

**TEST REPORT****Report Number: 103899661MPK-001****Project Number: G103899661****May 21, 2019****Testing performed on the  
ArcReach™ Heater Extension Cable  
Model Number: 301451****to****FCC Part 15 Subpart C (15.225)  
Industry Canada RSS-210 Issue 9****For****Miller Electric MFG. LLC**

Test Performed by:

Intertek

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Menlo Park, CA 94025 USA

Test Authorized by:

Miller Electric MFG. LLC

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Appleton, WI 54914 USA

Prepared by: 

Minh Ly

**Date:** May 21, 2019Reviewed by: 

Krishna Vemuri

**Date:** May 21, 2019

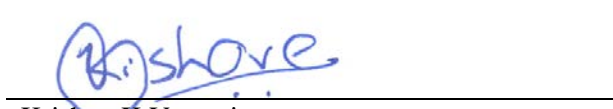
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Report No. 103899661MPK-001	
<b>Equipment Under Test:</b>	ArcReach™ Heater Extension Cable
<b>Trade Name:</b>	Miller Electric MFG. LLC
<b>Model Number:</b>	301451
<b>Applicant:</b>	Miller Electric MFG. LLC
<b>Contact:</b>	Terry Christianson-Plato
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<b>Applicable Regulation:</b>	FCC Part 15 Subpart C (15.225) Industry Canada RSS-210 Issue 9
<b>Date of Test:</b>	April 09-30, 2019

*We attest to the accuracy of this report:*



Minh Ly  
Project Engineer



Krishna K Vemuri  
Engineering Team Lead

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## 1.0 Summary of Tests

TEST	REFERENCE FCC 15.225	REFERENCE RSS-210	RESULTS
Field Strength of Fundamental	15.225(a)	B.6	Complies
Radiated Emissions Outside the band	15.225(b), 15.225(c), 15.225(d), 15.209	B.6	Complies
Frequency Tolerance of the Carrier	15.225(e)	B.6	Complies
Line Conducted Emissions	15.207	RSS-GEN	Complies
Occupied Bandwidth	15.215	RSS-GEN	Complies
Antenna requirement	15.203	RSS-GEN	Complies <sup>1</sup>

<sup>1</sup> EUT utilizes an internal Antenna.

## 2.0 General Description

### 2.1 Product Description

Miller Electric MFG. LLC supplied the following description of the EUT: The EUT is NFC radio.

#### Overview of the EUT

<b>Model</b>	301451
<b>Operating Frequency</b>	13.56MHz
<b>Number of Channels</b>	1
<b>Type of Modulation</b>	OOK
<b>Operating Temperature</b>	-20°C to +50°C
<b>Antenna Type/ Gain</b>	Internal Antenna
<b>Applicant name &amp; address</b>	Miller Electric MFG. LLC 1635 W Spencer St, PO Box 1079 Appleton, WI 54914 USA

**EUT receive date:** April 09, 2019

**EUT receive condition:** The EUT was received in good condition with no apparent damage. As declared by the Applicant it is identical to the production units.

**Test start date:** April 09, 2019

**Test completion date:** April 30, 2019

## 2.2 Related Submittal(s) Grants

None

## 2.3 Test Methodology

Both AC mains line-conducted and radiated emissions measurements were performed according to the procedures in ANSI C63.4. Radiated tests were performed at an antenna to EUT distance of 10 meters, unless stated otherwise in this test report. All other measurements were made in accordance with the procedures in part 2 of CFR 47 7, ANSI C63.10: 2013, ANSI C63.4-2014& RSS-GEN Issue 5.

## 2.4 Test Facility

The radiated emission test site and conducted measurement facility used to collect the data is 10m semi-anechoic chamber located in Menlo Park, California. This test facility and site measurement data have been fully placed on file with the FCC and Industry Canada (Site # 2042L-1).

## 2.5 Measurement Uncertainty

Compliance with the limits was based on the results of the measurements and doesn't take into account the measurement uncertainty.

Estimated Measurement Uncertainty

Measurement	Expanded Uncertainty (k=2)		
	0.15 MHz – 1 GHz	1 GHz – 2.5 GHz	> 2.5 GHz
RF Power and Power Density – antenna conducted	-	0.7 dB	-
Unwanted emissions - antenna conducted	1.1 dB	1.3 dB	1.9 dB
Bandwidth – antenna conducted	-	30 Hz	-

Measurement	Expanded Uncertainty (k=2)		
	0.15 MHz – 30MHz	30 MHz – 1 GHz	1 GHz – 18 GHz
Radiated emissions	-	4.7	5.1 dB
AC mains conducted emissions	2.1 dB	-	-

### 3.0 System Test Configuration

#### 3.1 Support Equipment and description

Support Equipment		
Description	Manufacturer	Model Number or Part Number
ArcReach Heater	Miller Electric MFG. LLC	301390
Heater Cable 1	Miller Electric MFG. LLC	Not Listed
Heater Cable 2	Miller Electric MFG. LLC	Not Listed
Worksense Cable	Miller Electric MFG. LLC	Not Listed
Six 301517 W/ Flex Cable	Miller Electric MFG. LLC	301517
DC Power Supply	Extech	D30030012

Note: All I/O cables used for testing are longer than 3m

#### 3.2 Block Diagram of Test Setup

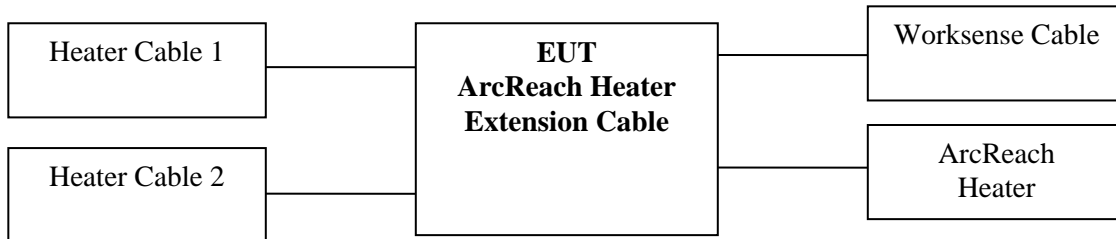
**EUT Photo**



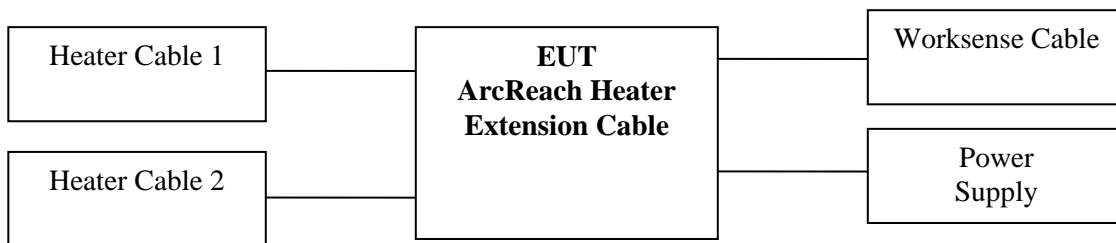
Equipment Under Test			
Description	Manufacturer	Model	Serial Number
ArcReach Heater Extension Cable	Miller Electric MFG. LLC	301451	MK080063G

