

**Attachment 4**

**INTEL PART 15.247 TEST REPORT**

**REPORT NUMBER: INTEL-060907F**

Modular Approval  
 Test Report  
 And Application for Grant of Equipment Authorization

*TEST REPORT PERTAINING TO:*

Equipment Under Test	Model Number(s)
Intel PRO/Wireless 4965AGN Network Connection	4965AGN

CONFIGURATION
802.11a / 802.11b / 802.11g / 802.11n with a set of Ethertronics Antennas

*MEASUREMENTS PERFORMED IN ACCORDANCE WITH THE FOLLOWING STANDARD (S)*

Regulatory Standard(s)
47 CFR Part 15, Subpart C Section 15.247
Test Method: ANSI C63.4: 2003 American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz



Certificate Number: 1111.01

**PREPARED FOR:**

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Test Report #: INTEL-060907F

Test Report Revision: A1

	REPORT BODY	APPENDICES		TOTAL PAGES
		A	B	
PAGES	22	220	1	243

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## 1.0 REGULATORY COMPLIANCE GUIDELINES

Aegis Labs, Inc. operates as both a Nevada and California Corporation with no organizational or financial relationship with any company, institution, or private individual. Testing and engineering functions provided by Aegis Labs were furnished by RF technicians and engineers with accredited qualifications and training credentials to carry out their duties.

The object of this report was to publish verifiable test results of an EUT subjected to the tests outlined in the standard listed on the cover page of this report.

### 1.1 Guidelines For Testing To Emissions Standards

This standard for EMC emission requirements apply to electrical equipment for Information Technology Equipment (ITE). Compliance to these standards and in combination with the other standards listed in this test report can be used to demonstrate presumption of compliance with the protection requirements of the appropriate agency standard.

The purpose of this standard is to specify minimum requirements for emissions regarding electromagnetic compatibility (EMC) and protect the radio frequency spectrum 9 kHz. – 400 GHz. from unwanted interference generated from electrical/digital systems that intentionally or unintentionally generated RF energy. The emissions standards, normative documents and/or publications were used to conduct all tests performed on the equipment herein referred to as “Equipment Under Test”.

## 2.0 SUMMARY OF TEST RESULTS

### 802.11a Mode (5745-5825 MHz) Chain A

#### EMISSIONS STANDARD

FCC Part 15 Section	Description	Results	Comments
15.247(a)(2)	The minimum 6dB bandwidth shall be at least 500 kHz.	PASSED	5745 MHz = 16.50 MHz 5785 MHz = 16.50 MHz 5825 MHz = 16.50 MHz
15.247(b)(3)	The maximum peak output power of the intentional radiator shall not exceed 1 watt.	PASSED	5745 MHz = 19.61 dBm = 91.40 mW 5785 MHz = 19.71 dBm = 93.53 mW 5825 MHz = 19.91 dBm = 97.94 mW
15.247(b)(5)	The intentional radiator shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the FCC guidelines per Section 1.1307(b)(1).	PASSED	Refer to MPE Calculations Exhibit
15.247(c)	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.	PASSED	See Data Sheets
15.247(c)	Radiated emissions, which fall in the restricted bands, as defined in Sec. 15.205(a), must also comply with the radiated emission limits specified in Sec. 15.209(a). All others must be < -20dBc.	PASSED	See Data Sheets
15.247(d)	The peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.	PASSED	5745 MHz = -5.83 dB 5785 MHz = -6.67 dB 5825 MHz = -7.83 dB
15.207	AC Conducted Emissions	PASSED	See Data Sheets
15.209	Radiated Emissions (30-1000 MHz)	PASSED	See Data Sheets

2.0 Summary of Test Results (Continued)

**802.11a Mode (5745-5825 MHz) Chain B**

**EMISSIONS STANDARD**

<b>FCC Part 15 Section</b>	<b>Description</b>	<b>Results</b>	<b>Comments</b>
15.247(a)(2)	The minimum 6dB bandwidth shall be at least 500 kHz.	PASSED	5745 MHz = 16.42 MHz 5785 MHz = 16.50 MHz 5825 MHz = 16.33 MHz
15.247(b)(3)	The maximum peak output power of the intentional radiator shall not exceed 1 watt.	PASSED	5745 MHz = 20.21 dBm = 104.94 mW 5785 MHz = 20.31 dBm = 107.39 mW 5825 MHz = 20.31 dBm = 107.39 mW
15.247(b)(5)	The intentional radiator shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the FCC guidelines per Section 1.1307(b)(1).	PASSED	Refer to MPE Calculations Exhibit
15.247(c)	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.	PASSED	See Data Sheets
15.247(c)	Radiated emissions, which fall in the restricted bands, as defined in Sec. 15.205(a), must also comply with the radiated emission limits specified in Sec. 15.209(a). All others must be < -20dBc.	PASSED	See Data Sheets
15.247(d)	The peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.	PASSED	5745 MHz = -4.00 dB 5785 MHz = -3.83 dB 5825 MHz = -6.17 dB
15.207	AC Conducted Emissions	PASSED	See Data Sheets
15.209	Radiated Emissions (30-1000 MHz)	PASSED	See Data Sheets

2.0 Summary of Test Results (Continued)

**802.11b Mode (2400-2483.5 MHz) Chain A**

**EMISSIONS STANDARD**

<b>FCC Part 15 Section</b>	<b>Description</b>	<b>Results</b>	<b>Comments</b>
15.247(a)(2)	The minimum 6dB bandwidth shall be at least 500 kHz.	PASSED	2412 MHz = 12.58 MHz 2437 MHz = 12.67 MHz 2462 MHz = 12.67 MHz
15.247(b)(3)	The maximum peak output power of the intentional radiator shall not exceed 1 watt.	PASSED	2412 MHz = 19.07 dBm = 80.68 mW 2437 MHz = 19.24 dBm = 83.90 mW 2462 MHz = 20.03 dBm = 100.64 mW
15.247(b)(5)	The intentional radiator shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the FCC guidelines per Section 1.1307(b)(1).	PASSED	Refer to MPE Calculations Exhibit
15.247(c)	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.	PASSED	See Data Sheets
15.247(c)	Radiated emissions, which fall in the restricted bands, as defined in Sec. 15.205(a), must also comply with the radiated emission limits specified in Sec. 15.209(a). All others must be < -20dBc.	PASSED	See Data Sheets
15.247(d)	The peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.	PASSED	2412 MHz = -9.00 dB 2437 MHz = -9.00 dB 2462 MHz = -8.67 dB
15.207	AC Conducted Emissions	PASSED	See Data Sheets
15.209	Radiated Emissions (30-1000 MHz)	PASSED	See Data Sheets



2.0 Summary of Test Results (Continued)

**802.11b Mode (2400-2483.5 MHz) Chain B**

**EMISSIONS STANDARD**

<b>FCC Part 15 Section</b>	<b>Description</b>	<b>Results</b>	<b>Comments</b>
15.247(a)(2)	The minimum 6dB bandwidth shall be at least 500 kHz.	PASSED	2412 MHz = 12.08 MHz 2437 MHz = 12.17 MHz 2462 MHz = 13.00 MHz
15.247(b)(3)	The maximum peak output power of the intentional radiator shall not exceed 1 watt.	PASSED	2412 MHz = 18.73 dBm = 74.61 mW 2437 MHz = 18.88 dBm = 77.23 mW 2462 MHz = 19.94 dBm = 98.58 mW
15.247(b)(5)	The intentional radiator shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the FCC guidelines per Section 1.1307(b)(1).	PASSED	Refer to MPE Calculations Exhibit
15.247(c)	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.	PASSED	See Data Sheets
15.247(c)	Radiated emissions, which fall in the restricted bands, as defined in Sec. 15.205(a), must also comply with the radiated emission limits specified in Sec. 15.209(a). All others must be < -20dBc.	PASSED	See Data Sheets
15.247(d)	The peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.	PASSED	2412 MHz = -7.67 dB 2437 MHz = -6.50 dB 2462 MHz = -6.67 dB
15.207	AC Conducted Emissions	PASSED	See Data Sheets
15.209	Radiated Emissions (30-1000 MHz)	PASSED	See Data Sheets



2.0 Summary of Test Results (Continued)

**802.11g Mode (2400-2483.5 MHz) Chain A**

**EMISSIONS STANDARD**

<b>FCC Part 15 Section</b>	<b>Description</b>	<b>Results</b>	<b>Comments</b>
15.247(a)(2)	The minimum 6dB bandwidth shall be at least 500 kHz.	PASSED	2412 MHz = 16.50 MHz 2437 MHz = 16.50 MHz 2462 MHz = 16.50 MHz
15.247(b)(3)	The maximum peak output power of the intentional radiator shall not exceed 1 watt.	PASSED	2412 MHz = 23.80 dBm = 239.86 mW 2437 MHz = 23.83 dBm = 241.52 mW 2462 MHz = 23.48 dBm = 222.82 mW
15.247(b)(5)	The intentional radiator shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the FCC guidelines per Section 1.1307(b)(1).	PASSED	Refer to MPE Calculations Exhibit
15.247(c)	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.	PASSED	See Data Sheets
15.247(c)	Radiated emissions, which fall in the restricted bands, as defined in Sec. 15.205(a), must also comply with the radiated emission limits specified in Sec. 15.209(a). All others must be < -20dBc.	PASSED	See Data Sheets
15.247(d)	The peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.	PASSED	2412 MHz = -6.33 dB 2437 MHz = -7.17 dB 2462 MHz = -8.67 dB
15.207	AC Conducted Emissions	PASSED	See Data Sheets
15.209	Radiated Emissions (30-1000 MHz)	PASSED	See Data Sheets

2.0 Summary of Test Results (Continued)

**802.11g Mode (2400-2483.5 MHz) Chain B**

**EMISSIONS STANDARD**

<b>FCC Part 15 Section</b>	<b>Description</b>	<b>Results</b>	<b>Comments</b>
15.247(a)(2)	The minimum 6dB bandwidth shall be at least 500 kHz.	PASSED	2412 MHz = 16.42 MHz 2437 MHz = 16.50 MHz 2462 MHz = 16.50 MHz
15.247(b)(3)	The maximum peak output power of the intentional radiator shall not exceed 1 watt.	PASSED	2412 MHz = 23.54 dBm = 225.92 mW 2437 MHz = 23.63 dBm = 230.65 mW 2462 MHz = 23.52 dBm = 224.88 mW
15.247(b)(5)	The intentional radiator shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the FCC guidelines per Section 1.1307(b)(1).	PASSED	Refer to MPE Calculations Exhibit
15.247(c)	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.	PASSED	See Data Sheets
15.247(c)	Radiated emissions, which fall in the restricted bands, as defined in Sec. 15.205(a), must also comply with the radiated emission limits specified in Sec. 15.209(a). All others must be < -20dBc.	PASSED	See Data Sheets
15.247(d)	The peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.	PASSED	2412 MHz = -8.67 dB 2437 MHz = -6.67 dB 2462 MHz = -8.00 dB
15.207	AC Conducted Emissions	PASSED	See Data Sheets
15.209	Radiated Emissions (30-1000 MHz)	PASSED	See Data Sheets

2.0 Summary of Test Results (Continued)

**802.11n Mode 20MHz Wide (2400-2483.5 MHz) Chain A**

<b>EMISSIONS STANDARD</b>			
<b>FCC Part 15 Section</b>	<b>Description</b>	<b>Results</b>	<b>Comments</b>
15.247(a)(2)	The minimum 6dB bandwidth shall be at least 500 kHz.	PASSED	2412 MHz = 17.67 MHz 2437 MHz = 17.67 MHz 2462 MHz = 17.83 MHz
15.247(b)(3)	The maximum peak output power of the intentional radiator shall not exceed 1 watt.	PASSED	2412 MHz = 23.55 dBm = 226.44 mW 2437 MHz = 23.37 dBm = 217.25 mW 2462 MHz = 23.28 dBm = 212.79 mW
15.247(b)(5)	The intentional radiator shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the FCC guidelines per Section 1.1307(b)(1).	PASSED	Refer to MPE Calculations Exhibit
15.247(c)	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.	PASSED	See Data Sheets
15.247(c)	Radiated emissions, which fall in the restricted bands, as defined in Sec. 15.205(a), must also comply with the radiated emission limits specified in Sec. 15.209(a). All others must be < -20dBc.	PASSED	See Data Sheets
15.247(d)	The peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.	PASSED	2412 MHz = -3.00 dB 2437 MHz = -2.67 dB 2462 MHz = -3.33 dB
15.207	AC Conducted Emissions	PASSED	See Data Sheets
15.209	Radiated Emissions (30-1000 MHz)	PASSED	See Data Sheets

2.0 Summary of Test Results (Continued)

**802.11n Mode 20MHz Wide (2400-2483.5 MHz) Chain B**

<b>EMISSIONS STANDARD</b>			
<b>FCC Part 15 Section</b>	<b>Description</b>	<b>Results</b>	<b>Comments</b>
15.247(a)(2)	The minimum 6dB bandwidth shall be at least 500 kHz.	PASSED	2412 MHz = 17.67 MHz 2437 MHz = 17.67 MHz 2462 MHz = 17.75 MHz
15.247(b)(3)	The maximum peak output power of the intentional radiator shall not exceed 1 watt.	PASSED	2412 MHz = 23.27 dBm = 212.30 mW 2437 MHz = 23.39 dBm = 218.25 mW 2462 MHz = 23.19 dBm = 208.43 mW
15.247(b)(5)	The intentional radiator shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the FCC guidelines per Section 1.1307(b)(1).	PASSED	Refer to MPE Calculations Exhibit
15.247(c)	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.	PASSED	See Data Sheets
15.247(c)	Radiated emissions, which fall in the restricted bands, as defined in Sec. 15.205(a), must also comply with the radiated emission limits specified in Sec. 15.209(a). All others must be < -20dBc.	PASSED	See Data Sheets
15.247(d)	The peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.	PASSED	2412 MHz = -8.50 dB 2437 MHz = -8.33 dB 2462 MHz = -8.17 dB
15.207	AC Conducted Emissions	PASSED	See Data Sheets
15.209	Radiated Emissions (30-1000 MHz)	PASSED	See Data Sheets

2.0 Summary of Test Results (Continued)

**802.11n Mode 20MHz Wide (5745-5825 MHz) Chain A**

**EMISSIONS STANDARD**

<b>FCC Part 15 Section</b>	<b>Description</b>	<b>Results</b>	<b>Comments</b>
15.247(a)(2)	The minimum 6dB bandwidth shall be at least 500 kHz.	PASSED	5745 MHz = 17.50 MHz 5785 MHz = 17.58 MHz 5825 MHz = 17.50 MHz
15.247(b)(3)	The maximum peak output power of the intentional radiator shall not exceed 1 watt.	PASSED	5745 MHz = 20.11 dBm = 102.56 mW 5785 MHz = 20.91 dBm = 123.30 mW 5825 MHz = 20.41 dBm = 109.89 mW
15.247(b)(5)	The intentional radiator shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the FCC guidelines per Section 1.1307(b)(1).	PASSED	Refer to MPE Calculations Exhibit
15.247(c)	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.	PASSED	See Data Sheets
15.247(c)	Radiated emissions, which fall in the restricted bands, as defined in Sec. 15.205(a), must also comply with the radiated emission limits specified in Sec. 15.209(a). All others must be < -20dBc.	PASSED	See Data Sheets
15.247(d)	The peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.	PASSED	5745 MHz = -3.83 dB 5785 MHz = -4.33 dB 5825 MHz = -6.17 dB
15.207	AC Conducted Emissions	PASSED	See Data Sheets
15.209	Radiated Emissions (30-1000 MHz)	PASSED	See Data Sheets

2.0 Summary of Test Results (Continued)

**802.11n Mode 20MHz Wide (5745-5825 MHz) Chain B**

**EMISSIONS STANDARD**

<b>FCC Part 15 Section</b>	<b>Description</b>	<b>Results</b>	<b>Comments</b>
15.247(a)(2)	The minimum 6dB bandwidth shall be at least 500 kHz.	PASSED	5745 MHz = 17.67 MHz 5785 MHz = 17.58 MHz 5825 MHz = 17.75 MHz
15.247(b)(3)	The maximum peak output power of the intentional radiator shall not exceed 1 watt.	PASSED	5745 MHz = 20.21 dBm = 104.94 mW 5785 MHz = 20.61 dBm = 115.07 mW 5825 MHz = 20.31 dBm = 107.39 mW
15.247(b)(5)	The intentional radiator shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the FCC guidelines per Section 1.1307(b)(1).	PASSED	Refer to MPE Calculations Exhibit
15.247(c)	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.	PASSED	See Data Sheets
15.247(c)	Radiated emissions, which fall in the restricted bands, as defined in Sec. 15.205(a), must also comply with the radiated emission limits specified in Sec. 15.209(a). All others must be < -20dBc.	PASSED	See Data Sheets
15.247(d)	The peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.	PASSED	5745 MHz = -9.17 dB 5785 MHz = -8.83 dB 5825 MHz = -9.17 dB
15.207	AC Conducted Emissions	PASSED	See Data Sheets
15.209	Radiated Emissions (30-1000 MHz)	PASSED	See Data Sheets

2.0 Summary of Test Results (Continued)

**802.11n Mode 40MHz Wide (5745-5825 MHz) Chain A**

**EMISSIONS STANDARD**

<b>FCC Part 15 Section</b>	<b>Description</b>	<b>Results</b>	<b>Comments</b>
15.247(a)(2)	The minimum 6dB bandwidth shall be at least 500 kHz.	PASSED	5755 MHz = 35.50 MHz 5795 MHz = 35.70 MHz
15.247(b)(3)	The maximum peak output power of the intentional radiator shall not exceed 1 watt.	PASSED	5755 MHz = 18.51 dBm = 70.95 mW 5795 MHz = 18.11 dBm = 64.70 mW
15.247(b)(5)	The intentional radiator shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the FCC guidelines per Section 1.1307(b)(1).	PASSED	Refer to MPE Calculations Exhibit
15.247(c)	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.	PASSED	See Data Sheets
15.247(c)	Radiated emissions, which fall in the restricted bands, as defined in Sec. 15.205(a), must also comply with the radiated emission limits specified in Sec. 15.209(a). All others must be < -20dBc.	PASSED	See Data Sheets
15.247(d)	The peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.	PASSED	5755 MHz = -3.00 dB 5795 MHz = -6.83 dB
15.207	AC Conducted Emissions	PASSED	See Data Sheets
15.209	Radiated Emissions (30-1000 MHz)	PASSED	See Data Sheets

2.0 Summary of Test Results (Continued)

**802.11n Mode 40MHz Wide (5745-5825 MHz) Chain B**

**EMISSIONS STANDARD**

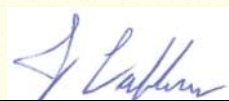
FCC Part 15 Section	Description	Results	Comments
15.247(a)(2)	The minimum 6dB bandwidth shall be at least 500 kHz.	PASSED	5755 MHz = 35.50 MHz 5795 MHz = 35.50 MHz
15.247(b)(3)	The maximum peak output power of the intentional radiator shall not exceed 1 watt.	PASSED	5755 MHz = 18.41 dBm = 69.33 mW 5795 MHz = 18.21 dBm = 66.21 mW
15.247(b)(5)	The intentional radiator shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the FCC guidelines per Section 1.1307(b)(1).	PASSED	Refer to MPE Calculations Exhibit
15.247(c)	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.	PASSED	See Data Sheets
15.247(c)	Radiated emissions, which fall in the restricted bands, as defined in Sec. 15.205(a), must also comply with the radiated emission limits specified in Sec. 15.209(a). All others must be < -20dBc.	PASSED	See Data Sheets
15.247(d)	The peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.	PASSED	5755 MHz = -12.33 dB 5795 MHz = -13.17 dB
15.207	AC Conducted Emissions	PASSED	See Data Sheets
15.209	Radiated Emissions (30-1000 MHz)	PASSED	See Data Sheets

**ANALYSIS AND CONCLUSIONS**

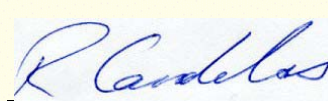
Based upon the measurement results we find that this equipment is within the limits of the global standards listed on the cover page of this test report. All results are based on a test of one sample. If any significant changes are made to the unit, the changes shall be evaluated and a retest may be required.

Approval Signatories

**Test and Report Completed By:**

  
Johnny Candelas      **11/10/06**  
**Date:**  
**Test Technician**  
**Aegis Labs, Inc.**

**Report Approved By:**

  
Rick Candelas      **11/10/06**  
**Date:**  
**Quality Assurance Manager**  
**Aegis Labs, Inc.**



### 3.0 ADMINISTRATIVE DATA AND TEST DESCRIPTION

<b>DEVICE TESTED:</b>	ITE Type: Intel PRO/Wireless 4965AGN Network Connection Model Number(s): 4965AGN Serial Number: 0013E804612B FCC ID: PD94965AGN
<b>DATE EUT RECEIVED:</b>	August 25 <sup>th</sup> , 2006
<b>TEST DATE(S):</b>	September 7 <sup>th</sup> – November 9 <sup>th</sup> , 2006
<b>ORIGIN OF TEST SAMPLE(S):</b>	Production
<b>EQUIPMENT CLASS:</b>	EUT tested as CLASS B device
<b>RESPONSIBLE PARTY:</b>	Intel Corporation 2111 NE 25 <sup>th</sup> Avenue Hillsboro, Oregon 97124
<b>CLIENT CONTACT:</b>	Mr. Robert Paxman
<b>MANUFACTURER:</b>	Intel Corporation
<b>TEST LOCATION:</b>	Aegis Labs, Inc. 32231 Trabuco Creek Road Trabuco Canyon, CA 92678 Open Area Test Site #1& #2
<b>ACCREDITATION CERTIFICATE(S):</b>	A2LA Certificate Number: 1111.01, Valid through February 28, 2008
<b>PURPOSE OF TEST:</b>	To demonstrate compliance with the standards as described in Sections 1.0 & 2.0 of this report.
<b>UNCERTAINTY BUDGET:</b>	Proficiency Testing and Uncertainty Calculations for all tests indicated in this report have been conducted in accordance with ISO 17025: 2005 requirements Section 5.4.6, and 5.9. Uncertainty Budgets and Proficiency Test results available upon request.
<b>STATEMENT OF CALIBRATION:</b>	All accredited equipment calibrations were performed by Liberty Labs, Inc. and World Cal. with typical calibration uncertainty estimates derived from ISO Guide to the determination of uncertainties with a Coverage Factor of k=2 for 95% level of confidence.

## 4.0 DESCRIPTION OF EUT CONFIGURATION

### 4.1 EUT Description

<b>Equipment Under Test (EUT)</b>	
<b>Trade Name:</b>	Intel PRO/Wireless 4965AGN Network Connection
<b>Model Number:</b>	4965AGN
<b>Frequency Range:</b>	802.11a = 5745 – 5825 MHz 802.11b/g = 2412 – 2462MHz 802.11n = 2412 – 2462MHz & 5745 – 5825 MHz
<b>Type of Transmission:</b>	Direct Sequence Spread Spectrum
<b>Transfer Rate:</b>	1/5.5/11 Mbps for 802.11b mode 6/36/54 Mbps for 802.11g and 802.11a modes Up to 300 Mbps for 802.11n mode
<b>Number of Channels:</b>	802.11a mode (5725-5850 MHz) = 5 802.11b mode (2400-2483.5 MHz) = 11 802.11g mode (2400-2483.5 MHz) = 11 802.11n mode (5725-5850 MHz) = 5 802.11n mode (2400-2483.5 MHz) = 11
<b>Modulation Type:</b>	DBPSK, DQPSK, CCK, OFDM
<b>Antenna Type:</b>	PIFA (Main/Aux)
<b>Antenna Gain (See Note 2):</b>	Ethertronics Antenna @ 5 GHz = 5.00 dBi Ethertronics Antenna @ 2.4 GHz = 3.00 dBi
<b>Transmit Output Power:</b>	Please see Appendix A (Data Sheets) for actual output power.
<b>Power Supply:</b>	3.3VDC from computer MPCPI slot.
<b>Number of External Test Ports Exercised:</b>	3 Antenna Ports

The Intel PRO/Wireless 4965AGN Network Connection is an embedded 802.11a/b/g/n network adapter operating in the 2.4 GHz and 5 GHz spectrum. The EUT is based on the Mini Card form factor designed to meet the space and size requirements for thin and light notebook PCs. It is capable of a data rate of up to 300 Mbps.

**NOTE 1:** For a more detailed description, please refer to the manufacture’s specifications or User’s Manual.

**NOTE 2:** The EUT was tested with a set of Ethertronics Antennas. (Refer to the antenna specifications exhibits).

## 4.2 EUT Configuration

The EUT was tested installed in the Mini PCI-E slot of the host computer as a modular device using a PCI extender board to extend the EUT outside the computer chassis. The EUT was then connected to a set of antennas via its Chain A, B, & C antenna ports. Data for a set of Ethertronics antennas can be found in Appendix A (Data Sheets)

The low, middle, and high channels were tested in 802.11a, b, g, & n modes. Also, the EUT was tested once transmitting from Chain A antenna port and once transmitting from Chain B antenna port. The EUT was placed in either continuous transmit or continuous receive mode by a program provided by the manufacturer (*CRTU Version 4.1.14.0000*).

## 4.3 List of EUT, Sub-Assemblies and Host Equipment

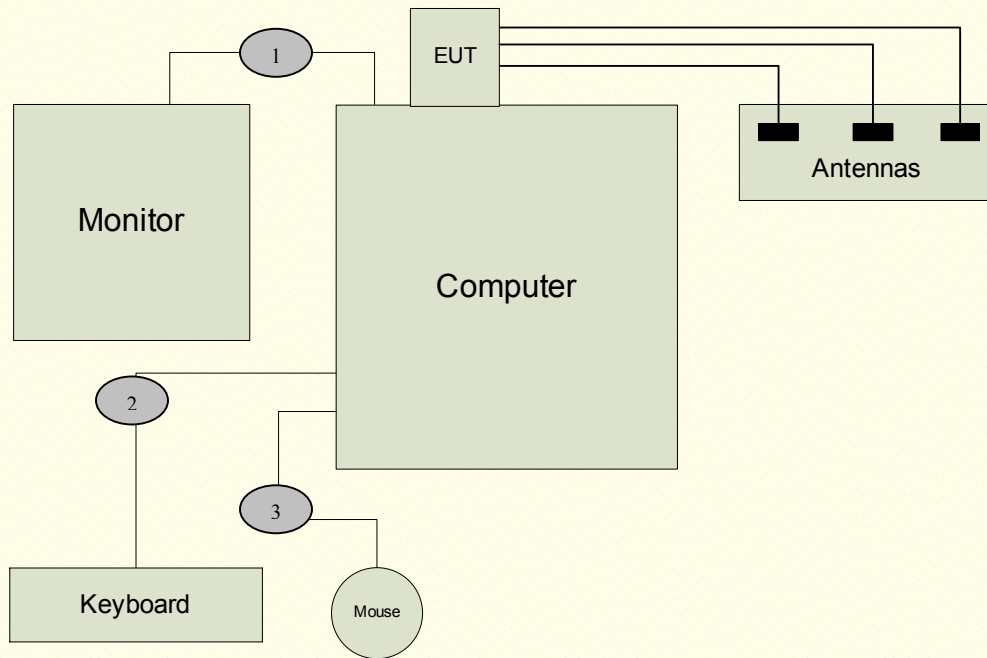
Equipment Under Test			
Manufacturer	Equipment Name	Model or Part Number	Serial Number
Intel Corporation	Intel PRO/Wireless 4965AGN Network Connection	4965AGN	0013E804612B

EUT Sub Assemblies			
Manufacturer	Equipment Name	Model or Part Number	Serial Number
Ethertronics	Chain A (Tx) Antenna	MPCI01001	N/A
Ethertronics	Chain B (Tx) Antenna	MPCI01001	N/A
Ethertronics	Chain C (Rx) Antenna	MPCI01001	N/A

HOST EQUIPMENT LIST			
Manufacturer	Equipment Name	Model or Part Number	Serial Number
GST	Host Computer	GST-8000	G0400295337-015
Sony	Monitor	CPD-200ES	0742818
Logitech	Keyboard	Y-BF37	MCT25200581
Logitech	Mouse	M-BJ58	LNA22802012

NOTE: All the power cords of the above support equipment are standard and non-shielded.

#### 4.4 I/O Cabling Diagram and Description



**Signal Line Cable Description**

Cable	Length	Construction	Source Connector	Destination Connector	Bundled Length	Ferrite Attached	Note
1	1.5m	Round, Braid & Foil Shielded	Host Computer: Metallic DB-15	Monitor: Hardwired	N/A	N/A	N/A
2	1.5m	Round, Braid & Foil Shielded	Host Computer: Metallic 8-pin Mini DIN	Keyboard: Hardwired	N/A	N/A	N/A
3	1.5m	Round, Braid & Foil Shielded	Host Computer: Metallic 8-pin Mini DIN	Mouse: Hardwired	N/A	N/A	N/A

#### 4.5 EMC Test Hardware and Software Measurement Equipment

<b>TEST EQUIPMENT LIST - Emissions</b>					
<b>Equipment Name</b>	<b>Manufacturer</b>	<b>Model Number</b>	<b>Serial Number</b>	<b>Calibration Due Date</b>	<b>Maintenance Calibration Cycle</b>
Spectrum Analyzer	Agilent	8565EC	3946A00245	07/24/07	1 Year
Antenna - Horn	EMCO	3115	2230	05/15/07	1 Year
Preamp	Agilent	8449B	3008A01573	12/08/06	1 Year
18 Foot Coax	Semflex	X116BFSX10216	546	12/14/06	1 Year
2.4 GHz Notch Filter	Micro-Tronics	BRM50702-02	003	10/21/06	1.5 Years
5.725-5.850 GHz Notch Filter	Microwave Circuits	N0257881	3173-01	04/21/07	2 Years
Antenna - 18-26.5 GHz Pre-amplified Horn	Aegis Labs, Inc.	H042	SLK-35-3W	02/08/07	1 Year
EMI Receiver - RF Section	Hewlett Packard	8546A	3325A00137	04/26/07	1 Year
EMI Receiver - RF Filter Section	Hewlett Packard	85460A	3325A00138	04/26/07	1 Year
10dB Attenuator	Radiall	R412710000	Lot 9624	06/30/07	2 Years
LISN (EUT)	Solar Electronics	9252-50-R-24-BNC	961025	03/30/08	2 Years
LISN (Access)	Solar Electronics	9252-50-R-24-BNC	961024	07/05/07	2 Years
Antenna - Biconical	EMCO	3110B	3383	04/06/07	1 Year
Antenna - Log Periodic	EMCO	3148	47943	06/22/07	1 Year
Power Meter	Anritsu	ML2487A	6K00001785	05/30/07	1 Year
Wide Bandwidth Sensor	Anritsu	MA2491A	31193	05/30/07	1 Year
12dB Attenuator	Narda	4779-12	203	12/09/06	1.5 Year
Temperature/Humidity Monitor	Dickson	TH550	7255185	03/24/07	1 Year

## 5.0 CONDITIONS DURING EMISSIONS MEASUREMENTS

### 5.1 General

All measurements were made according to the procedures defined in or referred to by the standard listed on the cover page of this report. The measurements were made in the operating mode producing the largest emissions consistent with normal operation and connected to the minimum configuration of auxiliary devices.

### 5.2 Conducted Emissions Test Setup

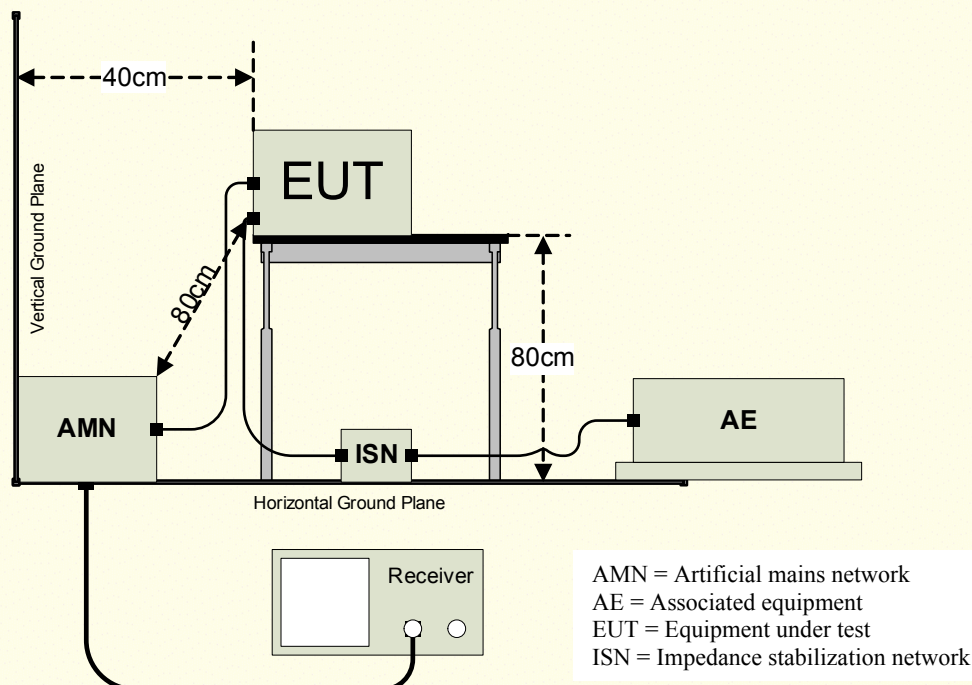
The following was the test configuration.

EUT signal cables that hung closer than 40 cm to the horizontal metal ground plane were folded back and forth forming a bundle 30 cm to 40 cm long. The power cord of the EUT was also bundled in the center and plugged into one of the artificial mains network (AMN). All peripheral equipment was powered from a second AMN via a multiple outlet strip placed at a distance on 10cm from each other. The AMN and ISN were positioned 80cm from the EUT. Signal cables that were not connected to an AE were terminated using the correct termination. If applicable, the current probe was placed at 0.1 m from the ISN.

Peak, quasi-peak and/or average detectors were used for testing performed between 150 kHz and 30 MHz. A swept frequency scan was performed for both Line 1 and Line 2. The six highest readings were compared against the limit and recorded in the data sheet along with a snapshot image of the sweep scan. The graphical scans in Appendix A only reflect peak readings while the tabulated data sheets reflect peak, average, and/or quasi-peak measurements.

#### Climatic Conditions:

The EUT was tested within its intended operating and climatic conditions.



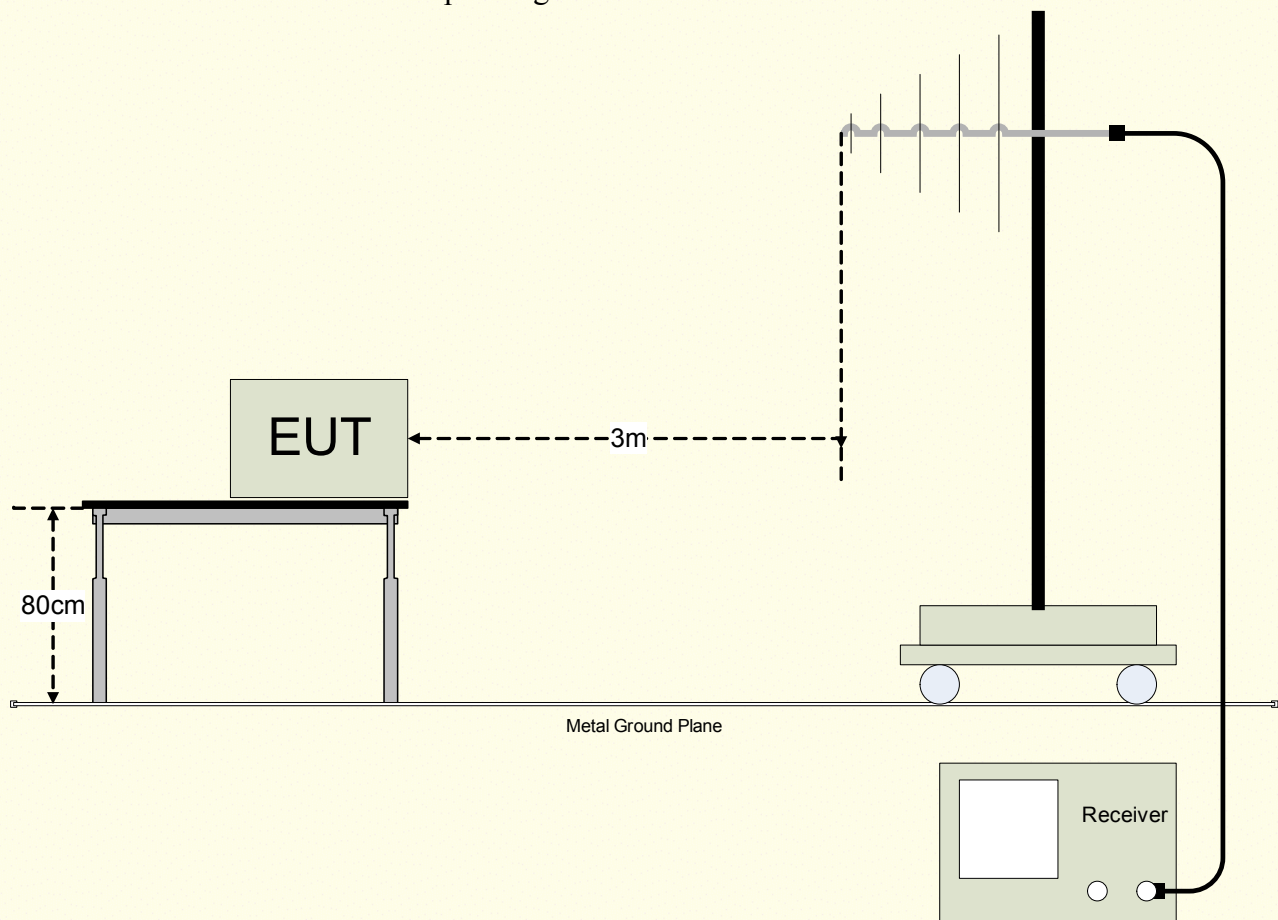
### 5.3 Radiated Emissions Test Setup

The Open Area Test Site (OATS) was used for radiated emission testing. The receiving (Rx) antenna(s) was placed 10m from the nearest side of the EUT facing the Rx antenna. The EUT (if floor-standing) was placed directly on the flush-mounted 360 degree rotating turntable. The EUT (if table-top) was placed directly on an 80cm high non-metallic table, and the table was placed on the rotating turntable. During the initial EMI scan, all the suspect frequencies, i.e.; harmonics, broadband signals were checked with the Rx broadband antennas in both vertical and horizontal polarities. The biconical Rx, log periodic Rx, and horn Rx antennas were used from 30MHz – 299.99MHz, 300MHz – 1000MHz, and 1GHz – 18GHz respectively.

Upon completion of all harmonic and broadband measurements, the balance of any remaining frequencies was checked between 30MHz – 18GHz. Any signals appearing within 20 dB of the classification limit was measured. Each signal was maximized by first rotating the turntable at least 360 degrees and recording the azimuth in the data sheet. Lastly, the Rx antenna was raised and/or lowered to maximize the signal elevation. If the measured signal was obtained using the peak detector and that signal appeared within 3 dB of the regulatory limit line, then the same signal was re-measured using the quasi-peak detector on the EMI receiver. Both meter readings if necessary were recorded on the data sheet.

#### Climatic Conditions:

The EUT was tested within its intended operating and climatic conditions.





## **APPENDIX A**

### ***TEST DATA***





## AC POWER PORT - CONDUCTED EMISSIONS TEST RESULTS

<b>CLIENT:</b>	Intel Corporation	<b>DATE:</b>	09/07/06
<b>EUT:</b>	Intel PRO/Wireless 4965AGN Network Connection	<b>PROJECT NUMBER:</b>	INTEL-060907
<b>MODEL NUMBER:</b>	4965AGN	<b>TEST ENGINEER:</b>	JC
<b>SERIAL NUMBER:</b>	0013E804612B	<b>SITE #:</b>	1
<b>CONFIGURATION:</b>	Tested installed in the host computer's mini PCI slot.	<b>TEMPERATURE:</b>	22 deg. C
		<b>HUMIDITY:</b>	49%
		<b>TIME:</b>	2:15 PM

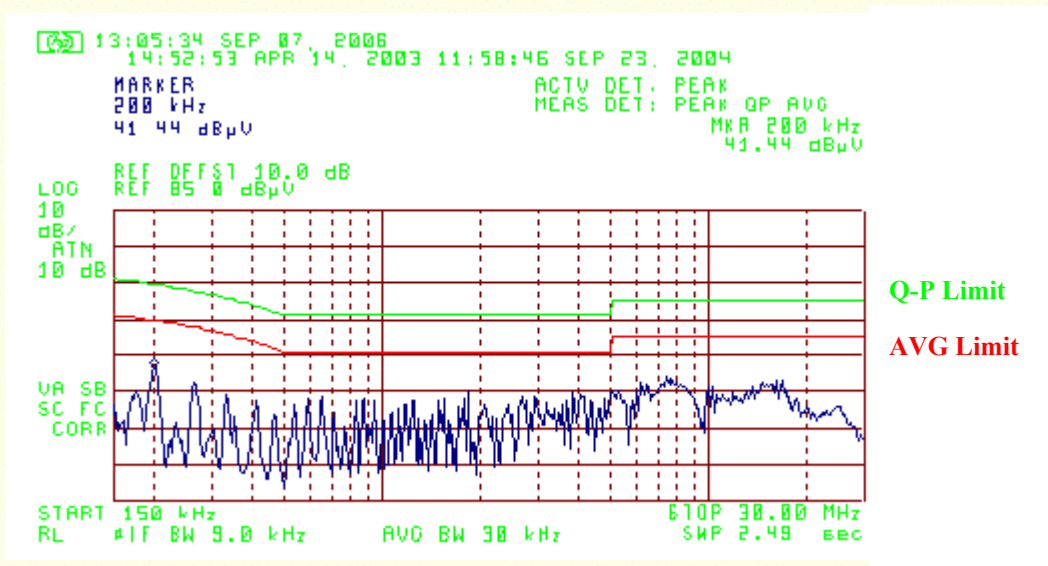
<b>Description:</b>	Conducted Power RF Emissions (150 kHz – 30 MHz)
<b>Results:</b>	<b>PASSED</b> LINE 1 and LINE 2 Limits
<b>Note:</b>	Conducted Emissions Measurements were performed on the EUT with the power supply set at the following voltage and frequency. <ul style="list-style-type: none"><li>• 120VAC / 60 Hz</li></ul>

AC Power Port – Conducted Emissions Test Results (Continued)

**Continuously Transmitting @ 120VAC/60Hz (INTEL-060907-01)**

**FCC CLASS B CONDUCTED EMISSIONS – LINE 1**

Freq. (MHz)	Meter Reading (dBuV)	Detector (PK/QP/AV)	Average Limit (dBuV)	Average Delta(dB)	Quasi-Peak Limit (dBuV)	Quasi-Peak Delta(dB)
0.2000	41.44	PK	54.57	-13.13	64.57	-23.13
0.2700	37.40	PK	52.57	-15.17	62.57	-25.17
1.8400	35.48	PK	46.00	-10.52	56.00	-20.52
7.3900	38.91	PK	50.00	-11.09	60.00	-21.09
10.0000	36.02	PK	50.00	-13.98	60.00	-23.98
16.1400	38.26	PK	50.00	-11.74	60.00	-21.74

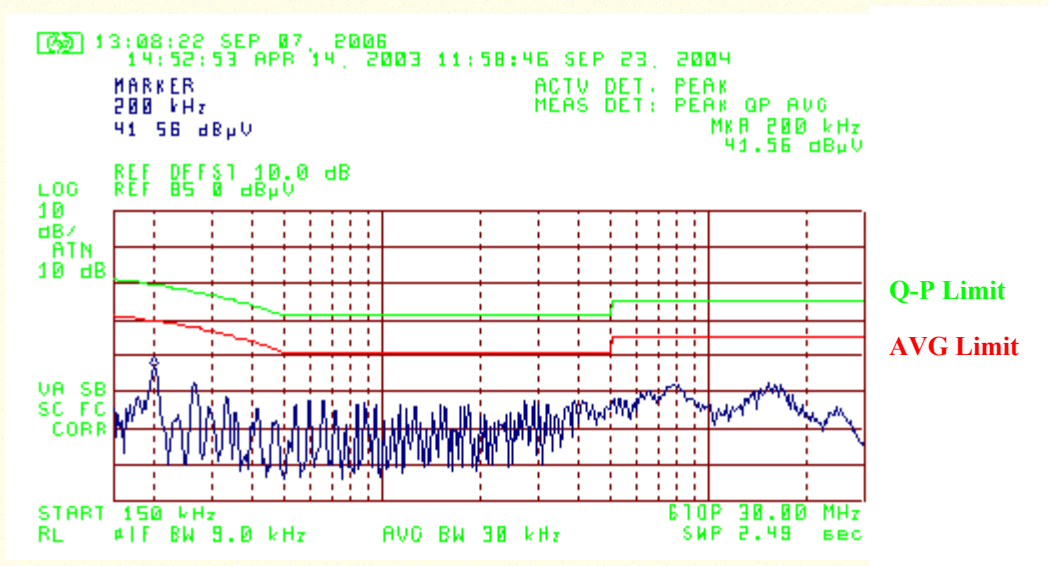


AC Power Port – Conducted Emissions Test Results (Continued)

**Continuously Transmitting @ 120VAC/60Hz (INTEL-060907-01)**

**FCC CLASS B CONDUCTED EMISSIONS - LINE 2**

Freq. (MHz)	Meter Reading (dBuV)	Detector (PK/QP/AV)	Average Limit (dBuV)	Average Delta(dB)	Quasi-Peak Limit (dBuV)	Quasi-Peak Delta(dB)
0.2000	41.56	PK	54.57	-13.01	64.57	-23.01
0.2700	37.40	PK	52.57	-15.17	62.57	-25.17
0.3300	33.69	PK	50.86	-17.17	60.86	-27.17
4.1300	32.63	PK	46.00	-13.37	56.00	-23.37
7.6800	36.91	PK	50.00	-13.09	60.00	-23.09
15.2200	37.46	PK	50.00	-12.54	60.00	-22.54



**Q-P Limit**  
**AVG Limit**



## RADIATED EMISSIONS TEST RESULTS

<b>CLIENT:</b>	Intel Corporation	<b>DATE:</b>	09/07/06
<b>EUT:</b>	Intel PRO/Wireless 4965AGN Network Connection	<b>PROJECT NUMBER:</b>	INTEL-060907
<b>MODEL NUMBER:</b>	4965AGN	<b>TEST ENGINEER:</b>	JC
<b>SERIAL NUMBER:</b>	0013E804612B	<b>SITE #:</b>	1
<b>CONFIGURATION:</b>	Tested installed in the host computer's mini PCI slot.	<b>TEMPERATURE:</b>	22 deg. C
		<b>HUMIDITY:</b>	49%
		<b>TIME:</b>	2:15 PM

<b>Description:</b>	Radiated RF Emissions (30 MHz – 1000 MHz)
<b>Results:</b>	<b>PASSED</b> Horizontal and Vertical Antenna Polarizations Class B Limits
<b>Note:</b>	Radiated Emissions Measurements were performed on the EUT with the power supply set at the following voltage and frequency. <ul style="list-style-type: none"><li>• 120VAC / 60 Hz.</li></ul>

### Radiated Emissions Sample Calculations

$$\text{Corrected Meter Reading} = \text{Meter Reading} + F + C - D$$

Where, F = Antenna Factor

C = Cable Factor

G = Amplifier Gain

D = Distance Factor (if applicable)

Therefore, the equation for determining the Corrected Meter Reading Limit (CML) is:

$$\text{CML} = \text{Specification Limit} - F - C + D$$

Radiated Emissions Test Results (Continued)

**Continuously Transmitting @ 120VAC/60Hz (INTEL-060907-03)**

**Horizontal Open Field Maximized Data**

<i>Freq. (MHz)</i>	<i>Meter Reading (dBuV)</i>	<i>Antenna Height (cm)</i>	<i>Azimuth (degrees)</i>	<i>Quasi pk or AVG (dBuV)</i>		<i>Cable Factor (dB)</i>	<i>Cable Factor (dB)</i>	<i>Antenna Factor (dB)</i>	<i>Corrected Reading (dBuV/m)</i>	<i>Limits (dBuV/m)</i>	<i>Diff (dB) +=FAIL</i>
48.02	8.58	400	45			2.65	10.32	10.46	32.01	40.00	-7.99
120.00	14.23	400	90	11.03	Q	2.39	11.20	10.46	35.08	43.50	-8.42
250.01	10.96	350	90			2.91	17.40	10.46	41.73	46.00	-4.27
305.09	11.32	300	270			3.07	14.49	10.46	39.33	46.00	-6.67
375.00	10.53	250	45			3.35	15.10	10.46	39.44	46.00	-6.57
386.00	11.63	225	45			3.39	15.54	10.46	41.02	46.00	-4.98

**Vertical Open Field Maximized Data**

<i>Freq. (MHz)</i>	<i>Meter Reading (dBuV)</i>	<i>Antenna Height (cm)</i>	<i>Azimuth (degrees)</i>	<i>Quasi pk or AVG (dBuV)</i>		<i>Cable Factor (dB)</i>	<i>Cable Factor (dB)</i>	<i>Antenna Factor (dB)</i>	<i>Corrected Reading (dBuV/m)</i>	<i>Limits (dBuV/m)</i>	<i>Diff (dB) +=FAIL</i>
48.01	11.12	100	45			2.65	10.52	10.46	34.75	40.00	-5.25
119.98	18.40	100	90	14.65	Q	2.39	10.80	10.46	38.30	43.50	-5.20
250.03	8.51	100	45			2.91	18.30	10.46	40.18	46.00	-5.82
306.35	13.06	100	45			3.07	14.78	10.46	41.37	46.00	-4.63
358.01	7.94	100	0			3.27	15.44	10.46	37.11	46.00	-8.89
375.05	8.85	100	90			3.35	15.30	10.46	37.96	46.00	-8.04
386.01	15.71	100	180	13.62	Q	3.39	15.61	10.46	43.08	46.00	-2.92



## RADIATED EMISSIONS TEST RESULTS

<b>CLIENT:</b>	Intel Corporation	<b>DATE:</b>	09/18/06
<b>EUT:</b>	Intel PRO/Wireless 4965AGN Network Connection	<b>PROJECT NUMBER:</b>	INTEL-060907
<b>MODEL NUMBER:</b>	4965AGN	<b>TEST ENGINEER:</b>	BM/JC
<b>SERIAL NUMBER:</b>	0013E804612B	<b>SITE #:</b>	2
<b>CONFIGURATION:</b>	Tested installed in the host computer's mini PCI slot in <b>802.11a (5745-5825 MHz) mode with Ethertronics Antennas.</b>	<b>TEMPERATURE:</b>	20 deg. C
		<b>HUMIDITY:</b>	48% RH
		<b>TIME:</b>	9:00 PM

<b>Description:</b>	Radiated RF Emissions (1 GHz – 18 GHz)
<b>Results:</b>	<b>PASSED</b> Horizontal and Vertical Antenna Polarizations Class B Limits
<b>Note:</b>	Radiated Emissions Measurements were performed on the EUT with power supply set at the following voltage and frequency. <ul style="list-style-type: none"> <li>• 120VAC / 60 Hz.</li> </ul>

Unwanted Spurious Emissions Limits			
Frequency (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m) (Emissions in the restricted bands)	Field Strength (dBm/MHz) (Emissions outside the restricted bands)
Above 960	500	54.00 (Average) 74.00 (Peak)	< -20 dBc

### Radiated Emissions Sample Calculations

$$\text{Corrected Meter Reading} = \text{Meter Reading} + F + C - D$$

Where, F = Antenna Factor

C = Cable Factor

G = Amplifier Gain

D = Distance Factor (if applicable)

Therefore, the equation for determining the Corrected Meter Reading Limit (CML) is:

$$\text{CML} = \text{Specification Limit} - F - C + D$$

Radiated Emissions Test Results (Continued)

*Fundamental Measurements in 802.11a mode (5745-5825 MHz)  
 Channels 149, 157, & 165  
 Continuous TX at Chain A Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-20*

<b>RADIATED EMISSIONS - Horizontal Antenna Polarization</b>											
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
5745.00	61.83	100	135			4.99	35.25	102.07			<b>Ch. 149</b>
5745.00				52.19	A	4.99	35.25	92.43			
5785.00	61.33	100	135			5.01	35.26	101.59			<b>Ch. 157</b>
5785.00				52.14	A	5.01	35.26	92.40			
5825.00	62.83	100	135			5.02	35.27	103.12			<b>Ch. 165</b>
5825.00				53.63	A	5.02	35.27	93.92			

<b>RADIATED EMISSIONS – Vertical Antenna Polarization</b>											
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
5745.00	68.83	100	135			4.99	35.05	108.86			<b>Ch. 149</b>
5745.00				59.29	A	4.99	35.05	99.32			
5785.00	68.83	100	225			5.01	35.07	108.91			<b>Ch. 157</b>
5785.00				59.22	A	5.01	35.07	99.30			
5825.00	69.33	100	225			5.02	35.10	109.45			<b>Ch. 165</b>
5825.00				59.53	A	5.02	35.10	99.65			

NOTE: Fundamental signals measured to calculate the band edge field strengths using the “Marker Delta Method”.

Radiated Emissions Test Results (Continued)

*Band Edge Field Strength Measurements in 802.11a mode (5745-5825 MHz)  
 Channels 149 & 165  
 Continuous TX at Chain A Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-20*

<b>RADIATED EMISSIONS - Horizontal Antenna Polarization</b>										
<i>Freq. (MHz)</i>	<i>Meter Reading (dBuV)</i>	<i>Antenna Height (cm)</i>	<i>Azimuth (degrees)</i>	<i>Quasi pk or AVG (dBuV)</i>	<i>Cable Factor (dB)</i>	<i>Ant. Factor (dB)</i>	<i>Corrected Reading (dBuV)</i>	<i>Limits (dBuV)</i>	<i>Diff (dB) +=FAIL</i>	<i>Comments</i>
5725.00	32.83	100	135		4.98	35.25	73.05	82.07	-9.01	<b>Ch. 149</b>
5850.00	30.17	100	135		5.03	35.27	70.47	83.12	-12.64	<b>Ch. 165</b>

<b>RADIATED EMISSIONS – Vertical Antenna Polarization</b>										
<i>Freq. (MHz)</i>	<i>Meter Reading (dBuV)</i>	<i>Antenna Height (cm)</i>	<i>Azimuth (degrees)</i>	<i>Quasi pk or AVG (dBuV)</i>	<i>Cable Factor (dB)</i>	<i>Ant. Factor (dB)</i>	<i>Corrected Reading (dBuV)</i>	<i>Limits (dBuV)</i>	<i>Diff (dB) +=FAIL</i>	<i>Comments</i>
5725.00	43.50	100	135		4.98	35.04	83.51	88.86	-5.35	<b>Ch. 149</b>
5850.00	30.50	100	225		5.03	35.11	70.64	89.45	-18.80	<b>Ch. 165</b>

NOTE: The “Band Edge Field Strength” was calculated using the “Fundamental” and “Conducted Band Edge” measurements per the “Marker-Delta Method” with the following formula:

$$BE = F_m - \Delta_m$$

Where

BE = Band Edge Field Strength

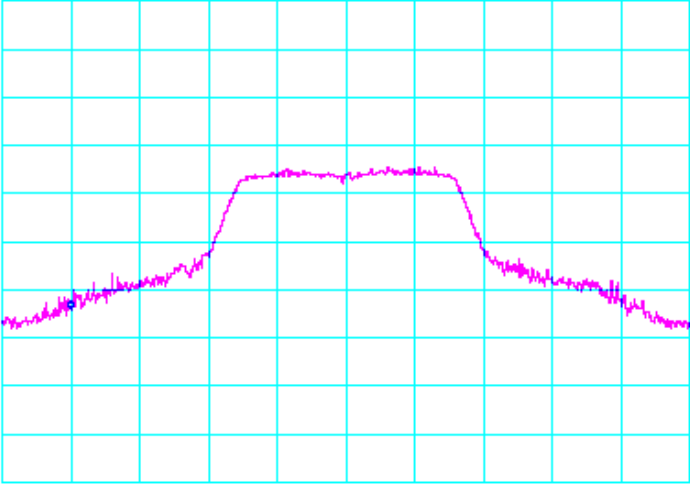
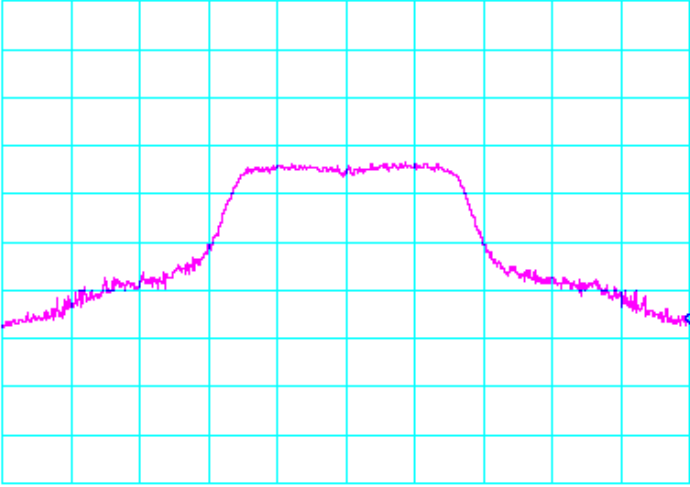
F<sub>m</sub> = Measured Fundamental (Peak or Average)

Δ<sub>m</sub> = Measured Conducted Band Edge Delta (Peak or Average)



### Radiated Emissions Test Results (Continued)

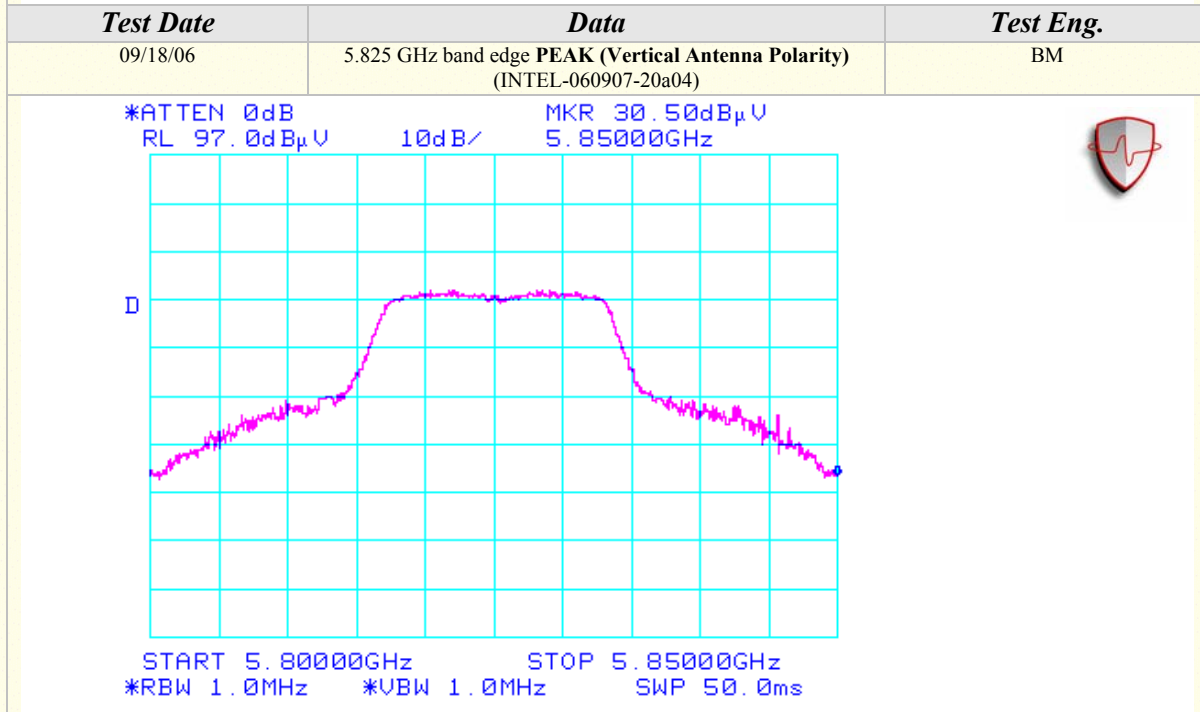
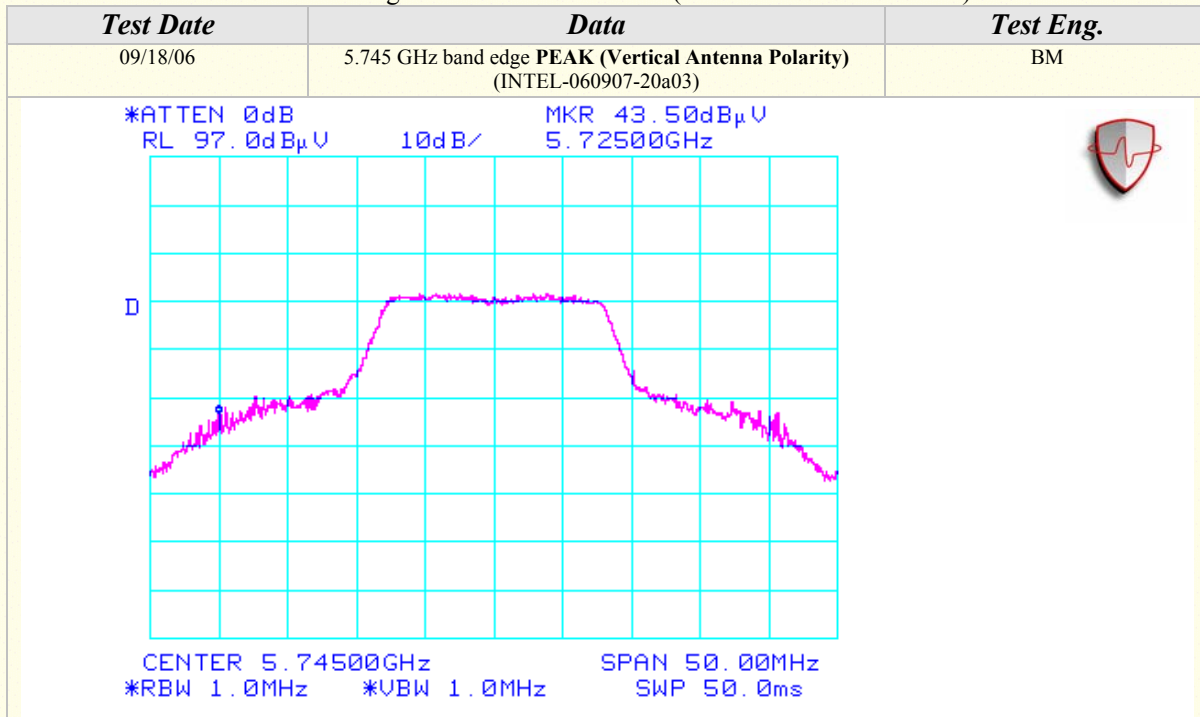
Plots Showing Out-Of-Band Emissions (Peak RBW=VBW=1MHz)

<i>Test Date</i>	<i>Data</i>	<i>Test Eng.</i>
09/18/06	5.745 GHz band edge <b>PEAK (Horizontal Antenna Polarity)</b> (INTEL-060907-20a01)	BM
<p>*ATTEN 0dB                                MKR 32.83dB<math>\mu</math>V            RL 97.0dB<math>\mu</math>V                            10dB/                    5.72500GHz</p>  <p style="text-align: center;">D</p> <p>CENTER 5.74500GHz                      SPAN 50.00MHz            *RBW 1.0MHz                            *VBW 1.0MHz                      SWP 50.0ms</p>		
<i>Test Date</i>	<i>Data</i>	<i>Test Eng.</i>
09/18/06	5.825 GHz band edge <b>PEAK (Horizontal Antenna Polarity)</b> (INTEL-060907-20a02)	BM
<p>*ATTEN 0dB                                MKR 30.17dB<math>\mu</math>V            RL 97.0dB<math>\mu</math>V                            10dB/                    5.85000GHz</p>  <p style="text-align: center;">D</p> <p>CENTER 5.82500GHz                      SPAN 50.00MHz            *RBW 1.0MHz                            *VBW 1.0MHz                      SWP 50.0ms</p>		



Radiated Emissions Test Results (Continued)

Plots Showing Out-Of-Band Emissions (Peak RBW=VBW=1MHz)





Radiated Emissions Test Results (Continued)

*Spurious Emissions Measurements in 802.11a mode (5745-5825 MHz)  
 Channels 149, 157, & 165  
 Continuous TX at Chain A Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-19*

<b>RADIATED EMISSIONS - Horizontal Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
7660.00	61.33	100	225			50.15	5.81	37.40	54.39	74.00	-19.61	<b>Ch. 149</b>
7660.00				55.99	A	50.15	5.81	37.40	49.05	54.00	-4.95	
11490.00	63.00	100	225			50.58	7.42	39.23	59.06	74.00	-14.94	
11490.00				48.40	A	50.58	7.42	39.23	44.46	54.00	-9.54	
7713.25	60.67	100	180			50.15	5.81	37.40	53.73	74.00	-20.27	<b>Ch. 157</b>
7713.25				55.24	A	50.15	5.81	37.40	48.30	54.00	-5.70	
11570.00	63.50	100	135			50.58	7.42	39.23	59.56	74.00	-14.44	
11570.00				47.50	A	50.58	7.42	39.23	43.56	54.00	-10.44	
7766.66	60.17	100	180			50.58	7.42	39.23	56.23	74.00	-17.77	<b>Ch.165</b>
7766.66				54.62	A	50.58	7.42	39.23	50.68	54.00	-3.32	

<b>RADIATED EMISSIONS - Vertical Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
7660.00	62.67	100	180			50.15	5.81	37.26	55.59	74.00	-18.41	<b>Ch. 149</b>
7660.00				57.91	A	50.15	5.81	37.26	50.83	54.00	-3.17	
11490.00	70.33	100	180			50.53	7.41	39.19	66.41	74.00	-7.59	
11490.00				54.90	A	50.53	7.41	39.19	50.98	54.00	-3.02	
7713.42	62.83	100	180			50.14	5.83	37.29	55.80	74.00	-18.20	<b>Ch. 157</b>
7713.42				57.08	A	50.14	5.83	37.29	50.05	54.00	-3.95	
11570.00	71.17	100	180			50.58	7.42	39.23	67.23	74.00	-6.77	
11570.00				54.60	A	50.58	7.42	39.23	50.66	54.00	-3.34	
7766.66	61.17	100	180			50.13	5.85	37.31	54.20	74.00	-19.80	<b>Ch.165</b>
7766.66				56.73	A	50.13	5.85	37.31	49.76	54.00	-4.24	
11650.00	65.83	100	135			50.64	7.42	39.26	61.87	74.00	-12.13	
11650.00				48.86	A	50.64	7.42	39.26	44.90	54.00	-9.10	



Radiated Emissions Test Results (Continued)

*Spurious Emissions Measurements in 802.11a mode (5745-5825 MHz)  
 Channels 149, 157, & 165  
 Continuous RX at Chain A Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-19*

<b>RADIATED EMISSIONS - Horizontal Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
3830.00	55.67	100	225			50.78	4.05	33.13	42.07	74.00	-31.93	<b>Ch. 149</b>
3830.00				46.31	A	50.78	4.05	33.13	32.71	54.00	-21.29	
3856.62	56.83	100	225			50.78	4.07	33.18	43.30	74.00	-30.70	<b>Ch. 157</b>
3856.62				47.14	A	50.78	4.07	33.18	33.61	54.00	-20.39	
3883.34	55.00	100	225			50.78	4.08	33.24	41.55	74.00	-32.45	<b>Ch.165</b>
3883.34				45.57	A	50.78	4.08	33.24	32.12	54.00	-21.88	

<b>RADIATED EMISSIONS - Vertical Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
3830.00	57.00	100	135			50.78	4.05	33.13	43.40	74.00	-30.60	<b>Ch. 149</b>
3830.00				50.58	A	50.78	4.05	33.13	36.98	54.00	-17.02	
3856.65	56.50	100	135			50.78	4.07	32.83	42.62	74.00	-31.38	<b>Ch. 157</b>
3856.65				49.76	A	50.78	4.07	32.83	35.88	54.00	-18.12	
3883.35	55.67	100	135			50.78	4.08	32.90	41.87	74.00	-32.13	<b>Ch.165</b>
3883.35				47.81	A	50.78	4.08	32.90	34.01	54.00	-19.99	

Radiated Emissions Test Results (Continued)

*Fundamental Measurements in 802.11a mode (5745-5825 MHz)  
 Channels 149, 157, & 165  
 Continuous TX at Chain B Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-24*

<b>RADIATED EMISSIONS - Horizontal Antenna Polarization</b>											
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
5745.00	66.83	100	135			4.99	35.25	107.07			<b>Ch. 149</b>
5745.00				56.07	A	4.99	35.25	96.31			
5785.00	62.67	100	135			5.01	35.26	102.93			<b>Ch. 157</b>
5785.00				52.68	A	5.01	35.26	92.94			
5825.00	64.17	100	135			5.02	35.27	104.46			<b>Ch. 165</b>
5825.00				54.34	A	5.02	35.27	94.63			

<b>RADIATED EMISSIONS – Vertical Antenna Polarization</b>											
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
5745.00	71.83	100	180			4.99	35.05	111.86			<b>Ch. 149</b>
5745.00				62.01	A	4.99	35.05	102.04			
5785.00	71.50	100	225			5.01	35.07	111.58			<b>Ch. 157</b>
5785.00				61.73	A	5.01	35.07	101.81			
5825.00	71.50	100	225			5.02	35.10	111.62			<b>Ch. 165</b>
5825.00				62.32	A	5.02	35.10	102.44			

NOTE: Fundamental signals measured to calculate the band edge field strengths using the “Marker Delta Method”.



