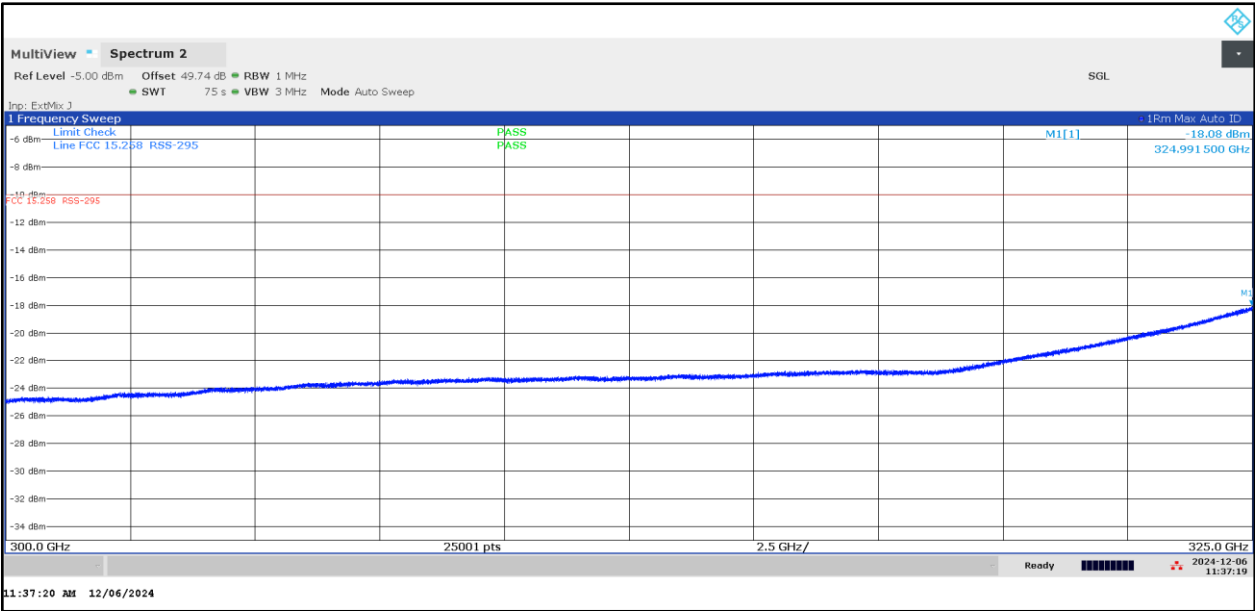
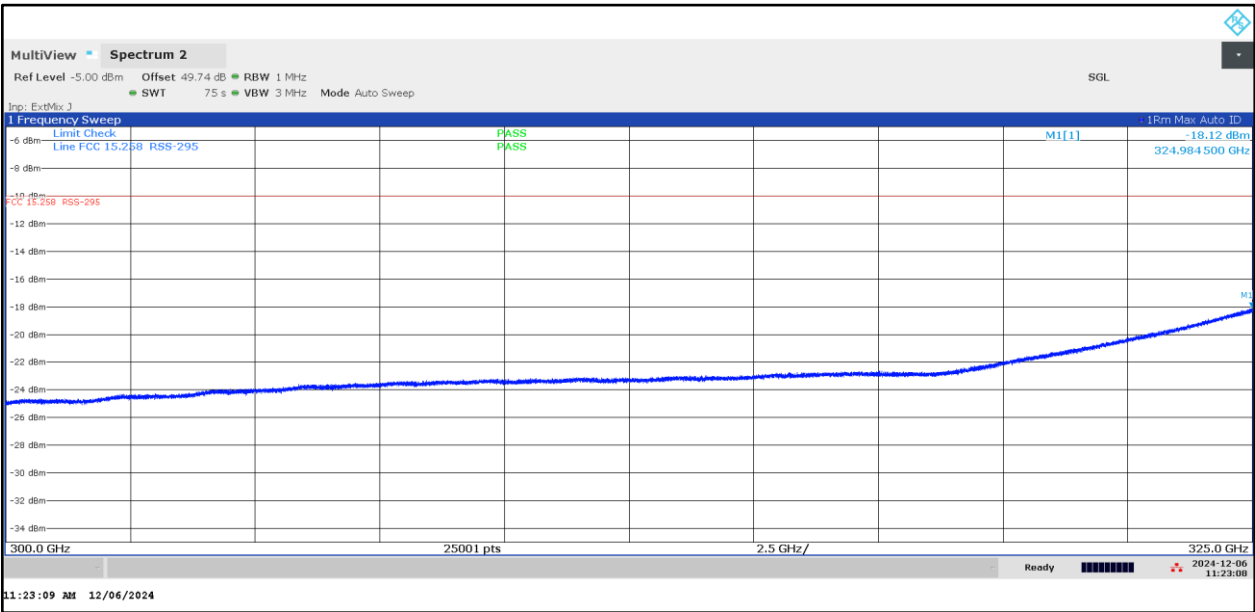


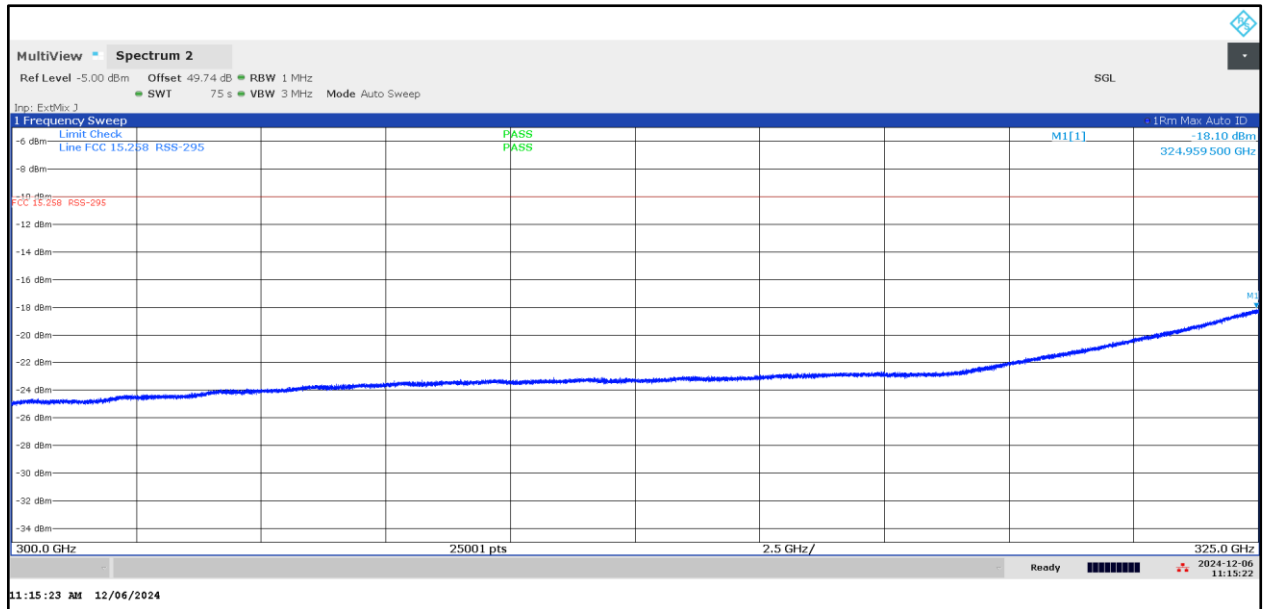
Plot 72: 300 GHz – 325 GHz, stop mode, low frequency



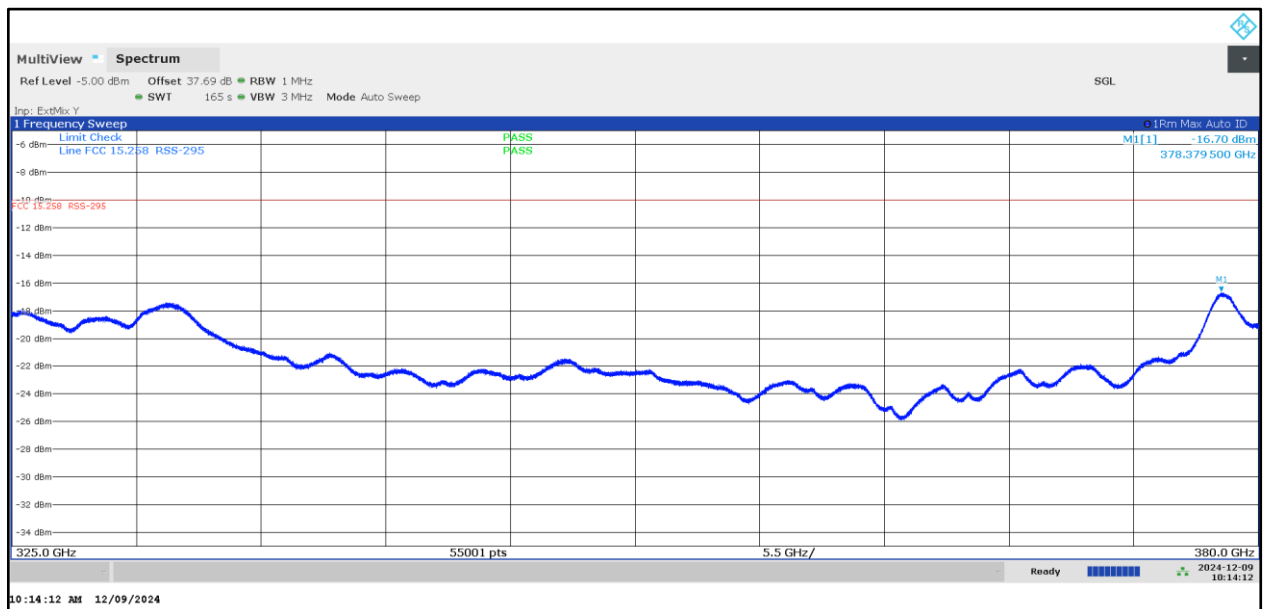
Plot 73: 300 GHz – 325 GHz, stop mode, middle frequency



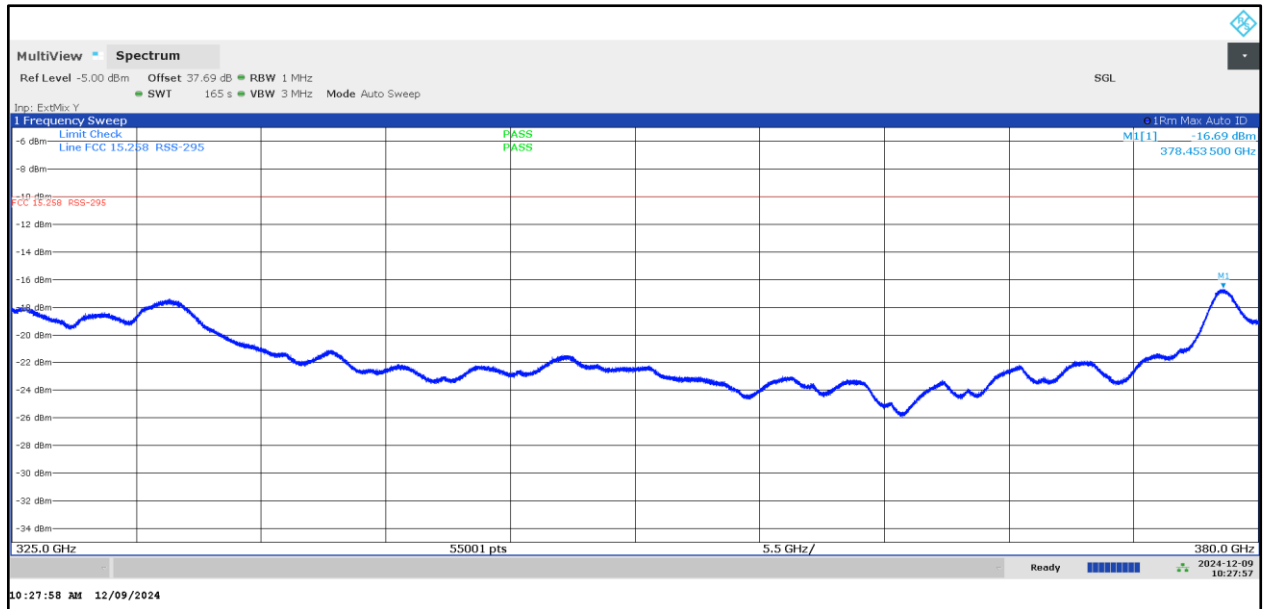
Plot 74: 300 GHz – 325 GHz, stop mode, high frequency



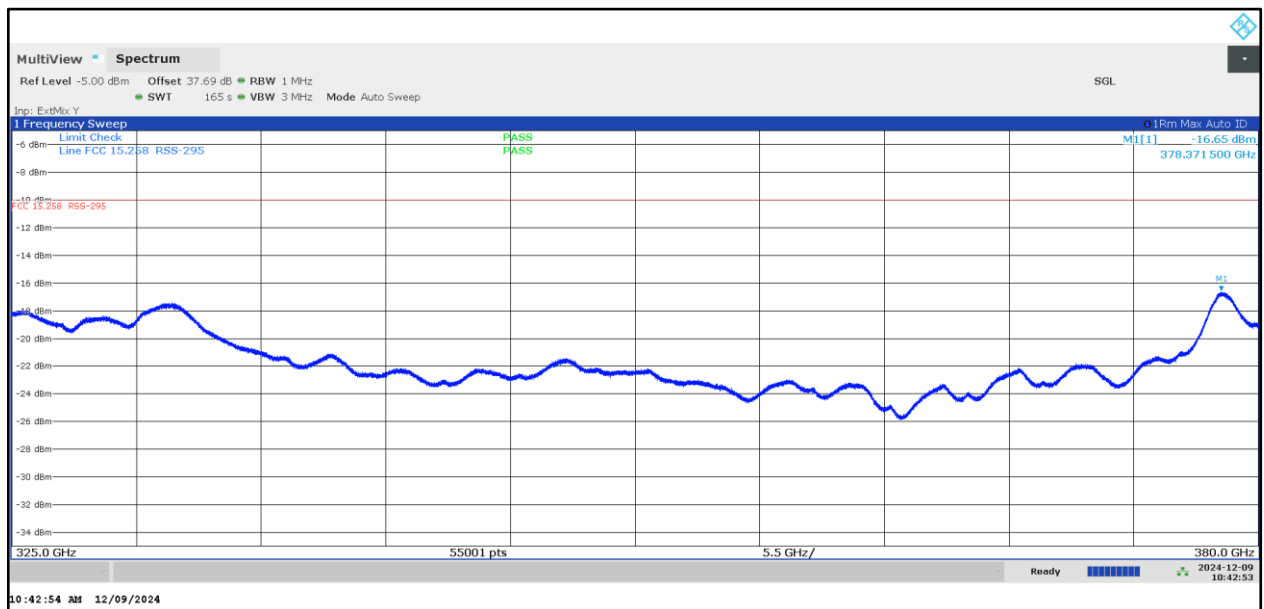
Plot 75: 325 GHz – 380 GHz, stop mode, low frequency



Plot 76: 325 GHz – 380 GHz, stop mode, middle frequency

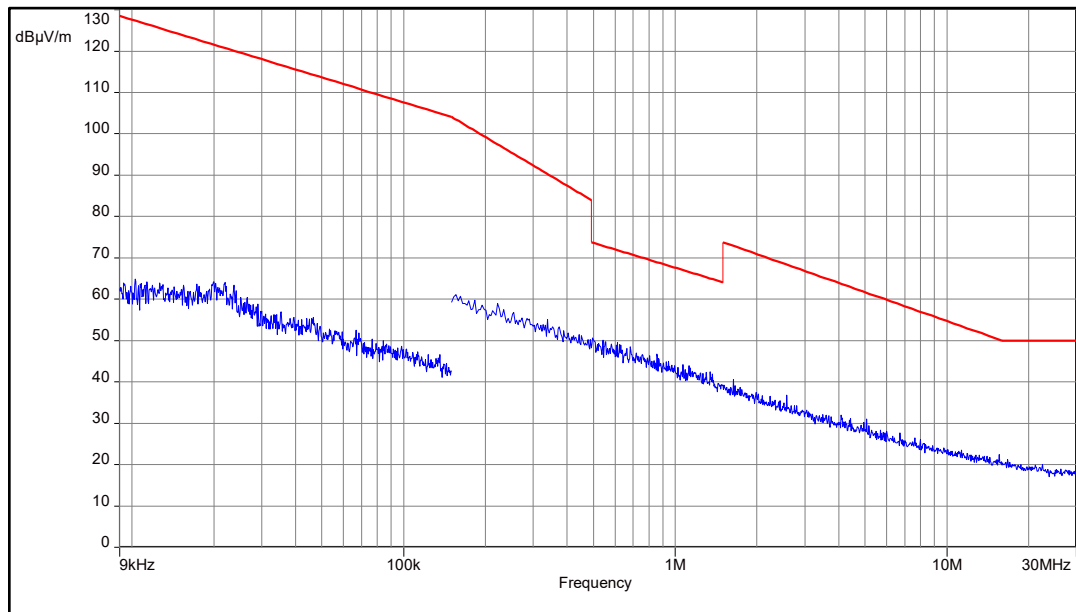


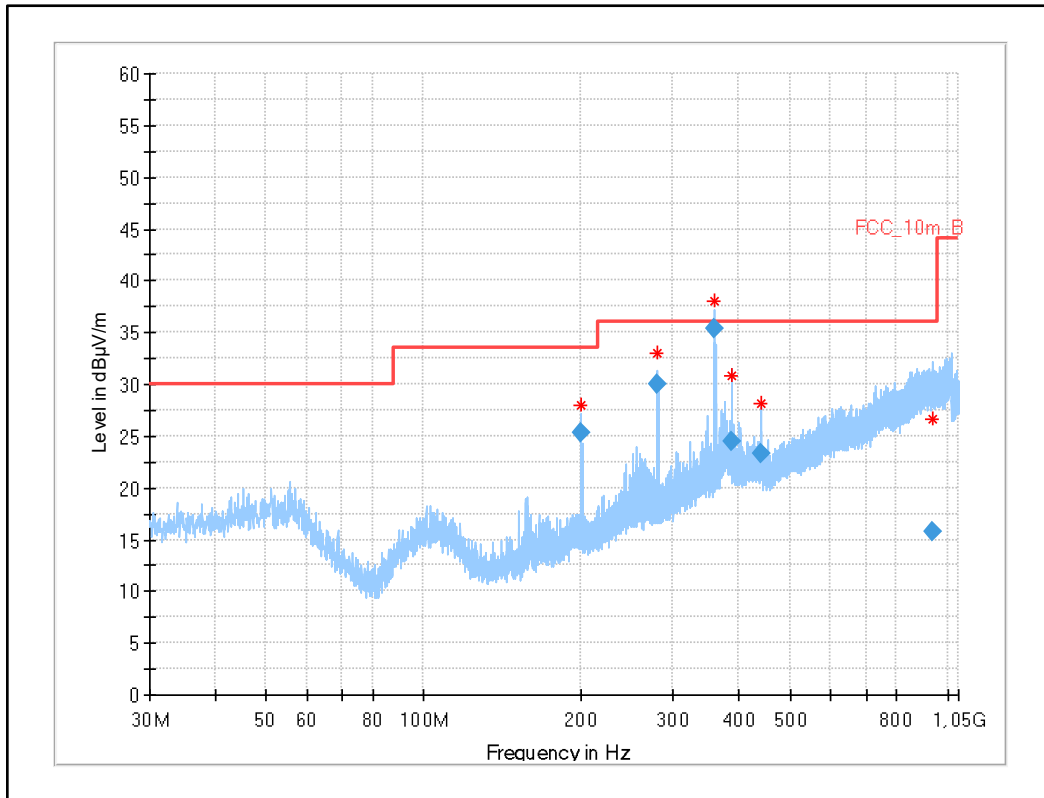
Plot 77: 325 GHz – 380 GHz, stop mode, high frequency



13.3.3 EUT 2 normal mode

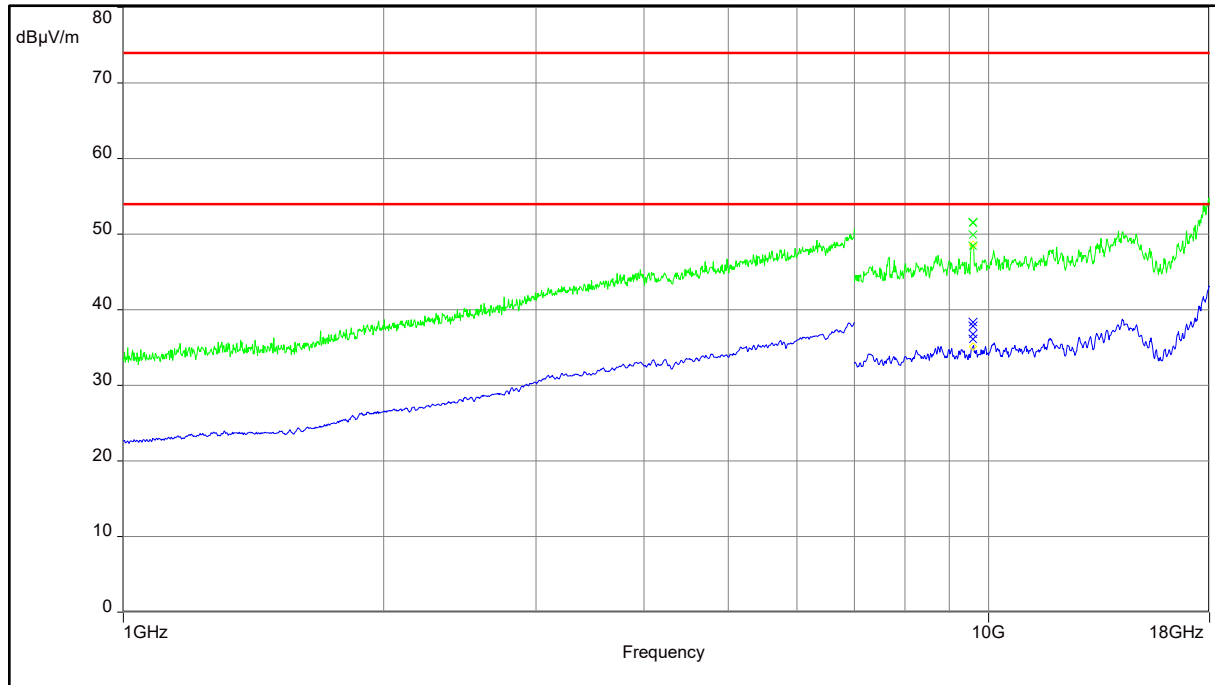
Plot 78: 9 kHz – 30 MHz, normal operation mode



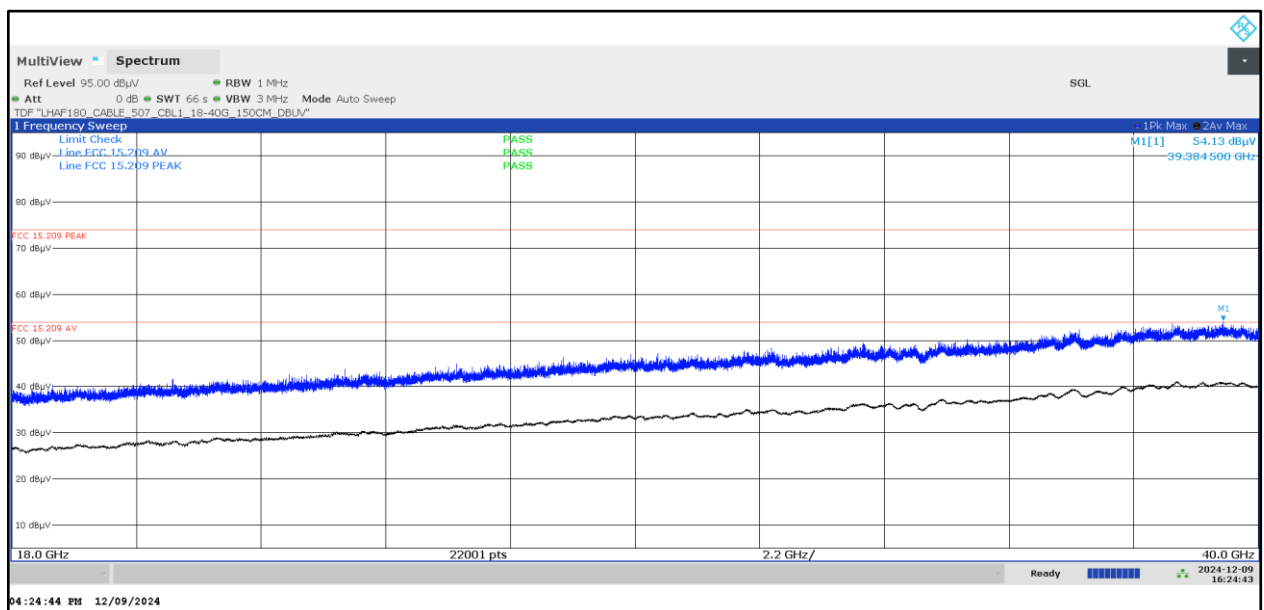
Plot 79: 30 MHz – 1GHz, normal operation mode

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
199.993	25.35	33.5	8.2	1000	120.0	104.0	V	270	12
279.998	30.01	36.0	6.0	1000	120.0	295.0	H	288	15
359.999	35.29	36.0	0.7	1000	120.0	106.0	V	-44	17
387.088	24.49	36.0	11.5	1000	120.0	104.0	V	10	17
440.004	23.35	36.0	12.7	1000	120.0	103.0	V	99	19
936.523	15.78	36.0	20.2	1000	120.0	200.0	V	144	25

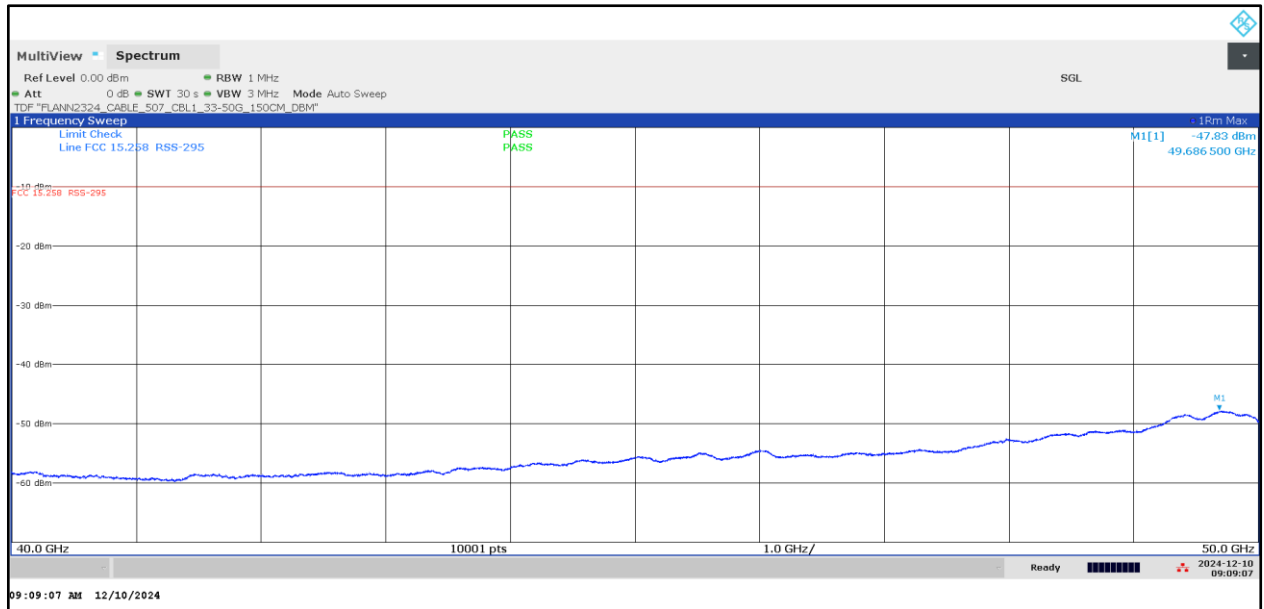
Plot 80: 1GHz – 18 GHz, normal operation mode



