

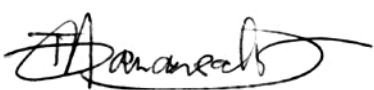
RF TEST REPORT



Report No.: FCC_RF_SL14022501-SLX-003_2.4GHz Rev1.1
Supersede Report No.: FCC_RF_SL14022501-SLX-003_2.4GHz_Rev1.0

Applicant	:	Hayward Industries, Inc.
Product Name	:	SDIO Wireless Module
Model No.	:	SX-SDMAN
Test Standard	:	47 CFR 15.247 RSS-210 Issue 8.0, Dec 2010
Host Product Name:	:	Waterproof Remote
Host Model No.	:	HL Waterproof
Test Method	:	ANSI C63.10: 2013 RSS-Gen Issue 4 558074 D01 DTS Meas Guidance v03r02
FCC ID	:	RNW-SDMAN
IC ID	:	5110A-SDMAN
Dates of test	:	January 15, 2015 to January 23, 2015
Issue Date	:	April 6rd, 2015
Test Result	:	☒ Pass ☐ Fail
Equipment complied with the specification [X]		
Equipment did not comply with the specification []		

This Test Report is Issued Under the Authority of:

	
Teody Manansala	Nima Molaei
Test Engineer	Engineer Reviewer
This test report may be reproduced in full only Test result presented in this test report is applicable to the tested sample only	

Issued By:
SIEMIC Laboratories
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Laboratory Introduction

SIEMIC, headquartered in the heart of Silicon Valley, with superior facilities in US and Asia, is one of the leading independent testing and certification facilities providing customers with one-stop shop services for Compliance Testing and Global Certifications.



In addition to testing and certification, SIEMIC provides initial design reviews and compliance management throughout a project. Our extensive experience with China, Asia Pacific, North America, European, and International compliance requirements, assures the fastest, most cost effective way to attain regulatory compliance for the global markets.

Accreditations for Conformity Assessment

Country/Region	Accreditation Body	Scope
USA	FCC, A2LA	EMC, RF/Wireless, Telecom
Canada	IC, A2LA, NIST	EMC, RF/Wireless, Telecom
Taiwan	BSMI, NCC, NIST	EMC, RF, Telecom, Safety
Hong Kong	OFTA, NIST	RF/Wireless, Telecom
Australia	NATA, NIST	EMC, RF, Telecom, Safety
Korea	KCC/RRA, NIST	EMI, EMS, RF, Telecom, Safety
Japan	VCCI, JATE, TELEC, RFT	EMI, RF/Wireless, Telecom,
Mexico	NOM, COFETEL, Caniety	EMC, RF/Wireless, Telecom, Safety
Europe	A2LA, NIST	EMC, RF, Telecom, Safety
Israel	MOC, NIST	EMC, RF, Telecom, Safety

Accreditations for Product Certifications

Country	Accreditation Body	Scope
USA	FCC TCB, NIST	EMC, RF, Telecom
Canada	IC FCB, NIST	EMC, RF, Telecom
Singapore	iDA, NIST	EMC, RF, Telecom
EU	NB	EMC & R&TTE Directive
Japan	MIC (RCB 208)	RF, Telecom
Hong Kong	OFTA (US002)	RF, Telecom

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1 Report Revision History

Report No.	Report Version	Description	Issue Date
FCC_RF_SL14022501-SLX-003_2.4GHz	None	Original	02/20/2015
FCC_RF_SL14022501-SLX-003_2.4GHz Rev1.0	Rev1.0	Update test plot	04/03/2015
FCC_RF_SL14022501-SLX-003_2.4GHz Rev1.1	Rev1.1	Update Standard version	04/06/2015

2 Executive Summary

The purpose of this test program was to demonstrate compliance of following product

Company: Hayward Industries, Inc.
Product: SDIO Wireless Module
Model: SX-SDMAN
Host Product Name: Waterproof Remote
Host Model Number: HL Waterproof

to be installed into a waterproof remote host (Model: HL Waterproof) and simultaneously transmission with FCC certified WLAN radio module (FCC ID: RNW-SDMAN, IC ID: 5110A-SDMAN) , against the current Stipulated Standards. The specified model product stated above has demonstrated compliance with the Stipulated Standard listed on 1st page.

3 Customer information

Applicant Name	:	Hayward Industries, Inc.
Applicant Address	:	620 Division Street, Elizabeth, NJ 07201
Manufacturer Name	:	Hayward Industries, Inc.
Manufacturer Address	:	620 Division Street, Elizabeth, NJ 07201

4 Test site information

Lab performing tests	SIEMIC Laboratories
Lab Address	775 Montague Expressway, Milpitas, CA 95035
FCC Test Site No.	881796
IC Test Site No.	4842D-2
VCCI Test Site No.	A0133

5 Modification

Index	Item	Description	Note
-	-	-	-

6 EUT Information

6.1 EUT Description

Product Name	:	SDIO Wireless Module
Model No.	:	SX-SDMAN
Trade Name	:	Hayward
Serial No.	:	N/A
Host Product Name:	:	Waterproof Remote
Host Model No.	:	HL Waterproof
Input Power	:	100-240VAC, 50-60Hz
Output Power	:	5VDC, 1.2A
Power Adapter Manu/Model	:	CUI Inc./EPSA050120U-PSP-SZ
Power Adapter SN	:	N/A
Hardware version	:	v3.1.63.48
Software version	:	ver. A
Date of EUT received	:	January 10, 2015
Equipment Class/ Category	:	DTS
Operating Frequencies	:	2412MHz-2462MHz
Port/Connectors	:	N/A

6.2 Radio Description

Spec for WLAN

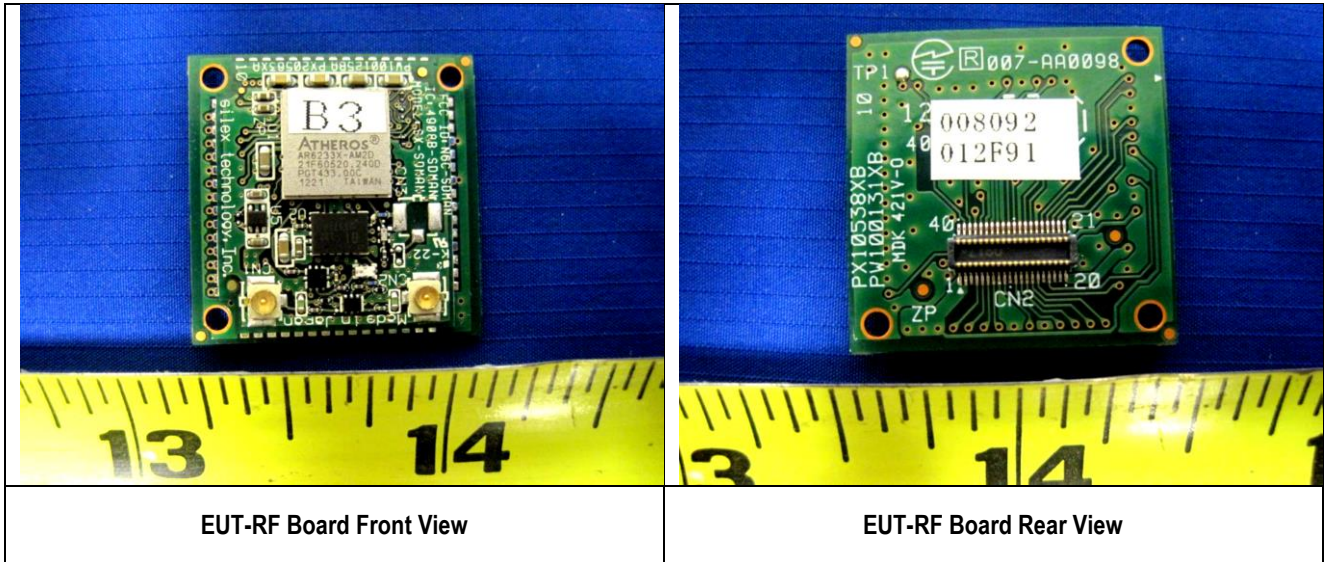
Radio Type	802.11b	802.11g	802.11n-HT20
Operating Frequency	2412-2462MHz	2412-2462MHz	2412-2462MHz
Modulation	DSSS (CCK, DQPSK, DBPSK)	OFDM-CCK (BPSK, QPSK, 16QAM, 64QAM)	OFDM (BPSK, QPSK, 16QAM, 64QAM)
Channel Spacing	5MHz	5MHz	5MHz(2.4GHz)
Number of Channels	11	11	11(2.4GH)
Antenna Type	Prestta WLAN Embedded Antenna		
Antenna Gain	2.5dBi (for 2.4GHz)		
Antenna Connector Type	U.FI		
Software Version	v3.1.63.48		
Hardware Version	ver. A		

Note: EUT has 2 antena ports, but only one antenna will be used at a time. No simultaneous transmission will occur.

