

TEST REPORT

Report Number. : R14275554-E11

Applicant : InfoBionic, Inc
400 Totten Pond Rd STE 315
Waltham, MA 02451, U.S.A.

Model(s) : MoMe ARC Charger, MoMe ARC K3 Sensor & MoMe ARC Gateway

FCC IDs : 2AHLC01858, 2AHLC01857, 2AHLC01856

EUT Description : Charger Base, Sensor & Gateway

Test Standard(s) : FCC 47 CFR PART 15 SUBPART C: 2022

Date Of Issue:
2023-10-03

Prepared by:
UL LLC
12 Laboratory Dr.
Research Triangle Park, NC 27709 U.S.A.
TEL: (919) 549-1400



Revision History

Rev.	Issue Date	Revisions	Revised By
V1	2023-10-03	Initial Issue	Noah Bennett

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS	4
2. TEST RESULTS SUMMARY	5
3. TEST METHODOLOGY	5
4. FACILITIES AND ACCREDITATION	5
5. DECISION RULES AND MEASUREMENT UNCERTAINTY	6
5.1. METROLOGICAL TRACEABILITY	6
5.2. DECISION RULES	6
5.3. MEASUREMENT UNCERTAINTY	6
5.4. SAMPLE CALCULATION	6
6. EQUIPMENT UNDER TEST	7
6.1. DESCRIPTION OF EUT	7
6.2. MAXIMUM OUTPUT POWER	7
6.3. SOFTWARE AND FIRMWARE	7
6.4. WORST-CASE CONFIGURATION AND MODE	8
6.5. DESCRIPTION OF TEST SETUP	9
7. TEST AND MEASUREMENT EQUIPMENT	10
8. EMISSION BANDWIDTH	12
9. RADIATED EMISSION TEST RESULTS	14
9.1. LIMITS AND PROCEDURE	14
9.2. FCC TX FUNDAMENTAL AND SPURIOUS EMISSIONS FROM 9 kHz TO 30 MHz ..	15
9.2.1. CONFIG 1	15
9.2.2. CONFIG 2	16
9.2.3. CONFIG 3	17
9.3. FCC TX SPURIOUS EMISSION 30 TO 1000 MHz	18
9.3.1. CONFIG 1	18
9.3.2. CONFIG 2	20
9.3.3. CONFIG 3	22
10. AC MAINS LINE CONDUCTED EMISSIONS	24
10.1.1. CONFIG 1	25
10.1.2. CONFIG 2	27
11. SETUP PHOTOS	29

1. ATTESTATION OF TEST RESULTS

COMPANY NAME: InfoBionic, Inc
400 Totten Pond Rd STE 315
Waltham, MA 02451, U.S.A

EUT DESCRIPTION: Charger Base

MODEL: Mome ARC Charger, MoMe ARC K3 Sensor &
MoMe ARC Gateway

SERIAL NUMBER: SIA2008, MIB2008, MIB1033

SAMPLE RECEIPT DATE: 2022-08-15

DATE TESTED: 2022-11-14 Thru 2022-11-30

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC PART 15 SUBPART C: 2022	Complies

UL LLC tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. All samples tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise.

This document may not be altered or revised in any way unless done so by UL LLC and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL LLC will constitute fraud and shall nullify the document.

Approved & Released For
UL LLC. By:

Prepared By:



Mike Antola
Staff Engineer
Consumer Technology Division
UL LLC.



Noah Bennett
Electrical Engineer
Consumer Technology Division
UL LLC.

2. TEST RESULTS SUMMARY

This report contains data provided by the applicant which can impact the validity of results. UL LLC is only responsible for the validity of results after the integration of the data provided by the customer.

FCC Clause	Requirement	Result	Comment
-	Emission Bandwidth	Reporting purposes only	ANSI C63.10 Section 6.9.3.
15.209, 15.205	Radiated Emissions	Compliant	None.
15.207	AC Mains Conducted Emissions	Compliant	None.

3. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.10-2013, FCC CFR 47 Part 2, and FCC CFR 47 Part 15.

4. FACILITIES AND ACCREDITATION

UL LLC is accredited by A2LA, Certificate Number 0751.06, for all testing performed within the scope of this report. Testing was performed at the locations noted below.

	Address	ISED CABID	ISED Company Number	FCC Registration
☒	Building 2800 Suite Perimeter Park Dr. Suite B Morrisville, NC 27560, U.S.A	US0067	27265	825374

5. DECISION RULES AND MEASUREMENT UNCERTAINTY

5.1. METROLOGICAL TRACEABILITY

All test and measuring equipment utilized to perform the tests documented in this report are calibrated on a regular basis, with a maximum time between calibrations of one year or the manufacturers' recommendation, whichever is less, and where applicable is traceable to recognized national standards.

5.2. DECISION RULES

The Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4:2012 Clause 8.2. (Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

5.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	U _{LAB}
All emissions, radiated	6.01 dB
Conducted Emissions (0.150-30MHz) - LISN	±3.40 dB
Humidity	±3.39 % RH
Temperature	±0.57°C
Time	±3.39 %

Uncertainty figures are valid to a confidence level of 95%.

5.4. SAMPLE CALCULATION

RADIATED EMISSIONS

Where relevant, the following sample calculation is provided:

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)
 $36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} = 28.9 \text{ dBuV/m}$

MAINS CONDUCTED EMISSIONS

Where relevant, the following sample calculation is provided:

Final Voltage (dBuV) = Measured Voltage (dBuV) + Cable Loss (dB) + Limiter Factor (dB) + LISN Insertion Loss.
 $\text{dBuV} + 0 \text{ dB} + 10.1 \text{ dB} + 0 \text{ dB} = 46.6 \text{ dBuV}$

6. EQUIPMENT UNDER TEST

6.1. DESCRIPTION OF EUT

The EUT is a charger of a three component ambulatory electro cardiogram that contains a WPT and BLE radio. This report covers full emissions testing for the WPT radio.

6.2. MAXIMUM OUTPUT POWER

The transmitter has maximum peak radiated electric field strength as follows:

Fundamental Frequency (KHz)	Mode	E field (300m distance) FCC (dBuV/m)	E field (30m distance) FCC (dBuV/m)
1072	Config 2		7.64
158.32	Config 2	-15.76	

6.3. SOFTWARE AND FIRMWARE

The EUT firmware installed during testing was Charger Bootloader + App: V00.1355, Sensor Bootloader + App: V00.1355. Gateway Bootloader + App: V00.1355

The test utility software used during testing was Charger Bootloader + App: V00.13555, Sensor Bootloader + App: V00.1355 and Gateway Bootloader + App: V00.1355.

6.4. WORST-CASE CONFIGURATION AND MODE

The EUT is a Charger base, Gateway, and Sensor device with a proprietary WPT radio at 1MHz and Qi Wireless charging at 110kHz – 200kHz.

Radiated Emissions from 9kHz to 1000MHz were performed on the EUTs in various configurations. Below is a list of configurations tested.

Config	Mode	Descriptions
1	Charger + Gateway	Charger is source, Gateway is load at 110-200kHz
2	Charger + Gateway + Sensor	Charger is source, Gateway is load at 110-200kHz + Gateway is source, Sensor is load at 1MHz
3	Gateway + Sensor	Gateway is source, Sensor is load at 1MHz

AC power line conducted emissions were also investigated on the following configurations.

Note: Since the gateway and sensor cannot be plugged into AC Mains, Config 3 was excluded from AC power line conducted emissions testing.

Config	Mode	Descriptions
1	Charger + Gateway	Charger is source, Gateway is load at 110-200kHz
2	Charger + Gateway + Sensor	Charger is source, Gateway is load at 110-200kHz + Gateway is source, Sensor is load at 1MHz

The Fundamental of the EUT while in Config 3 was investigated in 3 orthogonal orientations, X, Y, and Z. It was determined that Z was worst case orientation. Therefore, all radiated testing in Config 3 was done in Z orientation.

While in Configs 1 and 2 with the Charger Base, the EUT was stated by the manufacturer to operate in only one orthogonal orientation, X. Therefore, all final radiated testing of Config 1 and Config 2 was performed with the EUT in X orientation.