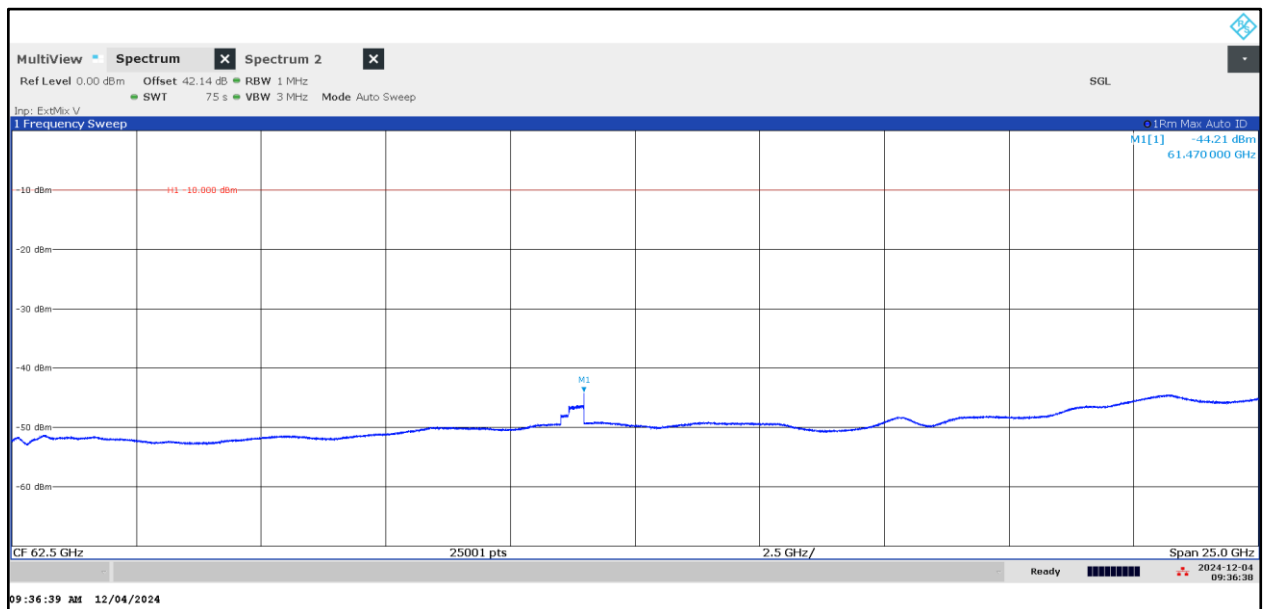
Plot 81: 18 GHz – 40 GHz, normal operation mode



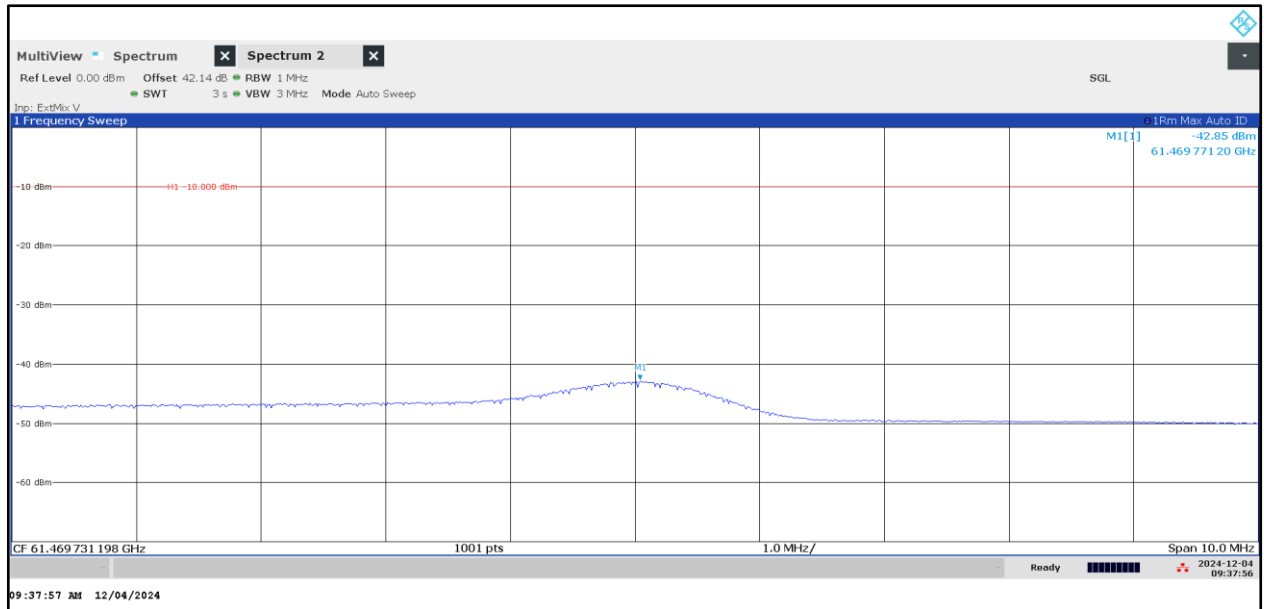
Plot 82: 40 GHz – 50 GHz, normal operation mode



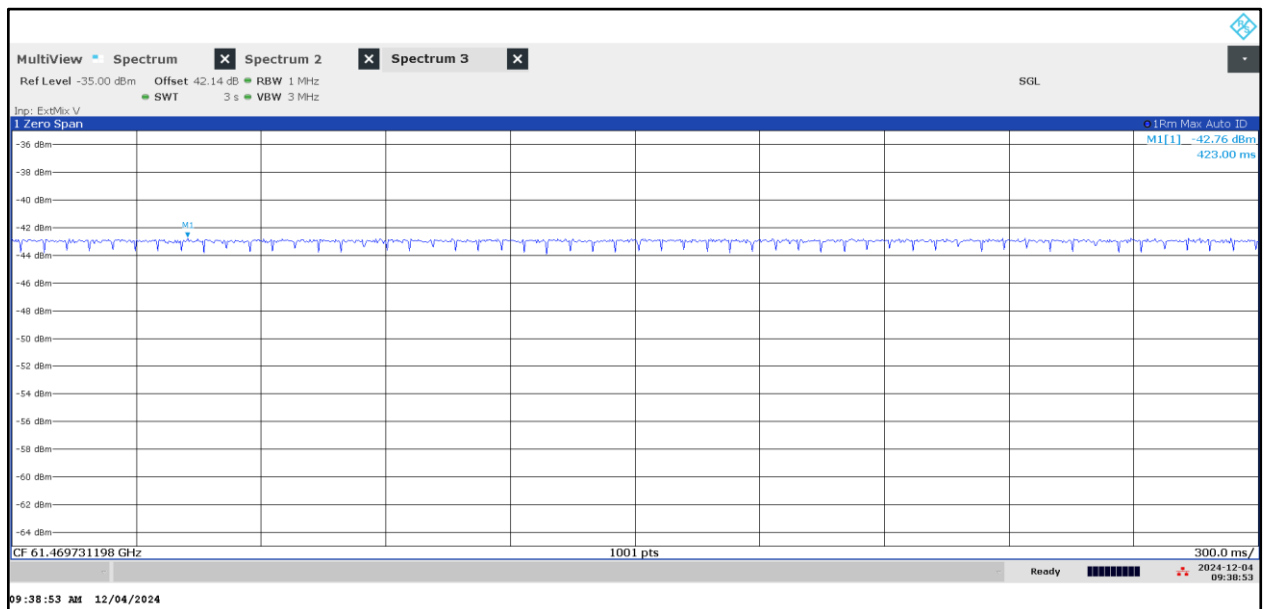
Plot 83: 50 GHz – 75 GHz, normal operation mode



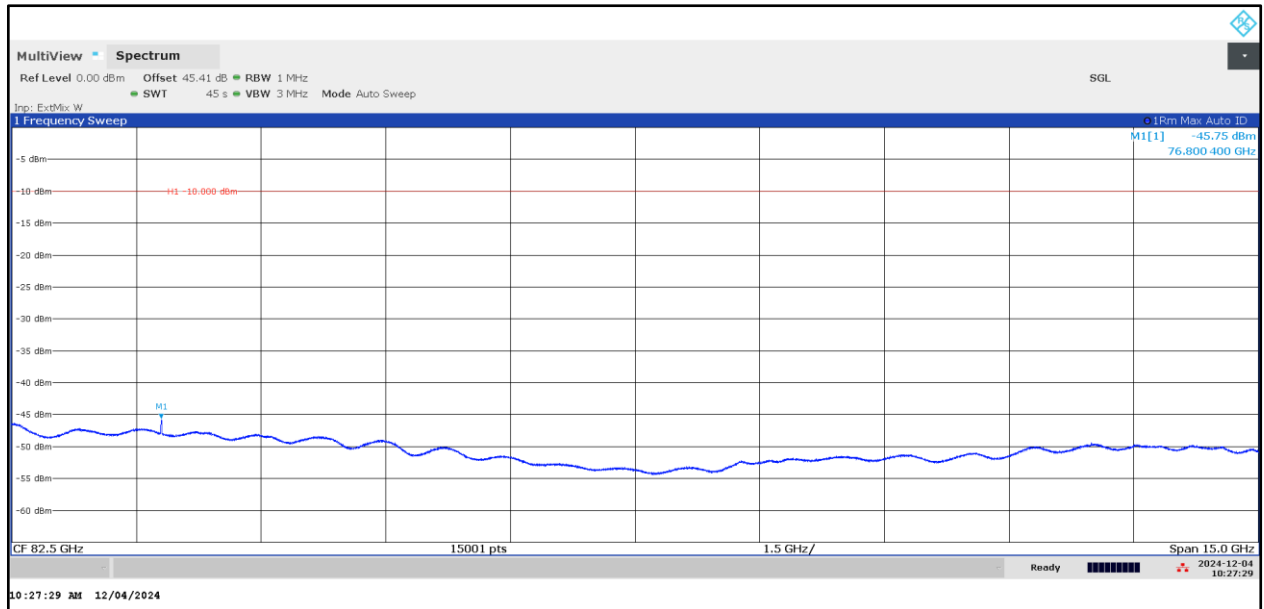
Plot 84: Spurious at 61 GHz, normal operation mode with 10 MHz span



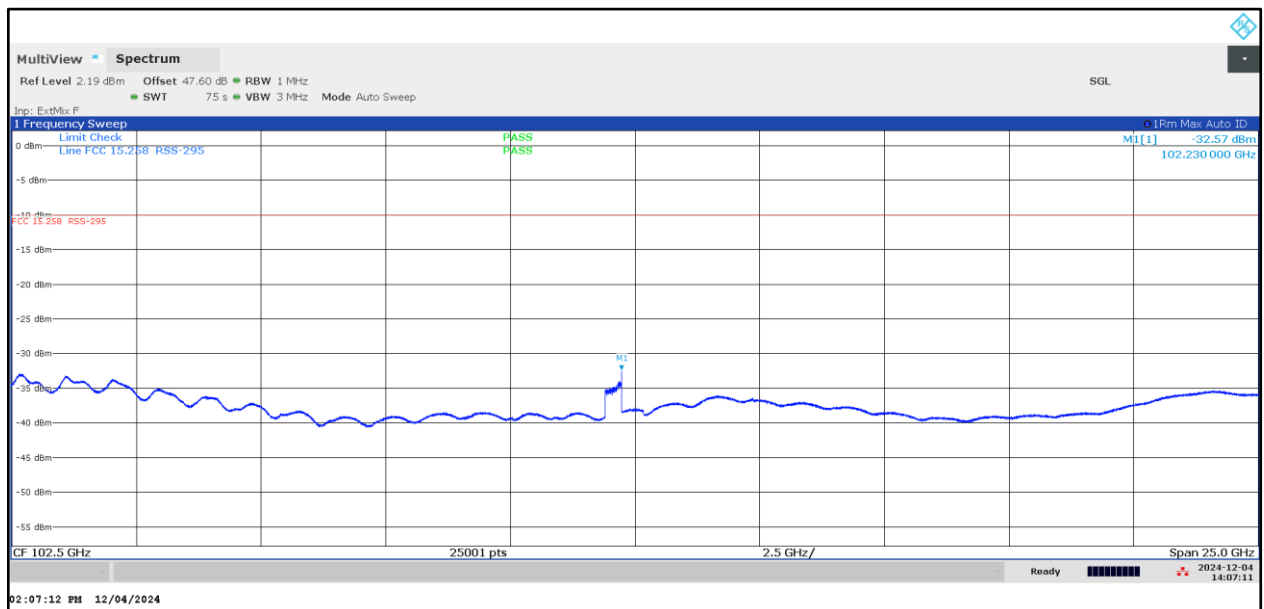
Plot 85: Spurious at 61 GHz, normal operation mode with zero span

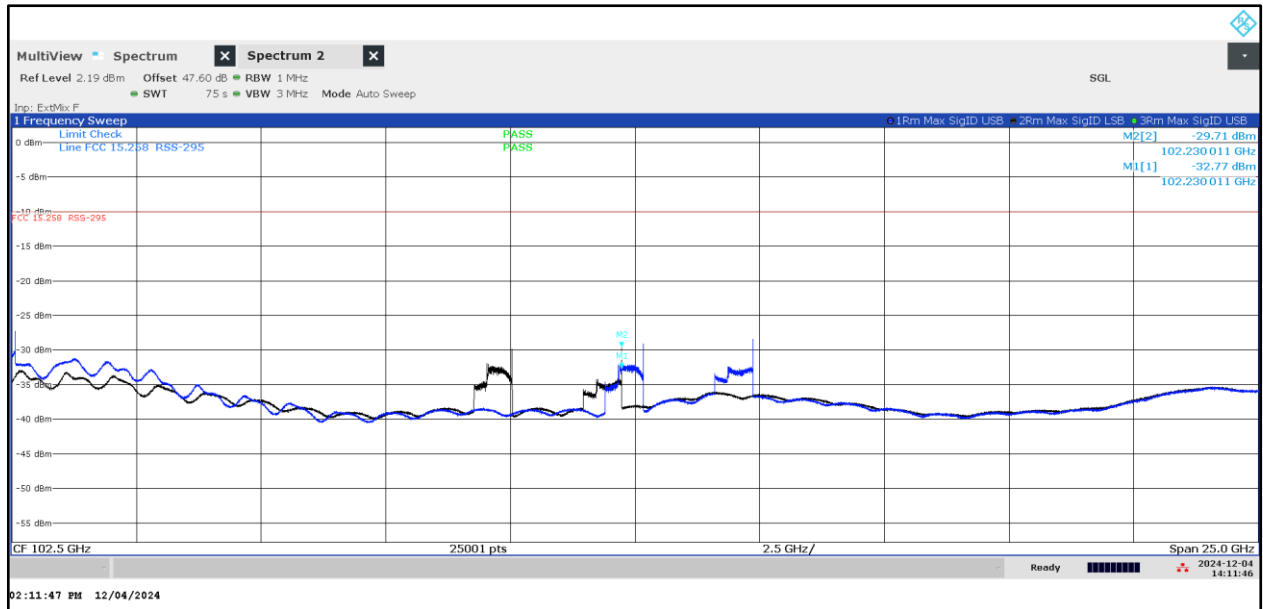


Plot 86: 75 GHz – 90 GHz, normal operation mode

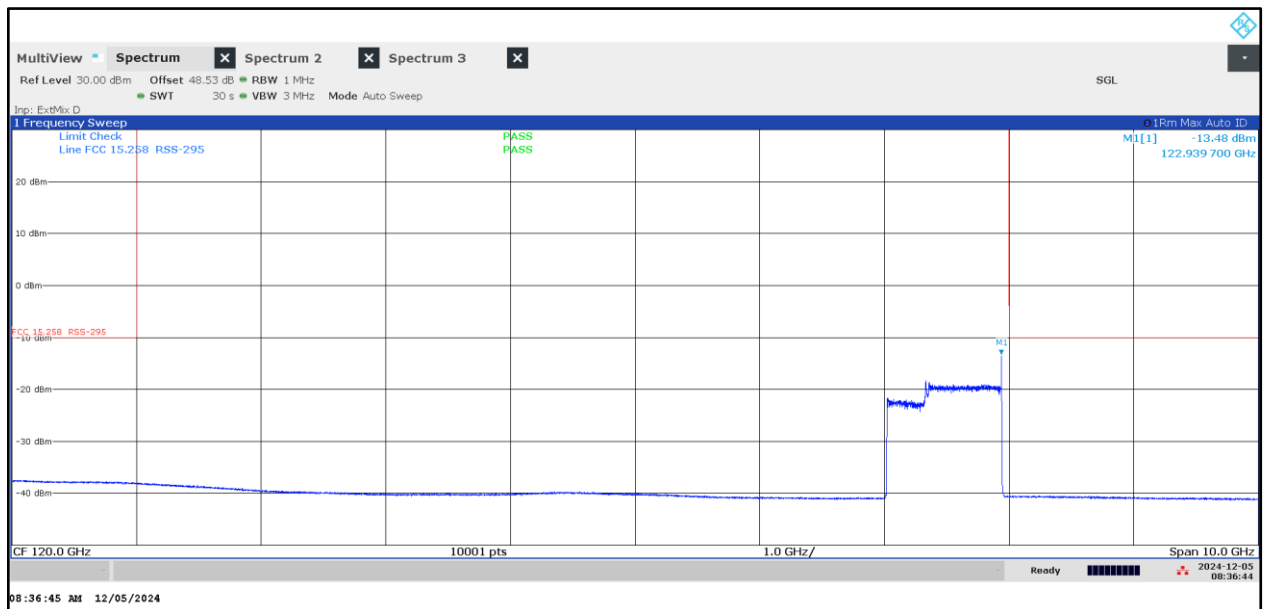


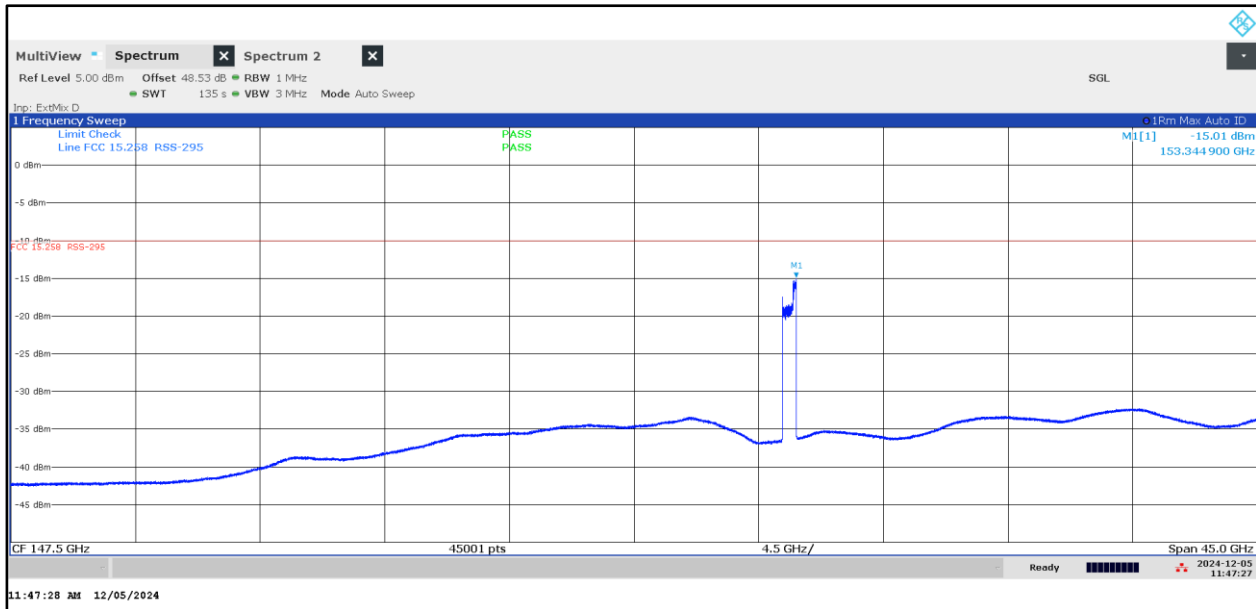
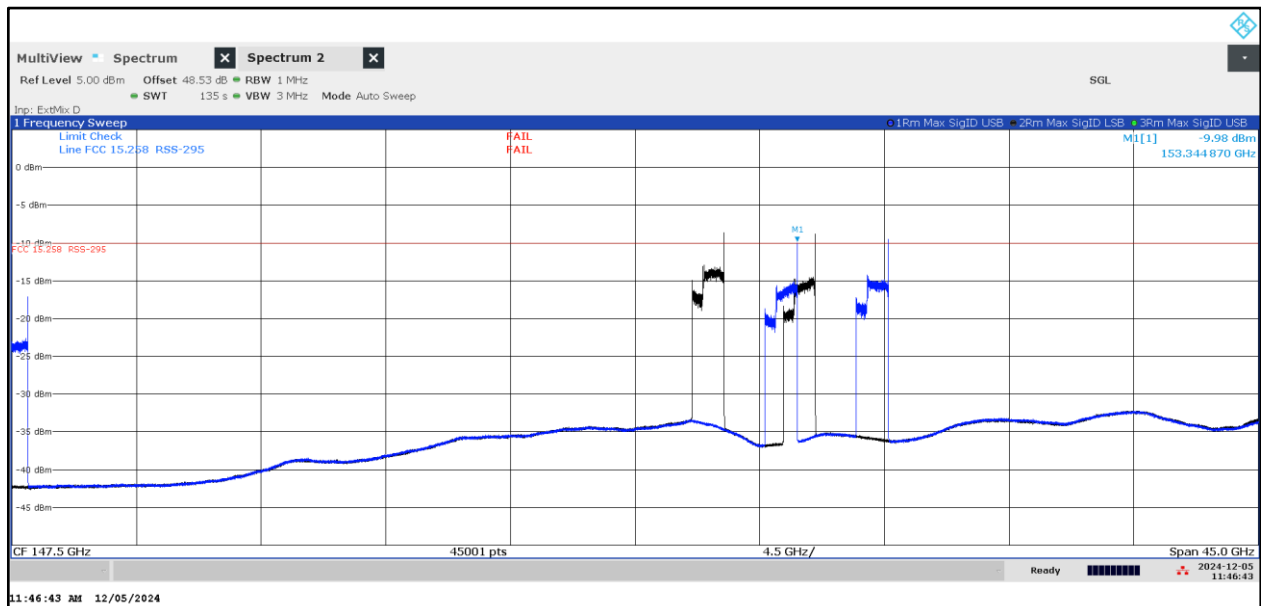
Plot 87: 90 GHz – 115 GHz, normal operation mode



Plot 88: 90 GHz – 115 GHz, signal analysis**Note:**

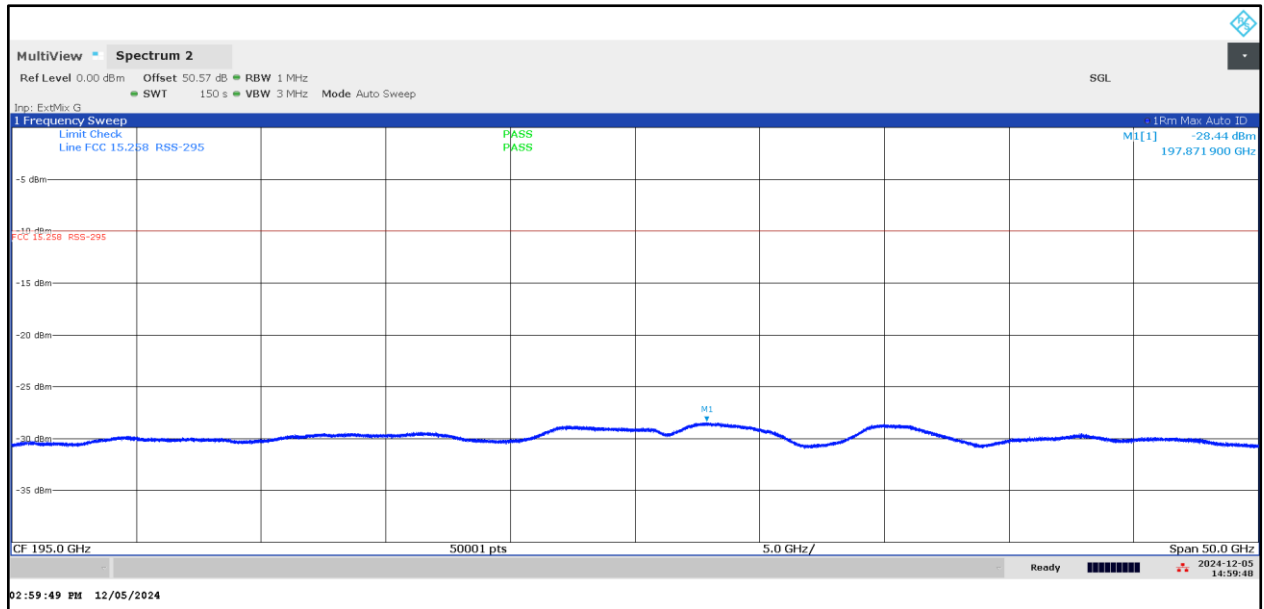
- The analysis shows that the signal is produced by the mixer and not by the EUT

Plot 89: 115 GHz – 125 GHz, normal operation mode

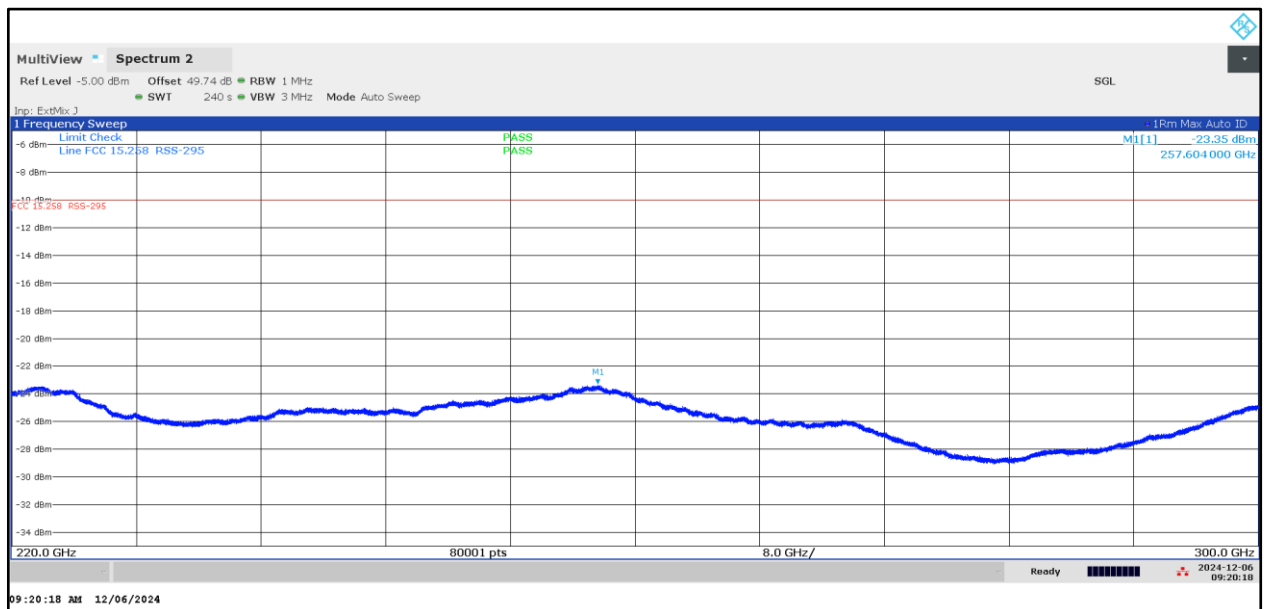
Plot 90: 125 GHz – 170 GHz, normal operation mode**Plot 91: 125 GHz – 170 GHz, signal analysis****Note:**