### 3.2 Block Diagram of Test Setup (Continued)

#### Radiated Emission Configuration



#### DC Power Configuration



<b>S</b> = Shielded	<b>F</b> = With Ferrite
<b>U</b> = Unshielded	<b>m</b> = Length in Meters



### 3.3 Justification

For radiated emission measurements the EUT is placed on a non-conductive table. The EUT was configured to continuously transmit and looking for tags. The highest clock frequency used in the EUT is 27.12MHz; Radiated emissions were performed up to 1GHz for FCC.

The EUT is 15VDC powered. Therefore, for conducted emission, a DC power supply was utilized.

### 3.4 Software Exercise Program

N/A

### 3.5 Mode of Operation during test

The EUT was constantly broadcasting a 13.56 MHz signal.

### 3.6 Modifications required for Compliance

No Modifications were made to bring the EUT into compliance.

### 3.7 Additions, deviations and exclusions from standards

No additions, deviations or exclusion have been made from standard.

## 4.0 Measurement Results

### 4.1 Field Strength of Fundamental and Radiated Emissions Outside the band

#### 4.1.1 Requirements

FCC Rules 15.225, 15.209

- a) The field strength of any emissions within the band 13.553-13.567 MHz shall not exceed 15,848 microvolts/meter (84 dBuV) at 30 meters.
- b) Within the bands 13.410-13.553 MHz and 13.567-13.710 MHz, the field strength of any emissions shall not exceed 334 microvolts/meter at 30 meters.
- c) Within the bands 13.110-13.410 MHz and 13.710-14.010 MHz the field strength of any emissions shall not exceed 106 microvolts/meter at 30 meters.
- d) The field strength of any emissions appearing outside of the 13.110-14.010 MHz band shall not exceed the general radiated emission limits in §15.209.

§15.209 Radiated emission limits; general requirements.

Frequency (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

#### 4.1.2 Procedure

##### Radiated Measurements Below 30 MHz

During the test the EUT is rotated and the measuring antenna angles are varied during the search for maximum signal level.

Radiated emissions are taken at ten meters unless the signal level is too low for measurement at that distance. If necessary, a pre-amplifier is used and/or the test is conducted at a closer distance. Measurements for below 30 MHz were performed at 10 meters. Data results below are corrected for distance at 10m. Limits were normalized to 10 meters.

##### Radiated Measurements Above 30 MHz

During the test the EUT is rotated and the measuring antenna height and polarization are varied during the search for maximum signal level. The antenna height is varied from 1 to 4 meters.

Radiated emissions are taken at ten meters unless the signal level is too low for measurement at that distance. If necessary, a pre-amplifier is used and/or the test is conducted at a closer distance. Measurements for above 30 MHz were made at 10 meters.

Radiated emission measurements were performed from 9kHz to 1 GHz.  
Analyzer resolution is:

200Hz or greater for 9kHz to 150kHz  
9 kHz or greater for 150kHz to 30 MHz  
120 kHz or greater for 30MHz to 1000 MHz  
For those frequencies quasi-peak detector applies

Data includes of the worst-case configuration (the configuration which resulted in the highest emission levels). A sample calculation, configuration photographs and data tables of the emissions are included.

##### Field Strength Calculation

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

$$FS = RA + AF + CF - AG - DCF$$

Where FS = Field Strength in dB ( $\mu$ V/m)

RA = Receiver Amplitude (including preamplifier) in dB ( $\mu$ V)

CF = Cable Attenuation Factor in dB

AF = Antenna Factor in dB (1/m)

AG = Amplifier Gain in dB

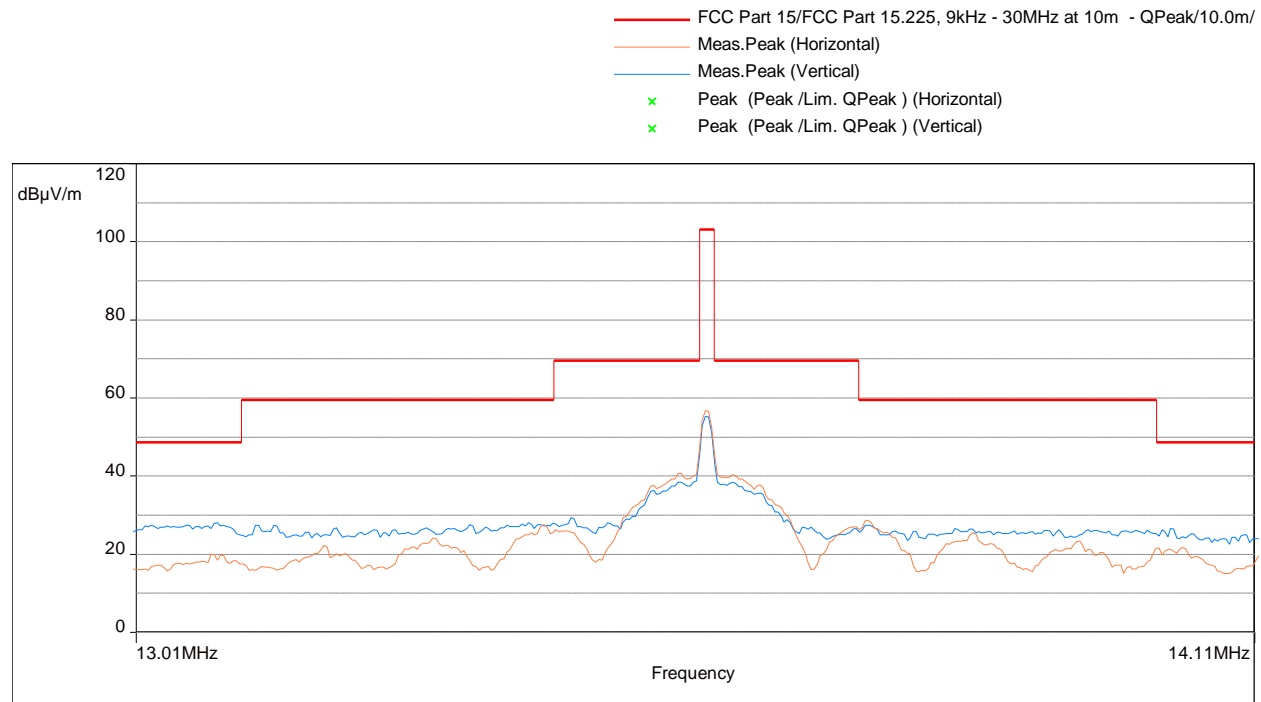
DCF = Distance Correction Factor

Note: FS was measured with loop antenna below 30MHz

#### 4.1.3 Test Results

The data below shows the significant emission frequencies, the limit and the margin of compliance.

