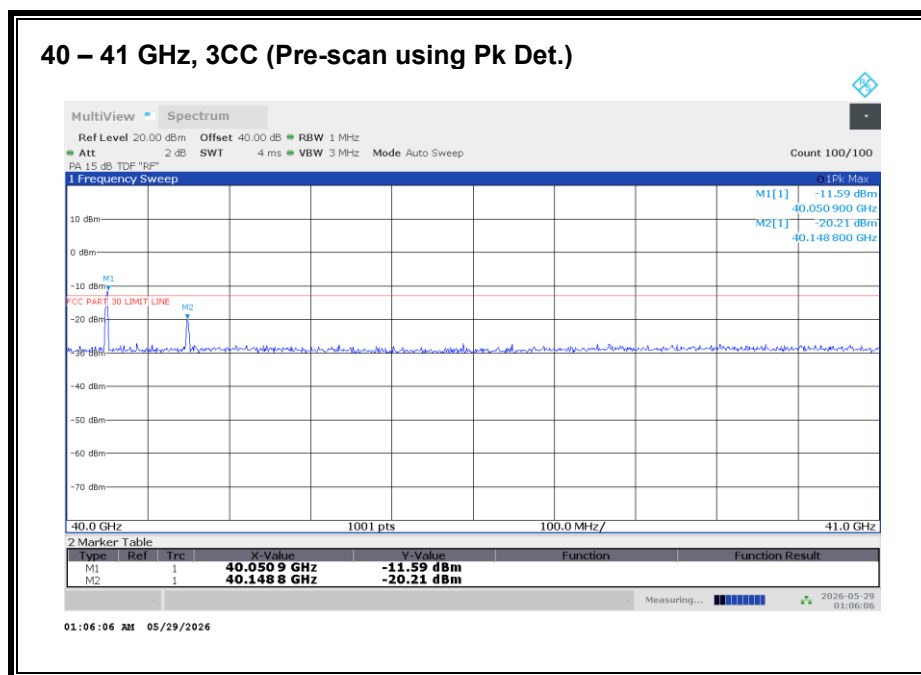


40 – 41 GHz n260, 3CC



Worst case configuration:

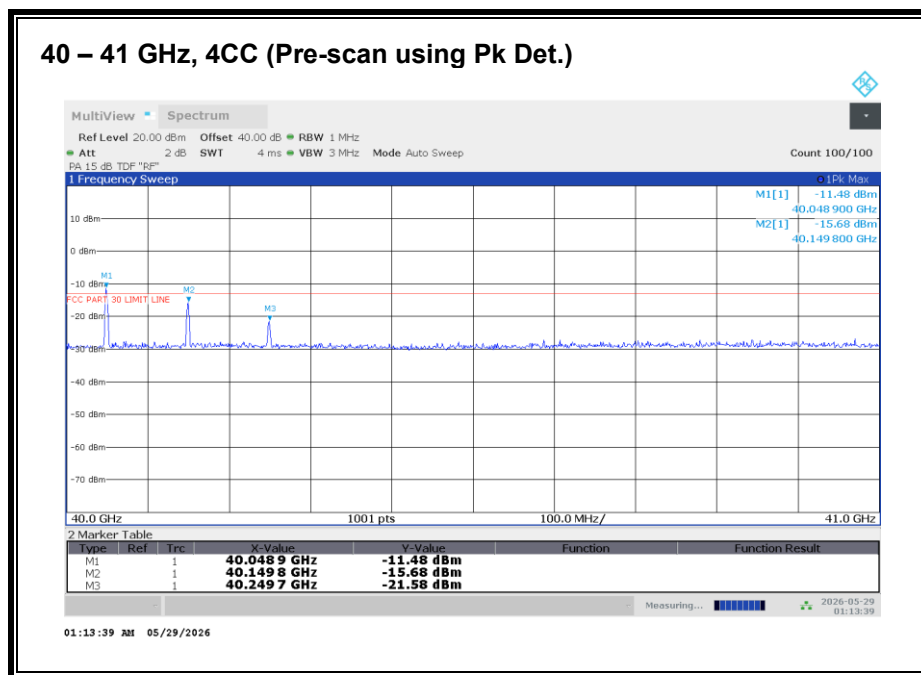
SISO-DUAL_QPSK_(100 MHz + 100 MHz + 100 MHz)_High CH_RB Offset 1/32 (1RB-M)

Emissions detected using Peak Detection at pre-scan. Avg EIRP was measured.

All emissions were investigated, and the highest emission was reported.

Freq.	Meas. Distance	Rx Ant. Polarity	Corrected Avg EIRP	TRP Limit	Margin
(GHz)	(m)	H/V	(dBm)	(dBm)	(dB)
40.049	3	V	-15.17	-13.00	-2.17

40 – 41 GHz n260, 4CC



Worst case configuration:

SISO-DUAL_QPSK_(100 MHz + 100 MHz + 100 MHz + 100 MHz)_High CH_RB Offset 1/32 (1RB-M)

Emissions detected using Peak Detection at pre-scan. Avg EIRP was measured.

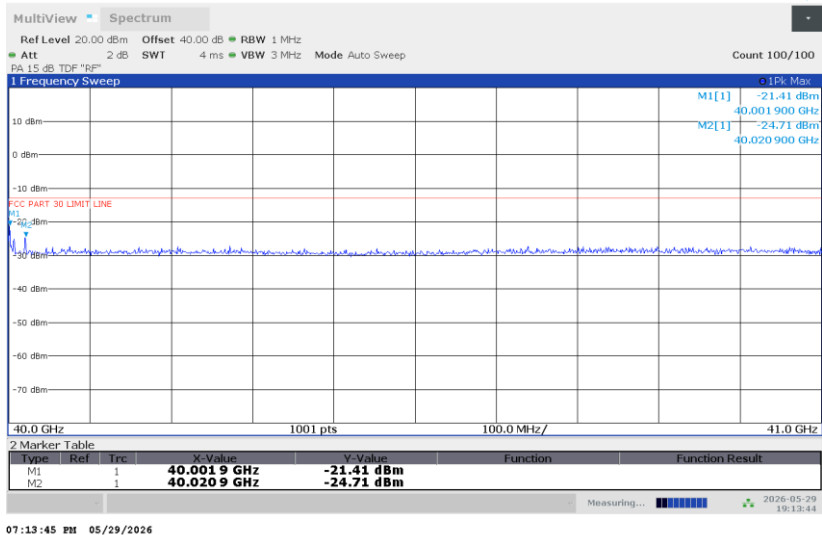
All emissions were investigated, and the highest emission was reported.

Freq.	Meas.	Rx Ant.	Corrected	TRP Limit	Margin
(GHz)	Distance	Polarity	Avg EIRP	(dBm)	(dB)
	(m)	H/V	(dBm)		
40.049	3	V	-15.83	-13.00	-2.83

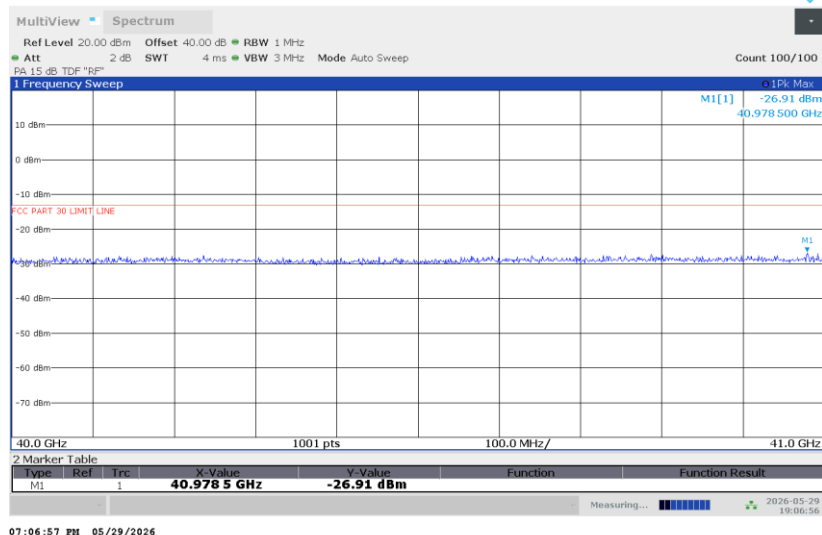
8.5.68. RSE n260 40 – 41 GHz STATE B

Note: 37 - 40 GHz covered by Fundamental and BE measurements.

