Etherios Design Solutions

ConnectCore i.MX6 WiFi/Bluetooth

FCC 15.207:2014
FCC 15.247:2014

Report # ETHE0009

NVLAP Lab Code: 200881-0

This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government of the United States of America. This Report may only be duplicated in its entirety

CERTIFICATE OF TEST

WTD 13.9.30

Last Date of Test: October 17, 2014
Etherios Design Solutions
Model: ConnectCore i.MX6 WiFi/Bluetooth

Radio Equipment Testing

Standards

Specification	Method
FCC 15.247:2014 FCC 15.207:2014	ANSI C63.10:2009

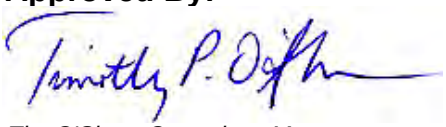
Results

Method Clause	Test Description	Applied	Results	Comments
6.2	Powerline Conducted Emissions	Yes	Pass	
6.5, 6.6	Spurious Radiated Emissions	Yes	Pass	
6.7	Band Edge Compliance	Yes	Pass	
6.7	Spurious Conducted Emissions	Yes	Pass	
6.9.1	Occupied Bandwidth	Yes	Pass	
6.10.2	Output Power	Yes	Pass	
6.11.2	Power Spectral Density	Yes	Pass	
7.5	Duty Cycle	Yes	N/A	Characterization of radio operation.

Deviations From Test Standards

None

Approved By:



Tim O'Shea, Operations Manager

Product compliance is the responsibility of the client; therefore, the tests and equipment modes of operation represented in this report were agreed upon by the client, prior to testing. The results of this test pertain only to the sample(s) tested. The specific description is noted in each of the individual sections of the test report supporting this certificate of test.

NORTHWEST EMC
REV 2012.08.02

REVISION HISTORY

Revision Number	Description	Date	Page Number
00	None		

Barometric Pressure

The recorded barometric pressure has been normalized to sea level.

NORTHWEST EMC

REV 2014.08.11

ACCREDITATIONS AND AUTHORIZATIONS

United States

FCC - Designated by the FCC as a Telecommunications Certification Body (TCB). Certification chambers, Open Area Test Sites, and conducted measurement facilities are listed with the FCC.

A2LA - Accredited by A2LA to ISO / IEC Guide 65 as a product certifier. This allows Northwest EMC to certify transmitters to FCC and IC specifications.

NVLAP - Each laboratory is accredited by NVLAP to ISO 17025

Canada

IC - Recognized by Industry Canada as a Certification Body (CB). Certification chambers and Open Area Test Sites are filed with IC.

European Union

European Commission – Validated by the European Commission as a Conformity Assessment Body (CAB) under the EMC directive and as a Notified Body under the R&TTE Directive.

Australia/New Zealand

ACMA - Recognized by ACMA as a CAB for the acceptance of test data.

Korea

MSIP / RRA - Recognized by KCC's RRA as a CAB for the acceptance of test data.

Japan

VCCI - Associate Member of the VCCI. Conducted and radiated measurement facilities are registered.

Taiwan

BSMI – Recognized by BSMI as a CAB for the acceptance of test data.

NCC - Recognized by NCC as a CAB for the acceptance of test data.

Singapore

IDA – Recognized by IDA as a CAB for the acceptance of test data.

Israel

MOC – Recognized by MOC as a CAB for the acceptance of test data.

Hong Kong

OFTA – Recognized by OFTA as a CAB for the acceptance of test data.

Vietnam

MIC – Recognized by MIC as a CAB for the acceptance of test data.

SCOPE

For details on the Scopes of our Accreditations, please visit:
http://www.nwemc.com/accreditations/

MEASUREMENT UNCERTAINTY

Measurement Uncertainty

When a measurement is made, the result will be different from the true or theoretically correct value. The difference is the result of tolerances in the measurement system that cannot be completely eliminated. To the extent that technology allows us, it has been our aim to minimize this error. Measurement uncertainty is a statistical expression of measurement error qualified by a probability distribution.

A measurement uncertainty estimation has been performed for each test per our internal quality document WP 342. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty (K=2) for each test is on each data sheet. Our measurement data meets or exceeds the measurement uncertainty requirements of the applicable specification; therefore, the test data can be compared directly to the specification limit to determine compliance. The calculations for estimating measurement uncertainty are based upon ETSI TR 100 028 (or CISPR 16-4-2 as applicable), and are available upon request.

The following table represents the Measurement Uncertainty (MU) budgets for each of the tests that may be contained in this report.

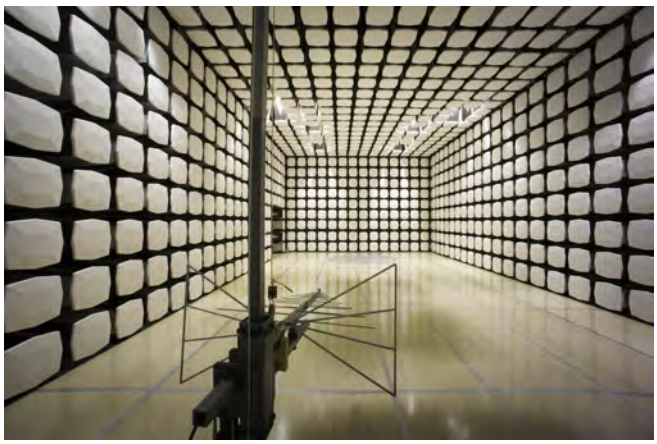
Test	+ MU	- MU
Frequency Accuracy (Hz)	0.0007%	-0.0007%
Amplitude Accuracy (dB)	1.19 dB	-1.19 dB
Conducted Power (dB)	0.29 dB	-0.29 dB
Radiated Power via Substitution (dB)	0.71 dB	-0.71 dB
Temperature (degrees C)	0.7°C	-0.7°C
Humidity (% RH)	2.5% RH	-2.5% RH
Voltage (AC)	1.0%	-1.0%
Voltage (DC)	0.7%	-0.7%
Field Strength (dB)	4.7 dB	-4.7 dB
AC Powerline Conducted Emissions (dB)	2.9 dB	-2.9 dB

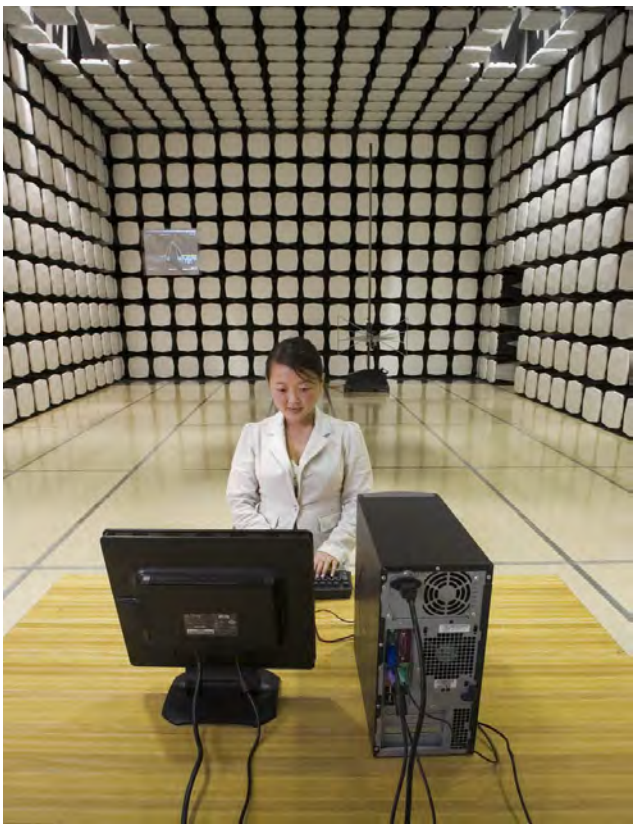
NORTHWEST EMC

REV 2013.06.28

FACILITIES

Oregon	California	New York	Minnesota	Washington
Labs EV01-12 22975 NW Evergreen Pkwy Hillsboro, OR 97124 (503) 844-4066	Labs OC01-13 41 Tesla Irvine, CA 92618 (949) 861-8918	Labs NY01-04 4939 Jordan Rd. Elbridge, NY 13060 (315) 685-0796	Labs MN01-08 9349 W Broadway Ave. Brooklyn Park, MN 55445 (763) 425-2281	Labs NC01-05,SU02,SU07 19201 120th Ave. NE Bothell, WA 98011 (425) 984-6600
VCCI				
A-0108	A-0029		A-0109	A-0110
Industry Canada				
2834D-1, 2834D-*2*	2834B-1, 2834B-2, 2834B-3		2834E-1	2834F-1
NVLAP				
NVLAP Lab Code: 200630-0	NVLAP Lab Code: 200676-0	NVLAP Lab Code: 200761-0	NVLAP Lab Code: 200881-0	NVLAP Lab Code: 200629-0





PRODUCT DESCRIPTION

WTD 13.9.30

Client and Equipment Under Test (EUT) Information

Company Name:	DIGI International
Address:	1101 Bren Road East
City, State, Zip:	Minnetonka, MN 55343
Test Requested By:	Moshe Peri
Model:	ConnectCore i.MX6 WiFi/Bluetooth
First Date of Test:	September 18, 2014
Last Date of Test:	October 17, 2014
Receipt Date of Samples:	September 12, 2014
Equipment Design Stage:	Production
Equipment Condition:	No Damage

Information Provided by the Party Requesting the Test

Functional Description of the EUT:
802.11abgn SISO / Bluetooth radio module with quad core I.MX6 processor, and Kinetis microcontroller. Three possible antenna models for 2.4 GHz operation and two possible antenna models for 5 GHz operation.

