RF TEST REPORT



Report No.: SL13072901-ZBR-045 (FCC)_BT

Supersede Report No.: NONE

Applicant	:	Zebra Technologies Corp.
Product Name	:	Bluetooth Module
Model No.	:	EYSMACAXX
Test Standard	:	47CFR15.247: 2012, RSS 210 Issue 8: 2010
Tast Mathed		ANSI 062 4 2000
Test Method	•	ANSI C63.4 – 2009
		RSS-Gen Issue 3: 2010
		DA 00-705 Measurement Guidelines for Frequency
		Hopping Spread Spectrum Systems
FCC ID	:	I28MD-ZBR5QLN
IC ID	:	3798B-ZBR5QLN
Dates of test	:	July 30th - Aug 2nd, 2013
Issue Date	:	9/11/2013
Test Result	:	🛛 Pass 🛛 Fail
Equipment complied with the specification	[X]
Equipment did not comply with the specification	ſ	1

This Test Report is Issued Under the Authority of:	
David Zhang	and.
David Zhang	Choon Sian Ooi
Test Engineer	Engineer Reviewer

SIEMIC Laboratories 775 Montague Expressway, Milpitas, 95035 CA



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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	Safety, EMC , RF/Wireless, Telecom
Europe	A2LA, 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
HongKong	OFTA (US002)	RF , Telecom

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1 Executive Summary

The purpose of this test program was to demonstrate compliance of the Zebra Technologies Corp., FCC/IC certified, Bluetooth Module (FCC ID: I28MD-ZBR5QLN, IC ID: 3798B-ZBR5QLN), and model: EYSMACAXX, to be install into a printer host (Printer mode: ZT400 Series (Models ZT410 and ZT420)), and transmit simultaneously with N radio module, against the current Stipulated Standards. The EYSMACAXX to be install into a printer host (Printer model: ZT400 Series (Models ZT410 and ZT420)) has demonstrated compliance with the Stipulated Standard listed on 1st page.

The ZT400 Series (Models ZT410 and ZT420) are mobile printer with both N radio module and ZBR5 Bluetooth installed inside.

2 Customer information

Applicant Name	:	Zebra Technologies Corp.	
Applicant Address	:	333 Corporate Woods Pkwy , Vernon Hills, IL 60061- 3109 USA	
Manufacturer Name	:	Zebra Technologies Corp.	
Manufacturer Address	:	333 Corporate Woods Pkwy , Vernon Hills, IL 60061- 3109 USA	

3 <u>Test site information</u>

Lab performing tests	:	SIEMIC Laboratories
Lab Address	:	775 Montague Expressway, Milpitas, CA 95035
Dates of test (from – to)	:	July 30th - Aug 2nd, 2013

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EUT Information 4

EUT Description 4.1

Product Name	:	Bluetooth Module
Model No.	:	EYSMACAXX
Trade Name	•••	Zebra
Serial No.	:	N/A
Input Power	•••	3.3VDC
Equipment Category	:	DSS
Host	:	Mobile Printer
Host model	•••	ZT400 Series (Models ZT410 and ZT420)
Host SN	:	18J133000001 (ZT410), 18J133000006 (ZT420)
Host Input Power	:	100-240VAC
Date of EUT received	:	July 30th, 2013
Clock Frequencies	:	N/A
Port/Connectors	:	N Radio (WLAN), ZBR5 Radio (Bluetooth)

Radio Description <u>4.2</u>

Spec for ZBR5 Bluetooth Radio

Radio Type	Blue Tooth
Operating Frequency	2402-2480MHz
Modulation	FHSS
Modulation	(GFSK ,π/4-DQPSK, 8-DPSK)
Channel Spacing	1MHz
Number of Channels	79
Antenna Type	PCB Trace Antenna
Antenna Gain	3.81 dBi (2.4GHz)
Antenna Connector Type	N/A

Bluetooth Channel list

Туре		Channel No.	Frequency (MHz)	Available (Y/N)
		0	2402	Y
				Y
				Y
				Y
				Y
Blue Tooth	2402-2480MHz	39	2441	Y
				Y
				Y
				Y
				Y
		78	2480	Y

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4.3

EUT test modes/configuration Description

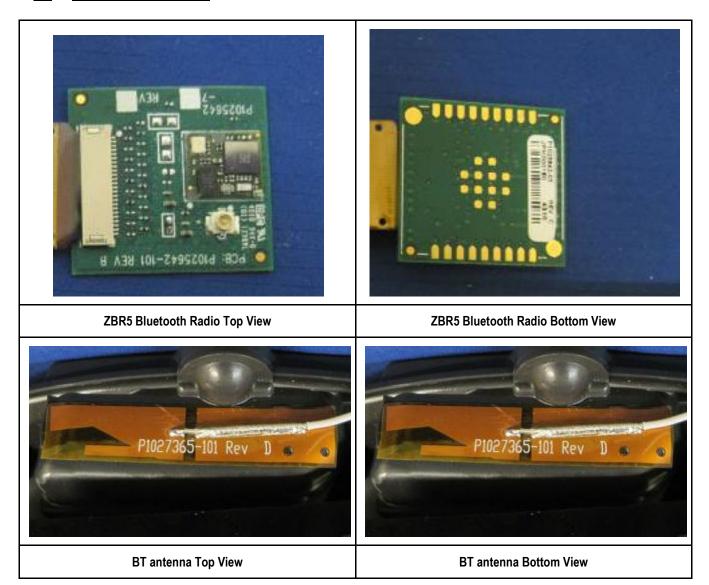
Mode	Note
GFSK modulation @ Low, mid and high channel @ Cont- TX	GFSK modulation @ Low, mid and high channel @ Cont-TX
8DPSK modulation @ Low, mid and high channel @ Cont-TX	8DPSK modulation @ Low, mid and high channel @ Cont-TX
GFSK Hopping mode	To be transmitting simultaneously with N radio module on the printer
8DPSK Hopping mode	
Note: NONE	

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4.4 EUT Photos - External



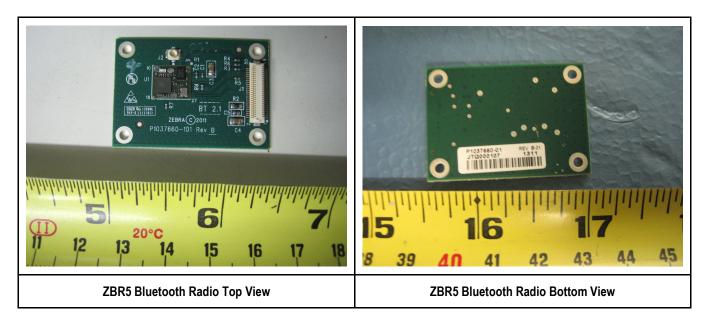
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4.5 EUT Photos - Internal