40 – 41 GHz, 1CC (Pre-scan using Pk Det.) Horizontal



40 – 41 GHz, 1CC (Pre-scan using Pk Det.) Vertical

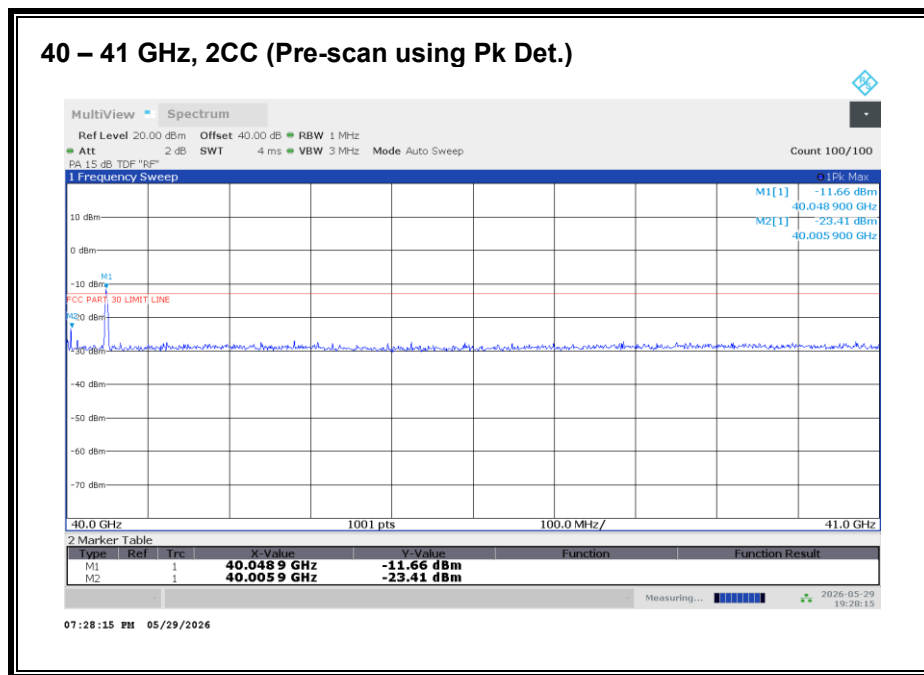


Emissions detected using Peak Detection at pre-scan. Avg EIRP was measured.

40 - 41 GHz n260, 1CC

Freq.	Meas. Distance	Rx Ant. Polarity	Corrected Avg EIRP	TRP Limit	Margin
(GHz)	(m)	H/V	(dBm)	(dBm)	(dB)
40.002	3	H	-37.75	-13.00	-24.75
40.002	3	V	-33.25	-13.00	-20.25
40.021	3	H	-37.92	-13.00	-24.92
40.021	3	V	-38.61	-13.00	-25.61

40 – 41 GHz n260, 2CC



Worst case configuration:

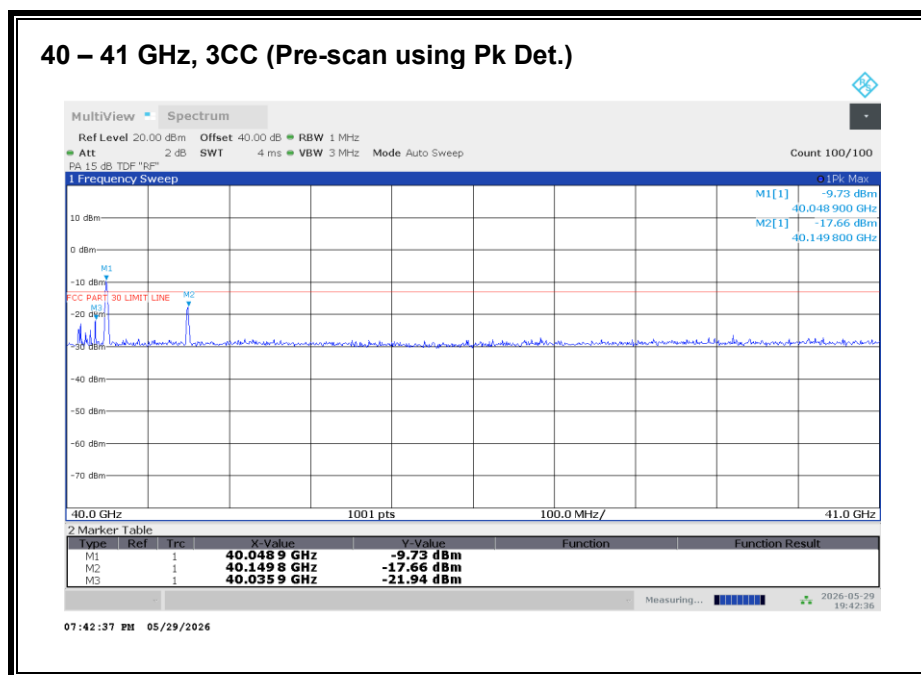
SISO-DUAL_QPSK_(100 MHz + 100 MHz)_High CH_RB Offset 1/32 (1RB-M)

Emissions detected using Peak Detection at pre-scan. Avg EIRP was measured.

All emissions were investigated, and the highest emission was reported.

Freq.	Meas. Distance	Rx Ant. Polarity	Corrected Avg EIRP	TRP Limit	Margin
(GHz)	(m)	H/V	(dBm)	(dBm)	(dB)
40.049	3	V	-16.45	-13.00	-3.45

40 – 41 GHz n260, 3CC



Worst case configuration:

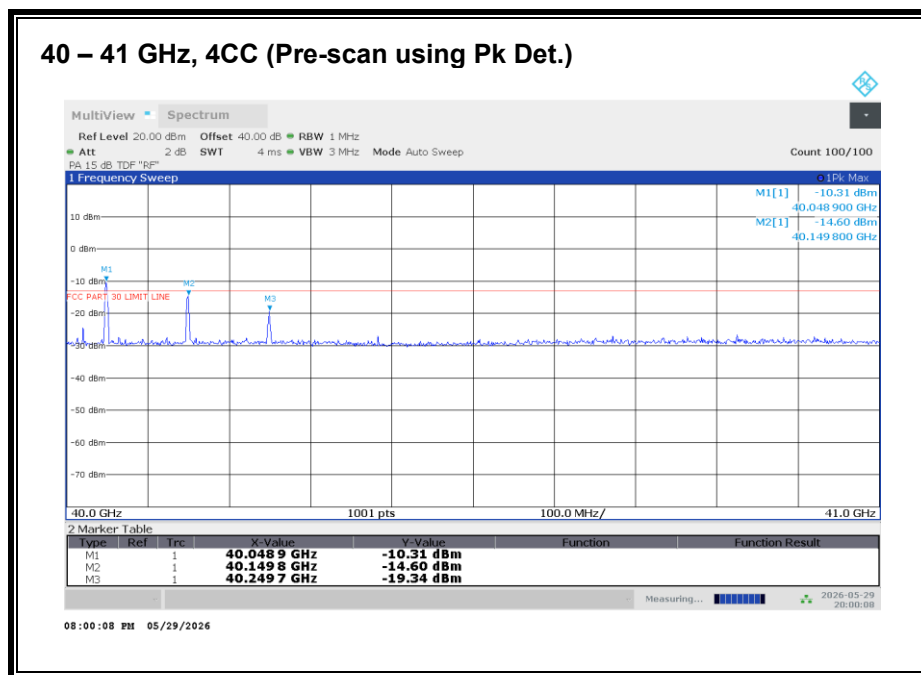
SISO-DUAL_QPSK_(100 MHz + 100 MHz + 100 MHz)_High CH_RB Offset 1/32 (1RB-M)

Emissions detected using Peak Detection at pre-scan. Avg EIRP was measured.

All emissions were investigated, and the highest emission was reported.

