WaveLynx Technologies Corporation

TEST REPORT FOR

Ethos Models: ET10-1, ET10-3, ET10-5, and ET10-7

Tested To The Following Standards:

FCC Part 15 Subpart C Sections:

15.207 & 15.209

Report No.: 97029-32

Date of issue: May 24, 2016



This test report bears the accreditation symbol indicating that the testing performed herein meets the test and reporting requirements of ISO/IEC 17025 under the applicable scope of EMC testing for CKC Laboratories, Inc.

We strive to create long-term, trust based relationships by providing sound, adaptive, customer first testing services. We embrace each of our customers' unique EMC challenges, not as an interruption to set processes, but rather as the reason we are in business.

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ADMINISTRATIVE INFORMATION

Test Report Information

REPORT PREPARED FOR: REPORT PREPARED BY:

WaveLynx Technologies Corporation Terri Rayle
12303 Airport Way, Suite 200 CKC Laboratories, Inc.
Broomfield, CO 80021 5046 Sierra Pines Drive
Mariposa, CA 95338

REPRESENTATIVE: Daniel Field Project Number: 97029

Customer Reference Number: CKPO030916

DATE OF EQUIPMENT RECEIPT: March 14, 2016

DATE(S) OF TESTING: March 14 - May 10, 2016

Report Authorization

The test data contained in this report documents the observed testing parameters pertaining to and are relevant for only the sample equipment tested in the agreed upon operational mode(s) and configuration(s) as identified herein. Compliance assessment remains the client's responsibility. This report may not be used to claim product endorsement by A2LA or any government agencies. This test report has been authorized for release under quality control from CKC Laboratories, Inc.

Steve Behm

Director of Quality Assurance & Engineering Services CKC Laboratories, Inc.

Steve 2 Be

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Test Facility Information



Our laboratories are configured to effectively test a wide variety of product types. CKC utilizes first class test equipment, anechoic chambers, data acquisition and information services to create accurate, repeatable and affordable test results.

TEST LOCATION(S): CKC Laboratories, Inc. 5046 Sierra Pines Drive Mariposa, CA 95338

Software Versions

CKC Laboratories Proprietary Software	Version
EMITest Emissions	5.03.02

Site Registration & Accreditation Information

Location	CB#	TAIWAN	CANADA	FCC	JAPAN
Mariposa D	US0103	SL2-IN-E-1147R	3082A-1	784962	A-0136

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SUMMARY OF RESULTS

Standard / Specification: FCC Part 15 Subpart C - 15.209

Test Procedure	Description	Modifications	Results
15.215(c)	Occupied Bandwidth	NA	Pass
15.209	Field Strength of Fundamental	NA	Pass
15.209	Field Strength of Spurious Emissions	NA	Pass
15.207	AC Conducted Emissions	NA	Pass

NA = Not Applicable

Modifications During Testing

This list is a summary of the modifications made to the equipment during testing.

Summary of Conditions	
No modifications were made during testing.	

Modifications listed above must be incorporated into all production units.

Conditions During Testing

This list is a summary of the conditions noted to the equipment during testing.

Summary of Conditions		
None		

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EQUIPMENT UNDER TEST (EUT)

During testing numerous configurations may have been utilized. The configurations listed below support compliance to the standard(s) listed in the Summary of Results section.

Configuration 1

Equipment	Tested.
Lympinem	i csicu.

Device	Manufacturer	Model #	S/N	
Ethos	WaveLynx Technologies	ET10-1	NA	
	Corporation			

Support Equipment:

Device	Manufacturer	Model #	S/N
DC Power Supply	HP	6205C	2228A01775

Configuration 3

Equipment Tested:

Device	Manufacturer	Model #	S/N
Ethos	WaveLynx Technologies	ET10-3	NA
	Corporation		

Support Equipment:

Device	Manufacturer	Model #	S/N
DC Power Supply	HP	6205C	2228A01775

Configuration 5

Equipment Tested:

Device	Manufacturer	Model #	S/N
Ethos	WaveLynx Technologies	ET10-5	NA
	Corporation		

Support Equipment:

Device	Manufacturer	Model #	S/N
DC Power Supply	HP	6205C	2228A01775

Configuration 7

Equipment Tested:

Device	Manufacturer	Model #	S/N
Ethos	WaveLynx Technologies	ET10-7	NA
	Corporation		

Support Equipment:

Device	Manufacturer	Model #	S/N
DC Power Supply	HP	6205C	2228A01775

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Configuration 8

Equipment Tested:

Device	Manufacturer	Model #	S/N
Ethos	WaveLynx Technologies	ET10-1	NA
	Corporation		
Ethos	WaveLynx Technologies	ET10-3	NA
	Corporation		

Support Equipment:

Device	Manufacturer	Model #	S/N
DC Power Supply	HP	6205C	2228A01775

Configuration 9

Equipment Tested:

<u> 1 - 1 </u>				
Device	Manufacturer	Model #	S/N	
Ethos	WaveLynx Technologies	ET10-5	NA	
	Corporation			
Ethos	WaveLynx Technologies	ET10-7	NA	
	Corporation			

Support Equipment:

Device	Manufacturer	Model #	S/N
DC Power Supply	HP	6205C	2228A01775

General Product Information:

Product Information	Manufacturer-Provided Details	
Equipment Type (All 4 EUTs):	Stand-Alone Equipment	
Modulation Type(s) (All 4 EUTs):	CW	
	Configuration 1 = 17.13%	
Maximum Duty Cycle (Massured)	Configuration 3 = 5.7%	
Maximum Duty Cycle (Measured):	Configuration 5 = 17.13%	
	Configuration 7 = 5.7%	
Antonna Typo(s) and Cain:	Configurations 1 and 5 = Coil Antenna 90mm x 32mm / 2dBi	
Antenna Type(s) and Gain:	Configuration 3 and 7 = Coil Antenna 90mm x 30mm / 2dBi	
Antenna Connection Type	Integral	
(All 4 EUTs):	integral	
Nominal Input Voltage	12VDC	
(All 4 EUTs):	IZVDC	
Firmware / Software used for Test	Wallmount Reader FCC LF Version 1	
(All 4 EUTs):	waiiiiouiit keader FCC LF Version 1	

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FCC Part 15 Subpart C

15.215(c) Occupied Bandwidth (20dB BW)

	Test Setup/Conditions					
Test Location:	Mariposa Lab D	Test Engineer:	Benny Lovan			
Test Method:	ANSI C63.10 (2013)	Test Date(s):	March 14 – 18, 2016			
Configuration:	1, 3, 5 and 7					
Test Setup:	Configuration 1 (125kHz Only) –	Measured in X-Axis				
	Configuration 3 (Set for 125kHz) -					
	Configuration 5 (125 kHz Only) –					
	Configuration 7 (Set for 125kHz) -	 Measured in X-Axis 				
	Antenna Type: Integral					
	Modulation: CW					
	The EUT is powered by a DC pow Max power was measured in two o	orthogonalities.				
	The manufacturer declares it will sideways (X-axis) orientation.	l only ever be wall n	nounted in an upright (Y-axis) or			
	The OBW was performed in the power measurements.	worst case orientation	observed during the fundamental			
	The EUT is setup on an 80cm foam block.					
	The EUT has been programmed to		the RFID signal at 125kHz.			

Environmental Conditions					
	3/14/2016				
Temperature (°C)	Temperature (°C) 10 Relative Humidity (%): 86				
	3/15/2016				
Temperature (ºC)	10	Relative Humidity (%):	85		
3/18/2016					
Temperature (ºC)	11	Relative Humidity (%):	85		

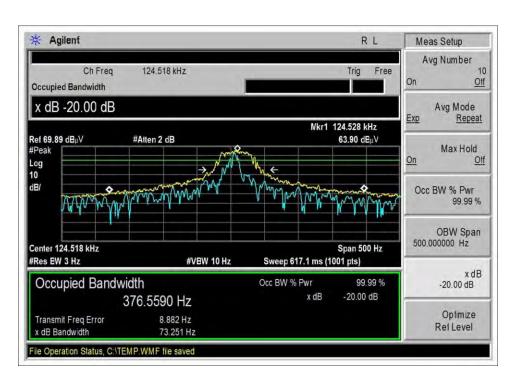
Test Equipment							
Asset# / Serial# Description Manufacturer Model Cal Date Cal Due							
ANSITED 3M	Cable	None	None	11/15/14	11/15/2016		
ANP06884	Cable	TMS	LMR195-FR-4	10/27/15	10/27/2017		
AN00226	Loop Antenna	EMCO	6502	03/28/14	3/28/2016		

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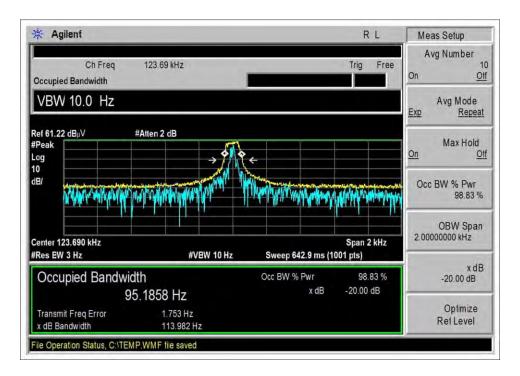
	Test Data Summary					
Frequency (MHz)	Antenna Port	Modulation	Measured (kHz)	Limit (kHz)	Results	
125kHz (Config. 1)	Integral	CW	0.073251	None	NA	
125kHz (Config. 3)	Integral	CW	0.113982	None	NA	
125kHz (Config. 5)	Integral	CW	0.103982	None	NA	
125kHz (Config. 7)	Integral	CW	0.090895	None	NA	

Plots

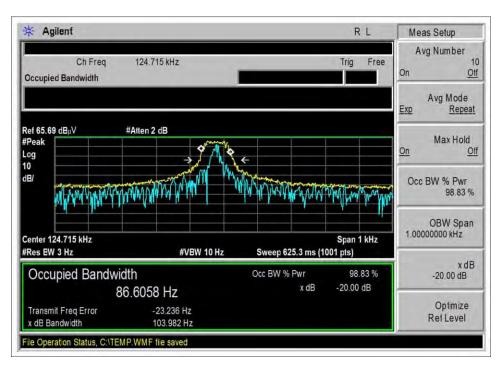


Configuration 1



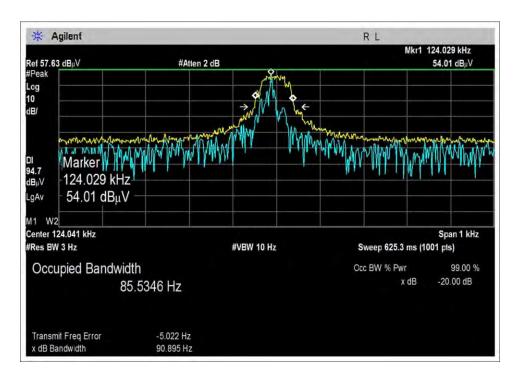


Configuration 3



Configuration 5





Configuration 7



Test Setup Photos



X Axis



Y Axis



15.209 Field Strength of Fundamental

Test Data Summary - Voltage Variations – Configuration 1								
Frequency (MHz)	Modulation / Ant Port	V _{Minimum} (dBuV/m)	V _{Nominal} (dBuV/m)	V _{Maximum} (dBuV/m)	Max Deviation from V _{Nominal} (dB)			
0.125 Parallel	CW / Integral Antenna	-6.6	-6.4	-6.7	0.3			
0.125 Perpendicular	CW / Integral Antenna	-13.4	-13.3	-13.3	0.1			

Test performed using operational mode with the highest output power, representing worst case. Worst case orientation for this unit was the X-Axis.

	Test Data Summary - Voltage Variations – Configuration 3									
Frequency (MHz)	Modulation / Ant Port	V _{Minimum} (dBuV/m)	V _{Nominal} (dBuV/m)	V _{Maximum} (dBuV/m)	Max Deviation from V _{Nominal} (dB)					
0.125 Parallel	CW / Integral Antenna	-7.6	-6.9	-7.1	0.7 dB					
0.125 Perpendicular	CW / Integral Antenna	-12.5	-9.8	-12	2.7 dB					

Test performed using operational mode with the highest output power, representing worst case. Worst case orientation for this unit was the Y-Axis.

Test Data Summary - Voltage Variations – Configuration 5							
Frequency (MHz)	Modulation / Ant Port	V _{Minimum} (dBuV/m)	V _{Nominal} (dBuV/m)	V _{Maximum} (dBuV/m)	Max Deviation from V _{Nominal} (dB)		
0.125 Parallel	CW / Integral Antenna	-5.8	-5.0	-6.0	1.0 dB		
0.125 Perpendicular	CW / Integral Antenna	-10.2	-9.0	-10.3	1.3 dB		

Test performed using operational mode with the highest output power, representing worst case. Worst case orientation for this unit was the Y-Axis.

Test Data Summary - Voltage Variations – Configuration 7								
Frequency (MHz)	Modulation / Ant Port	V _{Minimum} (dBuV/m)	V _{Nominal} (dBuV/m)	V _{Maximum} (dBuV/m)	Max Deviation from V _{Nominal} (dB)			
0.125 Parallel	CW / Integral Antenna	-7.1	-6.6	-7.1	0.5 dB			
0.125 Perpendicular	CW / Integral Antenna	-12.5	-11.9	-12.4	0.6 dB			

Test performed using operational mode with the highest output power, representing worst case. Worst case orientation for this unit was the Y-Axis.

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 $\frac{\textit{Parameter Definitions:}}{\textit{Measurements performed at input voltage Vnominal} \pm 15\%.}$

Parameter	Value
V _{Nominal} :	12VDC
V _{Minimum} :	10.20 VDC
V _{Maximum} :	13.80 VDC

	Test Data Summary – Radiated Field Strength Measurement								
Frequency Modulation		Ant. Type	Measured (dBuV/m @ 300m)	Limit (dBuV/m @ 300m)	Results				
	Configuration 1								
0.12446 (Parallel)	CW	Integral	-6.4	≤25.7	Pass				
0.12446 (Perpendicular)	CW	Integral	ntegral -13.3 ≤25.7		Pass				
		Configur	ation 3						
0.125 (Parallel)	CW	Integral	-6.9	≤25.8	Pass				
0.125 (Perpendicular)	CW	Integral	-9.8 ≤25.8		Pass				
		Configur	ation 5						
0.125 (Parallel)	CW	Integral	-5.0	≤25.7	Pass				
0.125 (Perpendicular)	CW	Integral	-9.0 ≤25.7		Pass				
		Configur	ation 7						
0.125 (Parallel)	CW	Integral	-6.6	≤25.7	Pass				
0.125 (Perpendicular)	CW	Integral	-11.9	≤25.7	Pass				

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Test Setup / Conditions / Data

Test Location: CKC Laboratories Inc. • 5046 Sierra Pines Dr. • Mariposa, CA 95338 • 209-966-5240

WaveLynx Technologies Corporation Customer:

15.209 Radiated Emissions Specification:

Work Order #: 97029 Date: 3/14/2016 Test Type: **Radiated Scan** Time: 11:41:38 Tested By: Benny Lovan Sequence#: 1

Software: EMITest 5.03.02

Equipment Tested:

Device Manufacturer Model # S/N Configuration 1

Support Equipment:

Device Manufacturer Model # S/N Configuration 1

Test Conditions / Notes:

Radiated Emissions Fundamental Measurements

Temperature: 10°C Humidity:86%

Atmospheric Pressure: 98.0 kPa

Method: ANSI C63.10 2013

Antenna Type: Integral Modulation: CW

The EUT is powered by a DC power supply at 12VDC.

Max power was measured in two orthogonalities.

125kHz Only – Measured in X-Axis

The Fundamental measurements were performed in the worst case orientation observed during the fundamental power measurements.

The manufacturer declares it will only ever be wall mounted in an upright (Y-axis) or sideways (X-axis) orientation.

The EUT is setup on an 80cm foam block.

The EUT has been programmed to continuously transmit the RFID signal at 125kHz.

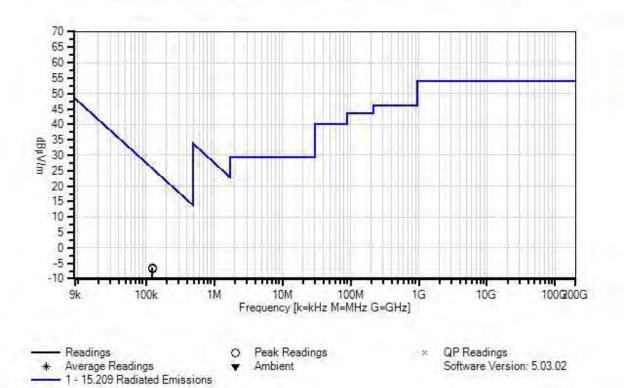
Measurements will be made in both orientations as well as with the voltage variation of 11.2VDC and 13.8VDC

(+/-15% of nominal).

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WaveLynx Technologies Corporation WO#: 97029 Sequence#: 1 Date: 3/14/2016 15.209 Radiated Emissions Test Distance: 10 Meters Parallel





Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANSITED 3M	Cable		11/15/2014	11/15/2016
T2	ANP06884	Cable	LMR195-FR-4	10/27/2015	10/27/2017
T3	AN00226	Loop Antenna	6502	3/28/2014	3/28/2016

Measur	rement Data:	Re	eading lis	ted by ma	argin.		Te	est Distanc	e: 10 Meter	rs.	
#	Freq	Rdng	T1	T2	T3		Dist	Corr	Spec	Margin	Polar
	MHz	$dB\mu V$	dB	dB	dB	dB	Table	$dB\mu V/m$	$dB\mu V/m$	dB	Ant
1	124.460k	41.7	+0.1	+0.0	+10.9		-59.1	-6.4	25.7	-32.1	Paral
									X-Axis		
2	124.414k	41.7	+0.1	+0.0	+10.9		-59.1	-6.4	25.7	-32.1	Paral
									Y-Axis		
3	124.442k	41.5	+0.1	+0.0	+10.9		-59.1	-6.6	25.7	-32.3	Paral
									X-Axis @	10.2	
									VDC		
4	124.481k	41.4	+0.1	+0.0	+10.9		-59.1	-6.7	25.7	-32.4	Paral
									X-Axis @	13.8	
									VDC		
5	124.465k	34.8	+0.1	+0.0	+10.9		-59.1	-13.3	25.7	-39.0	Perpe
									X-Axis		
6	124.513k	34.8	+0.1	+0.0	+10.9		-59.1	-13.3	25.7	-39.0	Perpe
									X-Axis @		
									13.8VDC		
7	124.448k	34.7	+0.1	+0.0	+10.9		-59.1	-13.4	25.7	-39.1	Perpe
									X-Axis @	10.2	
									VDC		
8	124.509k	34.0	+0.1	+0.0	+10.9		-59.1	-14.1	25.7	-39.8	Perpe
									Y-Axis		

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Test Location: CKC Laboratories Inc. • 5046 Sierra Pines Dr. • Mariposa, CA 95338 • 209-966-5240

Customer: WaveLynx Technologies Corporation

Specification: 15.209 Radiated Emissions

Work Order #: 97029 Date: 3/15/2016
Test Type: Radiated Scan Time: 09:09:09
Tested By: Benny Lovan Sequence#: 2

Software: EMITest 5.03.02

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 3			

Support Equipment:

Device	Manufacturer	Model #	S/N	
Configuration 3				

Test Conditions / Notes:

Radiated Emissions Fundamental Measurements

Temperature: 10°C Humidity:85%

Atmospheric Pressure: 101.0 kPa

Method: ANSI C63.10 2013

Antenna Type: Integral Modulation: CW

The EUT is powered by a DC power supply at 12VDC. Max power was measured in two orthogonalities.

Set for 125kHz – Measured in Y-Axis

The Fundamental measurements were performed in the worst case orientation observed during the fundamental power measurements.

The manufacturer declares it will only ever be wall mounted in an upright (Y-axis) or sideways (X-axis) orientation.

The EUT is setup on an 80cm foam block.

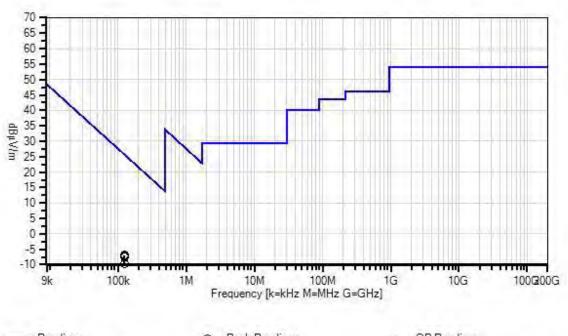
The EUT has been programmed to continuously transmit the RFID signal at 125kHz.