Testing Objective:
To demonstrate compliance under FCC 15.247 for operation in the 2.4 GHz and 5.8 GHz band(s).

CONFIGURATIONS

Configuration ETHE0009- 1

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Module	Etherios Design Solutions	5001475-02	00409D 7C03B4

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Laptop Supply	Lenovo	92P1160	None
Laptop	Lenovo	T400	L3-A9984 08/09
Power Supply	Agilent	U8002A	TPZ

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
AC Mains Cable	No	1.8m	No	AC Mains	Laptop supply
USB To Serial	Yes	2.2m	No	Laptop	Module
AC Mains Cable	No	1.80m	No	AC Mains	Power Supply
DC Power	No	1.80m	Yes	Laptop Supply	Laptop
DC Power	No	1.20m	No	Power Supply	Module

Configuration ETHE0009- 2

Software/Firmware Running during test	
Description	**Version**
Windows XP	SP3
iPerf via command prompt	Unknown

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Module	Etherios Design Solutions	5001475-02	00409D 7C03CE
AF Dual Band Antenna	Antenna Factor	ANT-DB1-RAF-XXX	None

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Laptop Supply	Lenovo	92P1160	None
Laptop	Lenovo	T400	L3-A9984 08/09
Power Supply	Agilent	U8002A	TPZ

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
AC Mains Cable	No	1.8m	No	AC Mains	Laptop supply
USB To Serial	Yes	2.2m	No	Laptop	Module
AC Mains Cable	No	1.80m	No	AC Mains	Power Supply
DC Power	No	1.80m	Yes	Laptop Supply	Laptop
DC Power	No	1.20m	No	Power Supply	Module

CONFIGURATIONS

Configuration ETHE0009- 4

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Module	Etherios Design Solutions	5001475-02	00409D 7C03CA

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
DC Power Supply	EZ	GP-4303D	TPY
AF Dual Band Antenna	Antenna Factor	ANT-DB1-RAF-XXX	None

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
AC Mains Cable	No	1.80m	No	AC Mains	Power Supply
DC Power	No	1.20m	No	Power Supply	Module

Configuration ETHE0009- 6

Software/Firmware Running during test	
Description	**Version**
Windows XP	SP3
iPerf via command prompt	Unknown

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Module	Etherios Design Solutions	5001475-02	00409D 7C03CE
Ethertronics Dipole Antenna	Ethertronics	1001932	None

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Laptop Supply	Lenovo	92P1160	None
Laptop	Lenovo	T400	L3-A9984 08/09
Power Supply	Agilent	U8002A	TPZ

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
AC Mains Cable	No	1.8m	No	AC Mains	Laptop supply
USB To Serial	Yes	2.2m	No	Laptop	Module
AC Mains Cable	No	1.80m	No	AC Mains	Power Supply
DC Power	No	1.80m	Yes	Laptop Supply	Laptop
DC Power	No	1.20m	No	Power Supply	Module

CONFIGURATIONS

Configuration ETHE0009- 7

Software/Firmware Running during test	
Description	**Version**
Windows XP	SP3
iPerf via command prompt	Unknown

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Module	Etherios Design Solutions	5001475-02	00409D 7C03CE
Yageo Omni Antenna	Yageo	ANTX100P001B24003	None
AF Dual Band Antenna	Antenna Factor	ANT-DB1-RAF-XXX	None

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Laptop Supply	Lenovo	92P1160	None
Laptop	Lenovo	T400	L3-A9984 08/09
Power Supply	Agilent	U8002A	TPZ

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
AC Mains Cable	No	1.8m	No	AC Mains	Laptop supply
USB To Serial	Yes	2.2m	No	Laptop	Module
AC Mains Cable	No	1.80m	No	AC Mains	Power Supply
DC Power	No	1.80m	Yes	Laptop Supply	Laptop
DC Power	No	1.20m	No	Power Supply	Module

MODIFICATIONS

WTD 13.9.30

Equipment Modifications

Item	Date	Test	Modification	Note	Disposition of EUT
1	9/18/2014	Spurious Radiated Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
2	9/29/2014	Band Edge Compliance	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
3	9/29/2014	Occupied Bandwidth	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
4	9/29/2014	Output Power	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
5	9/29/2014	Power Spectral Density	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
6	9/30/2014	Spurious Conducted Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
7	10/17/2014	Powerline Conducted Emissions	Modified from delivered configuration.	No EMI suppression devices were added or modified during this test.	Scheduled testing was completed.

POWERLINE CONDUCTED EMISSIONS

TEST DESCRIPTION

Using the mode of operation and configuration noted within this report, conducted emissions tests were performed. The frequency range investigated (scanned), is also noted in this report. Conducted power line measurements are made, unless otherwise specified, over the frequency range from 150 kHz to 30 MHz to determine the line-to-ground radio-noise voltage that is conducted from the EUT power-input terminals that are directly (or indirectly via separate transformer or power supplies) connected to a public power network. Equipment is tested with power cords that are normally used or that have electrical or shielding characteristics that are the same as those cords normally used. Typically those measurements are made using a LISN (Line Impedance Stabilization Network), the 50 Ω measuring port is terminated by a 50 Ω EMI meter or a 50 Ω resistive load. All 50 Ω measuring ports of the LISN are terminated by 50Ω.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval (mo)
Receiver	Rohde & Schwarz	ESR7	ARI	05/06/2014	12 mo
LISN	Solar Electronics	9252-50-R-24-BNC	LIY	05/15/2014	12 mo
MN03 Cables	ESM Cable Corp.	Conducted Cables	MNC	12/05/2013	12 mo
Attenuator 20dB, BNC	Fairview Microwave	SA01B-20	AQP	07/22/2014	12 mo
High Pass Filter	TTE	H97-100K-50-720B	HGN	05/23/2014	24 mo
DC Power Supply	EZ Digital Co	GP-4303D	TPY	NCR	0 mo

MEASUREMENT UNCERTAINTY

Description		
Expanded k=2	2.9 dB	-2.9 dB

CONFIGURATIONS INVESTIGATED

ETHE0009-4

MODES INVESTIGATED

Transmitting 802.11 2412 MHz, 1 mbps
Transmitting 802.11 2437 MHz, 1 mbps
Transmitting 802.11 2462 MHz, 1 mbps
Transmitting 802.11 5745 MHz, 6 mbps
Transmitting 802.11 5785 MHz, 6 mbps
Transmitting 802.11 5825 MHz, 6 mbps

POWERLINE CONDUCTED EMISSIONS

EUT:	ConnectCore i.MX6 WiFi/Bluetooth	Work Order:	ETHE0009
Serial Number:	00409D 7C03CA	Date:	10/17/2014
Customer:	Etherios Design Solutions	Temperature:	22.3°C
Attendees:	None	Relative Humidity:	38.4%
Customer Project:	None	Bar. Pressure:	1007 mb
Tested By:	Trevor Buls	Job Site:	MN03
Power:	5VDC	Configuration:	ETHE0009-4

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2014	ANSI C63.10:2009

TEST PARAMETERS

Run #:	27	Line:	Positive Lead	Ext. Attenuation (dB):	20

COMMENTS

Customer added filtering to power supply. Modification authorized by Moshe Peri.

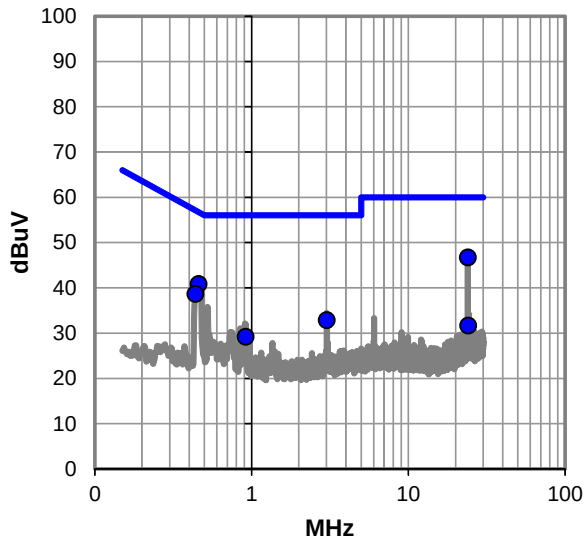
EUT OPERATING MODES

Transmitting 802.11 5745 MHz, 6 mbps

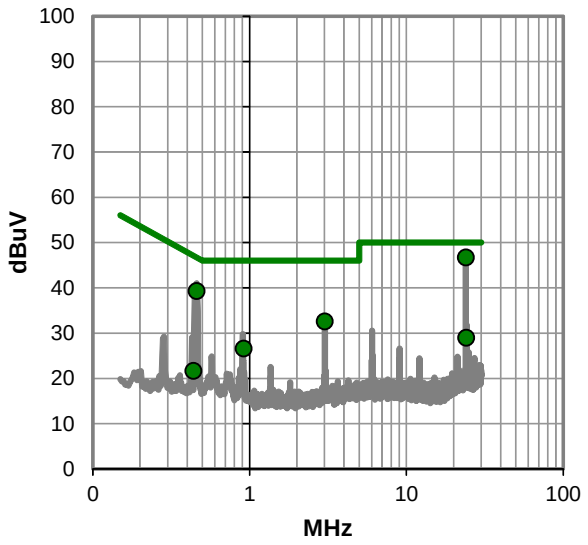
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



