

# Honeywell

## XYR6000 802.15.4 2.4 GHz DSSS-FH Radio

Part Number: 50025034-001, REV. C1

April 3, 2008

Report No. HONE00027

Report Prepared By



[www.nwemc.com](http://www.nwemc.com)  
1-888-EMI-CERT

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EMC Test Report

**Certificate of Test**  
**Issue Date: April 3, 2008**  
**Honeywell**  
**Model: XYR6000 15.4 GHz Radio with LPF modified**

Emissions					
Test Description	Specification	Test Method	Pass	Fail	
Band Edge Compliance	FCC 15.247 (DTS):2007	ANSI C63.4:2003 KDB No. 558074	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Channel Spacing	FCC 15.247 (DTS):2007	ANSI C63.4:2003 KDB No. 558074	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Number of Hopping Frequencies	FCC 15.247 (DTS):2007	ANSI C63.4:2003 KDB No. 558074	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Occupied Bandwidth	FCC 15.247 (DTS):2007	ANSI C63.4:2003 KDB No. 558074	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Output Power	FCC 15.247 (DTS):2007	ANSI C63.4:2003 KDB No. 558074	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Power Spectral Density	FCC 15.247 (DTS):2007	ANSI C63.4:2003 KDB No. 558074	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Spurious Radiated Emissions	FCC 15.247(d) Spurious Radiated Emissions	ANSI C63.4:2003	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Dwell Time	FCC 15.247 (DTS):2007	ANSI C63.4:2003 DA 00-705:2000	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Spurious Conducted Emissions	FCC 15.247 (DTS):2007	ANSI C63.4:2003 DA 00-705:2000	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

**Modifications made to the product**

See the Modifications section of this report

**Test Facility**

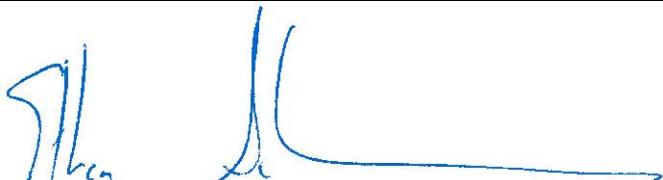
The measurement facility used to collect the data is located at:

Northwest EMC, Inc.  
41 Tesla  
Irvine, CA 92618

Phone: (949) 861-8918    Fax: (949) 861-8923

This site has been fully described in a report filed with and accepted by the FCC (Federal Communications Commission) and Industry Canada.

**Approved By:**



Ethan Schoonover, Sultan Lab Manager



NVLAP Lab Code: 200676-0

*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.*

*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. This Report may only be duplicated in its entirety. 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.*

Revision Number	Description	Date	Page Number
00	None		

**FCC:** Accredited by NVLAP for performance of FCC radio, digital, and ISM device testing. Our Open Area Test Sites, certification chambers, and conducted measurement facilities have been fully described in reports filed with the FCC and accepted by the FCC in letters maintained in our files. Northwest EMC has been accredited by ANSI to ISO / IEC Guide 65 as a product certifier. We have been designated by the FCC as a Telecommunications Certification Body (TCB). This allows Northwest EMC to certify transmitters to FCC specifications in accordance with 47 CFR 2.960 and 2.962.



**NVLAP:** Northwest EMC, Inc. is accredited under the United States Department of Commerce, National Institute of Standards and Technology, and National Voluntary Laboratory Accreditation Program for satisfactory compliance with the requirements of ISO/IEC 17025 for Testing Laboratories. The NVLAP accreditation encompasses Electromagnetic Compatibility Testing in accordance with the European Union EMC Directive 2004/108/EC, and ANSI C63.4. Additionally, Northwest EMC is accredited by NVLAP to perform radio testing in accordance with the European Union R&TTE Directive 1999/5/EEC, the requirements of FCC, and the RSS radio standards for Industry Canada.



NVLAP LAB CODE 200629-0  
NVLAP LAB CODE 200630-0  
NVLAP LAB CODE 200676-0  
NVLAP LAB CODE 200761-0

**Industry Canada:** Accredited by NVLAP for performance of Industry Canada RSS and ICES testing. Our Open Area Test Sites and certification chambers comply with RSS 212, Issue 1 (Provisional) and have been filed with Industry Canada and accepted. Northwest EMC has been accredited by ANSI to ISO / IEC Guide 65 as a product certifier. We have been designated by NIST and recognized by Industry Canada as a Certification Body (CB) per the APEC Mutual Recognition Arrangement (MRA). This allows Northwest EMC to certify transmitters to Industry Canada technical requirements.



**CAB:** Designated by NIST and validated by the European Commission as a Conformity Assessment Body (CAB) to conduct tests and approve products to the EMC directive and transmitters to the R&TTE directive, as described in the U.S. - EU Mutual Recognition Agreement.



**TÜV Product Service:** Included in TÜV Product Service Group's Listing of Recognized Laboratories. It qualifies in connection with the TÜV Certification after Recognition of Agent's Testing Program for the product categories and/or standards shown in TÜV's current Listing of CARAT Laboratories, available from TÜV. A certificate was issued to represent that this laboratory continues to meet TÜV's CARAT Program requirements. Certificate No. USA0604C.



**TÜV Rheinland:** Authorized to carryout EMC tests by order and under supervision of TÜV Rheinland. This authorization is based on "Conditions for EMC-Subcontractors" of November 1992.



**NEMKO:** Assessed and accredited by NEMKO (Norwegian testing and certification body) for European emissions and immunity testing. As a result of NEMKO's laboratory assessment, they will accept test results from Northwest EMC, Inc. for product certification (Authorization No. ELA 119).



**Australia/New Zealand:** The National Association of Testing Authorities (NATA), Australia has been appointed by the ACA as an accreditation body to accredit test laboratories and competent bodies for EMC standards. Accredited test reports or assessments by competent bodies must carry the NATA logo. Test reports made by an overseas laboratory that has been accredited for the relevant standards by an overseas accreditation body that has a Mutual Recognition Agreement (MRA) with NATA are also accepted as technical grounds for product conformity. The report should be endorsed with the respective logo of the accreditation body (NVLAP).



**VCCI:** Accepted as an Associate Member to the VCCI, Acceptance No. 564. Conducted and radiated measurement facilities have been registered in accordance with Regulations for Voluntary Control Measures, Article 8. (Registration Numbers. - Hillsboro: C-1071, R-1025, C-2687, T-289, and R-2318, Irvine: R-1943, C-2766, and T-298, Sultan: R-871, C-1784, and T-294).



**BSMI:** Northwest EMC has been designated by NIST and validated by C-Taipei (BSMI) as a CAB to conduct tests as described in the APEC Mutual Recognition Agreement. License No.SL2-IN-E-1017.



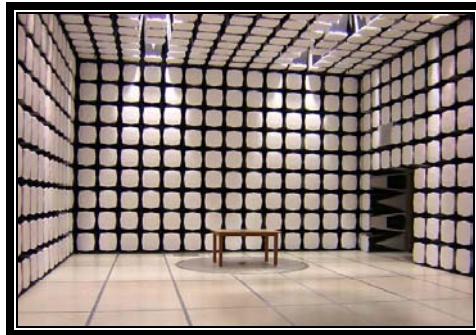
**GOST:** Northwest EMC, Inc. has been assessed and accredited by the Russian Certification bodies Certinform VNIINMASH, CERTINFO, SAMTES, and Federal CHEC, to perform EMC and Hygienic testing for Information Technology Products. As a result of their laboratory assessment, they will accept test results from Northwest EMC, Inc. for product certification



## SCOPE

For details on the Scopes of our Accreditations, please visit:

<http://www.nwemc.com/scope.asp>



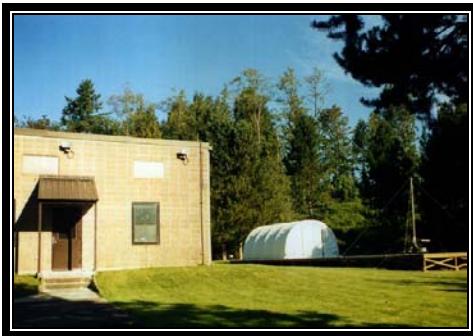
**California – Orange County Facility  
Labs OC01 – OC13**

41 Tesla Ave. Irvine, CA 92618  
(888) 364-2378 Fax: (503) 844-3826



**Oregon – Evergreen Facility  
Labs EV01 – EV11**

22975 NW Evergreen Pkwy. Suite 400 Hillsboro, OR 97124  
(503) 844-4066 Fax: (503) 844-3826



**Washington – Sultan Facility  
Labs SU01 – SU07**

14128 339<sup>th</sup> Ave. SE Sultan, WA 98294  
(888) 364-2378

## Party Requesting the Test

<b>Company Name:</b>	Honeywell
<b>Address:</b>	2500 W. Union Hills Road
<b>City, State, Zip:</b>	Phoenix, AZ 85027
<b>Test Requested By:</b>	David Shipley
<b>Model:</b>	XYR6000 802.15.4 2.4 GHz DSSS-FH Radio. Part Number: 50025034-001, REV. C1
<b>First Date of Test:</b>	March 5, 2008
<b>Last Date of Test:</b>	March 11, 2008
<b>Receipt Date of Samples:</b>	March 5, 2008
<b>Equipment Design Stage:</b>	Production
<b>Equipment Condition:</b>	No Damage

## Information Provided by the Party Requesting the Test

## Functional Description of the EUT (Equipment Under Test):

XYR6000 802.15.4 2.4 GHz DSSS-FH Radio. Part Number: 50025034-001, REV. C1

## Testing Objective:

To demonstrate compliance to FCC 15.247 requirements as a hybrid device.

## EUT Photo





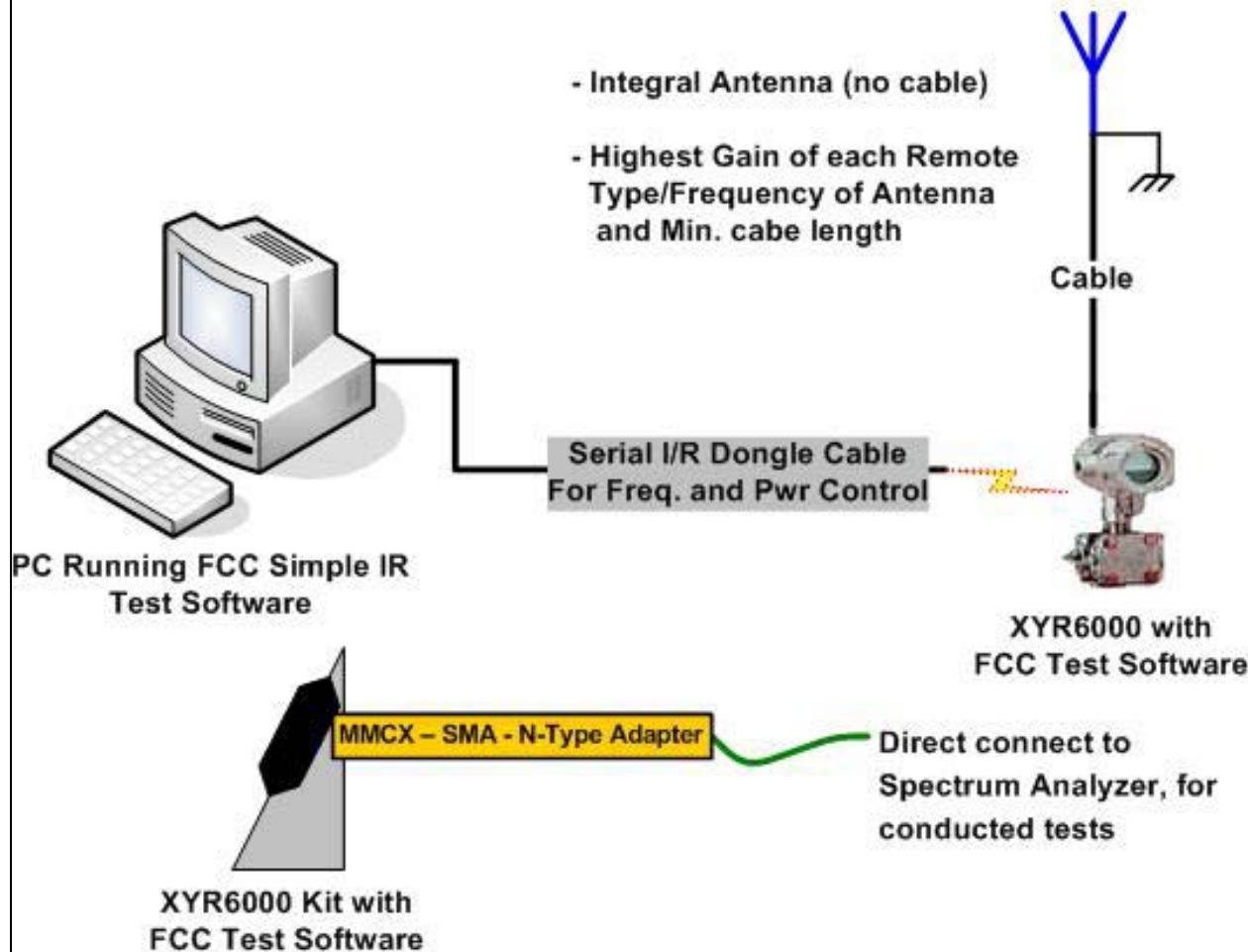
## CONFIGURATION 1 HONE0027

## EUT

## Description

Refer to the configuration document provided by the client below.

## Radio Transmitter Test Setup, XYR6000 Radio



Equipment modifications					
Item	Date	Test	Modification	Note	Disposition of EUT
1	3/10/2008	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.
2	3/10/2008	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.
3	3/10/2008	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.
4	3/10/2008	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.
5	3/11/2008	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.
6	3/11/2008	Channel Spacing	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	3/11/2008	Dwell Time	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.
8	3/11/2008	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.
9	3/11/2008	Number of Hopping Frequencies	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	Scheduled testing was completed.

# CHANNEL SPACING

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

## TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Agilent	E4440A	AAX	10/1/2007	12

## MEASUREMENT UNCERTAINTY

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

## TEST DESCRIPTION

The channel carrier frequencies in the 2400-2483.5MHz band must be separated by 25 kHz or the 20dB bandwidth of the hopping channel, whichever is greater. Or, if the output power is less than 125 mW, the channel separation can be 25 kHz or 2/3 of the 20dB bandwidth. The EUT was operated in pseudorandom hopping mode. The spectrum was scanned across two adjacent peaks. The separation between the peaks of these channels was measured.

## CHANNEL SPACING

EUT: XYR6000 15.4 Radio with LPF modified.	Work Order: HONE0023
Serial Number: None	Date: 03/11/08
Customer: Honeywell	Temperature: 22°C
Attendees: David Shipley	Humidity: 40%
Project: None	Barometric Pres.: 1019 mb
Tested by: Jaemi Suh	Job Site: OC11

## TEST SPECIFICATIONS

FCC 15.247 (DTS):2007	Test Method: ANSI C63.4:2003 KDB No. 558074

## COMMENTS

Channel spacing must be greater than or equal to the 20 dB Occupied Bandwidth

## DEVIATIONS FROM TEST STANDARD

No Deviations

Configuration #	1	
		Signature

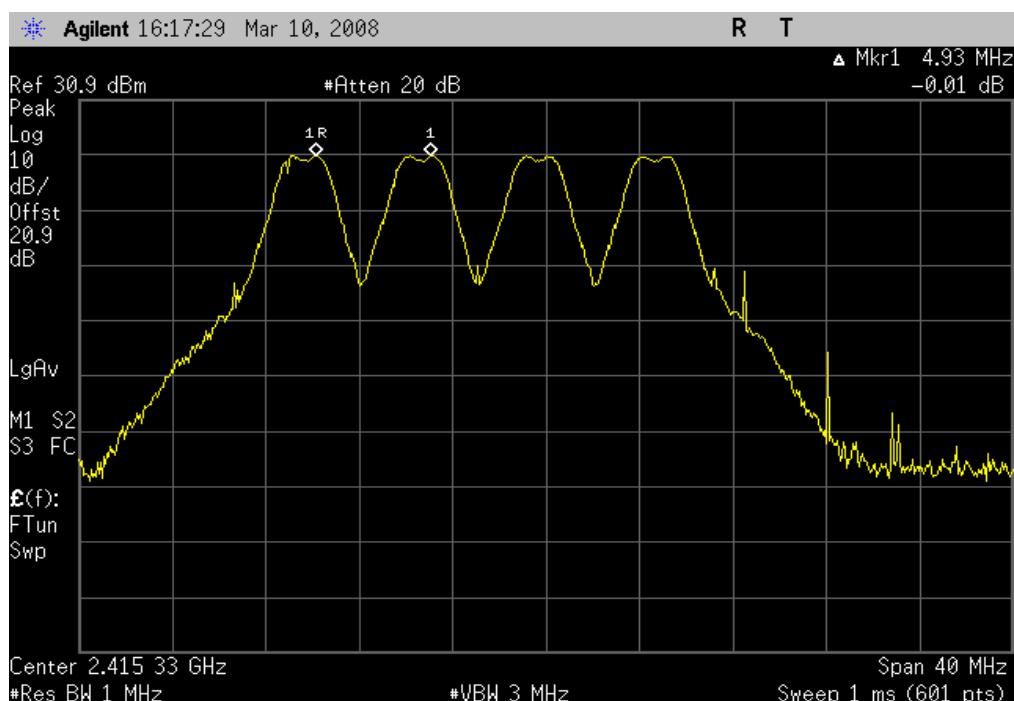
	Value	Limit	Results
Highest Output Power	4.93 MHz	≥ 2.65 MHz	Pass

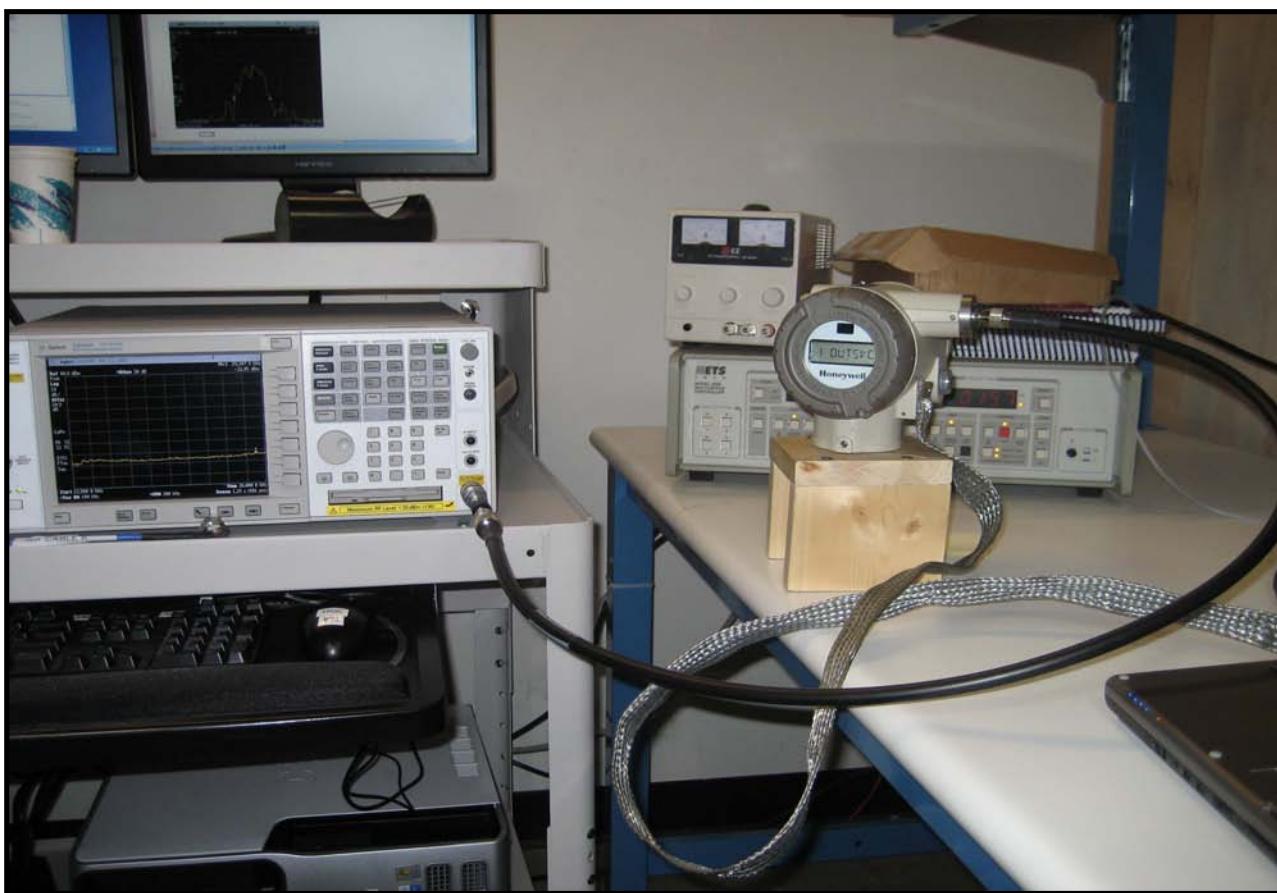
Channel Spacing

## Highest Output Power, Channel Spacing

Result: Pass

Value: 4.93 MHz

Limit:  $\geq 2.65$  MHz



# DWELL TIME

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

## TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Agilent	E4440A	AAX	10/1/2007	12

## MEASUREMENT UNCERTAINTY

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

## TEST DESCRIPTION

The average dwell time per hopping channel was measured at one hopping channel in the middle of the authorized band. The measurements were made using a direct connection between the RF output of the EUT and the spectrum analyzer. The hopping function of the EUT was enabled.

## DWELL TIME - FHSS

EUT: XYR6000 15.4 Radio with LPF modified	Work Order: HONE0023
Serial Number: None	Date: 03/11/08
Customer: Honeywell	Temperature: 22°C
Attendees: David Shipley	Humidity: 40%
Project: None	Barometric Pres.: 1019 mb
Tested by: Jaemi Suh	Job Site: OC11

## TEST SPECIFICATIONS

FCC 15.247 (DTS):2007	Test Method: ANSI C63.4:2003 KDB No. 558074

## COMMENTS

PC Power Level: 255. CHIP PA level = 0 dBm. Cable Loss = 0.9 dB. Dwell time = 0.61 msec \* 3 = 1.83 msec. Limit = 0.4 sec. Dwell time is passing.

## DEVIATIONS FROM TEST STANDARD

Configuration #	1	Signature

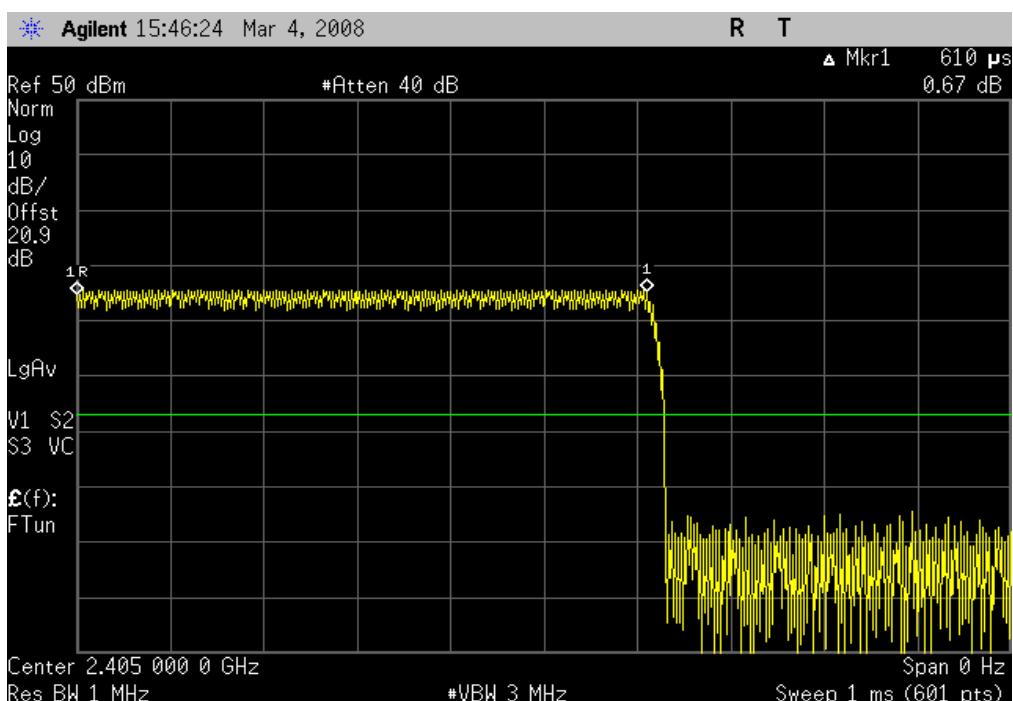
	Value	Limit	Results
Highest Output Power			
Dwell Time	0.61 mS	See comments	Pass
Dwell Time in 1.2 Seconds	3 Transmissions	See Comments	Pass

Result: Pass

### Highest Output Power, Dwell Time

ghest Output Power

Limit: See comments

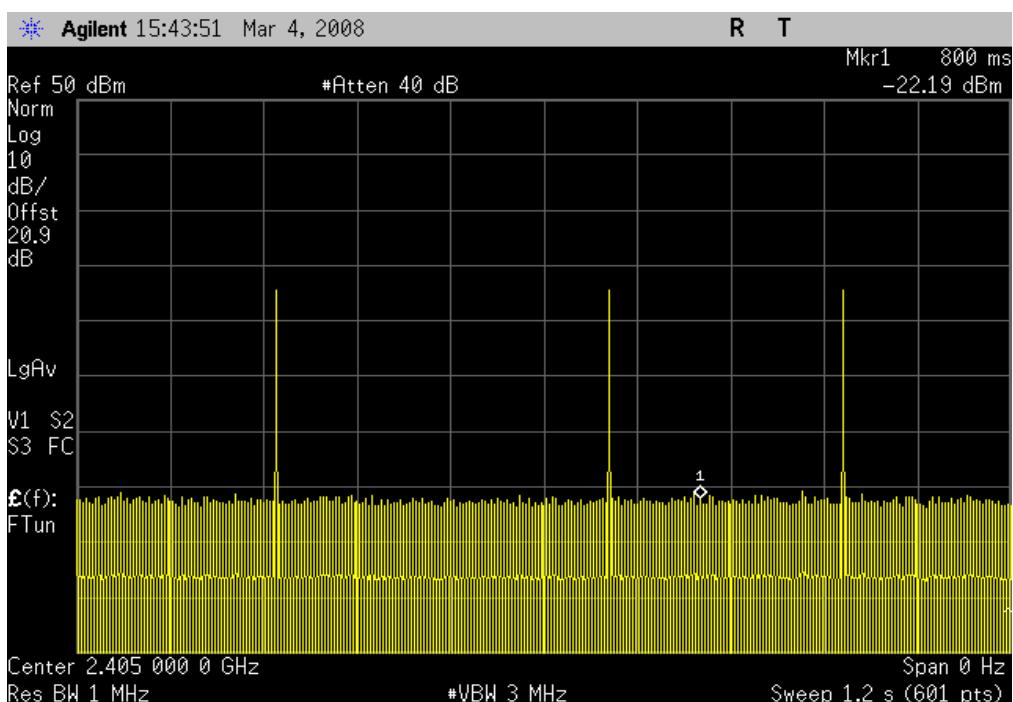


### Highest Output Power, Dwell Time in 1.2 Seconds

**Result:** Pass

**Value:** 3 Transmissions

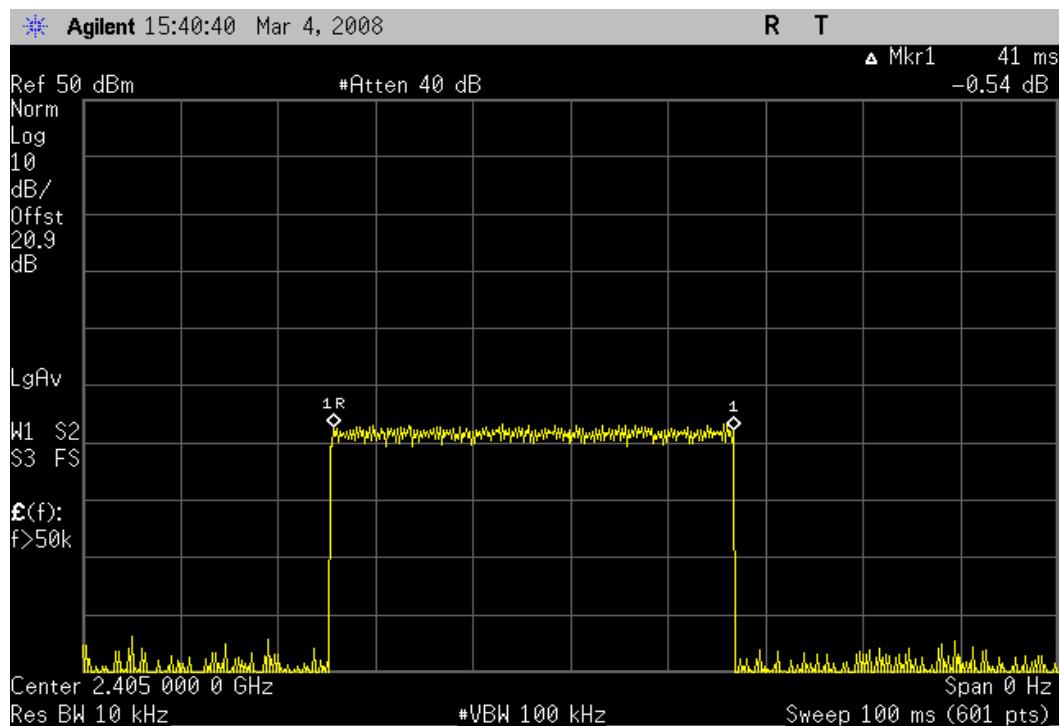
**Limit:** See Comments

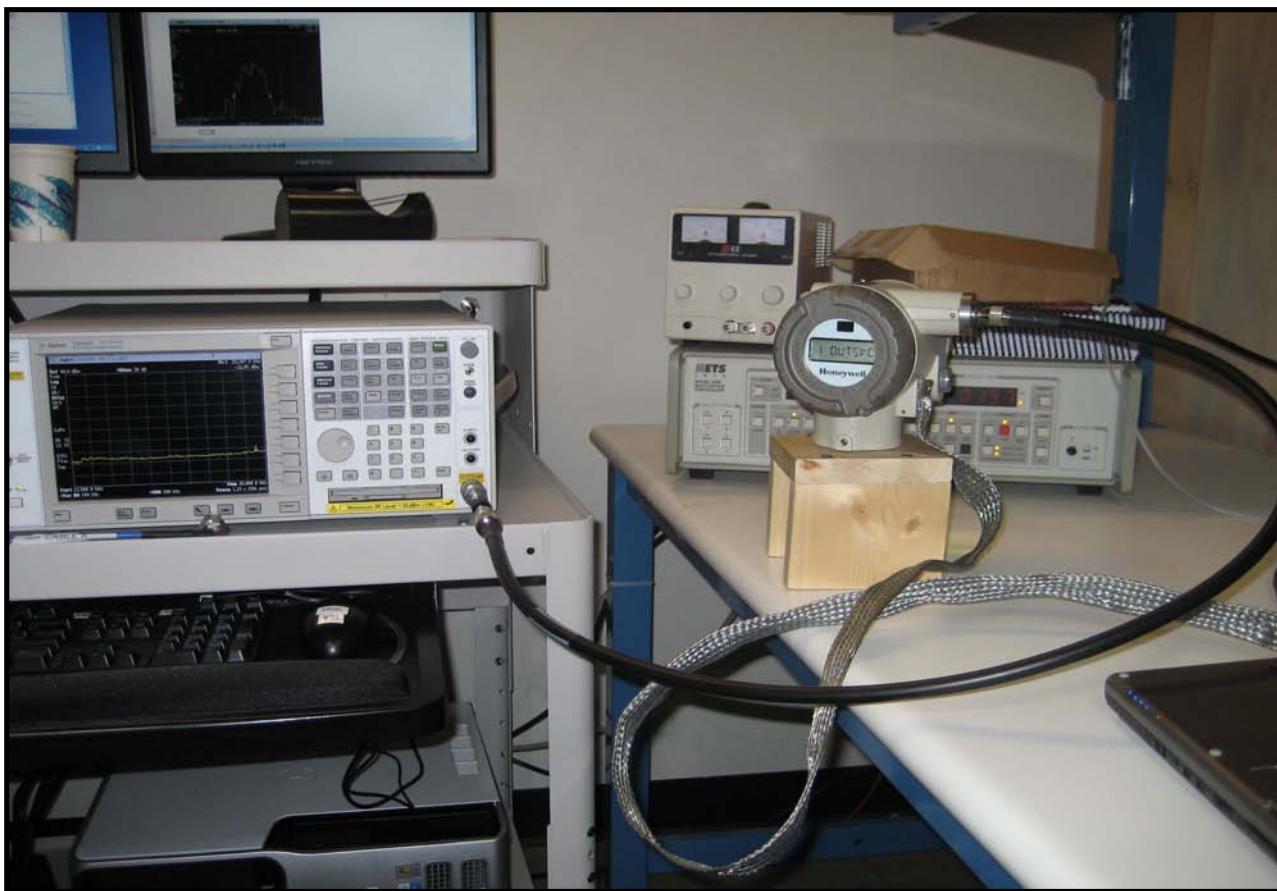


## DWELL TIME - DSSS

EUT: XYR6000 15.4 Radio with LPF modified DSSS Mode.		Work Order: HONE0027	
Serial Number: None		Date: 03/11/08	
Customer: Honeywell		Temperature: 22c°C	
Attendees: David Shipley		Humidity: 40%	
Project: None		Barometric Pres.: 1019 mb	
Tested by: Jaemi Suh	Power: Battery	Job Site: OC11	
TEST SPECIFICATIONS			
FCC 15.247 (DTS):2006		Test Method: ANSI C63.4:2003 KDB No. 558074	
COMMENTS			
PC Power Level: 255. CHIP PA level = 0 dBm. Cable Loss = 0.9 dB. 41% Duty Cycle. Dwell time = 41 msec out of 100msec.			
DEVIATIONS FROM TEST STANDARD			
Configuration #	1	Signature: 	
	Value	Limit	Results
Highest Output Power	41 ms	100 ms	Pass
Dwell Time			

Highest Output Power, Dwell Time		
Result: Pass	Value: 41 ms	Limit: 100 ms





Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

**TEST EQUIPMENT**

Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Agilent	E4440A	AAX	10/1/2007	12

**MEASUREMENT UNCERTAINTY**

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

**TEST DESCRIPTION**

The number of hopping frequencies was measured across the authorized band. The measurements were made using a direct connection between the RF output of the EUT and the spectrum analyzer. The hopping function of the EUT was enabled.

## NUMBER OF HOPPING FREQUENCIES

EUT: XYR6000 15.4 Radio with LPF modified.

Work Order: HONE0027

Serial Number: None

Date: 03/11/08

Customer: Honeywell

Temperature: 22c°C

Attendees: David Shipley

Humidity: 40%

Project: None

Barometric Pres.: 1019 mb

Tested by: Jaemi Suh

Power: Battery

Job Site: OC11

## TEST SPECIFICATIONS

## Test Method

FCC 15.247 (DTS):2007

ANSI C63.4:2003 KDB No. 558074

## COMMENTS

PC Power Level: 255. CHIP PA level = 0 dBm

## DEVIATIONS FROM TEST STANDARD

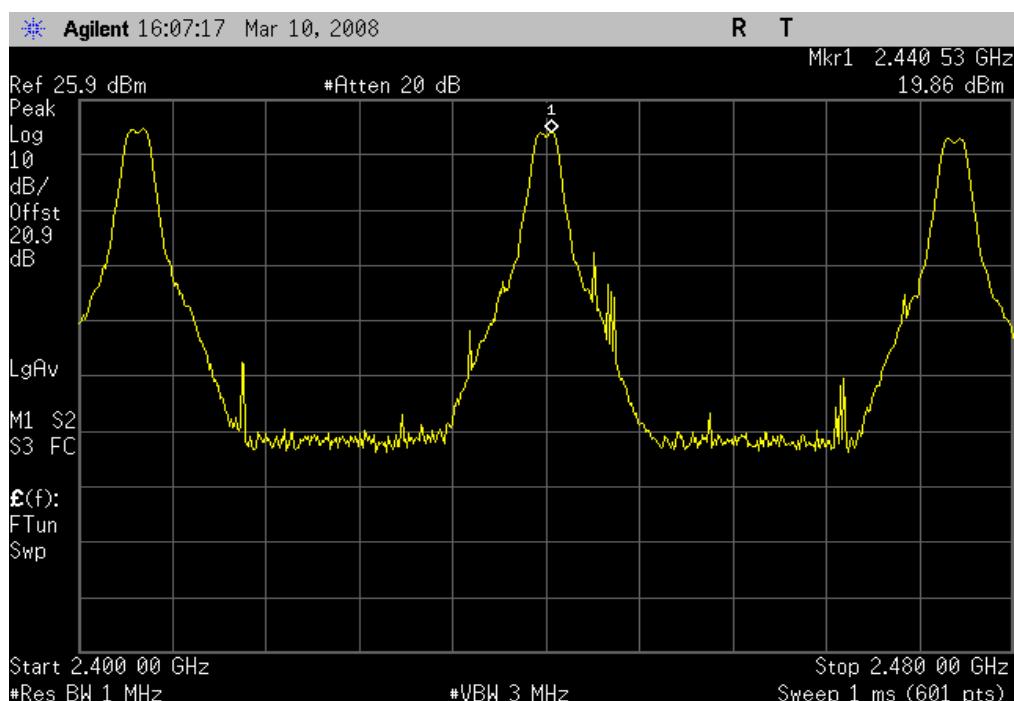
Configuration #	1	Signature	Value	Limit	Results
Highest Output Power	Number of Hopping Frequencies		3	No Limit	Pass

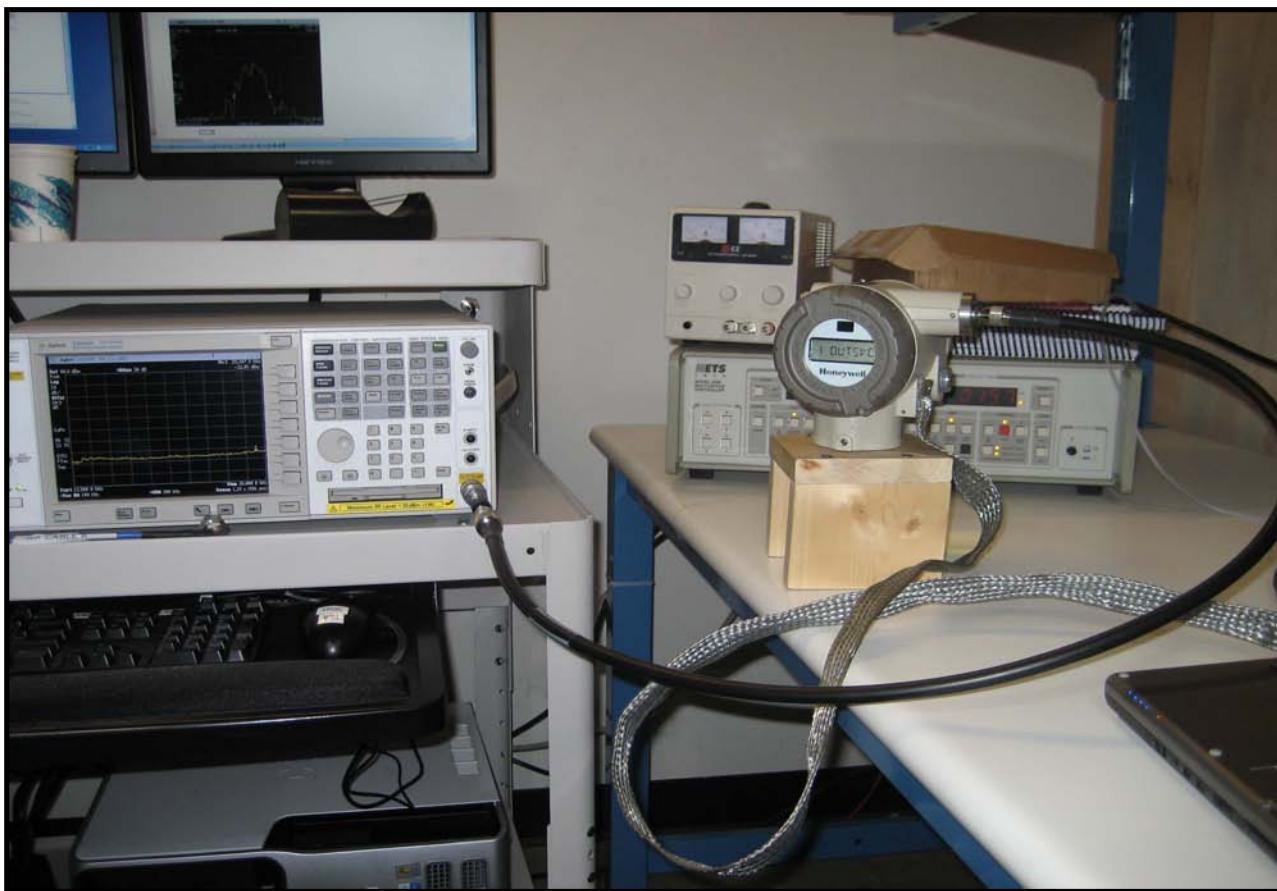
## Highest Output Power, # of Hopping Frequencies

Result: Pass

Value: 3 Hopping Frequency

Limit: No Limit





# OCCUPIED BANDWIDTH

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

## TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Agilent	E4440A	AAX	10/1/2007	12

## MEASUREMENT UNCERTAINTY

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

## TEST DESCRIPTION

The occupied bandwidth was measured with the EUT set to low, medium, and high transmit frequencies. The measurement was made using a direct connection between the RF output of the EUT and the spectrum analyzer. The EUT was transmitting at its maximum data rate in a no hop mode.

