

SENSUS METERING SYSTEMS INC. **TEST REPORT**

SCOPE OF WORK

RADIO TESTING –C2PC SDBSNUSCM1 / 2220A-SNUSCM1 – PART 27/RSS-130/RSS-139

REPORT NUMBER

106435507ATL-007C

ISSUE DATE

23 April 2026

REVISED DATE

27 May 2026

PAGES

42



DOCUMENT CONTROL NUMBER

Non-Specific Radio Report Shell Rev. January 2025

© 2025 INTERTEK

RADIO TEST REPORT**Report Number:** 106435507ATL-001C**Project Number:** G106435507**Report Revision Date:** 27 May 2026**PMN:** SNUSCM1**Model/HVIN:** GM02S**FCC ID:** SDBSNUSCM1**IC:** 2220A-SNUSCM1

Standards: 47 CFR Part 27, Subpart C
RSS-130, Issue 2
RSS-139, Issue 4
ANSI C63.26-2015
RSS-GEN, Issue 5

Test Location

Intertek
1950 Evergreen Blvd., Suite 100
Duluth, GA 30096 USA
FCC Designation: US1046
ISED CAB Designator: US0128
ISO 17025 A2LA Accreditation: 1455.01

Client

Sensus Metering Systems Inc.
639 Davis Drive
Morrisville, NC 27560 USA

Report prepared by



Jeremy Pickens / Senior Staff Engineer

Report reviewed by



David Perry / EMC Engineer

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

Table of Contents

1	<i>Introduction and Conclusion</i>	<i>4</i>
2	<i>Test Summary</i>	<i>4</i>
3	<i>Client Information</i>	<i>5</i>
4	<i>Description of Equipment Under Test and Variant Models</i>	<i>5</i>
5	<i>System Setup and Method</i>	<i>7</i>
6	<i>RF Output Power Power (FCC 27.1507 / RSS-130, S4.6 / RSS-139, S5.5)</i>	<i>9</i>
7	<i>Spurious Emissions at Antenna Terminals (FCC 27.1509 / RSS-130, S4.7 / RSS-139, S5.6)</i>	<i>12</i>
8	<i>Field Strength of Spurious Emissions Terminals (FCC 27.1509 / RSS-130, S4.7 / RSS-139, S5.6) 24</i>	
9	<i>Measurement Uncertainty</i>	<i>41</i>
10	<i>Revision History</i>	<i>42</i>

1 Introduction and Conclusion

The tests indicated in Section 2 were performed on the product constructed as described in Section 4. The remaining test sections are the verbatim text from the actual data sheets used during the investigation. These test sections include the test name, the specified test Method, a list of the actual Test Equipment Used, Results and raw Data. No additions, deviations, or exclusions have been made from the standard(s) unless specifically noted.

Based on the results of our investigation, we have concluded the product tested **complies** with the requirements of the standard(s) indicated. The results obtained in this test report pertain only to the item(s) tested. Intertek does not make any claims of compliance for samples or variants which were not tested.

2 Test Summary

Section	Test Description	Test Specification		Result
		FCC Rule Part	ISED RSS	
6	RF Output Power	2.1046 27.50 27.1507	RSS-GEN S6.12 RSS-130 S4.6 RSS-139 S5.5	Compliant
7	Spurious Emissions at Antenna Terminals	2.1051 27.53 27.1509	RSS-Gen S6.13 RSS-130 S4.7 RSS-139 S5.6	Compliant
8	Field Strength of Spurious Emissions	2.1053 27.53 27.1509	RSS-Gen S6.13 RSS-130 S4.7 RSS-139 S5.6	Compliant

3 Client Information

This evaluation was performed at the request of:

Client: Sensus Metering Systems Inc.
639 Davis Drive
Morrisville, NC 27560 USA

Contact: James Francisco

Email: James.Francisco@xylem.com

4 Description of Equipment Under Test and Variant Models

Manufacturer: Sensus Metering Systems Inc.
639 Davis Drive
Morrisville, NC 27560 USA

Equipment Under Test			
Description	Manufacturer	Model Number (HVIN)	Serial Number
Transceiver Module	Sensus Metering Systems Inc.	GM02S	G0R2549_135 ¹ G0R2549_334 ²
Cellular Modem	Sequans	GM02S	IMEI: 359197355731598 ¹ IMEI: 359197355760357 ²

- 1) Conducted Measurements
- 2) Radiated Measurements

Receive Date:	17 December 2025
Received Condition:	Good
Type:	Production

Description of Equipment Under Test

This cell module is designed to be installed into the Stratus IQ+ family of electric meters utilizing a M2 socket. It has its own antenna and cannot transmit simultaneously with the electric meter resident radio. The cell module is a Cat-M and NB-IoT module.

Certification Purpose

This test report is to support a Class II Permissive Change of the cellular modem to address a trace layout change through a u.fl connector to a PCB antenna.

Equipment Under Test Power Configuration

Rated Voltage	Rated Current	Rated Frequency	Number of Phases
4.2Vdc	1.0A	NA	NA

Operating modes of the EUT

No.	Descriptions of EUT Exercising
1	The on-board eSIM was programmed as a test SIM. Using TeraTerm, AT commands were sent over USB. The EUT was configured to allow constant connection to a CMW-500 communications test set. The CMW was used to control the band, channel, and force the radio to transmit at max power. In RMC Test Mode, the duty cycles for CatM and NbloT were 30.1% and 52.0% respectively.

Test Channels						
FCC Rule Part	ISED RSS	LTE Band	Frequency Band (MHz)	Channel Location	Test Frequency (MHz)	
					CatM	NB IoT
27	RSS-139	4	1710-1755	Low	1712.5	1710.2
				Middle	1732.5	1732.5
				High	1752.5	1754.8
27	RSS-130	12	699-716	Low	701.5	699.2
				Middle	707.5	707.5
				High	713.5	715.8
27	RSS-130	13	777-787	Low	779.5	777.2
				Middle	782	782
				High	784.5	786.8
27	RSS-130	17	704-716	Low	706.5	704.2
				Middle	710	710
				High	713.5	715.8
27	RSS-139	66	1710-1780	Low	1712.5	1712.5
				Middle	1745	1745
				High	1777.5	1777.5
27	--	106	896-901	Low	896.7	898.2
				Middle	898.5	898.5
				High	900.3	900.8

- 1) Note: For spurious emissions, bands 12 and 66 were used as supersets of bands 17 and 4.
- 2) Note that Band 106 is for US operation only.

Software used by the EUT

No.	Description of Control Software
1	TeraTerm Version 5.0

Radio/Receiver Characteristics (Bands 4/12/13/17/66/106)	
Frequency Ranges	699-716MHz, 777-787MHz, 896-901MHz, 1710-1780MHz
Modulation Type(s)	CatM: QPSK / 16QAM NB IoT: $\pi/2$ BPSK / $\pi/4$ QPSK
Maximum Output Power (Conducted):	25dBm (0.316W) – Including tune up tolerance
Power Setting	Max
MIMO Information (# of Transmit and Receive antenna ports)	1 (SISO)
Equipment Type	Full Module
Antenna Type and Gain	PCB Patch Antenna – Peak Gain by Band: LTE Band 4 (-1.14dBi) LTE Band 12 (+1.52dBi) LTE Band 13 (+1.09dBi) LTE Band 17 (+1.52dBi) LTE Band 66 (-1.07dBi) LTE Band 106 (+0.64dBi) <i>Note: Values provided by Sensus. Intertek does not claim any responsibility for the accuracy of this data.</i>

Note: The worst-case CatM configuration from the original certification was with a 5MHz cell bandwidth (except for Band 106 where a 1.4MHz cell bandwidth was applied), QPSK modulation, and 1RB Pos 0. For NBLoT, the worst-case setting was 12kHz bandwidth, $\pi/4$ QPSK, and 3 tones. The worst-case orientation for radiated field strength measurements was the Y-Axis.

5 System Setup and Method

Cables					
ID	Description	Length (m)	Shielding	Ferrites	Termination
1	DC Power	10.0	None	None	DC Power Supply

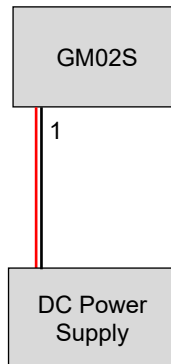
System Configuration			
Description	Manufacturer	Model Number	Serial Number
Transceiver Module	Sensus Metering Systems Inc.	GM02S	G0R2549_135 ¹ G0R2549_334 ²
Cellular Modem	Sequans	GM02S	IMEI: 359197355731598 ¹ IMEI: 359197355760357 ²
DC Power Supply	Kikusui	PAS 60-18	ML000349

- 1) Conducted Measurements
- 2) Radiated Measurements

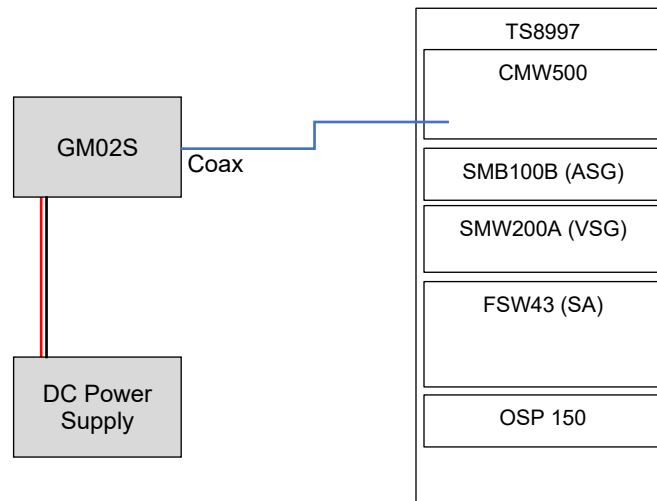
5.1 Method

Configuration as required by ANSI C63.26.

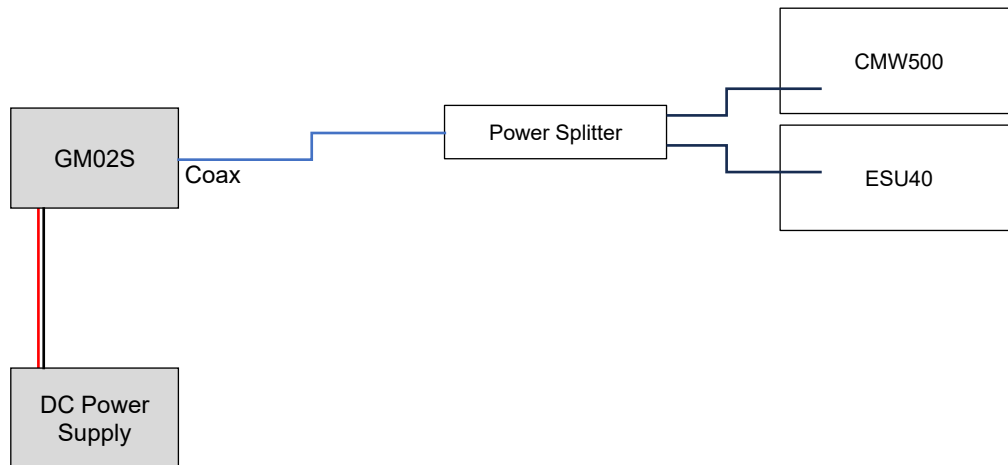
5.2 EUT Block Diagram – Radiated Measurements



5.3 EUT Block Diagram – Conducted Measurements (Power)



5.4 EUT Block Diagram – Conducted Measurements (Spurious Emissions)



6 RF Output Power Power (FCC 27.1507 / RSS-130, S4.6 / RSS-139, S5.5)**6.1 Method**

The methods defined in ANSI C63.26, Sections 5.2.4.2 were applied for measuring the average (RMS Burst) output power. Because power was only reported during on times of the transmission, no duty cycle correction was required. The antenna port was connected directly to a CMW500 through a coaxial cable. The CMW was configured with both signaling and measurement capabilities. The attenuation was accounted for by applying an offset on the CMW.

TEST SITE: RF Bench

The RF bench consists of a Rohde & Schwarz TS8997 automated test system coupled with a temperature/humidity environmental chamber. Where applicable, 2.4 and 5GHz radio measurements are automated using the Rohde & Schwarz EMC32 test software. The TS8997 system houses a switch matrix (OSP), along with a spectrum analyzer, vector network analyzer, and analog signal generator.

6.2 Test Equipment

Asset	Description	Manufacturer	Model	Serial	Cal Date	Cal Due
212165	Temperature/Humidity/Pressure Sensor	Extech	SD700	110344	04/29/2025	04/29/2026
213500	Analog Signal Generator (8kHz-40GHz)	Rohde & Schwarz	SMB100B	106096	08/20/2024	08/20/2026
213499	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	172359	08/08/2025	08/08/2027
213503-01	Megaphase	OSP DUT Cable 1	KC12-K1K1-80	20815001 001	VBU	VBU

Software Utilized

Name	Manufacturer	Version
CMW-KS300 NB-IOT SIG	Rohde & Schwarz	4.0.230.8
CMW-KS590 LTE MTC SIG	Rohde & Schwarz	4.0.230.5
CMW-KS500 LTE FDD R8 SIG BASIC	Rohde & Schwarz	4.0.230.5
CMW-KM300 NB-IOT R13/14 TX MEAS	Rohde & Schwarz	4.0.230.8
CMW-KM500 LTE FDD R8 TX MEAS	Rohde & Schwarz	4.0.230.5
CMW-KM550 LTE TDD R8 TX MEAS	Rohde & Schwarz	4.0.230.5

6.3 Results

The sample tested was found to Comply.

6.4 Test Data

FCC Rule Part / RSS	Band	Frequency (MHz)	Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	ERP (dBm)	FCC ERP/EIRP Limit (dBm)	ISED ERP/EIRP Limit (dBm)
CatM								
27 / RSS-139	4	1712.5	22.65	-1.14	21.51	19.36	30.0	30.0
27 / RSS-139	4	1732.5	22.62	-1.14	21.48	19.33	30.0	30.0
27 / RSS-139	4	1752.5	22.63	-1.14	21.49	19.34	30.0	30.0
27 / RSS-130	12	701.5	23.19	1.52	24.71	22.56	44.8	44.8
27 / RSS-130	12	707.5	23.21	1.52	24.73	22.58	44.8	44.8
27 / RSS-130	12	713.5	23.21	1.52	24.73	22.58	44.8	44.8
27 / RSS-130	13	779.5	23.33	1.09	24.42	22.27	44.8	44.8
27 / RSS-130	13	784.5	23.28	1.09	24.37	22.22	44.8	44.8
27 / RSS-130	17	706.5	23.19	1.52	24.71	22.56	44.8	44.8
27 / RSS-130	17	710	23.23	1.52	24.75	22.6	44.8	44.8
27 / RSS-130	17	713.5	23.24	1.52	24.76	22.61	44.8	44.8
27 / RSS-139	66	1712.5	22.72	-1.07	21.65	19.5	30.0	30.0
27 / RSS-139	66	1745	22.73	-1.07	21.66	19.51	30.0	30.0
27 / RSS-139	66	1777.5	22.5	-1.07	21.43	19.28	30.0	30.0
27	106	896.7	22.51	0.64	23.15	21	34.8	--
27	106	900.3	22.48	0.64	23.12	20.97	34.8	--
NBIoT								
27 / RSS-139	4	1710.2	23.49	-1.14	22.35	20.2	30.0	30.0
27 / RSS-139	4	1732.5	23.5	-1.14	22.36	20.21	30.0	30.0
27 / RSS-139	4	1754.8	23.39	-1.14	22.25	20.1	30.0	30.0
27 / RSS-130	12	699.2	23.47	1.52	24.99	22.84	44.8	44.8
27 / RSS-130	12	707.5	23.45	1.52	24.97	22.82	44.8	44.8
27 / RSS-130	12	715.8	23.55	1.52	25.07	22.92	44.8	44.8
27 / RSS-130	13	777.2	23.57	1.09	24.66	22.51	44.8	44.8
27 / RSS-130	13	786.8	23.34	1.09	24.43	22.28	44.8	44.8
27 / RSS-130	17	704.2	23.4	1.52	24.92	22.77	44.8	44.8
27 / RSS-130	17	710	23.57	1.52	25.09	22.94	44.8	44.8
27 / RSS-130	17	715.8	23.55	1.52	25.07	22.92	44.8	44.8
27 / RSS-139	66	1712.5	23.51	-1.07	22.44	20.29	30.0	30.0
27 / RSS-139	66	1745	23.49	-1.07	22.42	20.27	30.0	30.0
27 / RSS-139	66	1777.5	23.29	-1.07	22.22	20.07	30.0	30.0
27	106	896.7	22.91	0.64	23.55	21.4	34.8	--
27	106	900.3	22.9	0.64	23.54	21.39	34.8	--

Calculation: $P_{EIRP} = \text{Power} + \text{Antenna Gain (dBi)}$ (LTE Bands 4/66)
 $P_{ERP} = \text{Power} + \text{Antenna Gain (dBi)} - 2.15$ (LTE Bands 12/13/17)
2.15 is the conversion from EIRP to ERP

Test Personnel: Jeremy Pickens 

Test Date: 16 January 2026

Ambient Temperature: 17.2°C

Reference Standard: ANSI C63.26

Relative Humidity: 16.8%

Atmospheric Pressure: 98.1kPa

7 Spurious Emissions at Antenna Terminals (FCC 27.1509 / RSS-130, S4.7 / RSS-139, S5.6)

7.1 Method

The methods defined in ANSI C63.26, Section 5.7.3 were applied for measuring the out of band emissions. The antenna port was connected directly to a spectrum analyzer and CMW500 through cables and attenuator(s). The software was used to collect the data from the spectrum analyzer in ranges with the preselector active to prevent overloading. The RF path attenuation was accounted for by applying a correction factor to the data collected from the spectrum analyzer. The spectrum analyzer was configured with the following Resolution Bandwidth (RBW) settings:

Frequency Range (MHz)	RBW
30 – 1000	100 kHz
1000 – 10000	1 MHz

TEST SITE: 10-Meter Chamber Control Room

7.2 Test Equipment

Asset	Description	Manufacturer	Model	Serial	Cal Date	Cal Due
200162	EMI Receiver (20Hz-40GHz)	Rohde & Schwarz	ESU 40	100314	10/07/2025	10/07/2026
212166	Temperature/Humidity/Pressure Sensor	Extech	SD700	110392	04/02/2025	04/02/2026
213499	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	172359	08/08/2025	08/08/2027
213500	Analog Signal Generator (8kHz-40GHz)	Rohde & Schwarz	SMB100B	106096	08/20/2024	08/20/2026
213502	Spectrum Analyzer (2Hz-43.5GHz)	Rohde & Schwarz	FSW43	102972	08/01/2024	08/01/2026
213503-01	Megaphase	OSP DUT Cable 1	KC12-K1K1-80	20815001 001	VBU	VBU
213503-02	Megaphase	OSP DUT Cable 2	KC12-K1K1-80	20815001 002	VBU	VBU
213503-03	Megaphase	OSP DUT Cable 3	KC12-K1K1-80	20815001 003	VBU	VBU
213507-06	Tojoin	6dB SMA Attenuator	6dB	240425	VBU	VBU
213530	Mini-Circuits	Power Divider	ZC2PD-5R263-S+	5383081	VBU	VBU

1) Note: The signal generator and spectrum analyzer were used to characterize the path losses.