Note: Measurements were performed at parallel and perpendicular orientation of loop antenna. The worst-case data was presented below.



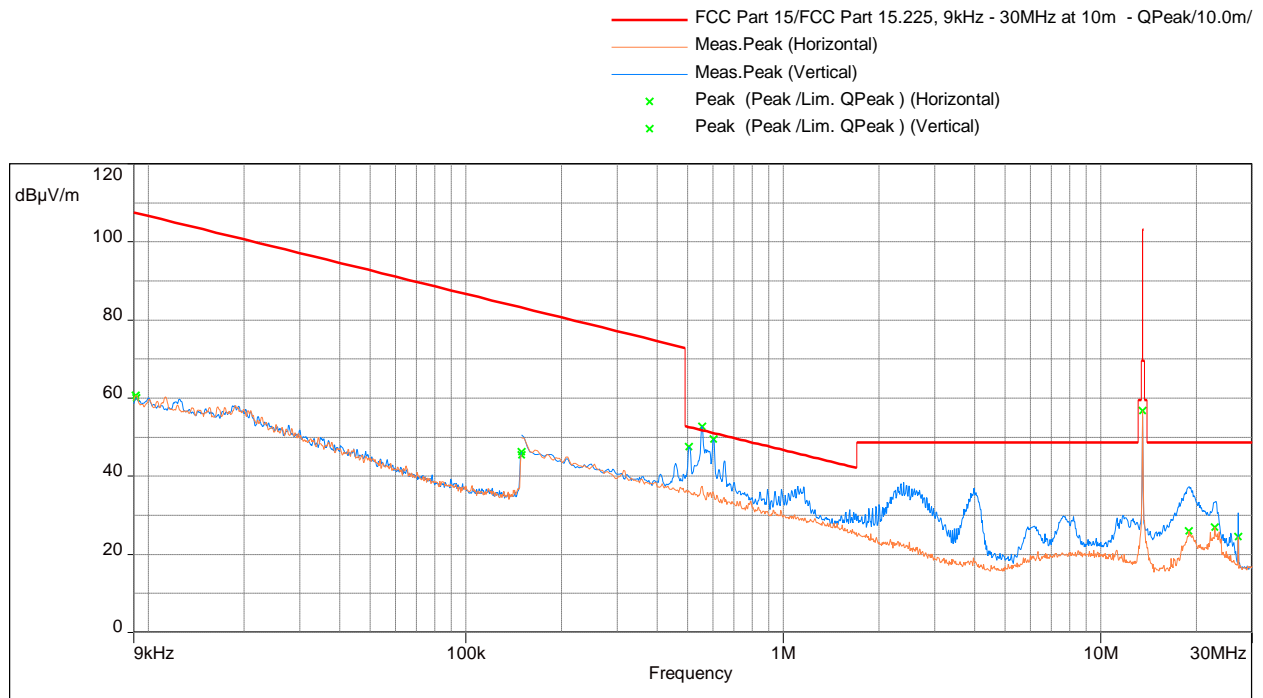
Model: ; Client: ; Comments: ; Test Date: 04/24/2019 20:31

Frequency	Corrected FS @10m	Limit @10m	Margin	RA@10m	Correction
(MHz)	dB(uV/m)	dB(uV/m)	dB	dB(uV)	dB
13.56	56.78	103.10	-46.32	53.48	3.30

Note: Correction = AF+CF-AG

#### 4.1.3 Test Result (Continued)

##### *Radiated Spurious Emissions from 9 kHz to 30MHz*



Model: ; Client: ; Comments: ; Test Date: 04/24/2019 20:31

Frequency	Corrected FS @10m	Limit @10m	Margin	RA@10m	Correction
(MHz)	dB(uV/m)	dB(uV/m)	dB	dB(uV)	dB
0.555	49.11	51.81	-2.7	29.82	19.29
0.603	49.45	51.09	-1.6	30.88	18.57

#### 4.1.3 Test Result (Continued)

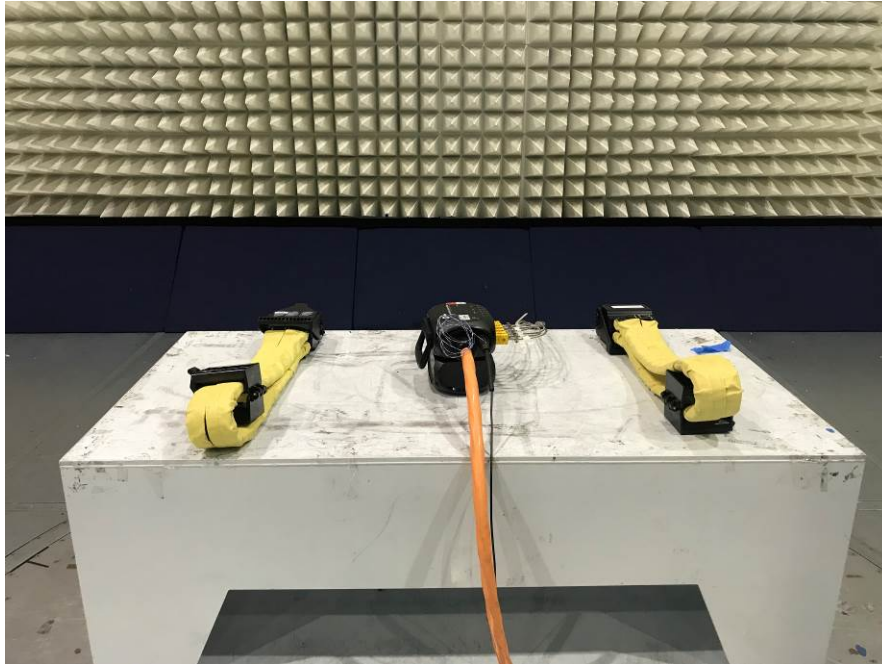
##### *Radiated Spurious Emissions from 30 MHz to 1000 MHz*