## 20 dB OCCUPIED BANDWIDTH - FHSS

EUT: XYR6000 15.4 Radio with LPF modified.

Work Order: HONE0027

Serial Number: None

Date: 03/10/08

Customer: Honeywell

Temperature: 22c°C

Attendees: David Shipley

Humidity: 40%

Project: None

Barometric Pres.: 1019 mb

Tested by: Jaemi Suh

Power: Battery

Job Site: OC10

## TEST SPECIFICATIONS

## Test Method

FCC 15.247 (FHSS):2006

ANSI C63.4:2003 KDB No. 558074

## COMMENTS

The 20dB occupied bandwidth must be less than or equal to the channel spacing.

## DEVIATIONS FROM TEST STANDARD

No Deviations

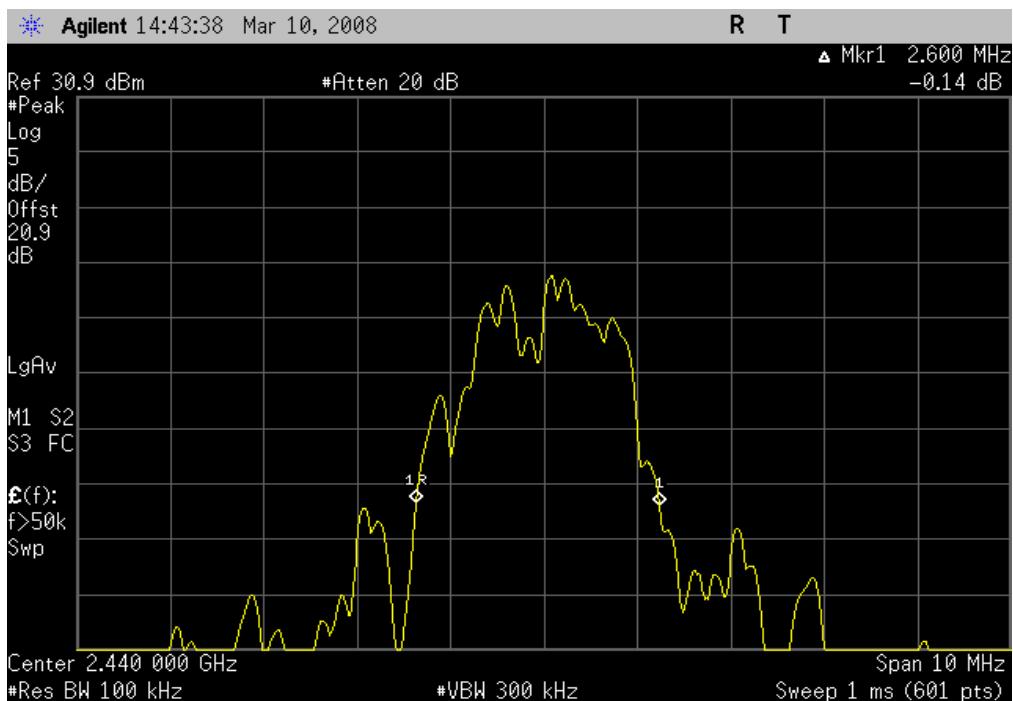
Configuration #	1	Signature			
Occupied Bandwidth					

	Value	Limit	Results
Low Channel	2.65 MHz	≥ 4.93 MHz	Pass
Mid Channel	2.6 MHz	≥ 4.93 MHz	Pass
High Channel	2.6 MHz	≥ 4.93 MHz	Pass

Occupied Bandwidth, Low Channel		
Result: Pass	Value: 2.65 MHz	Limit: $\leq 4.93$ MHz



Occupied Bandwidth, Mid Channel		
Result: Pass	Value: 2.6 MHz	Limit: $\leq 4.93$ MHz



Occupied Bandwidth, High Channel		
<b>Result:</b> Pass	<b>Value:</b> 2.6 MHz	<b>Limit:</b> $\leq 4.93$ MHz



## 6 dB OCCUPIED BANDWIDTH - DSSS

EUT: XYR6000 15.4 Radio with LPF modified DSSS Mode.

Work Order: HONE0023

Serial Number: None

Date: 03/11/08

Customer: Honeywell

Temperature: 22°C

Attendees: David Shipley

Humidity: 40%

Project: None

Barometric Pres.: 1019 mb

Tested by: Jaemi Suh

Power: Battery

Job Site: OC11

## TEST SPECIFICATIONS

## Test Method

FCC 15.247 (DTS):2006

ANSI C63.4:2003 KDB No. 558074

## COMMENTS

Highest Output Power. PC Power Level: 255. CHIP PA level = 0 dBm Cable Loss = 0.9 dBm

## DEVIATIONS FROM TEST STANDARD

No Deviations

Configuration #	1	Signature
		

	Value	Limit	Results
Highest Output Power			
Low Channel	1.55 MHz	≥ 500 kHz	Pass
Mid Channel	1.65 MHz	≥ 500 kHz	Pass
High Channel	1.56 MHz	≥ 500 kHz	Pass

Highest Output Power, Low Channel		
Result: Pass	Value: 1.55 MHz	Limit: $\geq 500$ kHz

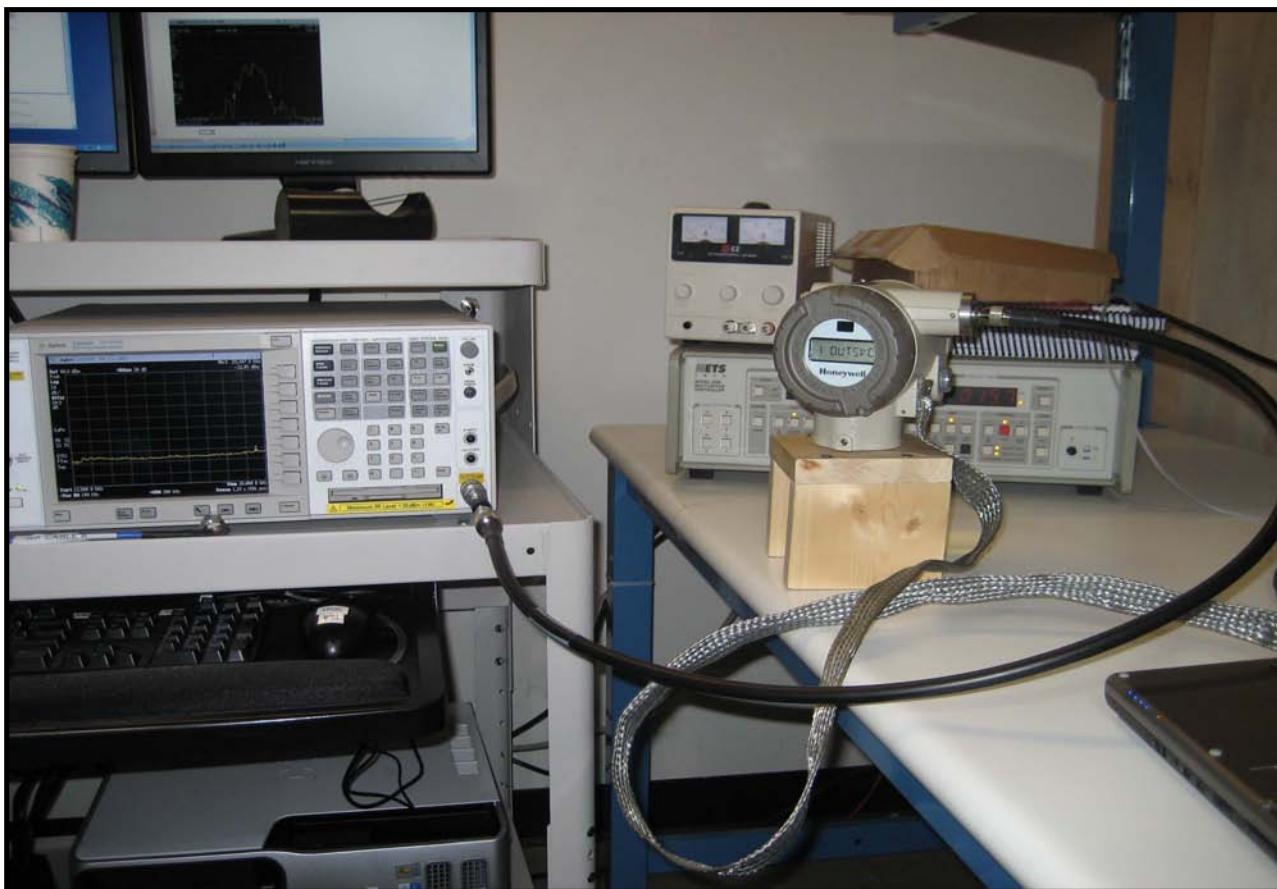


Highest Output Power, Mid Channel		
Result: Pass	Value: 1.65 MHz	Limit: $\geq 500$ kHz



Highest Output Power, High Channel		
Result: Pass	Value: 1.56 MHz	Limit: $\geq 500$ kHz





# OUTPUT POWER

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

## TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Agilent	E4440A	AAX	10/1/2007	12

## MEASUREMENT UNCERTAINTY

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

## TEST DESCRIPTION

The peak output power was measured with the EUT set to low, medium, and high transmit frequencies. The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. The EUT was transmitting at its maximum data rate in a no hop mode.

De Facto EIRP Limit: Per 47 CFR 15.247 (b)(1-3), the EUT meets the de facto EIRP limit of +36dBm.

## OUTPUT POWER - FHSS

EUT: XYR6000 15.4 Radio with LPF modified.

Work Order: HONE0023

Serial Number: None

Date: 03/10/08

Customer: Honeywell

Temperature: 22c°C

Attendees: David Shipley

Humidity: 40%

Project: None

Barometric Pres.: 1019 mb

Tested by: Jaemi Suh

Power: Battery

Job Site: OC11

## TEST SPECIFICATIONS

## Test Method

FCC 15.247 (DTS):2006

ANSI C63.4:2003 KDB No. 558074

## COMMENTS

PC Power Level: 255. CHIP PA level = 0 dBm. Cable Loss = 0.9

## DEVIATIONS FROM TEST STANDARD

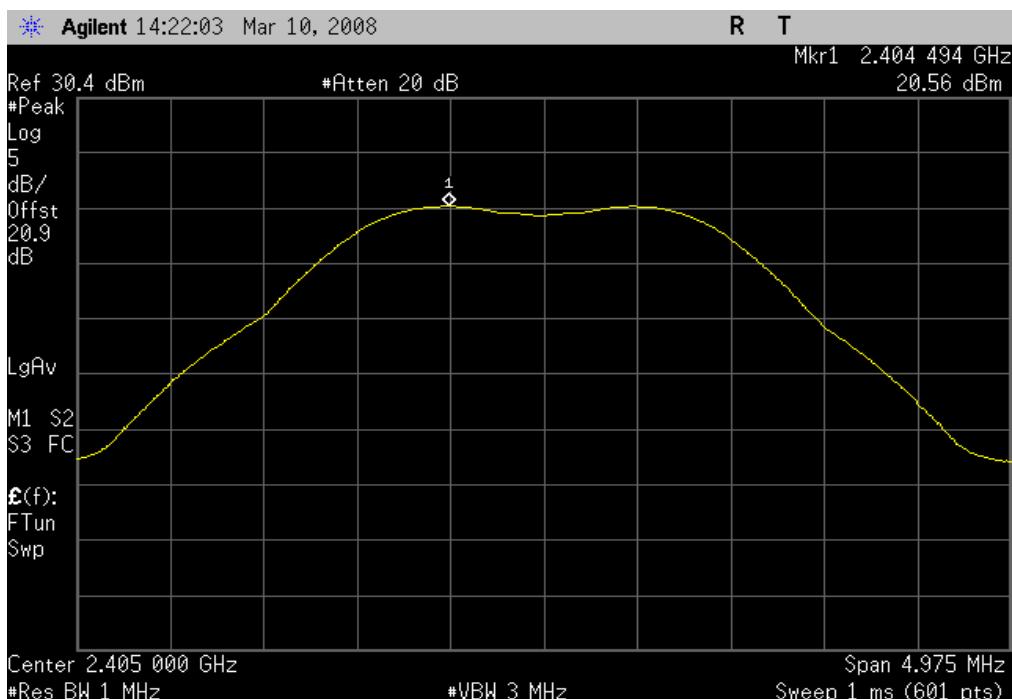
Configuration #	1	Signature	Value	Limit	Results
Output Power					
	Low Channel		20.56 dBm	30 dBm	Pass
	Mid Channel		19.65 dBm	30 dBm	Pass
	High Channel		18.47 dBm	30 dBm	Pass

## Output Power, Low Channel

Result: Pass

Value: 20.56 dBm

Limit: 30 dBm

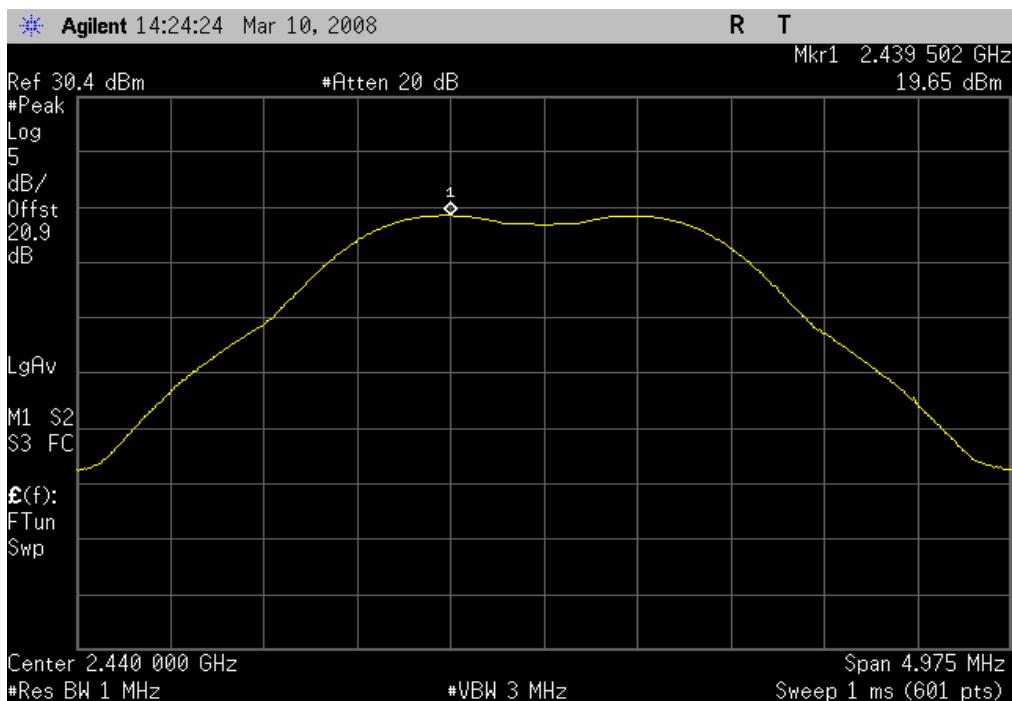


## Output Power, Mid Channel

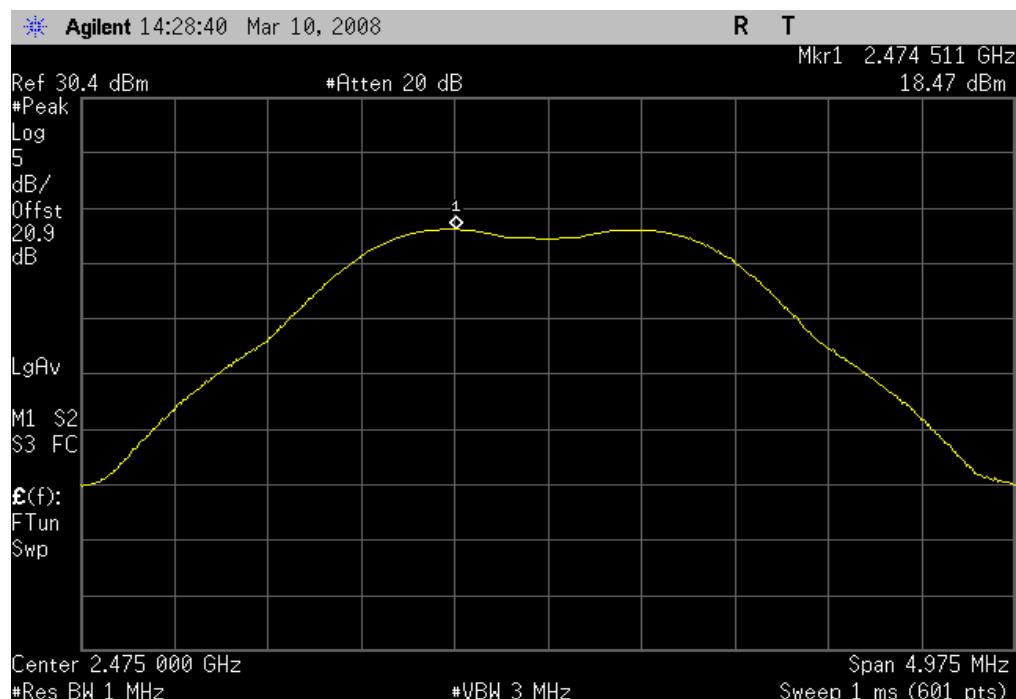
Result: Pass

Value: 19.65 dBm

Limit: 30 dBm



Output Power, High Channel		
Result: Pass	Value: 18.47 dBm	Limit: 30 dBm



EUT: XYR6000 15.4 Radio with LPF modified DSSS Mode.		Work Order: HONE0023
Serial Number:	None	Date: 03/11/08
Customer:	Honeywell	Temperature: 22°C
Attendees:	David Shipley	Humidity: 40%
Project:	None	Barometric Pres.: 1019 mb
Tested by:	Jaemi Suh	Job Site: OC11

## TEST SPECIFICATIONS

FCC 15.247 (DTS):2006	Test Method: ANSI C63.4:2003 KDB No. 558074
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## COMMENTS

Highest Gain Antenna 14dBi. PC Power Level: 168. CHIP PA level = 0 dBm

MiddeGain Antenna 8 dBi. PC Power Level: 195 CHIP PA level = 0 dBm

Lowest Gain Antenna -2 dBi. PC Power Level: 255. CHIP PA level = 0 dBm

## DEVIATIONS FROM TEST STANDARD

Configuration #	1	Signature
DSSS Output Power		

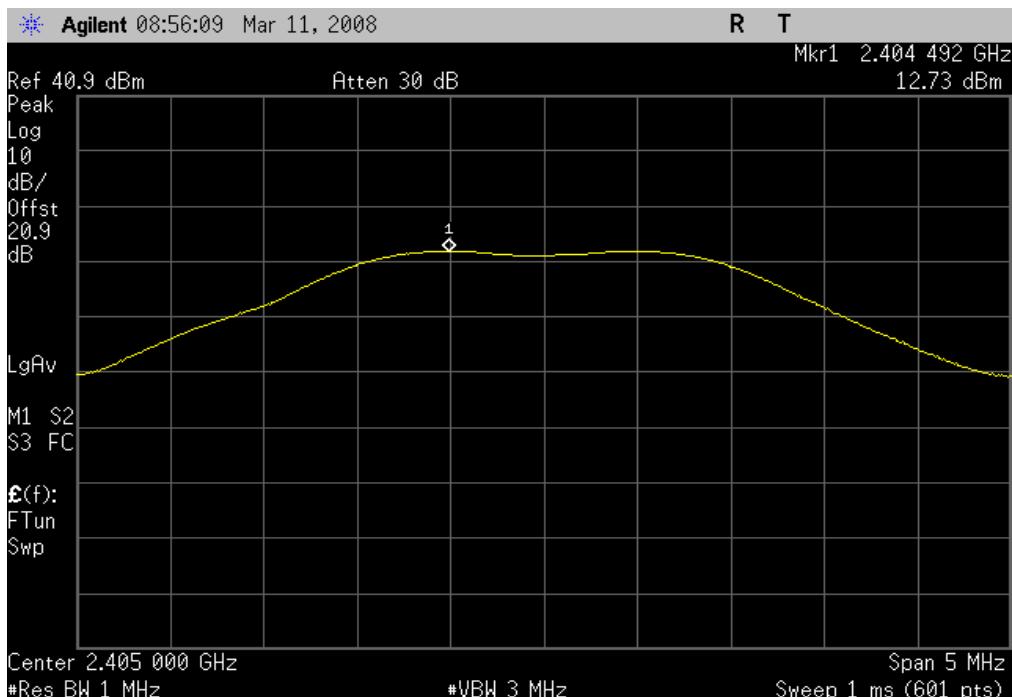
Power Level 168		Value	Limit	Results
Low Channel	12.73 dBm	27 dBm	Pass	
Mid Channel	12.32 dBm	27 dBm	Pass	
High Channel	12.10 dBm	27 dBm	Pass	
Power Level 195				
Low Channel	16.67 dBm	29 dBm	Pass	
Mid Channel	16.13 dBm	29 dBm	Pass	
High Channel	15.66 dBm	29 dBm	Pass	
Power Level 255				
Low Channel	20.56 dBm	30 dBm	Pass	
Mid Channel	19.56 dBm	30 dBm	Pass	
High Channel	18.47 dBm	30 dBm	Pass	

## DSSS Output Power, Power Level 168, Low Channel

Result: Pass

Value: 12.73 dBm

Limit: 27 dBm

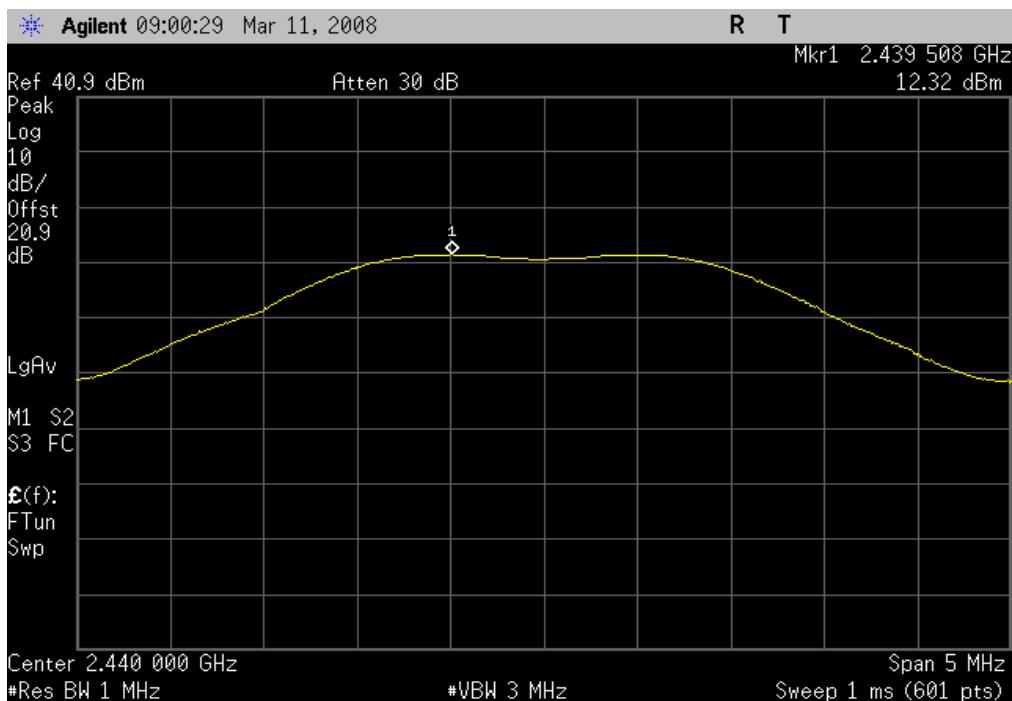


## DSSS Output Power, Power Level 168, Mid Channel

Result: Pass

Value: 12.32 dBm

Limit: 27 dBm

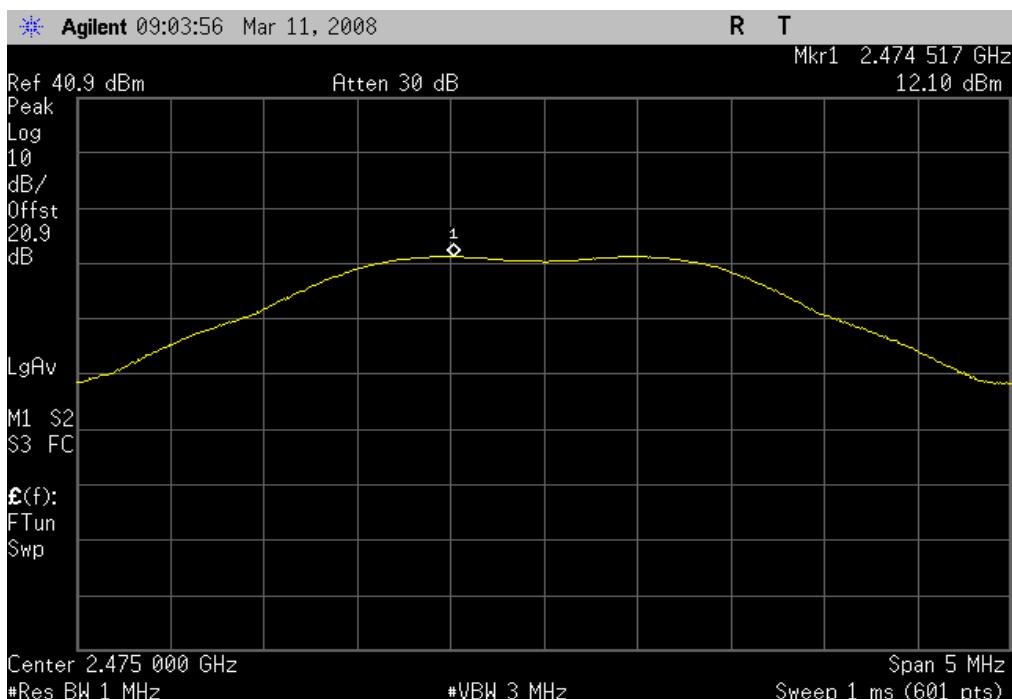


## DSSS Output Power, Power Level 168, High Channel

Result: Pass

Value: 12.10 dBm

Limit: 27 dBm

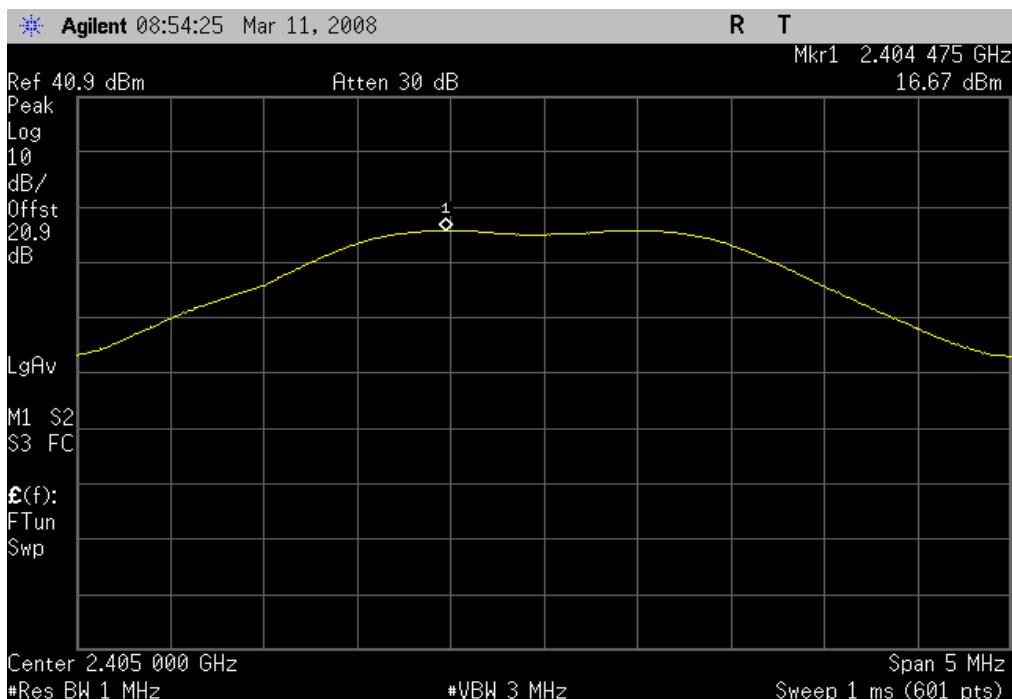


## DSSS Output Power, Power Level 195, Low Channel

Result: Pass

Value: 16.67 dBm

Limit: 29 dBm

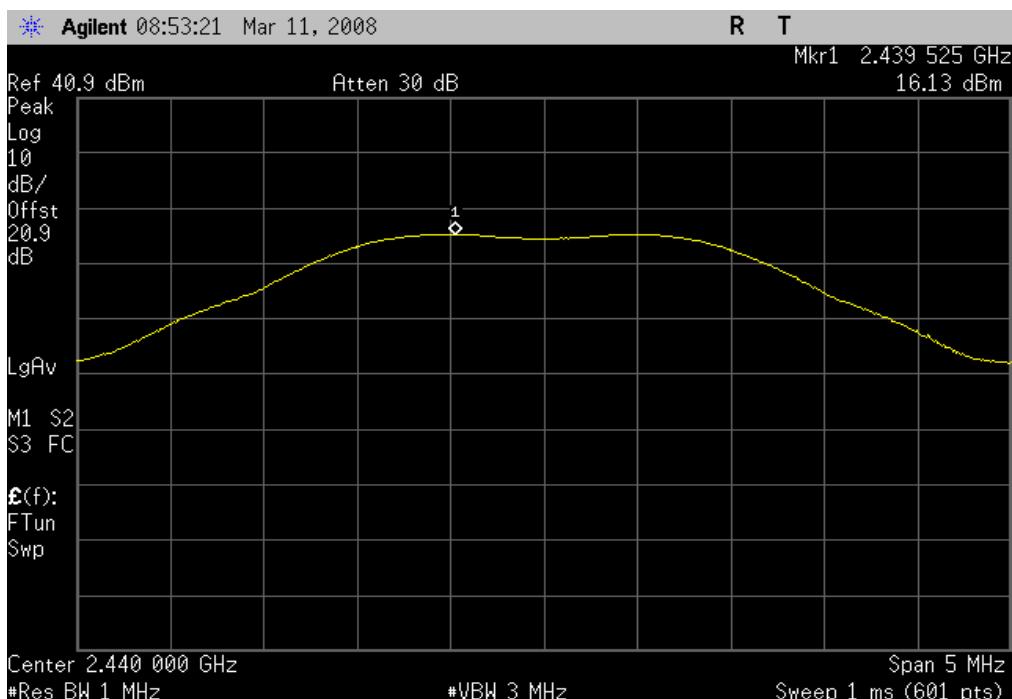


## DSSS Output Power, Power Level 195, Mid Channel

Result: Pass

Value: 16.13 dBm

Limit: 29 dBm

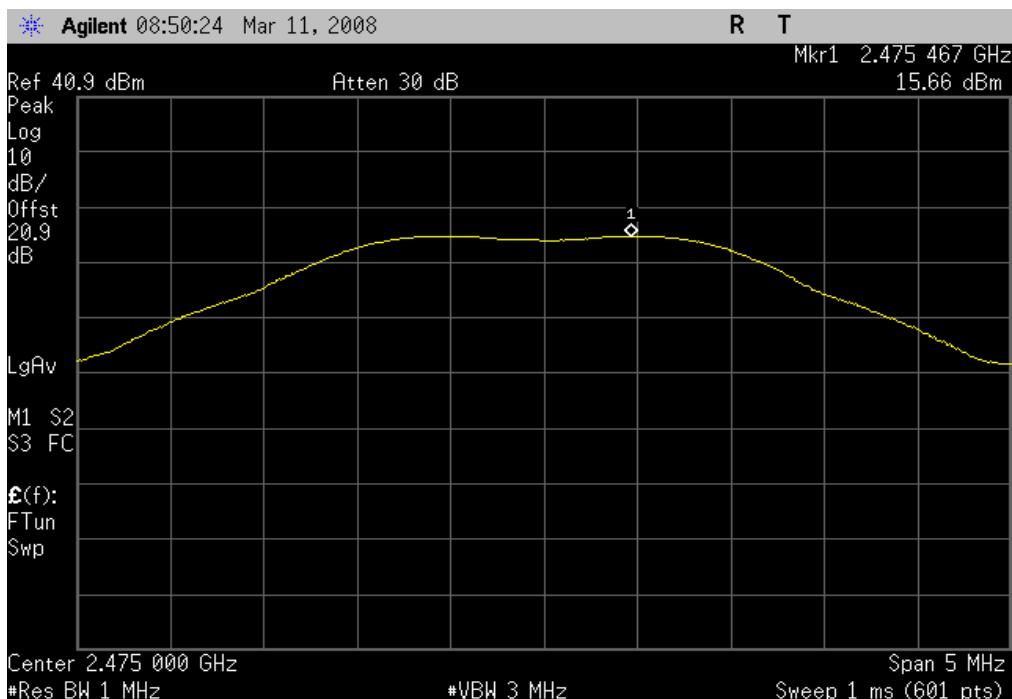


## DSSS Output Power, Power Level 195, High Channel

Result: Pass

Value: 15.66 dBm

Limit: 29 dBm

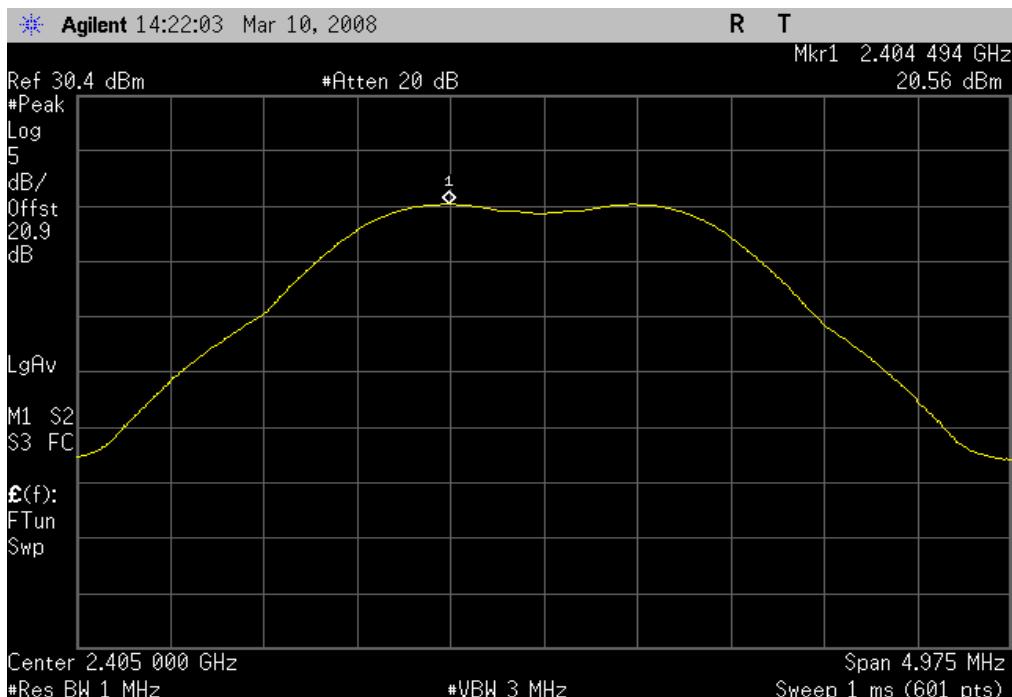


## DSSS Output Power, Power Level 255, Low Channel

Result: Pass

Value: 20.56 dBm

Limit: 30 dBm

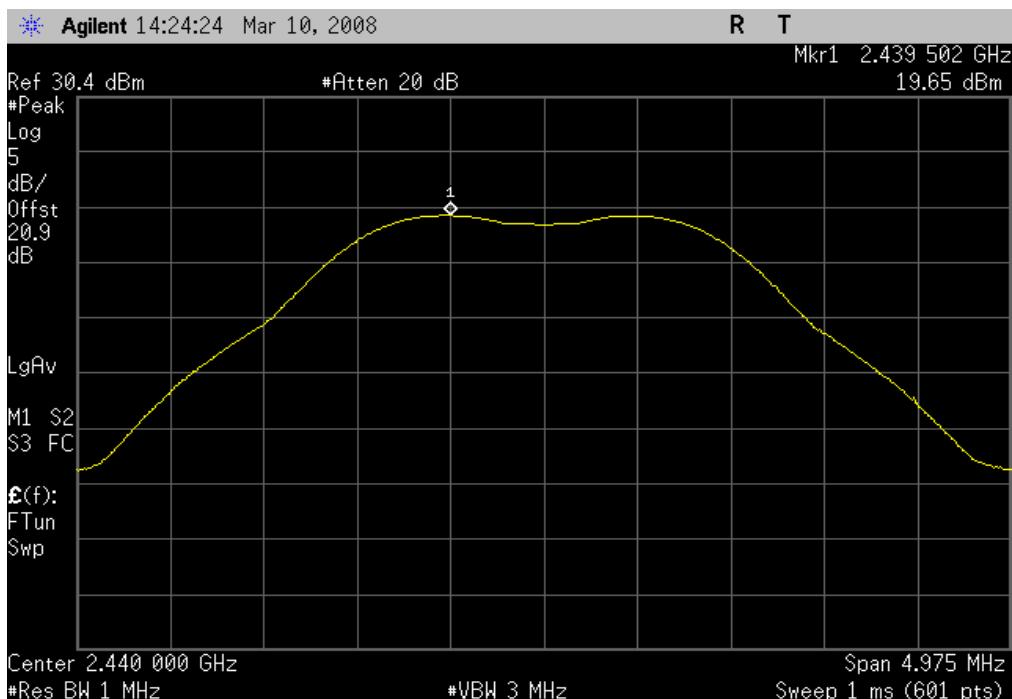


## DSSS Output Power, Power Level 255, Mid Channel

Result: Pass

Value: 19.56 dBm

Limit: 30 dBm

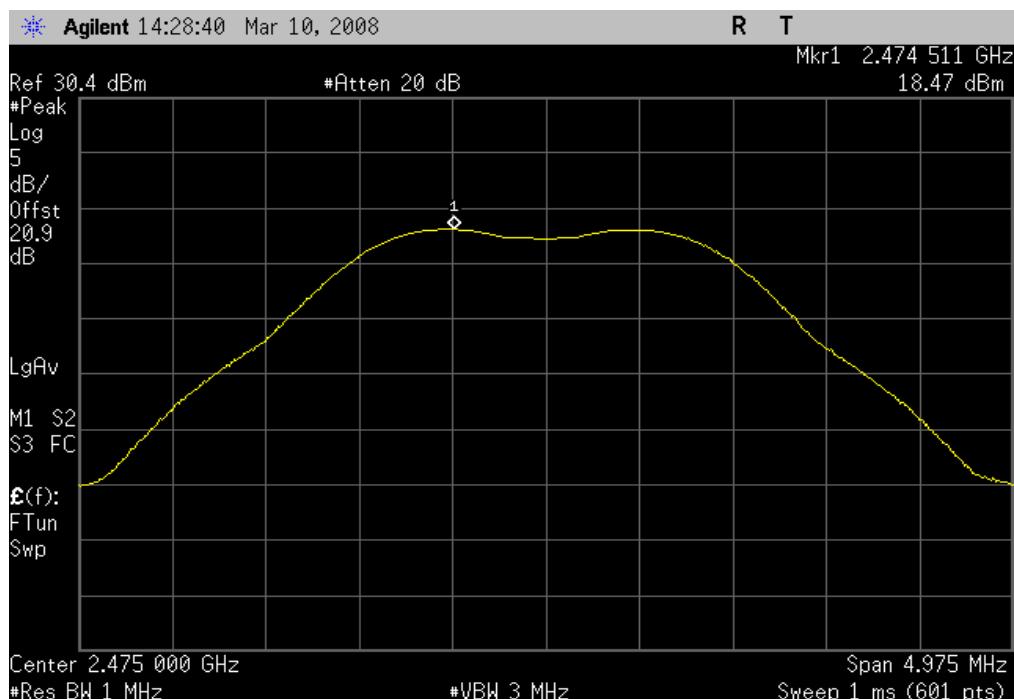


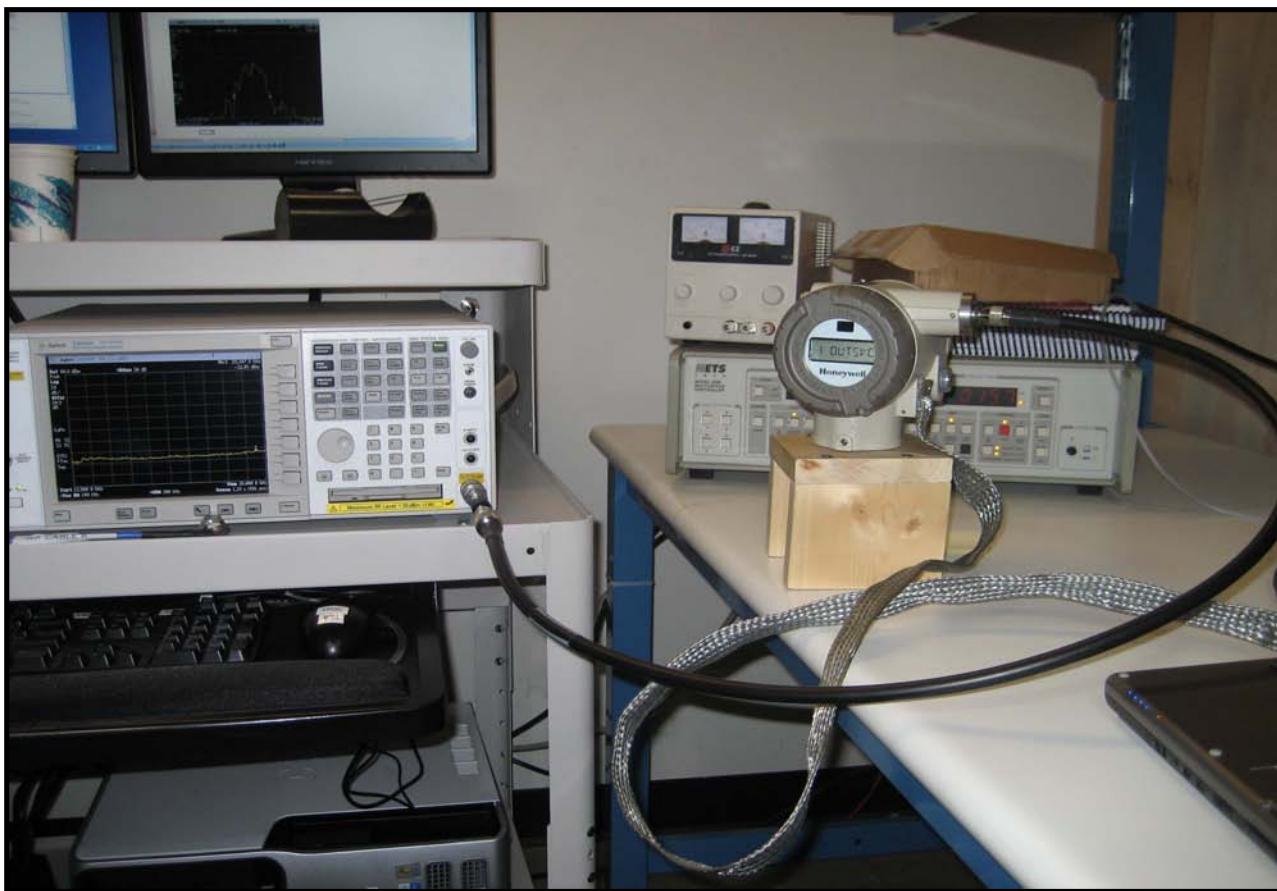
## DSSS Output Power, Power Level 255, High Channel

Result: Pass

Value: 18.47 dBm

Limit: 30 dBm





# BAND EDGE COMPLIANCE

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

## TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Agilent	E4440A	AAX	10/1/2007	12

## MEASUREMENT UNCERTAINTY

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

## TEST DESCRIPTION

The spurious RF conducted emissions at the edges of the authorized band were measured with the EUT set to low and high transmit frequencies. The measurement was made using a direct connection between the RF output of the EUT and the spectrum analyzer. The EUT was transmitting at its maximum data rate in a no hop mode. The channels closest to the band edges were selected. The spectrum was scanned across each band edge from 5 MHz below the band edge to 5 MHz above the band edge.