EUT ART Power Level Settings

Mode	Channel	Power (dBm)
802.11b	2412	13
802.11b	2437	13
802.11b	2462	13
802.11g	2412	8
802.11g	2437	11
802.11g	2462	8.5
802.11n20	2412	7
802.11n20	2437	10
802.11n20	2462	7.5

6.3 EUT Photos – Internal



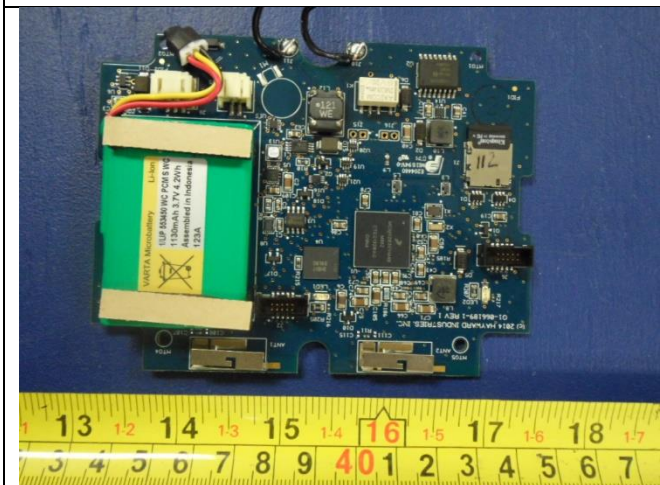
6.4 Host Photos - Internal



Host – Without cover



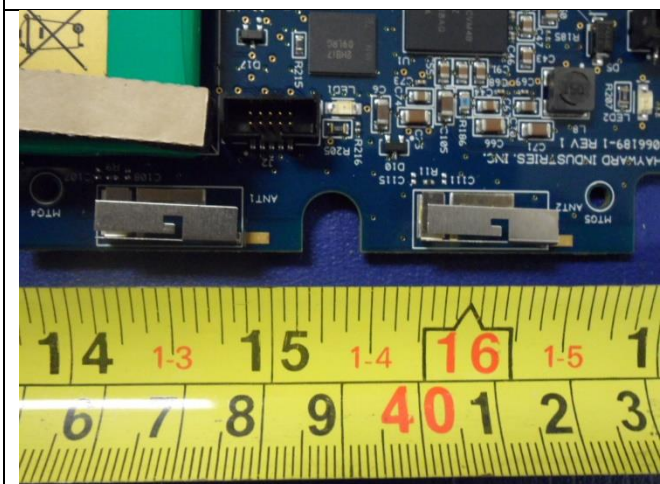
Host –LCD Display



Host – PCBA Main Board Top View



Host – PCBA Main Board Bottom View



Host – Embedded Antenna Close up View



Host PCBA with EUT Close up View

Note: EUT has 2 antenna ports, but only one antenna will be used at a time. No simultaneous transmission will occur.

6.5 Host Photos - External



EUT – Front View



EUT – Rear View



EUT – Left View



EUT – Right View



EUT – Top View

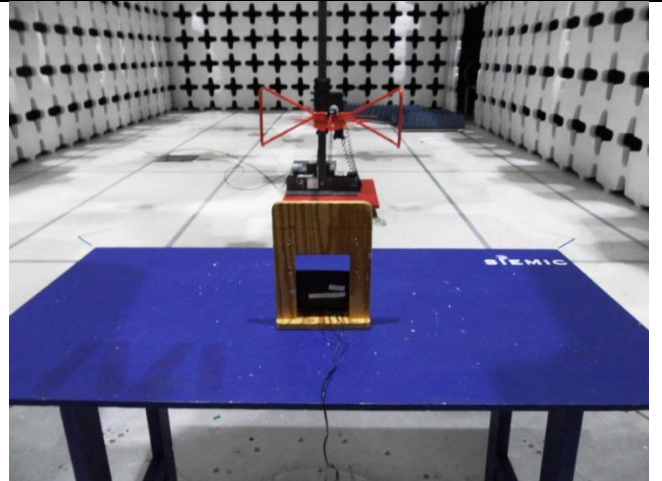


EUT – Bottom View

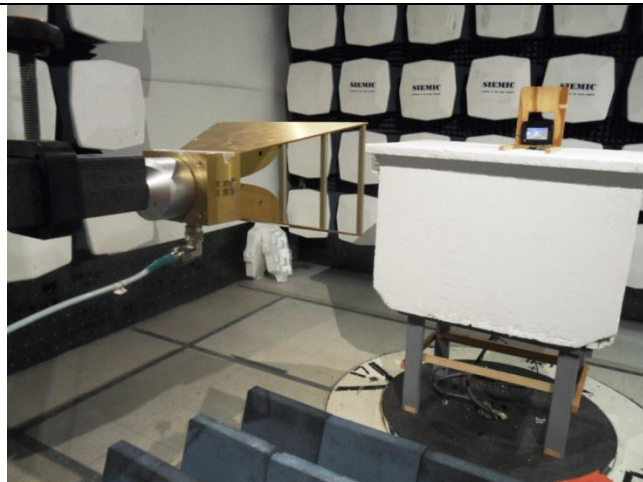
6.6 EUT Test Setup Photos



Radiated Emissions (<1GHz) – Front View



Radiated Emissions (<1GHz) – Rear View



Radiated Emissions (>1GHz) – Front View



Radiated Emissions (>1GHz) – Rear View

7 Supporting Equipment/Software and cabling Description

7.1 Supporting Equipment

Item	Supporting Equipment Description	Model	Serial Number	Manufacturer	Note
1	Laptop	PP30L	J6HRN1	Dell	-

7.2 Cabling Description

Name	Connection Start		Connection Stop		Length / shielding Info		Note
	From	I/O Port	To	I/O Port	Length (m)	Shielding	
-	EUT	Serial	Laptop	USB	0.5M	No	

7.3 Test Software Description

Test Item	Software	Description
RF Testing	Tera Term Version 4.84 Athtestcmd v3.1	Set the EUT to transmit continuously in diferent test mode

8 Test Summary

Test Item	Test standard		Test Method/Procedure		Pass / Fail
Restricted Band of Operation	FCC	15.205	FCC	ANSI C63.10 – 2013 558074 D01 DTS Meas Guidance v03r02	☒ Pass ☐ N/A
AC Conducted Emissions Voltage	FCC	15.207(a)	FCC	ANSI C63.10 – 2013	☐ Pass ☒ N/A

DTS band Requirement

Test Item	Test standard		Test Method/Procedure		Pass / Fail
Channel Separation	FCC	15.247 (a)(1)	FCC	-	☐ Pass ☒ N/A
	IC	RSS210 (A8.1)	IC	-	
99% Occupied Bandwidth	IC	RSS210(A8.1)	IC	RSS Gen (6.6)	☐ Pass ☒ N/A
6db Bandwidth	FCC	15.247(a)(2)	FCC	558074 D01 DTS Meas Guidance v03r02	☐ Pass ☒ N/A
	IC	RSS210 (A8.2)	IC	-	
Number of Hopping Channels	FCC	15.247(a)(1)	FCC	-	☐ Pass ☒ N/A
	IC	RSS210(A8.1)	IC	-	
Band Edge and Radiated Spurious Emissions	FCC	15.247(d)	FCC	ANSI C63.10 – 2013, 558074 D01 DTS Meas Guidance v03r02	☒ Pass ☐ N/A
	IC	RSS210(A8.5)	IC	-	
Time of Occupancy	FCC	15.247(a)(1)	FCC	-	☐ Pass ☒ N/A
	IC	RSS210(A8.1)	IC	-	
Output Power	FCC	15.247(b)	FCC	558074 D01 DTS Meas Guidance v03r02	☐ Pass ☒ N/A
	IC	RSS210 (A8.4)	IC	-	
Receiver Spurious Emissions	IC	RSS Gen (7.1)	IC	RSS Gen (7.1)	☐ Pass ☒ N/A
Antenna Gain > 6 dBi	FCC	15.247(e)	FCC	-	☐ Pass ☒ N/A
	IC	RSS210(A8.4)	IC	-	
Power Spectral Density	FCC	15.247(e)	FCC	558074 D01 DTS Meas Guidance v03r02	☐ Pass ☒ N/A
	IC	RSS210(A8.3)	IC	-	
Hybrid System Requirement	FCC	15.247(f)	FCC	-	☐ Pass ☒ N/A
	IC	RSS210(A8.3)	IC	-	
Hopping Capability	FCC	15.247(g)	FCC	-	☐ Pass ☒ N/A
	IC	RSS210(A8.1)	IC	-	
Hopping Coordination Requirement	FCC	15.247(h)	FCC	-	☐ Pass ☒ N/A
	IC	RSS210(A8.1)	IC	-	
RF Exposure requirement	FCC	15.247(i)	FCC	-	☐ Pass ☒ N/A
	IC	RSS Gen(3.2)	IC	-	
Remark	1. All measurement uncertainties do not take into consideration for all presented test results. 2. The applicant shall ensure frequency stability by showing that an emission is maintained within the band of operation under all normal operating conditions as specified in the user's manual.				