6.5. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
AC Adapter	HDP	HDP12-MD05024U	N/A	N/A

I/O CABLES

I/O Cable List						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	USB	1	USB	Shielded	<3m	Power Cable

TEST SETUP

The EUT was configured to be charging via WPT and Qi during the entirety of the test.

SETUP DIAGRAM

Please refer to R14275554-EP5 for setup diagrams

7. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

Test Equipment Used - Line-Conducted Emissions – Voltage (Morrisville – Conducted 1)

Equipment ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
CBL087	Coax cable, RG223, N-male to BNC-male, 20-ft.	Pasternack	PE3W06143-240	2022-04-05	2023-04-05
HI0091	Environmental Meter	Fisher Scientific	15-077-963	2022-07-20	2023-07-20
LISN003	LISN, 50-ohm/50-uH, 250uH 2-conductor, 25A	Fischer Custom Com.	FCC-LISN-50/250-25-2-01	2022-08-01	2023-08-01
75141	EMI Test Receiver 9kHz-7GHz	Rohde & Schwarz	ESCI 7	2022-08-03	2023-08-03
ATA222	Transient Limiter, 0.009-100MHz	Electro-Metrics	EM-7600	2022-04-05	2023-04-05
PS214	AC Power Source	Elgar	CW2501M	NA	NA
SOFTEMI	EMI Software	UL	Version 9.5 (04 Mar 2021)		
	Miscellaneous (if needed)				
CDECABLE001	ANSI C63.4 1m extension cable.	UL	Per Annex B of ANSI C63.4	2022-09-12	2023-09-12

Test Equipment Used - Wireless Conducted Measurement Equipment

Equipment ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
Conducted 2					
SA0027	Spectrum Analyzer	Keysight Technologies	N9030A	2022-05-24	2023-05-24
HI0090	Environmental Meter	Fisher Scientific	15-077-963	2022-07-20	2023-07-20
-	Near Field Probe Kit	EMC Test Systems	7405	-	-

Test Equipment Used - Radiated Disturbance Emissions Test Equipment (Morrisville – Chamber 2)

Equip. ID	Description	Manufacturer/Brand	Model Number	Last Cal.	Next Cal.
	0.009-30MHz				
AT0079	Active Loop Antenna	ETS-Lindgren	6502	2022-09-12	2023-09-12
	30-1000 MHz				
AT0074	Hybrid Broadband Antenna	Sunol Sciences Corp.	JB3	2022-09-07	2023-09-07
	Gain-Loss Chains				
C2-SAC01	Gain-loss string: 0.009-30MHz	Various	Various	2022-05-10	2023-05-10
C2-SAC02	Gain-loss string: 25-1000MHz	Various	Various	2022-05-10	2023-05-10
	Receiver & Software				
197955	Spectrum Analyzer	Rohde & Schwarz	ESW44	2022-03-08	2023-03-08
SOFTMI	EMI Software	UL	Version 9.5 (18 Oct 2021)		
	Additional Equipment used				
200540	Environmental Meter	Fisher Scientific	15-077-963 (s/n 181474409)	2021-09-27	2022-09-27

