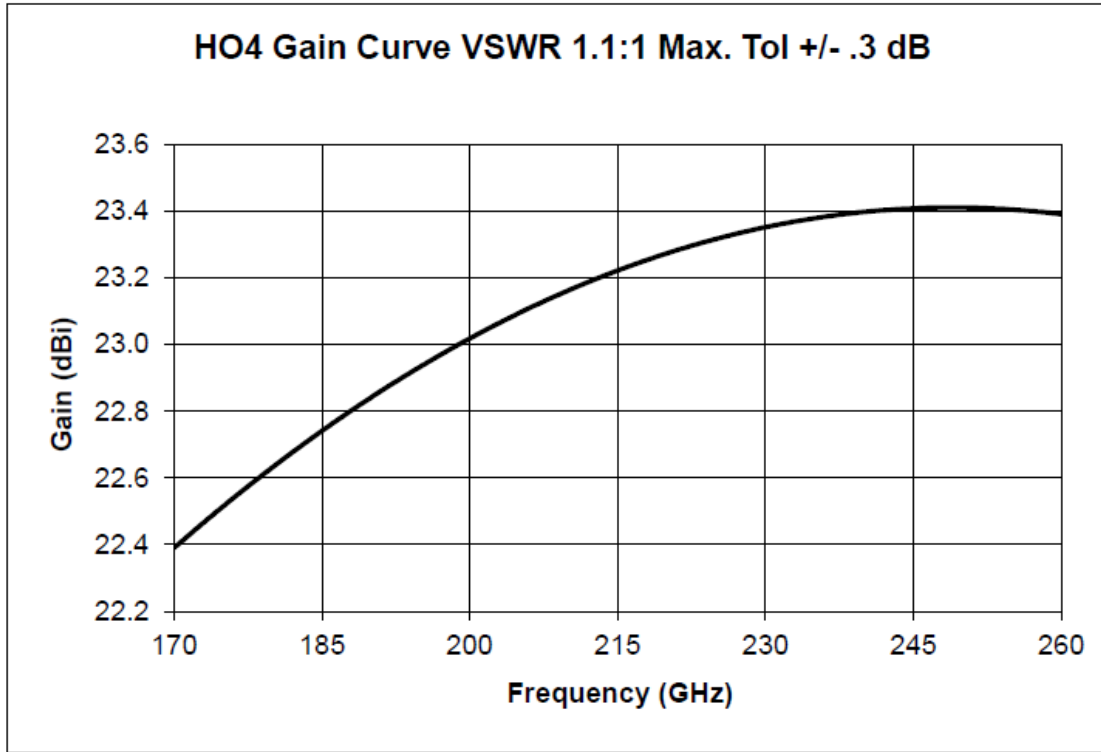
75-110 GHz CMI HO10R HORN ANTENNA



110-170 GHz CMI HO6 HORN ANTENNA



170-200 GHz CMI HO4 HORN ANTENNA



LABORATORY ACCREDITATION



Accredited Laboratory

A2LA has accredited

UL LLC

Research Triangle Park, North Carolina

for technical competence in the field of

Electrical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 3rd day of May 2022.

Trace McInturf, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 0751.06
Valid to February 29, 2024

For the tests to which this accreditation applies, please refer to the laboratory's Electrical Scope of Accreditation.

END OF REPORT