- The analysis shows that the signal is produced by the mixer and not by the EUT

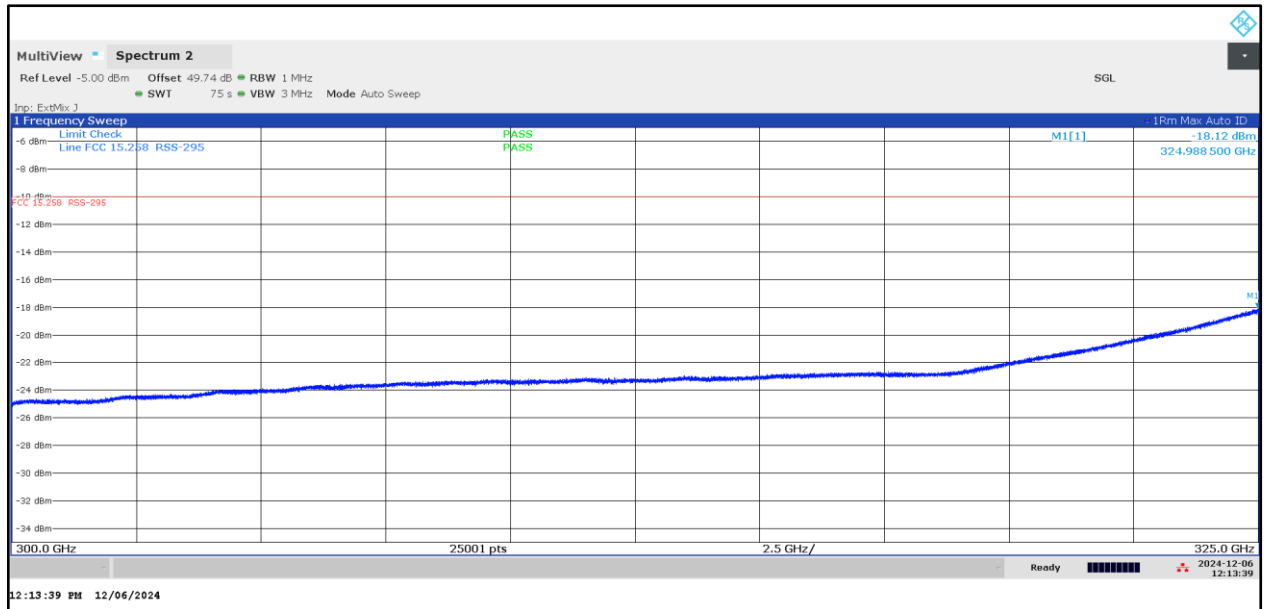
Plot 92: 170 GHz – 220 GHz, normal operation mode



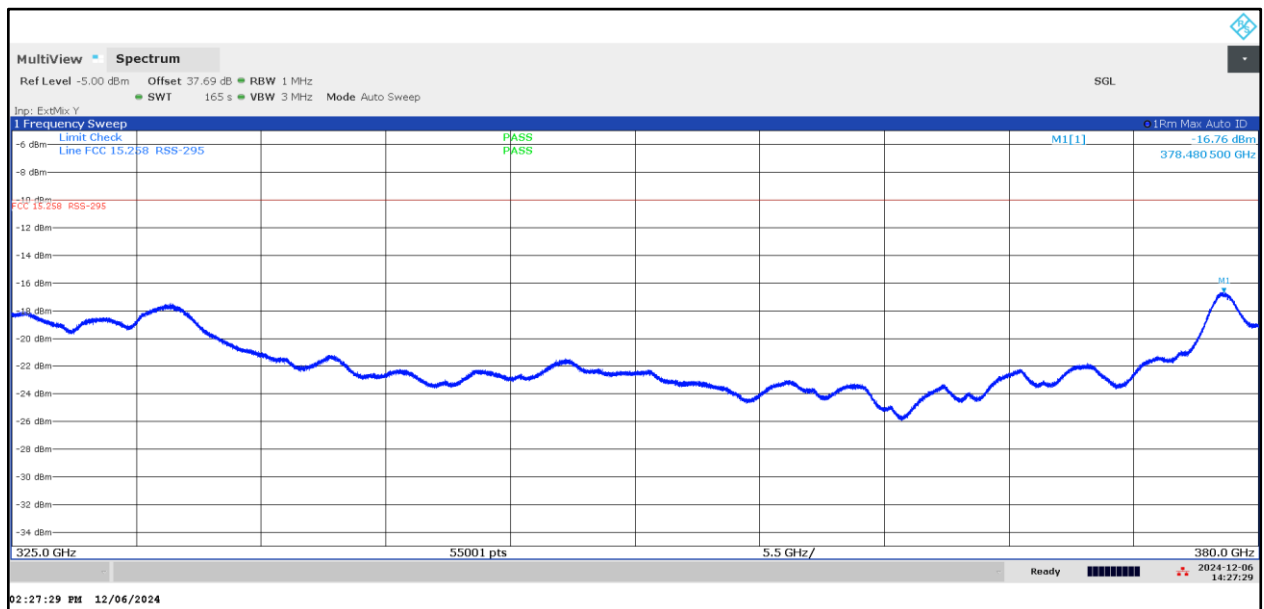
Plot 93: 220 GHz – 300 GHz, normal operation mode



Plot 94: 300 GHz – 325 GHz, normal operation mode

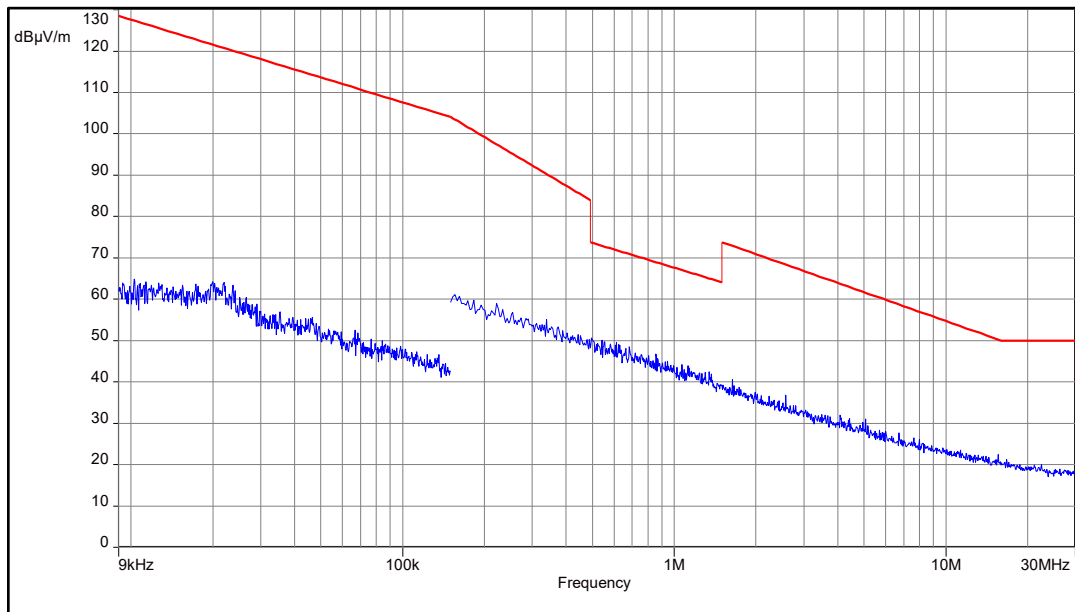


Plot 95: 325 GHz – 380 GHz, normal operation mode

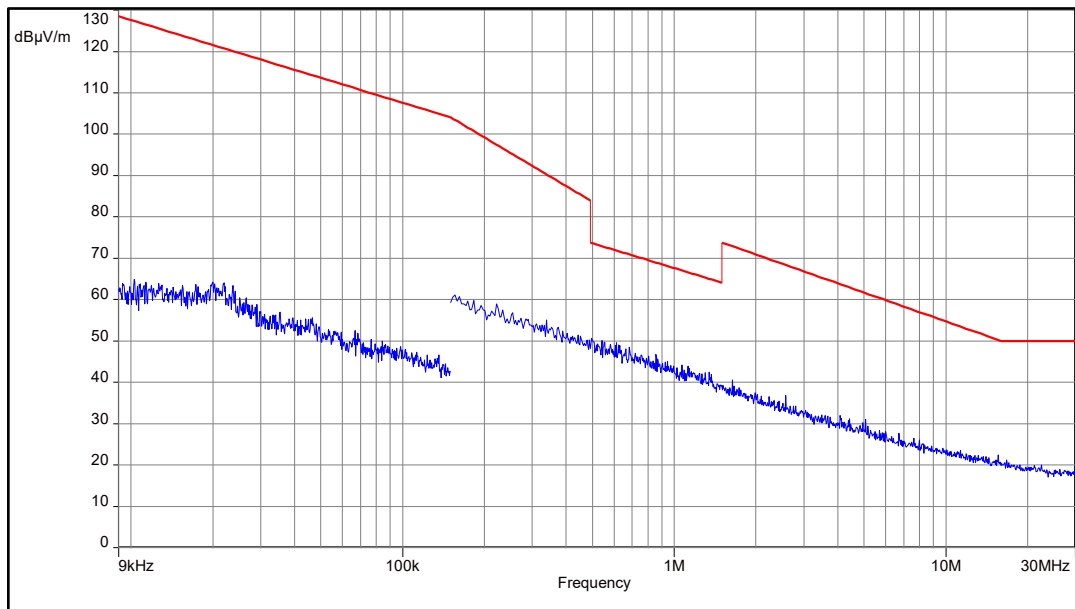


13.3.4 EUT 2 stop mode

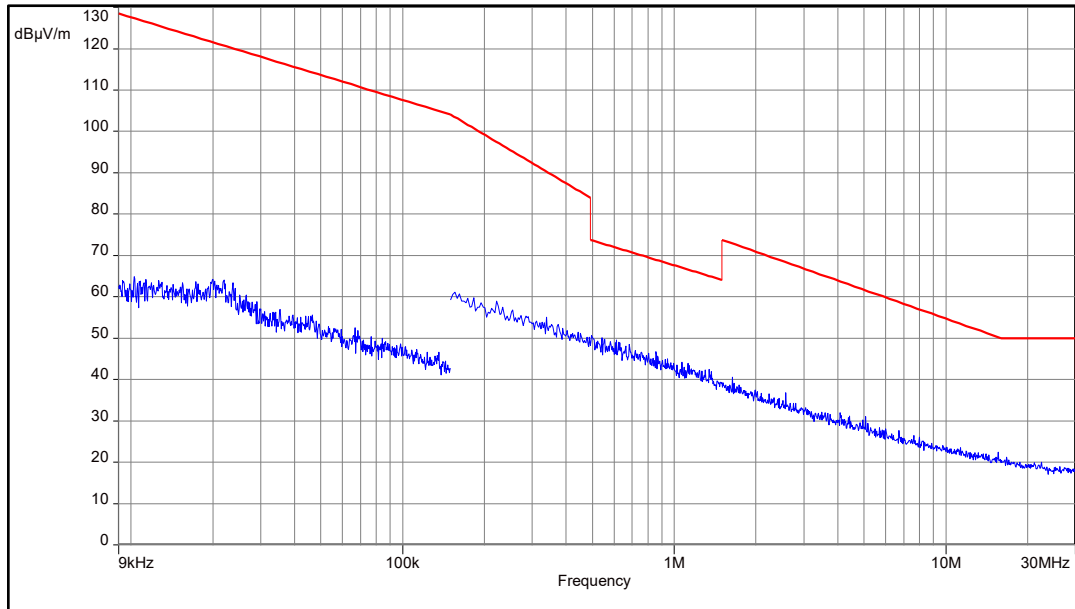
Plot 96: 9 kHz – 30 MHz, stop mode, low frequency

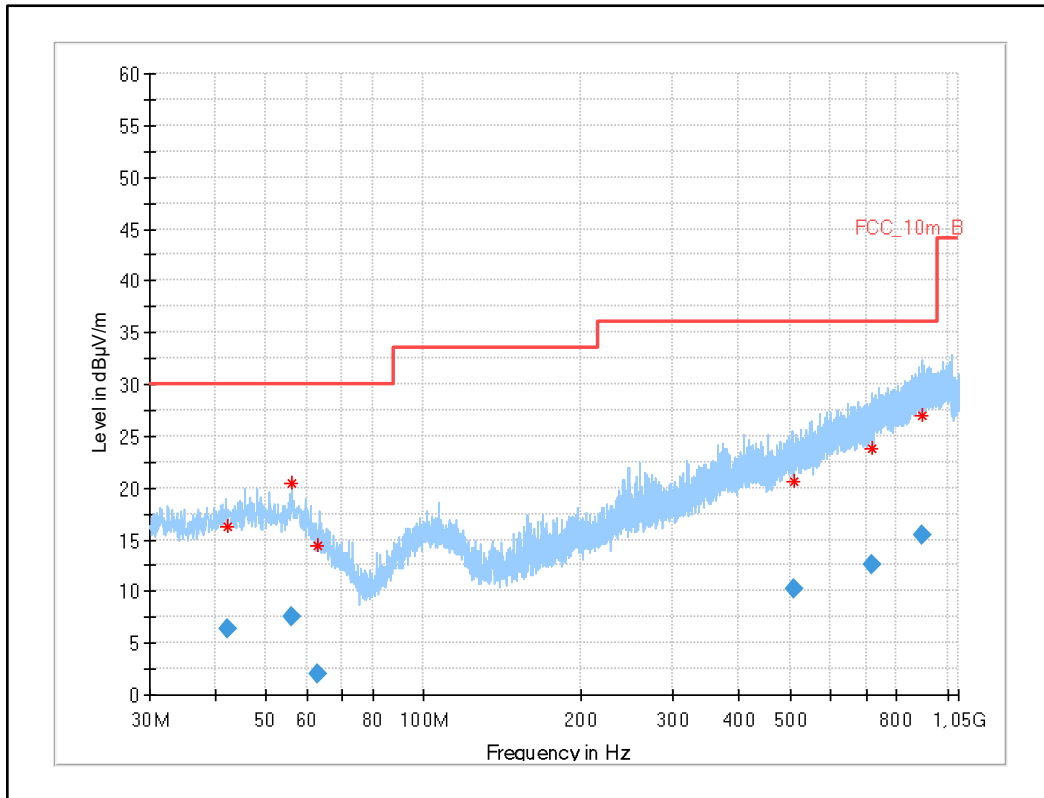


Plot 97: 9 kHz – 30 MHz, stop mode, middle frequency

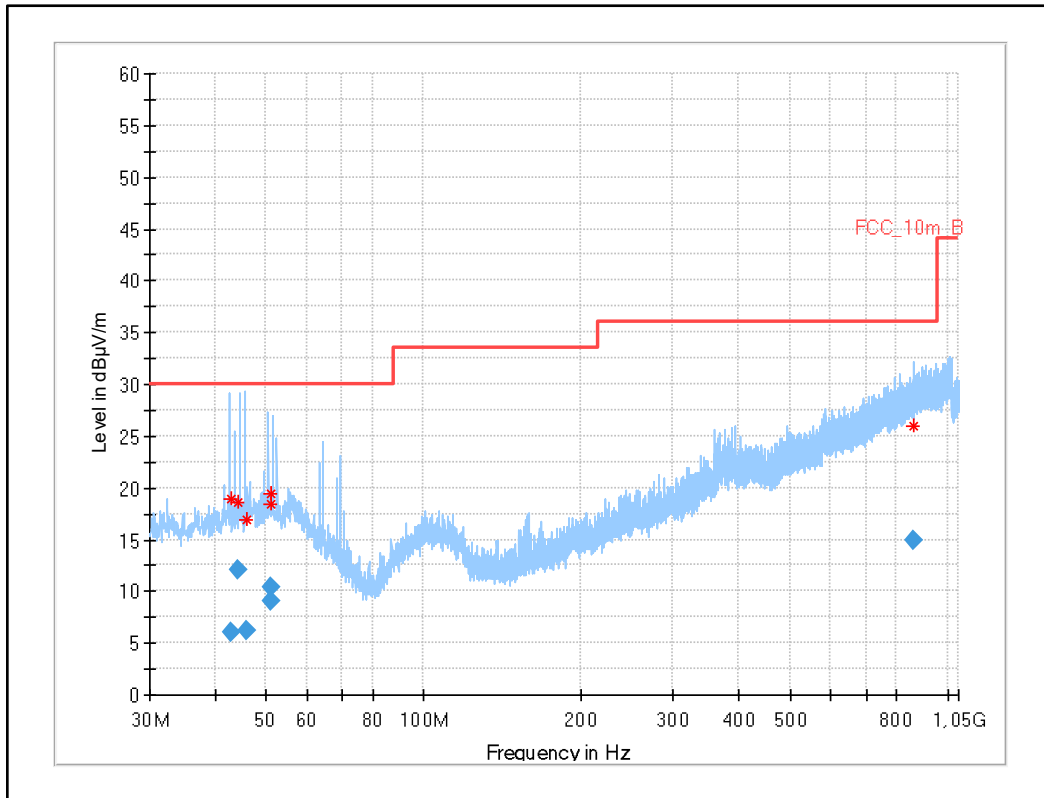


Plot 98: 9 kHz – 30 MHz, stop mode, high frequency

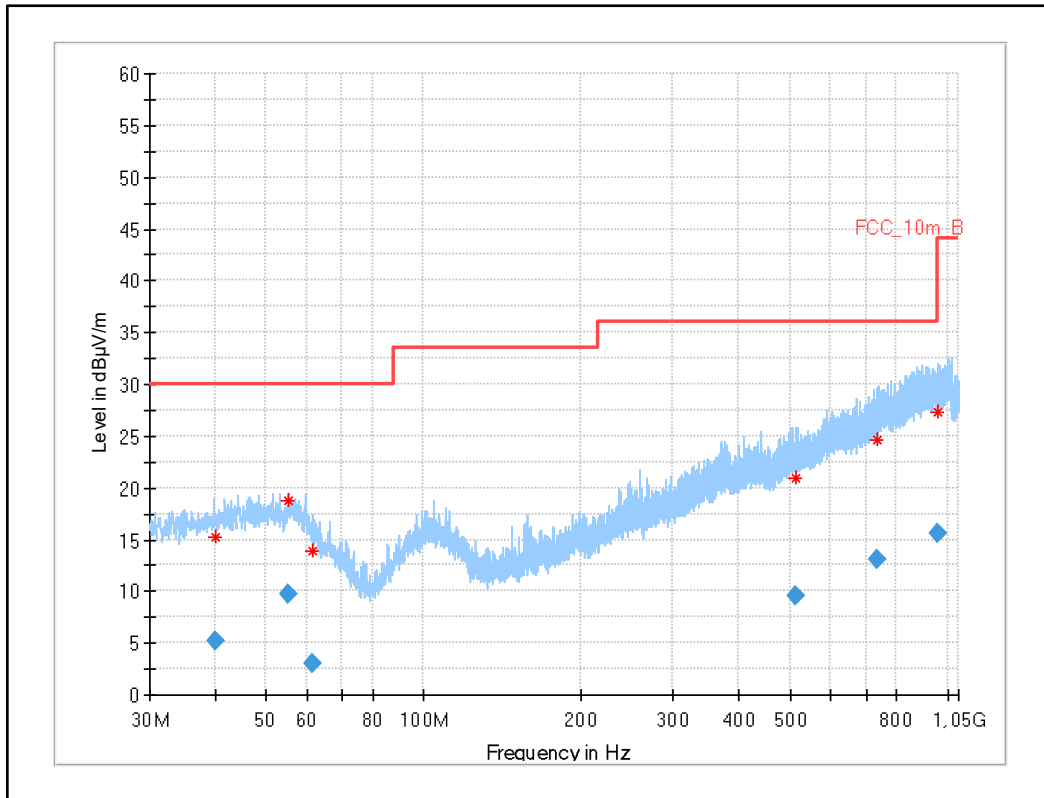


Plot 99: 30 MHz – 1GHz, stop mode, low frequency

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
42.154	6.40	30.0	23.6	1000	120.0	200.0	V	123	15
55.958	7.51	30.0	22.5	1000	120.0	117.0	V	50	16
62.619	2.03	30.0	28.0	1000	120.0	218.0	V	306	13
507.652	10.23	36.0	25.8	1000	120.0	207.0	H	90	20
718.028	12.63	36.0	23.4	1000	120.0	195.0	V	352	22
897.719	15.45	36.0	20.6	1000	120.0	244.0	H	295	25

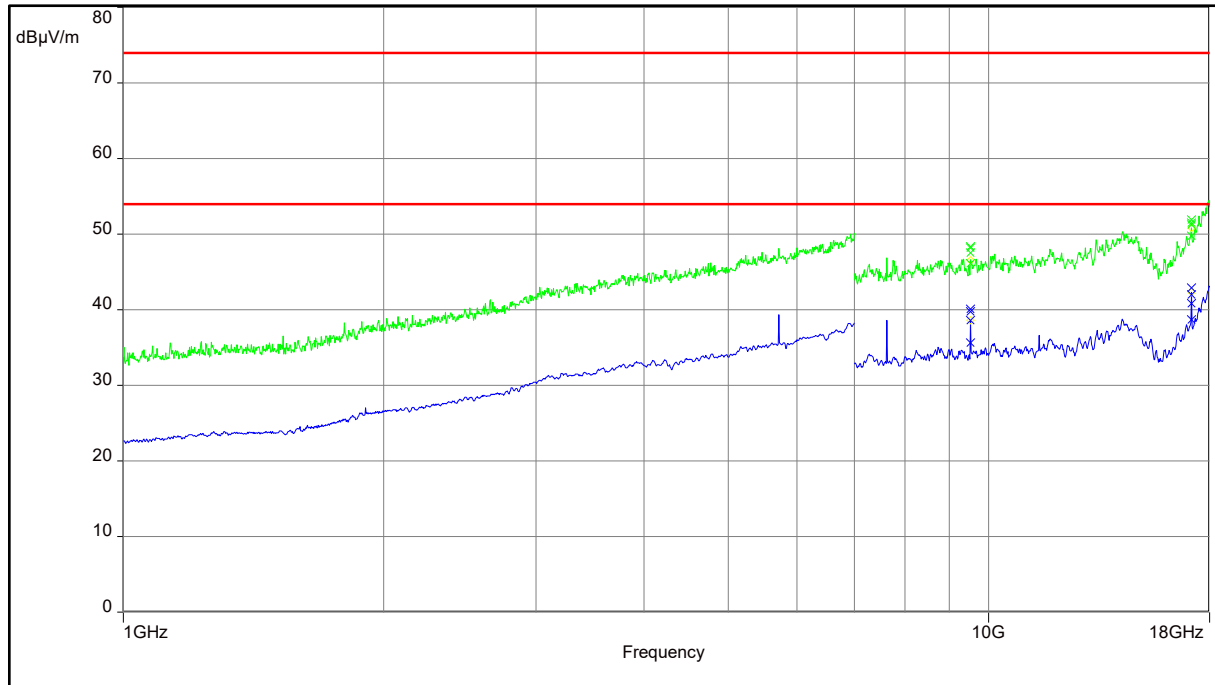
Plot 100: 30 MHz – 1GHz, stop mode, middle frequency

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
42.821	5.95	30.0	24.1	1000	120.0	146.0	V	113	15
44.242	12.13	30.0	17.9	1000	120.0	100.0	V	109	15
45.790	6.17	30.0	23.8	1000	120.0	186.0	V	18	15
51.044	9.02	30.0	21.0	1000	120.0	200.0	V	64	15
51.189	10.32	30.0	19.7	1000	120.0	109.0	V	31	15
863.710	14.93	36.0	21.1	1000	120.0	138.0	H	225	25

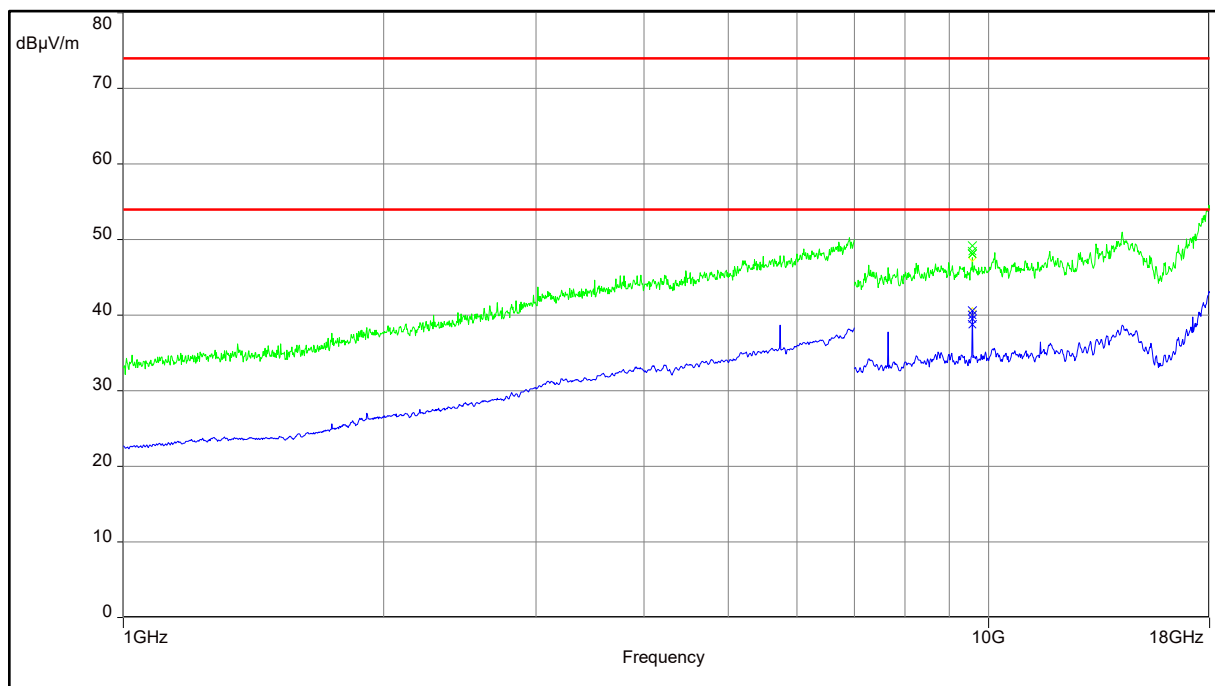
Plot 101: 30 MHz – 1GHz, stop mode, high frequency