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4.6 Host Printer



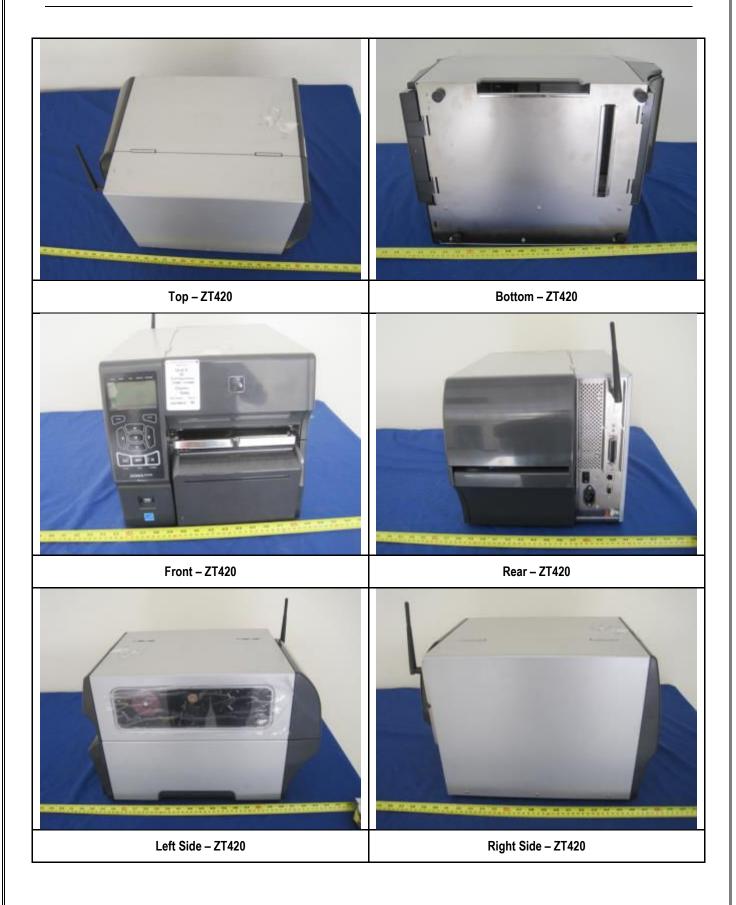
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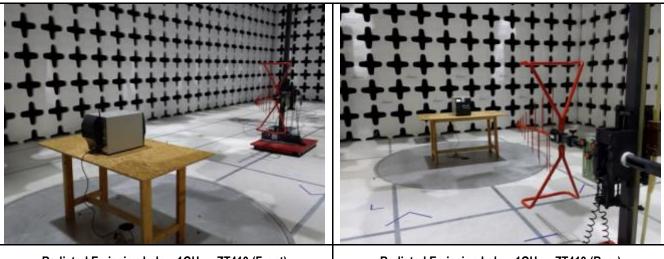
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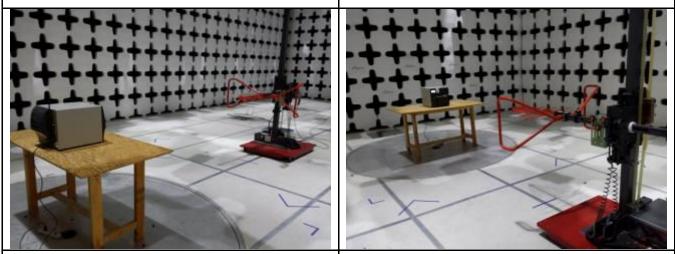
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EUT Test Setup Photos 4.7



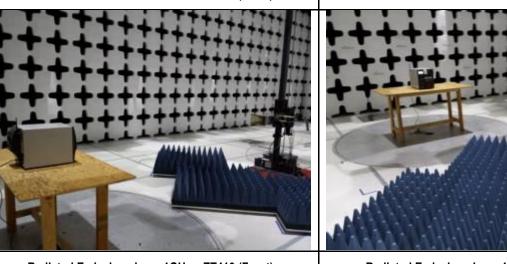
Radiated Emission below 1GHz - ZT410 (Front)

Radiated Emission below 1GHz - ZT410 (Rear)



Radiated Emission below 1GHz - ZT420 (Front)

Radiated Emission below 1GHz - ZT420 (Rear)



Radiated Emission above 1GHz - ZT410 (Front)

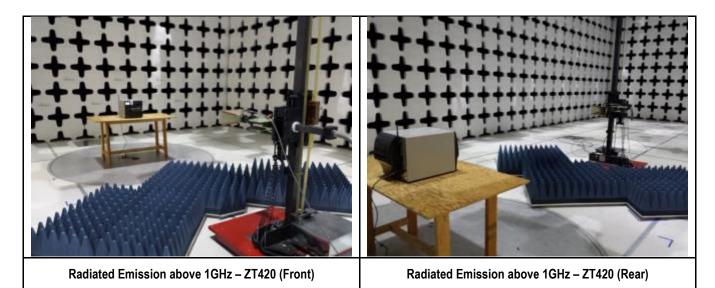
Radiated Emission above 1GHz - ZT410 (Rear)

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Report Revision History 5

Report No.	Report Version	Description	Issue Date
SL13072901-ZBR-045 (FCC)_BT	NONE	Original	09/09/2013

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Test Summary 6

Test Item	-	Test standard	Test Method/Procedure Pa					
Radiated Spurious Emissions	FCC	15.209; 15.247(d)	FCC	ANSI C63.4 – 2009 DA 00-705 Measurement Guidelines for Frequency Hopping Spread Spectrum Systems	⊠ Pass □ N/A			
IC RSS210(A8.5) IC -								
Note: This report is C2PC report for the ZBR5 Bluetooth radio to be installed into the printer host. Only the spurious emission measurement was required to be made. Please refer to following original FCC test report for other test results,								
SL11012304-ZBR-003(FCC FHSS) rev 1.0								

PS: All measurement uncertainty is not taken into consideration for all presented data.