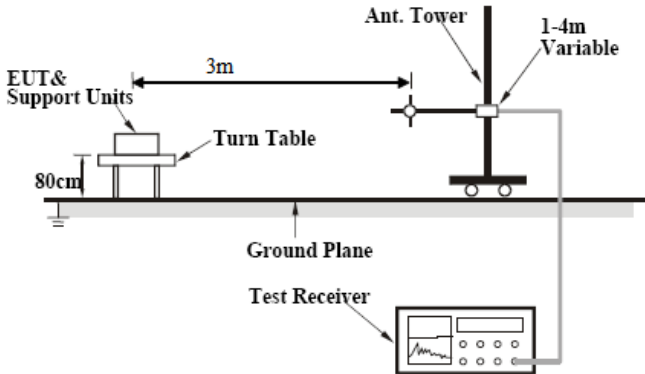
9 Measurement Uncertainty

Emissions			
Test Item	Frequency Range	Description	Uncertainty
Band Edge and Radiated Spurious Emissions	30MHz – 1GHz	Confidence level of approximately 95% (in the case where distributions are normal), with a coverage factor of 2 (for EUTs < 0.5m X 0.5m X 0.5m)	+5.6dB/-4.5dB
Band Edge and Radiated Spurious Emissions	1GHz – 40GHz	Confidence level of approximately 95% (in the case where distributions are normal), with a coverage factor of 2 (for EUTs < 0.5m X 0.5m X 0.5m)	+4.3dB/-4.1dB

10 Measurements, Examination and Derived Results

10.1 Radiated Emissions below 1GHz

Requirement(s):

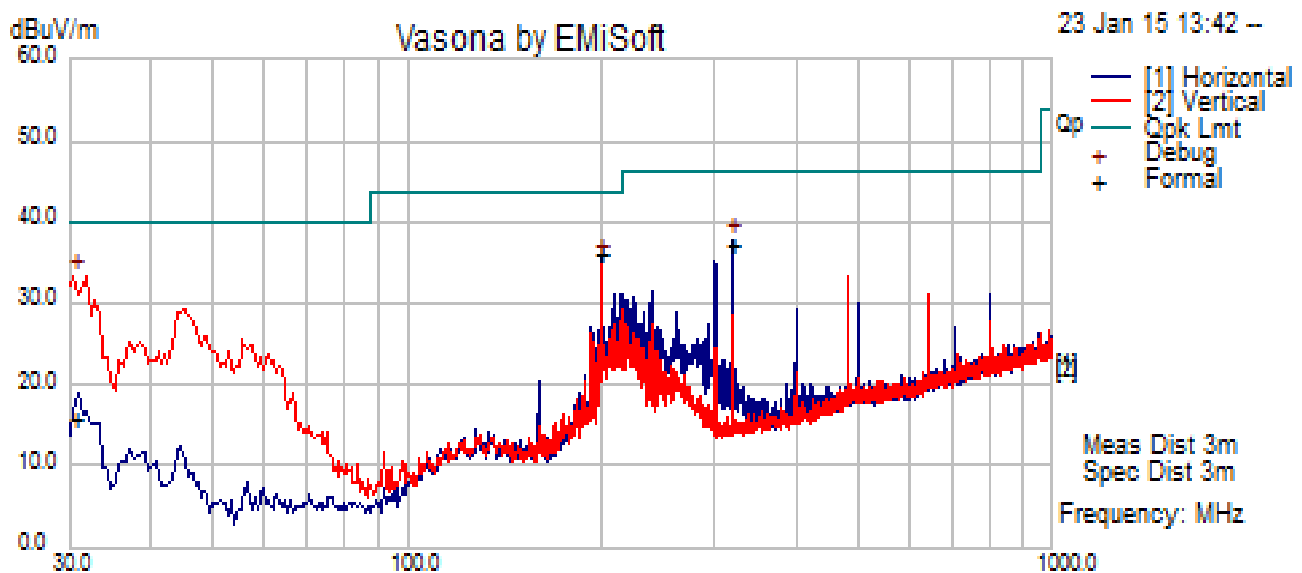
Spec	Item	Requirement	Applicable										
47CFR§15.247(d), RSS210(A8.5)	a)	Except higher limit as specified elsewhere in other section, the emissions from the low-power radio-frequency devices shall not exceed the field strength levels specified in the following table and the level of any unwanted emissions shall not exceed the level of the fundamental emission. The tighter limit applies at the band edges	☒										
		<table><tr><th>Frequency range (MHz)</th><th>Field Strength (uV/m)</th></tr><tr><td>30 – 88</td><td>100</td></tr><tr><td>88 – 216</td><td>150</td></tr><tr><td>216 960</td><td>200</td></tr><tr><td>Above 960</td><td>500</td></tr></table>		Frequency range (MHz)	Field Strength (uV/m)	30 – 88	100	88 – 216	150	216 960	200	Above 960	500
		Frequency range (MHz)		Field Strength (uV/m)									
		30 – 88		100									
		88 – 216		150									
216 960	200												
Above 960	500												
Test Setup													
Procedure		1. The EUT was switched on and allowed to warm up to its normal operating condition. 2. The test was carried out at the selected frequency points obtained from the EUT characterisation. Maximization of the emissions, was carried out by rotating the EUT, changing the antenna polarization, and adjusting the antenna height in the following manner: a. Vertical or horizontal polarisation (whichever gave the higher emission level over a full rotation of the EUT) was chosen. b. The EUT was then rotated to the direction that gave the maximum emission. c. Finally, the antenna height was adjusted to the height that gave the maximum emission. 3. A Quasi-peak measurement was then made for that frequency point. 4. Steps 2 and 3 were repeated for the next frequency point, until all selected frequency points were measured.											
Remark		The EUT was scanned up to 1GHz. Both horizontal and vertical polarities were investigated. The results show only the worst case.											
Result		☒ Pass ☐ Fail											

Test Data ☒ Yes (See below) ☐ N/A

Test Plot ☒ Yes (See below) ☐ N/A

Radiated Emission Test Results (Below 1GHz)

Test specification	Below 1GHz			
Environmental Conditions:	Temp (°C):	26.1	Result	Pass
	Humidity (%)	47.5		
	Atmospheric (mbar):	1020		
Mains Power:	110VAC, 60Hz			
Tested by:	Teody Manansala			
Test Date:	January 23, 2015			
Remarks:	2.4GHz 802.11b 2437MHz			