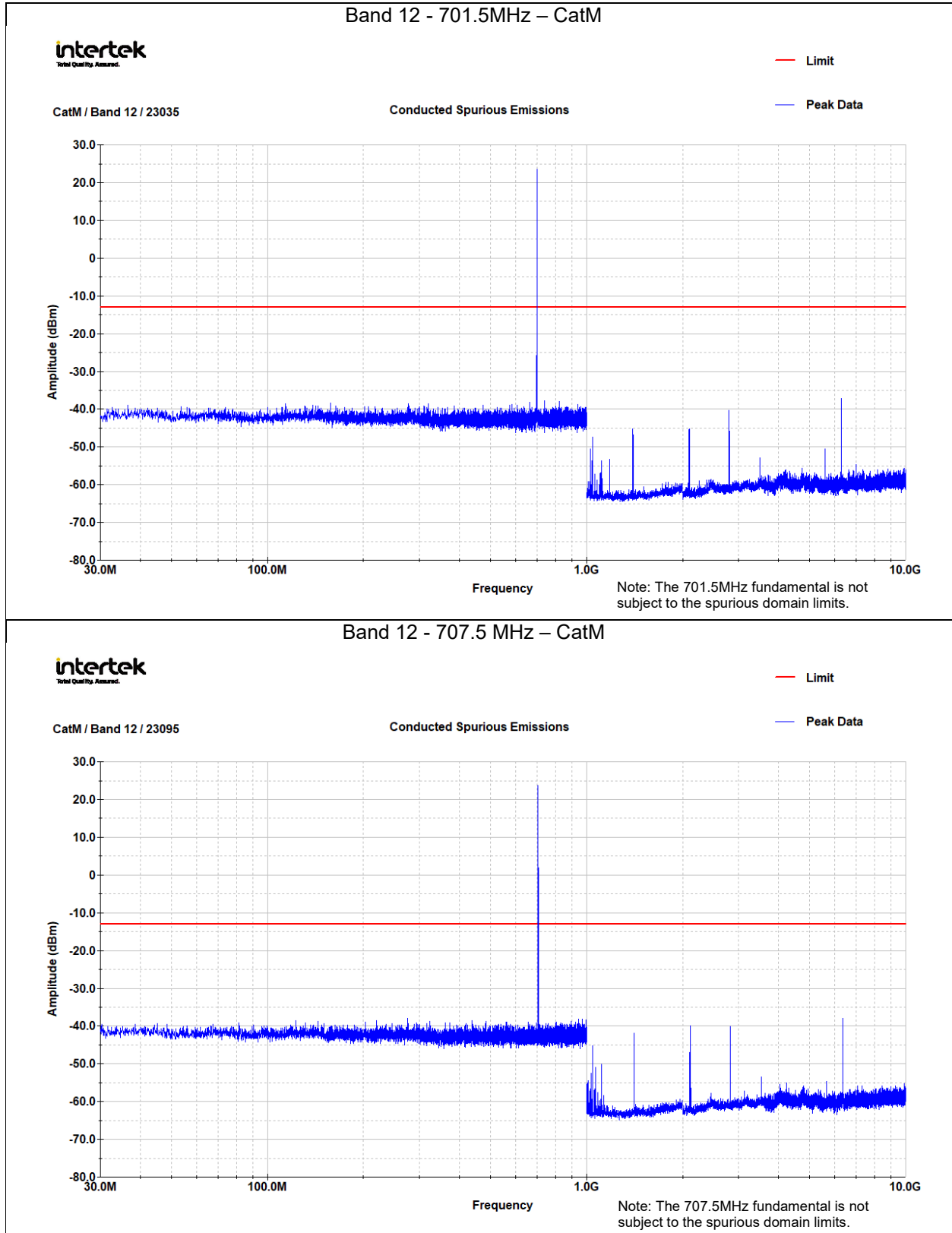
Software Utilized

Name	Manufacturer	Version
Tile7	ETS-Lindgren	7.9.3.6

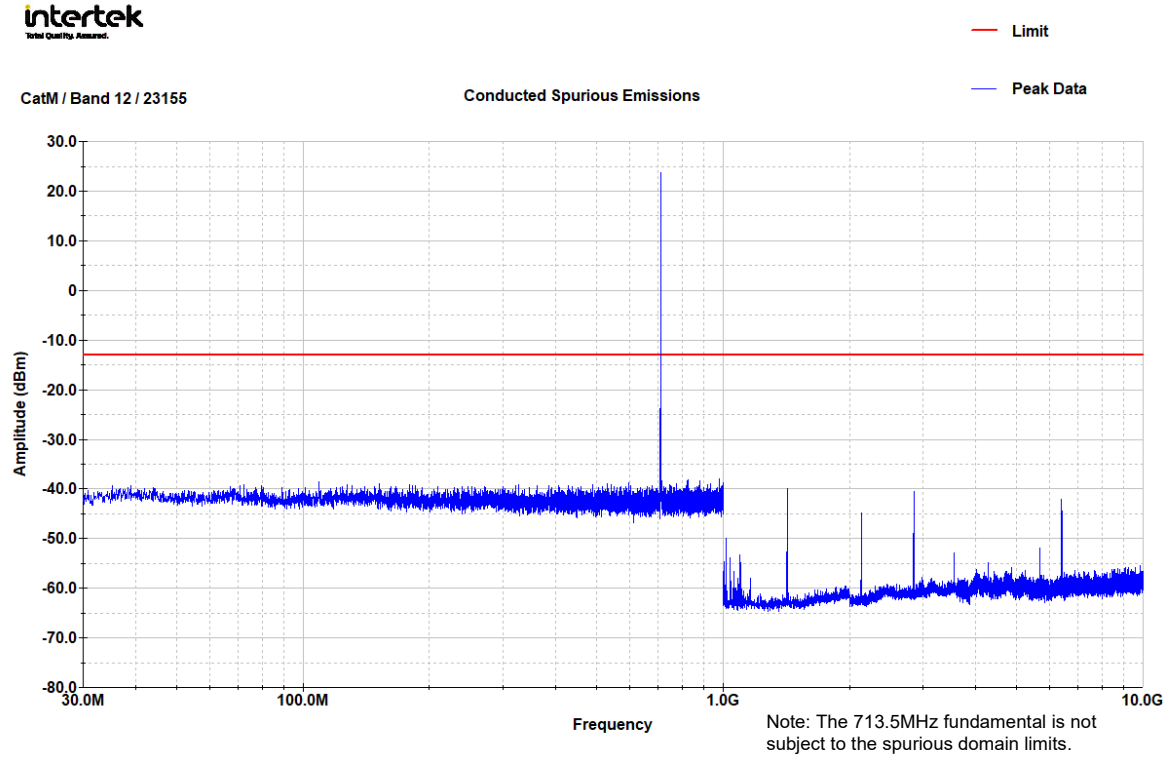
7.3 Results

The sample tested was found to Comply.

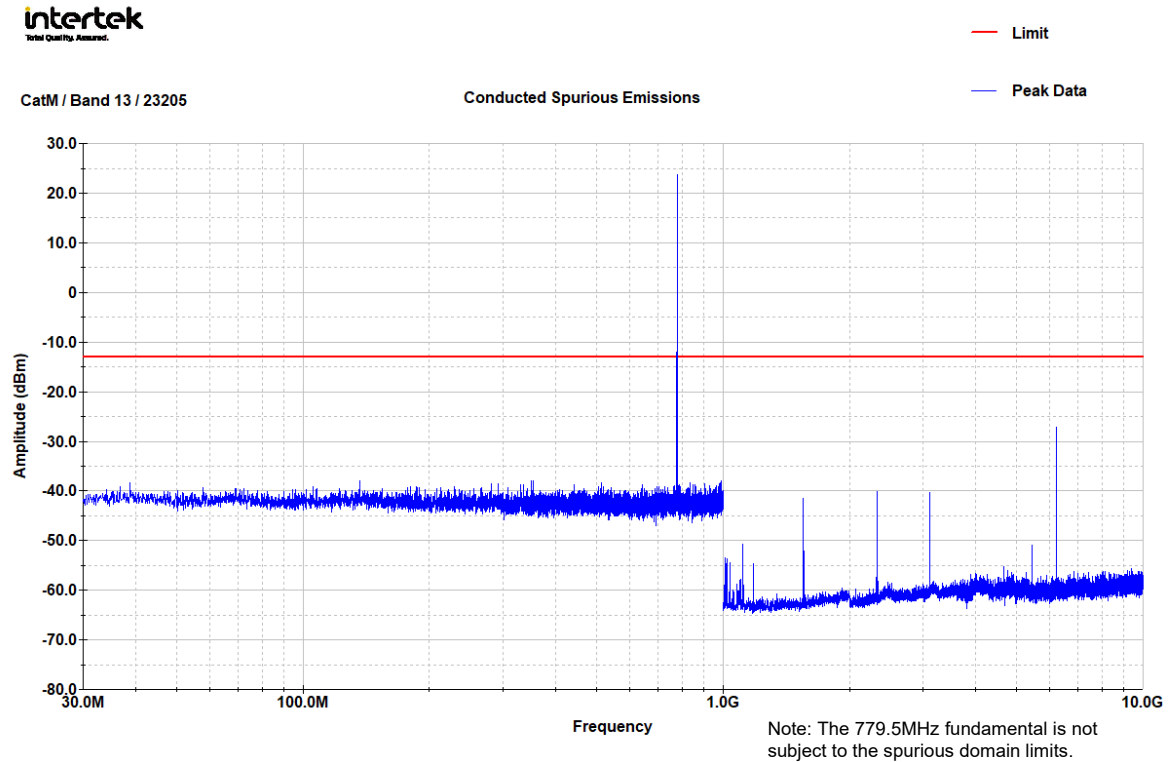
7.4 Test Data



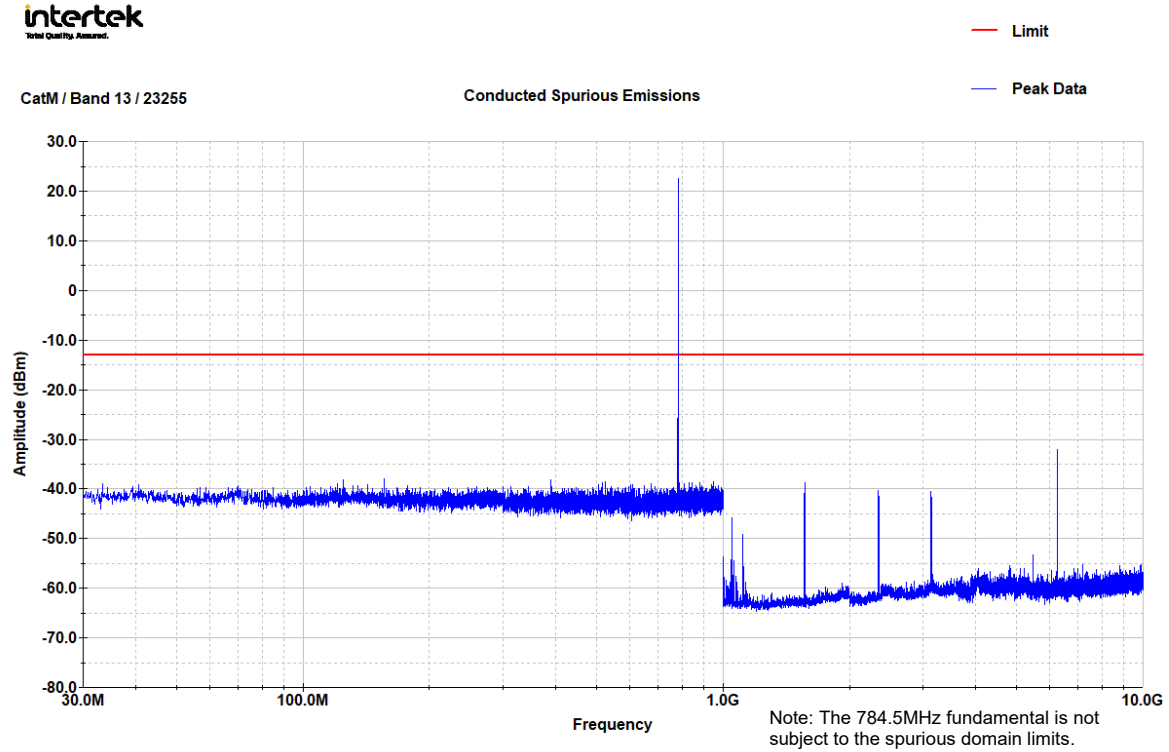
Band 12 - 713.5 MHz – CatM



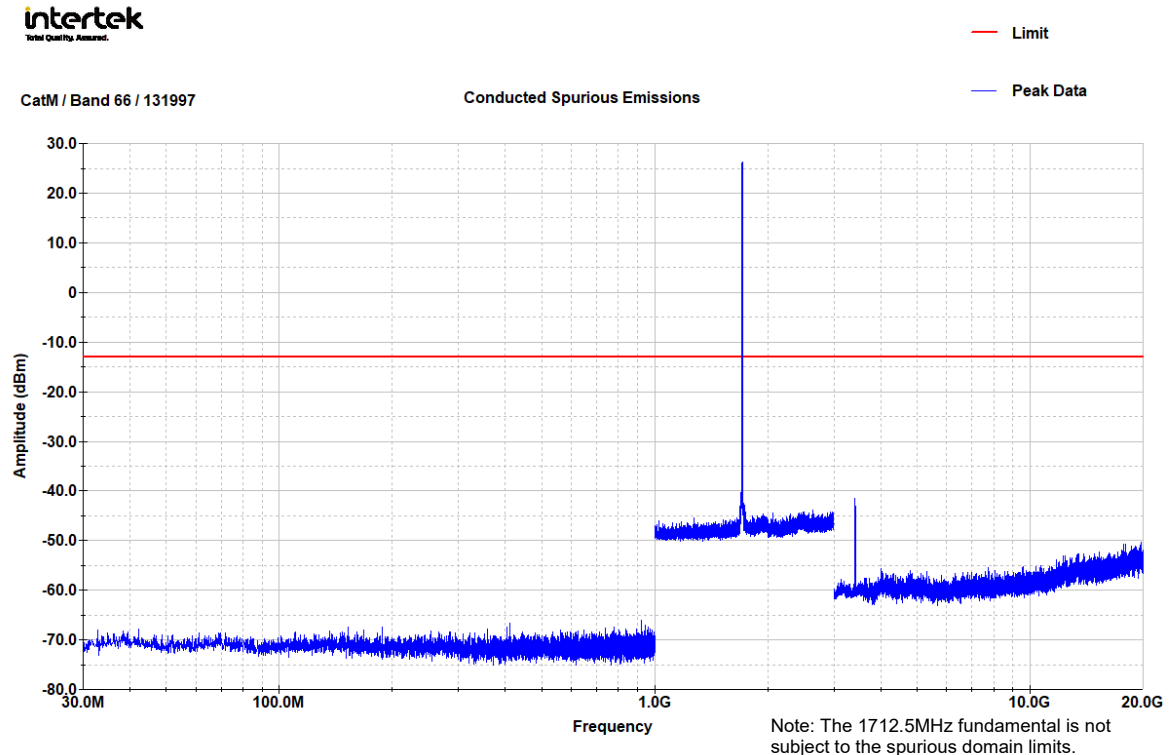
Band 13 - 779.5 MHz – CatM

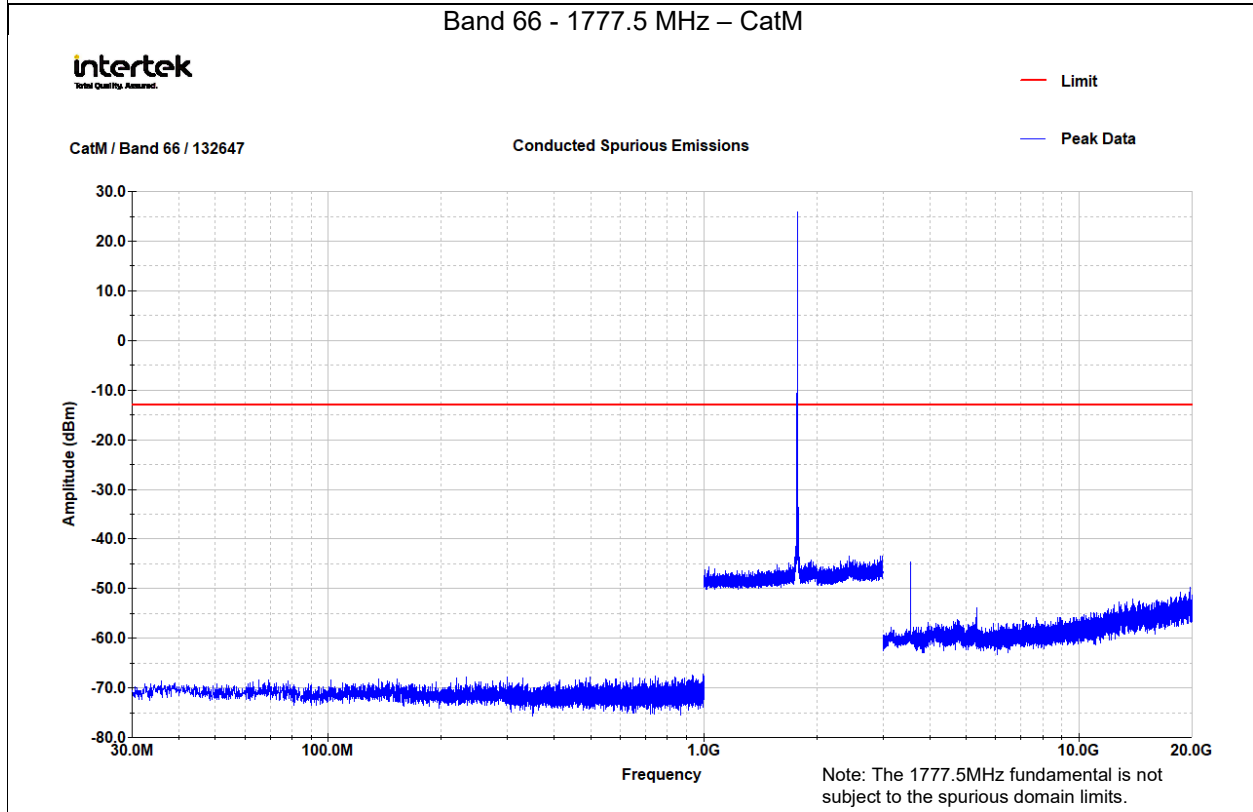
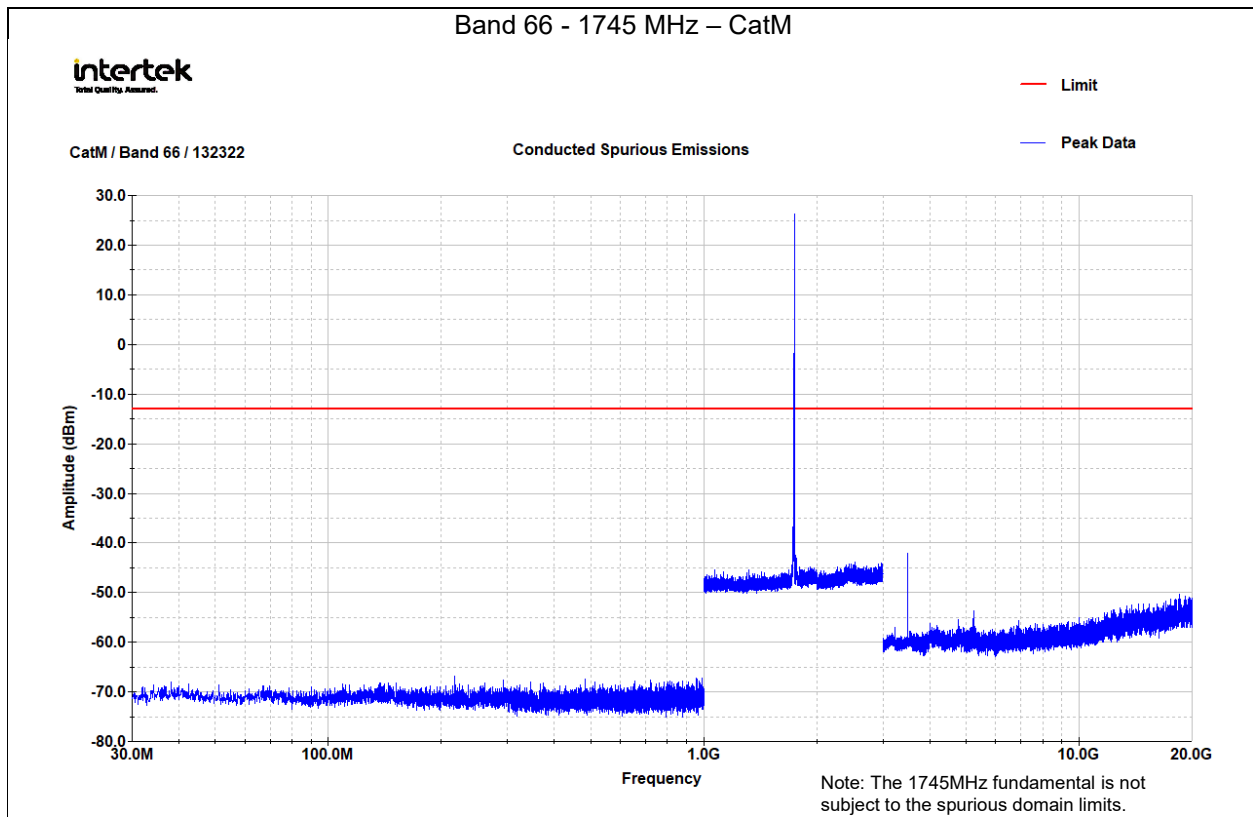