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
40.004	5.27	30.0	24.7	1000	120.0	124.0	V	9	14
55.279	9.75	30.0	20.3	1000	120.0	391.0	V	57	15
61.284	3.00	30.0	27.0	1000	120.0	200.0	V	78	13
514.342	9.49	36.0	26.5	1000	120.0	204.0	H	-22	20
733.379	13.15	36.0	22.9	1000	120.0	200.0	V	79	23
959.017	15.65	36.0	20.4	1000	120.0	200.0	V	180	25

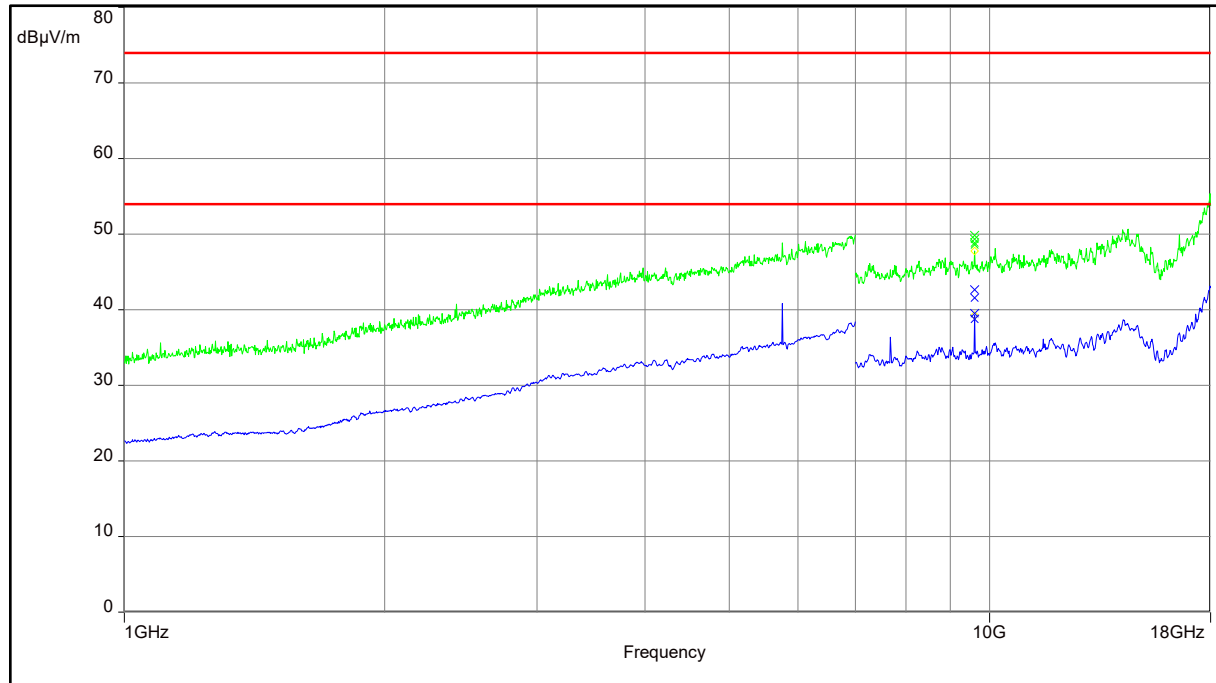
Plot 102: 1GHz – 18 GHz, stop mode, low frequency



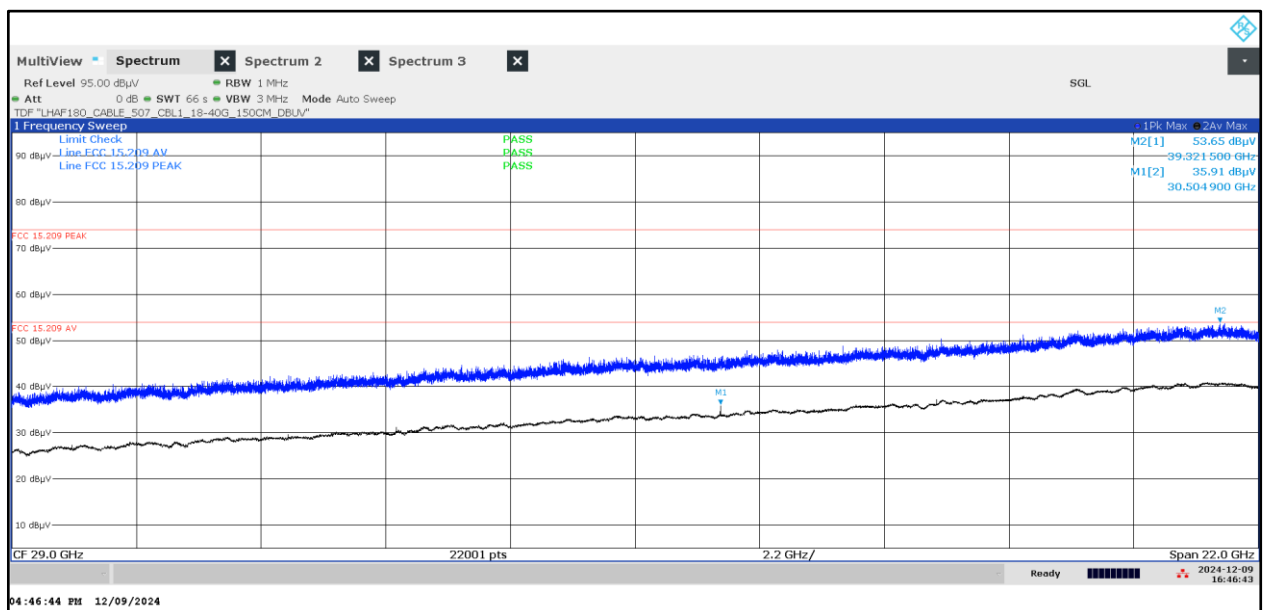
Plot 103: 1GHz – 18 GHz, stop mode, middle frequency



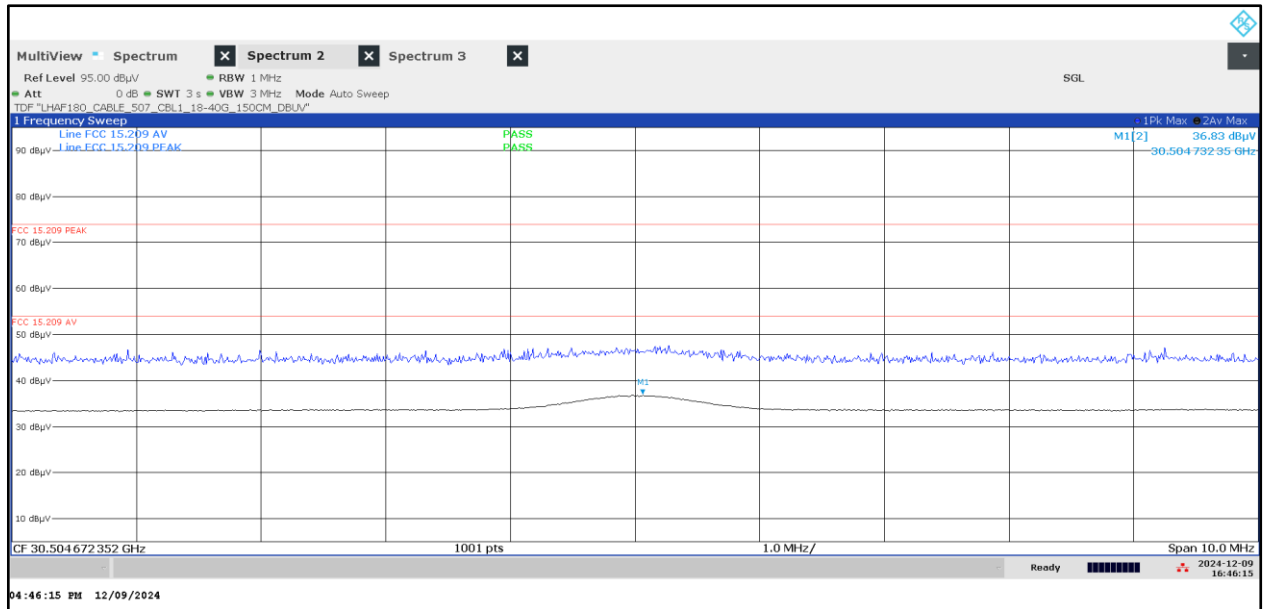
Plot 104: 1GHz – 18 GHz, stop mode, high frequency



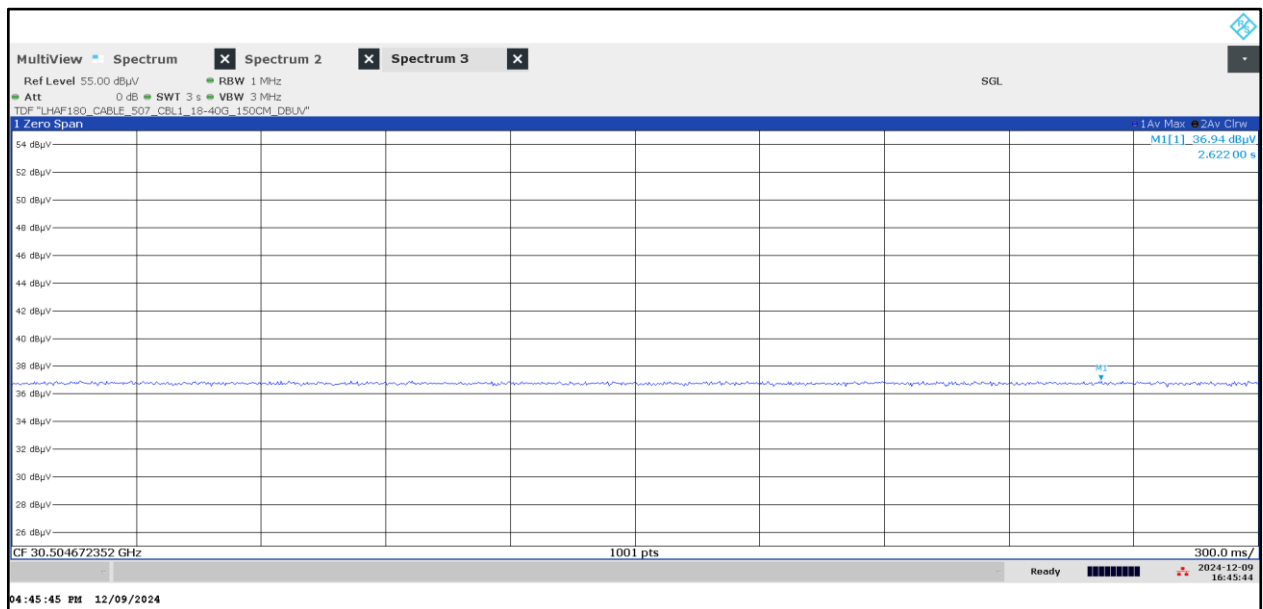
Plot 105: 18 GHz – 40 GHz, stop mode, low frequency



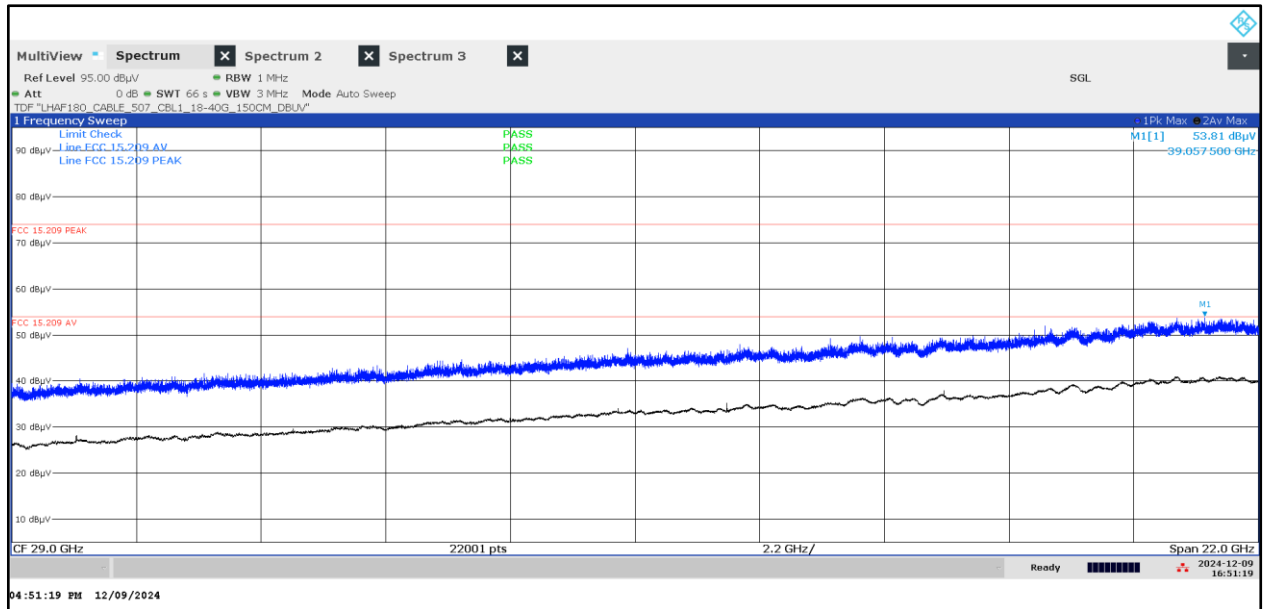
Plot 106: Spurious at 30 GHz, stop mode, low frequency with 10 MHz span



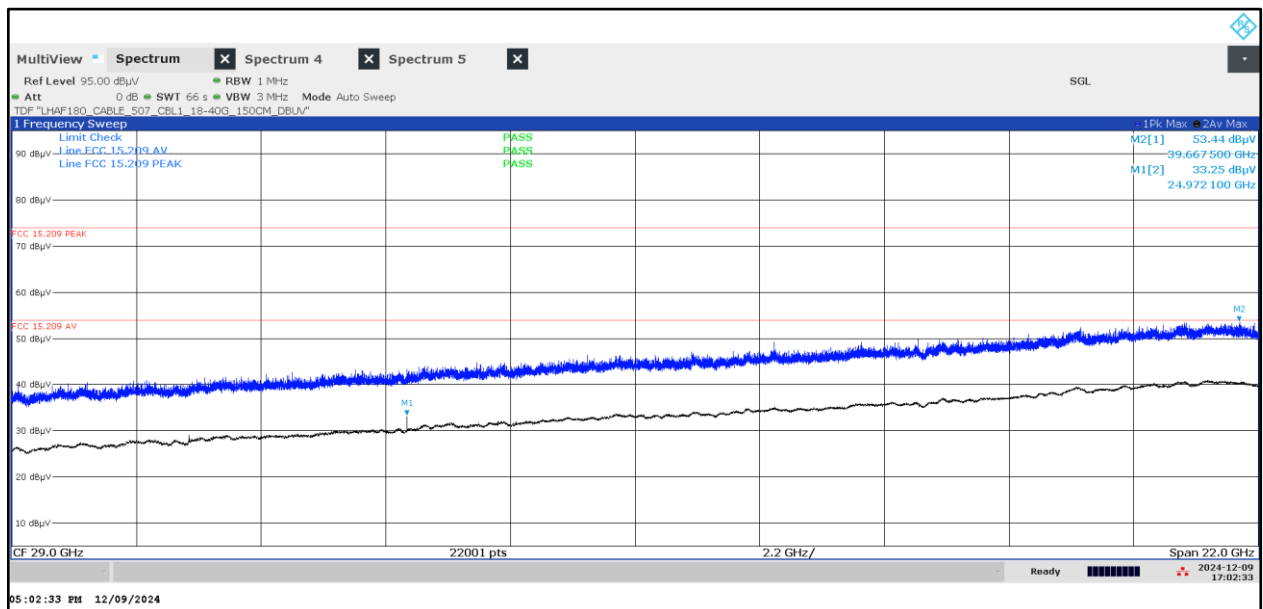
Plot 107: Spurious at 30 GHz, stop mode, low frequency with zero span



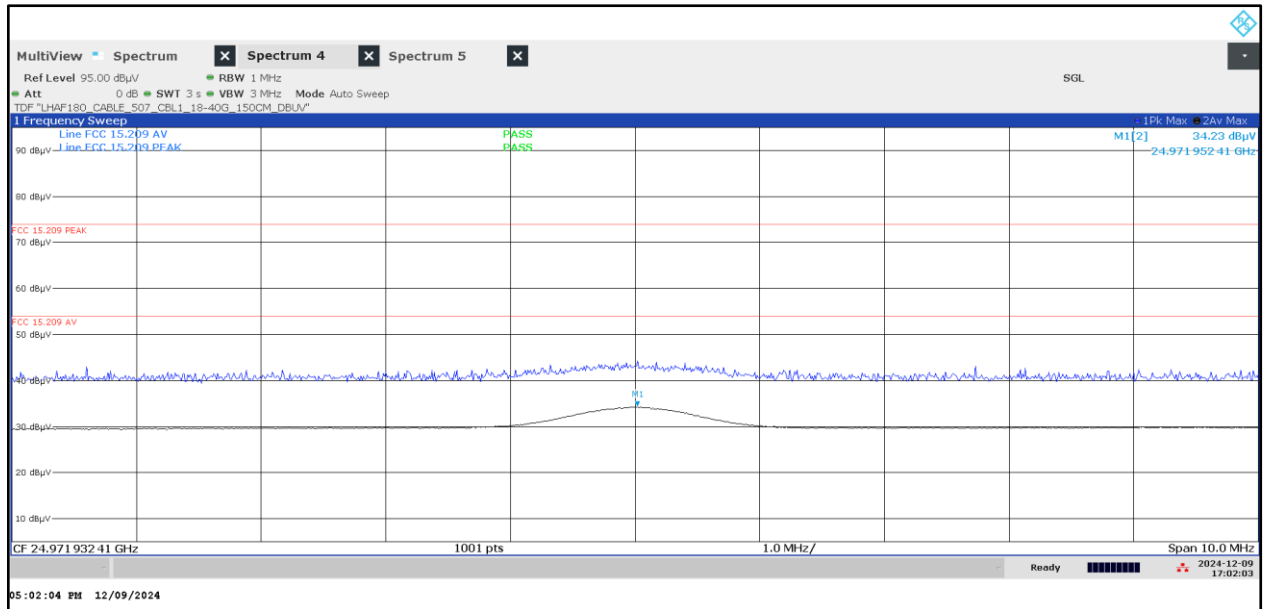
Plot 108: 18 GHz – 40 GHz, stop mode, middle frequency



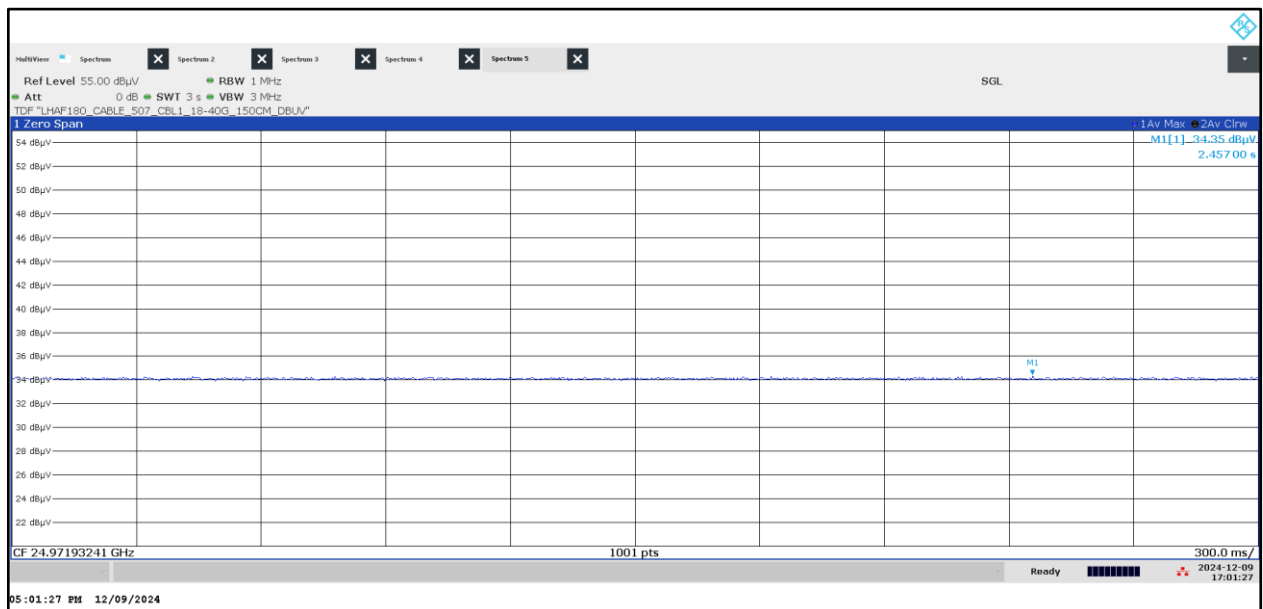
Plot 109: 18 GHz – 40 GHz, stop mode, high frequency



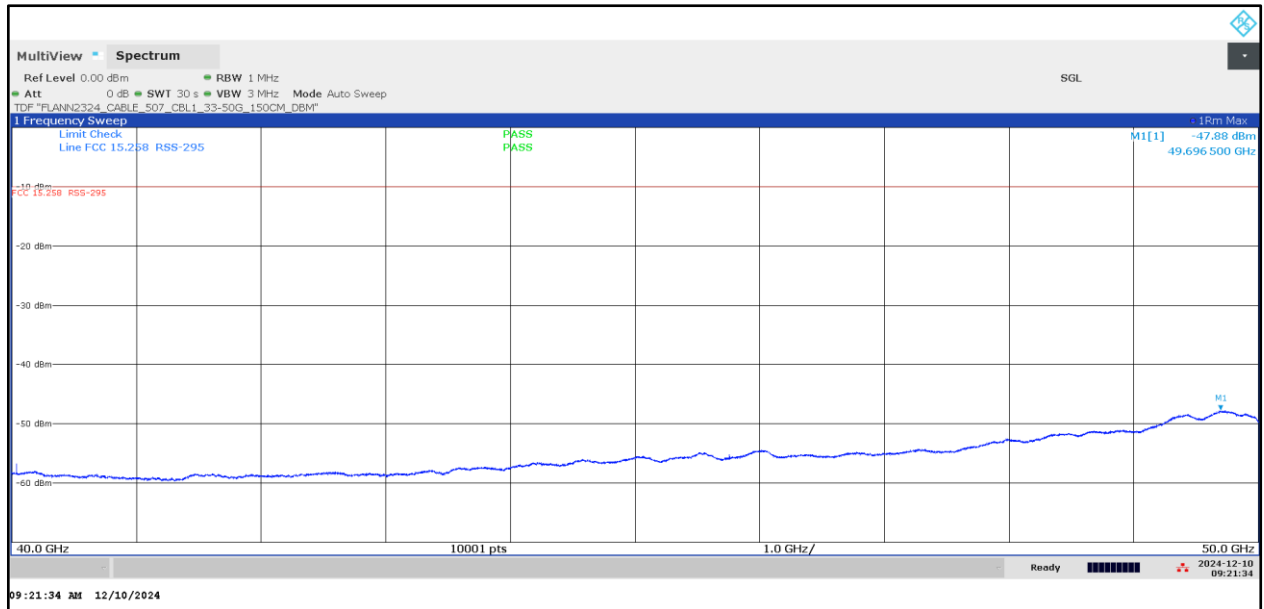
Plot 110: Spurious at 25 GHz, stop mode, high frequency with 10 MHz span



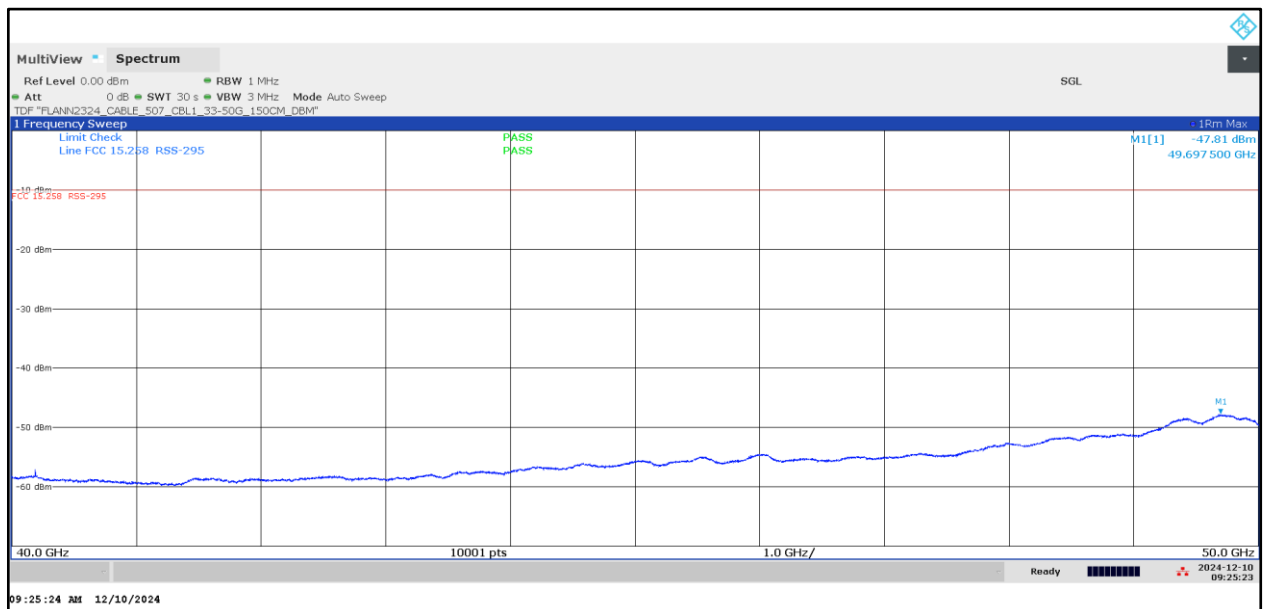
Plot 111: Spurious at 25 GHz, stop mode, high frequency with zero span



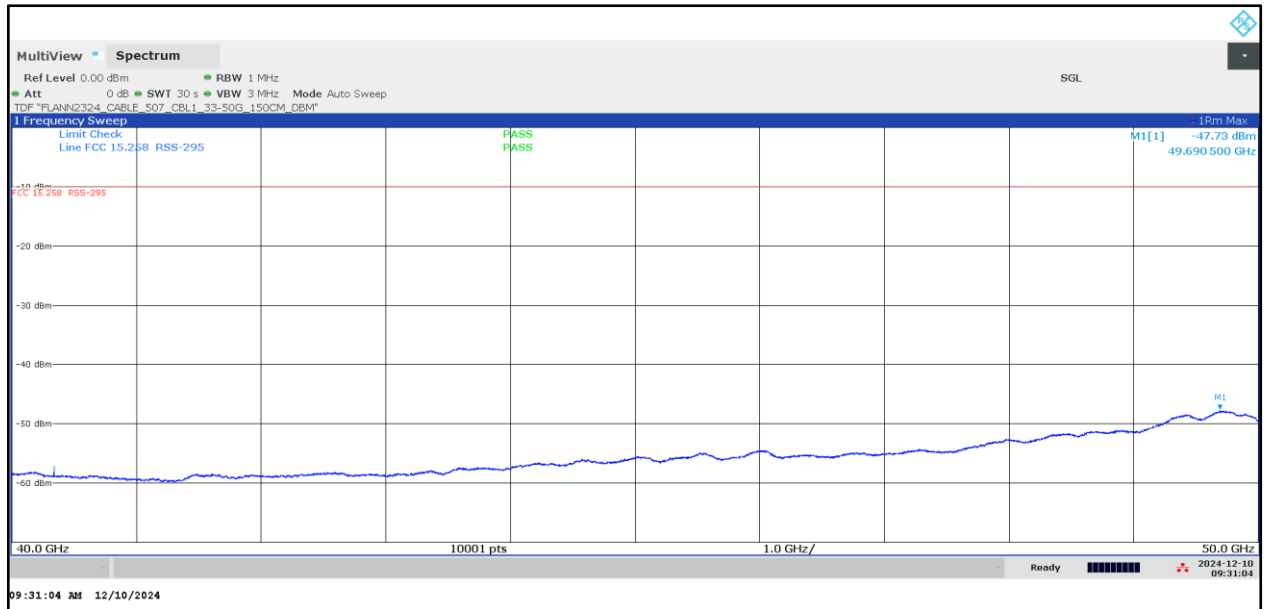
Plot 112: 40 GHz – 50 GHz, stop mode, low frequency