Frequency (MHz)	QP @3m dB(μV/m)	QPLim. @3m dB(μV/m)	Margin (dB)	Height (m)	Angle (°)	Polarity	Correction (dB)
79.99	25.7	29.5	-3.9	4.0	284.5	Horizontal	-21.5
135.57	25.7	33.0	-7.3	4.0	105.5	Horizontal	-16.9
135.60	22.8	33.0	-10.2	1.0	293.3	Vertical	-16.9
149.15	23.1	33.0	-9.9	1.0	273.0	Vertical	-17.3
280.00	28.5	35.5	-7.0	3.0	125.0	Horizontal	-14.1
280.00	28.2	35.5	-7.3	1.0	164.0	Vertical	-14.1

<b>Result</b>	<b>Complies by 1.6dB</b>
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#### 4.1.4 Test Configuration Photographs

**The following photographs show the testing configurations used.**





#### 4.1.5 Test Configuration Photographs (Continued)



*Electromagnetic Radiated Disturbance Setup Photograph*



## 4.2 Frequency Tolerance

### 4.2.1 Requirement FCC 15.225 (e)

The frequency tolerance of the carrier signal shall be maintained within  $\pm 0.01\%$  of the operating frequency over a temperature variation of  $-20$  degrees to  $+50$  degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. For battery operated equipment, the equipment tests shall be performed using a new battery.

### 4.2.2 Procedure

The EUT was placed in the temperature chamber. The frequency counter was connected to the transmitter output. For each temperature, the carrier frequency was recorded.

#### 4.2.3 Test Results

Voltage (DC)	Temperature (C)	Measured Frequency (Hz)	Deviation from Reference (Hz)	Deviation (%)
15.0	-20	13559964	128	0.000944
15.0	-10	13559955	168	0.001239
15.0	0	13559943	179	0.001320
15.0	10	13559923	177	0.001305
15.0	20	13559836	0	0.000000
15.0	30	13559787	49	0.000361
15.0	40	13559764	72	0.000531
15.0	50	13559746	90	0.000664
Voltage (DC)	Temperature (C)	Measured Frequency (Hz)	Deviation from Reference (Hz)	Deviation (%)
14.25	20	13559875	39	0.000288
15.75	20	13559870	83	0.000612

Nominal Frequency @ 20C, 15VDC: 13559836 Hz

According to manufacturer, the EUT is 15VDC powered with 5% tolerance.

#### 4.3 Occupied Bandwidth FCC 15.215

##### 4.3.1 Requirements

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§15.217 through 15.257, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated. The requirement to contain the designated bandwidth of the emission within the specified frequency band includes the effects from frequency sweeping, frequency hopping and other modulation techniques that may be employed as well as the frequency stability of the transmitter over expected variations in temperature and supply voltage.

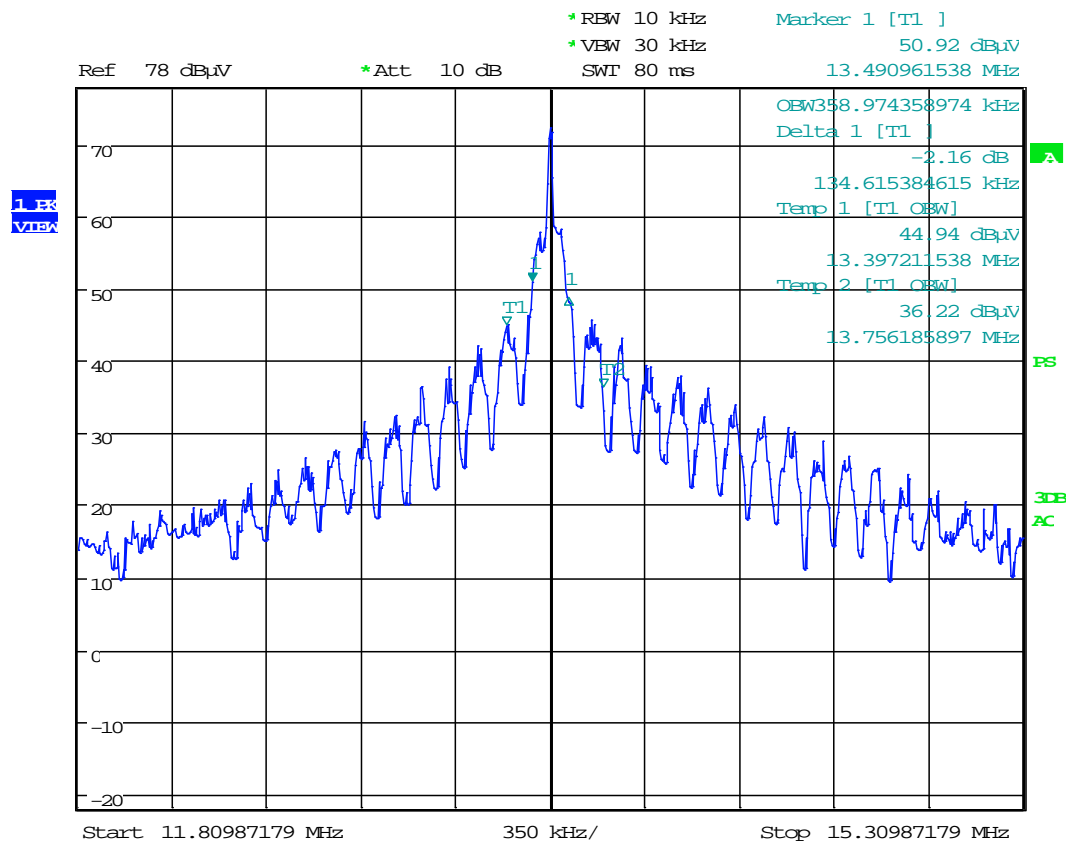
##### 4.3.2 Procedure

The EUT was setup to transmit in normal operating condition.

Measurements were made with the loop antenna in close proximity of the EUT. Following the procedures of ANSI 63.10, the 20dB bandwidth measurements were taken. The following plots show Occupied Bandwidth.