Freq.	Meas.	Rx Ant.	Corrected	TRP Limit	Margin
(GHz)	Distance	Polarity	Avg EIRP	(dBm)	(dB)
	(m)	H/V	(dBm)		
40.049	3	V	-15.63	-13.00	-2.63

40 – 41 GHz n260, 4CC



Worst case configuration:

SISO-DUAL_QPSK_(100 MHz + 100 MHz + 100 MHz + 100 MHz)_High CH_RB Offset 1/32 (1RB-M)

Emissions detected using Peak Detection at pre-scan. Avg EIRP was measured.

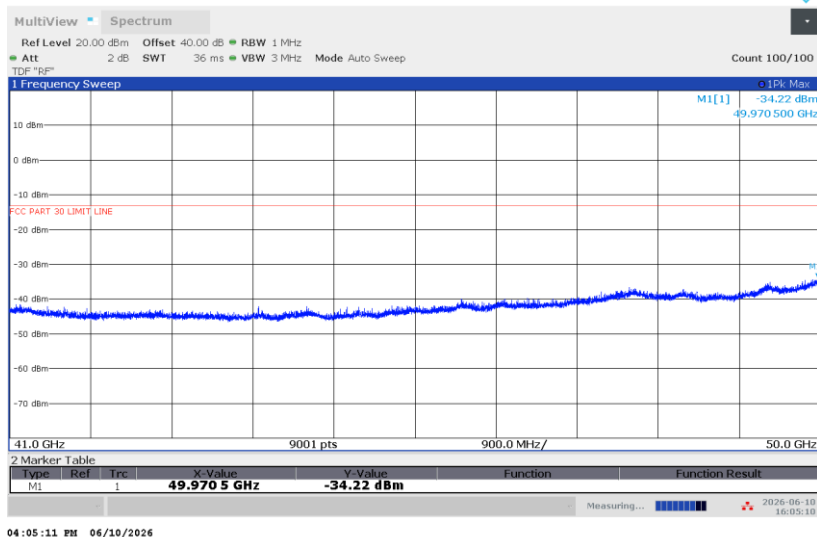
All emissions were investigated, and the highest emission was reported.

Freq.	Meas. Distance	Rx Ant. Polarity	Corrected Avg EIRP	TRP Limit	Margin
(GHz)	(m)	H/V	(dBm)	(dBm)	(dB)
40.049	3	V	-15.91	-13.00	-2.91

8.5.69. RSE n260 41 – 50 GHz STATE A

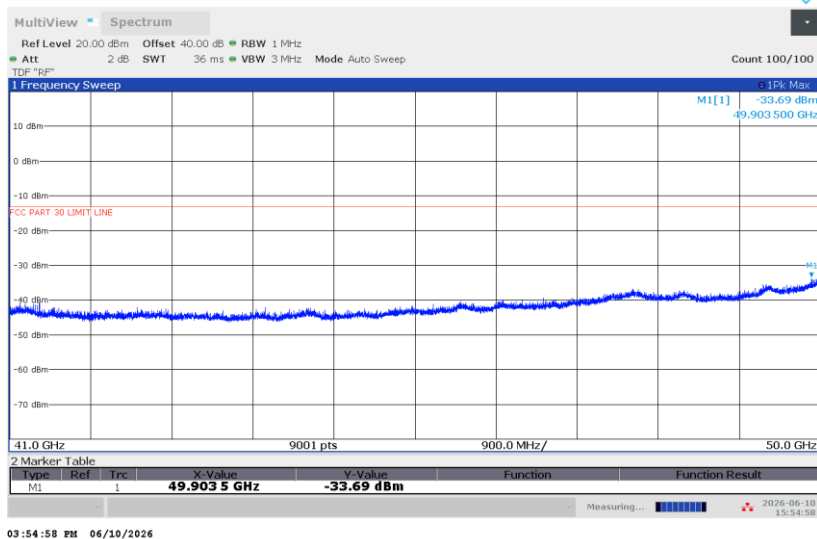
41 – 50 GHz, 1CC (Pre-scan using Pk Det.)

Horizontal



41 – 50 GHz, 1CC (Pre-scan using Pk Det.)

Vertical

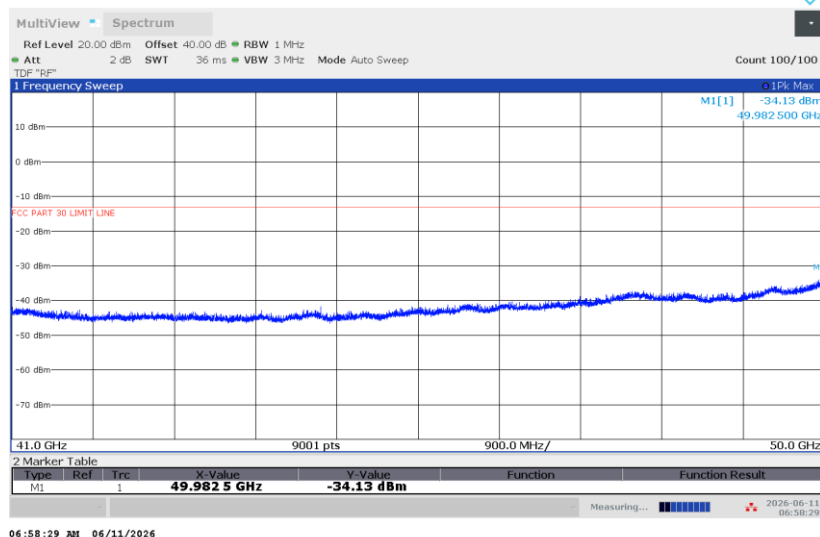


No emission detected using Peak Detection.

8.5.70. RSE n260 41 – 50 GHz STATE B

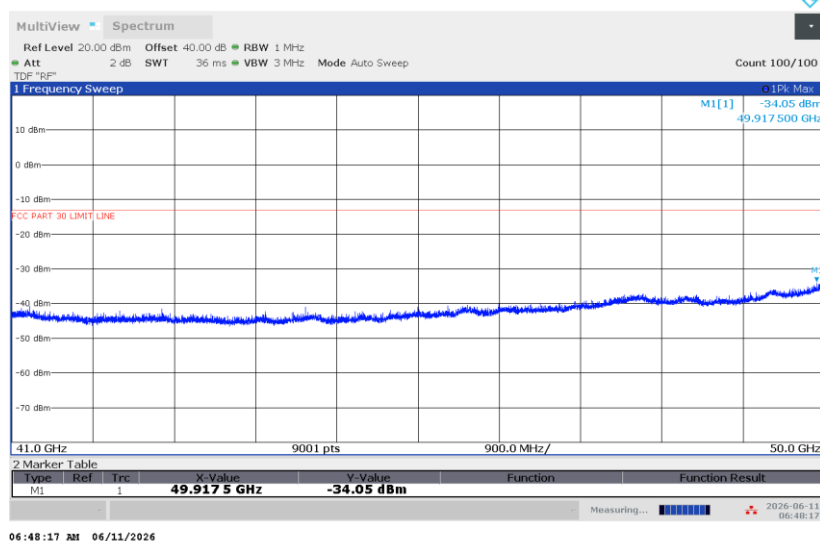
41 – 50 GHz, 1CC (Pre-scan using Pk Det.)

Horizontal



41 – 50 GHz, 1CC (Pre-scan using Pk Det.)

Vertical

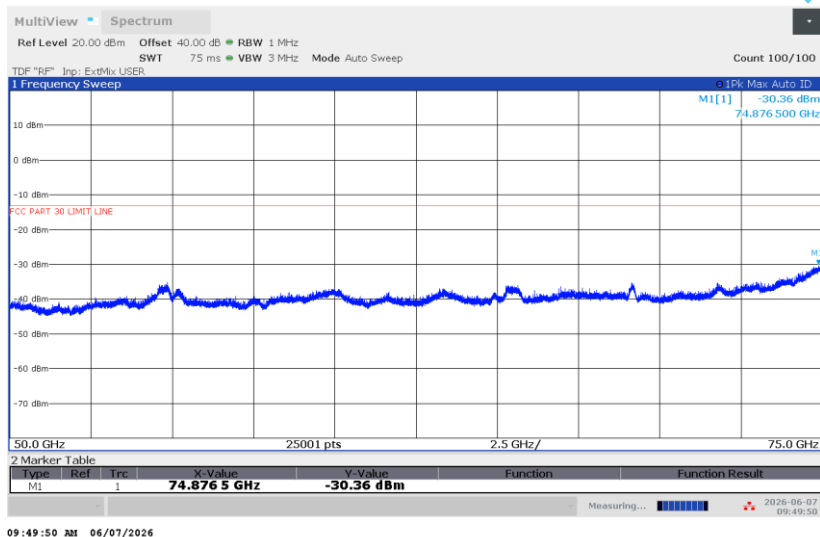


No emission detected using Peak Detection.