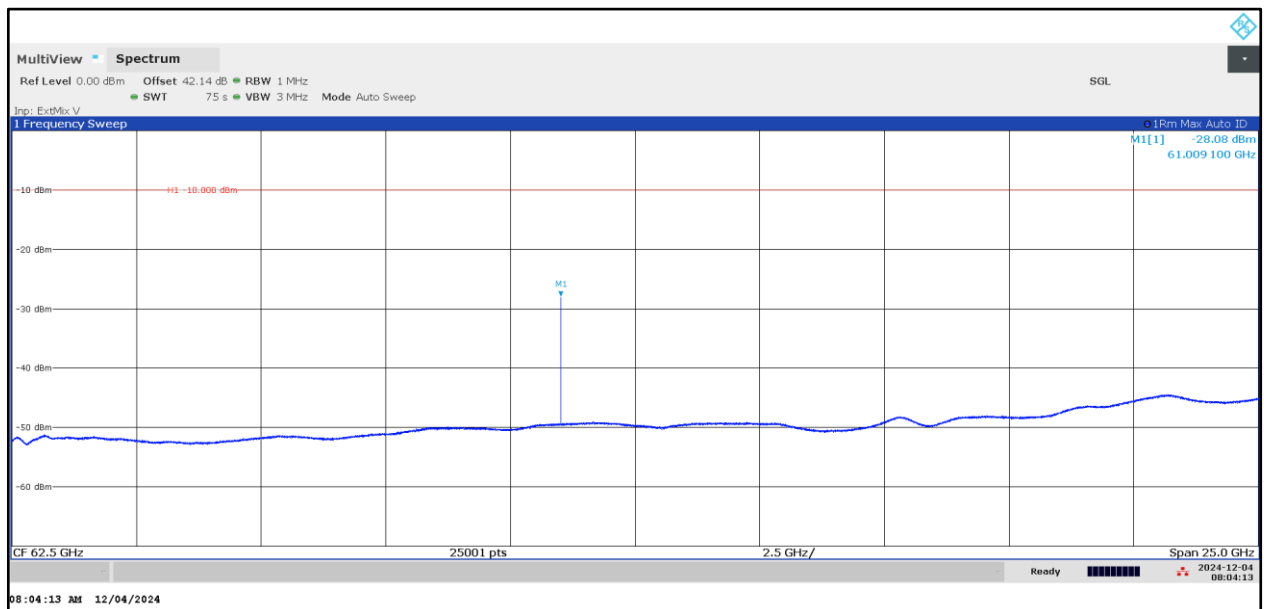
Plot 113: 40 GHz – 50 GHz, stop mode, middle frequency



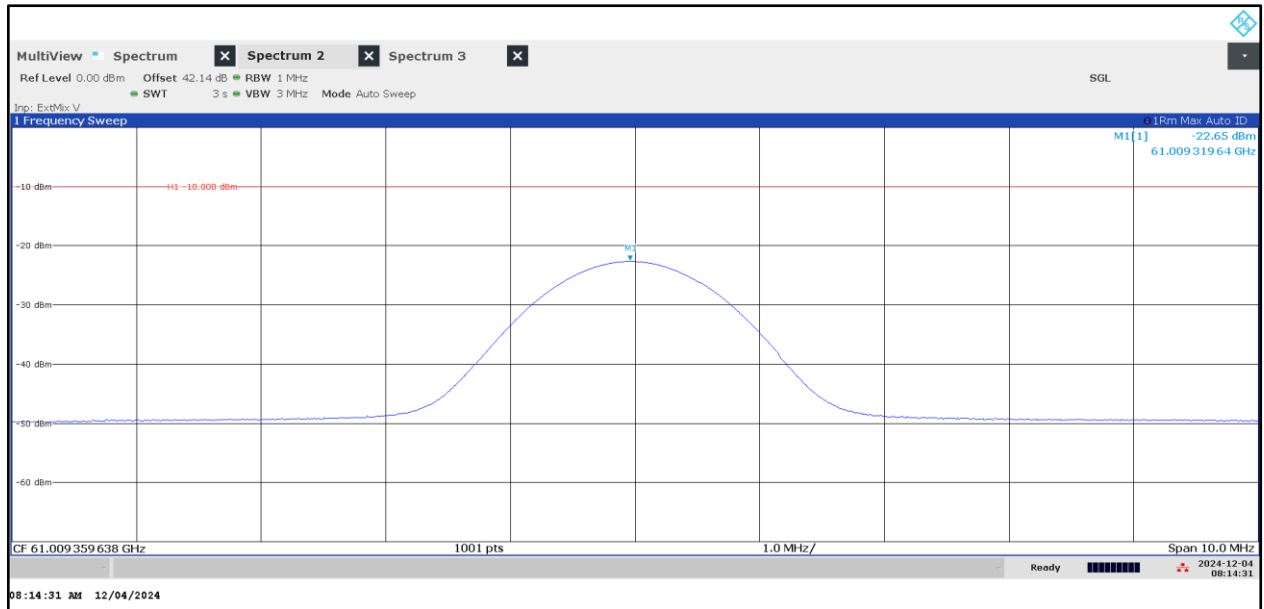
Plot 114: 40 GHz – 50 GHz, stop mode, high frequency



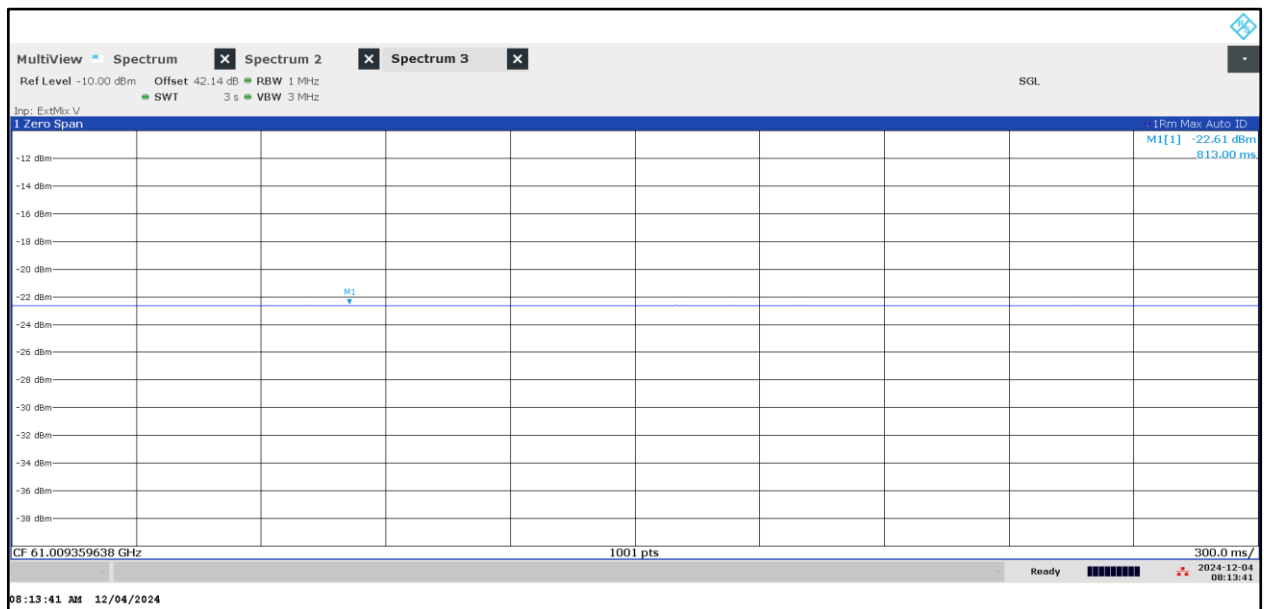
Plot 115: 50 GHz – 75 GHz, stop mode, low frequency



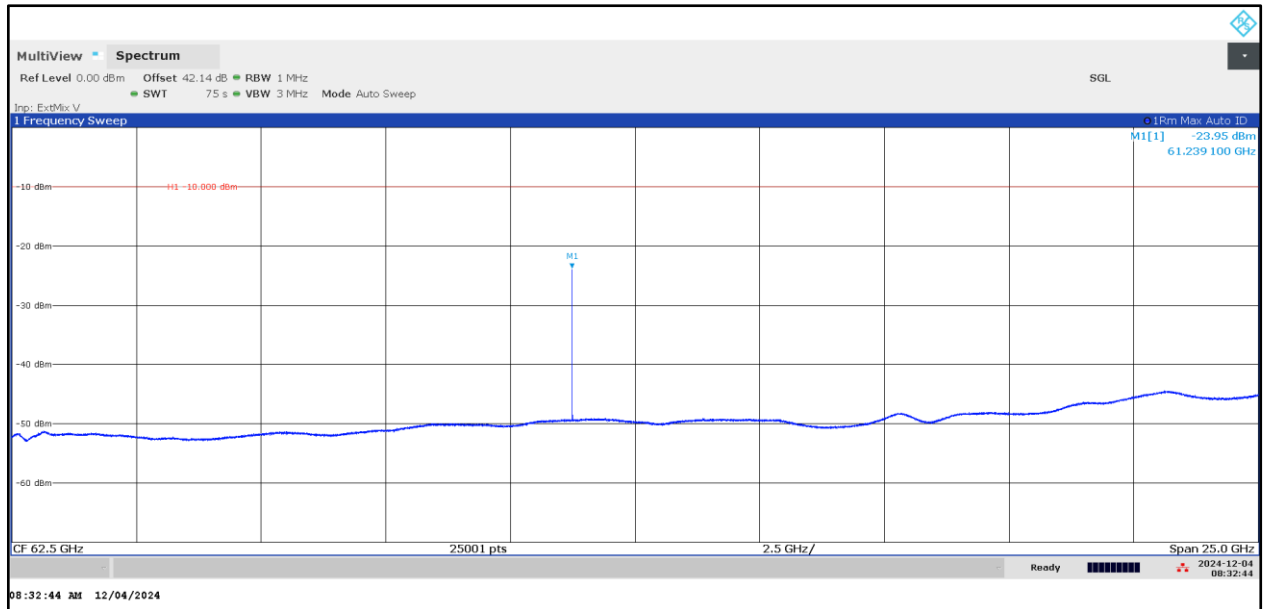
Plot 116: Spurious at 61 GHz, stop mode, low frequency with 10 MHz span



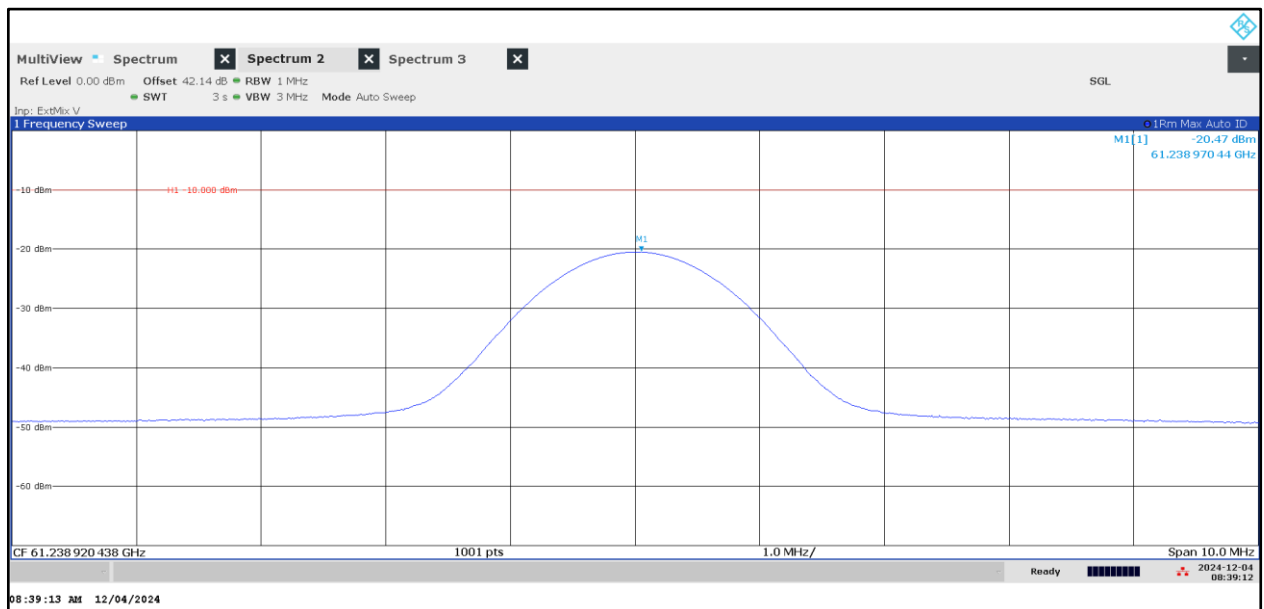
Plot 117: Spurious at 61 GHz, stop mode, low frequency with zero span



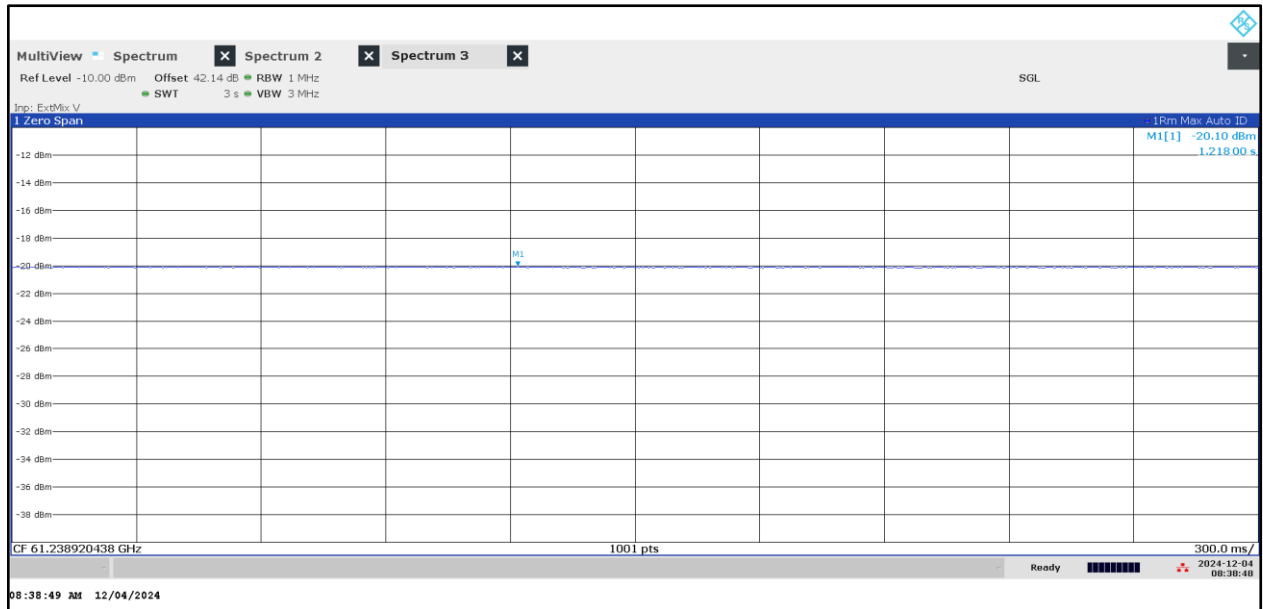
Plot 118: 50 GHz – 75 GHz, stop mode, middle frequency



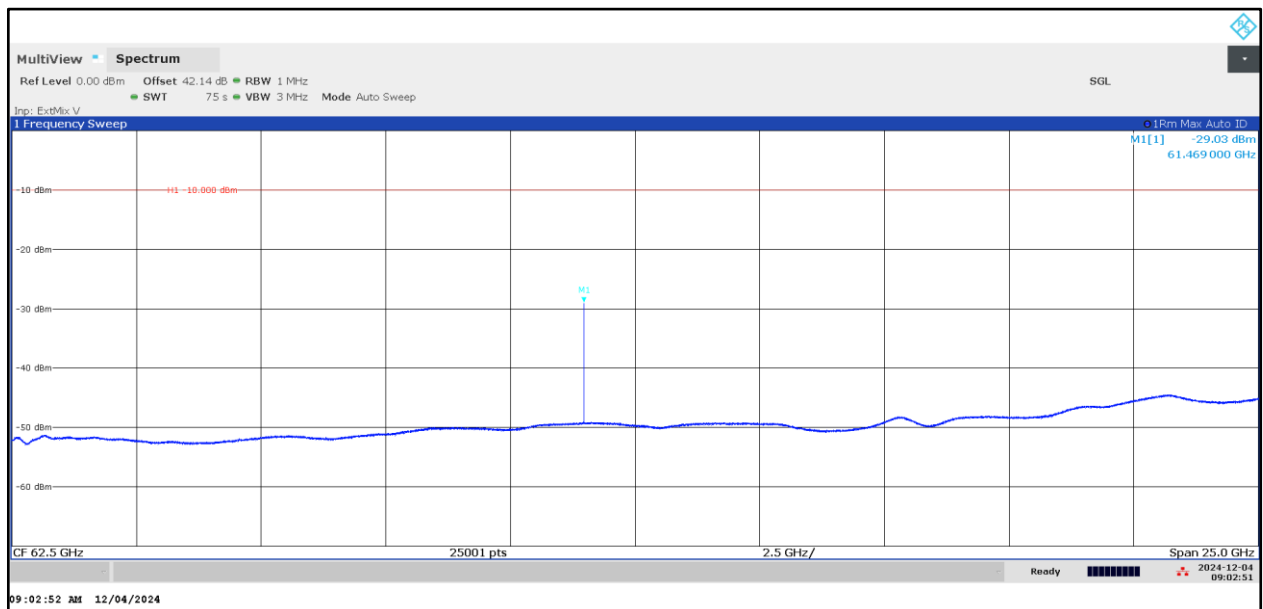
Plot 119: Spurious at 61 GHz, stop mode, middle frequency with 10 MHz span



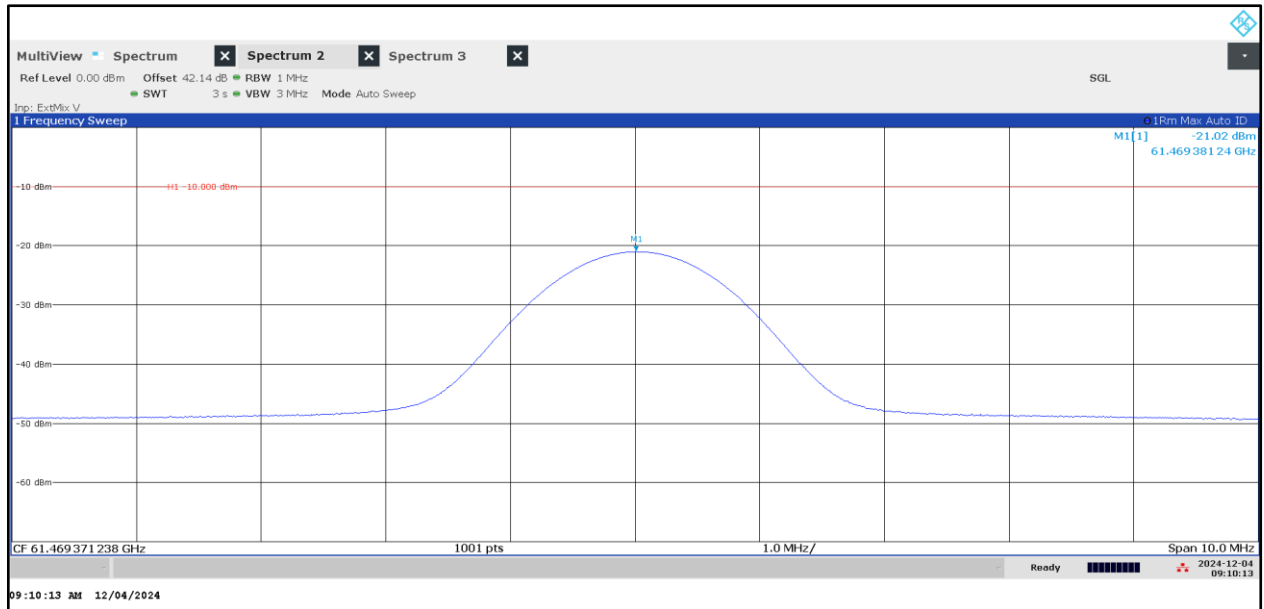
Plot 120: Spurious at 61 GHz, stop mode, middle frequency with zero span



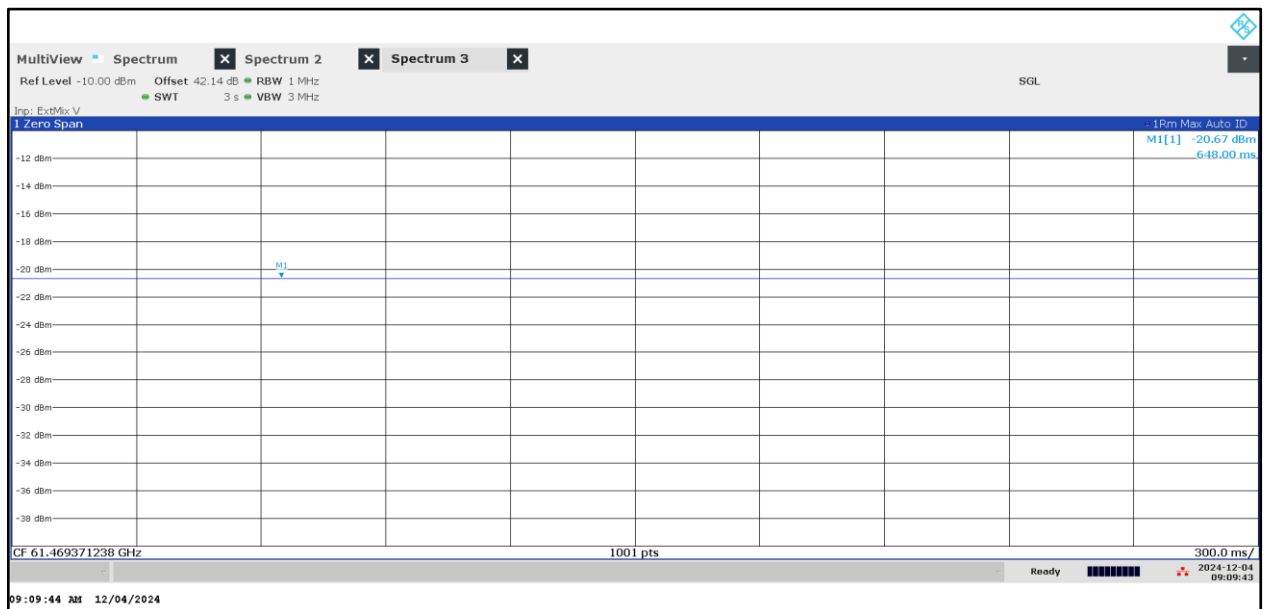
Plot 121: 50 GHz – 75 GHz, stop mode, high frequency



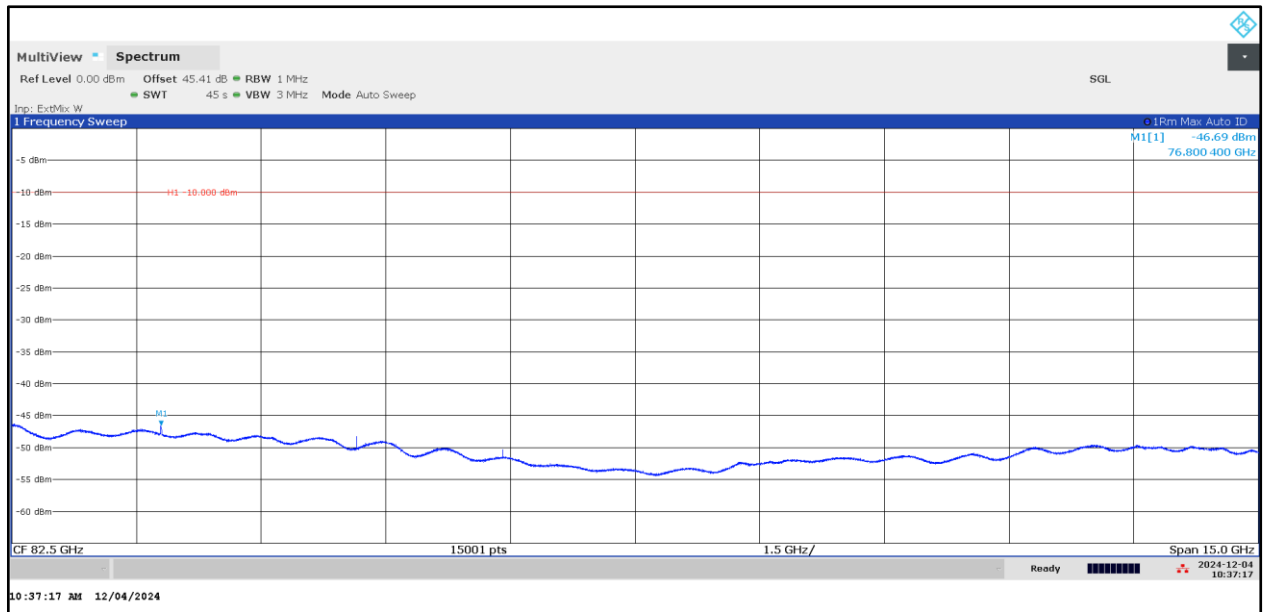
Plot 122: Spurious at 61 GHz, stop mode, high frequency with 10 MHz span