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WTD.2014.08.28, PSA-ESCI 2014.09.10, EmiR5 2014.07.09

POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #27

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
23.999	24.9	21.7	46.6	60.0	-13.4
0.460	20.6	20.2	40.8	56.7	-15.9
0.439	18.4	20.2	38.6	57.1	-18.5
3.021	12.5	20.3	32.8	56.0	-23.2
0.917	8.9	20.3	29.2	56.0	-26.8
24.170	9.9	21.8	31.7	60.0	-28.3

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
23.999	24.9	21.7	46.6	50.0	-3.4
0.460	19.1	20.2	39.3	46.7	-7.4
3.021	12.2	20.3	32.5	46.0	-13.5
0.917	6.3	20.3	26.6	46.0	-19.4
24.170	7.2	21.8	29.0	50.0	-21.0
0.439	1.4	20.2	21.6	47.1	-25.5

CONCLUSION

Pass

Trevor Buls

Tested By

POWERLINE CONDUCTED EMISSIONS

EUT:	ConnectCore i.MX6 WiFi/Bluetooth	Work Order:	ETHE0009
Serial Number:	00409D 7C03CA	Date:	10/17/2014
Customer:	Etherios Design Solutions	Temperature:	22.3°C
Attendees:	None	Relative Humidity:	38.4%
Customer Project:	None	Bar. Pressure:	1007 mb
Tested By:	Trevor Buls	Job Site:	MN03
Power:	5VDC	Configuration:	ETHE0009-4

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2014	ANSI C63.10:2009

TEST PARAMETERS

Run #:	28	Line:	Negative Lead	Ext. Attenuation (dB):	20

COMMENTS

Customer added filtering to power supply. Modification authorized by Moshe Peri.

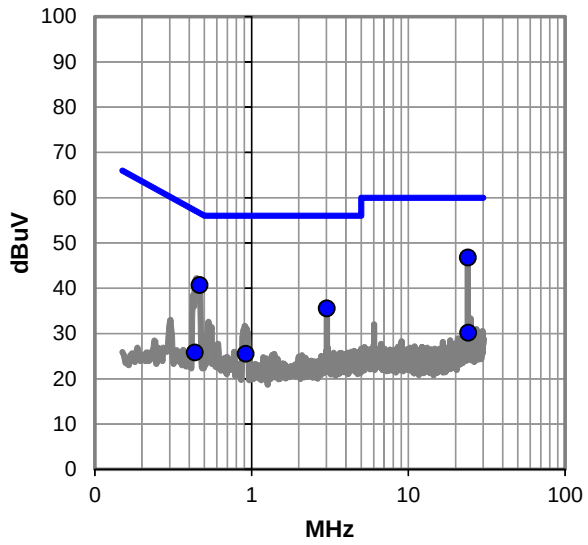
EUT OPERATING MODES

Transmitting 802.11 5745 MHz, 6 mbps

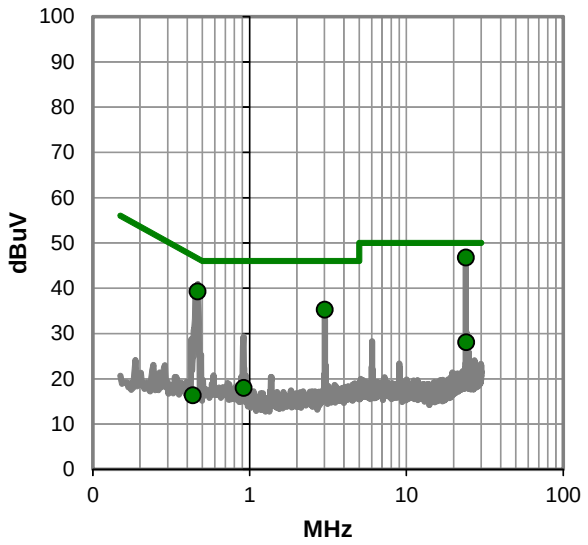
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



NORTHWEST EMC

WTD.2014.08.28, PSA-ESCI 2014.09.10, EmiR5 2014.07.09

POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #28

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
24.000	25.0	21.7	46.7	60.0	-13.3
0.467	20.5	20.2	40.7	56.6	-15.9
3.021	15.2	20.3	35.5	56.0	-20.5
24.155	8.4	21.8	30.2	60.0	-29.8
0.921	5.2	20.3	25.5	56.0	-30.5
0.436	5.6	20.2	25.8	57.1	-31.3

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
24.000	25.0	21.7	46.7	50.0	-3.3
0.467	19.1	20.2	39.3	46.6	-7.3
3.021	14.9	20.3	35.2	46.0	-10.8
24.155	6.3	21.8	28.1	50.0	-21.9
0.921	-2.3	20.3	18.0	46.0	-28.0
0.436	-3.9	20.2	16.3	47.1	-30.8

CONCLUSION

Pass

Trevor Buls

Tested By

POWERLINE CONDUCTED EMISSIONS

EUT:	ConnectCore i.MX6 WiFi/Bluetooth	Work Order:	ETHE0009
Serial Number:	00409D 7C03CA	Date:	10/17/2014
Customer:	Etherios Design Solutions	Temperature:	22.3°C
Attendees:	None	Relative Humidity:	38.4%
Customer Project:	None	Bar. Pressure:	1007 mb
Tested By:	Trevor Buls	Job Site:	MN03
Power:	5VDC	Configuration:	ETHE0009-4

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2014	ANSI C63.10:2009

TEST PARAMETERS

Run #:	31	Line:	Positive Lead	Ext. Attenuation (dB):	20

COMMENTS

Customer added filtering to power supply. Modification authorized by Moshe Peri.

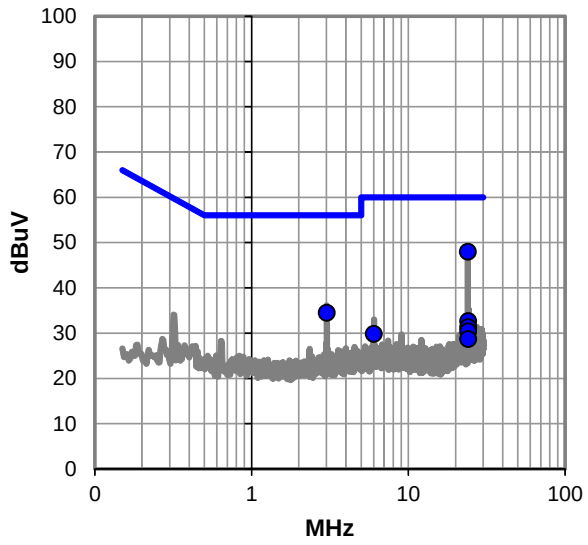
EUT OPERATING MODES

Transmitting 802.11 2437 MHz, 1 mbps

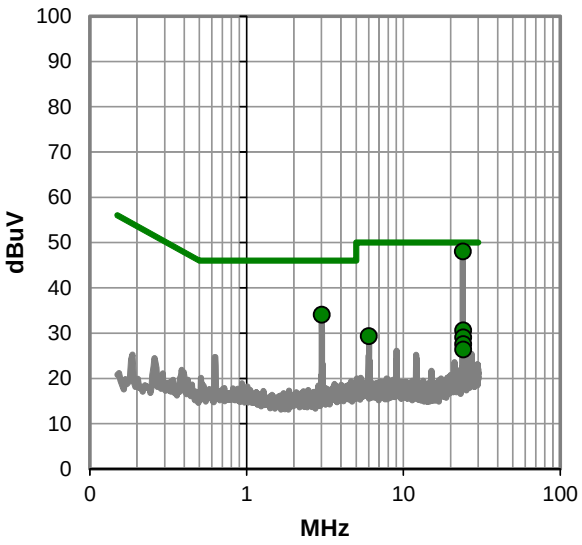
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #31

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
23.999	26.2	21.7	47.9	60.0	-12.1
3.019	14.1	20.3	34.4	56.0	-21.6
24.152	10.9	21.8	32.7	60.0	-27.3
24.184	9.5	21.8	31.3	60.0	-28.7
24.114	8.6	21.8	30.4	60.0	-29.6
6.038	9.3	20.5	29.8	60.0	-30.2
24.084	6.9	21.8	28.7	60.0	-31.3

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
23.999	26.3	21.7	48.0	50.0	-2.0
3.019	13.7	20.3	34.0	46.0	-12.0
24.152	8.8	21.8	30.6	50.0	-19.4
6.038	8.8	20.5	29.3	50.0	-20.7
24.184	7.3	21.8	29.1	50.0	-20.9
24.114	5.8	21.8	27.6	50.0	-22.4
24.084	4.6	21.8	26.4	50.0	-23.6

CONCLUSION

Pass

Trevor Buls

Tested By

POWERLINE CONDUCTED EMISSIONS

EUT:	ConnectCore i.MX6 WiFi/Bluetooth	Work Order:	ETHE0009
Serial Number:	00409D 7C03CA	Date:	10/17/2014
Customer:	Etherios Design Solutions	Temperature:	22.3°C
Attendees:	None	Relative Humidity:	38.4%
Customer Project:	None	Bar. Pressure:	1007 mb
Tested By:	Trevor Buls	Job Site:	MN03
Power:	5VDC	Configuration:	ETHE0009-4

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2014	ANSI C63.10:2009

TEST PARAMETERS

Run #:	32	Line:	Negative Lead	Ext. Attenuation (dB):	20

COMMENTS

Customer added filtering to power supply. Modification authorized by Moshe Peri.