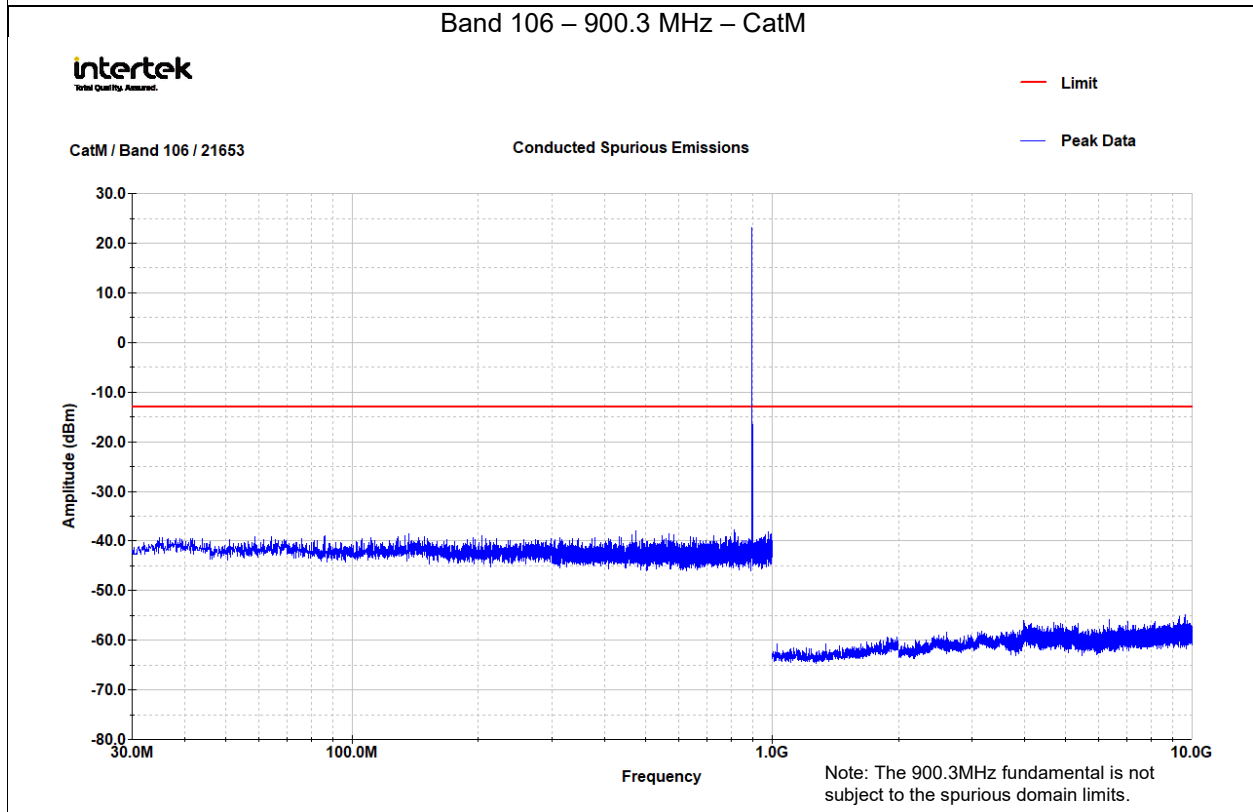
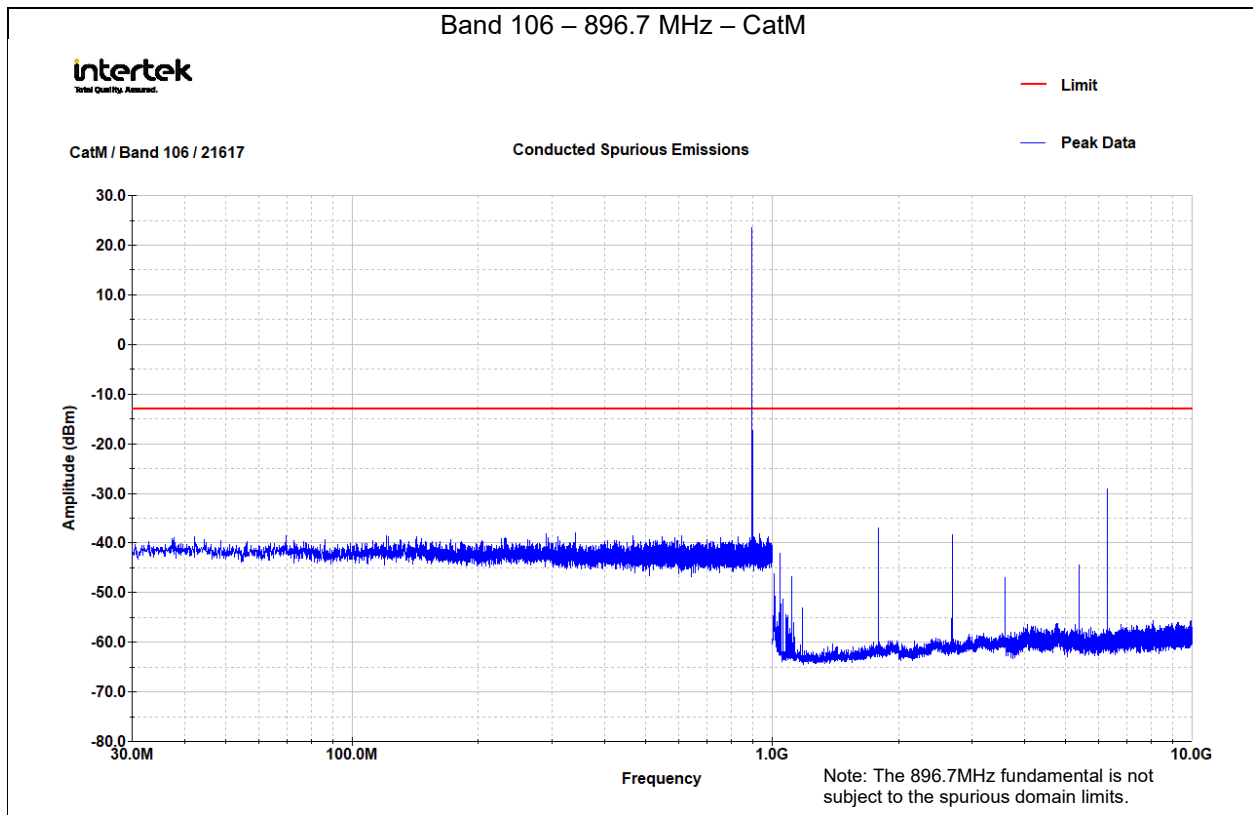
Band 13 - 784.5 MHz – CatM

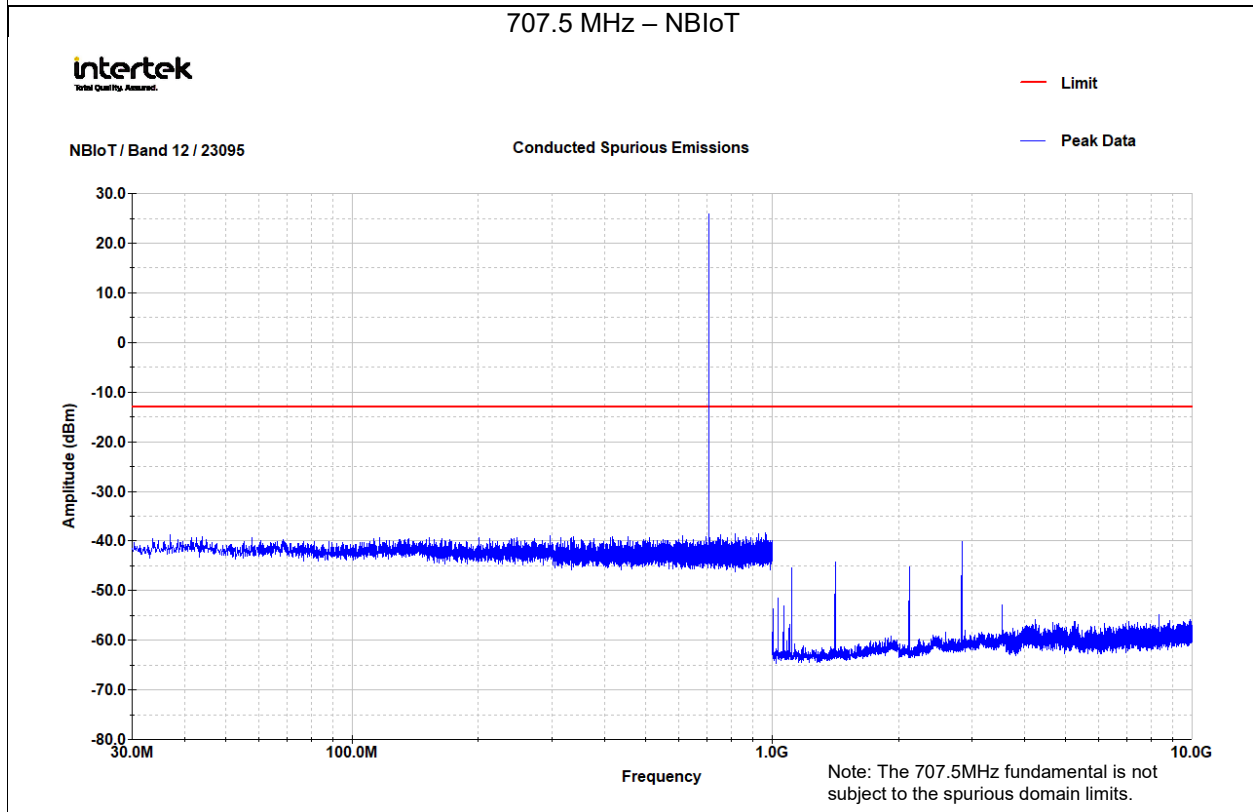
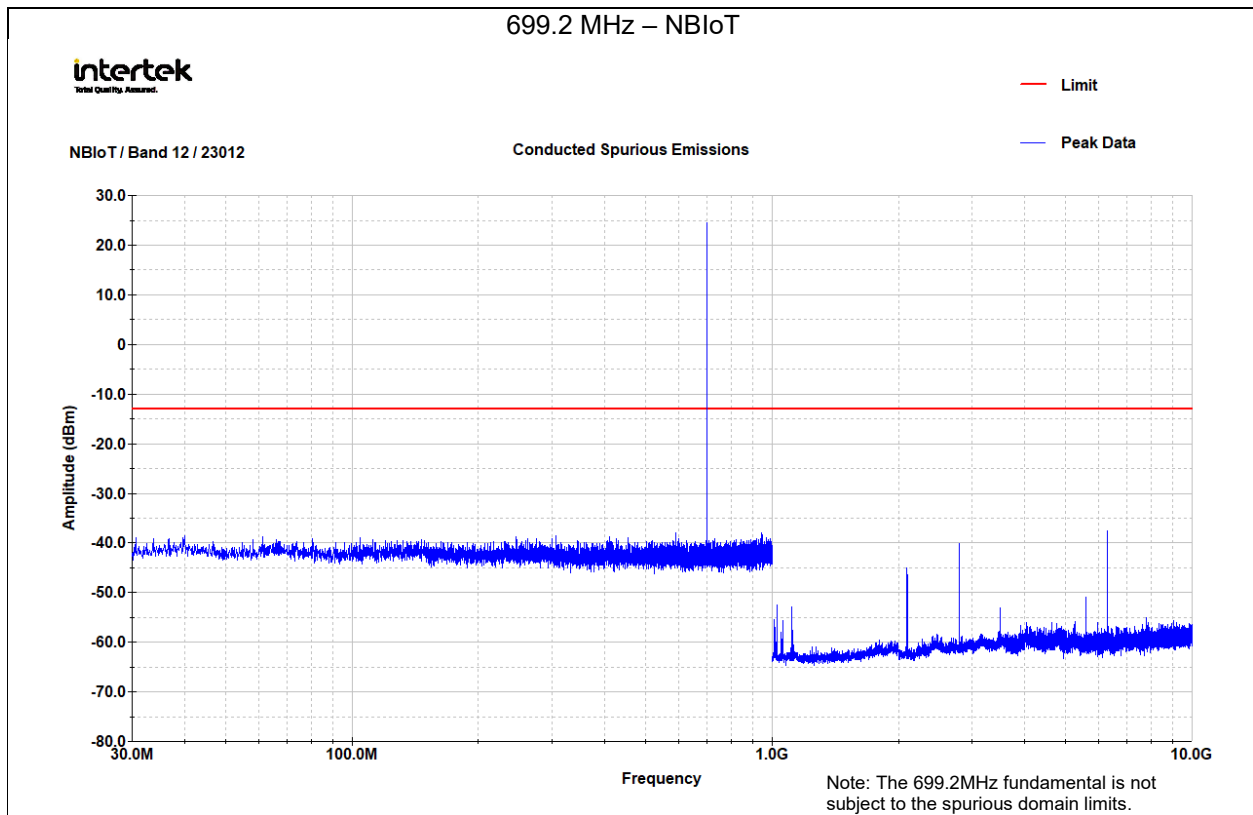


