TEST REPORT

Applicant	Onset Computer Corp.
Address	470 MacArthur Blvd. Bourne, MA 02532

FCC ID	WXF-ONST13
ISED Canada IC	7936A-ONST13
Product Description	HOBO® MX TidbiT® Ext Temp Logger
Model/HVIN	MX2205
Additional Models	None
Date of tests	Jun 8 – Jun 15, 2023
FCC Test Firm DN Canada CABID	US1028 US0106

The tests have been carried out according to the requirements of the following standard:

☒ **FCC Part 15, Subpart C, Section 15.247**
☒ **ISED Canada RSS-247 Issue 3**

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

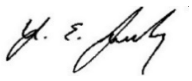
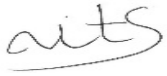
Prepared by Yunus Faziloglu Sr. Wireless Engineer	Approved by Ahmed Ait Ahmed EMC Manager
	
Report Issue Date: Dec 20, 2024	Issue Number: 4

TABLE OF CONTENTS

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
1	Original release	Oct 20, 2023
2	To address TCB review comments: Pg 11: Added note 4 for limit adjustments for measurements above 30MHz at distances closer than 3m. Pg 44: Removed notch filter related generic statement. Pg 50: Corrected measurement setup and test equipment references. Pg 53: Added ANSI C63.10 clause number for peak PSD measurement procedure reference.	Apr 30, 2024
3	Cover page updated for: - Report signatories - RSS-247 Issue number Pg 11 updated for: - Added justification for testing at distances less than 3m from the EUT for freq. above 6GHz. - Adjusted amplitude and correction factor formulas added for clarify.	Jul 19, 2024
4	FCC ID and IC ID updated	Dec 20, 2024

1 SUMMARY OF TEST RESULTS

EUT was tested against the following requirements:

APPLIED STANDARD: FCC PART 15, SUBPART C (SECTION 15.247), RSS-247				
STANDARD SECTION		TEST TYPE AND LIMIT	APPLICABLE	RESULT
47CFR15	RSS			
15.207	Gen 8.8	AC Power Line Conducted Emissions	N/A (Note 1)	N/A
15.205 15.209	247 3.3 247 5.5 Gen 8.9 Gen 8.10	Radiated Spurious Emissions	Y	PASS
15.247(d)	247 5.5	Conducted Spurious Emissions	Y	PASS
15.247(a)(2)	247 5.2(a)	6dB Bandwidth	Y	PASS
--	Gen 6.7	99% Occupied Bandwidth	Y	PASS
15.247(b)(3)	247 5.4(d)	Conducted Output Power	Y	PASS
15.247(e)	247 5.2(b)	Power Spectral Density	Y	PASS
15.203	Gen 6.8	Antenna Requirement	Y	PASS

Note 1: EUT is battery powered only.

2 MEASUREMENT UNCERTAINTY

The listed uncertainties are the worst-case uncertainty for the entire range of measurement. Please note that the uncertainty values are provided for informational purposes only and are not used in determining the PASS/FAIL results. Values for measurement uncertainty are calculated per ETSI TR 100 028 (2001).

Measurement	Expanded Uncertainty k=2	Maximum allowable uncertainty
Radio frequency (@ 2.4GHz)	3.23×10^{-8}	1×10^{-7}
RF power, conducted	0.40dB	0.75dB
Maximum frequency deviation: Within 300Hz and 6kHz of audio frequency / Within 6kHz and 25kHz of audio frequency	3.4% 0.3dB	5% 3dB
Adjacent channel power	1.9dB	3dB
Conducted spurious emission of transmitter, valid up to 12.75GHz	2.39dB	3dB
Conducted emission of receivers	1.3dB	3dB
Radiated emission of transmitter, valid up to 26.5GHz	3.9dB	6dB
Radiated emission of transmitter, valid up to 80GHz	3.3dB	6dB
Radiated emission of receiver, valid up to 26.5GHz	3.9dB	6dB
Radiated emission of receiver, valid up to 80GHz	3.3dB	6dB
Humidity	2.37%	5%
Temperature	0.7°C	1.0°C
Time	4.1%	10%
RF Power Density, Conducted	0.4dB	3dB
DC and low frequency voltages	1.3%	3%
Voltage (AC, <10kHz)	1.3%	2%
Voltage (DC)	0.62%	1%
The above reflects a 95% confidence level		

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k = 2.

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

NOMINAL VOLTAGE	3.2VDC Battery
MODULATION TECHNOLOGY	DTS
MODULATION TYPES	GFSK
DATA RATES	1Mbps (GFSK)
OPERATING FREQUENCY	2402 – 2480MHz
EUT Power Setting	Default: 2 (Maximum)
OUTPUT POWER	0.75mW Conducted Average Power
ANTENNA TYPE	Chip antenna with 1.3dBi peak gain (Customer Supplied Information)

EUT Ports:									
Port Label	**Port Type**	**No. of ports**	**No. Populated**	**Cable Type**	**Shielded**	**Ferrites**	**Length**	**Max Length**	**In/Out Type**
Temperature Sensor Cable	Data	1	1	4-conductor	Yes	Yes	2m	3m	Out

Lowest clock frequency in the device (used/generated): 0.032678MHz

Highest clock frequency in the device (used/generated): 2480MHz.

NOTES:

1. For a more detailed description of the EUT, please refer to the manufacturer's specifications or the user's manual.
2. For photos of the EUT, please refer to External and Internal Photos exhibits.

3.2 DESCRIPTION OF TEST MODES

40 channels are provided for BLE (GFSK):

CHANNEL	FREQ. (MHZ)	CHANNEL	FREQ. (MHZ)	CHANNEL	FREQ. (MHZ)	CHANNEL	FREQ. (MHZ)
0	2402	10	2422	20	2442	30	2462
1	2404	11	2424	21	2444	31	2464
2	2406	12	2426	22	2446	32	2466
3	2408	13	2428	23	2448	33	2468
4	2410	14	2430	24	2450	34	2470
5	2412	15	2432	25	2452	35	2472
6	2414	16	2434	26	2454	36	2474
7	2416	17	2436	27	2456	37	2476
8	2418	18	2438	28	2458	38	2478
9	2420	19	2440	29	2460	39	2480

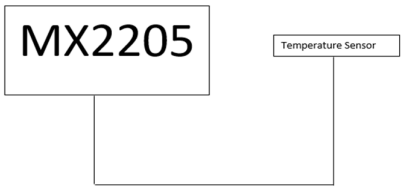
Two samples were provided for testing, one for radiated measurements and another with an SMA connector for conducted antenna port measurements. EUT was powered by a DC supply @ 3.2VDC (in order to avoid needing to replace battery during testing). Support laptop was used to activate and change BLE channels.

EUT configuration modes:

TEST MODE	DESCRIPTION
A	Continuous Transmit at 1Mbps (Duty-cycle: 63.4%)

EUT SETUP BLOCK DIAGRAMS

Radiated Emissions EUT Setup



Following channels/modes were selected for the applicable tests below.

TEST	TEST MODE	AVAILABLE CHANNELS	TESTED CHANNEL	MODULATION TYPE	DATA RATE (Mbps)	Notes
COP	A	0 to 39	0,19,39	GFSK	1	--
PSD	A	0 to 39	0,19,39	GFSK	1	--
CBE	A	0 to 39	0,39	GFSK	1	--
6DB	A	0 to 39	0,19,39	GFSK	1	--
OBW	A	0 to 39	0,19,39	GFSK	1	--
CSE	A	0 to 39	0,19,39	GFSK	1	--
RSE<1G	A	0 to 39	0,19,39	GFSK	1	1
RSE≥1G	A	0 to 39	0,19,39	GFSK	1	1
RBE	A	0 to 39	0,39	GFSK	1	1
PLCE	-					2

Note 1: For radiated emissions, worst-case orientation was found when the EUT was positioned on Y axis as shown in the Test Setup Photos exhibit.
Note 2: Not applicable since EUT is battery powered only.
COP: Conducted Output Power
PSD: Power Spectral Density
CBE: Conducted Band-edge
6DB: 6dB Bandwidth
OBW: 99% Occupied Bandwidth
CSE: Conducted Spurious Emissions
RSE<1G: Radiated Spurious Emissions Below 1GHz
RSE≥1G: Radiated Spurious Emissions Above 1GHz
RBE: Radiated Band-edge
PLCE: Power Line Conducted Emissions

TEST CONDITIONS:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY	DATE OF TEST
RE<1G	22.8°C, 54.9% RH, 994 mbar 22.8°C, 56.1% RH, 990 mbar	3.2VDC	MCM	Jun 14, 2023 Jun 15, 2023
RE≥1G	21.4°C, 47.2% RH, 999 mbar 22.8°C, 53.9% RH, 1000 mbar	3.2VDC	MCM	Jun 09, 2023 Jun 12, 2023
Antenna Port Measurements	22.6°C, 49.8% RH, 997 mbar	3.2VDC	MCM	Jun 08, 2023

3.3 MEASUREMENT PROCEDURES USED

All tests were performed in accordance with the following measurement procedures:

FCC KDB 558074 D01 15.247 Meas Guidance v05r02

ANSI C63.10-2013

3.4 DESCRIPTION OF SUPPORT EQUIPMENT

A laptop computer was supplied by the customer to setup BLE transmit test modes.

4 TEST RESULTS

4.1 RADIATED SPURIOUS EMISSIONS

4.1.1 LIMITS

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emissions limits specified in Section 15.209(a).

FREQUENCIES (MHz)	FIELD STRENGTH (microvolts/meter)	MEASUREMENT DISTANCE (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

NOTES:

1. Lower limit applies at the transition frequencies.
2. dBµV/m = 20*log(µV/m).
3. As specified in 15.35(b), for frequencies above 1000MHz, field strength limits are based on the use of measurement instrumentation employing an average detector function. However, there is also a limit on the peak level of the emissions that is 20 dB above the maximum permitted average emission limit.
4. Measurements above 6GHz or 18GHz can be performed at distances less than 3m from the EUT due to increased noise floor of the measurement system. Since such measurements produce higher amplitudes than what they supposedly would be if they were measured at 3 meters, this would be considered worst-case and no compensation back to 3 meters is needed. Limit conversion above 30MHz is done by using inverse linear distance extrapolation factor (20dB/decade) as allowed in FCC 15.31(f)(1).

   Limit(1m) = Limit(3m) + 20*log(3/1) = Limit(3m) + 9.5

   Limit(0.1m) = Limit(3m) + 20*log(3/0.1) = Limit(3m) + 29.5
5. Limit conversion below 30MHz is done by using the square of an inverse linear distance extrapolation factor (40 dB/decade) as allowed in FCC 15.31(f)(2).

   Limit(3m) = Limit(30m) + 40*log(30/3) = Limit(30m) + 40

   Limit (3m) = Limit (300m) + 40*log(300/3) = Limit (300m) + 80
6. Adjusted Reading (dBuV/m) = Raw Reading (dBuV) + Transducer(Correction) Factor (dB/m)

   Transducer Factor (dB/m) = Antenna Factor (dB/m) – PreAmp Gain (dB) + Cable Loss (dB) + Filter Loss (dB)
   Note: Filter loss only applies if a notch filter is used during testing.
7. RSS-GEN Table 6 H-field limits are 51.5dB lower than FCC 15.209(a) E-field limits. Measurements are performed in terms of magnetic field and converted to electric field using the free space impedance of 377Ω (E-field = H-field +51.5). Therefore resulting pass/fail margin would be the same if an E-field reading is compared to an H-field limit.