Measurements will be made in both orientations as well as with the voltage variation of 11.2VDC and 13.8VDC (+/-15% of nominal).

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WaveLynx Technologies Corporation WO#: 97029 Sequence#: 2 Date: 3/15/2016 15.209 Radiated Emissions Test Distance: 3 Meters Parallel



Readings

* Average Readings

1 - 15.209 Radiated Emissions

Peak Readings
Ambient

 QP Readings Software Version: 5.03.02



Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANSITED 3M	Cable		11/15/2014	11/15/2016
T2	ANP06884	Cable	LMR195-FR-4	10/27/2015	10/27/2017
T3	AN00226	Loop Antenna	6502	3/28/2014	3/28/2016

Measurement Data:		Re	eading lis	ted by ma	argin.		Te	est Distanc	e: 3 Meters		
#	Freq	Rdng	T1	T2	T3		Dist	Corr	Spec	Margin	Polar
	MHz	$dB\mu V$	dB	dB	dB	dB	Table	$dB\mu V/m$	$dB\mu V/m$	dB	Ant
1	123.635k	62.1	+0.1	+0.0	+10.9		-80.0	-6.9	25.8	-32.7	Paral
									X-Axis		
2	123.610k	62.1	+0.1	+0.0	+10.9		-80.0	-6.9	25.8	-32.7	Paral
									Y-Axis		
3	123.640k	61.9	+0.1	+0.0	+10.9		-80.0	-7.1	25.8	-32.9	Paral
									Y-Axis @		
									13.8VDC		
4	123.675k	61.4	+0.1	+0.0	+10.9		-80.0	-7.6	25.8	-33.4	Paral
									Y-Axis @	10.2	
									VDC		
5	123.580k	59.2	+0.1	+0.0	+10.9		-80.0	-9.8	25.8	-35.6	Perpe
									Y-Axis		
6	123.595k	57.3	+0.1	+0.0	+10.9		-80.0	-11.7	25.8	-37.5	Perpe
									X-Axis		
7	123.685k	57.0	+0.1	+0.0	+10.9		-80.0	-12.0	25.8	-37.8	Perpe
									Y-Axis @		
									13.8VDC		
8	123.680k	56.5	+0.1	+0.0	+10.9		-80.0	-12.5	25.8	-38.3	Perpe
									Y-Axis @		
									10.2VDC		

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Test Location: CKC Laboratories Inc. • 5046 Sierra Pines Dr. • Mariposa, CA 95338 • 209-966-5240

Customer: WaveLynx Technologies Corporation

Specification: 15.209 Radiated Emissions

Work Order #: 97029 Date: 3/15/2016
Test Type: Radiated Scan Time: 11:22:20
Tested By: Benny Lovan Sequence#: 3

Software: EMITest 5.03.02

Equipment Tested:

Device	Manufacturer	Model #	S/N
Configuration 5			

Support Equipment:

Device	Manufacturer	Model #	S/N	
Configuration 5				

Test Conditions / Notes:

Radiated Emissions Fundamental Measurements

Temperature: 10°C Humidity: 85%

Atmospheric Pressure: 101.0 kPa

Method: ANSI C63.10 2013

Antenna Type: Integral Modulation: CW

The EUT is powered by a DC power supply at 12VDC.

Max power was measured in two orthogonalities.

125 kHz Only- Measured in Y-Axis

The Fundamental measurements were performed in the worst case orientation observed during the fundamental power measurements.

The manufacturer declares it will only ever be wall mounted in an upright (Y-axis) or sideways (X-axis) orientation.

The EUT is setup on an 80cm foam block.

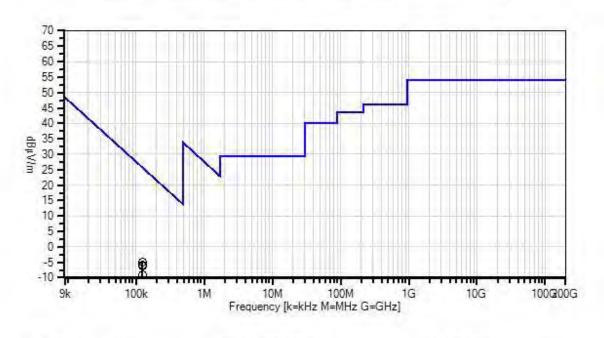
The EUT has been programmed to continuously transmit the RFID signal at 125kHz.

Measurements will be made in both orientations as well as with the voltage variation of 11.2VDC and 13.8VDC (+/-15% of nominal).

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WaveLynx Technologies Corporation WO#: 97029 Sequence#: 3 Date: 3/15/2016 15.209 Radiated Emissions Test Distance: 3 Meters Parallel



Readings

Average Readings

1 - 15.209 Radiated Emissions

Peak Readings
Ambient

× QP Readings Software Version: 5.03.02



Test Equipment:

ID	Asset #	Description	Description Model		Cal Due Date	
T1	ANSITED 3M	Cable		11/15/2014	11/15/2016	
T2	ANP06884	Cable	LMR195-FR-4	10/27/2015	10/27/2017	
T3	AN00226	Loop Antenna	6502	3/28/2014	3/28/2016	

Measur	ement Data:	Re	eading lis	ted by ma	argin.		Τe	est Distanc	e: 3 Meters		
#	Freq	Rdng	T1	T2	Т3		Dist	Corr	Spec	Margin	Polar
	MHz	$dB\mu V$	dB	dB	dB	dB	Table	$dB\mu V/m$	$dB\mu V/m$	dB	Ant
1	124.735k	64.0	+0.1	+0.0	+10.9		-80.0	-5.0	25.7	-30.7	Paral
									Y-axis		
2	124.705k	63.2	+0.1	+0.0	+10.9		-80.0	-5.8	25.7	-31.5	Paral
									Y-Axis @	10.2	
									VDC		
3	124.730k	63.0	+0.1	+0.0	+10.9		-80.0	-6.0	25.7	-31.7	Paral
									Y-Axis @	13.8	
									VDC		
4	124.715k	62.9	+0.1	+0.0	+10.9		-80.0	-6.1	25.7	-31.8	Paral
									X-Axis		
5	124.710k	60.0	+0.1	+0.0	+10.9		-80.0	-9.0	25.7	-34.7	Perpe
									Y-axis		
6	124.685k	58.8	+0.1	+0.0	+10.9		-80.0	-10.2	25.7	-35.9	Perpe
									Y-Axis@ 1	10.2VDC	
7	124.700k	58.7	+0.1	+0.0	+10.9		-80.0	-10.3	25.7	-36.0	Perpe
									Y-Axis @		
									13.8VDC		
8	124.715k	58.0	+0.1	+0.0	+10.9		-80.0	-11.0	25.7	-36.7	Perpe
									X-Axis		

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Test Location: CKC Laboratories Inc. • 5046 Sierra Pines Dr. • Mariposa, CA 95338 • 209-966-5240

Customer: WaveLynx Technologies Corporation

Specification: 15.209 Radiated Emissions

Work Order #: 97029 Date: 3/18/2016
Test Type: Radiated Scan Time: 11:43:46
Tested By: Benny Lovan Sequence#: 4

Software: EMITest 5.03.02

Equipment Tested:

Device	Manufacturer	Model #	S/N	
Configuration 7				

Support Equipment:

Device	Manufacturer	Model #	S/N	
Configuration 7				

Test Conditions / Notes:

Radiated Emissions Fundamental Measurements

Temperature: 11°C Humidity: 85%

Atmospheric Pressure: 100.8 kPa

Method: ANSI C63.10 2013

Antenna Type: Integral Modulation: CW

The EUT is powered by a DC power supply at 12VDC.

Max power was measured in two orthogonalities.

Set for 125kHz- Measured in X-Axis

The Fundamental measurements were performed in the worst case orientation observed during the fundamental power measurements.

The manufacturer declares it will only ever be wall mounted in an upright (Y-axis) or sideways (X-axis) orientation.

The EUT is setup on an 80cm foam block. This EUT has both 125kHz and 13.56MHz.

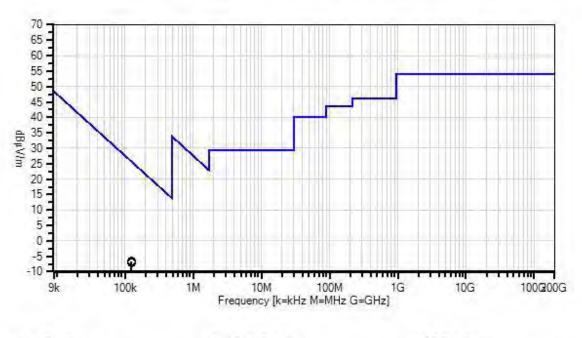
The EUT has been programmed to continuously transmit the RFID signal at 125kHz.

Measurements will be made in both orientations as well as with the voltage variation of 11.2VDC and 13.8VDC (+/-15% of nominal)..

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WaveLynx Technologies Corporation WO#: 97029 Sequence#: 4 Date: 3/18/2016 15.209 Radiated Emissions Test Distance: 3 Meters Parallel



Readings

* Average Readings

1 - 15.209 Radiated Emissions

Peak Readings Ambient × QP Readings Software Version: 5.03.02



Test Equipment:

ID	Asset #	Description	Description Model		Cal Due Date	
T1	ANSITED 3M	Cable		11/15/2014	11/15/2016	
T2	ANP06884	Cable	LMR195-FR-4	10/27/2015	10/27/2017	
T3	AN00226	Loop Antenna	6502	3/28/2014	3/28/2016	

Measur	ement Data:	Re	eading lis	ted by ma	argin.		Τe	est Distanc	e: 3 Meters		
#	Freq	Rdng	T1	T2	T3		Dist	Corr	Spec	Margin	Polar
	MHz	$dB\mu V$	dB	dB	dB	dB	Table	$dB\mu V/m$	$dB\mu V/m$	dB	Ant
1	124.390k	62.4	+0.1	+0.0	+10.9		-80.0	-6.6	25.7	-32.3	Paral
									X-Axis		
2	124.145k	62.1	+0.1	+0.0	+10.9		-80.0	-6.9	25.7	-32.6	Paral
									Y-Axis		
3	124.125k	61.9	+0.1	+0.0	+10.9		-80.0	-7.1	25.7	-32.8	Paral
									X-Axis @		
									13.8VDC		
4	124.040k	61.9	+0.1	+0.0	+10.9		-80.0	-7.1	25.7	-32.8	Paral
									X-Axis @	10.2	
									VDC		
5	124.295k	57.1	+0.1	+0.0	+10.9		-80.0	-11.9	25.7	-37.6	Perpe
									X-Axis		
6	124.240k	56.7	+0.1	+0.0	+10.9		-80.0	-12.3	25.7	-38.0	Perpe
									Y-Axis		
7	124.050k	56.6	+0.1	+0.0	+10.9		-80.0	-12.4	25.7	-38.1	Perpe
									X-Axis @		
									13.8VDC		
8	124.060k	56.5	+0.1	+0.0	+10.9		-80.0	-12.5	25.7	-38.2	Perpe
									X-Axis @		
									10.2VDC		

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Test Setup Photos



X Axis



Y Axis



15.209 Radiated Emissions

Test Setup / Conditions / Data

Test Location: CKC Laboratories Inc. • 5046 Sierra Pines Dr. • Mariposa, CA 95338 • 209-966-5240

Customer: WaveLynx Technologies Corporation

Specification: 15.209 Radiated Emissions

Work Order #: 97029 Date: 3/22/2016
Test Type: Radiated Scan Time: 12:03:29
Tested By: Benny Lovan Sequence#: 5

Software: EMITest 5.03.02

Equipment Tested:

Device Manufacturer Model # S/N
Configuration 8

Support Equipment:

Device Manufacturer Model # S/N
Configuration 8

Test Conditions / Notes:

Radiated Emissions Spurious Measurements 9kHz - 30MHz

Temperature: 10.6°C Humidity: 62%

Atmospheric Pressure: 98.2 kPa

Method: ANSI C63.10 2013

Highest Generated Frequency (Configuration 1): 8MHz Highest Generated Frequency (Configuration 3): 27.12 MHz

Both EUTs are running at 125kHz.

The EUT is powered by a DC power supply at 12VDC.

Spurious was measured on two EUTs at one time.

Configuration 8 is made up of Configuration 1 and Configuration 3 (Testing at the same time).

Configuration 1 is in X-axis and Configuration 3 is in the Y-axis.

Preliminary measurements of the fundamental were taken in two orientations. The orientation that displayed the highest emissions was the orientation used for radiated spurious emissions.

The manufacturer declares it will only ever be wall mounted in an upright (Y-axis) or sideways (X-axis) orientation.

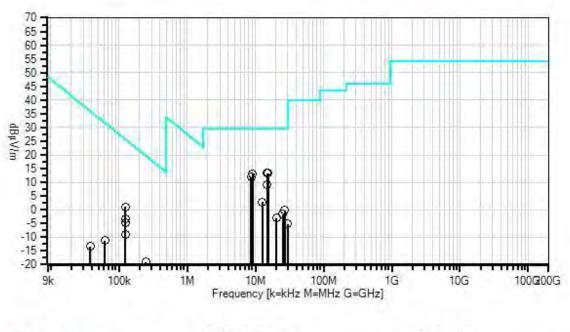
The EUT is setup on an 0.80 meter foam block.

The EUT is setup to continuously transmit at 125kHz

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WaveLynx Technologies Corporation WO#: 97029 Sequence#: 5 Date: 3/22/2016 15.209 Radiated Emissions Test Distance: 3 Meters Parallel



Readings
 Average Readings
 1 - 15.209 Radiated Emissions

Peak Readings
Ambient

× QP Readings Software Version: 5.03.02



Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANSITED 3M	Cable		11/15/2014	11/15/2016
T2	ANP06884	Cable	LMR195-FR-4	10/27/2015	10/27/2017
T3	AN00226	Loop Antenna	6502	3/28/2014	3/28/2016

Measur	ement Data:	Re	ading list	ted by ma	argin.		Τe	est Distance	e: 3 Meters		
#	Freq	Rdng	T1	T2	T3		Dist	Corr	Spec	Margin	Polar
	MHz	$dB\mu V$	dB	dB	dB	dB	Table	$dB\mu V/m$	$dB\mu V/m$	dB	Ant
1	15.439M	43.0	+0.7	+0.1	+9.5		-40.0	13.3	29.5	-16.2	Perpe
2	14.999M	42.9	+0.7	+0.1	+9.6		-40.0	13.3	29.5	-16.2	Perpe
3	9.048M	42.3	+0.6	+0.1	+10.1		-40.0	13.1	29.5	-16.4	Paral
4	8.696M	41.1	+0.6	+0.1	+10.1		-40.0	11.9	29.5	-17.6	Perpe
5	14.999M	38.8	+0.7	+0.1	+9.6		-40.0	9.2	29.5	-20.3	Paral
6	124.486k	70.1	+0.1	+0.0	+10.9		-80.0	1.1	25.7	-24.6	Paral
7	12.701M	32.2	+0.7	+0.1	+9.8		-40.0	2.8	29.5	-26.7	Paral
8	124.475k	65.8	+0.1	+0.0	+10.9		-80.0	-3.2	25.7	-28.9	Perpe
9	27.013M	31.5	+1.0	+0.1	+7.2		-40.0	-0.2	29.5	-29.7	Perpe
10	123.858k	64.2	+0.1	+0.0	+10.9		-80.0	-4.8	25.7	-30.5	Paral
11	25.305M	29.7	+0.9	+0.1	+7.7		-40.0	-1.6	29.5	-31.1	Paral
12	20.387M	27.8	+0.8	+0.1	+8.2		-40.0	-3.1	29.5	-32.6	Paral
13	29.874M	27.2	+1.0	+0.1	+6.5		-40.0	-5.2	29.5	-34.7	Perpe
14	123.885k	59.9	+0.1	+0.0	+10.9		-80.0	-9.1	25.7	-34.8	Perpe
15	247.750k	50.7	+0.1	+0.0	+10.2		-80.0	-19.0	19.7	-38.7	Perpe
16	249.200k	50.6	+0.1	+0.0	+10.2		-80.0	-19.1	19.7	-38.8	Paral
17	61.913k	57.8	+0.1	+0.0	+10.9		-80.0	-11.2	31.8	-43.0	Paral
18	37.780k	54.9	+0.0	+0.0	+11.8		-80.0	-13.3	36.0	-49.3	Perpe

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Test Location: CKC Laboratories Inc. • 5046 Sierra Pines Dr. • Mariposa, CA 95338 • 209-966-5240

Customer: WaveLynx Technologies Corporation

Specification: 15.209 Radiated Emissions

Work Order #: 97029 Date: 3/23/2016
Test Type: Radiated Scan Time: 11:17:01
Tested By: Benny Lovan Sequence#: 6

Software: EMITest 5.03.02

Equipment Tested:

Device	Manufacturer	Model #	S/N	
Configuration 8				

Support Equipment:

Device	Manufacturer	Model #	S/N	
Configuration 8				

Test Conditions / Notes:

Radiated Emissions Spurious Measurements 30MHz -1GHz

Temperature: 10.5°C Humidity: 57%

Atmospheric Pressure: 98.5 kPa

Method: ANSI C63.10 2013

Highest Generated Frequency (Configuration 1): 8MHz Highest Generated Frequency (Configuration 3): 27.12 MHz

Both EUTs are running at 125kHz.

The EUT is powered by a DC power supply at 12VDC.

Spurious was measured on two EUTs at one time.

Configuration 8 is made up of Configuration 1 and Configuration 3 (Testing at the same time).

Configuration 1 is in X-axis and Configuration 3 is in the Y-axis.

Preliminary measurements of the fundamental were taken in two orientations. The orientation that displayed the highest emissions was the orientation used for radiated spurious emissions.

The manufacturer declares it will only ever be wall mounted in an upright (Y-axis) or sideways (X-axis) orientation.

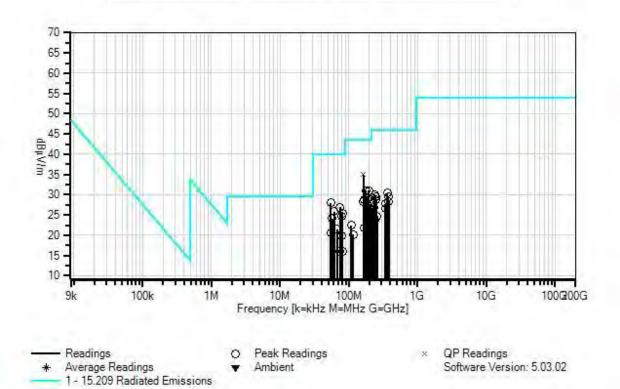
The EUT is setup on an 0.80 meter foam block.