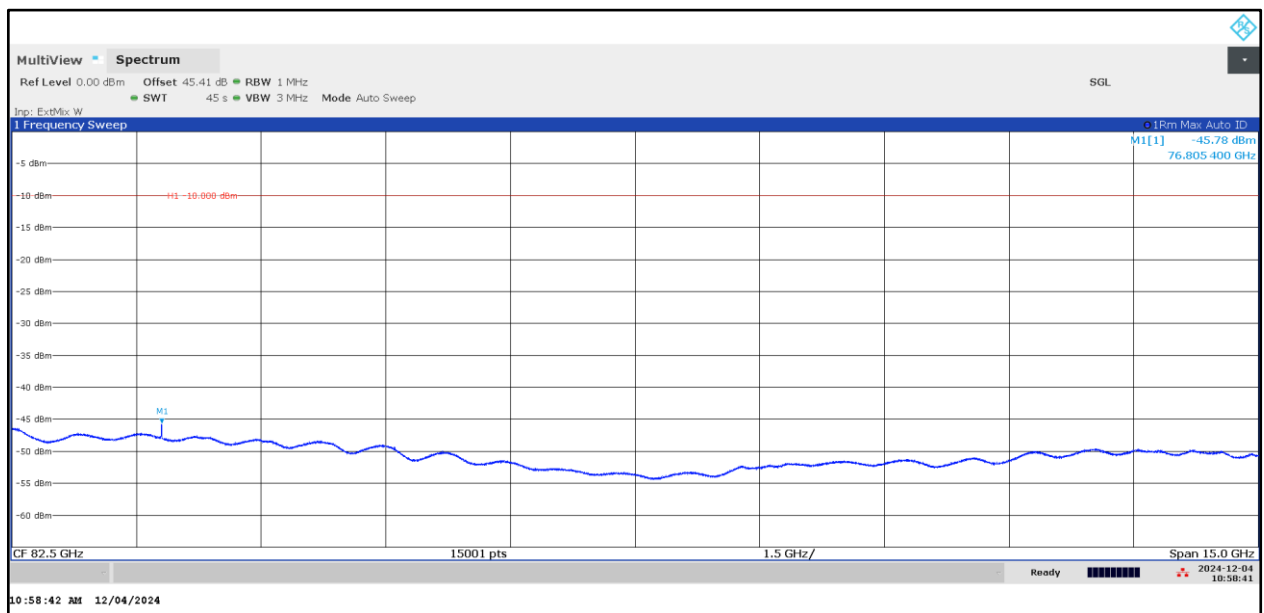
Plot 123: Spurious at 61 GHz, stop mode, high frequency with zero span



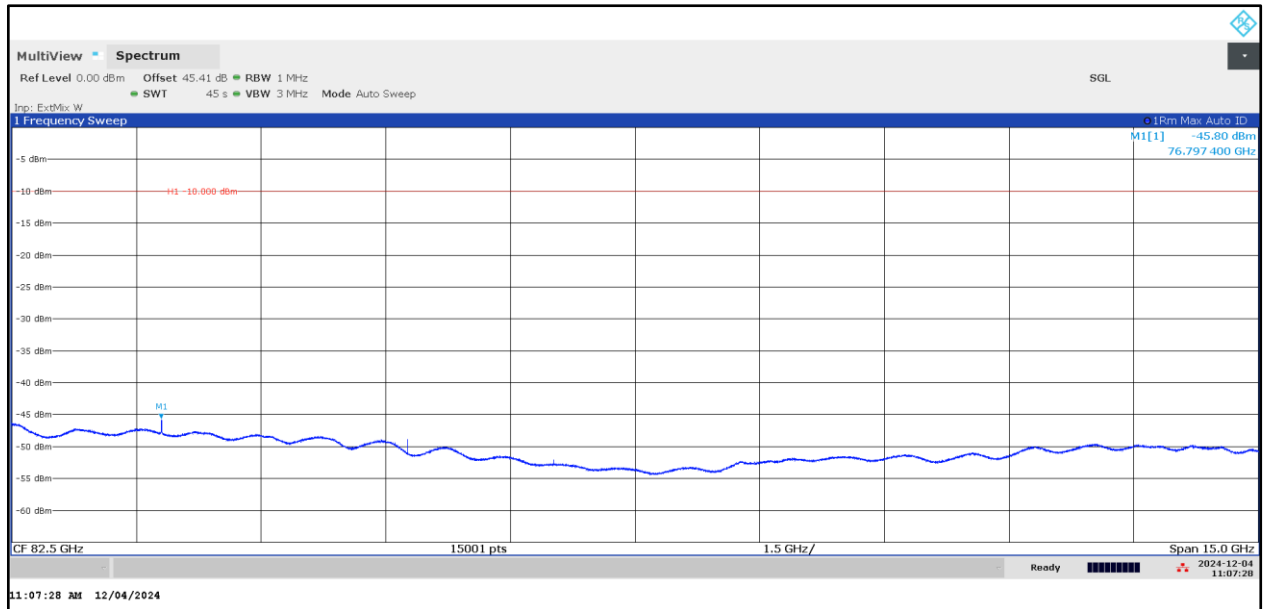
Plot 124: 75 GHz – 90 GHz, stop mode, low frequency



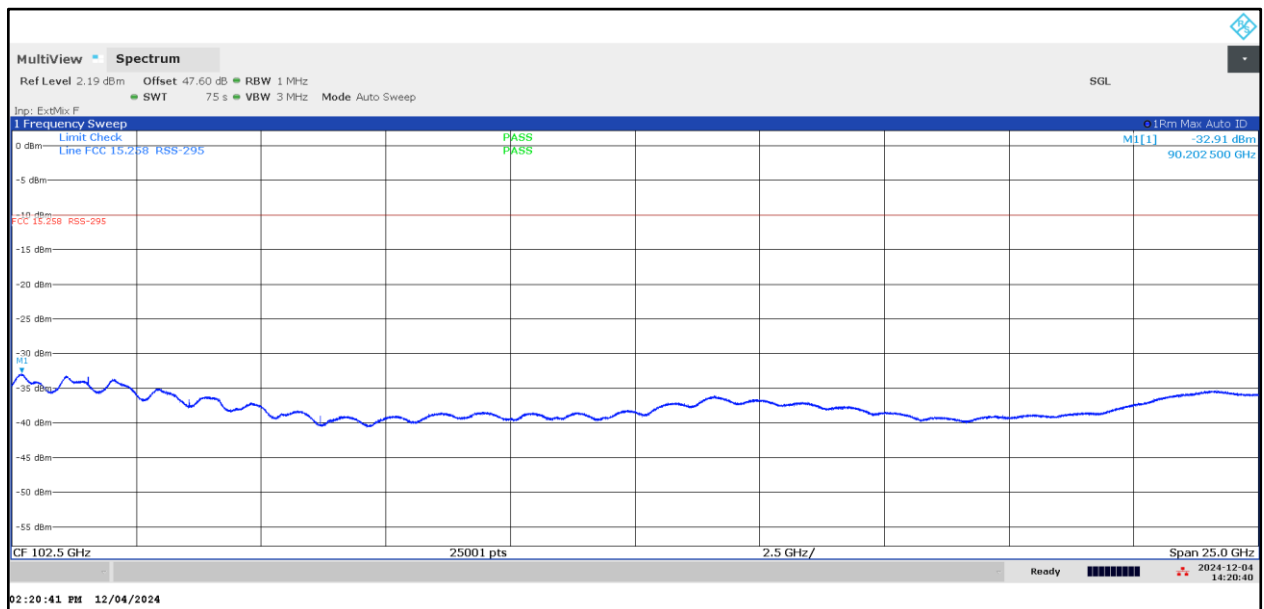
Plot 125: 75 GHz – 90 GHz, stop mode, middle frequency



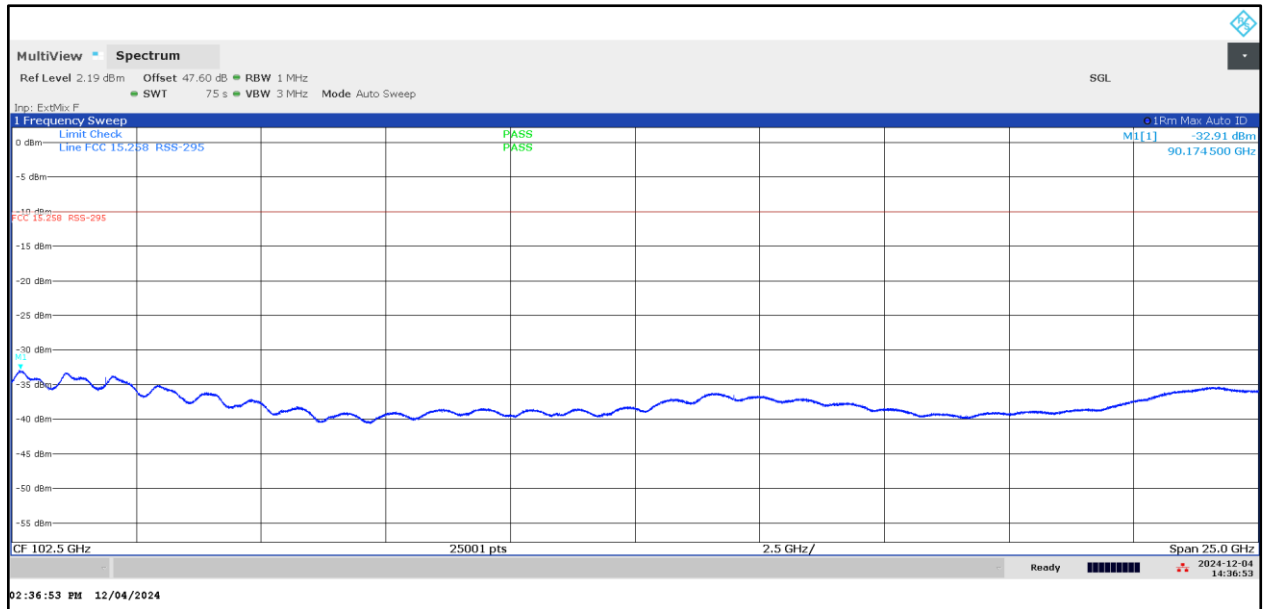
Plot 126: 75 GHz – 90 GHz, stop mode, high frequency



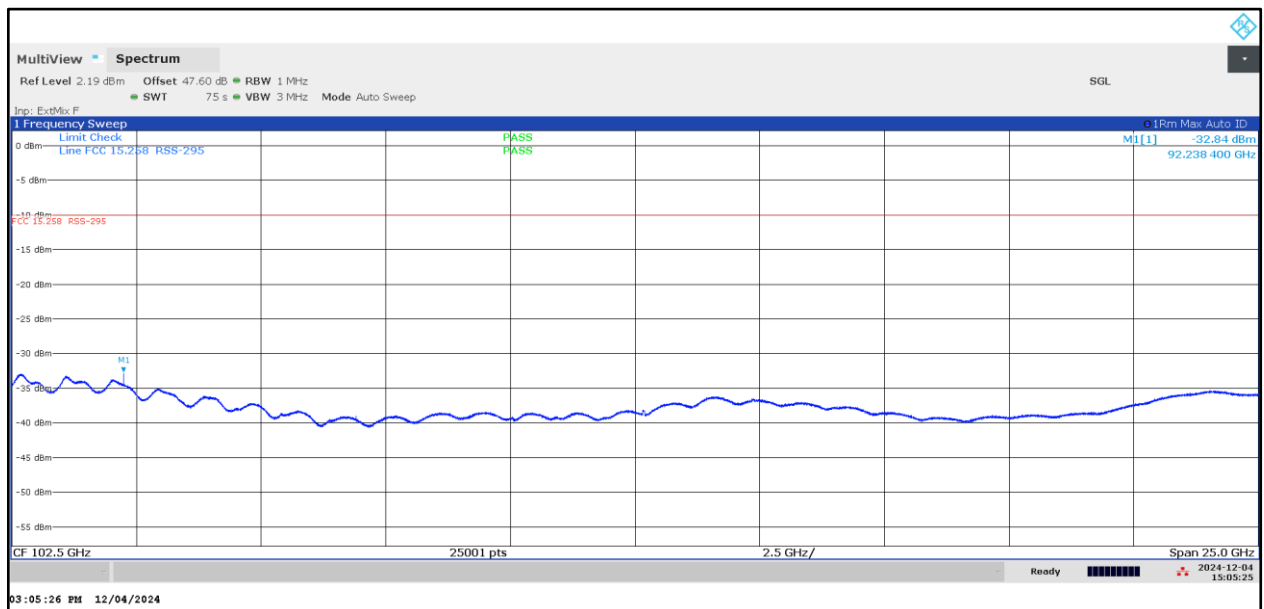
Plot 127: 90 GHz – 115 GHz, stop mode, low frequency



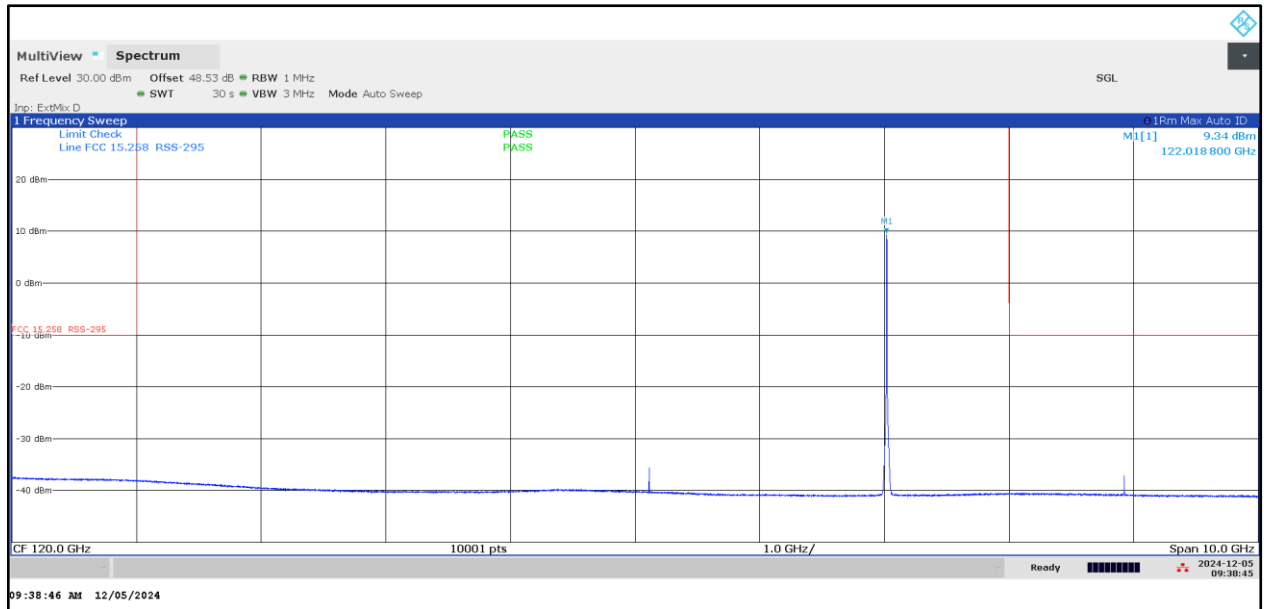
Plot 128: 90 GHz – 115 GHz, stop mode, middle frequency



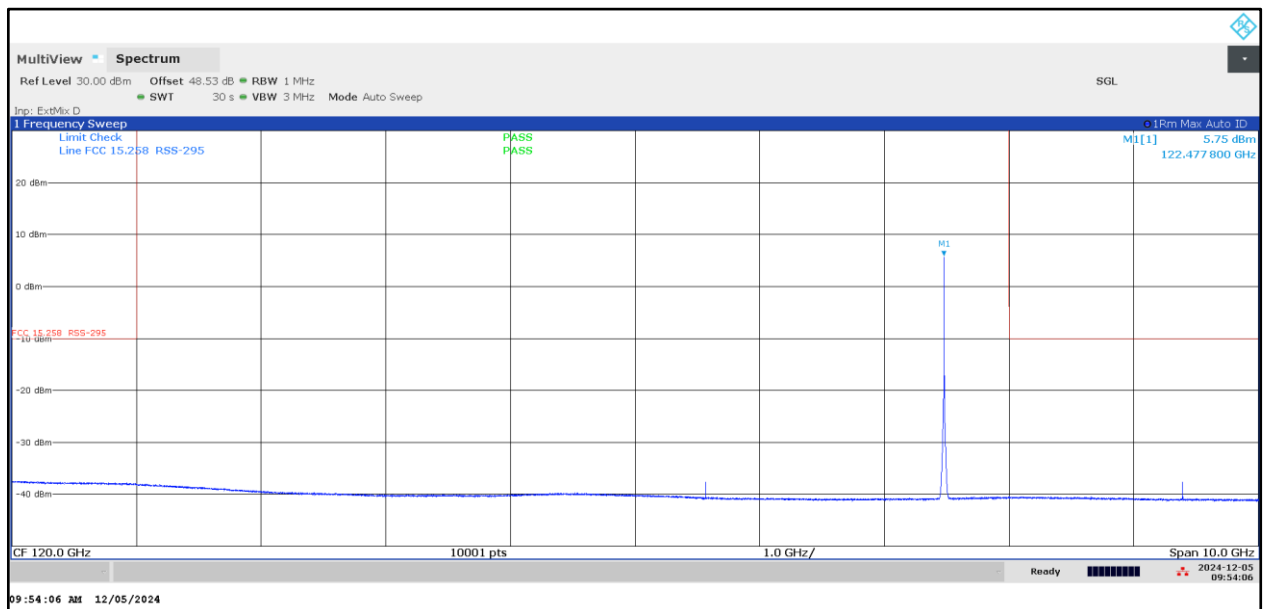
Plot 129: 90 GHz – 115 GHz, stop mode, high frequency



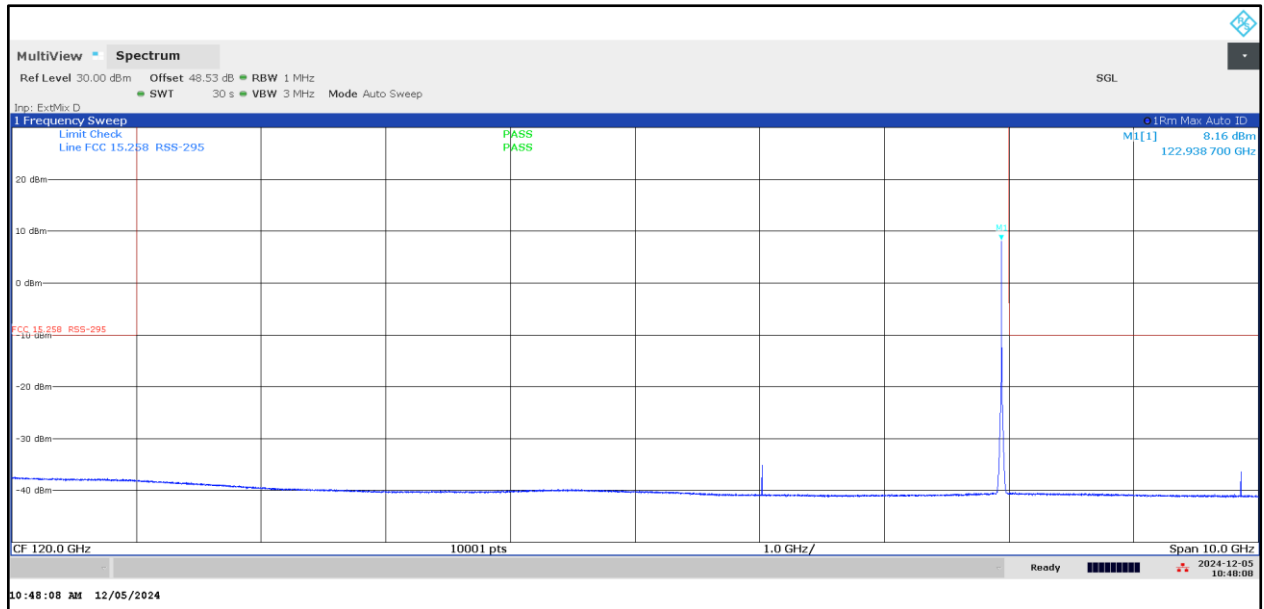
Plot 130: 115 GHz – 125 GHz, stop mode, low frequency



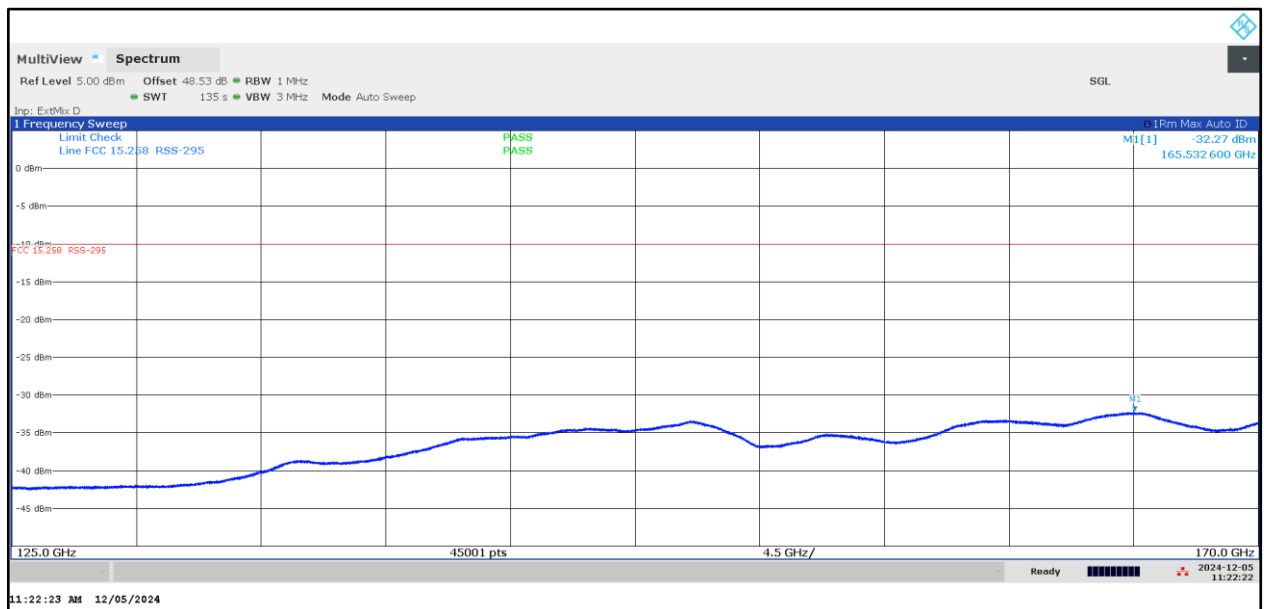
Plot 131: 115 GHz – 125 GHz, stop mode, middle frequency



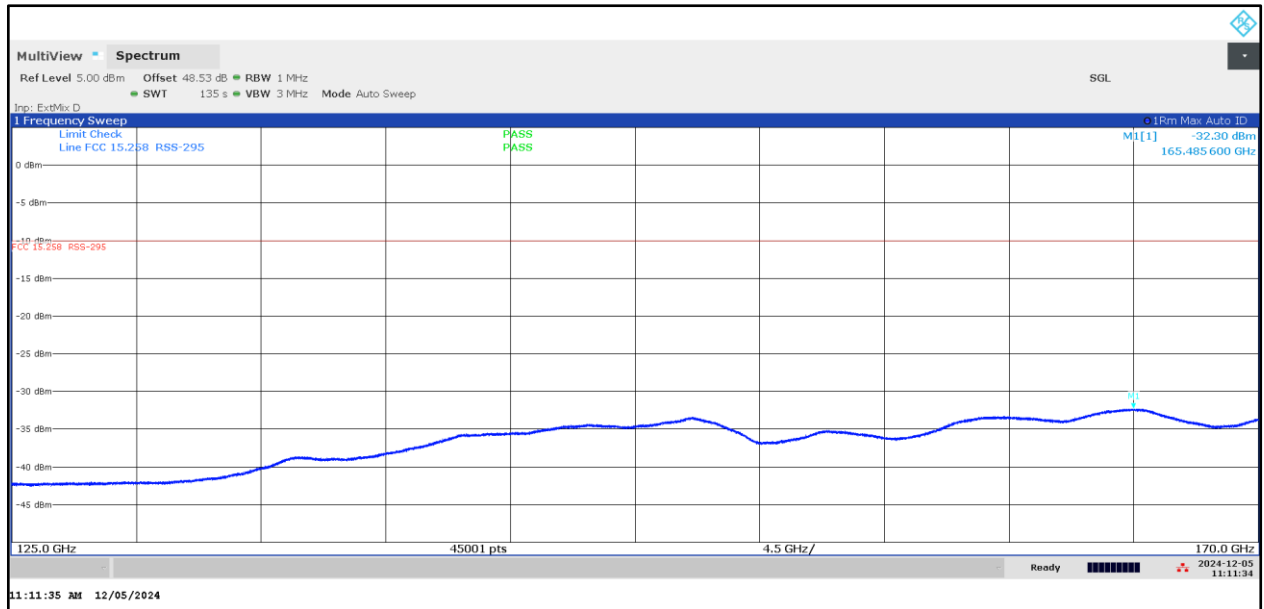
Plot 132: 115 GHz – 125 GHz, stop mode, high frequency



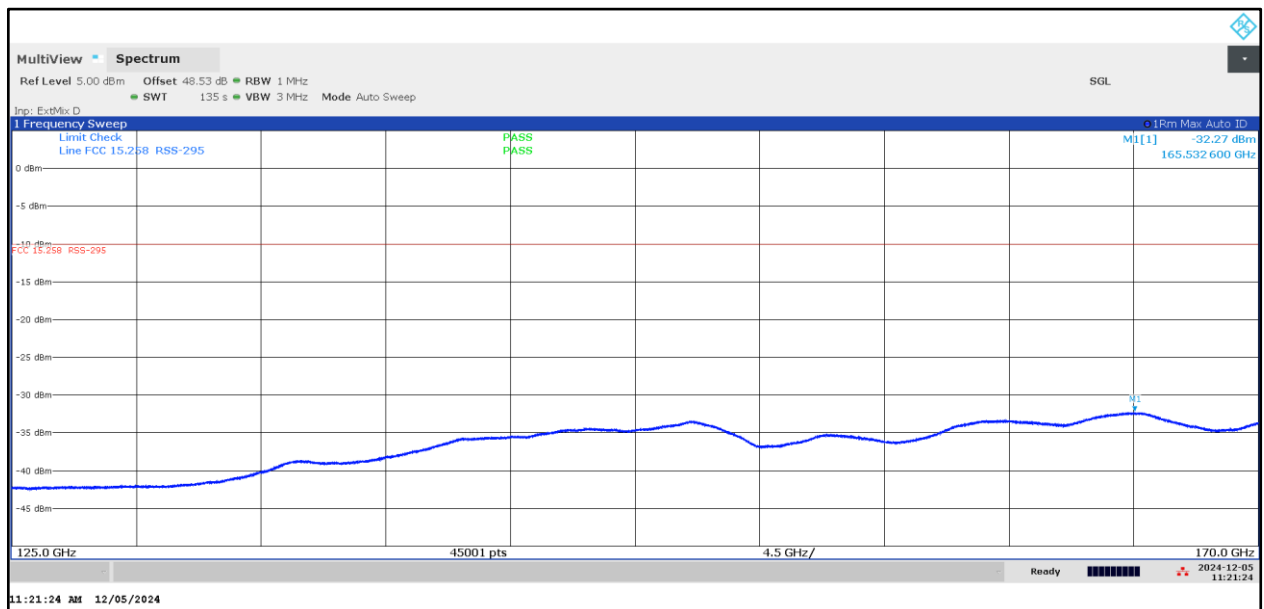
Plot 133: 125 GHz – 170 GHz, stop mode, low frequency