## BAND EDGE COMPLIANCE

EUT: XYR6000 15.4 Radio with LPF modified.	Work Order: HONE0023
Serial Number: None	Date: 03/10/08
Customer: Honeywell	Temperature: 22°C
Attendees: David Shipley	Humidity: 40%
Project: None	Barometric Pres.: 1019 mb
Tested by: Jaemi Suh	Job Site: OC11

## TEST SPECIFICATIONS

FCC 15.247 (DTS):2007	Test Method: ANSI C63.4:2003 KDB No. 558074

## COMMENTS

PC Power Level: 255. CHIP PA level = 0 dBm. Cable Loss = 0.9 dBm

## DEVIATIONS FROM TEST STANDARD

Configuration #	1	Signature

	Value	Limit	Results
Band Edge			
Low Channel	-37.95 dBc	≤ -20 dBc	Pass
High Channel	-54.48 dBc	≤ -20 dBc	Pass

## Band Edge , Low Channel

Result: Pass

Value: -37.95 dBc

Limit: ≤ -20 dBc

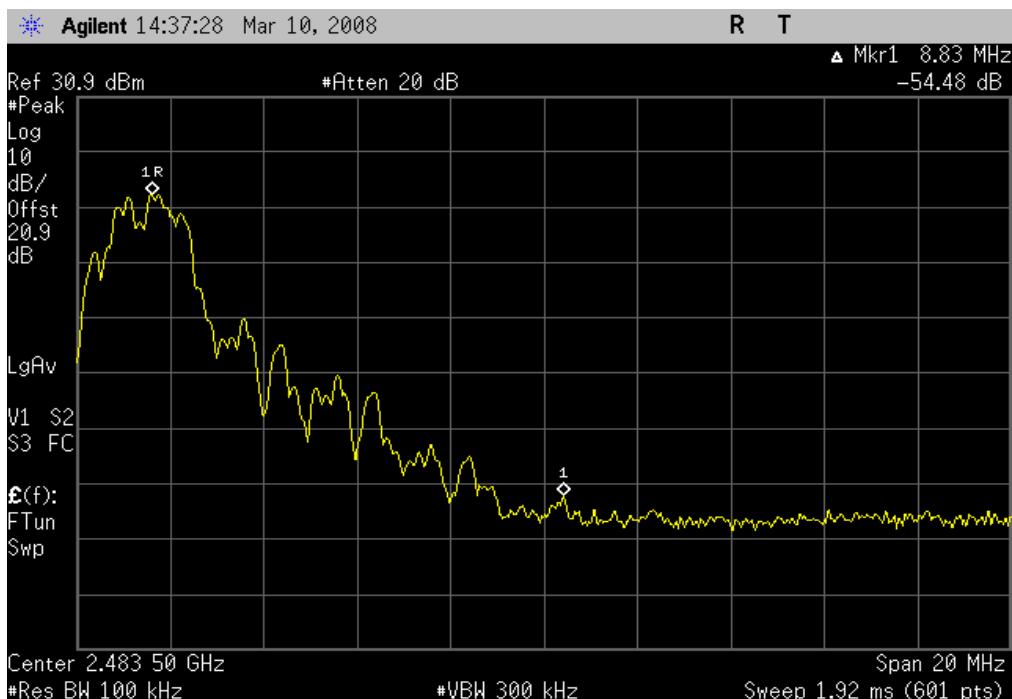


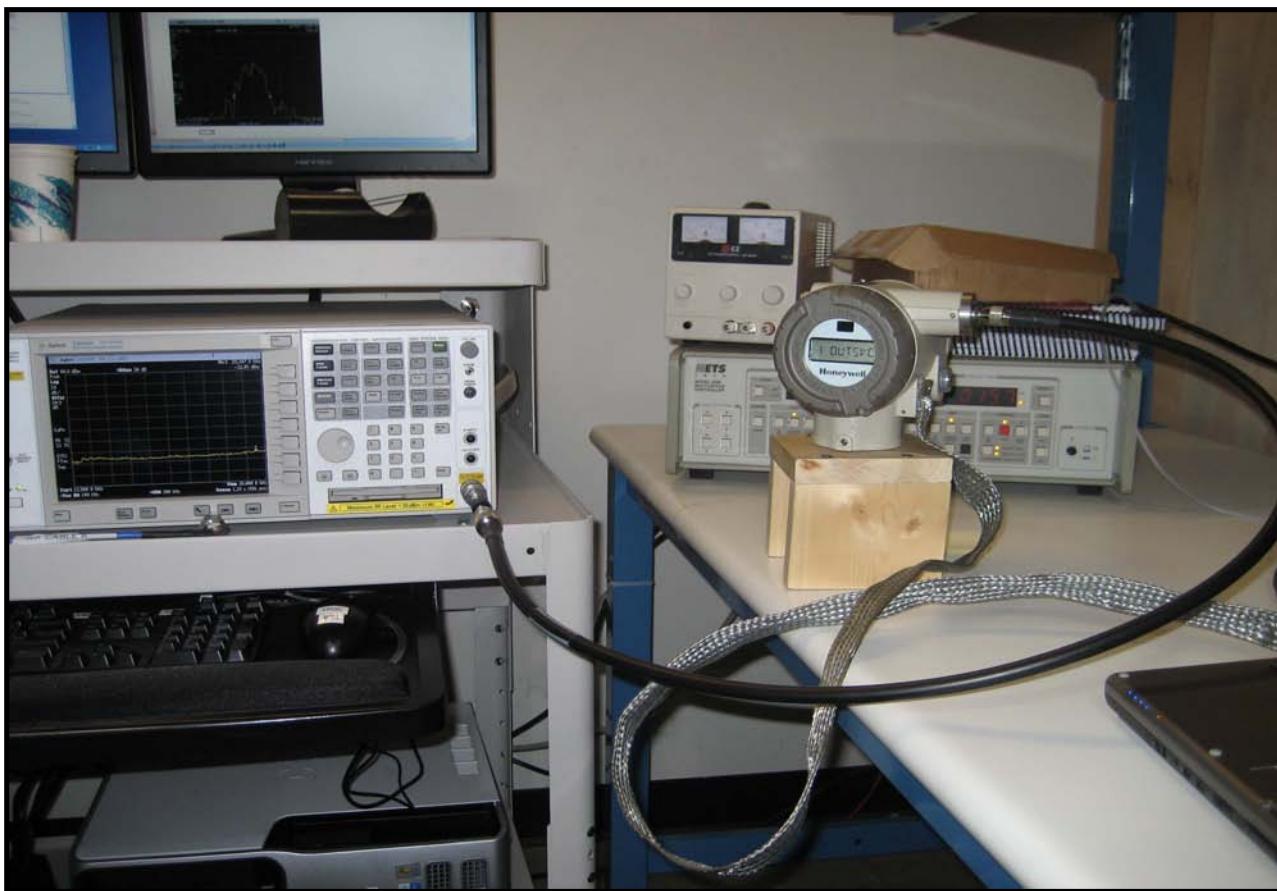
## Band Edge , High Channel

Result: Pass

Value: -54.48 dBc

Limit: ≤ -20 dBc





Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

**TEST EQUIPMENT**

Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Agilent	E4440A	AAX	10/1/2007	12

**MEASUREMENT UNCERTAINTY**

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

**TEST DESCRIPTION**

The spurious RF conducted emissions were measured with the EUT set to low, medium, and high transmit frequencies. The measurements were made using a direct connection between the RF output of the EUT and the spectrum analyzer. The EUT was transmitting at its maximum data rate in a no hop mode. For each transmit frequency, the spectrum was scanned throughout the specified frequency.

## SPURIOUS CONDUCTED EMISSIONS

EUT: XYR6000 15.4 Radio with LPF modified.	Work Order: HONE0023
Serial Number: None	Date: 03/10/08
Customer: Honeywell	Temperature: 22°C
Attendees: David Shipley	Humidity: 40%
Project: None	Barometric Pres.: 1019 mb
Tested by: Jaemi Suh	Job Site: OC11

## TEST SPECIFICATIONS

FCC 15.247 (DTS):2007	Test Method: ANSI C63.4:2003 KDB No. 558074
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## COMMENTS

PC Power Level: 255. CHIP PA level = 0 dBm. Cable Loss = 0.9 dBm

## DEVIATIONS FROM TEST STANDARD

Configuration #	1	
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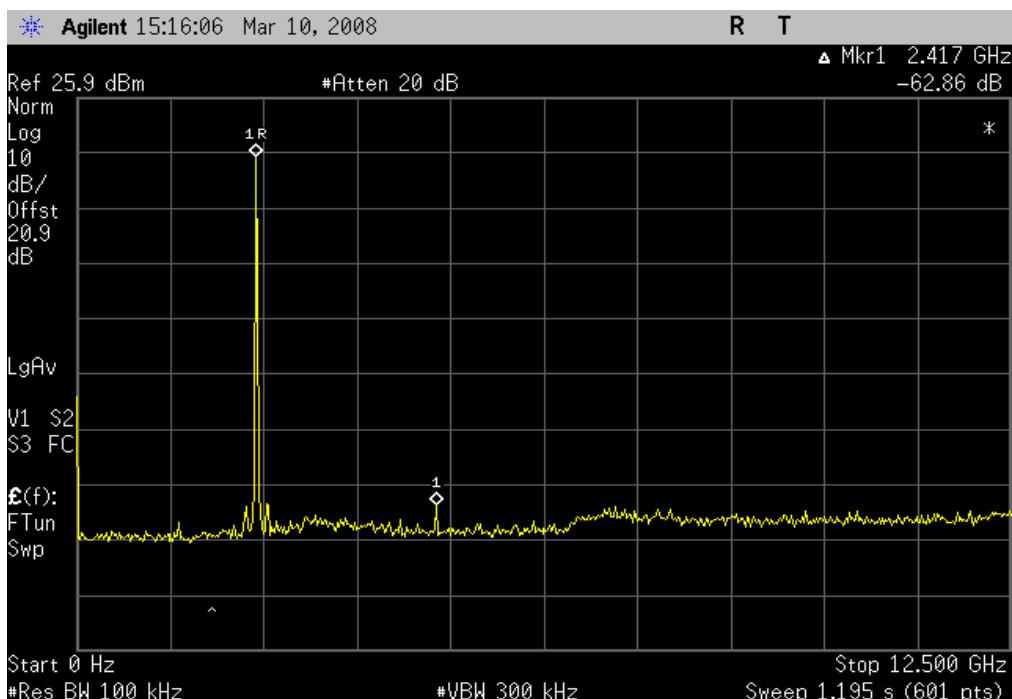
		Value	Limit	Results
Highest Output Power				
Low Channel	0 Mhz - 12.5 GHz	-62.86 dBc	≤ -20 dBc	Pass
	12.5 GHz -26 GHz	≤ -40 dBc	≤ -20 dBc	Pass
Mid Channel	0 Mhz - 12.5 GHz	-62.60 dBc	≤ -20 dBc	Pass
	12.5 GHz -26 GHz	≤ -40 dBc	≤ -20 dBc	Pass
High Channel	0 Mhz - 12.5 GHz	-60.73 dBc	≤ -20 dBc	Pass
	12.5 GHz -26 GHz	≤ -40 dBc	≤ -20 dBc	Pass

Highest Output Power, Low Channel, 0 Mhz - 12.5 GHz

Result: Pass

Value: -62.86 dBc

Limit: ≤ -20 dBc

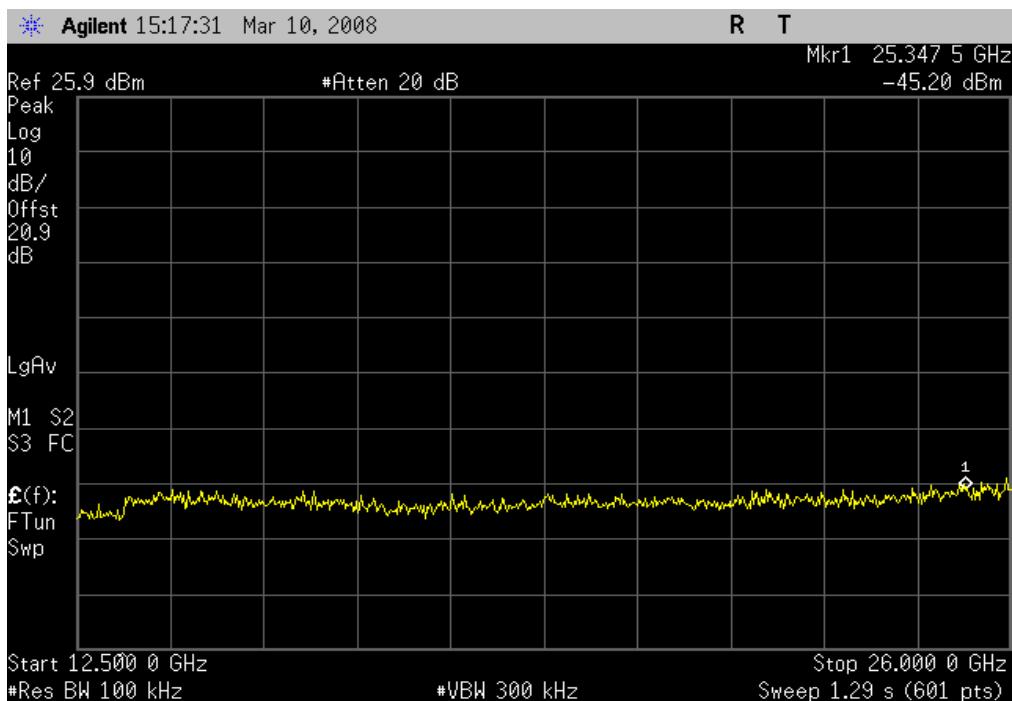


Highest Output Power, Low Channel, 12.5 GHz -26 GHz

Result: Pass

Value: ≤ -40 dBc

Limit: ≤ -20 dBc

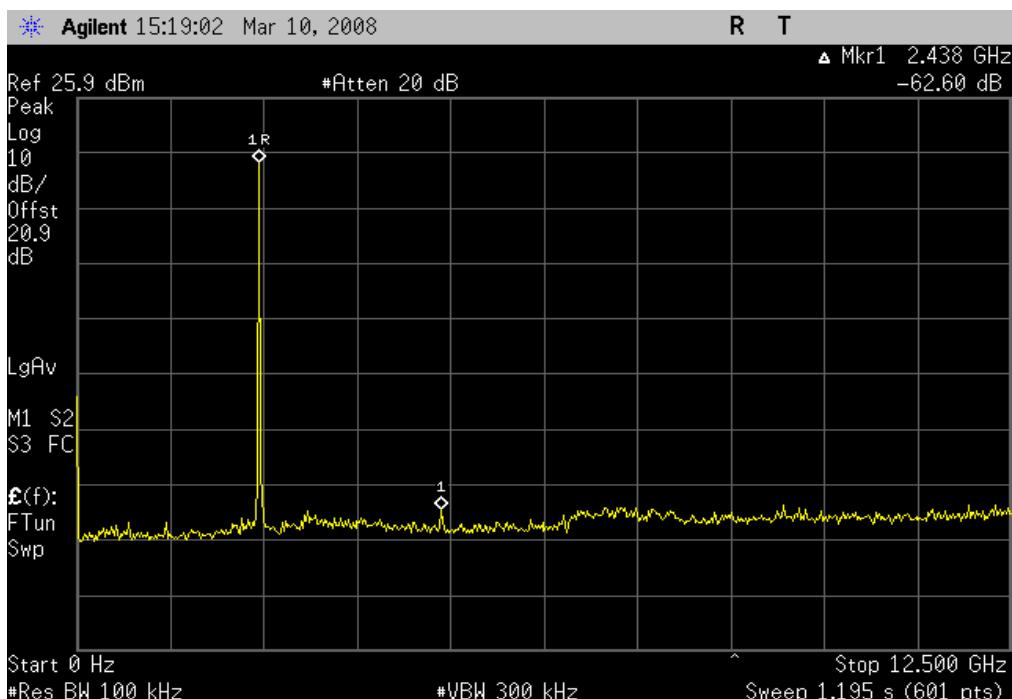


Highest Output Power, Mid Channel, 0 Mhz - 12.5 GHz

Result: Pass

Value: -62.60 dBc

Limit: ≤ -20 dBc

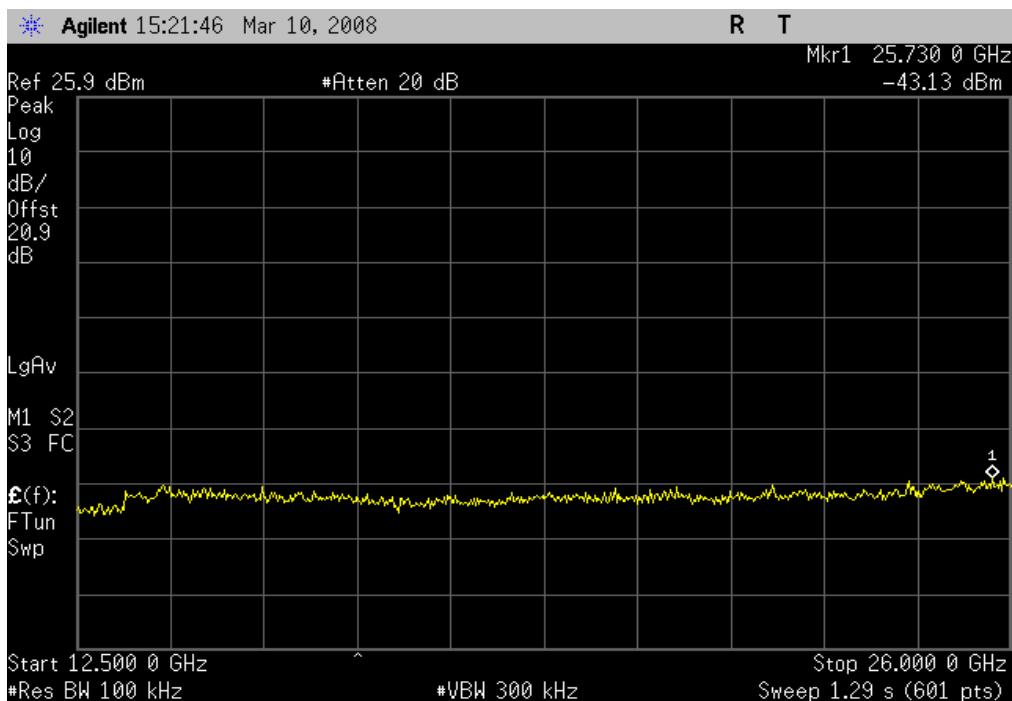


Highest Output Power, Mid Channel, 12.5 GHz -26 GHz

Result: Pass

Value: ≤ -40 dBc

Limit: ≤ -20 dBc

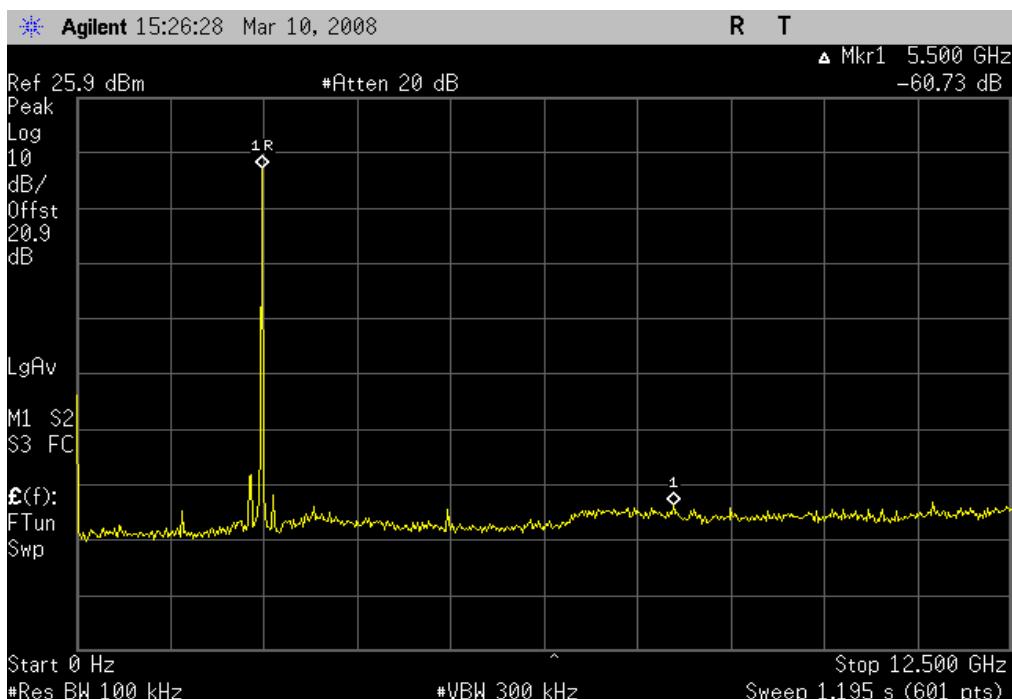


Highest Output Power, High Channel, 0 Mhz - 12.5 GHz

Result: Pass

Value: -60.73 dBc

Limit: ≤ -20 dBc

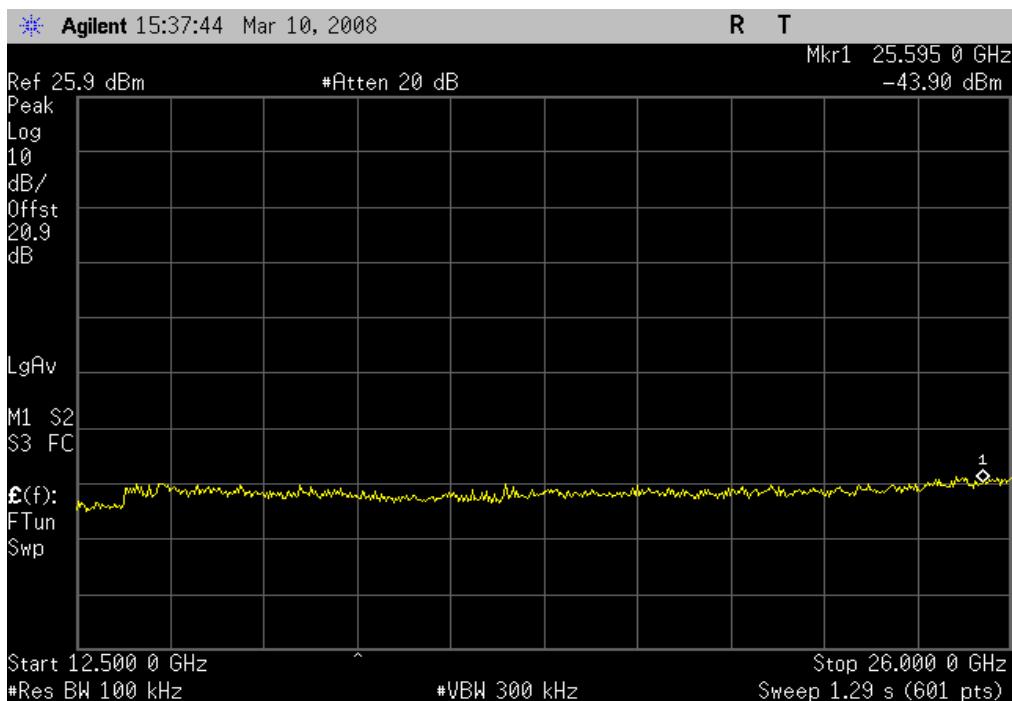


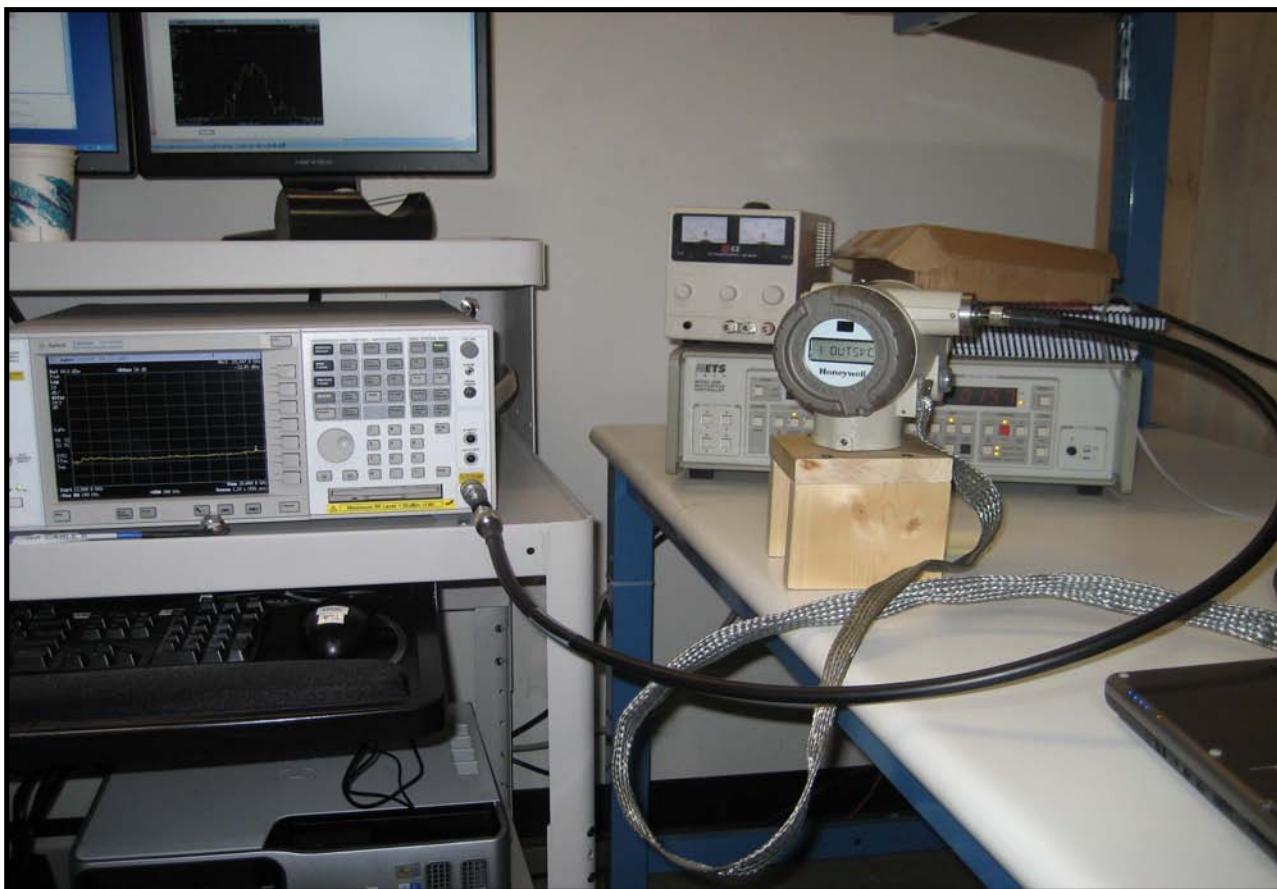
Highest Output Power, High Channel, 12.5 GHz -26 GHz

Result: Pass

Value: ≤ -40 dBc

Limit: ≤ -20 dBc





Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

**TEST EQUIPMENT**

Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Agilent	E4440A	AAX	10/1/2007	12

**MEASUREMENT UNCERTAINTY**

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

**TEST DESCRIPTION**

The peak power spectral density measurements were measured with the EUT set to low, mid, and high transmit frequencies. The measurement was made using a direct connection between the RF output of the EUT and the spectrum analyzer. The EUT was transmitting at its maximum data rate using direct sequence modulation. Per the procedure outlined in FCC 97-114, the spectrum analyzer was used as follows:

The emission peak(s) were located and zoom in on within the passband. The resolution bandwidth was set to 3 kHz, the video bandwidth was set to greater than or equal to the resolution bandwidth. The sweep speed was set equal to the span divided by 3 kHz (sweep = (SPAN/3 kHz)). For example, given a span of 1.5 MHz, the sweep should be  $1.5 \times 10^6 \div 3 \times 10^3 = 500$  seconds. External attenuation was used and added to the reading. The following FCC procedure was used for modifying the power spectral density measurements:

"If the spectrum line spacing cannot be resolved on the available spectrum analyzer, the noise density function on most modern conventional spectrum analyzers will directly measure the noise power density normalized to a 1 Hz noise power bandwidth. Add 35 dB for correction to 3 kHz."

## POWER SPECTRAL DENSITY

EUT: XYR6000 15.4 Radio with LPF modified.