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Measurement Uncertainty 7

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	1Hz – 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

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Measurements, examination and derived results 8

<u>8.1</u> **Radiated Measurement**

Receiver/Spectrum analyser setting

TEST	Detector	RBW	VBW	Test Distance	NOTES
Radiated Emission < 1GHz (30MHz – 1GHz)	PK/QP	120KHz	300KHz	3m	NONE
Radiated Emission > 1GHz (1GHz – 40GHz)	PK/AV	1MHz	3MHz	3m	NONE

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8.1.1 Radiated Measurement below 1GHz

Requirement(s):

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 Image: 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 b) or restricted band, emission must also comply with the radiated emission limits specified in § 15.209(a) Image: 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) Test Setup Image: Contains the highest level of the desired power, determined by the measurement method on and allowed to warm up to its normal operating condition. Procedure 1. The EUT was switched on and allowed to warm up to its normal operating condition. Procedure 1. 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 targe with a maximum emission. c. Fried	Spec	Item Requirement	Applicable
b) or restricted band, emission must also comply with the radiated emission limits specified in § 15.209(a) Test Setup Image: Support Units Support Support Units Support S		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	
Test Setup Image: Secified in § 15.209(a) Test Setup Image: Secified in § 15.209(a) Image: Secified in § 15.209(a) Image: Secified in § 15.209(a) Image: Secified in § 15.209(a) Image: Secified in § 15.209(a) Image: Secified in § 15.209(a) Image: Secified in § 15.209(a) Image: Secified in § 15.209(a) Image: Secified in § 15.209(a) Image: Secified in § 15.209(a) Image: Secified in § 15.209(a) Image: Secified in § 15.209(a) Image: Secified in § 15.209(a) Image: Secified in § 15.209(a) Image: Secified in § 15.209(a) Image: Secified in § 15.209(a) Image: Secified in § 15.209(a) Image: Secified in § 15.209(a) Image: Secified in § 15.209(a) Image: Secified in § 15.209(a) Image: Secified in § 15.209(a) Image: Secified in § 15.209(a) Image: Secified in § 15.209(a) Image: Secified in § 15.209(a) Image: Secified in § 15.209(a) Image: Secified in § 15.209(a) Image: Secified in § 15.209(a) Image: Secified in § 15.209(a) Image: Secified in § 15.209(a) Image: Secified in § 15.209(a) Image: Secified in § 15.209(a) Image: Secified in § 15.209(a) Image: Secified in § 15.209(a) Image: Secified in § 15.209(a) Image: Seci		🖂 20 dB down 🛛 30 dB down	
Test Setup 10m for <1GHz 3m for >1GHz 1-4m Yariable Test Setup 80cm Turn Table Bocm Ground Plane Ground Plane Test Receiver Image: Comparison of 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 NONE		or restricted band, emission must also comply with the radiated emission limits	\boxtimes
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. Steps 2 and 3 were repeated for the next frequency point, until all selected frequency points were measured. Remark	Test Setup	10m for <1GHz 3m for >1GHz Support Units Turn Table Socn Ground Plane Test Receiver	-
	Procedure	 The test was carried out at the selected frequency points obtained from the EUT chara Maximization of the emissions, was carried out by rotating the EUT, changing the anter polarization, and adjusting the antenna height in the following manner: a. Vertical or horizontal polarisation (whichever gave the higher emission level 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 A Quasi-peak measurement was then made for that frequency point. Steps 2 and 3 were repeated for the next frequency point, until all selected frequency 	enna l over a full n. um emission.
Posult 🛛 Doco 🗖 Ecil	Remark		
	Result	⊠ Pass □ Fail	

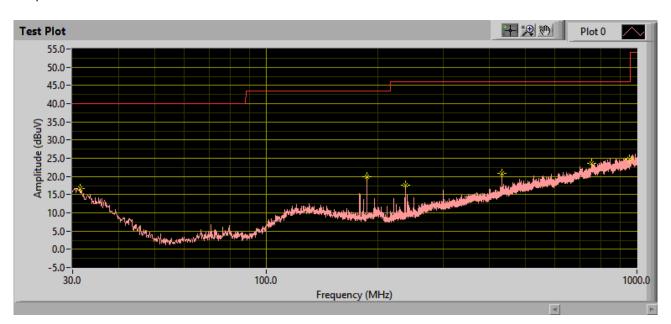
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Test specification:	Radiated Spurious Emission	Radiated Spurious Emission						
Environ Conditions:	Temp(oC):	Temp(oC): 23						
	Humidity(%):	55						
	Atmospheric(mPa):	1008	Result:	Pass				
Mains Power:	120VAC, 60Hz	120VAC, 60Hz Result:						
Test Date:	07/30/2013	07/30/2013						
Tested by:	David Zhang	David Zhang						
Remarks:	With ZBR5 Bluetooth radio to	With ZBR5 Bluetooth radio to be installed inside ZT410 Printer host						

Graph-



Test Data

Frequency (MHz)	Azimute	Polarity	Height (cm)	Antenna (dB)	Cable (dB)	Amplifier (dB)	Corrected (dBuV/m)	Limit (dBuV/m)	Margin (dB)
31.46	132.00	Н	122.00	20.70	0.50	30.00	13.46	40.00	-26.54
956.35	121.00	V	291.00	26.00	4.20	30.00	21.58	46.00	-24.42
236.85	114.00	Н	134.00	13.10	1.80	30.00	14.37	46.00	-31.63
432.07	98.00	V	108.00	18.90	2.50	30.00	17.48	46.00	-28.52
187.02	145.00	Н	100.00	13.00	1.60	30.00	16.53	43.52	-26.99
755.32	11.00	Н	150.00	23.60	3.70	30.00	20.35	46.00	-25.65

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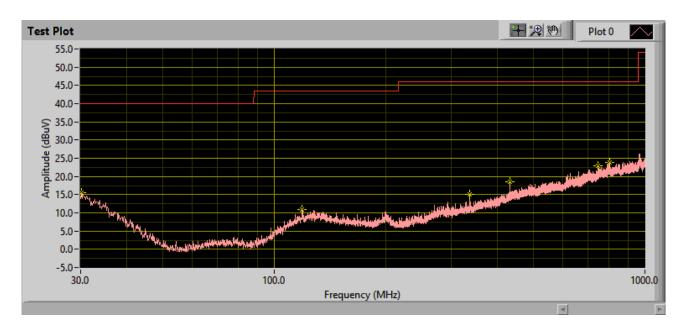
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Test specification:	Radiated Spurious Emission	Radiated Spurious Emission						
Environ Conditions:	Temp(oC):	Temp(oC): 23						
	Humidity(%):	55						
	Atmospheric(mPa):	1008	Decult	Pass				
Mains Power:	120VAC, 60Hz	120VAC, 60Hz Result:						
Test Date:	07/30/2013	07/30/2013						
Tested by:	David Zhang	David Zhang						
Remarks:	With ZBR5 Bluetooth radio to	With ZBR5 Bluetooth radio to be installed inside ZT420 Printer host						

Graph-



Test Data

Frequency (MHz)	Azimute	Polarity	Height (cm)	Antenna (dB)	Cable (dB)	Amplifier (dB)	Corrected (dBuV/m)	Limit (dBuV/m)	Margin (dB)
336.04	110.00	V	232.00	16.30	2.20	30.00	12.95	46.00	-33.05
30.12	194.00	V	112.00	21.70	0.50	30.00	13.45	40.00	-26.55
119.00	105.00	Н	100.00	15.00	1.20	30.00	8.69	43.52	-34.83
805.03	152.00	Н	104.00	24.70	3.80	30.00	21.60	46.00	-24.40
746.10	193.00	V	105.00	23.60	3.70	30.00	20.80	46.00	-25.20
431.94	113.00	V	106.00	18.90	2.50	30.00	16.40	46.00	-29.60