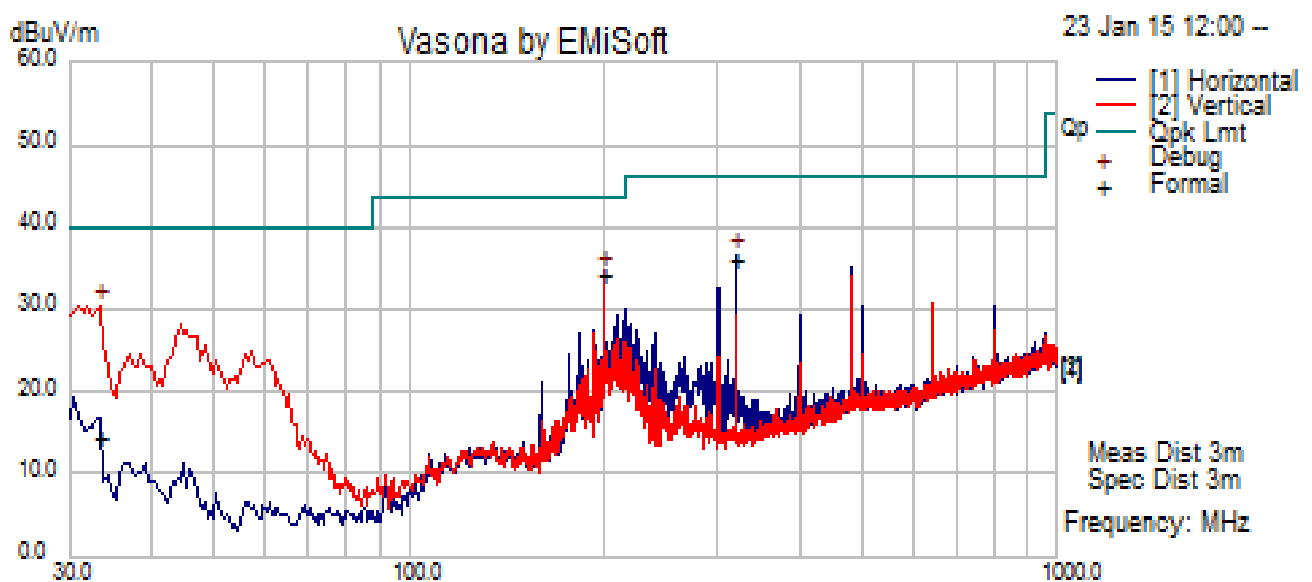


Quasi Max Measurement

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
30.53	34.05	1.16	-19.53	15.67	Quasi Max	V	115.00	225.00	40.00	-24.33	Pass
199.99	60.26	2.50	-26.83	35.93	Quasi Max	H	151.00	286.00	43.50	-7.57	Pass
320.01	59.73	3.07	-25.67	37.13	Quasi Max	H	101.00	281.00	46.00	-8.87	Pass

Note: Both horizontal and vertical polarities were investigated. The results above show only the worst case.

Test specification	Below 1GHz					
Environmental Conditions:	Temp (°C):	26.1		Result	Pass	
	Humidity (%)	47.5				
	Atmospheric (mbar):	1020				
Mains Power:	110VAC, 60Hz					
Tested by:	Teody Manansala					
Test Date:	January 23, 2015					
Remarks:	2.4GHz 802.11g 2437MHz					

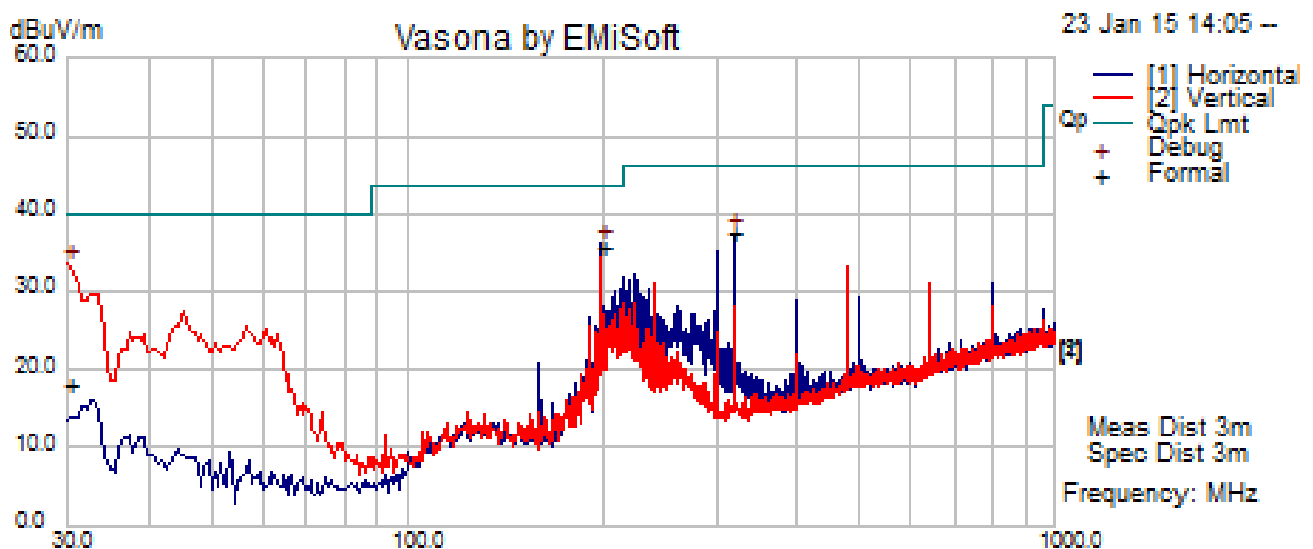


Quasi Max Measurement

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
199.99	58.38	2.50	-26.83	34.05	Quasi Max	V	100.00	65.00	43.50	-9.45	Pass
319.98	58.73	3.07	-25.67	36.14	Quasi Max	H	103.00	272.00	46.00	-9.86	Pass
33.26	35.55	1.16	-22.29	14.42	Quasi Max	V	219.00	315.00	40.00	-25.58	Pass

Note: Both horizontal and vertical polarities were investigated. The results above show only the worst case.

Test specification	Below 1GHz			
Environmental Conditions:	Temp (°C):	26.1	Result	Pass
	Humidity (%)	47.5		
	Atmospheric (mbar):	1020		
Mains Power:	110VAC, 60Hz			
Tested by:	Teody Manansala			
Test Date:	January 23, 2015			
Remarks:	2.4GHz 802.11n20 2437MHz			



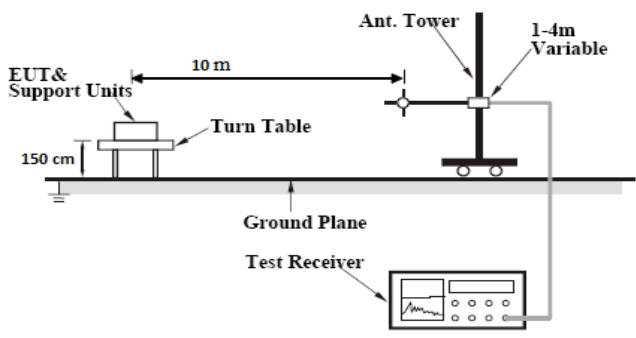
Quasi Max Measurement

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
30.00	36.11	1.16	-19.27	18.00	Quasi Max	V	173.00	287.00	40.00	-22.00	Pass
200.00	60.14	2.50	-26.83	35.81	Quasi Max	H	165.00	289.00	43.50	-7.69	Pass
320.00	60.29	3.07	-25.67	37.69	Quasi Max	H	100.00	273.00	46.00	-8.31	Pass

Note: Both horizontal and vertical polarities were investigated. The results above show only the worst case.

10.2 Radiated Spurious Emissions above 1GHz

Requirement(s):

Spec	Item	Requirement	Applicable
47CFR§15.247(d), RSS210(A8.5)	a)	For non-restricted band, In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB or 30dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, determined by the measurement method on output power to be used. Attenuation below the general limits specified in § 15.209(a) is not required ☒ 20 dB down ☐ 30 dB down	☒
	b)	or restricted band, emission must also comply with the radiated emission limits specified in 15.209	☒
Test Setup			
Procedure	- The EUT was switched on and allowed to warm up to its normal operating condition. - The test was carried out at the selected frequency points obtained from the EUT characterisation. Maximization of the emissions, was carried out by rotating the EUT, changing the antenna polarization, and adjusting the antenna height in the following manner: - Vertical or horizontal polarisation (whichever gave the higher emission level over a full rotation of the EUT) was chosen. - The EUT was then rotated to the direction that gave the maximum emission. - Finally, the antenna height was adjusted to the height that gave the maximum emission. - An average measurement was then made for that frequency point. - Steps 2 and 3 were repeated for the next frequency point, until all selected frequency points were measured.		
Remark	The EUT was scanned up to 25GHz. Both horizontal and vertical polarities were investigated. The results show only the worst case.		
Result	☒ Pass ☐ Fail		

Equipment Setting

TEST	RBW	VBW	SPAN	Detector	SWEEP	Trace	NOTES
Radiated Spurious Emission	1MHz	3MHz	1GHz-18 GHz	Peak	Auto	Max hold	PK Measurement
Radiated Spurious Emission	1MHz	10Hz	1GHz-18 GHz	Peak	Auto	Max hold	Ave Measurement