Work Order: HONE0023

Serial Number: None

Date: 03/10/08

Customer: Honeywell

Temperature: 22c°C

Attendees: David Shipley

Humidity: 40%

Project: None

Barometric Pres.: 1019 mb

Tested by: Jaemi Suh

Power: Battery

Job Site: OC11

## TEST SPECIFICATIONS

## Test Method

FCC 15.247 (DTS):2007

ANSI C63.4:2003 KDB No. 558074

## COMMENTS

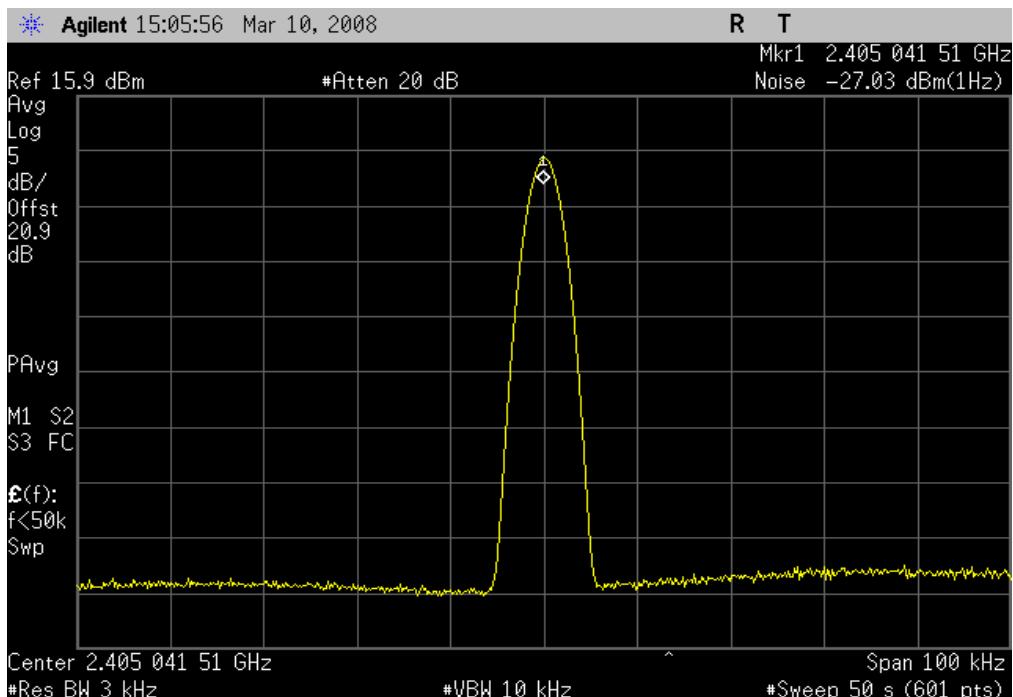
PC Power Level: 255. CHIP PA level = 0 dB. Cable Loss= 0.9 dBm

## DEVIATIONS FROM TEST STANDARD

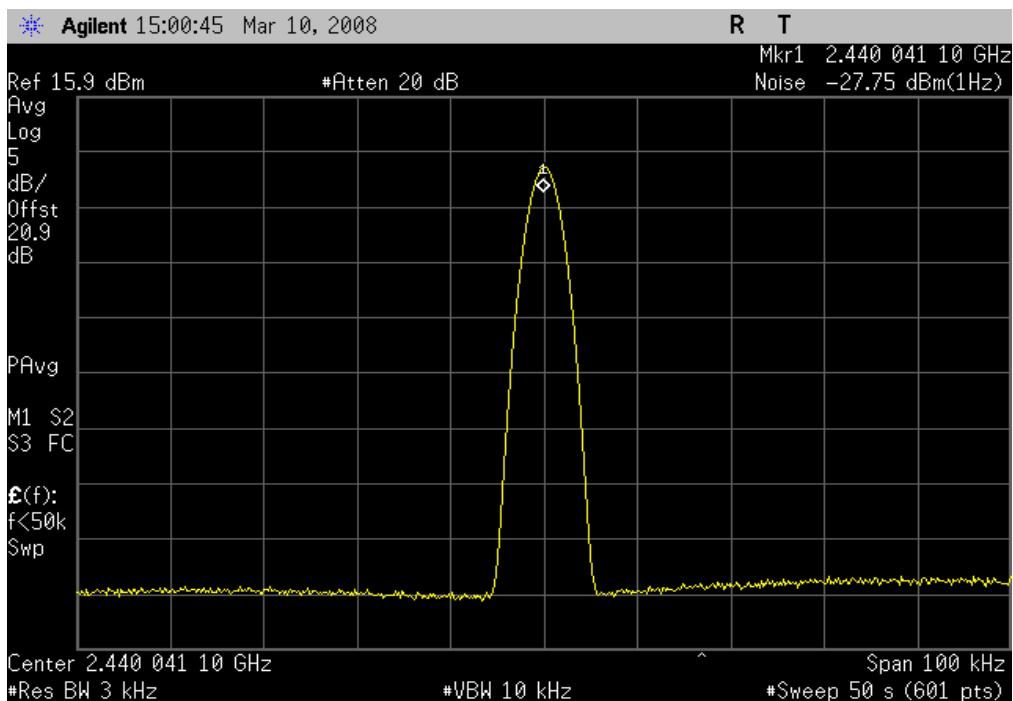
Configuration #	1	Signature	Value	Limit	Results
Power Spectral Density					
Low Channel			7.97 dBm / 3 kHz	8 dBm / 3 kHz	Pass
Mid Channel			7.25 dBm / 3 kHz	8 dBm / 3 kHz	Pass
High Channel			6.15 dBm / 3 kHz	8 dBm / 3 kHz	Pass

## POWER SPECTRAL DENSITY

Power Spectral Density, Low Channel		
<b>Result:</b> Pass	<b>Value:</b> 7.97 dBm / 3 kHz	<b>Limit:</b> 8 dBm / 3 kHz



Power Spectral Density, Mid Channel		
<b>Result:</b> Pass	<b>Value:</b> 7.25 dBm / 3 kHz	<b>Limit:</b> 8 dBm / 3 kHz

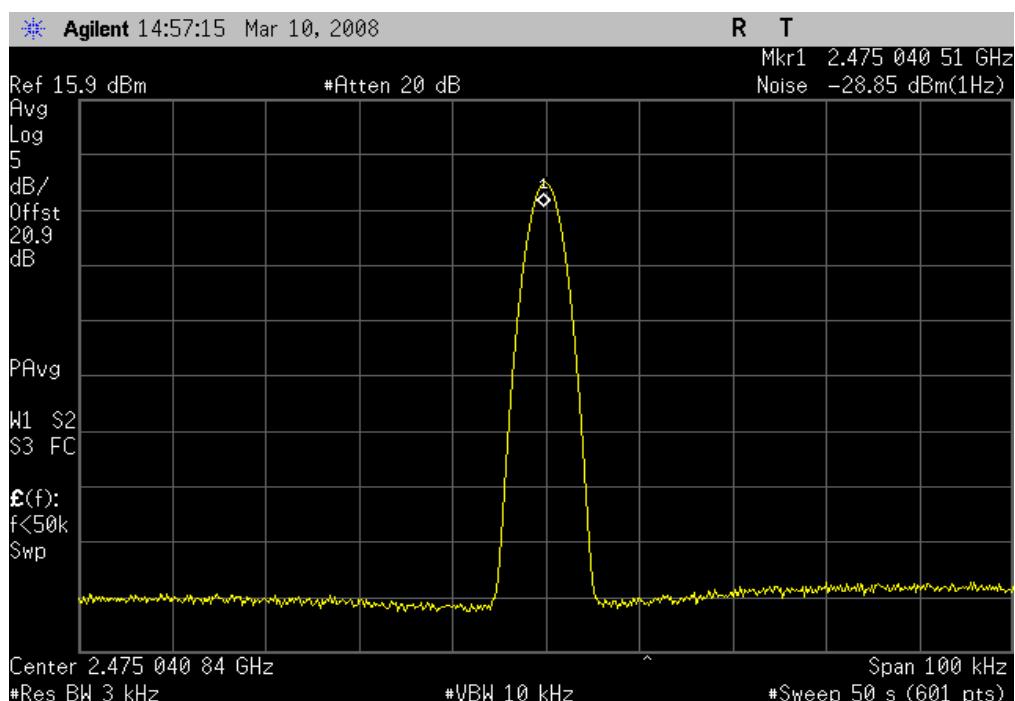


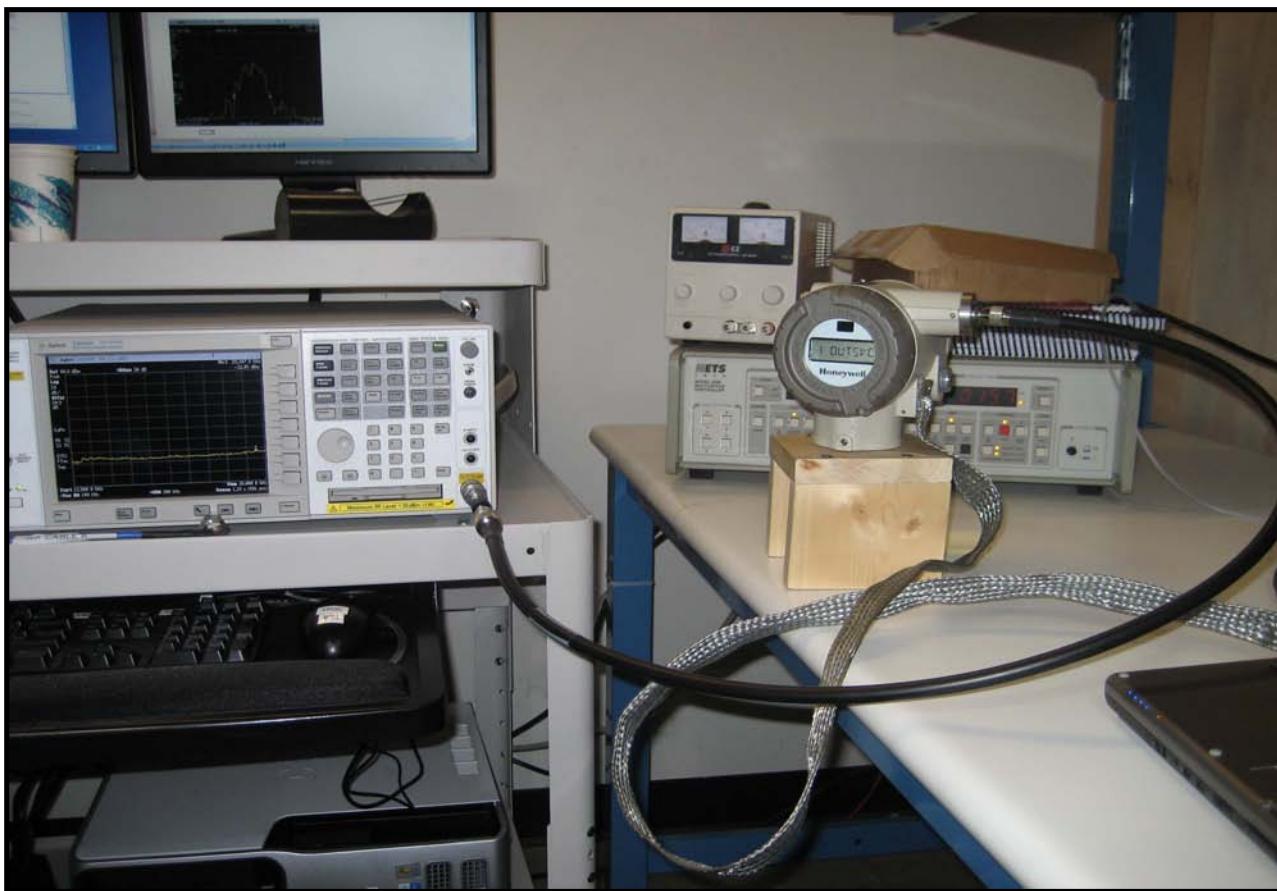
## Power Spectral Density, High Channel

Result: Pass

Value: 6.15 dBm / 3 kHz

Limit: 8 dBm / 3 kHz





Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

#### MODES OF OPERATION

Channel 1. Transmitting at 2405. FHSS Mode.  
Channel 40. Transmitting at 2440. FHSS Mode.  
Channel 75. Transmitting at 2475. FHSS Mode.

#### ANTENNA TYPE

-2 dB Omni (Dipole) Antenna. Honeywell Part #50016185-001, MFR Part #MAF94152  
8 dB Omni (Dipole) Antenna. Honeywell Part #50018414-001, MFR Part #HGV-2409U  
14 dB Directional (Dish) Antenna. Honeywell Part #50018415-001, MFR Part #HG2414D

#### MODE USED FOR FINAL DATA

Channel 1. Transmitting at 2405. FHSS Mode.  
Channel 40. Transmitting at 2440. FHSS Mode.  
Channel 75. Transmitting at 2475. FHSS Mode.

#### POWER SETTINGS INVESTIGATED

12 VDC

#### POWER SETTINGS USED FOR FINAL DATA

12 VDC

#### FREQUENCY RANGE INVESTIGATED

Start Frequency	30 MHz	Stop Frequency	26 GHz
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#### CLOCKS AND OSCILLATORS

2405 MHz, 2440 MHz, 2475 MHz

#### SAMPLE CALCULATIONS

Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation

#### TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Antenna, Horn	EMCO	3160-09	AHN	NCR	0
OC10 SMA cable for 18026 GHz			OCK	3/3/2008	13
Pre-Amplifier	Miteq	AMF-6F-12001800-30-10P	AOF	10/13/2006	24
Antenna, Horn	ETS	3160-08	AHT	NCR	0
Pre-Amplifier	Miteq	AMF-6F-08001200-30-10P	AOE	10/13/2006	24
Antenna, Horn	ETS	3160-07	AHR	NCR	0
OC 10 Cables a, b, c, I Cables			OCO	2/2/2008	13
Pre-Amplifier	Miteq	AMF-4D-010120-30-10P-1	AOP	2/2/2008	13
Antenna, Horn	EMCO	3115	AHB	8/31/2007	24
OC10 cables a,b,c,e,f Horn Cables			OCJ	2/2/2008	13
Antenna, Biconilog	EMCO	3142	AXJ	2/25/2008	24
OC10 cables a,b,c,d Bilog			OCH	1/7/2008	13
Pre-Amplifier	Miteq	AM-1616-1000	AOM	1/7/2008	13
Spectrum Analyzer	Agilent	E4446A	AAQ	12/14/2007	13

#### MEASUREMENT BANDWIDTHS

	Frequency Range	Peak Data	Quasi-Peak Data	Average Data
	(MHz)	(kHz)	(kHz)	(kHz)
	0.01 - 0.15	1.0	0.2	0.2
	0.15 - 30.0	10.0	9.0	9.0
	30.0 - 1000	100.0	120.0	120.0
	Above 1000	1000.0	N/A	1000.0

Measurements were made using the bandwidths and detectors specified. No video filter was used.

#### MEASUREMENT UNCERTAINTY

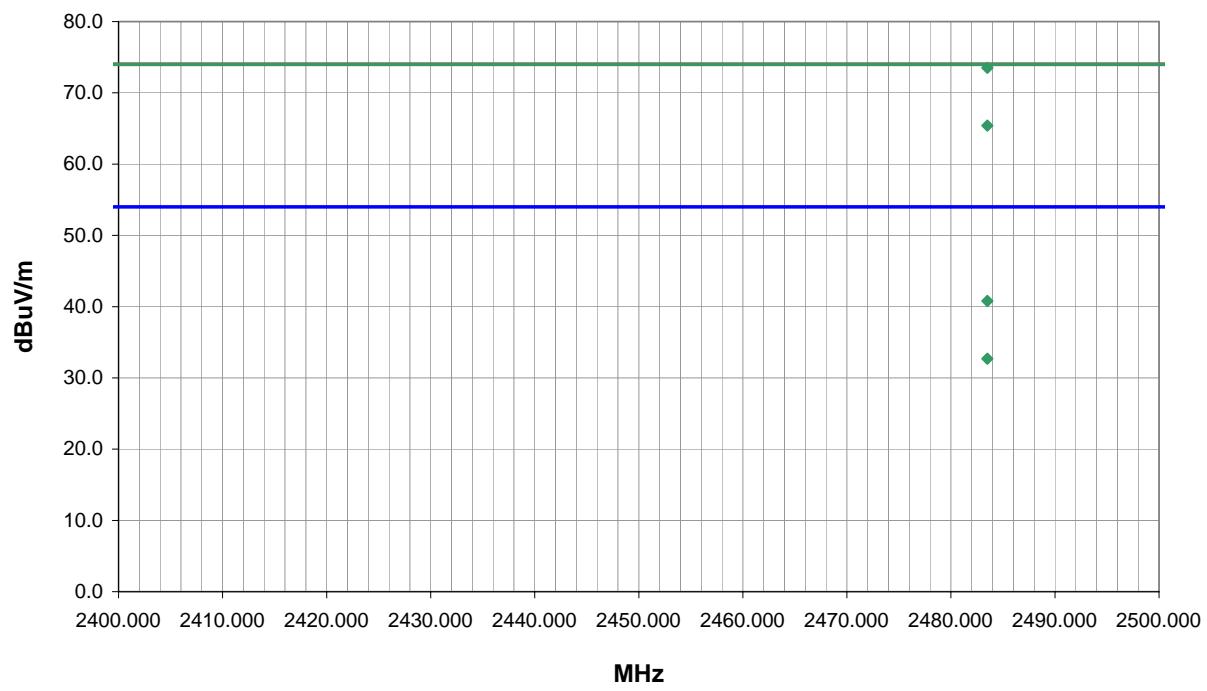
Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

#### TEST DESCRIPTION

The highest gain of each type of antenna to be used with the EUT was tested. The EUT was configured for low, mid, and high band transmit frequencies. For each configuration, the spectrum was scanned throughout the specified range. In addition, measurements were made in the restricted bands to verify compliance. While scanning, emissions from the EUT were maximized by rotating the EUT on a turntable, adjusting the position of the EUT and the EUT antenna in three orthogonal axis, and adjusting measurement antenna height and polarization, and manipulating the EUT antenna in 3 orthogonal planes (per ANSI C63.4:2003). A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

SPURIOUS RADIATED EMISSIONS DATA SHEET										EMC		NORTHWEST	
EUT: XYR6000 15.4 Radio with LPF modified FHSS Mode.										Work Order: HONE0027		PSA 2007.05.07	
Serial Number: None										Date: 03/06/08		EMI 2006.4.26	
Customer: Honeywell										Temperature: 22c			
Attendees: David Shipley										Humidity: 40%			
Project: None										Barometric Pres.: 1019 mb			
Tested by: Jaemi Suh					Power: Battery		Job Site: OC10						
TEST SPECIFICATIONS													
FCC 15.247(d) Spurious Radiated Emissions													
ANSI C63.4													
TEST PARAMETERS													
Antenna Height(s) (m)		1 - 4		Test Distance (m)		3							
COMMENTS													
High Gain Antenna 14dBi. PC Power Level: 255 (18.8 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 0.61msec dwell time.													
EUT OPERATING MODES													
Transmitting at 2475.													
DEVIATIONS FROM TEST STANDARD													
No deviations.													
Run #	75								<i>Jaemi Suh</i>				
Configuration #	1												
Results	Pass												
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)	
2322.786	47.9	5.4	0.0	1.7	0.0	20.0	H-Horn	PK	0.0	73.3	74.0	-0.7	
2326.897	47.0	5.4	5.0	1.7	0.0	20.0	H-Horn	PK	0.0	72.4	74.0	-1.6	
2322.926	42.1	5.4	0.0	1.7	20.0	20.0	H-Horn	AV	0.0	47.5	54.0	-6.5	
2326.932	41.7	5.4	5.0	1.7	20.0	20.0	H-Horn	AV	0.0	47.1	54.0	-6.9	

EUT: XYR6000 15.4 Radio with LPF modified FHSS Mode				Work Order: HONE0027
Serial Number: None				Date: 03/06/08
Customer: Honeywell				Temperature: 22c
Attendees: David Shipley				Humidity: 40%
Project: None				Barometric Pres.: 1019 mb
Tested by: Jaemi Suh	Power: Battery	Job Site: OC10		
TEST SPECIFICATIONS				
FCC 15.247(d) Spurious Radiated Emissions		Test Method: ANSI C63.4		
TEST PARAMETERS				
Antenna Height(s) (m)	1 - 4	Test Distance (m)	3	
COMMENTS				
High Gain Antenna 14dBi. PC Power Level: 255 (18.8 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 0.61msec dwell time.				
EUT OPERATING MODES				
Transmitting at 2475				
DEVIATIONS FROM TEST STANDARD				
No deviations.				
Run #	76	 Signature		
Configuration #	1			
Results	Pass			



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
2483.500	48.1	5.4	359.0	1.5	0.0	20.0	H-Horn	PK	0.0	73.5	74.0	-0.5
2483.500	40.0	5.4	36.0	2.8	0.0	20.0	V-Horn	PK	0.0	65.4	74.0	-8.6
2483.499	35.4	5.4	359.0	1.5	20.0	20.0	H-Horn	AV	0.0	40.8	54.0	-13.2
2483.499	27.3	5.4	36.0	2.8	20.0	20.0	V-Horn	AV	0.0	32.7	54.0	-21.3

EUT: XYR6000 15.4 Radio with LPF modified FHSS Mode		Work Order: HONE0027
Serial Number: None		Date: 03/06/08
Customer: Honeywell		Temperature: 22c
Attendees: David Shipley		Humidity: 40%
Project: None		Barometric Pres.: 1019 mb
Tested by: Jaemi Suh	Power: Battery	Job Site: OC10

## TEST SPECIFICATIONS

FCC 15.247(d) Spurious Radiated Emissions	ANSI C63.4
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## TEST PARAMETERS

Antenna Height(s) (m)	1 - 4	Test Distance (m)	3
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## COMMENTS

High Gain Antenna 14dBi. PC Power Level: 255 (18.8 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 0.61msec dwell time.

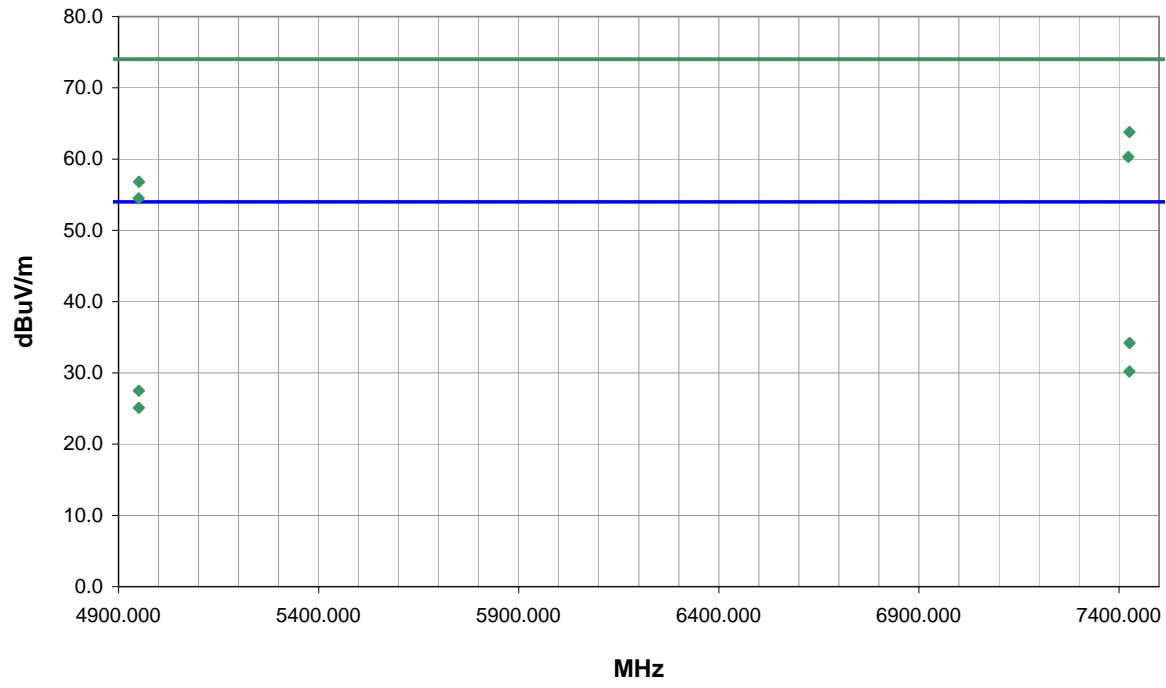
## EUT OPERATING MODES

Transmitting at 2475

## DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	77	Signature
Configuration #	1	
Results	Pass	



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
7426.119	47.3	16.5	182.0	1.1	0.0	0.0	H-Horn	PK	0.0	63.8	74.0	-10.2
7423.089	43.8	16.5	133.0	1.6	0.0	0.0	V-Horn	PK	0.0	60.3	74.0	-13.7
4951.078	44.0	12.8	0.0	1.6	0.0	0.0	H-Horn	PK	0.0	56.8	74.0	-17.2
4950.361	41.7	12.8	174.0	1.2	0.0	0.0	V-Horn	PK	0.0	54.5	74.0	-19.5
7426.285	37.7	16.5	182.0	1.1	20.0	0.0	H-Horn	AV	0.0	34.2	54.0	-19.8
7425.973	33.7	16.5	133.0	1.6	20.0	0.0	V-Horn	AV	0.0	30.2	54.0	-23.8
4950.949	34.7	12.8	0.0	1.6	20.0	0.0	H-Horn	AV	0.0	27.5	54.0	-26.5
4950.949	32.3	12.8	174.0	1.2	20.0	0.0	V-Horn	AV	0.0	25.1	54.0	-28.9

EUT: XYR6000 15.4 Radio with LPF modified		Work Order: HONE0027
Serial Number: None		Date: 03/06/08
Customer: Honeywell		Temperature: 22c
Attendees: David Shipley		Humidity: 40%
Project: None		Barometric Pres.: 1019 mb
Tested by: Jaemi Suh	Power: Battery	Job Site: OC10

## TEST SPECIFICATIONS

FCC 15.247(d) Spurious Radiated Emissions	ANSI C63.4
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## TEST PARAMETERS

Antenna Height(s) (m)	1 - 4	Test Distance (m)	3
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## COMMENTS

High Gain Antenna 14dBi. PC Power Level: 255 (18.8 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 0.61msec dwell time.

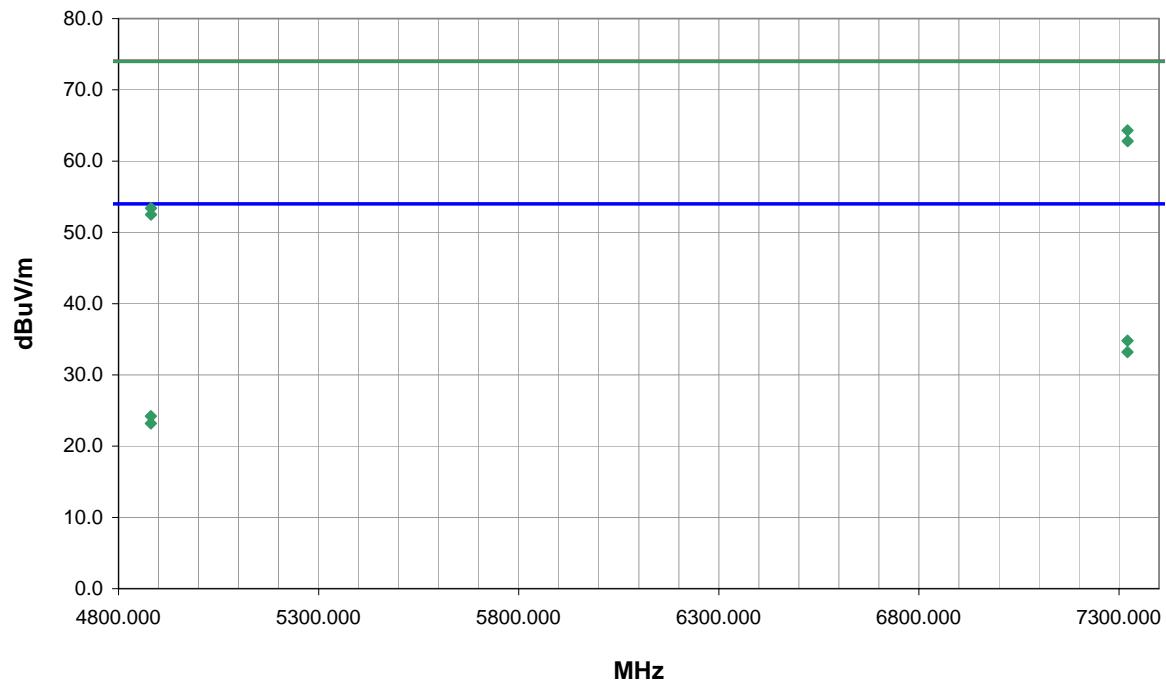
## EUT OPERATING MODES

Transmitting at 2440.

## DEVIATIONS FROM TEST STANDARD

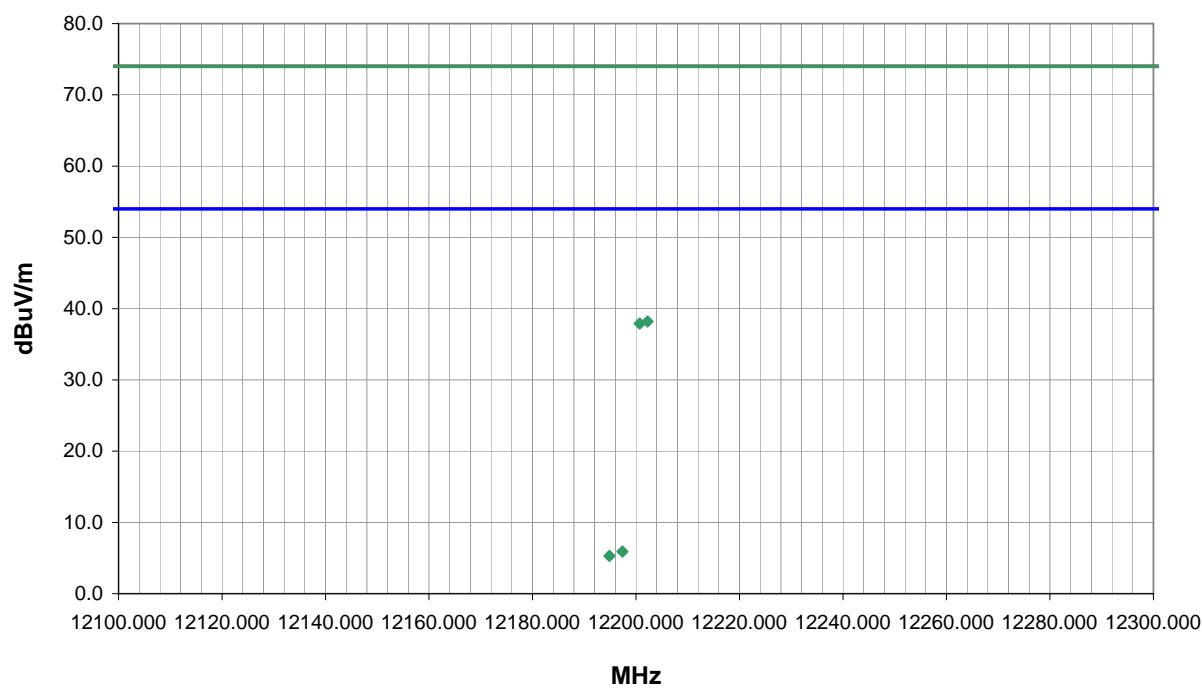
No deviations.

Run #	79	Signature
Configuration #	1	
Results	Pass	



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
7321.040	47.9	16.4	103.0	1.2	0.0	0.0	H-Horn	PK	0.0	64.3	74.0	-9.7
7321.614	46.4	16.4	202.0	1.5	0.0	0.0	V-Horn	PK	0.0	62.8	74.0	-11.2
7321.308	38.4	16.4	103.0	1.2	20.0	0.0	H-Horn	AV	0.0	34.8	54.0	-19.2
4881.187	40.8	12.6	34.0	1.3	0.0	0.0	H-Horn	PK	0.0	53.4	74.0	-20.6
7321.362	36.8	16.4	202.0	1.5	20.0	0.0	V-Horn	AV	0.0	33.2	54.0	-20.8
4881.086	39.9	12.6	147.0	1.1	0.0	0.0	V-Horn	PK	0.0	52.5	74.0	-21.5
4880.910	31.6	12.6	34.0	1.3	20.0	0.0	H-Horn	AV	0.0	24.2	54.0	-29.8
4880.928	30.6	12.6	147.0	1.1	20.0	0.0	V-Horn	AV	0.0	23.2	54.0	-30.8

EUT: XYR6000 15.4 Radio with LPF modified		Work Order: HONE0027
Serial Number: None		Date: 03/06/08
Customer: Honeywell		Temperature: 22c
Attendees: David Shipley		Humidity: 40%
Project: None		Barometric Pres.: 1019 mb
Tested by: Jaemi Suh	Power: Battery	Job Site: OC10
TEST SPECIFICATIONS		
FCC 15.247(d) Spurious Radiated Emissions		Test Method: ANSI C63.4
TEST PARAMETERS		
Antenna Height(s) (m)	1 - 4	Test Distance (m)
COMMENTS		
High Gain Antenna 14dBi. PC Power Level: 255 (18.8 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 0.61msec dwell time.		
EUT OPERATING MODES		
Transmitting at 2440.		
DEVIATIONS FROM TEST STANDARD		
No deviations.		
Run #	80	
Configuration #	1	
Results	Pass	



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
12202.240	46.6	-8.4	213.0	1.0	0.0	0.0	V-Horn	PK	0.0	38.2	74.0	-35.8
12200.720	46.3	-8.4	69.0	1.0	0.0	0.0	H-Horn	PK	0.0	37.9	74.0	-36.1
12197.370	34.3	-8.4	213.0	1.0	20.0	0.0	V-Horn	AV	0.0	5.9	54.0	-48.1
12194.880	33.7	-8.4	69.0	1.0	20.0	0.0	H-Horn	AV	0.0	5.3	54.0	-48.7

EUT: XYR6000 15.4 Radio with LPF modified		Work Order:	HONE0027
Serial Number: None		Date:	03/06/08
Customer: Honeywell		Temperature:	22c
Attendees: David Shipley		Humidity:	40%
Project: None		Barometric Pres.:	1019 mb
Tested by: Jaemi Suh	Power: Battery	Job Site:	OC10

## TEST SPECIFICATIONS

FCC 15.247(d) Spurious Radiated Emissions	ANSI C63.4
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## TEST PARAMETERS

Antenna Height(s) (m)	1 - 4	Test Distance (m)	3
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## COMMENTS

High Gain Antenna 14dBi. PC Power Level: 255 (18.8 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 0.61msec dwell time.

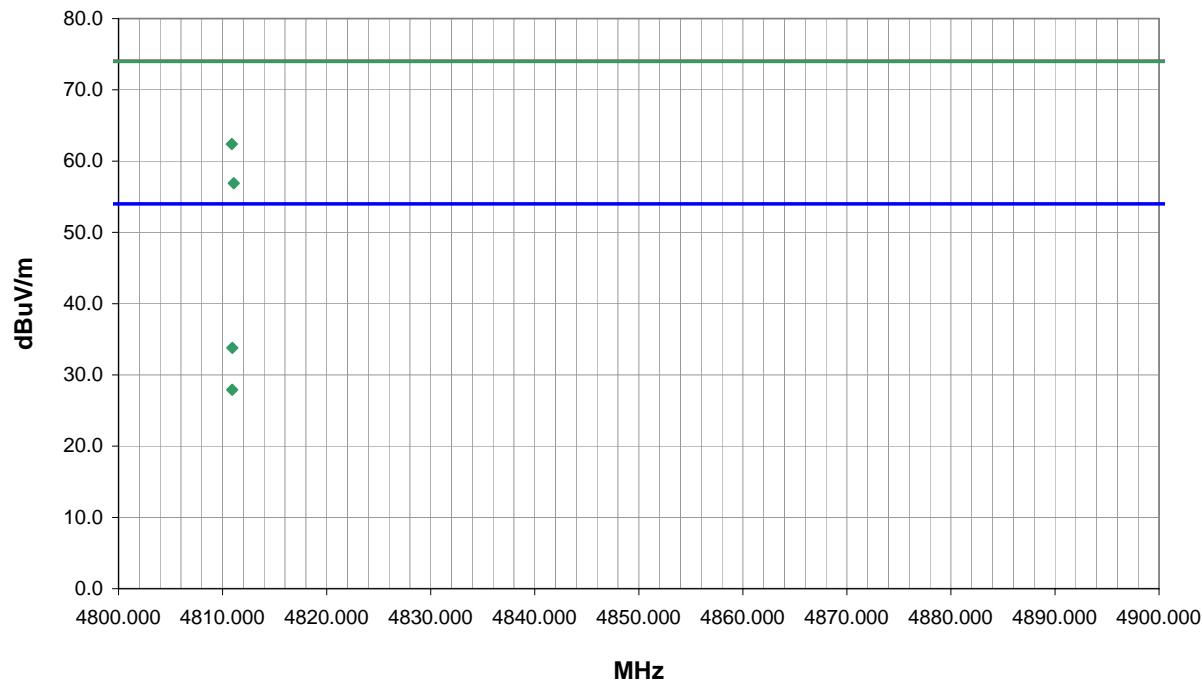
## EUT OPERATING MODES

Transmitting at 2405.

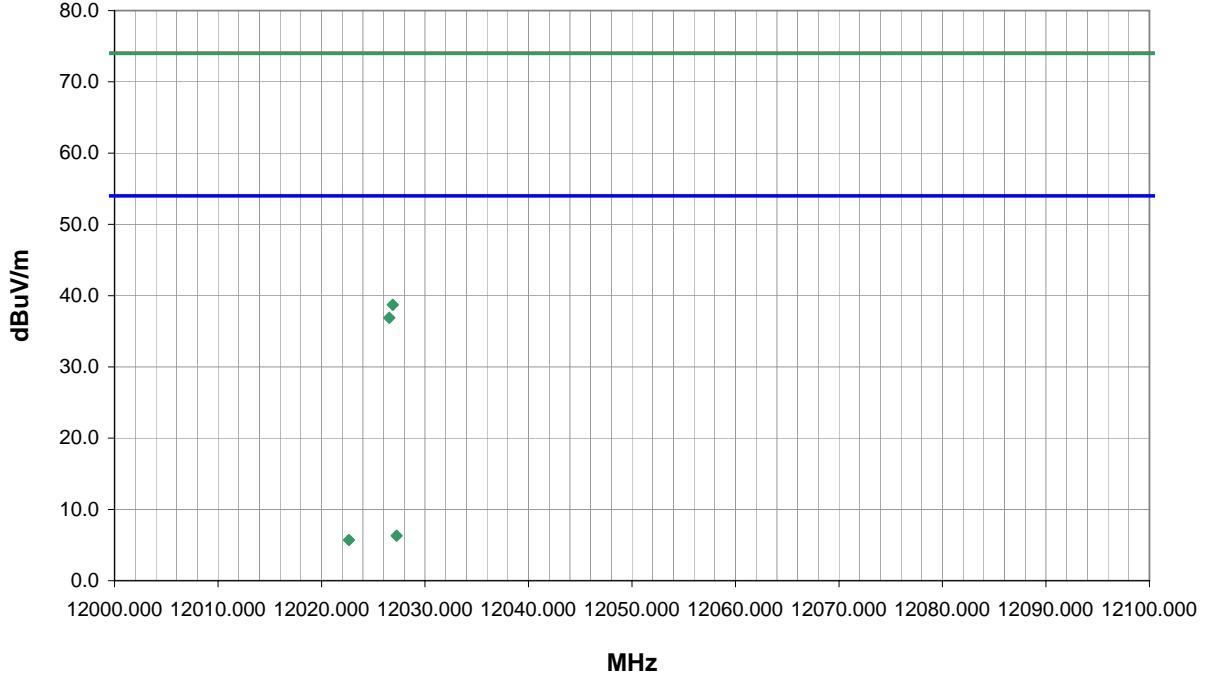
## DEVIATIONS FROM TEST STANDARD

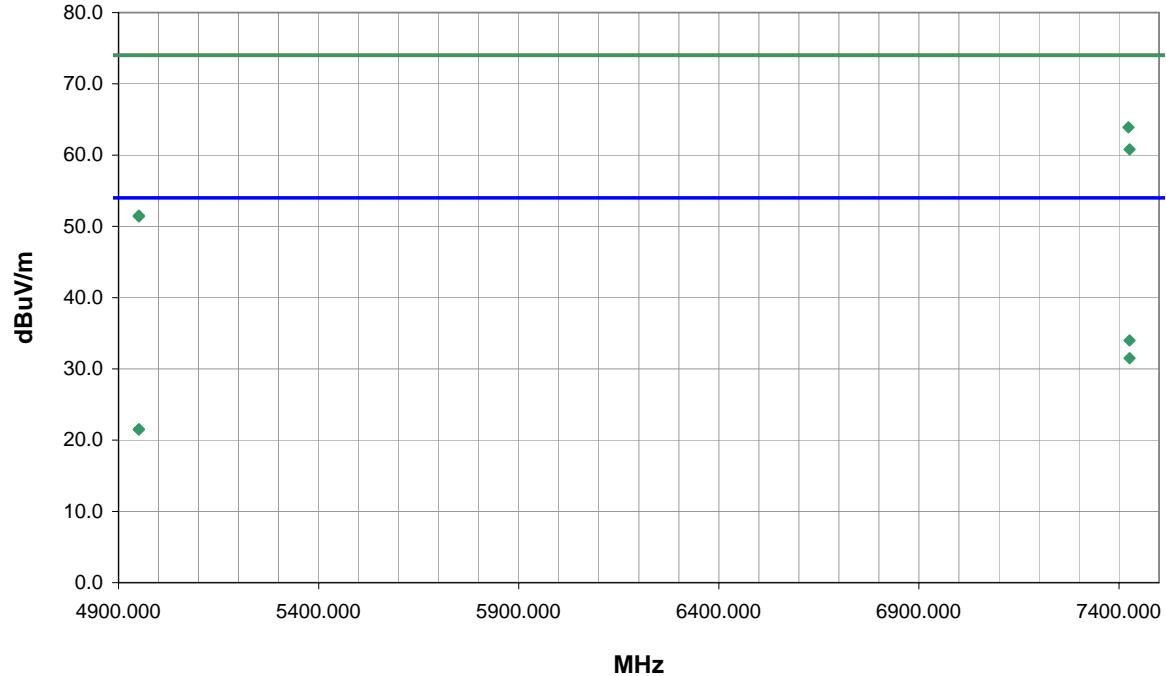
No deviations.