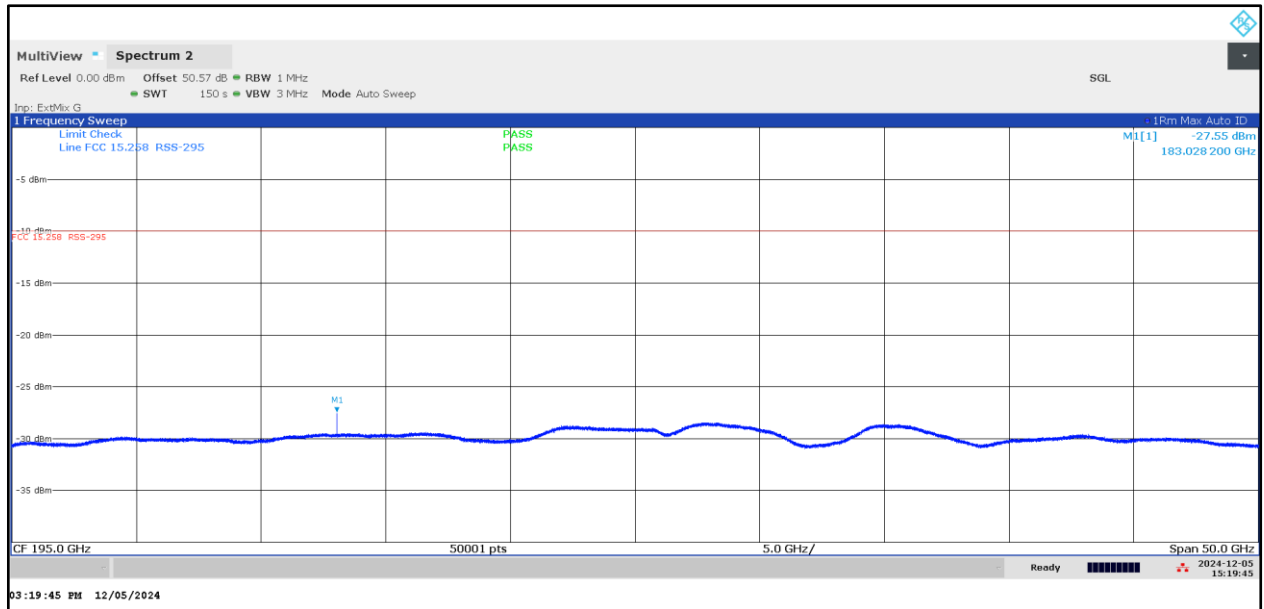
Plot 134: 125 GHz – 170 GHz, stop mode, middle frequency



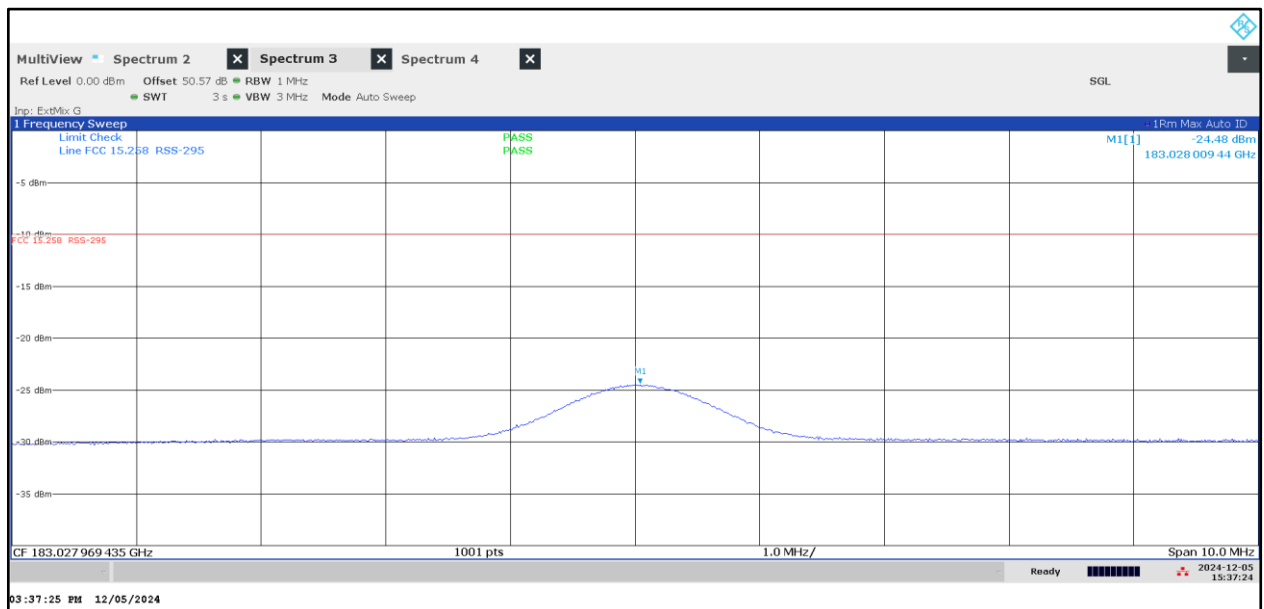
Plot 135: 125 GHz – 170 GHz, stop mode, high frequency



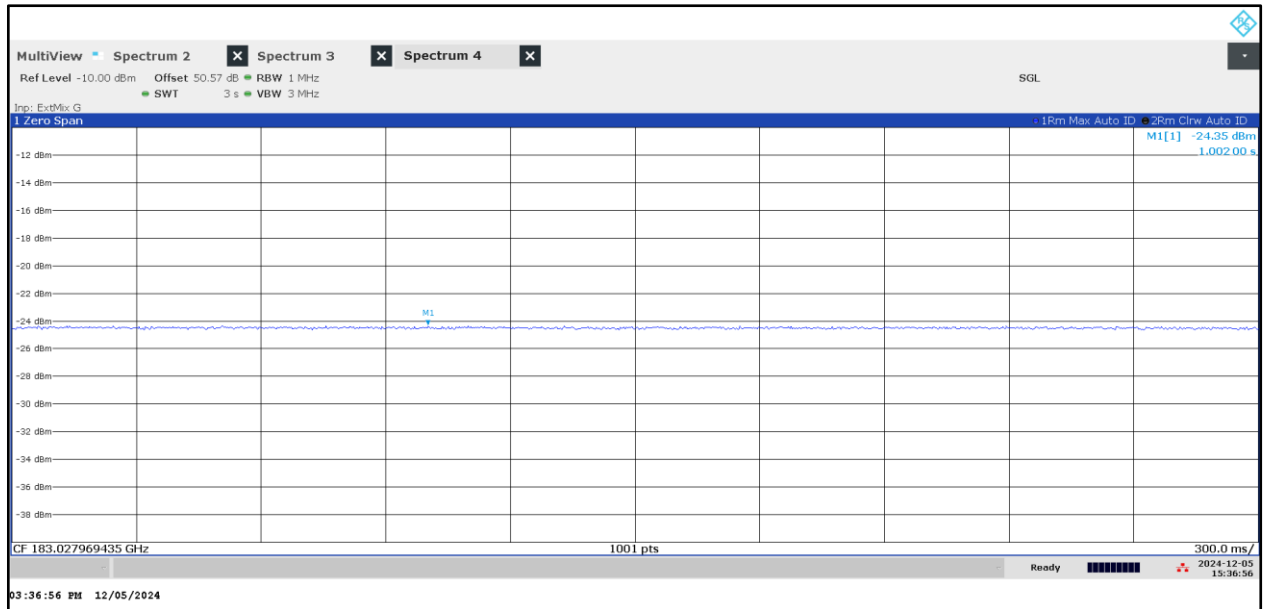
Plot 136: 170 GHz – 220 GHz, stop mode, low frequency



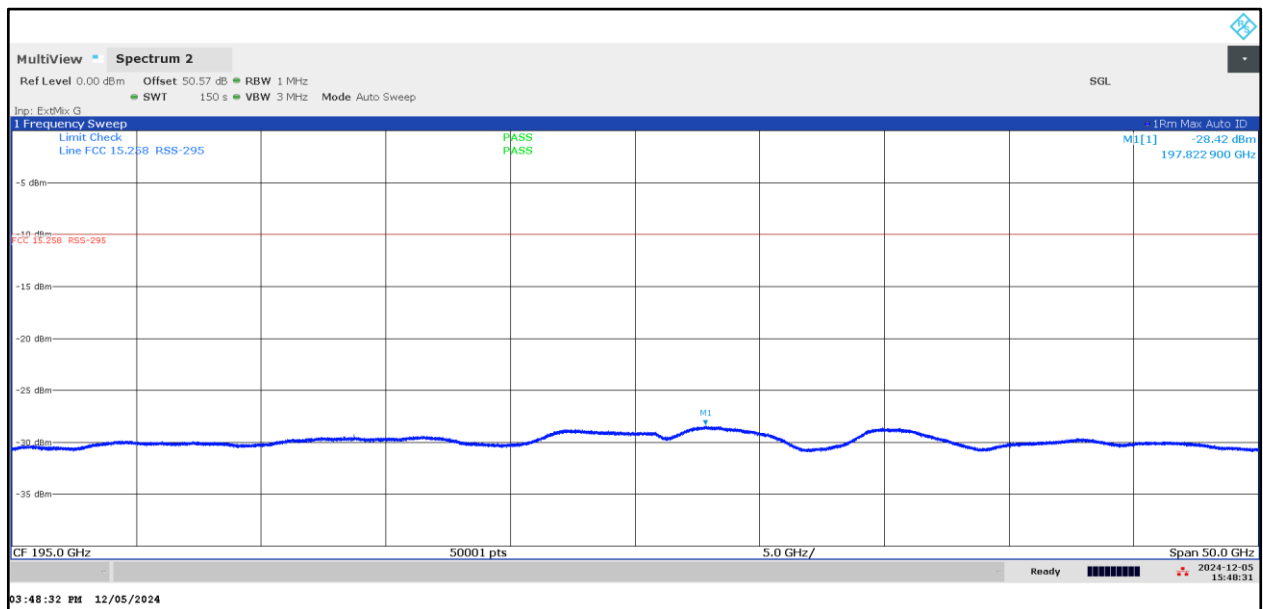
Plot 137: Spurious at 183 GHz, stop mode, low frequency with 10 MHz span



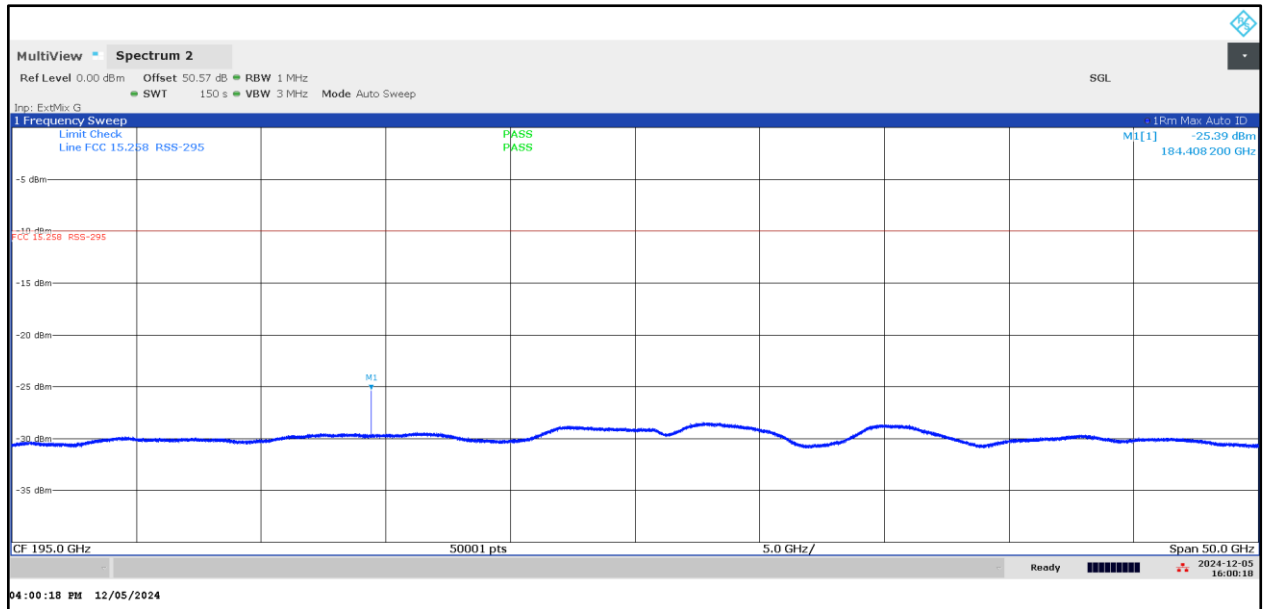
Plot 138: Spurious at 183 GHz, stop mode, low frequency with zero span



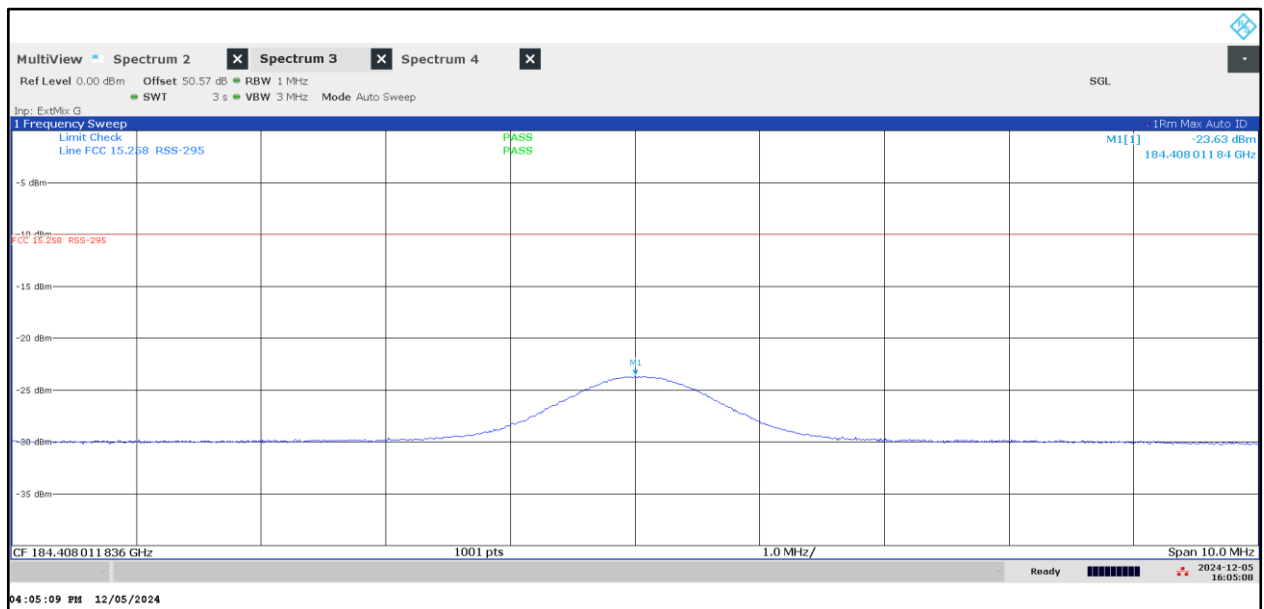
Plot 139: 170 GHz – 220 GHz, stop mode, middle frequency



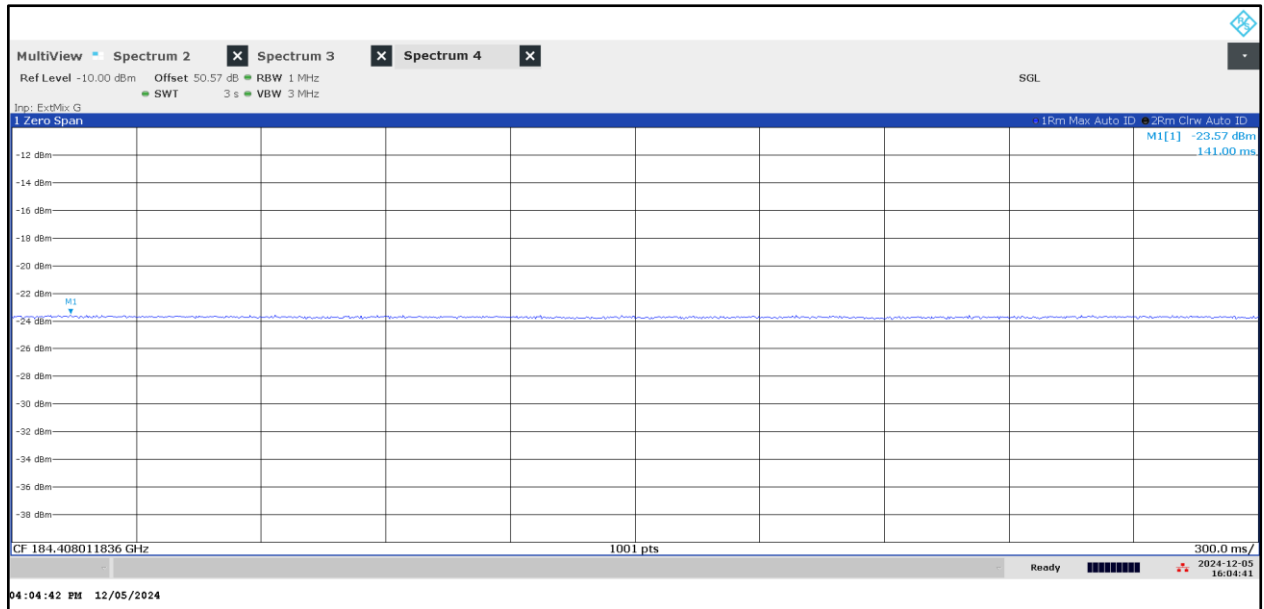
Plot 140: 170 GHz – 220 GHz, stop mode, high frequency



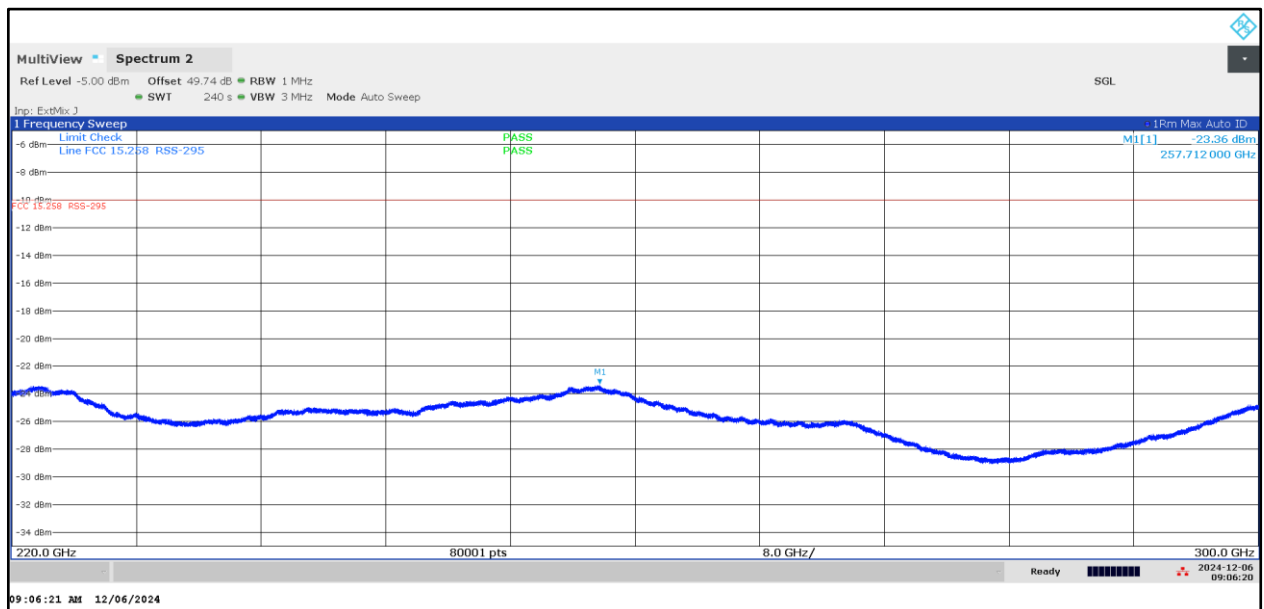
Plot 141: Spurious at 184 GHz, stop mode, high frequency with 10 MHz span



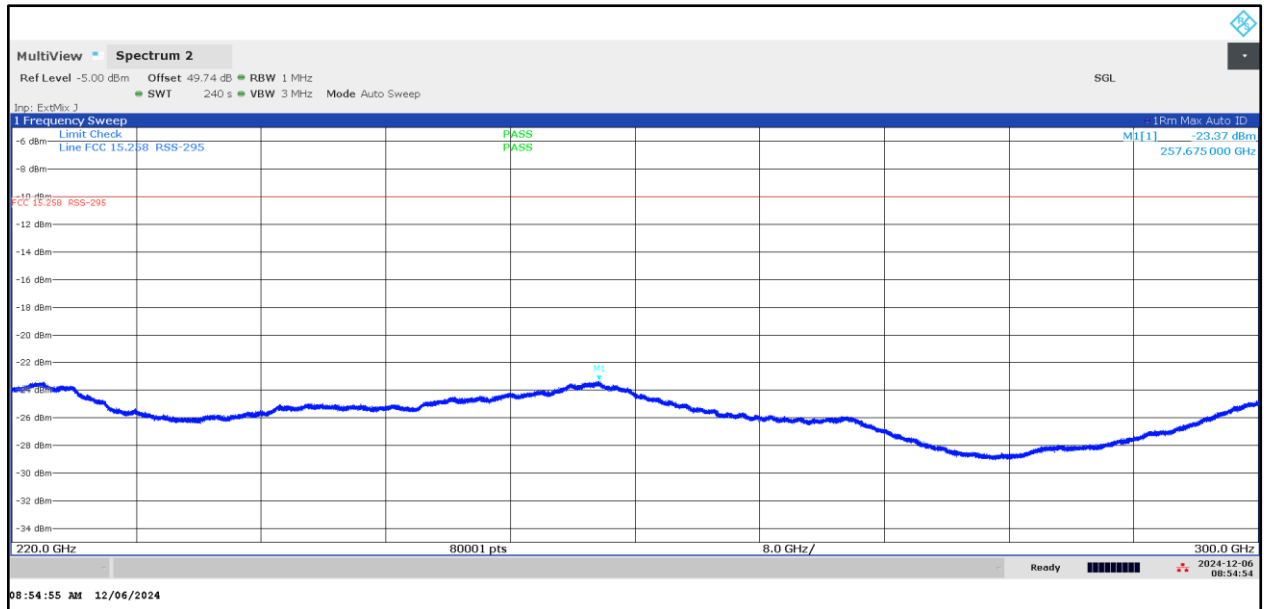
Plot 142: Spurious at 184 GHz, stop mode, high frequency with zero span



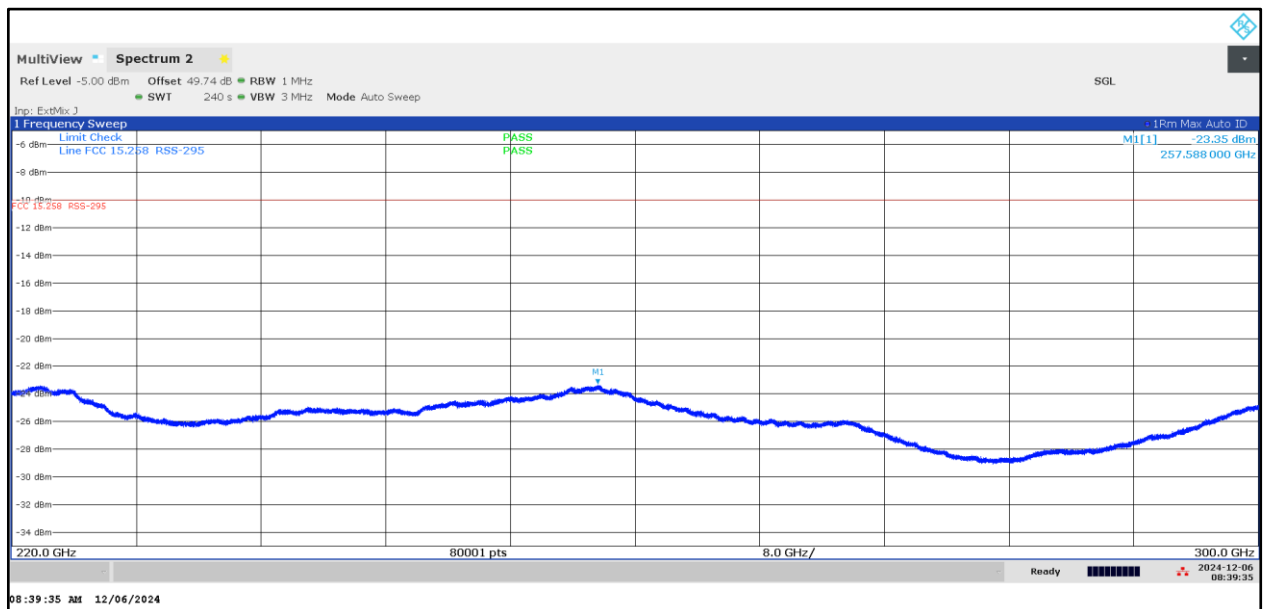
Plot 143: 220 GHz – 300 GHz, stop mode, low frequency



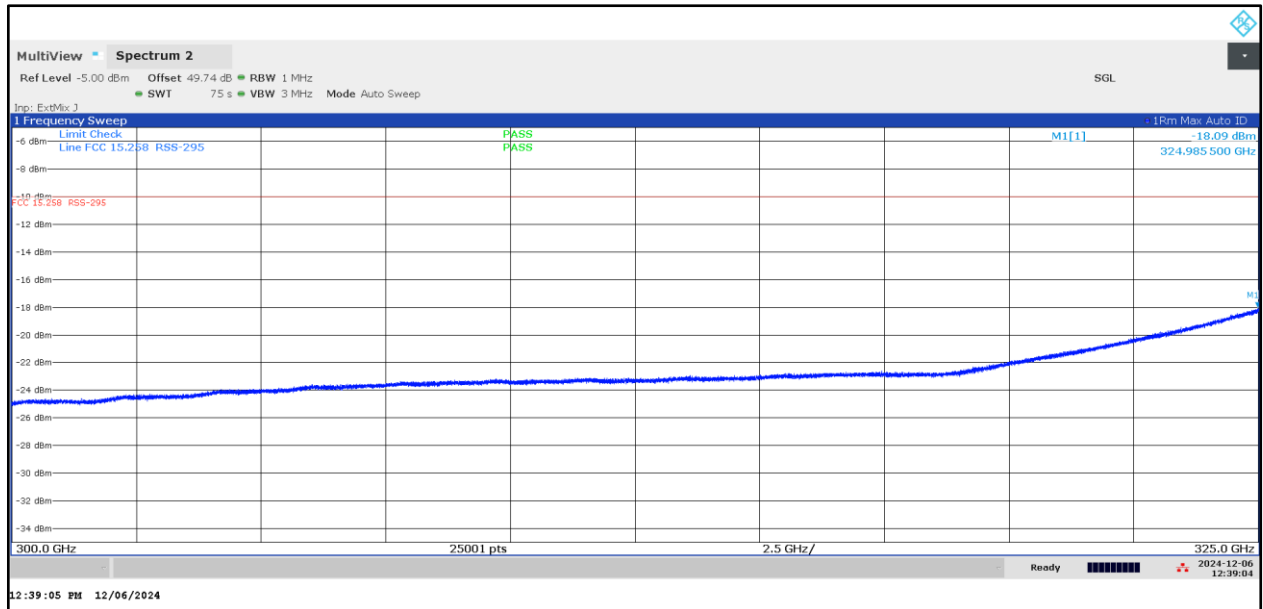
Plot 144: 220 GHz – 300 GHz, stop mode, middle frequency