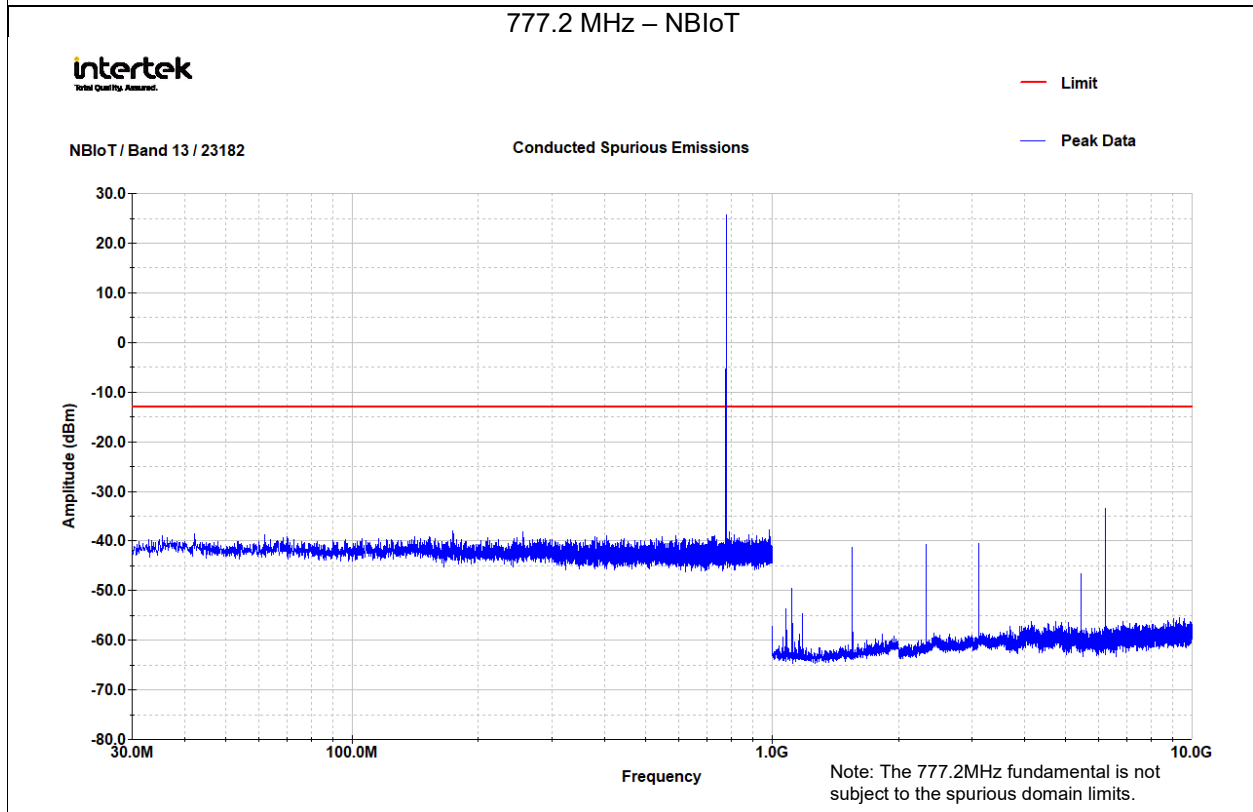
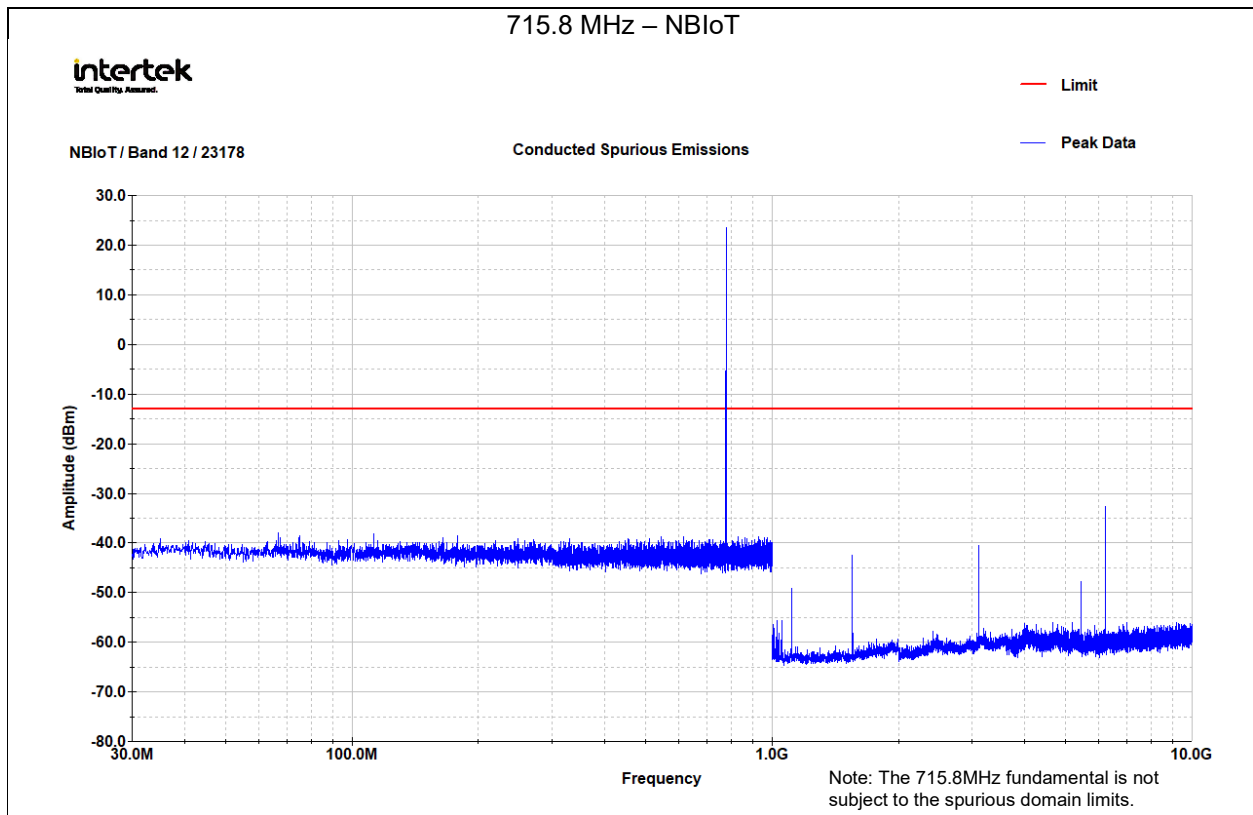
Band 66 - 1712.5 MHz – CatM

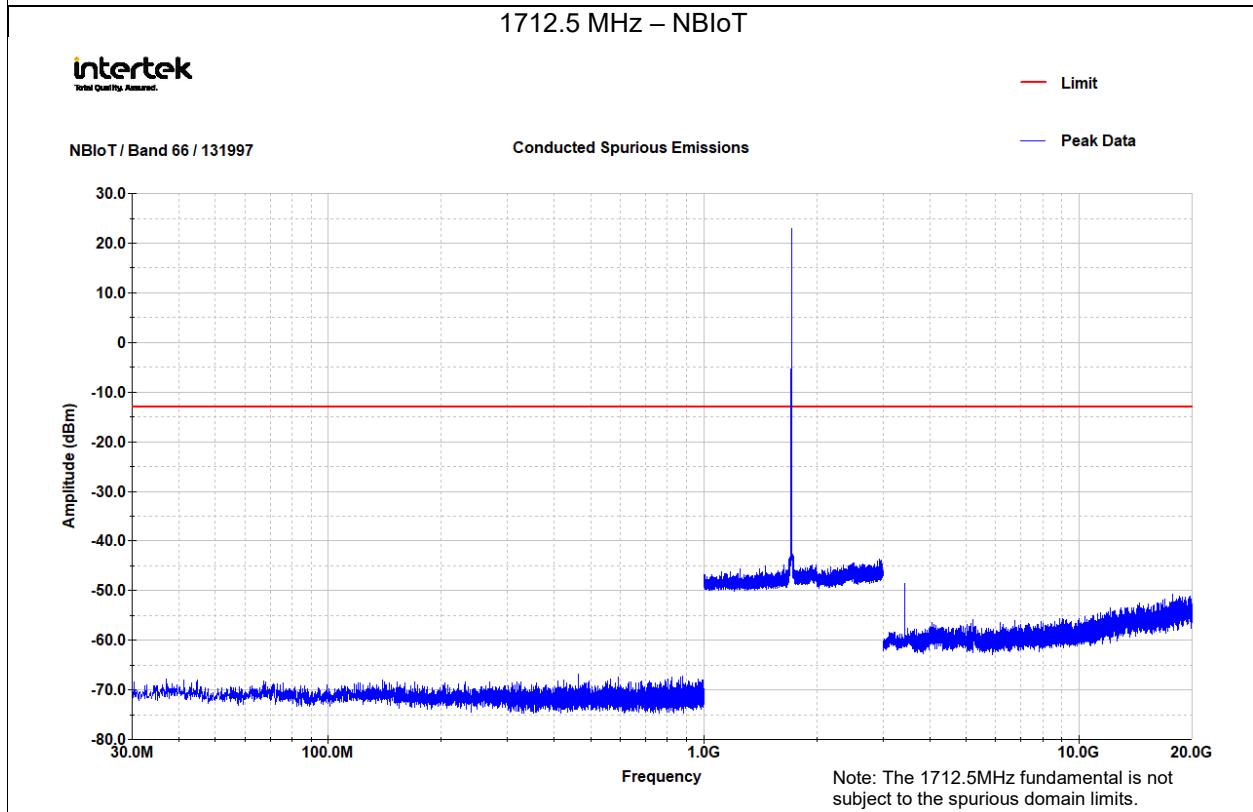
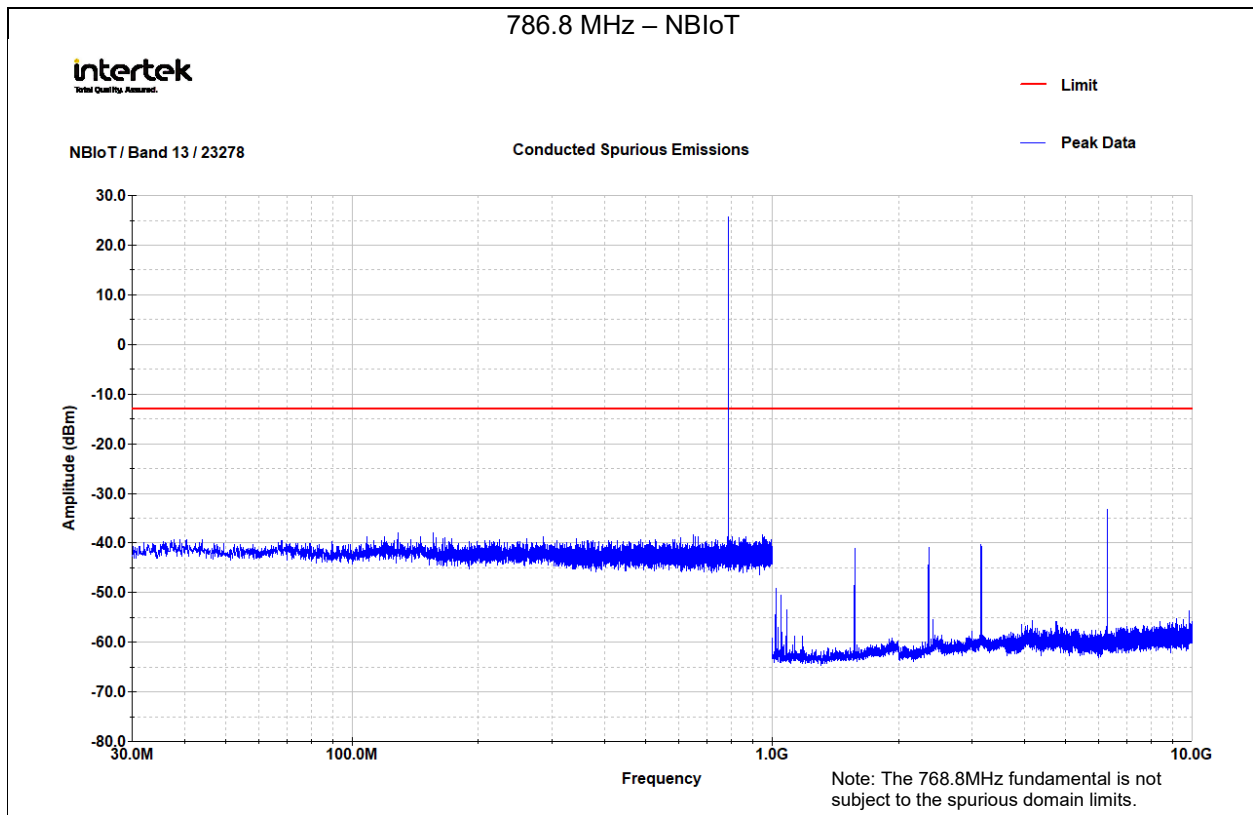


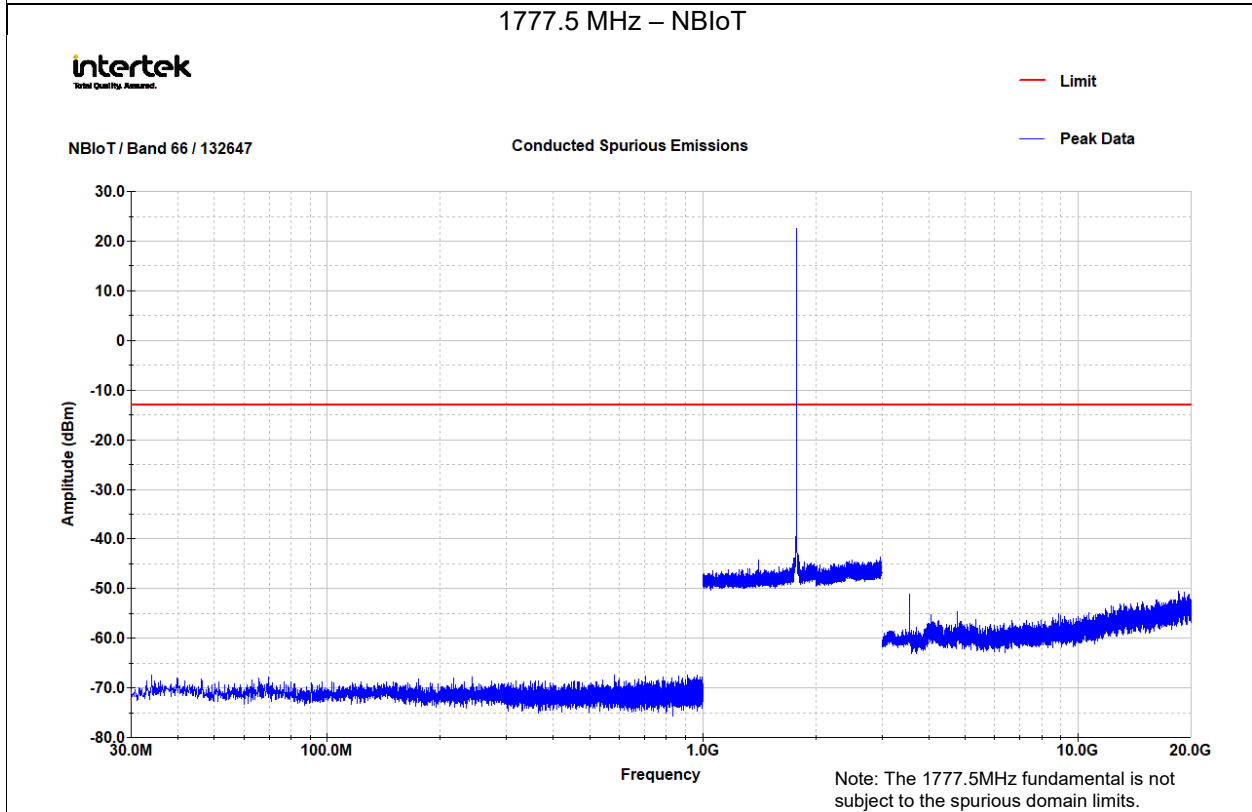
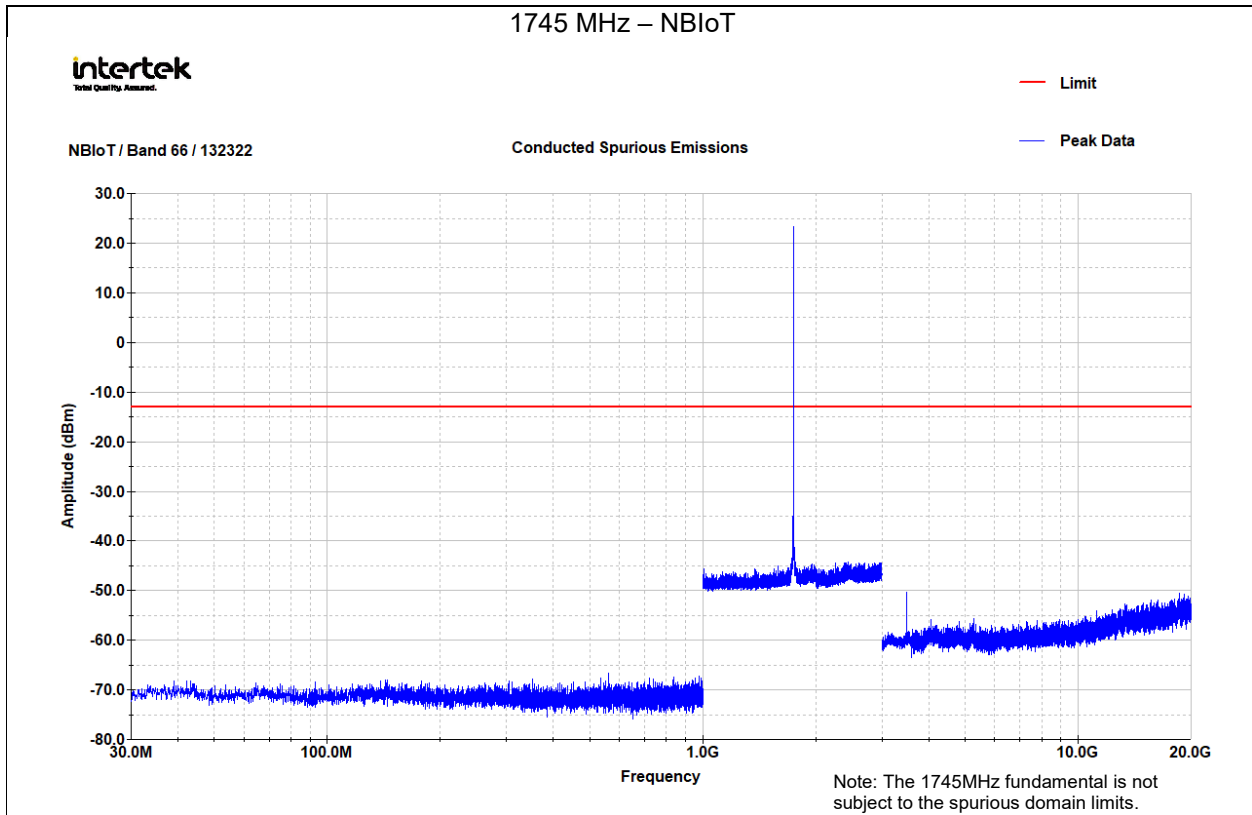