Run #	81	 Signature
Configuration #	1	
Results	Pass	



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
4810.882	49.9	12.5	1.0	1.7	0.0	0.0	H-Horn	PK	0.0	62.4	74.0	-11.6
4811.073	44.4	12.5	5.0	1.5	0.0	0.0	V-Horn	PK	0.0	56.9	74.0	-17.1
4810.932	41.3	12.5	1.0	1.7	20.0	0.0	H-Horn	AV	0.0	33.8	54.0	-20.2
4810.921	35.4	12.5	5.0	1.5	20.0	0.0	V-Horn	AV	0.0	27.9	54.0	-26.1

EUT: XYR6000 15.4 Radio with LPF modified								Work Order: HONE0027				
Serial Number: None								Date: 03/06/08				
Customer: Honeywell								Temperature: 22c				
Attendees: David Shipley								Humidity: 40%				
Project: None								Barometric Pres.: 1019 mb				
Tested by: Jaemi Suh				Power: Battery				Job Site: OC10				
TEST SPECIFICATIONS												
FCC 15.247(d) Spurious Radiated Emissions								Test Method: ANSI C63.4				
TEST PARAMETERS												
Antenna Height(s) (m)				1 - 4				Test Distance (m)				
Configuration #				1				3				
COMMENTS												
High Gain Antenna 14dBi. PC Power Level: 255 (18.8 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 0.61msec dwell time.												
EUT OPERATING MODES												
Transmitting at 2405.												
DEVIATIONS FROM TEST STANDARD												
No deviations.												
Run #	82											
Configuration #	1											
Results	Pass			Signature								
												
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
12026.880	47.7	-9.0	150.0	1.0	0.0	0.0	V-Horn	PK	0.0	38.7	74.0	-35.3
12026.540	45.9	-9.0	253.0	1.0	0.0	0.0	H-Horn	PK	0.0	36.9	74.0	-37.1
12027.260	35.3	-9.0	150.0	1.0	20.0	0.0	V-Horn	AV	0.0	6.3	54.0	-47.7
12022.650	34.7	-9.0	253.0	1.0	20.0	0.0	H-Horn	AV	0.0	5.7	54.0	-48.3

SPURIOUS RADIATED EMISSIONS DATA SHEET											PSA 2007.05.07 EMI 2006.4.26																																																																																																																				
EUT: XYR6000 15.4 Radio with LPF modified. Serial Number: None Customer: Honeywell Attendees: David Shipley Project: None Tested by: Jaemi Suh											Work Order: HONE0027																																																																																																																				
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Results	Pass																																																																																																																														
																																																																																																																															
<table border="1"> <thead> <tr> <th>Freq (MHz)</th> <th>Amplitude (dBuV)</th> <th>Factor (dB)</th> <th>Azimuth (degrees)</th> <th>Height (meters)</th> <th>Duty Cycle Correction Factor</th> <th>External Attenuation (dB)</th> <th>Polarity</th> <th>Detector</th> <th>Distance Adjustment (dB)</th> <th>Adjusted dBuV/m</th> <th>Spec. Limit dBuV/m</th> <th>Compared to Spec. (dB)</th> </tr> </thead> <tbody> <tr><td>7423.714</td><td>47.4</td><td>16.5</td><td>355.0</td><td>1.0</td><td>0.0</td><td>0.0</td><td>H-Horn</td><td>PK</td><td>0.0</td><td>63.9</td><td>74.0</td><td>-10.1</td></tr> <tr><td>7426.507</td><td>44.3</td><td>16.5</td><td>301.0</td><td>1.3</td><td>0.0</td><td>0.0</td><td>V-Horn</td><td>PK</td><td>0.0</td><td>60.8</td><td>74.0</td><td>-13.2</td></tr> <tr><td>7426.318</td><td>37.5</td><td>16.5</td><td>355.0</td><td>1.0</td><td>20.0</td><td>0.0</td><td>H-Horn</td><td>AV</td><td>0.0</td><td>34.0</td><td>54.0</td><td>-20.0</td></tr> <tr><td>7426.340</td><td>35.0</td><td>16.5</td><td>301.0</td><td>1.3</td><td>20.0</td><td>0.0</td><td>V-Horn</td><td>AV</td><td>0.0</td><td>31.5</td><td>54.0</td><td>-22.5</td></tr> <tr><td>4950.900</td><td>38.7</td><td>12.8</td><td>58.0</td><td>1.2</td><td>0.0</td><td>0.0</td><td>V-Horn</td><td>PK</td><td>0.0</td><td>51.5</td><td>74.0</td><td>-22.5</td></tr> <tr><td>4950.753</td><td>38.6</td><td>12.8</td><td>56.0</td><td>1.1</td><td>0.0</td><td>0.0</td><td>H-Horn</td><td>PK</td><td>0.0</td><td>51.4</td><td>74.0</td><td>-22.6</td></tr> <tr><td>4950.844</td><td>28.7</td><td>12.8</td><td>56.0</td><td>1.1</td><td>20.0</td><td>0.0</td><td>H-Horn</td><td>AV</td><td>0.0</td><td>21.5</td><td>54.0</td><td>-32.5</td></tr> <tr><td>4950.904</td><td>28.7</td><td>12.8</td><td>58.0</td><td>1.2</td><td>20.0</td><td>0.0</td><td>V-Horn</td><td>AV</td><td>0.0</td><td>21.5</td><td>54.0</td><td>-32.5</td></tr> </tbody> </table>											Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)	7423.714	47.4	16.5	355.0	1.0	0.0	0.0	H-Horn	PK	0.0	63.9	74.0	-10.1	7426.507	44.3	16.5	301.0	1.3	0.0	0.0	V-Horn	PK	0.0	60.8	74.0	-13.2	7426.318	37.5	16.5	355.0	1.0	20.0	0.0	H-Horn	AV	0.0	34.0	54.0	-20.0	7426.340	35.0	16.5	301.0	1.3	20.0	0.0	V-Horn	AV	0.0	31.5	54.0	-22.5	4950.900	38.7	12.8	58.0	1.2	0.0	0.0	V-Horn	PK	0.0	51.5	74.0	-22.5	4950.753	38.6	12.8	56.0	1.1	0.0	0.0	H-Horn	PK	0.0	51.4	74.0	-22.6	4950.844	28.7	12.8	56.0	1.1	20.0	0.0	H-Horn	AV	0.0	21.5	54.0	-32.5	4950.904	28.7	12.8	58.0	1.2	20.0	0.0	V-Horn	AV	0.0	21.5	54.0	-32.5
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)																																																																																																																			
7423.714	47.4	16.5	355.0	1.0	0.0	0.0	H-Horn	PK	0.0	63.9	74.0	-10.1																																																																																																																			
7426.507	44.3	16.5	301.0	1.3	0.0	0.0	V-Horn	PK	0.0	60.8	74.0	-13.2																																																																																																																			
7426.318	37.5	16.5	355.0	1.0	20.0	0.0	H-Horn	AV	0.0	34.0	54.0	-20.0																																																																																																																			
7426.340	35.0	16.5	301.0	1.3	20.0	0.0	V-Horn	AV	0.0	31.5	54.0	-22.5																																																																																																																			
4950.900	38.7	12.8	58.0	1.2	0.0	0.0	V-Horn	PK	0.0	51.5	74.0	-22.5																																																																																																																			
4950.753	38.6	12.8	56.0	1.1	0.0	0.0	H-Horn	PK	0.0	51.4	74.0	-22.6																																																																																																																			
4950.844	28.7	12.8	56.0	1.1	20.0	0.0	H-Horn	AV	0.0	21.5	54.0	-32.5																																																																																																																			
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EUT: XYR6000 15.4 Radio with LPF modified.		Work Order:	HONE0027
Serial Number: None		Date:	03/10/08
Customer: Honeywell		Temperature:	22c
Attendees: David Shipley		Humidity:	40%
Project: None		Barometric Pres.:	1019 mb
Tested by: Jaemi Suh	Power: Battery	Job Site:	OC10

## TEST SPECIFICATIONS

FCC 15.247(d) Spurious Radiated Emissions	ANSI C63.4
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## TEST PARAMETERS

Antenna Height(s) (m)	1 - 4	Test Distance (m)	3
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## COMMENTS

Middle Gain Antenna 8dBi. PC Power Level: 255(18.8 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 0.61msec dwell time.

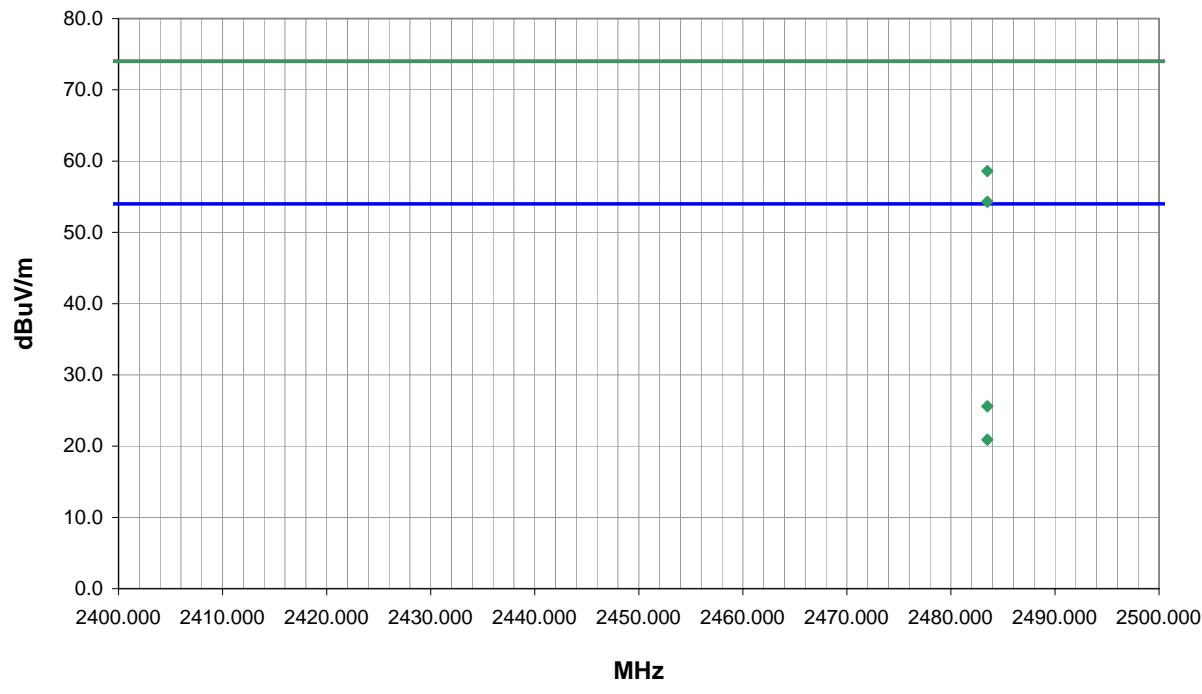
## EUT OPERATING MODES

Transmitting at 2475

## DEVIATIONS FROM TEST STANDARD

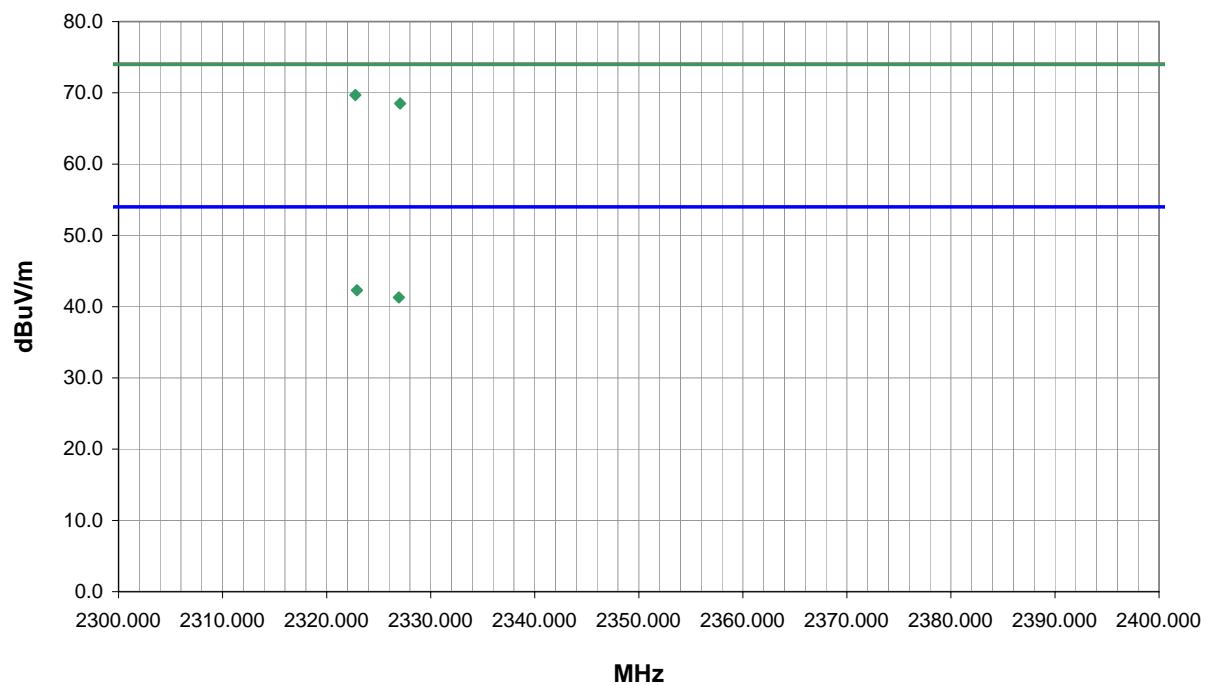
No deviations.

Run #	86	Signature
Configuration #	1	
Results	Pass	

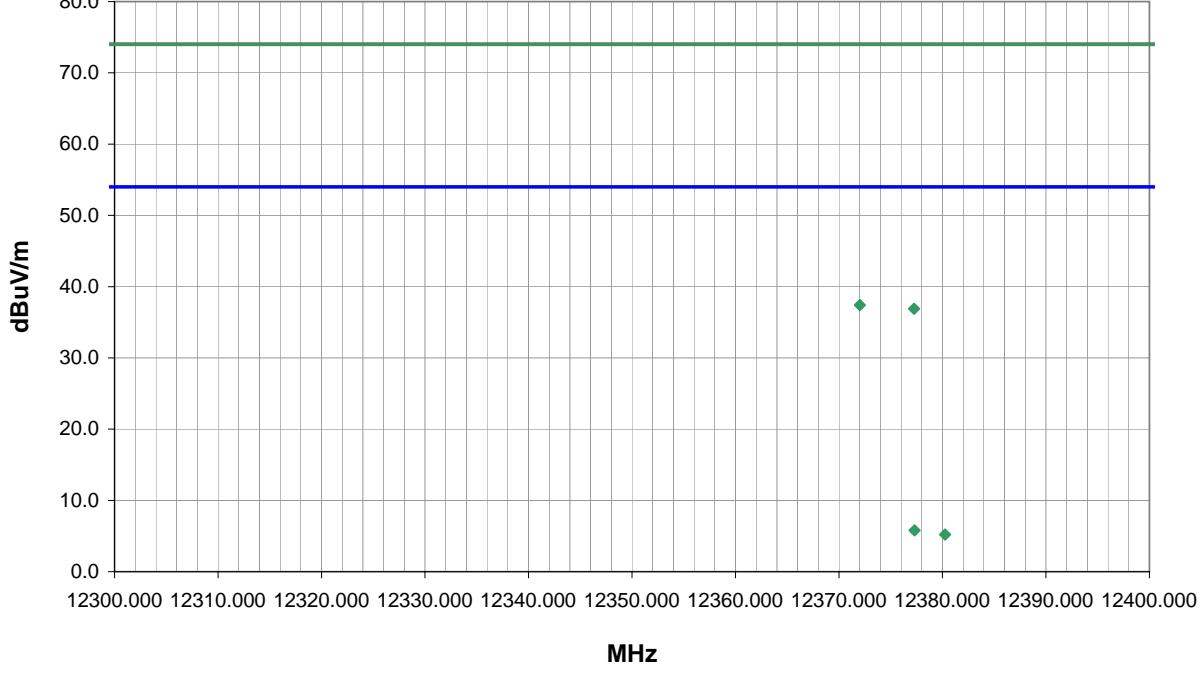


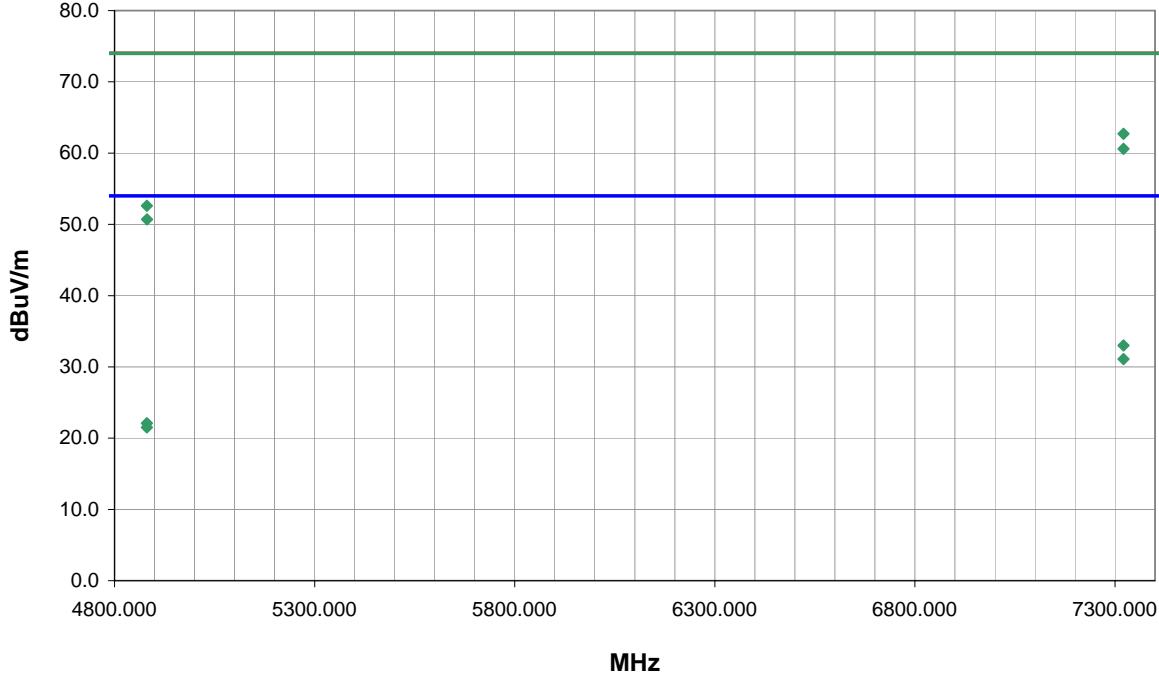
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
2483.500	33.2	5.4	118.0	1.0	0.0	20.0	V-Horn	PK	0.0	58.6	74.0	-15.4
2483.500	28.9	5.4	45.0	1.0	0.0	20.0	H-Horn	PK	0.0	54.3	74.0	-19.7
2483.500	20.2	5.4	118.0	1.0	20.0	20.0	V-Horn	AV	0.0	25.6	54.0	-28.4
2483.500	15.5	5.4	45.0	1.0	20.0	20.0	H-Horn	AV	0.0	20.9	54.0	-33.1

EUT: XYR6000 15.4 Radio with LPF modified		Work Order: HONE0027	
Serial Number: None	Date: 03/10/08		
Customer: Honeywell	Temperature: 22c		
Attendees: David Shipley	Humidity: 40%		
Project: None	Barometric Pres.: 1019 mb		
Tested by: Jaemi Suh	Power: Battery	Job Site: OC10	
TEST SPECIFICATIONS			
FCC 15.247(d) Spurious Radiated Emissions		Test Method: ANSI C63.4	
TEST PARAMETERS			
Antenna Height(s) (m)	1 - 4	Test Distance (m)	3
COMMENTS			
Middle Gain Antenna 8dBi. PC Power Level: 255(18.8 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 0.61msec dwell time.			
EUT OPERATING MODES			
Transmitting at 2475.			
DEVIATIONS FROM TEST STANDARD			
No deviations.			
Run #	89		
Configuration #	1		
Results	Pass		

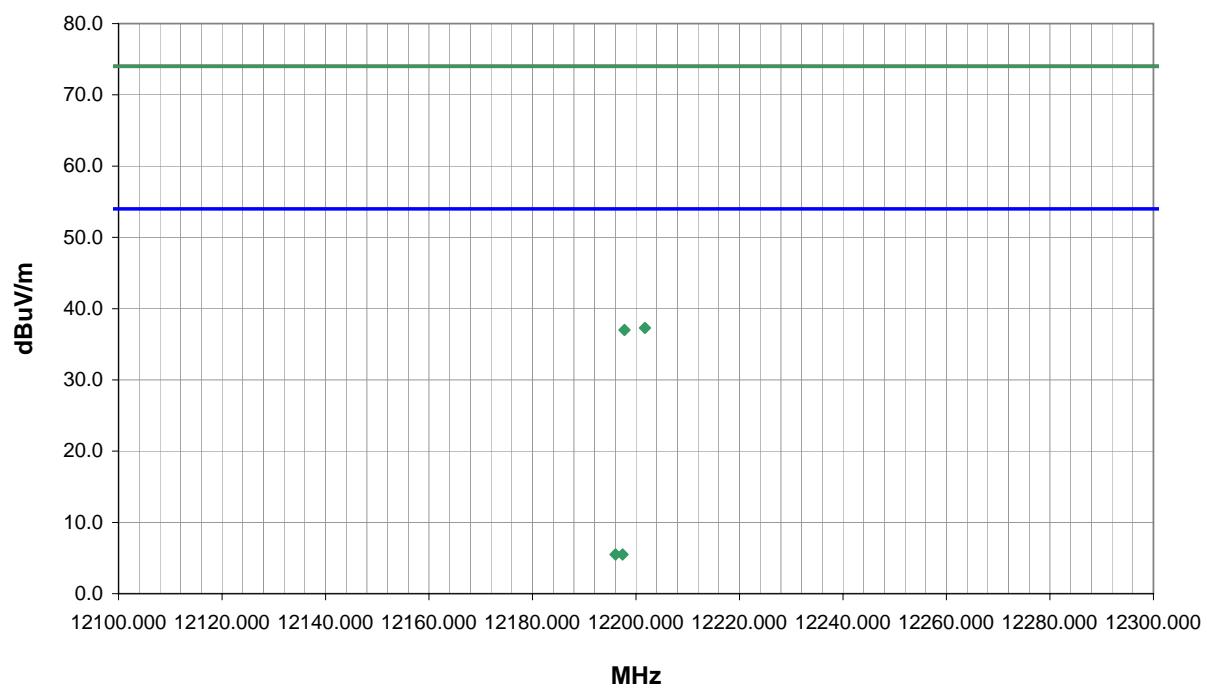


Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
2322.759	44.3	5.4	28.0	1.0	0.0	20.0	V-Horn	PK	0.0	69.7	74.0	-4.3
2327.070	43.1	5.4	360.0	1.0	0.0	20.0	V-Horn	PK	0.0	68.5	74.0	-5.5
2322.911	36.9	5.4	28.0	1.0	20.0	20.0	V-Horn	AV	0.0	42.3	54.0	-11.7
2326.942	35.9	5.4	360.0	1.0	20.0	20.0	V-Horn	AV	0.0	41.3	54.0	-12.7

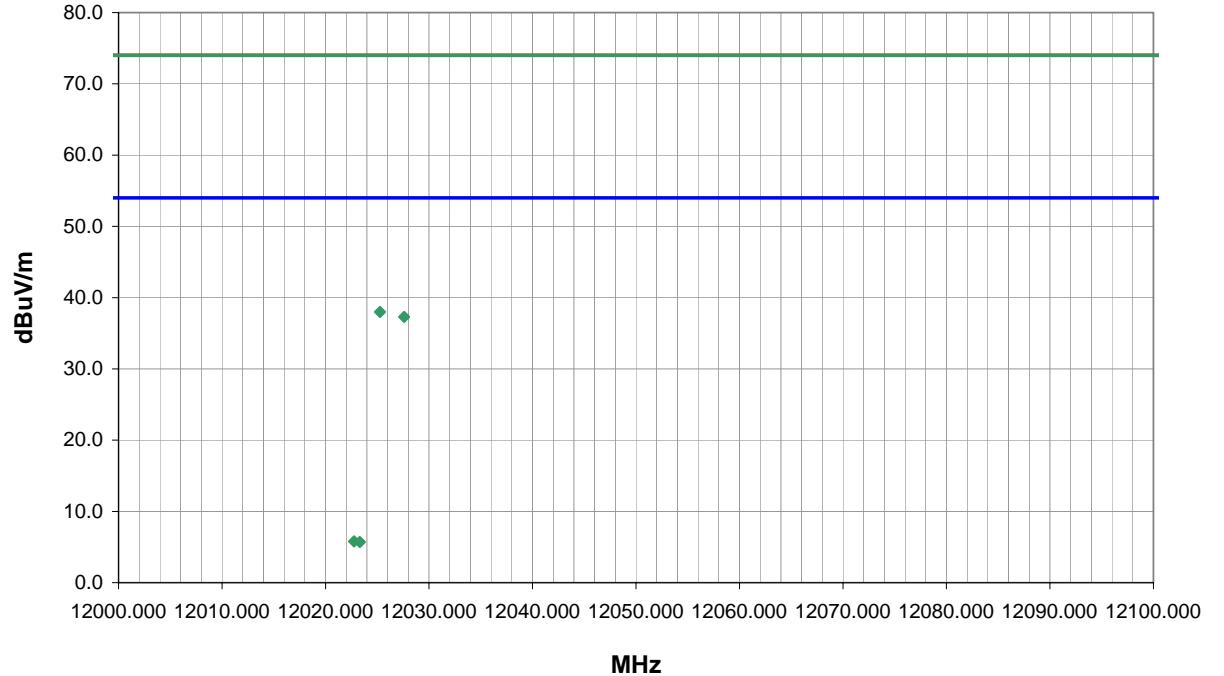
EUT: XYR6000 15.4 Radio with LPF modified		Work Order: HONE0027										
Serial Number: None		Date: 03/10/08										
Customer: Honeywell		Temperature: 22c										
Attendees: David Shipley		Humidity: 40%										
Project: None		Barometric Pres.: 1019 mb										
Tested by: Jaemi Suh	Power: Battery	Job Site: OC10										
TEST SPECIFICATIONS												
FCC 15.247(d) Spurious Radiated Emissions		Test Method: ANSI C63.4										
TEST PARAMETERS												
Antenna Height(s) (m)	1 - 4	Test Distance (m)										
COMMENTS												
Middle Gain Antenna 8dBi. PC Power Level: 255(18.8 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 0.61msec dwell time.												
EUT OPERATING MODES												
Transmitting at 2475.												
DEVIATIONS FROM TEST STANDARD												
No deviations.												
Run #	88	Signature										
Configuration #	1											
Results	Pass											
 <p>The graph plots dBuV/m on the y-axis (0.0 to 80.0) against MHz on the x-axis (12300.000 to 12400.000). A horizontal green line at approximately 74 dBuV/m represents the specification limit. A horizontal blue line at approximately 54 dBuV/m represents the test limit. Four data points are plotted as red diamonds, showing values around 38, 37, 6, and 5 dBuV/m, all falling below the specification limit.</p>												
<b>Freq (MHz)</b>	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
12372.010	45.1	-7.7	284.0	1.0	0.0	0.0	H-Horn	PK	0.0	37.4	74.0	-36.6
12377.250	44.6	-7.7	300.0	1.0	0.0	0.0	V-Horn	PK	0.0	36.9	74.0	-37.1
12377.310	33.5	-7.7	300.0	1.0	20.0	0.0	V-Horn	AV	0.0	5.8	54.0	-48.2
12380.260	33.0	-7.8	284.0	1.0	20.0	0.0	H-Horn	AV	0.0	5.2	54.0	-48.8

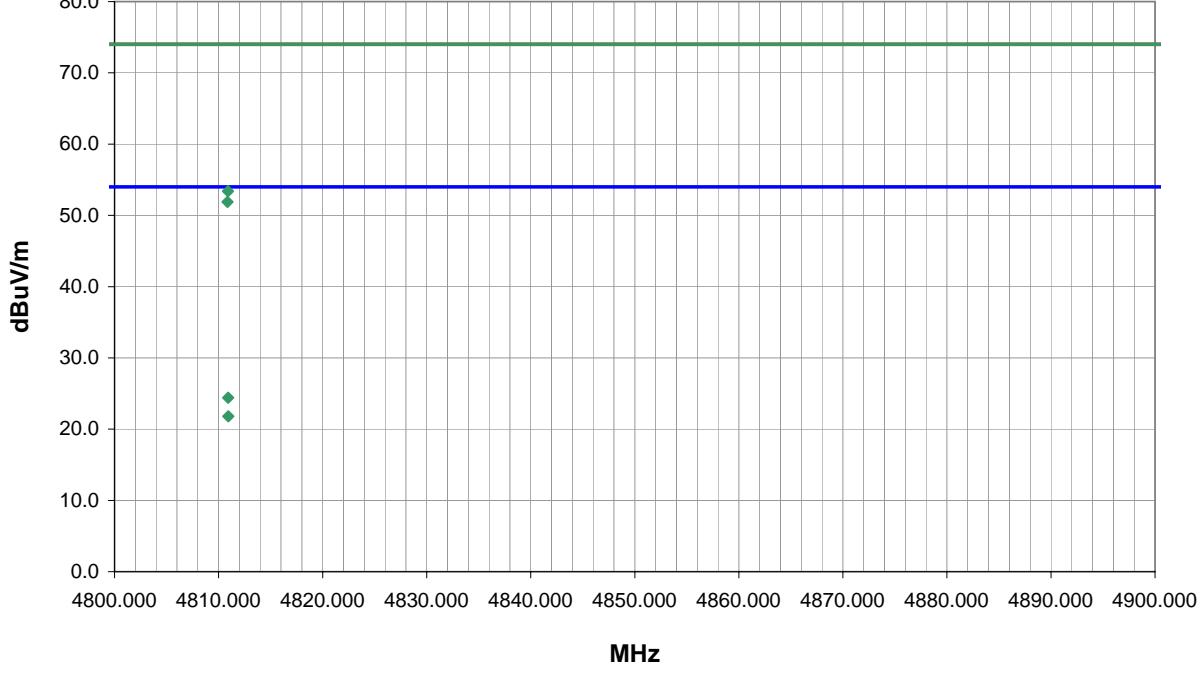
SPURIOUS RADIATED EMISSIONS DATA SHEET											PSA 2007.05.07	EMI 2006.4.26																																																																																																																					
EUT: XYR6000 15.4 Radio with LPF modified							Work Order: HONE0027																																																																																																																										
Serial Number: None							Date: 03/10/08																																																																																																																										
Customer: Honeywell							Temperature: 22c																																																																																																																										
Attendees: David Shipley							Humidity: 40%																																																																																																																										
Project: None							Barometric Pres.: 1019 mb																																																																																																																										
Tested by: Jaemi Suh				Power: Battery			Job Site: OC10				Test Method																																																																																																																						
TEST SPECIFICATIONS																																																																																																																																	
FCC 15.247(d) Spurious Radiated Emissions							ANSI C63.4																																																																																																																										
TEST PARAMETERS																																																																																																																																	
Antenna Height(s) (m)			1 - 4			Test Distance (m)			3																																																																																																																								
COMMENTS																																																																																																																																	
Middle Gain Antenna 8dBi. PC Power Level: 255(18.8 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 0.61msec dwell time.																																																																																																																																	
EUT OPERATING MODES																																																																																																																																	
Transmitting at 2440.																																																																																																																																	
DEVIATIONS FROM TEST STANDARD																																																																																																																																	
No deviations.																																																																																																																																	
Run #	90																																																																																																																																
Configuration #	1																																																																																																																																
Results	Evaluation				Signature																																																																																																																												
																																																																																																																																	
<table border="1"> <thead> <tr> <th>Freq (MHz)</th> <th>Amplitude (dBuV)</th> <th>Factor (dB)</th> <th>Azimuth (degrees)</th> <th>Height (meters)</th> <th>Duty Cycle Correction Factor</th> <th>External Attenuation (dB)</th> <th>Polarity</th> <th>Detector</th> <th>Distance Adjustment (dB)</th> <th>Adjusted dBuV/m</th> <th>Spec. Limit dBuV/m</th> <th>Compared to Spec. (dB)</th> </tr> </thead> <tbody> <tr> <td>7321.340</td> <td>46.3</td> <td>16.4</td> <td>29.0</td> <td>1.7</td> <td>0.0</td> <td>0.0</td> <td>V-Horn</td> <td>PK</td> <td>0.0</td> <td>62.7</td> <td>74.0</td> <td>-11.3</td> </tr> <tr> <td>7321.249</td> <td>44.2</td> <td>16.4</td> <td>0.0</td> <td>1.3</td> <td>0.0</td> <td>0.0</td> <td>H-Horn</td> <td>PK</td> <td>0.0</td> <td>60.6</td> <td>74.0</td> <td>-13.4</td> </tr> <tr> <td>7321.324</td> <td>36.6</td> <td>16.4</td> <td>29.0</td> <td>1.7</td> <td>20.0</td> <td>0.0</td> <td>V-Horn</td> <td>AV</td> <td>0.0</td> <td>33.0</td> <td>54.0</td> <td>-21.0</td> </tr> <tr> <td>4880.937</td> <td>40.0</td> <td>12.6</td> <td>283.0</td> <td>1.1</td> <td>0.0</td> <td>0.0</td> <td>H-Horn</td> <td>PK</td> <td>0.0</td> <td>52.6</td> <td>74.0</td> <td>-21.4</td> </tr> <tr> <td>7321.331</td> <td>34.7</td> <td>16.4</td> <td>0.0</td> <td>1.3</td> <td>20.0</td> <td>0.0</td> <td>H-Horn</td> <td>AV</td> <td>0.0</td> <td>31.1</td> <td>54.0</td> <td>-22.9</td> </tr> <tr> <td>4881.100</td> <td>38.1</td> <td>12.6</td> <td>347.0</td> <td>1.7</td> <td>0.0</td> <td>0.0</td> <td>V-Horn</td> <td>PK</td> <td>0.0</td> <td>50.7</td> <td>74.0</td> <td>-23.3</td> </tr> <tr> <td>4880.927</td> <td>29.5</td> <td>12.6</td> <td>283.0</td> <td>1.1</td> <td>20.0</td> <td>0.0</td> <td>H-Horn</td> <td>AV</td> <td>0.0</td> <td>22.1</td> <td>54.0</td> <td>-31.9</td> </tr> <tr> <td>4880.931</td> <td>28.9</td> <td>12.6</td> <td>347.0</td> <td>1.7</td> <td>20.0</td> <td>0.0</td> <td>V-Horn</td> <td>AV</td> <td>0.0</td> <td>21.5</td> <td>54.0</td> <td>-32.5</td> </tr> </tbody> </table>													Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)	7321.340	46.3	16.4	29.0	1.7	0.0	0.0	V-Horn	PK	0.0	62.7	74.0	-11.3	7321.249	44.2	16.4	0.0	1.3	0.0	0.0	H-Horn	PK	0.0	60.6	74.0	-13.4	7321.324	36.6	16.4	29.0	1.7	20.0	0.0	V-Horn	AV	0.0	33.0	54.0	-21.0	4880.937	40.0	12.6	283.0	1.1	0.0	0.0	H-Horn	PK	0.0	52.6	74.0	-21.4	7321.331	34.7	16.4	0.0	1.3	20.0	0.0	H-Horn	AV	0.0	31.1	54.0	-22.9	4881.100	38.1	12.6	347.0	1.7	0.0	0.0	V-Horn	PK	0.0	50.7	74.0	-23.3	4880.927	29.5	12.6	283.0	1.1	20.0	0.0	H-Horn	AV	0.0	22.1	54.0	-31.9	4880.931	28.9	12.6	347.0	1.7	20.0	0.0	V-Horn	AV	0.0	21.5	54.0	-32.5
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)																																																																																																																					
7321.340	46.3	16.4	29.0	1.7	0.0	0.0	V-Horn	PK	0.0	62.7	74.0	-11.3																																																																																																																					
7321.249	44.2	16.4	0.0	1.3	0.0	0.0	H-Horn	PK	0.0	60.6	74.0	-13.4																																																																																																																					
7321.324	36.6	16.4	29.0	1.7	20.0	0.0	V-Horn	AV	0.0	33.0	54.0	-21.0																																																																																																																					
4880.937	40.0	12.6	283.0	1.1	0.0	0.0	H-Horn	PK	0.0	52.6	74.0	-21.4																																																																																																																					
7321.331	34.7	16.4	0.0	1.3	20.0	0.0	H-Horn	AV	0.0	31.1	54.0	-22.9																																																																																																																					
4881.100	38.1	12.6	347.0	1.7	0.0	0.0	V-Horn	PK	0.0	50.7	74.0	-23.3																																																																																																																					
4880.927	29.5	12.6	283.0	1.1	20.0	0.0	H-Horn	AV	0.0	22.1	54.0	-31.9																																																																																																																					
4880.931	28.9	12.6	347.0	1.7	20.0	0.0	V-Horn	AV	0.0	21.5	54.0	-32.5																																																																																																																					

EUT: XYR6000 15.4 Radio with LPF modified	Work Order: HONE0027
Serial Number: None	Date: 03/10/08
Customer: Honeywell	Temperature: 22c
Attendees: David Shipley	Humidity: 40%
Project: None	Barometric Pres.: 1019 mb
Tested by: Jaemi Suh	Power: Battery
	Job Site: OC10
TEST SPECIFICATIONS	
FCC 15.247(d) Spurious Radiated Emissions	Test Method: ANSI C63.4
TEST PARAMETERS	
Antenna Height(s) (m)	1 - 4
Test Distance (m)	3
COMMENTS	
Middle Gain Antenna 8dBi. PC Power Level: 255(18.8 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 0.61msec dwell time.	
EUT OPERATING MODES	
Transmitting at 2440.	
DEVIATIONS FROM TEST STANDARD	
No deviations.	
Run #	91
Configuration #	1
Results	Pass
	Signature: 



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
12201.720	45.7	-8.4	298.0	1.0	0.0	0.0	H-Horn	PK	0.0	37.3	74.0	-36.7
12197.760	45.4	-8.4	272.0	1.0	0.0	0.0	V-Horn	PK	0.0	37.0	74.0	-37.0
12196.050	33.9	-8.4	272.0	1.0	20.0	0.0	V-Horn	AV	0.0	5.5	54.0	-48.5
12197.410	33.9	-8.4	298.0	1.0	20.0	0.0	H-Horn	AV	0.0	5.5	54.0	-48.5

EUT: XYR6000 15.4 Radio with LPF modified		Work Order: HONE0027										
Serial Number: None		Date: 03/10/08										
Customer: Honeywell		Temperature: 22c										
Attendees: David Shipley		Humidity: 40%										
Project: None		Barometric Pres.: 1019 mb										
Tested by: Jaemi Suh	Power: Battery	Job Site: OC10										
TEST SPECIFICATIONS												
FCC 15.247(d) Spurious Radiated Emissions		Test Method: ANSI C63.4										
TEST PARAMETERS												
Antenna Height(s) (m)	1 - 4	Test Distance (m)										
COMMENTS												
Middle Gain Antenna 8dBi. PC Power Level: 255(18.8 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 0.61msec dwell time.												
EUT OPERATING MODES												
Transmitting at 2405.												
DEVIATIONS FROM TEST STANDARD												
No deviations.												
Run #	92	Signature										
Configuration #	1											
Results	Pass											
 <p>The graph plots dBuV/m on the y-axis (0.0 to 80.0) against MHz on the x-axis (12000.000 to 12100.000). A horizontal green line at approximately 74 dBuV/m represents the specification limit. A horizontal blue line at approximately 54 dBuV/m represents the measurement limit. Three green diamond-shaped data points are plotted at approximately 12025.270 MHz, 12027.600 MHz, and 12023.320 MHz, all falling below the specification limit.</p>												
<b>Freq (MHz)</b>	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
12025.270	47.0	-9.0	240.0	1.0	0.0	0.0	V-Horn	PK	0.0	38.0	74.0	-36.0
12027.600	46.3	-9.0	234.0	1.0	0.0	0.0	H-Horn	PK	0.0	37.3	74.0	-36.7
12022.760	34.8	-9.0	234.0	1.0	20.0	0.0	H-Horn	AV	0.0	5.8	54.0	-48.2
12023.320	34.7	-9.0	240.0	1.0	20.0	0.0	V-Horn	AV	0.0	5.7	54.0	-48.3

SPURIOUS RADIATED EMISSIONS DATA SHEET											PSA 2007.05.07	EMI 2006.4.26	
EUT: XYR6000 15.4 Radio with LPF modified											Work Order:	H0NE0027	
Serial Number: None											Date:	03/10/08	
Customer: Honeywell											Temperature:	22c	
Attendees: David Shipley											Humidity:	40%	
Project: None											Barometric Pres.:	1019 mb	
Tested by: Jaemi Suh					Power:	Battery		Job Site: OC10					
TEST SPECIFICATIONS											Test Method		
FCC 15.247(d) Spurious Radiated Emissions											ANSI C63.4		
TEST PARAMETERS													
Antenna Height(s) (m)		1 - 4			Test Distance (m)		3						
COMMENTS													
Middle Gain Antenna 8dBi. PC Power Level: 255(18.8 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 0.61msec dwell time.													
EUT OPERATING MODES													
Transmitting at 2405.													
DEVIATIONS FROM TEST STANDARD													
No deviations.													
Run #	93					Signature							
Configuration #	1												
Results	Pass												
													
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)	
4810.899	40.9	12.5	289.0	1.7	0.0	0.0	V-Horn	PK	0.0	53.4	74.0	-20.6	
4810.853	39.4	12.5	280.0	1.0	0.0	0.0	H-Horn	PK	0.0	51.9	74.0	-22.1	
4810.916	31.9	12.5	289.0	1.7	20.0	0.0	V-Horn	AV	0.0	24.4	54.0	-29.6	
4810.929	29.3	12.5	280.0	1.0	20.0	0.0	H-Horn	AV	0.0	21.8	54.0	-32.2	

EUT: XYR6000 15.4 Radio with LPF modified.		Work Order:	HONE0027
Serial Number: None		Date:	03/05/08
Customer: Honeywell		Temperature:	22c
Attendees: none		Humidity:	40%
Project: None		Barometric Pres.:	1019 mb
Tested by: Jaemi Suh	Power: Battery	Job Site:	OC10

## TEST SPECIFICATIONS

FCC 15.247(d) Spurious Radiated Emissions	ANSI C63.4
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## TEST PARAMETERS

Antenna Height(s) (m)	1 - 4	Test Distance (m)	3
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## COMMENTS

Lowest Gain Antenna -2dBi. PC Power Level: 255 (20.6 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 0.61msec dwell time.