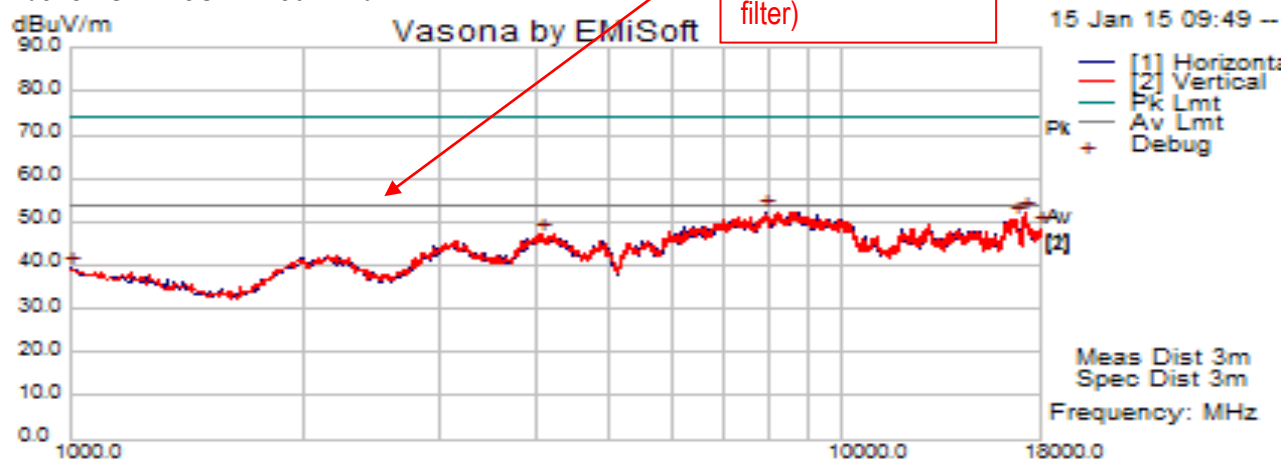
Test Data ☐ Yes (See below) ☒ N/A

Test Plot ☒ Yes (See below) ☐ N/A

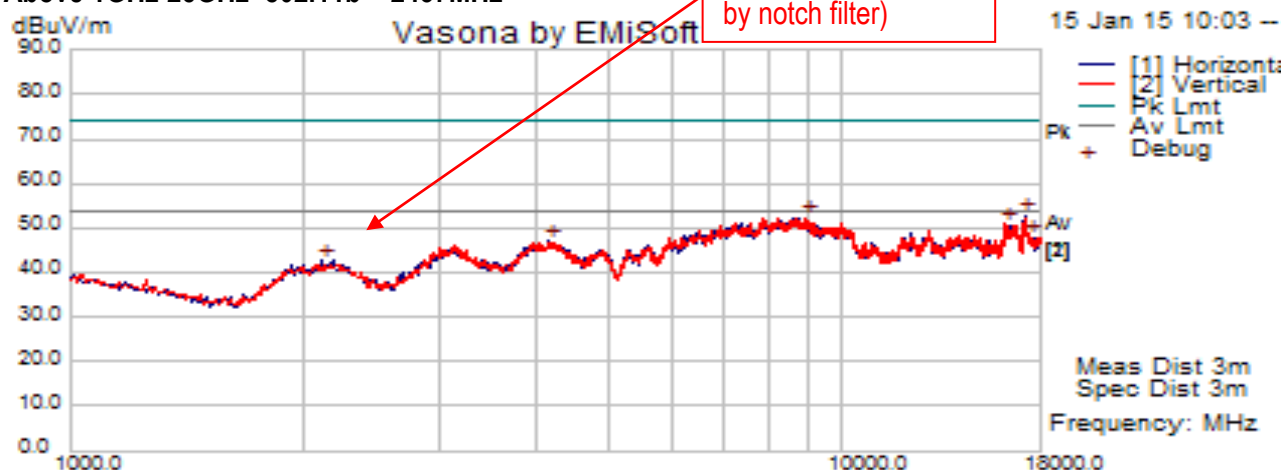
Note: Test was scanned upto 25GHz. No emissions was found above the noise floor. Both horizontal and vertical polarities were investigated.

Radiated Emission Test Results (Above 1GHz)