The EUT is setup to continuously transmit at 125kHz

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WaveLynx Technologies Corporation WO#: 97029 Sequence#: 6 Date: 3/23/2016 15.209 Radiated Emissions Test Distance: 3 Meters Horiz





Test Equipment:

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN00282	Preamp	8447D	4/7/2014	4/7/2016
T2	ANSITED 3M	Cable		11/15/2014	11/15/2016
T3	ANP06884	Cable	LMR195-FR-4	10/27/2015	10/27/2017
T4	ANP06885	Cable	P06885	10/27/2015	10/27/2017
T5	AN01991	Biconilog Antenna	CBL6111C	3/11/2016	3/11/2018

Measu	rement Data:	Re	eading list	ted by ma	ırgin.		Te	est Distance	e: 3 Meters		
#	Freq	Rdng	T1	T2	Т3	T4	Dist	Corr	Spec	Margin	Polar
			T5								
	MHz	dΒμV	dB	dB	dB	dB	Table	•	•	dB	Ant
1	162.797M	49.1	-27.6	+2.5	+0.2	+0.3	+0.0	34.9	43.5	-8.6	Horiz
	QP		+10.4								
^	162.795M	50.0	-27.6	+2.5	+0.2	+0.3	+0.0	35.8	43.5	-7.7	Horiz
	54.00.43.6	46.0	+10.4	. 1 4	. 0. 1	.0.2		27.0	40.0	10.1	T 7
3	54.234M	46.9	-28.0	+1.4	+0.1	+0.2	+0.0	27.9	40.0	-12.1	Vert
4	176.274M	46.2	+7.3 -27.6	+2.6	+0.2	+0.3	+0.0	31.0	43.5	-12.5	Vert
4	1/0.2/4IVI	40.2	+9.3	⊤ ∠.0	±0.∠	+0.3	+0.0	31.0	43.3	-12.3	vert
5	196.614M	46.1	-27.4	+2.8	+0.3	+0.3	+0.0	31.0	43.5	-12.5	Vert
	170.014141	70.1	+8.9	12.0	10.5	10.5	10.0	31.0	73.3	12.5	VCIt
6	74.588M	45.8	-27.9	+1.6	+0.2	+0.2	+0.0	26.9	40.0	-13.1	Vert
	, 110 00111		+7.0	1.0	٠. -	٠. ـ	0.0	_0.,		10.1	. 510
7	61.028M	46.2	-28.0	+1.5	+0.1	+0.2	+0.0	25.9	40.0	-14.1	Vert
			+5.9								
8	183.054M	44.3	-27.5	+2.6	+0.2	+0.3	+0.0	29.1	43.5	-14.4	Vert
			+9.2								
9	81.394M	44.1	-27.9	+1.7	+0.2	+0.2	+0.0	25.5	40.0	-14.5	Vert
			+7.2								
10	169.494M	43.7	-27.6	+2.5	+0.2	+0.3	+0.0	28.9	43.5	-14.6	Vert
			+9.8								
11	79.980M	43.6	-27.9	+1.7	+0.2	+0.2	+0.0	24.7	40.0	-15.3	Vert
10	162.75614	12.1	+6.9	. 2. 5	.0.2	.0.2		20.2	12.5	15.2	3.7
12	162.756M	42.4	-27.6 +10.4	+2.5	+0.2	+0.3	+0.0	28.2	43.5	-15.3	Vert
13	366.112M	38.0	-27.6	+3.9	+0.4	+0.4	+0.0	30.4	46.0	-15.6	Vert
13	300.112WI	36.0	+15.3	⊤3.9	±0.4	⊤0.4	+0.0	30.4	40.0	-13.0	vert
14	210.173M	41.8	-27.4	+2.9	+0.3	+0.3	+0.0	27.6	43.5	-15.9	Vert
1.	210.175141	11.0	+9.7	. 2.9	. 0.3	. 0.3	. 0.0	27.0	13.3	13.7	V 011
15	57.638M	44.0	-28.0	+1.4	+0.1	+0.2	+0.0	24.1	40.0	-15.9	Vert
			+6.4								
16	237.294M	42.1	-27.3	+3.0	+0.3	+0.4	+0.0	30.0	46.0	-16.0	Vert
			+11.5								
17	189.834M	42.5	-27.5	+2.7	+0.3	+0.3	+0.0	27.3	43.5	-16.2	Vert
			+9.0								
18	244.074M	41.1	-27.3	+3.1	+0.3	+0.4	+0.0	29.5	46.0	-16.5	Vert
			+11.9							4	
19	372.887M	37.0	-27.6	+3.9	+0.4	+0.4	+0.0	29.5	46.0	-16.5	Vert
			+15.4								

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20 250.854M												
+15.6 22 338.994M 36.2 -27.4 +3.7 +0.4 +0.4 +0.0 27.8 46.0 -18.2 Vert +14.5 23 67.808M 40.7 -27.9 +1.6 +0.1 +0.2 +0.0 21.5 40.0 -18.5 Vert +6.8 24 230.514M 39.4 -27.3 +3.0 +0.3 +0.4 +0.0 26.9 46.0 -19.1 Vert +11.1 25 345.774M 35.0 -27.5 +3.7 +0.4 +0.4 +0.0 26.7 46.0 -19.3 Vert +14.7 26 54.298M 39.6 -28.0 +1.4 +0.1 +0.2 +0.0 20.6 40.0 -19.4 Horiz +7.3 27 216.933M 40.0 -27.3 +2.9 +0.3 +0.4 +0.0 26.4 46.0 -19.6 Vert +10.1 28 223.734M 39.3 -27.3 +2.9 +0.3 +0.4 +0.0 26.2 46.0 -19.8 Vert +10.1 29 77.978M 38.6 -27.9 +1.7 +0.2 +0.2 +0.0 19.7 40.0 -20.3 Vert +6.9 30 108.490M 37.2 -27.9 +2.0 +0.2 +0.3 +0.4 +0.0 22.5 43.5 -21.0 Vert +10.7 31 257.634M 35.6 -27.3 +3.2 +0.3 +0.4 +0.0 24.7 46.0 -21.3 Vert +12.5 32 169.487M 36.7 -27.6 +2.5 +0.2 +0.3 +0.4 +0.0 23.6 46.0 -22.4 Horiz +11.5 34 115.268M 34.1 -27.8 +2.1 +0.2 +0.3 +0.0 23.6 46.0 -22.4 Horiz +11.5 35 74.568M 35.0 -27.9 +1.6 +0.2 +0.2 +0.0 16.1 40.0 -23.9 Horiz +7.0 36 81.348M 34.6 -27.9 +1.7 +0.2 +0.2 +0.0 16.0 40.0 -24.0 Horiz	20	250.854M	40.1		+3.1	+0.3	+0.4	+0.0	28.9	46.0	-17.1	Vert
22 338.994M 36.2 -27.4 +3.7 +0.4 +0.4 +0.0 27.8 46.0 -18.2 Vert 23 67.808M 40.7 -27.9 +1.6 +0.1 +0.2 +0.0 21.5 40.0 -18.5 Vert 24 230.514M 39.4 -27.3 +3.0 +0.3 +0.4 +0.0 26.9 46.0 -19.1 Vert 25 345.774M 35.0 -27.5 +3.7 +0.4 +0.4 +0.0 26.7 46.0 -19.3 Vert 26 54.298M 39.6 -28.0 +1.4 +0.1 +0.2 +0.0 20.6 40.0 -19.4 Horiz 27 216.933M 40.0 -27.3 +2.9 +0.3 +0.4 +0.0 26.4 46.0 -19.6 Vert 28 223.734M 39.3 -27.3 +2.9 +0.3 +0.4 +0.0 26.2 46.0 -19.8 Vert 40.6	21	379.667M	35.7	-27.7	+3.9	+0.4	+0.4	+0.0	28.3	46.0	-17.7	Vert
23 67.808M 40.7 -27.9 +1.6 +0.1 +0.2 +0.0 21.5 40.0 -18.5 Vert 24 230.514M 39.4 -27.3 +3.0 +0.3 +0.4 +0.0 26.9 46.0 -19.1 Vert 25 345.774M 35.0 -27.5 +3.7 +0.4 +0.4 +0.0 26.7 46.0 -19.3 Vert 26 54.298M 39.6 -28.0 +1.4 +0.1 +0.2 +0.0 20.6 40.0 -19.4 Horiz 27 216.933M 40.0 -27.3 +2.9 +0.3 +0.4 +0.0 26.4 46.0 -19.6 Vert 28 223.734M 39.3 -27.3 +2.9 +0.3 +0.4 +0.0 26.2 46.0 -19.8 Vert 29 77.978M 38.6 -27.9 +1.7 +0.2 +0.2 +0.0 19.7 40.0 -20.3 Vert 31	22	338.994M	36.2	-27.4	+3.7	+0.4	+0.4	+0.0	27.8	46.0	-18.2	Vert
+11.1 25 345.774M 35.0 -27.5 +3.7 +0.4 +0.4 +0.0 26.7 46.0 -19.3 Vert +14.7 26 54.298M 39.6 -28.0 +1.4 +0.1 +0.2 +0.0 20.6 40.0 -19.4 Horiz +7.3 27 216.933M 40.0 -27.3 +2.9 +0.3 +0.4 +0.0 26.4 46.0 -19.6 Vert +10.1 28 223.734M 39.3 -27.3 +2.9 +0.3 +0.4 +0.0 26.2 46.0 -19.8 Vert +10.6 29 77.978M 38.6 -27.9 +1.7 +0.2 +0.2 +0.0 19.7 40.0 -20.3 Vert +6.9 30 108.490M 37.2 -27.9 +2.0 +0.2 +0.3 +0.0 22.5 43.5 -21.0 Vert +10.7 31 257.634M 35.6 -27.3 +3.2 +0.3 +0.4 +0.0 24.7 46.0 -21.3 Vert +12.5 32 169.487M 36.7 -27.6 +2.5 +0.2 +0.3 +0.0 21.9 43.5 -21.6 Horiz +9.8 33 237.287M 35.7 -27.3 +3.0 +0.3 +0.4 +0.0 23.6 46.0 -22.4 Horiz +11.5 34 115.268M 34.1 -27.8 +2.1 +0.2 +0.3 +0.0 20.1 43.5 -23.4 Vert +11.2 35 74.568M 35.0 -27.9 +1.6 +0.2 +0.2 +0.0 16.1 40.0 -23.9 Horiz +7.0 36 81.348M 34.6 -27.9 +1.7 +0.2 +0.2 +0.0 16.0 40.0 -24.0 Horiz	23	67.808M	40.7	-27.9	+1.6	+0.1	+0.2	+0.0	21.5	40.0	-18.5	Vert
+14.7 26 54.298M 39.6 -28.0 +1.4 +0.1 +0.2 +0.0 20.6 40.0 -19.4 Horiz +7.3 27 216.933M 40.0 -27.3 +2.9 +0.3 +0.4 +0.0 26.4 46.0 -19.6 Vert +10.1 28 223.734M 39.3 -27.3 +2.9 +0.3 +0.4 +0.0 26.2 46.0 -19.8 Vert +10.6 29 77.978M 38.6 -27.9 +1.7 +0.2 +0.2 +0.0 19.7 40.0 -20.3 Vert +6.9 30 108.490M 37.2 -27.9 +2.0 +0.2 +0.3 +0.0 22.5 43.5 -21.0 Vert +10.7 31 257.634M 35.6 -27.3 +3.2 +0.3 +0.4 +0.0 24.7 46.0 -21.3 Vert +12.5 32 169.487M 36.7 -27.6 +2.5 +0.2 +0.3 +0.0 21.9 43.5 -21.6 Horiz +9.8 33 237.287M 35.7 -27.3 +3.0 +0.3 +0.4 +0.0 23.6 46.0 -22.4 Horiz +11.5 34 115.268M 34.1 -27.8 +2.1 +0.2 +0.3 +0.0 20.1 43.5 -23.4 Vert +11.2 35 74.568M 35.0 -27.9 +1.6 +0.2 +0.2 +0.0 16.1 40.0 -23.9 Horiz +7.0 36 81.348M 34.6 -27.9 +1.7 +0.2 +0.2 +0.0 16.0 40.0 -24.0 Horiz	24	230.514M	39.4		+3.0	+0.3	+0.4	+0.0	26.9	46.0	-19.1	Vert
+7.3 27 216.933M	25	345.774M	35.0		+3.7	+0.4	+0.4	+0.0	26.7	46.0	-19.3	Vert
+10.1 28 223.734M 39.3 -27.3 +2.9 +0.3 +0.4 +0.0 26.2 46.0 -19.8 Vert +10.6 29 77.978M 38.6 -27.9 +1.7 +0.2 +0.2 +0.0 19.7 40.0 -20.3 Vert +6.9 30 108.490M 37.2 -27.9 +2.0 +0.2 +0.3 +0.0 22.5 43.5 -21.0 Vert +10.7 31 257.634M 35.6 -27.3 +3.2 +0.3 +0.4 +0.0 24.7 46.0 -21.3 Vert +12.5 32 169.487M 36.7 -27.6 +2.5 +0.2 +0.3 +0.0 21.9 43.5 -21.6 Horiz +9.8 33 237.287M 35.7 -27.3 +3.0 +0.3 +0.4 +0.0 23.6 46.0 -22.4 Horiz +11.5 34 115.268M 34.1 -27.8 +2.1 +0.2 +0.3 +0.0 20.1 43.5 -23.4 Vert +11.2 35 74.568M 35.0 -27.9 +1.6 +0.2 +0.2 +0.0 16.1 40.0 -23.9 Horiz +7.0 36 81.348M 34.6 -27.9 +1.7 +0.2 +0.2 +0.0 16.0 40.0 -24.0 Horiz	26	54.298M	39.6		+1.4	+0.1	+0.2	+0.0	20.6	40.0	-19.4	Horiz
28 223.734M 39.3 -27.3 +2.9 +0.3 +0.4 +0.0 26.2 46.0 -19.8 Vert 29 77.978M 38.6 -27.9 +1.7 +0.2 +0.2 +0.0 19.7 40.0 -20.3 Vert 30 108.490M 37.2 -27.9 +2.0 +0.2 +0.3 +0.0 22.5 43.5 -21.0 Vert 31 257.634M 35.6 -27.3 +3.2 +0.3 +0.4 +0.0 24.7 46.0 -21.3 Vert 32 169.487M 36.7 -27.6 +2.5 +0.2 +0.3 +0.0 21.9 43.5 -21.6 Horiz 33 237.287M 35.7 -27.3 +3.0 +0.3 +0.4 +0.0 23.6 46.0 -22.4 Horiz 34 115.268M 34.1 -27.8 +2.1 +0.2 +0.3 +0.0 20.1 43.5 -23.4 Vert 35 74.568M 35.0 -27.9 +1.6 +0.2 +0.2 +0.0 16.0	27	216.933M	40.0		+2.9	+0.3	+0.4	+0.0	26.4	46.0	-19.6	Vert
29 77.978M 38.6 -27.9 +1.7 +0.2 +0.2 +0.0 19.7 40.0 -20.3 Vert 30 108.490M 37.2 -27.9 +2.0 +0.2 +0.3 +0.0 22.5 43.5 -21.0 Vert 31 257.634M 35.6 -27.3 +3.2 +0.3 +0.4 +0.0 24.7 46.0 -21.3 Vert 32 169.487M 36.7 -27.6 +2.5 +0.2 +0.3 +0.0 21.9 43.5 -21.6 Horiz 49.8 35.7 -27.3 +3.0 +0.3 +0.4 +0.0 23.6 46.0 -22.4 Horiz 34 115.268M 34.1 -27.8 +2.1 +0.2 +0.3 +0.0 20.1 43.5 -23.4 Vert 411.2 35 74.568M 35.0 -27.9 +1.6 +0.2 +0.2 +0.0 16.1 40.0 -23.9 Horiz 36 81.348M 34.6 -27.9 +1.7 +0.2 +0.2 +0.0 16.0	28	223.734M	39.3	-27.3	+2.9	+0.3	+0.4	+0.0	26.2	46.0	-19.8	Vert
30 108.490M 37.2 -27.9 +2.0 +0.2 +0.3 +0.0 22.5 43.5 -21.0 Vert 31 257.634M 35.6 -27.3 +3.2 +0.3 +0.4 +0.0 24.7 46.0 -21.3 Vert 32 169.487M 36.7 -27.6 +2.5 +0.2 +0.3 +0.0 21.9 43.5 -21.6 Horiz 33 237.287M 35.7 -27.3 +3.0 +0.3 +0.4 +0.0 23.6 46.0 -22.4 Horiz 34 115.268M 34.1 -27.8 +2.1 +0.2 +0.3 +0.0 20.1 43.5 -23.4 Vert +11.2 35 74.568M 35.0 -27.9 +1.6 +0.2 +0.2 +0.0 16.1 40.0 -23.9 Horiz 36 81.348M 34.6 -27.9 +1.7 +0.2 +0.2 +0.0 16.0 40.0 -24.0 Horiz	29	77.978M	38.6	-27.9	+1.7	+0.2	+0.2	+0.0	19.7	40.0	-20.3	Vert
+12.5 32 169.487M 36.7 -27.6 +2.5 +0.2 +0.3 +0.0 21.9 43.5 -21.6 Horiz +9.8 33 237.287M 35.7 -27.3 +3.0 +0.3 +0.4 +0.0 23.6 46.0 -22.4 Horiz +11.5 34 115.268M 34.1 -27.8 +2.1 +0.2 +0.3 +0.0 20.1 43.5 -23.4 Vert +11.2 35 74.568M 35.0 -27.9 +1.6 +0.2 +0.2 +0.0 16.1 40.0 -23.9 Horiz +7.0 36 81.348M 34.6 -27.9 +1.7 +0.2 +0.2 +0.0 16.0 40.0 -24.0 Horiz	30	108.490M	37.2	-27.9	+2.0	+0.2	+0.3	+0.0	22.5	43.5	-21.0	Vert
32 169.487M 36.7 -27.6 +2.5 +0.2 +0.3 +0.0 21.9 43.5 -21.6 Horiz +9.8 33 237.287M 35.7 -27.3 +3.0 +0.3 +0.4 +0.0 23.6 46.0 -22.4 Horiz +11.5 34 115.268M 34.1 -27.8 +2.1 +0.2 +0.3 +0.0 20.1 43.5 -23.4 Vert +11.2 35 74.568M 35.0 -27.9 +1.6 +0.2 +0.2 +0.0 16.1 40.0 -23.9 Horiz +7.0 36 81.348M 34.6 -27.9 +1.7 +0.2 +0.2 +0.0 16.0 40.0 -24.0 Horiz	31	257.634M	35.6	-27.3	+3.2	+0.3	+0.4	+0.0	24.7	46.0	-21.3	Vert
+11.5 34 115.268M 34.1 -27.8 +2.1 +0.2 +0.3 +0.0 20.1 43.5 -23.4 Vert +11.2 35 74.568M 35.0 -27.9 +1.6 +0.2 +0.2 +0.0 16.1 40.0 -23.9 Horiz +7.0 36 81.348M 34.6 -27.9 +1.7 +0.2 +0.2 +0.0 16.0 40.0 -24.0 Horiz	32	169.487M	36.7	-27.6	+2.5	+0.2	+0.3	+0.0	21.9	43.5	-21.6	Horiz
34 115.268M 34.1 -27.8 +2.1 +0.2 +0.3 +0.0 20.1 43.5 -23.4 Vert +11.2 35 74.568M 35.0 -27.9 +1.6 +0.2 +0.2 +0.0 16.1 40.0 -23.9 Horiz +7.0 36 81.348M 34.6 -27.9 +1.7 +0.2 +0.2 +0.0 16.0 40.0 -24.0 Horiz	33	237.287M	35.7	-27.3	+3.0	+0.3	+0.4	+0.0	23.6	46.0	-22.4	Horiz
35 74.568M 35.0 -27.9 +1.6 +0.2 +0.2 +0.0 16.1 40.0 -23.9 Horiz +7.0 36 81.348M 34.6 -27.9 +1.7 +0.2 +0.2 +0.0 16.0 40.0 -24.0 Horiz	34	115.268M	34.1	-27.8	+2.1	+0.2	+0.3	+0.0	20.1	43.5	-23.4	Vert
36 81.348M 34.6 -27.9 +1.7 +0.2 +0.2 +0.0 16.0 40.0 -24.0 Horiz	35	74.568M	35.0	-27.9	+1.6	+0.2	+0.2	+0.0	16.1	40.0	-23.9	Horiz
	36	81.348M	34.6		+1.7	+0.2	+0.2	+0.0	16.0	40.0	-24.0	Horiz



Test Location: CKC Laboratories Inc. • 5046 Sierra Pines Dr. • Mariposa, CA 95338 • 209-966-5240

Customer: WaveLynx Technologies Corporation

Specification: 15.209 Radiated Emissions

Work Order #: 97029 Date: 3/22/2016
Test Type: Radiated Scan Time: 14:17:51
Tested By: Benny Lovan Sequence#: 7

Software: EMITest 5.03.02

Equipment Tested:

Device	Manufacturer	Model #	S/N	
Configuration 9				

Support Equipment:

Device	Manufacturer	Model #	S/N	
Configuration 9				

Test Conditions / Notes:

Radiated Emissions Spurious Measurements 9kHz - 30MHz

Temperature: 10.6°C Humidity: 62%

Atmospheric Pressure: 98.2 kPa

Method: ANSI C63.10 2013

Highest Generated Frequency (Configuration 5): 8MHz Highest Generated Frequency (Configuration 7): 27.12 MHz

Both EUTs running at 125kHz.

The EUT is powered by a DC power supply at 12VDC.

Spurious was measured on two EUTs at one time.

Configuration 9 is made up of Configuration 5 and Configuration 7 (Testing at the same time).

Configuration 5 is in Y-axis and Configuration -7 is in the X-axis.

Preliminary measurements of the fundamental were taken in two orientations. The orientation that displayed the highest emissions was the orientation used for radiated spurious emissions.

The manufacturer declares it will only ever be wall mounted in an upright (Y-axis) or sideways (X-axis) orientation.