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8.1.2 Radiated Spurious Emissions > 1GHz & Band Edge

Requirement(s):

Spec	Item Requirement	Applicable
§ 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(a)	
§ 15.407(b)(6) RSS210(A2.5)	Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in § 15.209.	
§ 15.407(b)(7) RSS210(A2.5)	The provisions of § 15.205 apply to intentional radiators operating under this section.	
Test Setup	Ant. Tower 1-4m Variable Support Units Turn Table Socm Ground Plane Test Receiver	-
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 cha Maximization of the emissions, was carried out by rotating the EUT, changing the ar polarization, and adjusting the antenna height in the following manner: a. Vertical or horizontal polarisation (whichever gave the higher emission lev 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 maxin A Quasi-peak measurement was then made for that frequency point. Steps 2 and 3 were repeated for the next frequency point, until all selected frequency measured. 	aracterisation. ntenna rel over a full on. num emission.
Remark	NONE	
Result	⊠ Pass □ Fail	
Test Plot 🛛 🖂 Ye	(See below) □ N/A s (See below) □ N/A gue Expressway, Milpitas, CA 95035, USA • Phone: (+1) 408 526 1188 • Facsimile (+1) 408	526 1088



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Test Result for ZT410 under Basic Mode

Low Channel @ 2402MHz @ 3 Meter

Frequency (MHz)	Reading (dBuV/m)	Direction (degree)	Height (cm)	Polarity (H/V)	Antenna Loss (dB)	Cable Loss (dB)	Amplifier (dB)	Corrected Reading (dBuV/m)	15.247/15.209 AV Limit @ 3m (dBuV/m)	Margin (dBuV/m)	Detector (pk/avg)	
1930.38	52.00	-	-	Н	26.75	2.15	32.03	48.86	54	-5.14	PK	
7938.40	43.37	-	-	V	36.54	3.23	32.20	50.94	54	-3.06	PK	
Remark		Emission was scanned up to 25GHz; no emissions were detected above the noise floor which was at least 20dB below the specification limit. If the emission PK level is within Average limit, then the maximization and average measurement are not										

Mid Channel @ 2441MHz @ 3 Meter

Frequency (MHz)	Reading (dBuV/m)	Direction (degree)	Height (cm)	Polarity (H/V)	Antenna Loss (dB)	Cable Loss (dB)	Amplifier (dB)	Corrected Reading (dBuV/m)	15.247/15.209 AV Limit @ 3m (dBuV/m)	Margin (dBuV/m)	Detector (pk/avg)
1579.16	47.14	-	-	Н	25.54	1.99	31.99	42.68	54	-11.32	PK
6893.79	43.47	-	-	Н	34.97	4.04	32.38	50.11	54	-3.89	PK
7915.83	44.04	-	-	V	36.52	3.25	32.21	51.60	54	-2.40	PK
11901.80	36.86	-	-	V	40.94	5.85	32.38	51.27	54	-2.73	PK
Remark	Emission was scanned up to 25GHz; no emissions were detected above the noise floor which was at least 20dB below the specification limit. If the emission PK level is within Average limit, then the maximization and average measurement are not performed.										

High Channel @ 2480MHz @ 3 Meter

Frequency (MHz)	Reading (dBuV/m)	Direction (degree)	Height (cm)	Polarity (H/V)	Antenna Loss (dB)	Cable Loss (dB)	Amplifier (dB)	Corrected Reading (dBuV/m)	15.247/15.209 AV Limit @ 3m (dBuV/m)	Margin (dBuV/m)	Detector (pk/avg)
1613.23	47.54	-	-	Н	25.65	2.01	31.99	43.21	54	-10.79	PK
7132.26	43.18	-	-	V	35.36	3.93	32.41	50.06	54	-3.94	PK
Remark	specificatio	Emission was scanned up to 25GHz; no emissions were detected above the noise floor which was at least 20dB below the specification limit. If the emission PK level is within Average limit, then the maximization and average measurement are not performed.									

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IC ID	3798B-ZBR5QLN

Band Edge @ Con-TX mode @ 2402MHz @ 3 Meter

Frequency (MHz)	Reading (dBuV/m)	Direction (degree)	Height (cm)	Polarity (H/V)	Antenna Loss (dB)	Cable Loss (dB)	Amplifier (dB)	Corrected Reading (dBuV/m)	15.247/15.209 AV Limit @ 3m (dBuV/m)	Margin (dBuV/m)	Detector (pk/avg)
2390.00	49.76	35	145	Н	28.17	2.45	32.07	48.30	54	-5.70	PK
2390.00	49.42	35	145	V	28.17	2.45	32.07	47.96	54	-6.04	PK
Remark	NONE										

Band Edge @ Con-TX mode @ 2402MHz @ 3 Meter

Frequency (MHz)	Reading (dBuV/m)	Direction (degree)	Height (cm)	Polarity (H/V)	Antenna Loss (dB)	Cable Loss (dB)	Amplifier (dB)	Corrected Reading (dBuV/m)	15.247/15.209 AV Limit @ 3m (dBuV/m)	Margin (dBuV/m)	Detector (pk/avg)
2390.00	51.16	-	-	Н	28.17	2.45	32.07	49.70	54	-4.30	PK
2390.00	49.57	-	-	V	28.17	2.45	32.07	48.11	54	-5.89	PK
Remark	NONE										

Band Edge @ Con-TX mode @ 2480MHz @ 3 Meter

Frequency (MHz)	Reading (dBuV/m)	Direction (degree)	Height (cm)	Polarity (H/V)	Antenna Loss (dB)	Cable Loss (dB)	Amplifier (dB)	Corrected Reading (dBuV/m)	15.247/15.209 AV Limit @ 3m (dBuV/m)	Margin (dBuV/m)	Detector (pk/avg)
2483.50	58.15	0	120	Н	28.45	2.51	32.08	57.03	74 (PK limit)	-16.97	PK
2483.50	44.73	0	120	Н	28.45	2.51	32.08	43.61	54	-10.39	AV
2483.50	49.27	-	-	V	28.45	2.51	32.08	48.15	54	-5.85	PK
Remark	NONE	-									