4.1.2 TEST EQUIPMENT USED

Rev. 4/28/2023

Spectrum Analyzers / Receivers /Preselectors	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Gold	100Hz-26.5 GHz	E4407B	Agilent	MY45113816	1284	I	1/23/2024	1/23/2023
2093 MXE EMI Receiver	20Hz-26.5GHz	N9038A	Agilent	MY51210181	2093	I	3/30/2024	3/30/2023
Radiated Emissions Sites	**FCC Code**	**IC Code**	**VCCI Code**	**Range**	**Asset**	**Cat**	**Calibration Due**	**Calibrated on**
EMI Chamber 2	719150	2762A-7	A-0015	0.009-40000MHz	1686	I	12/28/2024	12/28/2022
Preamps /Couplers Attenuators / Filters	**Range**	**MN**	**Mfr**	**SN**	**Asset**	**Cat**	**Calibration Due**	**Calibrated on**
8449B HF Preamp	1-18GHz	8449B	Agilent	1149055		II	11/1/2023	11/1/2022
8447F Rental PA	9KHz-1.3GHz	84477F	HP	3113A05395		II	10/17/2023	10/17/2022
HF (Yellow)	18-26.5GHz	AFS4-18002650-60-8P-4	CS	467559	1266	II	10/25/2023	10/25/2022
Antennas	**Range**	**MN**	**Mfr**	**SN**	**Asset**	**Cat**	**Calibration Due**	**Calibrated on**
Red-White Bilog	30-2000MHz	JB1	Sunol	A091604-1	1105	I	10/25/2023	10/25/2021
Blue Horn	1-18Ghz	3117	ETS	157647	1861	I	3/27/2025	3/27/2023
Small Loop	10kHz-30MHz	PLA-130/A	ARA	1024	755	I	9/12/2024	9/12/2022
Large Loop	20Hz-5MHz	6511	EMCO	9704-1154	67	I	8/22/2024	8/22/2022
Meteorological Meters/Chambers		**MN**	**Mfr**	**SN**	**Asset**	**Cat**	**Calibration Due**	**Calibrated on**
Asset 2707		SD700	EXTECH	A.115171	2707	I	1/13/2025	1/13/2023
Asset #2655		1235C97	Control Company	181683829	2655	I	8/18/2025	8/18/2022
Cables	**Range**		**Mfr**			**Cat**	**Calibration Due**	**Calibrated on**
Asset #2466	9KHz-18GHz		MegaPhase			II	11/1/2023	11/1/2022
Asset #2608	9KHz-18GHz		Pasternack			II	11/1/2023	11/1/2022
Asset #2323	1-26.5GHz	TM26-S1S1-120	MEGAPHASE	17139101 002		II	9/14/2023	9/14/2022
Asset #2682	9KHz-18GHz		Pasternack			II	10/6/2023	10/6/2022

All equipment is calibrated using standards traceable to NIST or other nationally recognized calibration standard.

4.1.3 TEST PROCEDURES

a. The EUT was placed on the top of a rotating table 1.5 meters (above 1GHz) and 0.8 meters (below 1GHz) above the ground at a 3 meters semi-anechoic chamber.

b. For below 30MHz, a loop antenna with its lowest point 1m above the ground was placed 3m away from the EUT and it was rotated 0 and 90 degrees around its vertical axis.

c. In 30MHz-1GHz range, a biconilog antenna was mounted on a variable-height antenna tower and placed 3m away from the EUT. Antenna height was varied from 1 meter to 4 meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna were investigated. The table was rotated 360 degrees to determine the position of the highest radiation.

d. In 1GHz-6GHz range, a horn antenna was mounted on a variable-height antenna tower and placed 3m away from the EUT. Antenna height was varied from 1 meter to 4 meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna were investigated. The table was rotated 360 degrees to determine the position of the highest radiation. Using the same antenna, the measurement distance was reduced to 1m in 6-18GHz range.

e. In 18-25GHz a smaller horn antenna was used to make measurements at 0.1m away from the EUT.

f. For battery operated equipment, tests were performed using fresh batteries.

g. Following bandwidths were used during emissions testing:

Freq. (MHz)	RBW	VBW	Pre-scan	Final
0.009-0.15	200Hz	1kHz	Peak	Quasi Peak and RMS Power Avg (Trace Avg)
0.15-30	9kHz	30kHz	Peak	Quasi Peak and RMS Power Avg (Trace Avg)
30-1000	120kHz	300kHz	Peak	Quasi Peak
>1000	1MHz	3MHz	Peak	Peak Max Hold and RMS Power Avg (Trace Avg)

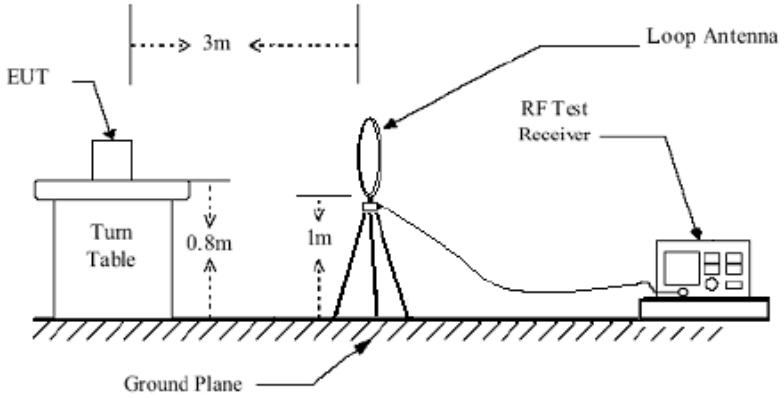
Per FCC §15.209(d), limits §15.209(a) are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector. If peak measurements in these frequency bands were below the applicable limits, QPk and RMS measurements were not performed.

4.1.4 DEVIATIONS

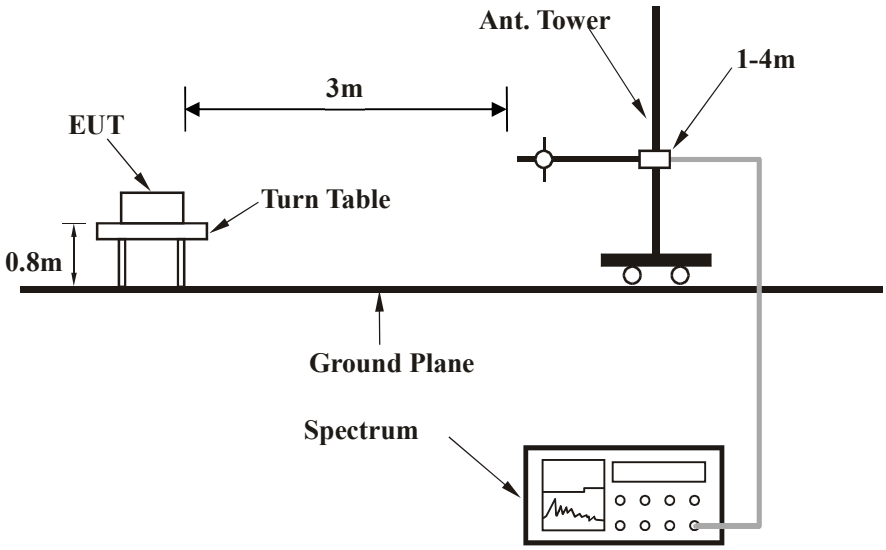
No deviations from the standard.

4.1.5 TEST SETUP

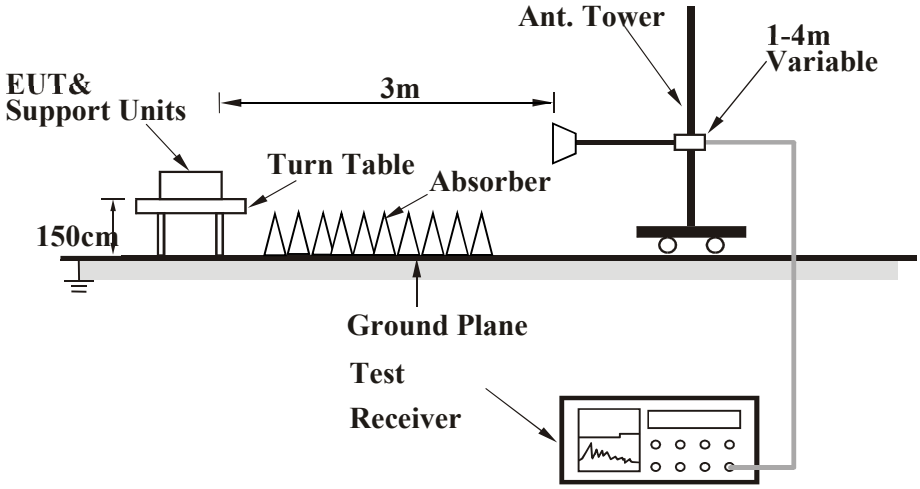
Below 30MHz Test Setup



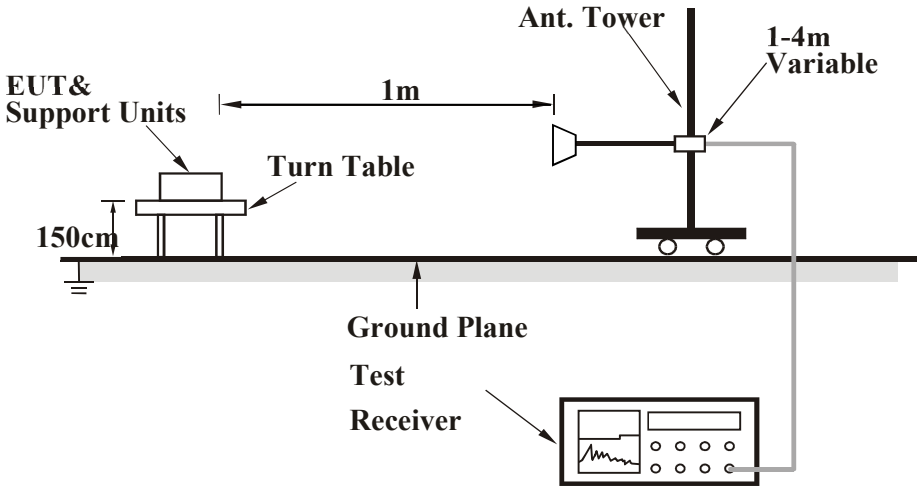
30MHz - 1GHz Test Setup



1GHz – 6GHz Test Setup



6GHz – 18GHz Test Setup



Note: For the actual test configuration, please refer to the Test Setup Photos exhibit.

4.1.6 EUT OPERATING CONDITIONS

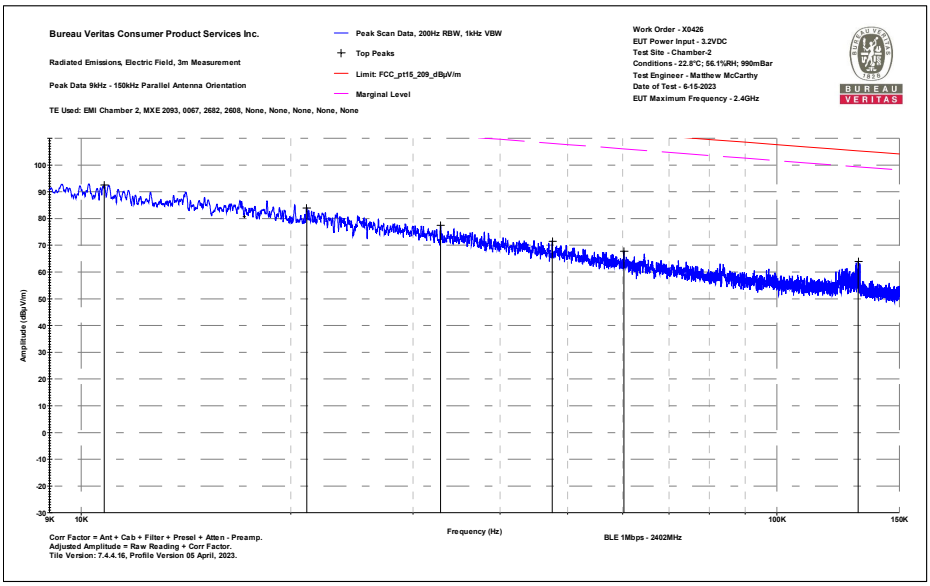
EUT was operated according to the manufacturer's specifications.