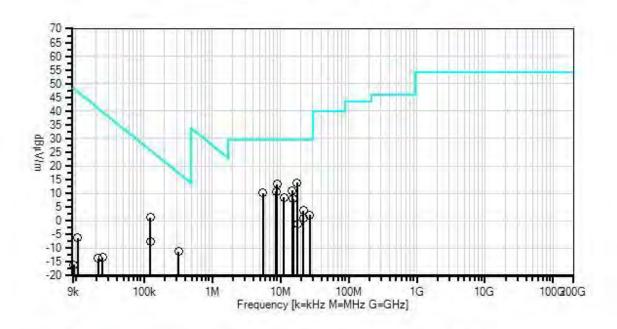
The EUT is setup on an 0.80 meter foam block.

The EUT is setup to continuously transmit at 125kHz

Page 35 of 77 Report No.: 97029-32



WaveLynx Technologies Corporation WO#: 97029 Sequence#: 7 Date: 3/22/2016 15.209 Radiated Emissions Test Distance: 3 Meters Perpendicular



Readings

Average Readings

1 - 15.209 Radiated Emissions

Peak Readings
Ambient

× QP Readings Software Version: 5.03.02



ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANSITED 3M	Cable		11/15/2014	11/15/2016
T2	ANP06884	Cable	LMR195-FR-4	10/27/2015	10/27/2017
T3	AN00226	Loop Antenna	6502	3/28/2014	3/28/2016

## Freq MHz Rdng MB ₂ V T1 T2 T3 Dist Corr Spec MB ₂ V/m dB ₂ V/m corr spec V/m	Measur	rement Data:						Те	est Distance	e: 3 Meters		
1 17.527M 44.2 +0.8 +0.1 +8.8 -40.0 13.9 29.5 -15.6 Paral 2 9.027M 42.5 +0.6 +0.1 +10.1 -40.0 13.3 29.5 -16.2 Perpe 3 14.999M 40.7 +0.7 +0.1 +9.6 -40.0 11.1 29.5 -18.4 Perpe 4 8.683M 39.8 +0.6 +0.1 +10.1 -40.0 10.6 29.5 -18.9 Paral 5 5.596M 39.5 +0.5 +0.1 +10.1 -40.0 10.2 29.5 -18.9 Paral 6 11.325M 37.9 +0.5 +0.1 +10.1 -40.0 10.2 29.5 -21.0 Perpe 7 15.441M 37.8 +0.7 +0.1 +9.5 -40.0 8.1 29.5 -21.4 Paral 8 124.660k 70.3 +0.1 +0.0 +10.9 -80.0 1.3 25.7 -24.4 Paral 10 27.083M 33.9 +1.0 <	#	Freq	Rdng	T1	T2	T3		Dist	Corr	Spec	Margin	Polar
2 9.027M 42.5 +0.6 +0.1 +10.1 -40.0 13.3 29.5 -16.2 Perpe 3 14.999M 40.7 +0.7 +0.1 +9.6 -40.0 11.1 29.5 -18.4 Perpe 4 8.683M 39.8 +0.6 +0.1 +10.1 -40.0 10.6 29.5 -18.9 Paral 5 5.596M 39.5 +0.5 +0.1 +10.1 -40.0 10.2 29.5 -18.9 Paral 6 11.325M 37.9 +0.6 +0.1 +9.9 -40.0 8.5 29.5 -21.0 Perpe 7 15.441M 37.8 +0.7 +0.1 +9.5 -40.0 8.1 29.5 -21.4 Paral 8 124.660k 70.3 +0.1 +0.0 +10.9 -80.0 1.3 25.7 -24.4 Paral 9 21.676M 34.7 +0.9 +0.1 +8.1 -40.0 3.8		MHz	$dB\mu V$	dB	dB	dB	dB	Table	$dB\mu V/m$	$dB\mu V/m$	dB	Ant
3 14.999M 40.7 +0.7 +0.1 +9.6 -40.0 11.1 29.5 -18.4 Perpe 4 8.683M 39.8 +0.6 +0.1 +10.1 -40.0 10.6 29.5 -18.9 Paral 5 5.596M 39.5 +0.5 +0.1 +10.1 -40.0 10.2 29.5 -19.3 Paral 6 11.325M 37.9 +0.6 +0.1 +9.9 -40.0 8.5 29.5 -21.0 Perpe 7 15.441M 37.8 +0.7 +0.1 +9.5 -40.0 8.1 29.5 -21.4 Paral 8 124.660k 70.3 +0.1 +0.0 +10.9 -80.0 1.3 25.7 -24.4 Paral 9 21.676M 34.7 +0.9 +0.1 +8.1 -40.0 3.8 29.5 -25.7 Paral 10 27.083M 33.9 +1.0 +0.1 +7.2 -40.0 2.2 29.5 -27.3 Paral 11 324.610k 58.5 +0.1 +0.0 +10.2 -80.0 -11.2 17.4 -28.6 Paral 12 21.673M 31.8 +0.9 +0.1 +8.1 -40.0 0.9 29.5 -28.6 Perpe 13 17.803M 29.3 +0.8 +0.1 +8.8 -40.0 -1.0 29.5 -30.5 Perpe 14 124.620k 61.3 +0.1 +0.0 +10.9 -80.0 -7.7 25.7 -33.4 Perpe 15 24.780k 53.6 +0.0 +0.0 +13.0 -80.0 -13.4 39.7 -53.1 Perpe 16 10.625k 56.7 +0.0 +0.0 +17.1 -80.0 -6.2 47.1 -53.3 Paral	1	17.527M	44.2	+0.8	+0.1	+8.8		-40.0	13.9	29.5	-15.6	Paral
4 8.683M 39.8 +0.6 +0.1 +10.1 -40.0 10.6 29.5 -18.9 Paral 5 5.596M 39.5 +0.5 +0.1 +10.1 -40.0 10.2 29.5 -19.3 Paral 6 11.325M 37.9 +0.6 +0.1 +9.9 -40.0 8.5 29.5 -21.0 Perpe 7 15.441M 37.8 +0.7 +0.1 +9.5 -40.0 8.1 29.5 -21.4 Paral 8 124.660k 70.3 +0.1 +0.0 +10.9 -80.0 1.3 25.7 -24.4 Paral 9 21.676M 34.7 +0.9 +0.1 +8.1 -40.0 3.8 29.5 -25.7 Paral 10 27.083M 33.9 +1.0 +0.1 +7.2 -40.0 2.2 29.5 -27.3 Paral 11 324.610k 58.5 +0.1 +0.0 +10.2 -80.0 -11.2 17.4 -28.6 Paral 12 21.673M 31.8 +0.9 +0.1 +8.1 -40.0 0.9 29.5 -28.6 Perpe 13 17.803M 29.3 +0.8 +0.1 +8.8 -40.0 -1.0 29.5 -30.5 Perpe 14 124.620k 61.3 +0.1 +0.0 +10.9 -80.0 -7.7 25.7 -33.4 Perpe 15 24.780k 53.6 +0.0 +0.0 +10.0 +13.0 -80.0 -13.4 39.7 -53.1 Perpe 16 10.625k 56.7 +0.0 +0.0 +17.1 -80.0 -6.2 47.1 -53.3 Paral 17 21.390k 52.8 +0.0 +0.0 +13.6 -80.0 -13.6 41.0 -54.6 Paral	2	9.027M	42.5	+0.6	+0.1	+10.1		-40.0	13.3	29.5	-16.2	Perpe
5 5.596M 39.5 +0.5 +0.1 +10.1 -40.0 10.2 29.5 -19.3 Paral 6 11.325M 37.9 +0.6 +0.1 +9.9 -40.0 8.5 29.5 -21.0 Perpe 7 15.441M 37.8 +0.7 +0.1 +9.5 -40.0 8.1 29.5 -21.4 Paral 8 124.660k 70.3 +0.1 +0.0 +10.9 -80.0 1.3 25.7 -24.4 Paral 9 21.676M 34.7 +0.9 +0.1 +8.1 -40.0 3.8 29.5 -25.7 Paral 10 27.083M 33.9 +1.0 +0.1 +7.2 -40.0 2.2 29.5 -27.3 Paral 11 324.610k 58.5 +0.1 +0.0 +10.2 -80.0 -11.2 17.4 -28.6 Paral 12 21.673M 31.8 +0.9 +0.1 +8.1 -40.0 0.9 29.5 -28.6 Perpe 13 17.803M 29.3 +0.8	3	14.999M	40.7	+0.7	+0.1	+9.6		-40.0	11.1	29.5	-18.4	Perpe
6 11.325M 37.9 +0.6 +0.1 +9.9 -40.0 8.5 29.5 -21.0 Perpe 7 15.441M 37.8 +0.7 +0.1 +9.5 -40.0 8.1 29.5 -21.4 Paral 8 124.660k 70.3 +0.1 +0.0 +10.9 -80.0 1.3 25.7 -24.4 Paral 9 21.676M 34.7 +0.9 +0.1 +8.1 -40.0 3.8 29.5 -25.7 Paral 10 27.083M 33.9 +1.0 +0.1 +7.2 -40.0 2.2 29.5 -27.3 Paral 11 324.610k 58.5 +0.1 +0.0 +10.2 -80.0 -11.2 17.4 -28.6 Paral 12 21.673M 31.8 +0.9 +0.1 +8.1 -40.0 0.9 29.5 -28.6 Perpe 13 17.803M 29.3 +0.8 +0.1 +8.8 -40.0 -1.0 29.5 -30.5 Perpe 14 124.620k 61.3 +0.1 +0.0 +10.9 -80.0 -7.7 25.7 -33.4 Perpe 15 24.780k 53.6 +0.0 +0.0 +13.0 -80.0 -13.4 39.7 -53.1 Perpe 16 10.625k 56.7 +0.0 +0.0 +17.1 -80.0 -6.2 47.1 -53.3 Paral 17 21.390k 52.8 +0.0 +0.0 +13.6 -80.0 -13.6 41.0 -54.6 Paral	4	8.683M	39.8	+0.6	+0.1	+10.1		-40.0	10.6	29.5	-18.9	Paral
7 15.441M 37.8 +0.7 +0.1 +9.5 -40.0 8.1 29.5 -21.4 Paral 8 124.660k 70.3 +0.1 +0.0 +10.9 -80.0 1.3 25.7 -24.4 Paral 9 21.676M 34.7 +0.9 +0.1 +8.1 -40.0 3.8 29.5 -25.7 Paral 10 27.083M 33.9 +1.0 +0.1 +7.2 -40.0 2.2 29.5 -27.3 Paral 11 324.610k 58.5 +0.1 +0.0 +10.2 -80.0 -11.2 17.4 -28.6 Paral 12 21.673M 31.8 +0.9 +0.1 +8.1 -40.0 0.9 29.5 -28.6 Perpe 13 17.803M 29.3 +0.8 +0.1 +8.8 -40.0 -1.0 29.5 -30.5 Perpe 14 124.620k 61.3 +0.1 +0.0 +10.9 -80.0 -7.7 25.7 -33.4 Perpe 15 24.780k 53.6 +0.0 +0.0 +13.0 -80.0 -13.4 39.7 -53.1 Perpe 16 10.625k 56.7 +0.0 +0.0 +17.1 -80.0 -6.2 47.1 -53.3 Paral 17 21.390k 52.8 +0.0 +0.0 +13.6 -80.0 -13.6 41.0 -54.6 Paral	5	5.596M	39.5	+0.5	+0.1	+10.1		-40.0	10.2	29.5	-19.3	Paral
8 124.660k 70.3 +0.1 +0.0 +10.9 -80.0 1.3 25.7 -24.4 Paral 9 21.676M 34.7 +0.9 +0.1 +8.1 -40.0 3.8 29.5 -25.7 Paral 10 27.083M 33.9 +1.0 +0.1 +7.2 -40.0 2.2 29.5 -27.3 Paral 11 324.610k 58.5 +0.1 +0.0 +10.2 -80.0 -11.2 17.4 -28.6 Paral 12 21.673M 31.8 +0.9 +0.1 +8.1 -40.0 0.9 29.5 -28.6 Perpe 13 17.803M 29.3 +0.8 +0.1 +8.8 -40.0 -1.0 29.5 -30.5 Perpe 14 124.620k 61.3 +0.1 +0.0 +10.9 -80.0 -7.7 25.7 -33.4 Perpe 15 24.780k 53.6 +0.0 +0.0 +13.0 -80.0 -13.4 39.7 -53.1 Perpe 16 10.625k 56.7 +0.0 <th>6</th> <th>11.325M</th> <th>37.9</th> <th>+0.6</th> <th>+0.1</th> <th>+9.9</th> <th></th> <th>-40.0</th> <th>8.5</th> <th>29.5</th> <th>-21.0</th> <th>Perpe</th>	6	11.325M	37.9	+0.6	+0.1	+9.9		-40.0	8.5	29.5	-21.0	Perpe
9 21.676M 34.7 +0.9 +0.1 +8.1 -40.0 3.8 29.5 -25.7 Paral 10 27.083M 33.9 +1.0 +0.1 +7.2 -40.0 2.2 29.5 -27.3 Paral 11 324.610k 58.5 +0.1 +0.0 +10.2 -80.0 -11.2 17.4 -28.6 Paral 12 21.673M 31.8 +0.9 +0.1 +8.1 -40.0 0.9 29.5 -28.6 Perpe 13 17.803M 29.3 +0.8 +0.1 +8.8 -40.0 -1.0 29.5 -30.5 Perpe 14 124.620k 61.3 +0.1 +0.0 +10.9 -80.0 -7.7 25.7 -33.4 Perpe 15 24.780k 53.6 +0.0 +0.0 +13.0 -80.0 -13.4 39.7 -53.1 Perpe 16 10.625k 56.7 +0.0 +0.0 +17.1 -80.0 -6.2 47.1 -53.3 Paral 17 21.390k 52.8 +0.0 </th <th>7</th> <th>15.441M</th> <th>37.8</th> <th>+0.7</th> <th>+0.1</th> <th>+9.5</th> <th></th> <th>-40.0</th> <th>8.1</th> <th>29.5</th> <th>-21.4</th> <th>Paral</th>	7	15.441M	37.8	+0.7	+0.1	+9.5		-40.0	8.1	29.5	-21.4	Paral
10 27.083M 33.9 +1.0 +0.1 +7.2 -40.0 2.2 29.5 -27.3 Paral 11 324.610k 58.5 +0.1 +0.0 +10.2 -80.0 -11.2 17.4 -28.6 Paral 12 21.673M 31.8 +0.9 +0.1 +8.1 -40.0 0.9 29.5 -28.6 Perpe 13 17.803M 29.3 +0.8 +0.1 +8.8 -40.0 -1.0 29.5 -30.5 Perpe 14 124.620k 61.3 +0.1 +0.0 +10.9 -80.0 -7.7 25.7 -33.4 Perpe 15 24.780k 53.6 +0.0 +0.0 +13.0 -80.0 -13.4 39.7 -53.1 Perpe 16 10.625k 56.7 +0.0 +0.0 +17.1 -80.0 -6.2 47.1 -53.3 Paral 17 21.390k 52.8 +0.0 +0.0 +13.6 -80.0 -13.6 41.0 -54.6 Paral	8	124.660k	70.3	+0.1	+0.0	+10.9		-80.0	1.3	25.7	-24.4	Paral
11 324.610k 58.5 +0.1 +0.0 +10.2 -80.0 -11.2 17.4 -28.6 Paral 12 21.673M 31.8 +0.9 +0.1 +8.1 -40.0 0.9 29.5 -28.6 Perpe 13 17.803M 29.3 +0.8 +0.1 +8.8 -40.0 -1.0 29.5 -30.5 Perpe 14 124.620k 61.3 +0.1 +0.0 +10.9 -80.0 -7.7 25.7 -33.4 Perpe 15 24.780k 53.6 +0.0 +0.0 +13.0 -80.0 -13.4 39.7 -53.1 Perpe 16 10.625k 56.7 +0.0 +0.0 +17.1 -80.0 -6.2 47.1 -53.3 Paral 17 21.390k 52.8 +0.0 +0.0 +13.6 -80.0 -13.6 41.0 -54.6 Paral	9	21.676M	34.7	+0.9	+0.1	+8.1		-40.0	3.8	29.5	-25.7	Paral
12 21.673M 31.8 +0.9 +0.1 +8.1 -40.0 0.9 29.5 -28.6 Perpe 13 17.803M 29.3 +0.8 +0.1 +8.8 -40.0 -1.0 29.5 -30.5 Perpe 14 124.620k 61.3 +0.1 +0.0 +10.9 -80.0 -7.7 25.7 -33.4 Perpe 15 24.780k 53.6 +0.0 +0.0 +13.0 -80.0 -13.4 39.7 -53.1 Perpe 16 10.625k 56.7 +0.0 +0.0 +17.1 -80.0 -6.2 47.1 -53.3 Paral 17 21.390k 52.8 +0.0 +0.0 +13.6 -80.0 -13.6 41.0 -54.6 Paral	10	27.083M	33.9	+1.0	+0.1	+7.2		-40.0	2.2	29.5	-27.3	Paral
13 17.803M 29.3 +0.8 +0.1 +8.8 -40.0 -1.0 29.5 -30.5 Perpe 14 124.620k 61.3 +0.1 +0.0 +10.9 -80.0 -7.7 25.7 -33.4 Perpe 15 24.780k 53.6 +0.0 +0.0 +13.0 -80.0 -13.4 39.7 -53.1 Perpe 16 10.625k 56.7 +0.0 +0.0 +17.1 -80.0 -6.2 47.1 -53.3 Paral 17 21.390k 52.8 +0.0 +0.0 +13.6 -80.0 -13.6 41.0 -54.6 Paral	11	324.610k	58.5	+0.1	+0.0	+10.2		-80.0	-11.2	17.4	-28.6	Paral
14 124.620k 61.3 +0.1 +0.0 +10.9 -80.0 -7.7 25.7 -33.4 Perpe 15 24.780k 53.6 +0.0 +0.0 +13.0 -80.0 -13.4 39.7 -53.1 Perpe 16 10.625k 56.7 +0.0 +0.0 +17.1 -80.0 -6.2 47.1 -53.3 Paral 17 21.390k 52.8 +0.0 +0.0 +13.6 -80.0 -13.6 41.0 -54.6 Paral	12	21.673M	31.8	+0.9	+0.1	+8.1		-40.0	0.9	29.5	-28.6	Perpe
15 24.780k 53.6 +0.0 +0.0 +13.0 -80.0 -13.4 39.7 -53.1 Perpe 16 10.625k 56.7 +0.0 +0.0 +17.1 -80.0 -6.2 47.1 -53.3 Paral 17 21.390k 52.8 +0.0 +0.0 +13.6 -80.0 -13.6 41.0 -54.6 Paral	13	17.803M	29.3	+0.8	+0.1	+8.8		-40.0	-1.0	29.5	-30.5	Perpe
16 10.625k 56.7 +0.0 +0.0 +17.1 -80.0 -6.2 47.1 -53.3 Paral 17 21.390k 52.8 +0.0 +0.0 +13.6 -80.0 -13.6 41.0 -54.6 Paral	14	124.620k	61.3	+0.1	+0.0	+10.9		-80.0	-7.7	25.7	-33.4	Perpe
17 21.390k 52.8 +0.0 +0.0 +13.6 -80.0 -13.6 41.0 -54.6 Paral	15	24.780k	53.6	+0.0	+0.0	+13.0		-80.0	-13.4	39.7	-53.1	Perpe
	16	10.625k	56.7	+0.0	+0.0	+17.1		-80.0	-6.2	47.1	-53.3	Paral
18 9.420k 46.5 +0.0 +0.0 +17.5 -80.0 -16.0 48.1 -64.1 Paral	17	21.390k	52.8	+0.0	+0.0	+13.6		-80.0	-13.6	41.0	-54.6	Paral
	18	9.420k	46.5	+0.0	+0.0	+17.5		-80.0	-16.0	48.1	-64.1	Paral

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Test Location: CKC Laboratories Inc. • 5046 Sierra Pines Dr. • Mariposa, CA 95338 • 209-966-5240

Customer: WaveLynx Technologies Corporation

Specification: 15.209 Radiated Emissions

Work Order #: 97029 Date: 3/23/2016
Test Type: Radiated Scan Time: 09:43:02
Tested By: Benny Lovan Sequence#: 8

Software: EMITest 5.03.02

Equipment Tested:

Device	Manufacturer	Model #	S/N	
Configuration 9				

Support Equipment:

Device	Manufacturer	Model #	S/N	
Configuration 9				

Test Conditions / Notes:

Radiated Emissions Spurious Measurements 30MHz -1GHz

Temperature: 10.5°C Humidity: 57%

Atmospheric Pressure: 98.5 kPa

Method: ANSI C63.10 2013

Highest Generated Frequency (Configuration 5): 8MHz Highest Generated Frequency (Configuration 7): 27.12 MHz

Both EUTs are running at 125kHz.