8.5.71. RSE n260 50 - 75 GHz STATE A

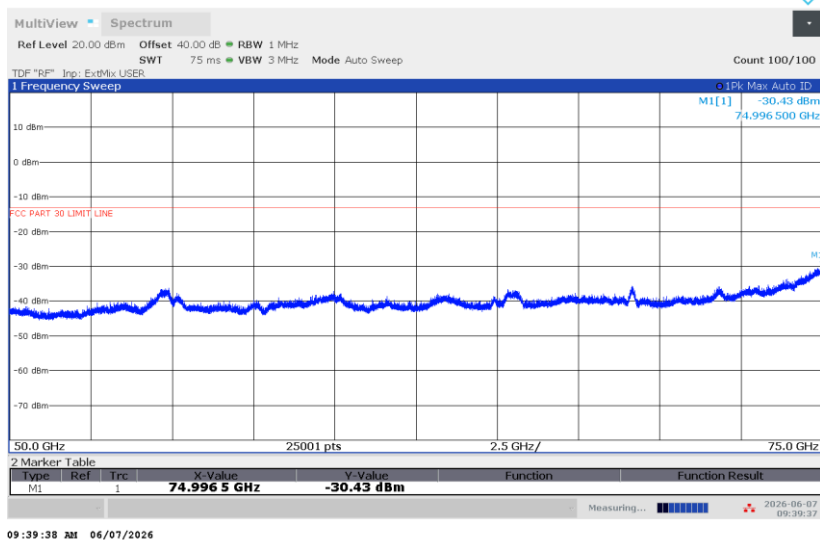
50 - 75 GHz, 1CC (Pre-scan using Pk Det.)

Horizontal



50 - 75 GHz, 1CC (Pre-scan using Pk Det.)

Vertical

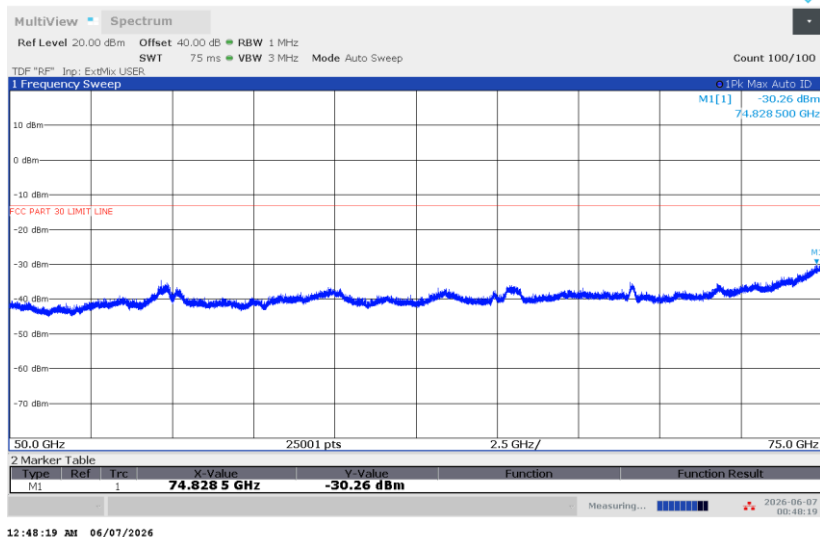


No emission detected using Peak Detection.

8.5.72. RSE n260 50 - 75 GHz STATE B

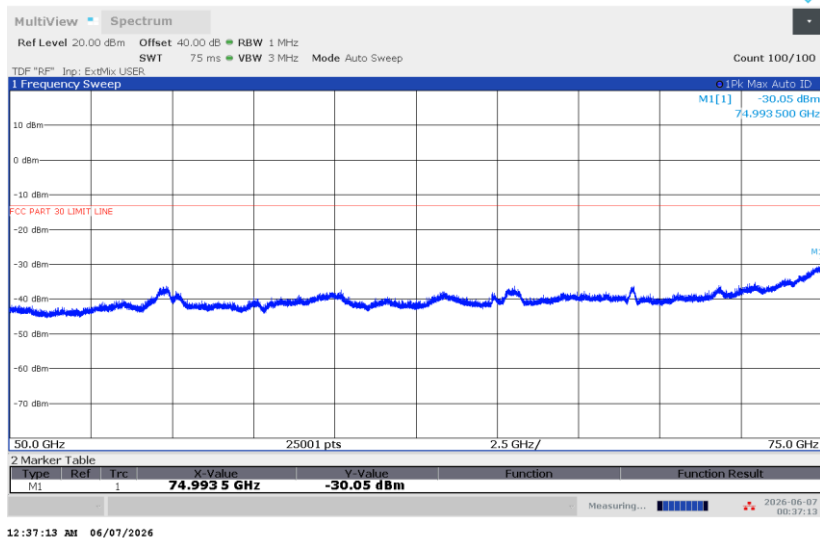
50 - 75 GHz, 1CC (Pre-scan using Pk Det.)

Horizontal



50 - 75 GHz, 1CC (Pre-scan using Pk Det.)

Vertical

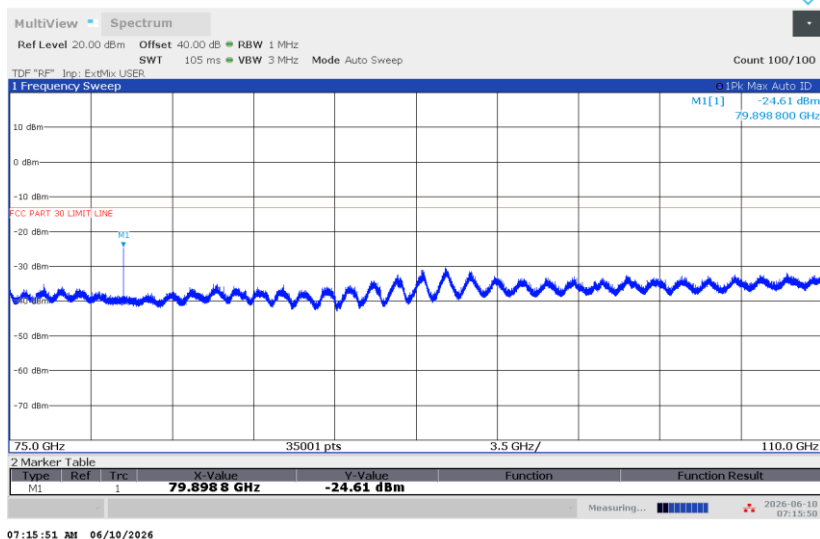


No emission detected using Peak Detection.

8.5.73. RSE n260 75 - 110 GHz STATE A

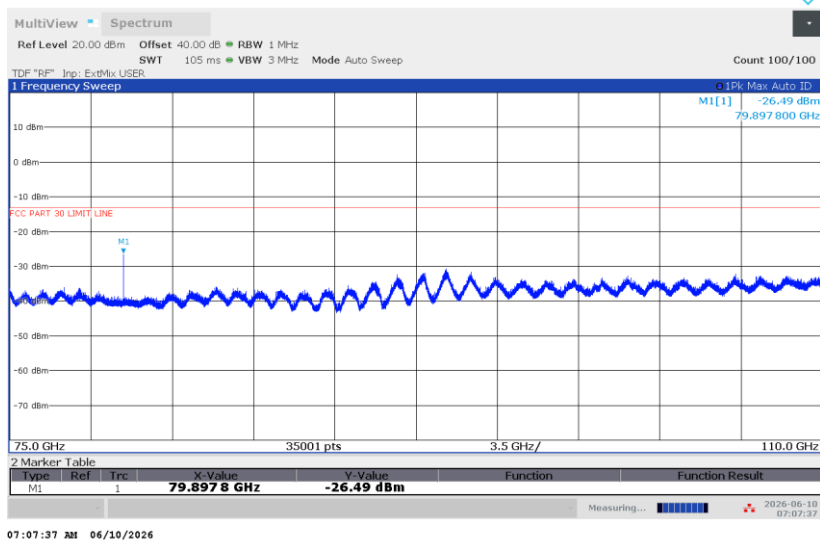
75 - 110 GHz, 1CC (Pre-scan using Pk Det.)