4.1.7 TEST RESULTS

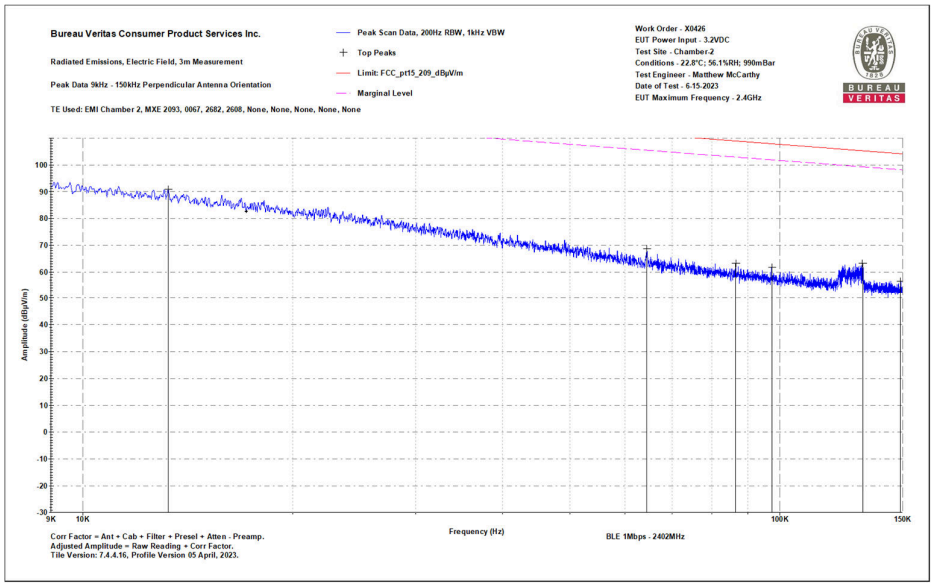
Emissions below 1GHz

Results for BLE 1Mbps GFSK Channel 0

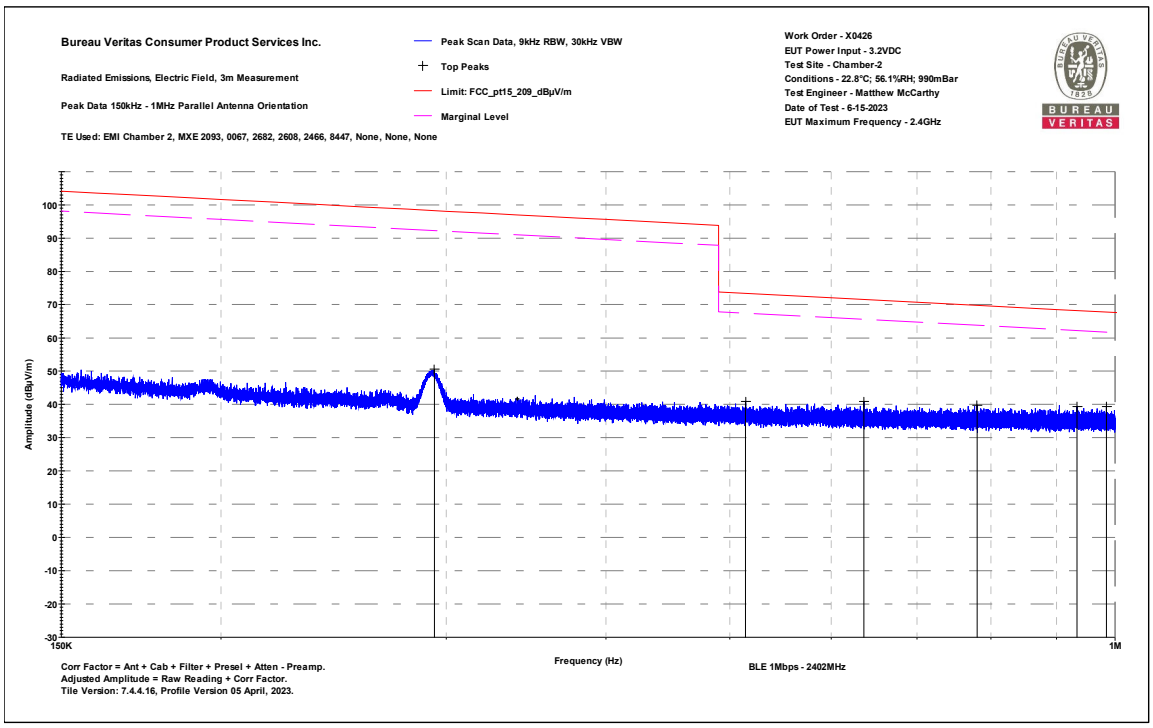
No emissions within 10dB of the limit were identified in 9kHz-30MHz range. Only plots shown below.