### 4.3.3 Test Results

Frequency (MHz)	20-dB Channel Bandwidth (kHz)	99% Channel Bandwidth (kHz)
13.56	134.6	359.0



Date: 16.APR.2019 15:19:11

#### 4.4 AC Line Conducted Emission FCC Rule 15.207

##### 4.4.1 Requirement

Frequency Band MHz	15.207 Limit dB(μV)	
	Quasi-Peak	Average
0.15-0.50	66 to 56 *	56 to 46 *
0.50-5.00	56	46
5.00-30.00	60	50

*Note: \*Decreases linearly with the logarithm of the frequency. At the transition frequency the lower limit applies.*

##### 4.4.2 Procedure

Measurements are carried out using quasi-peak and average detector receivers in accordance with CISPR 16. An AMN is required to provide a defined impedance at high frequencies across the power feed at the point of measurement of terminal voltage and also to provide isolation of the circuit under test from the ambient noise on the power lines. An AMN as defined in CISPR 16 shall be used.

The EUT is located so that the distance between the boundary of the EUT and the closest surface of the AMN is 0.8m.

Where a flexible mains cord is provided by the manufacturer, this shall be 1m long or if in excess of 1m, the excess cable is folded back and forth as far as possible so as to form a bundle not exceeding 0.4m in length.

The EUT is arranged and connected with cables terminated in accordance with the product specification.

Conducted disturbance is measured between the phase lead and the reference ground, and between the neutral lead and the reference ground. Both measured values are reported.

The EUT, where intended for tabletop use, is placed on a table whose top is 0.8m above the ground plane. A vertical, metal reference plane is placed 0.4m from the EUT. The vertical metal reference-plane is at least 2m by 2m. The EUT shall be kept at least 0.8m from any other metal surface or other ground plane not being part of the EUT. The table is constructed of non-conductive materials. Its dimensions are 1m by 1.5m, but may be extended for larger EUT.

Floor standing EUT are placed on a horizontal metal ground plane and isolated from the ground plane by resting on an insulating material. The metal ground plane extends at least 0.5m beyond the boundaries of the EUT and has minimum dimensions of 2m by 2m.

EUT was placed in transmission mode then tested for conducted emissions per 15.207 to ensure the device complies with 15.207 outside the transmitter fundamental emissions band. After, the EUT antenna is removed from the EUT and only the fundamental emission band was measured to show that the fundamental emission band is in compliance with the 15.207 limits.

Equipment setup for conducted disturbance tests followed.

#### 4.4.3 Test Result

### AC Line Conducted Emission with RFID Antenna

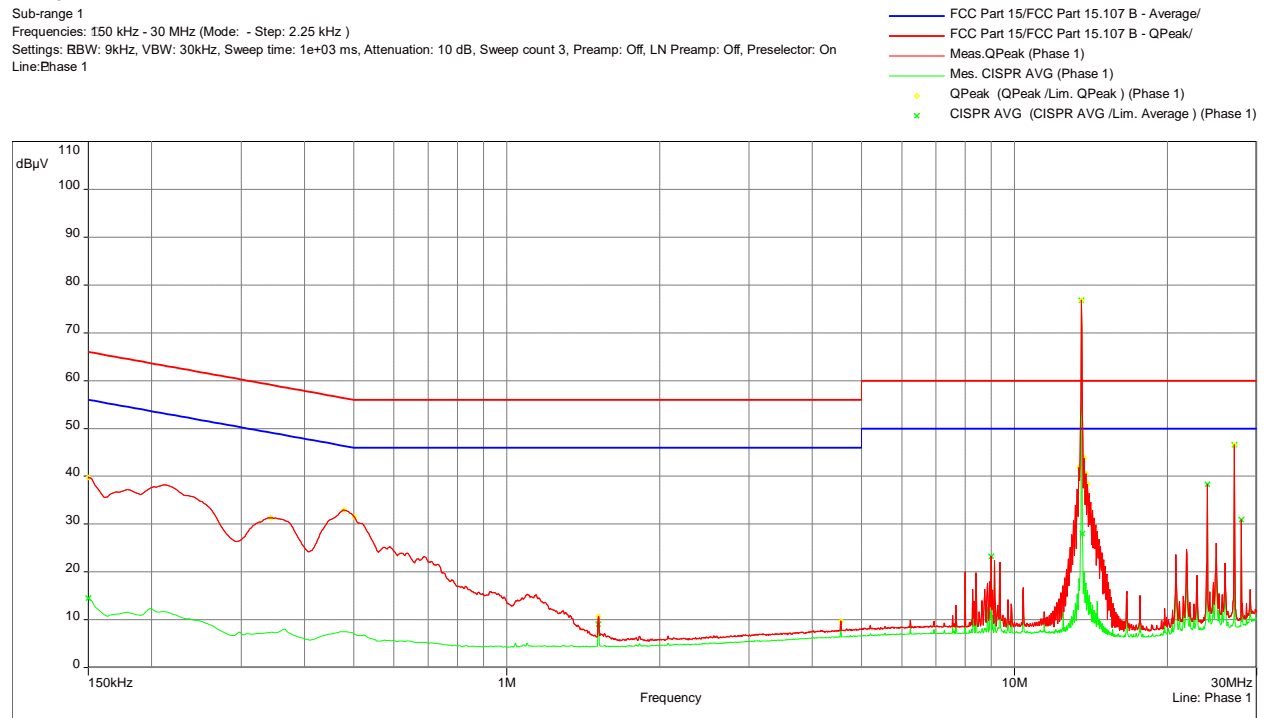
#### Line 1

Sub-range 1

Frequencies: 150 kHz - 30 MHz (Mode: - Step: 2.25 kHz)

Settings: RBW: 9kHz, VBW: 30kHz, Sweep time: 1e+03 ms, Attenuation: 10 dB, Sweep count 3, Preamp: Off, LN Preamp: Off, Preselector: On