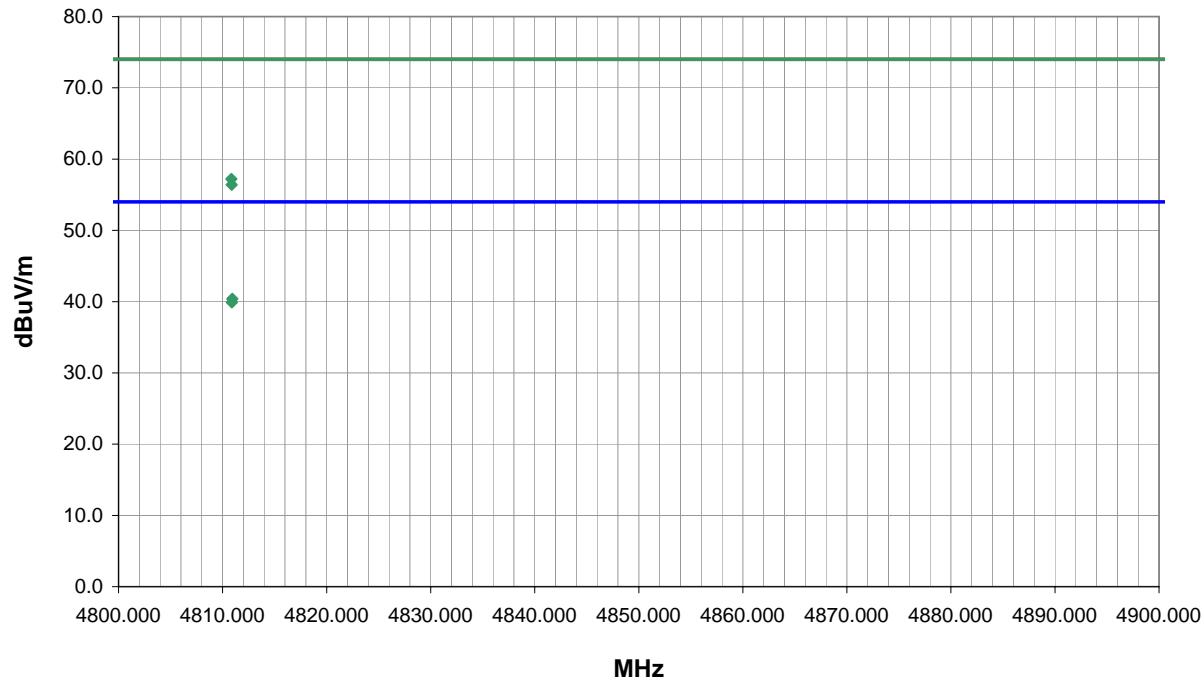
## EUT OPERATING MODES

Transmitting at 2405.

## DEVIATIONS FROM TEST STANDARD

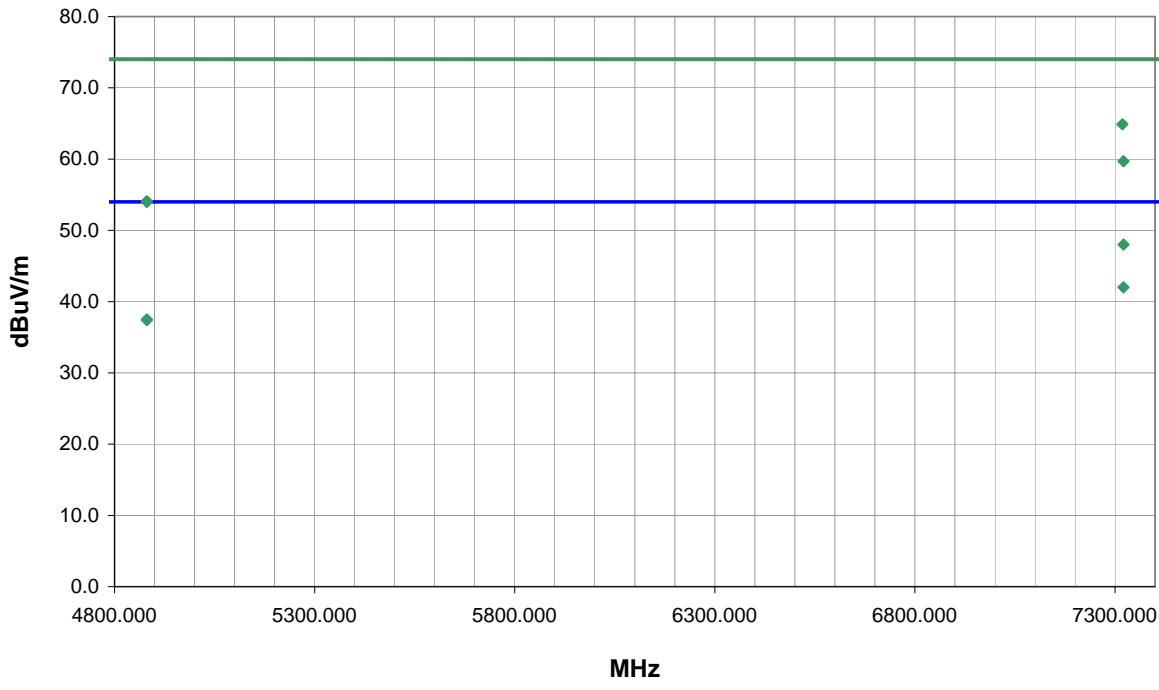
No deviations.

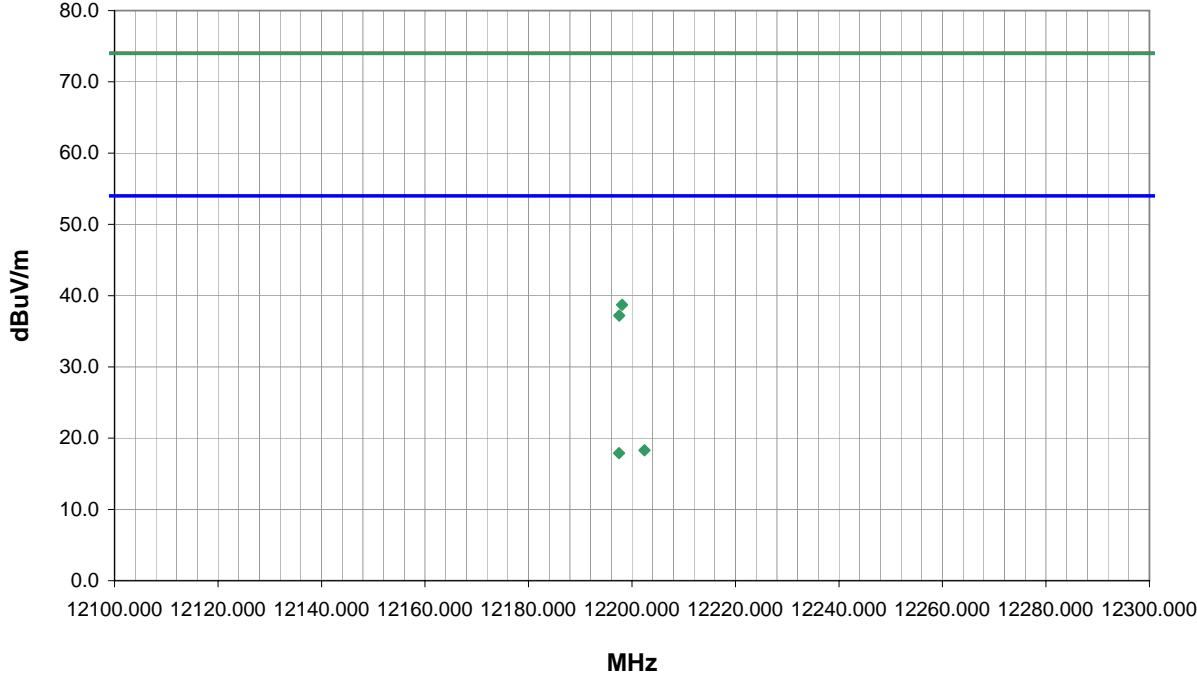
Run #	52	Signature
Configuration #	1	
Results	Pass	



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
4810.938	35.6	12.5	10.0	1.0	7.7	0.0	H-Horn	AV	0.0	40.4	54.0	-13.6
4810.887	35.1	12.5	29.0	1.0	7.7	0.0	V-Horn	AV	0.0	39.9	54.0	-14.1
4810.841	44.7	12.5	10.0	1.0	0.0	0.0	H-Horn	PK	0.0	57.2	74.0	-16.8
4810.874	43.9	12.5	29.0	1.0	0.0	0.0	V-Horn	PK	0.0	56.4	74.0	-17.6

EUT: XYR6000 15.4 Radio with LPF modified.								Work Order:	H0NE0027			
Serial Number: None								Date:	03/05/08			
Customer: Honeywell								Temperature:	22c			
Attendees: David Shipley								Humidity:	40%			
Project: None								Barometric Pres.:	1019 mb			
Tested by: Jaemi Suh				Power:	Battery		Job Site:		OC10			
TEST SPECIFICATIONS												
FCC 15.247(d) Spurious Radiated Emissions								Test Method				
								ANSI C63.4				
TEST PARAMETERS												
Antenna Height(s) (m)				1 - 4		Test Distance (m)		3				
COMMENTS												
Lowest Gain Antenna -2dBi. PC Power Level: 255 (20.6 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 0.61msec dwell time.												
EUT OPERATING MODES												
Transmitting at 2405.												
DEVIATIONS FROM TEST STANDARD												
No deviations.												
Run #	53		Signature									
Configuration #	1											
Results	Pass											
<p>dBuV/m</p> <p>MHz</p>												
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
12027.350	36.7	-9.0	55.0	1.0	7.7	0.0	V-Horn	AV	0.0	20.0	54.0	-34.0
12027.160	47.7	-9.0	55.0	1.0	0.0	0.0	V-Horn	PK	0.0	38.7	74.0	-35.3
12022.290	34.8	-9.0	36.0	1.0	7.7	0.0	H-Horn	AV	0.0	18.1	54.0	-35.9
12025.240	46.8	-9.0	36.0	1.0	0.0	0.0	H-Horn	PK	0.0	37.8	74.0	-36.2

SPURIOUS RADIATED EMISSIONS DATA SHEET											PSA 2007.05.07	EMI 2006.4.26																																																																																																																					
EUT: XYR6000 15.4 Radio with LPF modified.							Work Order: HONE0027																																																																																																																										
Serial Number: None							Date: 03/05/08																																																																																																																										
Customer: Honeywell							Temperature: 22c																																																																																																																										
Attendees: David Shipley							Humidity: 40%																																																																																																																										
Project: None							Barometric Pres.: 1019 mb																																																																																																																										
Tested by: Jaemi Suh				Power: Battery			Job Site: OC10																																																																																																																										
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 <p>The graph plots dBuV/m on the y-axis (0.0 to 80.0) against MHz on the x-axis (4800.000 to 7300.000). A horizontal green line is drawn at 74.0 dBuV/m. A blue line represents the 74.0 dBuV/m level. Green diamond markers represent measured data points, which are clustered around the 74.0 dBuV/m line across the frequency range.</p>																																																																																																																																	
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Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)																																																																																																																					
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7321.338	33.3	16.4	11.0	1.0	7.7	0.0	V-Horn	AV	0.0	42.0	54.0	-12.0																																																																																																																					
7321.406	43.3	16.4	11.0	1.0	0.0	0.0	V-Horn	PK	0.0	59.7	74.0	-14.3																																																																																																																					
4880.926	32.6	12.6	31.0	1.0	7.7	0.0	V-Horn	AV	0.0	37.5	54.0	-16.5																																																																																																																					
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SPURIOUS RADIATED EMISSIONS DATA SHEET										EMC		NORTHWEST	
EUT: XYR6000 15.4 Radio with LPF modified.										Work Order: HONE0027		PSA 2007.05.07	
Serial Number: None										Date: 03/05/08		EMI 2006.4.26	
Customer: Honeywell										Temperature: 22c			
Attendees: David Shipley										Humidity: 40%			
Project: None										Barometric Pres.: 1019 mb			
Tested by: Jaemi Suh					Power: Battery		Job Site: OC10						
TEST SPECIFICATIONS													
FCC 15.247(d) Spurious Radiated Emissions										ANSI C63.4			
TEST PARAMETERS													
Antenna Height(s) (m)		1 - 4		Test Distance (m)		3							
COMMENTS													
Lowest Gain Antenna -2dBi. PC Power Level: 255 (20.6 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 0.61msec dwell time.													
EUT OPERATING MODES													
Transmitting at 2440.													
DEVIATIONS FROM TEST STANDARD													
No deviations.													
Run #	58												
Configuration #	1												
Results	Pass												
													
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)	
12198.070	47.1	-8.4	108.0	1.0	0.0	0.0	V-Horn	PK	0.0	38.7	74.0	-35.3	
12202.420	34.4	-8.4	108.0	1.0	7.7	0.0	V-Horn	AV	0.0	18.3	54.0	-35.7	
12197.510	34.0	-8.4	166.0	1.0	7.7	0.0	H-Horn	AV	0.0	17.9	54.0	-36.1	
12197.540	45.6	-8.4	166.0	1.0	0.0	0.0	H-Horn	PK	0.0	37.2	74.0	-36.8	

SPURIOUS RADIATED EMISSIONS DATA SHEET												PSA 2007.05.07
												EMI 2006.4.26
EUT: XYR6000 15.4 Radio with LPF modified.							Work Order: HONE0027					
Serial Number: None							Date: 03/05/08					
Customer: Honeywell							Temperature: 22c					
Attendees: David Shipley							Humidity: 40%					
Project: None							Barometric Pres.: 1019 mb					
Tested by: Jaemi Suh				Power: Battery			Job Site: OC10					
TEST SPECIFICATIONS												Test Method
FCC 15.247(d) Spurious Radiated Emissions							ANSI C63.4					
TEST PARAMETERS												
Antenna Height(s) (m)			1 - 4			Test Distance (m)			3			
COMMENTS												
Lowest Gain Antenna -2dBi. PC Power Level: 255 (20.6 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 0.61msec dwell time.												
EUT OPERATING MODES												
Transmitting at 2475												
DEVIATIONS FROM TEST STANDARD												
No deviations.												
Run #	55											Signature
Configuration #	1											
Results	Pass											
<p>The graph plots dBuV/m on the y-axis (0.0 to 80.0) against MHz on the x-axis (4900.000 to 7400.000). A horizontal green line is drawn at 74 dBuV/m. A blue line represents the 74 dBuV/m level. Data points are plotted as green diamonds, showing values ranging from approximately 35 dBuV/m to 70 dBuV/m, generally staying below the 74 dBuV/m limit.</p>												
<b>Freq (MHz)</b>	<b>Amplitude (dBuV)</b>	<b>Factor (dB)</b>	<b>Azimuth (degrees)</b>	<b>Height (meters)</b>	<b>Duty Cycle Correction Factor</b>	<b>External Attenuation (dB)</b>	<b>Polarity</b>	<b>Detector</b>	<b>Distance Adjustment (dB)</b>	<b>Adjusted dBuV/m</b>	<b>Spec. Limit dBuV/m</b>	<b>Compared to Spec. (dB)</b>
7426.274	43.6	16.4	85.0	1.2	7.7	0.0	H-Horn	AV	0.0	52.3	54.0	-1.7
7421.740	52.9	16.5	85.0	1.2	0.0	0.0	H-Horn	PK	0.0	69.4	74.0	-4.6
7426.269	38.1	16.5	15.0	1.3	7.7	0.0	V-Horn	AV	0.0	46.9	54.0	-7.1
7423.643	47.3	16.5	15.0	1.3	0.0	0.0	V-Horn	PK	0.0	63.8	74.0	-10.2
4950.954	32.2	12.8	345.0	1.6	7.7	0.0	H-Horn	AV	0.0	37.3	54.0	-16.7
4950.756	41.4	12.8	345.0	1.6	0.0	0.0	H-Horn	PK	0.0	54.2	74.0	-19.8
4950.922	27.8	12.8	101.0	1.2	7.7	0.0	V-Horn	AV	0.0	32.9	54.0	-21.1
4950.802	38.1	12.8	101.0	1.2	0.0	0.0	V-Horn	PK	0.0	50.9	74.0	-23.1

EUT: XYR6000 15.4 Radio with LPF modified.		Work Order:	HONE0027
Serial Number: None		Date:	03/05/08
Customer: Honeywell		Temperature:	22c
Attendees: David Shipley		Humidity:	40%
Project: None		Barometric Pres.:	1019 mb
Tested by: Jaemi Suh	Power: Battery	Job Site:	OC10

## TEST SPECIFICATIONS

FCC 15.247(d) Spurious Radiated Emissions	ANSI C63.4
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## TEST PARAMETERS

Antenna Height(s) (m)	1 - 4	Test Distance (m)	3
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## COMMENTS

Lowest Gain Antenna -2dBi. PC Power Level: 255 (20.6 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 0.61msec dwell time.

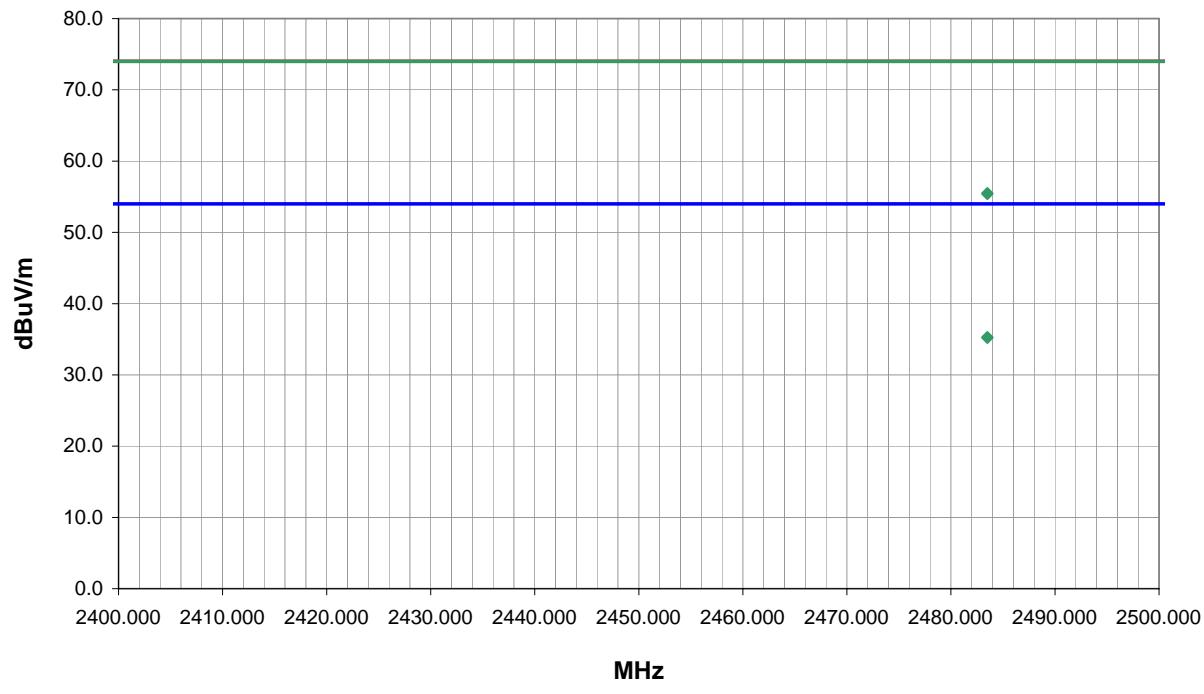
## EUT OPERATING MODES

Transmitting at 2475

## DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	56	Signature
Configuration #	1	
Results	Pass	



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
2483.500	30.1	5.4	186.0	1.0	0.0	20.0	H-Horn	PK	0.0	55.5	74.0	-18.5
2483.500	30.0	5.4	64.0	1.0	0.0	20.0	V-Horn	PK	0.0	55.4	74.0	-18.6
2483.499	17.6	5.4	186.0	1.0	7.7	20.0	H-Horn	AV	0.0	35.3	54.0	-18.7
2483.500	17.5	5.4	64.0	1.0	7.7	20.0	V-Horn	AV	0.0	35.2	54.0	-18.8

EUT: XYR6000 15.4 Radio with LPF modified.		Work Order:	HONE0027
Serial Number: None		Date:	03/05/08
Customer: Honeywell		Temperature:	22c
Attendees: David Shipley		Humidity:	40%
Project: None		Barometric Pres.:	1019 mb
Tested by: Jaemi Suh	Power: Battery	Job Site:	OC10

## TEST SPECIFICATIONS

FCC 15.247(d) Spurious Radiated Emissions	ANSI C63.4
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## TEST PARAMETERS

Antenna Height(s) (m)	1 - 4	Test Distance (m)	3
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## COMMENTS

Lowest Gain Antenna -2dBi. PC Power Level: 255 (20.6 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 0.61msec dwell time.

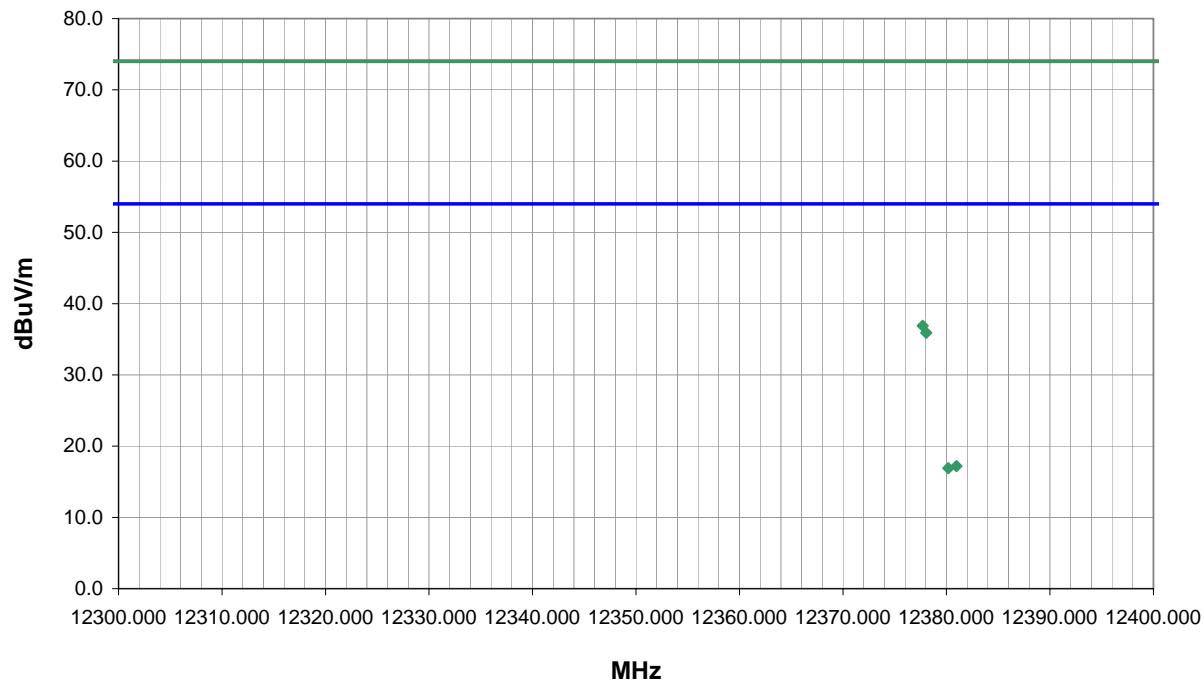
## EUT OPERATING MODES

Transmitting at 2475.

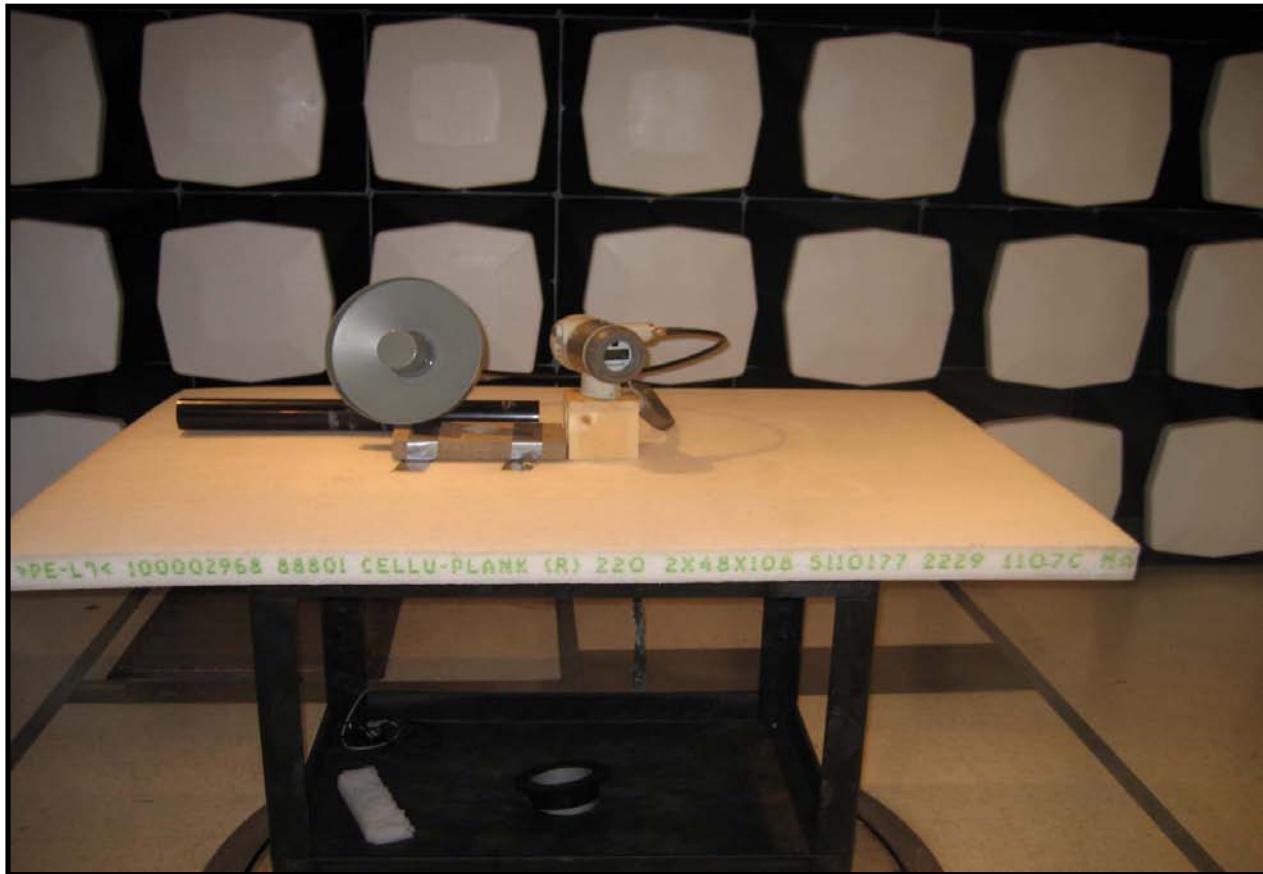
## DEVIATIONS FROM TEST STANDARD

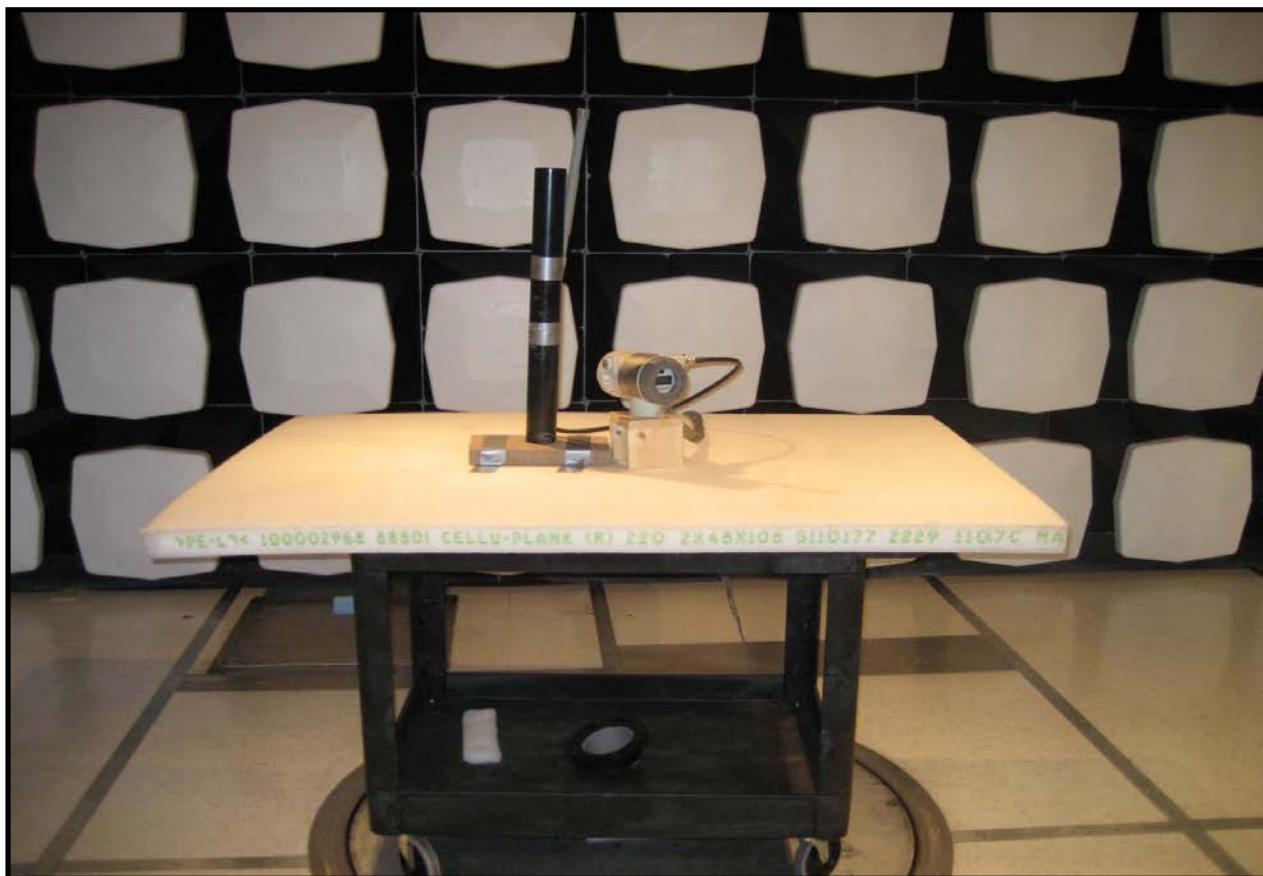
No deviations.

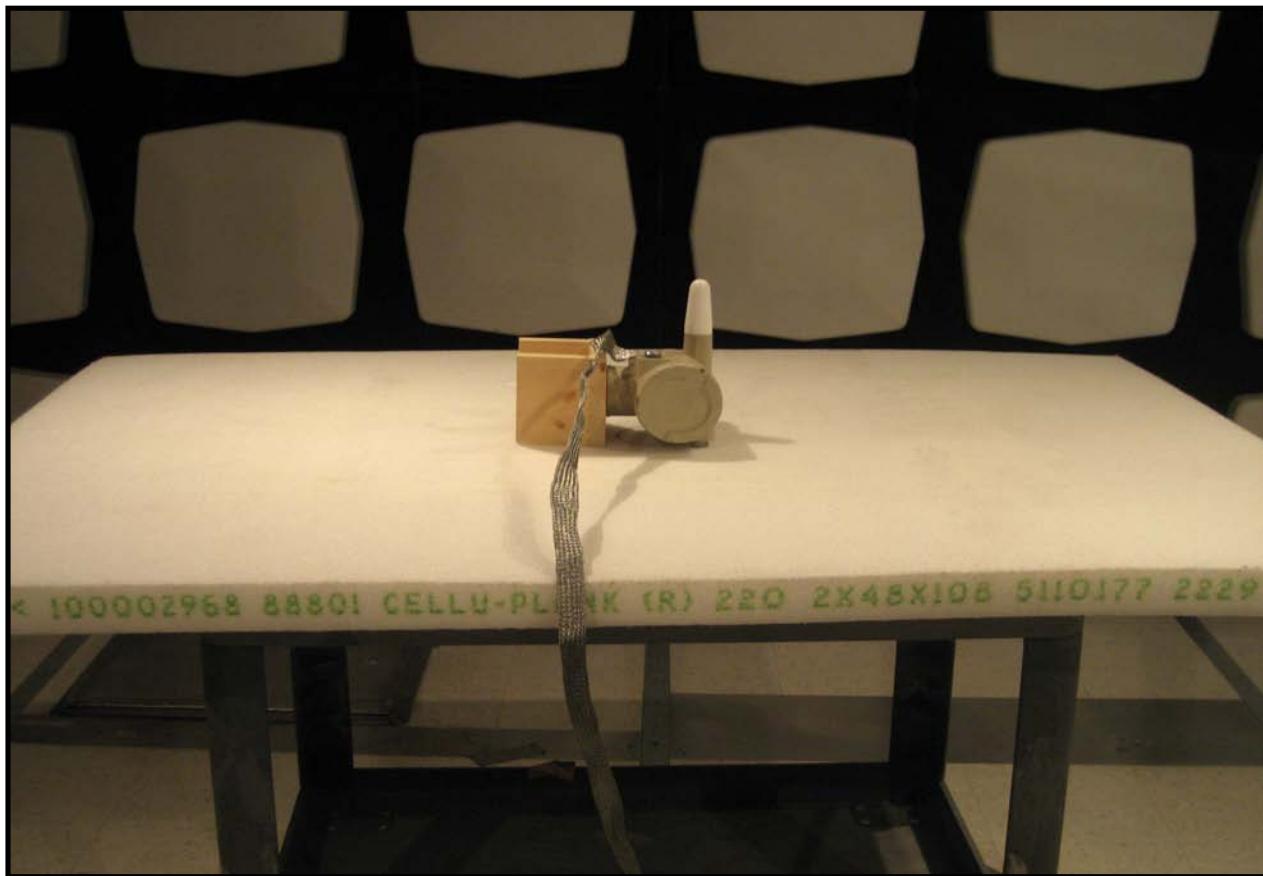
Run #	57	Signature
Configuration #	1	
Results	Pass	



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
12380.970	32.6	-7.7	267.0	1.0	7.7	0.0	V-Horn	AV	0.0	17.2	54.0	-36.8
12380.180	32.3	-7.7	343.0	1.0	7.7	0.0	H-Horn	AV	0.0	16.9	54.0	-37.1
12377.710	44.6	-7.7	267.0	1.0	0.0	0.0	V-Horn	PK	0.0	36.9	74.0	-37.1
12378.040	43.6	-7.7	343.0	1.0	0.0	0.0	H-Horn	PK	0.0	35.9	74.0	-38.1









Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

#### MODES OF OPERATION

Channel 1. Transmitting at 2405. DSSS Mode.  
Channel 40. Transmitting at 2440. DSSS Mode.  
Channel 75. Transmitting at 2475. DSSS Mode.

#### ANTENNA TYPE

-2 dB Omni (Dipole) Antenna. Honeywell Part #50016185-001, MFR Part #MAF94152  
8 dB Omni (Dipole) Antenna. Honeywell Part #50018414-001, MFR Part #HGV-2409U  
14 dB Directional (Dish) Antenna. Honeywell Part #50018415-001, MFR Part #HG2414D

#### MODE USED FOR FINAL DATA

Channel 1. Transmitting at 2405. DSSS Mode.  
Channel 40. Transmitting at 2440. DSSS Mode.  
Channel 75. Transmitting at 2475. DSSS Mode.

#### POWER SETTINGS INVESTIGATED

12 VDC

#### POWER SETTINGS USED FOR FINAL DATA

12 VDC

#### FREQUENCY RANGE INVESTIGATED

Start Frequency	30 MHz	Stop Frequency	26 GHz
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#### CLOCKS AND OSCILLATORS

2405 MHz, 2440 MHz, 2475 MHz

#### SAMPLE CALCULATIONS

Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation

#### TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Antenna, Horn	EMCO	3160-09	AHN	NCR	0
OC10 SMA cable for 18026 GHz			OCK	3/3/2008	13
Pre-Amplifier	Miteq	AMF-6F-12001800-30-10P	AOF	10/13/2006	24
Antenna, Horn	ETS	3160-08	AHT	NCR	0
Pre-Amplifier	Miteq	AMF-6F-08001200-30-10P	AOE	10/13/2006	24
Antenna, Horn	ETS	3160-07	AHR	NCR	0
OC 10 Cables a, b, c, l Cables			OCO	2/2/2008	13
Pre-Amplifier	Miteq	AMF-4D-010120-30-10P-1	AOP	2/2/2008	13
Antenna, Horn	EMCO	3115	AHB	8/31/2007	24
OC10 cables a,b,c,e,f Horn Cables			OCJ	2/2/2008	13
Antenna, Biconilog	EMCO	3142	AXJ	2/25/2008	24
OC10 cables a,b,c,d Bilog			OCH	1/7/2008	13
Pre-Amplifier	Miteq	AM-1616-1000	AOM	1/7/2008	13
Spectrum Analyzer	Agilent	E4446A	AAQ	12/14/2007	13

#### MEASUREMENT BANDWIDTHS

Frequency Range (MHz)	Peak Data (kHz)	Quasi-Peak Data (kHz)	Average Data (kHz)
0.01 - 0.15	1.0	0.2	0.2
0.15 - 30.0	10.0	9.0	9.0
30.0 - 1000	100.0	120.0	120.0
Above 1000	1000.0	N/A	1000.0

Measurements were made using the bandwidths and detectors specified. No video filter was used.

#### MEASUREMENT UNCERTAINTY

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

#### TEST DESCRIPTION

The highest gain of each type of antenna to be used with the EUT was tested. The EUT was configured for low, mid, and high band transmit frequencies. For each configuration, the spectrum was scanned throughout the specified range. In addition, measurements were made in the restricted bands to verify compliance. While scanning, emissions from the EUT were maximized by rotating the EUT on a turntable, adjusting the position of the EUT and the EUT antenna in three orthogonal axis, and adjusting measurement antenna height and polarization, and manipulating the EUT antenna in 3 orthogonal planes (per ANSI C63.4:2003). A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

EUT: XYR6000 15.4 Radio with LPF modified DSSS Mode.		Work Order:	HONE0023
Serial Number: None		Date:	03/06/08
Customer: Honeywell		Temperature:	22c
Attendees: David Shipley		Humidity:	40%
Project: None		Barometric Pres.:	1019 mb
Tested by: Jaemi Suh	Power: Battery	Job Site:	OC10

## TEST SPECIFICATIONS

FCC 15.247(d) Spurious Radiated Emissions	ANSI C63.4
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## TEST PARAMETERS

Antenna Height(s) (m)	1 - 4	Test Distance (m)	3
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## COMMENTS

Highest Gain Antenna 14dBi. PC Power Level: 168 (12.4 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 41msec dwell time. Duty cycle corr. = 20 log(41/100) = 7.7dB.