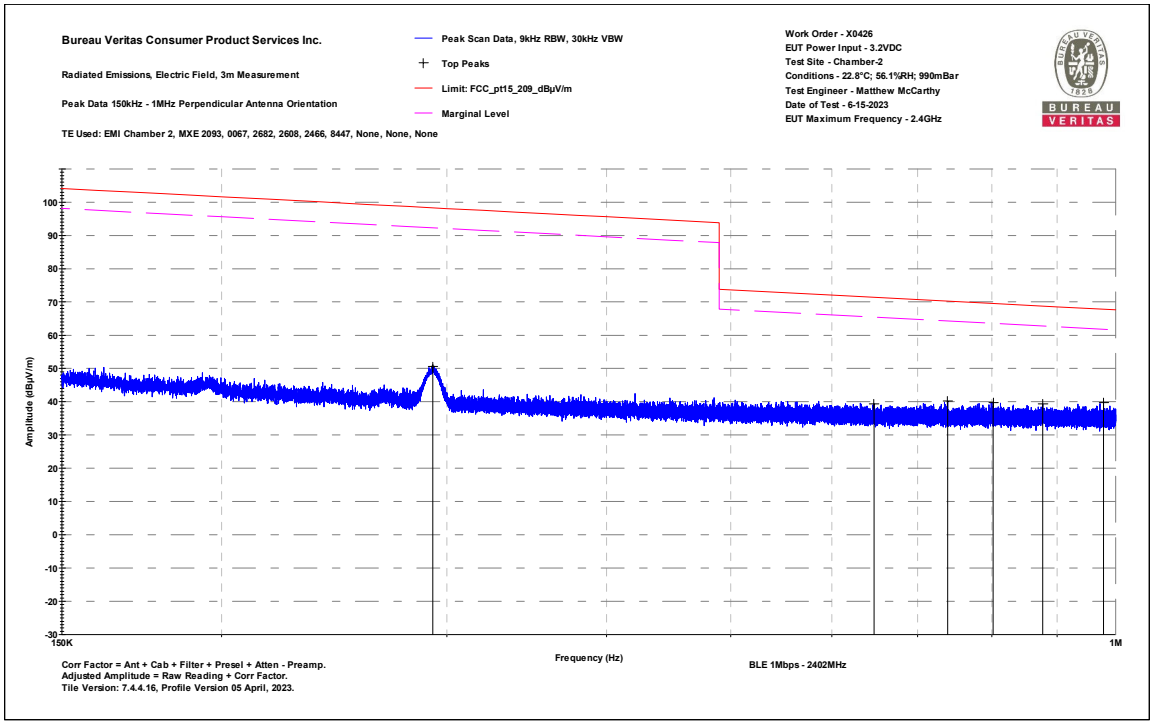
0.009-0.15MHz Parallel



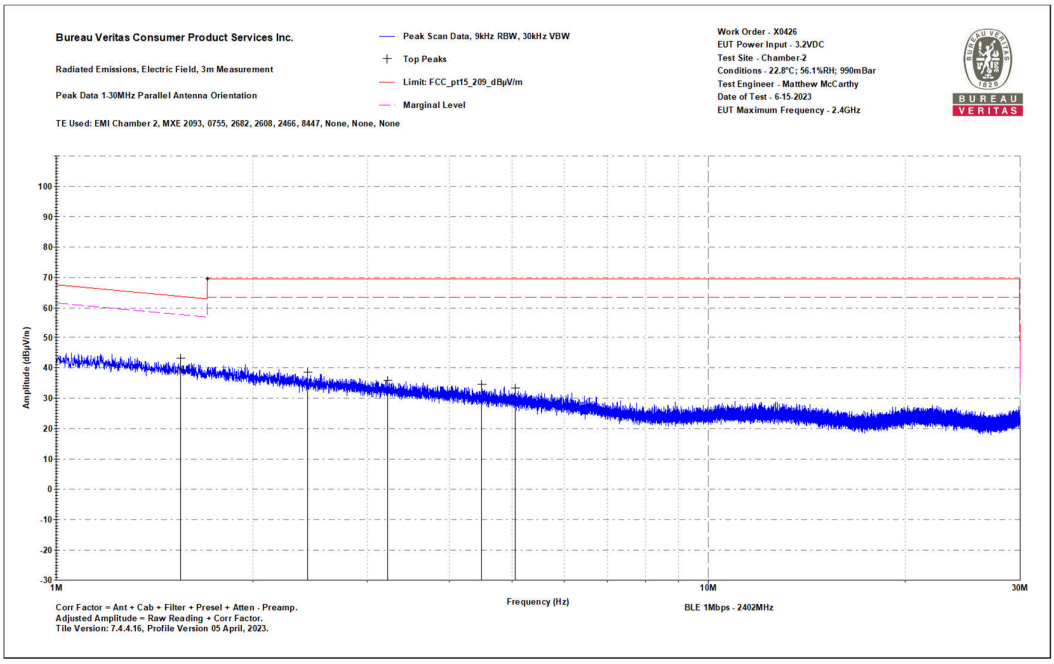
0.009-0.15MHz Perpendicular



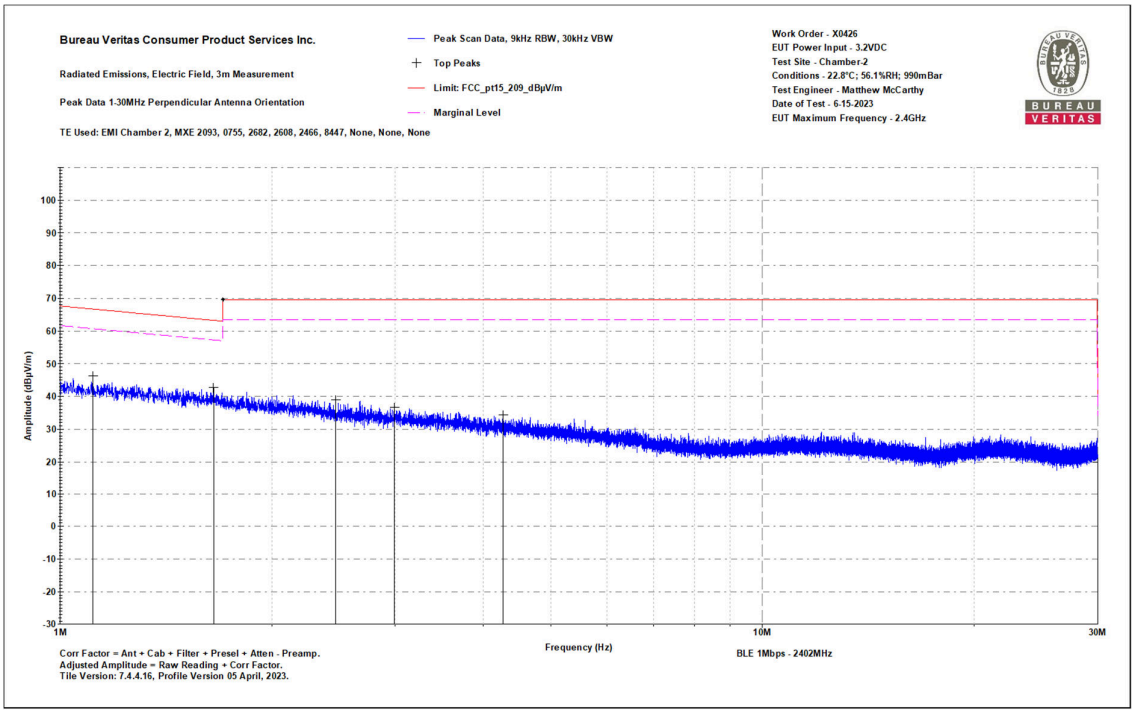
0.15-1MHz Parallel



0.15-1MHz Perpendicular



1-30MHz Parallel

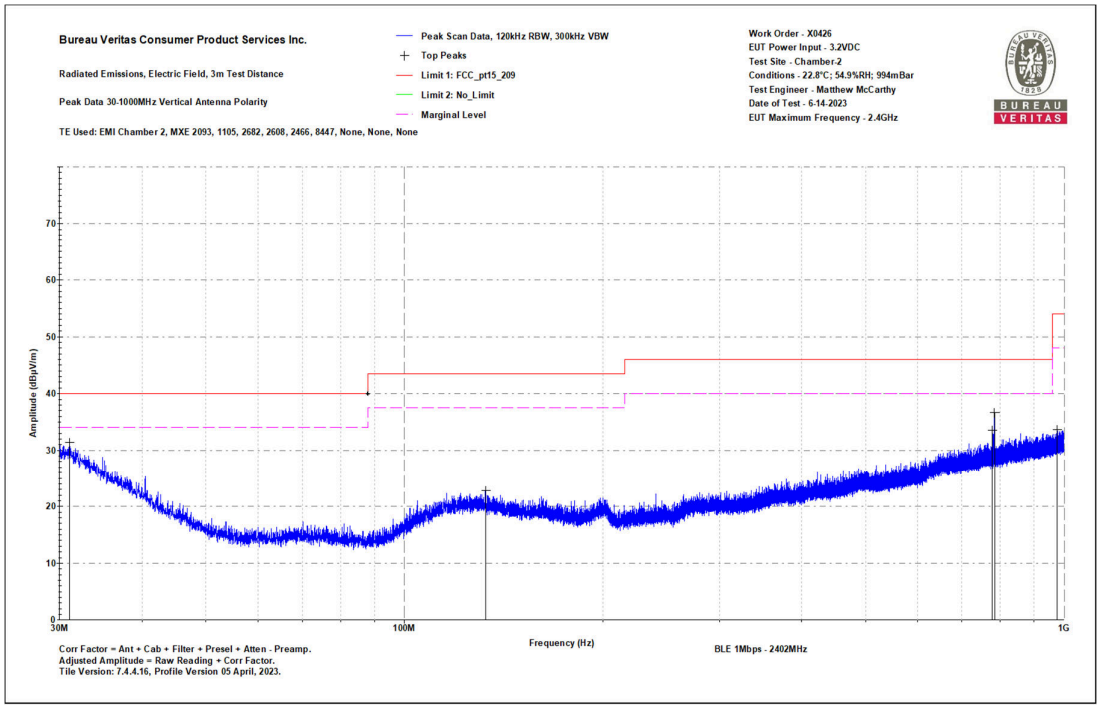


1-30MHz Perpendicular

Bureau Veritas Consumer Product Services Inc.	Work Order - X0426
Radiated Emissions Electric Field 3m Distance	EUT Power Input - 3.2VDC
Top Peaks Vertical 30-1000MHz	Test Site - Chamber-2
Notes:	Conditions - 22.8°C; 54.9%RH; 994mBar
BLE 1Mbps - 2402MHz	Test Engineer - Matthew McCarthy
	Date of Test - 6-14-2023

Frequency (MHz)	Peak Reading (dBµV)	Correction Factor (dB/m)	Adjusted Peak Amplitude (dBµV/m)	Lim1: FCC_pt15_209 (dBµV/m)	Lim1 Margin (dB)	Lim1 Test Results (Pass/Fail)	Worst Margin Lim1 (dB)
31.043	31.6	-0.2	31.3	40	-8.7	PASS	-8.7
132.796	29.5	-6.7	22.8	43.5	-20.7	PASS	
778.889	31.6	2	33.6	46	-12.4	PASS	
784.733	34.6	2.1	36.7	46	-9.3	PASS	
976.308	28.6	5.1	33.8	54	-20.2	PASS	

30-1000MHz Vertical Data Table



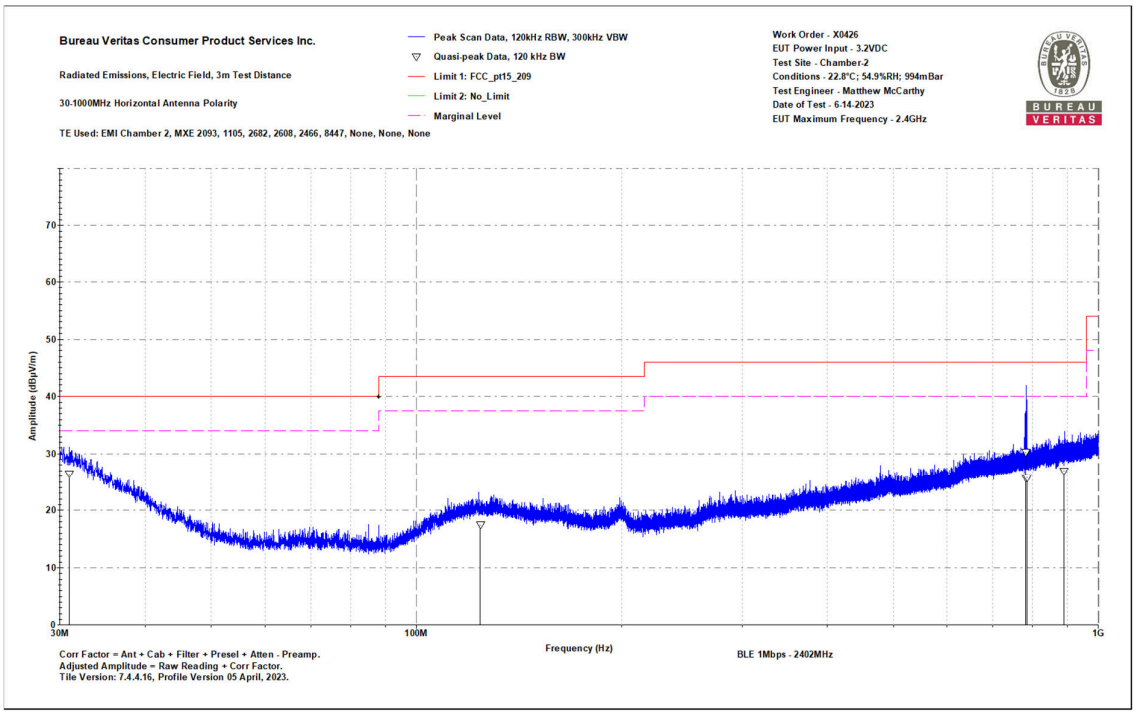
30-1000MHz Vertical Plot

Bureau Veritas Consumer Product Services Inc.
Radiated Emissions Electric Field 3m Distance
30-1000MHz Horizontal Data
Notes:
BLE 1Mbps - 2402MHz

Work Order - X0426
EUT Power Input - 3.2VDC
Test Site - Chamber-2
Conditions - 22.8°C; 54.9%RH; 994mBar
Test Engineer - Matthew McCarthy
Date of Test - 6-14-2023

Frequency (MHz)	Raw QP Reading (dBµV)	Correction Factor (dB/m)	Adjusted QP Amplitude (dBµV/m)	Lim1: FCC_pt15_209 (dbµV/m)	Margin to Lim1 (dB)	Test Results Lim1 (Pass/Fail)	Worst Margin Lim1 (dB)
30.934	26.6	-0.1	26.4	40	-13.6	PASS	-13.6
123.984	24.3	-6.8	17.5	43.5	-26	PASS	
781.773	28.2	2	30.3	46	-15.7	PASS	
782.542	23.7	2	25.8	46	-20.2	PASS	
785.477	23.7	2.1	25.8	46	-20.2	PASS	
890.823	23.2	3.8	27	46	-19	PASS	