Radiated Emissions Test Results (Continued)

*Band Edge Field Strength Measurements in 802.11a mode (5745-5825 MHz)  
 Channels 149 & 165  
 Continuous TX at Chain B Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-24*

<b>RADIATED EMISSIONS - Horizontal Antenna Polarization</b>										
<i>Freq. (MHz)</i>	<i>Meter Reading (dBuV)</i>	<i>Antenna Height (cm)</i>	<i>Azimuth (degrees)</i>	<i>Quasi pk or AVG (dBuV)</i>	<i>Cable Factor (dB)</i>	<i>Ant. Factor (dB)</i>	<i>Corrected Reading (dBuV)</i>	<i>Limits (dBuV)</i>	<i>Diff (dB) +=FAIL</i>	<i>Comments</i>
5725.00	36.50	100	135		4.98	35.25	76.72	87.07	-10.34	<b>Ch. 149</b>
5850.00	29.83	100	135		5.03	35.27	70.13	84.46	-14.32	<b>Ch. 165</b>

<b>RADIATED EMISSIONS – Vertical Antenna Polarization</b>										
<i>Freq. (MHz)</i>	<i>Meter Reading (dBuV)</i>	<i>Antenna Height (cm)</i>	<i>Azimuth (degrees)</i>	<i>Quasi pk or AVG (dBuV)</i>	<i>Cable Factor (dB)</i>	<i>Ant. Factor (dB)</i>	<i>Corrected Reading (dBuV)</i>	<i>Limits (dBuV)</i>	<i>Diff (dB) +=FAIL</i>	<i>Comments</i>
5725.00	46.50	100	180		4.98	35.04	86.51	91.86	-5.35	<b>Ch. 149</b>
5850.00	33.50	100	225		5.03	35.11	73.64	91.62	-17.97	<b>Ch. 165</b>

NOTE: The “Band Edge Field Strength” was calculated using the “Fundamental” and “Conducted Band Edge” measurements per the “Marker-Delta Method” with the following formula:

$$BE = F_m - \Delta_m$$

Where

BE = Band Edge Field Strength

F<sub>m</sub> = Measured Fundamental (Peak or Average)

Δ<sub>m</sub> = Measured Conducted Band Edge Delta (Peak or Average)


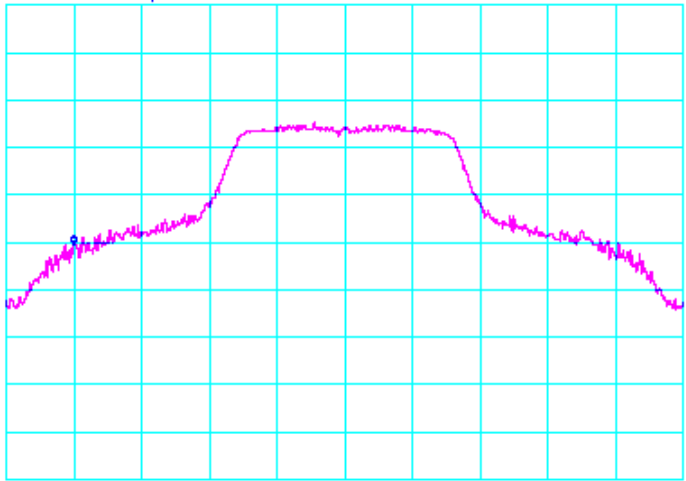

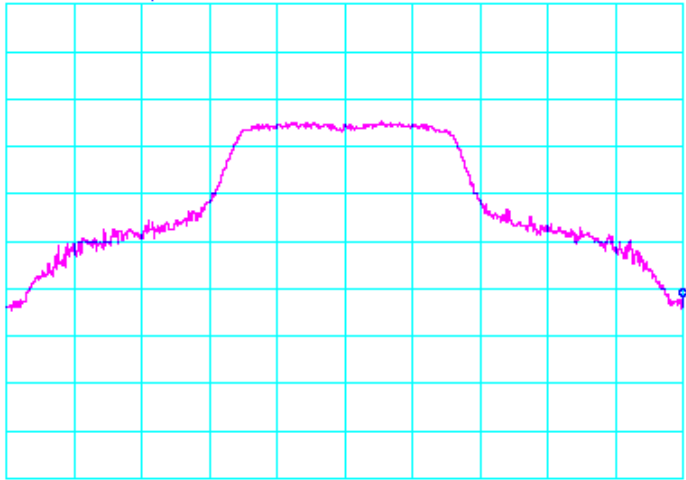
### Radiated Emissions Test Results (Continued)

Plots Showing Out-Of-Band Emissions (Peak RBW=VBW=1MHz)

Test Date	Data	Test Eng.
09/20/06	5.745 GHz band edge PEAK (Horizontal Antenna Polarity) (INTEL-060907-24a01)	BM
<div style="display: flex; justify-content: space-between;"> <div data-bbox="332 430 974 483"> <p>*ATTEN 0dB            RL 97.0dBμV 10dB/ MKR 36.50dBμV            5.72500GHz</p> </div> <div data-bbox="1282 430 1364 514" style="text-align: right;"> </div> </div> <div style="text-align: center; margin: 10px 0;"> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div data-bbox="332 955 755 1018"> <p>CENTER 5.74500GHz            *RBW 1.0MHz *VBW 1.0MHz</p> </div> <div data-bbox="803 955 1023 1018"> <p>SPAN 50.00MHz            SWP 50.0ms</p> </div> </div>		
Test Date	Data	Test Eng.
09/20/06	5.825 GHz band edge PEAK (Horizontal Antenna Polarity) (INTEL-060907-24a02)	BM
<div style="display: flex; justify-content: space-between;"> <div data-bbox="332 1144 974 1197"> <p>*ATTEN 0dB            RL 97.0dBμV 10dB/ MKR 29.83dBμV            5.85000GHz</p> </div> <div data-bbox="1282 1144 1364 1228" style="text-align: right;"> </div> </div> <div style="text-align: center; margin: 10px 0;"> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div data-bbox="332 1669 755 1732"> <p>CENTER 5.82500GHz            *RBW 1.0MHz *VBW 1.0MHz</p> </div> <div data-bbox="803 1669 1023 1732"> <p>SPAN 50.00MHz            SWP 50.0ms</p> </div> </div>		

### Radiated Emissions Test Results (Continued)

Plots Showing Out-Of-Band Emissions (Peak RBW=VBW=1MHz)

Test Date	Data	Test Eng.
09/20/06	5.745 GHz band edge <b>PEAK (Vertical Antenna Polarity)</b> (INTEL-060907-24a03)	BM
<div style="display: flex; justify-content: space-between;"> <div data-bbox="332 426 974 478"> <p>*ATTEN 0dB            RL 97.0dBµV 10dB/            MKR 46.50dBµV            5.72500GHz</p> </div> <div data-bbox="1282 430 1364 514" style="text-align: right;">  </div> </div> <div style="text-align: center; margin: 10px 0;">  </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div data-bbox="332 961 755 1014"> <p>CENTER 5.74500GHz            *RBW 1.0MHz *VBW 1.0MHz</p> </div> <div data-bbox="803 961 1023 1014"> <p>SPAN 50.00MHz            SWP 50.0ms</p> </div> </div>		
Test Date	Data	Test Eng.
09/20/06	5.825 GHz band edge <b>PEAK (Vertical Antenna Polarity)</b> (INTEL-060907-24a04)	BM
<div style="display: flex; justify-content: space-between;"> <div data-bbox="332 1144 974 1197"> <p>*ATTEN 0dB            RL 97.0dBµV 10dB/            MKR 35.17dBµV            5.85000GHz</p> </div> <div data-bbox="1282 1144 1364 1228" style="text-align: right;">  </div> </div> <div style="text-align: center; margin: 10px 0;">  </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div data-bbox="332 1680 755 1732"> <p>CENTER 5.82500GHz            *RBW 1.0MHz *VBW 1.0MHz</p> </div> <div data-bbox="803 1680 1023 1732"> <p>SPAN 50.00MHz            SWP 50.0ms</p> </div> </div>		





Radiated Emissions Test Results (Continued)

*Spurious Emissions Measurements in 802.11a mode (5745-5825 MHz)  
 Channels 149, 157, & 165  
 Continuous TX at Chain B Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-22*

**RADIATED EMISSIONS - Horizontal Antenna Polarization**

Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
11490.00	59.33	100	225			50.53	7.41	39.19	55.41	74.00	-18.59	<b>Ch. 149</b>
11490.00				45.19	A	50.53	7.41	39.19	41.27	54.00	-12.73	
11570.00	61.50	100	135			50.58	7.42	39.23	57.56	74.00	-16.44	<b>Ch. 157</b>
11570.00				45.43	A	50.58	7.42	39.23	41.49	54.00	-12.51	
11650.00	58.00	100	180			50.53	7.41	39.19	54.08	74.00	-19.92	<b>Ch.165</b>
11650.00				41.48	A	50.53	7.41	39.19	37.56	54.00	-16.44	

**RADIATED EMISSIONS - Vertical Antenna Polarization**

Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
11490.00	63.00	100	135			50.53	7.41	39.19	59.08	74.00	-14.92	<b>Ch. 149</b>
11490.00				48.32	A	50.53	7.41	39.19	44.40	54.00	-9.60	
11570.00	62.67	100	180			50.58	7.42	39.23	58.73	74.00	-15.27	<b>Ch. 157</b>
11570.00				47.28	A	50.58	7.42	39.23	43.34	54.00	-10.66	
11650.00	62.50	100	180			50.64	7.42	39.26	58.54	74.00	-15.46	<b>Ch.165</b>
11650.00				44.56	A	50.64	7.42	39.26	40.60	54.00	-13.40	

Radiated Emissions Test Results (Continued)

*Spurious Emissions Measurements in 802.11a mode (5745-5825 MHz)  
Channels 149, 157, & 165  
Continuous RX at Chain B Antenna port with Ethertronics Antennas  
Aegis Labs, Inc. File #: INTEL-060907-22*

RADIATED EMISSIONS - Horizontal Antenna Polarization												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
3830.00	57.00	100	225			50.78	4.05	33.13	43.40	74.00	-30.60	<b>Ch. 149</b>
3830.00				47.76	A	50.78	4.05	33.13	34.16	54.00	-19.84	
3856.62	57.67	100	225			50.78	4.07	33.18	44.14	74.00	-29.86	<b>Ch. 157</b>
3856.62				49.53	A	50.78	4.07	33.18	36.00	54.00	-18.00	
3883.34	56.83	100	180			50.78	4.08	33.24	43.38	74.00	-30.62	<b>Ch.165</b>
3883.34				47.37	A	50.78	4.08	33.24	33.92	54.00	-20.08	

RADIATED EMISSIONS - Vertical Antenna Polarization												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
3830.00	57.17	125	135			50.78	4.05	33.13	43.57	74.00	-30.43	<b>Ch. 149</b>
3830.00				48.82	A	50.78	4.05	33.13	35.22	54.00	-18.78	
3856.65	57.50	125	135			50.78	4.07	32.83	43.62	74.00	-30.38	<b>Ch. 157</b>
3856.65				49.29	A	50.78	4.07	32.83	35.41	54.00	-18.59	
3883.35	57.17	100	225			50.78	4.08	32.90	43.37	74.00	-30.63	<b>Ch.165</b>
3883.35				46.73	A	50.78	4.08	32.90	32.93	54.00	-21.07	



## RADIATED EMISSIONS TEST RESULTS

<b>CLIENT:</b>	Intel Corporation	<b>DATE:</b>	09/18/06
<b>EUT:</b>	Intel PRO/Wireless 4965AGN Network Connection	<b>PROJECT NUMBER:</b>	INTEL-060907
<b>MODEL NUMBER:</b>	4965AGN	<b>TEST ENGINEER:</b>	BM/JC
<b>SERIAL NUMBER:</b>	0013E804612B	<b>SITE #:</b>	2
<b>CONFIGURATION:</b>	Tested installed in the host computer's mini PCI slot in <b>802.11b (2400-2483.5 MHz) mode with Ethertronics Antennas.</b>	<b>TEMPERATURE:</b>	20 deg. C
		<b>HUMIDITY:</b>	48% RH
		<b>TIME:</b>	9:00 PM

<b>Description:</b>	Radiated RF Emissions (1 GHz – 18 GHz)
<b>Results:</b>	<b>PASSED</b> Horizontal and Vertical Antenna Polarizations Class B Limits
<b>Note:</b>	Radiated Emissions Measurements were performed on the EUT with power supply set at the following voltage and frequency. <ul style="list-style-type: none"> <li>• 120VAC / 60 Hz.</li> </ul>

Unwanted Spurious Emissions Limits			
Frequency (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m) (Emissions in the restricted bands)	Field Strength (dBm/MHz) (Emissions outside the restricted bands)
Above 960	500	54.00 (Average) 74.00 (Peak)	< -20 dBc

### Radiated Emissions Sample Calculations

$$\text{Corrected Meter Reading} = \text{Meter Reading} + F + C - D$$

Where, F = Antenna Factor

C = Cable Factor

G = Amplifier Gain

D = Distance Factor (if applicable)

Therefore, the equation for determining the Corrected Meter Reading Limit (CML) is:

$$\text{CML} = \text{Specification Limit} - F - C + D$$

Radiated Emissions Test Results (Continued)

*Fundamental Measurements in 802.11b mode (2400-2483.5 MHz)  
Channels 1, 6, & 11  
Continuous TX at Chain A Antenna port with Ethertronics Antennas  
Aegis Labs, Inc. File #: INTEL-060907-20*

<b>RADIATED EMISSIONS - Horizontal Antenna Polarization</b>											
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
2412.00	73.83	100	225			3.19	29.50	106.52			<b>Ch. 1</b>
2412.00				70.41	A	3.19	29.50	103.10			
2437.00	73.67	125	225			3.20	29.59	106.46			<b>Ch. 6</b>
2437.00				70.16	A	3.20	29.59	102.95			
2462.00	75.17	125	225			3.22	29.67	108.06			<b>Ch. 11</b>
2462.00				71.70	A	3.22	29.67	104.59			

<b>RADIATED EMISSIONS - Vertical Antenna Polarization</b>											
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
2412.00	71.67	100	180			3.19	29.04	103.89			<b>Ch. 1</b>
2412.00				68.13	A	3.19	29.04	100.35			
2437.00	71.33	100	180			3.20	29.11	103.65			<b>Ch. 6</b>
2437.00				68.08	A	3.20	29.11	100.40			
2462.00	72.33	125	225			3.22	29.19	104.74			<b>Ch. 11</b>
2462.00				68.67	A	3.22	29.19	101.08			

NOTE: Fundamental signals measured to calculate the band edge field strengths using the “Marker Delta Method”.



Radiated Emissions Test Results (Continued)

*Band Edge Field Strength Measurements in 802.11b mode (2400-2483.5 MHz)  
 Channels 1 & 11  
 Continuous TX at Chain A Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-20*

<b>RADIATED EMISSIONS - Horizontal Antenna Polarization</b>										
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
2390.00							60.85	74.00	-13.15	<b>Ch. 1</b>
2390.00				A			49.26	54.00	-4.74	
2376.80							61.35	74.00	-12.65	
2368.20				A			49.26	54.00	-4.74	
2400.00	40.83	100	225		3.18	29.46	73.47	86.52	-13.05	
2483.50							61.39	74.00	-12.61	<b>Ch. 11</b>
2483.50				A			50.42	54.00	-3.58	
2501.80							62.06	74.00	-11.94	
2501.20				A			50.92	54.00	-3.08	

<b>RADIATED EMISSIONS – Vertical Antenna Polarization</b>										
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
2390.00							58.22	74.00	-15.78	<b>Ch. 1</b>
2390.00				A			46.51	54.00	-7.49	
2376.80							58.72	74.00	-15.28	
2368.20				A			46.51	54.00	-7.49	
2400.00	38.33	100	180		3.18	29.00	70.51	83.89	-13.38	
2483.50							58.07	74.00	-15.93	<b>Ch. 11</b>
2483.50				A			46.91	54.00	-7.09	
2501.80							58.74	74.00	-15.26	
2501.20				A			47.41	54.00	-6.59	

NOTE: The “Band Edge Field Strength” was calculated using the “Fundamental” and “Conducted Band Edge” measurements per the “Marker-Delta Method” with the following formula:

$$BE = F_m - \Delta_m$$

Where

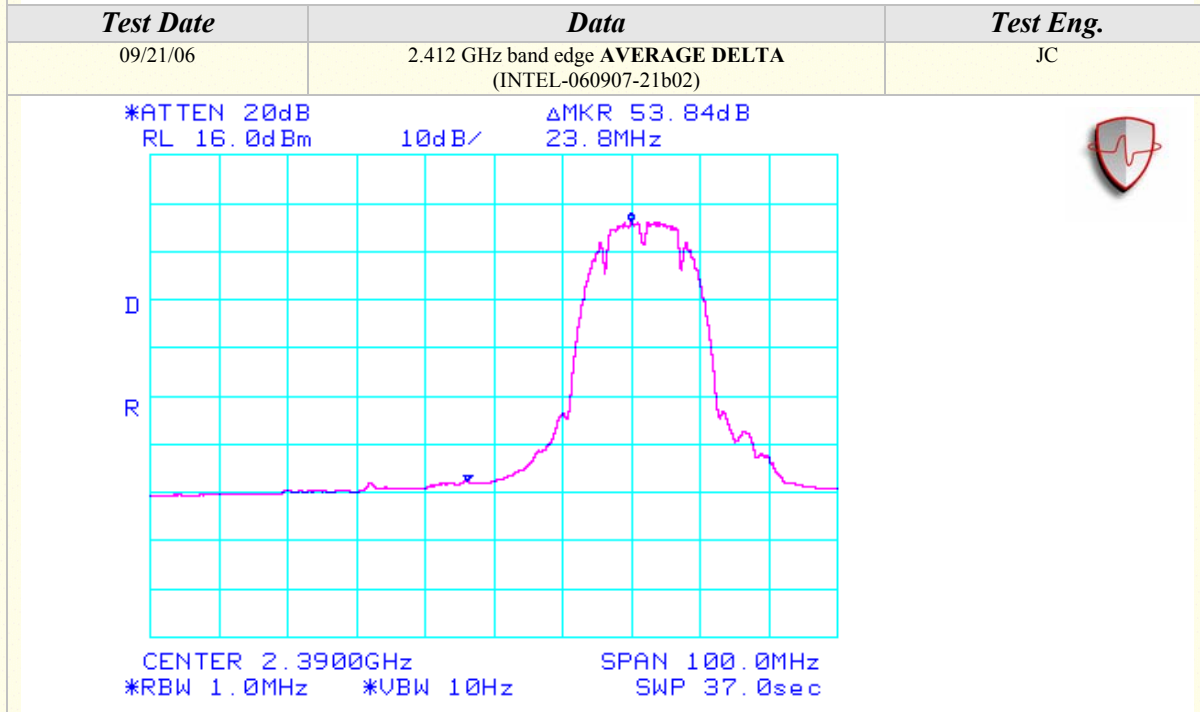
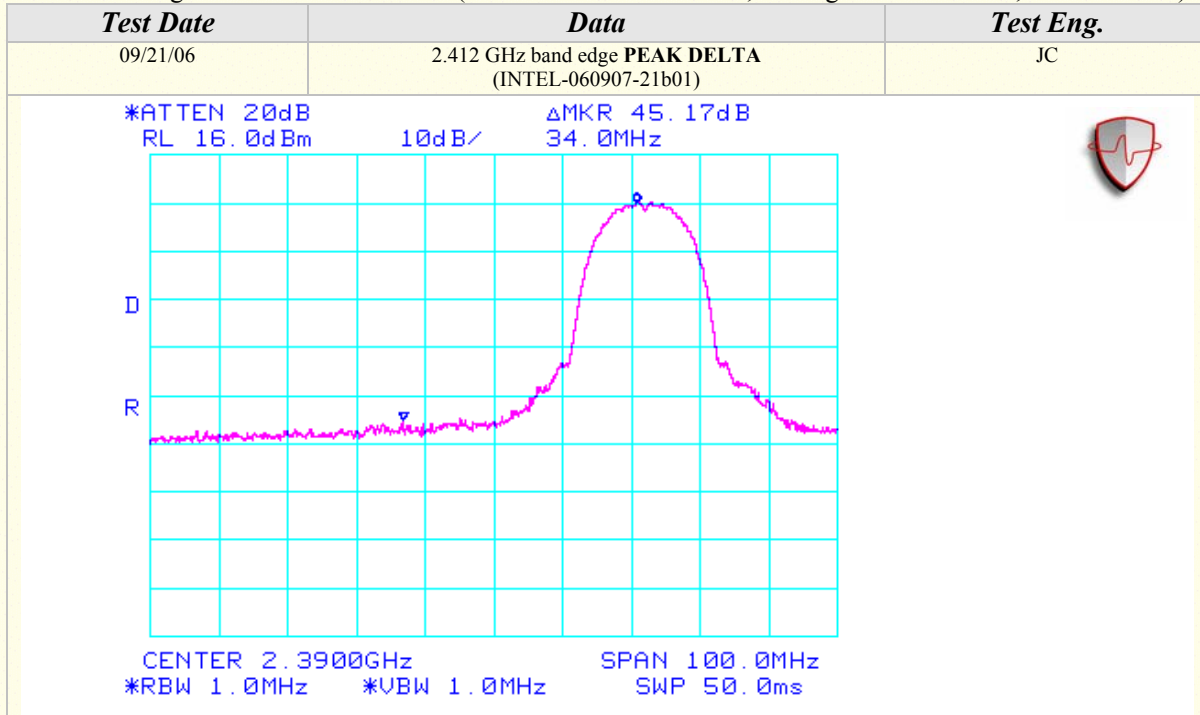
BE = Band Edge Field Strength

F<sub>m</sub> = Measured Fundamental (Peak or Average)

Δ<sub>m</sub> = Measured Conducted Band Edge Delta (Peak or Average)

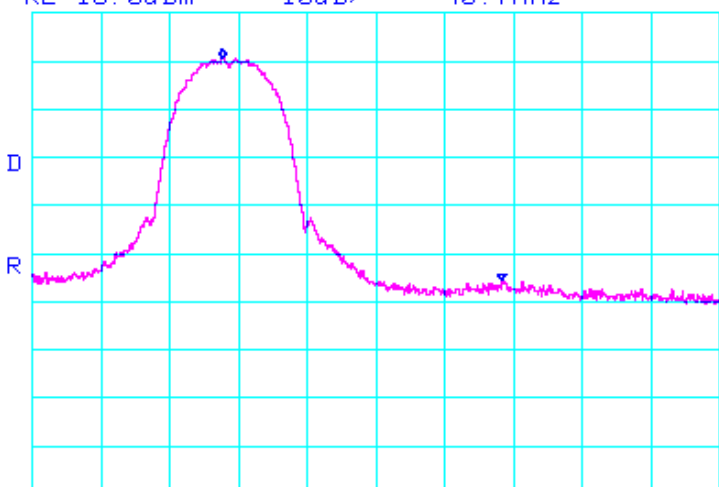
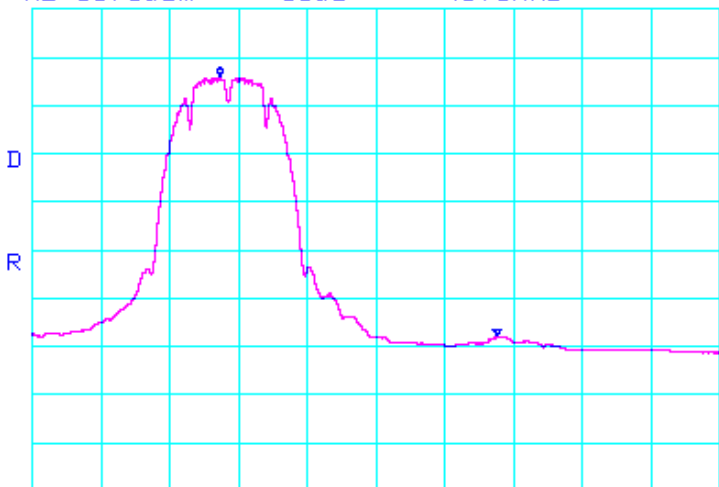
### Radiated Emissions Test Results (Continued)

Plots Showing Out-Of-Band Emissions (Peak RBW=VBW=1MHz; Average RBW = 1MHz, VBW = 10Hz)



### Radiated Emissions Test Results (Continued)

Plots Showing Out-Of-Band Emissions (Peak RBW=VBW=1MHz; Average RBW = 1MHz, VBW = 10Hz)

Test Date	Data	Test Eng.
09/21/06	2.462 GHz band edge <b>PEAK DELTA</b> (INTEL-060907-21b03)	JC
<p>*ATTEN 20dB      ΔMKR 46.00dB            RL 16.0dBm      10dB/      -40.7MHz</p>  <p>CENTER 2.4835GHz      SPAN 100.0MHz            *RBW 1.0MHz      *VBW 1.0MHz      SWP 50.0ms</p>		
Test Date	Data	Test Eng.
09/21/06	2.462 GHz band edge <b>AVERAGE DELTA</b> (INTEL-060907-21b04)	JC
<p>*ATTEN 20dB      ΔMKR 53.67dB            RL 16.0dBm      10dB/      -40.3MHz</p>  <p>CENTER 2.4835GHz      SPAN 100.0MHz            *RBW 1.0MHz      *VBW 10Hz      SWP 37.0sec</p>		





Spurious Radiated Emissions Test Results (Continued)

*Spurious Emissions Measurements in 802.11b mode (2400-2483.5 MHz)  
Channels 1, 6, & 11  
Continuous TX at Chain A Antenna port with Ethertronics Antennas  
Aegis Labs, Inc. File #: INTEL-060907-19*

<b>RADIATED EMISSIONS - Horizontal Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +/-FAIL	Comments
4824.00	53.67	100	135			51.08	4.57	33.91	41.07	74.00	-32.93	<b>Ch. 1</b>
4824.00				47.38	A	51.08	4.57	33.91	34.78	54.00	-19.22	
9648.01	58.33	100	135			50.15	6.56	38.12	52.85	86.52	-33.67	
14472.02	49.67	100	180			52.10	8.22	42.55	48.34	74.00	-25.66	
14472.02				37.32	A	52.10	8.22	42.55	35.99	54.00	-18.01	
4873.99	55.00	100	135			51.12	4.59	34.02	42.50	74.00	-31.50	<b>Ch. 6</b>
4873.99				49.86	A	51.12	4.59	34.02	37.36	54.00	-16.64	
9747.96	54.50	100	135			50.19	6.60	38.20	49.11	86.46	-37.35	
14622.01	50.67	100	225			52.06	8.27	42.28	49.17	74.00	-24.83	
14622.01				41.54	A	52.06	8.27	42.28	40.04	54.00	-13.96	
4924.00	54.83	100	180			51.15	4.61	34.13	42.42	74.00	-31.58	<b>Ch. 11</b>
4924.00				49.24	A	51.15	4.61	34.13	36.83	54.00	-17.17	
9848.01	56.67	100	180			50.23	6.64	38.28	51.36	88.06	-36.70	
14772.00	48.50	100	135			51.99	8.32	41.89	46.72	74.00	-27.28	
14772.00				37.59	A	51.99	8.32	41.89	35.81	54.00	-18.19	

<b>RADIATED EMISSIONS - Vertical Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +/-FAIL	Comments
4824.01	53.00	100	135			51.08	4.57	33.78	40.27	74.00	-33.73	<b>Ch. 1</b>
4824.01				46.79	A	51.08	4.57	33.78	34.06	54.00	-19.94	
9648.01	57.67	100	135			50.15	6.56	38.09	52.16	83.89	-31.73	
14472.02	49.33	100	225			52.10	8.22	42.74	48.18	74.00	-25.82	
14472.02				38.00	A	52.10	8.22	42.74	36.85	54.00	-17.15	
4873.99	54.33	100	135			51.12	4.59	33.87	41.68	74.00	-32.32	<b>Ch. 6</b>
4873.99				48.88	A	51.12	4.59	33.87	36.23	54.00	-17.77	
9747.96	56.00	100	135			50.19	6.60	38.15	50.56	83.65	-33.09	
14622.01	52.67	100	225			52.06	8.27	42.46	51.34	74.00	-22.66	
14622.01				45.35	A	52.06	8.27	42.46	44.02	54.00	-9.98	
4924.05	55.00	100	135			51.15	4.61	33.96	42.42	74.00	-31.58	<b>Ch. 11</b>
4924.05				50.03	A	51.15	4.61	33.96	37.45	54.00	-16.55	
9848.06	57.50	100	135			50.23	6.64	38.21	52.12	84.74	-32.62	
14772.00	49.83	100	225			51.99	8.32	42.04	48.20	74.00	-25.80	
14772.00				39.90	A	51.99	8.32	42.04	38.27	54.00	-15.73	





Radiated Emissions Test Results (Continued)

*Spurious Emissions Measurements in 802.11b mode (2400-2483.5 MHz)  
 Channels 1, 6, & 11  
 Continuous RX at Chain A Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-19*

**RADIATED EMISSIONS - Horizontal Antenna Polarization**

Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
4824.00	51.17	100	135			51.08	4.57	33.91	38.57	74.00	-35.43	<b>Ch. 1</b>
4824.00				40.29	A	51.08	4.57	33.91	27.69	54.00	-26.31	
4874.00	50.33	100	135			51.12	4.59	34.02	37.83	74.00	-36.17	<b>Ch. 6</b>
4874.00				39.71	A	51.12	4.59	34.02	27.21	54.00	-26.79	
4924.00	50.83	100	135			51.15	4.61	34.13	38.42	74.00	-35.58	<b>Ch. 11</b>
4924.00				40.02	A	51.15	4.61	34.13	27.61	54.00	-26.39	

**RADIATED EMISSIONS - Vertical Antenna Polarization**

Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
4824.00	52.00	100	135			51.08	4.57	33.78	39.27	74.00	-34.73	<b>Ch. 1</b>
4824.00				41.10	A	51.08	4.57	33.78	28.37	54.00	-25.63	
4874.00	51.50	100	135			51.12	4.59	33.87	38.85	74.00	-35.15	<b>Ch. 6</b>
4874.00				40.58	A	51.12	4.59	33.87	27.93	54.00	-26.07	
4924.00	50.67	100	135			51.15	4.61	33.96	38.09	74.00	-35.91	<b>Ch. 11</b>
4924.00				39.79	A	51.15	4.61	33.96	27.21	54.00	-26.79	

Radiated Emissions Test Results (Continued)

*Fundamental Measurements in 802.11b mode (2400-2483.5 MHz)  
 Channels 1, 6, & 11  
 Continuous TX at Chain B Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-24*

<b>RADIATED EMISSIONS - Horizontal Antenna Polarization</b>											
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
2412.00	75.50	100	135			3.19	29.50	108.19			<b>Ch. 1</b>
2412.00				72.19	A	3.19	29.50	104.88			
2437.00	75.17	100	135			3.20	29.59	107.96			<b>Ch. 6</b>
2437.00				71.88	A	3.20	29.59	104.67			
2462.00	76.17	100	135			3.22	29.67	109.06			<b>Ch. 11</b>
2462.00				72.68	A	3.22	29.67	105.57			

<b>RADIATED EMISSIONS – Vertical Antenna Polarization</b>											
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
2412.00	70.67	100	180			3.19	29.04	102.89			<b>Ch. 1</b>
2412.00				67.41	A	3.19	29.04	99.63			
2437.00	70.50	100	180			3.20	29.11	102.82			<b>Ch. 6</b>
2437.00				67.32	A	3.20	29.11	99.64			
2462.00	68.83	100	180			3.22	29.19	101.24			<b>Ch. 11</b>
2462.00				65.46	A	3.22	29.19	97.87			

NOTE: Fundamental signals measured to calculate the band edge field strengths using the “Marker Delta Method”.

Radiated Emissions Test Results (Continued)

*Band Edge Field Strength Measurements in 802.11b mode (2400-2483.5 MHz)  
 Channels 1 & 11  
 Continuous TX at Chain B Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-24*

RADIATED EMISSIONS - Horizontal Antenna Polarization										
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
2390.00							62.02	74.00	-11.98	<b>Ch. 1</b>
2390.00				A			50.88	54.00	-3.12	
2374.30							62.19	74.00	-11.81	
2385.50				A			51.38	54.00	-2.62	
2400.00	43.33	100	135		3.18	29.46	75.97	88.19	-12.22	
2483.50							62.39	74.00	-11.61	<b>Ch. 11</b>
2483.50				A			51.57	54.00	-2.43	

RADIATED EMISSIONS - Vertical Antenna Polarization										
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
2390.00							56.72	74.00	-17.28	<b>Ch. 1</b>
2390.00				A			45.63	54.00	-8.37	
2374.30							55.24	74.00	-18.76	
2385.50				A			44.37	54.00	-9.63	
2400.00	38.00	100	180		3.18	29.00	70.18	82.89	-12.71	
2483.50							54.57	74.00	-19.43	<b>Ch. 11</b>
2483.50				A			43.87	54.00	-10.13	

NOTE: The “Band Edge Field Strength” was calculated using the “Fundamental” and “Conducted Band Edge” measurements per the “Marker-Delta Method” with the following formula:

$$BE = F_m - \Delta_m$$

Where

BE = Band Edge Field Strength

F<sub>m</sub> = Measured Fundamental (Peak or Average)

Δ<sub>m</sub> = Measured Conducted Band Edge Delta (Peak or Average)

### Radiated Emissions Test Results (Continued)

Plots Showing Out-Of-Band Emissions (Peak RBW=VBW=1MHz; Average RBW = 1MHz, VBW = 10Hz)

Test Date	Data	Test Eng.
09/21/06	2.412 GHz band edge <b>PEAK DELTA</b> (INTEL-060907-25b01)	JC
<p>*ATTEN 20dB                      ΔMKR 46.00dB            RL 16.0dBm                    10dB/                    36.7MHz</p> <p>CENTER 2.3900GHz                      SPAN 100.0MHz            *RBW 1.0MHz                    *VBW 1.0MHz                    SWP 50.0ms</p>		
Test Date	Data	Test Eng.
09/21/06	2.412 GHz band edge <b>AVERAGE DELTA</b> (INTEL-060907-25b02)	JC
<p>*ATTEN 20dB                      ΔMKR 53.50dB            RL 16.0dBm                    10dB/                    28.0MHz</p> <p>CENTER 2.3900GHz                      SPAN 100.0MHz            *RBW 1.0MHz                    *VBW 10Hz                      SWP 37.0sec</p>		

### Radiated Emissions Test Results (Continued)

Plots Showing Out-Of-Band Emissions (Peak RBW=VBW=1MHz; Average RBW = 1MHz, VBW = 10Hz)

<i>Test Date</i>	<i>Data</i>	<i>Test Eng.</i>
09/21/06	2.462 GHz band edge <b>PEAK DELTA</b> (INTEL-060907-25b03)	JC
<p>*ATTEN 20dB                      ΔMKR 45.50dB            RL 16.0dBm                    10dB/                    -39.0MHz</p> <p>CENTER 2.4835GHz                      SPAN 100.0MHz            *RBW 1.0MHz                    *VBW 1.0MHz                    SWP 50.0ms</p>		
<i>Test Date</i>	<i>Data</i>	<i>Test Eng.</i>
09/21/06	2.462 GHz band edge <b>AVERAGE DELTA</b> (INTEL-060907-25b04)	JC
<p>*ATTEN 20dB                      MKR -52.17dBm            RL 16.0dBm                    10dB/                    2.4998GHz</p> <p>CENTER 2.4835GHz                      SPAN 100.0MHz            *RBW 1.0MHz                    *VBW 10Hz                    SWP 37.0sec</p>		

Spurious Radiated Emissions Test Results (Continued)

*Spurious Emissions Measurements in 802.11b mode (2400-2483.5 MHz)*  
*Channels 1, 6, & 11*  
**Continuous TX at Chain B Antenna port with Ethertronics Antennas**  
*Aegis Labs, Inc. File #: INTEL-060907-22*

<b>RADIATED EMISSIONS - Horizontal Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
14472.02	57.67	100	135			52.10	8.22	42.55	56.34	74.00	-17.66	<b>Ch. 1</b>
14472.02				48.78	A	52.10	8.22	42.55	47.45	54.00	-6.55	
14622.01	57.83	100	225			52.06	8.27	42.28	56.33	74.00	-17.67	<b>Ch. 6</b>
14622.01				47.63	A	52.06	8.27	42.28	46.13	54.00	-7.87	
14772.00	56.33	100	135			51.99	8.32	41.89	54.55	74.00	-19.45	<b>Ch. 11</b>
14772.00				44.30	A	51.99	8.32	41.89	42.52	54.00	-11.48	

<b>RADIATED EMISSIONS - Vertical Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
14472.02	59.00	150	225			52.10	8.22	42.74	57.85	74.00	-16.15	<b>Ch. 1</b>
14472.02				51.71	A	52.10	8.22	42.74	50.56	54.00	-3.44	
14622.01	58.83	150	225			52.06	8.27	42.46	57.50	74.00	-16.50	<b>Ch. 6</b>
14622.01				50.19	A	52.06	8.27	42.46	48.86	54.00	-5.14	
14772.00	57.33	150	225			51.99	8.32	42.04	55.70	74.00	-18.30	<b>Ch. 11</b>
14772.00				48.67	A	51.99	8.32	42.04	47.04	54.00	-6.96	



Radiated Emissions Test Results (Continued)

*Spurious Emissions Measurements in 802.11b mode (2400-2483.5 MHz)  
 Channels 1, 6, & 11  
 Continuous RX at Chain B Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-22*

<b>RADIATED EMISSIONS - Horizontal Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
4824.00	55.50	100	135			51.08	4.57	33.91	42.90	74.00	-31.10	<b>Ch. 1</b>
4824.00				43.28	A	51.08	4.57	33.91	30.68	54.00	-23.32	
4874.00	55.33	100	135			51.12	4.59	34.02	42.83	74.00	-31.17	<b>Ch. 6</b>
4874.00				42.46	A	51.12	4.59	34.02	29.96	54.00	-24.04	
4924.00	54.83	100	135			51.15	4.61	34.13	42.42	74.00	-31.58	<b>Ch. 11</b>
4924.00				42.82	A	51.15	4.61	34.13	30.41	54.00	-23.59	

<b>RADIATED EMISSIONS - Vertical Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
4824.00	55.50	100	135			51.08	4.57	33.78	42.77	74.00	-31.23	<b>Ch. 1</b>
4824.00				42.99	A	51.08	4.57	33.78	30.26	54.00	-23.74	
4874.00	54.67	100	135			51.12	4.59	33.87	42.02	74.00	-31.98	<b>Ch. 6</b>
4874.00				42.12	A	51.12	4.59	33.87	29.47	54.00	-24.53	
4924.00	55.17	100	135			51.15	4.61	33.96	42.59	74.00	-31.41	<b>Ch. 11</b>
4924.00				42.54	A	51.15	4.61	33.96	29.96	54.00	-24.04	



## RADIATED EMISSIONS TEST RESULTS

<b>CLIENT:</b>	Intel Corporation	<b>DATE:</b>	09/19/06
<b>EUT:</b>	Intel PRO/Wireless 4965AGN Network Connection	<b>PROJECT NUMBER:</b>	INTEL-060907
<b>MODEL NUMBER:</b>	4965AGN	<b>TEST ENGINEER:</b>	BM/JC
<b>SERIAL NUMBER:</b>	0013E804612B	<b>SITE #:</b>	2
<b>CONFIGURATION:</b>	Tested installed in the host computer's mini PCI slot in <b>802.11g (2400-2483.5 MHz) mode with Ethertronics Antennas.</b>	<b>TEMPERATURE:</b>	22 deg. C
		<b>HUMIDITY:</b>	33% RH
		<b>TIME:</b>	6:00 PM

<b>Description:</b>	Radiated RF Emissions (1 GHz – 18 GHz)
<b>Results:</b>	<b>PASSED</b> Horizontal and Vertical Antenna Polarizations Class B Limits
<b>Note:</b>	Radiated Emissions Measurements were performed on the EUT with power supply set at the following voltage and frequency. <ul style="list-style-type: none"> <li>• 120VAC / 60 Hz.</li> </ul>

Unwanted Spurious Emissions Limits			
Frequency (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m) (Emissions in the restricted bands)	Field Strength (dBm/MHz) (Emissions outside the restricted bands)
Above 960	500	54.00 (Average) 74.00 (Peak)	< -20 dBc

### Radiated Emissions Sample Calculations

$$\text{Corrected Meter Reading} = \text{Meter Reading} + F + C - D$$

Where, F = Antenna Factor

C = Cable Factor

G = Amplifier Gain

D = Distance Factor (if applicable)

Therefore, the equation for determining the Corrected Meter Reading Limit (CML) is:

$$\text{CML} = \text{Specification Limit} - F - C + D$$



Radiated Emissions Test Results (Continued)

*Fundamental Measurements in 802.11g mode (2400-2483.5 MHz)  
 Channels 1, 6, & 11  
 Continuous TX at Chain A Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-26 & -34*

<b>RADIATED EMISSIONS - Horizontal Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Distance Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
2412.00	80.83	100	225			9.54	3.19	29.50	103.98			<b>Ch. 1</b>
2412.00				66.50	A	9.54	3.19	29.50	89.65			
2437.00	81.33	100	225			9.54	3.20	29.59	104.58			<b>Ch. 6</b>
2437.00				66.78	A	9.54	3.20	29.59	90.03			
2462.00	82.17	100	225			9.54	3.22	29.67	105.52			<b>Ch. 11</b>
2462.00				67.67	A	9.54	3.22	29.67	91.02			

<b>RADIATED EMISSIONS - Vertical Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Distance Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
2412.00	80.00	100	180			9.54	3.19	29.04	102.68			<b>Ch. 1</b>
2412.00				65.00	A	9.54	3.19	29.04	87.68			
2437.00	79.17	100	180			9.54	3.20	29.11	101.95			<b>Ch. 6</b>
2437.00				64.67	A	9.54	3.20	29.11	87.45			
2462.00	81.67	125	225			9.54	3.22	29.19	104.54			<b>Ch. 11</b>
2462.00				67.50	A	9.54	3.22	29.19	90.37			

NOTE: Fundamental signals measured at 1 meter and extrapolated to 3 meters to calculate the radiated band edge field strengths.

Radiated Emissions Test Results (Continued)

*Band Edge Field Strength Measurements in 802.11g mode (2400-2483.5 MHz)  
 Channels 1 & 11  
 Continuous TX at Chain A Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-26 & -34*

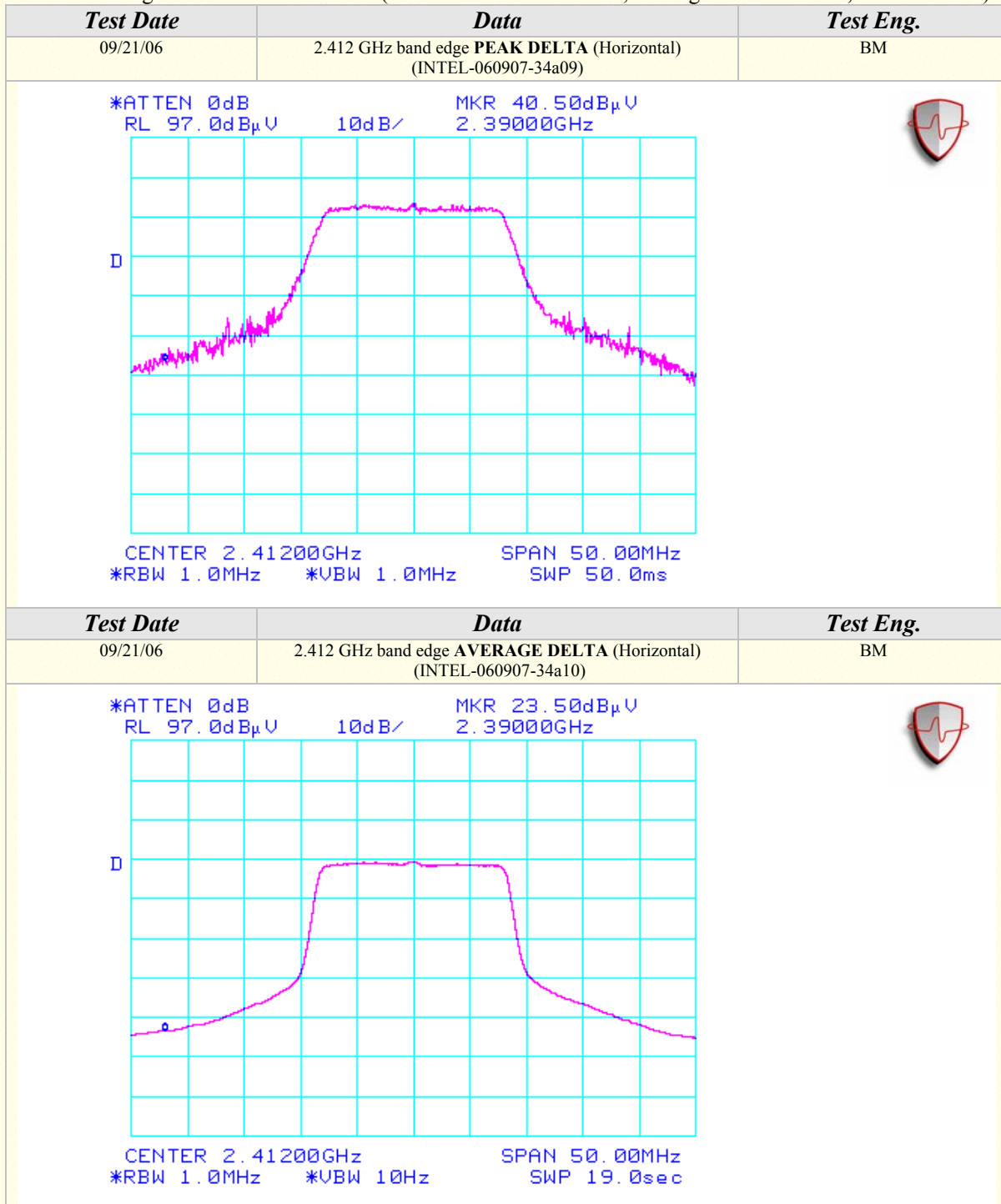
<b>RADIATED EMISSIONS - Horizontal Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Distance Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
2390.00	40.50	100	225			9.54	3.17	29.43	63.56	74.00	-10.44	<b>Ch. 1</b>
2390.00				23.50	A	9.54	3.17	29.43	46.56	54.00	-7.44	
2400.00	43.50	100	225			9.54	3.18	29.46	66.60	74.00	-7.40	
2483.50	47.50	100	225			9.54	3.24	29.74	70.94	74.00	-3.06	<b>Ch. 11</b>
2483.50				28.17	A	9.54	3.24	29.74	51.61	54.00	-2.39	

<b>RADIATED EMISSIONS - Vertical Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Distance Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
2390.00	42.33	100	180			9.54	3.17	28.97	64.93	74.00	-9.07	<b>Ch. 1</b>
2390.00				22.83	A	9.54	3.17	28.97	45.43	54.00	-8.57	
2400.00	45.17	100	180			9.54	3.18	29.00	67.81	74.00	-6.19	
2483.50	48.17	125	225			9.54	3.24	29.25	71.12	74.00	-2.88	<b>Ch. 11</b>
2483.50				28.83	A	9.54	3.24	29.25	51.78	54.00	-2.22	

NOTE: The “Band Edge Field Strength” was calculated using the “Radiated Fundamental” measurements.

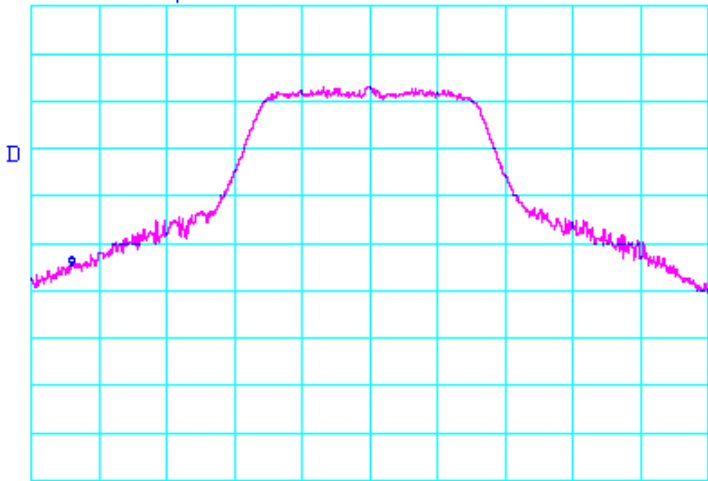

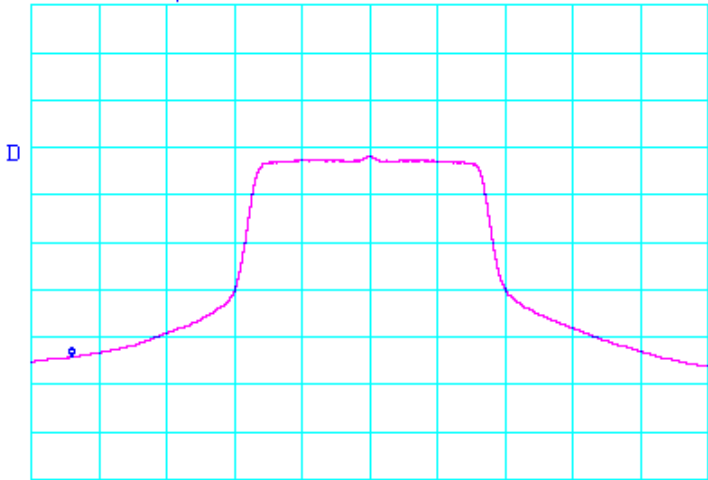

### Radiated Emissions Test Results (Continued)

Plots Showing Out-Of-Band Emissions (Peak RBW=VBW=1MHz; Average RBW = 1MHz, VBW = 10Hz)



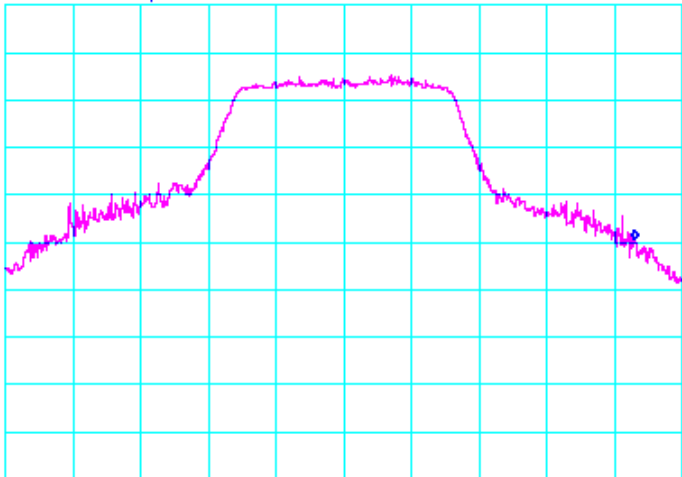
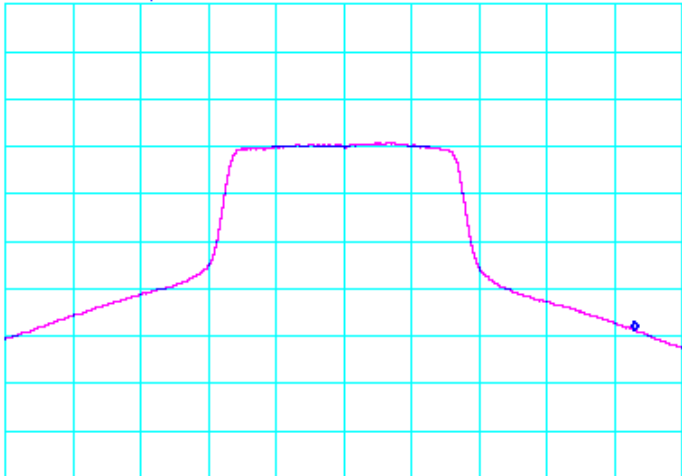
## Radiated Emissions Test Results (Continued)

Plots Showing Out-Of-Band Emissions (Peak RBW=VBW=1MHz; Average RBW = 1MHz, VBW = 10Hz)

<b>Test Date</b>	<b>Data</b>	<b>Test Eng.</b>
09/21/06	2.412 GHz band edge <b>PEAK DELTA</b> (Vertical) (INTEL-060907-34a11)	BM
<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 70%;"> <p>*ATTEN 0dB                      MKR 42.33dBμV RL 97.0dBμV                  10dB/                  2.39000GHz</p>  <p>CENTER 2.41200GHz                  SPAN 50.00MHz *RBW 1.0MHz                  *VBW 1.0MHz                  SWP 50.0ms</p> </div> <div style="width: 25%; text-align: center;">  </div> </div>		
<b>Test Date</b>	<b>Data</b>	<b>Test Eng.</b>
09/21/06	2.412 GHz band edge <b>AVERAGE DELTA</b> (Vertical) (INTEL-060907-34a12)	BM
<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 70%;"> <p>*ATTEN 0dB                      MKR 22.83dBμV RL 97.0dBμV                  10dB/                  2.39000GHz</p>  <p>CENTER 2.41200GHz                  SPAN 50.00MHz *RBW 1.0MHz                  *VBW 10Hz                  SWP 19.0sec</p> </div> <div style="width: 25%; text-align: center;">  </div> </div>		

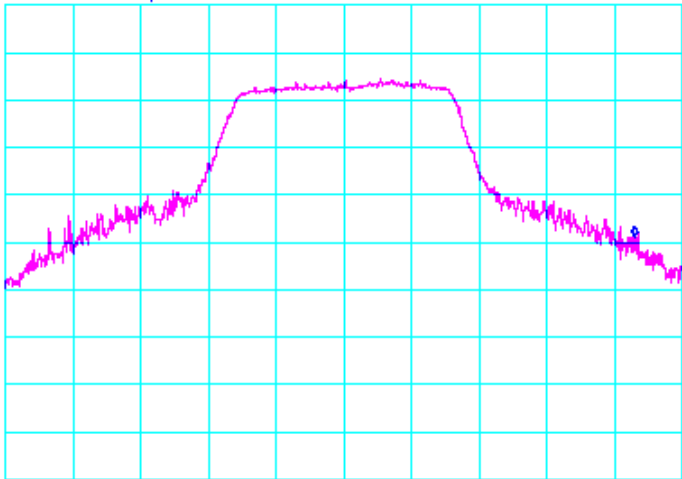

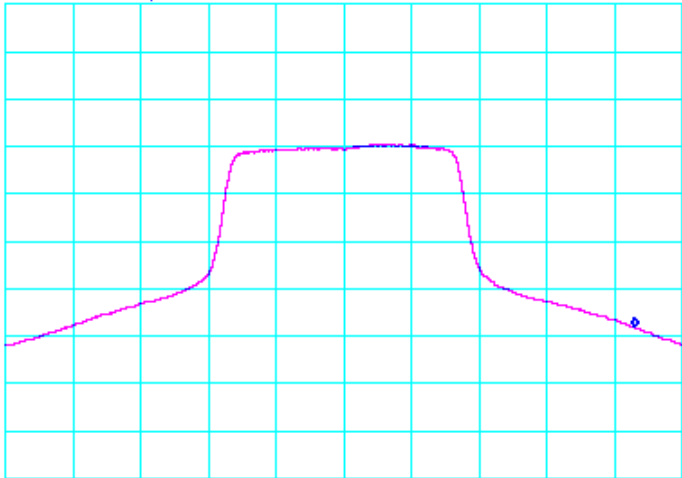

### Radiated Emissions Test Results (Continued)

Plots Showing Out-Of-Band Emissions (Peak RBW=VBW=1MHz; Average RBW = 1MHz, VBW = 10Hz)

Test Date	Data	Test Eng.
09/21/06	2.462 GHz band edge <b>PEAK DELTA</b> (Horizontal) (INTEL-060907-26a09)	BM
<div data-bbox="332 426 1039 1014"><p>*ATTEN 0dB RL 97.0dBμV 10dB/ MKR 47.50dBμV 2.48350GHZ</p><p>CENTER 2.46200GHz SPAN 50.00MHz *RBW 1.0MHz *VBW 1.0MHz SWP 50.0ms</p></div>		
Test Date	Data	Test Eng.
09/21/06	2.462 GHz band edge <b>AVERAGE DELTA</b> (Horizontal) (INTEL-060907-26a10)	BM
<div data-bbox="332 1144 1039 1732"><p>*ATTEN 0dB RL 97.0dBμV 10dB/ MKR 28.17dBμV 2.48350GHZ</p><p>CENTER 2.46200GHz SPAN 50.00MHz *RBW 1.0MHz *VBW 10Hz SWP 19.0sec</p></div>		

### Radiated Emissions Test Results (Continued)

Plots Showing Out-Of-Band Emissions (Peak RBW=VBW=1MHz; Average RBW = 1MHz, VBW = 10Hz)

Test Date	Data	Test Eng.
09/21/06	2.462 GHz band edge <b>PEAK DELTA</b> (Vertical) (INTEL-060907-26a11)	BM
<div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <p>*ATTEN 0dB            RL 97.0dBμV      10dB/</p> <p style="text-align: right;">MKR 48.17dBμV            2.48350GHz</p>  <p style="text-align: center;">CENTER 2.46200GHz      SPAN 50.00MHz            *RBW 1.0MHz      *VBW 1.0MHz      SWP 50.0ms</p> </div> <div style="width: 35%; text-align: right;">  </div> </div>		
Test Date	Data	Test Eng.
09/21/06	2.462 GHz band edge <b>AVERAGE DELTA</b> (Vertical) (INTEL-060907-26a12)	BM
<div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <p>*ATTEN 0dB            RL 97.0dBμV      10dB/</p> <p style="text-align: right;">MKR 28.83dBμV            2.48350GHz</p>  <p style="text-align: center;">CENTER 2.46200GHz      SPAN 50.00MHz            *RBW 1.0MHz      *VBW 10Hz      SWP 19.0sec</p> </div> <div style="width: 35%; text-align: right;">  </div> </div>		



Radiated Emissions Test Results (Continued)

*Spurious Emissions Measurements in 802.11g mode (2400-2483.5 MHz)  
 Channels 1, 6, & 11  
 Continuous TX at Chain A Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-35*

**RADIATED EMISSIONS - Horizontal Antenna Polarization**

Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)	Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments	
9648.00	54.33	100	225			50.15	6.56	38.12	48.85	83.98	-35.13	<b>Ch. 1</b>
9747.96	53.50	100	180			50.19	6.60	38.20	48.11	84.58	-36.47	<b>Ch. 6</b>
9848.01	53.50	100	180			50.23	6.64	38.28	48.19	85.52	-37.33	<b>Ch. 11</b>

**RADIATED EMISSIONS - Vertical Antenna Polarization**

Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)	Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments	
9647.62	55.00	100	180			50.15	6.56	38.09	49.49	82.68	-33.19	<b>Ch. 1</b>
9747.82	54.83	100	180			50.19	6.60	38.15	49.39	81.95	-32.56	<b>Ch. 6</b>
9848.28	56.00	100	135			50.23	6.64	38.21	50.62	84.54	-33.92	<b>Ch. 11</b>

Radiated Emissions Test Results (Continued)

*Fundamental Measurements in 802.11g mode (2400-2483.5 MHz)  
Channels 1, 6, & 11  
Continuous TX at Chain B Antenna port with Ethertronics Antennas  
Aegis Labs, Inc. File #: INTEL-060907-26 & -34*

<b>RADIATED EMISSIONS - Horizontal Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Distance Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
2412.00	82.67	100	180			9.54	3.19	29.50	105.82			<b>Ch. 1</b>
2412.00				67.00	A	9.54	3.19	29.50	90.15			
2437.00	81.50	100	180			9.54	3.20	29.59	104.75			<b>Ch. 6</b>
2437.00				66.15	A	9.54	3.20	29.59	89.40			
2462.00	80.50	100	180			9.54	3.22	29.67	103.85			<b>Ch. 11</b>
2462.00				66.17	A	9.54	3.22	29.67	89.52			

<b>RADIATED EMISSIONS - Vertical Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Distance Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
2412.00	81.50	100	180			9.54	3.19	29.04	104.18			<b>Ch. 1</b>
2412.00				66.67	A	9.54	3.19	29.04	89.35			
2437.00	78.33	100	180			9.54	3.20	29.11	101.11			<b>Ch. 6</b>
2437.00				64.32	A	9.54	3.20	29.11	87.10			
2462.00	78.00	100	180			9.54	3.22	29.19	100.87			<b>Ch. 11</b>
2462.00				63.17	A	9.54	3.22	29.19	86.04			

NOTE: Fundamental signals measured at 1 meter and extrapolated to 3 meters to calculate the radiated band edge field strengths.