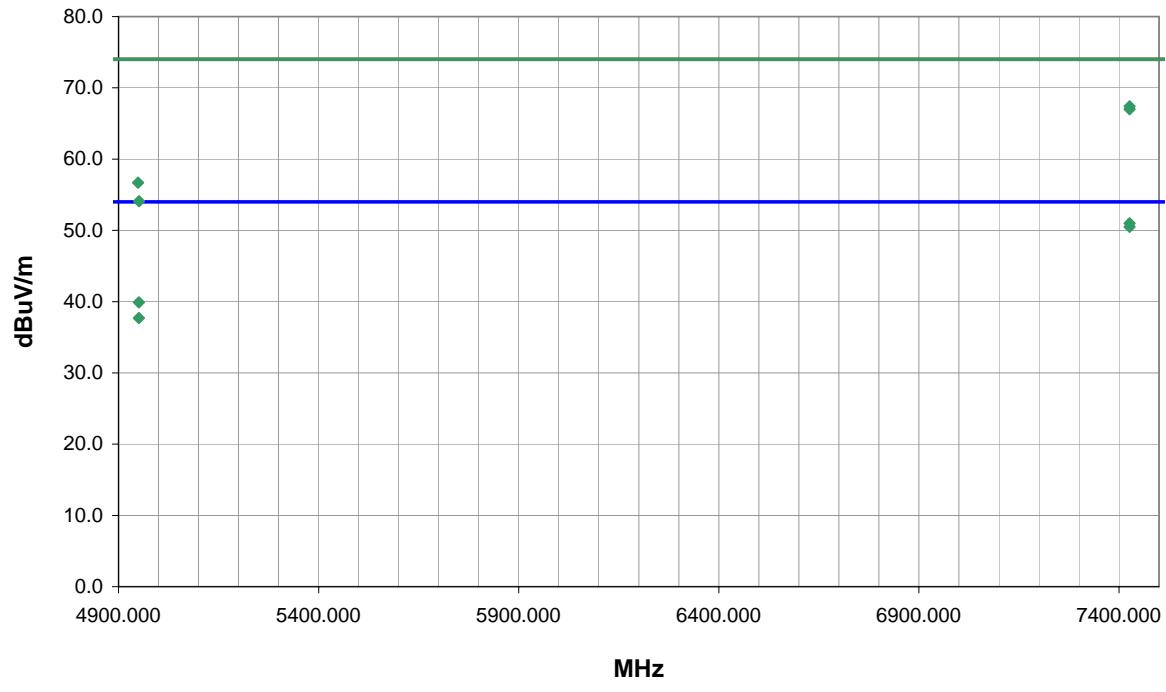
## EUT OPERATING MODES

Transmitting at 2475

## DEVIATIONS FROM TEST STANDARD

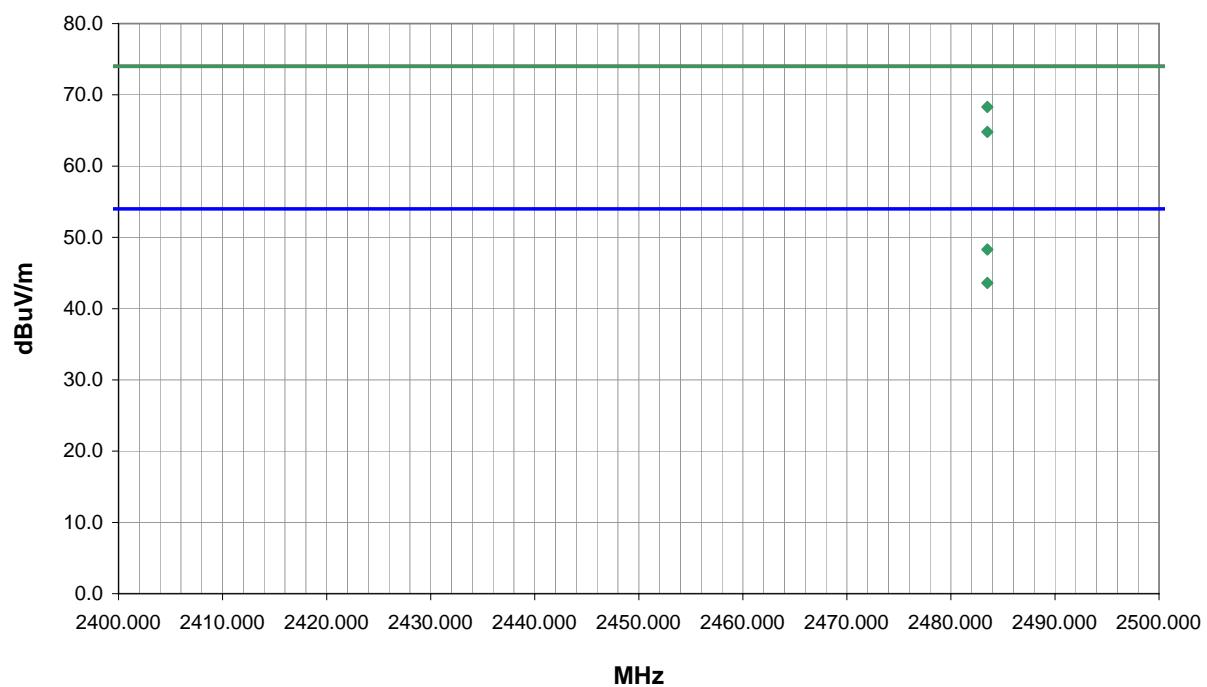
No deviations.

Run #	68	
Configuration #	1	
Results	Pass	



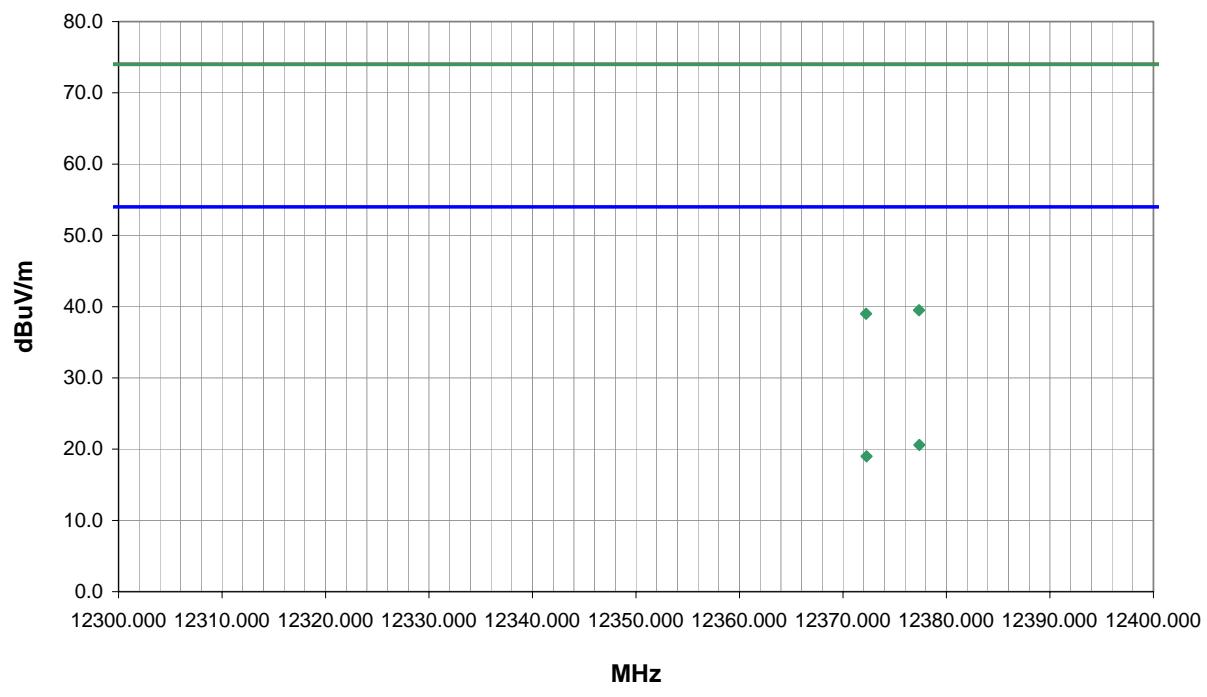
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
7426.303	42.2	16.5	322.0	1.5	7.7	0.0	V-Horn	AV	0.0	51.0	54.0	-3.0
7426.303	41.7	16.5	301.0	1.3	7.7	0.0	H-Horn	AV	0.0	50.5	54.0	-3.5
7426.485	50.9	16.5	322.0	1.5	0.0	0.0	V-Horn	PK	0.0	67.4	74.0	-6.6
7426.365	50.5	16.5	301.0	1.3	0.0	0.0	H-Horn	PK	0.0	67.0	74.0	-7.0
4950.907	34.8	12.8	6.0	1.1	7.7	0.0	V-Horn	AV	0.0	39.9	54.0	-14.1
4950.916	32.6	12.8	316.0	1.2	7.7	0.0	H-Horn	AV	0.0	37.7	54.0	-16.3
4948.664	43.9	12.8	6.0	1.1	0.0	0.0	V-Horn	PK	0.0	56.7	74.0	-17.3
4951.104	41.3	12.8	316.0	1.2	0.0	0.0	H-Horn	PK	0.0	54.1	74.0	-19.9

EUT: XYR6000 15.4 Radio with LPF modified DSSS Mode.		Work Order: HONE0023	
Serial Number: None	Date: 03/06/08		
Customer: Honeywell	Temperature: 22c		
Attendees: David Shipley	Humidity: 40%		
Project: None	Barometric Pres.: 1019 mb		
Tested by: Jaemi Suh	Power: Battery	Job Site: OC10	
TEST SPECIFICATIONS			
FCC 15.247(d) Spurious Radiated Emissions		Test Method: ANSI C63.4	
TEST PARAMETERS			
Antenna Height(s) (m)	1 - 4	Test Distance (m)	3
COMMENTS			
Highest Gain Antenna 14dBi. PC Power Level: 168 (12.4 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 41msec dwell time. Duty cycle corr. = 20 log(41/100) = 7.7dB.			
EUT OPERATING MODES			
Transmitting at 2475			
DEVIATIONS FROM TEST STANDARD			
No deviations.			
Run #	69	 Signature	
Configuration #	1		
Results	Pass		



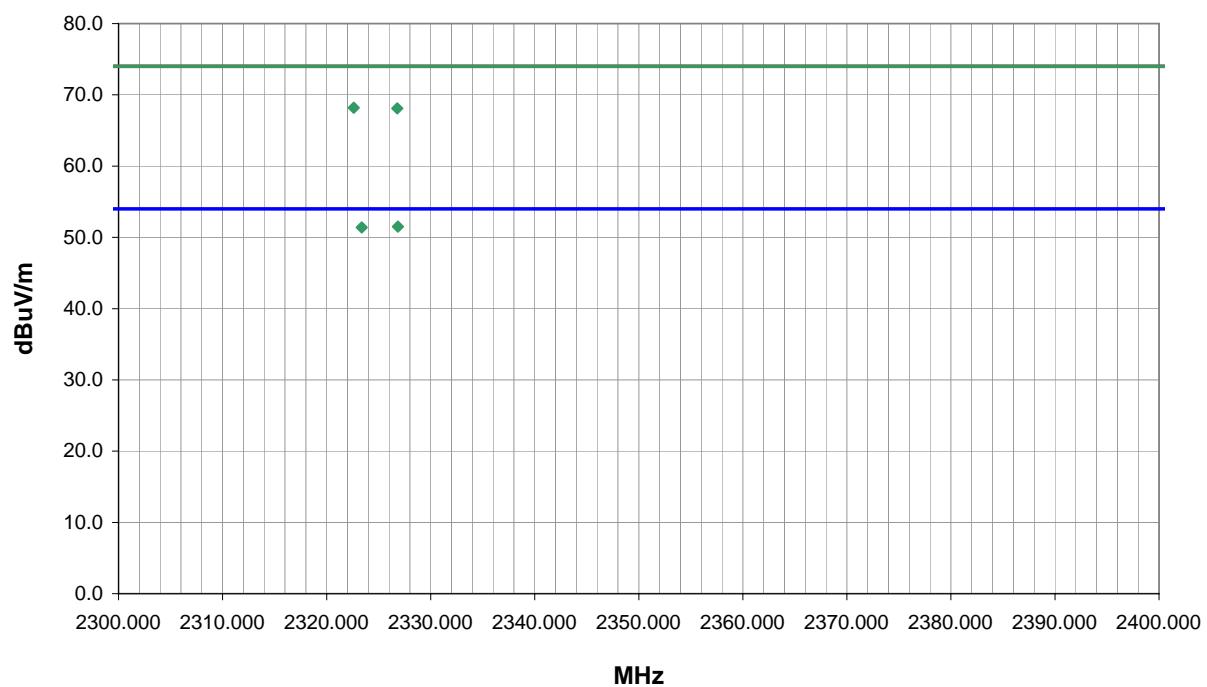
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
2483.500	42.9	5.4	1.0	1.6	0.0	20.0	H-Horn	PK	0.0	68.3	74.0	-5.7
2483.500	30.6	5.4	1.0	1.6	7.7	20.0	H-Horn	AV	0.0	48.3	54.0	-5.7
2483.500	39.4	5.4	5.0	1.0	0.0	20.0	V-Horn	PK	0.0	64.8	74.0	-9.2
2483.500	25.9	5.4	5.0	1.0	7.7	20.0	V-Horn	AV	0.0	43.6	54.0	-10.4

EUT: XYR6000 15.4 Radio with LPF modified DSSS Mode.		Work Order: HONE0023	
Serial Number: None	Date: 03/06/08		
Customer: Honeywell	Temperature: 22c		
Attendees: David Shipley	Humidity: 40%		
Project: None	Barometric Pres.: 1019 mb		
Tested by: Jaemi Suh	Power: Battery	Job Site: OC10	
TEST SPECIFICATIONS			
FCC 15.247(d) Spurious Radiated Emissions		Test Method: ANSI C63.4	
TEST PARAMETERS			
Antenna Height(s) (m)	1 - 4	Test Distance (m)	3
COMMENTS			
Highest Gain Antenna 14dBi. PC Power Level: 168 (12.4 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 41msec dwell time. Duty cycle corr. = 20 log(41/100) = 7.7dB.			
EUT OPERATING MODES			
Transmitting at 2475.			
DEVIATIONS FROM TEST STANDARD			
No deviations.			
Run #	70		
Configuration #	1		
Results	Pass	Signature	



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
12377.380	36.0	-7.7	303.0	1.0	7.7	0.0	V-Horn	AV	0.0	20.6	54.0	-33.4
12377.350	47.2	-7.7	303.0	1.0	0.0	0.0	V-Horn	PK	0.0	39.5	74.0	-34.5
12372.280	34.5	-7.8	239.0	1.0	7.7	0.0	H-Horn	AV	0.0	19.0	54.0	-35.0
12372.230	46.7	-7.7	239.0	1.0	0.0	0.0	H-Horn	PK	0.0	39.0	74.0	-35.0

EUT: XYR6000 15.4 Radio with LPF modified DSSS Mode.		Work Order: HONE0023	
Serial Number: None	Date: 03/06/08		
Customer: Honeywell	Temperature: 22c		
Attendees: David Shipley	Humidity: 40%		
Project: None	Barometric Pres.: 1019 mb		
Tested by: Jaemi Suh	Power: Battery	Job Site: OC10	
TEST SPECIFICATIONS			
FCC 15.247(d) Spurious Radiated Emissions		Test Method: ANSI C63.4	
TEST PARAMETERS			
Antenna Height(s) (m)	1 - 4	Test Distance (m)	3
COMMENTS			
Highest Gain Antenna 14dBi. PC Power Level: 168 (12.4 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 41msec dwell time. Duty cycle corr. = 20 log(41/100) = 7.7dB.			
EUT OPERATING MODES			
Transmitting at 2475.			
DEVIATIONS FROM TEST STANDARD			
No deviations.			
Run #	71	 Signature	
Configuration #	1		
Results	Pass		



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
2326.845	33.8	5.4	184.0	1.7	7.7	20.0	H-Horn	AV	0.0	51.5	54.0	-2.5
2323.371	33.7	5.4	183.0	1.7	7.7	20.0	H-Horn	AV	0.0	51.4	54.0	-2.6
2322.606	42.8	5.4	184.0	1.7	0.0	20.0	H-Horn	PK	0.0	68.2	74.0	-5.8
2326.795	42.7	5.4	184.0	1.7	0.0	20.0	H-Horn	PK	0.0	68.1	74.0	-5.9

EUT: XYR6000 15.4 Radio with LPF modified DSSS Mode.		Work Order:	HONE0023
Serial Number: None		Date:	03/06/08
Customer: Honeywell		Temperature:	22c
Attendees: David Shipley		Humidity:	40%
Project: None		Barometric Pres.:	1019 mb
Tested by: Jaemi Suh	Power: Battery	Job Site:	OC10

## TEST SPECIFICATIONS

FCC 15.247(d) Spurious Radiated Emissions	ANSI C63.4
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## TEST PARAMETERS

Antenna Height(s) (m)	1 - 4	Test Distance (m)	3
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## COMMENTS

Highest Gain Antenna 14dBi. PC Power Level: 168 (12.4 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 41msec dwell time. Duty cycle corr. = 20 log(41/100) = 7.7dB.

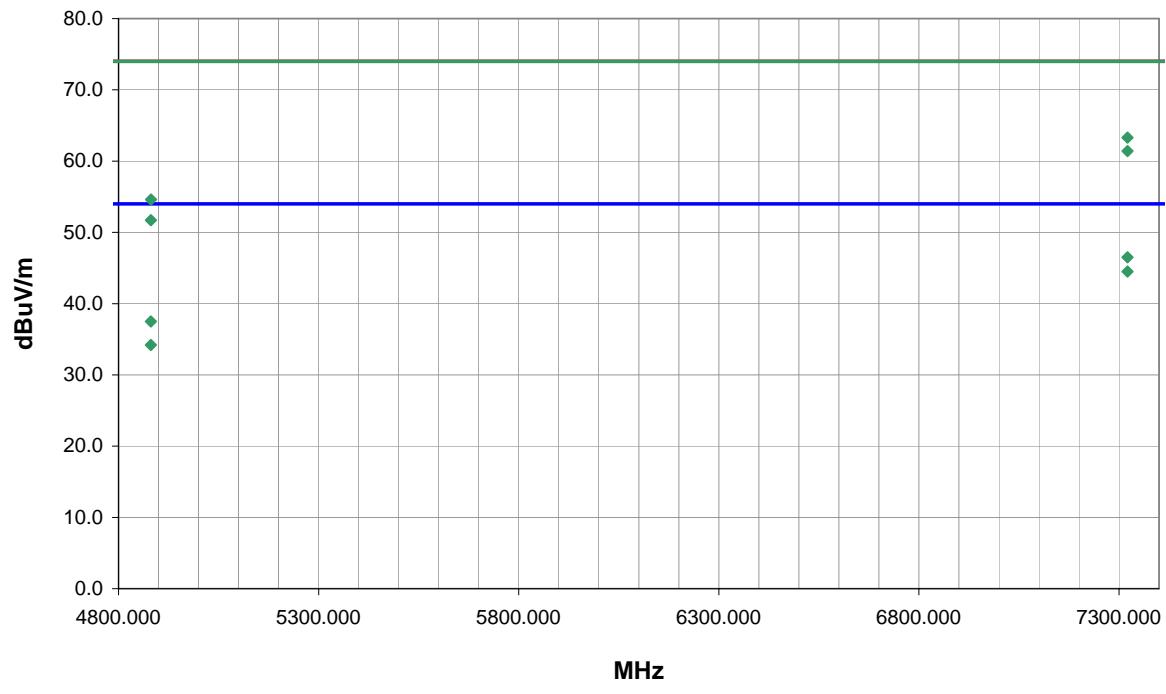
## EUT OPERATING MODES

Transmitting at 2440.

## DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	72	
Configuration #	1	
Results	Pass	



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
7321.285	37.8	16.4	129.0	1.4	7.7	0.0	V-Horn	AV	0.0	46.5	54.0	-7.5
7321.361	35.8	16.4	107.0	1.3	7.7	0.0	H-Horn	AV	0.0	44.5	54.0	-9.5
7321.304	46.9	16.4	129.0	1.4	0.0	0.0	V-Horn	PK	0.0	63.3	74.0	-10.7
7321.080	45.0	16.4	107.0	1.3	0.0	0.0	H-Horn	PK	0.0	61.4	74.0	-12.6
4880.935	32.6	12.6	171.0	1.1	7.7	0.0	V-Horn	AV	0.0	37.5	54.0	-16.5
4881.048	42.0	12.6	171.0	1.1	0.0	0.0	V-Horn	PK	0.0	54.6	74.0	-19.4
4880.931	29.3	12.6	108.0	1.3	7.7	0.0	H-Horn	AV	0.0	34.2	54.0	-19.8
4880.939	39.1	12.6	108.0	1.3	0.0	0.0	H-Horn	PK	0.0	51.7	74.0	-22.3

EUT: XYR6000 15.4 Radio with LPF modified DSSS Mode.								Work Order:	H0NE0023			
Serial Number: None								Date:	03/06/08			
Customer: Honeywell								Temperature:	22c			
Attendees: David Shipley								Humidity:	40%			
Project: None								Barometric Pres.:	1019 mb			
Tested by: Jaemi Suh				Power:	Battery		Job Site:		OC10			
TEST SPECIFICATIONS												
FCC 15.247(d) Spurious Radiated Emissions								Test Method				
								ANSI C63.4				
TEST PARAMETERS												
Antenna Height(s) (m)				1 - 4		Test Distance (m)		3				
COMMENTS												
Highest Gain Antenna 14dBi. PC Power Level: 168 (12.4 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 41msec dwell time. Duty cycle corr. = 20 log(41/100) = 7.7dB.												
EUT OPERATING MODES												
Transmitting at 2440												
DEVIATIONS FROM TEST STANDARD												
No deviations.												
Run #	53		Signature									
Configuration #	1											
Results	Pass											
<p>The graph plots dBuV/m on the y-axis (0.0 to 80.0) against MHz on the x-axis (12100.000 to 12300.000). A horizontal green line represents the specification limit at approximately 74 dBuV/m. A horizontal blue line represents the noise floor at approximately 54 dBuV/m. Two green diamond markers indicate measured data points at 12197.430 MHz and 12202.370 MHz, both of which exceed the specification limit.</p>												
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
12202.370	39.0	-8.4	200.0	1.0	7.7	0.0	H-Horn	AV	0.0	22.9	54.0	-31.1
12197.430	37.1	-8.4	223.0	1.0	7.7	0.0	V-Horn	AV	0.0	21.0	54.0	-33.0
12202.540	48.7	-8.4	200.0	1.0	0.0	0.0	H-Horn	PK	0.0	40.3	74.0	-33.7
12197.940	47.8	-8.4	223.0	1.0	0.0	0.0	V-Horn	PK	0.0	39.4	74.0	-34.6

EUT: XYR6000 15.4 Radio with LPF modified DSSS Mode.		Work Order:	HONE0023
Serial Number: None		Date:	03/06/08
Customer: Honeywell		Temperature:	22c
Attendees: David Shipley		Humidity:	40%
Project: None		Barometric Pres.:	1019 mb
Tested by: Jaemi Suh	Power: Battery	Job Site:	OC10

## TEST SPECIFICATIONS

FCC 15.247(d) Spurious Radiated Emissions	ANSI C63.4
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## TEST PARAMETERS

Antenna Height(s) (m)	1 - 4	Test Distance (m)	3
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## COMMENTS

Highest Gain Antenna 14dBi. PC Power Level: 168 (12.4 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 41msec dwell time. Duty cycle corr. = 20 log(41/100) = 7.7dB.

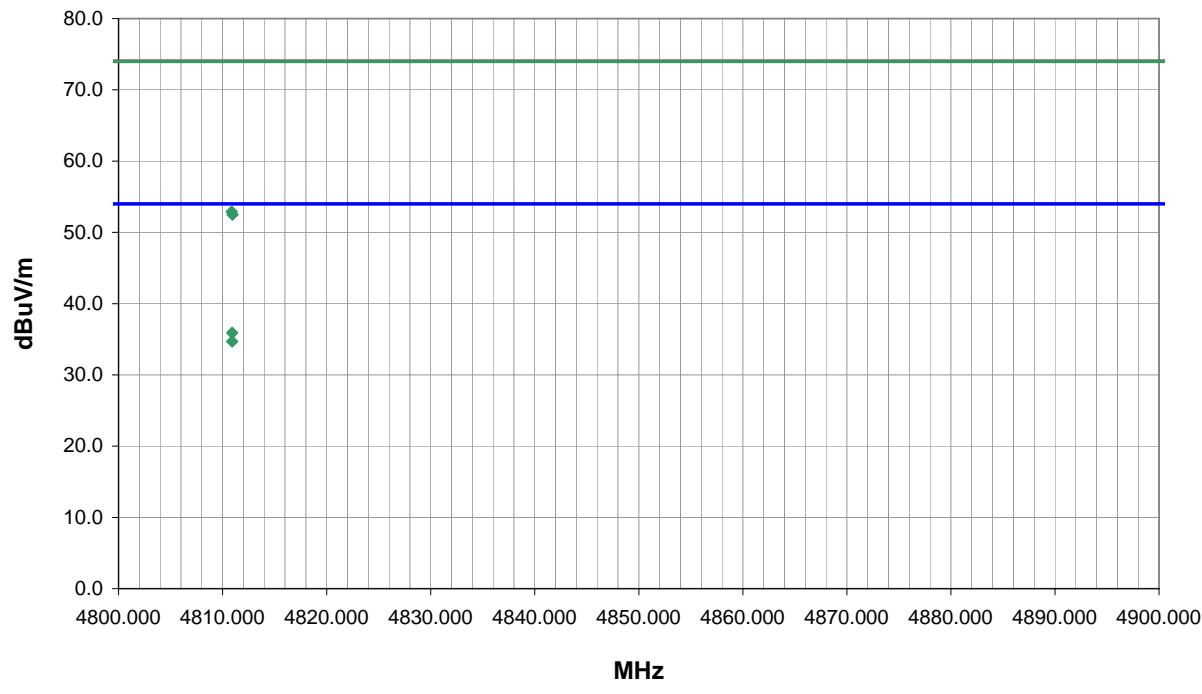
## EUT OPERATING MODES

Transmitting at 2405.

## DEVIATIONS FROM TEST STANDARD

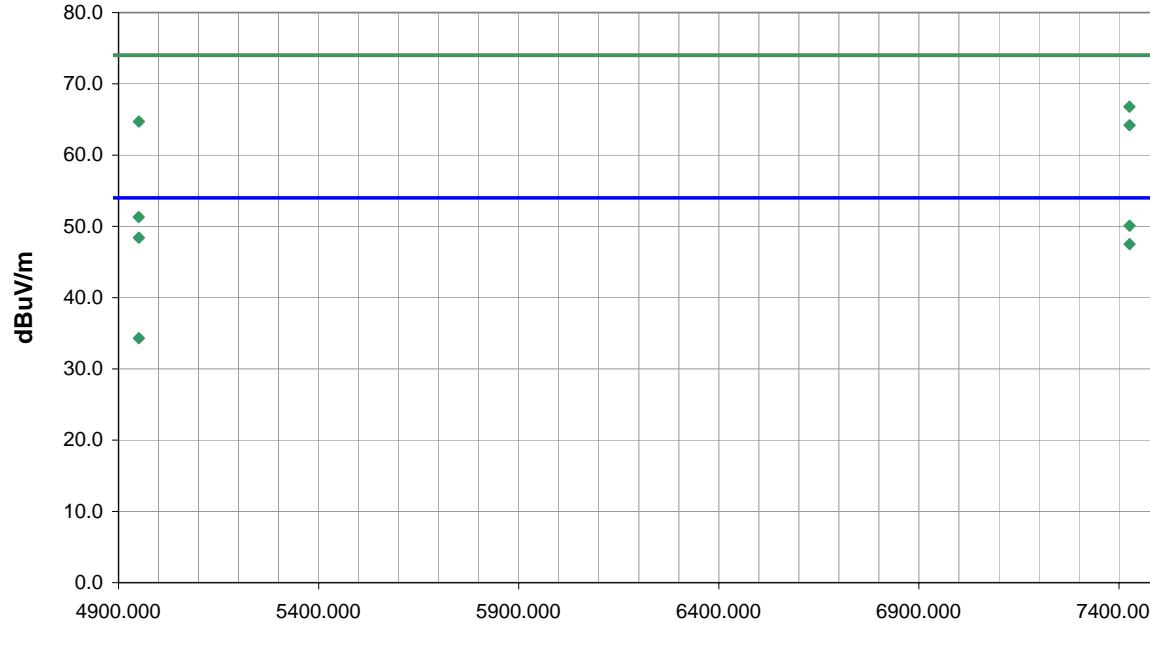
No deviations.

Run #	73	
Configuration #	1	
Results	Pass	



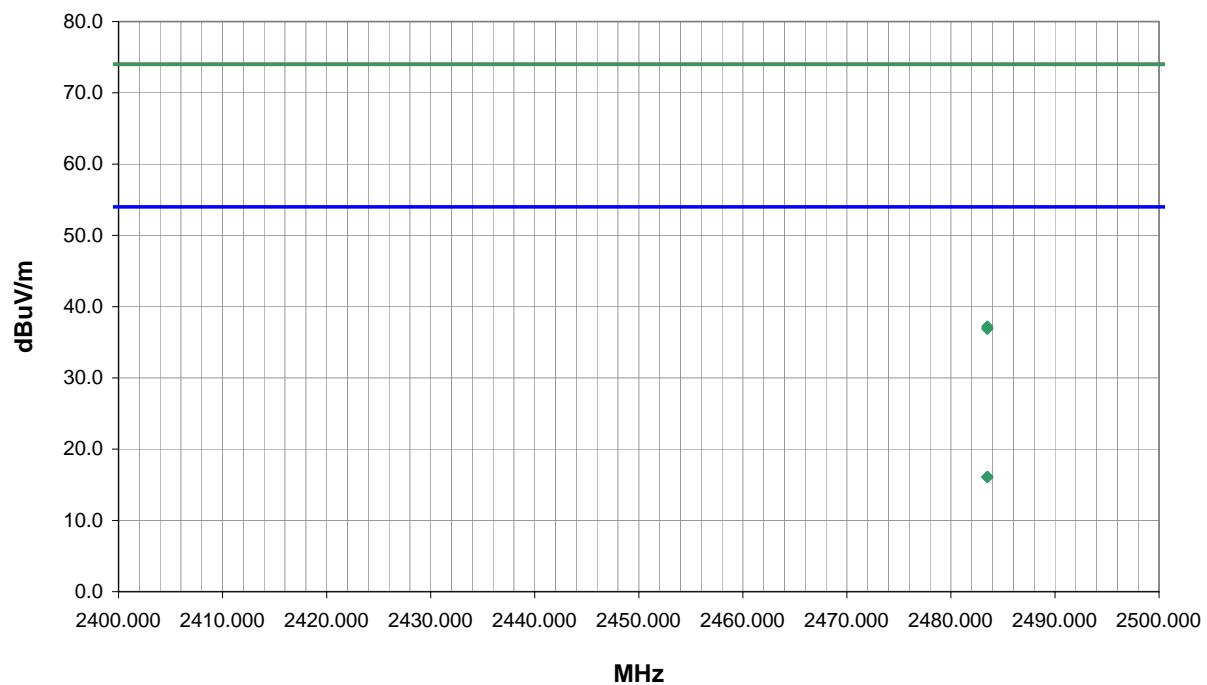
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
4810.923	31.1	12.5	169.0	1.1	7.7	0.0	H-Horn	AV	0.0	35.9	54.0	-18.1
4810.923	29.9	12.5	148.0	1.0	7.7	0.0	V-Horn	AV	0.0	34.7	54.0	-19.3
4810.879	40.4	12.5	169.0	1.1	0.0	0.0	H-Horn	PK	0.0	52.9	74.0	-21.1
4810.945	40.0	12.5	148.0	1.0	0.0	0.0	V-Horn	PK	0.0	52.5	74.0	-21.5

EUT: XYR6000 15.4 Radio with LPF modified DSSS Mode.								Work Order:	H0NE0023			
Serial Number: None								Date:	03/06/08			
Customer: Honeywell								Temperature:	22c			
Attendees: David Shipley								Humidity:	40%			
Project: None								Barometric Pres.:	1019 mb			
Tested by: Jaemi Suh				Power:	Battery		Job Site:		OC10			
TEST SPECIFICATIONS												
FCC 15.247(d) Spurious Radiated Emissions								Test Method				
								ANSI C63.4				
TEST PARAMETERS												
Antenna Height(s) (m)				1 - 4		Test Distance (m)		3				
COMMENTS												
Highest Gain Antenna 14dBi. PC Power Level: 168 (12.4 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 41msec dwell time. Duty cycle corr. = 20 log(41/100) = 7.7dB.												
EUT OPERATING MODES												
Transmitting at 2405.												
DEVIATIONS FROM TEST STANDARD												
No deviations.												
Run #	74		Signature									
Configuration #	1											
Results	Pass											
<p style="text-align: center;"><b>MHz</b></p>												
<b>Freq (MHz)</b>	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
12027.450	40.1	-9.0	197.0	1.0	7.7	0.0	V-Horn	AV	0.0	23.4	54.0	-30.6
12022.500	39.5	-9.0	228.0	1.0	7.7	0.0	H-Horn	AV	0.0	22.8	54.0	-31.2
12027.060	51.0	-9.0	197.0	1.0	0.0	0.0	V-Horn	PK	0.0	42.0	74.0	-32.0
12027.400	50.1	-9.0	228.0	1.0	0.0	0.0	H-Horn	PK	0.0	41.1	74.0	-32.9

SPURIOUS RADIATED EMISSIONS DATA SHEET												PSA 2007.05.07
												EMI 2006.4.26
EUT: XYR6000 15.4 Radio with LPF modified DSSS Mode.						Work Order: HONE0023						
Serial Number: None						Date: 03/05/08						
Customer: Honeywell						Temperature: 22c						
Attendees: David Shipley						Humidity: 40%						
Project: None						Barometric Pres.: 1019 mb						
Tested by: Jaemi Suh			Power: Battery			Job Site: OC10			Test Method			
TEST SPECIFICATIONS												
FCC 15.247(d) Spurious Radiated Emissions						ANSI C63.4						
TEST PARAMETERS												
Antenna Height(s) (m)			1 - 4			Test Distance (m)			3			
COMMENTS												
Middle Gain Antenna 8dBi. PC Power Level: 195 (15.8 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 41msec dwell time. Duty cycle corr. = 20 log(41/100) = 7.7dB.												
EUT OPERATING MODES												
Transmitting at 2475												
DEVIATIONS FROM TEST STANDARD												
No deviations.												
Run #	59											
Configuration #	1											
Results	Pass		Signature									
												
<b>Freq (MHz)</b>	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
7426.280	41.3	16.5	165.0	1.1	7.7	0.0	V-Horn	AV	0.0	50.1	54.0	-3.9
4950.852	43.3	12.8	167.0	1.3	7.7	0.0	V-Horn	AV	0.0	48.4	54.0	-5.6
7426.291	38.7	16.5	49.0	1.1	7.7	0.0	H-Horn	AV	0.0	47.5	54.0	-6.5
7426.194	50.3	16.5	165.0	1.1	0.0	0.0	V-Horn	PK	0.0	66.8	74.0	-7.2
4950.925	51.9	12.8	167.0	1.3	0.0	0.0	V-Horn	PK	0.0	64.7	74.0	-9.3
7426.351	47.7	16.5	49.0	1.1	0.0	0.0	H-Horn	PK	0.0	64.2	74.0	-9.8
4950.878	29.2	12.8	311.0	1.0	7.7	0.0	H-Horn	AV	0.0	34.3	54.0	-19.7
4950.426	38.5	12.8	311.0	1.0	0.0	0.0	H-Horn	PK	0.0	51.3	74.0	-22.7

EUT: XYR6000 15.4 Radio with LPF modified DSSS Mode.								Work Order:	H0NE0023			
Serial Number: None								Date:	03/05/08			
Customer: Honeywell								Temperature:	22c			
Attendees: David Shipley								Humidity:	40%			
Project: None								Barometric Pres.:	1019 mb			
Tested by: Jaemi Suh				Power:	Battery		Job Site:		OC10			
TEST SPECIFICATIONS												
FCC 15.247(d) Spurious Radiated Emissions								Test Method				
								ANSI C63.4				
TEST PARAMETERS												
Antenna Height(s) (m)				1 - 4		Test Distance (m)		3				
COMMENTS												
Middle Gain Antenna 8dBi. PC Power Level: 195 (15.8 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 41msec dwell time. Duty cycle corr. = 20 log(41/100) = 7.7dB.												
EUT OPERATING MODES												
Transmitting at 2475.												
DEVIATIONS FROM TEST STANDARD												
No deviations.												
Run #	60		Signature									
Configuration #	1											
Results	Pass											
<p>dBuV/m</p> <p>80.0 70.0 60.0 50.0 40.0 30.0 20.0 10.0 0.0</p> <p>12300.000 12310.000 12320.000 12330.000 12340.000 12350.000 12360.000 12370.000 12380.000 12390.000 12400.000</p> <p>MHz</p>												
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
12372.380	35.5	-7.8	319.0	1.0	7.7	0.0	V-Horn	AV	0.0	20.0	54.0	-34.0
12372.550	47.6	-7.7	319.0	1.0	0.0	0.0	V-Horn	PK	0.0	39.9	74.0	-34.1
12377.340	34.6	-7.7	314.0	1.0	7.7	0.0	H-Horn	AV	0.0	19.2	54.0	-34.8
12377.060	45.5	-7.7	314.0	1.0	0.0	0.0	H-Horn	PK	0.0	37.8	74.0	-36.2

EUT: XYR6000 15.4 Radio with LPF modified DSSS Mode.		Work Order: HONE0023	
Serial Number: None	Date: 03/05/08		
Customer: Honeywell	Temperature: 22c		
Attendees: David Shipley	Humidity: 40%		
Project: None	Barometric Pres.: 1019 mb		
Tested by: Jaemi Suh	Power: Battery	Job Site: OC10	
TEST SPECIFICATIONS			
FCC 15.247(d) Spurious Radiated Emissions		Test Method: ANSI C63.4	
TEST PARAMETERS			
Antenna Height(s) (m)	1 - 4	Test Distance (m)	3
COMMENTS			
Middle Gain Antenna 8dBi. PC Power Level: 195 (15.8 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 41msec dwell time. Duty cycle corr. = 20 log(41/100) = 7.7dB.			
EUT OPERATING MODES			
Transmitting at 2475			
DEVIATIONS FROM TEST STANDARD			
No deviations.			
Run #	61		
Configuration #	1		
Results	Pass	Signature	



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
2483.500	31.8	5.4	41.0	1.0	0.0	0.0	V-Horn	PK	0.0	37.2	74.0	-36.8
2483.500	31.5	5.4	101.0	1.0	0.0	0.0	H-Horn	PK	0.0	36.9	74.0	-37.1
2483.500	18.4	5.4	41.0	1.0	7.7	0.0	V-Horn	AV	0.0	16.1	54.0	-37.9
2483.500	18.4	5.4	101.0	1.0	7.7	0.0	H-Horn	AV	0.0	16.1	54.0	-37.9

EUT: XYR6000 15.4 Radio with LPF modified DSSS Mode.		Work Order:	H0NE0023
Serial Number: None		Date:	03/06/08
Customer: Honeywell		Temperature:	22c
Attendees: David Shipley		Humidity:	40%
Project: None		Barometric Pres.:	1019 mb
Tested by: Jaemi Suh	Power: Battery	Job Site:	OC10

## TEST SPECIFICATIONS

FCC 15.247(d) Spurious Radiated Emissions	ANSI C63.4
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## TEST PARAMETERS

Antenna Height(s) (m)	1 - 4	Test Distance (m)	3
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## COMMENTS

Middle Gain Antenna 8dBi. PC Power Level: 195 (15.8 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 41msec dwell time. Duty cycle corr. = 20 log(41/100) = 7.7dB.

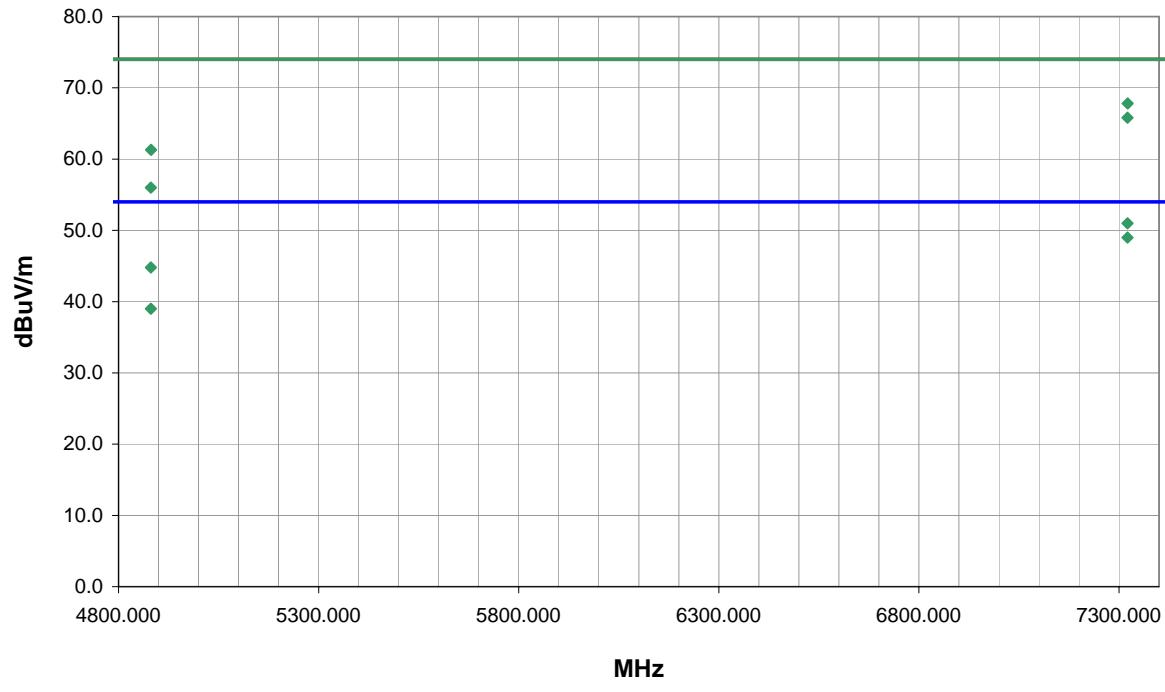
## EUT OPERATING MODES

Transmitting at 2440.