Horizontal



75 - 110 GHz, 1CC (Pre-scan using Pk Det.)

Vertical



Emissions detected using Peak Detection at pre-scan. Avg EIRP was measured.

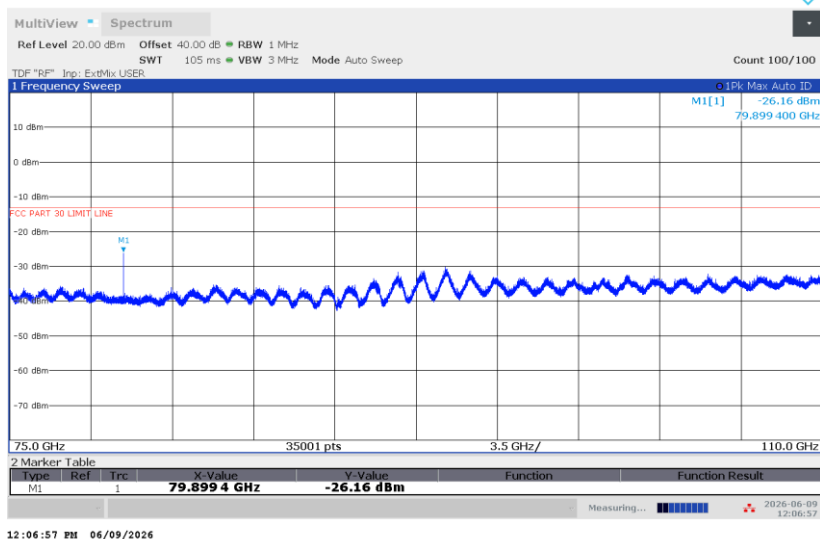
75 - 110 GHz n260, 1CC

Freq.	Meas. Distance	Rx Ant. Polarity	Corrected Avg EIRP	TRP Limit	Margin
(GHz)	(m)	H/V	(dBm)	(dBm)	(dB)
79.898	3	H	-25.66	-13.00	-12.66
79.898	3	V	-35.83	-13.00	-22.83

8.5.74. RSE n260 75 - 110 GHz STATE B

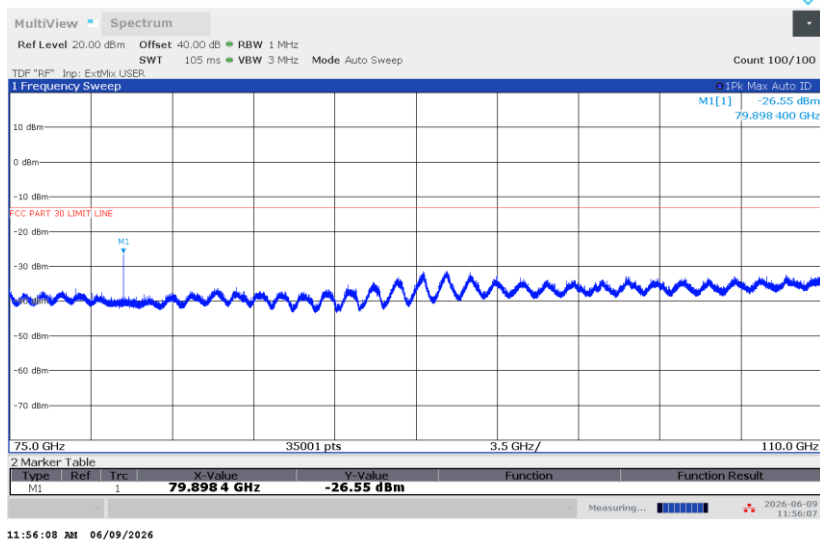
75 - 110 GHz, 1CC (Pre-scan using Pk Det.)

Horizontal



75 - 110 GHz, 1CC (Pre-scan using Pk Det.)

Vertical



Emissions detected using Peak Detection at pre-scan. Avg EIRP was measured.

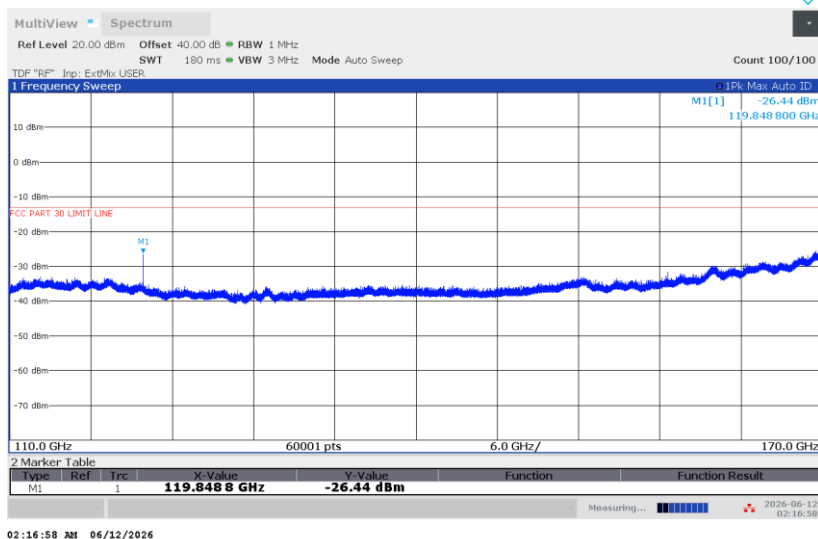
75 - 110 GHz n260, 1CC

Freq.	Meas. Distance	Rx Ant. Polarity	Corrected Avg EIRP	TRP Limit	Margin
(GHz)	(m)	H/V	(dBm)	(dBm)	(dB)
79.898	3	H	-44.80	-13.00	-31.80
79.898	3	V	-30.30	-13.00	-17.30

8.5.75. RSE n260 110 - 170 GHz STATE A

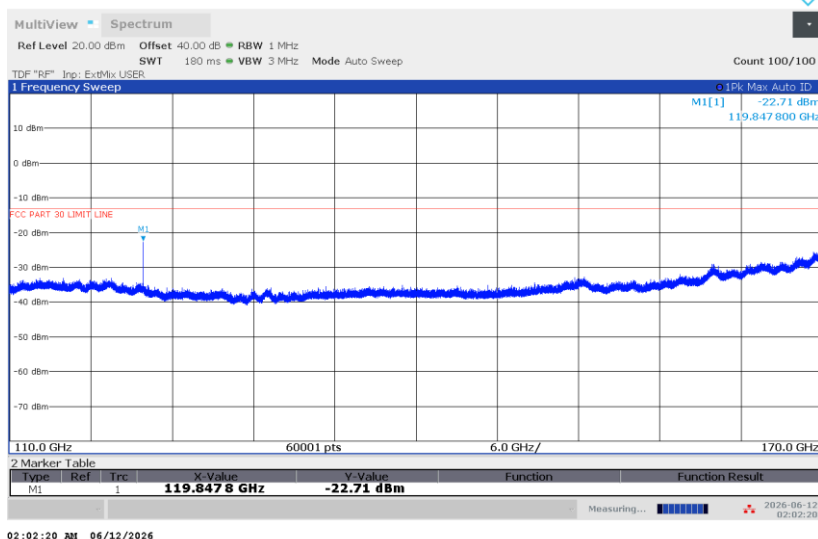
110 - 170 GHz, 1CC (Pre-scan using Pk Det.)

Horizontal



110 - 170 GHz, 1CC (Pre-scan using Pk Det.)

Vertical



Emissions detected using Peak Detection at pre-scan. Avg EIRP was measured.