8. EMISSION BANDWIDTH

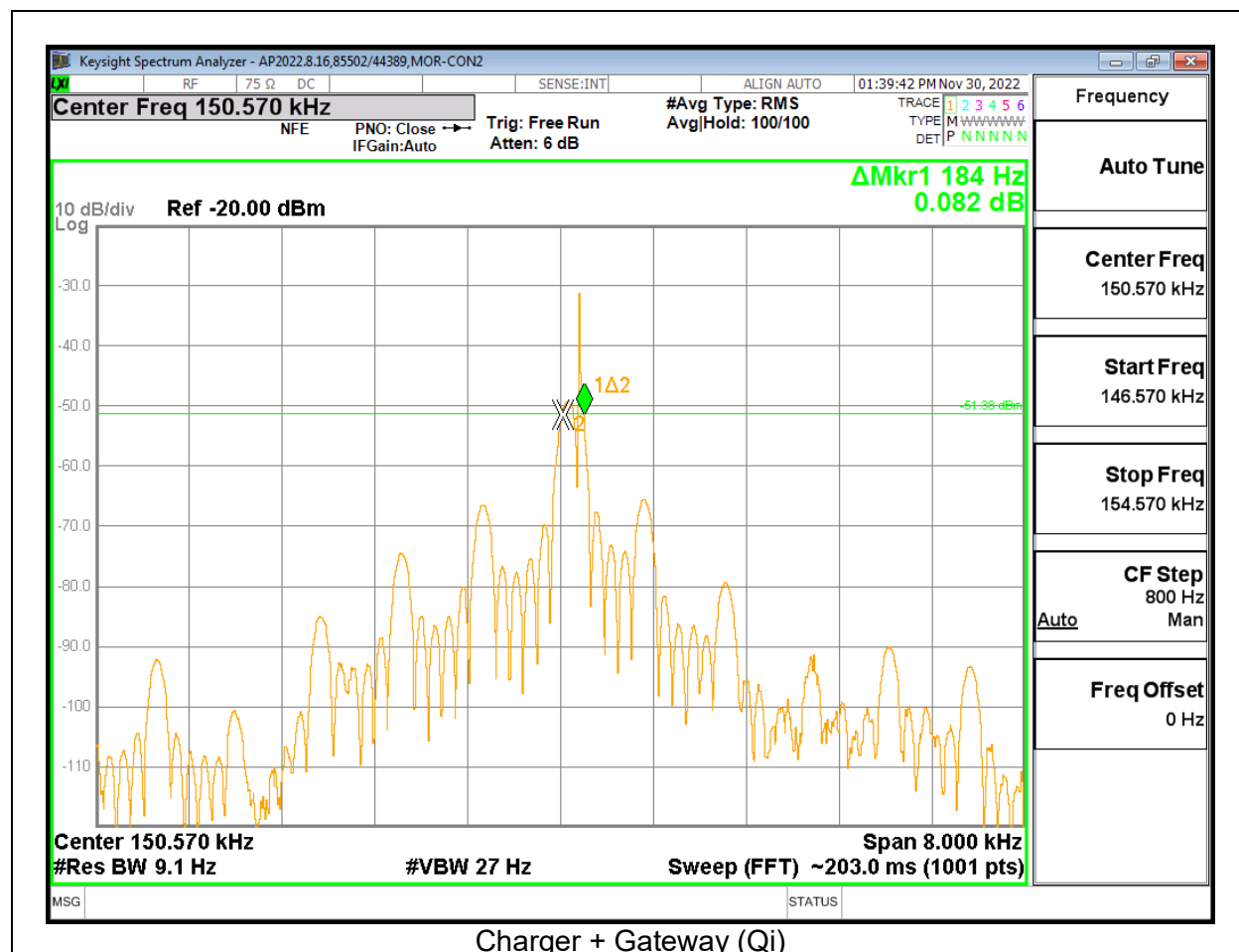
TEST PROCEDURE

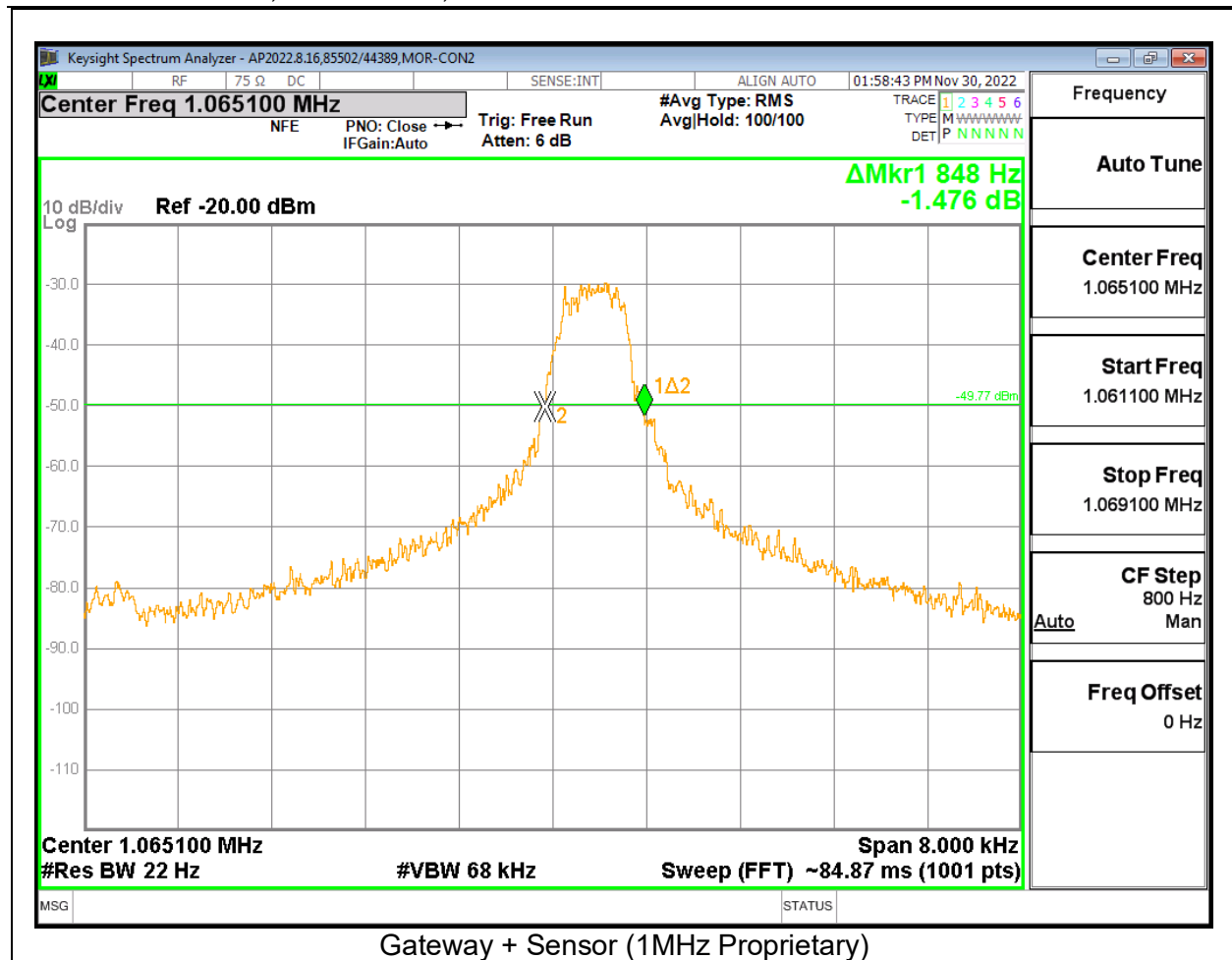
The transmitter output is connected to the spectrum analyzer. The RBW is set to 1-5% of the 99% BW. The VBW is set to 3 times the RBW. The sweep time is coupled.

EUT SETUP

Config	Mode	Descriptions
2	Charger + Gateway + Sensor	Charger is source, Gateway is load at 110-200kHz + Gateway is source, Sensor is load at 1MHz

RESULTS





9. RADIATED EMISSION TEST RESULTS

9.1. LIMITS AND PROCEDURE

LIMIT

FCC §15.209 (a)

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (m)
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 to 216	150	3
216 to 960	200	3
Above 960 MHz	500	3
Note: The lower limit shall apply at the transition frequency.		

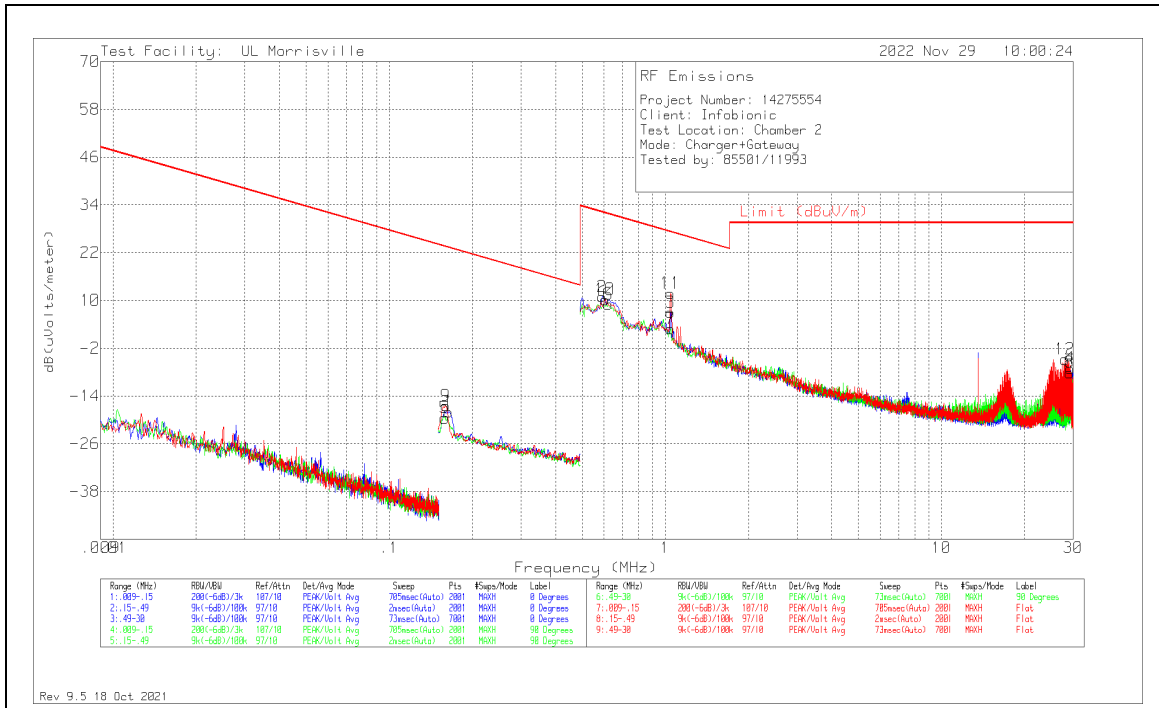
For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements in the 30-1000MHz range, 9kHz for peak and/or quasi-peak detection measurements in the 0.15-30MHz range and 200Hz for peak and/or quasi-peak detection measurements in the 9 to 150kHz range. Peak detection is used unless otherwise noted as quasi-peak or average (9-90kHz and 110-490kHz).

Although these tests were performed other than open area test site, adequate comparison measurements were confirmed against 300 m open area test site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 414788 D01.