Radiated Emissions Test Results (Continued)

*Band Edge Field Strength Measurements in 802.11g mode (2400-2483.5 MHz)  
 Channels 1 & 11  
 Continuous TX at Chain B Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-26 & -34*

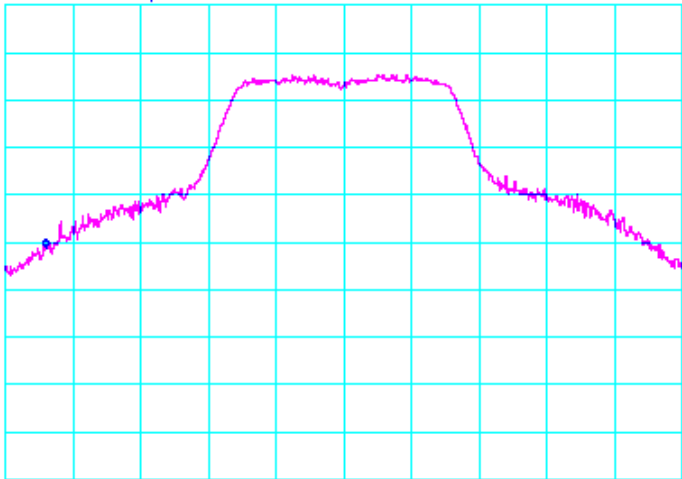

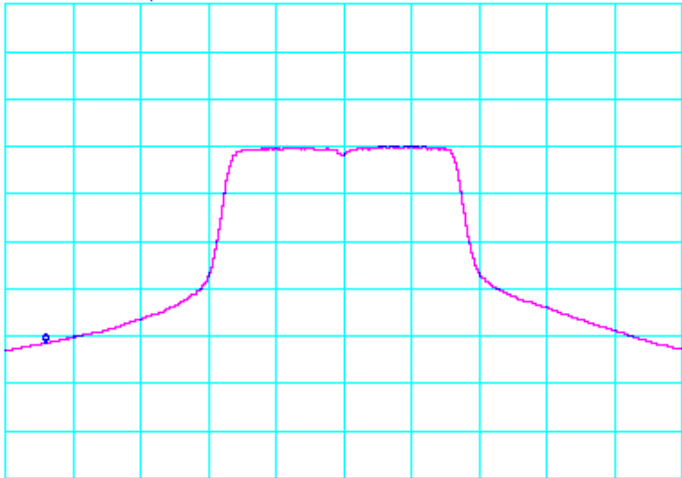

<b>RADIATED EMISSIONS - Horizontal Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Distance Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
2390.00	45.83	100	180			9.54	3.17	29.43	68.89	74.00	-5.11	<b>Ch. 1</b>
2390.00				25.50	A	9.54	3.17	29.43	48.56	54.00	-5.44	
2400.00	44.17	100	180			9.54	3.18	29.46	67.27	74.00	-6.73	
2483.50	46.17	100	180			9.54	3.24	29.74	69.61	74.00	-4.39	<b>Ch. 11</b>
2483.50				26.83	A	9.54	3.24	29.74	50.27	54.00	-3.73	

<b>RADIATED EMISSIONS - Vertical Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Distance Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
2390.00	45.17	100	180			9.54	3.17	28.97	67.77	74.00	-6.23	<b>Ch. 1</b>
2390.00				26.00	A	9.54	3.17	28.97	48.60	54.00	-5.40	
2400.00	46.00	100	180			9.54	3.18	29.00	68.64	74.00	-5.36	
2483.50	41.67	100	180			9.54	3.24	29.25	64.62	74.00	-9.38	<b>Ch. 11</b>
2483.50				23.67	A	9.54	3.24	29.25	46.62	54.00	-7.38	

NOTE: The “Band Edge Field Strength” was calculated using the “Radiated Fundamental” measurements.

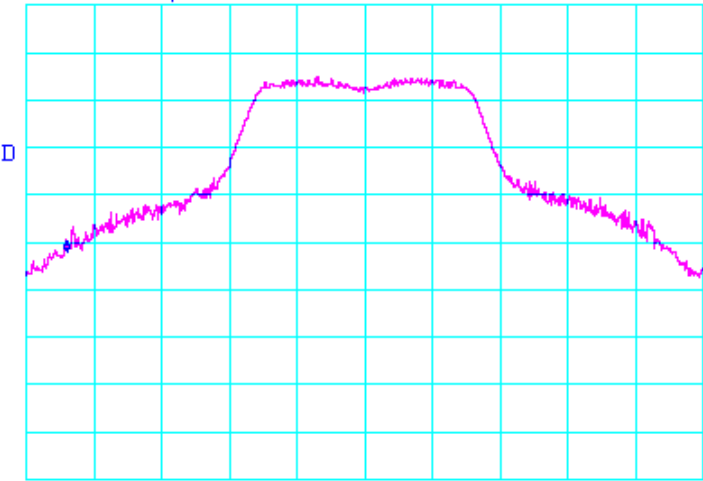

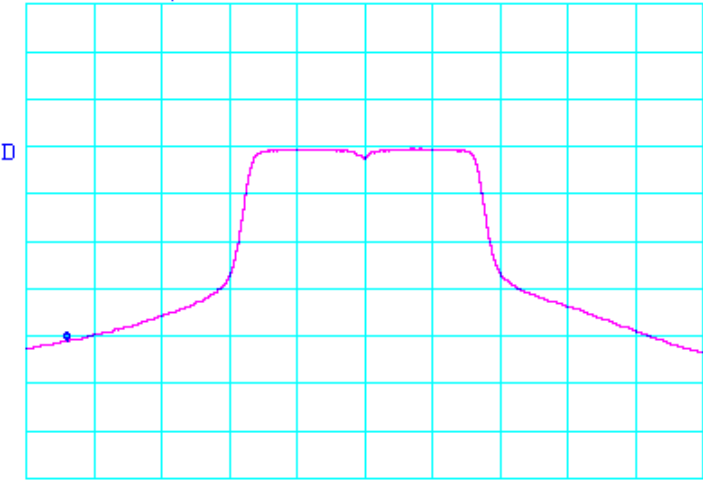

### Radiated Emissions Test Results (Continued)

Plots Showing Out-Of-Band Emissions (Peak RBW=VBW=1MHz; Average RBW = 1MHz, VBW = 10Hz)

Test Date	Data	Test Eng.
09/21/06	2.412 GHz band edge <b>PEAK DELTA</b> (Horizontal) (INTEL-060907-34a13)	BM
<div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <p>*ATTEN 0dB            RL 97.0dBμV      10dB/</p> <p style="text-align: right;">MKR 45.83dBμV            2.39000GHz</p>  <p style="text-align: center;">CENTER 2.41200GHz      SPAN 50.00MHz            *RBW 1.0MHz      *VBW 1.0MHz      SWP 50.0ms</p> </div> <div style="width: 35%; text-align: right;">  </div> </div>		
Test Date	Data	Test Eng.
09/21/06	2.412 GHz band edge <b>AVERAGE DELTA</b> (Horizontal) (INTEL-060907-34a14)	BM
<div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <p>*ATTEN 0dB            RL 97.0dBμV      10dB/</p> <p style="text-align: right;">MKR 25.50dBμV            2.39000GHz</p>  <p style="text-align: center;">CENTER 2.41200GHz      SPAN 50.00MHz            *RBW 1.0MHz      *VBW 10Hz      SWP 19.0sec</p> </div> <div style="width: 35%; text-align: right;">  </div> </div>		

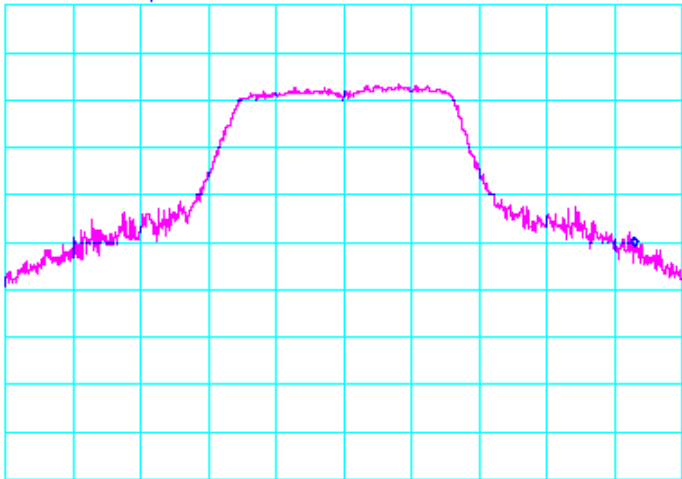

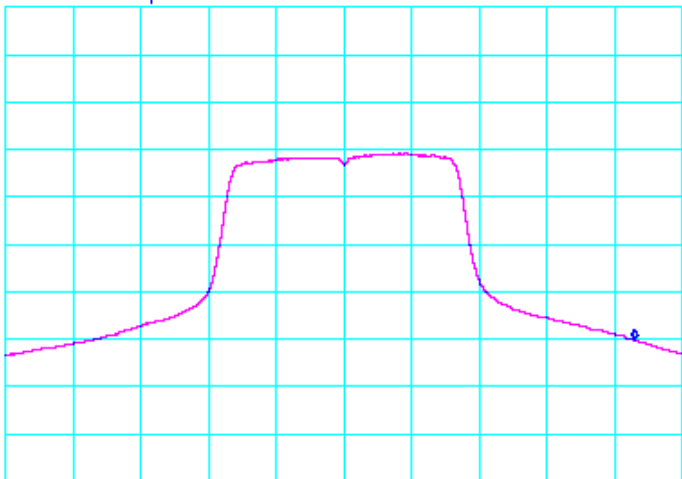

## Radiated Emissions Test Results (Continued)

Plots Showing Out-Of-Band Emissions (Peak RBW=VBW=1MHz; Average RBW = 1MHz, VBW = 10Hz)

Test Date	Data	Test Eng.
09/21/06	2.412 GHz band edge <b>PEAK DELTA</b> (Vertical) (INTEL-060907-34a15)	BM
<p>*ATTEN 0dB RL 97.0dBμV 10dB/ MKR 45.17dBμV 2.39000GHz</p>  <p>CENTER 2.41200GHz SPAN 50.00MHz *RBW 1.0MHz *VBW 1.0MHz SWP 50.0ms</p> 		
Test Date	Data	Test Eng.
09/21/06	2.412 GHz band edge <b>AVERAGE DELTA</b> (Vertical) (INTEL-060907-34a16)	BM
<p>*ATTEN 0dB RL 97.0dBμV 10dB/ MKR 26.00dBμV 2.39000GHz</p>  <p>CENTER 2.41200GHz SPAN 50.00MHz *RBW 1.0MHz *VBW 10Hz SWP 19.0sec</p> 		


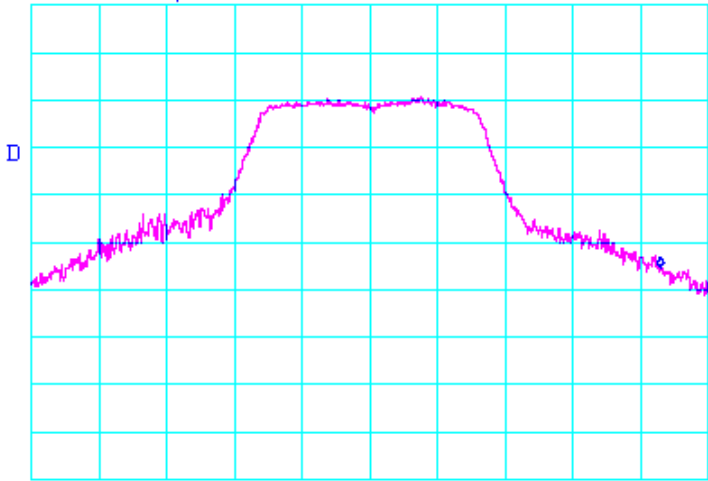

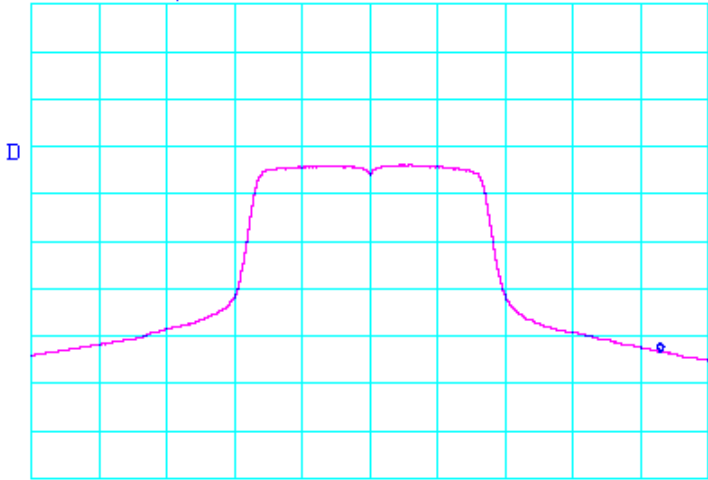
### Radiated Emissions Test Results (Continued)

Plots Showing Out-Of-Band Emissions (Peak RBW=VBW=1MHz; Average RBW = 1MHz, VBW = 10Hz)

Test Date	Data	Test Eng.
09/21/06	2.462 GHz band edge <b>PEAK DELTA</b> (Horizontal) (INTEL-060907-26a13)	BM
<div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <p>*ATTEN 0dB            RL 97.0dB<math>\mu</math>V      10dB/</p> <p style="text-align: right;">MKR 46.17dB<math>\mu</math>V            2.48350GHz</p>  <p style="text-align: center;">CENTER 2.46200GHz      SPAN 50.00MHz            *RBW 1.0MHz      *VBW 1.0MHz      SWP 50.0ms</p> </div> <div style="width: 35%; text-align: right;">  </div> </div>		
Test Date	Data	Test Eng.
09/21/06	2.462 GHz band edge <b>AVERAGE DELTA</b> (Horizontal) (INTEL-060907-26a14)	BM
<div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <p>*ATTEN 0dB            RL 97.0dB<math>\mu</math>V      10dB/</p> <p style="text-align: right;">MKR 26.83dB<math>\mu</math>V            2.48350GHz</p>  <p style="text-align: center;">CENTER 2.46200GHz      SPAN 50.00MHz            *RBW 1.0MHz      *VBW 10Hz      SWP 19.0sec</p> </div> <div style="width: 35%; text-align: right;">  </div> </div>		

### Radiated Emissions Test Results (Continued)

Plots Showing Out-Of-Band Emissions (Peak RBW=VBW=1MHz; Average RBW = 1MHz, VBW = 10Hz)

<i>Test Date</i>	<i>Data</i>	<i>Test Eng.</i>
09/21/06	2.462 GHz band edge <b>PEAK DELTA</b> (Vertical) (INTEL-060907-26a15)	BM
<div style="display: flex; justify-content: space-between;"> <div data-bbox="332 428 967 483"> <p>*ATTEN 0dB            RL 97.0dBμV 10dB/ MKR 41.67dBμV            2.48350GHz</p> </div> <div data-bbox="1279 436 1360 516">  </div> </div> <div style="text-align: center; margin: 10px 0;">  </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div data-bbox="332 961 753 1016"> <p>CENTER 2.46200GHz            *RBW 1.0MHz *VBW 1.0MHz</p> </div> <div data-bbox="797 961 1019 1016"> <p>SPAN 50.00MHz            SWP 50.0ms</p> </div> </div>		
<i>Test Date</i>	<i>Data</i>	<i>Test Eng.</i>
09/21/06	2.462 GHz band edge <b>AVERAGE DELTA</b> (Vertical) (INTEL-060907-26a16)	BM
<div style="display: flex; justify-content: space-between;"> <div data-bbox="332 1146 967 1201"> <p>*ATTEN 0dB            RL 97.0dBμV 10dB/ MKR 23.67dBμV            2.48350GHz</p> </div> <div data-bbox="1279 1155 1360 1234">  </div> </div> <div style="text-align: center; margin: 10px 0;">  </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div data-bbox="332 1680 721 1734"> <p>CENTER 2.46200GHz            *RBW 1.0MHz *VBW 10Hz</p> </div> <div data-bbox="797 1680 1019 1734"> <p>SPAN 50.00MHz            SWP 19.0sec</p> </div> </div>		



Radiated Emissions Test Results (Continued)

*Spurious Emissions Measurements in 802.11g mode (2400-2483.5 MHz)  
 Channels 1, 6, & 11  
 Continuous TX at Chain B Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-36*

**RADIATED EMISSIONS - Horizontal Antenna Polarization**

Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)	Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments	
3215.76	54.67	100	225			50.88	3.71	31.72	39.21	85.82	-46.61	<b>Ch. 1</b>
9748.12	54.50	100	180			50.19	6.60	38.20	49.11	84.75	-35.64	<b>Ch. 6</b>
9848.01	53.50	100	180			50.23	6.64	38.28	48.19	83.85	-35.66	<b>Ch. 11</b>

**RADIATED EMISSIONS - Vertical Antenna Polarization**

Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)	Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments	
3216.03	55.17	100	180			50.88	3.71	31.28	39.27	84.18	-44.91	<b>Ch. 1</b>
9747.96	55.17	100	180			50.19	6.60	38.15	49.73	81.11	-31.38	<b>Ch. 6</b>
9848.28	54.33	100	180			50.23	6.64	38.21	48.95	80.87	-31.92	<b>Ch. 11</b>



## RADIATED EMISSIONS TEST RESULTS

<b>CLIENT:</b>	Intel Corporation	<b>DATE:</b>	10/06/06
<b>EUT:</b>	Intel PRO/Wireless 4965AGN Network Connection	<b>PROJECT NUMBER:</b>	INTEL-060907
<b>MODEL NUMBER:</b>	4965AGN	<b>TEST ENGINEER:</b>	BM/JC
<b>SERIAL NUMBER:</b>	0013E804612B	<b>SITE #:</b>	2
<b>CONFIGURATION:</b>	Tested installed in the host computer's mini PCI slot in <b>802.11n (2400-2483.5 MHz) mode 20MHz Wide with Ethertronics Antennas.</b>	<b>TEMPERATURE:</b>	16 deg. C
		<b>HUMIDITY:</b>	60% RH
		<b>TIME:</b>	4:30 PM

<b>Description:</b>	Radiated RF Emissions (1 GHz – 18 GHz)
<b>Results:</b>	<b>PASSED</b> Horizontal and Vertical Antenna Polarizations Class B Limits
<b>Note:</b>	Radiated Emissions Measurements were performed on the EUT with power supply set at the following voltage and frequency. <ul style="list-style-type: none"> <li>• 120VAC / 60 Hz.</li> </ul>

Unwanted Spurious Emissions Limits			
Frequency (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m) (Emissions in the restricted bands)	Field Strength (dBm/MHz) (Emissions outside the restricted bands)
Above 960	500	54.00 (Average) 74.00 (Peak)	< -20 dBc

### Radiated Emissions Sample Calculations

$$\text{Corrected Meter Reading} = \text{Meter Reading} + F + C - D$$

Where, F = Antenna Factor

C = Cable Factor

G = Amplifier Gain

D = Distance Factor (if applicable)

Therefore, the equation for determining the Corrected Meter Reading Limit (CML) is:

$$\text{CML} = \text{Specification Limit} - F - C + D$$

Radiated Emissions Test Results (Continued)

*Fundamental Measurements in 802.11n mode 20MHz Wide (2400-2483.5 MHz)  
 Channels 1, 6, & 11  
 Continuous TX at Chain A Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-52*

<b>RADIATED EMISSIONS - Horizontal Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Distance Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
2412.00	83.50	100	180			9.54	1.99	29.50	105.45			<b>Ch. 1</b>
2412.00				68.67	A	9.54	1.99	29.50	90.62			
2437.00	84.50	100	135			9.54	2.00	29.59	106.55			<b>Ch. 6</b>
2437.00				69.17	A	9.54	2.00	29.59	91.22			
2462.00	82.17	100	135			9.54	2.01	29.67	104.31			<b>Ch. 11</b>
2462.00				67.00	A	9.54	2.01	29.67	89.14			

<b>RADIATED EMISSIONS - Vertical Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Distance Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
2412.00	81.67	100	225			9.54	1.99	29.04	103.16			<b>Ch. 1</b>
2412.00				66.67	A	9.54	1.99	29.04	88.16			
2437.00	83.50	100	135			9.54	2.00	29.11	105.07			<b>Ch. 6</b>
2437.00				68.33	A	9.54	2.00	29.11	89.90			
2462.00	82.00	100	225			9.54	2.01	29.19	103.66			<b>Ch. 11</b>
2462.00				66.83	A	9.54	2.01	29.19	88.49			

NOTE: Fundamental signals measured at 1 meter and extrapolated to 3 meters to calculate the radiated band edge field strengths.



Radiated Emissions Test Results (Continued)

*Band Edge Field Strength Measurements in 802.11n mode 20MHz Wide (2400-2483.5 MHz)  
 Channels 1 & 11  
 Continuous TX at Chain A Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-52*

**RADIATED EMISSIONS - Horizontal Antenna Polarization**

Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)	Distance Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
2390.00	46.50	100	180		9.54	1.98	29.43	68.37	74.00	-5.63	<b>Ch. 1</b>
2390.00				25.50 A	9.54	1.98	29.43	47.37	54.00	-6.63	
2400.00	47.83	100	180		9.54	1.98	29.46	69.73	74.00	-4.27	
2483.50	46.33	100	135		9.54	2.02	29.74	68.56	74.00	-5.44	<b>Ch. 11</b>
2483.50				24.50 A	9.54	2.02	29.74	46.73	54.00	-7.27	

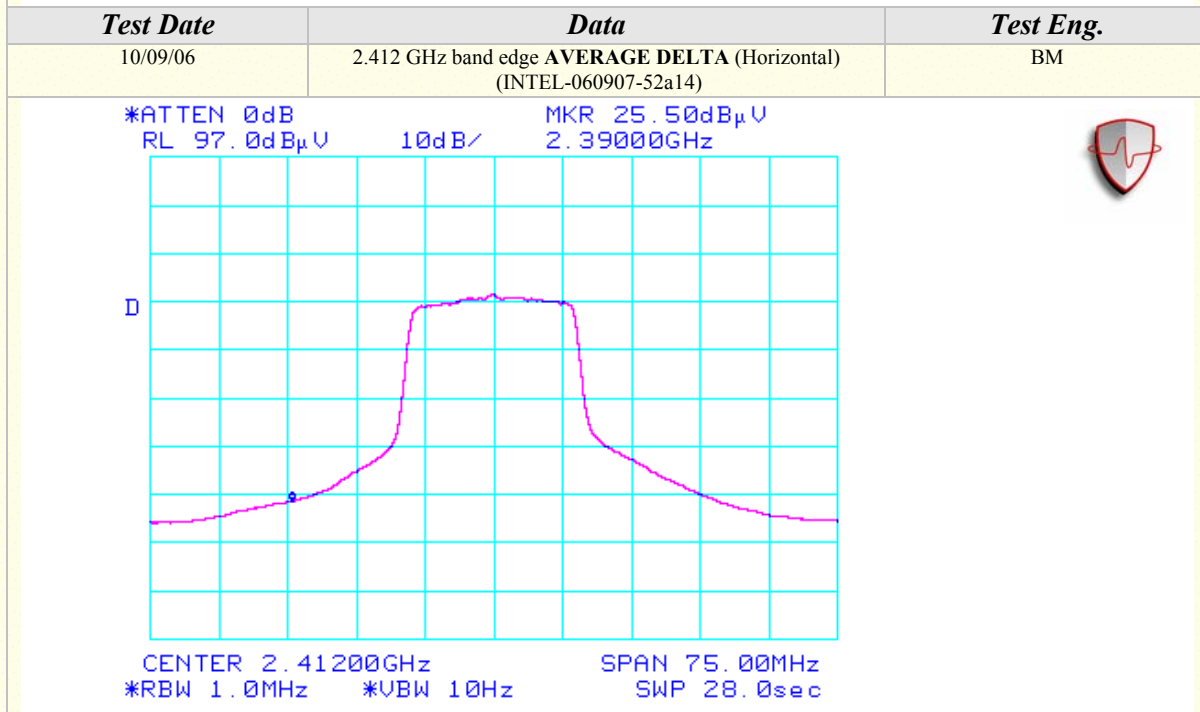
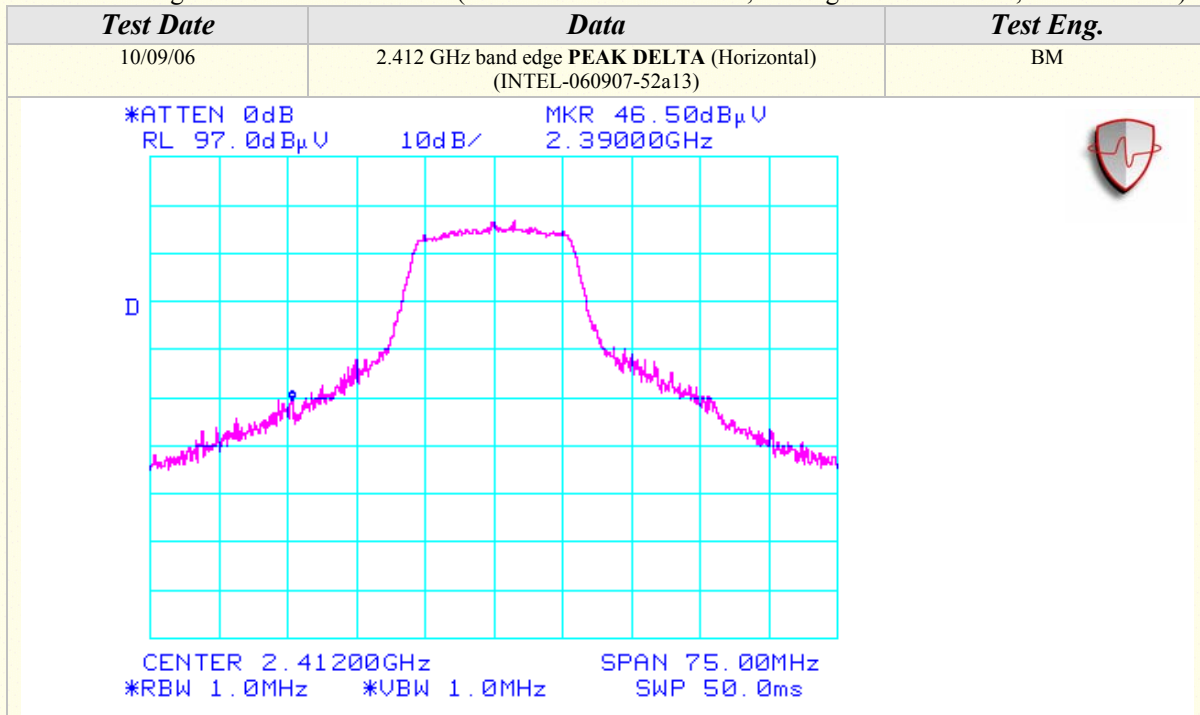
**RADIATED EMISSIONS - Vertical Antenna Polarization**

Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)	Distance Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
2390.00	43.00	100	225		9.54	1.98	28.97	64.41	74.00	-9.59	<b>Ch. 1</b>
2390.00				23.83 A	9.54	1.98	28.97	45.24	54.00	-8.76	
2400.00	45.33	100	225		9.54	1.98	29.00	66.77	74.00	-7.23	
2483.50	46.50	100	225		9.54	2.02	29.25	68.23	74.00	-5.77	<b>Ch. 11</b>
2483.50				25.33 A	9.54	2.02	29.25	47.06	54.00	-6.94	

NOTE: The “Band Edge Field Strength” was calculated using the “Radiated Fundamental” measurements.


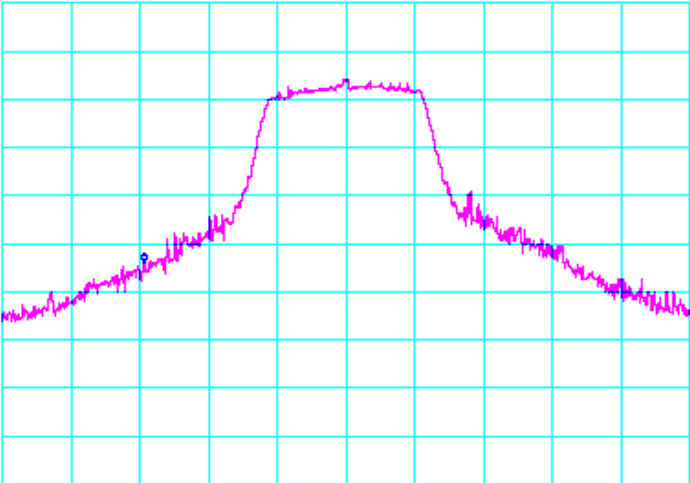

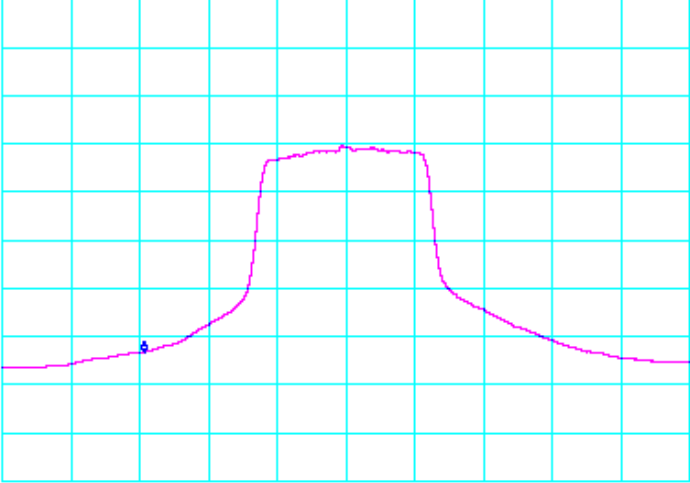
### Radiated Emissions Test Results (Continued)

Plots Showing Out-Of-Band Emissions (Peak RBW=VBW=1MHz; Average RBW = 1MHz, VBW = 10Hz)



### Radiated Emissions Test Results (Continued)

Plots Showing Out-Of-Band Emissions (Peak RBW=VBW=1MHz; Average RBW = 1MHz, VBW = 10Hz)

Test Date	Data	Test Eng.
10/09/06	2.412 GHz band edge <b>PEAK DELTA</b> (Vertical) (INTEL-060907-52a15)	BM
<div style="display: flex; justify-content: space-between;"> <div data-bbox="328 417 974 472"> <p>*ATTEN 0dB                                  MKR 43.00dBμV            RL 97.0dBμV                              10dB/                                  2.39000GHz</p> </div>  </div> <div style="text-align: center; margin-top: 20px;">  <p style="font-size: small; margin-top: 10px;">D</p> <p style="font-size: small; margin-top: 10px;">CENTER 2.41200GHz                                  SPAN 75.00MHz            *RBW 1.0MHz                                  *UBW 1.0MHz                                  SWP 50.0ms</p> </div>		
Test Date	Data	Test Eng.
10/09/06	2.412 GHz band edge <b>AVERAGE DELTA</b> (Vertical) (INTEL-060907-52a16)	BM
<div style="display: flex; justify-content: space-between;"> <div data-bbox="328 1131 974 1186"> <p>*ATTEN 0dB                                  MKR 23.83dBμV            RL 97.0dBμV                              10dB/                                  2.39000GHz</p> </div>  </div> <div style="text-align: center; margin-top: 20px;">  <p style="font-size: small; margin-top: 10px;">D</p> <p style="font-size: small; margin-top: 10px;">CENTER 2.41200GHz                                  SPAN 75.00MHz            *RBW 1.0MHz                                  *UBW 10Hz                                  SWP 28.0sec</p> </div>		







Radiated Emissions Test Results (Continued)

*Spurious Emissions Measurements in 802.11n mode 20MHz Wide (2400-2483.5 MHz)  
 Channels 1, 6, & 11  
 Continuous TX at Chain A Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-44*

**RADIATED EMISSIONS - Horizontal Antenna Polarization**

Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)	Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments	
9648.00	57.00	100	225			50.15	6.56	38.12	51.52	85.45	-33.93	<b>Ch. 1</b>
9747.96	55.83	100	180			50.19	6.60	38.20	50.44	86.55	-36.11	<b>Ch. 6</b>
9848.01	57.33	100	180			50.23	6.64	38.28	52.02	84.31	-32.29	<b>Ch. 11</b>

**RADIATED EMISSIONS - Vertical Antenna Polarization**

Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)	Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments	
9647.62	55.33	100	180			50.15	6.56	38.09	49.82	83.16	-33.34	<b>Ch. 1</b>
9747.82	55.00	100	180			50.19	6.60	38.15	49.56	85.07	-35.51	<b>Ch. 6</b>
9848.28	54.50	100	180			50.23	6.64	38.21	49.12	83.66	-34.54	<b>Ch. 11</b>

Radiated Emissions Test Results (Continued)

*Fundamental Measurements in 802.11n mode 20MHz Wide (2400-2483.5 MHz)  
 Channels 1, 6, & 11  
 Continuous TX at Chain B Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-53*

<b>RADIATED EMISSIONS - Horizontal Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Distance Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
2412.00	80.67	100	180			9.54	3.19	29.50	103.82			<b>Ch. 1</b>
2412.00				66.17	A	9.54	3.19	29.50	89.32			
2437.00	85.33	100	135			9.54	3.20	29.59	108.58			<b>Ch. 6</b>
2437.00				70.83	A	9.54	3.20	29.59	94.08			
2462.00	81.17	100	180			9.54	3.22	29.67	104.52			<b>Ch. 11</b>
2462.00				66.33	A	9.54	3.22	29.67	89.68			

<b>RADIATED EMISSIONS - Vertical Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Distance Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
2412.00	77.83	100	180			9.54	3.19	29.04	100.51			<b>Ch. 1</b>
2412.00				63.33	A	9.54	3.19	29.04	86.01			
2437.00	81.33	100	180			9.54	3.20	29.11	104.11			<b>Ch. 6</b>
2437.00				67.00	A	9.54	3.20	29.11	89.78			
2462.00	77.17	100	180			9.54	3.22	29.19	100.04			<b>Ch. 11</b>
2462.00				64.00	A	9.54	3.22	29.19	86.87			

NOTE: Fundamental signals measured at 1 meter and extrapolated to 3 meters to calculate the radiated band edge field strengths.

Radiated Emissions Test Results (Continued)

*Band Edge Field Strength Measurements in 802.11n mode 20MHz Wide (2400-2483.5 MHz)  
 Channels 1 & 11  
 Continuous TX at Chain B Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-53*

**RADIATED EMISSIONS - Horizontal Antenna Polarization**

Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Distance Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
2390.00	44.00	100	180			9.54	3.17	29.43	67.06	74.00	-6.94	<b>Ch. 1</b>
2390.00				25.33	A	9.54	3.17	29.43	48.39	54.00	-5.61	
2400.00	45.83	100	180			9.54	3.18	29.46	68.93	74.00	-5.07	
2483.50	44.50	100	180			9.54	3.24	29.74	67.94	74.00	-6.06	<b>Ch. 11</b>
2483.50				24.67	A	9.54	3.24	29.74	48.11	54.00	-5.89	

**RADIATED EMISSIONS - Vertical Antenna Polarization**

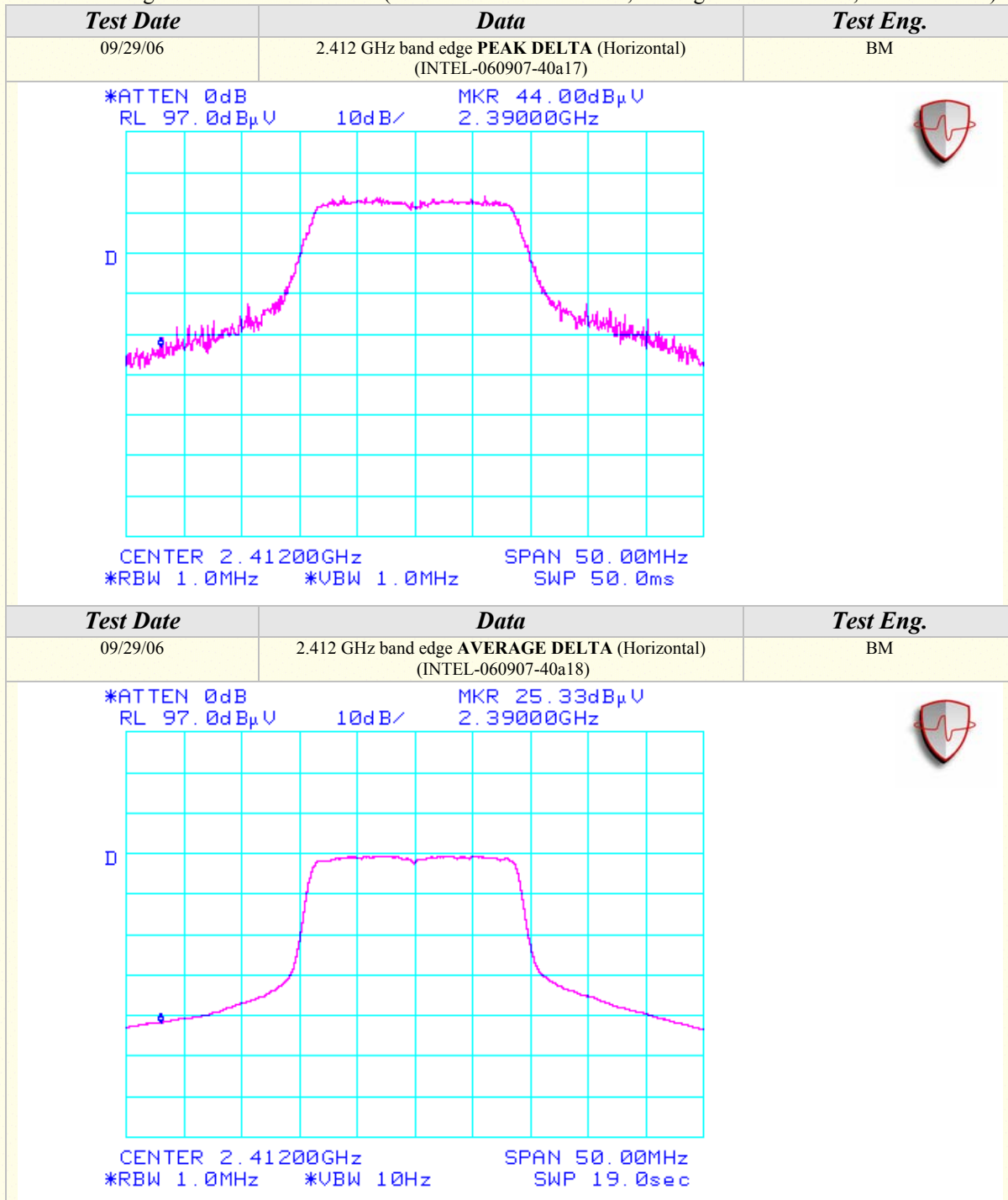
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Distance Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
2390.00	41.50	100	180			9.54	3.17	28.97	64.10	74.00	-9.90	<b>Ch. 1</b>
2390.00				22.33	A	9.54	3.17	28.97	44.93	54.00	-9.07	
2400.00	43.17	100	180			9.54	3.18	29.00	65.81	74.00	-8.19	
2483.50	43.83	100	180			9.54	3.24	29.25	66.78	74.00	-7.22	<b>Ch. 11</b>
2483.50				22.67	A	9.54	3.24	29.25	45.62	54.00	-8.38	

NOTE: The “Band Edge Field Strength” was calculated using the “Radiated Fundamental” measurements.



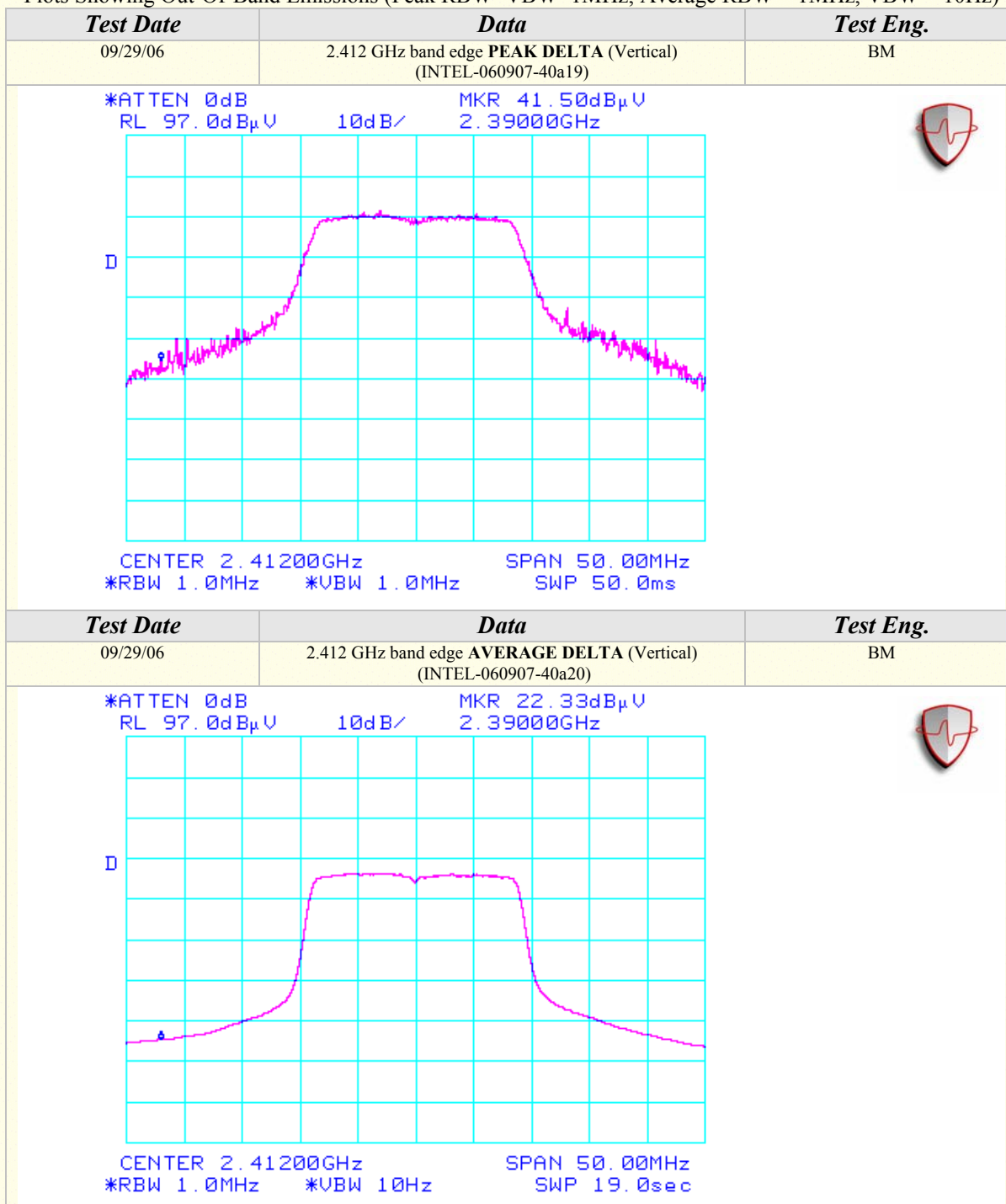
### Radiated Emissions Test Results (Continued)

Plots Showing Out-Of-Band Emissions (Peak RBW=VBW=1MHz; Average RBW = 1MHz, VBW = 10Hz)



## Radiated Emissions Test Results (Continued)

Plots Showing Out-Of-Band Emissions (Peak RBW=VBW=1MHz; Average RBW = 1MHz, VBW = 10Hz)









Radiated Emissions Test Results (Continued)

*Spurious Emissions Measurements in 802.11g mode (2400-2483.5 MHz)  
 Channels 1, 6, & 11  
 Continuous TX at Chain B Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-43*

**RADIATED EMISSIONS - Horizontal Antenna Polarization**

Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)	Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments	
9648.00	56.83	100	225			50.15	6.56	38.12	51.35	83.82	-32.47	<b>Ch. 1</b>
9747.96	55.50	100	180			50.19	6.60	38.20	50.11	88.58	-38.47	<b>Ch. 6</b>
9848.01	56.67	100	180			50.23	6.64	38.28	51.36	84.52	-33.16	<b>Ch. 11</b>

**RADIATED EMISSIONS - Vertical Antenna Polarization**

Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)	Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments	
9647.62	56.00	100	180			50.15	6.56	38.09	50.49	80.51	-30.02	<b>Ch. 1</b>
9747.82	55.33	100	180			50.19	6.60	38.15	49.89	84.11	-34.22	<b>Ch. 6</b>
9848.28	55.00	100	180			50.23	6.64	38.21	49.62	80.04	-30.42	<b>Ch. 11</b>

Radiated Emissions Test Results (Continued)

*Fundamental Measurements in 802.11n mode 20MHz Wide (2400-2483.5 MHz)  
 Channels 1, 6, & 11  
 Continuous TX at Dual Chain AB Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-54*

<b>RADIATED EMISSIONS - Horizontal Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Distance Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
2412.00	85.67	125	225			9.54	1.99	29.50	107.62			<b>Ch. 1</b>
2412.00				65.83	A	9.54	1.99	29.50	87.78			
2437.00	86.50	100	225			9.54	2.00	29.59	108.55			<b>Ch. 6</b>
2437.00				65.00	A	9.54	2.00	29.59	87.05			
2462.00	86.17	125	225			9.54	2.01	29.67	108.31			<b>Ch. 11</b>
2462.00				66.00	A	9.54	2.01	29.67	88.14			

<b>RADIATED EMISSIONS - Vertical Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Distance Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
2412.00	84.83	100	225			9.54	1.99	29.04	106.32			<b>Ch. 1</b>
2412.00				65.00	A	9.54	1.99	29.04	86.49			
2437.00	84.00	100	225			9.54	2.00	29.11	105.57			<b>Ch. 6</b>
2437.00				63.50	A	9.54	2.00	29.11	85.07			
2462.00	83.50	100	225			9.54	2.01	29.19	105.16			<b>Ch. 11</b>
2462.00				63.00	A	9.54	2.01	29.19	84.66			

NOTE: Fundamental signals measured at 1 meter and extrapolated to 3 meters to calculate the radiated band edge field strengths.

Radiated Emissions Test Results (Continued)

*Band Edge Field Strength Measurements in 802.11n mode 20MHz Wide (2400-2483.5 MHz)  
 Channels 1 & 11  
 Continuous TX at Dual Chain AB Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-54*

<b>RADIATED EMISSIONS - Horizontal Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Distance Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
2390.00	47.50	125	225			9.54	1.98	29.43	69.37	74.00	-4.63	<b>Ch. 1</b>
2390.00				28.00	A	9.54	1.98	29.43	49.87	54.00	-4.13	
2400.00	44.17	125	225			9.54	1.98	29.46	66.07	87.62	-21.55	
2483.50	50.50	125	225			9.54	2.02	29.74	72.73	74.00	-1.27	<b>Ch. 11</b>
2483.50				28.83	A	9.54	2.02	29.74	51.06	54.00	-2.94	

<b>RADIATED EMISSIONS - Vertical Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Distance Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
2390.00	46.50	100	225			9.54	1.98	28.97	67.91	74.00	-6.09	<b>Ch. 1</b>
2390.00				28.00	A	9.54	1.98	28.97	49.41	54.00	-4.59	
2400.00	45.33	100	225			9.54	1.98	29.00	66.77	86.32	-19.54	
2483.50	45.00	100	225			9.54	2.02	29.25	66.73	74.00	-7.27	<b>Ch. 11</b>
2483.50				25.33	A	9.54	2.02	29.25	47.06	54.00	-6.94	

NOTE: The “Band Edge Field Strength” was calculated using the “Radiated Fundamental” measurements.













Radiated Emissions Test Results (Continued)

*Spurious Emissions Measurements in 802.11n mode 20MHz Wide (2400-2483.5 MHz)  
 Channels 1, 6, & 11  
 Continuous TX at Dual Chain AB Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-55*

**RADIATED EMISSIONS - Horizontal Antenna Polarization**

Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)	Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments	
9648.00	56.50	100	225			50.15	6.56	38.12	51.02	87.62	-36.60	<b>Ch. 1</b>
9747.96	56.17	100	180			50.19	6.60	38.20	50.78	88.55	-37.77	<b>Ch. 6</b>
9848.01	58.67	100	225			50.23	6.64	38.28	53.36	88.31	-34.95	<b>Ch. 11</b>

**RADIATED EMISSIONS - Vertical Antenna Polarization**

Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)	Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments	
9647.62	56.17	100	180			50.15	6.56	38.09	50.66	86.32	-35.66	<b>Ch. 1</b>
9747.82	55.83	100	180			50.19	6.60	38.15	50.39	85.57	-35.18	<b>Ch. 6</b>
9848.28	57.00	100	180			50.23	6.64	38.21	51.62	85.16	-33.54	<b>Ch. 11</b>



## RADIATED EMISSIONS TEST RESULTS

<b>CLIENT:</b>	Intel Corporation	<b>DATE:</b>	10/06/06
<b>EUT:</b>	Intel PRO/Wireless 4965AGN Network Connection	<b>PROJECT NUMBER:</b>	INTEL-060907
<b>MODEL NUMBER:</b>	4965AGN	<b>TEST ENGINEER:</b>	BM/JC
<b>SERIAL NUMBER:</b>	0013E804612B	<b>SITE #:</b>	2
<b>CONFIGURATION:</b>	Tested installed in the host computer's mini PCI slot in <b>802.11n (5745-5825 MHz) mode 20MHz Wide with Ethertronics Antennas.</b>	<b>TEMPERATURE:</b>	16 deg. C
		<b>HUMIDITY:</b>	60% RH
		<b>TIME:</b>	4:30 PM

<b>Description:</b>	Radiated RF Emissions (1 GHz – 18 GHz)
<b>Results:</b>	<b>PASSED</b> Horizontal and Vertical Antenna Polarizations Class B Limits
<b>Note:</b>	Radiated Emissions Measurements were performed on the EUT with power supply set at the following voltage and frequency. <ul style="list-style-type: none"> <li>• 120VAC / 60 Hz.</li> </ul>

Unwanted Spurious Emissions Limits			
Frequency (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m) (Emissions in the restricted bands)	Field Strength (dBm/MHz) (Emissions outside the restricted bands)
Above 960	500	54.00 (Average) 74.00 (Peak)	< -20 dBc

### Radiated Emissions Sample Calculations

$$\text{Corrected Meter Reading} = \text{Meter Reading} + F + C - D$$

Where, F = Antenna Factor

C = Cable Factor

G = Amplifier Gain

D = Distance Factor (if applicable)

Therefore, the equation for determining the Corrected Meter Reading Limit (CML) is:

$$\text{CML} = \text{Specification Limit} - F - C + D$$

Radiated Emissions Test Results (Continued)

*Fundamental Measurements in 802.11n mode 20MHz Wide (5745-5825 MHz)  
 Channels 149, 157, & 165  
 Continuous TX at Chain A Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-52*

<b>RADIATED EMISSIONS - Horizontal Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Distance Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
5745.00	77.17	100	135			9.54	3.15	35.25	106.03			<b>Ch. 149</b>
5745.00				63.00	A	9.54	3.15	35.25	91.86			
5785.00	71.00	100	135			9.54	3.17	35.26	99.88			<b>Ch. 157</b>
5785.00				57.50	A	9.54	3.17	35.26	86.38			
5825.00	77.33	100	135			9.54	3.18	35.27	106.23			<b>Ch. 165</b>
5825.00				62.50	A	9.54	3.18	35.27	91.40			

<b>RADIATED EMISSIONS - Vertical Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Distance Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
5745.00	71.50	100	135			9.54	3.15	35.05	100.16			<b>Ch. 149</b>
5745.00				57.50	A	9.54	3.15	35.05	86.16			
5785.00	77.17	100	135			9.54	3.17	35.07	105.87			<b>Ch. 157</b>
5785.00				63.00	A	9.54	3.17	35.07	91.70			
5825.00	74.00	100	180			9.54	3.18	35.10	102.73			<b>Ch. 165</b>
5825.00				59.50	A	9.54	3.18	35.10	88.23			

NOTE: Fundamental signals measured at 1 meter and extrapolated to 3 meters to calculate the radiated band edge field strengths.

Radiated Emissions Test Results (Continued)

*Band Edge Field Strength Measurements in 802.11n mode 20MHz Wide (5745-5825 MHz)  
 Channels 149 & 165  
 Continuous TX at Chain A Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-52*

**RADIATED EMISSIONS - Horizontal Antenna Polarization**

<i>Freq. (MHz)</i>	<i>Meter Reading (dBuV)</i>	<i>Antenna Height (cm)</i>	<i>Azimuth (degrees)</i>	<i>Quasi pk or AVG (dBuV)</i>	<i>Distance Factor (dB)</i>	<i>Cable Factor (dB)</i>	<i>Ant. Factor (dB)</i>	<i>Corrected Reading (dBuV)</i>	<i>Limits (dBuV)</i>	<i>Diff (dB) +=FAIL</i>	<i>Comments</i>
5725.00	51.83	100	135		9.54	3.15	35.25	80.68	86.03	-5.35	<b>Ch. 149</b>
5850.00	40.67	100	135		9.54	3.19	35.27	69.59	86.23	-16.65	<b>Ch. 165</b>

**RADIATED EMISSIONS - Vertical Antenna Polarization**

<i>Freq. (MHz)</i>	<i>Meter Reading (dBuV)</i>	<i>Antenna Height (cm)</i>	<i>Azimuth (degrees)</i>	<i>Quasi pk or AVG (dBuV)</i>	<i>Distance Factor (dB)</i>	<i>Cable Factor (dB)</i>	<i>Ant. Factor (dB)</i>	<i>Corrected Reading (dBuV)</i>	<i>Limits (dBuV)</i>	<i>Diff (dB) +=FAIL</i>	<i>Comments</i>
5725.00	47.00	100	135		9.54	3.15	35.04	75.64	80.16	-4.52	<b>Ch. 149</b>
5850.00	39.17	100	180		9.54	3.19	35.11	67.93	82.73	-14.81	<b>Ch. 165</b>

NOTE: The “Band Edge Field Strength” was calculated using the “Radiated Fundamental” measurements.









Radiated Emissions Test Results (Continued)

*Spurious Emissions Measurements in 802.11n mode 20MHz Wide (5745-5825 MHz)  
Channels 149, 157, & 165  
Continuous TX at Chain A Antenna port with Ethertronics Antennas  
Aegis Labs, Inc. File #: INTEL-060907-44*

<b>RADIATED EMISSIONS - Horizontal Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
3830.04	38.50	100	180			50.78	4.05	33.13	24.90	74.00	-49.10	<b>Ch. 149</b>
3830.04				51.62	A	50.78	4.05	33.13	38.02	54.00	-15.98	
7659.98	60.33	100	180			50.15	5.81	37.40	53.39	74.00	-20.61	
7659.98				55.35	A	50.15	5.81	37.40	48.41	54.00	-5.59	
11490.00	68.52	100	225			50.53	7.41	39.19	64.60	74.00	-9.40	
11490.00				54.33	A	50.53	7.41	39.19	50.41	54.00	-3.59	
3856.44	59.17	180	135			50.78	4.07	33.18	45.64	74.00	-28.36	<b>Ch. 157</b>
3856.44				53.15	A	50.78	4.07	33.18	39.62	54.00	-14.38	
7713.41	58.67	100	225			50.14	5.83	37.43	51.79	74.00	-22.21	
7713.41				52.44	A	50.14	5.83	37.43	45.56	54.00	-8.44	
11570.06	66.17	100	180			50.58	7.42	39.23	62.23	74.00	-11.77	
11570.06				50.22	A	50.58	7.42	39.23	46.28	54.00	-7.72	
3883.18	59.33	100	225			50.78	4.08	33.24	45.87	74.00	-28.13	<b>Ch.165</b>
3883.18				53.01	A	50.78	4.08	33.24	39.55	54.00	-14.45	
7766.65	58.50	100	225			50.13	5.85	37.46	51.68	74.00	-22.32	
7766.65				52.09	A	50.13	5.85	37.46	45.27	54.00	-8.73	

<b>RADIATED EMISSIONS - Vertical Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
3830.04	60.00	150	135			50.78	4.05	32.76	46.03	74.00	-27.97	<b>Ch. 149</b>
3830.04				54.27	A	50.78	4.05	32.76	40.30	54.00	-13.70	
7659.85	58.33	100	225			50.15	5.81	37.26	51.25	74.00	-22.75	
7659.85				51.57	A	50.15	5.81	37.26	44.49	54.00	-9.51	
11490.00	68.17	100	225			50.53	7.41	39.19	64.25	74.00	-9.75	
11490.00				53.63	A	50.53	7.41	39.19	49.71	54.00	-4.29	
3856.44	59.83	100	135			50.78	4.07	32.83	45.94	74.00	-28.06	<b>Ch. 157</b>
3856.44				53.78	A	50.78	4.07	32.83	39.89	54.00	-14.11	
7713.43	61.17	100	180			50.14	5.83	37.29	54.14	74.00	-19.86	
7713.43				55.73	A	50.14	5.83	37.29	48.70	54.00	-5.30	
11569.89	70.67	100	225			50.58	7.42	39.23	66.73	74.00	-7.27	
11569.89				54.20	A	50.58	7.42	39.23	50.26	54.00	-3.74	
3883.32	63.00	100	180			50.78	4.08	32.90	49.20	74.00	-24.80	<b>Ch.165</b>
3883.32				59.08	A	50.78	4.08	32.90	45.28	54.00	-8.72	
7766.74	60.67	100	180			50.13	5.85	37.31	53.70	74.00	-20.30	
7766.74				55.57	A	50.13	5.85	37.31	48.60	54.00	-5.40	
11649.61	64.67	100	225			50.64	7.42	39.26	60.71	74.00	-13.29	
11649.61				47.06	A	50.64	7.42	39.26	43.10	54.00	-10.90	

Radiated Emissions Test Results (Continued)

*Fundamental Measurements in 802.11n mode 20MHz Wide (5745-5825 MHz)  
 Channels 149, 157, & 165  
 Continuous TX at Chain B Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-53*

<b>RADIATED EMISSIONS - Horizontal Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Distance Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
5745.00	69.33	100	135			9.54	4.99	35.25	100.03			<b>Ch. 149</b>
5745.00				56.00	A	9.54	4.99	35.25	86.70			
5785.00	69.50	100	135			9.54	5.01	35.26	100.22			<b>Ch. 157</b>
5785.00				56.17	A	9.54	5.01	35.26	86.89			
5825.00	70.17	100	135			9.54	5.02	35.27	100.92			<b>Ch. 165</b>
5825.00				56.67	A	9.54	5.02	35.27	87.42			

<b>RADIATED EMISSIONS - Vertical Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Distance Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
5745.00	77.50	100	180			9.54	4.99	35.05	107.99			<b>Ch. 149</b>
5745.00				62.50	A	9.54	4.99	35.05	92.99			
5785.00	76.67	100	225			9.54	5.01	35.07	107.21			<b>Ch. 157</b>
5785.00				61.33	A	9.54	5.01	35.07	91.87			
5825.00	75.17	125	225			9.54	5.02	35.10	105.75			<b>Ch. 165</b>
5825.00				61.17	A	9.54	5.02	35.10	91.75			

NOTE: Fundamental signals measured at 1 meter and extrapolated to 3 meters to calculate the radiated band edge field strengths.

Radiated Emissions Test Results (Continued)

*Band Edge Field Strength Measurements in 802.11n mode 20MHz Wide (5745-5825 MHz)  
 Channels 149 & 165  
 Continuous TX at Chain B Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-53*

**RADIATED EMISSIONS - Horizontal Antenna Polarization**

<i>Freq. (MHz)</i>	<i>Meter Reading (dBuV)</i>	<i>Antenna Height (cm)</i>	<i>Azimuth (degrees)</i>	<i>Quasi pk or AVG (dBuV)</i>	<i>Distance Factor (dB)</i>	<i>Cable Factor (dB)</i>	<i>Ant. Factor (dB)</i>	<i>Corrected Reading (dBuV)</i>	<i>Limits (dBuV)</i>	<i>Diff (dB) +=FAIL</i>	<i>Comments</i>
5725.00	42.00	100	135		9.54	4.98	35.25	72.68	80.03	-7.34	<b>Ch. 149</b>
5850.00	35.00	100	135		9.54	5.03	35.27	65.76	80.92	-15.15	<b>Ch. 165</b>

**RADIATED EMISSIONS - Vertical Antenna Polarization**

<i>Freq. (MHz)</i>	<i>Meter Reading (dBuV)</i>	<i>Antenna Height (cm)</i>	<i>Azimuth (degrees)</i>	<i>Quasi pk or AVG (dBuV)</i>	<i>Distance Factor (dB)</i>	<i>Cable Factor (dB)</i>	<i>Ant. Factor (dB)</i>	<i>Corrected Reading (dBuV)</i>	<i>Limits (dBuV)</i>	<i>Diff (dB) +=FAIL</i>	<i>Comments</i>
5725.00	49.83	100	180		9.54	4.98	35.04	80.30	87.99	-7.69	<b>Ch. 149</b>
5850.00	38.83	125	225		9.54	5.03	35.11	69.43	85.75	-16.31	<b>Ch. 165</b>

NOTE: The “Band Edge Field Strength” was calculated using the “Radiated Fundamental” measurements.