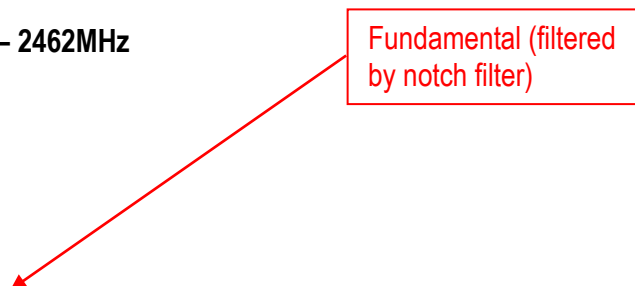
Above 1GHz-25GHz – 802.11b – 2412MHz

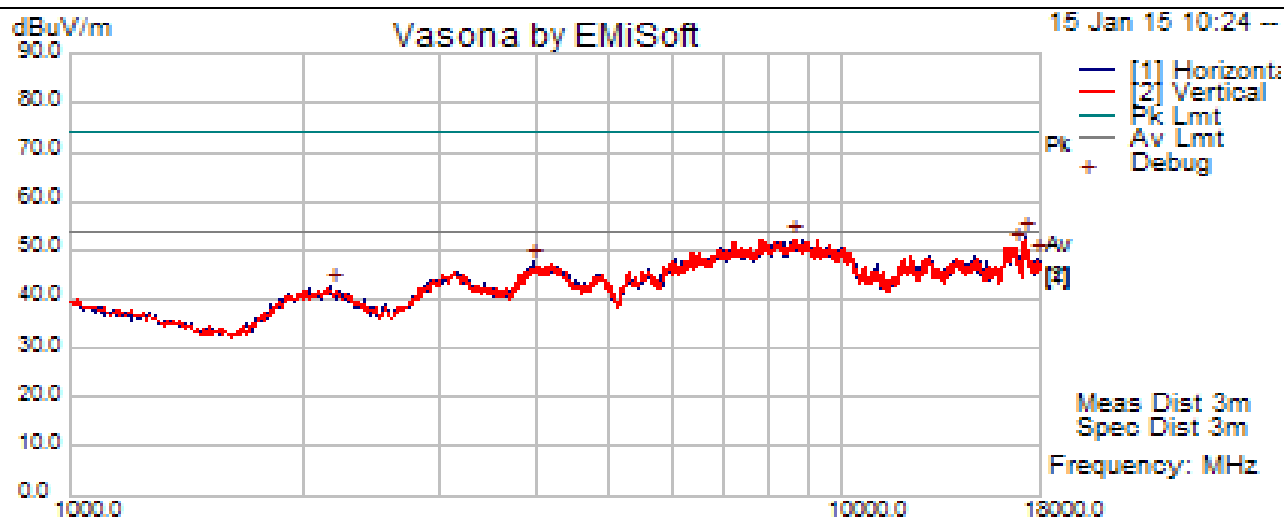


Above 1GHz-25GHz- 802.11b – 2437MHz

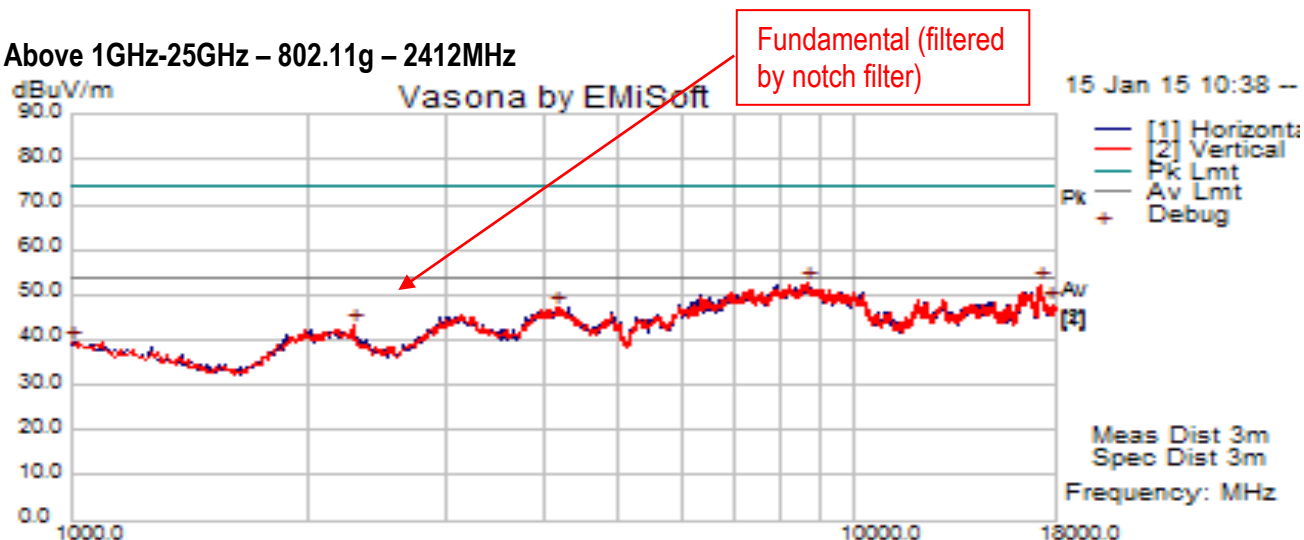


Above 1GHz-25GHz- 802.11b – 2462MHz

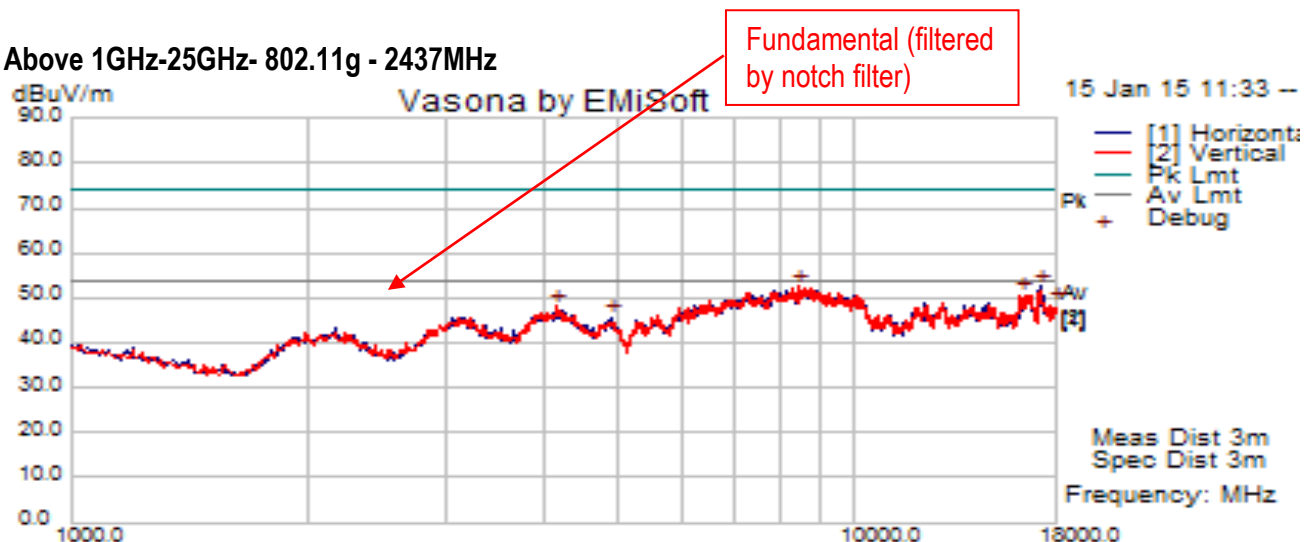




Above 1GHz-25GHz – 802.11g – 2412MHz

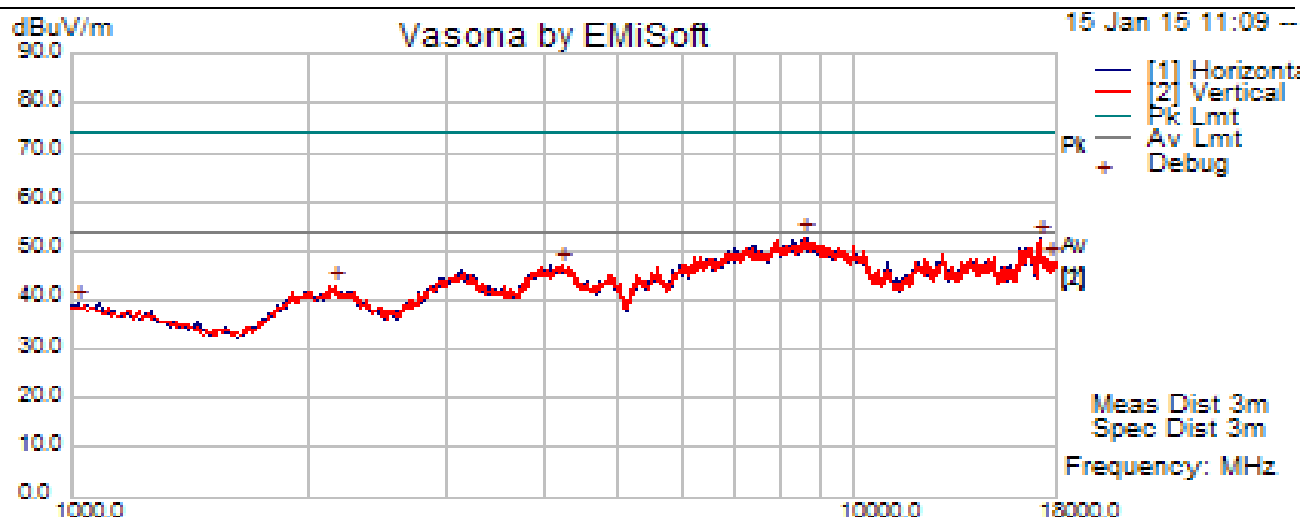


Above 1GHz-25GHz- 802.11g - 2437MHz

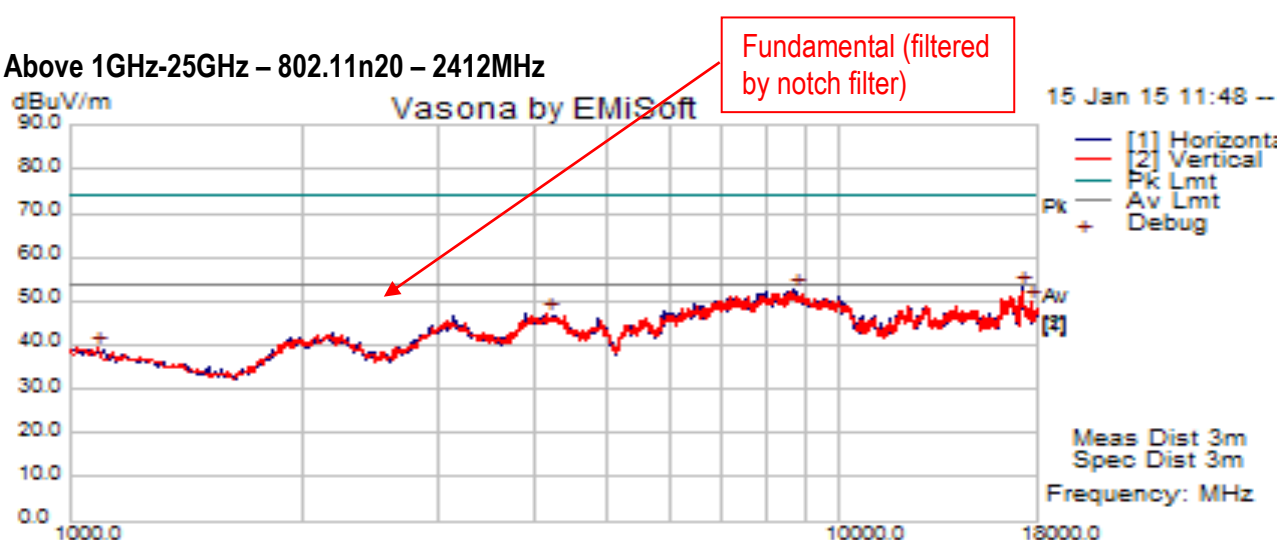


Above 1GHz-25GHz- 802.11g - 2462MHz

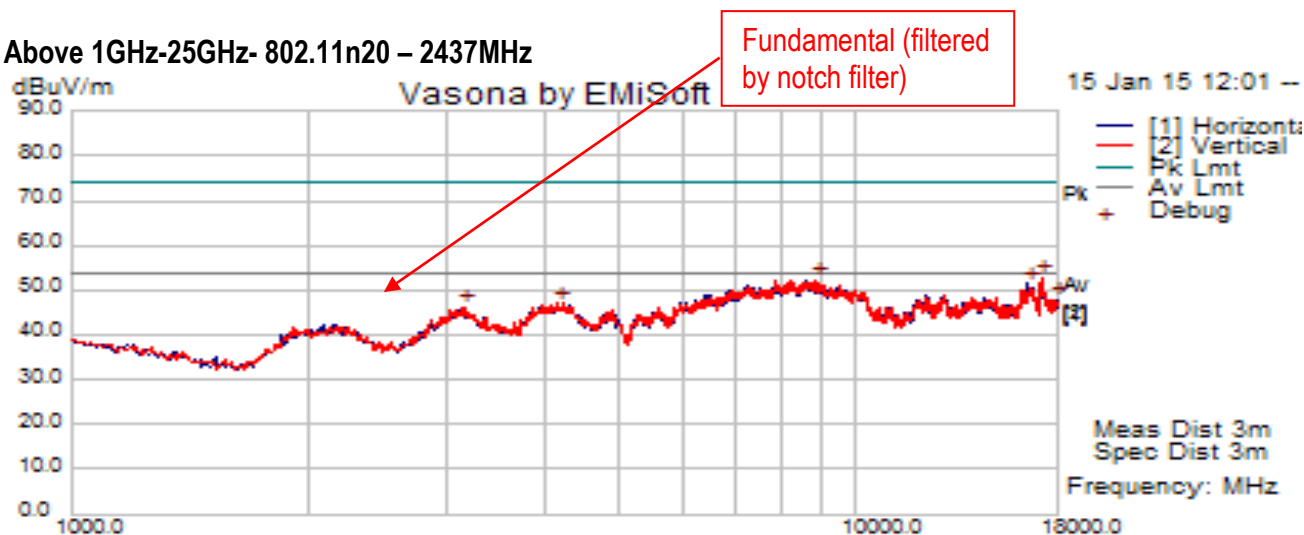