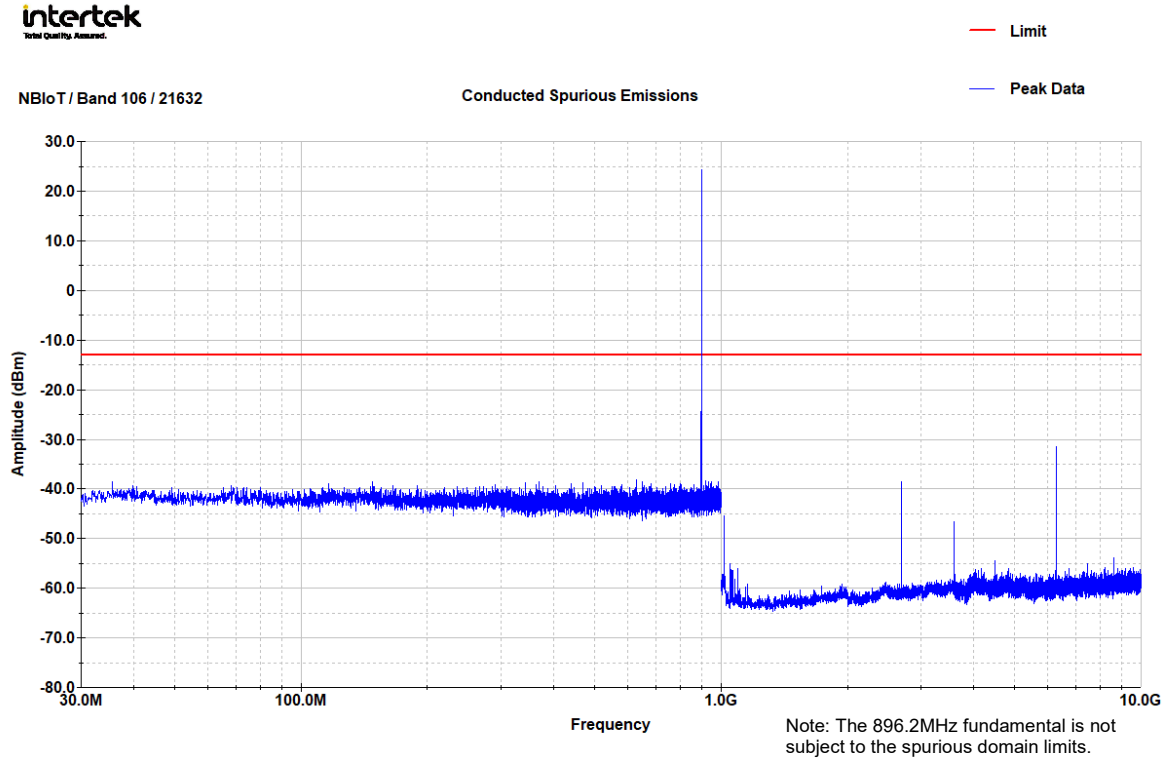




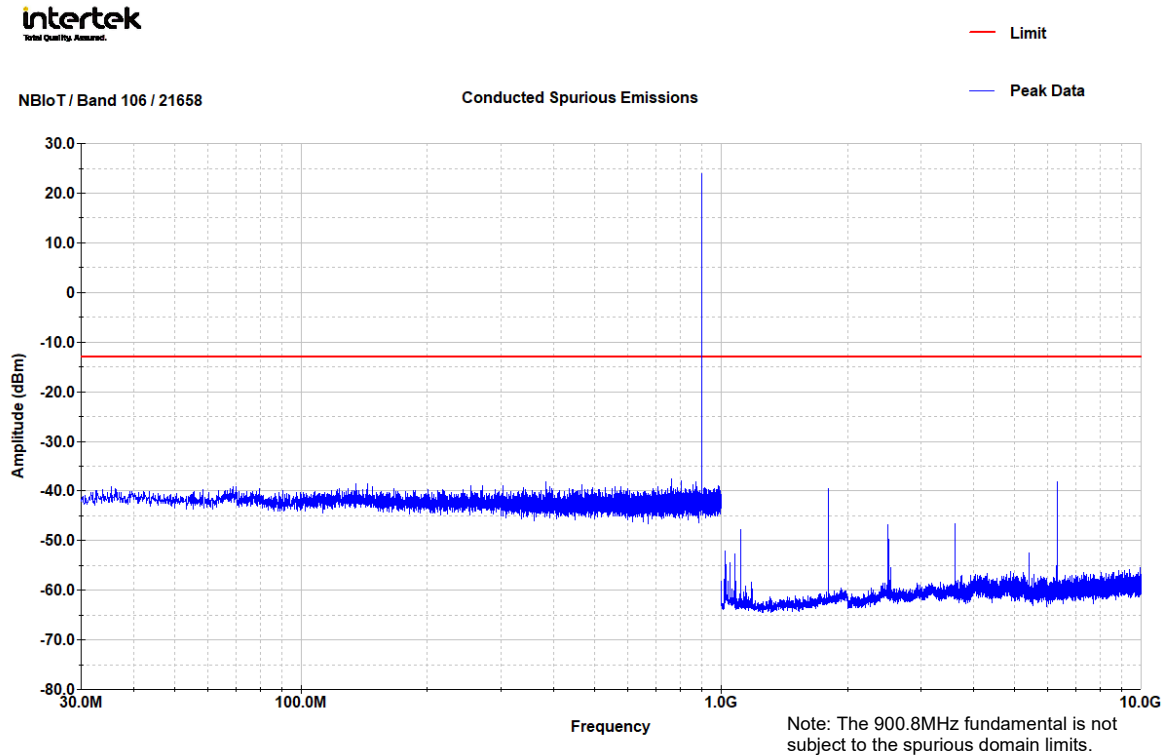




Band 106 – 896.2 MHz – NBloT



Band 106 – 900.8 MHz – NBloT



Test Personnel: Jeremy Pickens 

Test Date: 03 February 2026

Ambient Temperature: 19.1°C

Reference Standard: ANSI C63.26

Relative Humidity: 19.7%

Atmospheric Pressure: 98.3kPa

8 Field Strength of Spurious Emissions Terminals (FCC 27.1509 / RSS-130, S4.7 / RSS-139, S5.6)

8.1 Method

The field strength methods defined in ANSI C63.26, Section 5.5.4 were applied for measuring the radiated spurious emissions. The EUT was tested at a height of 0.8m for measurements below 1GHz and at 1.5 meters for measurements above 1GHz. Radiated field strength pre-scans were performed at a distance of 3 meters using a peak detector, and resolution bandwidth of 200Hz (9kHz to 150kHz), 10kHz (15kHz-30MHz), 100kHz (30MHz-1GHz), and 1MHz above 1GHz. The video bandwidth (VBW) was set to at least 3 times the RBW. The results were compared to the EIRP limits by applying a 95.2dB conversion to the applicable limit ($-20\text{dBm} + 95.2 = 75.2\text{dB}\mu\text{V/m}$ at 3 meters). For tabular data, the resulting peak field strength measurements were converted to EIRP using the same 95.2dB correction and compared to the applicable EIRP limit.

TEST SITE: 10 Meter Chamber

10 Meter Semi-Anechoic Chamber The test site for radiated emissions is located at 1950 Evergreen Blvd, Suite 100, Duluth, Georgia 30096. It is a 10-meter semi-anechoic chamber manufactured by Panashield. Embedded in the floor is a 3-meter diameter turntable.

Sample Calculation

The field strength was calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain (if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$\begin{aligned}\text{Correction} &= \text{AF} + \text{CF} - \text{AG} \\ \text{FS} &= \text{RA} + \text{Correction}\end{aligned}$$

Where

- FS = Field Strength in $\text{dB}\mu\text{V/m}$
- RA = Receiver Amplitude (including preamplifier) in $\text{dB}\mu\text{V}$
- CF = Cable Attenuation Factor in dB
- AF = Antenna Factor in dB
- AG = Amplifier Gain in dB

An example for the calculations in the following table is as follows.

Assume a receiver reading of $70.92\text{ dB}\mu\text{V}$ is obtained. The correction factor is calculated by adding the antenna factor of 26.26 dB and cable factor of 1.89 dB. The amplifier gain of 40.11 dB is subtracted, giving a correction factor of -11.96 dB/m . The correction factor is then added to the receiver amplitude resulting a field strength of $58.96\text{ dB}\mu\text{V/m}$.

$$\begin{aligned}\text{RA} &= 70.92\text{ dB}\mu\text{V} \\ \text{Correction} &= -11.96\text{ dB/m} \\ \text{FS} &= 58.96\text{ dB}\mu\text{V/m}\end{aligned}$$

To convert from field strength to EIRP, the following equations were used

$$\text{EIRP} = (E \times d)^2 / 30$$

Where:

- E = field strength in V/m
- d = measurement distance in m
- EIRP = equivalent isotropically radiated power in W

Working in dB units:

$$\text{EIRP}_{\text{dBm}} = E_{\text{dB}\mu\text{V/m}} + 20\log(d_m) - 104.77$$

For $d = 3$:

$$\text{EIRP}_{\text{dBm}} = E_{\text{dB}\mu\text{V/m}} - 95.2$$

Example

$$\begin{aligned}\text{FS} &= 58.96\text{ dB}\mu\text{V/m} \\ \text{EIRP}_{\text{dBm}} &= 58.96 - 95.2 = -36.24\text{ dBm}\end{aligned}$$

8.2 Test Equipment

Asset	Description	Manufacturer	Model	Serial	Cal Date	Cal Due
200074	Preamplifier, 10 MHz to 2000 MHz	Mini-Circuits	ZKL-2	D052005	08/04/2025	08/04/2026
200162	EMI Receiver (20Hz-40GHz)	Rohde & Schwarz	ESU 40	100314	10/07/2025	10/07/2026
211262	Controller - Turntable and Mast	Sunol	SC99V	SC99V-1	VBU	VBU
211264	Mast - Antenna	Sunol	TWR95	NNN2	VBU	VBU
211386	Antenna, BiLog, 20-2000MHz	Chase	CBL6112B	2622	06/30/2025	06/30/2026
212166	Temperature/Humidity/Pressure Sensor	Extech	SD700	110392	04/02/2025	04/02/2026
213073	Antenna positioning tower	Sunol	TLT2	040314-5	VBU	VBU
213103	1GHz High Pass Filter	Micro-Tronics	HPM50108	140	06/18/2025	06/18/2026
213154A	3 GHz High Pass Filter	Filtek	HP12/3000-5AB	15B57-01	05/21/2025	05/21/2026
213451	Omni -directional Comb Generator	Com-Power	CGO-520	281266	VBU	VBU
213453	Preamplifier 500MHz-18GHz	Com-Power	PAM-118A	18040030	10/20/2025	10/20/2026
BOX-HORN1	Antenna, Horn, <18 GHz	EMCO	3115	9512-4632	06/25/2025	06/25/2026
MM5	RF Coax Cable 9kHz-18GHz	Maury Microwave	UC-N-MM78	1514381	04/01/2025	04/01/2026
MM12	RF Coax Cable 9kHz-18GHz	Fairview Microwave	SCE18110505-600CM	MM12	09/11/2025	09/11/2026
MM36	RF Coax Cable 9kHz-18GHz	Maury Microwave	UC-N-MM36	16 32 10	06/18/2025	06/18/2026
MP10	RF Coax Cable 9kHz-18GHz	Fairview Microwave	FMCA1282-394	MP10	6/18/2025	06/18/2026
MP14	RF Coax Cable 9kHz-18GHz	Megaphase	EC29-N1N1-276-H	20938802	9/19/2025	09/19/2026

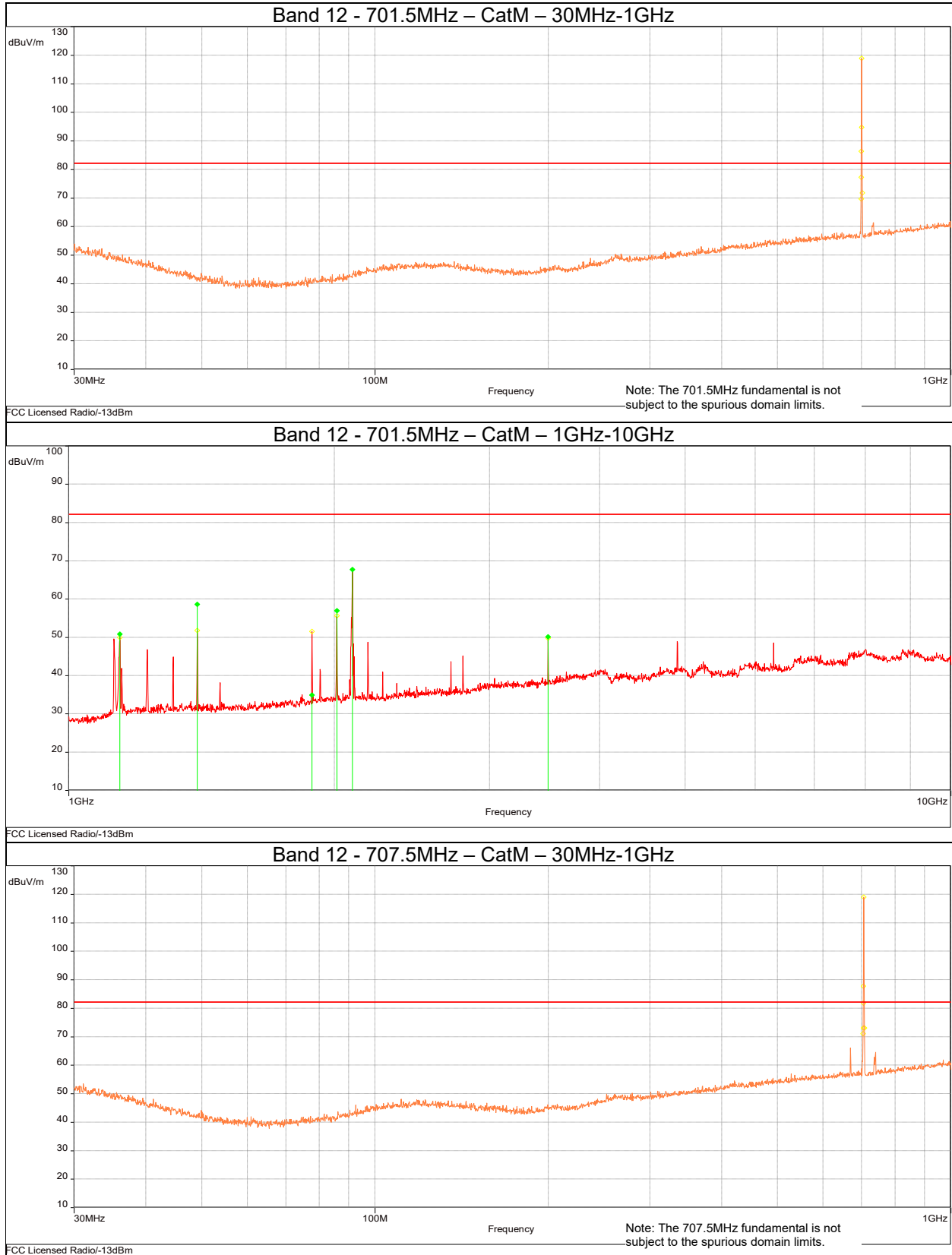
Software Utilized

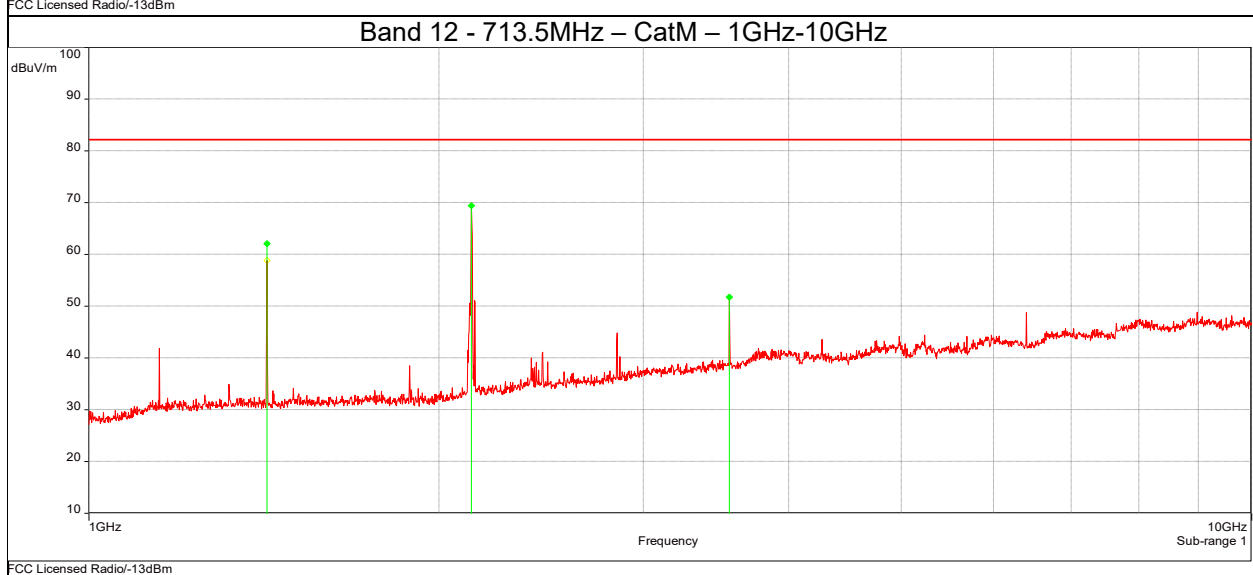
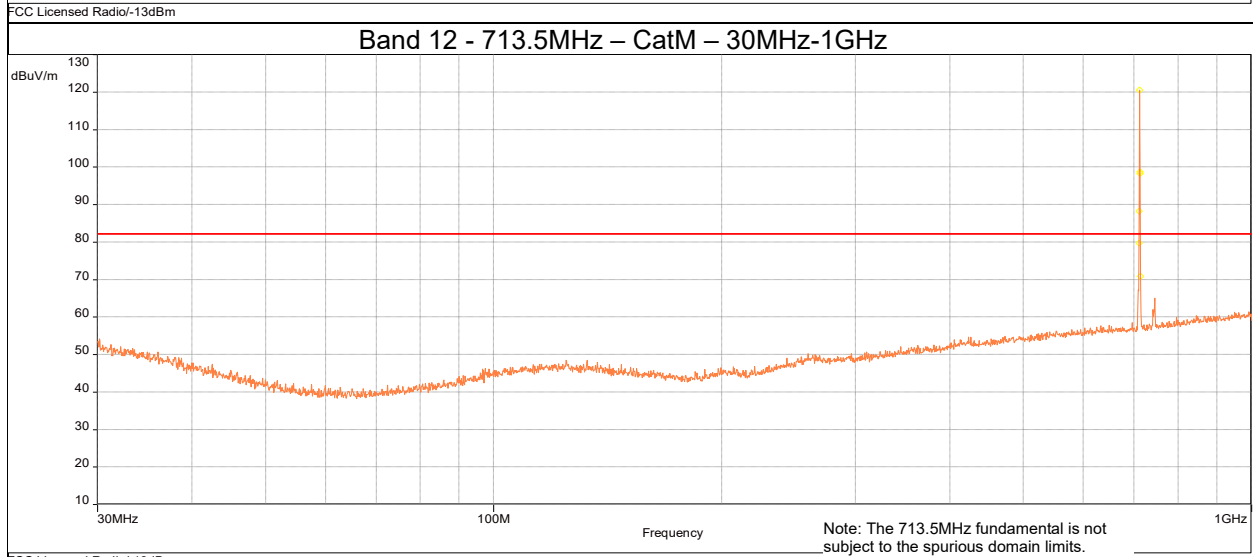
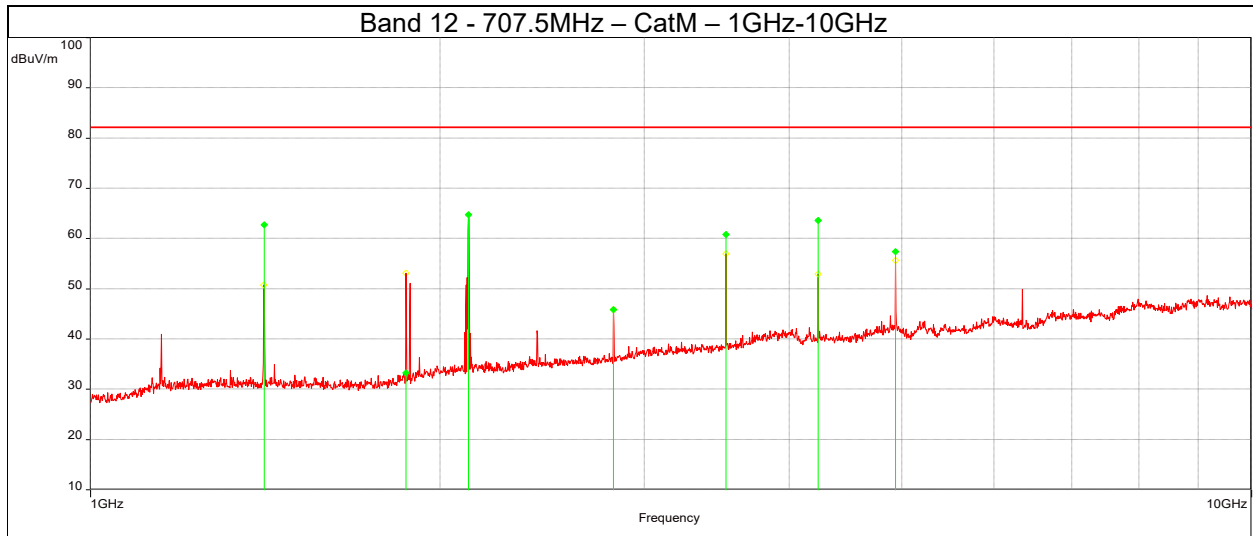
Name	Manufacturer	Version
BAT EMC	NEXIO	3.19.1.18