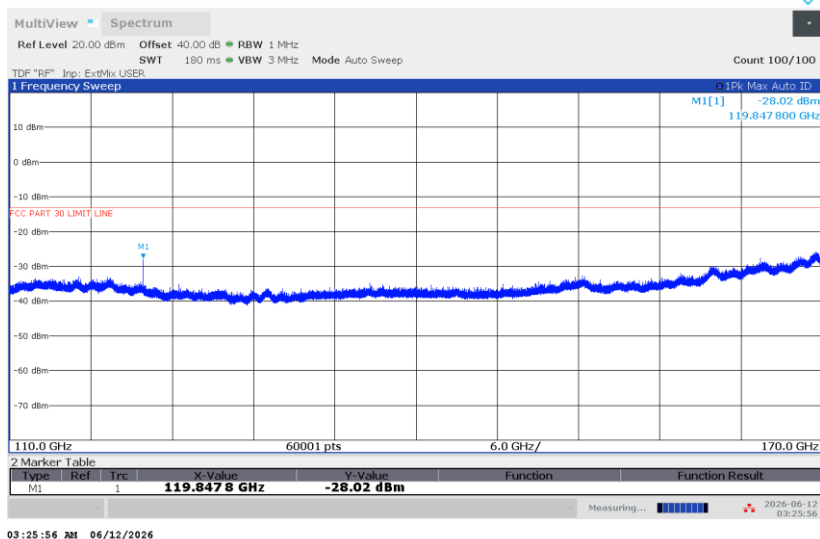
110 - 170 GHz n260, 1CC

Freq.	Meas. Distance	Rx Ant. Polarity	Corrected Avg EIRP	TRP Limit	Margin
(GHz)	(m)	H/V	(dBm)	(dBm)	(dB)
119.847	1	H	-43.19	-13.00	-30.19
119.847	1	V	-27.23	-13.00	-14.23

8.5.76. RSE n260 110 - 170 GHz STATE B

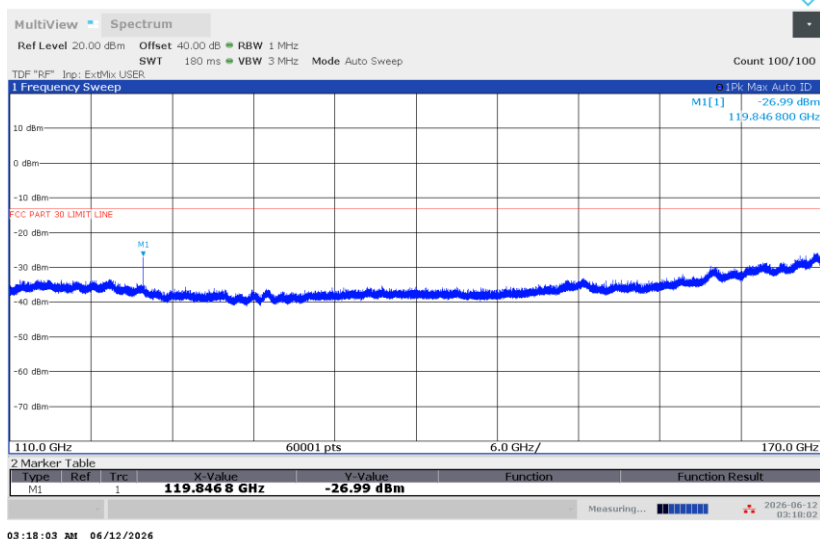
110 - 170 GHz, 1CC (Pre-scan using Pk Det.)

Horizontal



110 - 170 GHz, 1CC (Pre-scan using Pk Det.)

Vertical



Emissions detected using Peak Detection at pre-scan. Avg EIRP was measured.

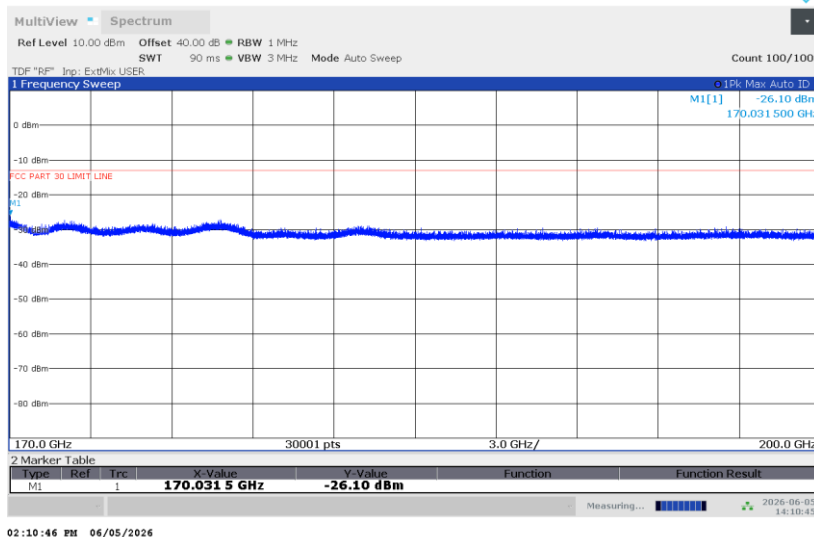
110 - 170 GHz n260, 1CC

Freq.	Meas. Distance	Rx Ant. Polarity	Corrected Avg EIRP	TRP Limit	Margin
(GHz)	(m)	H/V	(dBm)	(dBm)	(dB)
119.847	1	H	-40.64	-13.00	-27.64
119.847	1	V	-29.63	-13.00	-16.63

8.5.77. RSE n260 170 - 200 GHz STATE A

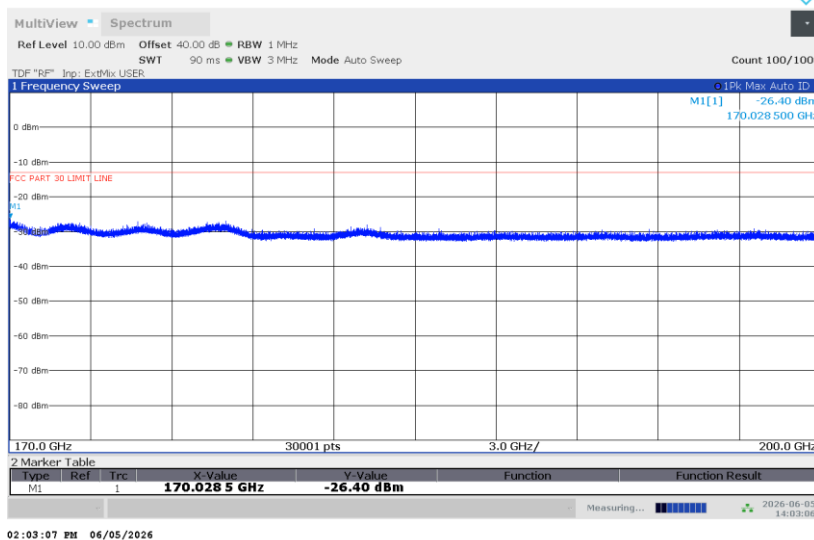
170 - 200 GHz, 1CC (Pre-scan using Pk Det.)

Horizontal



170 - 200 GHz, 1CC (Pre-scan using Pk Det.)

Vertical

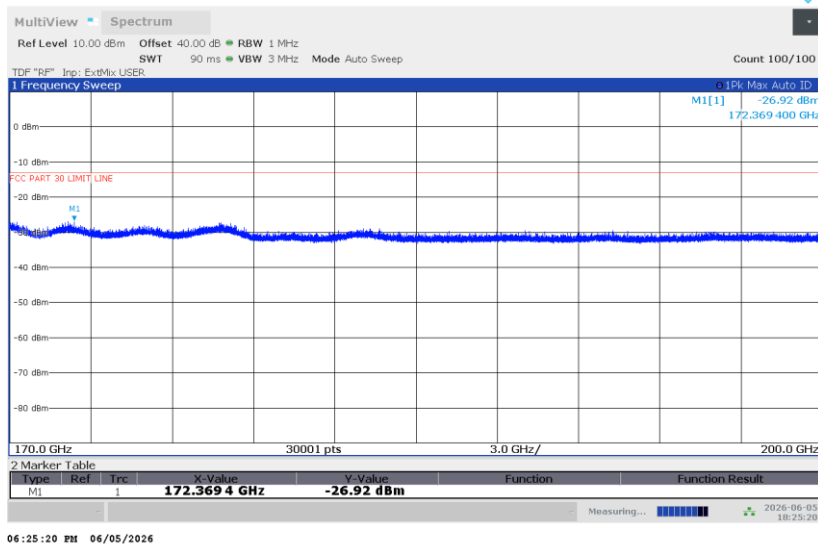


No emission detected using Peak Detection.