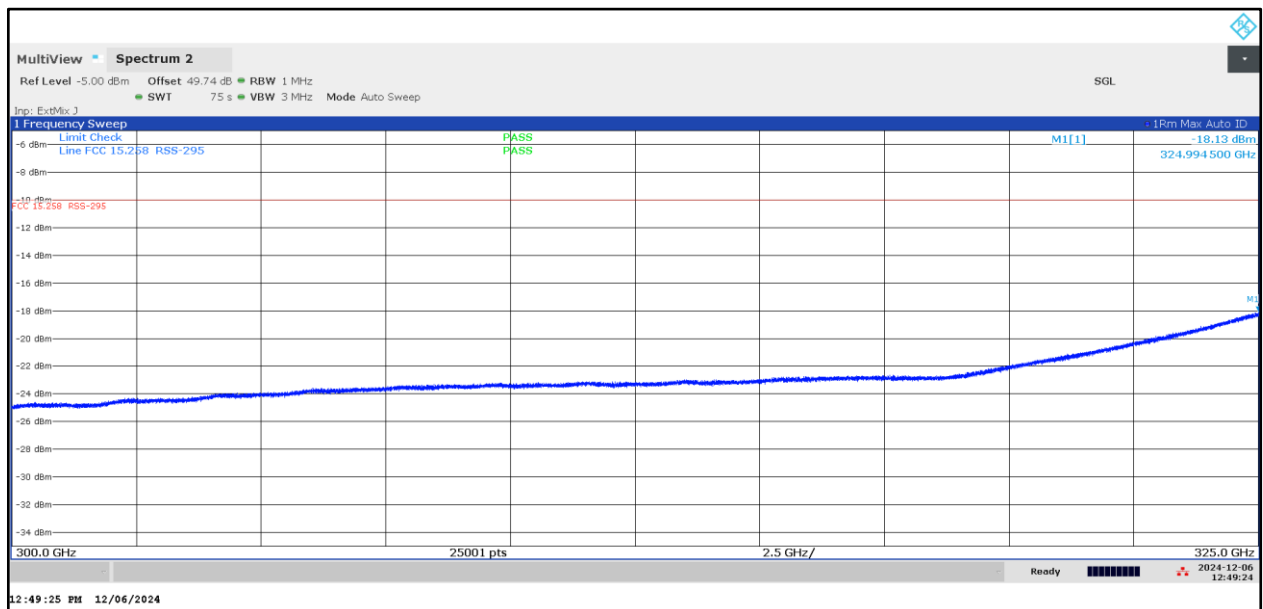
Plot 145: 220 GHz – 300 GHz, stop mode, high frequency



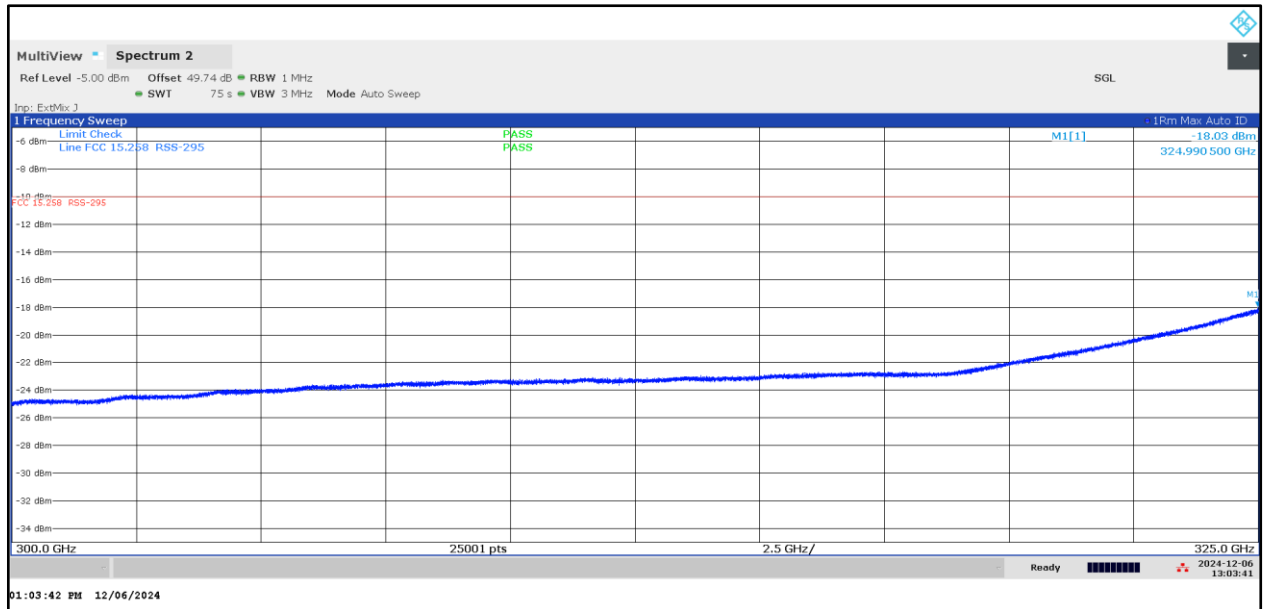
Plot 146: 300 GHz – 325 GHz, stop mode, low frequency



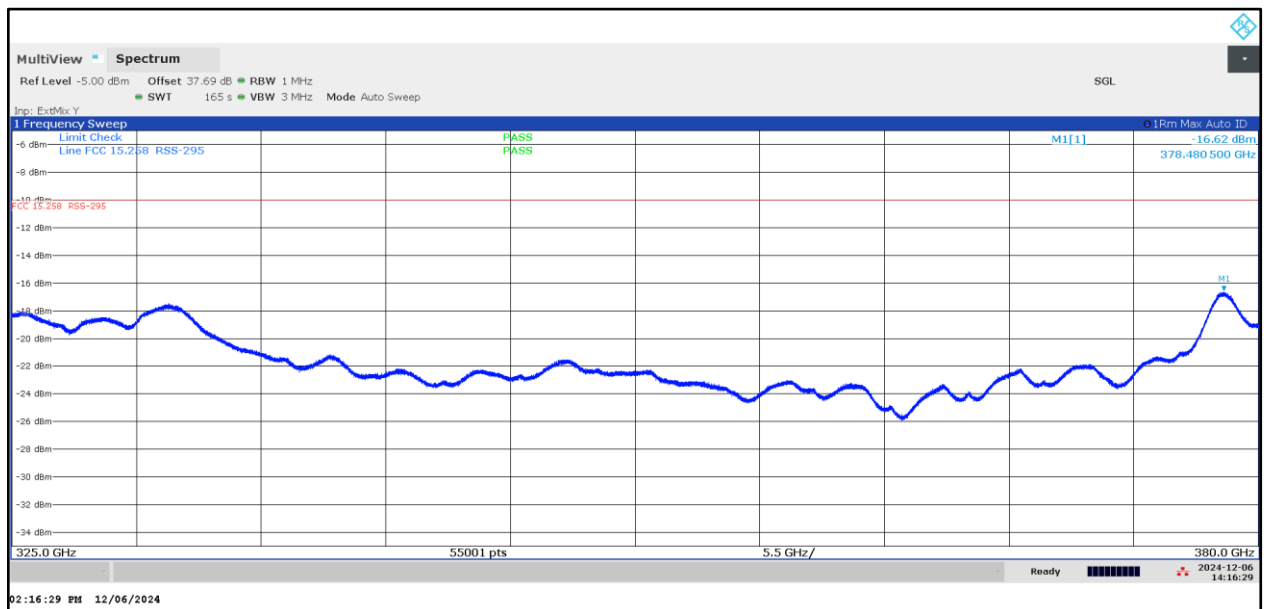
Plot 147: 300 GHz – 325 GHz, stop mode, middle frequency



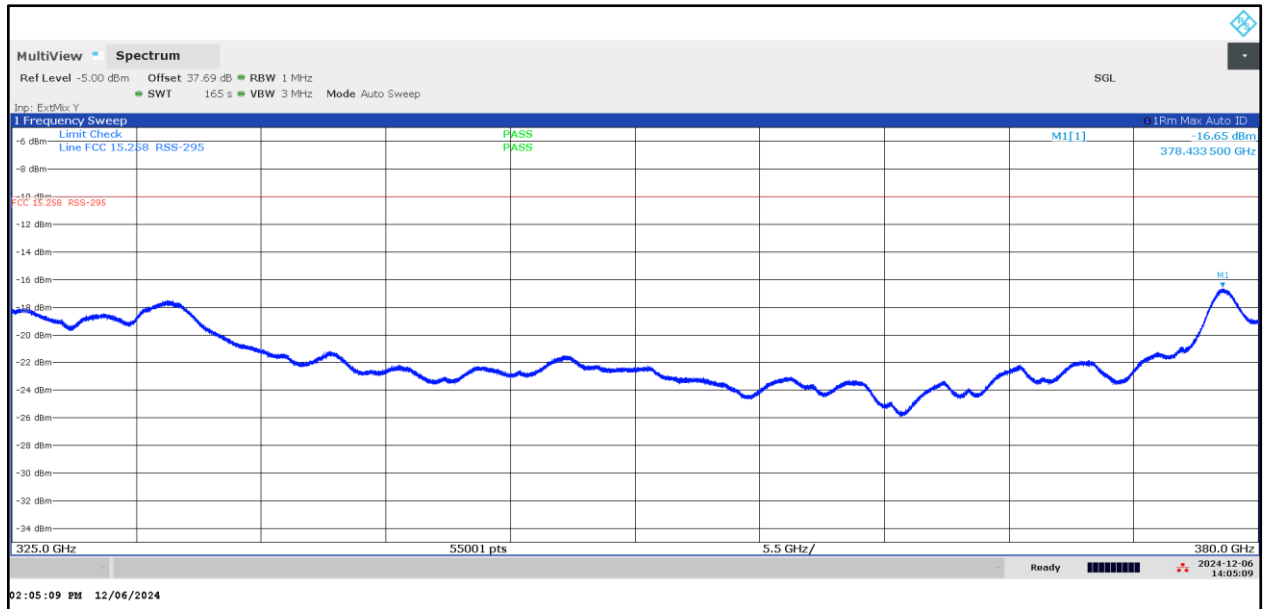
Plot 148: 300 GHz – 325 GHz, stop mode, high frequency



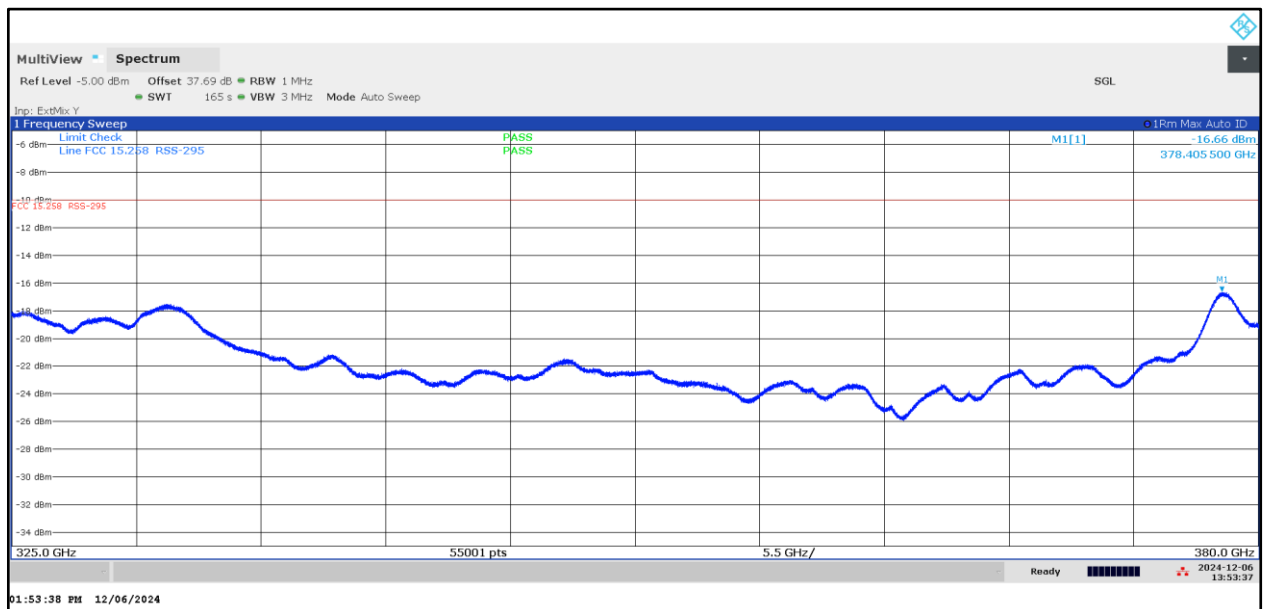
Plot 149: 325 GHz – 380 GHz, stop mode, low frequency



Plot 150: 325 GHz – 380 GHz, stop mode, middle frequency



Plot 151: 325 GHz – 380 GHz, stop mode, high frequency



13.4 Conducted emissions < 30 MHz (AC power line)

Description:

Measurement of the conducted spurious emissions in transmit mode below 30 MHz. Both power lines, phase and neutral line, are measured. Found peaks are re-measured with average and quasi peak detection to show compliance to the limits.

Limits and provisions:

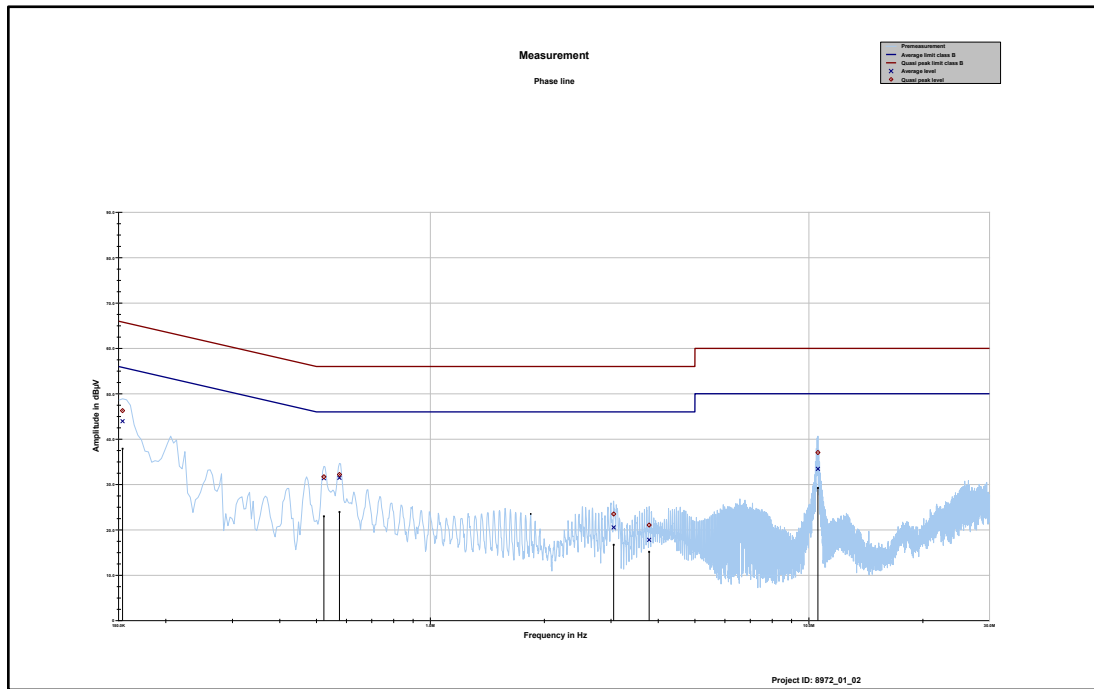
47 CFR 15.207(a)		
Frequency of emission (MHz)	Conducted limit (dBμV)	
	Quasi-peak	Average
0.15 – 0.5	66 to 56*	56 to 46*
0.5 – 5	56	46
5 – 30	60	50

* Decreases with the logarithm of the frequency

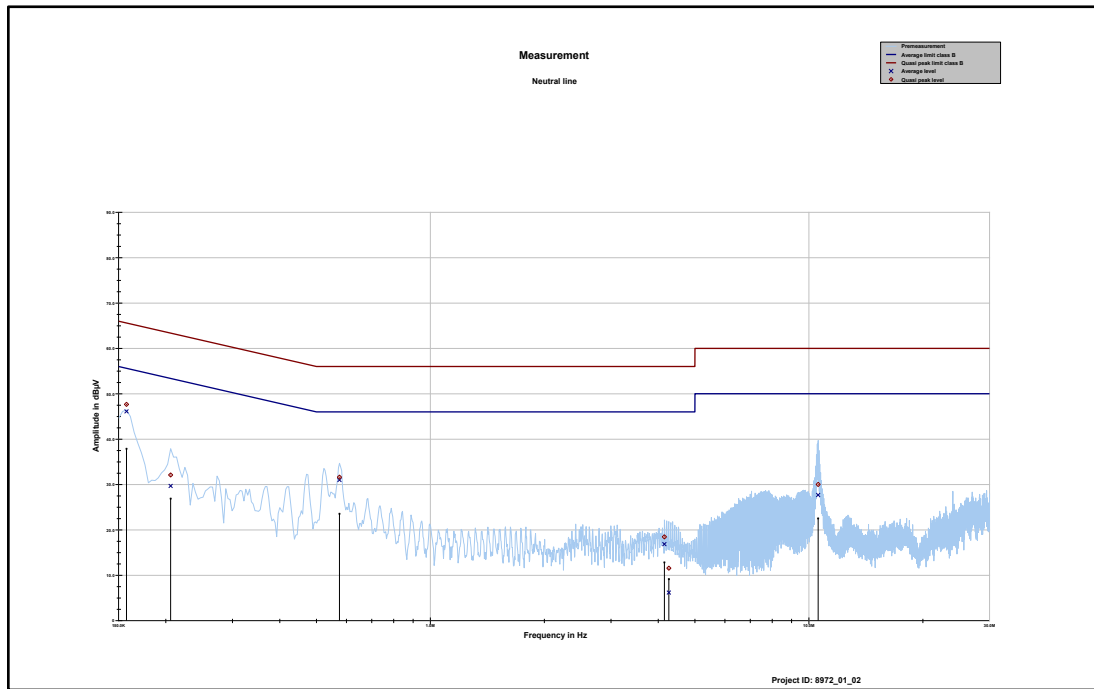
Measurement:

Parameter	
Detector:	Peak - Quasi Peak / Average
Sweep time:	Auto
Video bandwidth:	F < 150 kHz: 200 Hz F > 150 kHz: 9 kHz
Resolution bandwidth:	F < 150 kHz: 1 kHz F > 150 kHz: 100 kHz
Span:	9 kHz to 30 MHz
Trace-Mode:	Max Hold

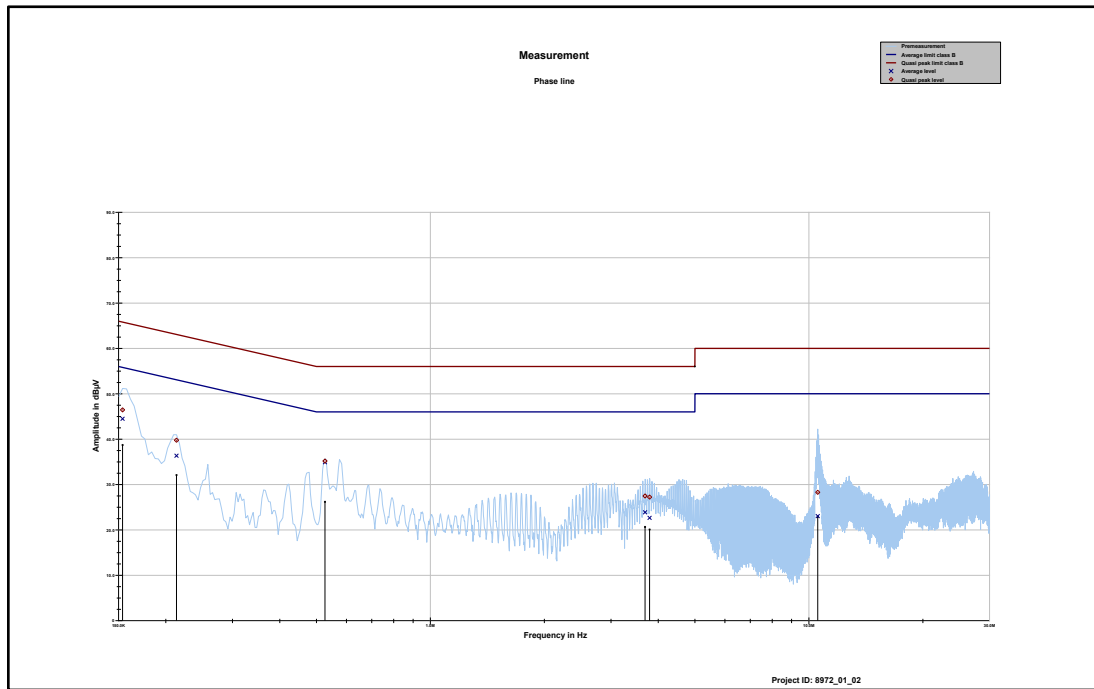
Verdict: Compliant

Measurement results: EUT 1**Plot 152: Phase line**

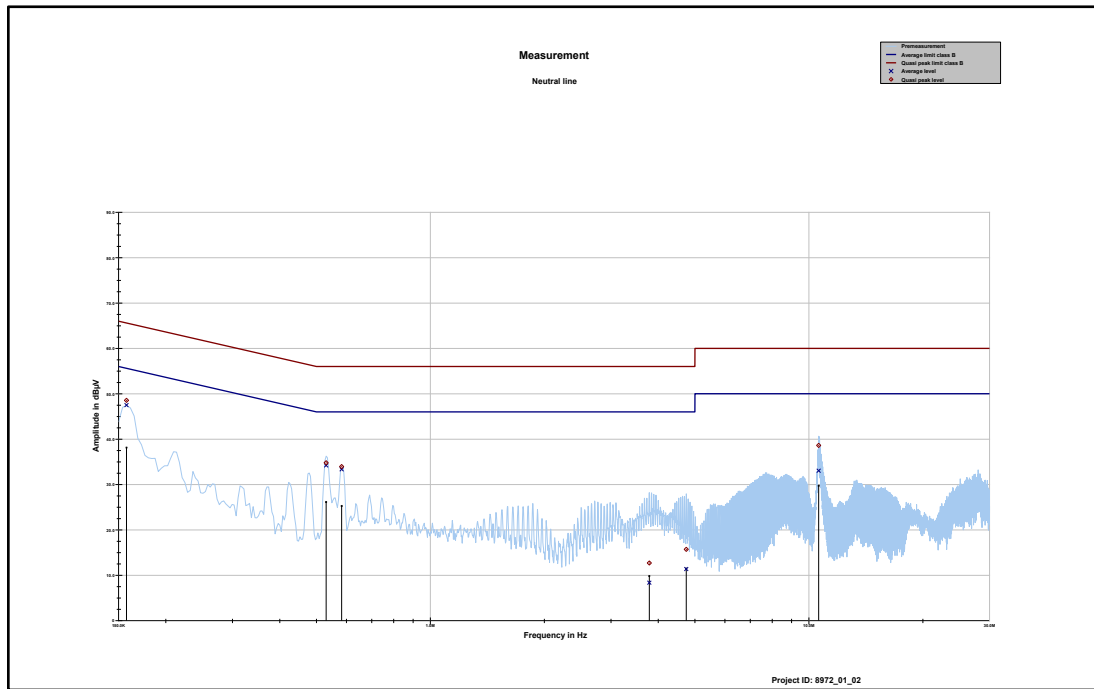
Frequency	Quasi peak level	Margin quasi peak	Limit QP	Average level	Margin average	Limit AV
MHz	dBµV	dB	dBµV	dBµV	dB	dBµV
0.153731	46.28	19.52	65.796	43.95	11.95	55.893
0.523125	31.71	24.29	56.000	31.39	14.61	46.000
0.575362	32.18	23.82	56.000	31.47	14.53	46.000
3.049181	23.49	32.51	56.000	20.54	25.46	46.000
3.784238	21.05	34.95	56.000	17.80	28.20	46.000
10.563919	37.04	22.96	60.000	33.44	16.56	50.000

Plot 153: Neutral line

Frequency	Quasi peak level	Margin quasi peak	Limit QP	Average level	Margin Average	Limit AV
MHz	dBµV	dB	dBµV	dBµV	dB	dBµV
0.157463	47.65	17.94	65.597	46.10	9.68	55.787
0.205969	32.10	31.26	63.366	29.67	24.73	54.401
0.575362	31.62	24.38	56.000	30.99	15.01	46.000
4.153631	18.44	37.56	56.000	16.84	29.16	46.000
4.265569	11.54	44.46	56.000	6.17	39.83	46.000
10.578844	30.02	29.98	60.000	27.69	22.31	50.000

Measurement results: EUT 2**Plot 154: Phase line**

Frequency	Quasi peak level	Margin quasi peak	Limit QP	Average level	Margin average	Limit AV
MHz	dBµV	dB	dBµV	dBµV	dB	dBµV
0.153731	46.44	19.36	65.796	44.48	11.41	55.893
0.213431	39.76	23.32	63.071	36.33	17.85	54.188
0.526856	35.16	20.84	56.000	34.90	11.10	46.000
3.690956	27.47	28.53	56.000	23.86	22.14	46.000
3.795431	27.22	28.78	56.000	22.64	23.36	46.000
10.552725	28.27	31.73	60.000	23.03	26.97	50.000

Plot 155: Neutral line

Frequency	Quasi peak level	Margin quasi peak	Limit QP	Average level	Margin Average	Limit AV
MHz	dBµV	dB	dBµV	dBµV	dB	dBµV
0.157463	48.55	17.04	65.597	47.48	8.30	55.787
0.530587	34.79	21.21	56.000	34.19	11.81	46.000
0.582825	33.94	22.06	56.000	33.32	12.68	46.000
3.787969	12.70	43.30	56.000	8.35	37.65	46.000
4.743169	15.70	40.30	56.000	11.37	34.63	46.000
10.612425	38.60	21.40	60.000	33.03	16.97	50.000

14 Glossary

EUT	Equipment under test
DUT	Device under test
UUT	Unit under test
GUE	GNSS User Equipment
ETSI	European Telecommunications Standards Institute
EN	European Standard
FCC	Federal Communications Commission
FCC ID	Company Identifier at FCC
IC	Industry Canada
PMN	Product marketing name
HMN	Host marketing name
HVIN	Hardware version identification number
FVIN	Firmware version identification number
EMC	Electromagnetic Compatibility
HW	Hardware
SW	Software
Inv. No.	Inventory number
S/N or SN	Serial number
C	Compliant
NC	Not compliant
NA	Not applicable
NP	Not performed
PP	Positive peak
QP	Quasi peak
AVG	Average
OC	Operating channel
OCW	Operating channel bandwidth
OBW	Occupied bandwidth
OOB	Out of band
DFS	Dynamic frequency selection
CAC	Channel availability check
OP	Occupancy period
NOP	Non occupancy period
DC	Duty cycle
PER	Packet error rate
CW	Clean wave
MC	Modulated carrier
WLAN	Wireless local area network
RLAN	Radio local area network
DSSS	Dynamic sequence spread spectrum
OFDM	Orthogonal frequency division multiplexing
FHSS	Frequency hopping spread spectrum
GNSS	Global Navigation Satellite System
C/N₀	Carrier to noise-density ratio, expressed in dB-Hz

15 Document history

Version	Applied changes	Date of release
TR1-R01	Initial release	2025-07-18

END OF TEST REPORT