Line: Phase 1



Model: ; Client: ; Comments: ; Test Date: 04/26/2019 19:32

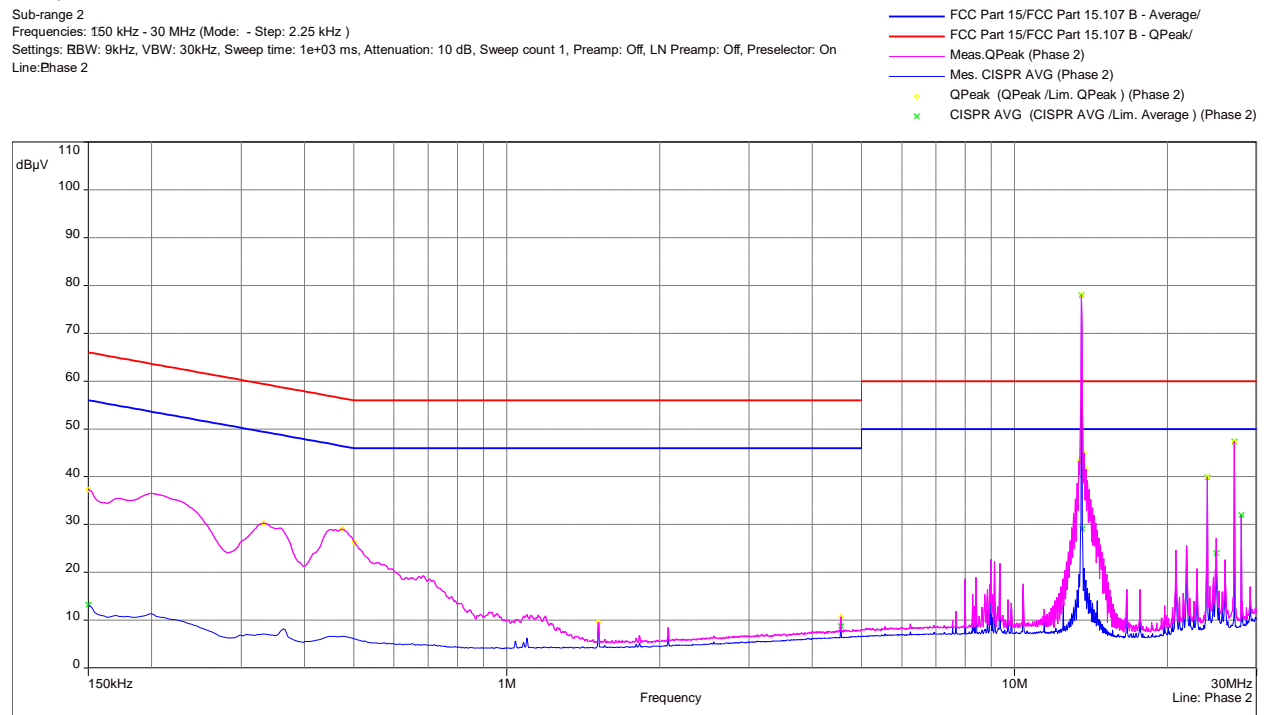
#### Line 2

Sub-range 2

Frequencies: 150 kHz - 30 MHz (Mode: - Step: 2.25 kHz)

Settings: RBW: 9kHz, VBW: 30kHz, Sweep time: 1e+03 ms, Attenuation: 10 dB, Sweep count 1, Preamp: Off, LN Preamp: Off, Preselector: On

Line: Phase 2



Model: ; Client: ; Comments: ; Test Date: 04/26/2019 19:32

## 4.4.3 Test Result (Continued)

Quasi-Peak Table					
Frequency	Q.Peak	Limit	Margin	Comment	Correction
(MHz)	(dBμV)	(dBμV)	(dB)		(dB)
0.150	39.7	66.0	-26.3	Phase 1	12.6
0.150	37.3	66.0	-28.7	Phase 2	12.6
0.332	30.3	59.4	-29.1	Phase 2	11.3
0.344	31.3	59.1	-27.8	Phase 1	11.3
0.474	29.0	56.4	-27.4	Phase 2	11.2
0.479	33.0	56.4	-23.4	Phase 1	11.2
0.501	31.5	56.0	-24.5	Phase 1	11.2
0.501	26.4	56.0	-29.7	Phase 2	11.2
1.516	9.6	56.0	-46.4	Phase 2	11.1
1.516	10.7	56.0	-45.3	Phase 1	11.1
4.551	9.8	56.0	-46.2	Phase 1	11.2
4.551	10.7	56.0	-45.3	Phase 2	11.2
13.400	41.9	60.0	-18.1	Phase 1	11.4
13.400	43.2	60.0	-16.8	Phase 2	11.4
13.720	43.8	60.0	-16.2	Phase 1	11.4
13.720	44.9	60.0	-15.1	Phase 2	11.4
13.826	41.6	60.0	-18.4	Phase 2	11.4
13.826	40.6	60.0	-19.4	Phase 1	11.4
13.931	38.4	60.0	-21.6	Phase 1	11.4
24.000	39.9	60.0	-20.1	Phase 2	11.7
27.121	46.5	60.0	-13.5	Phase 1	11.7
27.121	47.3	60.0	-12.7	Phase 2	11.7

#### 4.4.3 Test Result (Continued)

Average Table					
Frequency	Average	Limit	Margin	Comment	Correction
(MHz)	(dB $\mu$ V)	(dB $\mu$ V)	(dB)		(dB)
0.150	14.5	56.0	-41.5	Phase 1	12.6
0.150	13.2	56.0	-42.8	Phase 2	12.6
1.516	9.1	46.0	-36.9	Phase 1	11.1
4.551	8.7	46.0	-37.3	Phase 2	11.2
8.997	23.2	50.0	-26.8	Phase 1	11.3
13.612	28.0	50.0	-22.0	Phase 1	11.4
13.612	29.0	50.0	-21.0	Phase 2	11.4
24.000	39.9	50.0	-10.1	Phase 2	11.7
24.000	38.3	50.0	-11.7	Phase 1	11.7
24.963	24.0	50.0	-26.0	Phase 2	11.7
27.121	46.6	50.0	-3.4	Phase 1	11.7
27.121	47.4	50.0	-2.7	Phase 2	11.7
28.001	31.9	50.0	-18.1	Phase 2	11.8
28.001	31.0	50.0	-19.1	Phase 1	11.8