8.5.78. RSE n260 170 - 200 GHz STATE B

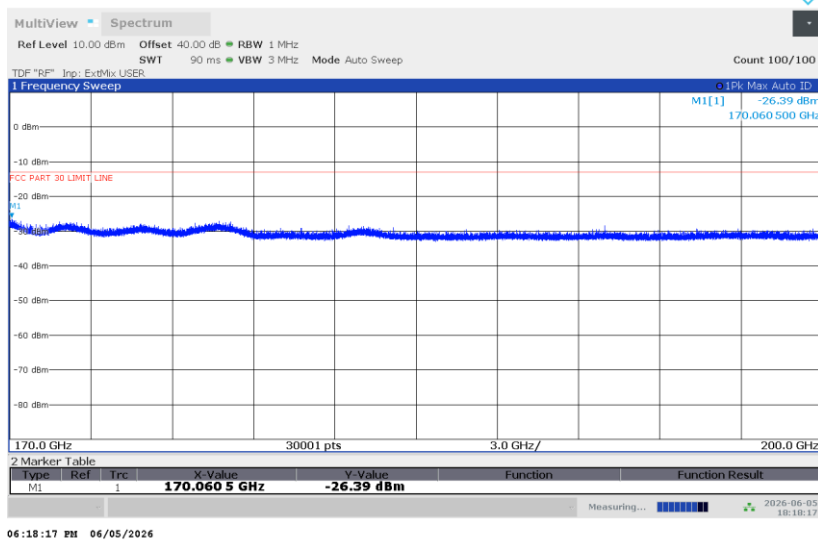
170 - 200 GHz, 1CC (Pre-scan using Pk Det.)

Horizontal



170 - 200 GHz, 1CC (Pre-scan using Pk Det.)

Vertical



No emission detected using Peak Detection.

8.6. FREQUENCY STABILITY

RULE PART(S)

FCC: §2.1055

LIMIT

For reporting purposes only

TEST PROCEDURES

KDB 842590 D01 Upper Microwave Flexible Use Service v01r03 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 the chamber temperature to 50°C and stabilize the EUT for at least 30 minutes.
 - c. Record maximum change in frequency within one minute after powering the EUT.
 - d. Decrease chamber temperature at 10°C intervals from 50°C to -30°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 the 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: 3.8 VDC; Low: 3.23 VDC; High: 4.37 VDC

The measurements were performed with the SISO-DUAL_QPSK_100 MHz_Mid CH_RB Offset 1/32 (1RB-M) signal of each frequency band in operating state of State A.

RESULTS

See the following pages.

Employee ID: 31925

Test Date: 2026-06-12

Test Location: Temperature Chamber B1

8.6.1. FREQUENCY STABILITY n258 SB1

Input Voltage	Environment	Frequency	Delta
	Temperature (°C)	(GHz)	(kHz)
Nominal	50	24.3492060	-21.1
Nominal	40	24.3492094	-17.7
Nominal	30	24.3492102	-16.9
Nominal	20	24.3492271	Reference
Nominal	10	24.3492180	-9.1
Nominal	0	24.3492196	-7.5
Nominal	-10	24.3492189	-8.3
Nominal	-20	24.3492222	-4.9
Nominal	-30	24.3492242	-2.9
115%	20	24.3492209	-6.2
85%	20	24.3492209	-6.2

8.6.2. FREQUENCY STABILITY n258 SB2

Input Voltage	Environment	Frequency	Delta
	Temperature (°C)	(GHz)	(kHz)
Nominal	50	24.9990311	-21.9
Nominal	40	24.9990315	-21.5
Nominal	30	24.9990304	-22.6
Nominal	20	24.9990530	Reference
Nominal	10	24.9990445	-8.5
Nominal	0	24.9990548	1.8
Nominal	-10	24.9990484	-4.6
Nominal	-20	24.9990470	-6.0
Nominal	-30	24.9990682	15.2
115%	20	24.9990399	-13.1
85%	20	24.9990422	-10.8

8.6.3. FREQUENCY STABILITY n261

Input Voltage	Environment Temperature (°C)	Frequency (GHz)	Delta (kHz)
Nominal	50	27.9240766	-1.8
Nominal	40	27.9240682	-10.2
Nominal	30	27.9240740	-4.5
Nominal	20	27.9240784	Reference
Nominal	10	27.9240404	-38.1
Nominal	0	27.9240441	-34.3
Nominal	-10	27.9240485	-29.9
Nominal	-20	27.9240439	-34.6
Nominal	-30	27.9240452	-33.2
115%	20	27.9240759	-2.5
85%	20	27.9240811	2.7

8.6.4. FREQUENCY STABILITY n260

Input Voltage	Environment Temperature (°C)	Frequency (GHz)	Delta (kHz)
Nominal	50	38.4991038	-15.2
Nominal	40	38.4991087	-10.3
Nominal	30	38.4991128	-6.2
Nominal	20	38.4991190	Reference
Nominal	10	38.4991018	-17.2
Nominal	0	38.4991025	-16.5
Nominal	-10	38.4991026	-16.4
Nominal	-20	38.4991021	-16.9
Nominal	-30	38.4991053	-13.7
115%	20	38.4991083	-10.8
85%	20	38.4991198	0.7

The occupied bandwidths (Section 8.2) are smaller than the channel bandwidths by at least 2.59 MHz (97.41 MHz from State B, n261, 2CC, 50 MHz BW, Pi/2 BPSK, Mid CH) for all modes of operation, therefore the signal is at least 1.295 MHz from either edge of the channel. As the channels are fully contained within the FCC-allocated bands, and the frequency stability is significantly less than 1.295 MHz, with a maximum frequency shift of 38.1 kHz over the test conditions (n261 at 10°C), the signal is always contained within the allocated channel and band.

9. SETUP PHOTOS

Please refer to 16064952-EP38V1 for setup photos.

END OF REPORT

APPENDIX A

1. 50 - 75 GHz VDI WR15SAX-F

Serial No.: SAX 954

2. 75 - 110 GHz VDI WR10SAX-F

Serial No.: SAX 955

3. 110 - 170 GHz VDI WR6.5SAX-F

Serial No.: SAX 956

4. 170 - 260 GHz VDI WR4.3SAX-F

Serial No.: SAX 987

Docusign Envelope ID: DE09E48C-4E2C-47D2-9EC6-18F9A0FE53C6



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 Solutions
47173 Benicia Street
Fremont, CA 94538
United States

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

Packing List No: 252918
Shipping Date: 8/27/2025

Today's Date: 08/28/2025
PO Number: 7862034186

<u>Quantity Shipped</u>	<u>Unit</u>	<u>Description</u>	<u>Order-Job Number</u>
1	EA	RETEST-WR15SAX-F - WR15.0SAX-F / SN: SAX 954	250406-01
1	EA	RETEST-WR10SAX-F - WR10.0SAX-F / SN: SAX 955	250406-02
1	EA	RETEST-WR6.5SAX-F - WR6.5SAX-F / SN: SAX 956	250406-03
1	EA	RETEST-WR4.3SAX-F - WR4.3SAX-F / SN: SAX 987	250406-04

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).