## Radiated Emissions Test Results (Continued)

*Spurious Emissions Measurements in 802.11n mode 20MHz Wide (5745-5825 MHz)*  
*Channels 149, 157, & 165*  
*Continuous TX at Chain B Antenna port with Ethertronics Antennas*  
*Aegis Labs, Inc. File #: INTEL-060907-43*

<b>RADIATED EMISSIONS - Horizontal Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
3830.04	57.17	100	180			50.78	4.05	33.13	43.57	74.00	-30.43	<b>Ch. 149</b>
3830.04				49.25	A	50.78	4.05	33.13	35.65	54.00	-18.35	
11490.00	60.17	100	180			50.53	7.41	39.19	56.25	74.00	-17.75	
11490.00				45.76	A	50.53	7.41	39.19	41.84	54.00	-12.16	
3856.44	56.33	100	180			50.78	4.07	33.18	42.80	74.00	-31.20	<b>Ch. 157</b>
3856.44				47.59	A	50.78	4.07	33.18	34.06	54.00	-19.94	
11570.06	56.50	100	225			50.58	7.42	39.23	52.56	74.00	-21.44	
11570.06				44.35	A	50.58	7.42	39.23	40.41	54.00	-13.59	
3883.18	57.00	100	225			50.78	4.08	33.24	43.54	74.00	-30.46	<b>Ch.165</b>
3883.18				47.75	A	50.78	4.08	33.24	34.29	54.00	-19.71	
11650.00	56.50	100	180			50.64	7.42	39.26	52.54	74.00	-21.46	
11650.00				44.46	A	50.64	7.42	39.26	40.50	54.00	-13.50	

<b>RADIATED EMISSIONS - Vertical Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
3830.04	57.17	100	225			50.78	4.05	32.76	43.20	74.00	-30.80	<b>Ch. 149</b>
3830.04				48.59	A	50.78	4.05	32.76	34.62	54.00	-19.38	
11490.00	61.50	100	225			50.53	7.41	39.19	57.58	74.00	-16.42	
11490.00				48.98	A	50.53	7.41	39.19	45.06	54.00	-8.94	
3856.44	56.50	100	225			50.78	4.07	32.83	42.61	74.00	-31.39	<b>Ch. 157</b>
3856.44				47.47	A	50.78	4.07	32.83	33.58	54.00	-20.42	
11569.89	58.33	100	180			50.58	7.42	39.23	54.39	74.00	-19.61	
11569.89				45.82	A	50.58	7.42	39.23	41.88	54.00	-12.12	
3883.32	56.83	100	225			50.78	4.08	32.90	43.03	74.00	-30.97	<b>Ch.165</b>
3883.32				48.03	A	50.78	4.08	32.90	34.23	54.00	-19.77	
11649.61	57.17	100	180			50.64	7.42	39.26	53.21	74.00	-20.79	
11649.61				43.91	A	50.64	7.42	39.26	39.95	54.00	-14.05	



Radiated Emissions Test Results (Continued)

*Fundamental Measurements in 802.11n mode 20MHz Wide (5745-5825 MHz)  
 Channels 149, 157, & 165  
 Continuous TX at Dual Chain AB Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-54*

<b>RADIATED EMISSIONS - Horizontal Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Distance Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
5745.00	73.17	100	225			9.54	3.15	35.25	102.03			<b>Ch. 149</b>
5745.00				54.83	A	9.54	3.15	35.25	83.69			
5785.00	73.83	100	225			9.54	3.17	35.26	102.71			<b>Ch. 157</b>
5785.00				54.83	A	9.54	3.17	35.26	83.71			
5825.00	74.17	100	225			9.54	3.18	35.27	103.07			<b>Ch. 165</b>
5825.00				55.17	A	9.54	3.18	35.27	84.07			

<b>RADIATED EMISSIONS - Vertical Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Distance Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
5745.00	80.67	100	225			9.54	3.15	35.05	109.33			<b>Ch. 149</b>
5745.00				60.83	A	9.54	3.15	35.05	89.49			
5785.00	82.00	100	225			9.54	3.17	35.07	110.70			<b>Ch. 157</b>
5785.00				60.83	A	9.54	3.17	35.07	89.53			
5825.00	80.33	100	225			9.54	3.18	35.10	109.06			<b>Ch. 165</b>
5825.00				60.83	A	9.54	3.18	35.10	89.56			

NOTE: Fundamental signals measured at 1 meter and extrapolated to 3 meters to calculate the radiated band edge field strengths.



Radiated Emissions Test Results (Continued)

*Band Edge Field Strength Measurements in 802.11n mode 20MHz Wide (5745-5825 MHz)  
 Channels 149 & 165  
 Continuous TX at Dual Chain AB Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-54*

**RADIATED EMISSIONS - Horizontal Antenna Polarization**

<i>Freq. (MHz)</i>	<i>Meter Reading (dBuV)</i>	<i>Antenna Height (cm)</i>	<i>Azimuth (degrees)</i>	<i>Quasi pk or AVG (dBuV)</i>	<i>Distance Factor (dB)</i>	<i>Cable Factor (dB)</i>	<i>Ant. Factor (dB)</i>	<i>Corrected Reading (dBuV)</i>	<i>Limits (dBuV)</i>	<i>Diff (dB) +=FAIL</i>	<i>Comments</i>
5725.00	41.33	100	225		9.54	3.15	35.25	70.18	82.03	-11.85	<b>Ch. 149</b>
5850.00	32.83	100	225		9.54	3.19	35.27	61.75	83.07	-21.33	<b>Ch. 165</b>

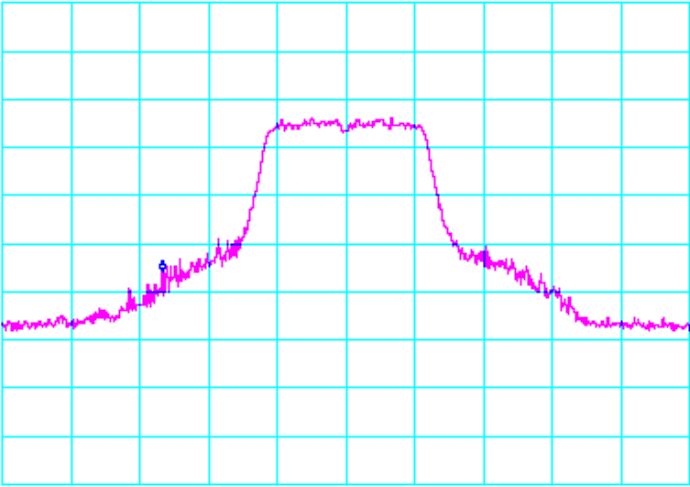
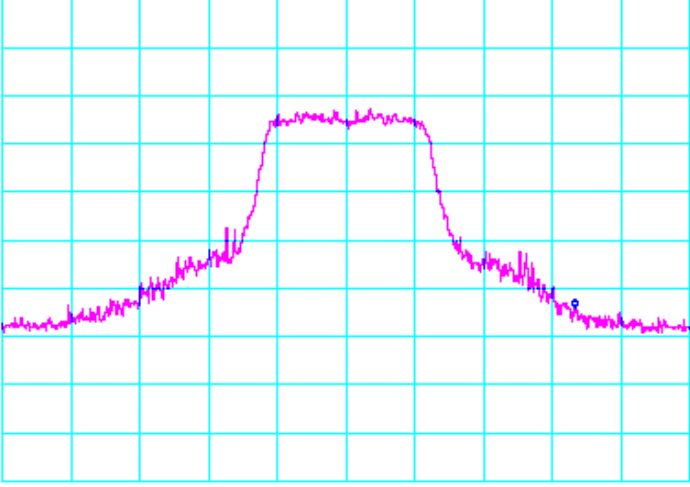
**RADIATED EMISSIONS - Vertical Antenna Polarization**

<i>Freq. (MHz)</i>	<i>Meter Reading (dBuV)</i>	<i>Antenna Height (cm)</i>	<i>Azimuth (degrees)</i>	<i>Quasi pk or AVG (dBuV)</i>	<i>Distance Factor (dB)</i>	<i>Cable Factor (dB)</i>	<i>Ant. Factor (dB)</i>	<i>Corrected Reading (dBuV)</i>	<i>Limits (dBuV)</i>	<i>Diff (dB) +=FAIL</i>	<i>Comments</i>
5725.00	44.83	100	225		9.54	3.15	35.04	73.47	89.33	-15.86	<b>Ch. 149</b>
5850.00	38.33	100	225		9.54	3.19	35.11	67.09	89.06	-21.98	<b>Ch. 165</b>

NOTE: The “Band Edge Field Strength” was calculated using the “Radiated Fundamental” measurements.

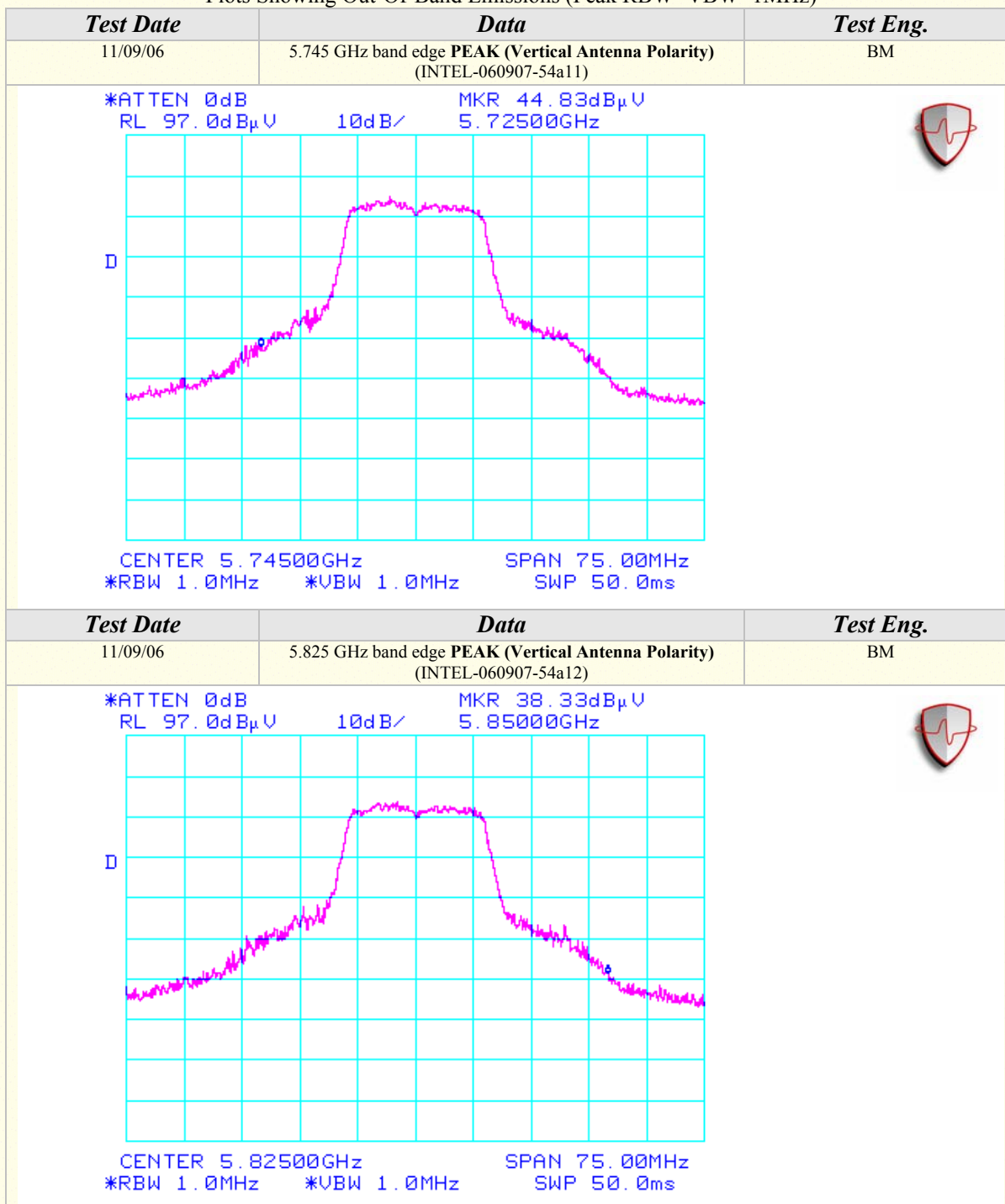
### Radiated Emissions Test Results (Continued)

Plots Showing Out-Of-Band Emissions (Peak RBW=VBW=1MHz)

<i><b>Test Date</b></i>	<i><b>Data</b></i>	<i><b>Test Eng.</b></i>
11/09/06	5.745 GHz band edge <b>PEAK (Horizontal Antenna Polarity)</b> (INTEL-060907-54a09)	BM
<p>*ATTEN 0dB                               MKR 41.33dBµV RL 97.0dBµV               10dB/           5.72500GHz</p>  <p>CENTER 5.74500GHz                       SPAN 75.00MHz *RBW 1.0MHz           *VBW 1.0MHz           SWP 50.0ms</p>		
<i><b>Test Date</b></i>	<i><b>Data</b></i>	<i><b>Test Eng.</b></i>
11/09/06	5.825 GHz band edge <b>PEAK (Horizontal Antenna Polarity)</b> (INTEL-060907-54a10)	BM
<p>*ATTEN 0dB                               MKR 32.83dBµV RL 97.0dBµV               10dB/           5.85000GHz</p>  <p>CENTER 5.82500GHz                       SPAN 75.00MHz *RBW 1.0MHz           *VBW 1.0MHz           SWP 50.0ms</p>		

## Radiated Emissions Test Results (Continued)

Plots Showing Out-Of-Band Emissions (Peak RBW=VBW=1MHz)





Radiated Emissions Test Results (Continued)

*Spurious Emissions Measurements in 802.11n mode 20MHz Wide (5745-5825 MHz)  
Channels 149, 157, & 165  
Continuous TX at Dual Chain AB Antenna port with Ethertronics Antennas  
Aegis Labs, Inc. File #: INTEL-060907-55*

<b>RADIATED EMISSIONS - Horizontal Antenna Polarization</b>												
<i>Freq. (MHz)</i>	<i>Meter Reading (dBuV)</i>	<i>Antenna Height (cm)</i>	<i>Azimuth (degrees)</i>	<i>Quasi pk or AVG (dBuV)</i>		<i>Preamp Factor (dB)</i>	<i>Cable Factor (dB)</i>	<i>Ant. Factor (dB)</i>	<i>Corrected Reading (dBuV)</i>	<i>Limits (dBuV)</i>	<i>Diff (dB) +=FAIL</i>	<i>Comments</i>
3830.01	57.17	100	225			50.78	4.05	33.13	43.57	74.00	-30.43	<b>Ch. 149</b>
3830.01				47.68	A	50.78	4.05	33.13	34.08	54.00	-19.92	
7659.98	60.50	125	270			50.15	5.81	37.40	53.56	74.00	-20.44	
7659.98				54.46	A	50.15	5.81	37.40	47.52	54.00	-6.48	
11490.00	59.67	100	225			50.53	7.41	39.19	55.75	74.00	-18.25	
11490.00				47.12	A	50.53	7.41	39.19	43.20	54.00	-10.80	
3856.44	57.67	100	225			50.78	4.07	33.18	44.14	74.00	-29.86	<b>Ch. 157</b>
3856.44				48.93	A	50.78	4.07	33.18	35.40	54.00	-18.60	
7713.41	60.67	150	270			50.14	5.83	37.43	53.79	74.00	-20.21	
7713.41				54.55	A	50.14	5.83	37.43	47.67	54.00	-6.33	
11570.06	58.17	100	180			50.58	7.42	39.23	54.23	74.00	-19.77	
11570.06				45.04	A	50.58	7.42	39.23	41.10	54.00	-12.90	
3883.18	59.33	100	225			50.78	4.08	33.24	45.87	74.00	-28.13	<b>Ch.165</b>
3883.18				51.76	A	50.78	4.08	33.24	38.30	54.00	-15.70	
7766.65	59.67	150	270			50.13	5.85	37.46	52.85	74.00	-21.15	
7766.65				52.91	A	50.13	5.85	37.46	46.09	54.00	-7.91	
11650.02	57.83	100	225			50.64	7.42	39.26	53.87	74.00	-20.13	
11650.02				44.46	A	50.64	7.42	39.26	40.50	54.00	-13.50	



Radiated Emissions Test Results (Continued)

RADIATED EMISSIONS - Vertical Antenna Polarization												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
3830.04	59.83	100	180			50.78	4.05	32.76	45.86	74.00	-28.14	<b>Ch. 149</b>
3830.04				53.59	A	50.78	4.05	32.76	39.62	54.00	-14.38	
7659.85	59.00	100	180			50.15	5.81	37.26	51.92	74.00	-22.08	
7659.85				51.13	A	50.15	5.81	37.26	44.05	54.00	-9.95	
11490.00	67.50	100	180			50.53	7.41	39.19	63.58	74.00	-10.42	
11490.00				53.36	A	50.53	7.41	39.19	49.44	54.00	-4.56	
3856.44	60.17	100	135			50.78	4.07	32.83	46.28	74.00	-27.72	<b>Ch. 157</b>
3856.44				53.22	A	50.78	4.07	32.83	39.33	54.00	-14.67	
7713.43	60.00	100	180			50.14	5.83	37.29	52.97	74.00	-21.03	
7713.43				52.87	A	50.14	5.83	37.29	45.84	54.00	-8.16	
11569.89	67.17	100	180			50.58	7.42	39.23	63.23	74.00	-10.77	
11569.89				49.82	A	50.58	7.42	39.23	45.88	54.00	-8.12	
3883.32	60.67	125	135			50.78	4.08	32.90	46.87	74.00	-27.13	<b>Ch.165</b>
3883.32				55.01	A	50.78	4.08	32.90	41.21	54.00	-12.79	
7766.74	59.00	100	315			50.13	5.85	37.31	52.03	74.00	-21.97	
7766.74				51.87	A	50.13	5.85	37.31	44.90	54.00	-9.10	
11649.61	63.17	100	180			50.64	7.42	39.26	59.21	74.00	-14.79	
11649.61				46.39	A	50.64	7.42	39.26	42.43	54.00	-11.57	



## RADIATED EMISSIONS TEST RESULTS

<b>CLIENT:</b>	Intel Corporation	<b>DATE:</b>	10/06/06
<b>EUT:</b>	Intel PRO/Wireless 4965AGN Network Connection	<b>PROJECT NUMBER:</b>	INTEL-060907
<b>MODEL NUMBER:</b>	4965AGN	<b>TEST ENGINEER:</b>	BM/JC
<b>SERIAL NUMBER:</b>	0013E804612B	<b>SITE #:</b>	2
<b>CONFIGURATION:</b>	Tested installed in the host computer's mini PCI slot in <b>802.11n (5745-5825 MHz) mode 40MHz Wide with Ethertronics Antennas.</b>	<b>TEMPERATURE:</b>	16 deg. C
		<b>HUMIDITY:</b>	60% RH
		<b>TIME:</b>	4:30 PM

<b>Description:</b>	Radiated RF Emissions (1 GHz – 18 GHz)
<b>Results:</b>	<b>PASSED</b> Horizontal and Vertical Antenna Polarizations Class B Limits
<b>Note:</b>	Radiated Emissions Measurements were performed on the EUT with power supply set at the following voltage and frequency. <ul style="list-style-type: none"> <li>• 120VAC / 60 Hz.</li> </ul>

Unwanted Spurious Emissions Limits			
Frequency (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m) (Emissions in the restricted bands)	Field Strength (dBm/MHz) (Emissions outside the restricted bands)
Above 960	500	54.00 (Average) 74.00 (Peak)	< -20 dBc

### Radiated Emissions Sample Calculations

$$\text{Corrected Meter Reading} = \text{Meter Reading} + F + C - D$$

Where, F = Antenna Factor

C = Cable Factor

G = Amplifier Gain

D = Distance Factor (if applicable)

Therefore, the equation for determining the Corrected Meter Reading Limit (CML) is:

$$\text{CML} = \text{Specification Limit} - F - C + D$$

Radiated Emissions Test Results (Continued)

*Fundamental Measurements in 802.11n mode 40MHz Wide (5745-5825 MHz)  
 Channels 151 & 159  
 Continuous TX at Chain A Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-52*

<b>RADIATED EMISSIONS - Horizontal Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Distance Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
5755.00	68.17	100	135			9.54	3.16	35.25	97.04			<b>Ch. 151</b>
5755.00				51.83	A	9.54	3.16	35.25	80.70			
5795.00	69.00	100	135			9.54	3.17	35.26	97.89			<b>Ch. 159</b>
5795.00				52.33	A	9.54	3.17	35.26	81.22			

<b>RADIATED EMISSIONS - Vertical Antenna Polarization</b>												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Distance Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
5755.00	75.50	100	135			9.54	3.16	35.05	104.17			<b>Ch. 151</b>
5755.00				57.00	A	9.54	3.16	35.05	85.67			
5795.00	73.67	100	180			9.54	3.17	35.08	102.38			<b>Ch. 159</b>
5795.00				56.17	A	9.54	3.17	35.08	84.88			

NOTE: Fundamental signals measured at 1 meter and extrapolated to 3 meters to calculate the radiated band edge field strengths.

Radiated Emissions Test Results (Continued)

*Band Edge Field Strength Measurements in 802.11n mode 40MHz Wide (5745-5825 MHz)  
 Channels 151 & 159  
 Continuous TX at Chain A Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-52*

**RADIATED EMISSIONS - Horizontal Antenna Polarization**

<i>Freq. (MHz)</i>	<i>Meter Reading (dBuV)</i>	<i>Antenna Height (cm)</i>	<i>Azimuth (degrees)</i>	<i>Quasi pk or AVG (dBuV)</i>	<i>Distance Factor (dB)</i>	<i>Cable Factor (dB)</i>	<i>Ant. Factor (dB)</i>	<i>Corrected Reading (dBuV)</i>	<i>Limits (dBuV)</i>	<i>Diff (dB) +=FAIL</i>	<i>Comments</i>
5725.00	42.83	100	135		9.54	3.15	35.25	71.68	77.04	-5.36	<b>Ch. 151</b>
5850.00	32.67	100	135		9.54	3.19	35.27	61.59	77.89	-16.30	<b>Ch. 159</b>

**RADIATED EMISSIONS - Vertical Antenna Polarization**

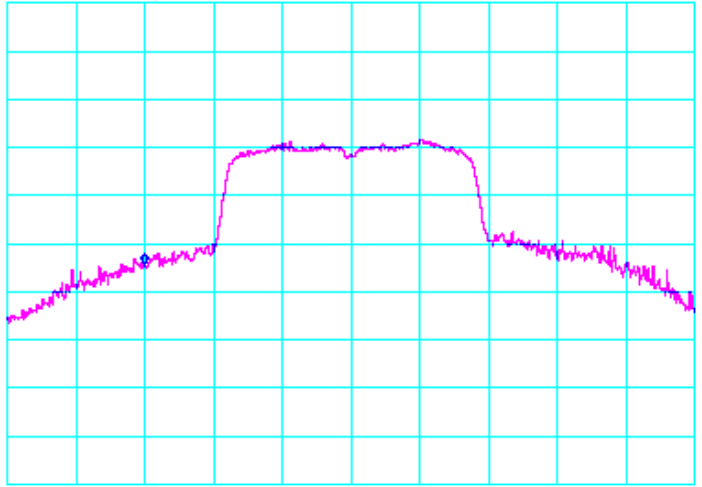
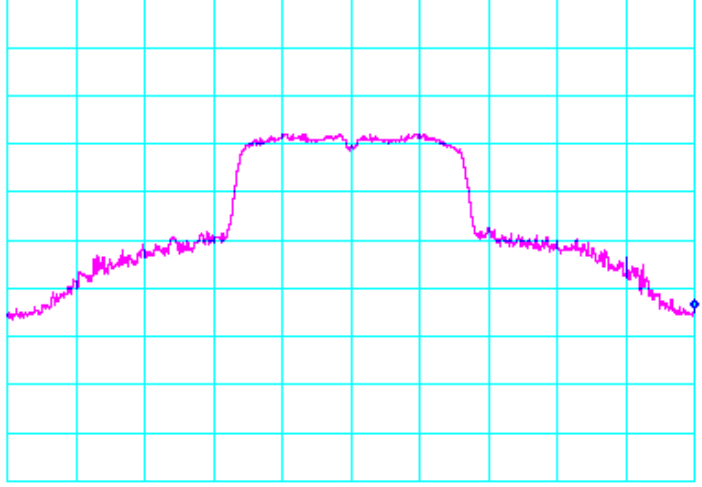
<i>Freq. (MHz)</i>	<i>Meter Reading (dBuV)</i>	<i>Antenna Height (cm)</i>	<i>Azimuth (degrees)</i>	<i>Quasi pk or AVG (dBuV)</i>	<i>Distance Factor (dB)</i>	<i>Cable Factor (dB)</i>	<i>Ant. Factor (dB)</i>	<i>Corrected Reading (dBuV)</i>	<i>Limits (dBuV)</i>	<i>Diff (dB) +=FAIL</i>	<i>Comments</i>
5725.00	51.33	100	135		9.54	3.15	35.04	79.97	84.17	-4.20	<b>Ch. 151</b>
5850.00	34.00	100	180		9.54	3.19	35.11	62.76	82.38	-19.62	<b>Ch. 159</b>

NOTE: The “Band Edge Field Strength” was calculated using the “Radiated Fundamental” measurements.



### Radiated Emissions Test Results (Continued)

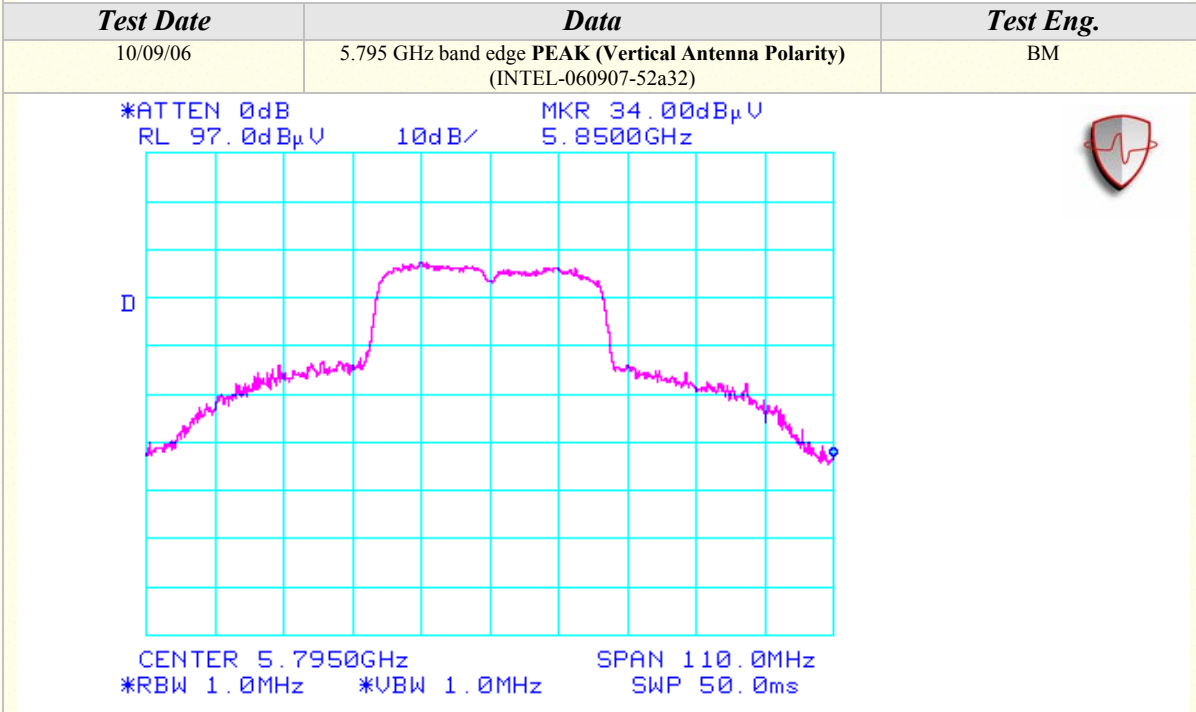
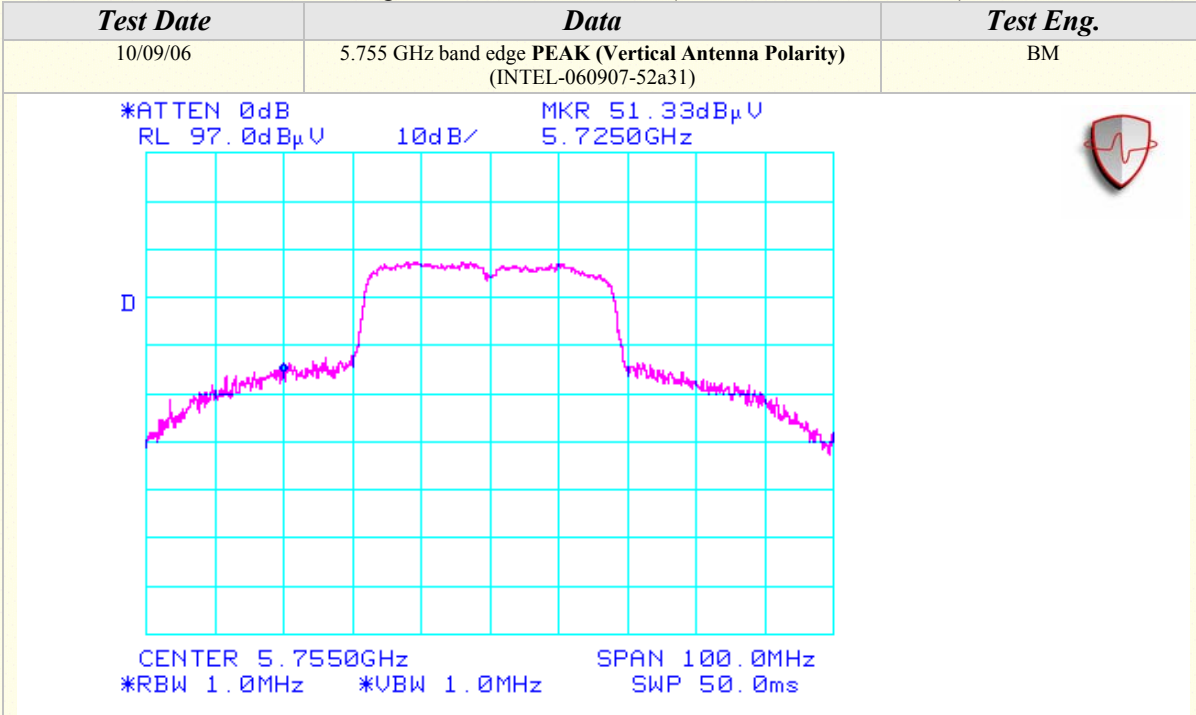
Plots Showing Out-Of-Band Emissions (Peak RBW=VBW=1MHz)

<i>Test Date</i>	<i>Data</i>	<i>Test Eng.</i>
10/09/06	5.755 GHz band edge <b>PEAK (Horizontal Antenna Polarity)</b> (INTEL-060907-52a29)	BM
<p>*ATTEN 0dB MKR 42.83dBμV RL 97.0dBμV 10dB/ 5.7250GHz</p>  <p>D</p> <p>CENTER 5.7550GHz SPAN 100.0MHz *RBW 1.0MHz *VBW 1.0MHz SWP 50.0ms</p>		
10/09/06	5.795 GHz band edge <b>PEAK (Horizontal Antenna Polarity)</b> (INTEL-060907-52a30)	BM
<p>*ATTEN 0dB MKR 32.67dBμV RL 97.0dBμV 10dB/ 5.8500GHz</p>  <p>D</p> <p>CENTER 5.7950GHz SPAN 110.0MHz *RBW 1.0MHz *VBW 1.0MHz SWP 50.0ms</p>		



### Radiated Emissions Test Results (Continued)

Plots Showing Out-Of-Band Emissions (Peak RBW=VBW=1MHz)





Radiated Emissions Test Results (Continued)

*Spurious Emissions Measurements in 802.11n mode 40MHz Wide (5745-5825 MHz)  
 Channels 151 & 159  
 Continuous TX at Chain A Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-44*

<b>RADIATED EMISSIONS - Horizontal Antenna Polarization</b>												
<i>Freq. (MHz)</i>	<i>Meter Reading (dBuV)</i>	<i>Antenna Height (cm)</i>	<i>Azimuth (degrees)</i>	<i>Quasi pk or AVG (dBuV)</i>		<i>Preamp Factor (dB)</i>	<i>Cable Factor (dB)</i>	<i>Ant. Factor (dB)</i>	<i>Corrected Reading (dBuV)</i>	<i>Limits (dBuV)</i>	<i>Diff (dB) +=FAIL</i>	<i>Comments</i>
3836.78	57.50	125	225			50.78	4.06	33.14	43.92	74.00	-30.08	<b>Ch. 151</b>
3836.78				51.54	A	50.78	4.06	33.14	37.96	54.00	-16.04	
7673.38	59.50	100	180			50.15	5.82	37.40	52.57	74.00	-21.43	
7673.38				53.01	A	50.15	5.82	37.40	46.08	54.00	-7.92	
11509.71	62.00	100	180			50.54	7.42	39.20	58.09	74.00	-15.91	
11509.71				47.71	A	50.54	7.42	39.20	43.80	54.00	-10.20	
3863.46	59.67	100	225			50.78	4.07	33.20	46.16	74.00	-27.84	<b>Ch.159</b>
3863.46				54.23	A	50.78	4.07	33.20	40.72	54.00	-13.28	
7726.79	60.00	100	180			50.14	5.84	37.44	53.13	74.00	-20.87	
7726.79				53.41	A	50.14	5.84	37.44	46.54	54.00	-7.46	
11589.56	60.50	100	180			50.60	7.42	39.24	56.56	74.00	-17.44	
11589.56				45.33	A	50.60	7.42	39.24	41.39	54.00	-12.61	

<b>RADIATED EMISSIONS - Vertical Antenna Polarization</b>												
<i>Freq. (MHz)</i>	<i>Meter Reading (dBuV)</i>	<i>Antenna Height (cm)</i>	<i>Azimuth (degrees)</i>	<i>Quasi pk or AVG (dBuV)</i>		<i>Preamp Factor (dB)</i>	<i>Cable Factor (dB)</i>	<i>Ant. Factor (dB)</i>	<i>Corrected Reading (dBuV)</i>	<i>Limits (dBuV)</i>	<i>Diff (dB) +=FAIL</i>	<i>Comments</i>
3836.81	58.50	125	180			50.78	4.06	32.78	44.55	74.00	-29.45	<b>Ch. 151</b>
3836.81				52.61	A	50.78	4.06	32.78	38.66	54.00	-15.34	
7673.41	61.00	100	180			50.15	5.82	37.27	53.94	74.00	-20.06	
7673.41				55.47	A	50.15	5.82	37.27	48.41	54.00	-5.59	
11509.66	66.67	100	180			50.54	7.42	39.20	62.76	74.00	-11.24	
11509.66				52.06	A	50.54	7.42	39.20	48.15	54.00	-5.85	
3863.44	60.67	100	180			50.78	4.07	32.84	46.81	74.00	-27.19	<b>Ch.159</b>
3863.44				55.45	A	50.78	4.07	32.84	41.59	54.00	-12.41	
7726.73	60.67	100	180			50.14	5.84	37.29	53.66	74.00	-20.34	
7726.73				55.01	A	50.14	5.84	37.29	48.00	54.00	-6.00	
11590.07	65.67	100	180			50.60	7.42	39.24	61.73	74.00	-12.27	
11590.07				50.28	A	50.60	7.42	39.24	46.34	54.00	-7.66	

Radiated Emissions Test Results (Continued)

*Spurious Emissions Measurements in 802.11n mode 40MHz Wide (5745-5825 MHz)  
 Channels 151 & 159  
 Continuous RX at Chain A Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-44*

**RADIATED EMISSIONS - Horizontal Antenna Polarization**

Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
3836.66	57.17	100	225			50.78	4.06	33.14	43.59	74.00	-30.41	<b>Ch. 151</b>
3836.66				48.12	A	50.78	4.06	33.14	34.54	54.00	-19.46	
3863.33	58.00	100	225			50.78	4.07	33.20	44.49	74.00	-29.51	<b>Ch.159</b>
3863.33				49.67	A	50.78	4.07	33.20	36.16	54.00	-17.84	

**RADIATED EMISSIONS - Vertical Antenna Polarization**

Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
3836.66	56.83	125	225			50.78	4.06	33.14	43.25	74.00	-30.75	<b>Ch. 151</b>
3836.66				46.76	A	50.78	4.06	33.14	33.18	54.00	-20.82	
3863.33	57.17	100	180			50.78	4.07	32.84	43.31	74.00	-30.69	<b>Ch.159</b>
3863.33				47.39	A	50.78	4.07	32.84	33.53	54.00	-20.47	

Radiated Emissions Test Results (Continued)

*Fundamental Measurements in 802.11n mode 40MHz Wide (5745-5825 MHz)  
 Channels 151 & 159  
 Continuous TX at Chain B Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-53*

<b>RADIATED EMISSIONS - Horizontal Antenna Polarization</b>												
<i>Freq. (MHz)</i>	<i>Meter Reading (dBuV)</i>	<i>Antenna Height (cm)</i>	<i>Azimuth (degrees)</i>	<i>Quasi pk or AVG (dBuV)</i>		<i>Distance Factor (dB)</i>	<i>Cable Factor (dB)</i>	<i>Ant. Factor (dB)</i>	<i>Corrected Reading (dBuV)</i>	<i>Limits (dBuV)</i>	<i>Diff (dB) +=FAIL</i>	<i>Comments</i>
5755.00	67.83	100	135			9.54	4.99	35.25	98.53			<b>Ch. 151</b>
5755.00				51.17	A	9.54	4.99	35.25	81.87			
5795.00	67.33	100	135			9.54	5.01	35.26	98.06			<b>Ch. 159</b>
5795.00				50.83	A	9.54	5.01	35.26	81.56			

<b>RADIATED EMISSIONS - Vertical Antenna Polarization</b>												
<i>Freq. (MHz)</i>	<i>Meter Reading (dBuV)</i>	<i>Antenna Height (cm)</i>	<i>Azimuth (degrees)</i>	<i>Quasi pk or AVG (dBuV)</i>		<i>Distance Factor (dB)</i>	<i>Cable Factor (dB)</i>	<i>Ant. Factor (dB)</i>	<i>Corrected Reading (dBuV)</i>	<i>Limits (dBuV)</i>	<i>Diff (dB) +=FAIL</i>	<i>Comments</i>
5755.00	74.17	100	225			9.54	4.99	35.05	104.68			<b>Ch. 151</b>
5755.00				56.83	A	9.54	4.99	35.05	87.34			
5795.00	73.00	100	180			9.54	5.01	35.08	103.55			<b>Ch. 159</b>
5795.00				55.33	A	9.54	5.01	35.08	85.88			

NOTE: Fundamental signals measured at 1 meter and extrapolated to 3 meters to calculate the radiated band edge field strengths.



Radiated Emissions Test Results (Continued)

*Band Edge Field Strength Measurements in 802.11n mode 40MHz Wide (5745-5825 MHz)  
 Channels 151 & 159  
 Continuous TX at Chain B Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-53*

<b>RADIATED EMISSIONS - Horizontal Antenna Polarization</b>												
<i>Freq. (MHz)</i>	<i>Meter Reading (dBuV)</i>	<i>Antenna Height (cm)</i>	<i>Azimuth (degrees)</i>	<i>Quasi pk or AVG (dBuV)</i>	<i>Distance Factor (dB)</i>	<i>Cable Factor (dB)</i>	<i>Ant. Factor (dB)</i>	<i>Corrected Reading (dBuV)</i>	<i>Limits (dBuV)</i>	<i>Diff (dB) +=FAIL</i>	<i>Comments</i>	
5725.00	40.00	100	135		9.54	4.98	35.25	70.68	78.53	-7.85	<b>Ch. 151</b>	
5850.00	30.17	100	135		9.54	5.03	35.27	60.93	78.06	-17.12	<b>Ch. 159</b>	

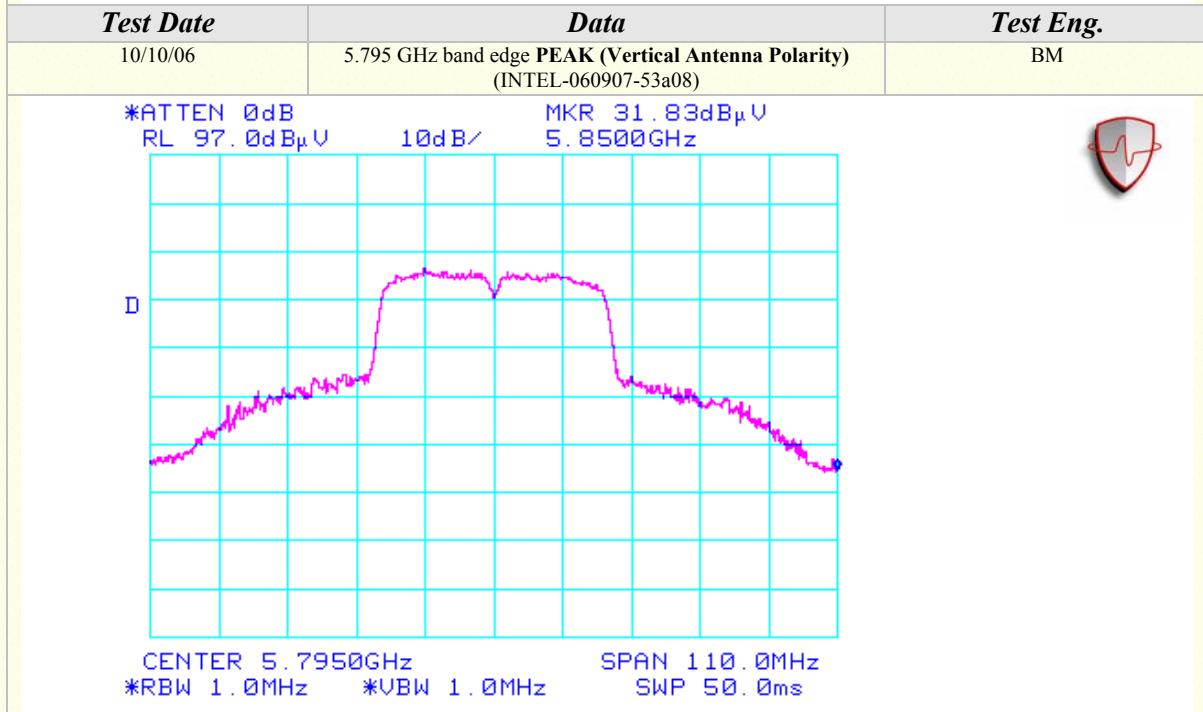
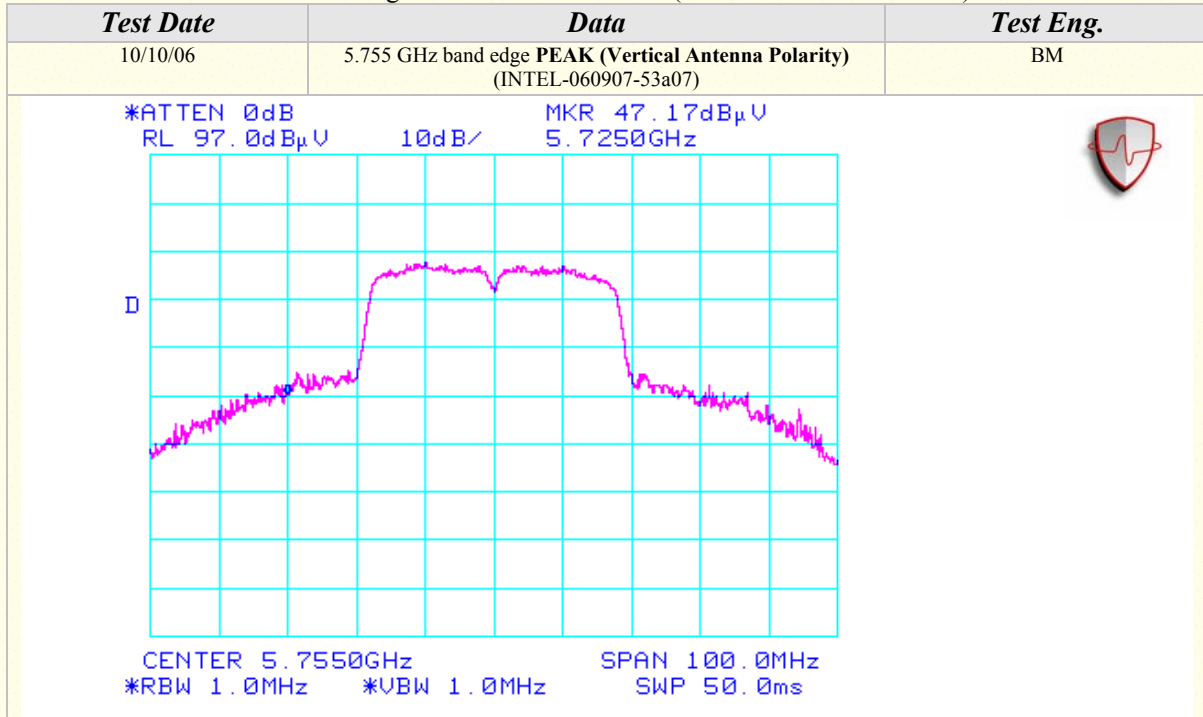
<b>RADIATED EMISSIONS - Vertical Antenna Polarization</b>												
<i>Freq. (MHz)</i>	<i>Meter Reading (dBuV)</i>	<i>Antenna Height (cm)</i>	<i>Azimuth (degrees)</i>	<i>Quasi pk or AVG (dBuV)</i>	<i>Distance Factor (dB)</i>	<i>Cable Factor (dB)</i>	<i>Ant. Factor (dB)</i>	<i>Corrected Reading (dBuV)</i>	<i>Limits (dBuV)</i>	<i>Diff (dB) +=FAIL</i>	<i>Comments</i>	
5725.00	47.17	100	225		9.54	4.98	35.04	77.64	84.68	-7.03	<b>Ch. 151</b>	
5850.00	31.83	100	180		9.54	5.03	35.11	62.43	83.55	-21.11	<b>Ch. 159</b>	

NOTE: The “Band Edge Field Strength” was calculated using the “Radiated Fundamental” measurements.



### Radiated Emissions Test Results (Continued)

Plots Showing Out-Of-Band Emissions (Peak RBW=VBW=1MHz)







Radiated Emissions Test Results (Continued)

*Spurious Emissions Measurements in 802.11n mode 40MHz Wide (5745-5825 MHz)  
 Channels 151 & 159  
 Continuous TX at Chain B Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-43*

**RADIATED EMISSIONS - Horizontal Antenna Polarization**

Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
3836.78	59.50	100	225			50.78	4.06	33.14	45.92	74.00	-28.08	<b>Ch. 151</b>
3836.78				50.32	A	50.78	4.06	33.14	36.74	54.00	-17.26	
7673.38	55.17	100	180			50.15	5.82	37.40	48.24	74.00	-25.76	
7673.38				43.43	A	50.15	5.82	37.40	36.50	54.00	-17.50	
11509.71	59.33	100	225			50.54	7.42	39.20	55.42	74.00	-18.58	
11509.71				45.54	A	50.54	7.42	39.20	41.63	54.00	-12.37	
3863.46	58.00	100	225			50.78	4.07	33.20	44.49	74.00	-29.51	<b>Ch.159</b>
3863.46				49.96	A	50.78	4.07	33.20	36.45	54.00	-17.55	
7726.79	56.67	100	180			50.14	5.84	37.44	49.80	74.00	-24.20	
7726.79				44.37	A	50.14	5.84	37.44	37.50	54.00	-16.50	
11589.56	56.00	100	225			50.60	7.42	39.24	52.06	74.00	-21.94	
11589.56				43.69	A	50.60	7.42	39.24	39.75	54.00	-14.25	

**RADIATED EMISSIONS - Vertical Antenna Polarization**

Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
3836.78	57.33	100	225			50.78	4.06	32.78	43.38	74.00	-30.62	<b>Ch. 151</b>
3836.78				49.32	A	50.78	4.06	32.78	35.37	54.00	-18.63	
7673.38	55.67	100	180			50.15	5.82	37.27	48.61	74.00	-25.39	
7673.38				44.28	A	50.15	5.82	37.27	37.22	54.00	-16.78	
11509.71	60.00	125	225			50.54	7.42	39.20	56.09	74.00	-17.91	
11509.71				46.75	A	50.54	7.42	39.20	42.84	54.00	-11.16	
3863.46	57.00	100	225			50.78	4.07	32.84	43.14	74.00	-30.86	<b>Ch.159</b>
3863.46				47.80	A	50.78	4.07	32.84	33.94	54.00	-20.06	
7726.79	54.83	100	180			50.14	5.84	37.29	47.82	74.00	-26.18	
7726.79				44.12	A	50.14	5.84	37.29	37.11	54.00	-16.89	
11589.56	57.00	100	180			50.60	7.42	39.24	53.06	74.00	-20.94	
11589.56				44.73	A	50.60	7.42	39.24	40.79	54.00	-13.21	



Radiated Emissions Test Results (Continued)

*Spurious Emissions Measurements in 802.11n mode 40MHz Wide (5745-5825 MHz)*  
*Channels 151 & 159*  
**Continuous RX at Chain B Antenna port with Ethertronics Antennas**  
*Aegis Labs, Inc. File #: INTEL-060907-43*

**RADIATED EMISSIONS - Horizontal Antenna Polarization**

Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
3836.82	56.50	100	225			50.78	4.06	33.14	42.92	74.00	-31.08	<b>Ch. 151</b>
3836.82				46.25	A	50.78	4.06	33.14	32.67	54.00	-21.33	
3863.32	57.67	100	225			50.78	4.07	33.20	44.16	74.00	-29.84	<b>Ch.159</b>
3863.32				47.06	A	50.78	4.07	33.20	33.55	54.00	-20.45	

**RADIATED EMISSIONS - Vertical Antenna Polarization**

Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
3836.78	56.00	125	135			50.78	4.06	33.14	42.42	74.00	-31.58	<b>Ch. 151</b>
3836.78				45.76	A	50.78	4.06	33.14	32.18	54.00	-21.82	
3863.44	56.83	100	135			50.78	4.07	32.84	42.97	74.00	-31.03	<b>Ch.159</b>
3863.44				46.59	A	50.78	4.07	32.84	32.73	54.00	-21.27	



Radiated Emissions Test Results (Continued)

*Fundamental Measurements in 802.11n mode 40MHz Wide (5745-5825 MHz)  
 Channels 151 & 159  
 Continuous TX at Dual Chain AB Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-54*

RADIATED EMISSIONS - Horizontal Antenna Polarization												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Distance Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
5755.00	70.17	100	225			9.54	3.16	35.25	99.04			<b>Ch. 151</b>
5755.00				46.50	A	9.54	3.16	35.25	75.37			
5795.00	69.33	100	225			9.54	3.17	35.26	98.22			<b>Ch. 159</b>
5795.00				46.50	A	9.54	3.17	35.26	75.39			

RADIATED EMISSIONS - Vertical Antenna Polarization												
Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Distance Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +=FAIL	Comments
5755.00	76.67	100	225			9.54	3.16	35.05	105.34			<b>Ch. 151</b>
5755.00				51.83	A	9.54	3.16	35.05	80.50			
5795.00	75.00	100	225			9.54	3.17	35.08	103.71			<b>Ch. 159</b>
5795.00				50.83	A	9.54	3.17	35.08	79.54			

NOTE: Fundamental signals measured at 1 meter and extrapolated to 3 meters to calculate the radiated band edge field strengths.



Radiated Emissions Test Results (Continued)

*Band Edge Field Strength Measurements in 802.11n mode 40MHz Wide (5745-5825 MHz)  
 Channels 151 & 159  
 Continuous TX at Dual Chain AB Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-54*

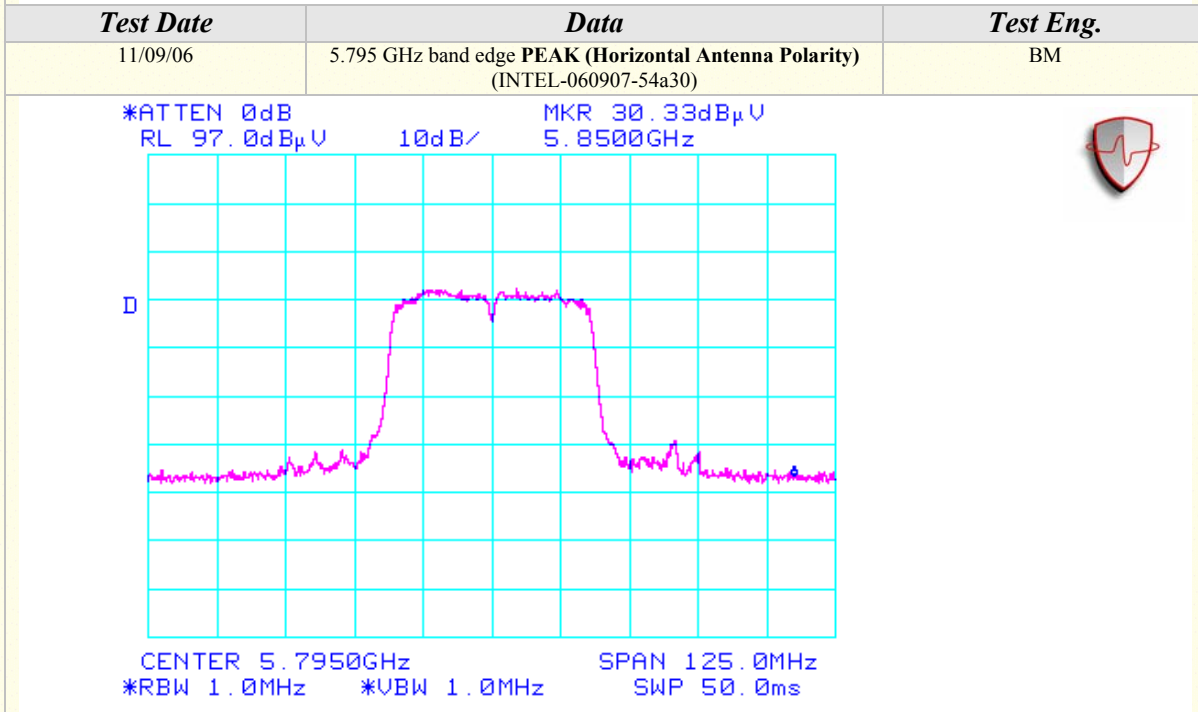
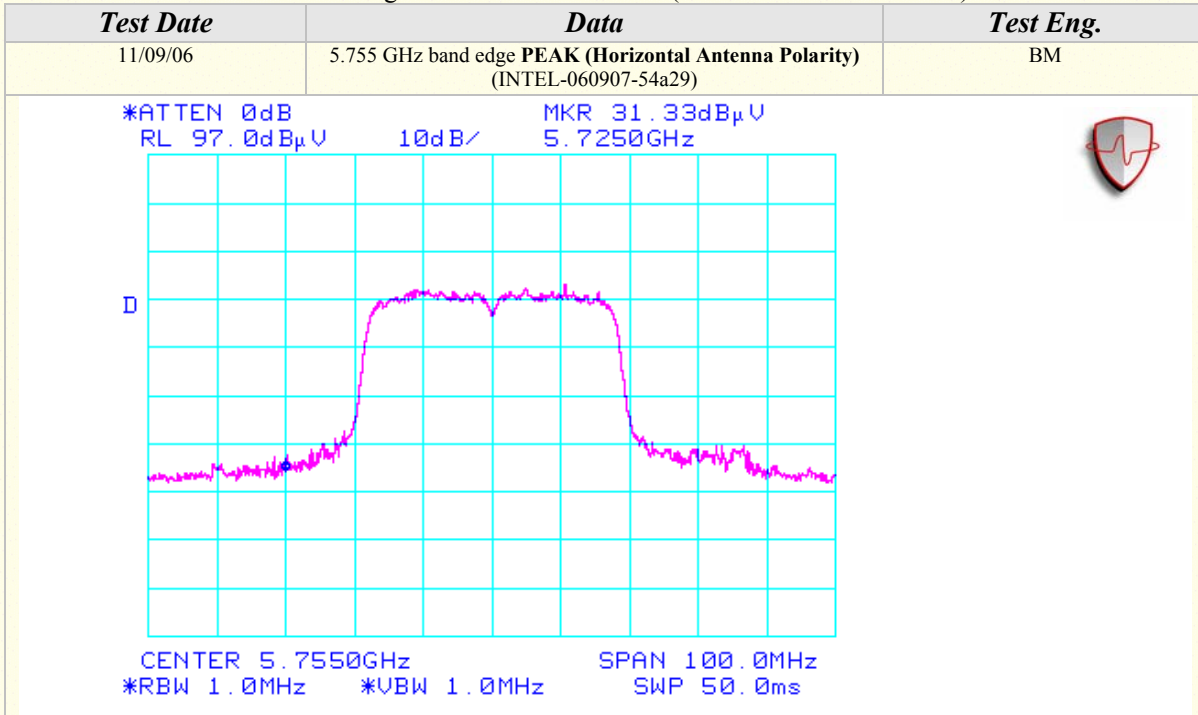
<b>RADIATED EMISSIONS - Horizontal Antenna Polarization</b>												
<i>Freq. (MHz)</i>	<i>Meter Reading (dBuV)</i>	<i>Antenna Height (cm)</i>	<i>Azimuth (degrees)</i>	<i>Quasi pk or AVG (dBuV)</i>	<i>Distance Factor (dB)</i>	<i>Cable Factor (dB)</i>	<i>Ant. Factor (dB)</i>	<i>Corrected Reading (dBuV)</i>	<i>Limits (dBuV)</i>	<i>Diff (dB) +=FAIL</i>	<i>Comments</i>	
5725.00	31.33	100	225		9.54	3.15	35.25	60.18	79.04	-18.86	<b>Ch. 151</b>	
5850.00	30.33	100	225		9.54	3.19	35.27	59.25	78.22	-18.97	<b>Ch. 159</b>	

<b>RADIATED EMISSIONS - Vertical Antenna Polarization</b>												
<i>Freq. (MHz)</i>	<i>Meter Reading (dBuV)</i>	<i>Antenna Height (cm)</i>	<i>Azimuth (degrees)</i>	<i>Quasi pk or AVG (dBuV)</i>	<i>Distance Factor (dB)</i>	<i>Cable Factor (dB)</i>	<i>Ant. Factor (dB)</i>	<i>Corrected Reading (dBuV)</i>	<i>Limits (dBuV)</i>	<i>Diff (dB) +=FAIL</i>	<i>Comments</i>	
5725.00	40.33	100	225		9.54	3.15	35.04	68.97	85.34	-16.37	<b>Ch. 151</b>	
5850.00	30.00	100	225		9.54	3.19	35.11	58.76	83.71	-24.95	<b>Ch. 159</b>	

NOTE: The “Band Edge Field Strength” was calculated using the “Radiated Fundamental” measurements.


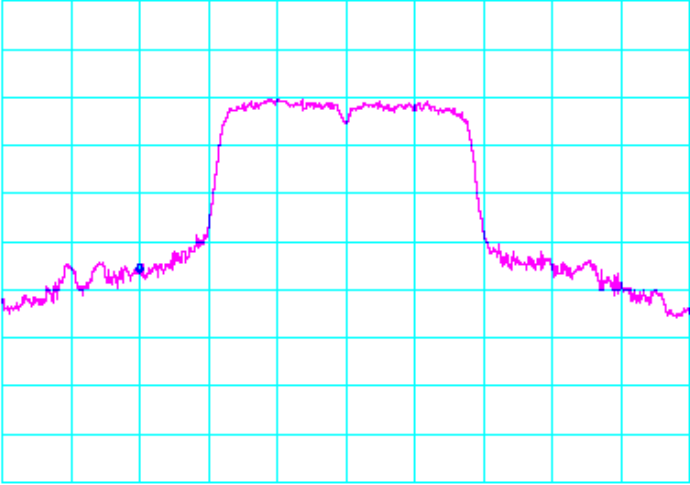

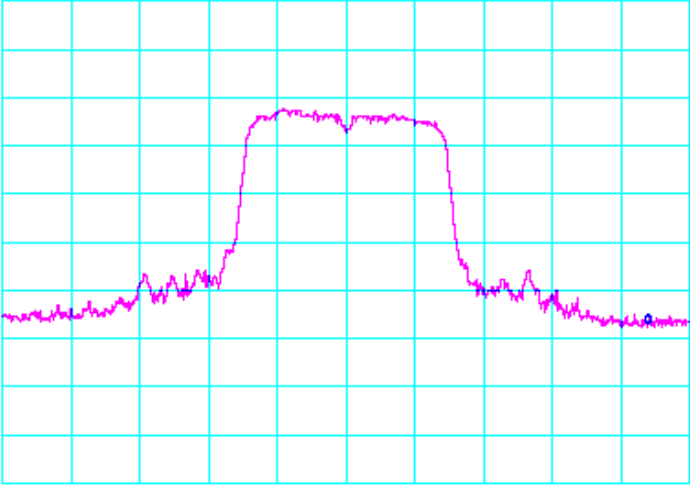
### Radiated Emissions Test Results (Continued)

Plots Showing Out-Of-Band Emissions (Peak RBW=VBW=1MHz)



## Radiated Emissions Test Results (Continued)

Plots Showing Out-Of-Band Emissions (Peak RBW=VBW=1MHz)

Test Date	Data	Test Eng.
11/09/06	5.755 GHz band edge <b>PEAK (Vertical Antenna Polarity)</b> (INTEL-060907-54a31)	BM
<div style="display: flex; justify-content: space-between;"> <div data-bbox="326 422 974 474">                     *ATTEN 0dB                      RL 97.0dBµV 10dB/                 </div> <div data-bbox="745 422 971 474">                     MKR 40.33dBµV                      5.7250GHz                 </div>  </div>  <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div data-bbox="326 963 751 1016">                     CENTER 5.7550GHz                      *RBW 1.0MHz *VBW 1.0MHz                 </div> <div data-bbox="799 963 1024 1016">                     SPAN 100.0MHz                      SWP 50.0ms                 </div> </div>		
Test Date	Data	Test Eng.
11/09/06	5.795 GHz band edge <b>PEAK (Vertical Antenna Polarity)</b> (INTEL-060907-54a32)	BM
<div style="display: flex; justify-content: space-between;"> <div data-bbox="326 1131 537 1184">                     *ATTEN 0dB                      RL 97.0dBµV 10dB/                 </div> <div data-bbox="745 1131 971 1184">                     MKR 30.00dBµV                      5.8500GHz                 </div>  </div>  <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div data-bbox="326 1673 751 1726">                     CENTER 5.7950GHz                      *RBW 1.0MHz *VBW 1.0MHz                 </div> <div data-bbox="799 1673 1024 1726">                     SPAN 125.0MHz                      SWP 50.0ms                 </div> </div>		



Radiated Emissions Test Results (Continued)

*Spurious Emissions Measurements in 802.11n mode 40MHz Wide (5745-5825 MHz)  
 Channels 151 & 159  
 Continuous TX at Dual Chain AB Antenna port with Ethertronics Antennas  
 Aegis Labs, Inc. File #: INTEL-060907-55*

**RADIATED EMISSIONS - Horizontal Antenna Polarization**

Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +/-FAIL	Comments
3836.78	57.50	100	225			50.78	4.06	33.14	43.92	74.00	-30.08	<b>Ch. 151</b>
3836.78				48.93	A	50.78	4.06	33.14	35.35	54.00	-18.65	
7673.38	59.67	100	225			50.15	5.82	37.40	52.74	74.00	-21.26	
7673.38				51.62	A	50.15	5.82	37.40	44.69	54.00	-9.31	
3863.26	59.33	100	225			50.78	4.07	33.20	45.82	74.00	-28.18	<b>Ch.159</b>
3863.26				51.23	A	50.78	4.07	33.20	37.72	54.00	-16.28	
7726.79	59.00	100	225			50.14	5.84	37.44	52.13	74.00	-21.87	
7726.79				50.07	A	50.14	5.84	37.44	43.20	54.00	-10.80	

**RADIATED EMISSIONS - Vertical Antenna Polarization**

Freq. (MHz)	Meter Reading (dBuV)	Antenna Height (cm)	Azimuth (degrees)	Quasi pk or AVG (dBuV)		Preamp Factor (dB)	Cable Factor (dB)	Ant. Factor (dB)	Corrected Reading (dBuV)	Limits (dBuV)	Diff (dB) +/-FAIL	Comments
3836.67	60.50	100	135			50.78	4.06	32.78	46.55	74.00	-27.45	<b>Ch. 151</b>
3836.67				52.94	A	50.78	4.06	32.78	38.99	54.00	-15.01	
7673.39	60.33	100	180			50.15	5.82	37.27	53.27	74.00	-20.73	
7673.39				52.37	A	50.15	5.82	37.27	45.31	54.00	-8.69	
11509.66	60.33	100	180			50.54	7.42	39.20	56.42	74.00	-17.58	
11509.66				46.89	A	50.54	7.42	39.20	42.98	54.00	-11.02	
3863.38	60.83	100	135			50.78	4.07	32.84	46.97	74.00	-27.03	<b>Ch.159</b>
3863.38				53.30	A	50.78	4.07	32.84	39.44	54.00	-14.56	
7726.70	60.17	100	180			50.14	5.84	37.29	53.16	74.00	-20.84	
7726.70				52.49	A	50.14	5.84	37.29	45.48	54.00	-8.52	



## PEAK TRANSMIT POWER

<b>CLIENT:</b>	Intel Corporation	<b>DATE:</b>	09/29/06
<b>EUT:</b>	Intel PRO/Wireless 4965AGN Network Connection	<b>PROJECT NUMBER:</b>	INTEL-060907
<b>MODEL NUMBER:</b>	4965AGN	<b>TEST ENGINEER:</b>	BM/JC
<b>SERIAL NUMBER:</b>	0013E804612B	<b>SITE #:</b>	2
<b>CONFIGURATION:</b>	Tested installed in the host computer's mini PCI slot.	<b>TEMPERATURE:</b>	22 deg. C
		<b>HUMIDITY:</b>	36% RH
		<b>TIME:</b>	5:00 PM

<b>Description:</b>	The maximum peak output power of the intentional radiator shall not exceed 1 watt.
<b>Results:</b>	Passed (See Data Sheet)
<b>Note:</b>	Conducted Emissions Measurements were performed on the EUT with power supply set at the following voltage and frequency. <ul style="list-style-type: none"><li>• 120VAC / 60 Hz.</li></ul>

Peak Transmit Power Limits	
Frequency (MHz)	Output Power (W)
5745-5825	1
2412-2462	1



Peak Transmit Power (Continued)

Mode	Channel	Frequency (MHz)	Chain	Data Rate (Mbps)	Average Power (dBm)	Average Power (mW)	Peak Power (dBm)	Peak Power (mW)
802.11a	149	5745	A	6	17.55	56.88	19.61	91.40
802.11a	157	5785	A	6	17.43	55.33	19.71	93.53
802.11a	165	5825	A	6	17.56	57.01	19.91	97.94
802.11a	149	5745	B	6	17.48	55.97	20.21	104.94
802.11a	157	5785	B	6	17.57	57.14	20.31	107.39
802.11a	165	5825	B	6	17.46	55.71	20.31	107.39
802.11b	1	2412	A	1	15.44	34.98	19.07	80.68
802.11b	6	2437	A	1	15.59	36.21	19.24	83.90
802.11b	11	2462	A	1	16.61	45.79	20.03	100.64
802.11b	1	2412	B	1	15.40	34.66	18.73	74.61
802.11b	6	2437	B	1	15.57	36.04	18.88	77.23
802.11b	11	2462	B	1	16.63	46.00	19.94	98.58
802.11g	1	2412	A	6	16.40	43.65	23.80	239.86
802.11g	6	2437	A	6	17.60	57.54	23.83	241.52
802.11g	11	2462	A	6	16.58	45.49	23.48	222.82
802.11g	1	2412	B	6	16.47	44.36	23.54	225.92
802.11g	6	2437	B	6	17.45	55.59	23.63	230.65
802.11g	11	2462	B	6	16.56	45.29	23.52	224.88
802.11n	149	5745	A	HT0	17.63	57.94	20.11	102.56
802.11n	157	5785	A	HT0	17.43	55.33	20.91	123.30
802.11n	165	5825	A	HT0	17.52	56.49	20.41	109.89
802.11n	149	5745	B	HT0	17.51	56.36	20.21	104.94
802.11n	157	5785	B	HT0	17.38	54.70	20.61	115.07
802.11n	165	5825	B	HT0	17.45	55.59	20.31	107.39
802.11n	1	2412	A	HT0	15.61	36.39	23.55	226.44
802.11n	6	2437	A	HT0	15.52	35.64	23.37	217.25
802.11n	11	2462	A	HT0	15.57	36.05	23.28	212.79
802.11n	1	2412	B	HT0	15.48	35.31	23.27	212.30
802.11n	6	2437	B	HT0	15.53	35.72	23.39	218.25
802.11n	11	2462	B	HT0	15.51	35.56	23.19	208.43
802.11n (40MHz)	151(F)	5755	A	HT0	17.28	53.45	18.51	70.95
802.11n (40MHz)	159(F)	5795	A	HT0	17.49	56.09	18.11	64.70
802.11n (40MHz)	151(F)	5755	B	HT0	17.38	54.69	18.41	69.33
802.11n (40MHz)	159(F)	5795	B	HT0	17.46	55.71	18.21	66.21

NOTE: The output power measurement is conducted.