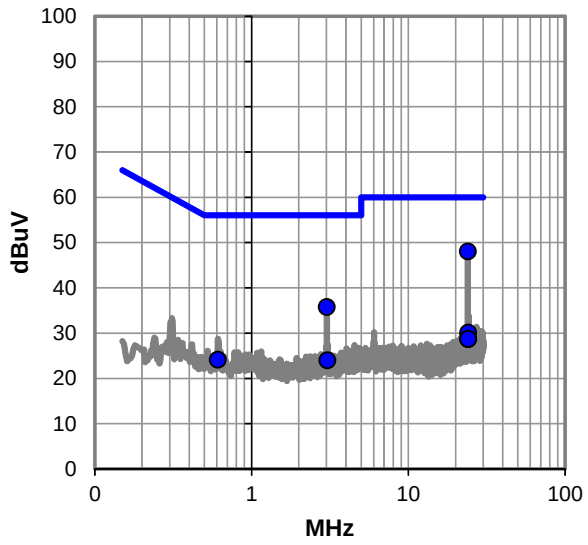
EUT OPERATING MODES

Transmitting 802.11 2437 MHz, 1 mbps

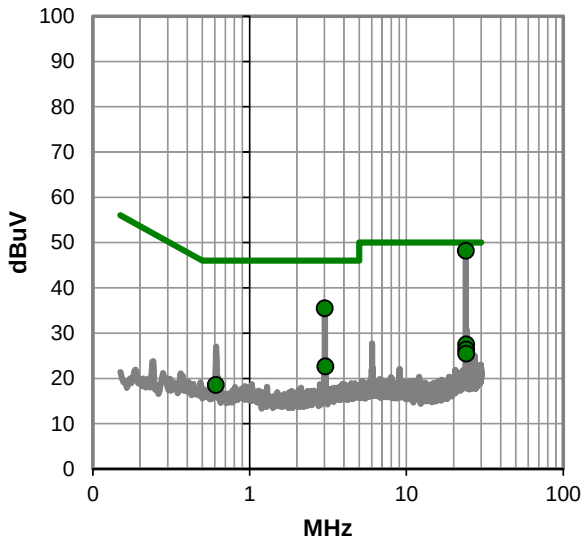
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



NORTHWEST EMC

WTD.2014.08.28, PSA-ESCI 2014.09.10, EmiR5 2014.07.09

POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #32

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
23.999	26.3	21.7	48.0	60.0	-12.0
3.018	15.4	20.3	35.7	56.0	-20.3
24.159	8.3	21.8	30.1	60.0	-29.9
24.193	6.9	21.8	28.7	60.0	-31.3
24.123	6.9	21.8	28.7	60.0	-31.3
0.611	3.9	20.2	24.1	56.0	-31.9
3.053	3.6	20.3	23.9	56.0	-32.1

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
23.999	26.4	21.7	48.1	50.0	-1.9
3.018	15.1	20.3	35.4	46.0	-10.6
24.159	5.7	21.8	27.5	50.0	-22.5
3.053	2.3	20.3	22.6	46.0	-23.4
24.123	4.6	21.8	26.4	50.0	-23.6
24.193	3.7	21.8	25.5	50.0	-24.5
0.611	-1.7	20.2	18.5	46.0	-27.5

CONCLUSION

Pass

Trevor Buls

Tested By

POWERLINE CONDUCTED EMISSIONS

EUT:	ConnectCore i.MX6 WiFi/Bluetooth	Work Order:	ETHE0009
Serial Number:	00409D 7C03CA	Date:	10/20/2014
Customer:	Etherios Design Solutions	Temperature:	21.5°C
Attendees:	None	Relative Humidity:	38.7%
Customer Project:	None	Bar. Pressure:	1016.9 mb
Tested By:	Dustin Sparks	Job Site:	MN03
Power:	5VDC	Configuration:	ETHE0009-4

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2014	ANSI C63.10:2009

TEST PARAMETERS

Run #:	37	Line:	Negative Lead	Ext. Attenuation (dB):	20

COMMENTS

Customer added filtering to power supply. Modification authorized by Moshe Peri.

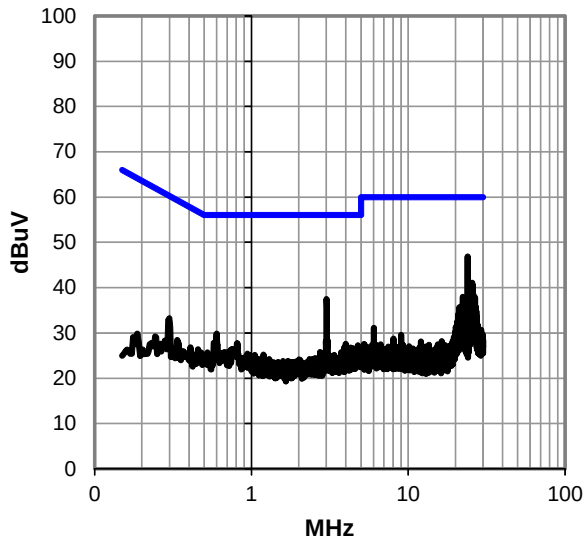
EUT OPERATING MODES

Transmitting 802.11 2412 MHz, 1 mbps

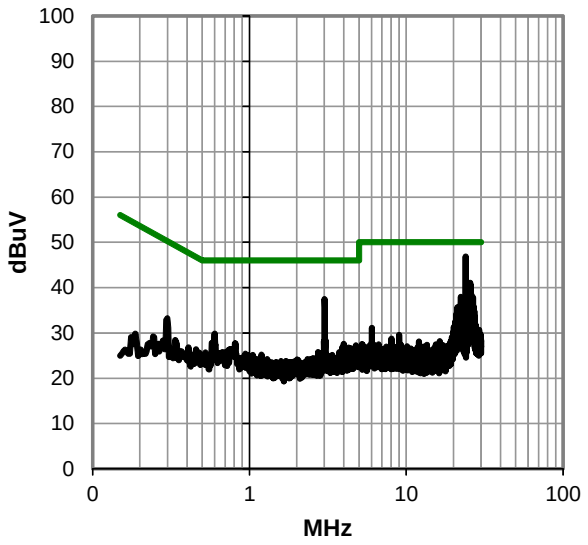
DEVIATIONS FROM TEST STANDARD

None

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #37

Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
23.997	25.1	21.7	46.8	60.0	-13.2
3.019	17.1	20.3	37.4	56.0	-18.6
25.598	19.2	21.9	41.1	60.0	-18.9
25.060	19.2	21.8	41.0	60.0	-19.0
25.620	18.9	21.9	40.8	60.0	-19.2
25.702	18.5	21.9	40.4	60.0	-19.6
25.169	17.9	21.8	39.7	60.0	-20.3
24.960	17.1	21.8	38.9	60.0	-21.1
26.124	16.4	22.0	38.4	60.0	-21.6
26.228	16.0	22.0	38.0	60.0	-22.0
22.296	16.3	21.6	37.9	60.0	-22.1
26.653	15.8	22.0	37.8	60.0	-22.2
24.531	16.0	21.8	37.8	60.0	-22.2
24.635	15.8	21.8	37.6	60.0	-22.4
26.340	15.3	22.0	37.3	60.0	-22.7
25.471	15.3	21.9	37.2	60.0	-22.8
25.493	15.2	21.9	37.1	60.0	-22.9
26.023	14.8	21.9	36.7	60.0	-23.3
22.930	14.8	21.7	36.5	60.0	-23.5
26.295	14.2	22.0	36.2	60.0	-23.8
22.829	14.5	21.7	36.2	60.0	-23.8
25.273	14.3	21.9	36.2	60.0	-23.8
25.803	14.1	21.9	36.0	60.0	-24.0
23.363	14.3	21.7	36.0	60.0	-24.0
22.400	14.3	21.6	35.9	60.0	-24.1
26.754	13.9	22.0	35.9	60.0	-24.1

Peak Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
23.997	25.1	21.7	46.8	50.0	-3.2
3.019	17.1	20.3	37.4	46.0	-8.6
25.598	19.2	21.9	41.1	50.0	-8.9
25.060	19.2	21.8	41.0	50.0	-9.0
25.620	18.9	21.9	40.8	50.0	-9.2
25.702	18.5	21.9	40.4	50.0	-9.6
25.169	17.9	21.8	39.7	50.0	-10.3
24.960	17.1	21.8	38.9	50.0	-11.1
26.124	16.4	22.0	38.4	50.0	-11.6
26.228	16.0	22.0	38.0	50.0	-12.0
22.296	16.3	21.6	37.9	50.0	-12.1
26.653	15.8	22.0	37.8	50.0	-12.2
24.531	16.0	21.8	37.8	50.0	-12.2
24.635	15.8	21.8	37.6	50.0	-12.4
26.340	15.3	22.0	37.3	50.0	-12.7
25.471	15.3	21.9	37.2	50.0	-12.8
25.493	15.2	21.9	37.1	50.0	-12.9
26.023	14.8	21.9	36.7	50.0	-13.3
22.930	14.8	21.7	36.5	50.0	-13.5
26.295	14.2	22.0	36.2	50.0	-13.8
22.829	14.5	21.7	36.2	50.0	-13.8
25.273	14.3	21.9	36.2	50.0	-13.8
25.803	14.1	21.9	36.0	50.0	-14.0
23.363	14.3	21.7	36.0	50.0	-14.0
22.400	14.3	21.6	35.9	50.0	-14.1
26.754	13.9	22.0	35.9	50.0	-14.1