The EUT is powered by a DC power supply at 12VDC.

Spurious was measured on two EUTs at one time.

Configuration 9 is made up of Configuration 5 and Configuration 7 (Testing at the same time).

Configuration 5 is in Y-axis and Configuration -7 is in the X-axis.

Preliminary measurements of the fundamental were taken in two orientations. The orientation that displayed the highest emissions was the orientation used for radiated spurious emissions.

The manufacturer declares it will only ever be wall mounted in an upright (Y-axis) or sideways (X-axis) orientation.

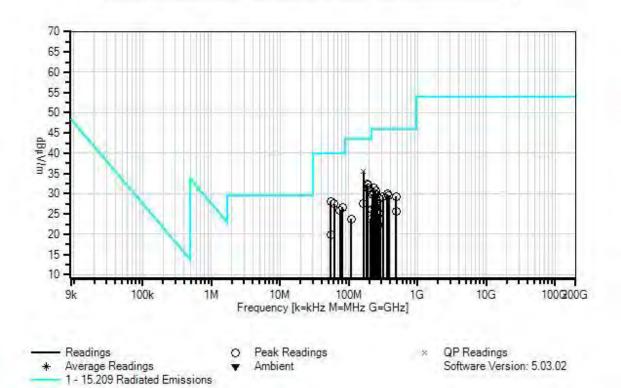
The EUT is setup on an 0.80 meter foam block.

The EUT is setup to continuously transmit at 125kHz

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WaveLynx Technologies Corporation WO#: 97029 Sequence#: 8 Date: 3/23/2016 15.209 Radiated Emissions Test Distance: 3 Meters Horiz





ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN00282	Preamp	8447D	4/7/2014	4/7/2016
T2	ANSITED 3M	Cable		11/15/2014	11/15/2016
Т3	ANP06884	Cable	LMR195-FR-4	10/27/2015	10/27/2017
T4	ANP06885	Cable	P06885	10/27/2015	10/27/2017
T5	AN01991	Biconilog Antenna	CBL6111C	3/11/2016	3/11/2018

Polar
Ant
Horiz
Horiz
T7 .
Vert
37.4
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VEIT
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20	311.892M	38.4	-27.3 +13.8	+3.5	+0.3	+0.4	+0.0	29.1	46.0	-16.9	Vert
21	204.7613.4	20.0		12.2	10.2	10.4	100	20.7	46.0	17.2	T 7 4
21	284.761M	38.8	-27.2	+3.3	+0.3	+0.4	+0.0	28.7	46.0	-17.3	Vert
			+13.1								
22	250.880M	38.9	-27.3	+3.1	+0.3	+0.4	+0.0	27.7	46.0	-18.3	Vert
			+12.3								
23	239.997M	38.5	-27.3	+3.1	+0.3	+0.4	+0.0	26.7	46.0	-19.3	Vert
			+11.7								
24	257.712M	37.5	-27.3	+3.2	+0.3	+0.4	+0.0	26.6	46.0	-19.4	Vert
	20,11,121,1	07.0	+12.5	<u>-</u>	0.2	٠	0.0	_0.0		27	. 010
25	210.150M	38.0	-27.4	+2.9	+0.3	+0.3	+0.0	23.8	43.5	-19.7	Vert
23	210.130W	36.0	+9.7	12.9	10.5	10.5	10.0	23.0	73.3	-19.7	VCII
26	100 40714	20.5		12.0	10.2	10.2	100	22.0	12.5	10.7	T 7 4
26	108.497M	38.5	-27.9	+2.0	+0.2	+0.3	+0.0	23.8	43.5	-19.7	Vert
			+10.7								
27	216.950M	39.6	-27.3	+2.9	+0.3	+0.4	+0.0	26.0	46.0	-20.0	Vert
			+10.1								
28	54.313M	38.9	-28.0	+1.4	+0.1	+0.2	+0.0	19.9	40.0	-20.1	Horiz
			+7.3								
29	486.846M	30.7	-28.2	+4.5	+0.4	+0.5	+0.0	25.7	46.0	-20.3	Horiz
			+17.8								
30	257.610M	36.5	-27.3	+3.2	+0.3	+0.4	+0.0	25.6	46.0	-20.4	Vert
	237.010141	50.5	+12.5	. 3.2	. 0.5	. 0. 1	. 0.0	23.0	10.0	20.1	V 011
31	271.220M	35.5	-27.2	+3.3	+0.3	+0.4	+0.0	25.1	46.0	-20.9	Vert
31	2/1.220W	33.3		13.3	10.3	10.4	10.0	23.1	40.0	-20.9	VEIL
- 22	257 7223 6	22.5	+12.8	12.2	10.2	+0.4		22.6	46.0	22.4	тт •
32	257.733M	33.5	-27.3	+3.2	+0.3	+0.4	+0.0	22.6	46.0	-23.4	Horiz
			+12.5								
33	267.264M	33.0	-27.2	+3.2	+0.3	+0.4	+0.0	22.4	46.0	-23.6	Vert
			+12.7								
34	264.420M	32.7	-27.2	+3.2	+0.3	+0.4	+0.0	22.0	46.0	-24.0	Vert
			+12.6								
35	237.420M	34.1	-27.3	+3.0	+0.3	+0.4	+0.0	22.0	46.0	-24.0	Vert
			+11.5								
36	229.092M	34.4	-27.3	+3.0	+0.3	+0.4	+0.0	21.8	46.0	-24.2	Horiz
	227.072.11	5 1. T	+11.0	. 5.0	. 0.5		. 0.0	21.0	10.0	21.2	110112
37	229.093M	33.6	-27.3	+3.0	+0.3	+0.4	+0.0	21.0	46.0	-25.0	Horiz
] ,	227.073141	55.0	+11.0	. 5.0	. 0.5	. 0.7	. 0.0	21.0	10.0	23.0	110112
38	238.636M	31.0	-27.3	+3.0	+0.3	+0.4	+0.0	19.0	46.0	-27.0	Vert
38	238.030IVI	31.0		±3.0	±0.5	±0.4	±0.0	19.0	40.0	-27.0	vert
			+11.6								



Test Setup Photos



Configuration 8



Configuration 9



15.207 AC Conducted Emissions

Test Setup / Conditions / Data

Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • (209) 966-5240

Customer: WaveLynx Technologies Corporation.

Specification: 15.207 AC Mains - Average

Work Order #: 97029 Date: 5/10/2016
Test Type: Conducted Emissions Time: 9:25:27 AM

Tested By: Skip Doyle / Benny Lovan Sequence#: 1

Software: EMITest 5.03.02 120V 60Hz

Equipment Tested:

Device Manufacturer Model # S/N
Configuration 1

Support Equipment:

Device Manufacturer Model # S/N
Configuration 1

Test Conditions / Notes:

Test Method: ANSI C63.10 (2013)

Frequency Range of Interest:

0.150-30MHz

RBW = 9kHz; VBW > 9kHz

Environmental Conditions: Temperature: 21°C Relative Humidity: 67% Atmospheric Pressure: 97.5kPa

Highest Generated Frequency: 27.12 MHz

The EUT is running at 125kHz.

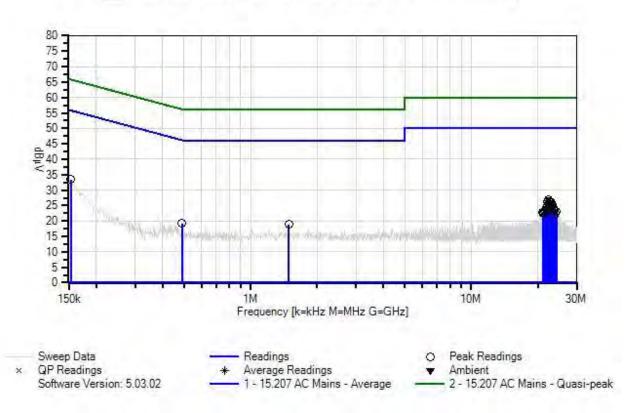
The EUT is powered by a DC power supply at 12VDC. The EUT is setup to continuously transmit at 125kHz.

AC Conducted Emissions is being performed on the AC portion of the AC/DC supply.

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WaveLynx Technologies Corporation. WO#: 97029 Sequence#: 1 Date: 5/10/2016 15.207 AC Mains - Average Test Lead: 120V 60Hz Line





ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANP06770	Attenuator	PE7010-10	1/15/2015	1/15/2017
	AN01248	50uH LISN-Line 1	8028-50-TS-24-	1/4/2016	1/4/2017
		(Return) (dB)	BNC		
T2	AN01248	50uH LISN-Line 2 (Line) (dB)	8028-50-TS-24- BNC	1/4/2016	1/4/2017
Т3	AN02609	High Pass Filter	HE9615-150K- 50-720B	2/18/2016	2/18/2018
T4	ANP06884	Cable	LMR195-FR-4	10/27/2015	10/27/2017
T5	ANMD INT	Cable	Underground cables only	3/17/2016	3/17/2018
	AN02111	Spectrum Analyzer	8593EM	6/4/2015	6/4/2016
T6	ANP01153	Cable	NA	3/3/2016	3/3/2018

Measur	rement Data:	Re	eading lis	ted by ma	ırgin.			Test Lead	d: Line		
#	Freq	Rdng	T1	T2	Т3	T4	Dist	Corr	Spec	Margin	Polar
			T5	T6							
	MHz	dΒμV	dB	dB	dB	dB	Table	dΒμV	dΒμV	dB	Ant
1	153.637k	21.7	+10.1	+0.1	+1.5	+0.0	+0.0	33.4	55.8	-22.4	Line
			+0.0	+0.0							
2	22.297M	15.3	+10.1	+0.6	+0.3	+0.1	+0.0	26.8	50.0	-23.2	Line
			+0.2	+0.2							
3	22.531M	14.9	+10.1	+0.6	+0.3	+0.1	+0.0	26.4	50.0	-23.6	Line
			+0.2	+0.2							
4	22.170M	14.9	+10.1	+0.5	+0.3	+0.1	+0.0	26.3	50.0	-23.7	Line
			+0.2	+0.2							
5	22.784M	14.8	+10.1	+0.6	+0.3	+0.1	+0.0	26.3	50.0	-23.7	Line
			+0.2	+0.2							
6	22.658M	14.7	+10.1	+0.6	+0.3	+0.1	+0.0	26.2	50.0	-23.8	Line
			+0.2	+0.2							
7	23.036M	14.3	+10.1	+0.6	+0.3	+0.1	+0.0	25.8	50.0	-24.2	Line
			+0.2	+0.2							
8	22.423M	14.2	+10.1	+0.6	+0.3	+0.1	+0.0	25.7	50.0	-24.3	Line
			+0.2	+0.2							
9	22.910M	13.9	+10.1	+0.6	+0.3	+0.1	+0.0	25.4	50.0	-24.6	Line
			+0.2	+0.2							
10	23.289M	13.8	+10.1	+0.6	+0.3	+0.1	+0.0	25.3	50.0	-24.7	Line
			+0.2	+0.2							
11	23.163M	13.6	+10.1	+0.6	+0.3	+0.1	+0.0	25.1	50.0	-24.9	Line
			+0.2	+0.2							
12	22.053M	13.4	+10.1	+0.5	+0.3	+0.1	+0.0	24.8	50.0	-25.2	Line
- 10	• • • • • • • • • • • • • • • • • • • •		+0.2	+0.2					-		
13	21.800M	13.1	+10.1	+0.5	+0.2	+0.1	+0.0	24.4	50.0	-25.6	Line
- 1.4	22.5.423.5	10.5	+0.2	+0.2	. 0. 2	. 0. 1	. 0. 0	2.1.2	7 0.0	25.5	T .
14	23.542M	12.7	+10.1	+0.7	+0.3	+0.1	+0.0	24.3	50.0	-25.7	Line
1.5	22 10 63 5	10.0	+0.2	+0.2	. 0. 2	. 0. 1	. 0 0	22.0	7 0.0	261	T.
15	23.406M	12.3	+10.1	+0.7	+0.3	+0.1	+0.0	23.9	50.0	-26.1	Line
1.6	22.7043.5	10.0	+0.2	+0.2	. 0. 2	.0.1		22.0	50.0	26.2	T ·
16	23.794M	12.3	+10.1	+0.6	+0.3	+0.1	+0.0	23.8	50.0	-26.2	Line
			+0.2	+0.2							

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17	21.927M	12.3	+10.1	+0.5	+0.2	+0.1	+0.0	23.6	50.0	-26.4	Line
1.0	22 (52) 5	11.0	+0.2	+0.2	. 0. 2	. 0. 1	. 0. 0	22.4	7 0.0	266	
18	23.659M	11.8	+10.1	+0.7	+0.3	+0.1	+0.0	23.4	50.0	-26.6	Line
			+0.2	+0.2							
19	21.674M	12.0	+10.1	+0.5	+0.2	+0.1	+0.0	23.3	50.0	-26.7	Line
			+0.2	+0.2							
20	21.430M	11.8	+10.1	+0.5	+0.2	+0.1	+0.0	23.1	50.0	-26.9	Line
			+0.2	+0.2							
21	21.548M	11.8	+10.1	+0.5	+0.2	+0.1	+0.0	23.1	50.0	-26.9	Line
			+0.2	+0.2							
22	488.150k	8.8	+10.1	+0.1	+0.2	+0.0	+0.0	19.2	46.2	-27.0	Line
			+0.0	+0.0							
23	24.164M	11.6	+10.1	+0.5	+0.3	+0.1	+0.0	23.0	50.0	-27.0	Line
			+0.2	+0.2							
24	24.291M	11.6	+10.1	+0.5	+0.3	+0.1	+0.0	23.0	50.0	-27.0	Line
			+0.2	+0.2							
25	1.491M	8.1	+10.1	+0.4	+0.2	+0.0	+0.0	18.9	46.0	-27.1	Line
			+0.1	+0.0							
26	21.304M	11.6	+10.1	+0.5	+0.2	+0.1	+0.0	22.9	50.0	-27.1	Line
			+0.2	+0.2							
27	21.052M	11.5	+10.1	+0.5	+0.2	+0.1	+0.0	22.8	50.0	-27.2	Line
			+0.2	+0.2							
28	21.178M	11.2	+10.1	+0.5	+0.2	+0.1	+0.0	22.5	50.0	-27.5	Line
			+0.2	+0.2							
29	24.038M	11.1	+10.1	+0.5	+0.3	+0.1	+0.0	22.5	50.0	-27.5	Line
			+0.2	+0.2							
30	23.912M	10.8	+10.1	+0.6	+0.3	+0.1	+0.0	22.3	50.0	-27.7	Line
			+0.2	+0.2							



Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • (209) 966-5240

WaveLynx Technologies Corporation. Manufacturer:

Specification: 15.207 AC Mains - Average

Work Order #: Date: 5/10/2016 97029 Time: 9:32:48 AM Test Type: **Conducted Emissions**

Tested By: Skip Doyle / Benny Lovan Sequence#: 2

Software: EMITest 5.03.02 120V 60Hz

Equipment Tested:

Device Model # S/N Manufacturer Configuration 1

Support Equipment:

Model # Manufacturer Device S/N Configuration 1

Test Conditions / Notes:

Test Method: ANSI C63.10 (2013)

Frequency Range of Interest:

0.150-30MHz

RBW = 9kHz; VBW > 9kHz

Environmental Conditions: Temperature: 21°C Relative Humidity: 67%

Atmospheric Pressure: 97.5kPa

Highest Generated Frequency: 27.12 MHz

The EUT is running at 125kHz.

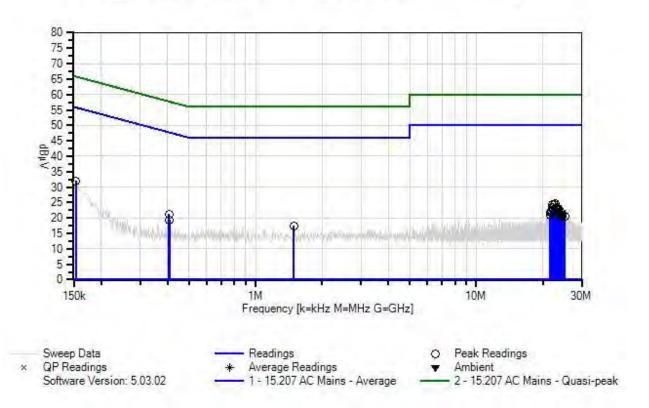
The EUT is powered by a DC power supply at 12VDC. The EUT is setup to continuously transmit at 125kHz.

AC Conducted Emissions is being performed on the AC portion of the AC/DC supply.

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WaveLynx Technologies Corporation. WO#: 97029 Sequence#: 2 Date: 5/10/2016 15.207 AC Mains - Average Test Lead: 120V 60Hz RETURN





ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANP06770	Attenuator	PE7010-10	1/15/2015	1/15/2017
T2	AN01248	50uH LISN-Line 1	8028-50-TS-24-	1/4/2016	1/4/2017
		(Return) (dB)	BNC		
	AN01248	50uH LISN-Line 2	8028-50-TS-24-	1/4/2016	1/4/2017
		(Line) (dB)	BNC		
T3	AN02609	High Pass Filter	HE9615-150K-	2/18/2016	2/18/2018
			50-720B		
T4	ANP06884	Cable	LMR195-FR-4	10/27/2015	10/27/2017
T5	ANMD INT	Cable	Underground	3/17/2016	3/17/2018
			cables only		
	AN02111	Spectrum Analyzer	8593EM	6/4/2015	6/4/2016
T6	ANP01153	Cable	NA	3/3/2016	3/3/2018

Measur	rement Data:	Re	eading lis	ted by ma	argin.			Test Lea	d: RETUR	N	
#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
			T5	T6							
	MHz	dΒμV	dB	dB	dB	dB	Table	dΒμV	dΒμV	dB	Ant
1	153.637k	20.3	+10.1	+0.1	+1.5	+0.0	+0.0	32.0	55.8	-23.8	RETUR
			+0.0	+0.0							
2	22.793M	13.1	+10.1	+0.6	+0.3	+0.1	+0.0	24.6	50.0	-25.4	RETUR
			+0.2	+0.2							
3	22.658M	13.0	+10.1	+0.6	+0.3	+0.1	+0.0	24.5	50.0	-25.5	RETUR
			+0.2	+0.2							
4	22.197M	12.8	+10.1	+0.6	+0.3	+0.1	+0.0	24.3	50.0	-25.7	RETUR
			+0.2	+0.2							
5	22.540M	12.7	+10.1	+0.6	+0.3	+0.1	+0.0	24.2	50.0	-25.8	RETUR
			+0.2	+0.2							
6	404.522k	10.8	+10.1	+0.1	+0.2	+0.0	+0.0	21.2	47.8	-26.6	RETUR
			+0.0	+0.0							
7	23.045M	11.9	+10.1	+0.6	+0.3	+0.1	+0.0	23.4	50.0	-26.6	RETUR
			+0.2	+0.2							
8	22.071M	11.8	+10.1	+0.6	+0.3	+0.1	+0.0	23.3	50.0	-26.7	RETUR
			+0.2	+0.2							
9	22.919M	11.6	+10.1	+0.6	+0.3	+0.1	+0.0	23.1	50.0	-26.9	RETUR
			+0.2	+0.2							
10	23.298M	11.6	+10.1	+0.6	+0.3	+0.1	+0.0	23.1	50.0	-26.9	RETUR
			+0.2	+0.2							
11	23.542M	11.5	+10.1	+0.6	+0.3	+0.1	+0.0	23.0	50.0	-27.0	RETUR
			+0.2	+0.2							
12	22.324M	11.3	+10.1	+0.6	+0.3	+0.1	+0.0	22.8	50.0	-27.2	RETUR
- 10			+0.2	+0.2				•••	= 0.0		
13	23.172M	11.3	+10.1	+0.6	+0.3	+0.1	+0.0	22.8	50.0	-27.2	RETUR
	22 1112 5		+0.2	+0.2					- 0.0		
14	22.441M	11.1	+10.1	+0.6	+0.3	+0.1	+0.0	22.6	50.0	-27.4	RETUR
			+0.2	+0.2							
15	23.424M	11.0	+10.1	+0.6	+0.3	+0.1	+0.0	22.5	50.0	-27.5	RETUR
			+0.2	+0.2							
16	21.936M	10.6	+10.1	+0.6	+0.2	+0.1	+0.0	22.0	50.0	-28.0	RETUR
			+0.2	+0.2							