Fundamental (filtered by notch filter)



Above 1GHz-25GHz – 802.11n20 – 2412MHz



Above 1GHz-25GHz- 802.11n20 – 2437MHz



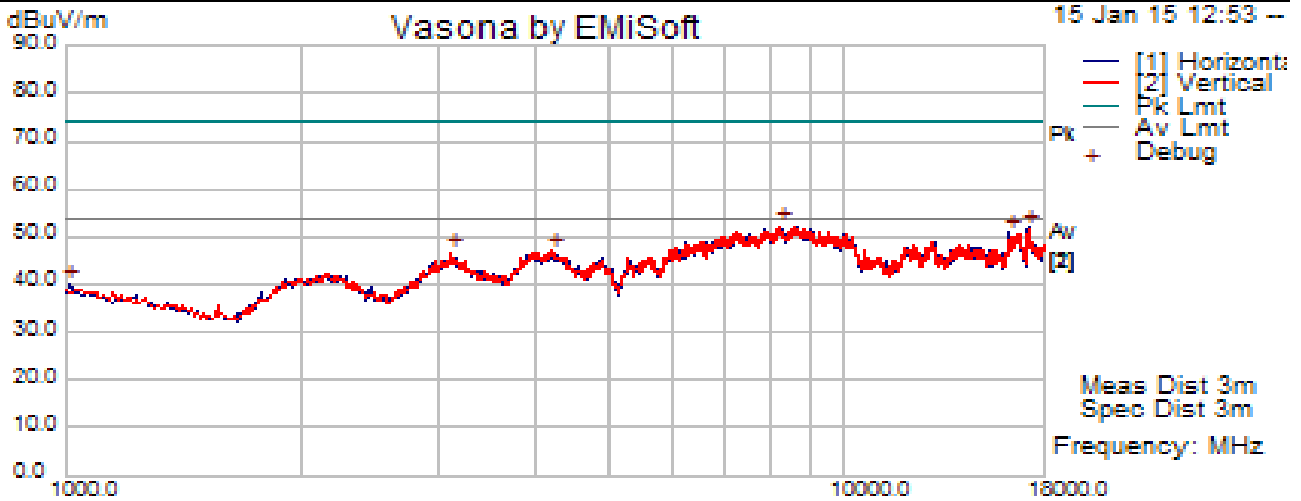
Above 1GHz-25GHz- 802.11n20 – 2462MHz

Fundamental (filtered by notch filter)

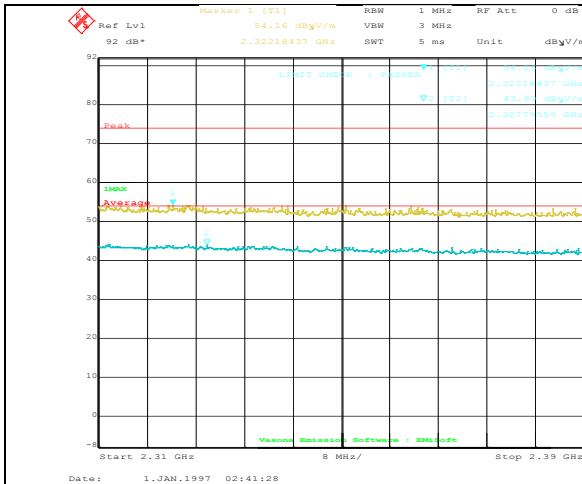
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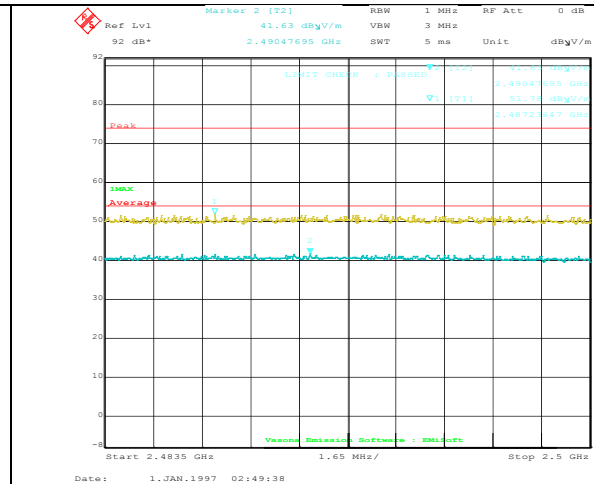




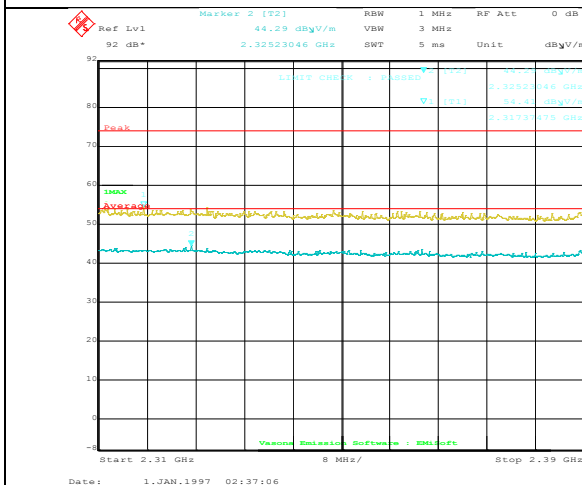
Restricted Band



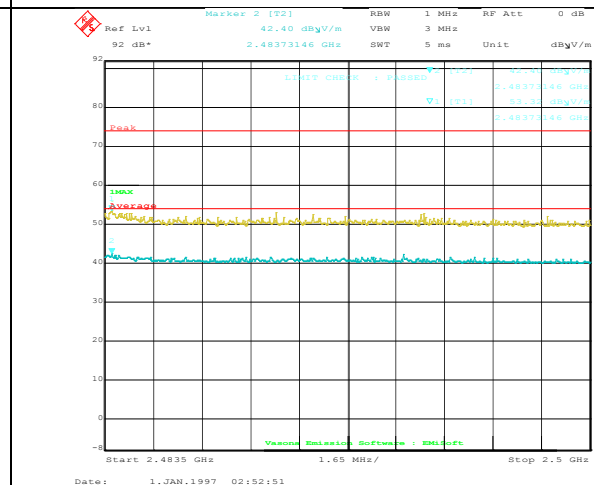
Lower Band (802.11b-2412MHz)