CONCLUSION

Pass

Tested By

NORTHWEST EMC

WTD.2014.08.28, PSA-ESCI 2014.09.10, EmiR5 2014.07.09

POWERLINE CONDUCTED EMISSIONS

EUT:	ConnectCore i.MX6 WiFi/Bluetooth	Work Order:	ETHE0009
Serial Number:	00409D 7C03CA	Date:	10/20/2014
Customer:	Etherios Design Solutions	Temperature:	21.5°C
Attendees:	None	Relative Humidity:	38.7%
Customer Project:	None	Bar. Pressure:	1016.9 mb
Tested By:	Dustin Sparks	Job Site:	MN03
Power:	5VDC	Configuration:	ETHE0009-4

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2014	ANSI C63.10:2009

TEST PARAMETERS

Run #:	39	Line:	Positive Lead	Ext. Attenuation (dB):	20

COMMENTS

Customer added filtering to power supply. Modification authorized by Moshe Peri.

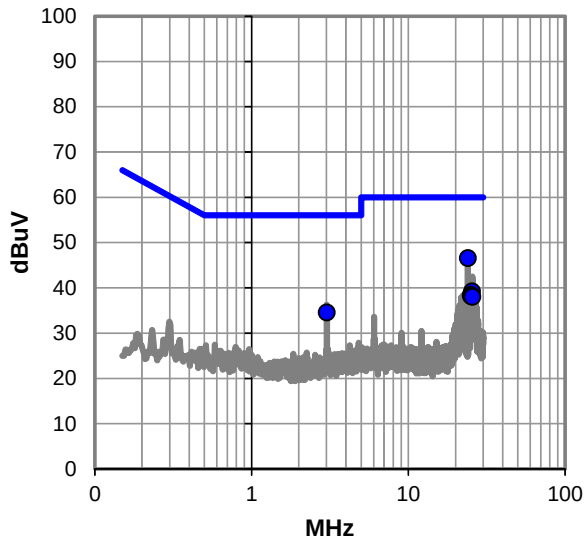
EUT OPERATING MODES

Transmitting 802.11 2412 MHz, 1 mbps

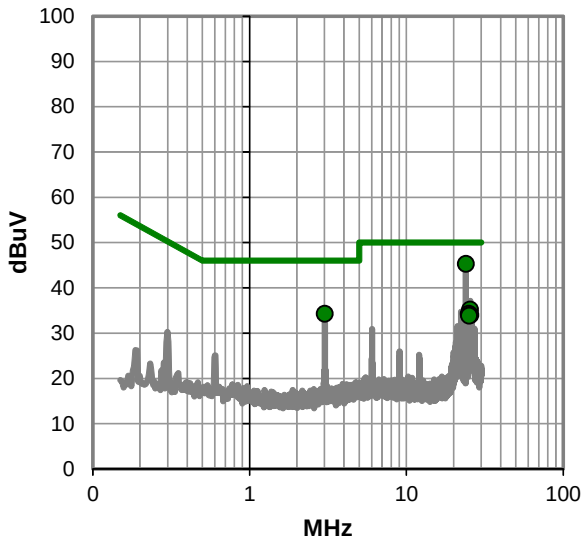
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



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POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #39

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
23.999	24.8	21.7	46.5	60.0	-13.5
25.594	17.3	21.9	39.2	60.0	-20.8
3.020	14.2	20.3	34.5	56.0	-21.5
25.067	16.6	21.8	38.4	60.0	-21.6
25.173	16.3	21.8	38.1	60.0	-21.9
25.704	16.1	21.9	38.0	60.0	-22.0

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
23.999	23.5	21.7	45.2	50.0	-4.8
3.020	13.9	20.3	34.2	46.0	-11.8
25.594	13.3	21.9	35.2	50.0	-14.8
25.067	12.4	21.8	34.2	50.0	-15.8
25.704	12.1	21.9	34.0	50.0	-16.0
25.173	12.0	21.8	33.8	50.0	-16.2

CONCLUSION

Pass

Tested By

POWERLINE CONDUCTED EMISSIONS

EUT:	ConnectCore i.MX6 WiFi/Bluetooth	Work Order:	ETHE0009
Serial Number:	00409D 7C03CA	Date:	10/20/2014
Customer:	Etherios Design Solutions	Temperature:	21.5°C
Attendees:	None	Relative Humidity:	38.7%
Customer Project:	None	Bar. Pressure:	1016.9 mb
Tested By:	Dustin Sparks	Job Site:	MN03
Power:	5VDC	Configuration:	ETHE0009-4

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2014	ANSI C63.10:2009

TEST PARAMETERS

Run #:	40	Line:	Positive Lead	Ext. Attenuation (dB):	20

COMMENTS

Customer added filtering to power supply. Modification authorized by Moshe Peri.

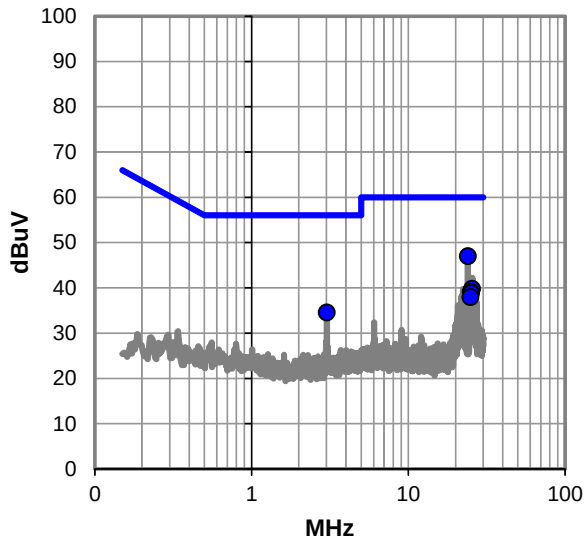
EUT OPERATING MODES

Transmitting 802.11 2462 MHz, 1 mbps

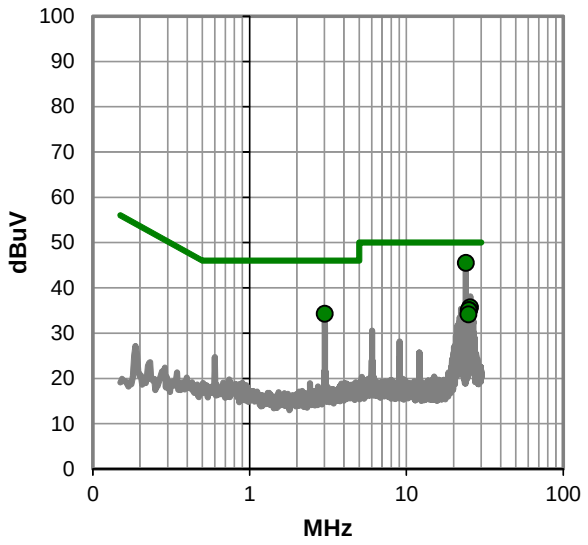
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



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POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #40

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
23.999	25.2	21.7	46.9	60.0	-13.1
25.594	17.9	21.9	39.8	60.0	-20.2
25.064	17.2	21.8	39.0	60.0	-21.0
25.171	17.0	21.8	38.8	60.0	-21.2
3.019	14.2	20.3	34.5	56.0	-21.5
24.957	16.1	21.8	37.9	60.0	-22.1

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
23.999	23.7	21.7	45.4	50.0	-4.6
3.019	13.9	20.3	34.2	46.0	-11.8
25.594	13.8	21.9	35.7	50.0	-14.3
25.171	13.2	21.8	35.0	50.0	-15.0
25.064	13.2	21.8	35.0	50.0	-15.0
24.957	12.3	21.8	34.1	50.0	-15.9

CONCLUSION

Pass

Tested By

POWERLINE CONDUCTED EMISSIONS

EUT:	ConnectCore i.MX6 WiFi/Bluetooth	Work Order:	ETHE0009
Serial Number:	00409D 7C03CA	Date:	10/20/2014
Customer:	Etherios Design Solutions	Temperature:	21.5°C
Attendees:	None	Relative Humidity:	38.7%
Customer Project:	None	Bar. Pressure:	1016.9 mb
Tested By:	Dustin Sparks	Job Site:	MN03
Power:	5VDC	Configuration:	ETHE0009-4

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2014	ANSI C63.10:2009

TEST PARAMETERS

Run #:	41	Line:	Negative Lead	Ext. Attenuation (dB):	20

COMMENTS

Customer added filtering to power supply. Modification authorized by Moshe Peri.