#### 4.4.3 Test Result (Continued)

### AC Line Conducted Emission with RFID Antenna Terminated with Load

#### Line 1

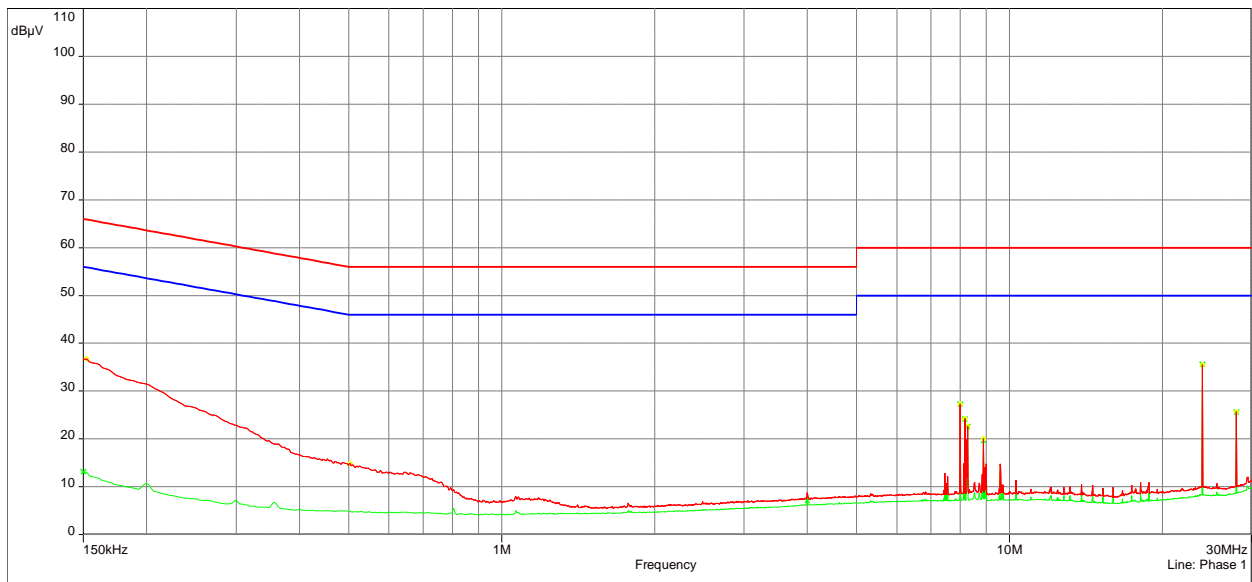
Sub-range 1

Frequencies: 150 kHz - 30 MHz (Mode: - Step: 2.25 kHz)

Settings: RBW: 9kHz, VBW: 30kHz, Sweep time: 1e+03 ms, Attenuation: 10 dB, Sweep count 3, Preamp: Off, LN Preamp: Off, Preselector: On

Line: Phase 1

— FCC Part 15/FCC Part 15.107 B - Average/  
— FCC Part 15/FCC Part 15.107 B - QPeak/  
— Meas.QPeak (Phase 1)  
— Mes. CISPR AVG (Phase 1)  
◇ QPeak (QPeak /Lim. QPeak ) (Phase 1)  
× CISPR AVG (CISPR AVG /Lim. Average ) (Phase 1)



Model: ; Client: ; Comments: ; Test Date: 04/29/2019 18:00

#### Line 2

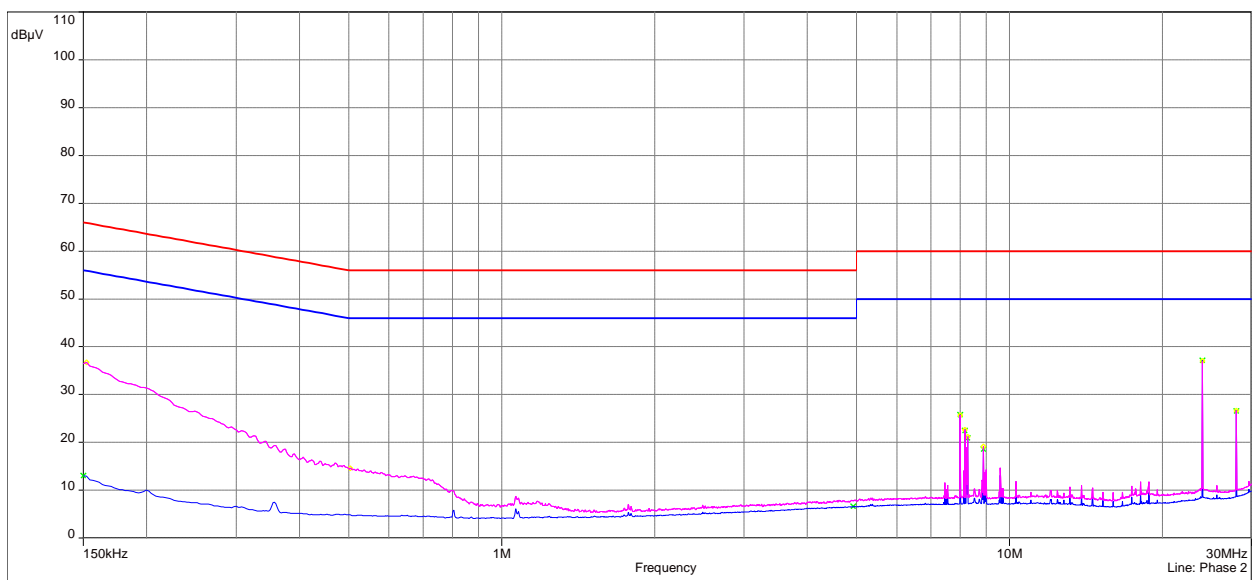
Sub-range 2

Frequencies: 150 kHz - 30 MHz (Mode: - Step: 2.25 kHz)

Settings: RBW: 9kHz, VBW: 30kHz, Sweep time: 1e+03 ms, Attenuation: 10 dB, Sweep count 1, Preamp: Off, LN Preamp: Off, Preselector: On

Line: Phase 2

— FCC Part 15/FCC Part 15.107 B - Average/  
— FCC Part 15/FCC Part 15.107 B - QPeak/  
— Meas.QPeak (Phase 2)  
— Mes. CISPR AVG (Phase 2)  
◇ QPeak (QPeak /Lim. QPeak ) (Phase 2)  
× CISPR AVG (CISPR AVG /Lim. Average ) (Phase 2)