RESULTS

9.2. FCC TX FUNDAMENTAL AND SPURIOUS EMISSIONS FROM 9 kHz TO 30 MHz

9.2.1. CONFIG 1



DATA

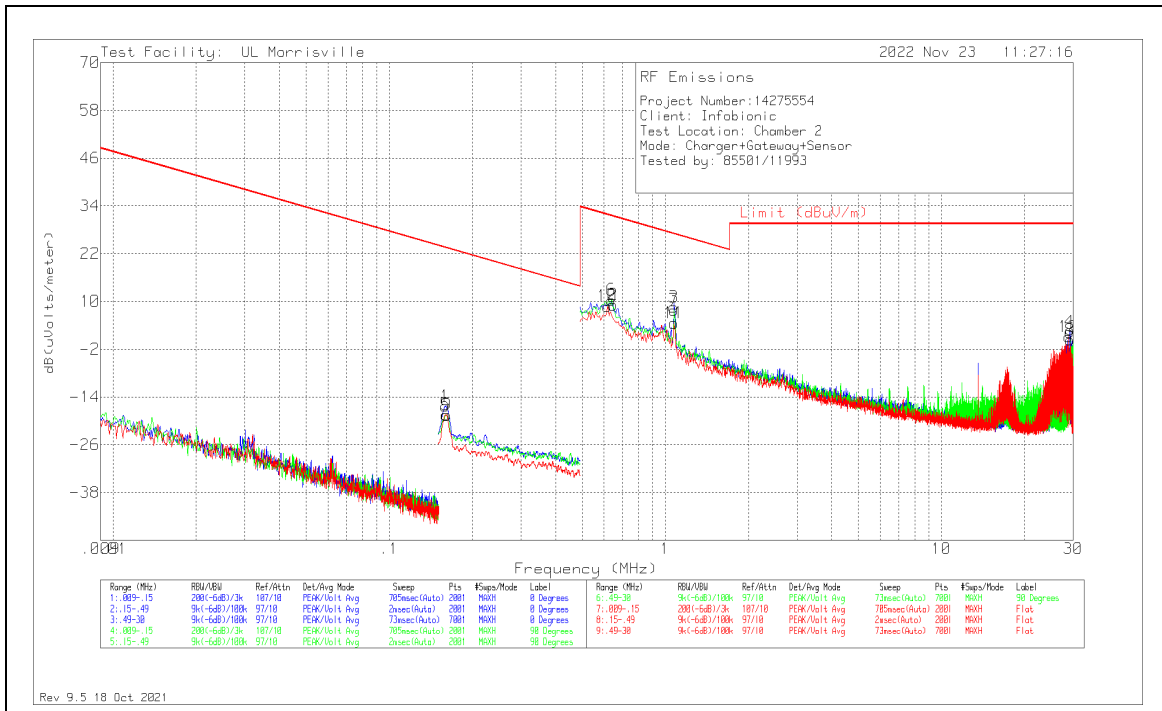
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0079 (dB/m)	Gain/Loss (dB)	Dist. Corr. Factor (dB)	Corrected Reading dB(uVolts/meter)	Av/QP Limit (dBuV/m)	Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Loop Angle
5	.15595	49.87	Av	11.1	.1	-80	-18.93	23.74	43.74	-42.67	24	90 degs
9	.15811	51.36	Av	11.1	.1	-80	-17.44	23.63	43.63	-41.07	306	Flat
1	.15906	51.62	Av	11.1	.1	-80	-17.18	23.57	43.57	-40.75	298	0 degs
2	.59118	39.62	Pk	11.1	.2	-40	10.92	32.17	-	-21.25	0-360	0 degs
10	.60383	38.87	Pk	11.1	.2	-40	10.17	31.99	-	-21.82	0-360	Flat
6	.6207	37.77	Pk	11.1	.2	-40	9.07	31.75	-	-22.68	0-360	90 degs
3	1.04698	31.03	Qp	11.4	.2	-40	2.63	27.21	-	-24.58	221	0 degs
11	1.04734	32.98	Qp	11.4	.2	-40	4.58	27.2	-	-22.62	186	Flat
7	1.04649	27.75	Qp	11.4	.2	-40	-.65	27.21	-	-27.86	132	90 degs
12	28.04156	25.31	Pk	8.8	1.1	-40	-4.79	29.54	-	-34.33	0-360	Flat
8	29.13772	22.26	Pk	8.5	1.1	-40	-8.14	29.54	-	-37.68	0-360	90 degs
4	29.25155	23.35	Pk	8.5	1.1	-40	-7.05	29.54	-	-36.59	0-360	0 degs

Pk - Peak detector

Qp - Quasi-Peak detector

Av - Average detection

9.2.2. CONFIG 2



DATA

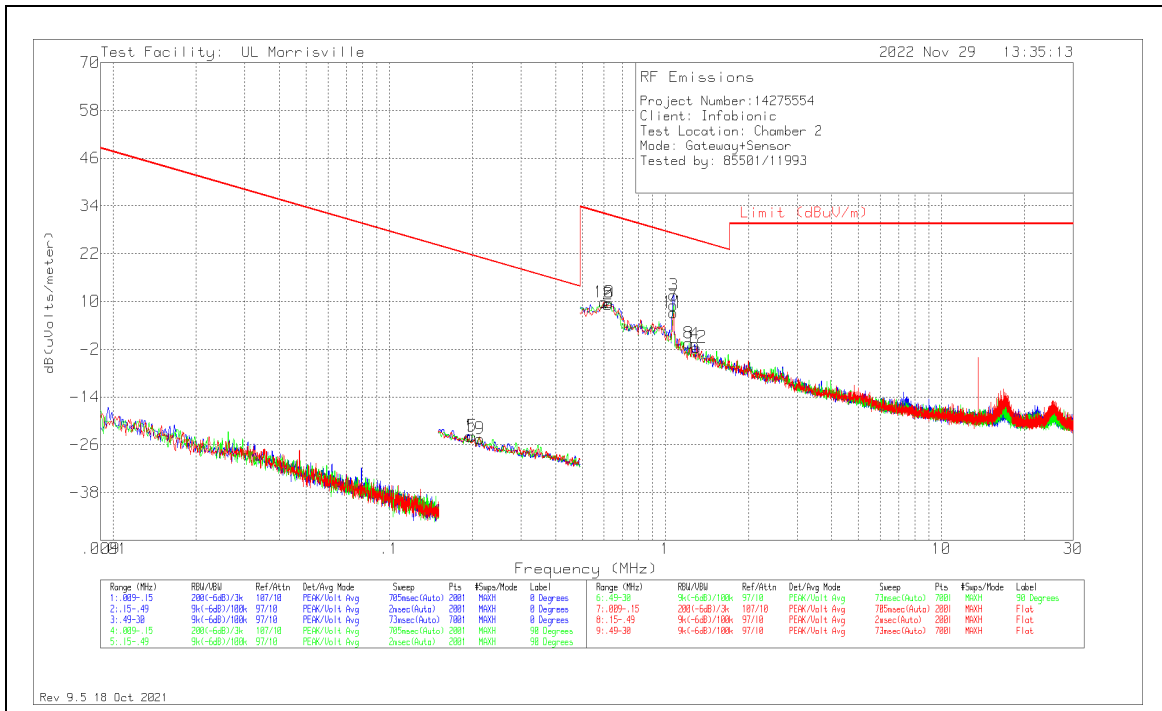
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0079 (dB/m)	Gain/Loss (dB)	Dist. Corr. Factor (dB)	Corrected Reading dB(uVolts/meter)	Av/QP Limit (dBuV/m)	Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Loop Angle
1	.1619	52.65	Av	11.2	.1	-80	-16.05	23.42	43.42	-39.47	302	0 degs
5	.16047	50.35	Av	11.2	.1	-80	-18.35	23.5	43.50	-41.85	14	90 degs
9	.15832	52.94	Av	11.2	.1	-80	-15.76	23.61	43.61	-39.37	291	Flat
10	.61648	37.39	Pk	11.2	.2	-40	8.79	31.81	-	-23.02	0-360	Flat
6	.63756	38.84	Pk	11.3	.2	-40	10.34	31.51	-	-21.17	0-360	90 degs
2	.64599	37.66	Pk	11.3	.2	-40	9.16	31.4	-	-22.24	0-360	0 degs
3	1.07135	34.49	Qp	11.3	.2	-40	5.99	27.01	-	-21.02	256	Flat
7	1.07228	36.14	Qp	11.3	.2	-40	7.64	27	-	-19.36	236	0 degs
11	1.07052	34.03	Qp	11.3	.2	-40	5.53	27.01	-	-21.48	167	90 degs
12	28.81309	32.11	Pk	7.9	1.1	-40	1.11	29.54	-	-28.43	0-360	Flat
4	29.11242	33.33	Pk	7.9	1.1	-40	2.33	29.54	--	-27.21	0-360	0 degs
8	29.32322	31.4	Pk	7.8	1.1	-40	.3	29.54	-	-29.24	0-360	90 degs

Pk – Peak detector

Qp - Quasi-Peak detector

Av - Average detection

9.2.3. CONFIG 3



DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0079 (dB/m)	Gain/Loss (dB)	Dist. Corr. Factor (dB)	Corrected Reading dB(uVolts/meter)	Qp/Av Limit (dBuV/m)	Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Loop Angle
1	.19488	44.94	Pk	11.1	.1	-80	-23.86	21.81	41.81	-45.67	0-360	0 degs
5	.19981	44.95	Pk	11.1	.1	-80	-23.85	21.59	41.59	-45.44	0-360	90 degs
9	.21307	44.31	Pk	11.1	.1	-80	-24.49	21.03	41.03	-45.52	0-360	Flat
10	.59962	38.48	Pk	11.1	.2	-40	9.78	32.05	-	-22.27	0-360	Flat
2	.6207	38	Pk	11.1	.2	-40	9.3	31.75	-	-22.45	0-360	0 degs
6	.62491	38.46	Pk	11.1	.2	-40	9.76	31.69	-	-21.93	0-360	90 degs
7	1.06633	34.71	Qp	11.4	.2	-40	6.31	27.05	-	-20.74	161	90 degs
11	1.06497	26.12	Qp	11.4	.2	-40	-2.28	27.06	-	-29.34	47	Flat
3	1.06501	27.89	Qp	11.4	.2	-40	-.51	27.06	-	-27.57	211	0 degs
8	1.21515	27.93	Pk	11.4	.2	-40	-.47	25.91	-	-26.38	0-360	90 degs
4	1.27839	27.72	Pk	11.4	.2	-40	-.68	25.47	-	-26.15	0-360	0 degs
12	1.29947	26.89	Pk	11.4	.2	-40	-1.51	25.33	-	-26.84	0-360	Flat