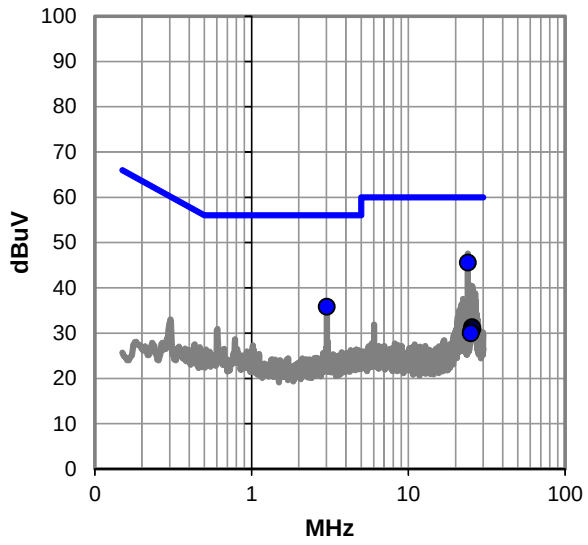
EUT OPERATING MODES

Transmitting 802.11 2462 MHz, 1 mbps

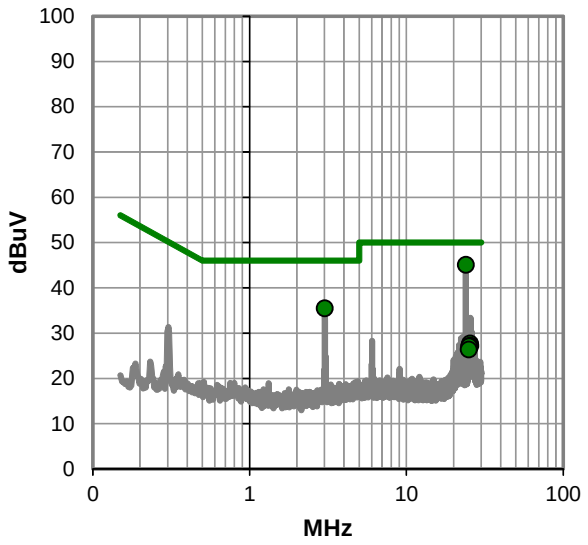
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



NORTHWEST EMC

WTD.2014.08.28, PSA-ESCI 2014.09.10, EmiR5 2014.07.09

POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #41

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
24.000	23.8	21.7	45.5	60.0	-14.5
3.020	15.5	20.3	35.8	56.0	-20.2
25.595	9.4	21.9	31.3	60.0	-28.7
25.703	9.0	21.9	30.9	60.0	-29.1
25.171	8.5	21.8	30.3	60.0	-29.7
25.066	8.1	21.8	29.9	60.0	-30.1

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
24.000	23.3	21.7	45.0	50.0	-5.0
3.020	15.1	20.3	35.4	46.0	-10.6
25.595	5.8	21.9	27.7	50.0	-22.3
25.703	5.3	21.9	27.2	50.0	-22.8
25.171	5.2	21.8	27.0	50.0	-23.0
25.066	4.5	21.8	26.3	50.0	-23.7

CONCLUSION

Pass

Tested By

POWERLINE CONDUCTED EMISSIONS

EUT:	ConnectCore i.MX6 WiFi/Bluetooth	Work Order:	ETHE0009
Serial Number:	00409D 7C03CA	Date:	10/20/2014
Customer:	Etherios Design Solutions	Temperature:	21.5°C
Attendees:	None	Relative Humidity:	38.7%
Customer Project:	None	Bar. Pressure:	1016.9 mb
Tested By:	Dustin Sparks	Job Site:	MN03
Power:	5VDC	Configuration:	ETHE0009-4

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2014	ANSI C63.10:2009

TEST PARAMETERS

Run #:	54	Line:	Negative Lead	Ext. Attenuation (dB):	20

COMMENTS

Customer added filtering to power supply. Modification authorized by Moshe Peri.

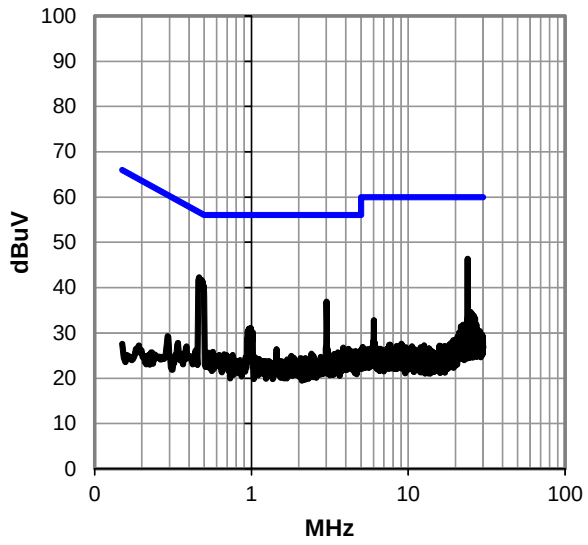
EUT OPERATING MODES

Transmitting 802.11 5785 MHz, 6 mbps

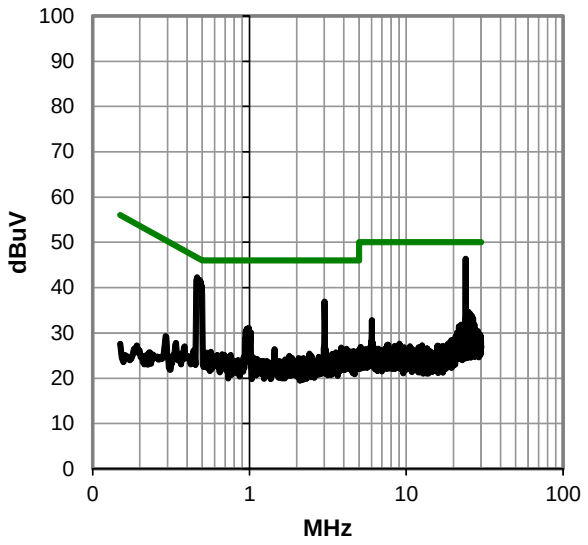
DEVIATIONS FROM TEST STANDARD

None

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



NORTHWEST EMC

WTD.2014.08.28, PSA-ESCI 2014.09.10, EmiR5 2014.07.09

POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #54

Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
23.997	24.6	21.7	46.3	60.0	-13.7
0.463	22.1	20.2	42.3	56.6	-14.3
3.015	16.6	20.3	36.9	56.0	-19.1
0.989	10.8	20.3	31.1	56.0	-24.9
0.960	10.6	20.3	30.9	56.0	-25.1
25.060	12.8	21.8	34.6	60.0	-25.4
25.590	12.3	21.9	34.2	60.0	-25.8
1.019	9.8	20.3	30.1	56.0	-25.9
25.702	11.9	21.9	33.8	60.0	-26.2
26.224	11.8	22.0	33.8	60.0	-26.2
24.135	11.9	21.8	33.7	60.0	-26.3
24.639	11.8	21.8	33.6	60.0	-26.4
25.172	11.6	21.8	33.4	60.0	-26.6
24.956	11.5	21.8	33.3	60.0	-26.7
26.661	11.2	22.0	33.2	60.0	-26.8
24.105	11.4	21.8	33.2	60.0	-26.8
6.033	12.3	20.5	32.8	60.0	-27.2
25.277	10.8	21.9	32.7	60.0	-27.3
26.127	10.7	22.0	32.7	60.0	-27.3
25.001	10.8	21.8	32.6	60.0	-27.4
24.176	10.4	21.8	32.2	60.0	-27.8
25.657	10.0	21.9	31.9	60.0	-28.1
27.157	9.8	22.1	31.9	60.0	-28.1
22.404	10.2	21.6	31.8	60.0	-28.2
26.064	9.8	21.9	31.7	60.0	-28.3
25.825	9.8	21.9	31.7	60.0	-28.3

Peak Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
23.997	24.6	21.7	46.3	50.0	-3.7
0.463	22.1	20.2	42.3	46.6	-4.3
3.015	16.6	20.3	36.9	46.0	-9.1
0.989	10.8	20.3	31.1	46.0	-14.9
0.960	10.6	20.3	30.9	46.0	-15.1
25.060	12.8	21.8	34.6	50.0	-15.4
25.590	12.3	21.9	34.2	50.0	-15.8
1.019	9.8	20.3	30.1	46.0	-15.9
25.702	11.9	21.9	33.8	50.0	-16.2
26.224	11.8	22.0	33.8	50.0	-16.2
24.135	11.9	21.8	33.7	50.0	-16.3
24.639	11.8	21.8	33.6	50.0	-16.4
25.172	11.6	21.8	33.4	50.0	-16.6
24.956	11.5	21.8	33.3	50.0	-16.7
26.661	11.2	22.0	33.2	50.0	-16.8
24.105	11.4	21.8	33.2	50.0	-16.8
6.033	12.3	20.5	32.8	50.0	-17.2
25.277	10.8	21.9	32.7	50.0	-17.3
26.127	10.7	22.0	32.7	50.0	-17.3
25.001	10.8	21.8	32.6	50.0	-17.4
24.176	10.4	21.8	32.2	50.0	-17.8
25.657	10.0	21.9	31.9	50.0	-18.1
27.157	9.8	22.1	31.9	50.0	-18.1
22.404	10.2	21.6	31.8	50.0	-18.2
26.064	9.8	21.9	31.7	50.0	-18.3
25.825	9.8	21.9	31.7	50.0	-18.3

CONCLUSION

Pass

Tested By

POWERLINE CONDUCTED EMISSIONS

EUT:	ConnectCore i.MX6 WiFi/Bluetooth	Work Order:	ETHE0009
Serial Number:	00409D 7C03CA	Date:	10/20/2014
Customer:	Etherios Design Solutions	Temperature:	21.5°C
Attendees:	None	Relative Humidity:	38.7%
Customer Project:	None	Bar. Pressure:	1016.9 mb
Tested By:	Dustin Sparks	Job Site:	MN03
Power:	5VDC	Configuration:	ETHE0009-4

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2014	ANSI C63.10:2009

TEST PARAMETERS

Run #:	55	Line:	Positive Lead	Ext. Attenuation (dB):	20

COMMENTS

Customer added filtering to power supply. Modification authorized by Moshe Peri.