## DEVIATIONS FROM TEST STANDARD

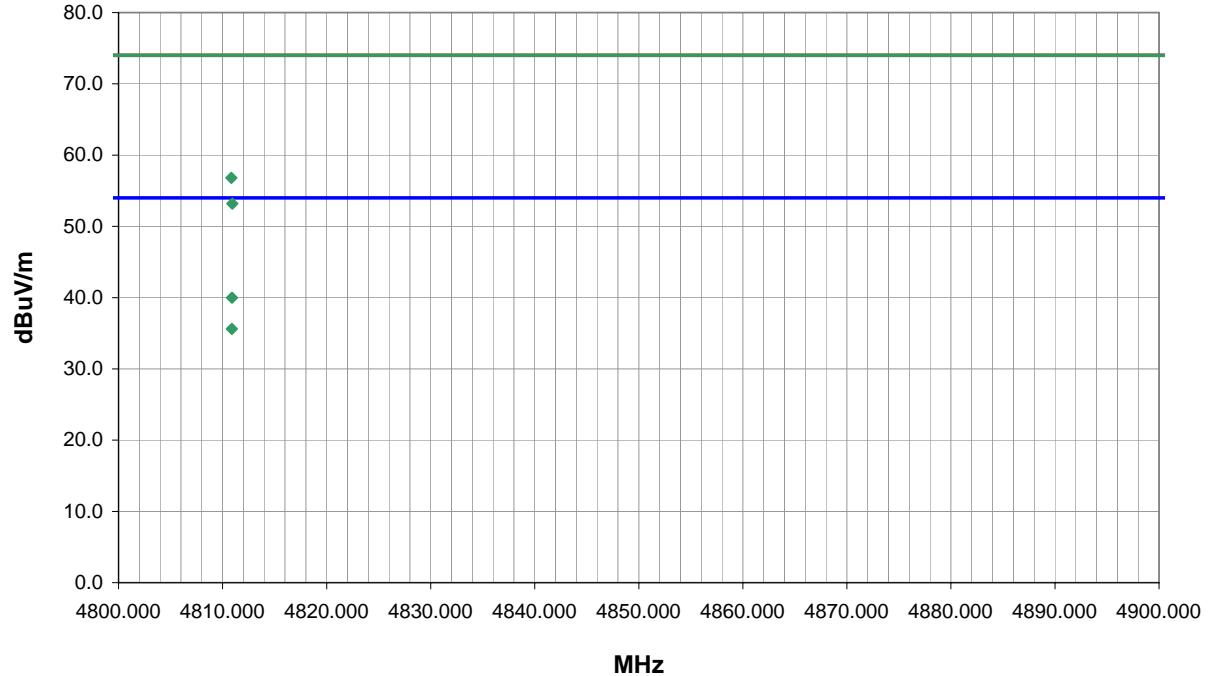
No deviations.

Run #	62	
Configuration #	1	
Results	Pass	



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
7321.283	42.3	16.4	245.0	1.2	7.7	0.0	H-Horn	AV	0.0	51.0	54.0	-3.0
7321.299	40.3	16.4	323.0	1.9	7.7	0.0	V-Horn	AV	0.0	49.0	54.0	-5.0
7321.641	51.4	16.4	245.0	1.2	0.0	0.0	H-Horn	PK	0.0	67.8	74.0	-6.2
7321.361	49.4	16.4	323.0	1.9	0.0	0.0	V-Horn	PK	0.0	65.8	74.0	-8.2
4880.908	39.9	12.6	5.0	1.1	7.7	0.0	V-Horn	AV	0.0	44.8	54.0	-9.2
4881.117	48.7	12.6	5.0	1.1	0.0	0.0	V-Horn	PK	0.0	61.3	74.0	-12.7
4880.960	34.1	12.6	307.0	1.3	7.7	0.0	H-Horn	AV	0.0	39.0	54.0	-15.0
4880.897	43.4	12.6	307.0	1.3	0.0	0.0	H-Horn	PK	0.0	56.0	74.0	-18.0

EUT: XYR6000 15.4 Radio with LPF modified DSSS Mode.								Work Order:	H0NE0023			
Serial Number: None								Date:	03/06/08			
Customer: Honeywell								Temperature:	22c			
Attendees: David Shipley								Humidity:	40%			
Project: None								Barometric Pres.:	1019 mb			
Tested by: Jaemi Suh				Power:	Battery		Job Site:		OC10			
TEST SPECIFICATIONS												
FCC 15.247(d) Spurious Radiated Emissions								Test Method				
								ANSI C63.4				
TEST PARAMETERS												
Antenna Height(s) (m)				1 - 4		Test Distance (m)		3				
COMMENTS												
Middle Gain Antenna 8dBi. PC Power Level: 195 (15.8 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 41msec dwell time. Duty cycle corr. = 20 log(41/100) = 7.7dB.												
EUT OPERATING MODES												
Transmitting at 2440.												
DEVIATIONS FROM TEST STANDARD												
No deviations.												
Run #	63		Signature									
Configuration #	1											
Results	Pass											
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
12199.270	30.5	-8.4	152.0	1.0	7.7	0.0	H-Horn	AV	0.0	14.4	54.0	-39.6
12195.560	30.4	-8.4	257.0	1.0	7.7	0.0	V-Horn	AV	0.0	14.3	54.0	-39.7
12199.940	38.7	-8.4	257.0	1.0	0.0	0.0	V-Horn	PK	0.0	30.3	74.0	-43.7
12200.350	38.6	-8.4	152.0	1.0	0.0	0.0	H-Horn	PK	0.0	30.2	74.0	-43.8

SPURIOUS RADIATED EMISSIONS DATA SHEET										PSA 2007.05.07 EMI 2006.4.26		
EUT: XYR6000 15.4 Radio with LPF modified DSSS Mode.										Work Order:	H0NE0023	
Serial Number: None										Date:	03/06/08	
Customer: Honeywell										Temperature:	22c	
Attendees: David Shipley										Humidity:	40%	
Project: None										Barometric Pres.:	1019 mb	
Tested by: Jaemi Suh					Power:	Battery		Job Site: OC10				
TEST SPECIFICATIONS												
FCC 15.247(d) Spurious Radiated Emissions										Test Method ANSI C63.4		
TEST PARAMETERS												
Antenna Height(s) (m)		1 - 4		Test Distance (m)		3						
COMMENTS												
Middle Gain Antenna 8dBi. PC Power Level: 195 (15.8 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 41msec dwell time. Duty cycle corr. = 20 log(41/100) = 7.7dB.												
EUT OPERATING MODES												
Transmitting at 2405.												
DEVIATIONS FROM TEST STANDARD												
No deviations.												
Run #	65											
Configuration #	1											
Results	Pass				Signature							
												
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
4810.903	35.2	12.5	1.0	1.0	7.7	0.0	V-Horn	AV	0.0	40.0	54.0	-14.0
4810.842	44.3	12.5	1.0	1.0	0.0	0.0	V-Horn	PK	0.0	56.8	74.0	-17.2
4810.885	30.8	12.5	356.0	1.1	7.7	0.0	H-Horn	AV	0.0	35.6	54.0	-18.4
4810.927	40.7	12.5	356.0	1.1	0.0	0.0	H-Horn	PK	0.0	53.2	74.0	-20.8

SPURIOUS RADIATED EMISSIONS DATA SHEET												PSA 2007.05.07	EMI 2006.4.26	
EUT: XYR6000 15.4 Radio with LPF modified DSSS Mode.												Work Order:	H0NE0023	
Serial Number: None												Date:	03/06/08	
Customer: Honeywell												Temperature:	22c	
Attendees: David Shipley												Humidity:	40%	
Project: None												Barometric Pres.:	1019 mb	
Tested by: Jaemi Suh						Power:	Battery		Job Site:	OC10				
TEST SPECIFICATIONS												Test Method		
FCC 15.247(d) Spurious Radiated Emissions												ANSI C63.4		
TEST PARAMETERS														
Antenna Height(s) (m)			1 - 4			Test Distance (m)			3					
COMMENTS														
Middle Gain Antenna 8dBi. PC Power Level: 195 (15.8 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 41msec dwell time. Duty cycle corr. = 20 log(41/100) = 7.7dB.														
EUT OPERATING MODES														
Transmitting at 2405.														
DEVIATIONS FROM TEST STANDARD														
No deviations.														
Run #	66											<i>Jaemi Suh</i>		
Configuration #	1													
Results	Pass													
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)		
12020.640	30.9	-9.0	257.0	3.0	7.7	0.0	V-Horn	AV	0.0	14.2	54.0	-39.8		
12025.920	30.8	-9.0	68.0	1.0	7.7	0.0	H-Horn	AV	0.0	14.1	54.0	-39.9		
12026.870	40.7	-9.0	257.0	3.0	0.0	0.0	V-Horn	PK	0.0	31.7	74.0	-42.3		
12025.330	39.6	-9.0	68.0	1.0	0.0	0.0	H-Horn	PK	0.0	30.6	74.0	-43.4		

EUT: XYR6000 15.4 Radio with LPF modified DSSS Mode.		Work Order:	HONE0023
Serial Number:	None	Date:	03/05/08
Customer:	Honeywell	Temperature:	22c
Attendees:	David Shipley	Humidity:	40%
Project:	None	Barometric Pres.:	1019 mb
Tested by:	Jaemi Suh	Power:	Battery
Test Method		Job Site:	OC10

## TEST SPECIFICATIONS

FCC 15.247(d) Spurious Radiated Emissions	ANSI C63.4
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## TEST PARAMETERS

Antenna Height(s) (m)	1 - 4	Test Distance (m)	3
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## COMMENTS

Lowest Gain Antenna -2dBi. PC Power Level: 255 (20.6 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 41msec dwell time. Duty cycle corr. = 20 log(41/100) = 7.7dB.

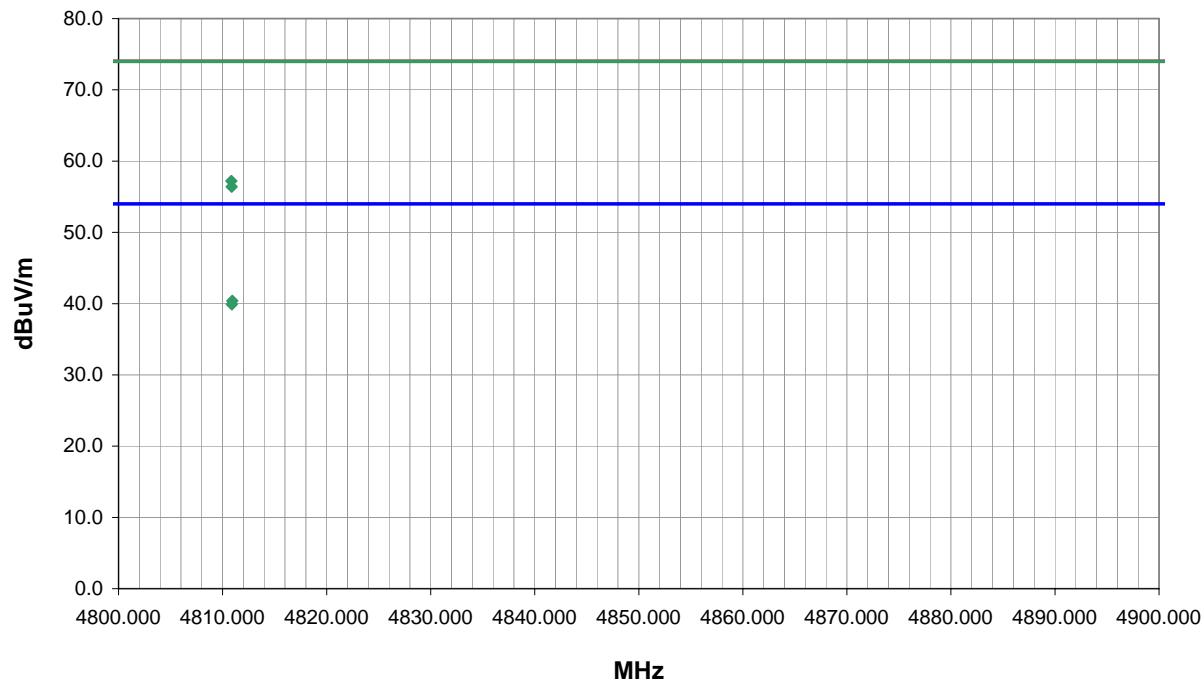
## EUT OPERATING MODES

Transmitting at 2405.

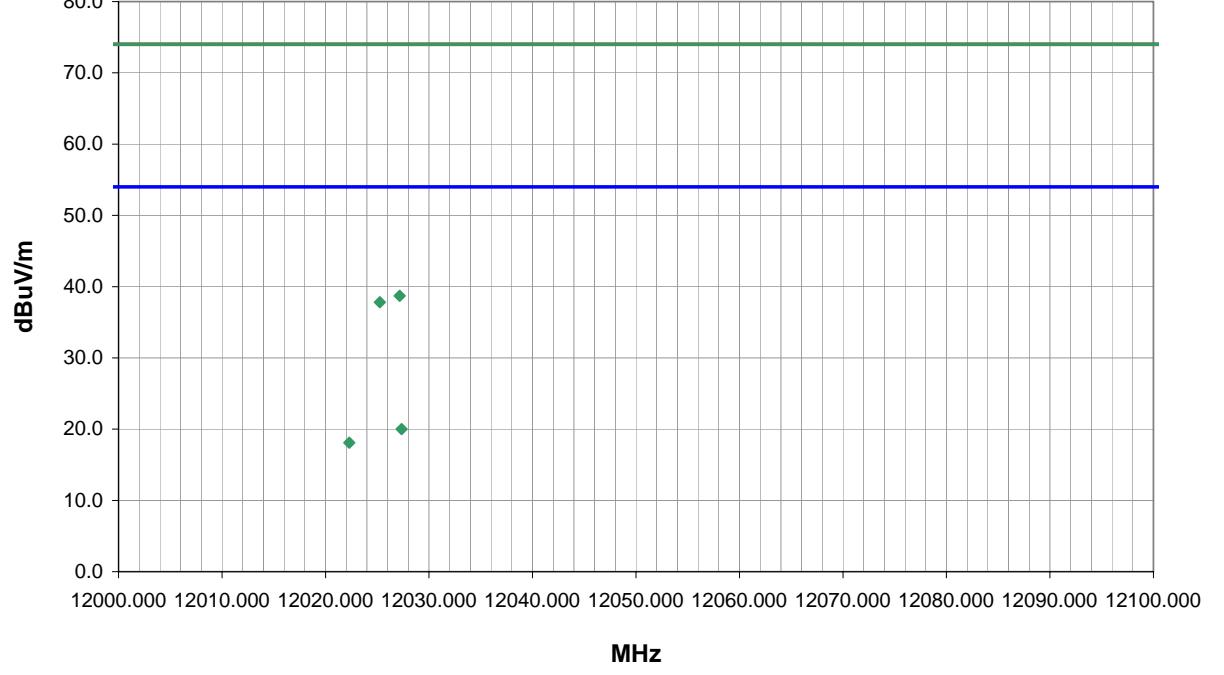
## DEVIATIONS FROM TEST STANDARD

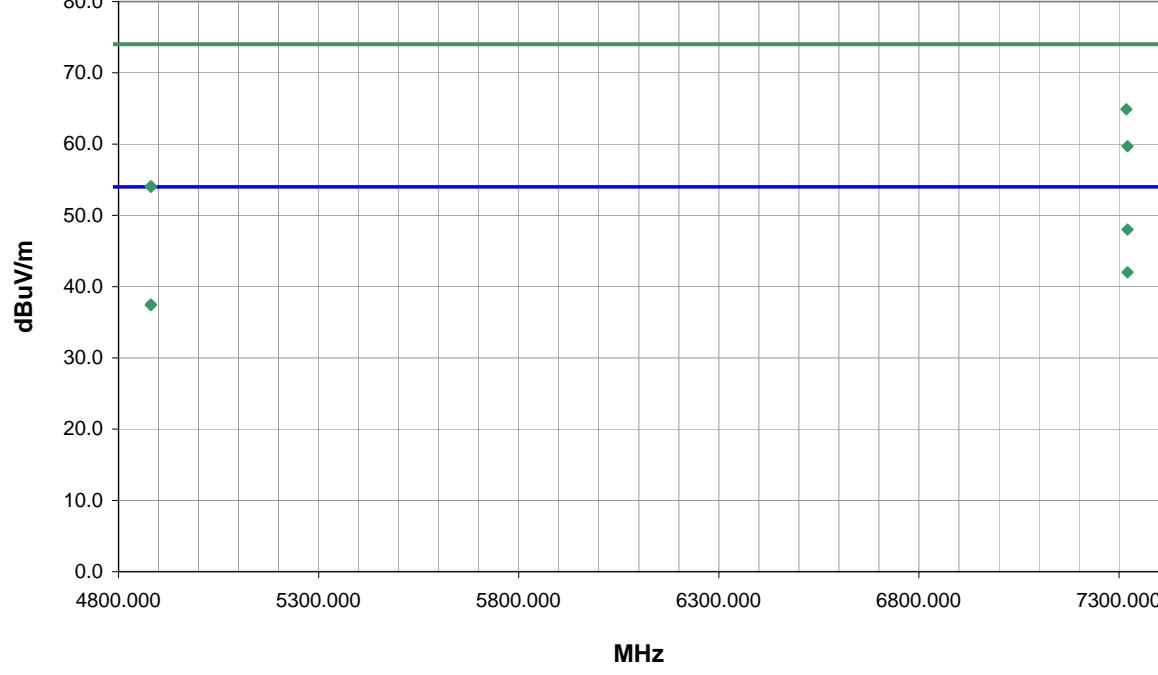
No deviations.

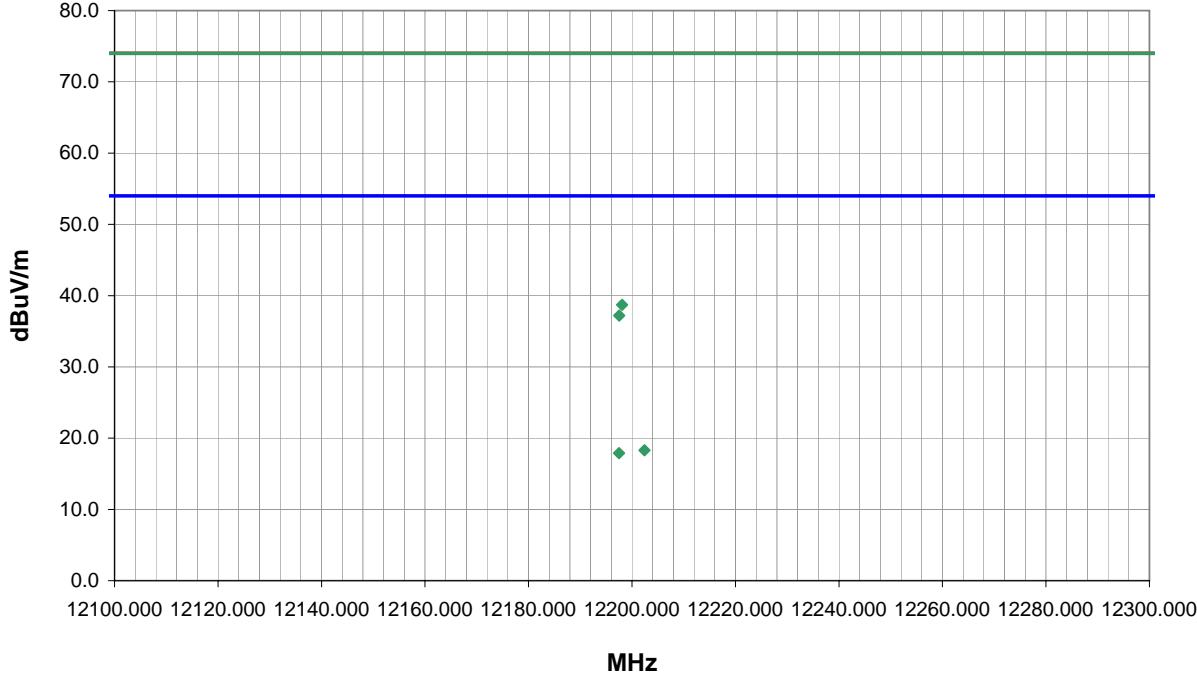
Run #	52	Signature
Configuration #	1	
Results	Pass	

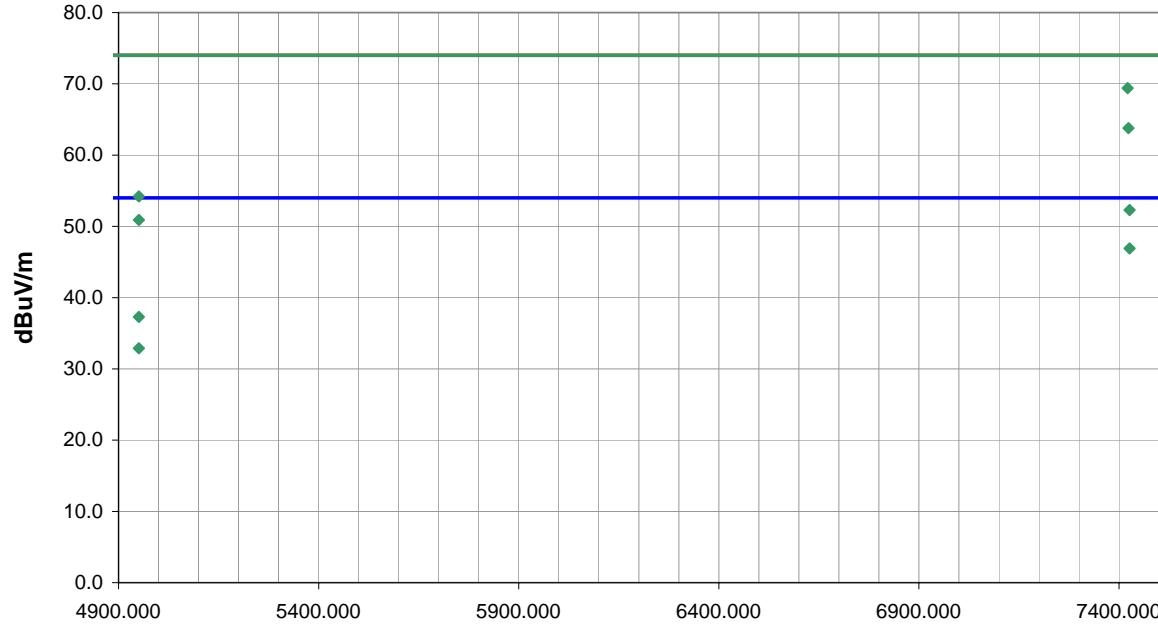


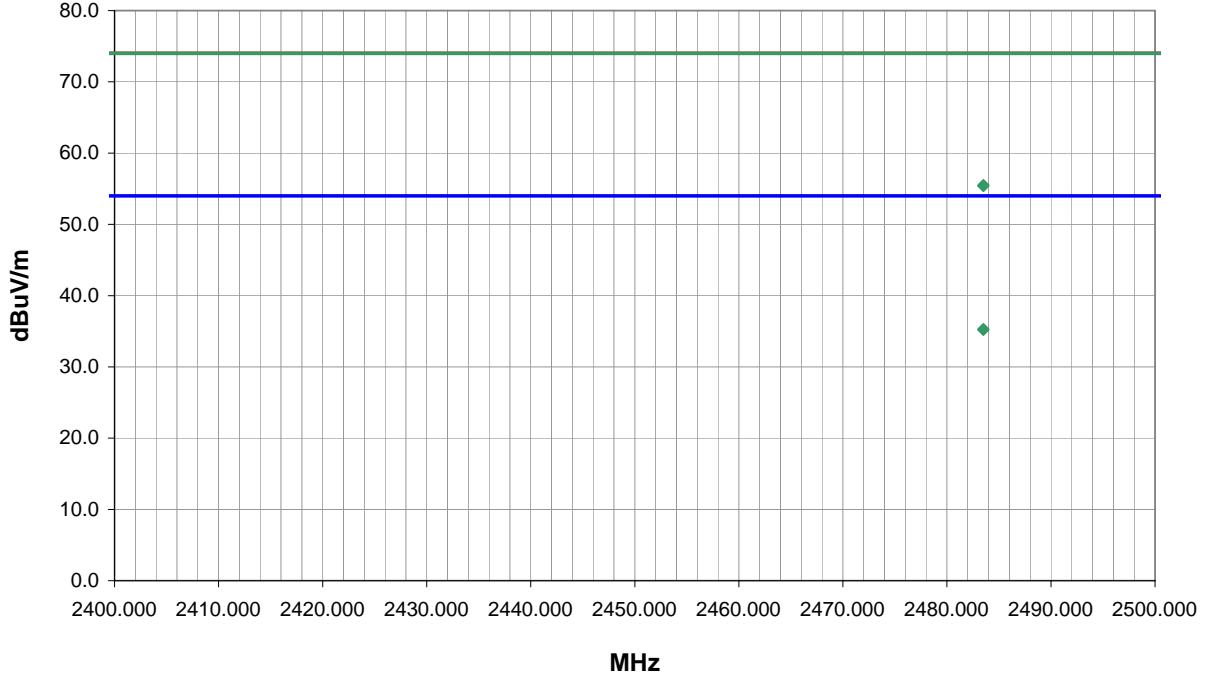
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
4810.938	35.6	12.5	10.0	1.0	7.7	0.0	H-Horn	AV	0.0	40.4	54.0	-13.6
4810.887	35.1	12.5	29.0	1.0	7.7	0.0	V-Horn	AV	0.0	39.9	54.0	-14.1
4810.841	44.7	12.5	10.0	1.0	0.0	0.0	H-Horn	PK	0.0	57.2	74.0	-16.8
4810.874	43.9	12.5	29.0	1.0	0.0	0.0	V-Horn	PK	0.0	56.4	74.0	-17.6

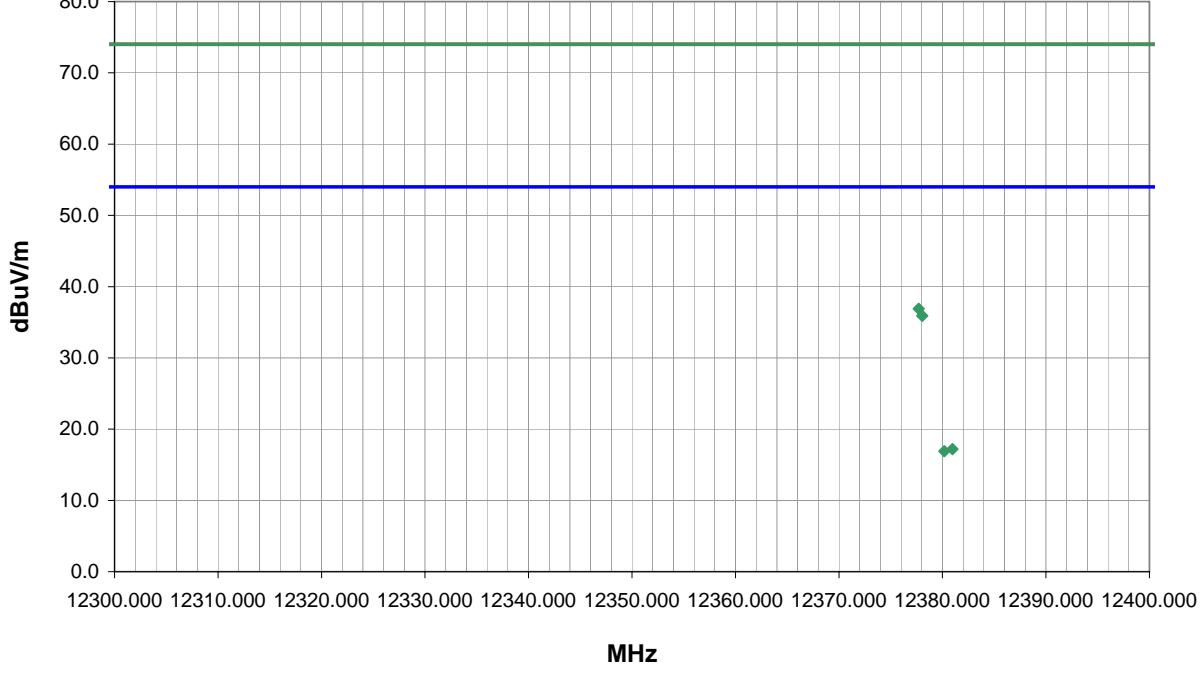
SPURIOUS RADIATED EMISSIONS DATA SHEET										EMC		NORTHWEST		PSA 2007.05.07		EMI 2006.4.26	
EUT: XYR6000 15.4 Radio with LPF modified DSSS Mode.										Work Order: HONE0023							
Serial Number: None										Date: 03/05/08							
Customer: Honeywell										Temperature: 22c							
Attendees: David Shipley										Humidity: 40%							
Project: None										Barometric Pres.: 1019 mb							
Tested by: Jaemi Suh					Power: Battery		Job Site: OC10										
TEST SPECIFICATIONS												Test Method					
FCC 15.247(d) Spurious Radiated Emissions												ANSI C63.4					
TEST PARAMETERS																	
Antenna Height(s) (m)		1 - 4		Test Distance (m)		3											
COMMENTS																	
Lowest Gain Antenna -2dBi. PC Power Level: 255 (20.6 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 41msec dwell time. Duty cycle corr. = 20 log(41/100) = 7.7dB.																	
EUT OPERATING MODES																	
Transmitting at 2405.																	
DEVIATIONS FROM TEST STANDARD																	
No deviations.																	
Run #	53																
Configuration #	1																
Results	Pass				Signature												
																	
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)					
12027.350	36.7	-9.0	55.0	1.0	7.7	0.0	V-Horn	AV	0.0	20.0	54.0	-34.0					
12027.160	47.7	-9.0	55.0	1.0	0.0	0.0	V-Horn	PK	0.0	38.7	74.0	-35.3					
12022.290	34.8	-9.0	36.0	1.0	7.7	0.0	H-Horn	AV	0.0	18.1	54.0	-35.9					
12025.240	46.8	-9.0	36.0	1.0	0.0	0.0	H-Horn	PK	0.0	37.8	74.0	-36.2					

SPURIOUS RADIATED EMISSIONS DATA SHEET											PSA 2007.05.07	
											EMI 2006.4.26	
EUT: XYR6000 15.4 Radio with LPF modified DSSS Mode.							Work Order: HONE0023					
Serial Number: None							Date: 03/05/08					
Customer: Honeywell							Temperature: 22c					
Attendees: David Shipley							Humidity: 40%					
Project: None							Barometric Pres.: 1019 mb					
Tested by: Jaemi Suh				Power: Battery			Job Site: OC10					
TEST SPECIFICATIONS											Test Method	
FCC 15.247(d) Spurious Radiated Emissions							ANSI C63.4					
TEST PARAMETERS												
Antenna Height(s) (m)			1 - 4			Test Distance (m)			3			
COMMENTS												
Lowest Gain Antenna -2dBi. PC Power Level: 255 (20.6 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 41msec dwell time. Duty cycle corr. = 20 log(41/100) = 7.7dB.												
EUT OPERATING MODES												
Transmitting at 2440.												
DEVIATIONS FROM TEST STANDARD												
No deviations.												
Run #	54											
Configuration #	1											
Results	Pass											
												
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
7321.333	39.3	16.4	148.0	1.3	7.7	0.0	H-Horn	AV	0.0	48.0	54.0	-6.0
7318.303	48.5	16.4	148.0	1.3	0.0	0.0	H-Horn	PK	0.0	64.9	74.0	-9.1
7321.338	33.3	16.4	11.0	1.0	7.7	0.0	V-Horn	AV	0.0	42.0	54.0	-12.0
7321.406	43.3	16.4	11.0	1.0	0.0	0.0	V-Horn	PK	0.0	59.7	74.0	-14.3
4880.926	32.6	12.6	31.0	1.0	7.7	0.0	V-Horn	AV	0.0	37.5	54.0	-16.5
4880.922	32.5	12.6	316.0	1.2	7.7	0.0	H-Horn	AV	0.0	37.4	54.0	-16.6
4880.771	41.5	12.6	31.0	1.0	0.0	0.0	V-Horn	PK	0.0	54.1	74.0	-19.9
4880.799	41.4	12.6	316.0	1.2	0.0	0.0	H-Horn	PK	0.0	54.0	74.0	-20.0

SPURIOUS RADIATED EMISSIONS DATA SHEET											PSA 2007.05.07	
											EMI 2006.4.26	
EUT: XYR6000 15.4 Radio with LPF modified DSSS Mode.						Work Order: HONE0023						
Serial Number: None						Date: 03/05/08						
Customer: Honeywell						Temperature: 22c						
Attendees: David Shipley						Humidity: 40%						
Project: None						Barometric Pres.: 1019 mb						
Tested by: Jaemi Suh			Power: Battery			Job Site: OC10			Test Method			
TEST SPECIFICATIONS												
FCC 15.247(d) Spurious Radiated Emissions						ANSI C63.4						
TEST PARAMETERS												
Antenna Height(s) (m)			1 - 4			Test Distance (m)			3			
COMMENTS												
Lowest Gain Antenna -2dBi. PC Power Level: 255 (20.6 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 41msec dwell time. Duty cycle corr. = 20 log(41/100) = 7.7dB.												
EUT OPERATING MODES												
Transmitting at 2440.												
DEVIATIONS FROM TEST STANDARD												
No deviations.												
Run #	58					Signature						
Configuration #	1											
Results	Pass											
												
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
12198.070	47.1	-8.4	108.0	1.0	0.0	0.0	V-Horn	PK	0.0	38.7	74.0	-35.3
12202.420	34.4	-8.4	108.0	1.0	7.7	0.0	V-Horn	AV	0.0	18.3	54.0	-35.7
12197.510	34.0	-8.4	166.0	1.0	7.7	0.0	H-Horn	AV	0.0	17.9	54.0	-36.1
12197.540	45.6	-8.4	166.0	1.0	0.0	0.0	H-Horn	PK	0.0	37.2	74.0	-36.8

SPURIOUS RADIATED EMISSIONS DATA SHEET												PSA 2007.05.07	EMI 2006.4.26
EUT: XYR6000 15.4 Radio with LPF modified DSSS Mode.							Work Order: HONE0023						
Serial Number: None							Date: 03/05/08						
Customer: Honeywell							Temperature: 22c						
Attendees: David Shipley							Humidity: 40%						
Project: None							Barometric Pres.: 1019 mb						
Tested by: Jaemi Suh				Power: Battery			Job Site: OC10						
TEST SPECIFICATIONS												Test Method	
FCC 15.247(d) Spurious Radiated Emissions							ANSI C63.4						
TEST PARAMETERS													
Antenna Height(s) (m)			1 - 4			Test Distance (m)			3				
COMMENTS													
Lowest Gain Antenna -2dBi. PC Power Level: 255 (20.6 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 41msec dwell time. Duty cycle corr. = 20 log(41/100) = 7.7dB.													
EUT OPERATING MODES													
Transmitting at 2475													
DEVIATIONS FROM TEST STANDARD													
No deviations.													
Run #	55					Signature							
Configuration #	1												
Results	Pass												
													
<b>Freq (MHz)</b>	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)	
7426.274	43.6	16.4	85.0	1.2	7.7	0.0	H-Horn	AV	0.0	52.3	54.0	-1.7	
7421.740	52.9	16.5	85.0	1.2	0.0	0.0	H-Horn	PK	0.0	69.4	74.0	-4.6	
7426.269	38.1	16.5	15.0	1.3	7.7	0.0	V-Horn	AV	0.0	46.9	54.0	-7.1	
7423.643	47.3	16.5	15.0	1.3	0.0	0.0	V-Horn	PK	0.0	63.8	74.0	-10.2	
4950.954	32.2	12.8	345.0	1.6	7.7	0.0	H-Horn	AV	0.0	37.3	54.0	-16.7	
4950.756	41.4	12.8	345.0	1.6	0.0	0.0	H-Horn	PK	0.0	54.2	74.0	-19.8	
4950.922	27.8	12.8	101.0	1.2	7.7	0.0	V-Horn	AV	0.0	32.9	54.0	-21.1	
4950.802	38.1	12.8	101.0	1.2	0.0	0.0	V-Horn	PK	0.0	50.9	74.0	-23.1	

SPURIOUS RADIATED EMISSIONS DATA SHEET												PSA 2007.05.07	EMI 2006.4.26	
EUT: XYR6000 15.4 Radio with LPF modified DSSS Mode.												Work Order:	H0NE0023	
Serial Number: None												Date:	03/05/08	
Customer: Honeywell												Temperature:	22c	
Attendees: David Shipley												Humidity:	40%	
Project: None												Barometric Pres.:	1019 mb	
Tested by: Jaemi Suh						Power:	Battery		Job Site:	OC10				
TEST SPECIFICATIONS													Test Method	
FCC 15.247(d) Spurious Radiated Emissions													ANSI C63.4	
TEST PARAMETERS														
Antenna Height(s) (m)		1 - 4		Test Distance (m)		3								
COMMENTS														
Lowest Gain Antenna -2dBi. PC Power Level: 255 (20.6 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 41msec dwell time. Duty cycle corr. = 20 log(41/100) = 7.7dB.														
EUT OPERATING MODES														
Transmitting at 2475														
DEVIATIONS FROM TEST STANDARD														
No deviations.														
Run #	56													
Configuration #	1													
Results	Pass													
														
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)		
2483.500	30.1	5.4	186.0	1.0	0.0	20.0	H-Horn	PK	0.0	55.5	74.0	-18.5		
2483.500	30.0	5.4	64.0	1.0	0.0	20.0	V-Horn	PK	0.0	55.4	74.0	-18.6		
2483.499	17.6	5.4	186.0	1.0	7.7	20.0	H-Horn	AV	0.0	35.3	54.0	-18.7		
2483.500	17.5	5.4	64.0	1.0	7.7	20.0	V-Horn	AV	0.0	35.2	54.0	-18.8		

EUT: XYR6000 15.4 Radio with LPF modified DSSS Mode.								Work Order:	H0NE0023			
Serial Number: None								Date:	03/05/08			
Customer: Honeywell								Temperature:	22c			
Attendees: David Shipley								Humidity:	40%			
Project: None								Barometric Pres.:	1019 mb			
Tested by: Jaemi Suh				Power:	Battery		Job Site:		OC10			
TEST SPECIFICATIONS												
FCC 15.247(d) Spurious Radiated Emissions								Test Method				
								ANSI C63.4				
TEST PARAMETERS												
Antenna Height(s) (m)				1 - 4		Test Distance (m)		3				
COMMENTS												
Lowest Gain Antenna -2dBi. PC Power Level: 255 (20.6 dBm). CHIP PA level = 0 dBm. Duty cycle correction factor is based on a 41msec dwell time. Duty cycle corr. = 20 log(41/100) = 7.7dB.												
EUT OPERATING MODES												
Transmitting at 2475.												
DEVIATIONS FROM TEST STANDARD												
No deviations.												
Run #	57		Signature									
Configuration #	1											
Results	Pass											
												
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
12380.970	32.6	-7.7	267.0	1.0	7.7	0.0	V-Horn	AV	0.0	17.2	54.0	-36.8
12380.180	32.3	-7.7	343.0	1.0	7.7	0.0	H-Horn	AV	0.0	16.9	54.0	-37.1
12377.710	44.6	-7.7	267.0	1.0	0.0	0.0	V-Horn	PK	0.0	36.9	74.0	-37.1
12378.040	43.6	-7.7	343.0	1.0	0.0	0.0	H-Horn	PK	0.0	35.9	74.0	-38.1