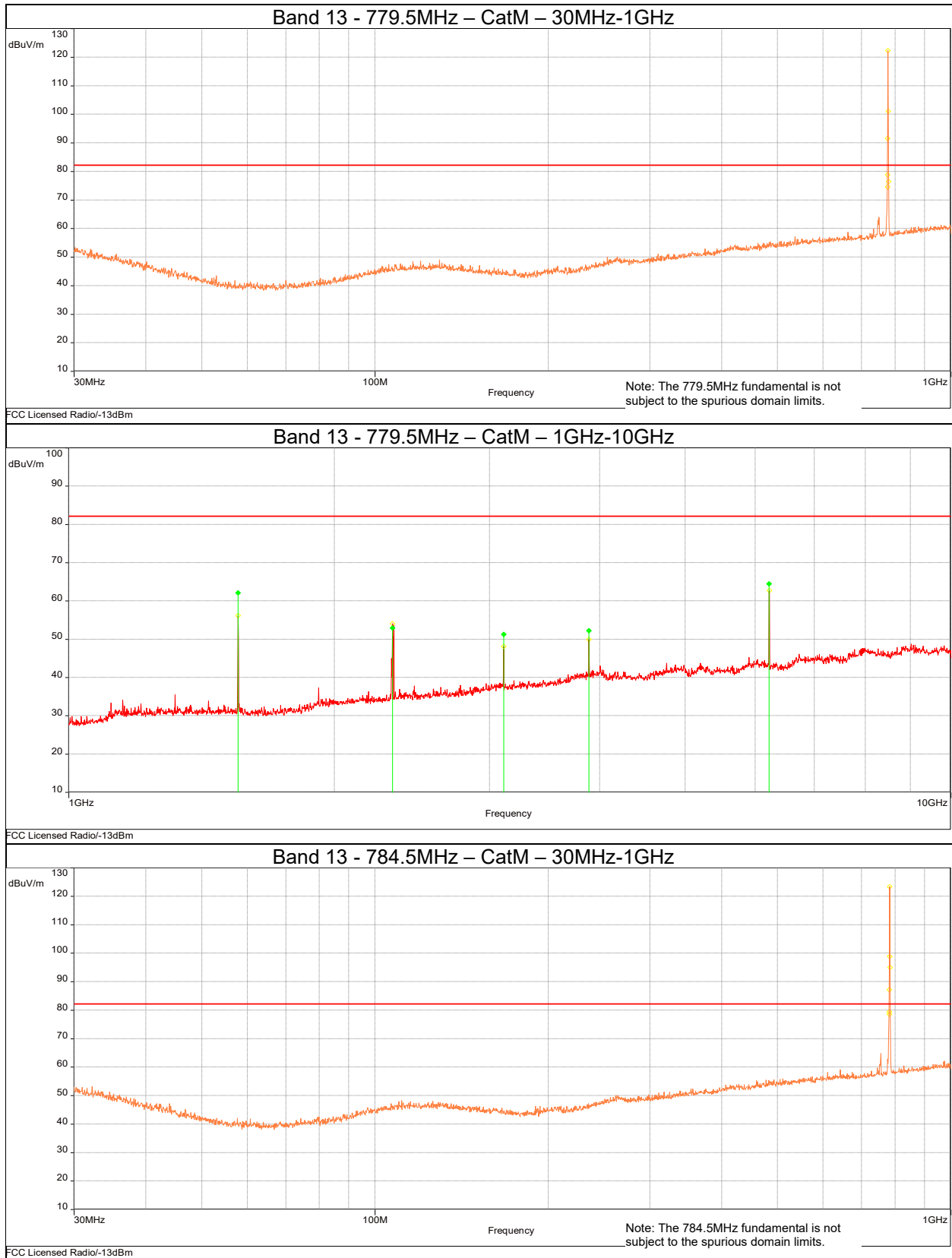
8.3 Results

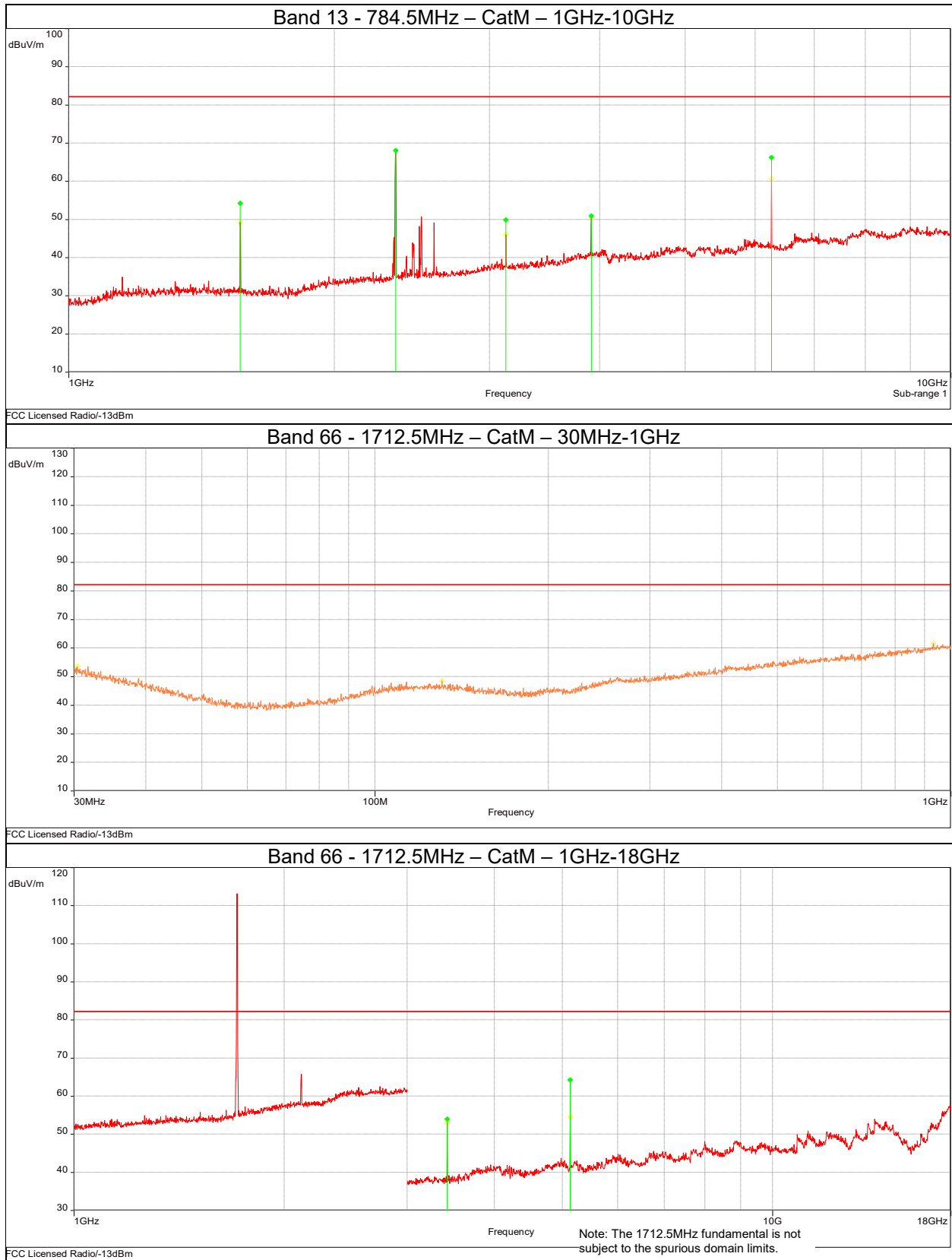
The sample tested was found to Comply.