Peak Transmit Power (Continued)

Mode	Channel	Freq. (MHz)	Data Rate (Mbps)	Avg. Power (dBm) Ch. A	Avg. Power (mW) Ch. A	Peak Power (dBm) Ch. A	Peak Power (mW) Ch. A	Avg. Power (dBm) Ch. B	Avg. Power (mW) Ch. B	Peak Power (dBm) Ch. B	Peak Power (mW) Ch. B
802.11n (20MHz)	1	2412	HT 8	14.55	28.49	23.70	234.28	14.39	27.46	23.53	225.29
802.11n (20MHz)	6	2437	HT 8	14.41	27.59	23.62	230.01	14.37	27.34	23.60	228.95
802.11n (20MHz)	11	2462	HT 8	14.57	28.62	23.66	232.14	14.29	26.84	23.64	231.07
802.11n (20MHz)	149	5745	HT 8	14.48	28.04	19.79	95.22	14.29	26.84	20.39	109.33
802.11n (20MHz)	157	5785	HT 8	14.50	28.17	20.59	114.48	14.36	27.27	21.49	140.85
802.11n (20MHz)	165	5825	HT 8	14.43	27.72	21.49	140.85	14.36	27.27	22.09	161.71
802.11n (40MHz)	151(F)	5755	HT 8	14.62	28.98	19.24	83.97	14.65	29.18	19.66	92.50
802.11n (40MHz)	159 (F)	5795	HT 8	14.58	28.72	19.34	85.93	14.45	27.87	20.04	100.95

Mode	Channel	Freq. (MHz)	Data Rate (Mbps)	Aggregate Avg. Output Power (dBm) Ch. A + B	Aggregate Avg. Output Power (mW) Ch. A + B	Aggregate Peak Output Power (dBm) Ch. A + B	Aggregate Peak Output Power (mW) Ch. A + B
802.11n (20MHz)	1	2412	HT 8	17.48	55.96	26.62	459.57
802.11n (20MHz)	6	2437	HT 8	17.40	54.93	26.62	458.96
802.11n (20MHz)	11	2462	HT 8	17.44	55.46	26.66	463.20
802.11n (20MHz)	149	5745	HT 8	17.39	54.88	23.11	204.55
802.11n (20MHz)	157	5785	HT 8	17.44	55.44	24.07	255.33
802.11n (20MHz)	165	5825	HT 8	17.40	54.99	24.81	302.56
802.11n (40MHz)	151(F)	5755	HT 8	17.65	58.16	22.47	176.47
802.11n (40MHz)	159 (F)	5795	HT 8	17.53	56.59	22.72	186.88

(F) = Fat Channel



## 6dB EMISSIONS BANDWIDTH

<b>CLIENT:</b>	Intel Corporation	<b>DATE:</b>	09/19/06
<b>EUT:</b>	Intel PRO/Wireless 4965AGN Network Connection	<b>PROJECT NUMBER:</b>	INTEL-060907
<b>MODEL NUMBER:</b>	4965AGN	<b>TEST ENGINEER:</b>	JC
<b>SERIAL NUMBER:</b>	0013E804612B	<b>SITE #:</b>	2
<b>CONFIGURATION:</b>	Tested installed in the host computer's mini PCI slot.	<b>TEMPERATURE:</b>	21 deg. C
		<b>HUMIDITY:</b>	29% RH
		<b>TIME:</b>	9:50 AM

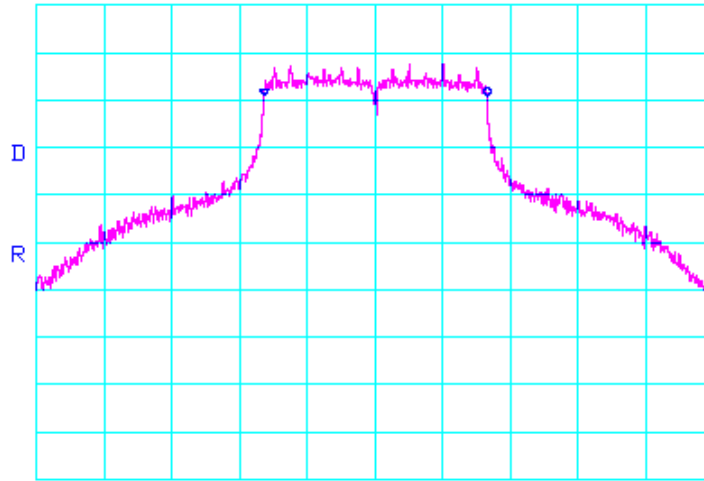
<b>Description:</b>	The minimum 6dB bandwidth shall be at least 500 kHz.
<b>Results:</b>	See Data Sheet
<b>Note:</b>	Conducted Emissions Measurements were performed on the EUT with power supply set at the following voltage and frequency. <ul style="list-style-type: none"><li>• 120VAC / 60 Hz.</li></ul>

6dB Emissions Bandwidth (Continued)

802.11a Mode

Test Date	Data	Chain	Test Eng.
09/19/06	5.745 GHz (INTEL-060907-27a01)	A	JC

\*ATTEN 20dB      ΔMKR -.17dB  
 RL 16.0dBm      10dB/      16.50MHz

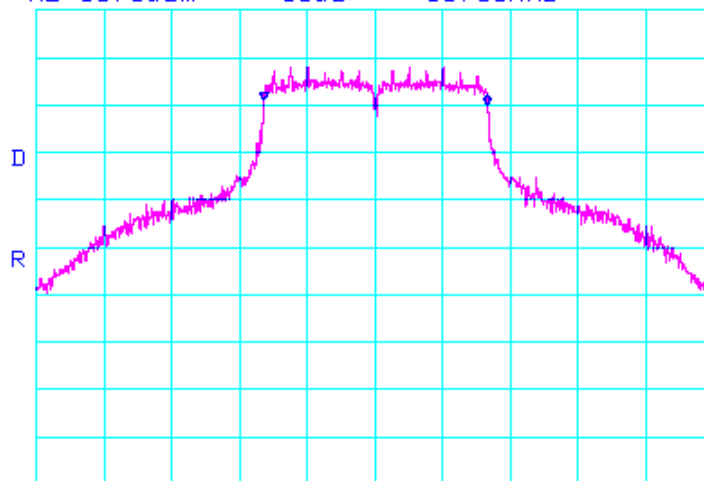


CENTER 5.74500GHz      SPAN 50.00MHz  
 \*RBW 100kHz      \*VBW 300kHz      SWP 50.0ms



Test Date	Data	Chain	Test Eng.
09/19/06	5.785 GHz (INTEL-060907-27a02)	A	JC

\*ATTEN 20dB      ΔMKR -1.00dB  
 RL 16.0dBm      10dB/      16.50MHz



CENTER 5.78500GHz      SPAN 50.00MHz  
 \*RBW 100kHz      \*VBW 300kHz      SWP 50.0ms

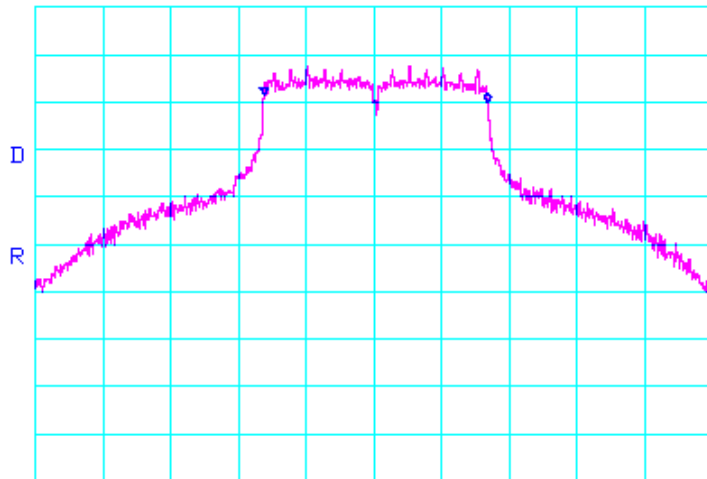


## 6dB Emissions Bandwidth (Continued)

## 802.11a Mode

<i>Test Date</i>	<i>Data</i>	<i>Chain</i>	<i>Test Eng.</i>
09/19/06	5.825 GHz (INTEL-060907-27a03)	A	JC

\*ATTEN 20dB      ΔMKR -1.67dB  
 RL 16.0dBm      10dB/      16.50MHz

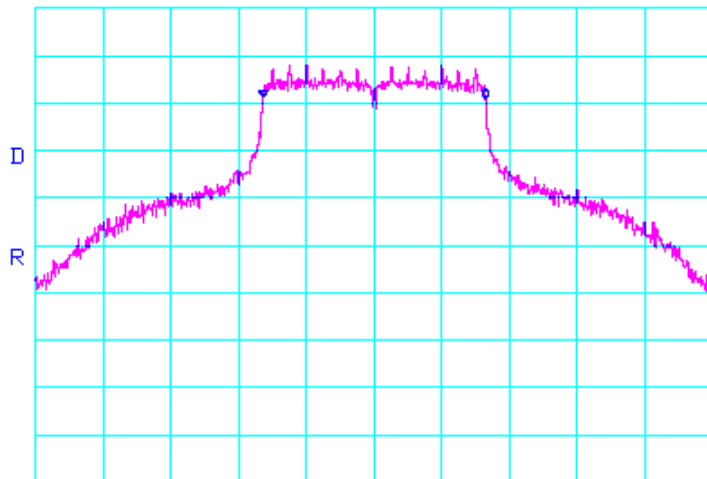


CENTER 5.82500GHz      SPAN 50.00MHz  
 \*RBW 100kHz      \*VBW 300kHz      SWP 50.0ms



<i>Test Date</i>	<i>Data</i>	<i>Chain</i>	<i>Test Eng.</i>
09/19/06	5.745 GHz (INTEL-060907-27a04)	B	JC

\*ATTEN 20dB      ΔMKR -.33dB  
 RL 16.0dBm      10dB/      16.42MHz

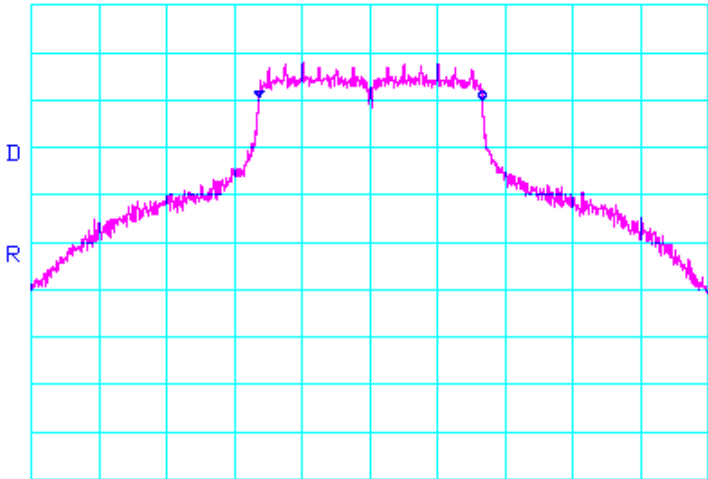
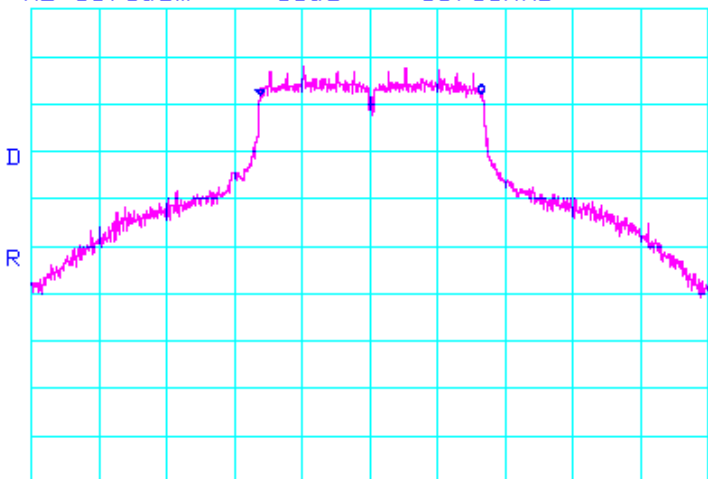


CENTER 5.74500GHz      SPAN 50.00MHz  
 \*RBW 100kHz      \*VBW 300kHz      SWP 50.0ms



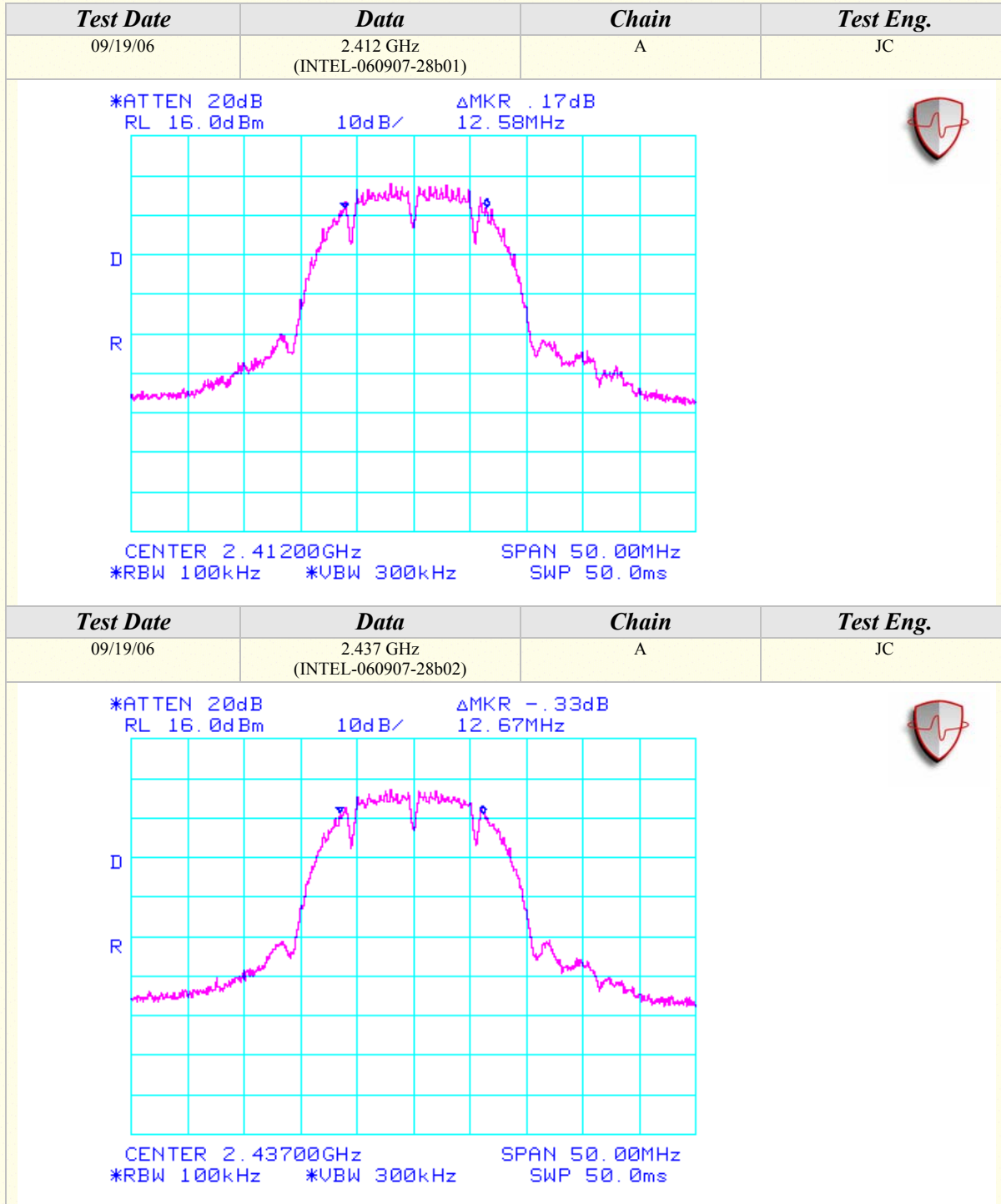
### 6dB Emissions Bandwidth (Continued)

#### 802.11a Mode

<i>Test Date</i>	<i>Data</i>	<i>Chain</i>	<i>Test Eng.</i>
09/19/06	5.785 GHz (INTEL-060907-27a05)	B	JC
<p>*ATTEN 20dB                                    ΔMKR -.67dB            RL 16.0dBm                                10dB/                                16.50MHz</p>  <p>CENTER 5.78500GHz                                SPAN 50.00MHz            *RBW 100kHz                                *VBW 300kHz                                SWP 50.0ms</p>			
<i>Test Date</i>	<i>Data</i>	<i>Chain</i>	<i>Test Eng.</i>
09/19/06	5.825 GHz (INTEL-060907-27a06)	B	JC
<p>*ATTEN 20dB                                    ΔMKR .34dB            RL 16.0dBm                                10dB/                                16.33MHz</p>  <p>CENTER 5.82500GHz                                SPAN 50.00MHz            *RBW 100kHz                                *VBW 300kHz                                SWP 50.0ms</p>			

### 6dB Emissions Bandwidth (Continued)

#### 802.11b Mode

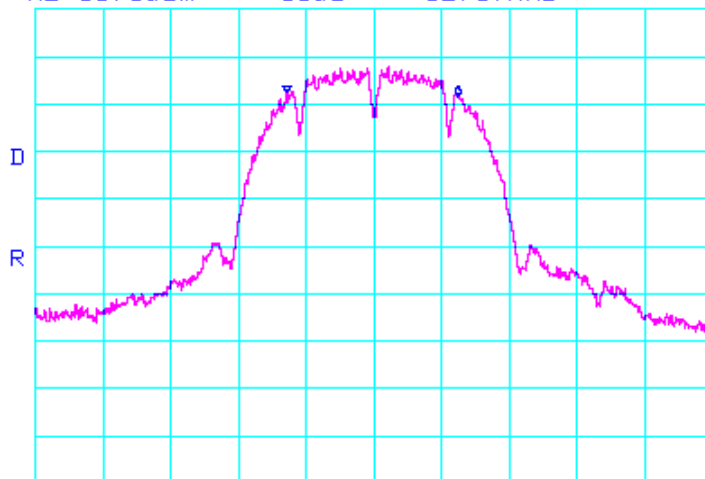


6dB Emissions Bandwidth (Continued)

802.11b Mode

Test Date	Data	Chain	Test Eng.
09/19/06	2.462 GHz (INTEL-060907-28b03)	A	JC

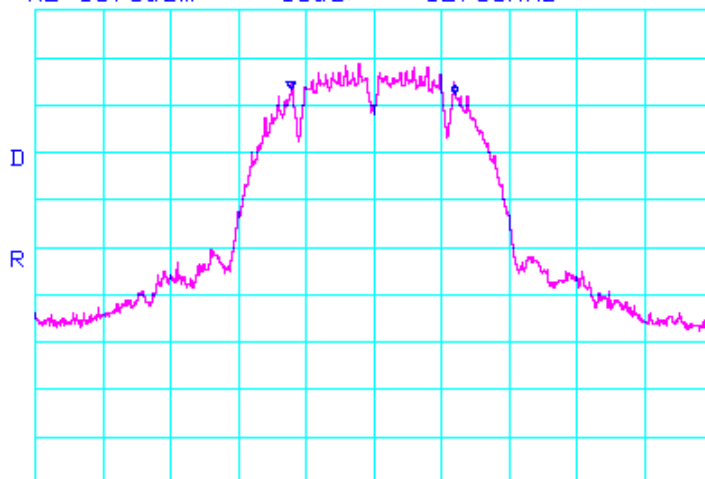
\*ATTEN 20dB      ΔMKR - .83dB  
RL 16.0dBm      10dB/      12.67MHz



CENTER 2.46200GHz      SPAN 50.00MHz  
\*RBW 100kHz      \*VBW 300kHz      SWP 50.0ms

Test Date	Data	Chain	Test Eng.
09/19/06	2.412 GHz (INTEL-060907-28b04)	B	JC

\*ATTEN 20dB      ΔMKR -1.17dB  
RL 16.0dBm      10dB/      12.08MHz



CENTER 2.41200GHz      SPAN 50.00MHz  
\*RBW 100kHz      \*VBW 300kHz      SWP 50.0ms



6dB Emissions Bandwidth (Continued)

802.11b Mode

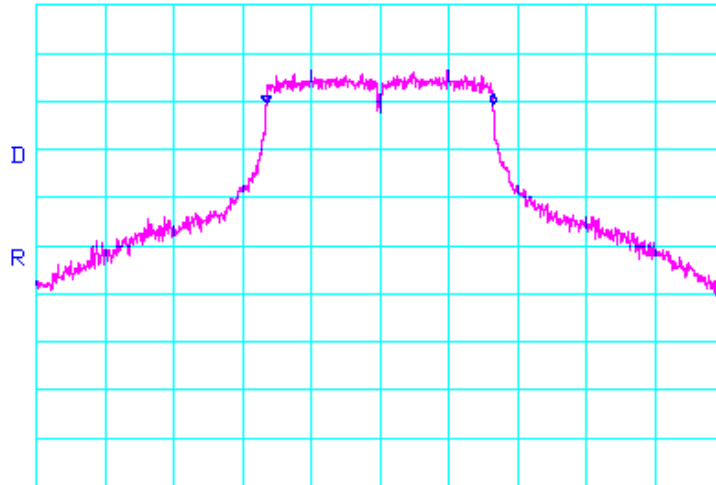
Test Date	Data	Chain	Test Eng.
09/19/06	2.437 GHz (INTEL-060907-28b05)	B	JC
<p>*ATTEN 20dB                      ΔMKR .17dB            RL 16.0dBm                    10dB/                    12.17MHz</p> <p>CENTER 2.43700GHz                      SPAN 50.00MHz            *RBW 100kHz                      *VBW 300kHz                      SWP 50.0ms</p>			
Test Date	Data	Chain	Test Eng.
09/19/06	2.462 GHz (INTEL-060907-28b06)	B	JC
<p>*ATTEN 20dB                      ΔMKR 0dB            RL 16.0dBm                    10dB/                    13.00MHz</p> <p>CENTER 2.46200GHz                      SPAN 50.00MHz            *RBW 100kHz                      *VBW 300kHz                      SWP 50.0ms</p>			

### 6dB Emissions Bandwidth (Continued)

#### 802.11g Mode

Test Date	Data	Chain	Test Eng.
09/22/06	2.412 GHz (INTEL-060907-29a01)	A	JC

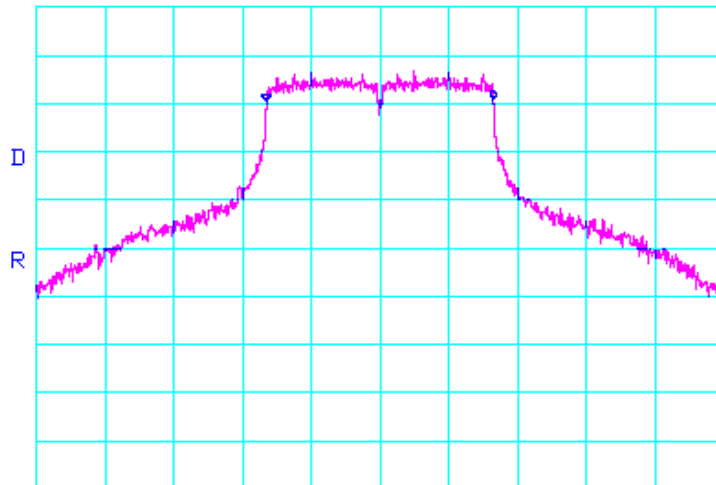
\*ATTEN 20dB      ΔMKR -.34dB  
RL 16.0dBm      10dB/      16.50MHz



CENTER 2.41200GHz      SPAN 50.00MHz  
\*RBW 100kHz      \*UBW 300kHz      SWP 50.0ms

Test Date	Data	Chain	Test Eng.
09/22/06	2.437 GHz (INTEL-060907-29a02)	A	JC

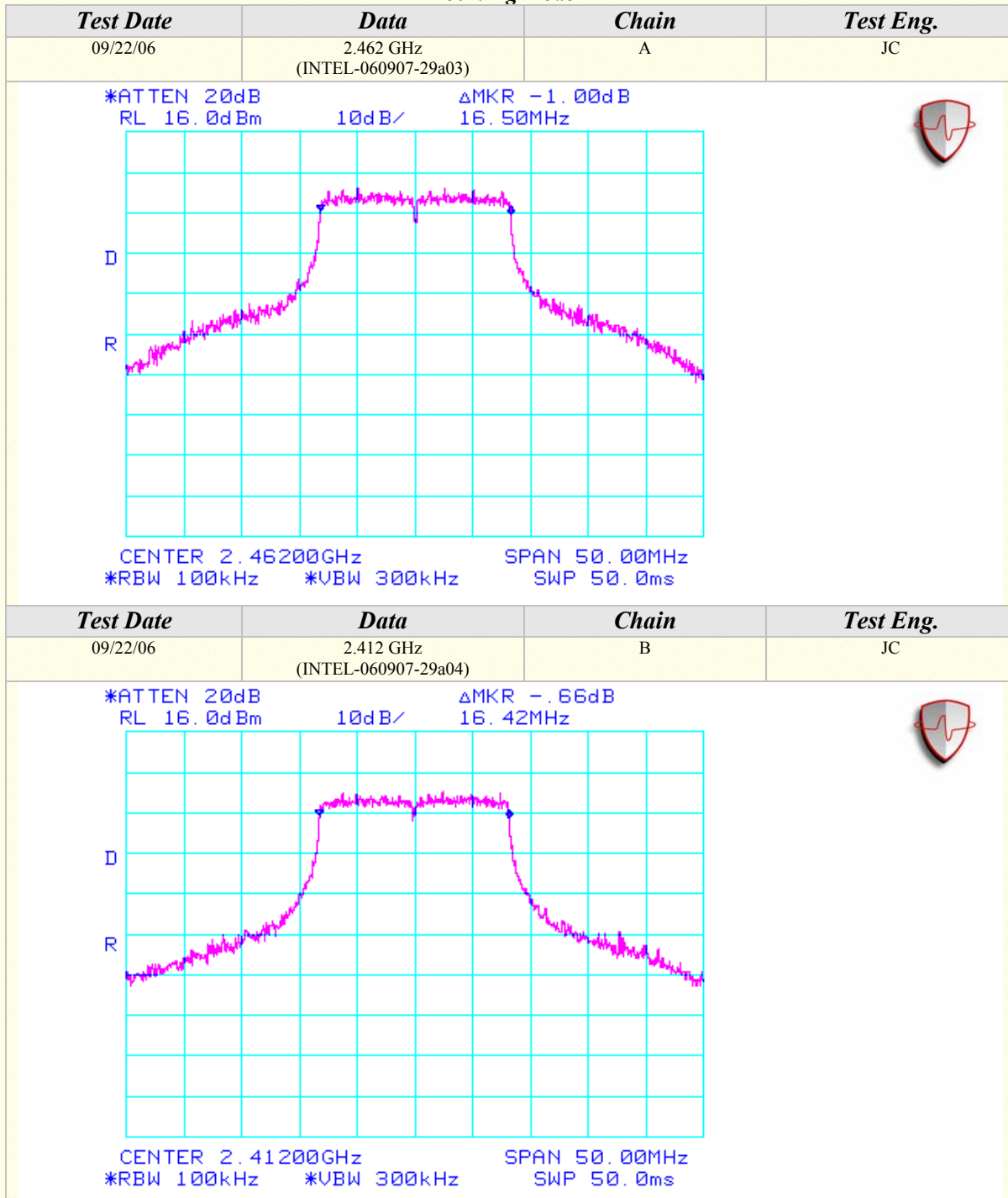
\*ATTEN 20dB      ΔMKR .33dB  
RL 16.0dBm      10dB/      16.50MHz



CENTER 2.43700GHz      SPAN 50.00MHz  
\*RBW 100kHz      \*UBW 300kHz      SWP 50.0ms

6dB Emissions Bandwidth (Continued)

802.11g Mode

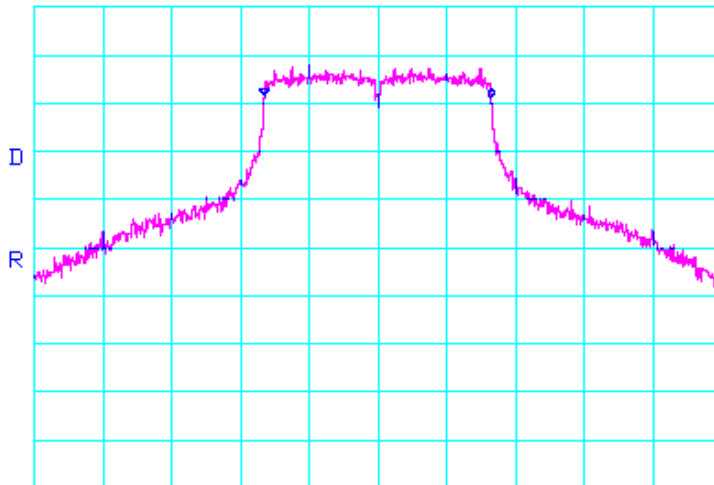


6dB Emissions Bandwidth (Continued)

802.11g Mode

Test Date	Data	Chain	Test Eng.
09/22/06	2.437 GHz (INTEL-060907-29a05)	B	JC

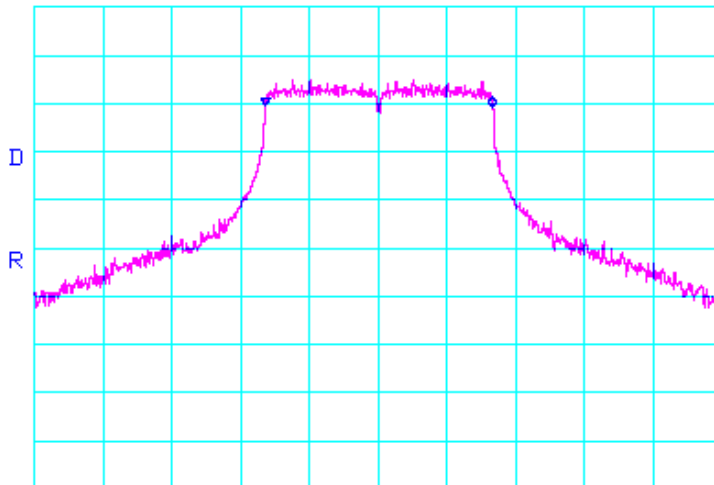
\*ATTEN 20dB      ΔMKR -.50dB  
 RL 16.0dBm      10dB/      16.50MHz



CENTER 2.43700GHz      SPAN 50.00MHz  
 \*RBW 100kHz      \*VBW 300kHz      SWP 50.0ms

Test Date	Data	Chain	Test Eng.
09/22/06	2.462 GHz (INTEL-060907-29a06)	B	JC

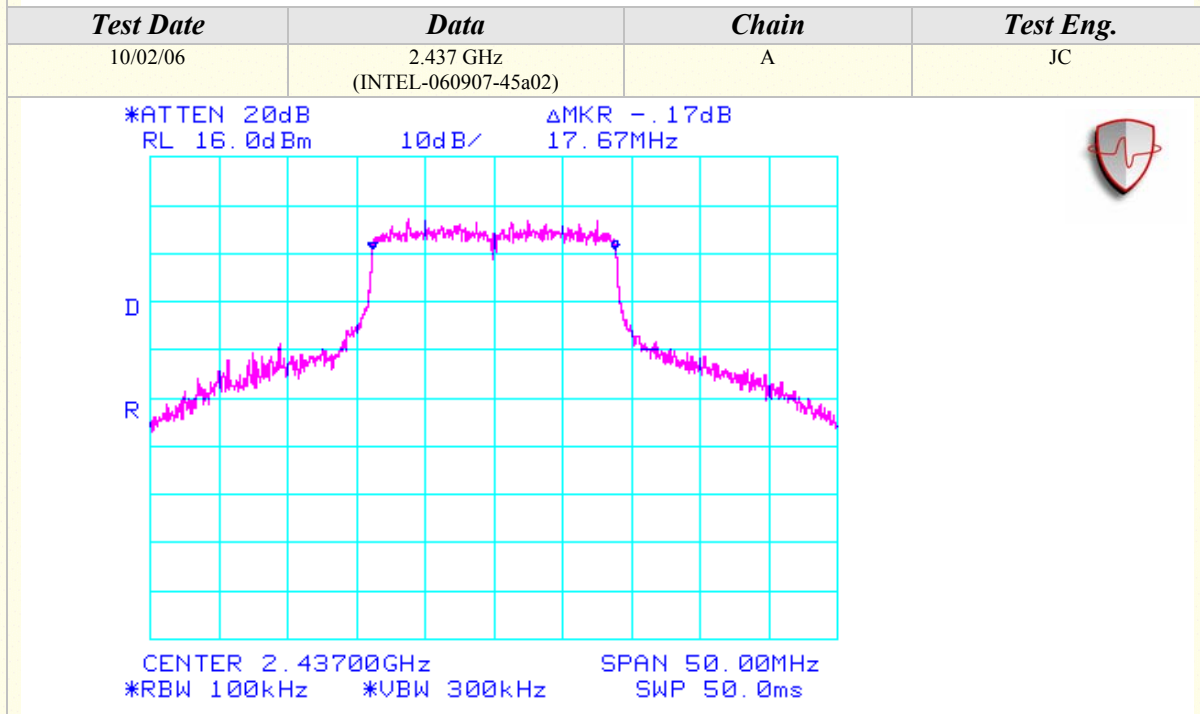
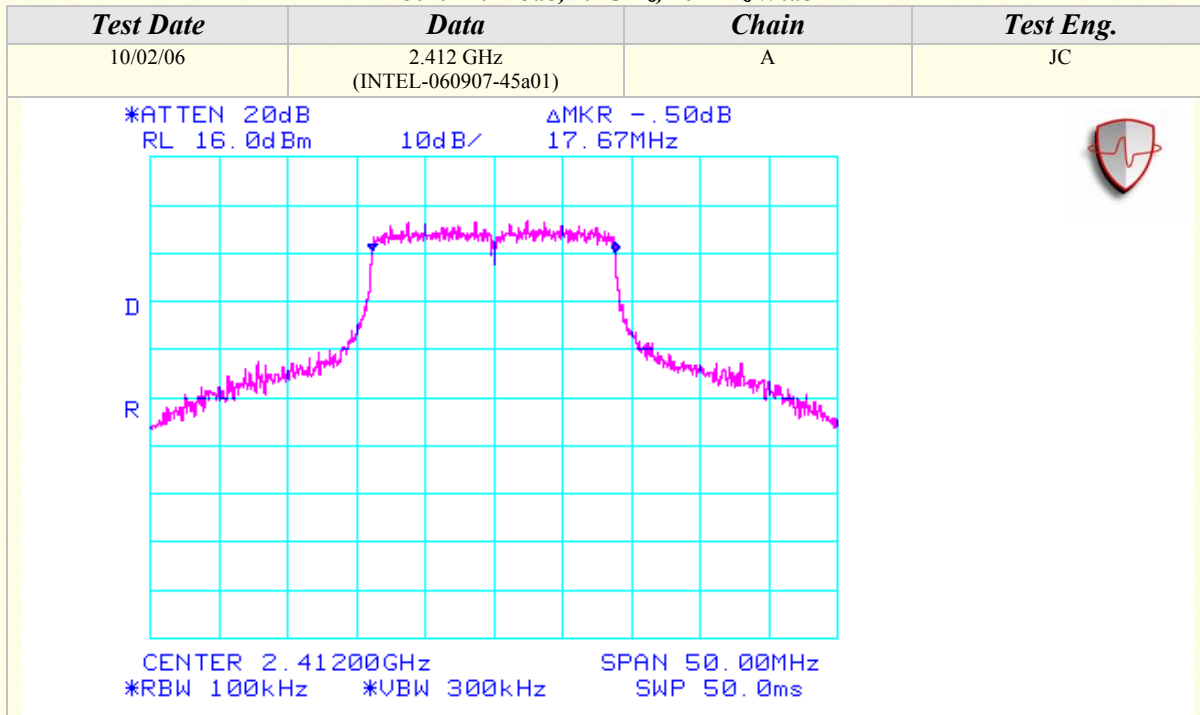
\*ATTEN 20dB      ΔMKR -.34dB  
 RL 16.0dBm      10dB/      16.50MHz



CENTER 2.46200GHz      SPAN 50.00MHz  
 \*RBW 100kHz      \*VBW 300kHz      SWP 50.0ms

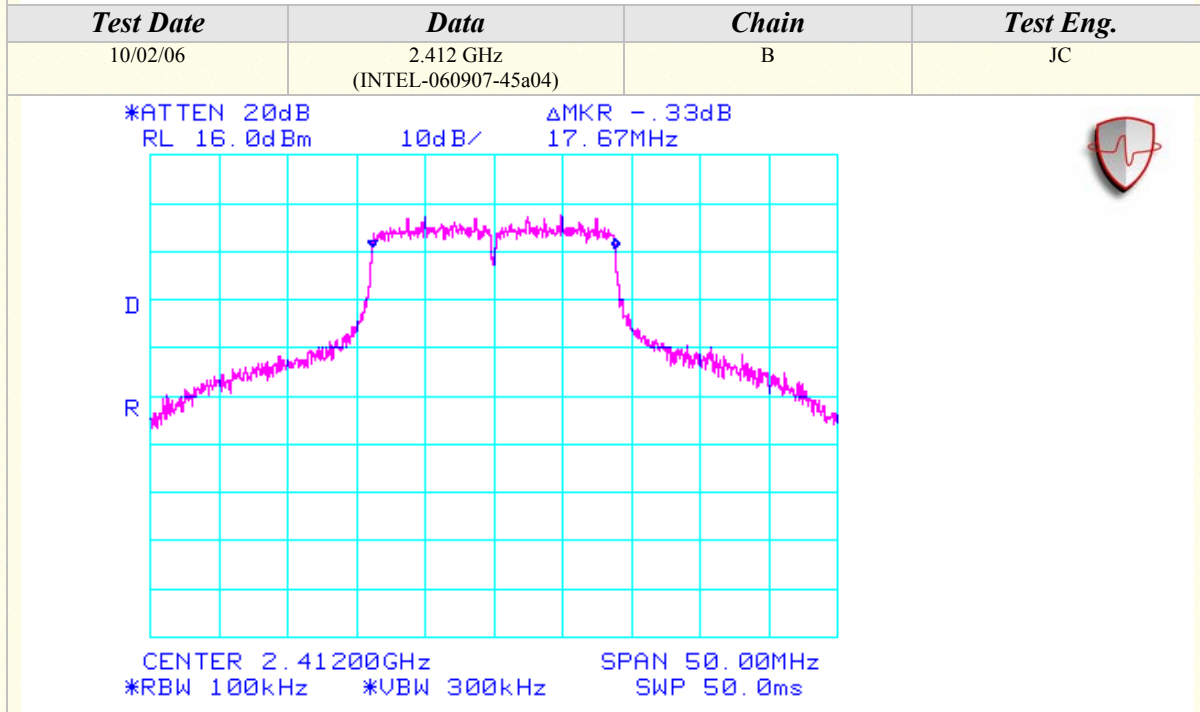
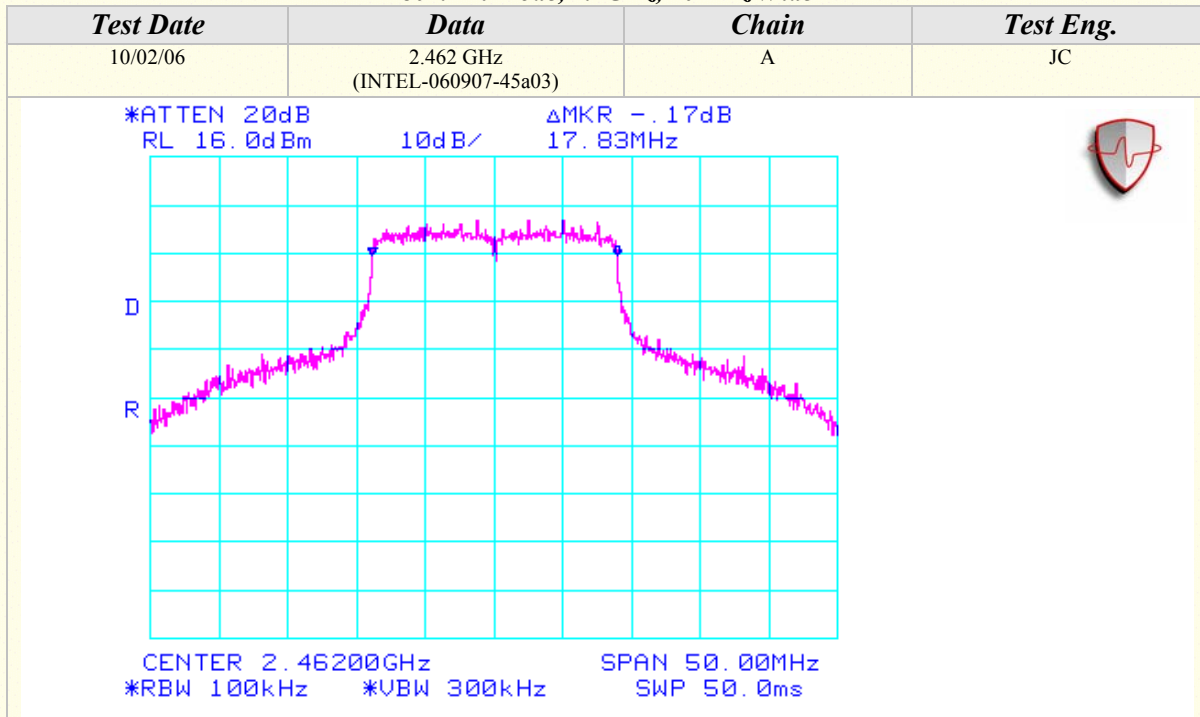
6dB Emissions Bandwidth (Continued)

802.11n Mode, 2.4GHz, 20MHz Wide



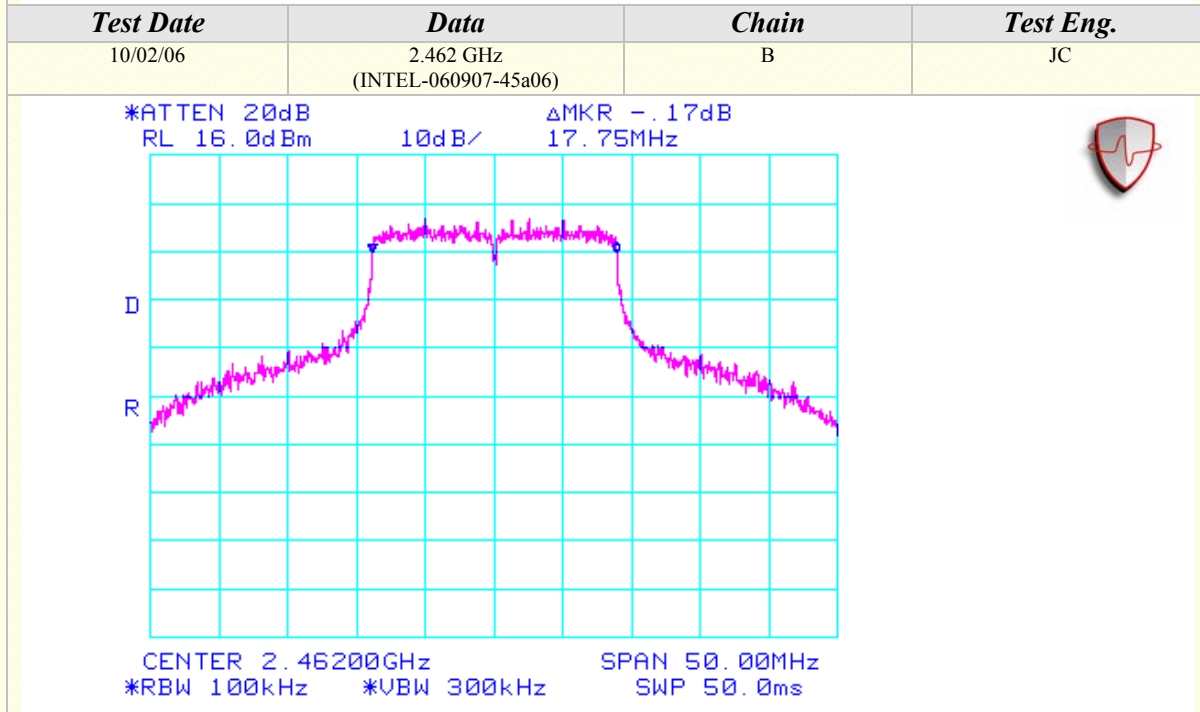
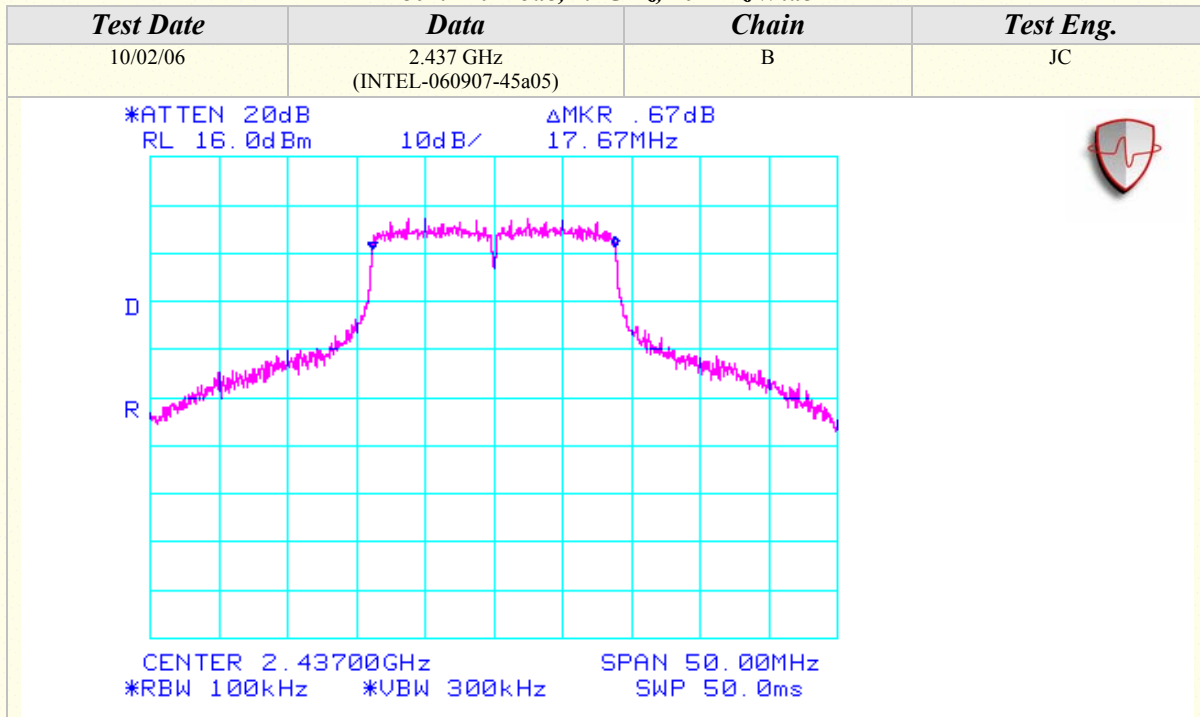
6dB Emissions Bandwidth (Continued)

802.11n Mode, 2.4GHz, 20MHz Wide



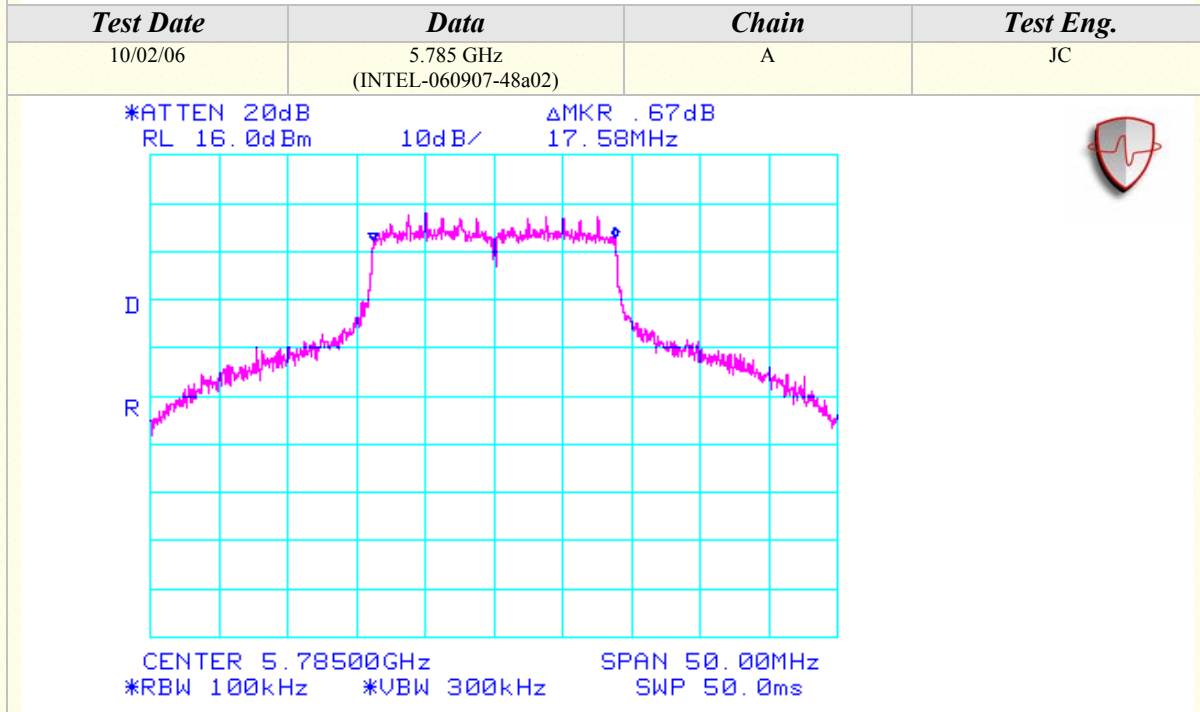
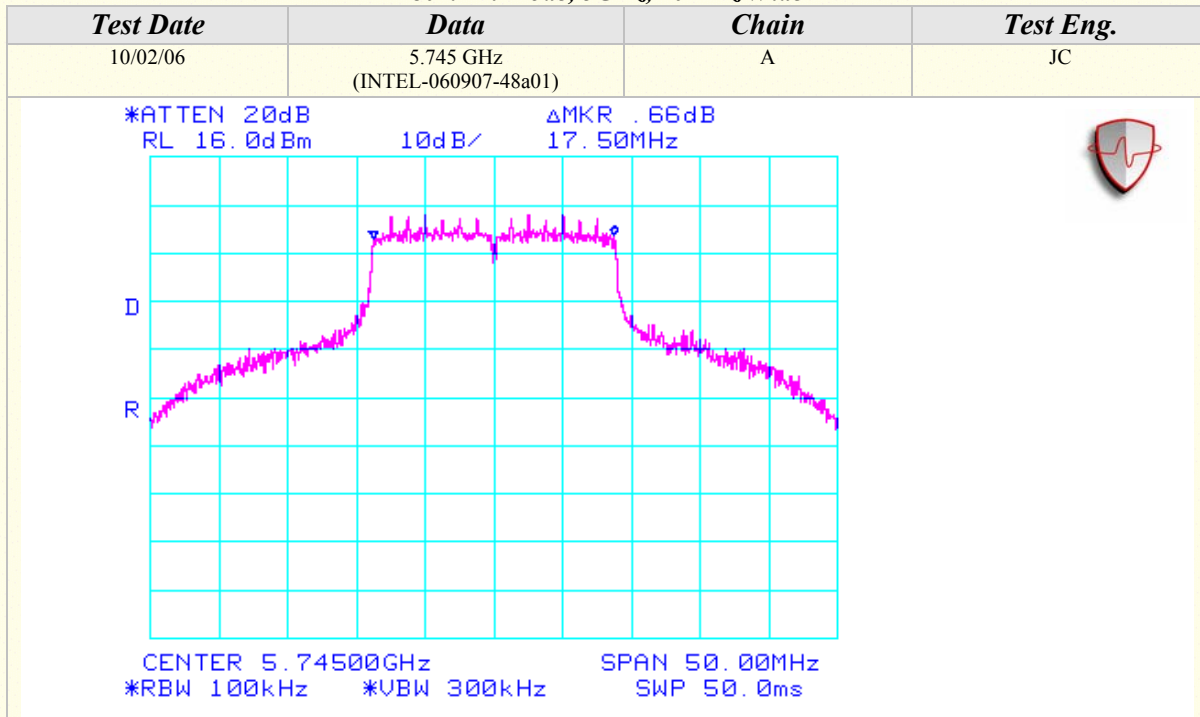
6dB Emissions Bandwidth (Continued)

802.11n Mode, 2.4GHz, 20MHz Wide



6dB Emissions Bandwidth (Continued)

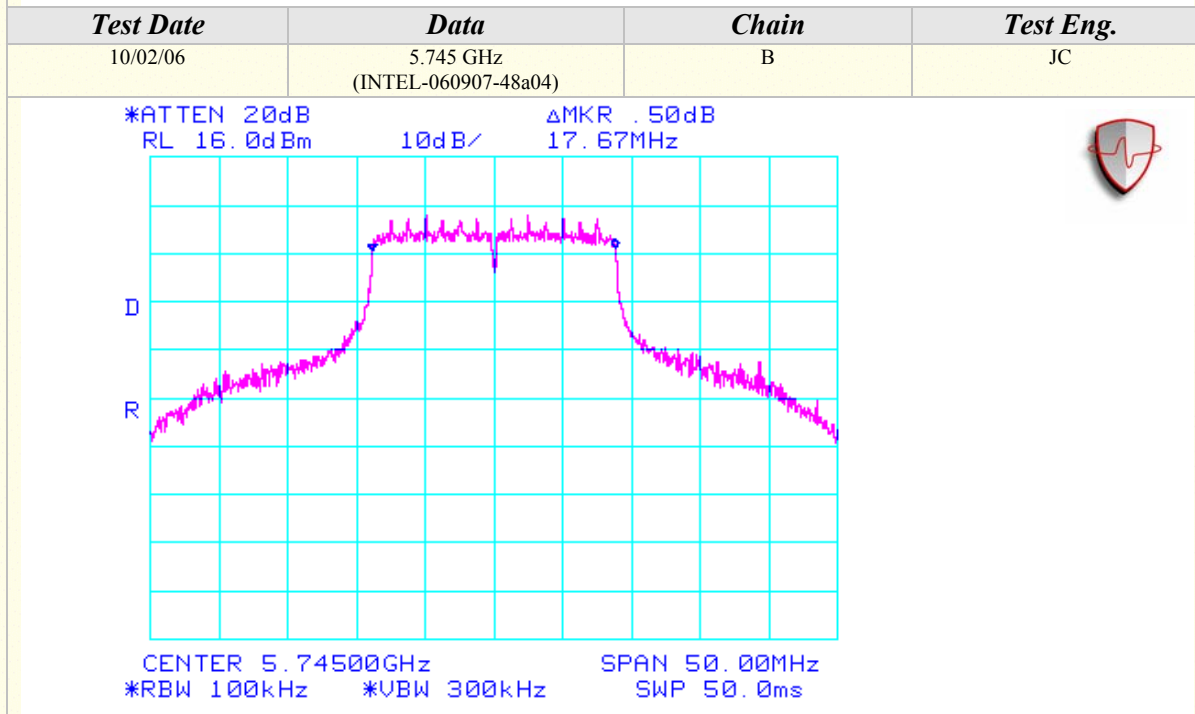
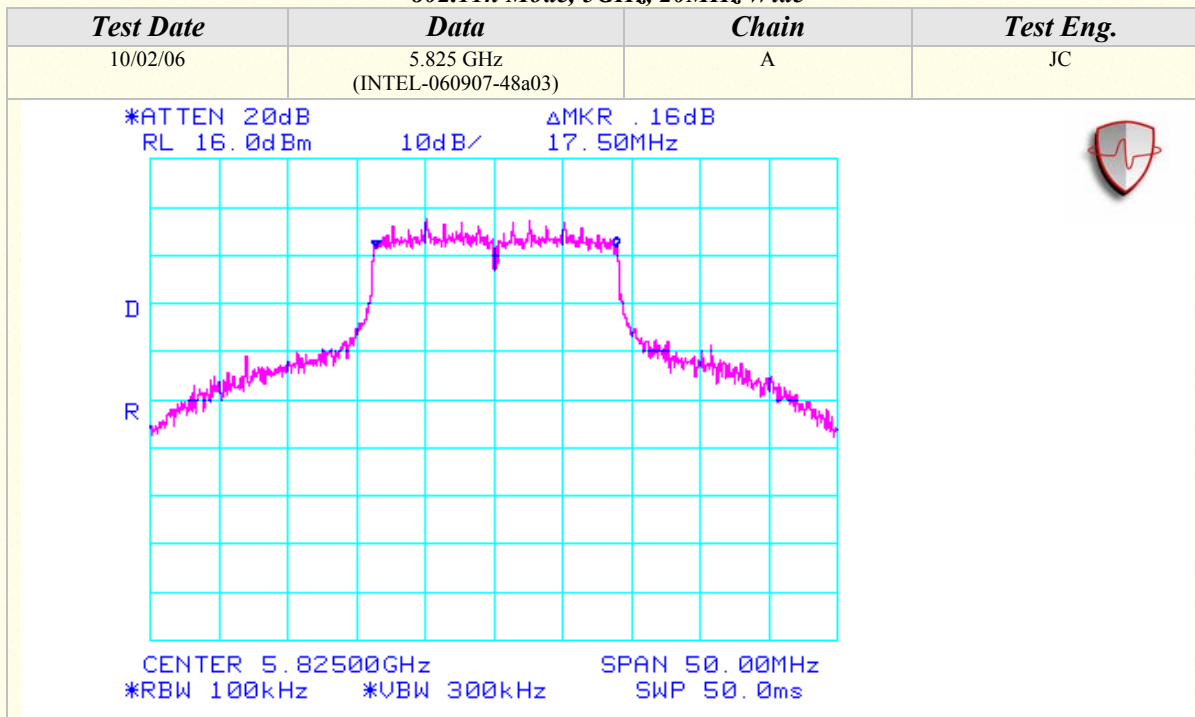
802.11n Mode, 5GHz, 20MHz Wide