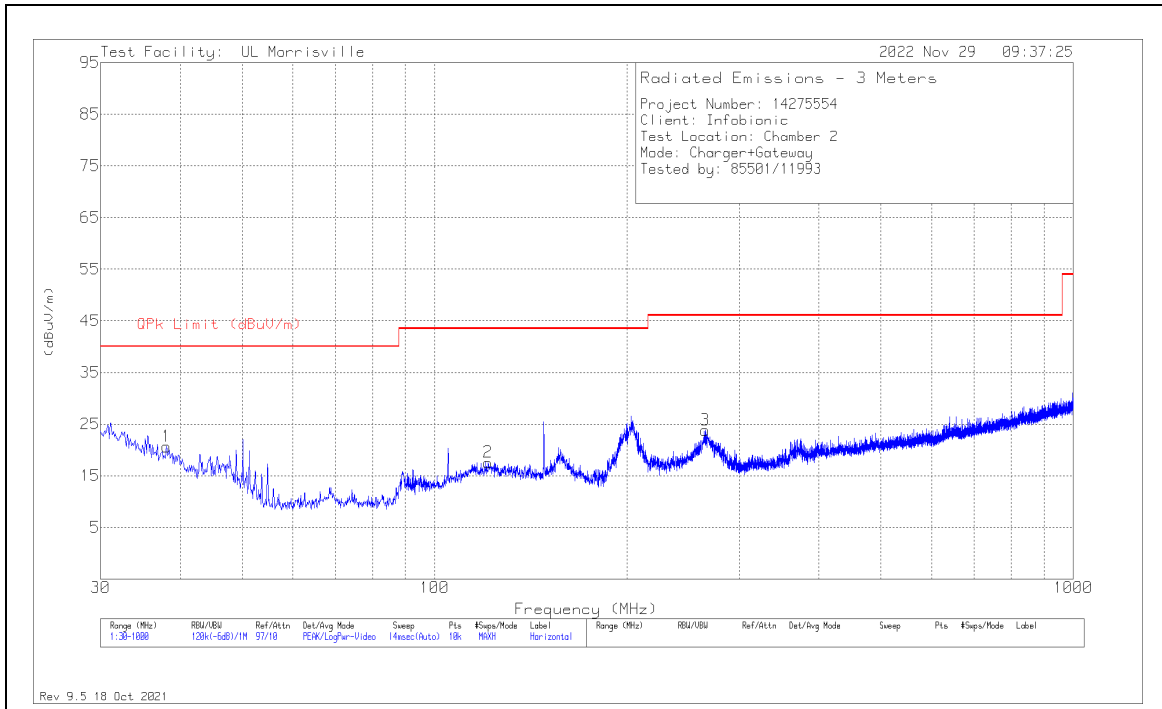
Pk - Peak detector

Qp - Quasi-Peak detector

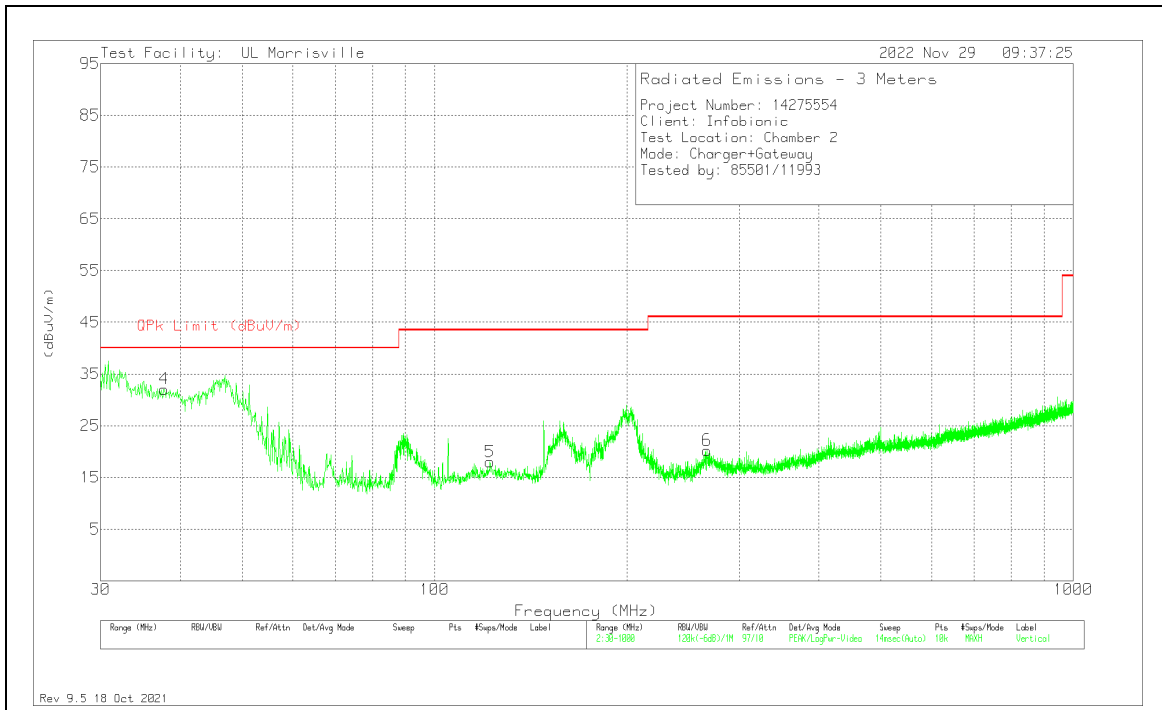
9.3. FCC TX SPURIOUS EMISSION 30 TO 1000 MHz

9.3.1. CONFIG 1

HORIZONTAL PLOT



VERTICAL PLOT



DATA

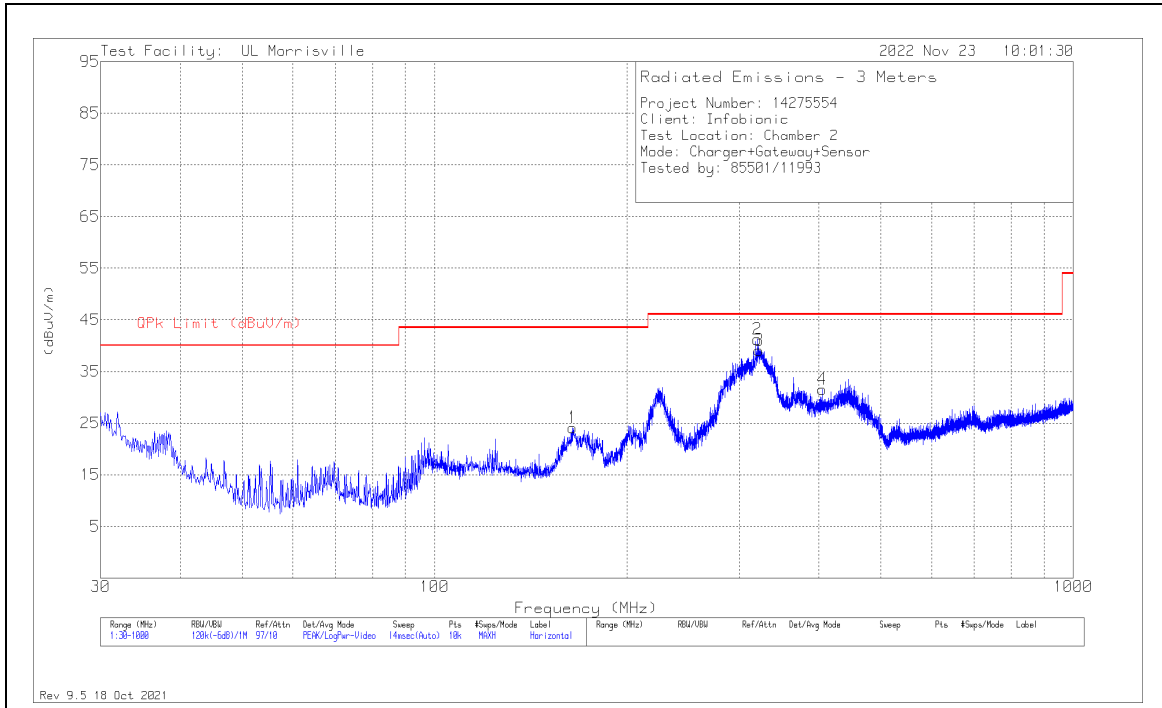
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0073 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 38.051	30.65	Pk	21.3	-31.3	20.65	40	-19.35	0-360	399	H
2	* ** 121.374	27.97	Pk	19.9	-30.3	17.57	43.52	-25.95	0-360	99	H
3	* ** 265.613	33.8	Pk	19	-29	23.8	46.02	-22.22	0-360	99	H
4	* ** 37.76	41.87	Pk	21.5	-31.3	32.07	40	-7.93	0-360	101	V
5	* ** 122.15	28.3	Pk	20	-30.3	18	43.52	-25.52	0-360	299	V
6	* ** 267.068	30.02	Pk	19.1	-28.9	20.22	46.02	-25.8	0-360	199	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