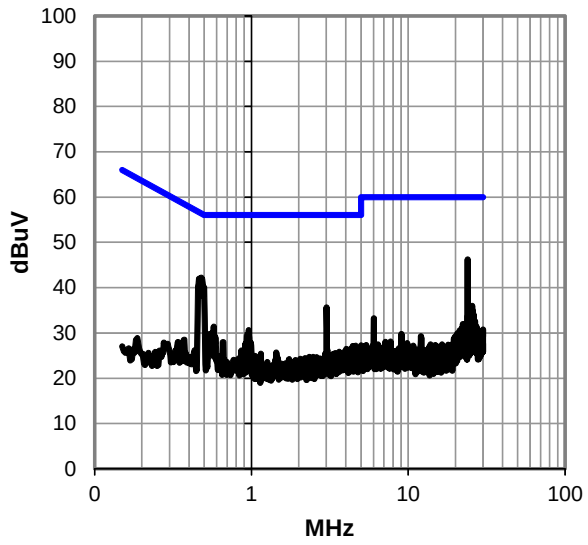
EUT OPERATING MODES

Transmitting 802.11 5785 MHz, 6 mbps

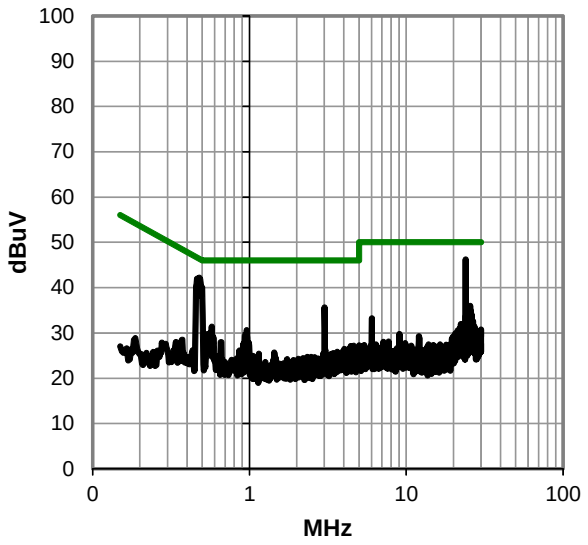
DEVIATIONS FROM TEST STANDARD

None

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #55

Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
23.997	24.5	21.7	46.2	60.0	-13.8
0.478	22.0	20.2	42.2	56.4	-14.2
3.015	15.3	20.3	35.6	56.0	-20.4
25.598	14.1	21.9	36.0	60.0	-24.0
0.575	11.2	20.2	31.4	56.0	-24.6
25.706	12.9	21.9	34.8	60.0	-25.2
0.960	10.3	20.3	30.6	56.0	-25.4
25.068	12.5	21.8	34.3	60.0	-25.7
24.150	12.5	21.8	34.3	60.0	-25.7
26.124	12.2	22.0	34.2	60.0	-25.8
25.169	12.3	21.8	34.1	60.0	-25.9
0.560	9.8	20.2	30.0	56.0	-26.0
24.109	12.2	21.8	34.0	60.0	-26.0
24.531	11.6	21.8	33.4	60.0	-26.6
25.105	11.5	21.8	33.3	60.0	-26.7
0.583	9.1	20.2	29.3	56.0	-26.7
6.037	12.7	20.5	33.2	60.0	-26.8
24.952	11.1	21.8	32.9	60.0	-27.1
25.489	10.9	21.9	32.8	60.0	-27.2
24.635	10.9	21.8	32.7	60.0	-27.3
26.023	10.7	21.9	32.6	60.0	-27.4
26.754	10.6	22.0	32.6	60.0	-27.4
24.997	10.7	21.8	32.5	60.0	-27.5
26.310	10.5	22.0	32.5	60.0	-27.5
24.076	10.7	21.8	32.5	60.0	-27.5
25.814	10.5	21.9	32.4	60.0	-27.6

Peak Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
23.997	24.5	21.7	46.2	50.0	-3.8
0.478	22.0	20.2	42.2	46.4	-4.2
3.015	15.3	20.3	35.6	46.0	-10.4
25.598	14.1	21.9	36.0	50.0	-14.0
0.575	11.2	20.2	31.4	46.0	-14.6
25.706	12.9	21.9	34.8	50.0	-15.2
0.960	10.3	20.3	30.6	46.0	-15.4
25.068	12.5	21.8	34.3	50.0	-15.7
24.150	12.5	21.8	34.3	50.0	-15.7
26.124	12.2	22.0	34.2	50.0	-15.8
25.169	12.3	21.8	34.1	50.0	-15.9
0.560	9.8	20.2	30.0	46.0	-16.0
24.109	12.2	21.8	34.0	50.0	-16.0
24.531	11.6	21.8	33.4	50.0	-16.6
25.105	11.5	21.8	33.3	50.0	-16.7
0.583	9.1	20.2	29.3	46.0	-16.7
6.037	12.7	20.5	33.2	50.0	-16.8
24.952	11.1	21.8	32.9	50.0	-17.1
25.489	10.9	21.9	32.8	50.0	-17.2
24.635	10.9	21.8	32.7	50.0	-17.3
26.023	10.7	21.9	32.6	50.0	-17.4
26.754	10.6	22.0	32.6	50.0	-17.4
24.997	10.7	21.8	32.5	50.0	-17.5
26.310	10.5	22.0	32.5	50.0	-17.5
24.076	10.7	21.8	32.5	50.0	-17.5
25.814	10.5	21.9	32.4	50.0	-17.6

CONCLUSION

Pass

Tested By

POWERLINE CONDUCTED EMISSIONS

EUT:	ConnectCore i.MX6 WiFi/Bluetooth	Work Order:	ETHE0009
Serial Number:	00409D 7C03CA	Date:	10/20/2014
Customer:	Etherios Design Solutions	Temperature:	21.5°C
Attendees:	None	Relative Humidity:	38.7%
Customer Project:	None	Bar. Pressure:	1016.9 mb
Tested By:	Dustin Sparks	Job Site:	MN03
Power:	5VDC	Configuration:	ETHE0009-4

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2014	ANSI C63.10:2009

TEST PARAMETERS

Run #:	56	Line:	Positive Lead	Ext. Attenuation (dB):	20

COMMENTS

Customer added filtering to power supply. Modification authorized by Moshe Peri.