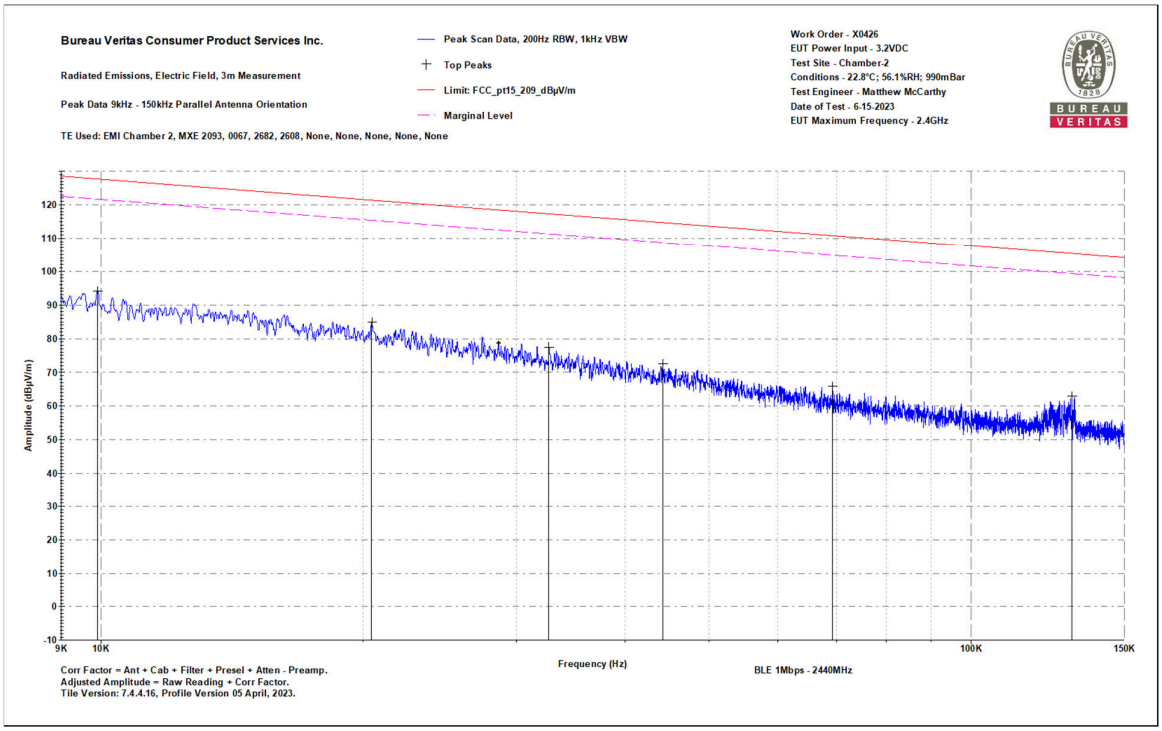
30-1000MHz Horizontal Data Table



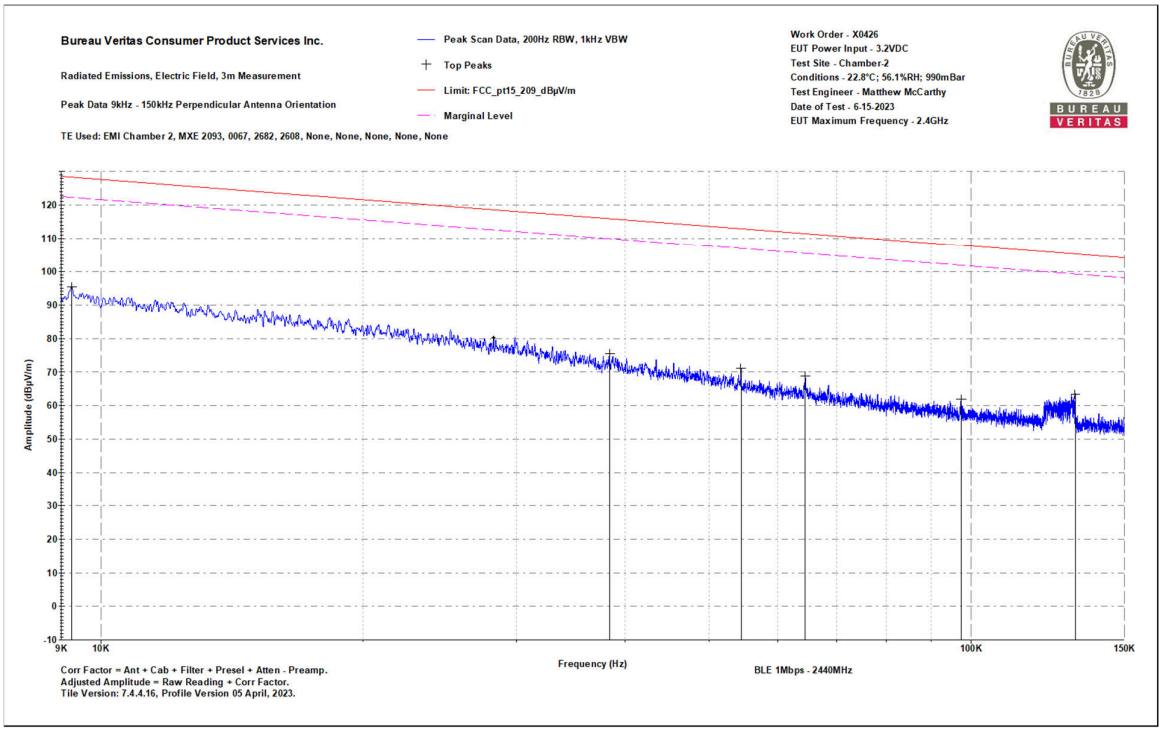
30-1000MHz Horizontal Plot

Results for BLE 1Mbps GFSK Channel 19

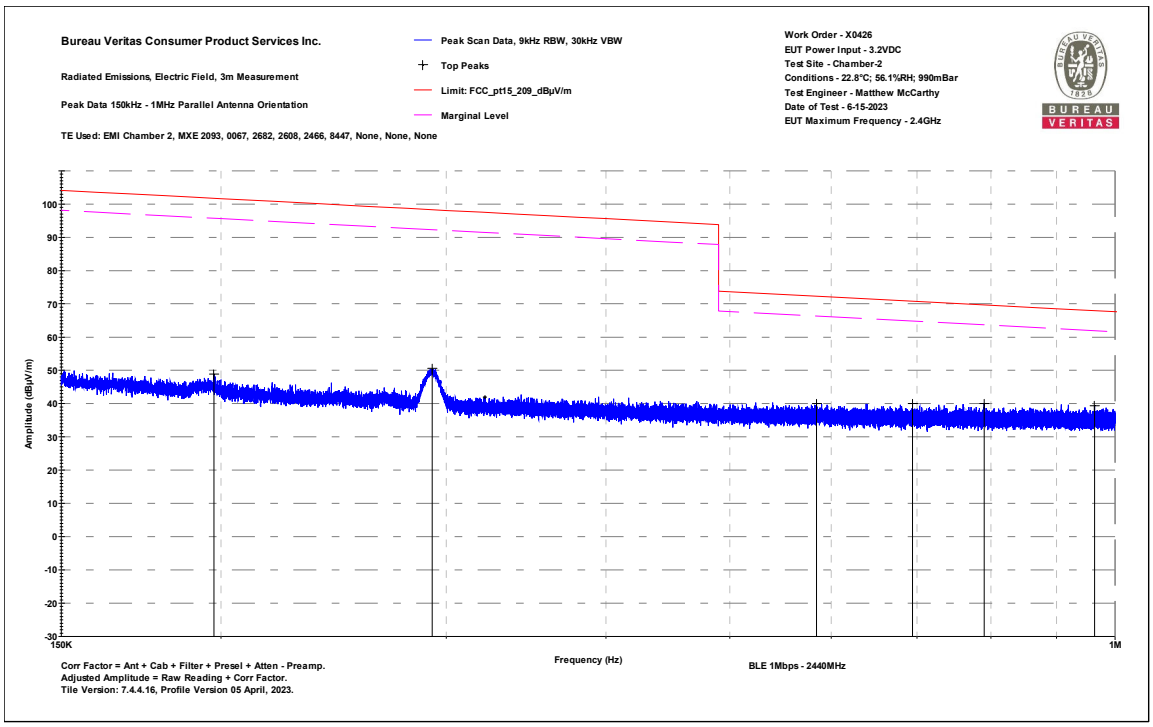
No emissions within 10dB of the limit were identified in 9kHz-30MHz range. Only plots shown below.