9.3.2. CONFIG 2 HORIZONTAL PLOT



VERTICAL PLOT



DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0073 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 164.636	35.6	Pk	18.2	-29.7	24.1	43.52	-19.42	0-360	199	H
3	* ** 322.067	47.79	Pk	20	-28.7	39.09	46.02	-6.93	0-360	99	H
4	* ** 404.905	37.74	Pk	21.9	-28.1	31.54	46.02	-14.48	0-360	299	H
6	* ** 37.5308	48.45	Qp	21.6	-31.3	38.75	40	-1.25	247	123	V
7	* ** 73.941	42.68	Pk	14	-30.8	25.88	40	-14.12	0-360	101	V
8	* ** 325.074	38.3	Pk	20	-28.7	29.6	46.02	-16.42	0-360	101	V
5	30.097	46.72	Pk	26.7	-31.5	41.92	-	-	0-360	101	V
2	320.418	49.93	Pk	20	-28.7	41.23	-	-	0-360	99	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

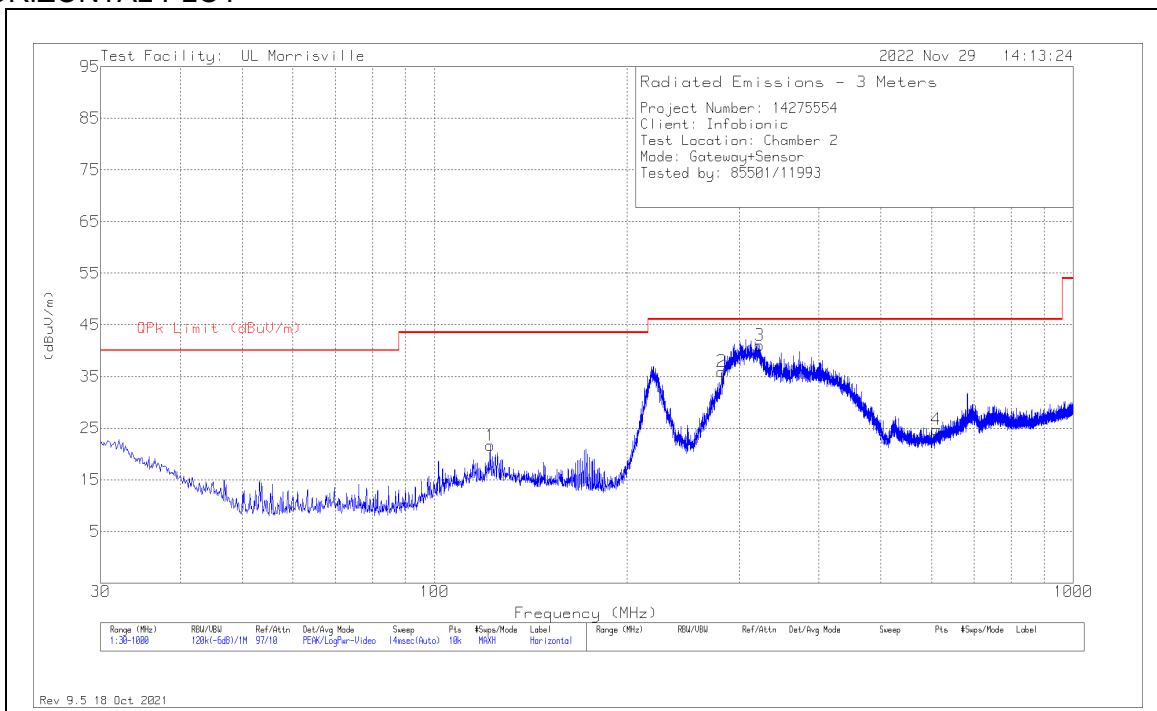
** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

Qp - Quasi-Peak detector

9.3.3. CONFIG 3

HORIZONTAL PLOT



VERTICAL PLOT



DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0073 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 122.247	31.94	Pk	20	-30.3	21.64	43.52	-21.88	0-360	199	H
2	* ** 281.715	45.52	Pk	19.4	-29	35.92	46.02	-10.1	0-360	101	H
3	* ** 323.0381	46.69	Qp	20	-28.7	37.99	46.02	-8.03	129	100	H
4	* ** 610.254	27.32	Pk	24.8	-27.4	24.72	46.02	-21.3	0-360	299	H
5	* ** 125.739	29.09	Pk	19.9	-30.2	18.79	43.52	-24.73	0-360	101	V
6	* ** 282.782	33.01	Pk	19.3	-28.8	23.51	46.02	-22.51	0-360	101	V
7	* ** 322.649	35.74	Pk	20	-28.7	27.04	46.02	-18.98	0-360	101	V
8	* ** 609.672	26.08	Pk	24.8	-27.4	23.48	46.02	-22.54	0-360	101	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

Qp - Quasi-Peak detector

10. AC MAINS LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

Frequency of Emission (MHz)	Conducted Limit (dB μ V)	
	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.

TEST PROCEDURE

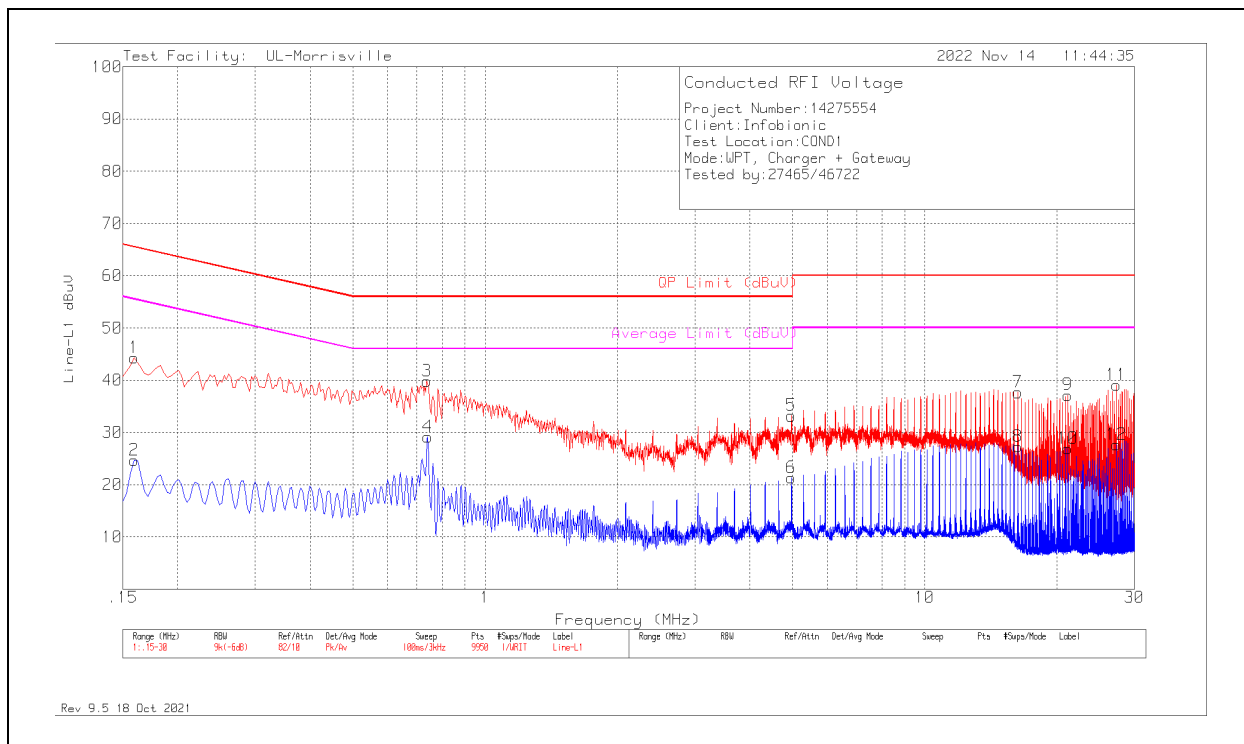
The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.10.