17	24.047M	10.5	+10.1 +0.2	+0.6 +0.2	+0.3	+0.1	+0.0	22.0	50.0	-28.0	RETUR
18	21.809M	10.5	+10.1	+0.6	+0.2	+0.1	+0.0	21.9	50.0	-28.1	RETUR
10	21.809W	10.3			±0.2	+0.1	+0.0	21.9	30.0	-28.1	KETUK
19	21.56614	10.4	+0.2	+0.2	10.2	+0.1	+0.0	21.8	50.0	-28.2	DETLID
19	21.566M	10.4	+10.1	+0.6	+0.2	+0.1	+0.0	21.8	30.0	-28.2	RETUR
20	22.7043.6	10.2	+0.2	+0.2	. 0. 2	.0.1	. 0. 0	21.0	50.0	20.2	DETELID
20	23.794M	10.3	+10.1	+0.6	+0.3	+0.1	+0.0	21.8	50.0	-28.2	RETUR
	100 1 501	0.0	+0.2	+0.2		0.0		10.0		• • •	D D. T. T.
21	408.158k	8.9	+10.1	+0.1	+0.2	+0.0	+0.0	19.3	47.7	-28.4	RETUR
			+0.0	+0.0							
22	23.677M	10.0	+10.1	+0.6	+0.3	+0.1	+0.0	21.5	50.0	-28.5	RETUR
			+0.2	+0.2							
23	24.552M	10.0	+10.1	+0.6	+0.3	+0.1	+0.0	21.5	50.0	-28.5	RETUR
			+0.2	+0.2							
24	1.491M	6.9	+10.1	+0.1	+0.2	+0.0	+0.0	17.4	46.0	-28.6	RETUR
			+0.1	+0.0							
25	24.300M	9.6	+10.1	+0.6	+0.3	+0.1	+0.0	21.1	50.0	-28.9	RETUR
			+0.2	+0.2							
26	23.921M	9.5	+10.1	+0.6	+0.3	+0.1	+0.0	21.0	50.0	-29.0	RETUR
			+0.2	+0.2							
27	21.692M	9.5	+10.1	+0.6	+0.2	+0.1	+0.0	20.9	50.0	-29.1	RETUR
			+0.2	+0.2							
28	24.164M	9.4	+10.1	+0.6	+0.3	+0.1	+0.0	20.9	50.0	-29.1	RETUR
			+0.2	+0.2							
29	24.417M	9.2	+10.1	+0.6	+0.3	+0.1	+0.0	20.7	50.0	-29.3	RETUR
			+0.2	+0.2							
30	25.184M	9.2	+10.1	+0.6	+0.3	+0.1	+0.0	20.7	50.0	-29.3	RETUR
		,. <u>-</u>	+0.2	+0.2	3.0	0.1	2.0	_ ,,,	2 3.0	_,	
				V. -							

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Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • (209) 966-5240

Customer: WaveLynx Technologies Corporation.

Specification: 15.207 AC Mains - Average

Work Order #: 97029 Date: 5/10/2016
Test Type: Conducted Emissions Time: 10:04:57 AM

Tested By: Skip Doyle / Benny Lovan Sequence#: 8

Software: EMITest 5.03.02 120V 60Hz

Equipment Tested:

Device Manufacturer Model # S/N
Configuration 3

Support Equipment:

Device Manufacturer Model # S/N
Configuration 3

Test Conditions / Notes:

Test Method: ANSI C63.10 (2013)

Frequency Range of Interest:

0.150-30MHz

RBW = 9kHz; VBW > 9kHz

Environmental Conditions: Temperature: 21°C Relative Humidity: 67% Atmospheric Pressure: 97.5kPa

Highest Generated Frequency: 27.12 MHz

The EUT is running at 125kHz.

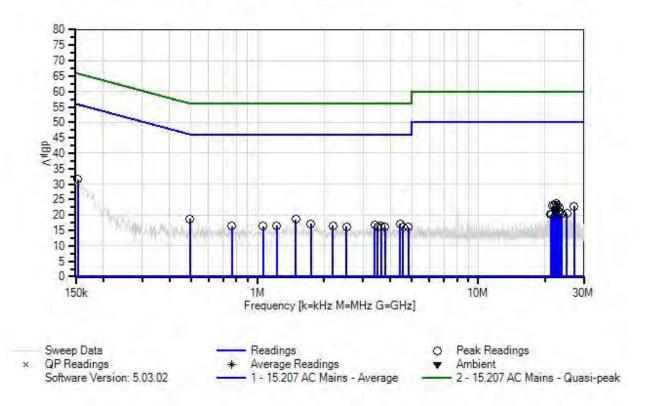
The EUT is powered by a DC power supply at 12VDC. The EUT is setup to continuously transmit at 125kHz.

AC Conducted Emissions is being performed on the AC portion of the AC/DC supply.

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WaveLynx Technologies Corporation. WO#: 97029 Sequence#: 8 Date: 5/10/2016 15.207 AC Mains - Average Test Lead: 120V 60Hz LINE





ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANP06770	Attenuator	PE7010-10	1/15/2015	1/15/2017
	AN01248	50uH LISN-Line 1	8028-50-TS-24-	1/4/2016	1/4/2017
		(Return) (dB)	BNC		
T2	AN01248	50uH LISN-Line 2	8028-50-TS-24-	1/4/2016	1/4/2017
		(Line) (dB)	BNC		
T3	AN02609	High Pass Filter	HE9615-150K-	2/18/2016	2/18/2018
			50-720B		
T4	ANP06884	Cable	LMR195-FR-4	10/27/2015	10/27/2017
T5	ANMD INT	Cable	Underground	3/17/2016	3/17/2018
			cables only		
	AN02111	Spectrum Analyzer	8593EM	6/4/2015	6/4/2016
T6	ANP01153	Cable	NA	3/3/2016	3/3/2018

Measur	rement Data:	Re	eading lis	ted by ma	ırgin.			Test Lead	d: LINE		
#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
			T5	T6							
	MHz	dΒμV	dB	dB	dB	dB	Table	dΒμV	dΒμV	dB	Ant
1	153.637k	19.9	+10.1	+0.1	+1.5	+0.0	+0.0	31.6	55.8	-24.2	LINE
			+0.0	+0.0							
2	22.513M	12.3	+10.1	+0.6	+0.3	+0.1	+0.0	23.8	50.0	-26.2	LINE
	22 520) (11.5	+0.2	+0.2	. 0. 2	. 0. 1	. 0 0		7 0.0	260	T D IE
3	22.730M	11.7	+10.1	+0.6	+0.3	+0.1	+0.0	23.2	50.0	-26.8	LINE
4	22 0001 5	11.6	+0.2	+0.2	.0.2	. 0. 1	. 0. 0	22.0	50.0	27.0	LDIE
4	22.008M	11.6	+10.1	+0.5	+0.3	+0.1	+0.0	23.0	50.0	-27.0	LINE
5	21.764M	11.7	+0.2	+0.2	+0.2	+0.1	+0.0	23.0	50.0	27.0	LINE
3	21./04IVI	11./	$+10.1 \\ +0.2$	+0.5 +0.2	+0.2	+0.1	+0.0	23.0	30.0	-27.0	LINE
6	27.124M	11.8	+10.1	+0.2	+0.3	+0.1	+0.0	22.8	50.0	-27.2	LINE
0	27.124IVI	11.0	+0.1	+0.1	+0.3	+0.1	+0.0	22.0	30.0	-21.2	LINE
7	493.604k	8.3	+10.1	+0.1	+0.2	+0.0	+0.0	18.7	46.1	-27.4	LINE
,	4/3.004K	0.5	+0.0	+0.0	10.2	10.0	10.0	10.7	70.1	-27.4	LINE
8	22.603M	11.1	+10.1	+0.6	+0.3	+0.1	+0.0	22.6	50.0	-27.4	LINE
			+0.2	+0.2	0.2	0.1	0.0		20.0		211 12
9	1.491M	7.7	+10.1	+0.4	+0.2	+0.0	+0.0	18.5	46.0	-27.5	LINE
			+0.1	+0.0							
10	23.235M	11.0	+10.1	+0.6	+0.3	+0.1	+0.0	22.5	50.0	-27.5	LINE
			+0.2	+0.2							
11	22.261M	9.9	+10.1	+0.6	+0.3	+0.1	+0.0	21.4	50.0	-28.6	LINE
			+0.2	+0.2							
12	4.414M	6.7	+10.1	+0.1	+0.1	+0.0	+0.0	17.2	46.0	-28.8	LINE
			+0.1	+0.1							
13	1.743M	6.1	+10.1	+0.6	+0.2	+0.0	+0.0	17.1	46.0	-28.9	LINE
			+0.1	+0.0							
14	22.991M	9.6	+10.1	+0.6	+0.3	+0.1	+0.0	21.1	50.0	-28.9	LINE
			+0.2	+0.2							
15	3.394M	6.2	+10.1	+0.1	+0.1	+0.0	+0.0	16.7	46.0	-29.3	LINE
			+0.1	+0.1							
16	1.220M	5.8	+10.1	+0.4	+0.2	+0.0	+0.0	16.6	46.0	-29.4	LINE
			+0.1	+0.0							

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17	2.194M	6.1	+10.1	+0.1	+0.2	+0.0	+0.0	16.6	46.0	-29.4	LINE
			+0.1	+0.0							
18	25.229M	9.4	+10.1	+0.2	+0.3	+0.1	+0.0	20.5	50.0	-29.5	LINE
			+0.2	+0.2							
19	3.620M	5.9	+10.1	+0.1	+0.1	+0.0	+0.0	16.4	46.0	-29.6	LINE
			+0.1	+0.1							
20	23.984M	8.9	+10.1	+0.6	+0.3	+0.1	+0.0	20.4	50.0	-29.6	LINE
			+0.2	+0.2							
21	766.306k	5.7	+10.1	+0.2	+0.3	+0.0	+0.0	16.3	46.0	-29.7	LINE
			+0.0	+0.0							
22	1.058M	5.6	+10.1	+0.3	+0.2	+0.0	+0.0	16.3	46.0	-29.7	LINE
			+0.1	+0.0							
23	21.521M	9.0	+10.1	+0.5	+0.2	+0.1	+0.0	20.3	50.0	-29.7	LINE
			+0.2	+0.2							
24	23.740M	8.8	+10.1	+0.6	+0.3	+0.1	+0.0	20.3	50.0	-29.7	LINE
			+0.2	+0.2							
25	2.528M	5.8	+10.1	+0.1	+0.1	+0.0	+0.0	16.2	46.0	-29.8	LINE
			+0.1	+0.0							
26	4.811M	5.6	+10.1	+0.1	+0.1	+0.0	+0.0	16.1	46.0	-29.9	LINE
			+0.1	+0.1							
27	21.268M	8.8	+10.1	+0.5	+0.2	+0.1	+0.0	20.1	50.0	-29.9	LINE
			+0.2	+0.2							
28	3.503M	5.5	+10.1	+0.1	+0.1	+0.0	+0.0	16.0	46.0	-30.0	LINE
			+0.1	+0.1							
29	3.773M	5.5	+10.1	+0.1	+0.1	+0.0	+0.0	16.0	46.0	-30.0	LINE
			+0.1	+0.1							
30	4.567M	5.5	+10.1	+0.1	+0.1	+0.0	+0.0	16.0	46.0	-30.0	LINE
			+0.1	+0.1							



Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • (209) 966-5240

Customer: WaveLynx Technologies Corporation.

Specification: 15.207 AC Mains - Average

Work Order #: 97029 Date: 5/10/2016
Test Type: Conducted Emissions Time: 10:01:48 AM

Tested By: Skip Doyle / Benny Lovan Sequence#: 7

Software: EMITest 5.03.02 120V 60Hz

Equipment Tested:

Device Manufacturer Model # S/N
Configuration 3

Support Equipment:

Device Manufacturer Model # S/N
Configuration 3

Test Conditions / Notes:

Test Method: ANSI C63.10 (2013)

Frequency Range of Interest:

0.150-30MHz

RBW = 9kHz; VBW > 9kHz

Environmental Conditions: Temperature: 21°C Relative Humidity: 67% Atmospheric Pressure: 97.5kPa

Highest Generated Frequency: 27.12 MHz

The EUT is running at 125kHz.

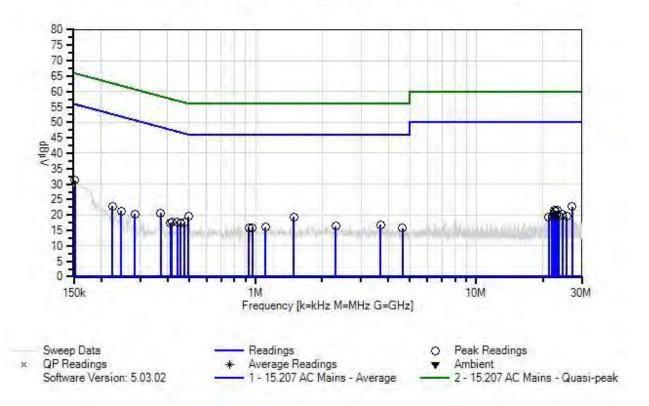
The EUT is powered by a DC power supply at 12VDC. The EUT is setup to continuously transmit at 125kHz.

AC Conducted Emissions is being performed on the AC portion of the AC/DC supply.

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WaveLynx Technologies Corporation. WO#: 97029 Sequence#: 7 Date: 5/10/2016 15.207 AC Mains - Average Test Lead: 120V 60Hz RETURN





ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANP06770	Attenuator	PE7010-10	1/15/2015	1/15/2017
T2	AN01248	50uH LISN-Line 1	8028-50-TS-24-	1/4/2016	1/4/2017
		(Return) (dB)	BNC		
	AN01248	50uH LISN-Line 2	8028-50-TS-24-	1/4/2016	1/4/2017
		(Line) (dB)	BNC		
T3	AN02609	High Pass Filter	HE9615-150K-	2/18/2016	2/18/2018
			50-720B		
T4	ANP06884	Cable	LMR195-FR-4	10/27/2015	10/27/2017
T5	ANMD INT	Cable	Underground	3/17/2016	3/17/2018
			cables only		
	AN02111	Spectrum Analyzer	8593EM	6/4/2015	6/4/2016
T6	ANP01153	Cable	NA	3/3/2016	3/3/2018

	ement Data:	Re	eading list	ted by ma	ırgin.			Test Lea	d: RETUR	N	
#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
			T5	T6							
	MHz	dΒμV	dB	dB	dB	dB	Table	dΒμV	dΒμV	dB	Ant
1	151.819k	19.2	+10.1	+0.1	+1.8	+0.0	+0.0	31.2	55.9	-24.7	RETUR
	10= 4 101	0.0	+0.0	+0.0	0.0			10.6	46.0	261	D D T T T D
2	497.240k	9.2	+10.1	+0.1	+0.2	+0.0	+0.0	19.6	46.0	-26.4	RETUR
	1 4013.5	0.0	+0.0	+0.0	. 0. 2	. 0. 0	. 0. 0	10.2	46.0	265	D.E.W.ID
3	1.491M	8.8	+10.1	+0.1	+0.2	+0.0	+0.0	19.3	46.0	-26.7	RETUR
	27.12414	11.1	+0.1	+0.0	+0.2	+0.1		22.7	50.0	27.2	DETID
4	27.124M	11.1	+10.1	+0.7	+0.3	+0.1	+0.0	22.7	50.0	-27.3	RETUR
5	371.798k	10.2	+0.2	+0.2	+0.2	+0.0	+0.0	20.6	48.5	-27.9	RETUR
3	3/1./98K	10.2	$+10.1 \\ +0.0$	+0.1 +0.0	+0.2	+0.0	+0.0	20.6	48.3	-27.9	KETUK
6	22.504M	10.1	+10.1	+0.6	+0.3	+0.1	+0.0	21.6	50.0	-28.4	RETUR
0	22.304W	10.1	+0.1	+0.0	±0.3	+0.1	+0.0	21.0	30.0	-20.4	KETUK
7	23.226M	9.9	+10.1	+0.6	+0.3	+0.1	+0.0	21.4	50.0	-28.6	RETUR
,	23.220IVI	9.9	+0.2	+0.2	10.5	10.1	10.0	21.7	30.0	-20.0	KETUK
8	22.721M	9.8	+10.1	+0.6	+0.3	+0.1	+0.0	21.3	50.0	-28.7	RETUR
	22.,2111	7.0	+0.2	+0.2	0.5	. 0.1	. 0.0	21.5	20.0	20.7	TET OIL
9	477.242k	7.2	+10.1	+0.1	+0.2	+0.0	+0.0	17.6	46.4	-28.8	RETUR
	.,,		+0.0	+0.0				-,			
10	3.683M	6.4	+10.1	+0.1	+0.1	+0.0	+0.0	16.9	46.0	-29.1	RETUR
			+0.1	+0.1							
11	457.244k	7.1	+10.1	+0.1	+0.2	+0.0	+0.0	17.5	46.7	-29.2	RETUR
			+0.0	+0.0							
12	442.700k	7.2	+10.1	+0.1	+0.2	+0.0	+0.0	17.6	47.0	-29.4	RETUR
			+0.0	+0.0							
13	2.303M	5.8	+10.1	+0.1	+0.2	+0.0	+0.0	16.3	46.0	-29.7	RETUR
			+0.1	+0.0							
14	24.480M	8.8	+10.1	+0.6	+0.3	+0.1	+0.0	20.3	50.0	-29.7	RETUR
			+0.2	+0.2							
15	417.248k	7.3	+10.1	+0.1	+0.2	+0.0	+0.0	17.7	47.5	-29.8	RETUR
			+0.0	+0.0							
16	224.539k	12.4	+10.1	+0.1	+0.2	+0.0	+0.0	22.8	52.6	-29.8	RETUR
			+0.0	+0.0							

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17	22.261M	8.6	+10.1	+0.6	+0.3	+0.1	+0.0	20.1	50.0	-29.9	RETUR
			+0.2	+0.2							
18	1.112M	5.5	+10.1	+0.1	+0.2	+0.0	+0.0	16.0	46.0	-30.0	RETUR
			+0.1	+0.0							
19	967.430k	5.5	+10.1	+0.1	+0.2	+0.0	+0.0	15.9	46.0	-30.1	RETUR
			+0.0	+0.0							
20	931.340k	5.5	+10.1	+0.1	+0.2	+0.0	+0.0	15.9	46.0	-30.1	RETUR
			+0.0	+0.0							
21	22.982M	8.4	+10.1	+0.6	+0.3	+0.1	+0.0	19.9	50.0	-30.1	RETUR
			+0.2	+0.2							
22	22.603M	8.4	+10.1	+0.6	+0.3	+0.1	+0.0	19.9	50.0	-30.1	RETUR
			+0.2	+0.2							
23	411.794k	7.0	+10.1	+0.1	+0.2	+0.0	+0.0	17.4	47.6	-30.2	RETUR
			+0.0	+0.0							
24	4.622M	5.2	+10.1	+0.1	+0.1	+0.0	+0.0	15.7	46.0	-30.3	RETUR
			+0.1	+0.1							
25	22.008M	8.2	+10.1	+0.6	+0.3	+0.1	+0.0	19.7	50.0	-30.3	RETUR
			+0.2	+0.2							
26	284.533k	9.9	+10.1	+0.1	+0.2	+0.0	+0.0	20.3	50.7	-30.4	RETUR
			+0.0	+0.0							
27	25.716M	8.0	+10.1	+0.7	+0.3	+0.1	+0.0	19.6	50.0	-30.4	RETUR
			+0.2	+0.2							
28	23.722M	8.0	+10.1	+0.6	+0.3	+0.1	+0.0	19.5	50.0	-30.5	RETUR
			+0.2	+0.2							
29	246.355k	10.9	+10.1	+0.1	+0.2	+0.0	+0.0	21.3	51.9	-30.6	RETUR
			+0.0	+0.0							
30	21.268M	8.0	+10.1	+0.6	+0.2	+0.1	+0.0	19.4	50.0	-30.6	RETUR
			+0.2	+0.2							

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Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • (209) 966-5240

Customer: WaveLynx Technologies Corporation.