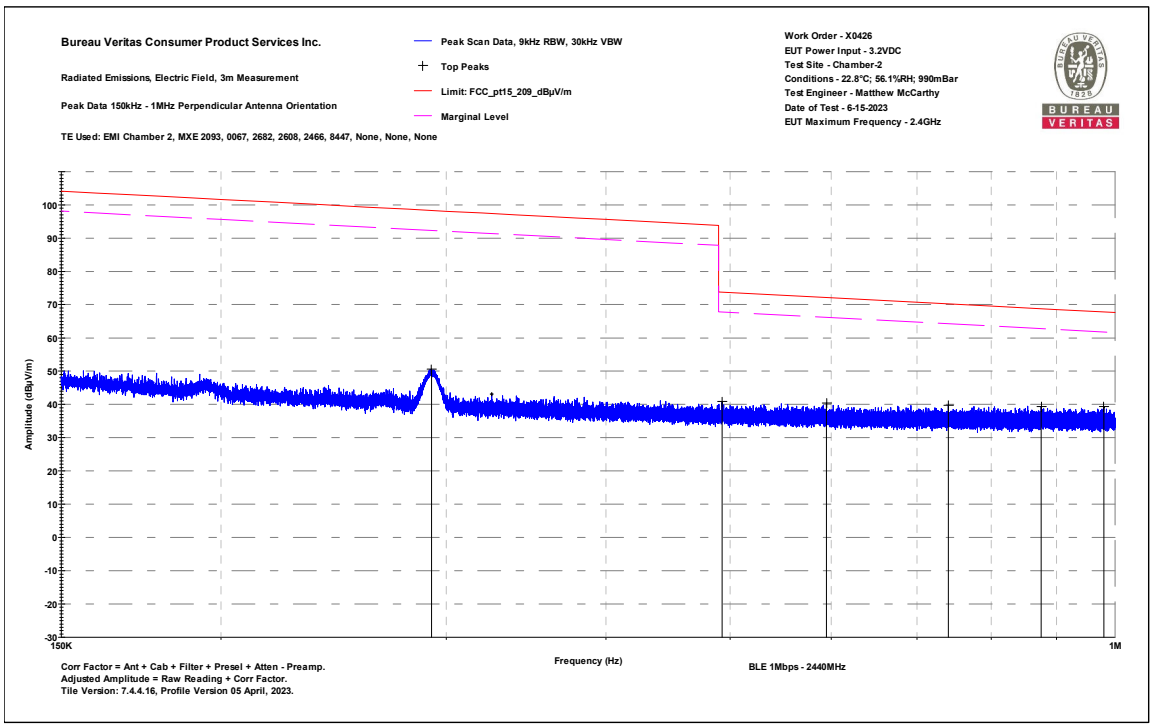
0.009-0.15MHz Parallel



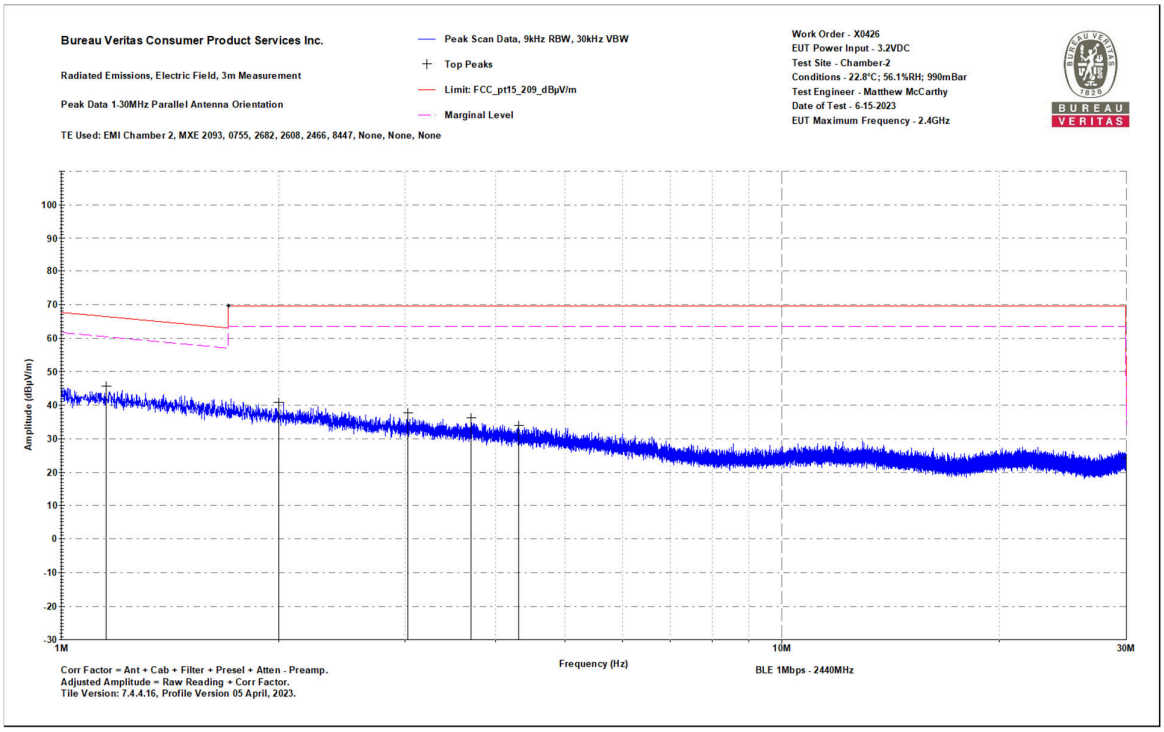
0.009-0.15MHz Perpendicular



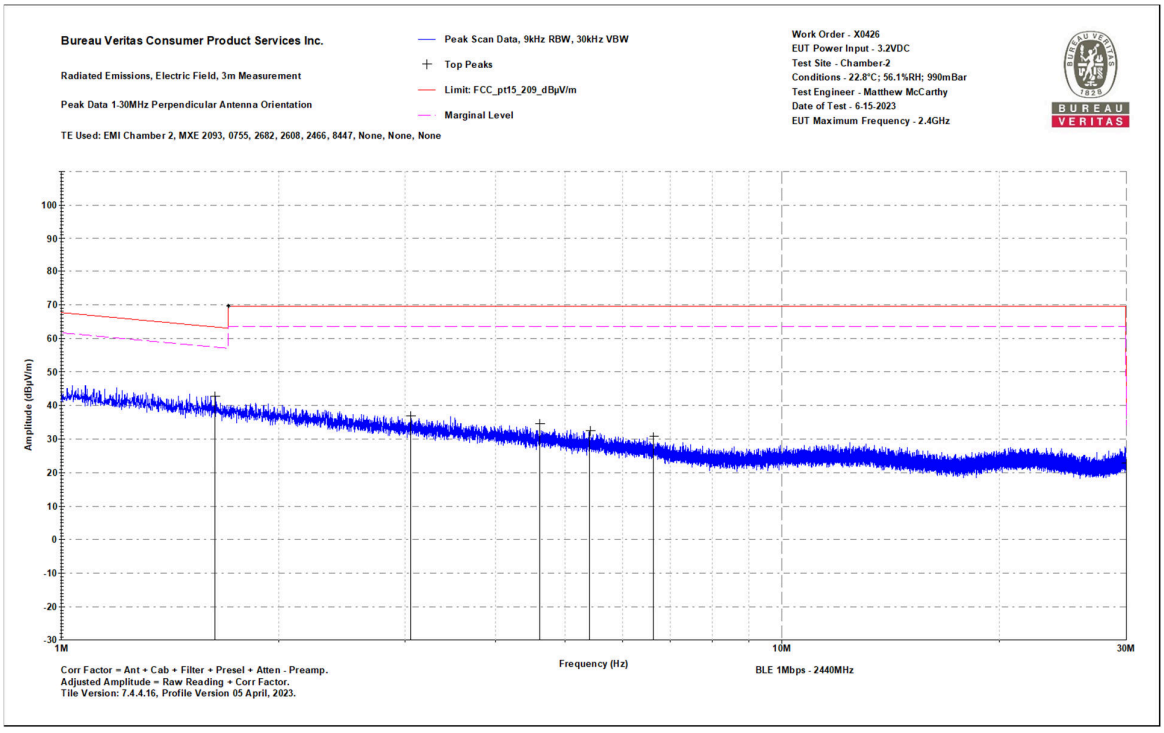
0.15-1MHz Parallel



0.15-1MHz Perpendicular



1-30MHz Parallel



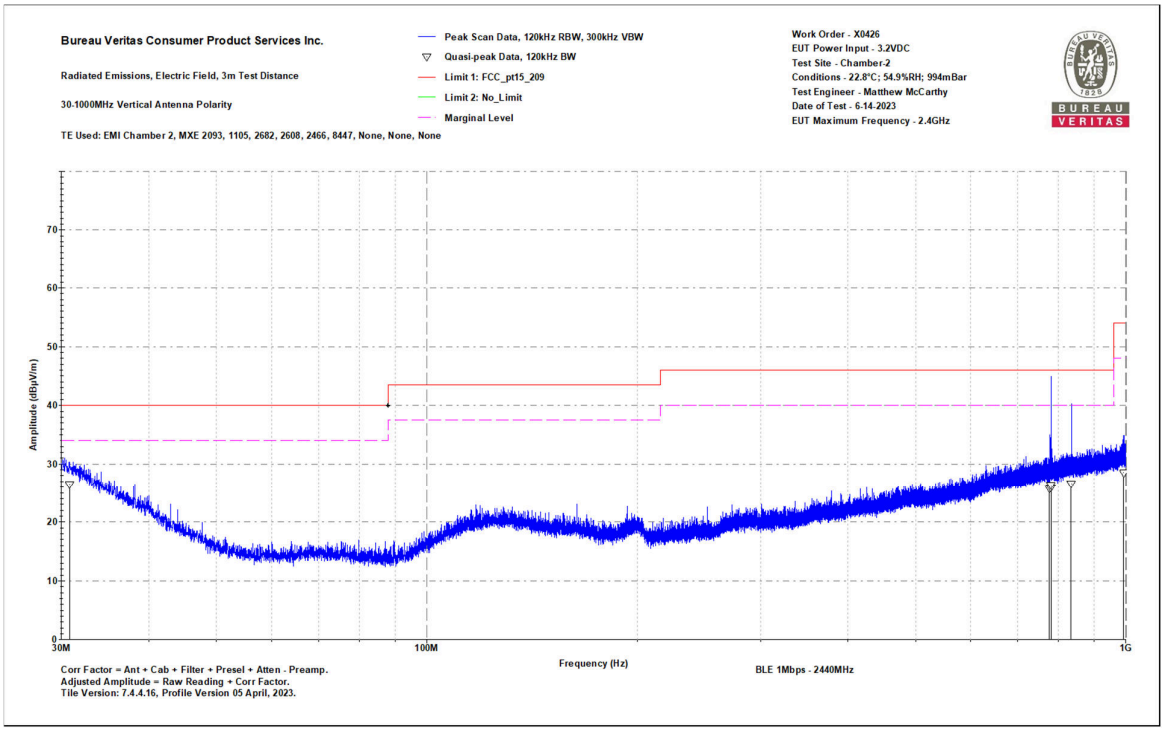
1-30MHz Perpendicular

Bureau Veritas Consumer Product Services Inc.
Radiated Emissions Electric Field 3m Distance
30-1000MHz Vertical Data
Notes:
BLE 1Mbps - 2440MHz

Work Order - X0426
EUT Power Input - 3.2VDC
Test Site - Chamber-2
Conditions - 22.8°C; 54.9%RH; 994mBar
Test Engineer - Matthew McCarthy
Date of Test - 6-14-2023

Frequency (MHz)	Raw QP Reading (dBµV)	Correction Factor (dB/m)	Adjusted QP Amplitude (dBµV/m)	Lim1: FCC_pt15_209 (dBµV/m)	Margin to Lim1 (dB)	Test Results Lim1 (Pass/Fail)	Worst Margin Lim1 (dB)
30.827	26.5	-0.1	26.4	40	-13.6	PASS	-13.6
777.314	23.7	2	25.7	46	-20.3	PASS	
781.211	23.7	2.1	25.8	46	-20.2	PASS	
781.616	24.3	2	26.3	46	-19.7	PASS	
835.055	23.4	3.1	26.6	46	-19.4	PASS	
992.756	22.8	5.7	28.5	54	-25.5	PASS	

30-1000MHz Vertical Data Table

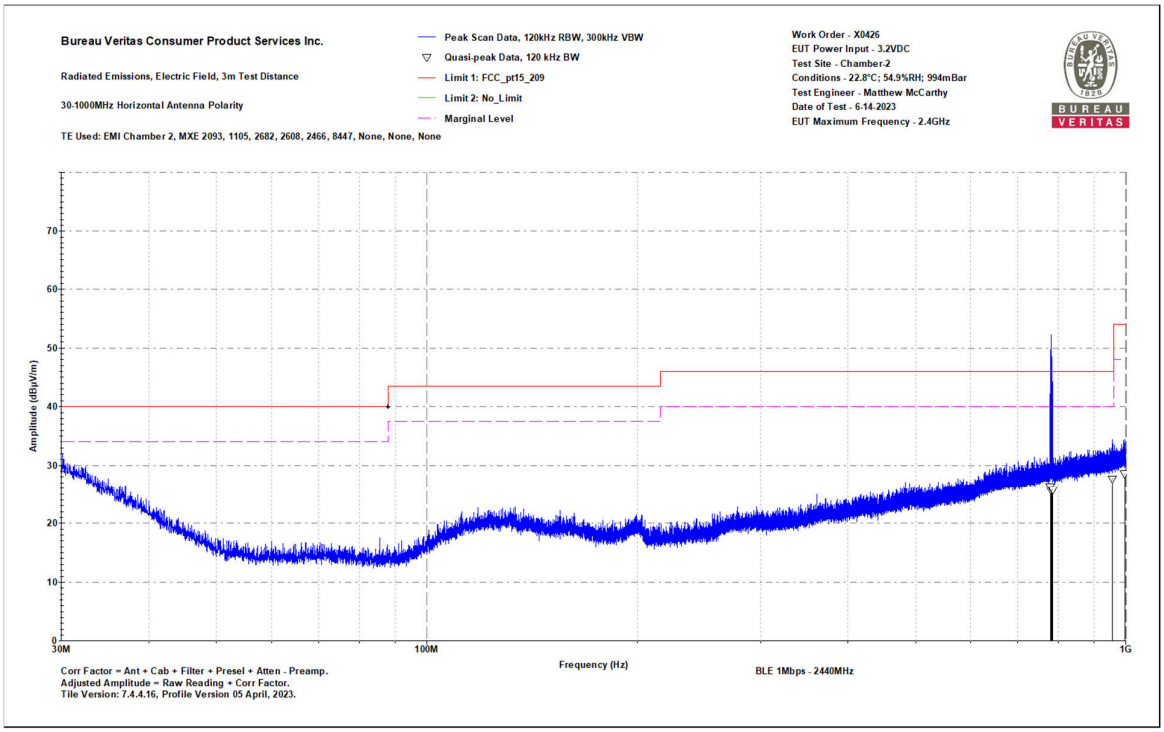


30-1000MHz Vertical Plot

Bureau Veritas Consumer Product Services Inc.	Work Order - X0426
Radiated Emissions Electric Field 3m Distance	EUT Power Input - 3.2VDC
30-1000MHz Horizontal Data	Test Site - Chamber-2
Notes:	Conditions - 22.8°C; 54.9%RH; 994mBar
BLE 1Mbps - 2440MHz	Test Engineer - Matthew McCarthy
	Date of Test - 6-14-2023

Frequency (MHz)	Raw QP Reading (dBµV)	Correction Factor (dB/m)	Adjusted QP Amplitude (dBµV/m)	Lim1: FCC_pt15_209 (dbµV/m)	Margin to Lim1 (dB)	Test Results Lim1 (Pass/Fail)	Worst Margin Lim1 (dB)
779.454	24.4	2	26.4	46	-19.6	PASS	
781.26	23.7	2.1	25.8	46	-20.2	PASS	
784.133	23.7	2.1	25.8	46	-20.2	PASS	
786.063	23.7	2.1	25.7	46	-20.3	PASS	
955.505	22.8	4.9	27.7	46	-18.3	PASS	-18.3
996.336	22.7	5.8	28.5	54	-25.5	PASS	