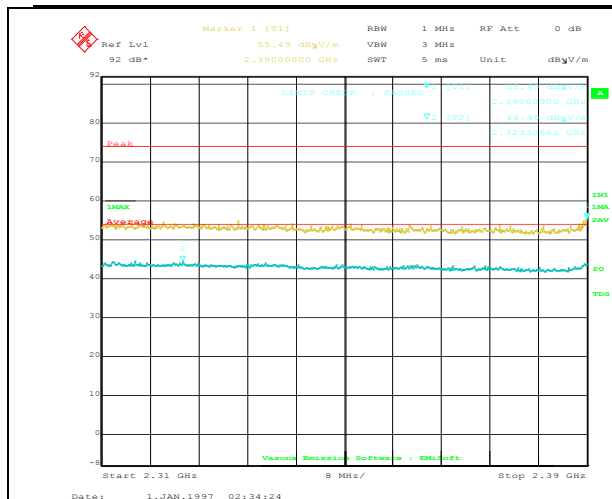
Higher Band (802.11b-2462MHz)



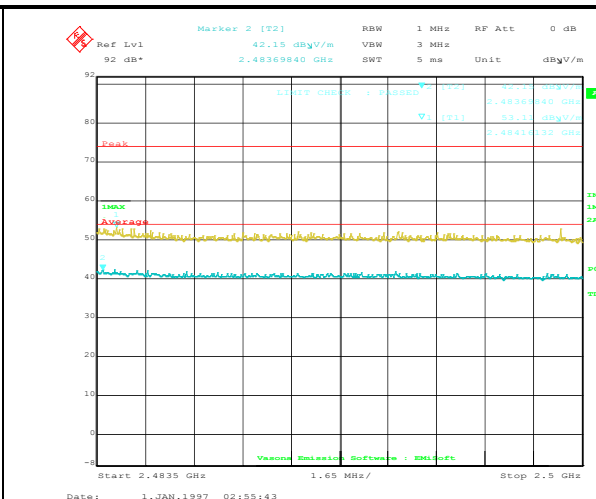
Lower Band (802.11g-2412MHz)



Higher Band (802.11g-2462MHz)



Lower Band (802.11n20 2412MHz)



Higher Band (802.11n20-2462MHz)

Annex A. TEST INSTRUMENT

Instrument	Model	Serial #	Cal Date	Cal Cycle	Cal Due	In use
Conducted Emissions						
R & S Receiver	ESIB 40	100179	04/20/2014	1 Year	04/20/2015	☐
R&S LISN	ESH2-Z5	861741/013	05/18/2014	1 Year	05/18/2015	☐
CHASE LISN	MN2050B	1018	07/24/2014	1 Year	07/24/2015	☐
Sekonic Hygro Hermograph	ST-50	HE01-000092	05/25/2014	1 Year	05/25/2015	☐
Radiated Emissions						
R & S Receiver	ESL6	100178	03/01/2014	1 Year	03/01/2015	☒
R & S Receiver	ESIB 40	100179	04/20/2014	1 Year	04/20/2015	☒
ETS-Lingren Loop Antenna	6512	00049120	05/13/2014	1 Year	05/13/2015	☐
Bi-Log antenna (30MHz~2GHz)	JB1	A030702	07/03/2014	1 Year	07/03/2015	☒
Horn Antenna (1-26.5GHz)	3115	10SL0059	04/26/2014	1 Year	04/26/2015	☒
Horn Antenna (18-40 GHz)	AH-840	101013	04/23/2014	1 Year	04/23/2015	☒
Pre-Amplifier (1-26.5GHz)	8449B	3008A00715	05/30/2014	1 Year	05/30/2015	☒
Microwave Preamplifier (18-40 GHz)	PA-840	181251	05/30/2014	1 Year	05/30/2015	☒
3 Meters SAC	3M	N/A	10/13/2014	1 Year	10/13/2015	☒
10 Meters SAC	10M	N/A	06/05/2014	1 Year	06/05/2015	☒
Sekonic Hygro Hermograph	ST-50	HE01-000092	05/25/2014	1 Year	05/25/2015	☒
RF Conducted Measurement						
Spectrum Analyzer	N9010A	MY50210206	05/30/2014	1 Year	05/30/2015	☐
Spectrum Analyzer	E4407B	US88441016	05/31/2014	1 Year	05/31/2015	☐

R & S Receiver	ESIB 40	100179	04/20/2014	1 Year	04/20/2015	☐
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Test Software Version

Test Item	Vendor	Software	Version
Radiated Emission	EMISoft	EMISoft Vasona	V5.0

Annex B. SIEMIC Accreditation

Accreditations	Document	Scope / Remark
ISO 17025 (A2LA)		Please see the documents for the detailed scope
ISO Guide 65 (A2LA)		Please see the documents for the detailed scope
TCB Designation		A1 , A2 , A3 , A4 , B1 , B2 , B3 , B4 , C
FCC DoC Accreditation		FCC Declaration of Conformity Accreditation
FCC Site Registration		3 meter site
FCC Site Registration		10 meter site
IC Site Registration		3 meter site
IC Site Registration		10 meter site
EU NB		Radio & Telecommunications Terminal Equipment: EN45001 – EN ISO/IEC 17025
		Electromagnetic Compatibility: EN45001 – EN ISO/IEC 17025
Singapore iDA CB(Certification Body)		Phase I , Phase II
Vietnam MIC CAB Accreditation		Please see the document for the detailed scope
Hong Kong OFCA		(Phase II) OFCA Foreign Certification Body for Radio and Telecom
		(Phase I) Conformity Assessment Body for Radio and Telecom
Industry Canada CAB		Radio: Scope A – All Radio Standard Specification in Category I
		Telecom: CS-03 Part I, II, V, VI, VII, VIII
Japan Recognized Certification Body Designation		Radio: A1. Terminal equipment for purpose of calling Telecom: B1. Specified radio equipment specified in Article 38-2, Paragraph 1, Item 1 of the Radio Law

Korea CAB Accreditation		EMI: KCC Notice 2008-39, RRL Notice 2008-3: CA Procedures for EMI KN22: Test Method for EMI EMS: KCC Notice 2008-38, RRL Notice 2008-4: CA Procedures for EMS KN24, KN61000-4-2, -4-3, -4-4, -4-5, -4-6, -4-8, -4-11: Test Method for EMS Radio: RRL Notice 2008-26, RRL Notice 2008-2, RRL Notice 2008-10, RRL Notice 2007-49, RRL Notice 2007-20, RRL Notice 2007-21, RRL Notice 2007-80, RRL Notice 2004-68 Telecom: President Notice 20664, RRL Notice 2007-30, RRL Notice 2008-7 with attachments 1, 3, 5, 6; President Notice 20664, RRL Notice 2008-7 with attachment 4
Taiwan NCC CAB Recognition		LP0002, PSTN01, ADSL01, ID0002, IS6100, CNS14336, PLMN07, PLMN01, PLMN08
Taiwan BSMI CAB Recognition		CNS 13438
Japan VCCI		R-3083: Radiation 3 meter site C-3421: Main Ports Conducted Interference Measurement T-1597: Telecommunication Ports Conducted Interference Measurement
Australia CAB Recognition		EMC: AS/NZS CISPR 11, AS/NZS CISPR 14.1, AS/NZS CISPR22, AS/NZS 61000.6.3, AS/NZS 61000.6.4 Radio communications: AS/NZS 4281, AS/NZS 4268, AS/NZS 4280.1, AS/NZS 4280.2, AS/NZS 4295, AS/NZS 4582, AS/NZS 4583, AS/NZS 4769.1, AS/NZS 4769.2, AS/NZS 4770, AS/NZS 4771 Telecommunications: AS/ACIF S002:05, AS/ACIF S003:06, AS/ACIF S004:06 AS/ACIF S006:01, AS/ACIF S016:01, AS/ACIF S031:01, AS/ACIF S038:01, AS/ACIF S040:01, AS/ACIF S041:05, AS/ACIF S043.2:06, AS/ACIF S60950.1
Australia NATA Recognition		AS/ACIF S002, AS/ACIF S003, AS/ACIF S004, AS/ACIF S006, AS/ACIF S016, AS/ACIF S031, AS/ACIF S038, AS/ACIF S040, AS/ACIF S041, AS/ACIF S043.2