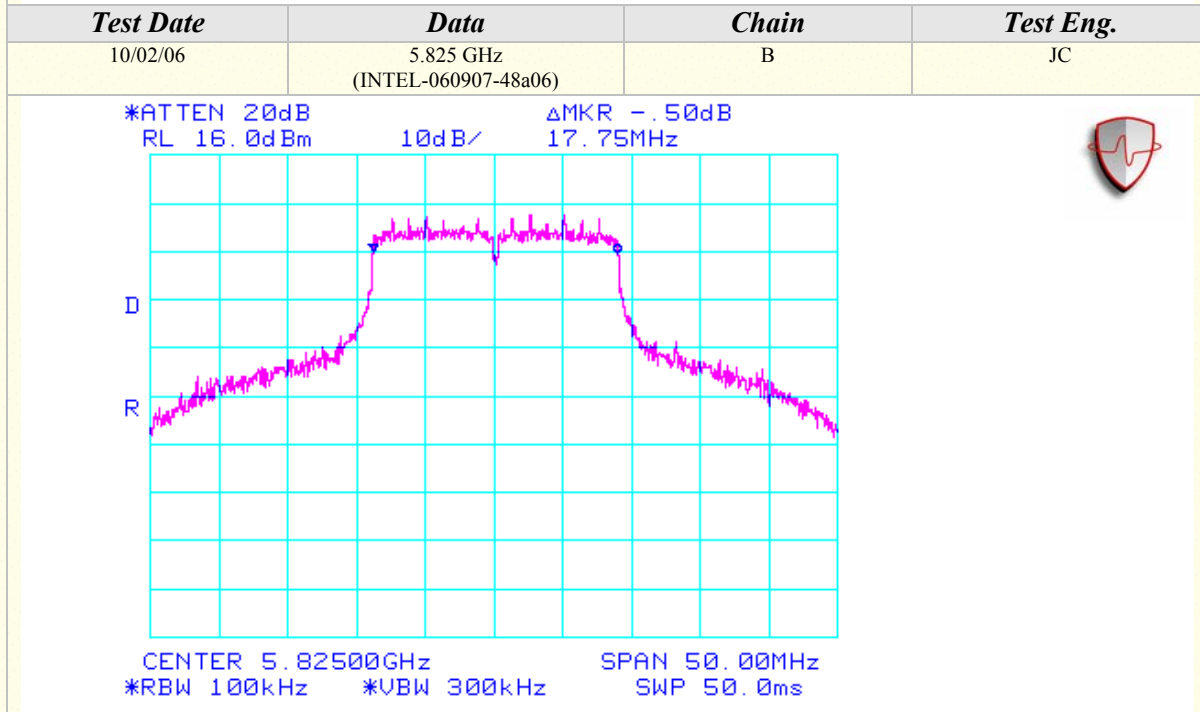
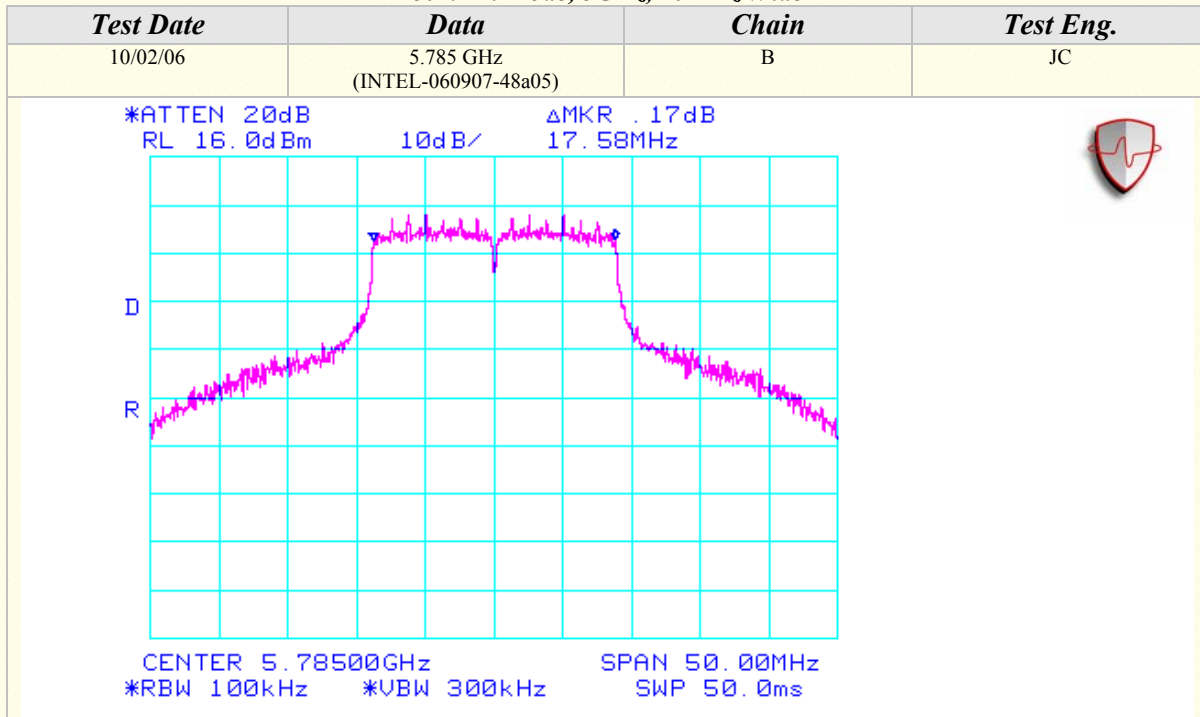
6dB Emissions Bandwidth (Continued)

802.11n Mode, 5GHz, 20MHz Wide



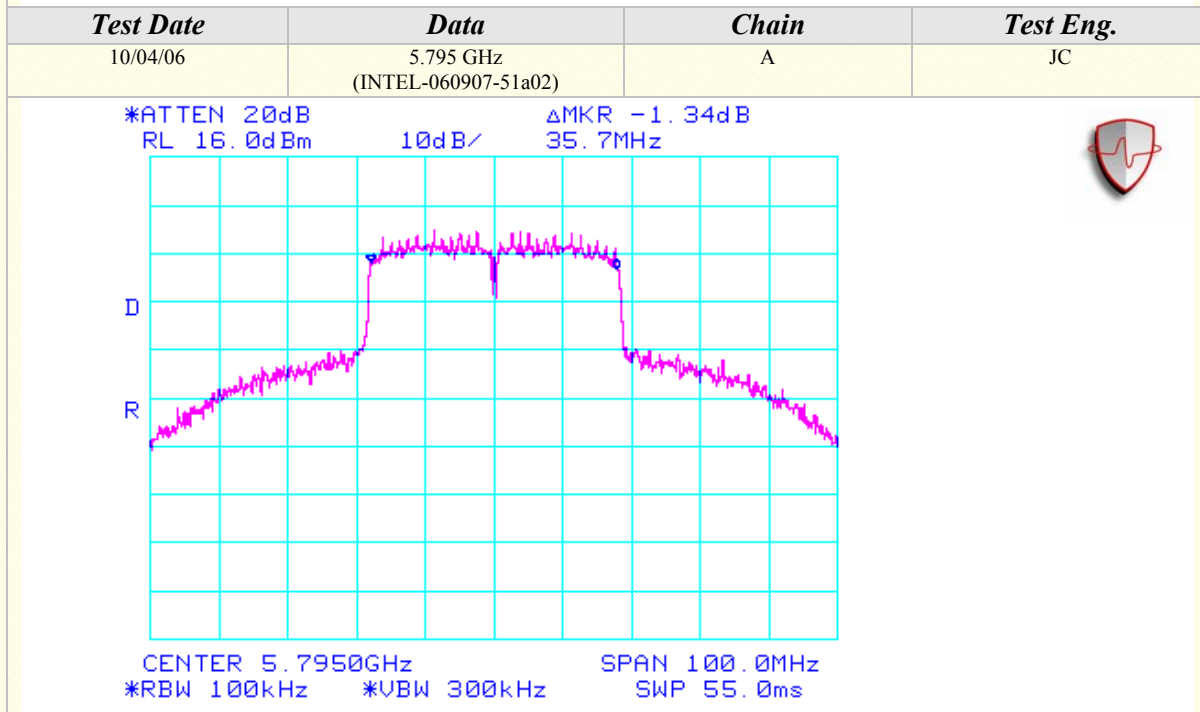
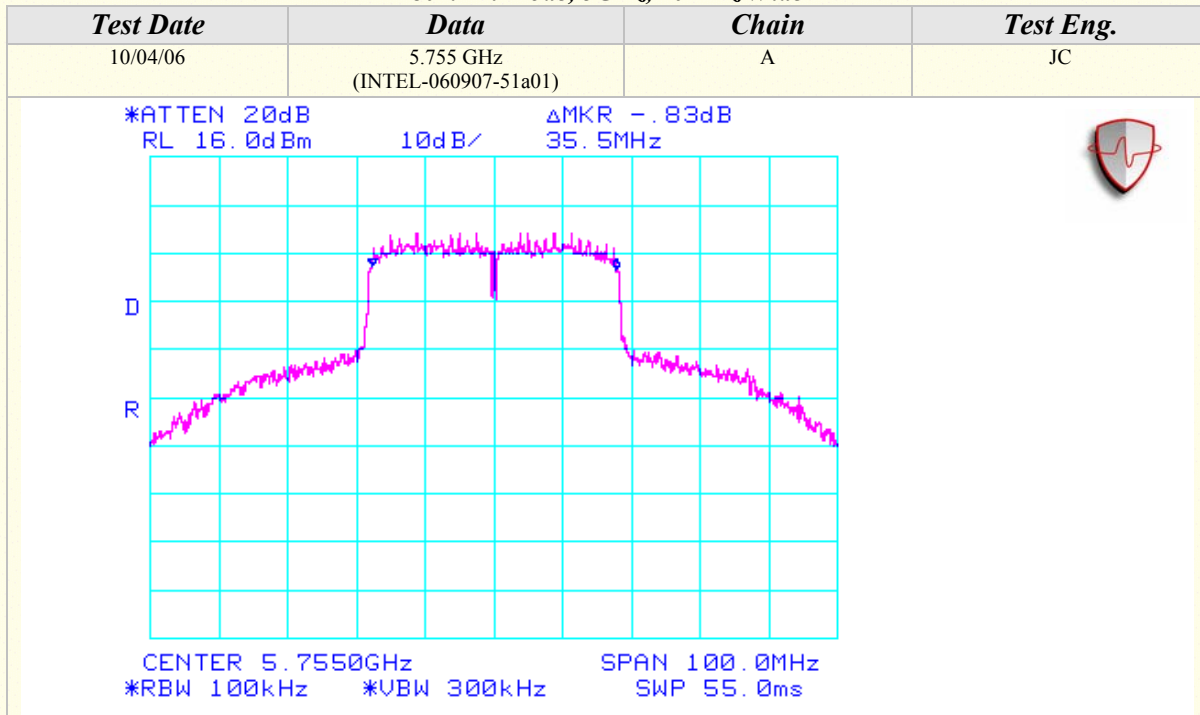
6dB Emissions Bandwidth (Continued)

802.11n Mode, 5GHz, 20MHz Wide



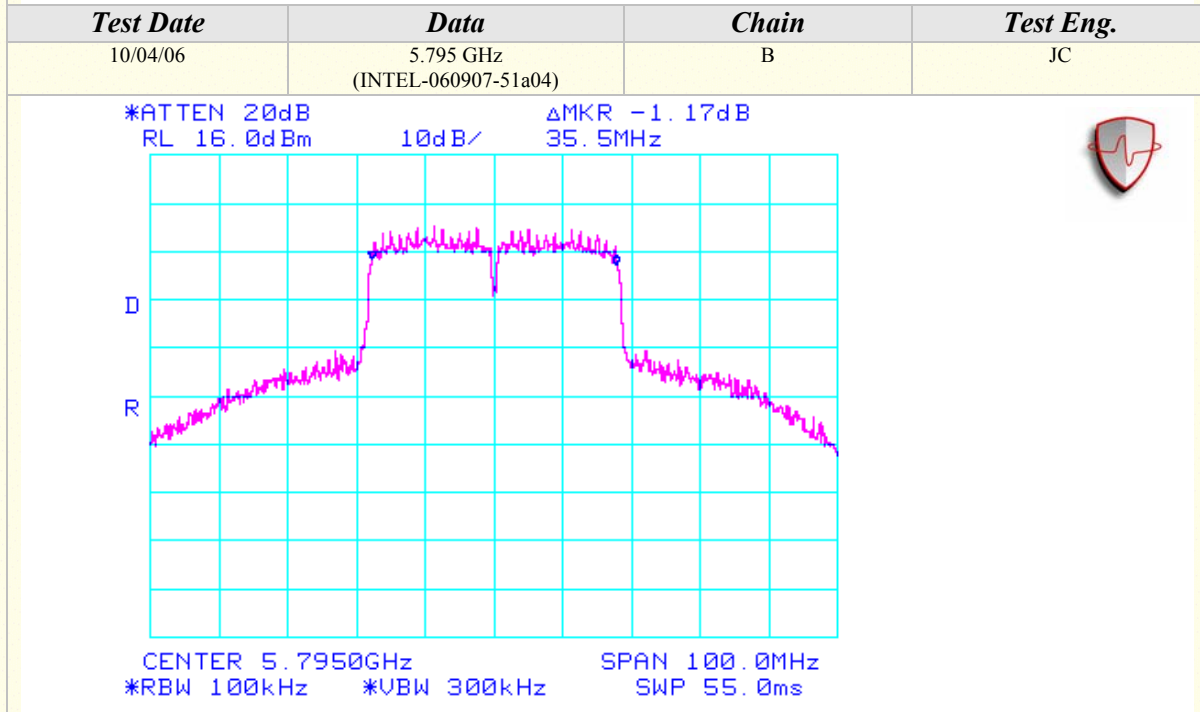
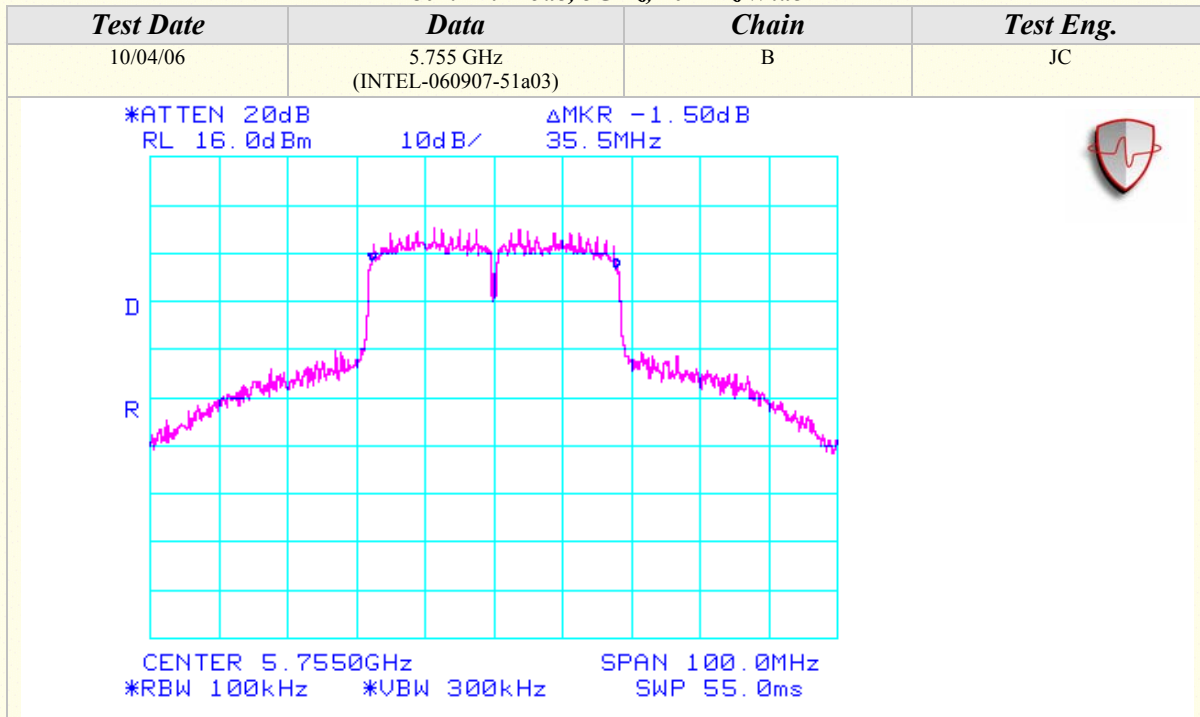
6dB Emissions Bandwidth (Continued)

802.11n Mode, 5GHz, 40MHz Wide



6dB Emissions Bandwidth (Continued)

802.11n Mode, 5GHz, 40MHz Wide





## PEAK POWER SPECTRAL DENSITY

<b>CLIENT:</b>	Intel Corporation	<b>DATE:</b>	09/19/06
<b>EUT:</b>	Intel PRO/Wireless 4965AGN Network Connection	<b>PROJECT NUMBER:</b>	INTEL-060907
<b>MODEL NUMBER:</b>	4965AGN	<b>TEST ENGINEER:</b>	JC
<b>SERIAL NUMBER:</b>	0013E804612B	<b>SITE #:</b>	2
<b>CONFIGURATION:</b>	Tested installed in the host computer's mini PCI slot.	<b>TEMPERATURE:</b>	21 deg. C
		<b>HUMIDITY:</b>	29% RH
		<b>TIME:</b>	9:50 AM

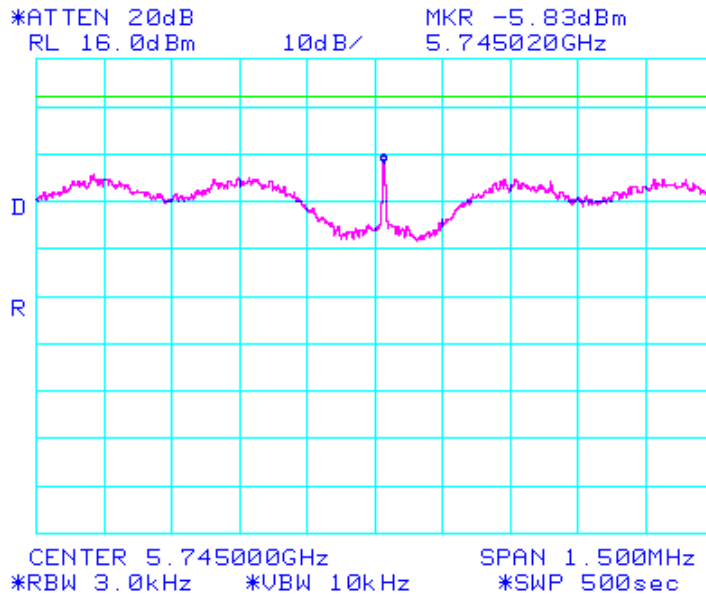
<b>Description:</b>	The peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.
<b>Results:</b>	See Data Sheet
<b>Note:</b>	Conducted Emissions Measurements were performed on the EUT with power supply set at the following voltage and frequency. <ul style="list-style-type: none"><li>• 120VAC / 60 Hz.</li></ul>

Peak Power Spectral Density Limits	
Frequency (MHz)	Limit (dBm)
5725-5850	8
2412-2462	8

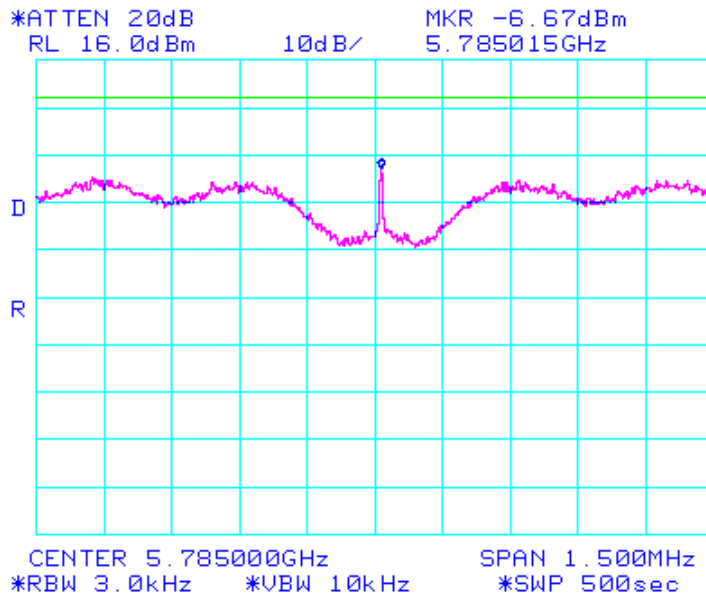
Peak Power Spectral Density (Continued)

802.11a Mode

Test Date	Data	Chain	Test Eng.
09/19/06	5.745 GHz (INTEL-060907-27c01)	A	JC



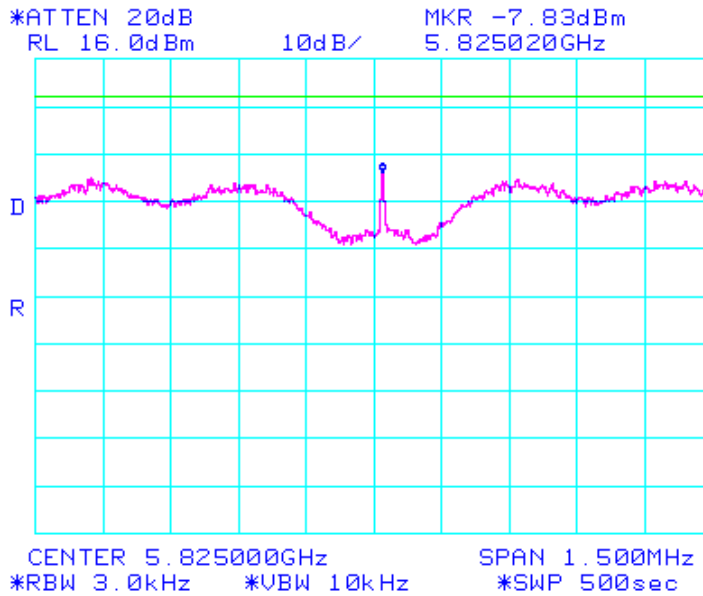
Test Date	Data	Chain	Test Eng.
09/19/06	5.785 GHz (INTEL-060907-27c02)	A	JC



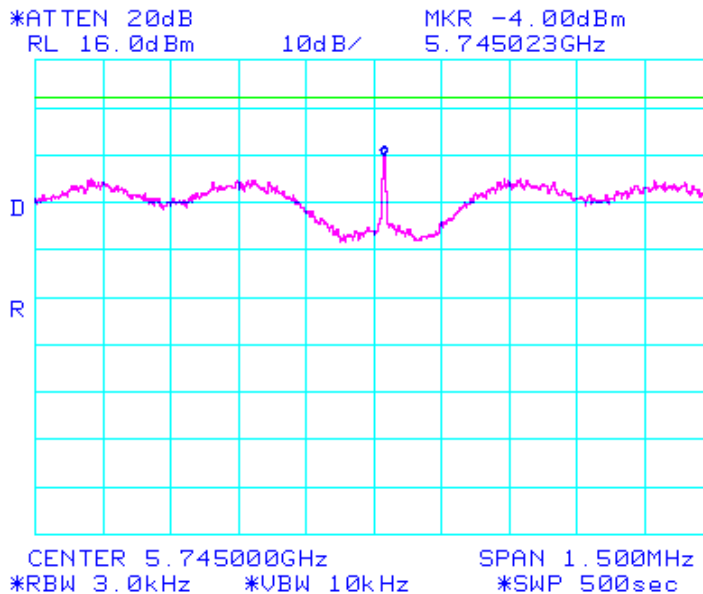
Peak Power Spectral Density (Continued)

802.11a Mode

Test Date	Data	Chain	Test Eng.
09/19/06	5.825 GHz (INTEL-060907-27c03)	A	JC



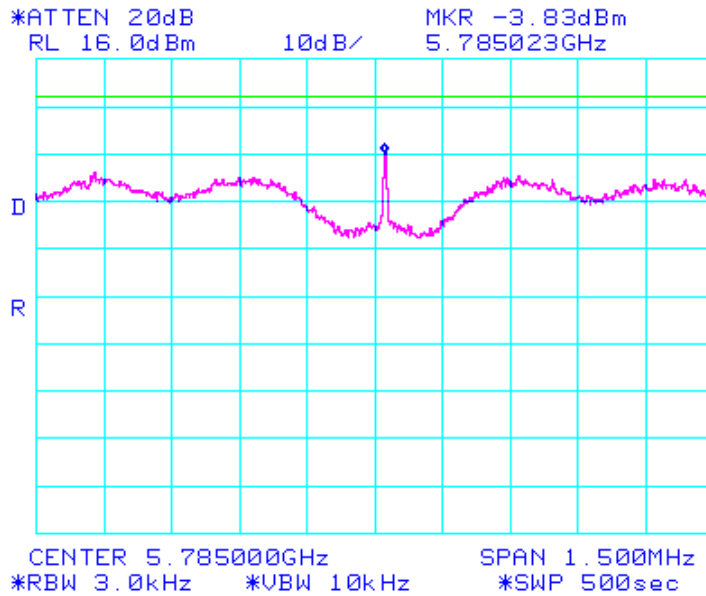
Test Date	Data	Chain	Test Eng.
09/19/06	5.745 GHz (INTEL-060907-27c04)	B	JC



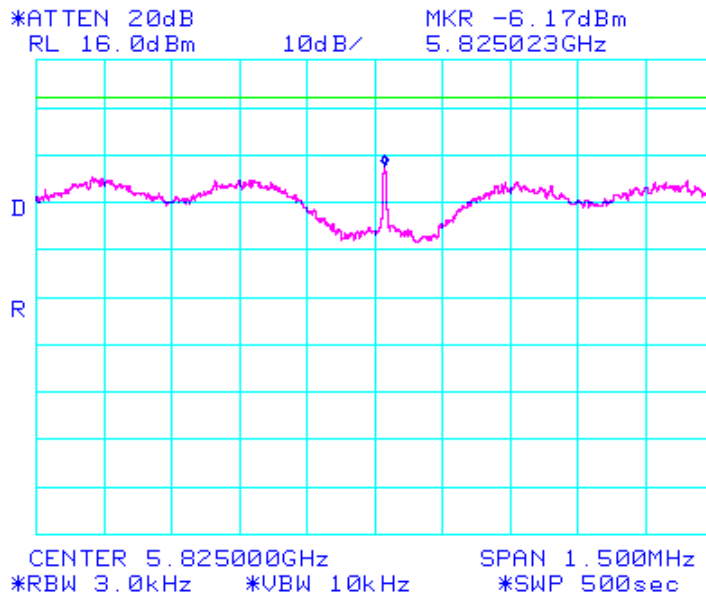
Peak Power Spectral Density (Continued)

802.11a Mode

Test Date	Data	Chain	Test Eng.
09/19/06	5.785 GHz (INTEL-060907-27c05)	B	JC



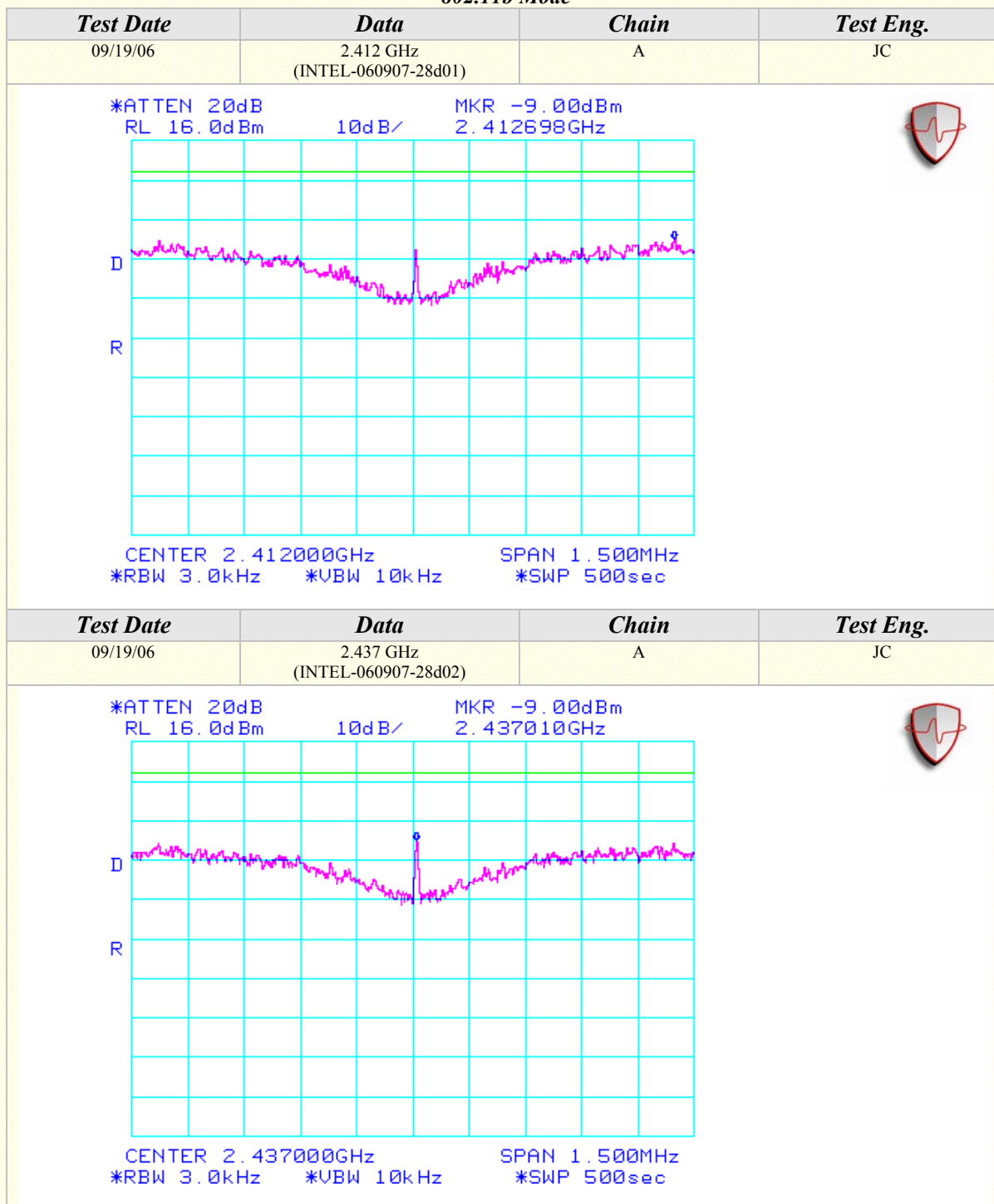
Test Date	Data	Chain	Test Eng.
09/19/06	5.825 GHz (INTEL-060907-27c06)	B	JC





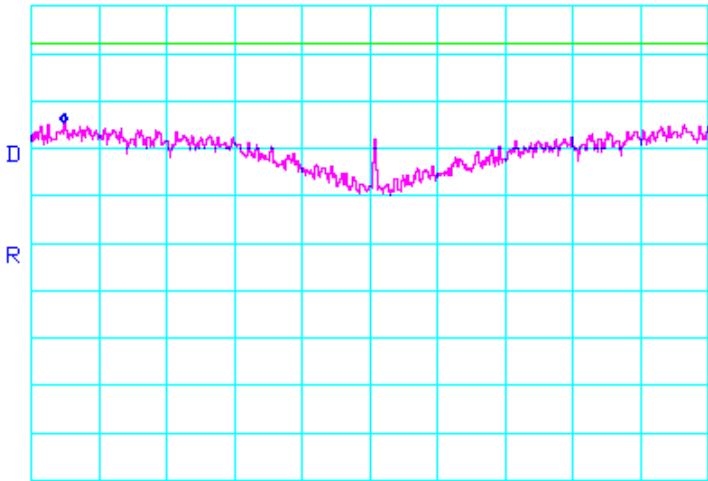
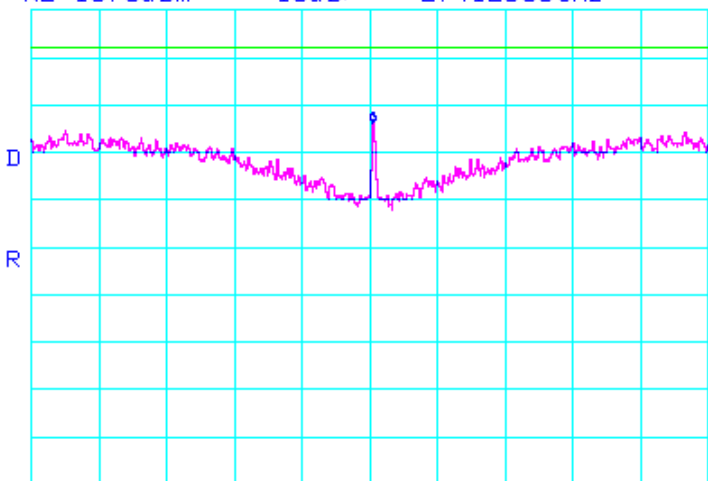
Peak Power Spectral Density (Continued)

802.11b Mode



## Peak Power Spectral Density (Continued)

## 802.11b Mode

Test Date	Data	Chain	Test Eng.
09/19/06	2.462 GHz (INTEL-060907-28d03)	A	JC
<p>                     *ATTEN 20dB                                  MKR -8.67dBm                      RL 16.0dBm                                  10dB/                                  2.461323GHz                 </p>  <p>                     CENTER 2.462000GHz                                  SPAN 1.500MHz                      *RBW 3.0kHz                                  *VBW 10kHz                                  *SWP 500sec                 </p>			
Test Date	Data	Chain	Test Eng.
09/19/06	2.412 GHz (INTEL-060907-28d04)	B	JC
<p>                     *ATTEN 20dB                                  MKR -7.67dBm                      RL 16.0dBm                                  10dB/                                  2.412008GHz                 </p>  <p>                     CENTER 2.412000GHz                                  SPAN 1.500MHz                      *RBW 3.0kHz                                  *VBW 10kHz                                  *SWP 500sec                 </p>			

Peak Power Spectral Density (Continued)

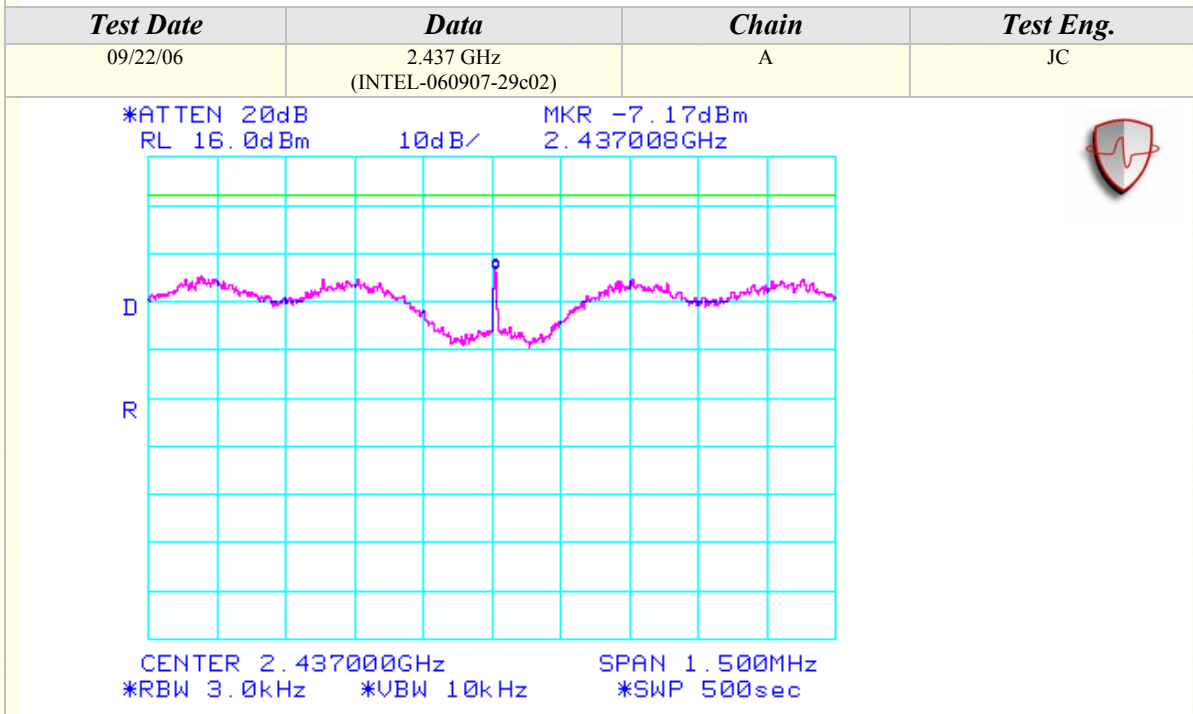
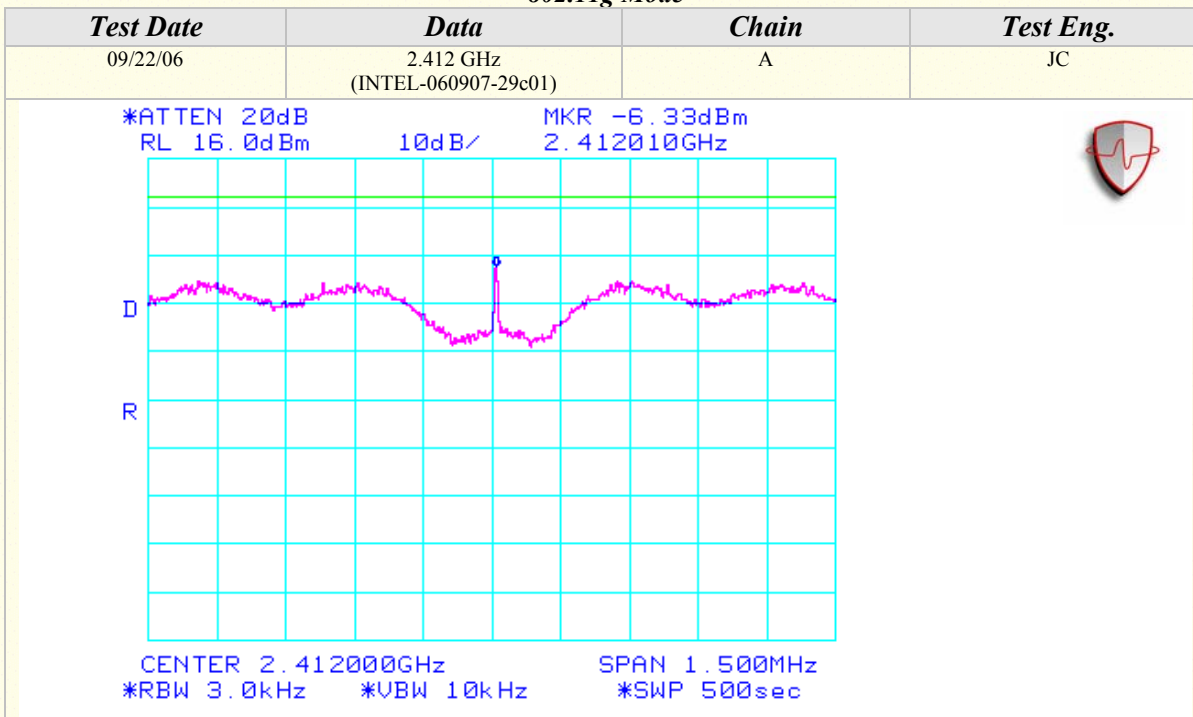
802.11b Mode

Test Date	Data	Chain	Test Eng.
09/19/06	2.437 GHz (INTEL-060907-28d05)	B	JC
<p>*ATTEN 20dB      MKR -6.50dBm RL 16.0dBm      10dB/      2.437013GHz</p> <p>CENTER 2.437000GHz      SPAN 1.500MHz *RBW 3.0kHz      *VBW 10kHz      *SWP 500sec</p>			
Test Date	Data	Chain	Test Eng.
09/19/06	2.462 GHz (INTEL-060907-28d06)	B	JC
<p>*ATTEN 20dB      MKR -6.67dBm RL 16.0dBm      10dB/      2.462013GHz</p> <p>CENTER 2.462000GHz      SPAN 1.500MHz *RBW 3.0kHz      *VBW 10kHz      *SWP 500sec</p>			



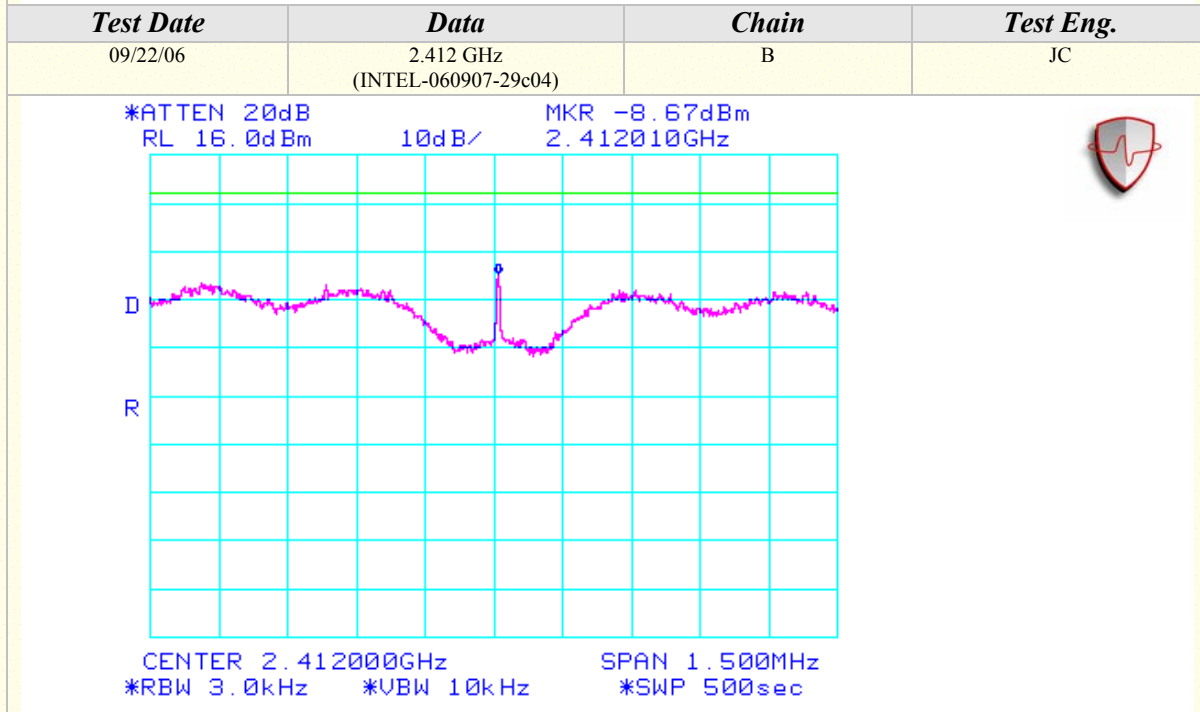
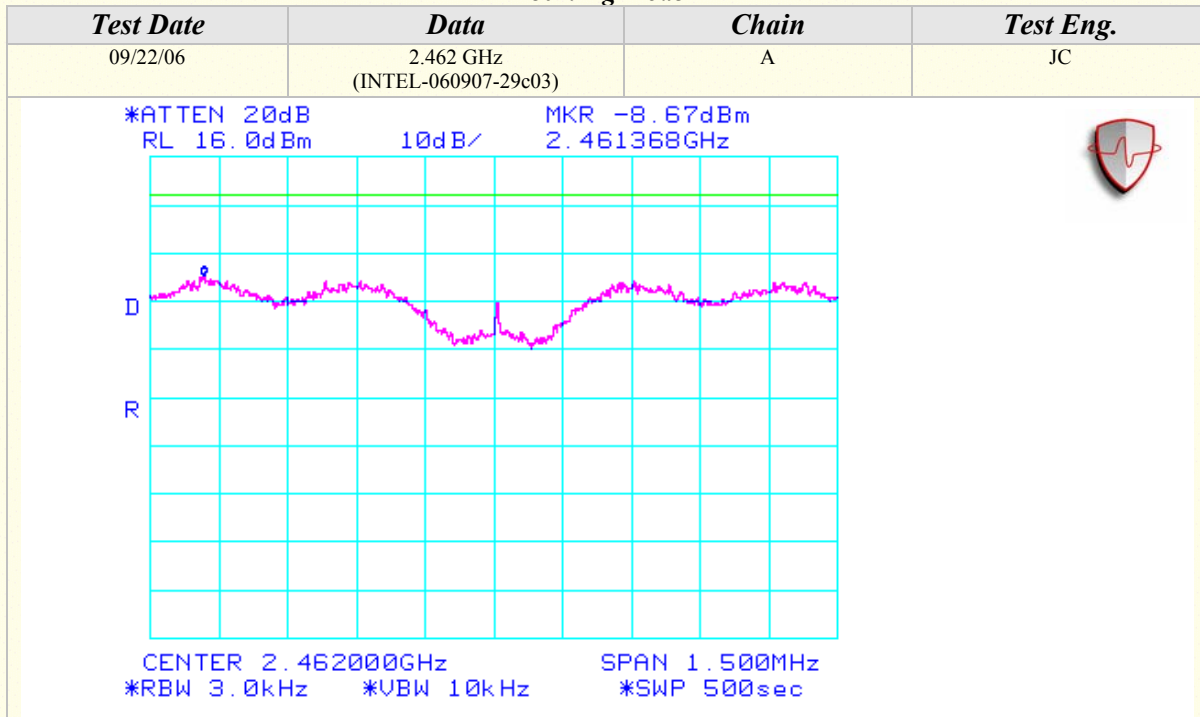
Peak Power Spectral Density (Continued)

802.11g Mode



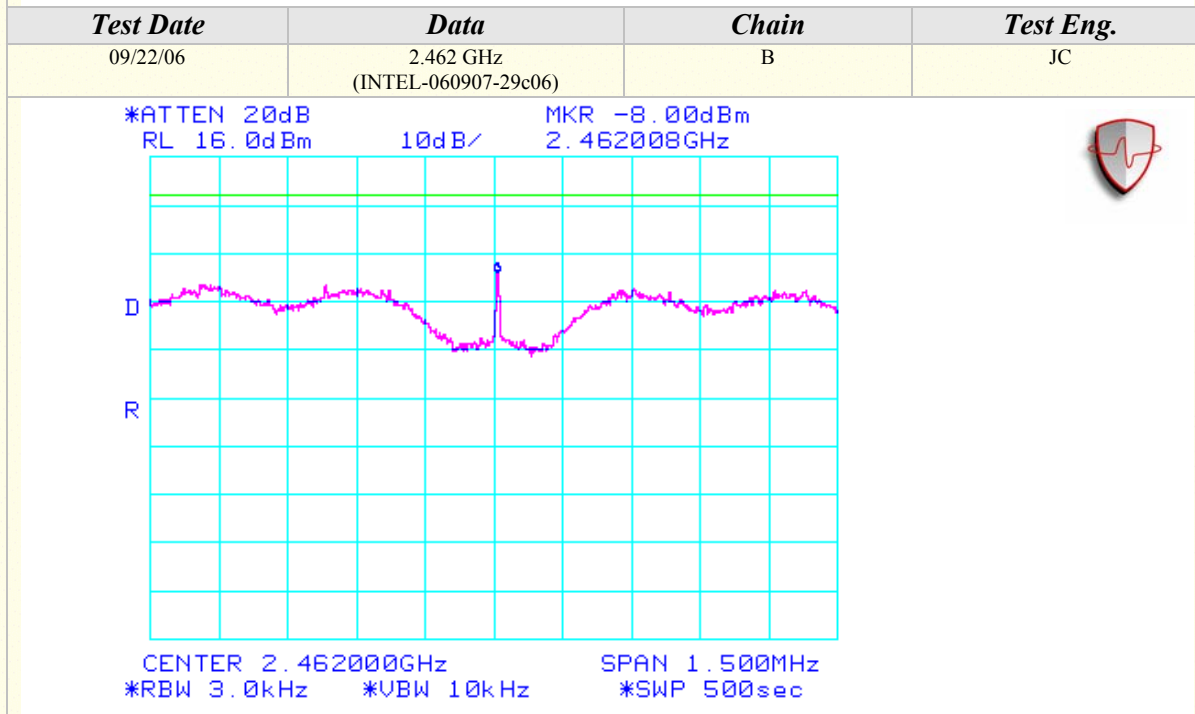
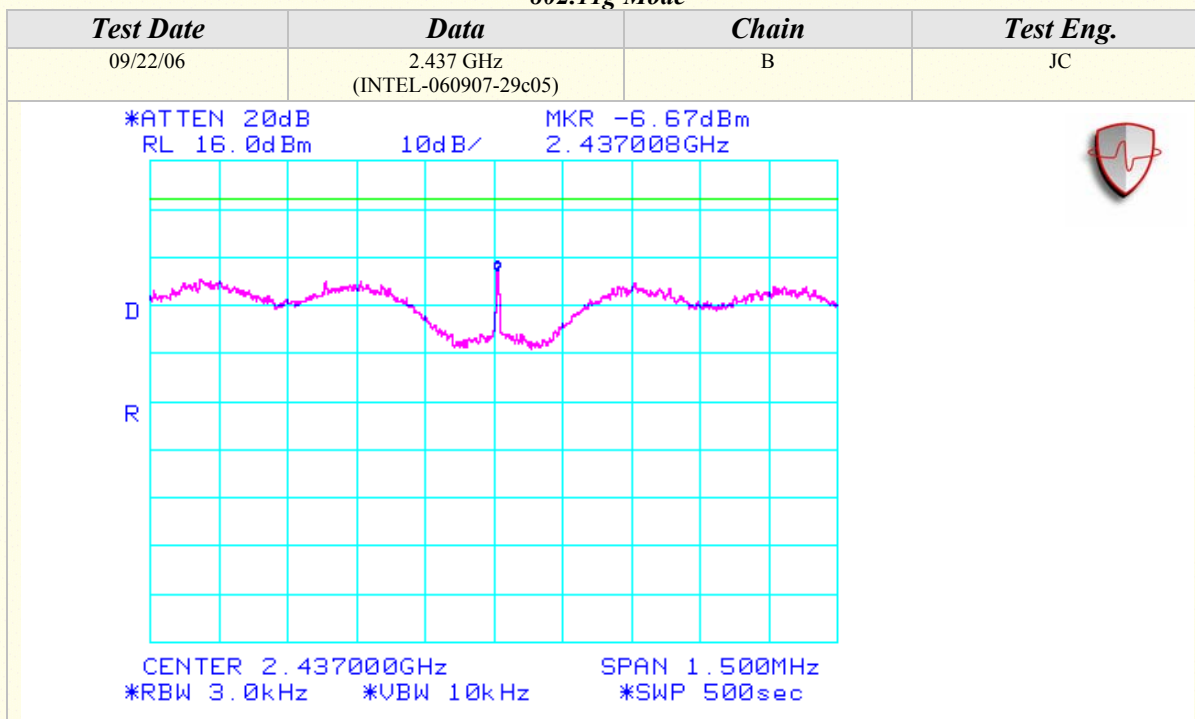
Peak Power Spectral Density (Continued)

802.11g Mode



Peak Power Spectral Density (Continued)

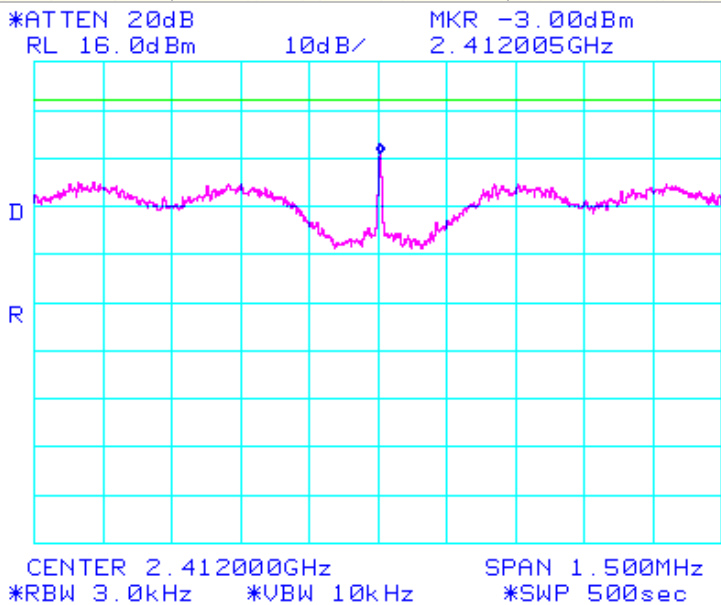
802.11g Mode



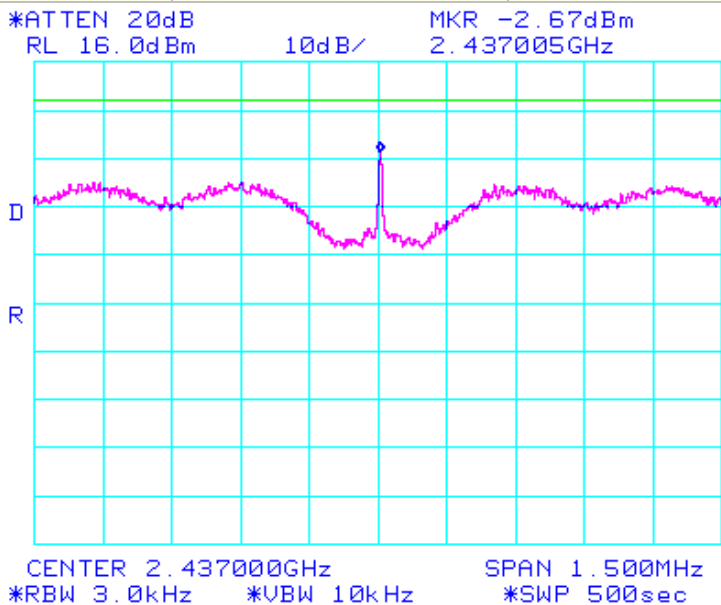
Peak Power Spectral Density (Continued)

802.11n Mode, 2.4GHz, 20MHz Wide

Test Date	Data	Chain	Test Eng.
10/02/06	2.412 GHz (INTEL-060907-45c01)	A	JC

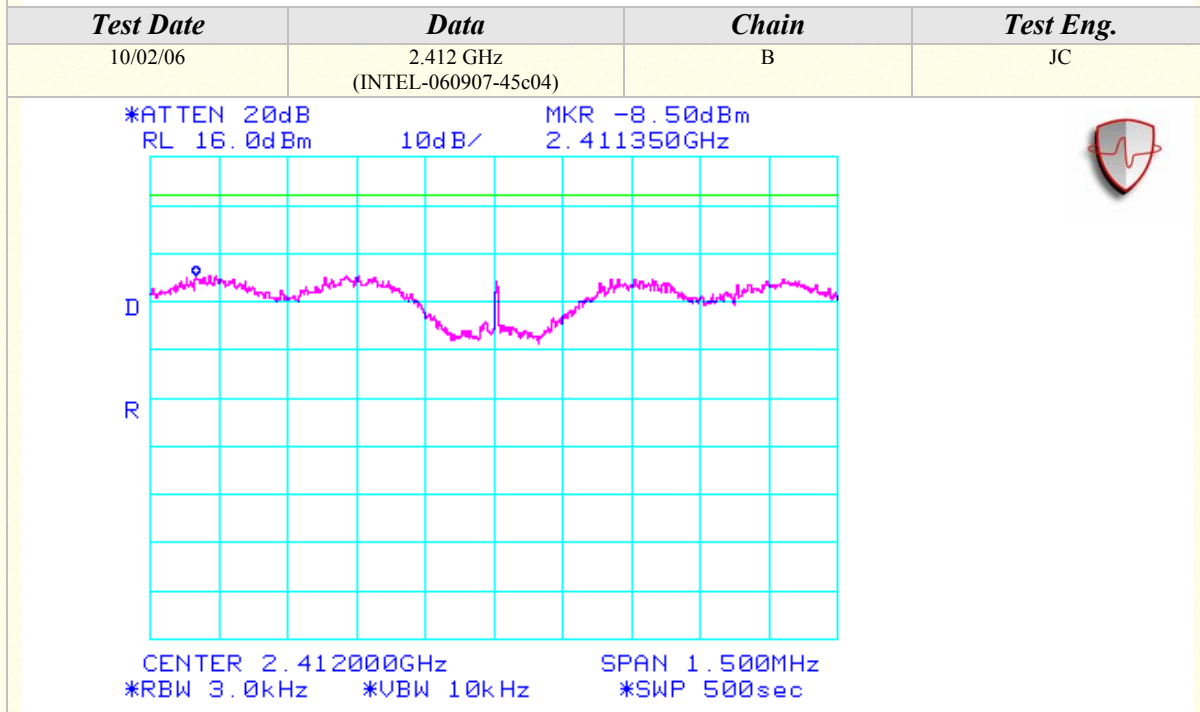
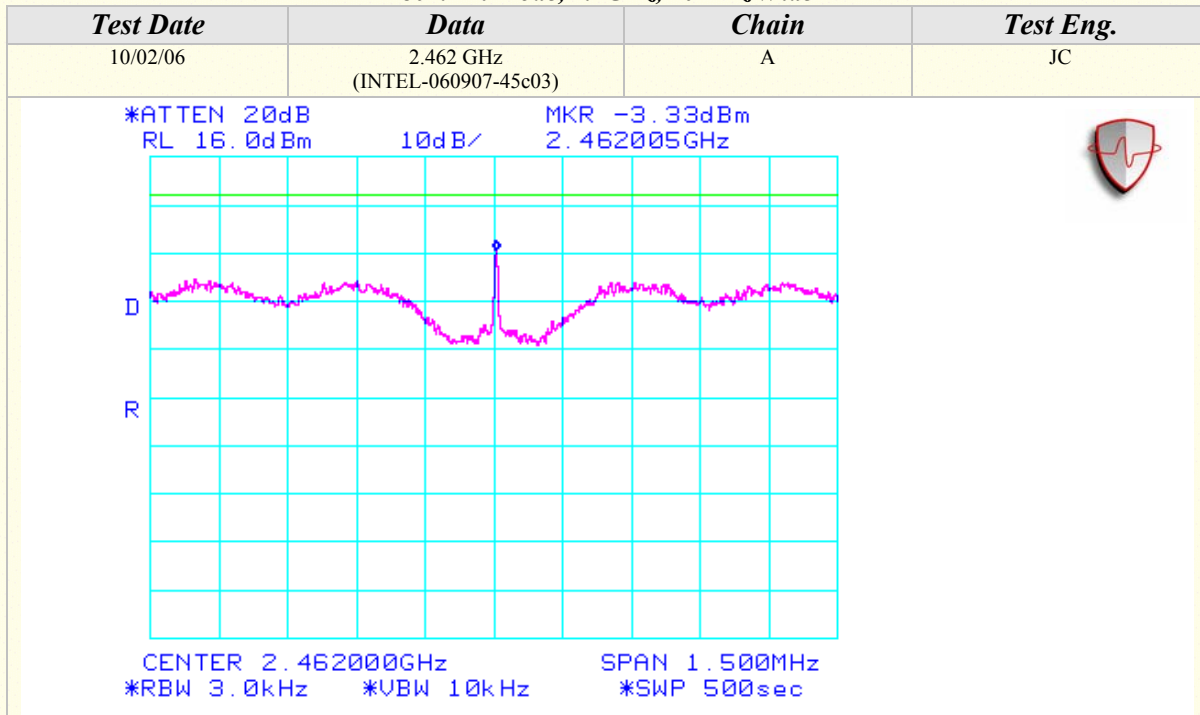


Test Date	Data	Chain	Test Eng.
10/02/06	2.437 GHz (INTEL-060907-45c02)	A	JC



Peak Power Spectral Density (Continued)

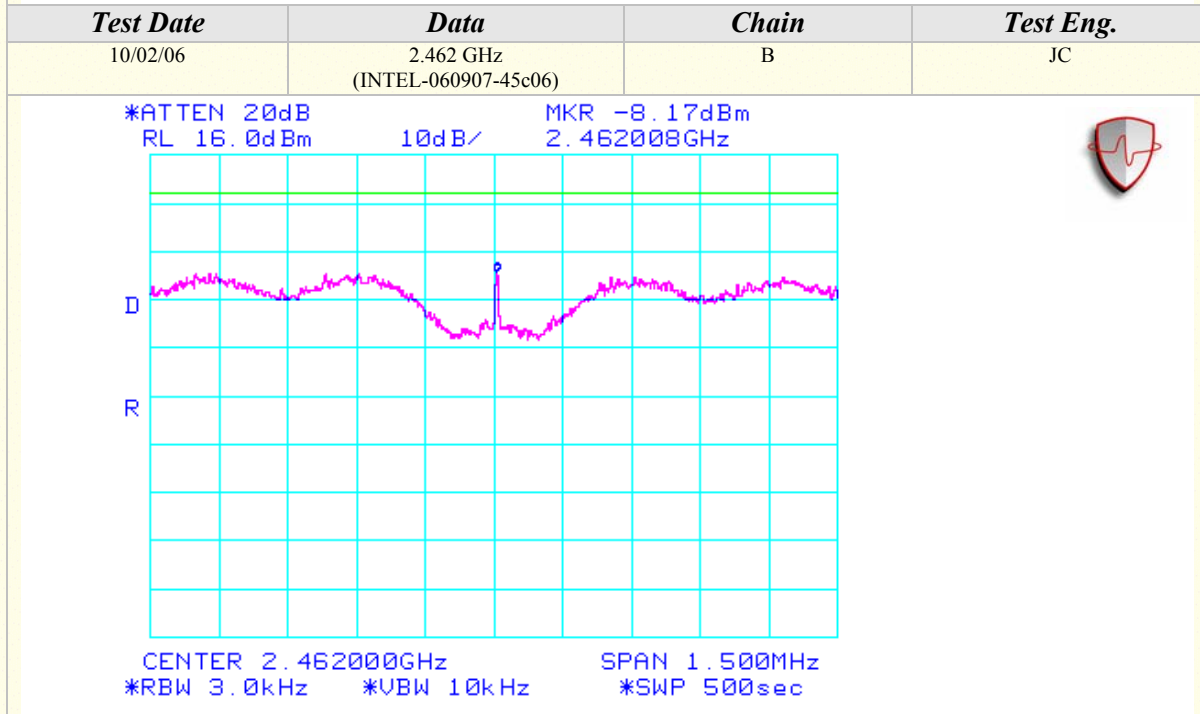
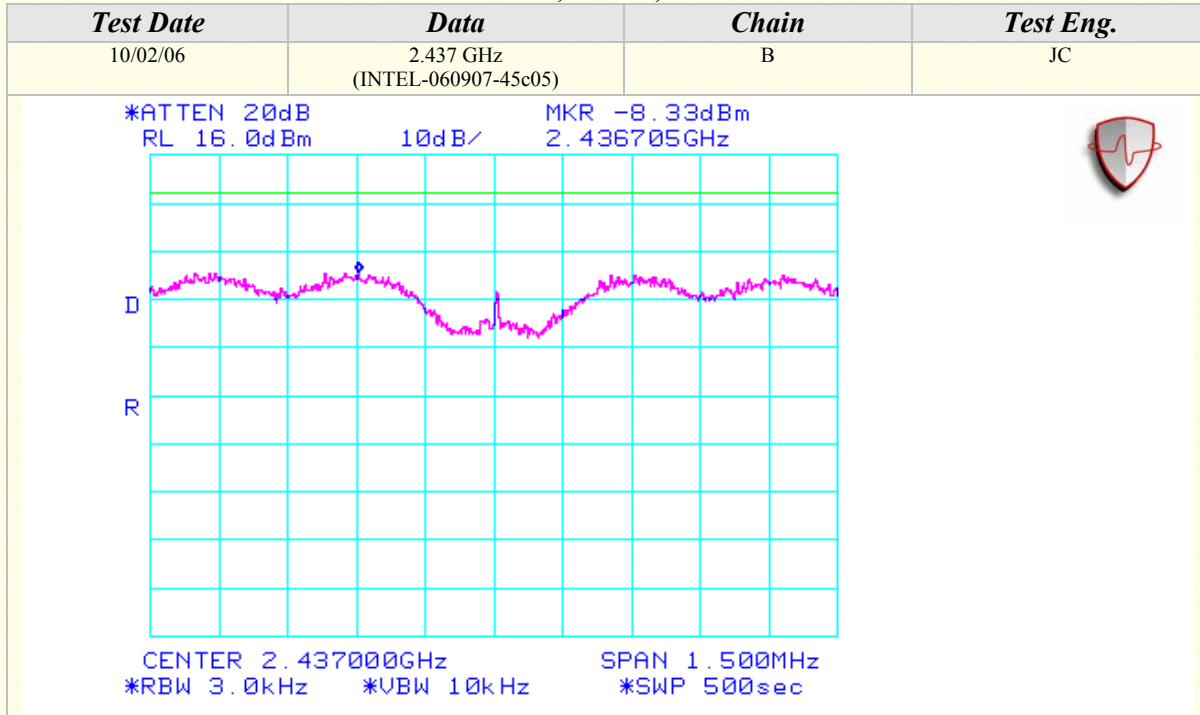
802.11n Mode, 2.4GHz, 20MHz Wide