Specification: 15.207 AC Mains - Average

 Work Order #:
 97029
 Date: 5/10/2016

 Test Type:
 Conducted Emissions
 Time: 10:08:10 AM

Tested By: Skip Doyle / Benny Lovan Sequence#: 9

Software: EMITest 5.03.02 120V 60Hz

Equipment Tested:

Device Manufacturer Model # S/N
Configuration 5

Support Equipment:

Device Manufacturer Model # S/N
Configuration 5

Test Conditions / Notes:

Test Method: ANSI C63.10 (2013)

Frequency Range of Interest:

0.150-30MHz

RBW = 9kHz; VBW > 9kHz

Environmental Conditions: Temperature: 21°C Relative Humidity: 67% Atmospheric Pressure: 97.5kPa

Highest Generated Frequency: 27.12 MHz

The EUT is running at 125kHz.

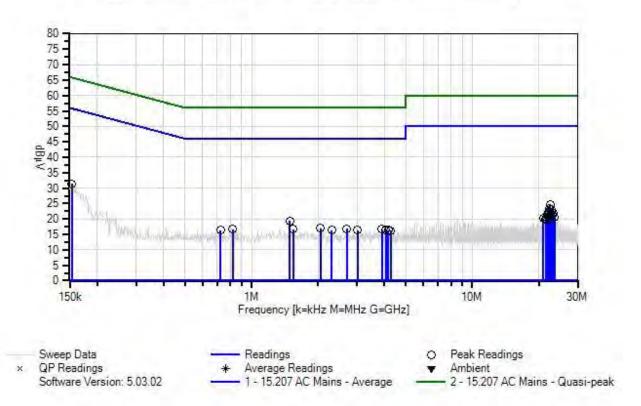
The EUT is powered by a DC power supply at 12VDC. The EUT is setup to continuously transmit at 125kHz.

AC Conducted Emissions is being performed on the AC portion of the AC/DC supply.

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WaveLynx Technologies Corporation. WO#: 97029 Sequence#: 9 Date: 5/10/2016 15.207 AC Mains - Average Test Lead: 120V 60Hz LINE





ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANP06770	Attenuator	PE7010-10	1/15/2015	1/15/2017
	AN01248	50uH LISN-Line 1	8028-50-TS-24-	1/4/2016	1/4/2017
		(Return) (dB)	BNC		
T2	AN01248	50uH LISN-Line 2 (Line) (dB)	8028-50-TS-24- BNC	1/4/2016	1/4/2017
Т3	AN02609	High Pass Filter	HE9615-150K- 50-720B	2/18/2016	2/18/2018
T4	ANP06884	Cable	LMR195-FR-4	10/27/2015	10/27/2017
T5	ANMD INT	Cable	Underground cables only	3/17/2016	3/17/2018
	AN02111	Spectrum Analyzer	8593EM	6/4/2015	6/4/2016
T6	ANP01153	Cable	NA	3/3/2016	3/3/2018

	ement Data:	Re	eading lis	ted by ma	ırgin.			Test Lead	d: LINE		
#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
			T5	T6							
	MHz	dΒμV	dB	dB	dB	dB	Table	dΒμV	dΒμV	dB	Ant
1	153.637k	19.7	+10.1	+0.1	+1.5	+0.0	+0.0	31.4	55.8	-24.4	LINE
			+0.0	+0.0							
2	22.549M	13.1	+10.1	+0.6	+0.3	+0.1	+0.0	24.6	50.0	-25.4	LINE
	22 222 5	12.0	+0.2	+0.2	. 0. 2	. 0. 1	. 0 0	22.5	7 0.0	26.7	LDIE
3	22.333M	12.0	+10.1	+0.6	+0.3	+0.1	+0.0	23.5	50.0	-26.5	LINE
	1 4013 6	0.6	+0.2	+0.2	.0.2		. 0. 0	10.4	46.0	26.6	LDIE
4	1.491M	8.6	+10.1	+0.4	+0.2	+0.0	+0.0	19.4	46.0	-26.6	LINE
5	22.802M	11.7	+0.1	+0.0	+0.3	+0.1	+0.0	23.2	50.0	-26.8	LINE
3	22.802IVI	11./	$+10.1 \\ +0.2$	+0.6	+0.3	+0.1	+0.0	23.2	30.0	-20.8	LINE
6	22.450M	10.9	+10.1	+0.2	+0.3	+0.1	+0.0	22.4	50.0	-27.6	LINE
0	22.430WI	10.9	+0.1	+0.0	±0.5	+0.1	+0.0	22.4	30.0	-27.0	LINE
7	23.307M	10.2	+10.1	+0.6	+0.3	+0.1	+0.0	21.7	50.0	-28.3	LINE
/	23.307101	10.2	+0.2	+0.2	10.5	10.1	10.0	21.7	50.0	-20.3	LINE
8	22.080M	10.3	+10.1	+0.5	+0.3	+0.1	+0.0	21.7	50.0	-28.3	LINE
	22.000111	10.5	+0.2	+0.2	. 0.5	. 0.1	. 0.0	21.7	20.0	20.3	EII (E
9	22.937M	9.9	+10.1	+0.6	+0.3	+0.1	+0.0	21.4	50.0	-28.6	LINE
			+0.2	+0.2							
10	23.055M	9.9	+10.1	+0.6	+0.3	+0.1	+0.0	21.4	50.0	-28.6	LINE
			+0.2	+0.2							
11	21.827M	10.1	+10.1	+0.5	+0.2	+0.1	+0.0	21.4	50.0	-28.6	LINE
			+0.2	+0.2							
12	21.954M	9.9	+10.1	+0.5	+0.2	+0.1	+0.0	21.2	50.0	-28.8	LINE
			+0.2	+0.2							
13	2.050M	6.5	+10.1	+0.1	+0.2	+0.0	+0.0	17.0	46.0	-29.0	LINE
			+0.1	+0.0							
14	22.685M	9.5	+10.1	+0.6	+0.3	+0.1	+0.0	21.0	50.0	-29.0	LINE
			+0.2	+0.2							
15	22.197M	9.4	+10.1	+0.6	+0.3	+0.1	+0.0	20.9	50.0	-29.1	LINE
			+0.2	+0.2							
16	2.700M	6.3	+10.1	+0.1	+0.1	+0.0	+0.0	16.8	46.0	-29.2	LINE
			+0.1	+0.1							



17	820.846k	6.1	+10.1	+0.2	+0.3	+0.0	+0.0	16.7	46.0	-29.3	LINE
1,	020101011	0.1	+0.0	+0.0	0.0	0.0	0.0	1017		_,	211 (2
18	1.545M	5.9	+10.1	+0.4	+0.2	+0.0	+0.0	16.7	46.0	-29.3	LINE
			+0.1	+0.0							
19	3.891M	6.2	+10.1	+0.1	+0.1	+0.0	+0.0	16.7	46.0	-29.3	LINE
			+0.1	+0.1							
20	21.584M	9.4	+10.1	+0.5	+0.2	+0.1	+0.0	20.7	50.0	-29.3	LINE
			+0.2	+0.2							
21	4.062M	6.1	+10.1	+0.1	+0.1	+0.0	+0.0	16.6	46.0	-29.4	LINE
			+0.1	+0.1							
22	722.674k	5.8	+10.1	+0.2	+0.3	+0.0	+0.0	16.4	46.0	-29.6	LINE
			+0.0	+0.0							
23	23.560M	8.8	+10.1	+0.7	+0.3	+0.1	+0.0	20.4	50.0	-29.6	LINE
			+0.2	+0.2							
24	4.161M	5.9	+10.1	+0.1	+0.1	+0.0	+0.0	16.4	46.0	-29.6	LINE
			+0.1	+0.1							
25	3.016M	5.9	+10.1	+0.1	+0.1	+0.0	+0.0	16.4	46.0	-29.6	LINE
			+0.1	+0.1							
26	2.312M	5.9	+10.1	+0.1	+0.2	+0.0	+0.0	16.4	46.0	-29.6	LINE
			+0.1	+0.0				1.5	46.0	•••	
27	4.261M	5.7	+10.1	+0.1	+0.1	+0.0	+0.0	16.2	46.0	-29.8	LINE
20	20.0523.6	0.0	+0.1	+0.1	. 0. 2	. 0.1	. 0. 0	20.2	50.0	20.0	TDIE
28	20.952M	8.9	+10.1	+0.5	+0.2	+0.1	+0.0	20.2	50.0	-29.8	LINE
20	21 450) 5	0.7	+0.2	+0.2	.0.2	+0.1	10.0	20.0	50.0	20.0	LDIE
29	21.458M	8.7	+10.1	+0.5	+0.2	+0.1	+0.0	20.0	50.0	-30.0	LINE
20	21.7013.6	0.7	+0.2	+0.2	.0.2	+0.1	10.0	20.0	50.0	20.0	LDIE
30	21.701M	8.7	+10.1	+0.5	+0.2	+0.1	+0.0	20.0	50.0	-30.0	LINE
			+0.2	+0.2							

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Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • (209) 966-5240

WaveLynx Technologies Corporation. Customer:

Specification: 15.207 AC Mains - Average

Work Order #: Date: 5/10/2016 97029 Test Type: Time: 10:11:39 AM **Conducted Emissions**

Skip Doyle / Benny Lovan Tested By: Sequence#: 10

Software: EMITest 5.03.02 120V 60Hz

Equipment Tested:

Device Model # S/N Manufacturer Configuration 5

Support Equipment:

Manufacturer Device Model # S/N Configuration 5

Test Conditions / Notes:

Test Method: ANSI C63.10 (2013)

Frequency Range of Interest:

0.150-30MHz

RBW = 9kHz; VBW > 9kHz

Environmental Conditions: Temperature: 21°C Relative Humidity: 67%

Atmospheric Pressure: 97.5kPa

Highest Generated Frequency: 27.12 MHz

The EUT is running at 125kHz.

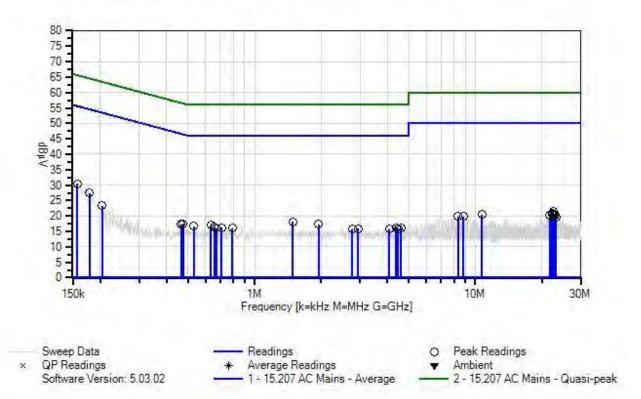
The EUT is powered by a DC power supply at 12VDC. The EUT is setup to continuously transmit at 125kHz.

AC Conducted Emissions is being performed on the AC portion of the AC/DC supply.

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WaveLynx Technologies Corporation. WO#: 97029 Sequence#: 10 Date: 5/10/2016 15.207 AC Mains - Average Test Lead: 120V 60Hz RETURN





ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANP06770	Attenuator	PE7010-10	1/15/2015	1/15/2017
T2	AN01248	50uH LISN-Line 1	8028-50-TS-24-	1/4/2016	1/4/2017
		(Return) (dB)	BNC		
	AN01248	50uH LISN-Line 2	8028-50-TS-24-	1/4/2016	1/4/2017
		(Line) (dB)	BNC		
T3	AN02609	High Pass Filter	HE9615-150K-	2/18/2016	2/18/2018
			50-720B		
T4	ANP06884	Cable	LMR195-FR-4	10/27/2015	10/27/2017
T5	ANMD INT	Cable	Underground	3/17/2016	3/17/2018
			cables only		
	AN02111	Spectrum Analyzer	8593EM	6/4/2015	6/4/2016
T6	ANP01153	Cable	NA	3/3/2016	3/3/2018

Measur	rement Data:	Re	eading lis	ted by ma	argin.		Test Lead: RETURN				
#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
			T5	T6							
	MHz	dΒμV	dB	dB	dB	dB	Table	dΒμV	dΒμV	dB	Ant
1	157.273k	19.3	+10.1	+0.1	+1.0	+0.0	+0.0	30.5	55.6	-25.1	RETUR
			+0.0	+0.0							
2	179.089k	16.9	+10.1	+0.1	+0.3	+0.0	+0.0	27.4	54.5	-27.1	RETUR
			+0.0	+0.0							
3	1.491M	7.6	+10.1	+0.1	+0.2	+0.0	+0.0	18.1	46.0	-27.9	RETUR
			+0.1	+0.0							
4	22.540M	10.1	+10.1	+0.6	+0.3	+0.1	+0.0	21.6	50.0	-28.4	RETUR
			+0.2	+0.2					46.0		
5	1.951M	6.8	+10.1	+0.1	+0.2	+0.0	+0.0	17.3	46.0	-28.7	RETUR
			+0.1	+0.0							
6	475.424k	7.0	+10.1	+0.1	+0.2	+0.0	+0.0	17.4	46.4	-29.0	RETUR
			+0.0	+0.0				1=0	46.0	• • • •	
7	633.591k	6.5	+10.1	+0.1	+0.3	+0.0	+0.0	17.0	46.0	-29.0	RETUR
			+0.0	+0.0				• • • •	= 0.0	• • • •	
8	22.324M	9.4	+10.1	+0.6	+0.3	+0.1	+0.0	20.9	50.0	-29.1	RETUR
	161 5161		+0.2	+0.2					15.5	• • •	
9	464.516k	6.9	+10.1	+0.1	+0.2	+0.0	+0.0	17.3	46.6	-29.3	RETUR
1.0			+0.0	+0.0					46.0	• • •	
10	531.783k	6.2	+10.1	+0.1	+0.3	+0.0	+0.0	16.7	46.0	-29.3	RETUR
	22 4413 5	0.1	+0.0	+0.0		. 0. 1	. 0. 0	20.6	5 0.0	20.4	DETTID
11	22.441M	9.1	+10.1	+0.6	+0.3	+0.1	+0.0	20.6	50.0	-29.4	RETUR
			+0.2	+0.2				• • • •	= 0.0	• • •	
12	22.784M	9.1	+10.1	+0.6	+0.3	+0.1	+0.0	20.6	50.0	-29.4	RETUR
1.0	(55.00.51	7 0	+0.2	+0.2		. 0 0	. 0. 0	164	46.0	20.6	DETTID
13	657.225k	5.9	+10.1	+0.1	+0.3	+0.0	+0.0	16.4	46.0	-29.6	RETUR
1.4	10.72016	0.5	+0.0	+0.0	. 0. 2	. 0. 1	. 0. 0	20.4	50.0	20.6	DETIL
14	10.730M	9.5	+10.1	+0.3	+0.2	+0.1	+0.0	20.4	50.0	-29.6	RETUR
1.5	21 (02) 5	0.0	+0.1	+0.1	. 0. 2	.0.1	. 0. 0	20.2	50.0	20.0	DETER
15	21.692M	8.8	+10.1	+0.6	+0.2	+0.1	+0.0	20.2	50.0	-29.8	RETUR
1.0	5 00 0 101		+0.2	+0.2				160	46.0	20.0	DECLE
16	709.948k	5.7	+10.1	+0.1	+0.3	+0.0	+0.0	16.2	46.0	-29.8	RETUR
			+0.0	+0.0							

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17	4.378M	5.7	+10.1	+0.1	+0.1	+0.0	+0.0	16.2	46.0	-29.8	RETUR
			+0.1	+0.1							
18	793.576k	5.6	+10.1	+0.1	+0.3	+0.0	+0.0	16.1	46.0	-29.9	RETUR
			+0.0	+0.0							
19	671.769k	5.6	+10.1	+0.1	+0.3	+0.0	+0.0	16.1	46.0	-29.9	RETUR
			+0.0	+0.0							
20	23.036M	8.6	+10.1	+0.6	+0.3	+0.1	+0.0	20.1	50.0	-29.9	RETUR
			+0.2	+0.2							
21	22.667M	8.6	+10.1	+0.6	+0.3	+0.1	+0.0	20.1	50.0	-29.9	RETUR
			+0.2	+0.2							
22	4.603M	5.5	+10.1	+0.1	+0.1	+0.0	+0.0	16.0	46.0	-30.0	RETUR
			+0.1	+0.1							
23	2.943M	5.4	+10.1	+0.1	+0.1	+0.0	+0.0	15.9	46.0	-30.1	RETUR
			+0.1	+0.1							
24	204.541k	12.9	+10.1	+0.1	+0.2	+0.0	+0.0	23.3	53.4	-30.1	RETUR
			+0.0	+0.0							
25	4.459M	5.4	+10.1	+0.1	+0.1	+0.0	+0.0	15.9	46.0	-30.1	RETUR
			+0.1	+0.1							
26	8.844M	9.1	+10.1	+0.2	+0.2	+0.1	+0.0	19.9	50.0	-30.1	RETUR
			+0.1	+0.1							
27	8.339M	9.1	+10.1	+0.2	+0.2	+0.1	+0.0	19.9	50.0	-30.1	RETUR
			+0.1	+0.1							
28	2.772M	5.3	+10.1	+0.1	+0.1	+0.0	+0.0	15.8	46.0	-30.2	RETUR
			+0.1	+0.1							
29	4.080M	5.3	+10.1	+0.1	+0.1	+0.0	+0.0	15.8	46.0	-30.2	RETUR
			+0.1	+0.1							
30	23.172M	8.2	+10.1	+0.6	+0.3	+0.1	+0.0	19.7	50.0	-30.3	RETUR
			+0.2	+0.2							

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Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • (209) 966-5240

WaveLynx Technologies Corporation. Customer:

Specification: 15.207 AC Mains - Average

Work Order #: Date: 5/10/2016 97029 Time: 10:45:42 AM Test Type: **Conducted Emissions**

Skip Doyle / Benny Lovan Tested By: Sequence#: 16

Software: EMITest 5.03.02 120V 60Hz

Equipment Tested:

Device Model # S/N Manufacturer Configuration 7

Support Equipment:

Manufacturer Device Model # S/N Configuration 7

Test Conditions / Notes:

Test Method: ANSI C63.10 (2013)

Frequency Range of Interest:

0.150-30MHz

RBW = 9kHz; VBW > 9kHz

Environmental Conditions: Temperature: 21°C Relative Humidity: 67% Atmospheric Pressure: 97.5kPa

Highest Generated Frequency: 27.12 MHz

The EUT is running at 125kHz.

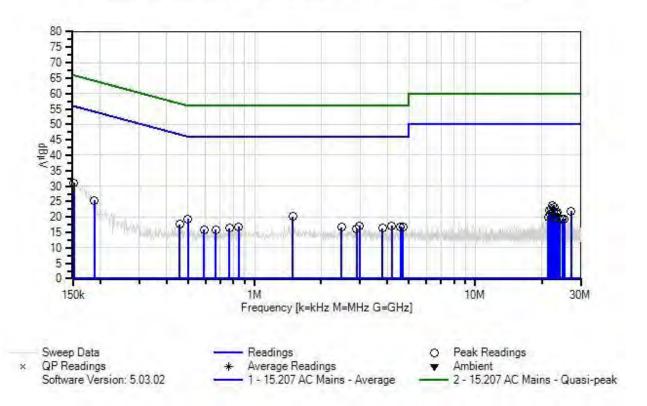
The EUT is powered by a DC power supply at 12VDC. The EUT is setup to continuously transmit at 125kHz.

AC Conducted Emissions is being performed on the AC portion of the AC/DC supply.