Band Edge @ Con-TX mode @ 2480MHz @ 3 Meter

Frequency (MHz)	Reading (dBuV/m)	Direction (degree)	Height (cm)	Polarity (H/V)	Antenna Loss (dB)	Cable Loss (dB)	Amplifier (dB)	Corrected Reading (dBuV/m)	15.247/15.209 AV Limit @ 3m (dBuV/m)	Margin (dBuV/m)	Detector (pk/avg)
2390.00	51.16	-	-	Н	28.17	2.45	32.07	49.70	54	-4.30	PK
2390.00	58.89	340	100	V	28.17	2.45	32.07	57.43	74 (PK limit)	-16.57	PK
2390.00	39.89	340	100	V	28.17	2.45	32.07	38.43	54	-15.57	AV
Remark	NONE										

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IC ID	3798B-ZBR5QLN

Test Result for ZT410 under EDR Mode

Low Channel @ 2402MHz @ 3 Meter

Frequency (MHz)	Reading (dBuV/m)	Direction (degree)	Height (cm)	Polarity (H/V)	Antenna Loss (dB)	Cable Loss (dB)	Amplifier (dB)	Corrected Reading (dBuV/m)	15.247/15.209 AV Limit @ 3m (dBuV/m)	Margin (dBuV/m)	Detector (pk/avg)	
1579.16	45.58	-	-	Н	25.54	1.99	31.99	41.12	54	-12.88	PK	
9346.69	40.79	-	-	Н	38.62	3.72	32.32	50.81	54	-3.19	PK	
7336.67	43.21	-	-	V	35.77	3.75	32.44	50.29	54	-3.71	PK	
11833.67	36.89	-	-	V	40.90	5.79	32.40	51.18	54	-2.82	PK	
Remark	Emission was scanned up to 25GHz; no emissions were detected above the noise floor which was at least 20dB below the specification limit. If the emission PK level is within Average limit, then the maximization and average measurement are not performed.											

Mid Channel @ 2441MHz @ 3 Meter

	Frequency (MHz)	Reading (dBuV/m)	Direction (degree)	Height (cm)	Polarity (H/V)	Antenna Loss (dB)	Cable Loss (dB)	Amplifier (dB)	Corrected Reading (dBuV/m)	15.247/15.209 AV Limit @ 3m (dBuV/m)	Margin (dBuV/m)	Detector (pk/avg)	
	1597.74	47.60	-	-	Н	25.60	2.00	31.99	43.21	54	-10.79	PK	
	8615.78	42.83	-	-	Н	37.23	3.29	32.37	50.97	54	-3.03	PK	
Γ	10445.46	39.26	-	-	V	40.14	4.74	32.82	51.32	54	-2.68	PK	
	Remark	Emission was scanned up to 25GHz; no emissions were detected above the noise floor which was at least 20dB below the specification limit. If the emission PK level is within Average limit, then the maximization and average measurement are not performed.											

High Channel @ 2480MHz @ 3 Meter

Frequency (MHz)	Reading (dBuV/m)	Direction (degree)	Height (cm)	Polarity (H/V)	Antenna Loss (dB)	Cable Loss (dB)	Amplifier (dB)	Corrected Reading (dBuV/m)	15.247/15.209 AV Limit @ 3m (dBuV/m)	Margin (dBuV/m)	Detector (pk/avg)	
1653.86	47.21	-	-	Н	25.79	2.03	32.00	43.03	54	-10.97	PK	
4972.49	48.21	-	-	Н	32.87	3.75	32.55	52.28	54	-1.72	PK	
5545.09	41.88	-	-	V	33.45	3.92	32.47	46.78	54	-7.22	PK	
Remark	Emission was scanned up to 25GHz; no emissions were detected above the noise floor which was at least 20dB below the specification limit. If the emission PK level is within Average limit, then the maximization and average measurement are not performed.											

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IC ID	3798B-ZBR5QLN

Band Edge @ Con-TX mode @ 2402MHz @ 3 Meter

Frequency (MHz)	Reading (dBuV/m)	Direction (degree)	Height (cm)	Polarity (H/V)	Antenna Loss (dB)	Cable Loss (dB)	Amplifier (dB)	Corrected Reading (dBuV/m)	15.247/15.209 AV Limit @ 3m (dBuV/m)	Margin (dBuV/m)	Detector (pk/avg)
2390.00	44.42	-	-	Н	28.17	2.45	32.07	42.96	54	-11.04	PK
2390.00	42.78	-	-	V	28.17	2.45	32.07	41.32	54	-12.68	PK
Remark	NONE										

Band Edge @ Con-TX mode @ 2402MHz @ 3 Meter

Frequency (MHz)	Reading (dBuV/m)	Direction (degree)	Height (cm)	Polarity (H/V)	Antenna Loss (dB)	Cable Loss (dB)	Amplifier (dB)	Corrected Reading (dBuV/m)	15.247/15.209 AV Limit @ 3m (dBuV/m)	Margin (dBuV/m)	Detector (pk/avg)
2389.55	46.81	-	-	Н	28.17	2.44	32.07	45.35	54	-8.65	PK
2390.46	44.65	-	-	V	28.17	2.45	32.07	43.19	54	-10.81	PK
Remark	NONE										

Band Edge @ Con-TX mode @ 2480MHz @ 3 Meter

Frequency (MHz)	Reading (dBuV/m)	Direction (degree)	Height (cm)	Polarity (H/V)	Antenna Loss (dB)	Cable Loss (dB)	Amplifier (dB)	Corrected Reading (dBuV/m)	15.247/15.209 AV Limit @ 3m (dBuV/m)	Margin (dBuV/m)	Detector (pk/avg)
2483.50	64.35	0	100	Н	28.45	2.51	32.08	63.23	74 (PK limit)	-10.77	PK
2483.50	47.82	0	100	Н	28.45	2.51	32.08	46.70	54	-7.30	AV
2483.50	53.62	-	-	V	28.45	2.51	32.08	52.50	54	-1.50	PK
Remark	NONE										

Band Edge @ Con-TX mode @ 2480MHz @ 3 Meter

Frequency (MHz)	Reading (dBuV/m)	Direction (degree)	Height (cm)	Polarity (H/V)	Antenna Loss (dB)	Cable Loss (dB)	Amplifier (dB)	Corrected Reading (dBuV/m)	15.247/15.209 AV Limit @ 3m (dBuV/m)	Margin (dBuV/m)	Detector (pk/avg)
2483.50	62.12	0	100	Н	28.45	2.51	32.08	61.00	74 (PK limit)	-13.00	PK
2483.50	34.96	0	100	Н	28.45	2.51	32.08	33.84	54	-20.16	AV
2390.46	53.97	-	-	V	28.17	2.45	32.07	52.51	54	-1.49	PK
Remark	NONE										

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IC ID	3798B-ZBR5QLN

Test Result with both N radio and ZBR5 BT radio module transmitting simultaneously in Printer host: ZT410

Frequency (MHz)	Reading (dBuV/m)	Direction (degree)	Height (cm)	Polarity (H/V)	Antenna Loss (dB)	Cable Loss (dB)	Amplifier (dB)	Corrected Reading (dBuV/m)	15.247/15.209 AV Limit @ 3m (dBuV/m)	Margin (dBuV/m)	Detector (pk/avg)	
1614.61	47.63	-	-	Н	25.66	2.01	31.99	43.30	54	-10.70	PK	
7201.79	42.91	-	-	Н	35.50	3.87	32.42	49.86	54	-4.14	PK	
10404.19	38.75	-	-	Н	40.02	4.71	32.82	50.66	54	-3.34	PK	
4851.09	46.59	-	-	V	32.74	3.71	32.53	50.50	54	-3.50	PK	
10438.26	39.18	-	-	V	40.12	4.73	32.82	51.21	54	-2.79	PK	
Remark	Emission was scanned up to 25GHz; no emissions were detected above the noise floor which was at least 20dB below the specification limit. If the emission PK level is within Average limit, then the maximization and average measurement are not performed.											