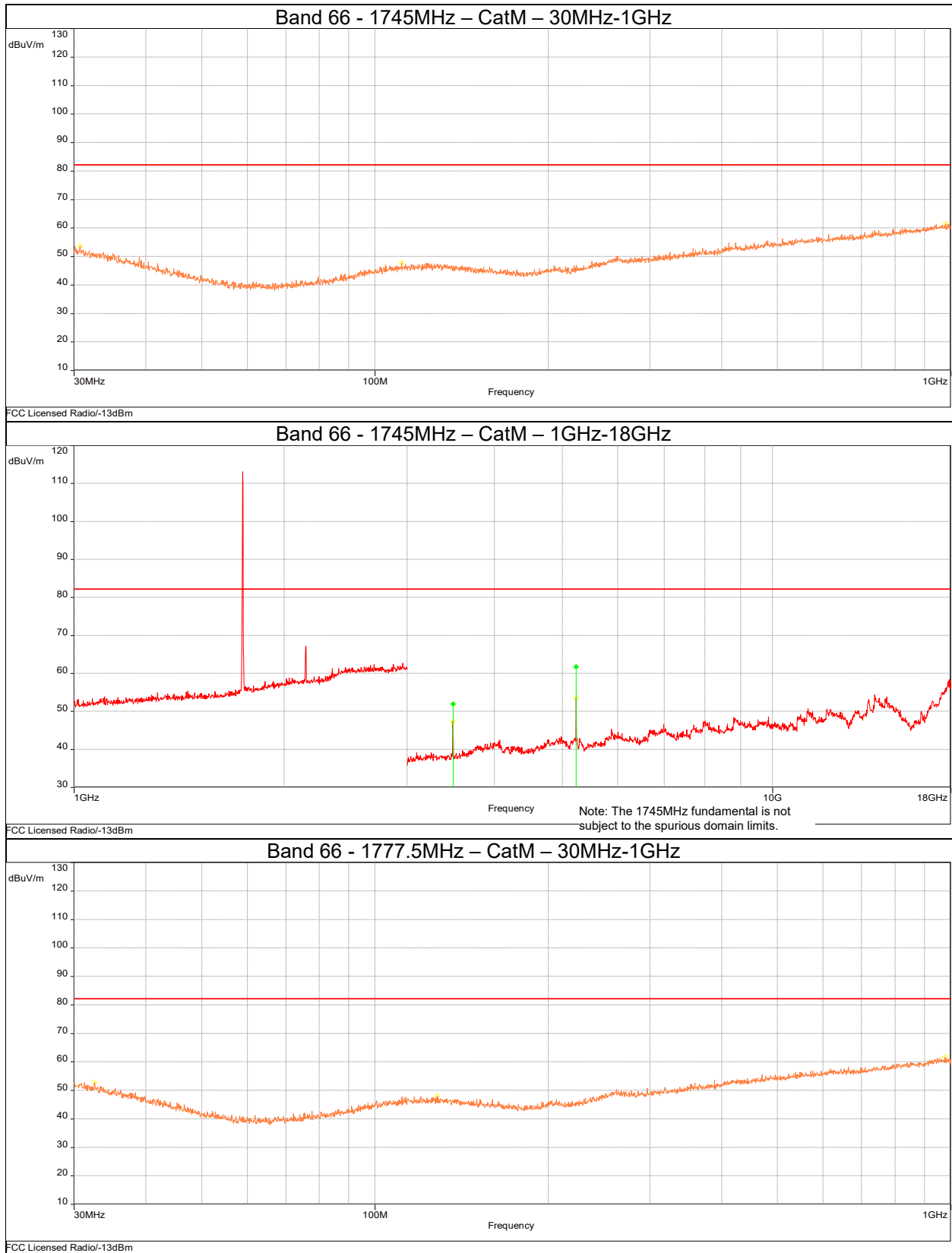
8.4 Plots/Data

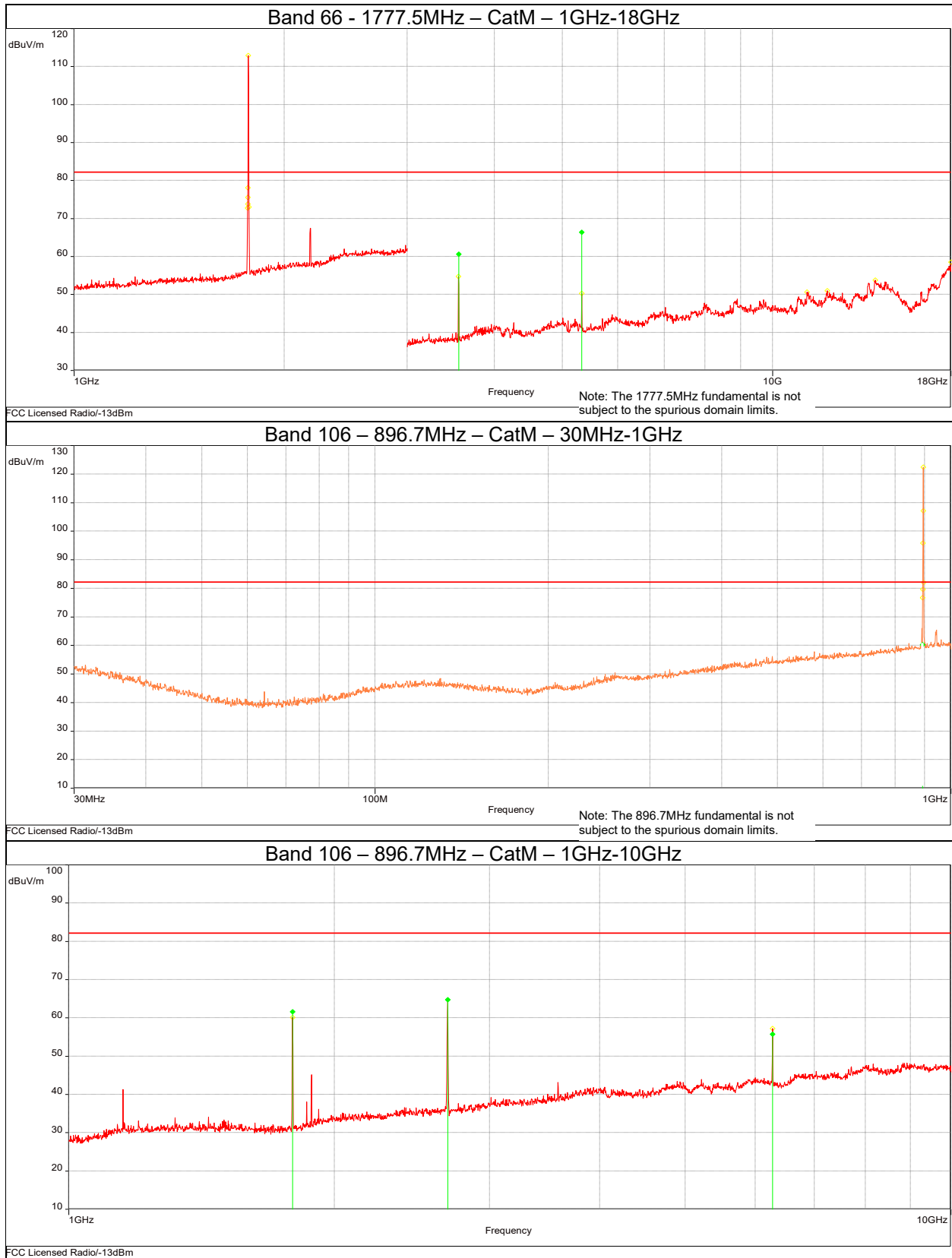


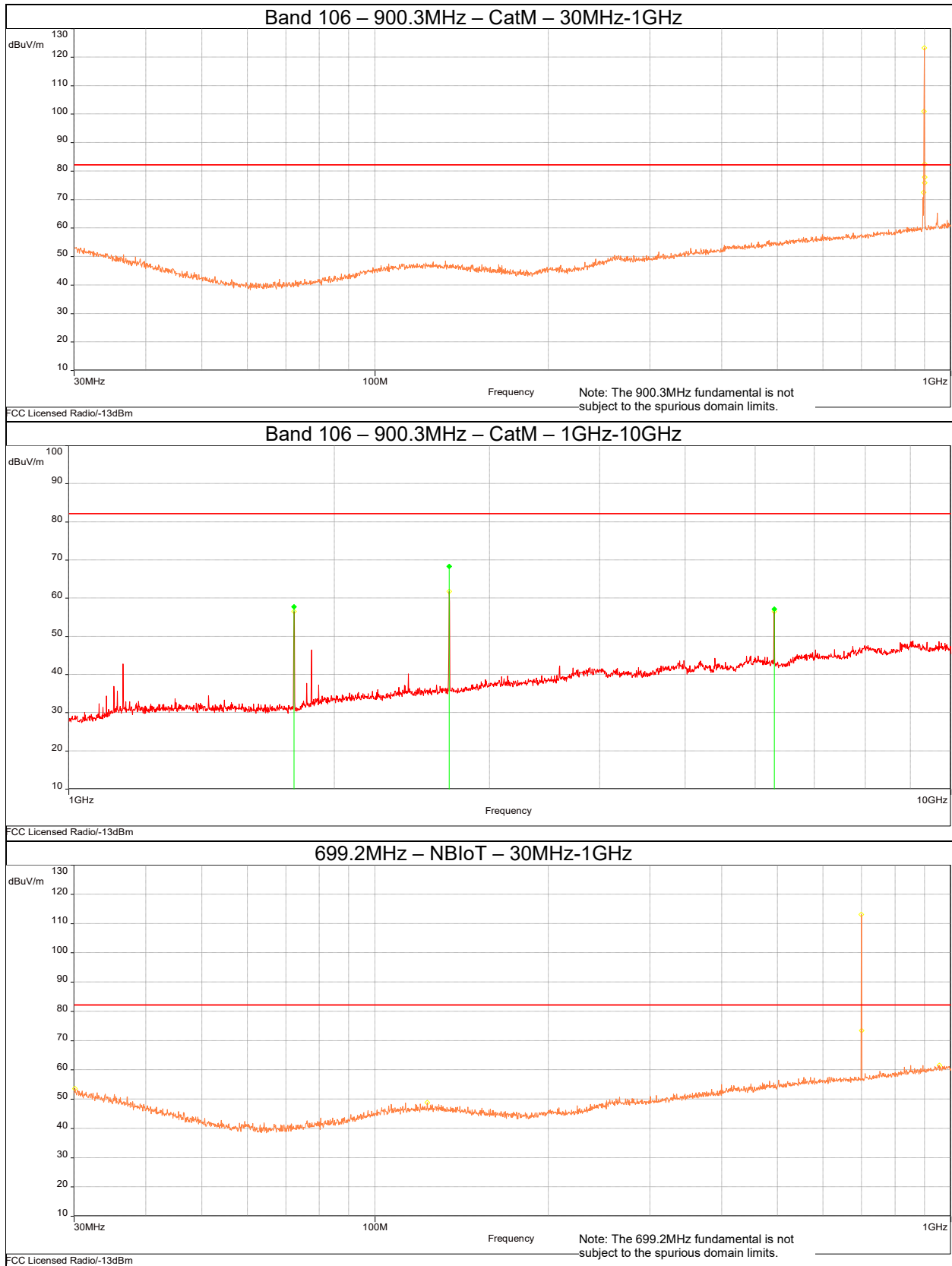


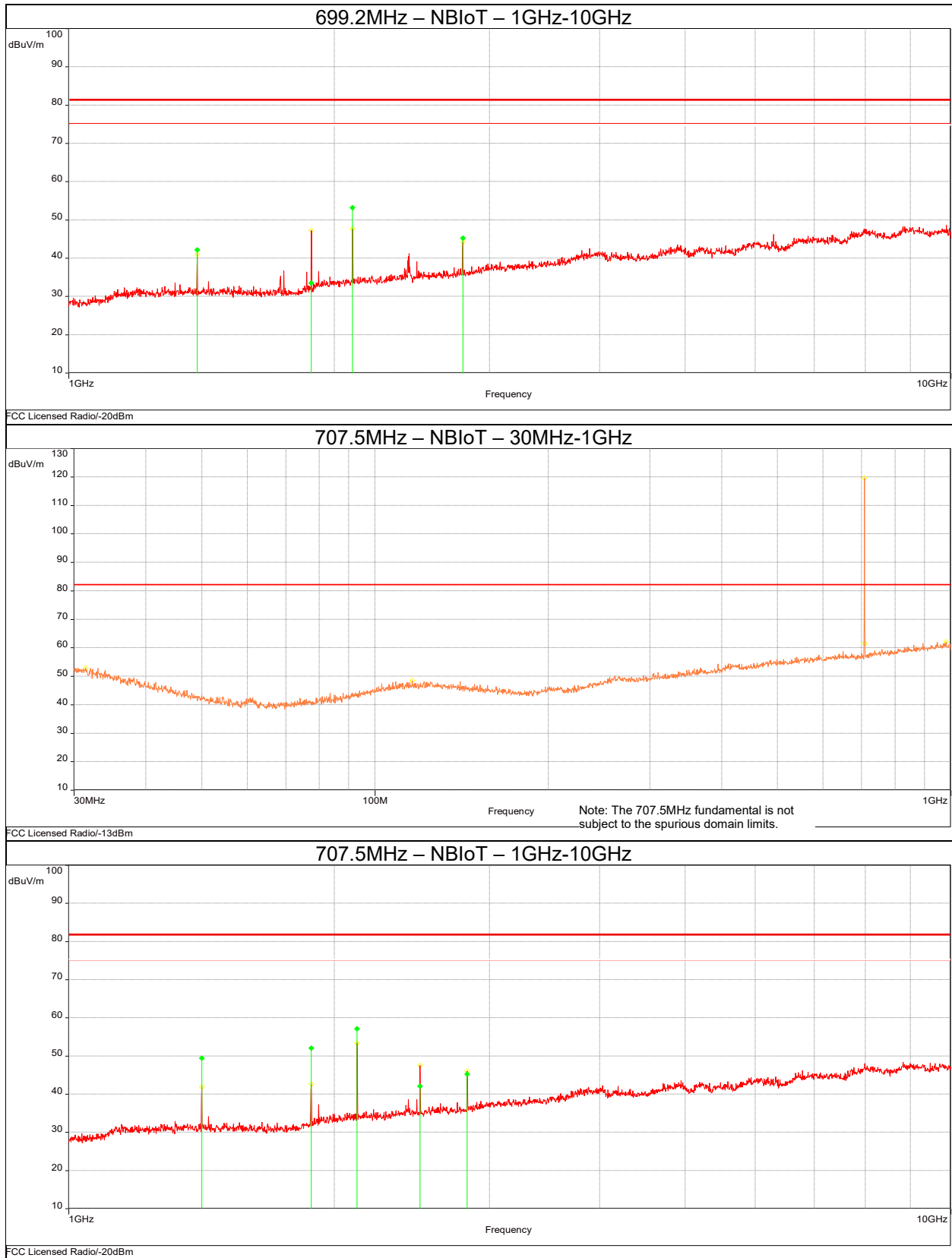


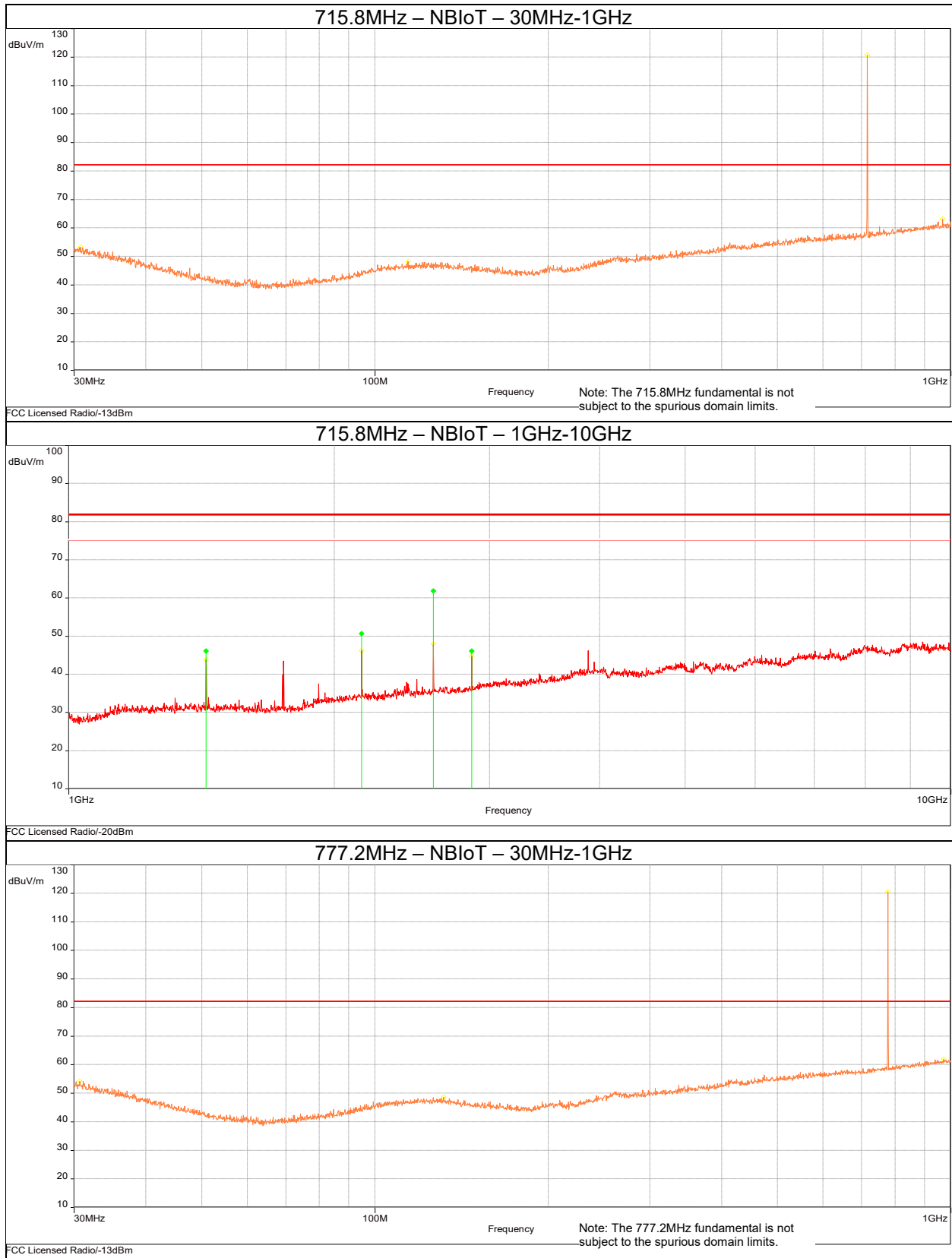


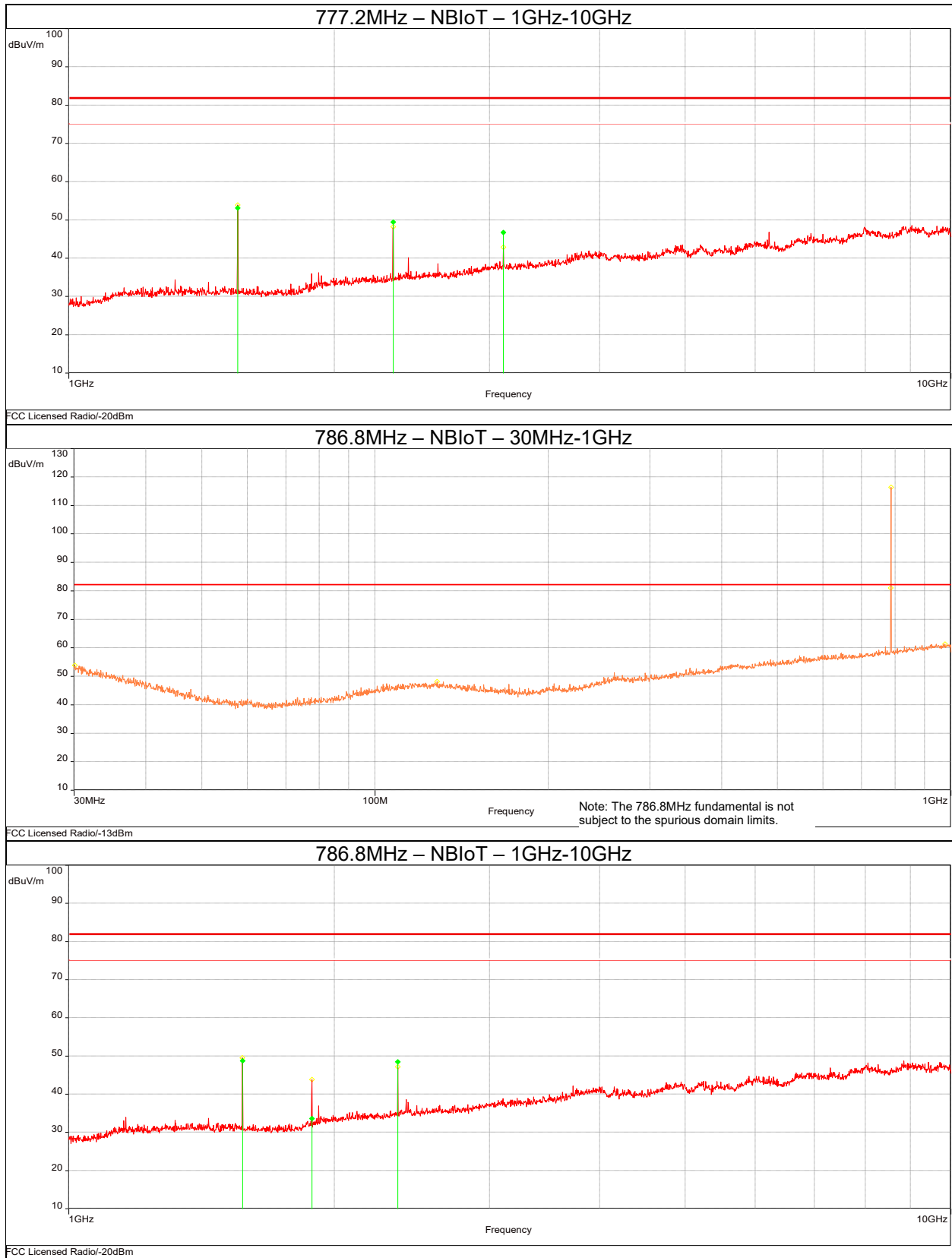


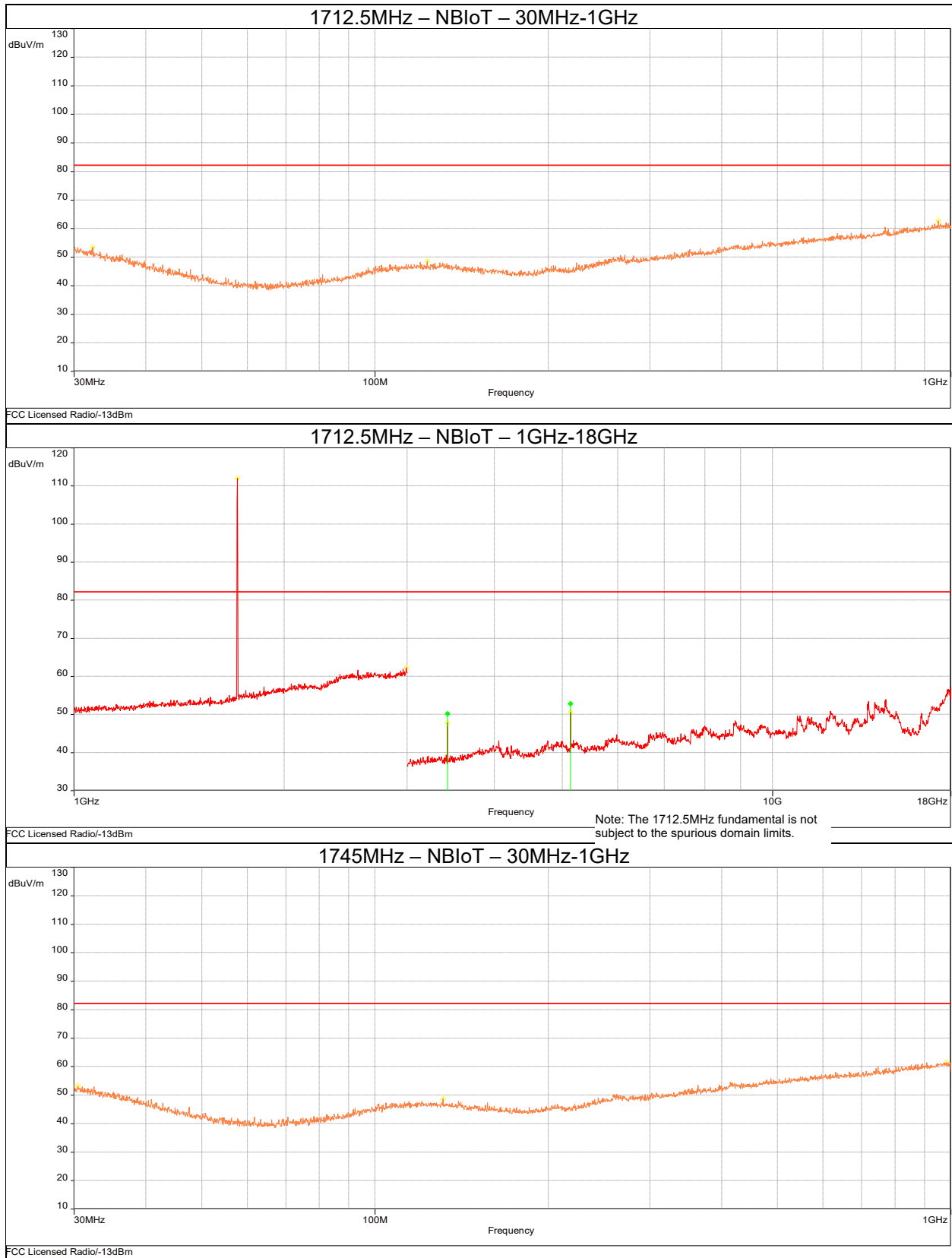


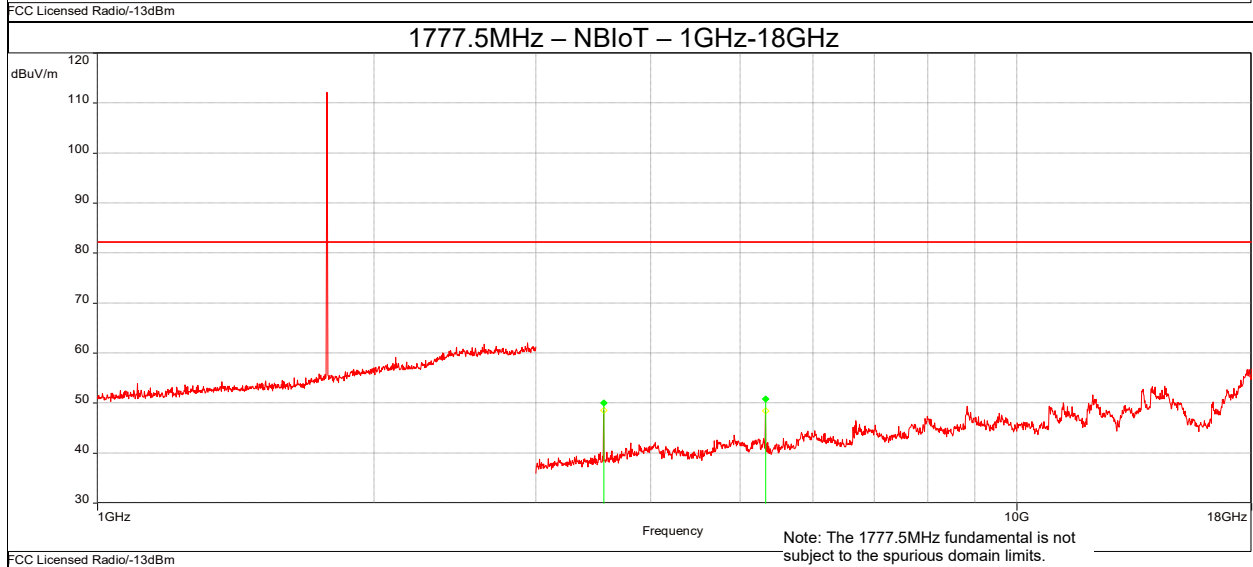
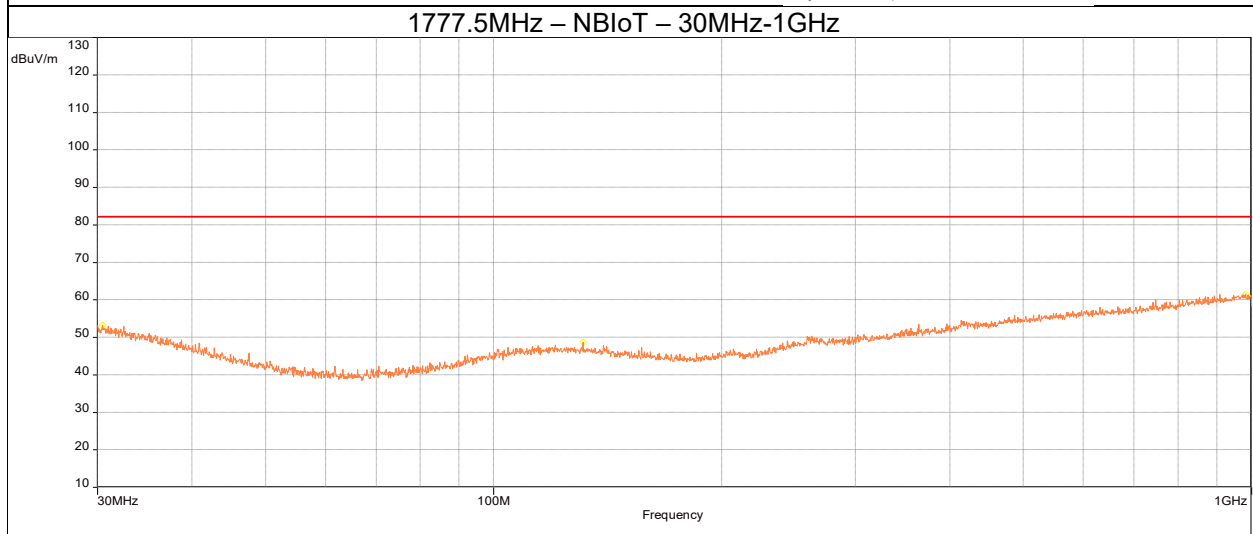
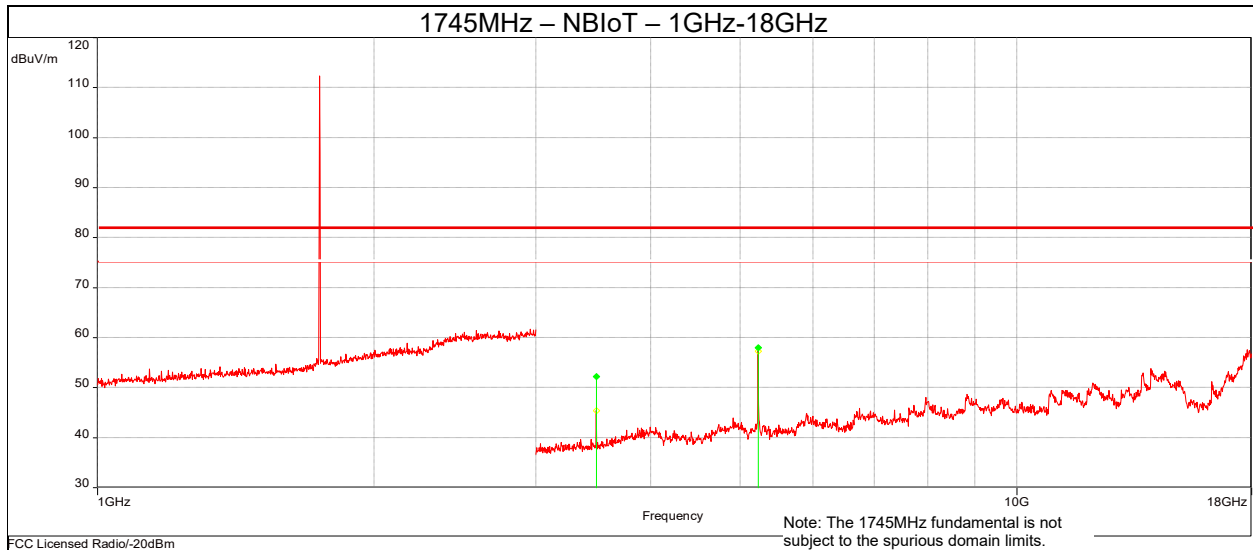