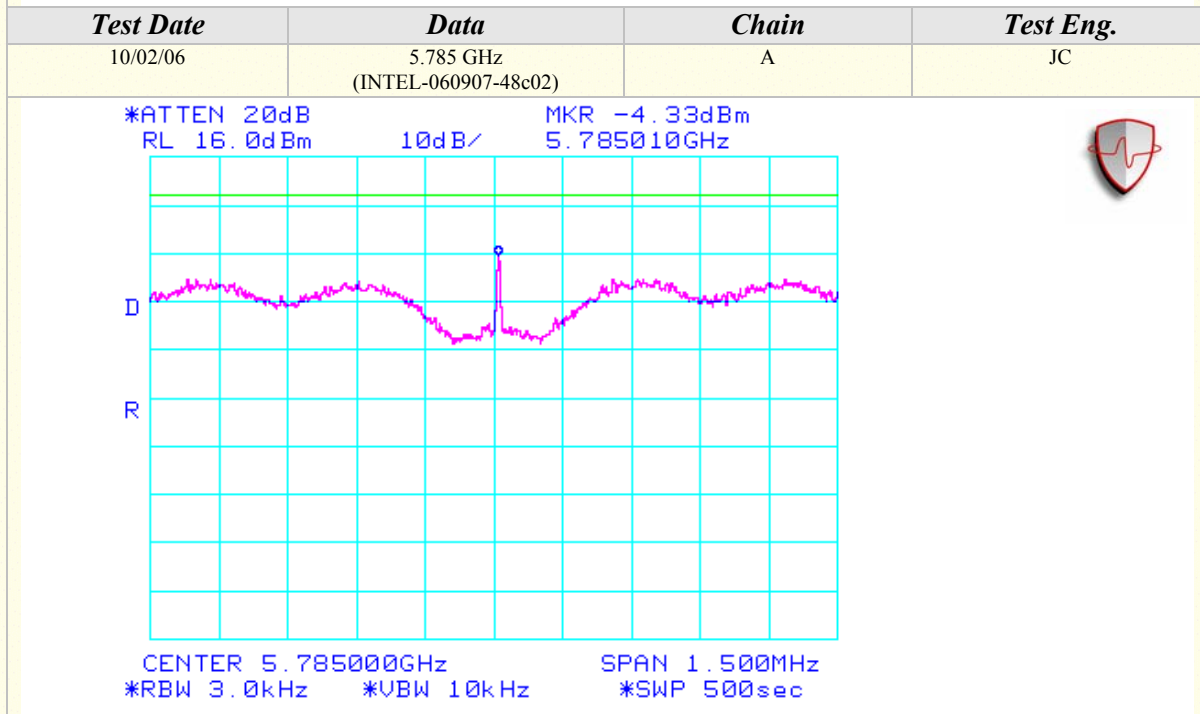
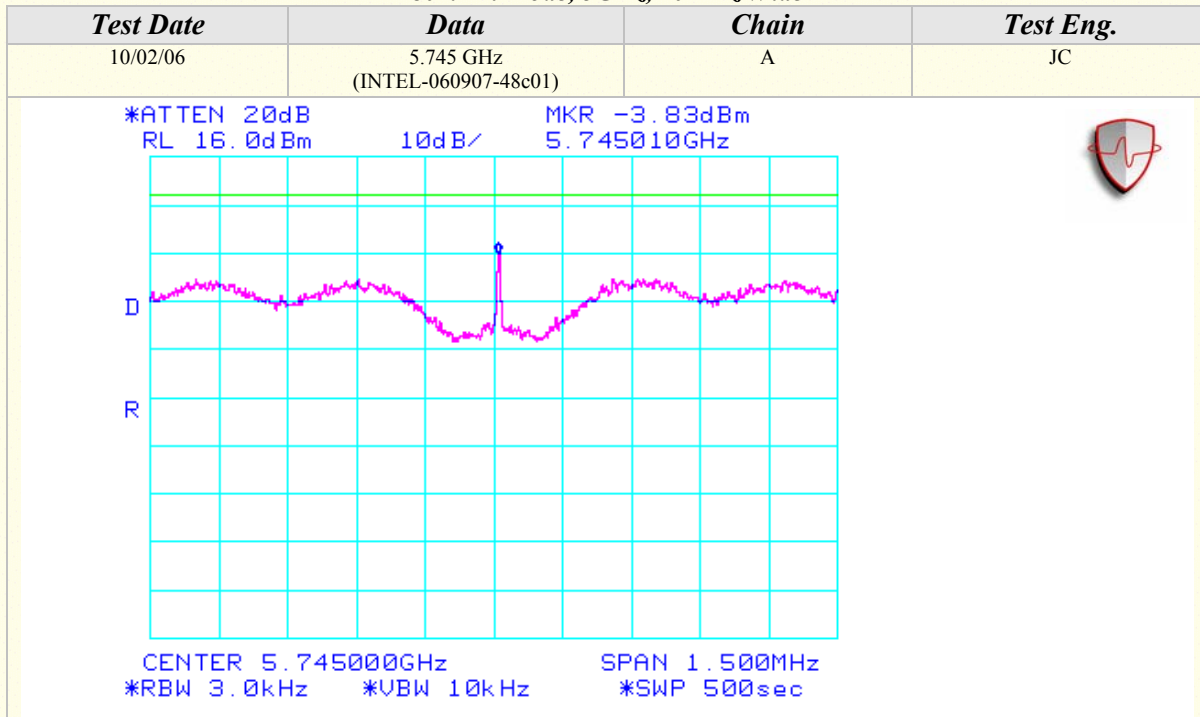
Peak Power Spectral Density (Continued)

*802.11n Mode, 2.4GHz, 20MHz Wide*



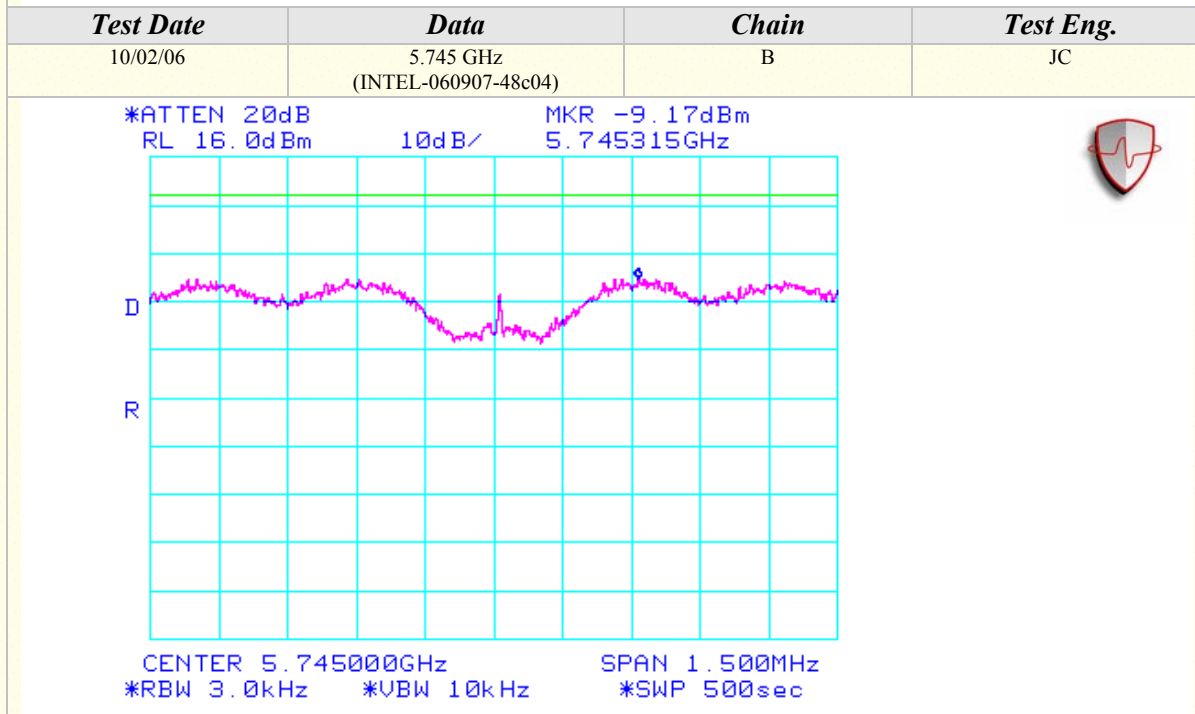
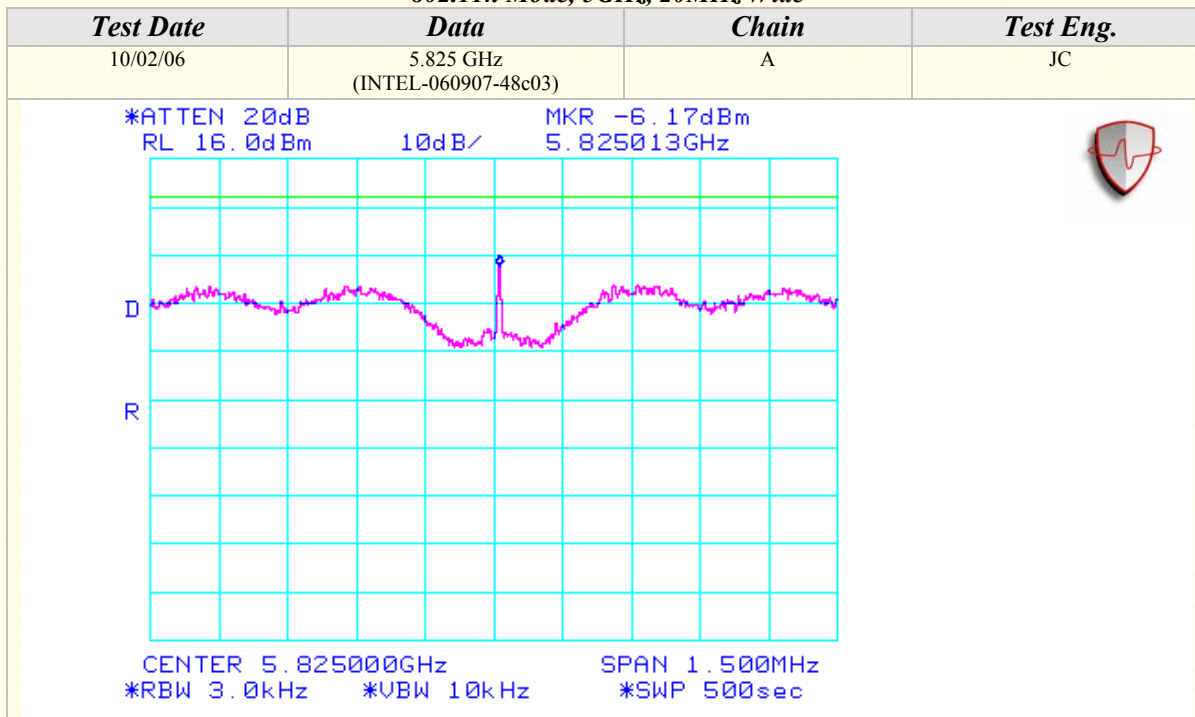
Peak Power Spectral Density (Continued)

802.11n Mode, 5GHz, 20MHz Wide



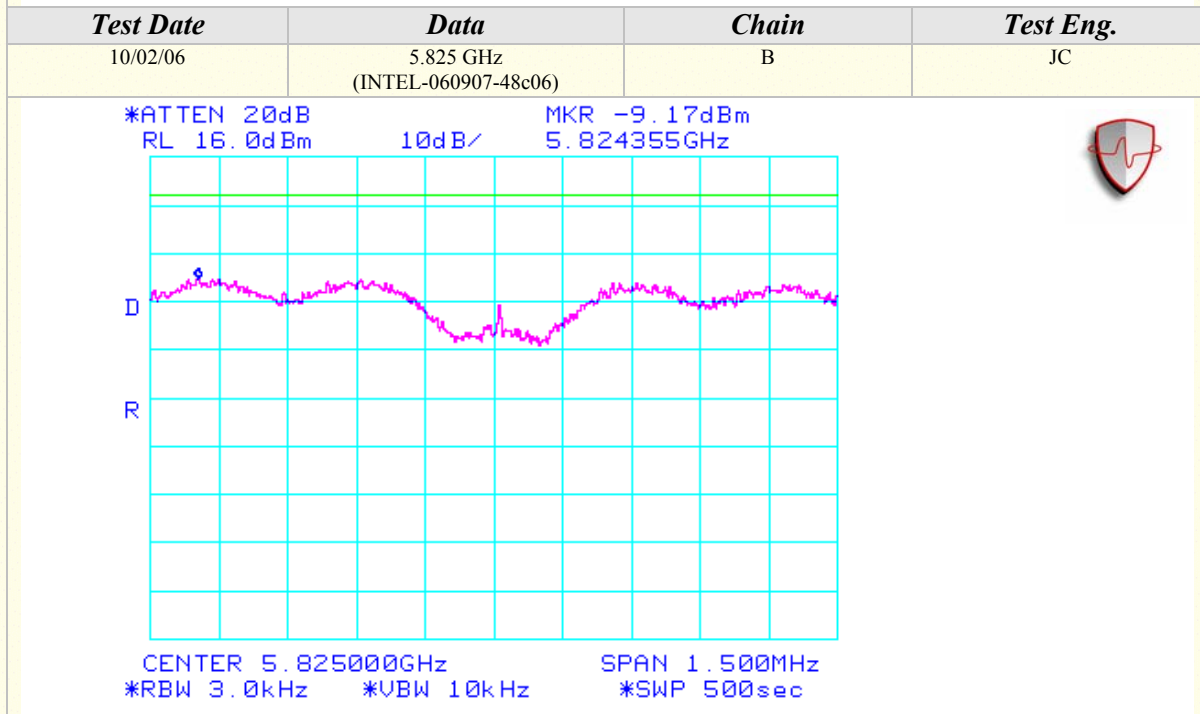
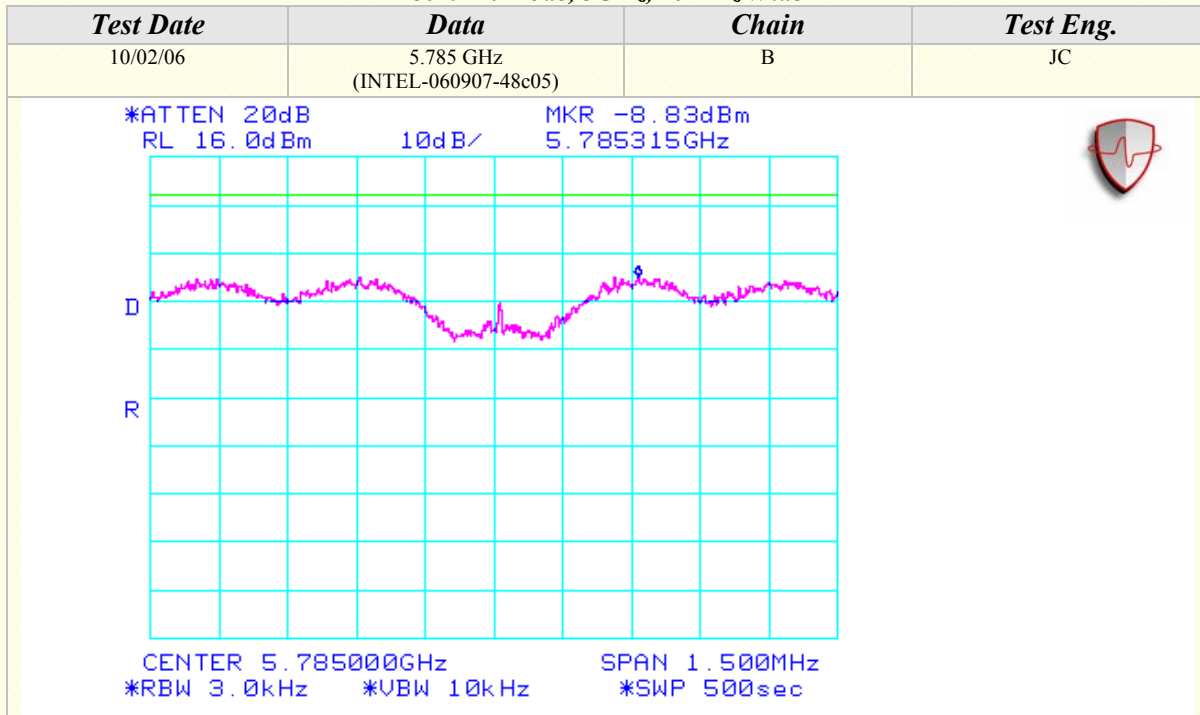
Peak Power Spectral Density (Continued)

802.11n Mode, 5GHz, 20MHz Wide



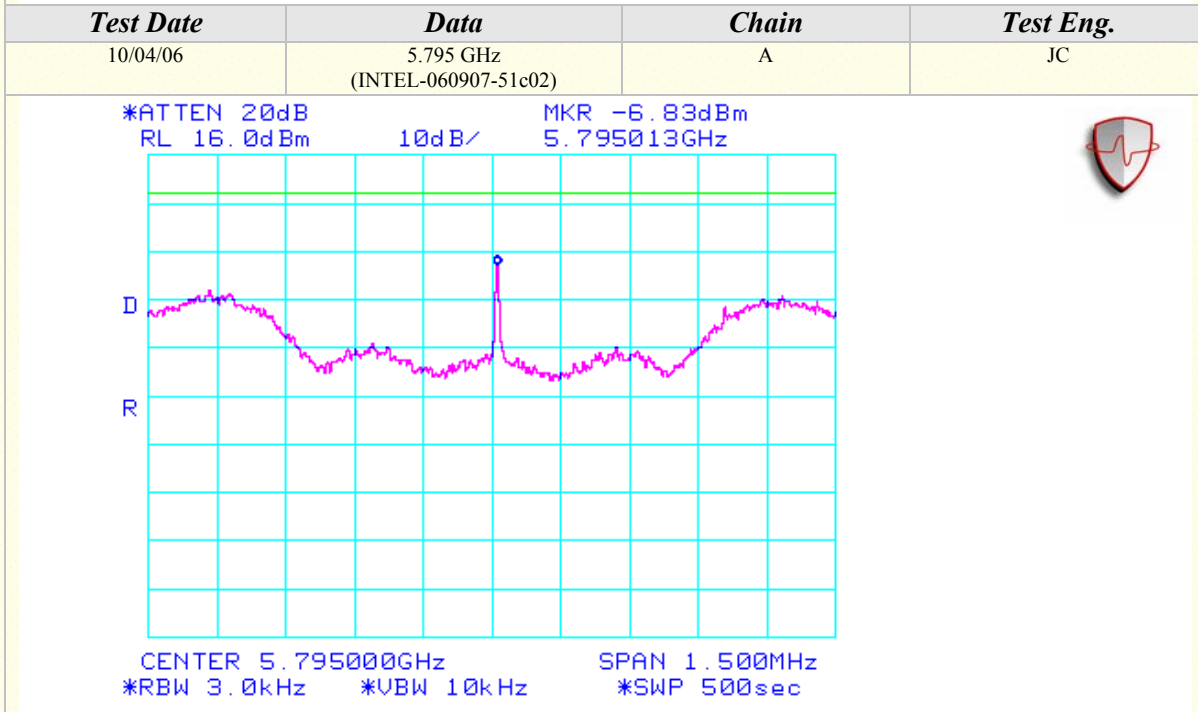
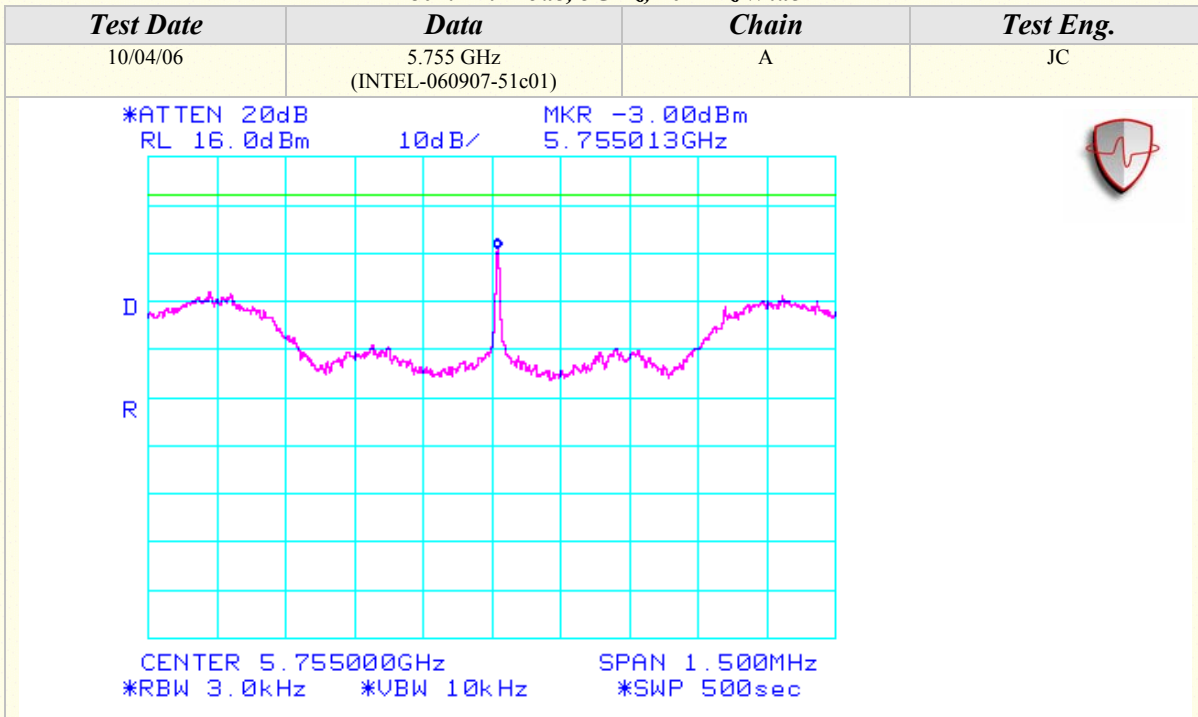
### Peak Power Spectral Density (Continued)

#### 802.11n Mode, 5GHz, 20MHz Wide



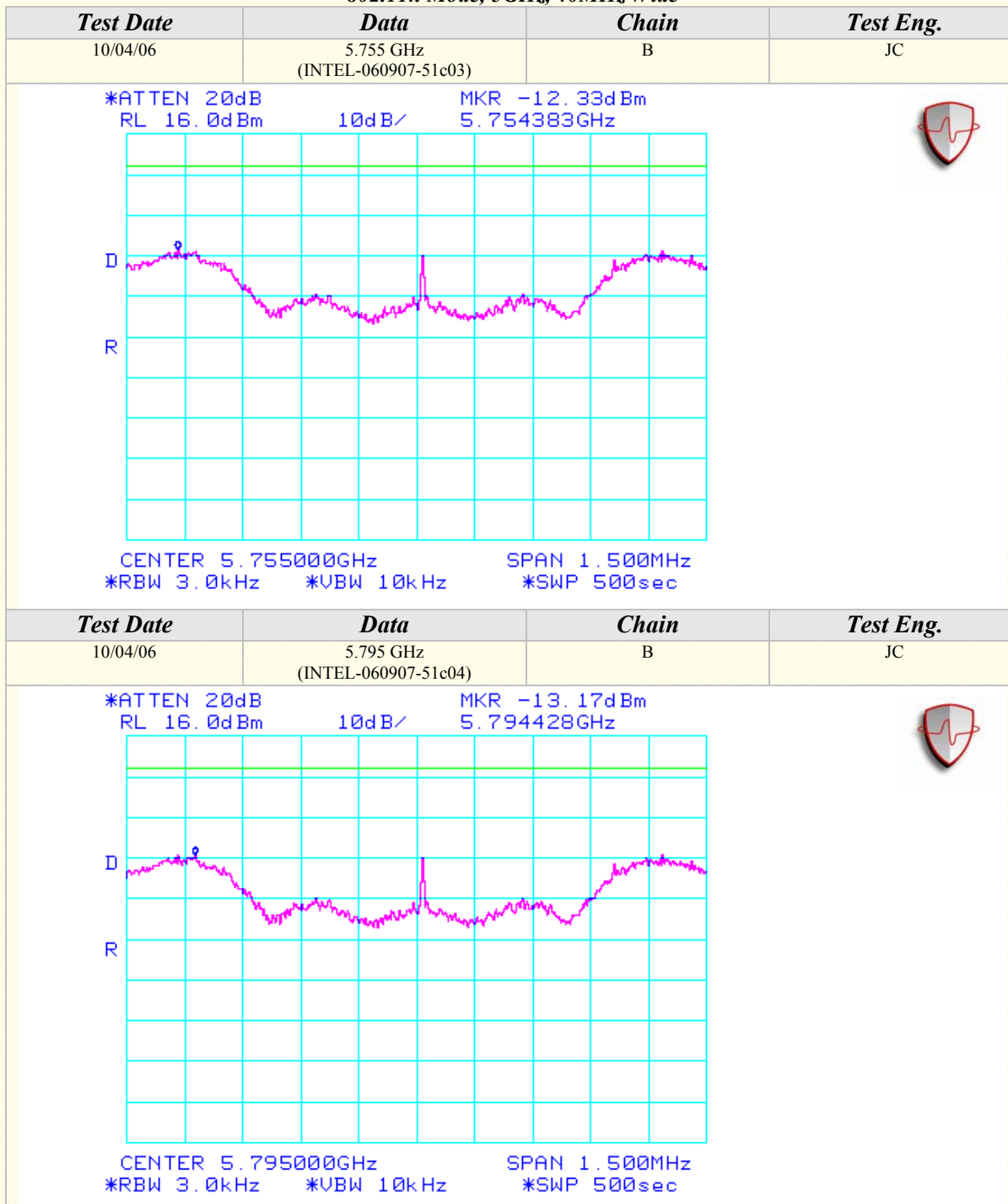
Peak Power Spectral Density (Continued)

802.11n Mode, 5GHz, 40MHz Wide



Peak Power Spectral Density (Continued)

802.11n Mode, 5GHz, 40MHz Wide





## CONDUCTED OUT OF BAND EMISSIONS

<b>CLIENT:</b>	Intel Corporation	<b>DATE:</b>	09/19/06
<b>EUT:</b>	Intel PRO/Wireless 4965AGN Network Connection	<b>PROJECT NUMBER:</b>	INTEL-060907
<b>MODEL NUMBER:</b>	4965AGN	<b>TEST ENGINEER:</b>	JC
<b>SERIAL NUMBER:</b>	0013E804612B	<b>SITE #:</b>	2
<b>CONFIGURATION:</b>	Tested installed in the host computer's mini PCI slot.	<b>TEMPERATURE:</b>	21 deg. C
		<b>HUMIDITY:</b>	29% RH
		<b>TIME:</b>	9:50 AM

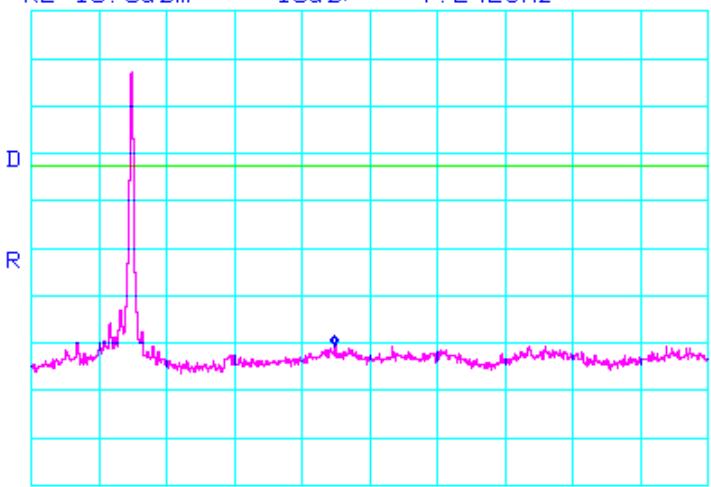
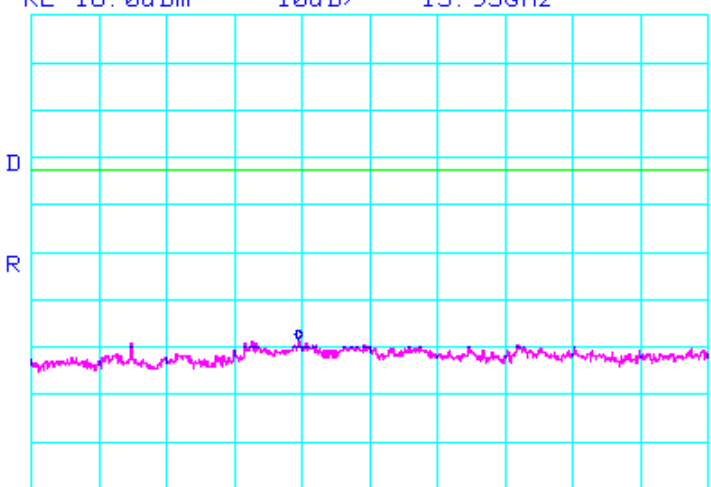
<b>Description:</b>	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.
<b>Results:</b>	See Data Sheet
<b>Note:</b>	Conducted Emissions Measurements were performed on the EUT with power supply set at the following voltage and frequency. <ul style="list-style-type: none"><li>• 120VAC / 60 Hz.</li></ul>





## Conducted Out Of Band Emissions (Continued)

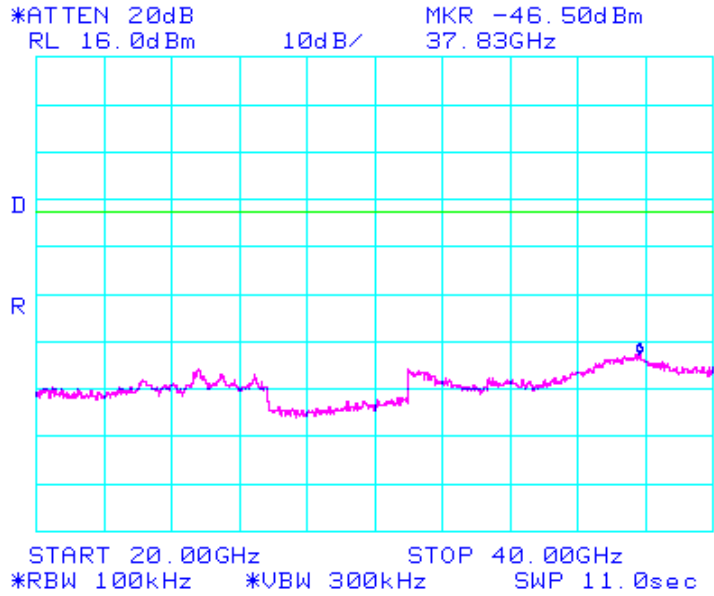
## 802.11a Mode

Test Date	Data	Chain	Test Eng.
09/19/06	5.745 GHz (INTEL-060907-27d03)	A	JC
*ATTEN 20dB RL 16.0dBm      10dB/      MKR -54.50dBm 7.242GHz			
			
START 5.000GHz      STOP 10.000GHz *RBW 100kHz      *VBW 300kHz      SWP 2.80sec			
09/19/06	5.745 GHz (INTEL-060907-27d04)	A	JC
*ATTEN 20dB RL 16.0dBm      10dB/      MKR -52.33dBm 13.95GHz			
			
START 10.00GHz      STOP 20.00GHz *RBW 100kHz      *VBW 300kHz      SWP 5.50sec			

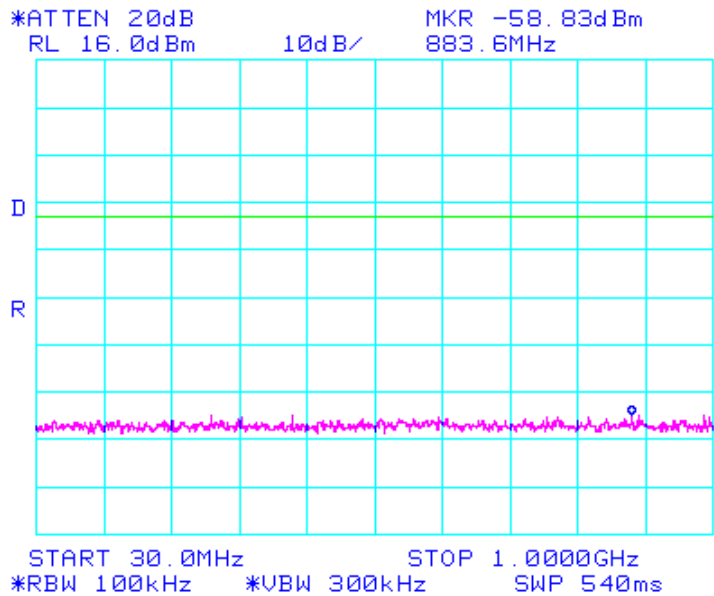
Conducted Out Of Band Emissions (Continued)

802.11a Mode

Test Date	Data	Chain	Test Eng.
09/19/06	5.745 GHz (INTEL-060907-27d05)	A	JC



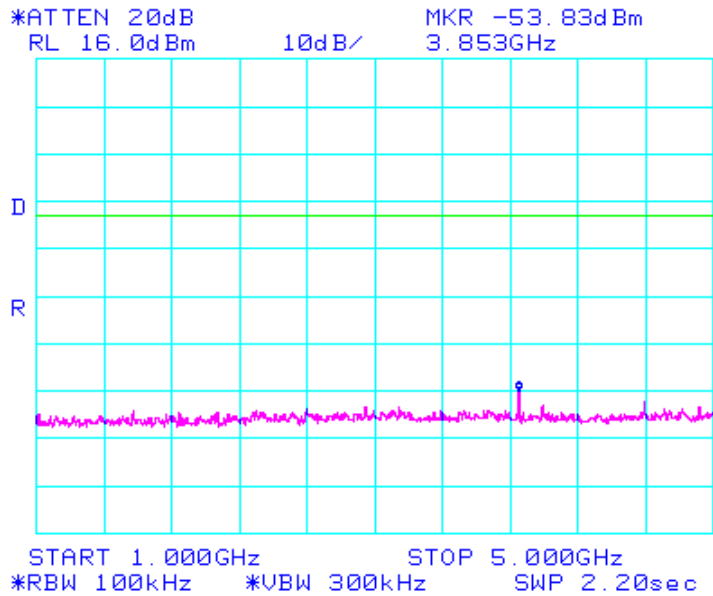
Test Date	Data	Chain	Test Eng.
09/19/06	5.785 GHz (INTEL-060907-27d06)	A	JC



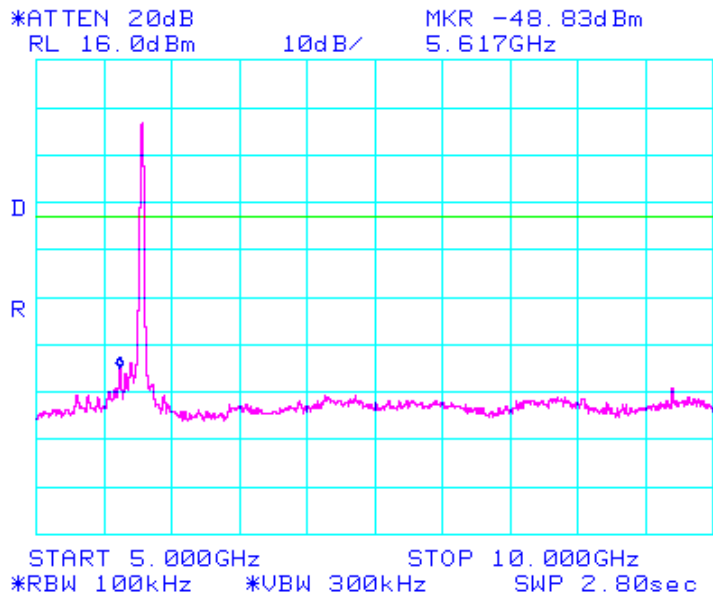
Conducted Out Of Band Emissions (Continued)

802.11a Mode

Test Date	Data	Chain	Test Eng.
09/19/06	5.785 GHz (INTEL-060907-27d07)	A	JC

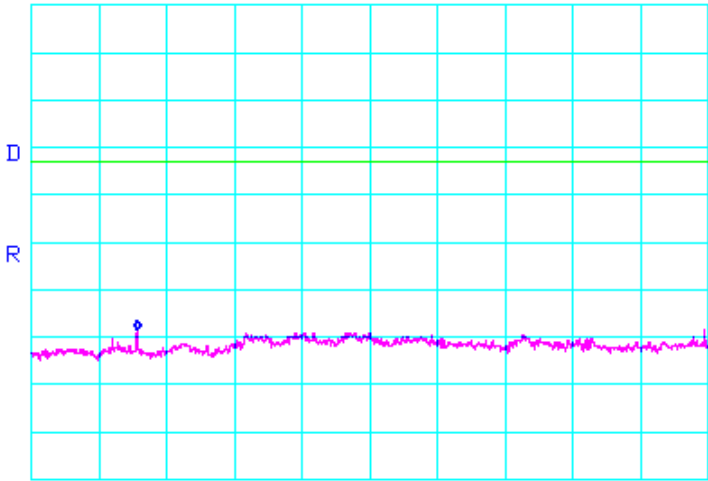
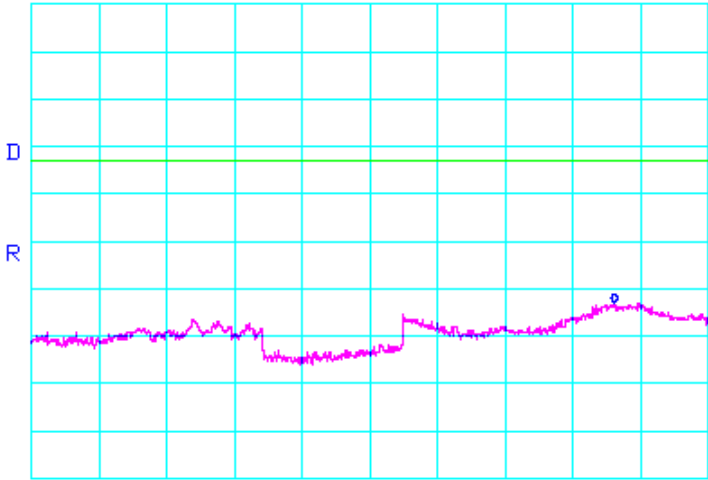


Test Date	Data	Chain	Test Eng.
09/19/06	5.785 GHz (INTEL-060907-27d08)	A	JC



Conducted Out Of Band Emissions (Continued)

802.11a Mode

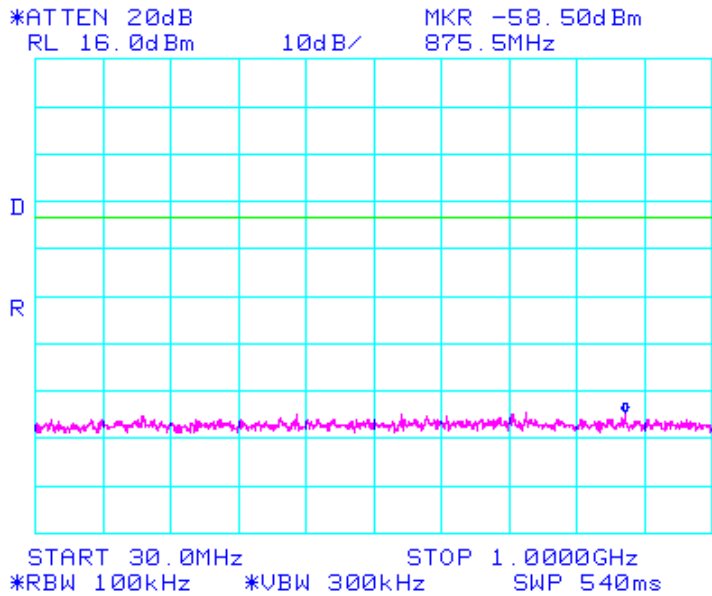
<b>Test Date</b>	<b>Data</b>	<b>Chain</b>	<b>Test Eng.</b>
09/19/06	5.785 GHz (INTEL-060907-27d09)	A	JC
<pre>*ATTEN 20dB      MKR -52.50dBm RL 16.0dBm      10dB/      11.57GHz</pre>  <pre>START 10.00GHz    STOP 20.00GHz *RBW 100kHz      *VBW 300kHz     SWP 5.50sec</pre>			
09/19/06	5.785 GHz (INTEL-060907-27d10)	A	JC
<pre>*ATTEN 20dB      MKR -47.00dBm RL 16.0dBm      10dB/      37.23GHz</pre>  <pre>START 20.00GHz    STOP 40.00GHz *RBW 100kHz      *VBW 300kHz     SWP 11.0sec</pre>			



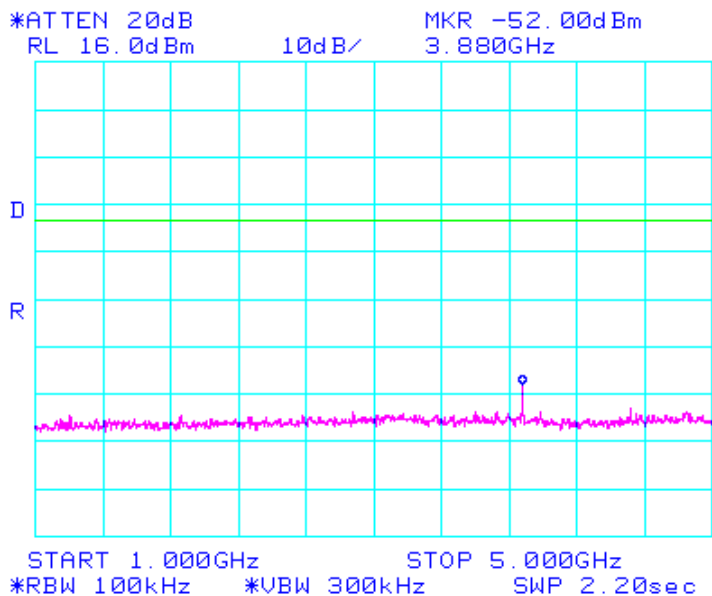
Conducted Out Of Band Emissions (Continued)

802.11a Mode

Test Date	Data	Chain	Test Eng.
09/19/06	5.825 GHz (INTEL-060907-27d11)	A	JC

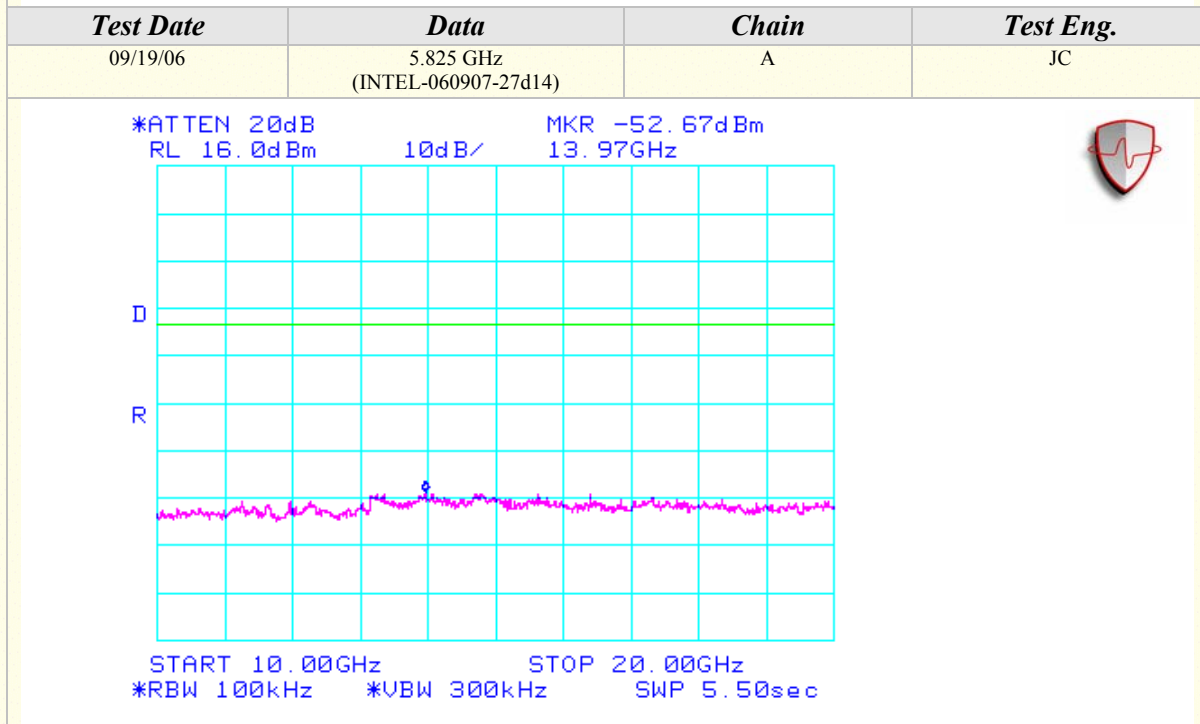
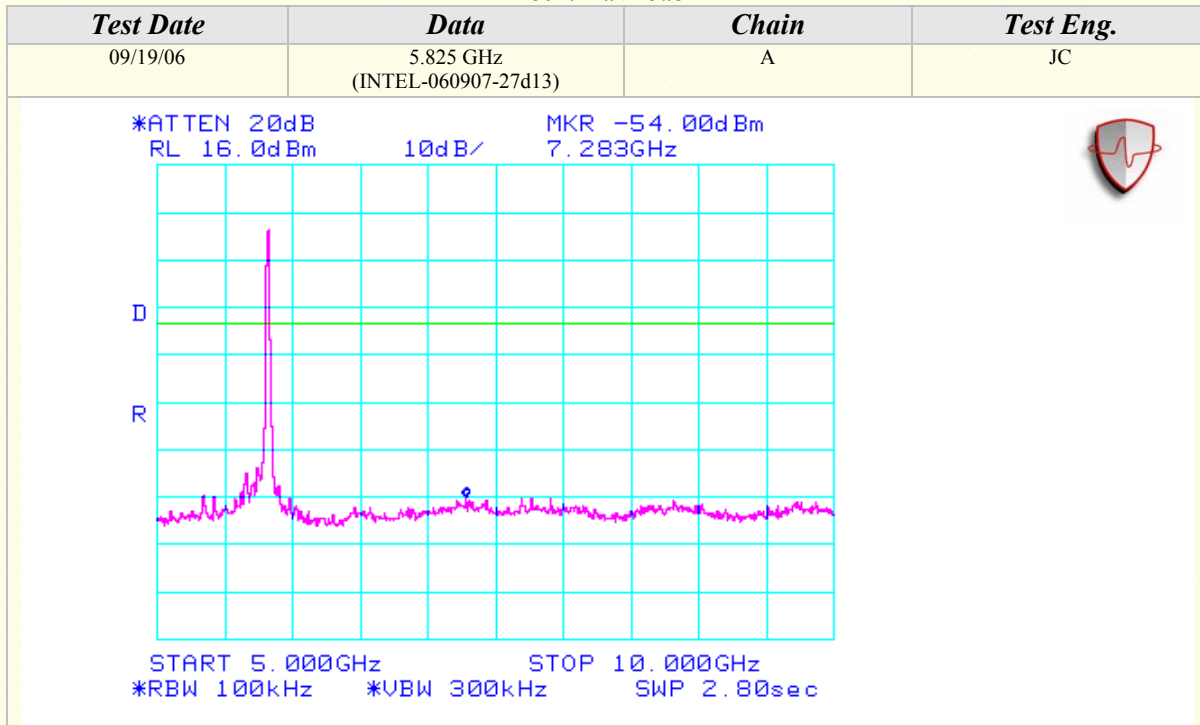


Test Date	Data	Chain	Test Eng.
09/19/06	5.825 GHz (INTEL-060907-27d12)	A	JC



Conducted Out Of Band Emissions (Continued)

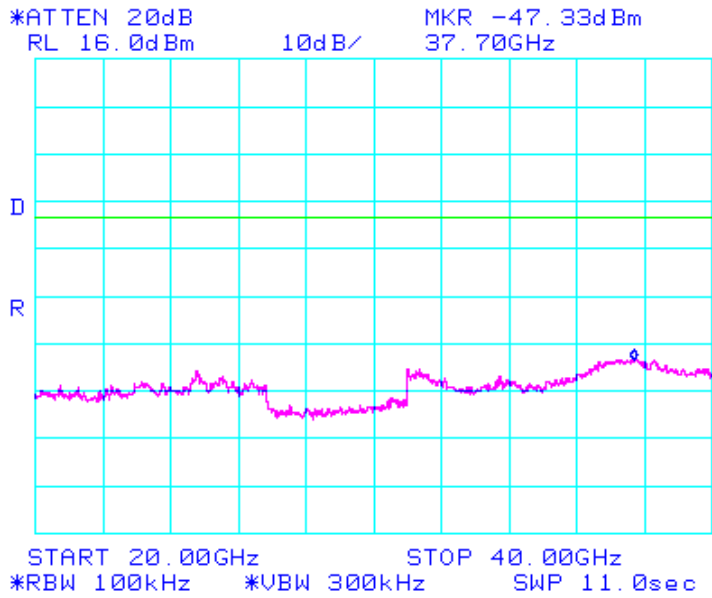
802.11a Mode



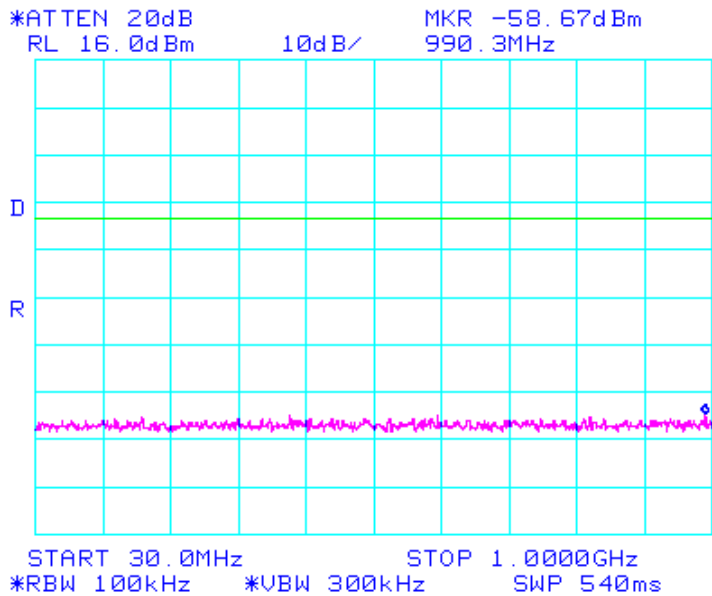
Conducted Out Of Band Emissions (Continued)

802.11a Mode

Test Date	Data	Chain	Test Eng.
09/19/06	5.825 GHz (INTEL-060907-27d15)	A	JC



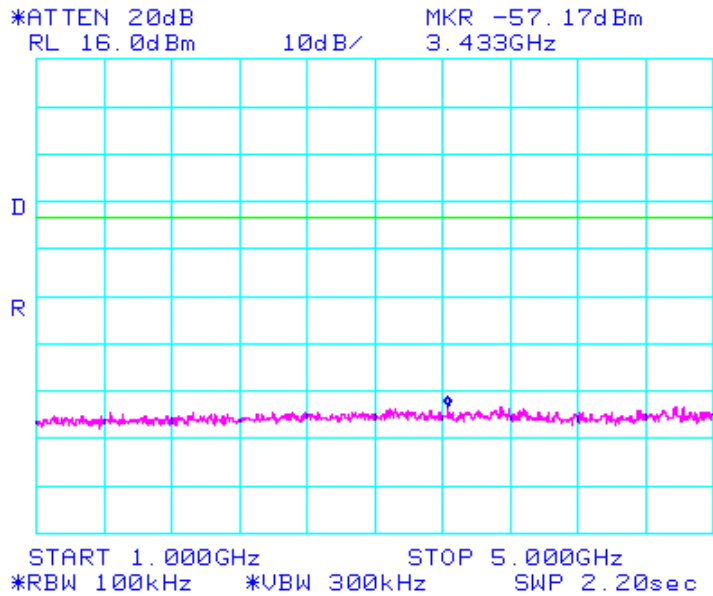
Test Date	Data	Chain	Test Eng.
09/19/06	5.745 GHz (INTEL-060907-27d16)	B	JC



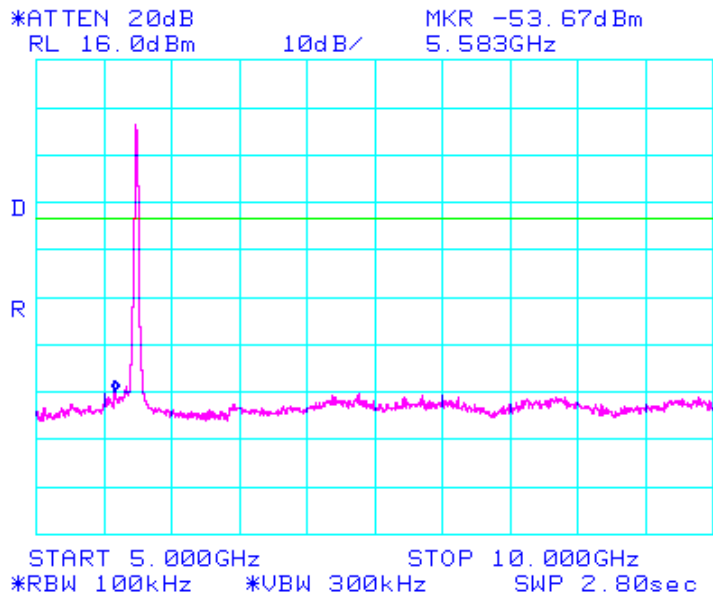
Conducted Out Of Band Emissions (Continued)

802.11a Mode

Test Date	Data	Chain	Test Eng.
09/19/06	5.745 GHz (INTEL-060907-27d17)	B	JC



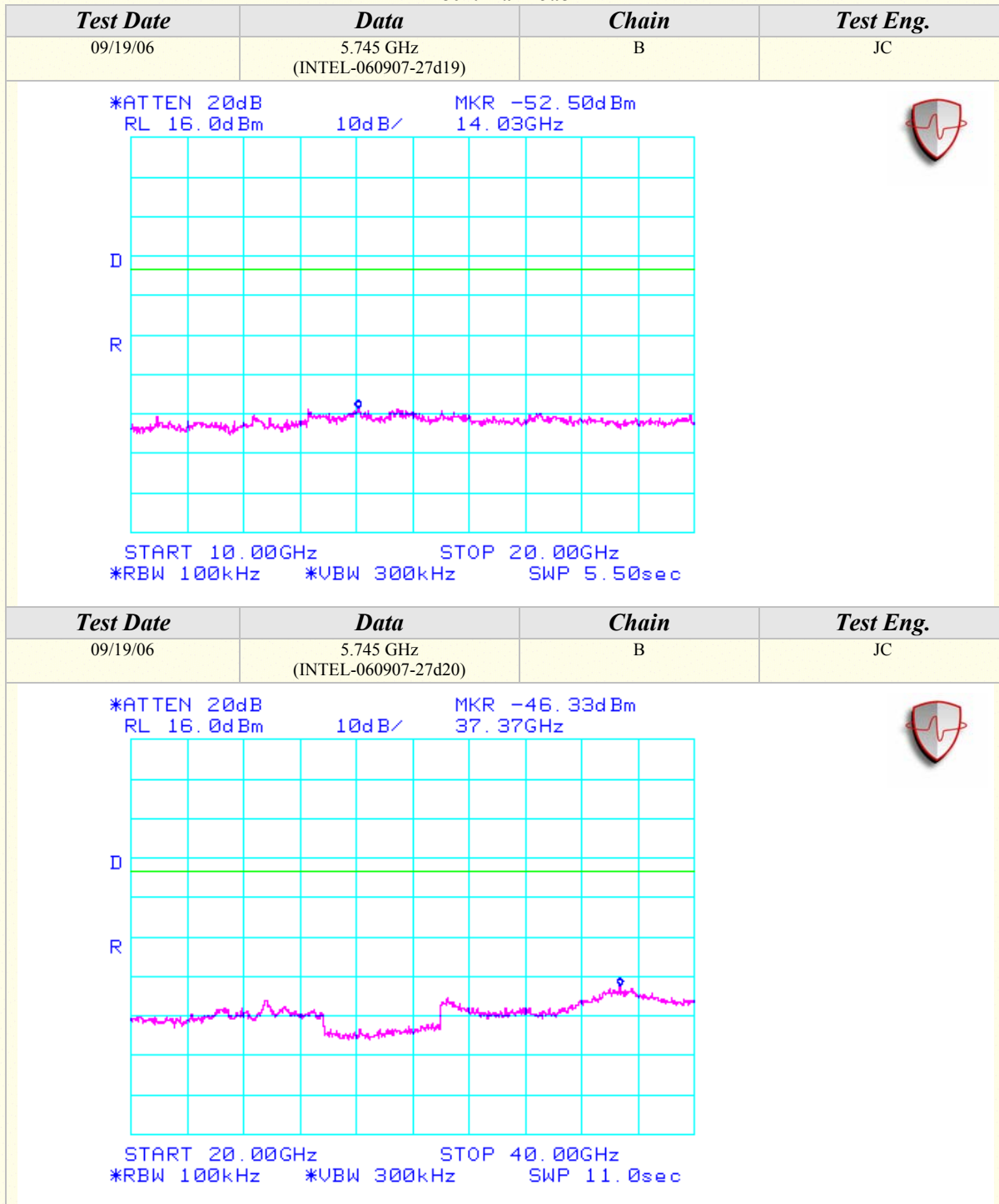
Test Date	Data	Chain	Test Eng.
09/19/06	5.745 GHz (INTEL-060907-27d18)	B	JC





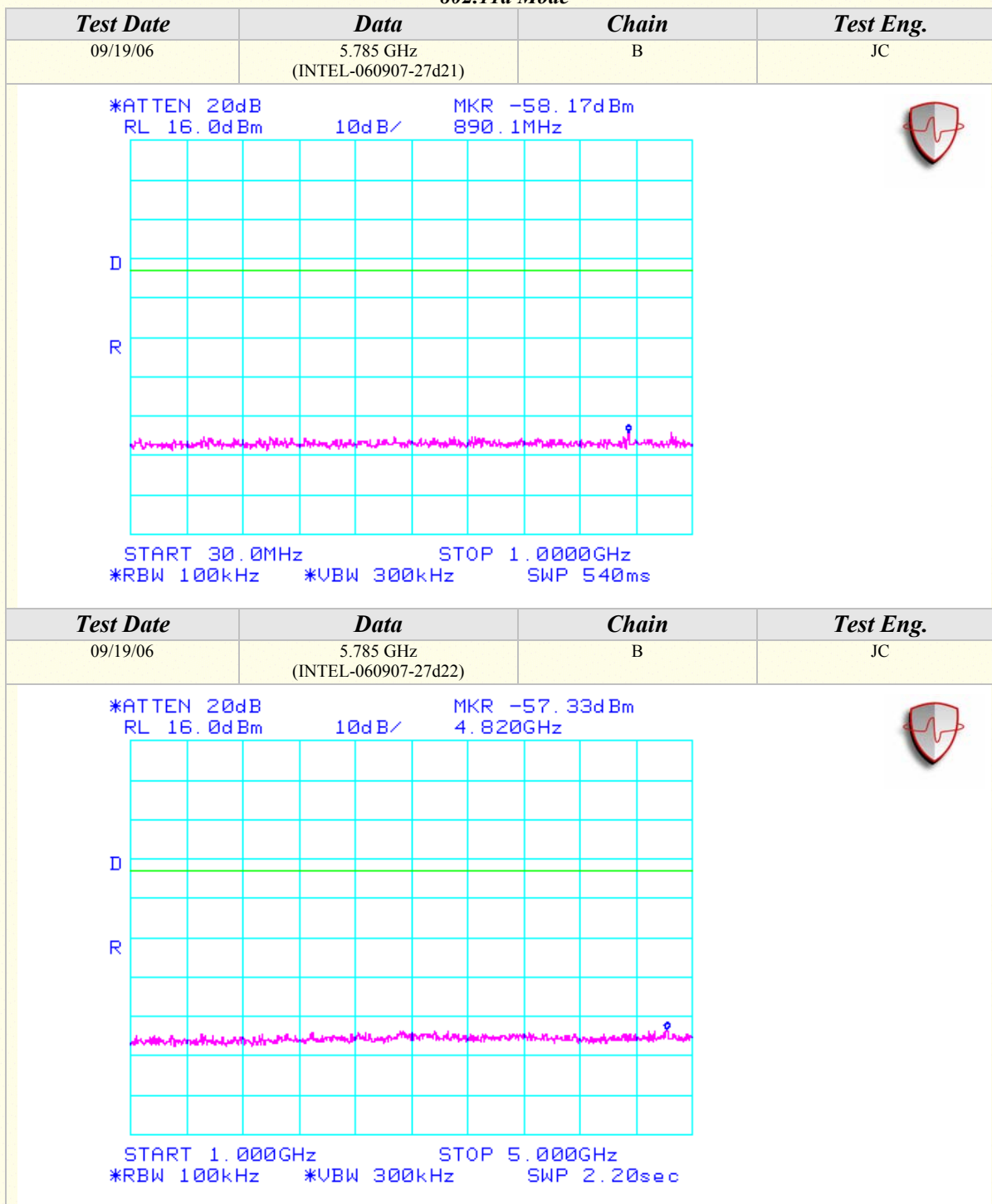
Conducted Out Of Band Emissions (Continued)

802.11a Mode



Conducted Out Of Band Emissions (Continued)

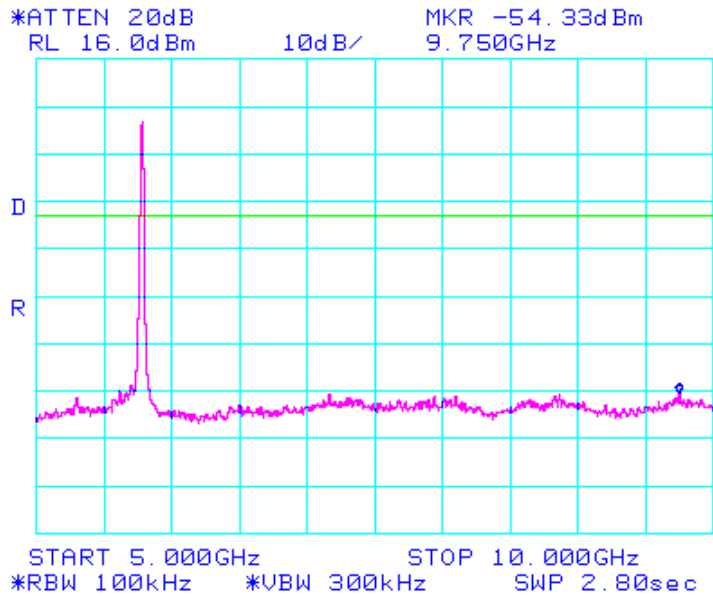
802.11a Mode



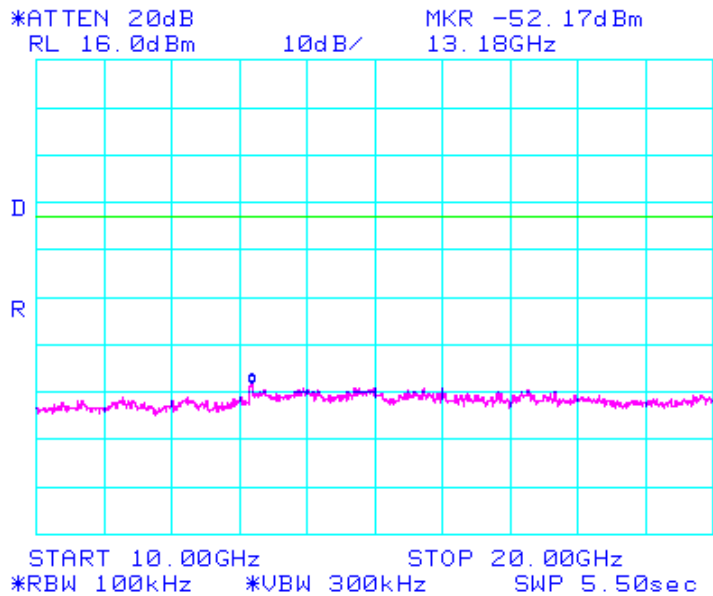
Conducted Out Of Band Emissions (Continued)