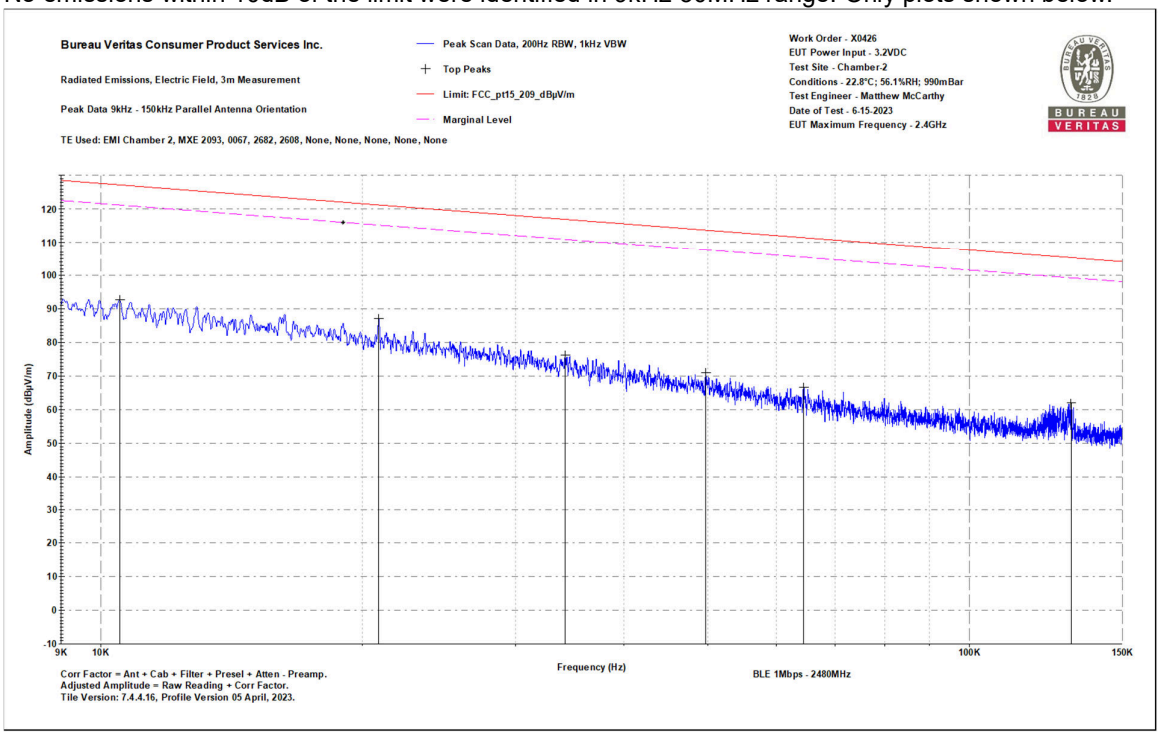
30-1000MHz Horizontal Data Table



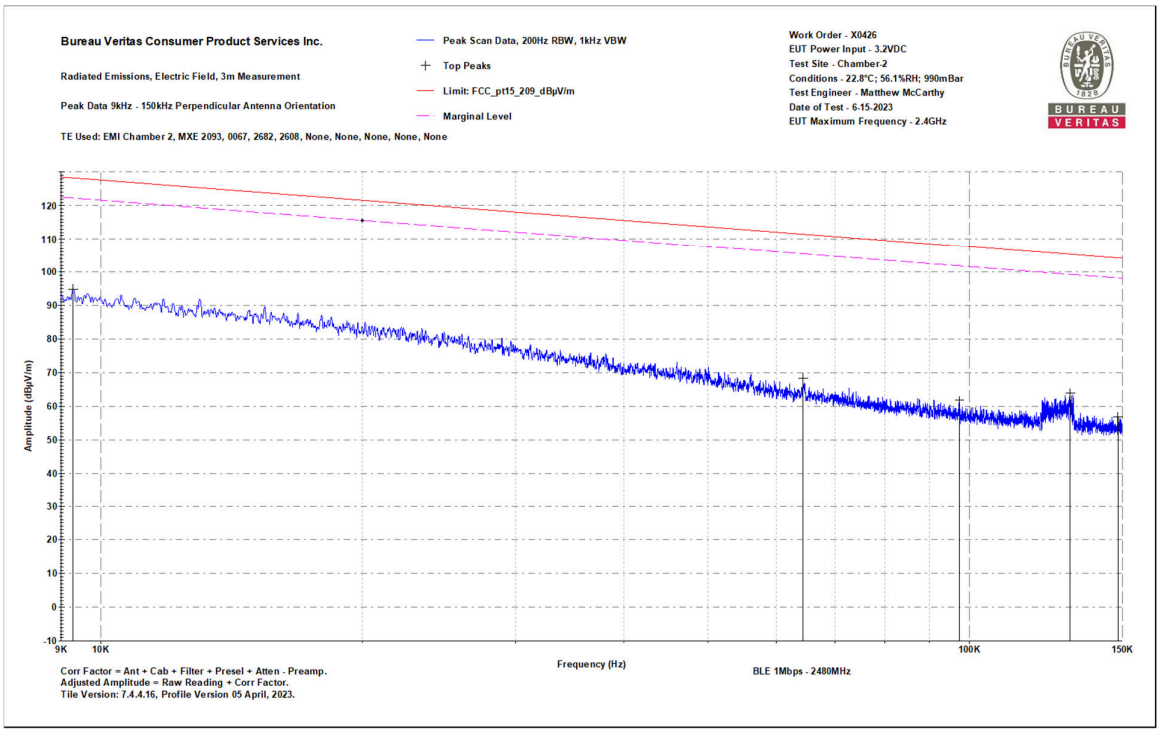
30-1000MHz Horizontal Plot

Results for BLE 1Mbps GFSK Channel 39

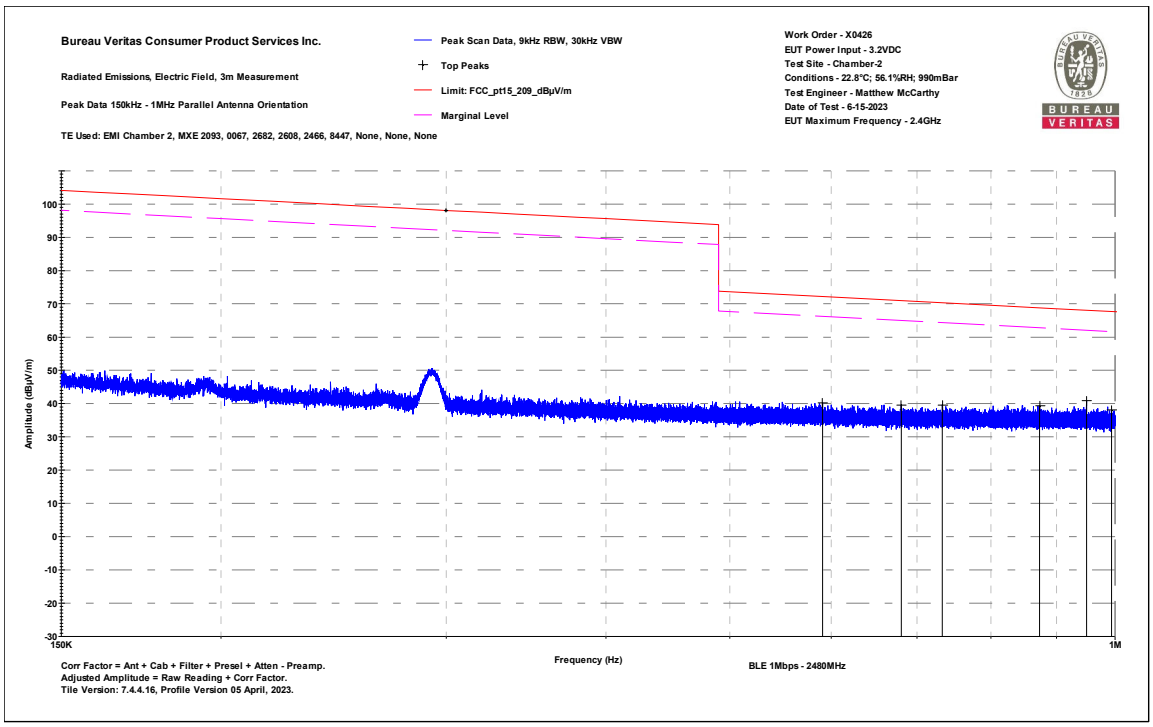
No emissions within 10dB of the limit were identified in 9kHz-30MHz range. Only plots shown below.