Model: ; Client: ; Comments: ; Test Date: 04/29/2019 18:00

#### 4.4.3 Test Result (Continued)

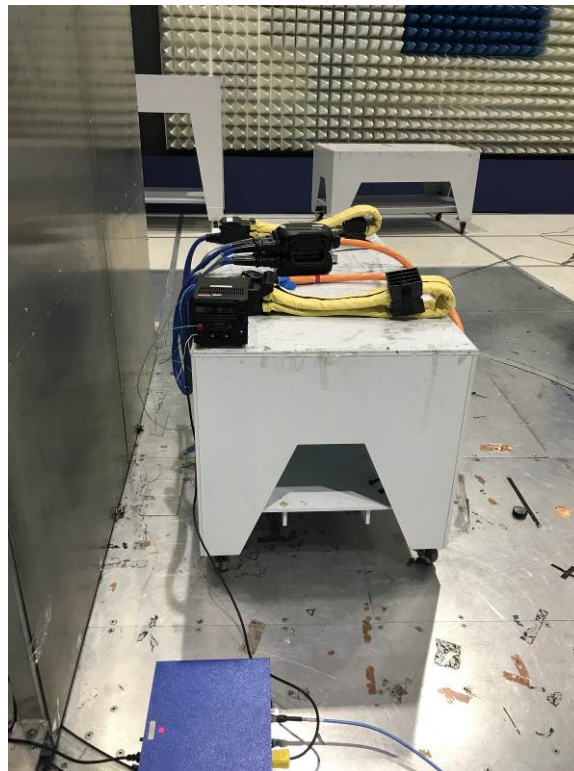
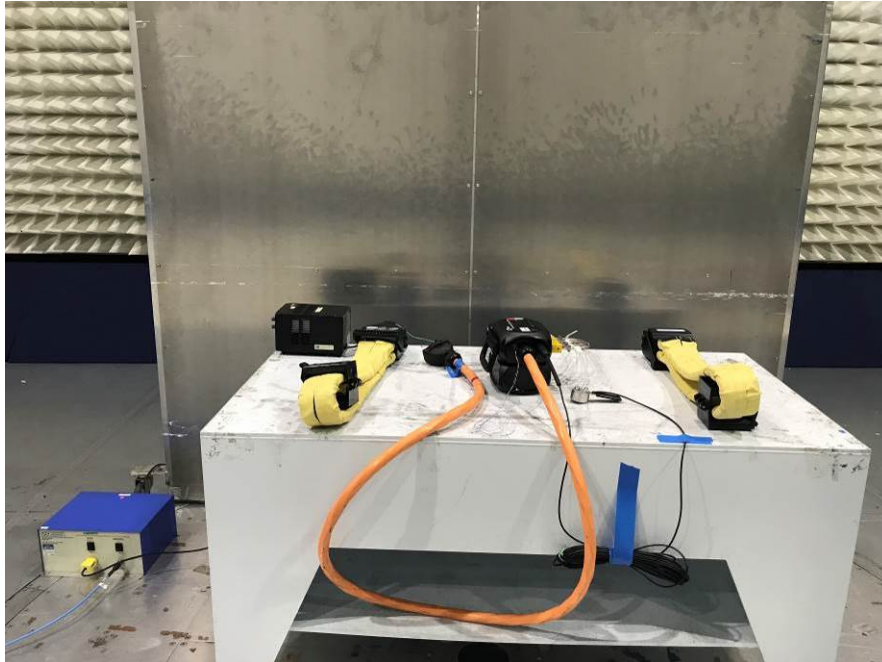
Quasi-Peak Table					
Frequency	Q.Peak	Limit	Margin	Comment	Correction
(MHz)	(dBμV)	(dBμV)	(dB)		(dB)
0.152	36.7	65.9	-29.2	Phase 1	12.5
0.152	36.7	65.9	-29.2	Phase 2	12.5
0.503	14.8	56.0	-41.2	Phase 1	11.2
0.503	14.6	56.0	-41.4	Phase 2	11.2
8.000	27.2	60.0	-32.8	Phase 1	11.3
8.000	25.7	60.0	-34.3	Phase 2	11.3
8.176	24.2	60.0	-35.8	Phase 1	11.3
8.176	22.6	60.0	-37.4	Phase 2	11.3
8.273	21.2	60.0	-38.8	Phase 2	11.3
8.275	22.7	60.0	-37.3	Phase 1	11.3
8.885	19.1	60.0	-40.9	Phase 2	11.3
8.887	20.0	60.0	-40.0	Phase 1	11.3
24.000	35.5	60.0	-24.6	Phase 1	11.7
24.000	37.0	60.0	-23.0	Phase 2	11.7
28.001	26.6	60.0	-33.4	Phase 2	11.8
28.001	25.6	60.0	-34.4	Phase 1	11.8
<b>Results: Complies by 12.7 dB</b>					

#### 4.4.3 Test Result (Continued)

Average Table					
Frequency	Average	Limit	Margin	Comment	Correction
(MHz)	(dBμV)	(dBμV)	(dB)		(dB)
0.150	13.2	56.0	-42.8	Phase 1	12.6
0.150	13.1	56.0	-42.9	Phase 2	12.6
4.000	7.1	46.0	-38.9	Phase 1	11.2
4.925	6.6	46.0	-39.4	Phase 2	11.2
8.000	27.2	50.0	-22.8	Phase 1	11.3
8.000	25.7	50.0	-24.3	Phase 2	11.3
8.176	24.1	50.0	-25.9	Phase 1	11.3
8.176	22.5	50.0	-27.6	Phase 2	11.3
8.273	20.9	50.0	-29.1	Phase 2	11.3
8.275	22.5	50.0	-27.5	Phase 1	11.3
8.885	18.6	50.0	-31.5	Phase 2	11.3
8.887	19.6	50.0	-30.4	Phase 1	11.3
24.000	35.6	50.0	-14.4	Phase 1	11.7
24.000	37.1	50.0	-12.9	Phase 2	11.7
28.001	26.6	50.0	-23.4	Phase 2	11.8
28.001	25.5	50.0	-24.5	Phase 1	11.8
<b>Results: Complies by 2.7 dB</b>					

#### 4.4.4 Test Configuration Photographs

**The following photographs show the testing configurations used.**



## 5.0 List of test equipment

Measurement equipment used for emission compliance testing utilized the equipment on the following list:

Equipment	Manufacturer	Model/Type	Asset No.	Calibration Interval	Cal Due
Bi-Log Antenna	Teseq	CBL 6111D	ITS 01058	12	09/20/19
Pre-Amplifier	Com-Power	PAM_103	ITS 01645	12	03/06/20
EMI Receiver	Rohde and Schwarz	ESR7	ITS 01607	12	10/23/19
LISN	Com Power	LIN-115A	ITS 01290	12	06/21/19
RF Cable	Megaphase	EMC1-K1K1-236	ITS 01538	12	06/25/19
RF Cable	Megaphase	TM40-K1K1-59	ITS 01657	12	06/26/19
RF Cable	TRU Corporation	TRU CORE 300	ITS 01630	12	03/28/20
RF Cable	TRU Corporation	TRU CORE 300	ITS 00465	12	08/16/19
RF Cable	TRU Corporation	TRU CORE 300	ITS 01470	12	08/16/19
Loop Sensor	Solar Electronics	7334-1	ITS 01608	12	10/09/19
Environmental Test Chamber	Thermotron	F-158-CHM-15-15	ITS 01026	12	01/30/20
Ant-Passive Loop	EMCO	6512	ITS 01598	12	10/09/19
Variac	Powerstat	3PN2368	ITS 00726	12	#

# Verified before use

Software used for emission compliance testing utilized the following:

Name	Manufacturer	Version	Template/Profile
BAT-EMC	Nexio	3.17.0.10	MillerElectric.bpp

**6.0 Document History**

<b>Revision/ Job Number</b>	<b>Writer Initials</b>	<b>Reviewer Initials</b>	<b>Date</b>	<b>Change</b>
1.0 / G103899661	ML	KV	May 21, 2019	Original document

***END OF REPORT***