N radio in 802.11b mid CH + ZBR5 in GFSK-Hopping Mode, Con TX mode @ 3 Meter

N radio in 802.11b mid CH + ZBR5 in 8DPSK-Hopping Mode, Con TX mode @ 3 Meter

Frequency (MHz)	Reading (dBuV/m)	Direction (degree)	Height (cm)	Polarity (H/V)	Antenna Loss (dB)	Cable Loss (dB)	Amplifier (dB)	Corrected Reading (dBuV/m)	15.247/15.209 AV Limit @ 3m (dBuV/m)	Margin (dBuV/m)	Detector (pk/avg)		
1885.77	53.69	-	-	Н	26.59	2.13	32.03	50.39	54	-3.61	PK		
7915.83	43.71	-	-	Н	36.52	3.25	32.21	51.27	54	-2.73	PK		
10402.81	38.61	-	-	Н	40.02	4.71	32.82	50.51	54	-3.49	PK		
5973.95	43.14	-	-	V	33.87	4.05	32.37	48.70	54	-5.30	PK		
10402.81	37.85	-	-	V	40.02	4.71	32.82	49.75	54	-4.25	PK		
11867.74	37.47	-	-	V	40.92	5.82	32.39	51.82	54	-2.18	PK		
Remark	specification	Emission was scanned up to 25GHz; no emissions were detected above the noise floor which was at least 20dB below the specification limit. If the emission PK level is within Average limit, then the maximization and average measurement are not performed.											

PS: 802.11b Mid channel was determined to be the worst case from N-Radio spurious emission testing. Therefore it was chosen for this co-location testing.

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Test Result for ZT420 under Basic Mode

Low Channel @ 2402MHz @ 3 Meter

Frequency (MHz)	Reading (dBuV/m)	Direction (degree)	Height (cm)	Polarity (H/V)	Antenna Loss (dB)	Cable Loss (dB)	Amplifier (dB)	Corrected Reading (dBuV/m)	15.247/15.209 AV Limit @ 3m (dBuV/m)	Margin (dBuV/m)	Detector (pk/avg)
7915.83	43.54	-	-	Н	36.52	3.25	32.21	51.10	54	-2.90	PK
10505.01	38.84	-	-	V	40.30	4.78	32.83	51.10	54	-2.90	PK
Remark	Emission was scanned up to 25GHz; no emissions were detected above the noise floor which was at least 20dB below the specification limit. If the emission PK level is within Average limit, then the maximization and average measurement are not performed.										

Mid Channel @ 2441MHz @ 3 Meter

Frequency (MHz)	Reading (dBuV/m)	Direction (degree)	Height (cm)	Polarity (H/V)	Antenna Loss (dB)	Cable Loss (dB)	Amplifier (dB)	Corrected Reading (dBuV/m)	15.247/15.209 AV Limit @ 3m (dBuV/m)	Margin (dBuV/m)	Detector (pk/avg)
7881.76	43.63	-	-	Н	36.48	3.28	32.23	51.16	54	-2.84	PK
9108.22	41.52	-	-	Н	38.19	3.47	32.32	50.87	54	-3.13	PK
11867.74	36.14	-	-	V	40.92	5.82	32.39	50.49	54	-3.51	PK
12242.48	37.04	-	-	V	40.22	6.10	32.11	51.26	54	-2.74	PK
Remark		on limit. If th	•						r which was at le n and average m		

High Channel @ 2480MHz @ 3 Meter

Frequency (MHz)	Reading (dBuV/m)	Direction (degree)	Height (cm)	Polarity (H/V)	Antenna Loss (dB)	Cable Loss (dB)	Amplifier (dB)	Corrected Reading (dBuV/m)	15.247/15.209 AV Limit @ 3m (dBuV/m)	Margin (dBuV/m)	Detector (pk/avg)	
1539.08	47.55	-	-	Н	25.40	1.98	31.98	42.94	54	-11.06	PK	
7915.83	43.42	-	-	Н	36.52	3.25	32.21	50.98	54	-3.02	PK	
8597.19	42.65	-	-	V	37.19	3.29	32.38	50.75	54	-3.25	PK	
Remark	specificatio	Emission was scanned up to 25GHz; no emissions were detected above the noise floor which was at least 20dB below the specification limit. If the emission PK level is within Average limit, then the maximization and average measurement are not performed.										

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Band Edge @ Con-TX mode @ 2402MHz @ 3 Meter

Frequency (MHz)	Reading (dBuV/m)	Direction (degree)	Height (cm)	Polarity (H/V)	Antenna Loss (dB)	Cable Loss (dB)	Amplifier (dB)	Corrected Reading (dBuV/m)	15.247/15.209 AV Limit @ 3m (dBuV/m)	Margin (dBuV/m)	Detector (pk/avg)
2390.18	45.02	-	-	Н	28.17	2.45	32.07	43.56	54	-10.44	PK
2389.36	44.94	-	-	V	28.17	2.44	32.07	43.48	54	-10.52	PK
Remark	NONE										

Band Edge @ Con-TX mode @ 2402MHz @ 3 Meter

Frequency (MHz)	Reading (dBuV/m)	Direction (degree)	Height (cm)	Polarity (H/V)	Antenna Loss (dB)	Cable Loss (dB)	Amplifier (dB)	Corrected Reading (dBuV/m)	15.247/15.209 AV Limit @ 3m (dBuV/m)	Margin (dBuV/m)	Detector (pk/avg)
2390.26	45.69	-	-	Н	28.17	2.45	32.07	44.23	54	-9.77	PK
2390.20	44.17	-	-	V	28.17	2.45	32.07	42.71	54	-11.29	PK
Remark	NONE										