The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

Line conducted data is recorded for both NEUTRAL and HOT lines.

RESULTS

10.1.1. CONFIG 1 LINE 1 RESULTS



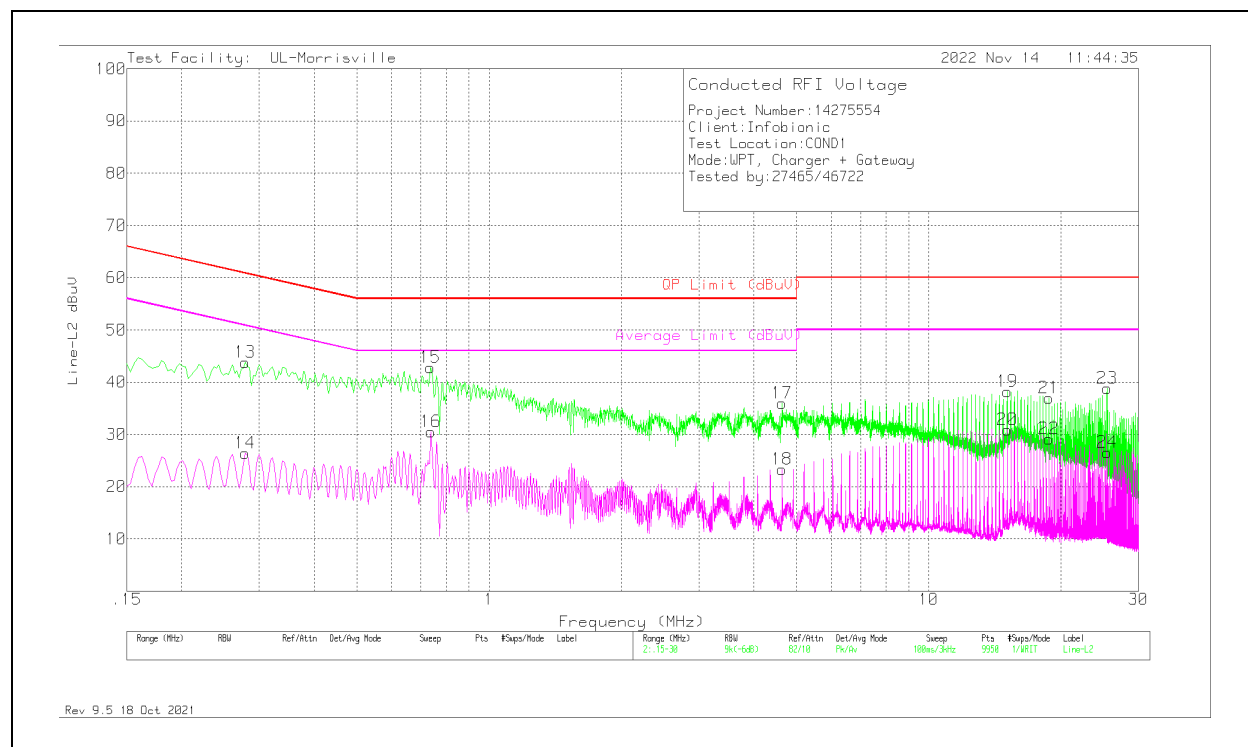
WORST EMISSIONS

Range 1: Line-L1 .15 - 30MHz										
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN VCF (dB)	Cbl/Limiter (dB)	Corrected Reading dBuV	QP Limit (dBuV)	Margin (dB)	Average Limit (dBuV)	Margin (dB)
1	.159	34.31	Pk	.2	9.8	44.31	65.52	-21.21	-	-
2	.159	14.62	Av	.2	9.8	24.62	-	-	55.52	-30.9
3	.738	29.99	Pk	0	9.8	39.79	56	-16.21	-	-
4	.741	19.32	Av	0	9.8	29.12	-	-	46	-16.88
5	4.977	23.28	Pk	0	9.9	33.18	56	-22.82	-	-
6	4.977	11.41	Av	0	9.9	21.31	-	-	46	-24.69
7	16.275	27.45	Pk	.1	10.1	37.65	60	-22.35	-	-
8	16.275	17.06	Av	.1	10.1	27.26	-	-	50	-22.74
9	21.174	26.75	Pk	.2	10.2	37.15	60	-22.85	-	-
10	21.174	16.52	Av	.2	10.2	26.92	-	-	50	-23.08
11	27.276	28.59	Pk	.3	10.2	39.09	60	-20.91	-	-
12	27.276	17.19	Av	.3	10.2	27.69	-	-	50	-22.31