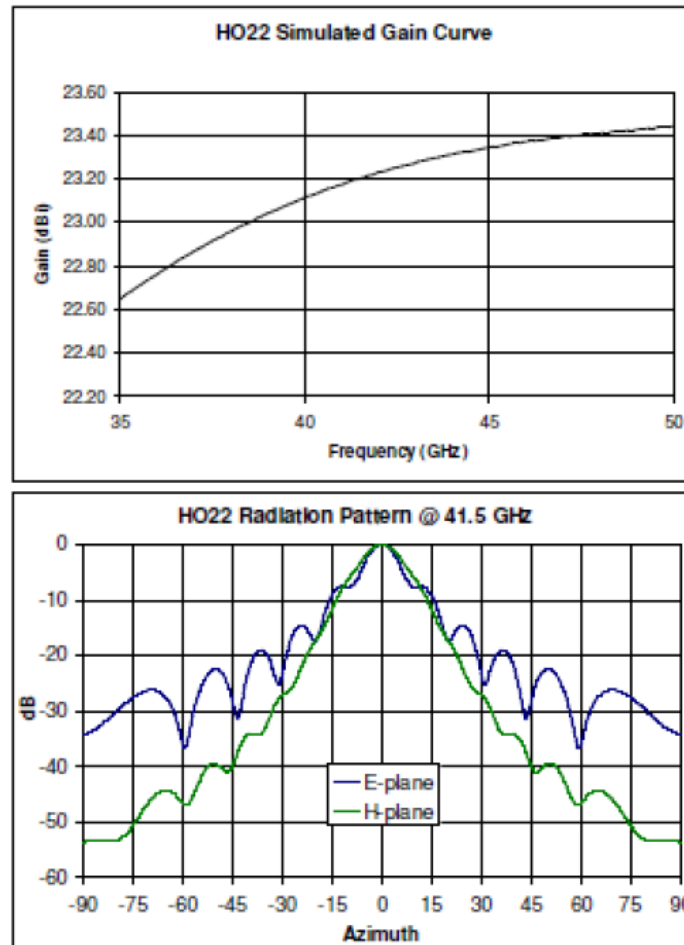
Brandia Wroniewicz
Authorized Signature
Virginia Diodes, Inc

DD

5. 33 - 50 GHz CMI HO22R HORN ANTENNA



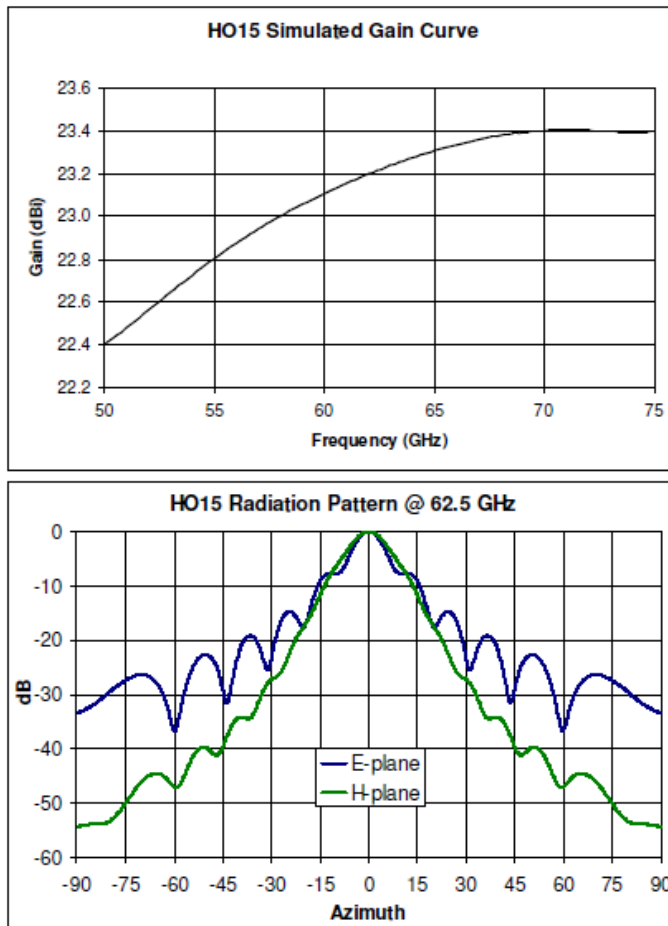
24 Boston Court
Longmont, CO 80501
303 651-0707 (P)
303 651-0706 (F)
www.custommicrowave.com



6. 50 - 75 GHz CMI HO15R HORN ANTENNA



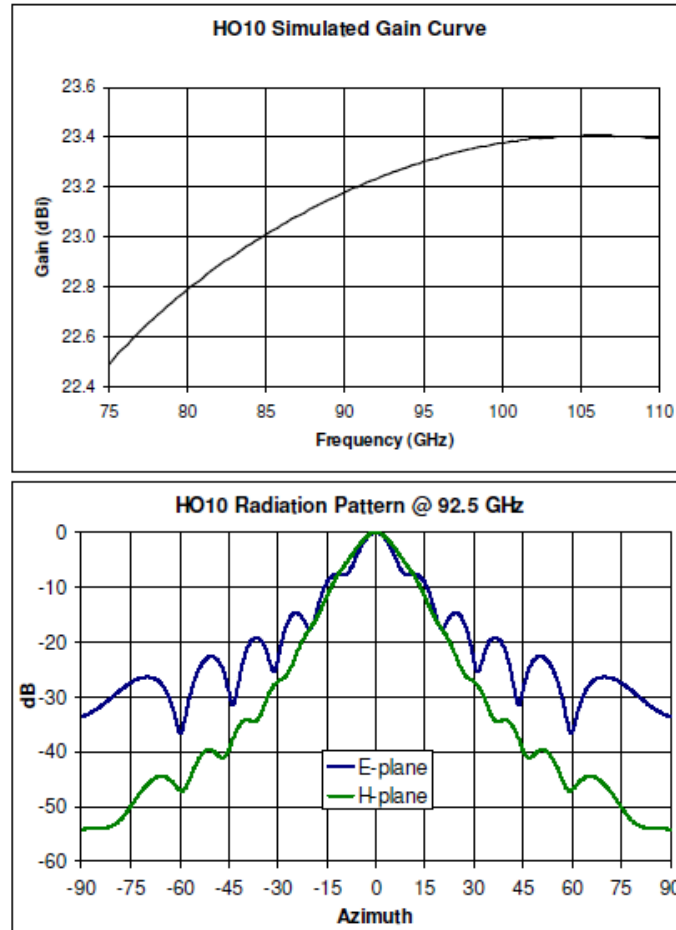
24 Boston Court
Longmont, CO 80501
303 651-0707(P)
303 651-0706(F)
www.custommicrowave.com



7. 75 - 110 GHz CMI HO10R HORN ANTENNA



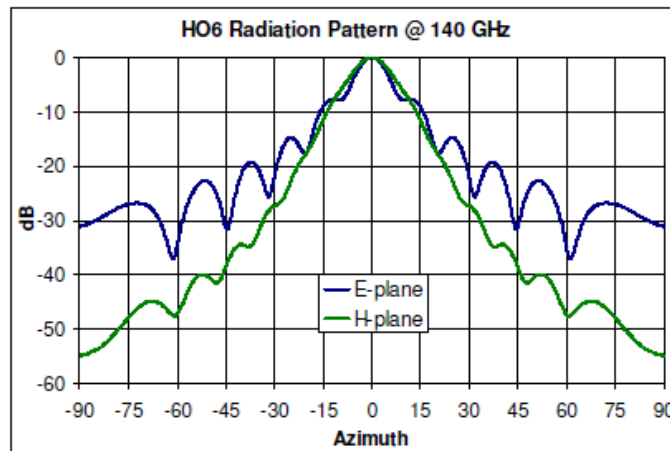
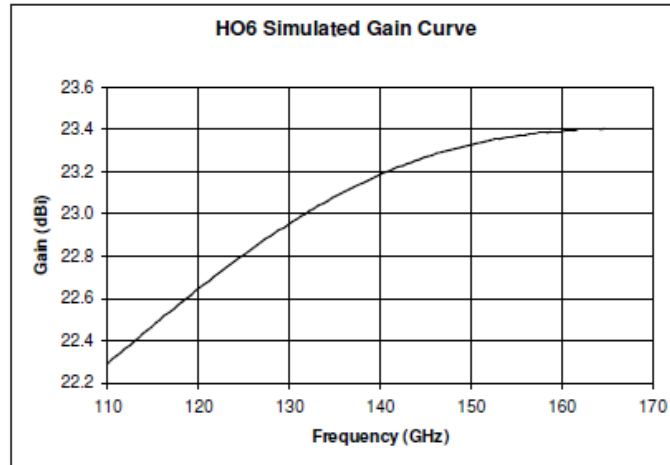
24 Boston Court
Longmont, CO 80501
303 651-0707(P)
303 651-0706(F)
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8. 110 - 170 GHz CMI HO6R HORN ANTENNA



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303 651-0706(F)
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9. 170 - 260 GHz CMI HO4R HORN ANTENNA



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