Band Edge @ Con-TX mode @ 2480MHz @ 3 Meter

Frequency (MHz)	Reading (dBuV/m)	Direction (degree)	Height (cm)	Polarity (H/V)	Antenna Loss (dB)	Cable Loss (dB)	Amplifier (dB)	Corrected Reading (dBuV/m)	15.247/15.209 AV Limit @ 3m (dBuV/m)	Margin (dBuV/m)	Detector (pk/avg)
7915.83	43.34	-	-	Н	36.52	3.25	32.21	50.90	54	-3.10	PK
7438.88	43.16	-	-	V	35.98	3.66	32.46	50.34	54	-3.66	PK
Remark	NONE										

Band Edge @ Con-TX mode @ 2480MHz @ 3 Meter

Frequency (MHz)	Reading (dBuV/m)	Direction (degree)	Height (cm)	Polarity (H/V)	Antenna Loss (dB)	Cable Loss (dB)	Amplifier (dB)	Corrected Reading (dBuV/m)	15.247/15.209 AV Limit @ 3m (dBuV/m)	Margin (dBuV/m)	Detector (pk/avg)
2483.50	55.62	0	150	Н	28.45	2.51	32.08	54.50	74 (PK limit0	-19.50	PK
2483.50	34.10	0	150	Н	28.45	2.51	32.08	32.98	54	-21.02	AV
2483.50	55.94	0	140	V	28.45	2.51	32.08	54.82	74 (PK limit0	-19.18	PK
2483.50	34.07	0	140	V	28.45	2.51	32.08	32.95	54	-21.05	AV
Remark	NONE										

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Test Result for ZT420 under EDR Mode

Low Channel @ 2402MHz @ 3 Meter

Frequency (MHz)	Reading (dBuV/m)	Direction (degree)	Height (cm)	Polarity (H/V)	Antenna Loss (dB)	Cable Loss (dB)	Amplifier (dB)	Corrected Reading (dBuV/m)	15.247/15.209 AV Limit @ 3m (dBuV/m)	Margin (dBuV/m)	Detector (pk/avg)		
1718.84	50.08	-	-	Н	26.02	2.06	32.01	46.15	54	-7.85	PK		
1923.25	51.85	-	-	Н	26.72	2.15	32.03	48.69	54	-5.31	PK		
7374.15	43.80	-	-	Н	35.85	3.72	32.45	50.92	54	-3.08	PK		
7919.24	43.84	-	-	V	36.52	3.25	32.21	51.40	54	-2.60	PK		
10815.03	38.90	-	-	V	40.36	5.02	32.75	51.53	54	-2.47	PK		
Remark		mission was scanned up to 25GHz; no emissions were detected above the noise floor which was at least 20dB below the pecification limit. If the emission PK level is within Average limit, then the maximization and average measurement are not											

Mid Channel @ 2441MHz @ 3 Meter

Frequency (MHz)	Reading (dBuV/m)	Direction (degree)	Height (cm)	Polarity (H/V)	Antenna Loss (dB)	Cable Loss (dB)	Amplifier (dB)	Corrected Reading (dBuV/m)	15.247/15.209 AV Limit @ 3m (dBuV/m)	Margin (dBuV/m)	Detector (pk/avg)	
1836.21	48.05	-	-	Н	26.42	2.11	32.02	44.56	54	-9.44	PK	
7832.20	43.16	-	-	Н	36.43	3.32	32.26	50.65	54	-3.35	PK	
7491.52	43.23	-	-	V	36.08	3.62	32.47	50.46	54	-3.54	PK	
Remark	Emission was scanned up to 25GHz; no emissions were detected above the noise floor which was at least 20dB below the specification limit. If the emission PK level is within Average limit, then the maximization and average measurement are not performed.											

High Channel @ 2480MHz @ 3 Meter

Frequency (MHz)	Reading (dBuV/m)	Direction (degree)	Height (cm)	Polarity (H/V)	Antenna Loss (dB)	Cable Loss (dB)	Amplifier (dB)	Corrected Reading (dBuV/m)	15.247/15.209 AV Limit @ 3m (dBuV/m)	Margin (dBuV/m)	Detector (pk/avg)
1631.80	46.93	-	-	Н	25.72	2.02	32.00	42.67	54	-11.33	PK
8241.02	42.85	-	-	V	36.79	3.22	32.27	50.59	54	-3.41	PK
Remark		on limit. If th							which was at le and average m		

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Band Edge @ Con-TX mode @ 2402MHz @ 3 Meter

Frequency (MHz)	Reading (dBuV/m)	Direction (degree)	Height (cm)	Polarity (H/V)	Antenna Loss (dB)	Cable Loss (dB)	Amplifier (dB)	Corrected Reading (dBuV/m)	15.247/15.209 AV Limit @ 3m (dBuV/m)	Margin (dBuV/m)	Detector (pk/avg)
2390.09	45.05	-	-	Н	28.17	2.45	32.07	43.59	54	-10.41	PK
2390.09	44.79	-	-	V	28.17	2.45	32.07	43.33	54	-10.67	PK
Remark	NONE										

Band Edge @ Con-TX mode @ 2402MHz @ 3 Meter

Frequency (MHz)	Reading (dBuV/m)	Direction (degree)	Height (cm)	Polarity (H/V)	Antenna Loss (dB)	Cable Loss (dB)	Amplifier (dB)	Corrected Reading (dBuV/m)	15.247/15.209 AV Limit @ 3m (dBuV/m)	Margin (dBuV/m)	Detector (pk/avg)
2389.00	46.31	-	-	Н	28.17	2.44	32.07	44.85	54	-9.15	PK
2390.26	44.11	-	-	V	28.17	2.45	32.07	42.65	54	-11.35	PK
Remark	NONE										

Band Edge @ Con-TX mode @ 2480MHz @ 3 Meter

Frequency (MHz)	Reading (dBuV/m)	Direction (degree)	Height (cm)	Polarity (H/V)	Antenna Loss (dB)	Cable Loss (dB)	Amplifier (dB)	Corrected Reading (dBuV/m)	15.247/15.209 AV Limit @ 3m (dBuV/m)	Margin (dBuV/m)	Detector (pk/avg)
2438.50	63.96	15	135	Н	28.32	2.48	32.08	62.68	74 (PK limit)	-11.32	PK
2438.50	46.28	15	135	Н	28.32	2.48	32.08	45.00	54	-9.00	AV
2438.50	52.13	37	120	V	28.32	2.48	32.08	50.85	54	-3.15	PK
2438.50	38.09	37	120	V	28.32	2.48	32.08	36.81	54	-17.19	AV
Remark	NONE										