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WaveLynx Technologies Corporation. WO#: 97029 Sequence#: 16 Date: 5/10/2016 15.207 AC Mains - Average Test Lead: 120V 60Hz LINE





ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANP06770	Attenuator	PE7010-10	1/15/2015	1/15/2017
	AN01248	50uH LISN-Line 1	8028-50-TS-24-	1/4/2016	1/4/2017
		(Return) (dB)	BNC		
T2	AN01248	50uH LISN-Line 2	8028-50-TS-24-	1/4/2016	1/4/2017
		(Line) (dB)	BNC		
T3	AN02609	High Pass Filter	HE9615-150K-	2/18/2016	2/18/2018
			50-720B		
T4	ANP06884	Cable	LMR195-FR-4	10/27/2015	10/27/2017
T5	ANMD INT	Cable	Underground	3/17/2016	3/17/2018
			cables only		
	AN02111	Spectrum Analyzer	8593EM	6/4/2015	6/4/2016
T6	ANP01153	Cable	NA	3/3/2016	3/3/2018

	rement Data:	Re	eading lis	ted by ma	ırgin.			Test Lead	d: LINE		
#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
			T5	T6							
	MHz	dΒμV	dB	dB	dB	dB	Table	dΒμV	dΒμV	dB	Ant
1	151.819k	19.0	+10.1	+0.1	+1.8	+0.0	+0.0	31.0	55.9	-24.9	LINE
			+0.0	+0.0							
2	1.491M	9.3	+10.1	+0.4	+0.2	+0.0	+0.0	20.1	46.0	-25.9	LINE
			+0.1	+0.0							
3	22.369M	12.2	+10.1	+0.6	+0.3	+0.1	+0.0	23.7	50.0	-26.3	LINE
<u> </u>	100.0501	0.0	+0.2	+0.2	. 0. 2	. 0 0	. 0. 0	10.0	46.0	265	LDIE
4	499.058k	8.9	+10.1	+0.1	+0.2	+0.0	+0.0	19.3	46.0	-26.7	LINE
5	22.04714	11.5	+0.0	+0.0	10.2	+0.1	100	22.0	50.0	27.0	LIME
3	22.847M	11.5	$+10.1 \\ +0.2$	+0.6	+0.3	+0.1	+0.0	23.0	50.0	-27.0	LINE
6	22.116M	11.5	+10.1	+0.2	+0.3	+0.1	+0.0	22.9	50.0	-27.1	LINE
0	22.110W	11.3	+0.1	+0.3	±0.5	+0.1	+0.0	22.9	30.0	-2/.1	LINE
7	21.620M	10.7	+10.1	+0.5	+0.2	+0.1	+0.0	22.0	50.0	-28.0	LINE
/	21.020W	10.7	+0.2	+0.2	10.2	10.1	10.0	22.0	30.0	-20.0	LINE
8	22.594M	10.4	+10.1	+0.6	+0.3	+0.1	+0.0	21.9	50.0	-28.1	LINE
	22.37 1111	10.1	+0.2	+0.2	. 0.3	. 0.1	. 0.0	21.7	50.0	20.1	Elive
9	27.124M	10.9	+10.1	+0.1	+0.3	+0.1	+0.0	21.9	50.0	-28.1	LINE
	,,,	10.,	+0.2	+0.2	0.2	0.1	0.0	-1.,	20.0	2011	
10	23.596M	9.8	+10.1	+0.7	+0.3	+0.1	+0.0	21.4	50.0	-28.6	LINE
			+0.2	+0.2							
11	188.179k	14.8	+10.1	+0.1	+0.3	+0.0	+0.0	25.3	54.1	-28.8	LINE
			+0.0	+0.0							
12	2.997M	6.7	+10.1	+0.1	+0.1	+0.0	+0.0	17.2	46.0	-28.8	LINE
			+0.1	+0.1							
13	4.188M	6.6	+10.1	+0.1	+0.1	+0.0	+0.0	17.1	46.0	-28.9	LINE
			+0.1	+0.1							
14	23.343M	9.6	+10.1	+0.6	+0.3	+0.1	+0.0	21.1	50.0	-28.9	LINE
			+0.2	+0.2							
15	457.244k	7.2	+10.1	+0.1	+0.2	+0.0	+0.0	17.6	46.7	-29.1	LINE
			+0.0	+0.0							
16	21.873M	9.5	+10.1	+0.5	+0.2	+0.1	+0.0	20.8	50.0	-29.2	LINE
			+0.2	+0.2							

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17	848.116k	6.2	+10.1	+0.2	+0.3	+0.0	+0.0	16.8	46.0	-29.2	LINE
			+0.0	+0.0							
18	4.576M	6.3	+10.1	+0.1	+0.1	+0.0	+0.0	16.8	46.0	-29.2	LINE
			+0.1	+0.1							
19	4.712M	6.2	+10.1	+0.1	+0.1	+0.0	+0.0	16.7	46.0	-29.3	LINE
			+0.1	+0.1							
20	2.474M	6.3	+10.1	+0.1	+0.1	+0.0	+0.0	16.7	46.0	-29.3	LINE
			+0.1	+0.0							
21	769.942k	5.8	+10.1	+0.2	+0.3	+0.0	+0.0	16.4	46.0	-29.6	LINE
			+0.0	+0.0							
22	3.791M	5.8	+10.1	+0.1	+0.1	+0.0	+0.0	16.3	46.0	-29.7	LINE
			+0.1	+0.1							
23	2.898M	5.5	+10.1	+0.1	+0.1	+0.0	+0.0	16.0	46.0	-30.0	LINE
			+0.1	+0.1							
24	589.959k	5.4	+10.1	+0.1	+0.3	+0.0	+0.0	15.9	46.0	-30.1	LINE
			+0.0	+0.0							
25	666.315k	5.3	+10.1	+0.2	+0.3	+0.0	+0.0	15.9	46.0	-30.1	LINE
			+0.0	+0.0							
26	21.376M	8.5	+10.1	+0.5	+0.2	+0.1	+0.0	19.8	50.0	-30.2	LINE
			+0.2	+0.2					.	• • •	
27	23.091M	8.2	+10.1	+0.6	+0.3	+0.1	+0.0	19.7	50.0	-30.3	LINE
20	04 1013 5	0.2	+0.2	+0.2	. 0. 2	. 0. 1	. 0. 0	10.5	5 0.0	20.2	LDIE
28	24.101M	8.3	+10.1	+0.5	+0.3	+0.1	+0.0	19.7	50.0	-30.3	LINE
20	25 2553 5	0.4	+0.2	+0.2	. 0. 2	.0.1	. 0. 0	10.4	50.0	20.6	LDIE
29	25.355M	8.4	+10.1	+0.1	+0.3	+0.1	+0.0	19.4	50.0	-30.6	LINE
20	24.050) 5	0.1	+0.2	+0.2	.0.2	10.1	10.0	10.2	50.0	20.7	LINE
30	24.850M	8.1	+10.1	+0.3	+0.3	+0.1	+0.0	19.3	50.0	-30.7	LINE
			+0.2	+0.2							

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Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Drive • Mariposa, CA 95338 • (209) 966-5240

Customer: WaveLynx Technologies Corporation.

Specification: 15.207 AC Mains - Average

Work Order #: 97029 Date: 5/10/2016
Test Type: Conducted Emissions Time: 10:43:12 AM

Tested By: Skip Doyle / Benny Lovan Sequence#: 15

Software: EMITest 5.03.02 120V 60Hz

Equipment Tested:

Device Manufacturer Model # S/N
Configuration 7

Support Equipment:

Device Manufacturer Model # S/N
Configuration 7

Test Conditions / Notes:

Test Method: ANSI C63.10 (2013)

Frequency Range of Interest:

0.150-30MHz

RBW = 9kHz; VBW > 9kHz

Environmental Conditions: Temperature: 21°C Relative Humidity: 67% Atmospheric Pressure: 97.5kPa

Highest Generated Frequency: 27.12 MHz

The EUT is running at 125kHz.

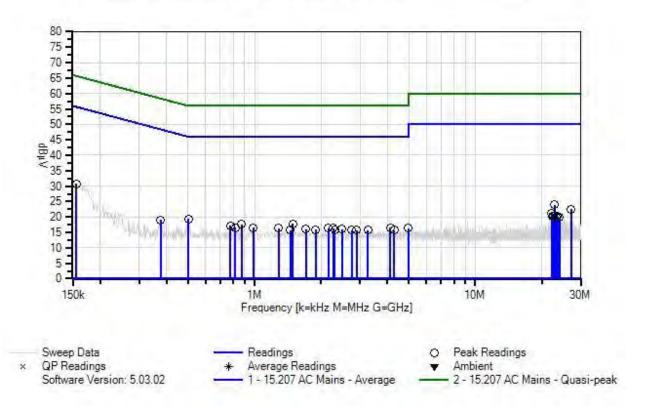
The EUT is powered by a DC power supply at 12VDC. The EUT is setup to continuously transmit at 125kHz.

AC Conducted Emissions is being performed on the AC portion of the AC/DC supply.

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WaveLynx Technologies Corporation. WO#: 97029 Sequence#: 15 Date: 5/10/2016 15.207 AC Mains - Average Test Lead: 120V 60Hz RETURN





ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	ANP06770	Attenuator	PE7010-10	1/15/2015	1/15/2017
T2	AN01248	50uH LISN-Line 1	8028-50-TS-24-	1/4/2016	1/4/2017
		(Return) (dB)	BNC		
	AN01248	50uH LISN-Line 2	8028-50-TS-24-	1/4/2016	1/4/2017
		(Line) (dB)	BNC		
T3	AN02609	High Pass Filter	HE9615-150K-	2/18/2016	2/18/2018
			50-720B		
T4	ANP06884	Cable	LMR195-FR-4	10/27/2015	10/27/2017
T5	ANMD INT	Cable	Underground	3/17/2016	3/17/2018
			cables only		
	AN02111	Spectrum Analyzer	8593EM	6/4/2015	6/4/2016
T6	ANP01153	Cable	NA	3/3/2016	3/3/2018

	ement Data:	Re	eading lis	ted by ma	ırgin.			Test Lea	d: RETUR	N	
#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
			T5	T6							
	MHz	dBμV	dB	dB	dB	dB	Table	dBμV	dBμV	dB	Ant
1	155.455k	19.3	+10.1	+0.1	+1.2	+0.0	+0.0	30.7	55.7	-25.0	RETUR
	22.0453.5	10.4	+0.0	+0.0	. 0. 2	. 0. 1	. 0 0	22.0	7 0.0	261	D.E.W.ID
2	22.847M	12.4	+10.1	+0.6	+0.3	+0.1	+0.0	23.9	50.0	-26.1	RETUR
	500.07(1	0.0	+0.2	+0.2	. 0. 2	. 0. 0	. 0. 0	10.4	46.0	26.6	DETELID
3	500.876k	9.0	+10.1	+0.1	+0.2	+0.0	+0.0	19.4	46.0	-26.6	RETUR
1	27.12414	10.0	+0.0	+0.0	10.2	+0.1	100	22.5	50.0	27.5	DETLID
4	27.124M	10.9	+10.1	+0.7	+0.3	+0.1	+0.0	22.5	50.0	-27.5	RETUR
5	1.491M	7.3	+0.2	+0.2	+0.2	+0.0	+0.0	17.8	46.0	-28.2	RETUR
3	1.4911VI	7.3	+10.1	$+0.1 \\ +0.0$	±0.∠	+0.0	+0.0	17.0	40.0	-20.2	KETUK
6	873.568k	7.2	+10.1	+0.1	+0.2	+0.0	+0.0	17.6	46.0	-28.4	RETUR
	073.300K	7.2	+0.0	+0.0	10.2	10.0	10.0	17.0	40.0	20.4	RETOR
7	22.125M	9.8	+10.1	+0.6	+0.3	+0.1	+0.0	21.3	50.0	-28.7	RETUR
,		,,,	+0.2	+0.2	0.2	0.1	0.0	-110	20.0	2017	1121011
8	779.032k	6.6	+10.1	+0.1	+0.3	+0.0	+0.0	17.1	46.0	-28.9	RETUR
			+0.0	+0.0							
9	375.434k	8.7	+10.1	+0.1	+0.2	+0.0	+0.0	19.1	48.4	-29.3	RETUR
			+0.0	+0.0							
10	985.475k	6.2	+10.1	+0.1	+0.2	+0.0	+0.0	16.6	46.0	-29.4	RETUR
			+0.0	+0.0							
11	817.210k	6.0	+10.1	+0.1	+0.3	+0.0	+0.0	16.5	46.0	-29.5	RETUR
			+0.0	+0.0							
12	4.125M	6.0	+10.1	+0.1	+0.1	+0.0	+0.0	16.5	46.0	-29.5	RETUR
			+0.1	+0.1							
13	2.158M	5.8	+10.1	+0.1	+0.2	+0.0	+0.0	16.3	46.0	-29.7	RETUR
			+0.1	+0.0							
14	2.267M	5.8	+10.1	+0.1	+0.2	+0.0	+0.0	16.3	46.0	-29.7	RETUR
1.5	4.0503.5	. .	+0.1	+0.0	. 0 . 1	. 0 0	. 0. 6	160	16.6	20.7	D.E.W. IS
15	4.973M	5.8	+10.1	+0.1	+0.1	+0.0	+0.0	16.3	46.0	-29.7	RETUR
1.0	1 2023 4	<i>5</i> 0	+0.1	+0.1	10.2	100	100	16.3	46.0	20.7	DETTE
16	1.283M	5.8	+10.1	+0.1	+0.2	+0.0	+0.0	16.3	46.0	-29.7	RETUR
			+0.1	+0.0							

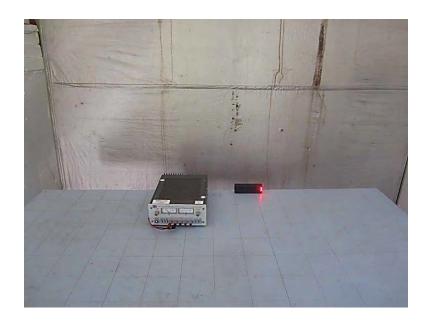
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17	22.369M	8.7	+10.1 +0.2	+0.6 +0.2	+0.3	+0.1	+0.0	20.2	50.0	-29.8	RETUR
1.0	22.50().4	0.7			10.2	+0.1	100	20.2	50.0	20.0	DETID
18	23.596M	8.7	+10.1	+0.6	+0.3	+0.1	+0.0	20.2	50.0	-29.8	RETUR
- 10			+0.2	+0.2		0.0		4 6 4		• • • •	D E-107 110
19	1.707M	5.6	+10.1	+0.1	+0.2	+0.0	+0.0	16.1	46.0	-29.9	RETUR
			+0.1	+0.0							
20	2.492M	5.7	+10.1	+0.1	+0.1	+0.0	+0.0	16.1	46.0	-29.9	RETUR
			+0.1	+0.0							
21	22.594M	8.6	+10.1	+0.6	+0.3	+0.1	+0.0	20.1	50.0	-29.9	RETUR
			+0.2	+0.2							
22	23.343M	8.5	+10.1	+0.6	+0.3	+0.1	+0.0	20.0	50.0	-30.0	RETUR
			+0.2	+0.2							
23	1.888M	5.4	+10.1	+0.1	+0.2	+0.0	+0.0	15.9	46.0	-30.1	RETUR
			+0.1	+0.0							
24	24.101M	8.4	+10.1	+0.6	+0.3	+0.1	+0.0	19.9	50.0	-30.1	RETUR
			+0.2	+0.2							
25	1.455M	5.3	+10.1	+0.1	+0.2	+0.0	+0.0	15.8	46.0	-30.2	RETUR
			+0.1	+0.0							
26	3.268M	5.3	+10.1	+0.1	+0.1	+0.0	+0.0	15.8	46.0	-30.2	RETUR
			+0.1	+0.1							
27	4.297M	5.3	+10.1	+0.1	+0.1	+0.0	+0.0	15.8	46.0	-30.2	RETUR
			+0.1	+0.1							
28	2.303M	5.2	+10.1	+0.1	+0.2	+0.0	+0.0	15.7	46.0	-30.3	RETUR
	2.0001.1	٠.2	+0.1	+0.0	~. _	0.0	0.0	10.,		20.5	-12.7.510
29	2.754M	5.2	+10.1	+0.1	+0.1	+0.0	+0.0	15.7	46.0	-30.3	RETUR
	2.75 1111	5.2	+0.1	+0.1	. 0.1	. 0.0	. 0.0	15.7	10.0	50.5	T.L. I OIK
30	2.898M	5.2	+10.1	+0.1	+0.1	+0.0	+0.0	15.7	46.0	-30.3	RETUR
30	2.070111	5.2	+0.1	+0.1	10.1	10.0	10.0	13.7	TU.U	-50.5	KLIOK
			10.1	10.1							



Test Setup Photos







SUPPLEMENTAL INFORMATION

Measurement Uncertainty

Uncertainty Value	Parameter
4.73 dB	Radiated Emissions
3.34 dB	Mains Conducted Emissions
3.30 dB	Disturbance Power

Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k=2. Compliance is deemed to occur provided measurements are below the specified limits.

Emissions Test Details

TESTING PARAMETERS

Unless otherwise indicated, the following configuration parameters are used for equipment setup: The cables were routed consistent with the typical application by varying the configuration of the test sample. Interface cables were connected to the available ports of the test unit. The effect of varying the position of the cables was investigated to find the configuration that produced maximum emissions. Cables were of the type and length specified in the individual requirements. The length of cable that produced maximum emissions was selected.

The equipment under test (EUT) was set up in a manner that represented its normal use, as shown in the setup photographs. Any special conditions required for the EUT to operate normally are identified in the comments that accompany the emissions tables.

The emissions data was taken with a spectrum analyzer or receiver. Incorporating the applicable correction factors for distance, antenna, cable loss and amplifier gain, the data was reduced as shown in the table below. The corrected data was then compared to the applicable emission limits. Preliminary and final measurements were taken in order to ensure that all emissions from the EUT were found and maximized.

CORRECTION FACTORS

The basic spectrum analyzer reading was converted using correction factors as shown in the highest emissions readings in the tables. For radiated emissions in $dB\mu V/m$, the spectrum analyzer reading in $dB\mu V$ was corrected by using the following formula. This reading was then compared to the applicable specification limit. Individual measurements were compared with the displayed limit value in the margin column. The margin was calculated based on the limit value subtracting the corrected measured value; a negative margin represents a measurement less than the limit while a positive margin represents a measurement exceeding the limit.

	SAMPLE CALCULATIONS									
	Meter reading (dBμV)									
+	Antenna Factor	(dB/m)								
+	Cable Loss	(dB)								
-	Distance Correction	(dB)								
-	Preamplifier Gain	(dB)								
=	Corrected Reading	(dBμV/m)								

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TEST INSTRUMENTATION AND ANALYZER SETTINGS

The test instrumentation and equipment listed were used to collect the emissions data. A spectrum analyzer or receiver was used for all measurements. Unless otherwise specified, the following table shows the measuring equipment bandwidth settings that were used in designated frequency bands. For testing emissions, an appropriate reference level and a vertical scale size of 10 dB per division were used.

MEASURING EQUIPMENT BANDWIDTH SETTINGS PER FREQUENCY RANGE							
TEST	BEGINNING FREQUENCY	ENDING FREQUENCY	BANDWIDTH SETTING				
CONDUCTED EMISSIONS	150 kHz	30 MHz	9 kHz				
RADIATED EMISSIONS	9 kHz	150 kHz	200 Hz				
RADIATED EMISSIONS	150 kHz	30 MHz	9 kHz				
RADIATED EMISSIONS	30 MHz	1000 MHz	120 kHz				
RADIATED EMISSIONS	1000 MHz	>1 GHz	1 MHz				

SPECTRUM ANALYZER/RECEIVER DETECTOR FUNCTIONS

The notes that accompany the measurements contained in the emissions tables indicate the type of detector function used to obtain the given readings. Unless otherwise noted, all readings were made in the "positive peak" detector mode. Whenever a "quasi-peak" or "average" reading was recorded, the measurement was annotated with a "QP" or an "Ave" on the appropriate rows of the data sheets. In cases where quasi-peak or average limits were employed and data exists for multiple measurement types for the same frequency then the peak measurement was retained in the report for reference, however the numbering for the affected row was removed and an arrow or caret ("^") was placed in the far left-hand column indicating that the row above takes precedence for comparison to the limit. The following paragraphs describe in more detail the detector functions and when they were used to obtain the emissions data.

Peak

In this mode, the spectrum analyzer or receiver recorded all emissions at their peak value as the frequency band selected was scanned. By combining this function with another feature called "peak hold," the measurement device had the ability to measure intermittent or low duty cycle transient emission peak levels. In this mode the measuring device made a slow scan across the frequency band selected and measured the peak emission value found at each frequency across the band.

Quasi-Peak

Quasi-peak measurements were taken using the quasi-peak detector when the true peak values exceeded or were within 2 dB of a quasi-peak specification limit. Additional QP measurements may have been taken at the discretion of the operator.

Average

Average measurements were taken using the average detector when the true peak values exceeded or were within 2 dB of an average specification limit. Additional average measurements may have been taken at the discretion of the operator. If the specification or test procedure requires trace averaging, then the averaging was performed using 100 samples or as required by the specification. All other average measurements are performed using video bandwidth averaging. To make these measurements, the test engineer reduces the video bandwidth on the measuring device until the modulation of the signal is filtered out. At this point the measuring device is set into the linear mode and the scan time is reduced.

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