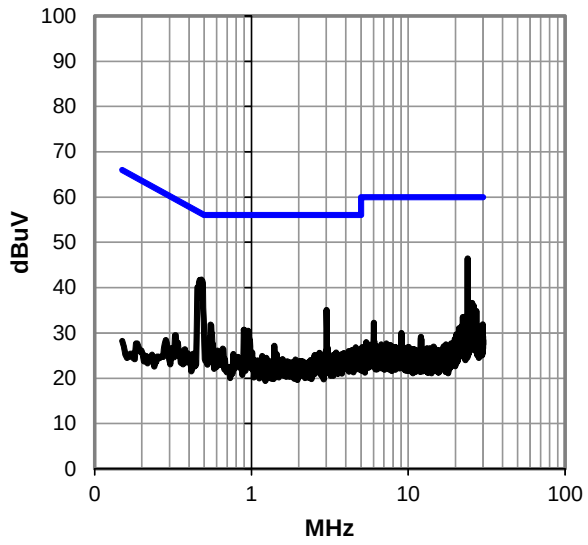
EUT OPERATING MODES

Transmitting 802.11 5825 MHz, 6 mbps

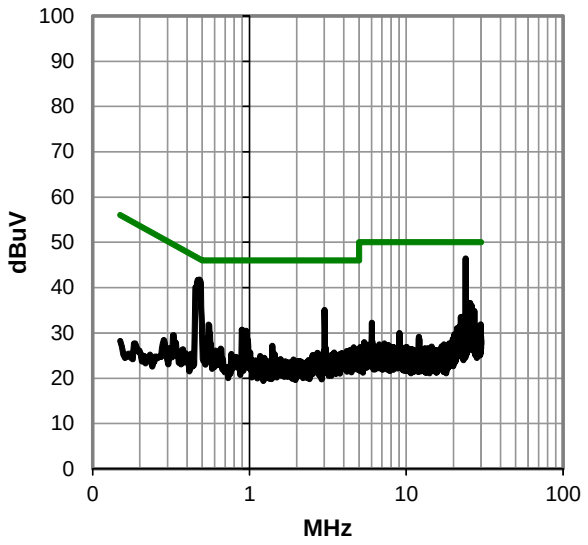
DEVIATIONS FROM TEST STANDARD

None

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



NORTHWEST EMC

WTD.2014.08.28, PSA-ESCI 2014.09.10, EmiR5 2014.07.09

POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #56

Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
23.997	24.7	21.7	46.4	60.0	-13.6
0.478	21.6	20.2	41.8	56.4	-14.6
3.015	14.7	20.3	35.0	56.0	-21.0
25.172	14.8	21.8	36.6	60.0	-23.4
25.594	14.7	21.9	36.6	60.0	-23.4
26.228	14.0	22.0	36.0	60.0	-24.0
25.060	14.1	21.8	35.9	60.0	-24.1
0.549	11.6	20.2	31.8	56.0	-24.2
25.706	13.4	21.9	35.3	60.0	-24.7
27.168	12.8	22.1	34.9	60.0	-25.1
25.807	12.9	21.9	34.8	60.0	-25.2
0.900	10.4	20.3	30.7	56.0	-25.3
26.127	12.7	22.0	34.7	60.0	-25.3
0.952	10.2	20.3	30.5	56.0	-25.5
24.534	12.6	21.8	34.4	60.0	-25.6
26.340	12.4	22.0	34.4	60.0	-25.6
25.486	12.3	21.9	34.2	60.0	-25.8
25.277	12.3	21.9	34.2	60.0	-25.8
24.960	12.3	21.8	34.1	60.0	-25.9
24.639	12.1	21.8	33.9	60.0	-26.1
24.176	12.1	21.8	33.9	60.0	-26.1
22.930	11.9	21.7	33.6	60.0	-26.4
22.296	11.9	21.6	33.5	60.0	-26.5
24.109	11.7	21.8	33.5	60.0	-26.5
25.665	11.5	21.9	33.4	60.0	-26.6
26.023	11.4	21.9	33.3	60.0	-26.7

Peak Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
23.997	24.7	21.7	46.4	50.0	-3.6
0.478	21.6	20.2	41.8	46.4	-4.6
3.015	14.7	20.3	35.0	46.0	-11.0
25.172	14.8	21.8	36.6	50.0	-13.4
25.594	14.7	21.9	36.6	50.0	-13.4
26.228	14.0	22.0	36.0	50.0	-14.0
25.060	14.1	21.8	35.9	50.0	-14.1
0.549	11.6	20.2	31.8	46.0	-14.2
25.706	13.4	21.9	35.3	50.0	-14.7
27.168	12.8	22.1	34.9	50.0	-15.1
25.807	12.9	21.9	34.8	50.0	-15.2
0.900	10.4	20.3	30.7	46.0	-15.3
26.127	12.7	22.0	34.7	50.0	-15.3
0.952	10.2	20.3	30.5	46.0	-15.5
24.534	12.6	21.8	34.4	50.0	-15.6
26.340	12.4	22.0	34.4	50.0	-15.6
25.486	12.3	21.9	34.2	50.0	-15.8
25.277	12.3	21.9	34.2	50.0	-15.8
24.960	12.3	21.8	34.1	50.0	-15.9
24.639	12.1	21.8	33.9	50.0	-16.1
24.176	12.1	21.8	33.9	50.0	-16.1
22.930	11.9	21.7	33.6	50.0	-16.4
22.296	11.9	21.6	33.5	50.0	-16.5
24.109	11.7	21.8	33.5	50.0	-16.5
25.665	11.5	21.9	33.4	50.0	-16.6
26.023	11.4	21.9	33.3	50.0	-16.7

CONCLUSION

Pass

Tested By

POWERLINE CONDUCTED EMISSIONS

EUT:	ConnectCore i.MX6 WiFi/Bluetooth	Work Order:	ETHE0009
Serial Number:	00409D 7C03CA	Date:	10/20/2014
Customer:	Etherios Design Solutions	Temperature:	21.5°C
Attendees:	None	Relative Humidity:	38.7%
Customer Project:	None	Bar. Pressure:	1016.9 mb
Tested By:	Dustin Sparks	Job Site:	MN03
Power:	5VDC	Configuration:	ETHE0009-4

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2014	ANSI C63.10:2009

TEST PARAMETERS

Run #:	57	Line:	Negative Lead	Ext. Attenuation (dB):	20

COMMENTS

Customer added filtering to power supply. Modification authorized by Moshe Peri.

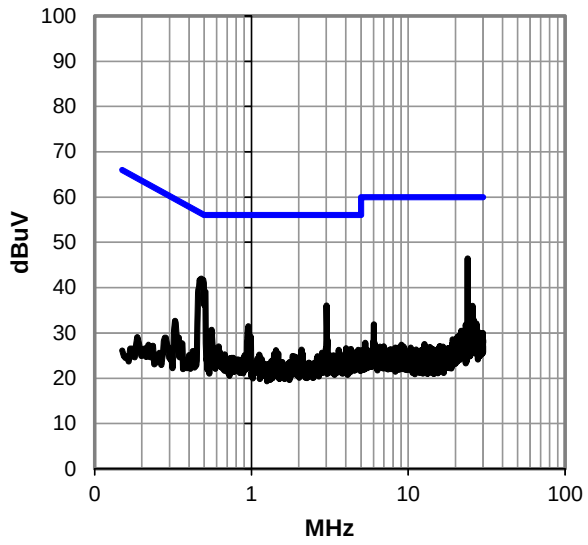
EUT OPERATING MODES

Transmitting 802.11 5825 MHz, 6 mbps

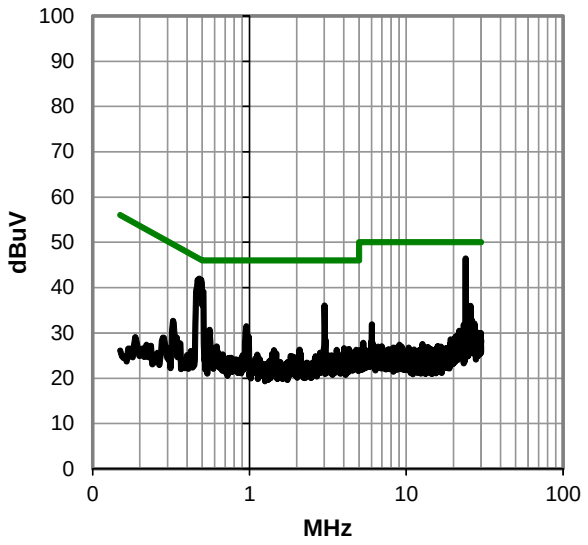
DEVIATIONS FROM TEST STANDARD

None

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #57

Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
23.997	24.7	21.7	46.4	60.0	-13.6
0.478	21.8	20.2	42.0	56.4	-14.4
3.019	15.7	20.3	36.0	56.0	-20.0
25.702	14.1	21.9	36.0	60.0	-24.0
0.956	11.2	20.3	31.5	56.0	-24.5
25.060	13.5	21.8	35.3	60.0	-24.7
25.590	12.9	21.9	34.8	60.0	-25.2
0.557	10.5	20.2	30.7	56.0	-25.3
25.180	12.6	21.8	34.4	60.0	-25.6
0.325	12.5	20.2	32.7	59.6	-26.9
25.807	11.2	21.9	33.1	60.0	-26.9
26.124	11.1	22.0	33.1	60.0	-26.9
24.635	11.2	21.8	33.0	60.0	-27.0
24.531	11.2	21.8	33.0	60.0	-27.0
24.146	11.1	21.8	32.9	60.0	-27.1
25.486	10.9	21.9	32.8	60.0	-27.2
24.180	10.8	21.8	32.6	60.0	-27.4
26.232	10.5	22.0	32.5	60.0	-27.5
3.049	8.1	20.3	28.4	56.0	-27.6
24.952	10.6	21.8	32.4	60.0	-27.6
27.168	10.0	22.1	32.1	60.0	-27.9
25.101	10.2	21.8	32.0	60.0	-28.0
26.336	10.0	22.0	32.0	60.0	-28.0
6.033	11.4	20.5	31.9	60.0	-28.1
23.355	10.1	21.7	31.8	60.0	-28.2
26.657	9.5	22.0	31.5	60.0	-28.5

Peak Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
23.997	24.7	21.7	46.4	50.0	-3.6
0.478	21.8	20.2	42.0	46.4	-4.4
3.019	15.7	20.3	36.0	46.0	-10.0
25.702	14.1	21.9	36.0	50.0	-14.0
0.956	11.2	20.3	31.5	46.0	-14.5
25.060	13.5	21.8	35.3	50.0	-14.7
25.590	12.9	21.9	34.8	50.0	-15.2
0.557	10.5	20.2	30.7	46.0	-15.3
25.180	12.6	21.8	34.4	50.0	-15.6
0.325	12.5	20.2	32.7	49.6	-16.9
25.807	11.2	21.9	33.1	50.0	-16.9
26.124	11.1	22.0	33.1	50.0	-16.9
24.635	11.2	21.8	33.0	50.0	-17.0
24.531	11.2	21.8	33.0	50.0	-17.0
24.146	11.1	21.8	32.9	50.0	-17.1
25.486	10.9	21.9	32.8	50.0	-17.2
24.180	10.8	21.8	32.6	50.0	-17.4
26.232	10.5	22.0	32.5	50.0	-17.5
3.049	8.1	20.3	28.4	46.0	-17.6
24.952	10.6	21.8	32.4	50.0	-17.6
27.168	10.0	22.1	32.1	50.0	-17.9
25.101	10.2	21.8	32.0	50.0	-18.0
26.336	10.0	22.0	32.0	50.0	-18.0
6.033	11.4	20.5	31.9	50.0	-18.1
23.355	10.1	21.7	31.8	50.0	-18.2
26.657	9.5	22.0	31.5	50.0	-18.5

CONCLUSION

Pass

Tested By