Band Edge @ Con-TX mode @ 2480MHz @ 3 Meter

Frequency (MHz)	Reading (dBuV/m)	Direction (degree)	Height (cm)	Polarity (H/V)	Antenna Loss (dB)	Cable Loss (dB)	Amplifier (dB)	Corrected Reading (dBuV/m)	15.247/15.209 AV Limit @ 3m (dBuV/m)	Margin (dBuV/m)	Detector (pk/avg)
2438.50	60.77	0	100	Н	28.32	2.48	32.08	59.49	74 (PK limit)	-14.51	PK
2438.50	34.19	0	100	Н	28.32	2.48	32.08	32.91	54	-21.09	AV
2438.50	48.77	-	-	V	28.32	2.48	32.08	47.49	54	-6.51	PK
Remark	NONE										

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Test Result with both N radio and ZBR5 BT radio module transmitting simultaneously in Printer host: ZT420

N radio in 802.11b mid CH + ZBR5 in GFSK-Hopping Mode, Con TX mode @ 3 Meter

Frequency (MHz)	Reading (dBuV/m)	Direction (degree)	Height (cm)	Polarity (H/V)	Antenna Loss (dB)	Cable Loss (dB)	Amplifier (dB)	Corrected Reading (dBuV/m)	15.247/15.209 AV Limit @ 3m (dBuV/m)	Margin (dBuV/m)	Detector (pk/avg)
4849.70	47.20	-	-	Н	32.73	3.71	32.53	51.11	54	-2.89	PK
7507.01	43.74	-	-	Н	36.11	3.60	32.47	50.99	54	-3.01	PK
7915.83	43.79	-	-	Н	36.52	3.25	32.21	51.35	54	-2.65	PK
4873.99	55.10	110	134	V	32.76	3.71	32.53	59.04	74 (PK limit)	-14.96	PK
4873.99	40.06	110	134	V	32.76	3.71	32.53	44.00	54	-10.00	AV
7575.15	43.79	-	-	V	36.18	3.55	32.42	51.09	54	-2.91	PK
Remark		on limit. If th	•						r which was at le n and average m		

N radio in 802.11b mid CH + ZBR5 in 8DPSK-Hopping Mode, Con TX mode @ 3 Meter

Frequency (MHz)	Reading (dBuV/m)	Direction (degree)	Height (cm)	Polarity (H/V)	Antenna Loss (dB)	Cable Loss (dB)	Amplifier (dB)	Corrected Reading (dBuV/m)	15.247/15.209 AV Limit @ 3m (dBuV/m)	Margin (dBuV/m)	Detector (pk/avg)
3189.36	44.34	-	-	Н	30.42	2.88	32.35	45.29	54	-8.71	PK
7983.97	43.29	-	-	Н	36.58	3.19	32.17	50.90	54	-3.10	PK
7915.83	43.21	-	-	V	36.52	3.25	32.21	50.77	54	-3.23	PK
Remark		on limit. If th							which was at le and average m		

PS: 802.11b Mid channel was determined to be the worst case from N-Radio spurious emission testing. Therefore it was chosen for this co-location testing.

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Annex A. TEST INSTRUMENT & METHOD

Annex A.i. TEST INSTRUMENTATION & GENERAL PROCEDURES

Instrument	Model	Serial #	Cal Date	Cal Cycle	Cal Due	In use
Conducted Emissions			J	1	I	
R & S Receiver	ESIB 40	100179	04/20/2013	1 Year	04/20/2014	~
R&S LISN	ESH2-Z5	861741/013	05/18/2013	1 Year	05/18/2014	~
CHASE LISN	MN2050B	1018	07/24/2013	1 Year	07/24/2014	~
Sekonic Hygro Hermograph	ST-50	HE01-000092	05/25/2013	1 Year	05/25/2014	~
Radiated Emissions						
R & S Receiver	ESL6	100178	03/01/2013	1 Year	03/01/2014	~
R & S Receiver	ESIB 40	100179	04/20/2013	1 Year	04/20/2014	
Bi-Log antenna (30MHz~2GHz)	JB1	A030702	02/09/2013	1 Year	02/09/2014	~
Horn Antenna (1-26.5GHz)	3115	10SL0059	04/26/2013	1 Year	04/26/2014	~
Horn Antenna (18-40 GHz)	AH-840	101013	04/23/2013	1 Year	04/23/2014	v
Pre-Amplifier (1-26.5GHz)	8449B	3008A00715	05/30/2013	1 Year	05/30/2014	~
Microwave Preamplifier (18-40 GHz)	PA-840	181251	05/30/2013	1 Year	05/30/2014	•
3 Meters SAC	3M	N/A	10/13/2012	1 Year	10/13/2013	
10 Meters SAC	10M	N/A	06/05/2013	1 Year	06/05/2014	v
Sekonic Hygro Hermograph	ST-50	HE01-000092	05/25/2013	1 Year	05/25/2014	~
Sekonic Hygro Hermograph	ST-50	HE01-000092	05/25/2013	1 Year	05/25/2014	~
Power Analyzer	PACS-1	72394	5/19/2013	1 Year	05/19/2014	~
Sekonic Hygro Hermograph	ST-50	HE01-000092	05/25/2013	1 Year	05/25/2014	~

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Annex B. TEST SETUP AND SUPPORTING EQUIPMENT

EUT TEST CONDITIONS

Annex B. i. SUPPORTING EQUIPMENT DESCRIPTION

The following is a description of supporting equipment and details of cables used with the EUT.

Equipment Description (Including Brand Name)	Model & Serial Number	Cable Description (List Length, Type & Purpose)
N/A	N/A	N/A

NOTE: No special supporting equipment are used or needed during testing to achieve compliance.

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Annex C. SIEMIC Accreditation

Accreditations	Document	Scope / Remark
ISO 17025 (A2LA)	R	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	B	Radio & Telecommunications Terminal Equipment: EN45001 – EN ISO/IEC 17025
	B	Electromagnetic Compatibility: EN45001 – EN ISO/IEC 17025
Singapore iDA CB(Certification Body)	đđ	Phase I, Phase II
Vietnam MIC CAB Accreditation	围	Please see the document for the detailed scope
HongKong 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
	A	Telecom: CS-03 Part I, II, V, VI, VII, VIII

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Japan Recognized Certification Body Designation	1 1 1 1	 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
		EMI: KCC Notice 2008-39, RRL Notice 2008-3: CA Procedures for EMI KN22: Test Method for EMIEMS: 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
Korea CAB Accreditation	đ	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	Ā	LP0002, PSTN01, ADSL01, ID0002, IS6100, CNS14336, PLMN07, PLMN01, PLMN08
Taiwan BSMI CAB Recognition	A	CNS 13438
Japan VCCI	Ð	R-3083: Radiation 3 meter site C-3421: Main Ports Conducted Interference Measurement T-1597: Telecommunication Ports Conducted Interference Measuremet
Australia CAB Regocnition		EMC: AS/NZS CISPR 11, AS/NZS CISPR 14.1, AS/NZS CISPR22, AS/NZS 61000.6.3, AS/NZS 61000.6.4
		Radiocommunications: 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	R	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

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