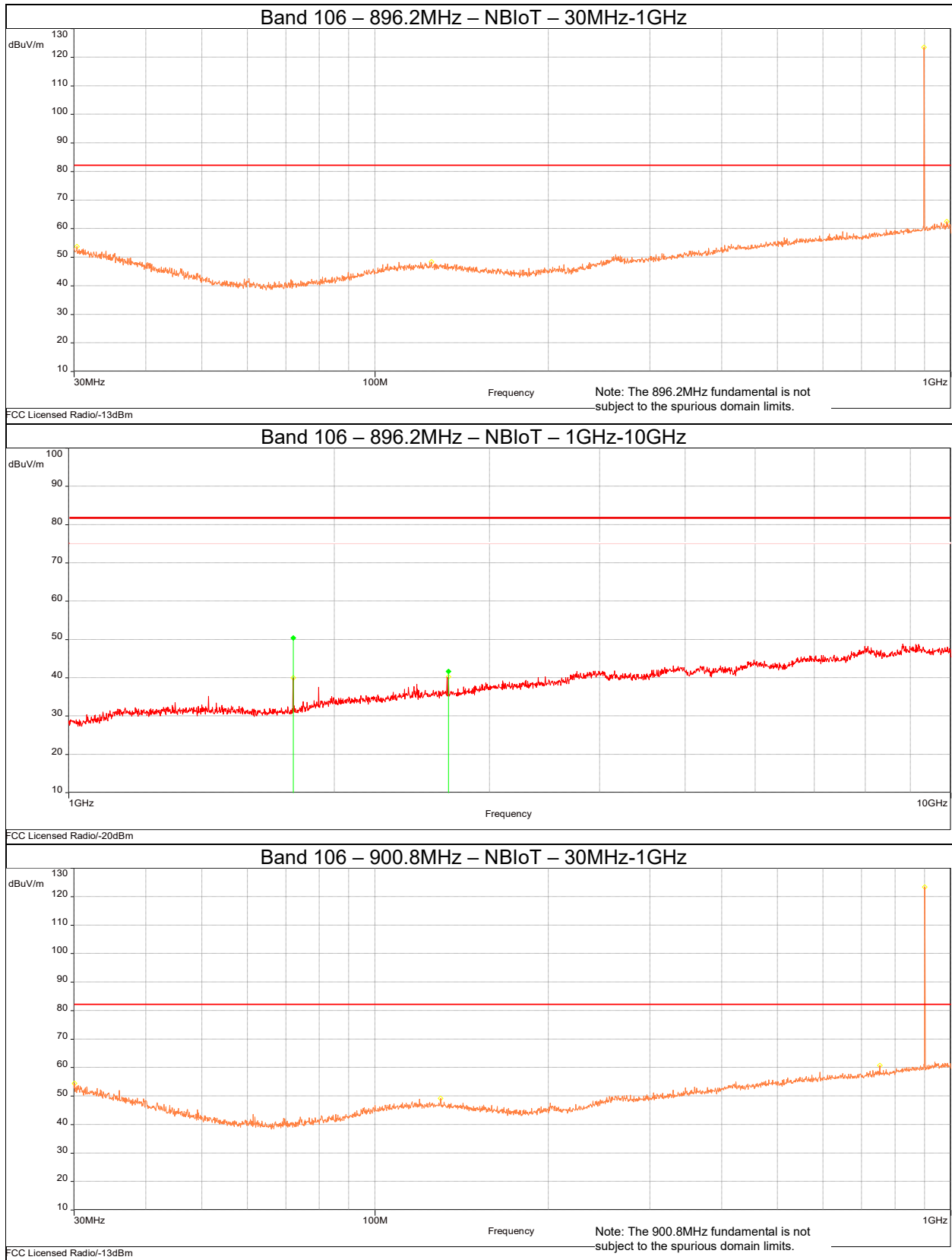


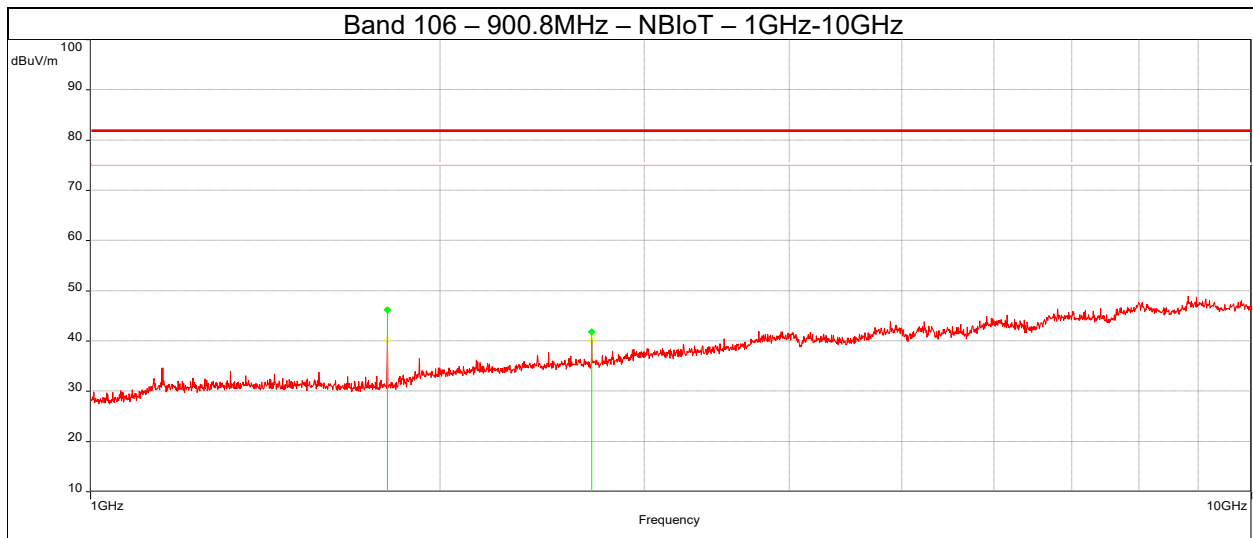












FCC Licensed Radio/20dBm

Tabular Data – LTE Band 12/17

Mode	TX Frequency (MHz)	Frequency (MHz)	Reading (dBμV)	Correction (dB/m)	Field Strength (dBμV/m)	Free Space Conversion	EIRP (dBm)	Limit (dBm)	Margin (dB)
CatM Band 12	701.500	1142.500	64.26	-13.41	50.85	95.2	-44.35	-13	-31.35
CatM Band 12	701.500	1398.700	71.61	-12.94	58.67	95.2	-36.53	-13	-23.53
CatM Band 12	701.500	1885.900	46.15	-11.18	34.97	95.2	-60.23	-13	-47.23
CatM Band 12	701.500	2012.800	67.97	-10.96	57.01	95.2	-38.19	-13	-25.19
CatM Band 12	701.500	2097.100	78.65	-10.91	67.74	95.2	-27.46	-13	-14.46
CatM Band 12	701.500	3494.800	57.99	-7.83	50.16	95.2	-45.04	-13	-32.04
CatM Band 12	707.500	1410.700	75.68	-12.96	62.72	95.2	-32.48	-13	-19.48
CatM Band 12	707.500	1869.700	44.66	-11.36	33.30	95.2	-61.9	-13	-48.90
CatM Band 12	707.500	2116.900	75.64	-10.86	64.78	95.2	-30.42	-13	-17.42
CatM Band 12	707.500	2821.300	55.46	-9.57	45.89	95.2	-49.31	-13	-36.31
CatM Band 12	707.500	3526.600	68.66	-7.80	60.86	95.2	-34.34	-13	-21.34
CatM Band 12	707.500	4232.200	70.40	-6.75	63.65	95.2	-31.55	-13	-18.55
CatM Band 12	707.500	4936.600	62.58	-5.16	57.42	95.2	-37.78	-13	-24.78
CatM Band 12	713.500	1422.700	75.07	-13.00	62.07	95.2	-33.13	-13	-20.13
CatM Band 12	713.500	2133.400	80.21	-10.80	69.41	95.2	-25.79	-13	-12.79
CatM Band 12	713.500	3554.500	59.51	-7.78	51.73	95.2	-43.47	-13	-30.47
NBLoT Band 12	699.200	1398.235	55.17	-12.94	42.23	95.2	-52.97	-13	-39.97
NBLoT Band 12	699.200	1882.963	44.79	-11.22	33.57	95.2	-61.63	-13	-48.63
NBLoT Band 12	699.200	2097.400	64.15	-10.91	53.24	95.2	-41.96	-13	-28.96
NBLoT Band 12	699.200	2796.524	54.92	-9.68	45.24	95.2	-49.96	-13	-36.96
NBLoT Band 12	707.500	1414.870	62.43	-12.97	49.46	95.2	-45.74	-13	-32.74
NBLoT Band 12	707.500	1882.801	63.30	-11.22	52.08	95.2	-43.12	-13	-30.12
NBLoT Band 12	707.500	2122.297	67.99	-10.84	57.15	95.2	-38.05	-13	-25.05
NBLoT Band 12	707.500	2501.996	52.47	-10.35	42.12	95.2	-53.08	-13	-40.08
NBLoT Band 12	707.500	2829.721	54.79	-9.56	45.23	95.2	-49.97	-13	-36.97
NBLoT Band 12	715.800	1431.437	59.11	-13.02	46.09	95.2	-49.11	-13	-36.11
NBLoT Band 12	715.800	2147.200	61.44	-10.75	50.69	95.2	-44.51	-13	-31.51
NBLoT Band 12	715.800	2590.074	72.01	-10.12	61.89	95.2	-33.31	-13	-20.31
NBLoT Band 12	715.800	2862.966	55.57	-9.48	46.09	95.2	-49.11	-13	-36.11

Tabular Data – LTE Band 13

Mode	TX Frequency (MHz)	Frequency (MHz)	Reading (dBμV)	Correction (dB/m)	Field Strength (dBμV/m)	Free Space Conversion	EIRP (dBm)	Limit (dBm)	Margin (dB)
CatM Band 13	779.500	1555.774	75.06	-12.95	62.11	95.2	-33.09	-13	-20.09
CatM Band 13	779.500	2328.294	63.51	-10.58	52.93	95.2	-42.27	-13	-29.27
CatM Band 13	779.500	3111.554	59.67	-8.42	51.25	95.2	-43.95	-13	-30.95
CatM Band 13	779.500	3887.048	58.69	-6.40	52.29	95.2	-42.91	-13	-29.91
CatM Band 13	779.500	6223.103	67.11	-2.63	64.48	95.2	-30.72	-13	-17.72
CatM Band 13	784.500	1564.600	67.23	-12.96	54.27	95.2	-40.93	-13	-27.93
CatM Band 13	784.500	2347.000	78.47	-10.40	68.07	95.2	-27.13	-13	-14.13
CatM Band 13	784.500	3129.400	58.24	-8.38	49.86	95.2	-45.34	-13	-32.34
CatM Band 13	784.500	3910.300	57.33	-6.40	50.93	95.2	-44.27	-13	-31.27
CatM Band 13	784.500	6258.700	68.84	-2.63	66.21	95.2	-28.99	-13	-15.99
NBLoT Band 13	777.200	1554.262	66.11	-12.95	53.16	95.2	-42.04	-13	-29.04
NBLoT Band 13	777.200	2331.395	59.98	-10.55	49.43	95.2	-45.77	-13	-32.77
NBLoT Band 13	777.200	3108.524	55.18	-8.42	46.76	95.2	-48.44	-13	-35.44
NBLoT Band 13	786.800	1573.483	61.71	-12.97	48.74	95.2	-46.46	-13	-33.46
NBLoT Band 13	786.800	1885.807	44.84	-11.19	33.65	95.2	-61.55	-13	-48.55
NBLoT Band 13	786.800	2360.187	58.80	-10.33	48.47	95.2	-46.73	-13	-33.73

Tabular Data – LTE Band 4/66									
Mode	Tx Frequency (MHz)	Frequency (MHz)	Reading (dBµV)	Correction (dB/m)	Field Strength (dBµV/m)	Free Space Conversion	EIRP (dBm)	Limit (dBm)	Margin (dB)
CatM Band 66	1712.500	3421.777	61.89	-7.96	53.93	95.2	-41.27	-13	-28.27
CatM Band 66	1712.500	5132.484	68.82	-4.50	64.32	95.2	-30.88	-13	-17.88
CatM Band 66	1745.000	3486.772	59.81	-7.84	51.97	95.2	-43.23	-13	-30.23
CatM Band 66	1745.000	5230.000	66.07	-4.31	61.76	95.2	-33.44	-13	-20.44
CatM Band 66	1777.500	3551.776	68.44	-7.79	60.65	95.2	-34.55	-13	-21.55
CatM Band 66	1777.500	5327.692	70.50	-4.10	66.40	95.2	-28.8	-13	-15.80
NBLoT Band 66	1712.500	3424.881	58.21	-7.96	50.25	95.2	-44.95	-13	-31.95
NBLoT Band 66	1712.500	5137.304	57.28	-4.49	52.79	95.2	-42.41	-13	-29.41
NBLoT Band 66	1745.000	3489.864	60.06	-7.84	52.22	95.2	-42.98	-13	-29.98
NBLoT Band 66	1745.000	5234.796	62.32	-4.30	58.02	95.2	-37.18	-13	-24.18
NBLoT Band 66	1777.500	3554.881	57.82	-7.78	50.04	95.2	-45.16	-13	-32.16
NBLoT Band 66	1777.500	5332.327	54.90	-4.08	50.82	95.2	-44.38	-13	-31.38
Tabular Data – LTE Band 106									
Mode	Tx Frequency (MHz)	Frequency (MHz)	Reading (dBµV)	Correction (dB/m)	Field Strength (dBµV/m)	Free Space Conversion	EIRP (dBm)	Limit (dBm)	Margin (dB)
CatM Band 106	896.700	1793.500	73.47	-11.89	61.58	95.2	-33.62	-13	-20.62
CatM Band 106	896.700	2689.300	74.69	-9.93	64.76	95.2	-30.44	-13	-17.44
CatM Band 106	896.700	6278.200	58.37	-2.61	55.76	95.2	-39.44	-13	-26.44
CatM Band 106	900.300	1800.106	69.73	-11.94	57.79	95.2	-37.41	-13	-24.41
CatM Band 106	900.300	2700.050	78.25	-9.92	68.33	95.2	-26.87	-13	-13.87
CatM Band 106	900.300	6303.313	59.75	-2.60	57.15	95.2	-38.05	-13	-25.05
NBLoT Band 106	898.200	1796.261	62.28	-11.91	50.37	95.2	-44.83	-13	-31.83
NBLoT Band 106	898.200	2694.404	51.60	-9.93	41.67	95.2	-53.53	-13	-40.53
NBLoT Band 106	900.800	1801.461	58.19	-11.94	46.25	95.2	-48.95	-13	-35.95
NBLoT Band 106	900.800	2702.221	51.76	-9.92	41.84	95.2	-53.36	-13	-40.36

Test Personnel: Jeremy Pickens
Jean Rene

Test Date: 23 – 26 January 2026

Ambient Temperature: 17.8 – 21.3°C

Reference Standard: ANSI C63.26

Relative Humidity: 18.5 – 20.9%

Atmospheric Pressure: 97.7 – 98.1kPa

9 Measurement Uncertainty

Parameter	Expanded Uncertainty for Normal k factor equal to 2
Radio Frequency	0.07 PPM
Total RF Power (Conducted)	0.65 dB
Power Density (Conducted)	0.65 dB
RF Spurious (Conducted)	1.8 dB
Radiated Emissions (9kHz-30MHz)	4.7 dB
Radiated Emissions (30MHz-1GHz)	4.1 dB
Radiated Emissions (1GHz-18GHz)	4.5dB
Radiated Emissions (18GHz-40GHz)	4.7 dB
AC Line Conducted Emissions	2.8 dB
Temperature	0.7°
Humidity	3.9%

10 Revision History

Revision Level	Date	Prepared By	Reviewed By	Notes
0	20 February 2026	JOP	JOP	Original Issue
1	27 May 2026	JOP	JOP	Added notation that Band 106 is only applicable to FCC certification

END OF REPORT