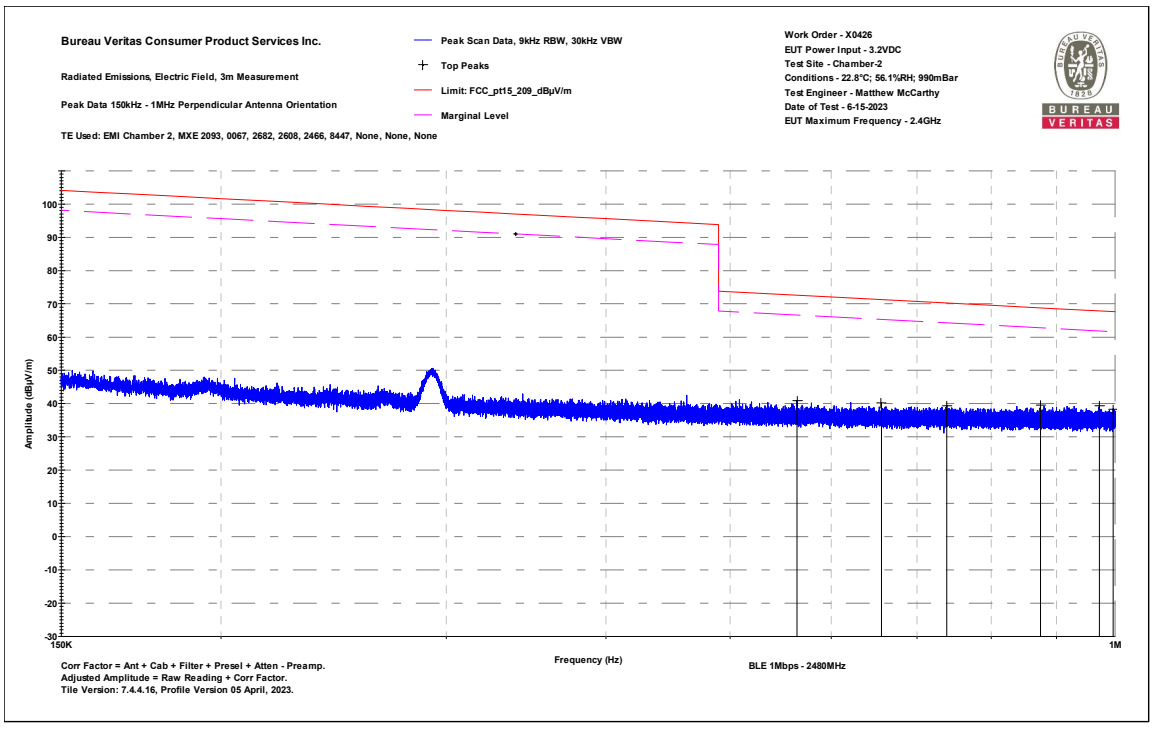
0.009-0.15MHz Parallel



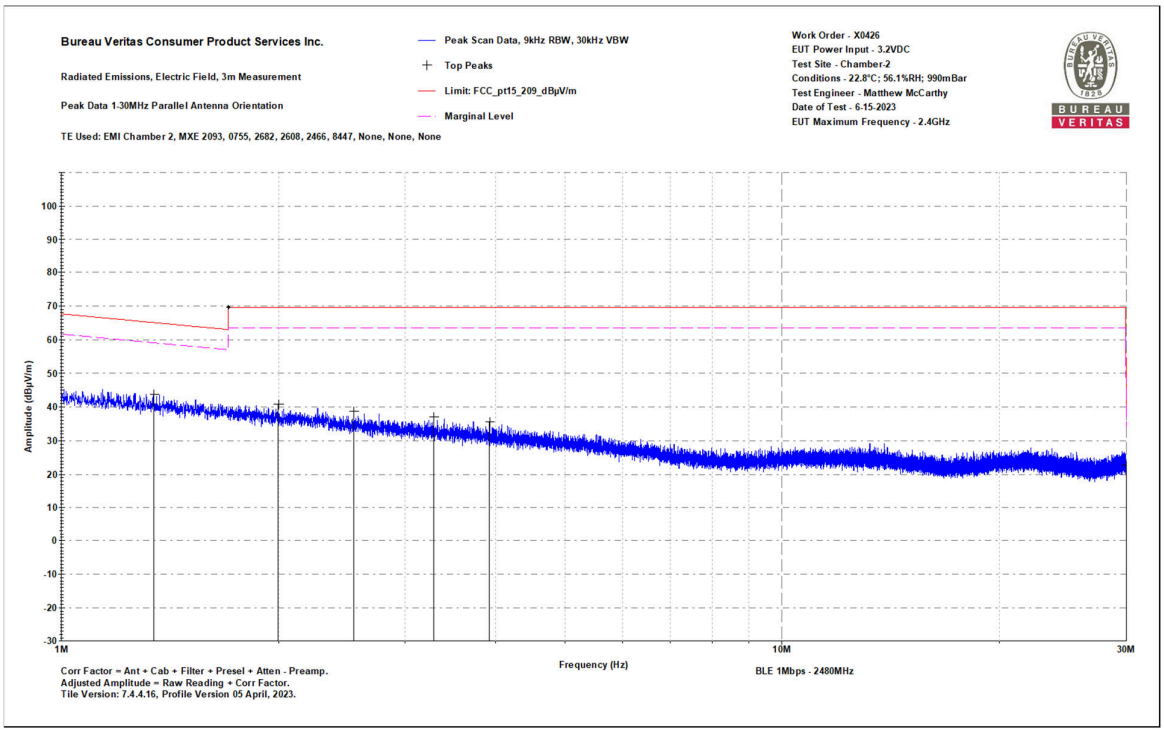
0.009-0.15MHz Perpendicular



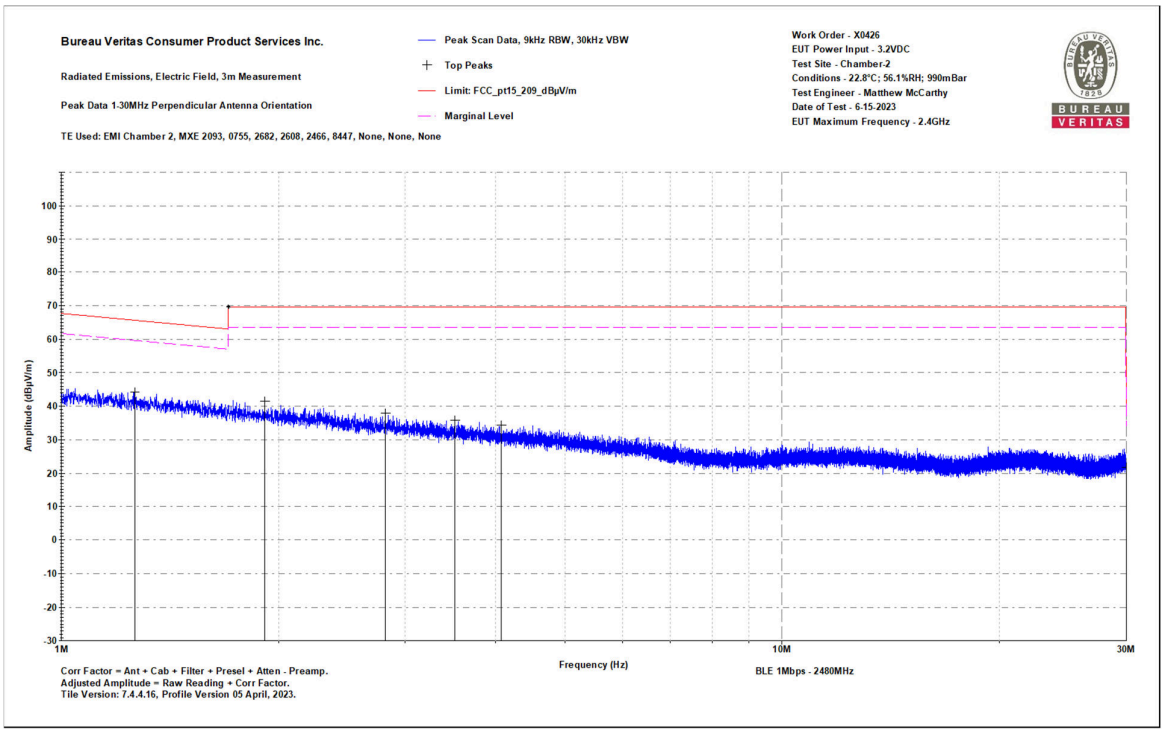
0.15-1MHz Parallel



0.15-1MHz Perpendicular



1-30MHz Parallel



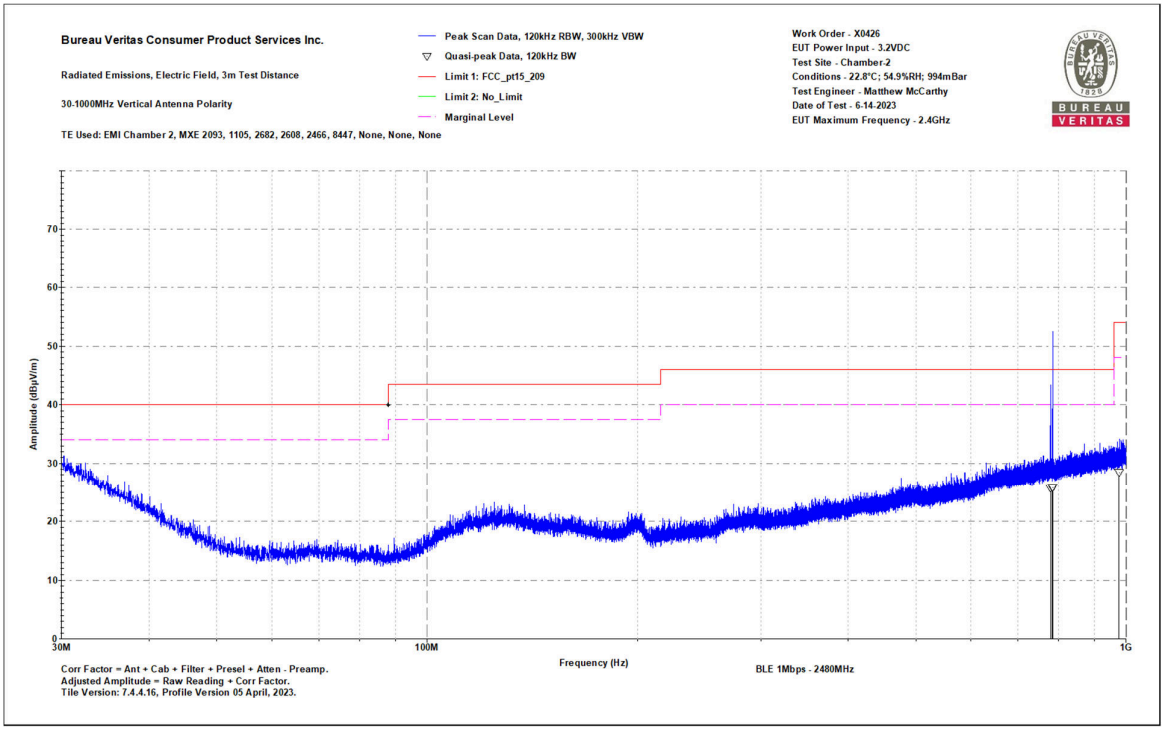
1-30MHz Perpendicular

Bureau Veritas Consumer Product Services Inc.
Radiated Emissions Electric Field 3m Distance
30-1000MHz Vertical Data
Notes:
BLE 1Mbps - 2480MHz

Work Order - X0426
EUT Power Input - 3.2VDC
Test Site - Chamber-2
Conditions - 22.8°C; 54.9%RH; 994mBar
Test Engineer - Matthew McCarthy
Date of Test - 6-14-2023

Frequency (MHz)	Raw QP Reading (dBµV)	Correction Factor (dB/m)	Adjusted QP Amplitude (dBµV/m)	Lim1: FCC_pt15_209 (dBµV/m)	Margin to Lim1 (dB)	Test Results Lim1 (Pass/Fail)	Worst Margin Lim1 (dB)
779.328	23.8	2	25.8	46	-20.2	PASS	
779.446	23.7	2	25.7	46	-20.3	PASS	
783.765	23.7	2.1	25.8	46	-20.2	PASS	
785.152	23.6	2.1	25.7	46	-20.3	PASS	
785.268	23.7	2.1	25.8	46	-20.2	PASS	-20.2
977.367	23.2	5.1	28.4	54	-25.6	PASS	

30-1000MHz Vertical Data Table



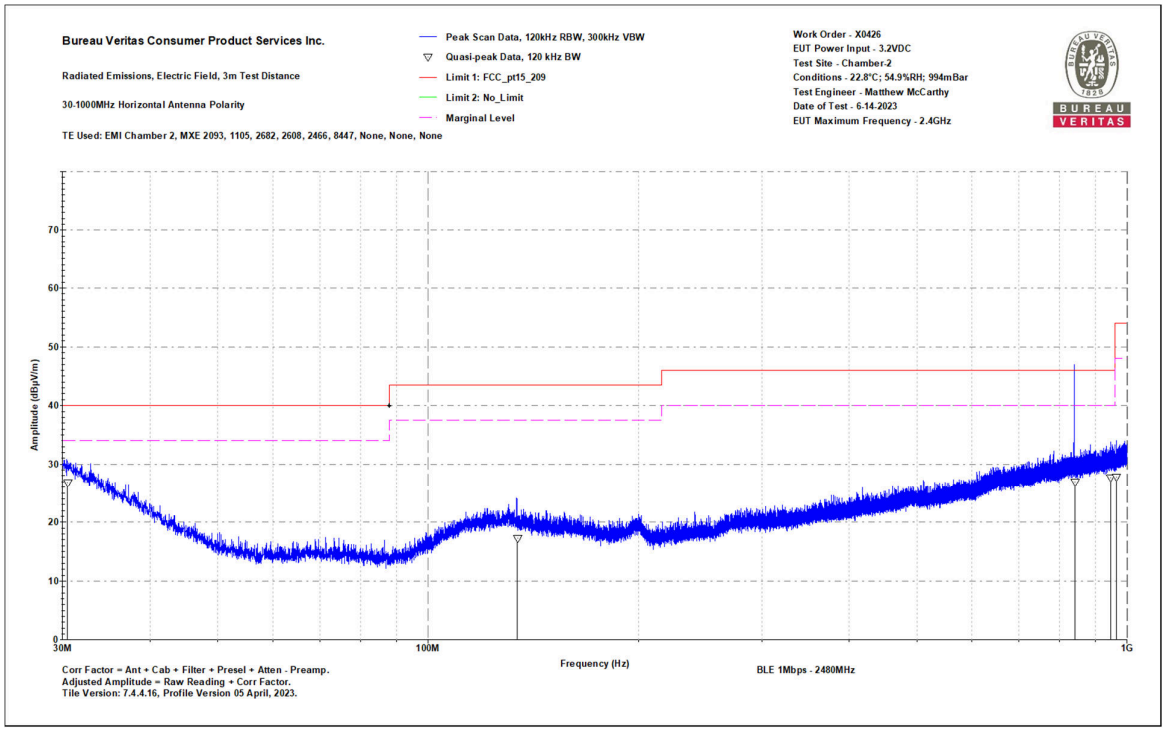
30-1000MHz Vertical Plot

Bureau Veritas Consumer Product Services Inc.
Radiated Emissions Electric Field 3m Distance
30-1000MHz Horizontal Data
Notes:
BLE 1Mbps - 2480MHz

Work Order - X0426
EUT Power Input - 3.2VDC
Test Site - Chamber-2
Conditions - 22.8°C; 54.9%RH; 994mBar
Test Engineer - Matthew McCarthy
Date of Test - 6-14-2023

Frequency (MHz)	Raw QP Reading (dBµV)	Correction Factor (dB/m)	Adjusted QP Amplitude (dBµV/m)	Lim1: FCC_pt15_209 (dbµV/m)	Margin to Lim1 (dB)	Test Results Lim1 (Pass/Fail)	Worst Margin Lim1 (dB)
30.481	26.6	0.2	26.8	40	-13.2	PASS	-13.2
134.207	24	-6.8	17.3	43.5	-26.2	PASS	
841.61	23.8	3.2	27	46	-19	PASS	
947.102	22.9	4.7	27.7	46	-18.3	PASS	
965.847	22.9	5	27.9	54	-26.1	PASS	

30-1000MHz Horizontal Data Table



30-1000MHz Horizontal Plot