Pk - Peak detector

Av - Average detection

LINE 2 RESULTS



WORST EMISSIONS

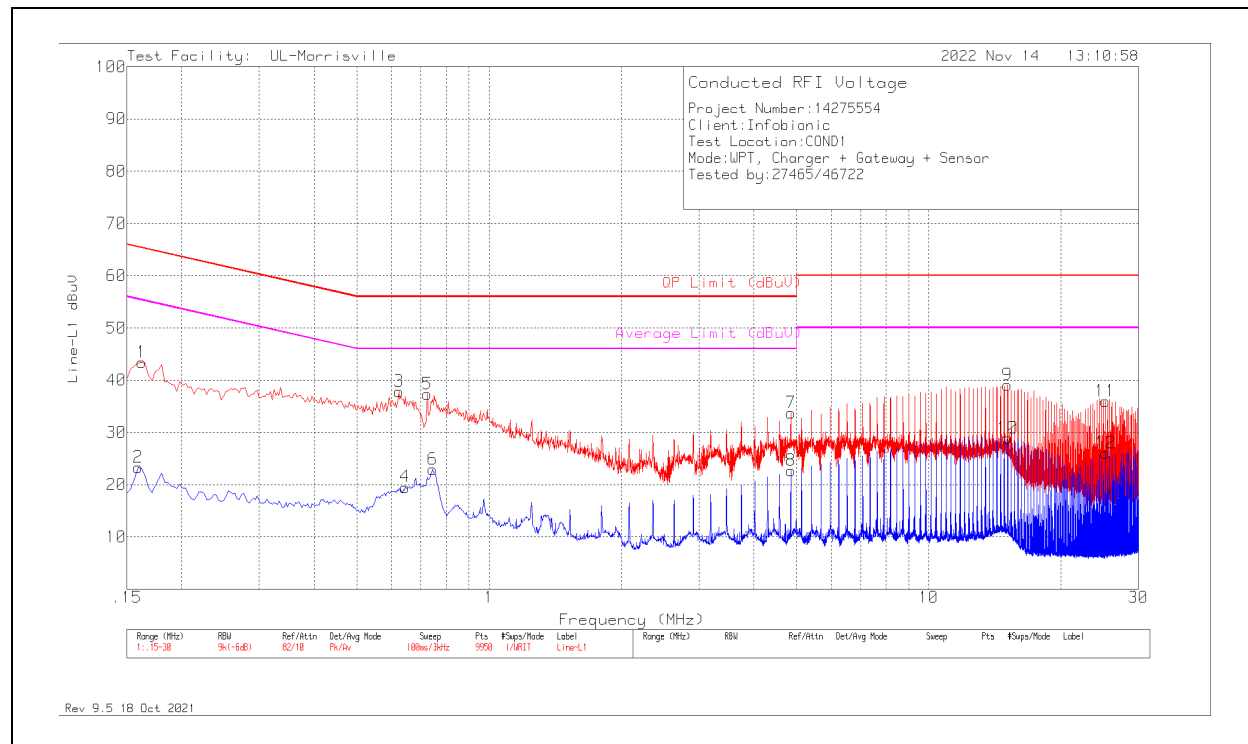
Range 2: Line-L2 .15 - 30MHz										
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN VCF (dB)	Cbl/Limiter (dB)	Corrected Reading dBuV	QP Limit (dBuV)	Margin (dB)	Average Limit (dBuV)	Margin (dB)
13	.279	33.87	Pk	.1	9.8	43.77	60.85	-17.08	-	-
14	.279	16.56	Av	.1	9.8	26.46	-	-	50.85	-24.39
15	.735	33.01	Pk	0	9.8	42.81	56	-13.19	-	-
16	.738	20.71	Av	0	9.8	30.51	-	-	46	-15.49
17	4.638	26.03	Pk	0	9.9	35.93	56	-20.07	-	-
18	4.641	13.38	Av	0	9.9	23.28	-	-	46	-22.72
19	15.096	27.99	Pk	.1	10.1	38.19	60	-21.81	-	-
20	15.096	20.69	Av	.1	10.1	30.89	-	-	50	-19.11
21	18.765	26.72	Pk	.1	10.1	36.92	60	-23.08	-	-
22	18.762	18.91	Av	.1	10.1	29.11	-	-	50	-20.89
23	25.476	28.38	Pk	.2	10.2	38.78	60	-21.22	-	-
24	25.479	16.16	Av	.2	10.2	26.56	-	-	50	-23.44

Pk - Peak detector

Av - Average detection

10.1.2. CONFIG 2

LINE 1 RESULTS



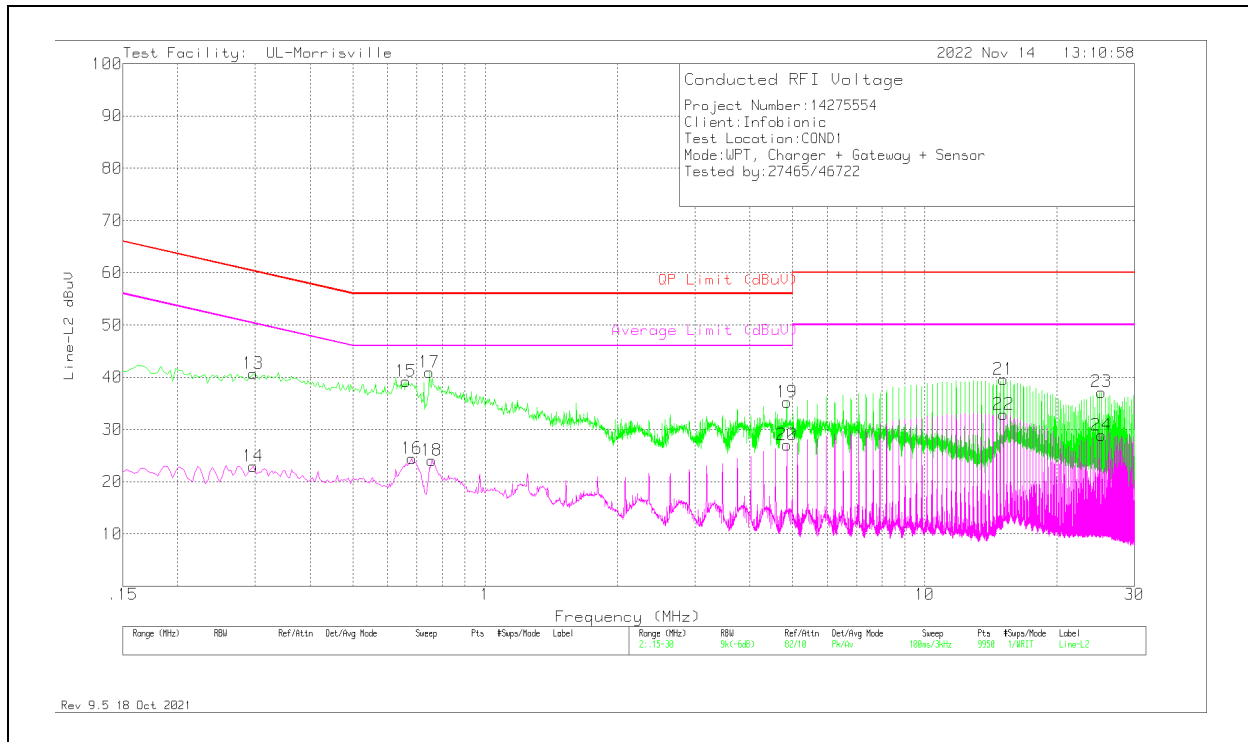
WORST EMISSIONS

Range 1: Line-L1 .15 - 30MHz										
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN VCF (dB)	Cbl/Limiter (dB)	Corrected Reading dBuV	QP Limit (dBuV)	Margin (dB)	Average Limit (dBuV)	Margin (dB)
1	.162	33.38	Pk	.2	9.8	43.38	65.36	-21.98	-	-
2	.159	13.31	Av	.2	9.8	23.31	-	-	55.52	-32.21
3	.624	28.01	Pk	0	9.8	37.81	56	-18.19	-	-
4	.645	9.72	Av	0	9.8	19.52	-	-	46	-26.48
5	.723	27.57	Pk	0	9.8	37.37	56	-18.63	-	-
6	.744	13.08	Av	0	9.8	22.88	-	-	46	-23.12
7	4.857	23.78	Pk	0	9.9	33.68	56	-22.32	-	-
8	4.857	12.78	Av	0	9.9	22.68	-	-	46	-23.32
9	15.123	28.9	Pk	.1	10.1	39.1	60	-20.9	-	-
10	15.123	18.68	Av	.1	10.1	28.88	-	-	50	-21.12
11	25.251	25.52	Pk	.2	10.2	35.92	60	-24.08	-	-
12	25.251	15.62	Av	.2	10.2	26.02	-	-	50	-23.98

Pk - Peak detector

Av - Average detection

LINE 2 RESULTS



WORST EMISSIONS

Range 2: Line-L2 .15 - 30MHz										
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN VCF (dB)	Cbl/Limiter (dB)	Corrected Reading dBuV	QP Limit (dBuV)	Margin (dB)	Average Limit (dBuV)	Margin (dB)
13	.297	30.78	Pk	.1	9.8	40.68	60.33	-19.65	-	-
14	.297	13.03	Av	.1	9.8	22.93	-	-	50.33	-27.4
15	.66	29.42	Pk	0	9.8	39.22	56	-16.78	-	-
16	.681	14.61	Av	0	9.8	24.41	-	-	46	-21.59
17	.747	31.11	Pk	0	9.8	40.91	56	-15.09	-	-
18	.756	14.29	Av	0	9.8	24.09	-	-	46	-21.91
19	4.857	25.32	Pk	0	9.9	35.22	56	-20.78	-	-
20	4.857	17.16	Av	0	9.9	27.06	-	-	46	-18.94
21	15.123	29.38	Pk	.1	10.1	39.58	60	-20.42	-	-
22	15.123	22.71	Av	.1	10.1	32.91	-	-	50	-17.09
23	25.251	26.75	Pk	.2	10.2	37.15	60	-22.85	-	-
24	25.251	18.5	Av	.2	10.2	28.9	-	-	50	-21.1

Pk - Peak detector

Av - Average detection

11. SETUP PHOTOS

Please refer to R14275554-EP5 for setup photos

END OF TEST REPORT