802.11a Mode

Test Date	Data	Chain	Test Eng.
09/19/06	5.785 GHz (INTEL-060907-27d23)	B	JC

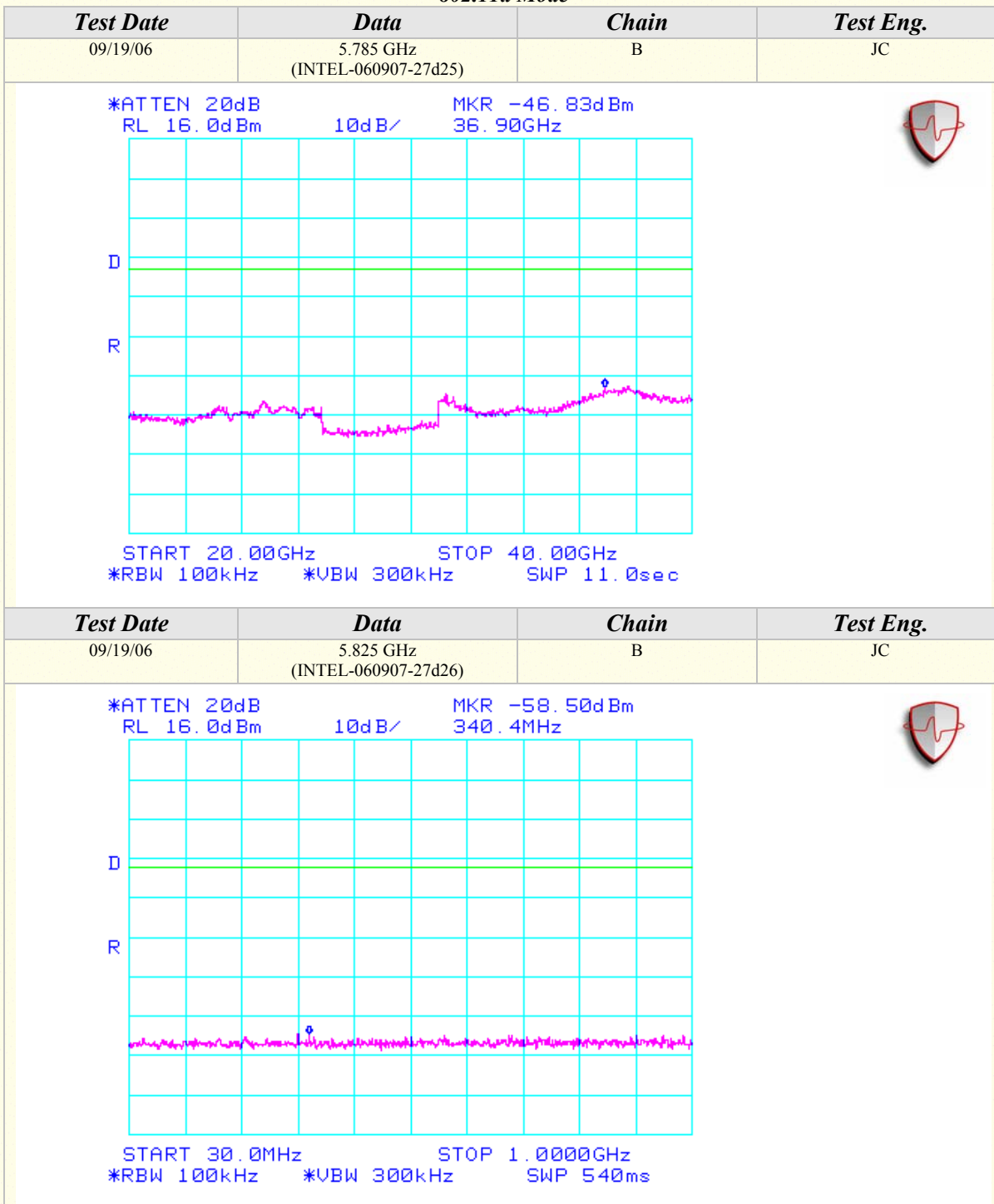


Test Date	Data	Chain	Test Eng.
09/19/06	5.785 GHz (INTEL-060907-27d24)	B	JC



Conducted Out Of Band Emissions (Continued)

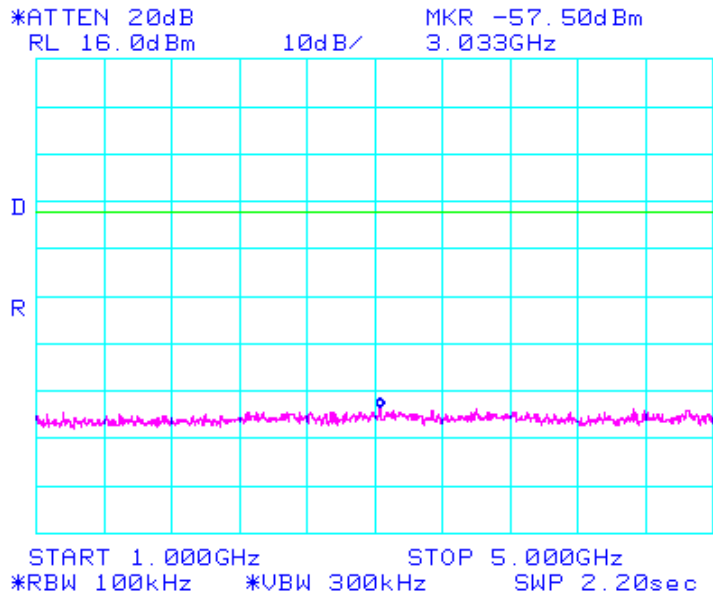
802.11a Mode



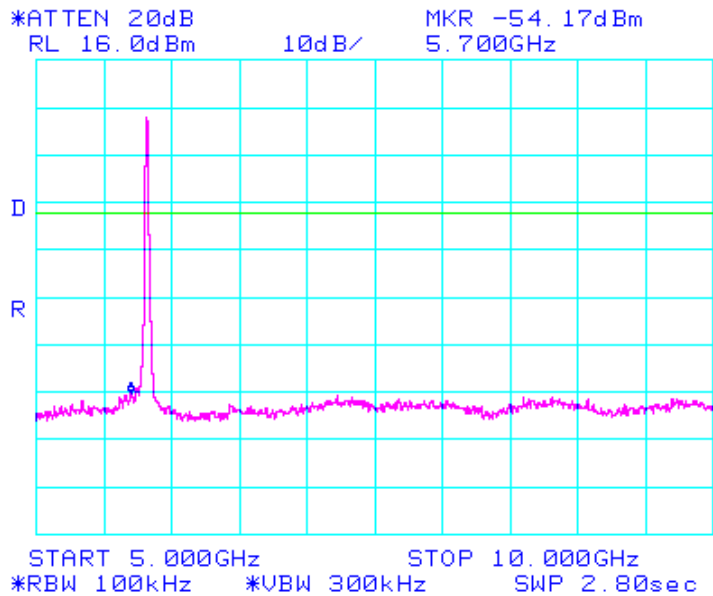
Conducted Out Of Band Emissions (Continued)

802.11a Mode

Test Date	Data	Chain	Test Eng.
09/19/06	5.825 GHz (INTEL-060907-27d27)	B	JC

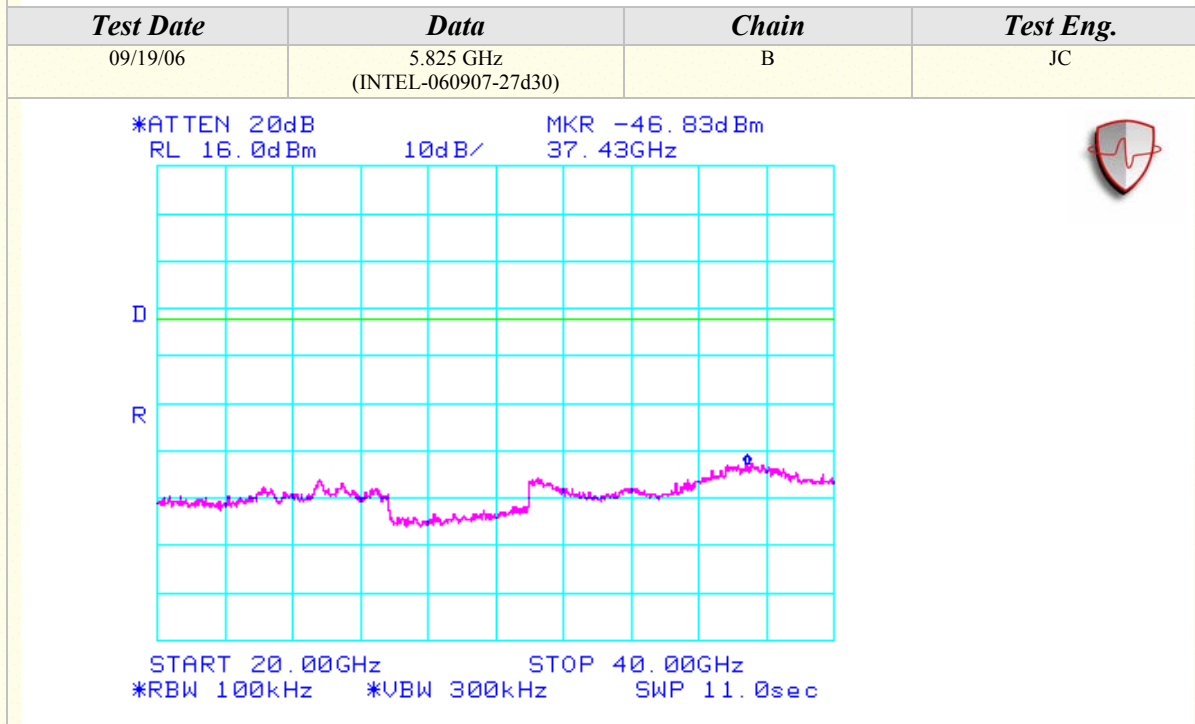
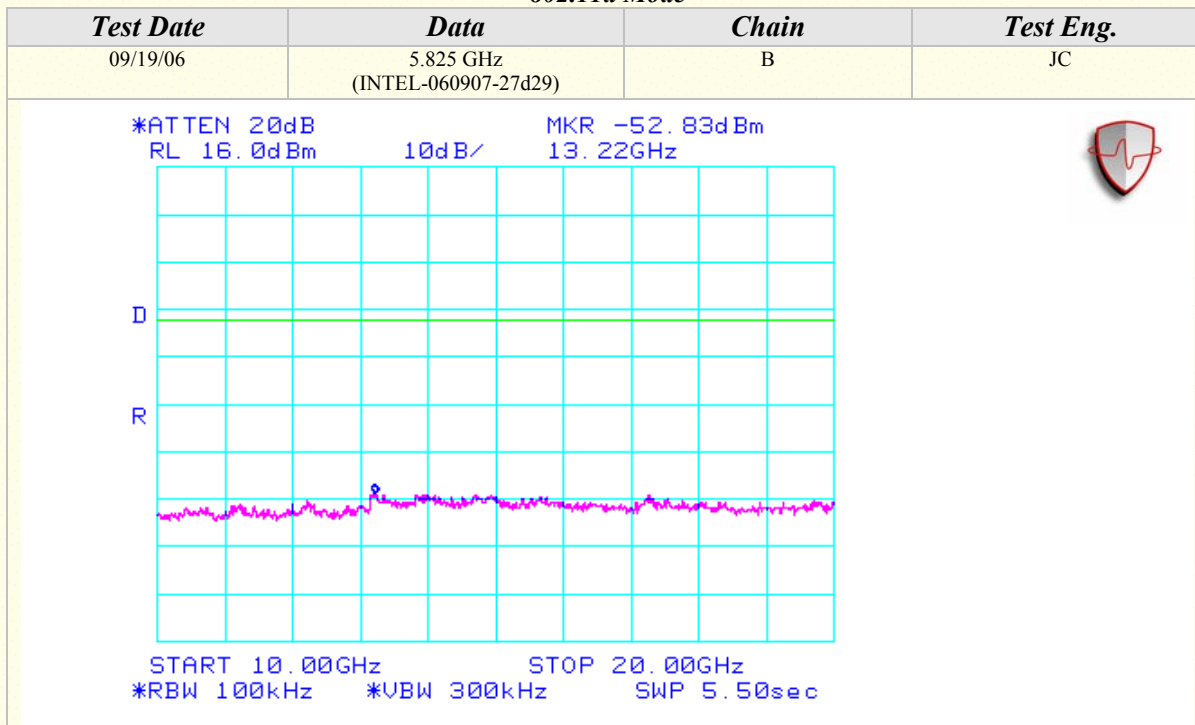


Test Date	Data	Chain	Test Eng.
09/19/06	5.825 GHz (INTEL-060907-27d28)	B	JC



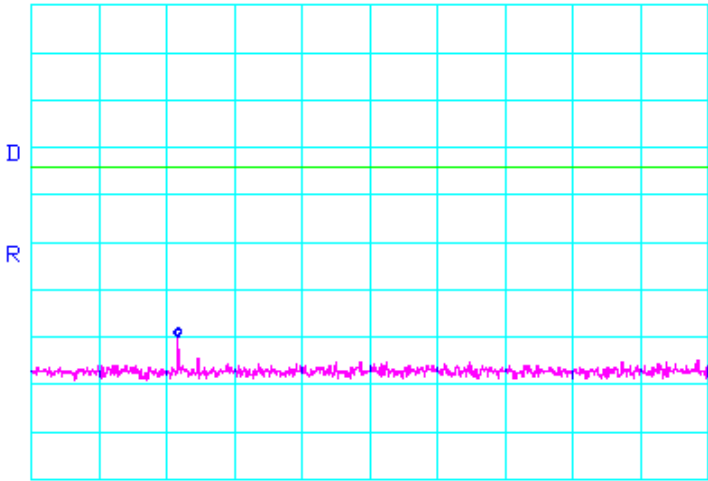
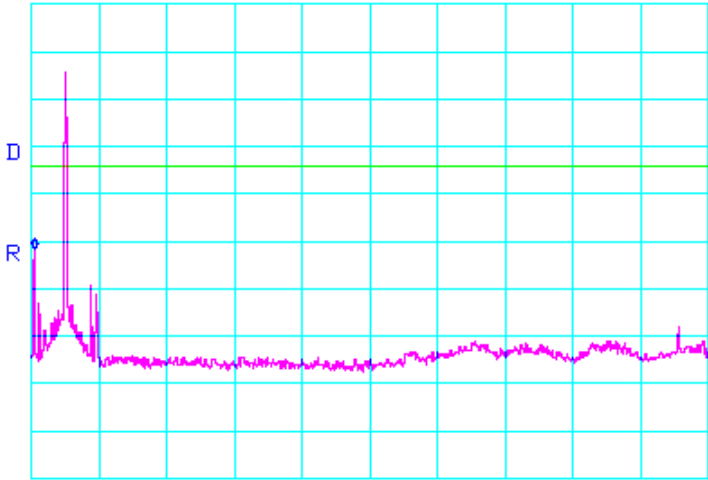
Conducted Out Of Band Emissions (Continued)

802.11a Mode



Conducted Out Of Band Emissions (Continued)

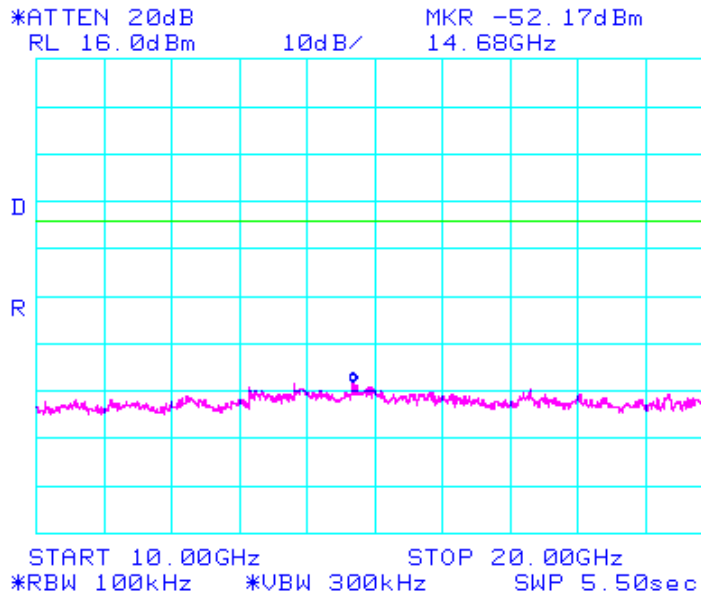
802.11b Mode

Test Date	Data	Chain	Test Eng.
09/19/06	2.412 GHz (INTEL-060907-28e01)	A	JC
<p>*ATTEN 20dB      MKR -54.00dBm            RL 16.0dBm      10dB/      457MHz</p>  <p>START 30MHz      STOP 2.000GHz            *RBW 100kHz      *VBW 300kHz      SWP 1.10sec</p>			
Test Date	Data	Chain	Test Eng.
09/19/06	2.412 GHz (INTEL-060907-28e02)	A	JC
<p>*ATTEN 20dB      MKR -35.50dBm            RL 16.0dBm      10dB/      2.040GHz</p>  <p>START 2.000GHz      STOP 10.000GHz            *RBW 100kHz      *VBW 300kHz      SWP 4.40sec</p>			

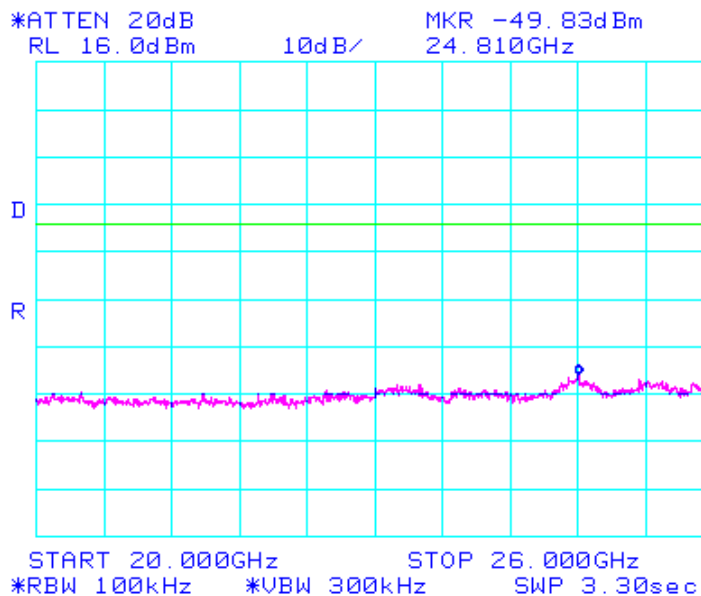
## Conducted Out Of Band Emissions (Continued)

## 802.11b Mode

Test Date	Data	Chain	Test Eng.
09/19/06	2.412 GHz (INTEL-060907-28e03)	A	JC



Test Date	Data	Chain	Test Eng.
09/19/06	2.412 GHz (INTEL-060907-28e04)	A	JC



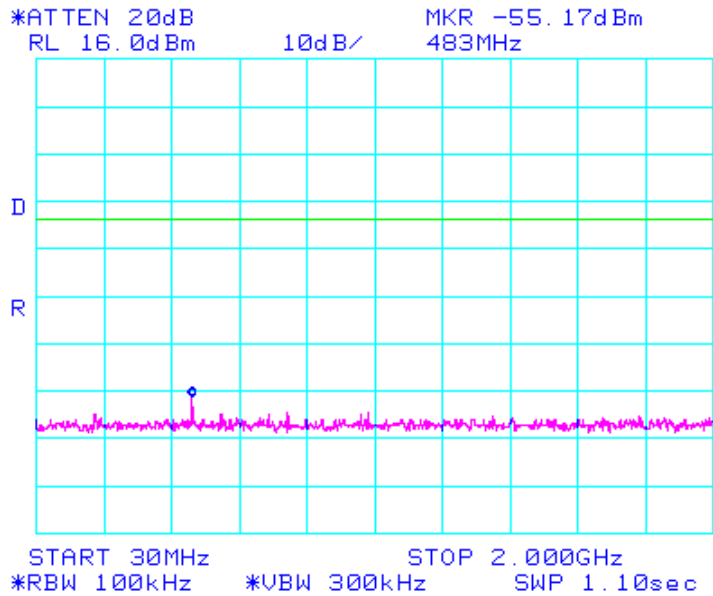




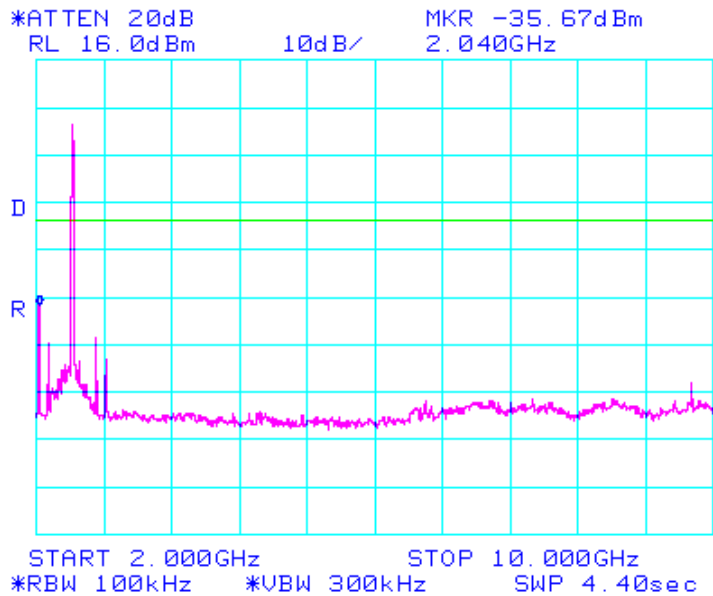
### Conducted Out Of Band Emissions (Continued)

#### 802.11b Mode

<i>Test Date</i>	<i>Data</i>	<i>Chain</i>	<i>Test Eng.</i>
09/19/06	2.437 GHz (INTEL-060907-28e05)	A	JC

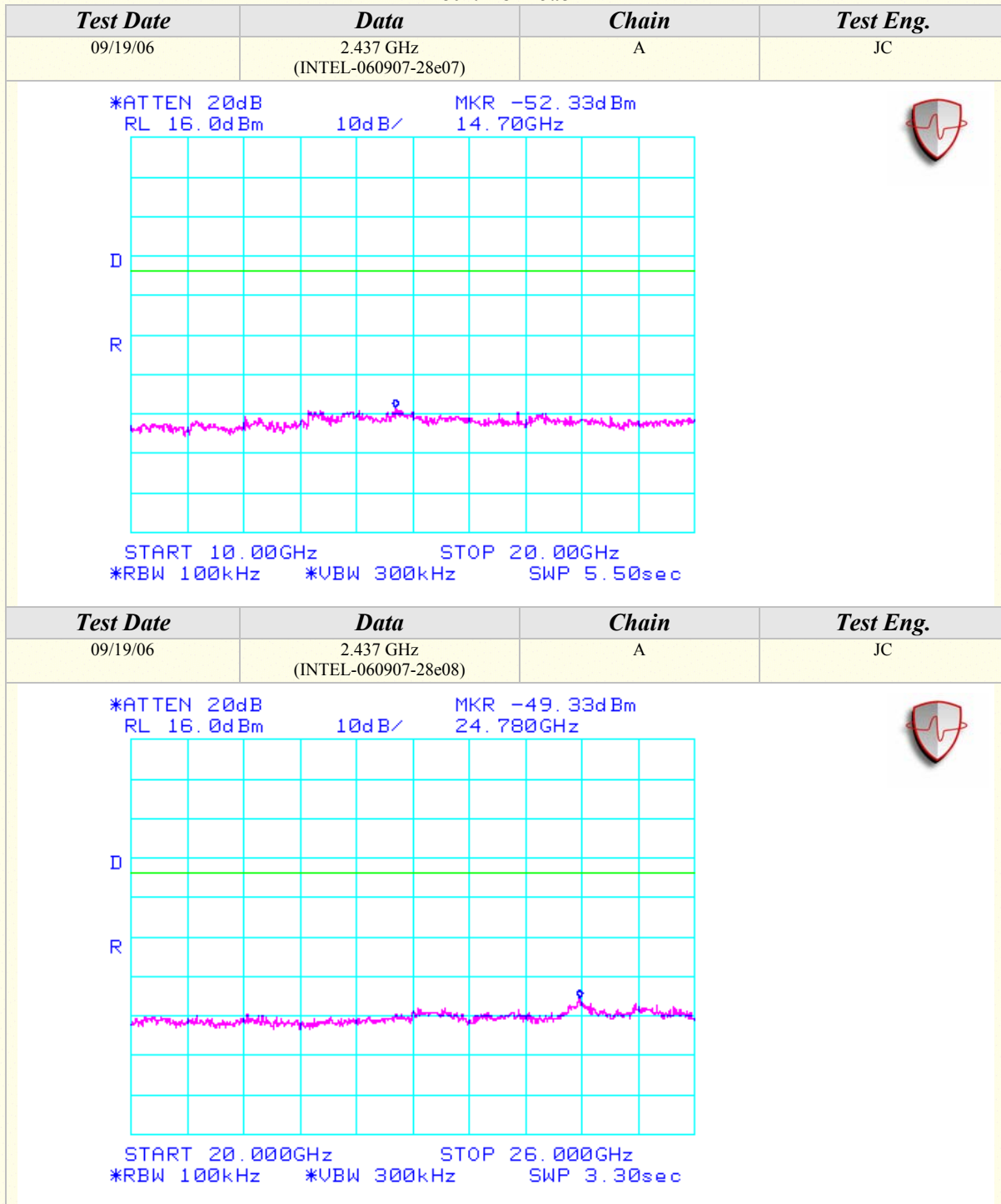


<i>Test Date</i>	<i>Data</i>	<i>Chain</i>	<i>Test Eng.</i>
09/19/06	2.437 GHz (INTEL-060907-28e06)	A	JC



Conducted Out Of Band Emissions (Continued)

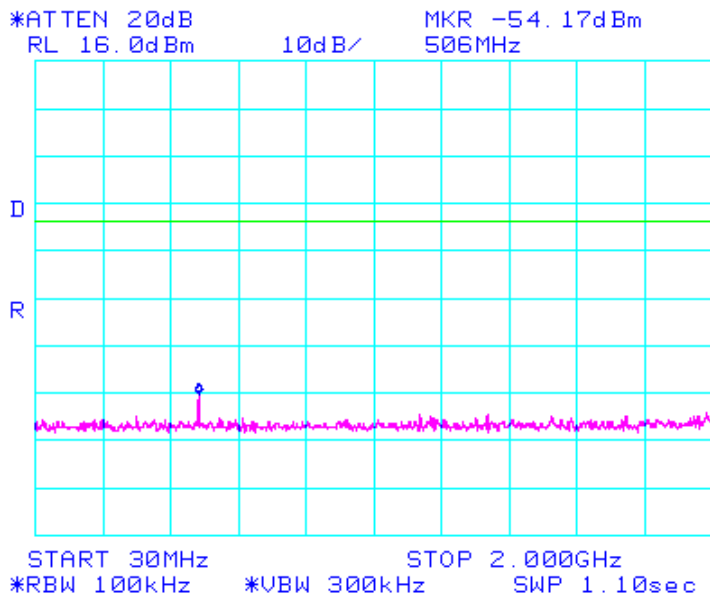
802.11b Mode



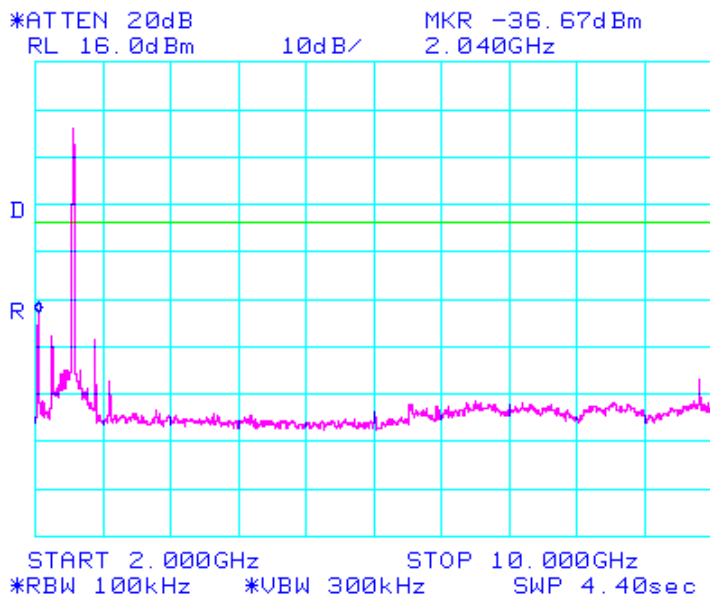
### Conducted Out Of Band Emissions (Continued)

#### 802.11b Mode

<i>Test Date</i>	<i>Data</i>	<i>Chain</i>	<i>Test Eng.</i>
09/19/06	2.462 GHz (INTEL-060907-28e09)	A	JC



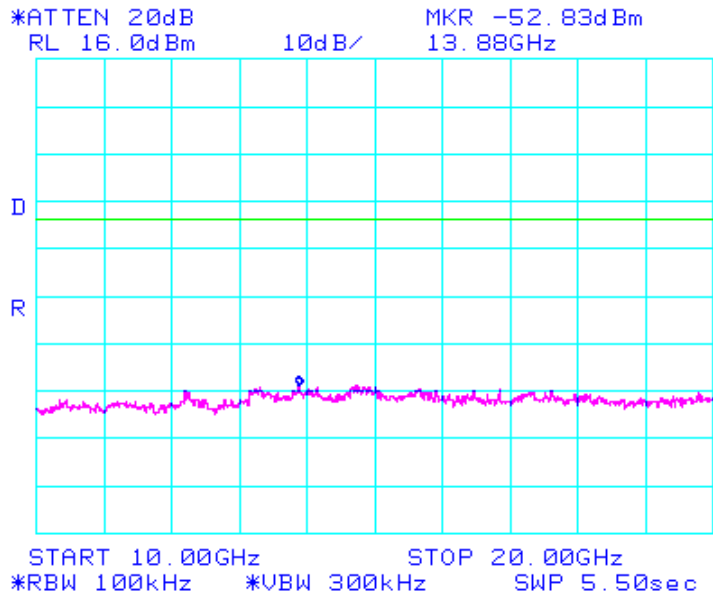
<i>Test Date</i>	<i>Data</i>	<i>Chain</i>	<i>Test Eng.</i>
09/19/06	2.462 GHz (INTEL-060907-28e10)	A	JC



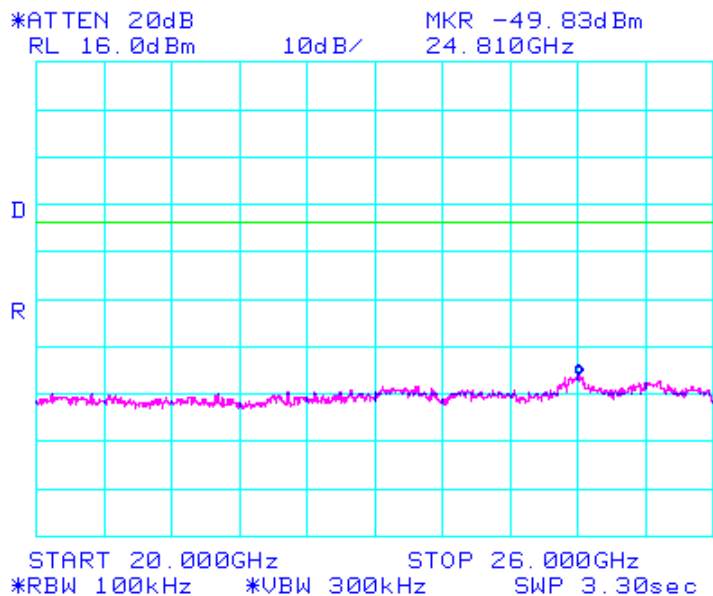
Conducted Out Of Band Emissions (Continued)

802.11b Mode

Test Date	Data	Chain	Test Eng.
09/19/06	2.462 GHz (INTEL-060907-28e11)	A	JC



Test Date	Data	Chain	Test Eng.
09/19/06	2.462 GHz (INTEL-060907-28e12)	A	JC



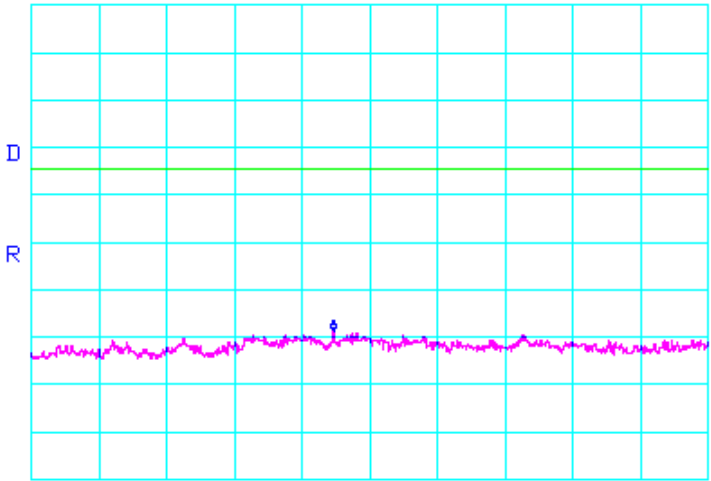
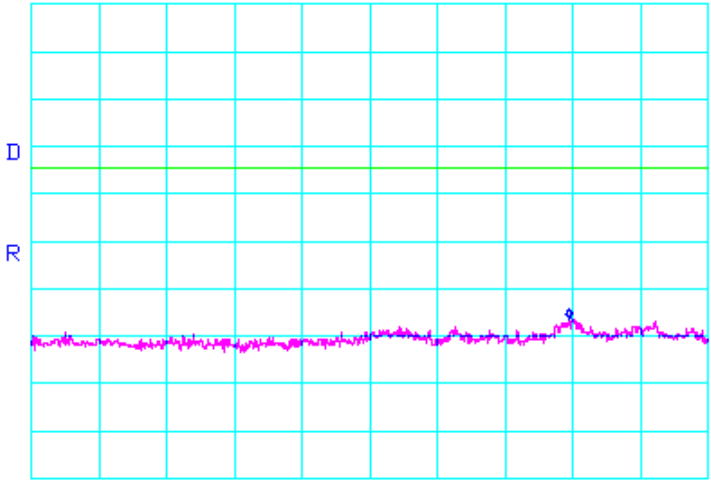
Conducted Out Of Band Emissions (Continued)

802.11b Mode

Test Date	Data	Chain	Test Eng.
09/19/06	2.412 GHz (INTEL-060907-28e13)	B	JC
<div style="display: flex; justify-content: space-between; font-size: small;"> <span>*ATTEN 20dB RL 16.0dBm</span> <span>10dB/</span> <span>MKR -52.33dBm 457MHz</span> </div> <div style="display: flex; justify-content: space-between; font-size: small; margin-top: 10px;"> <span>START 30MHz</span> <span>STOP 2.000GHz</span> </div> <div style="display: flex; justify-content: space-between; font-size: small;"> <span>*RBW 100kHz</span> <span>*VBW 300kHz</span> <span>SWP 1.10sec</span> </div> <div style="text-align: right; margin-top: 10px;"></div>			
Test Date	Data	Chain	Test Eng.
09/19/06	2.412 GHz (INTEL-060907-28e14)	B	JC
<div style="display: flex; justify-content: space-between; font-size: small;"> <span>*ATTEN 20dB RL 16.0dBm</span> <span>10dB/</span> <span>MKR -31.83dBm 2.040GHz</span> </div> <div style="display: flex; justify-content: space-between; font-size: small; margin-top: 10px;"> <span>START 2.000GHz</span> <span>STOP 10.000GHz</span> </div> <div style="display: flex; justify-content: space-between; font-size: small;"> <span>*RBW 100kHz</span> <span>*VBW 300kHz</span> <span>SWP 4.40sec</span> </div> <div style="text-align: right; margin-top: 10px;"></div>			

Conducted Out Of Band Emissions (Continued)

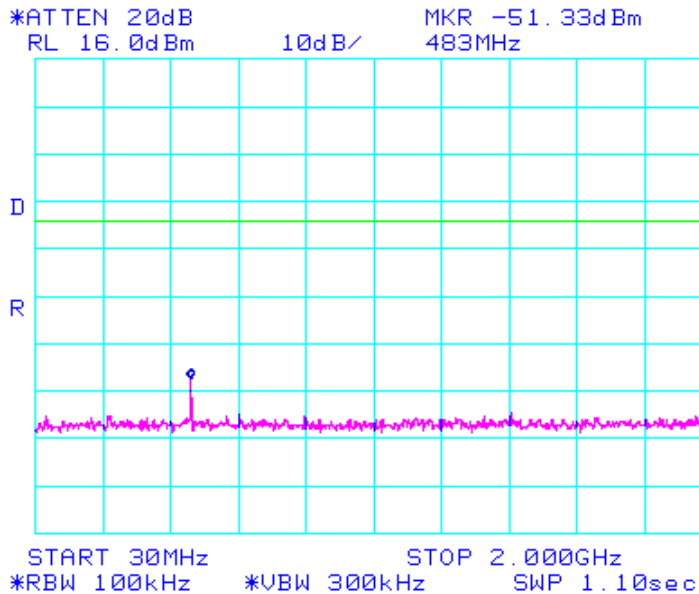
802.11b Mode

Test Date	Data	Chain	Test Eng.
09/19/06	2.412 GHz (INTEL-060907-28e15)	B	JC
<p>*ATTEN 20dB                                      MKR -52.67dBm            RL 16.0dBm                                    10dB/                                    14.47GHz</p>  <p>START 10.00GHz                                      STOP 20.00GHz            *RBW 100kHz                                    *VBW 300kHz                                SWP 5.50sec</p>			
Test Date	Data	Chain	Test Eng.
09/19/06	2.412 GHz (INTEL-060907-28e16)	B	JC
<p>*ATTEN 20dB                                      MKR -50.33dBm            RL 16.0dBm                                    10dB/                                    24.770GHz</p>  <p>START 20.000GHz                                    STOP 26.000GHz            *RBW 100kHz                                    *VBW 300kHz                                SWP 3.30sec</p>			

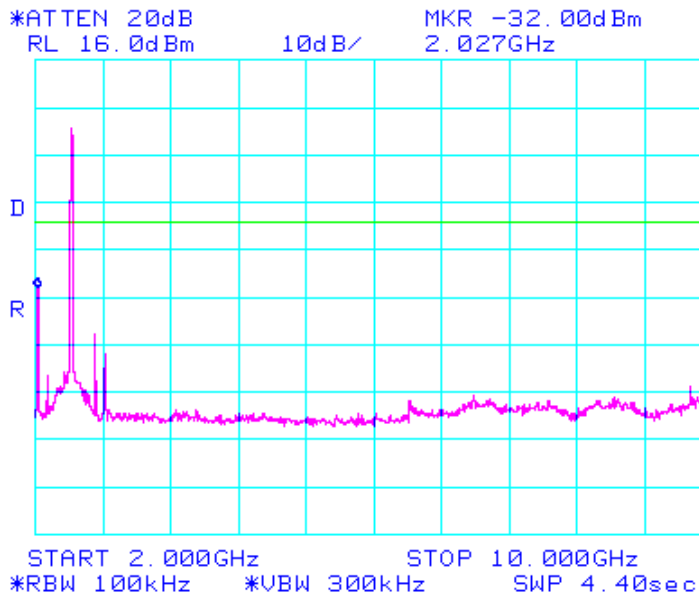
Conducted Out Of Band Emissions (Continued)

802.11b Mode

Test Date	Data	Chain	Test Eng.
09/19/06	2.437 GHz (INTEL-060907-28e17)	B	JC



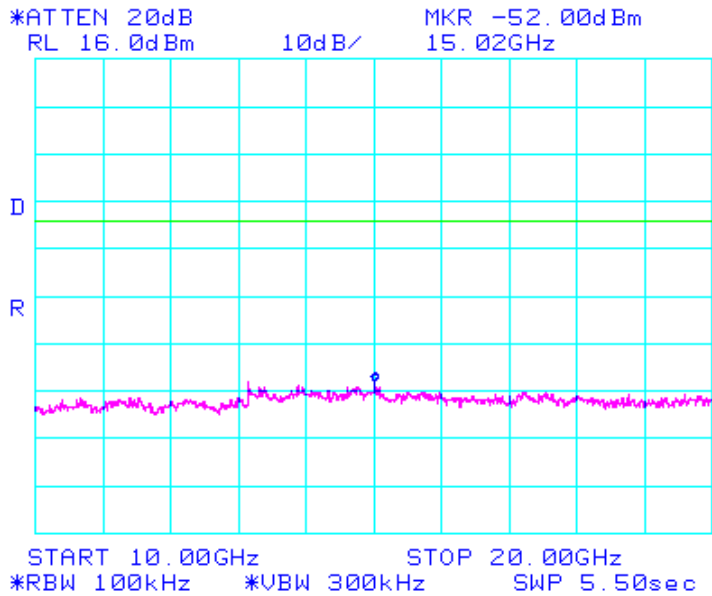
Test Date	Data	Chain	Test Eng.
09/19/06	2.437 GHz (INTEL-060907-28e18)	B	JC



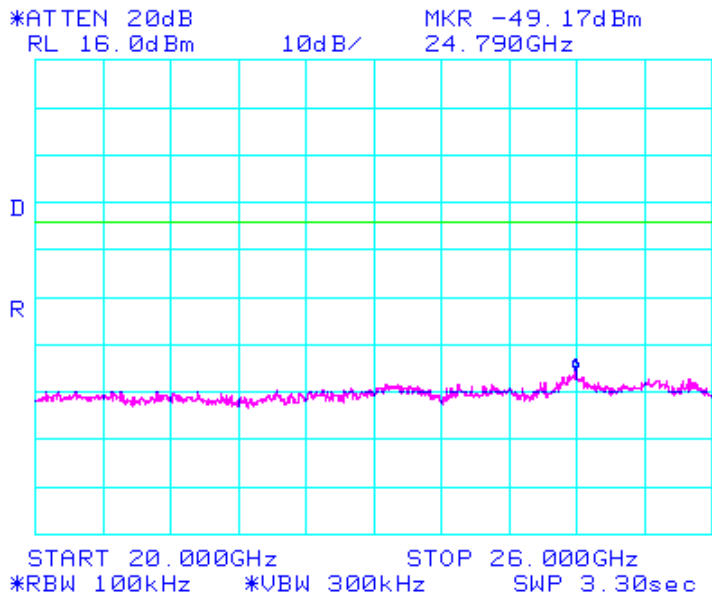
Conducted Out Of Band Emissions (Continued)

802.11b Mode

Test Date	Data	Chain	Test Eng.
09/19/06	2.437 GHz (INTEL-060907-28e19)	B	JC



Test Date	Data	Chain	Test Eng.
09/19/06	2.437 GHz (INTEL-060907-28e20)	B	JC

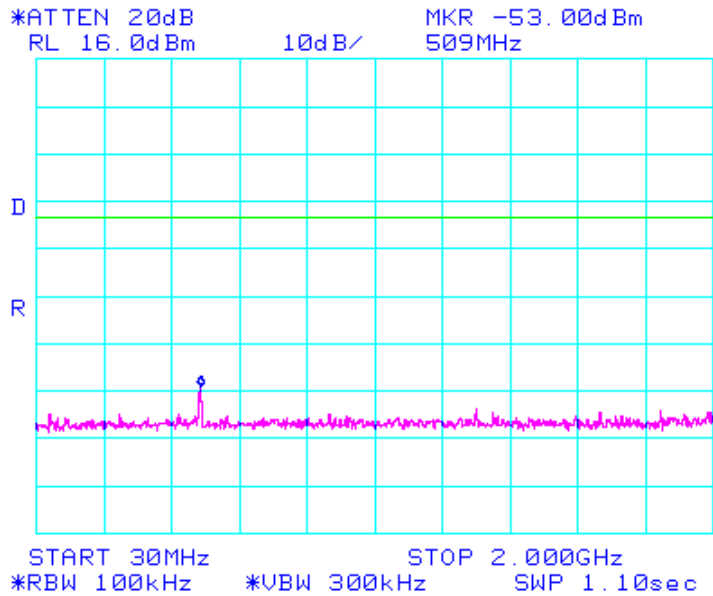




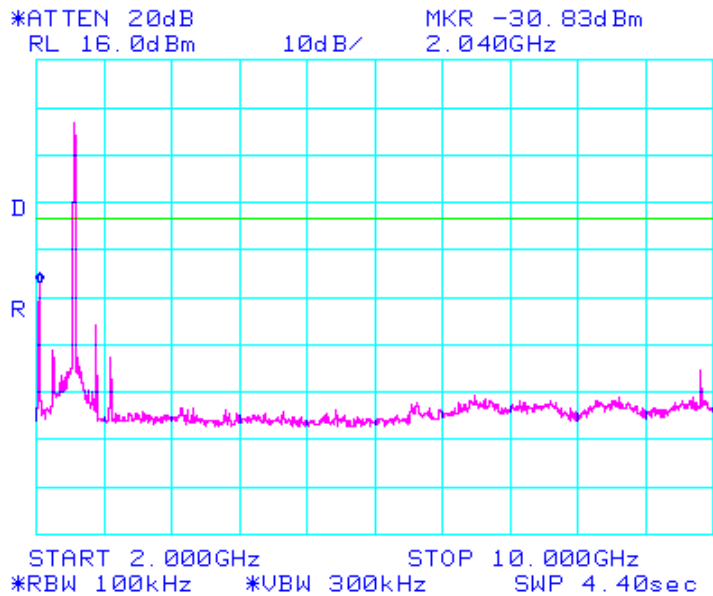
Conducted Out Of Band Emissions (Continued)

802.11b Mode

Test Date	Data	Chain	Test Eng.
09/19/06	2.462 GHz (INTEL-060907-28e21)	B	JC

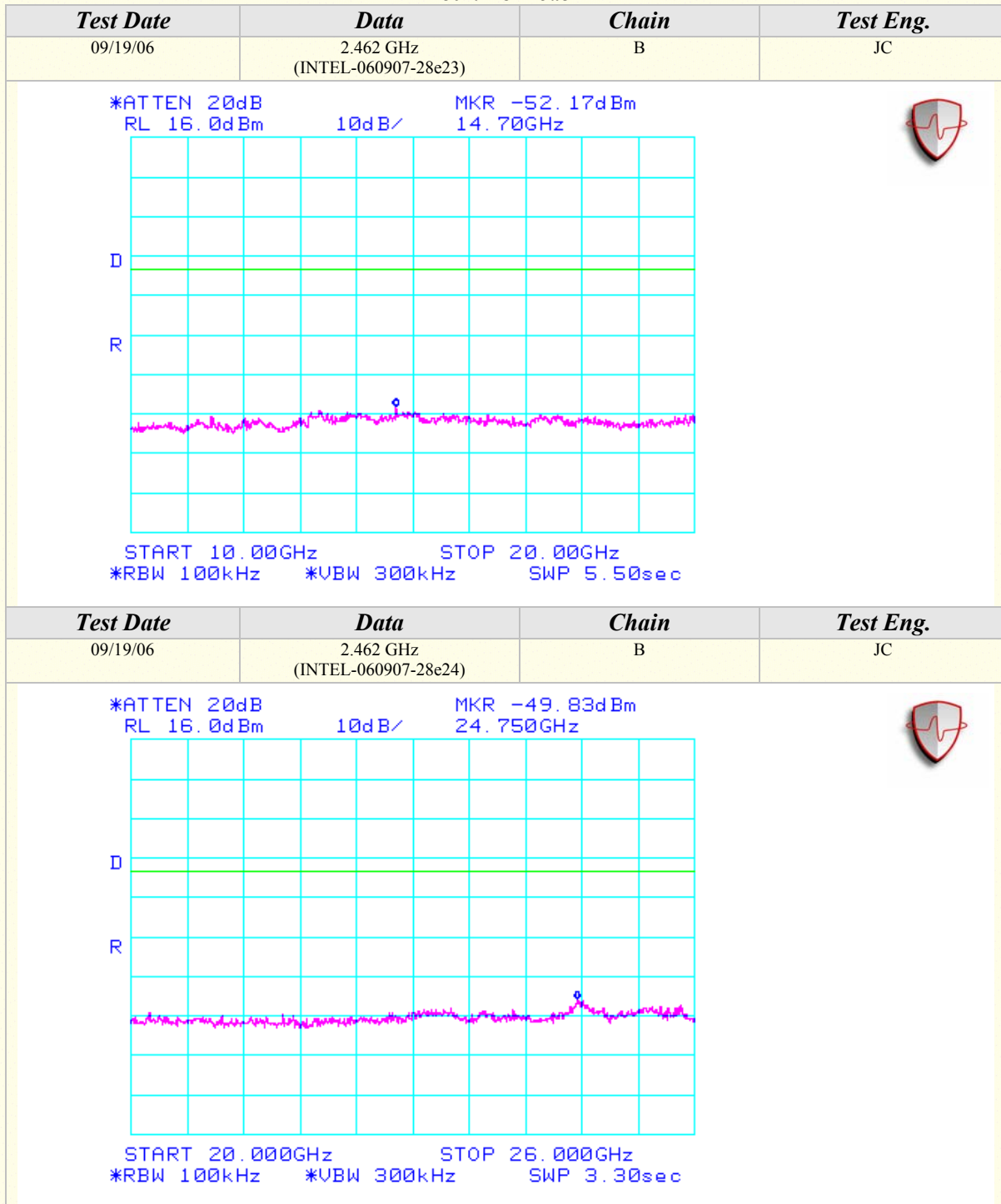


Test Date	Data	Chain	Test Eng.
09/19/06	2.462 GHz (INTEL-060907-28e22)	B	JC



Conducted Out Of Band Emissions (Continued)

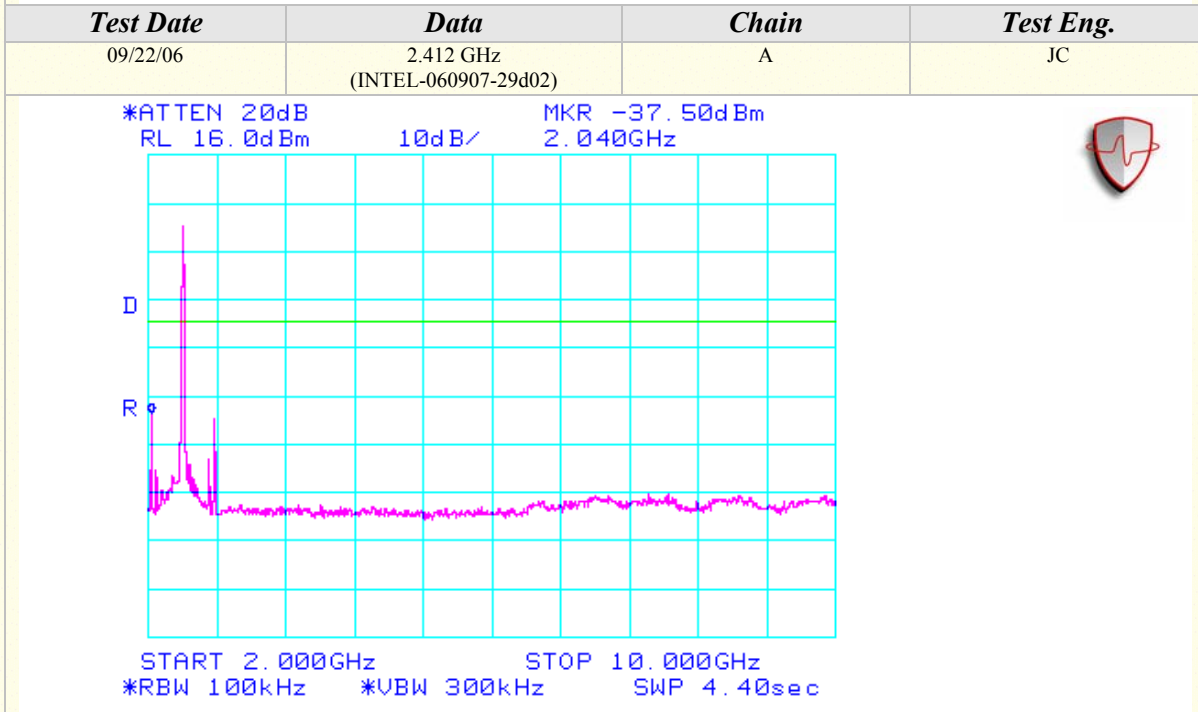
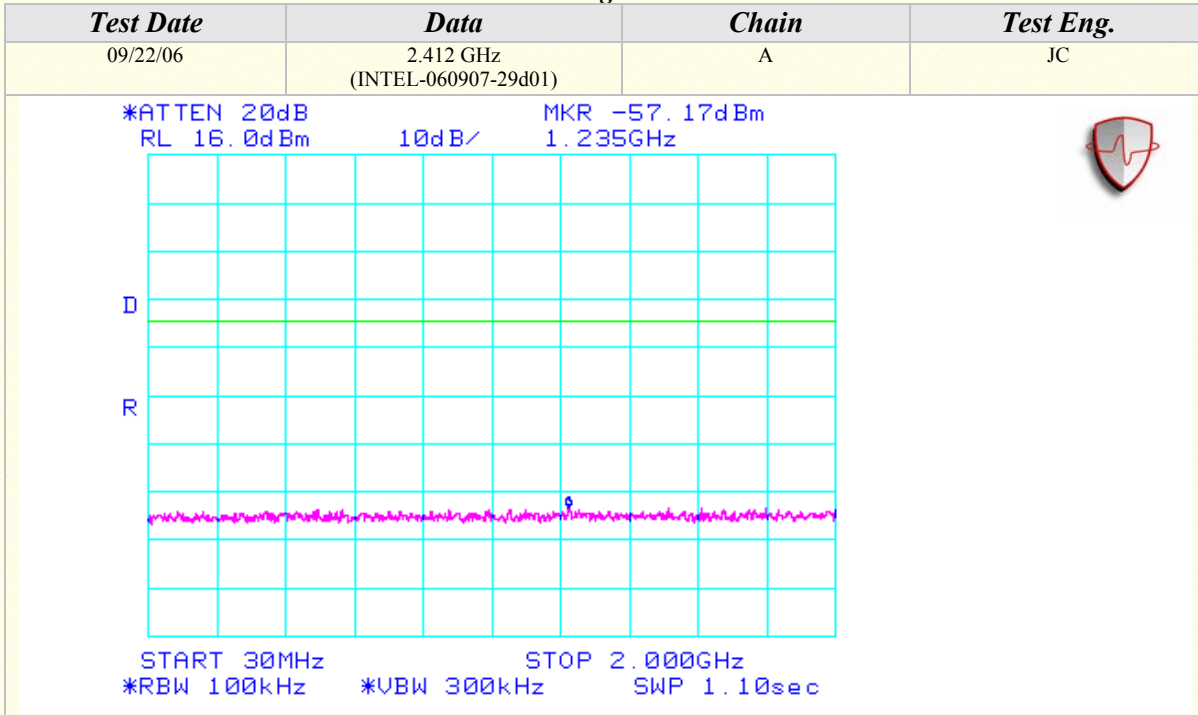
802.11b Mode





Conducted Out Of Band Emissions (Continued)

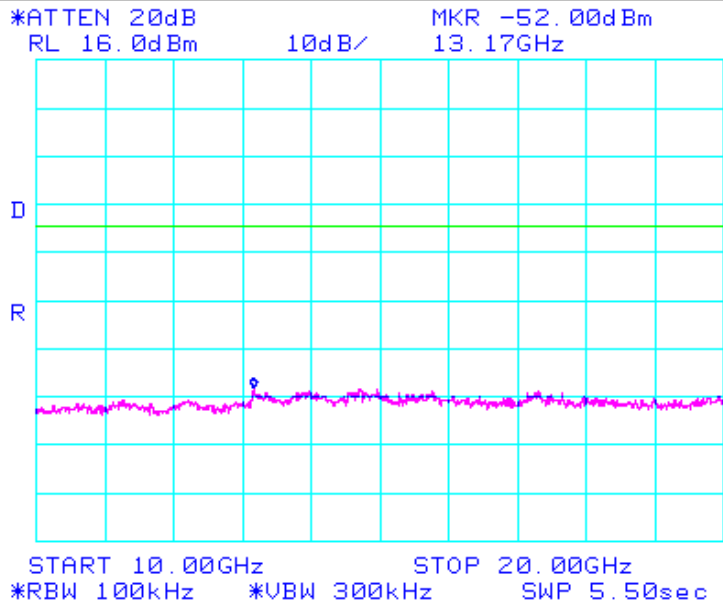
802.11g Mode



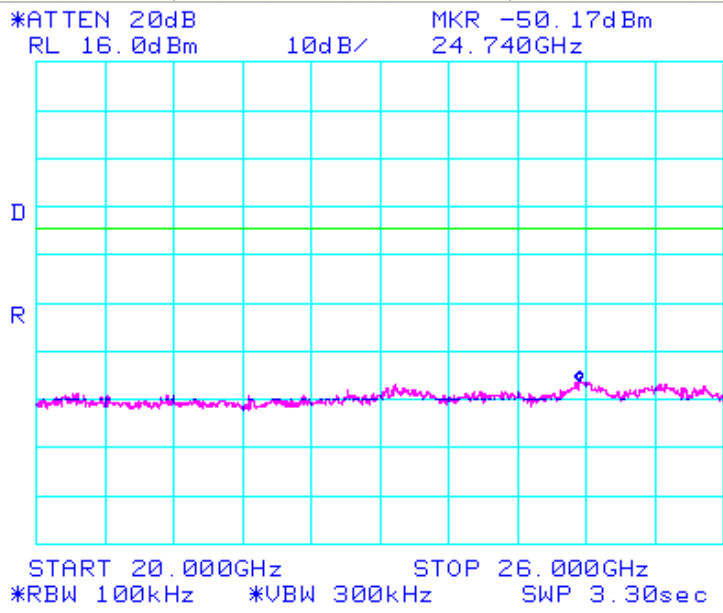
Conducted Out Of Band Emissions (Continued)

802.11g Mode

Test Date	Data	Chain	Test Eng.
09/22/06	2.412 GHz (INTEL-060907-29d03)	A	JC

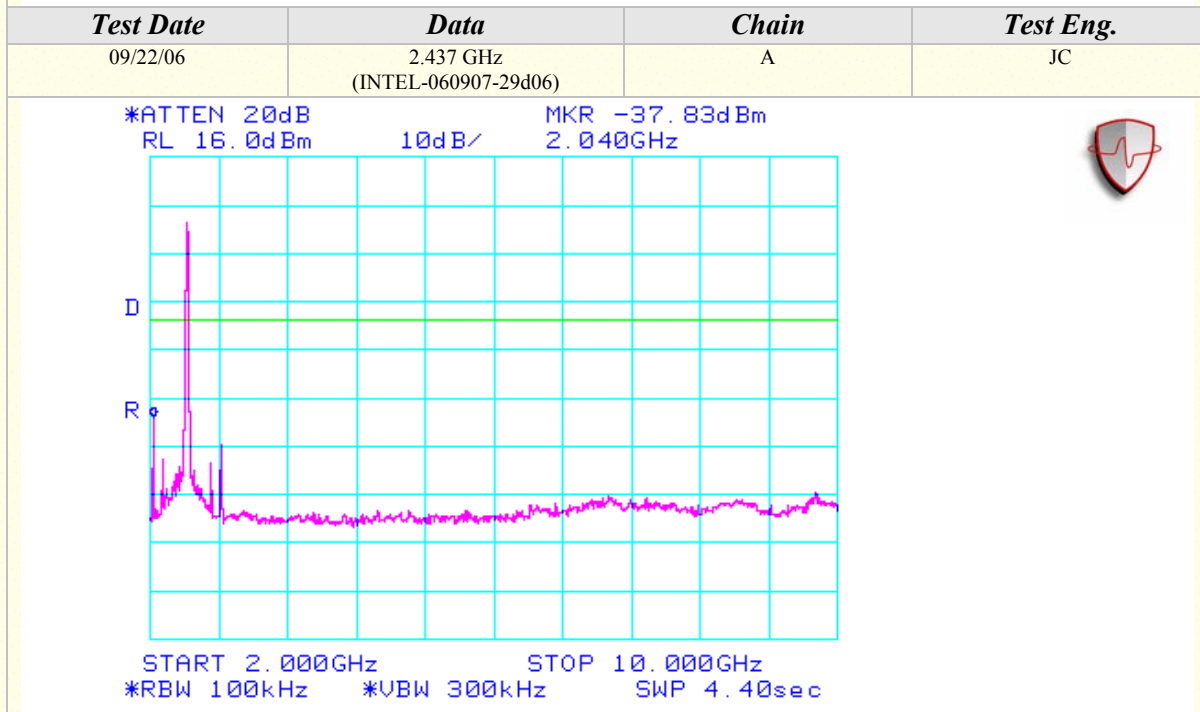
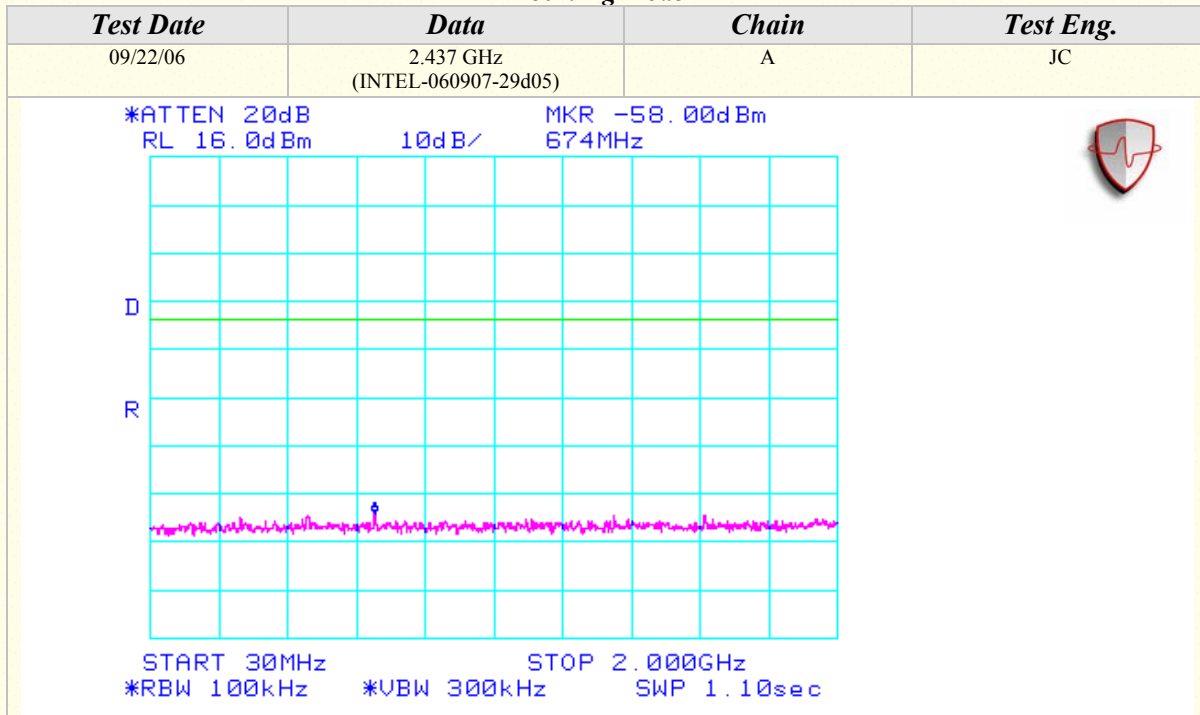


Test Date	Data	Chain	Test Eng.
09/22/06	2.412 GHz (INTEL-060907-29d04)	A	JC



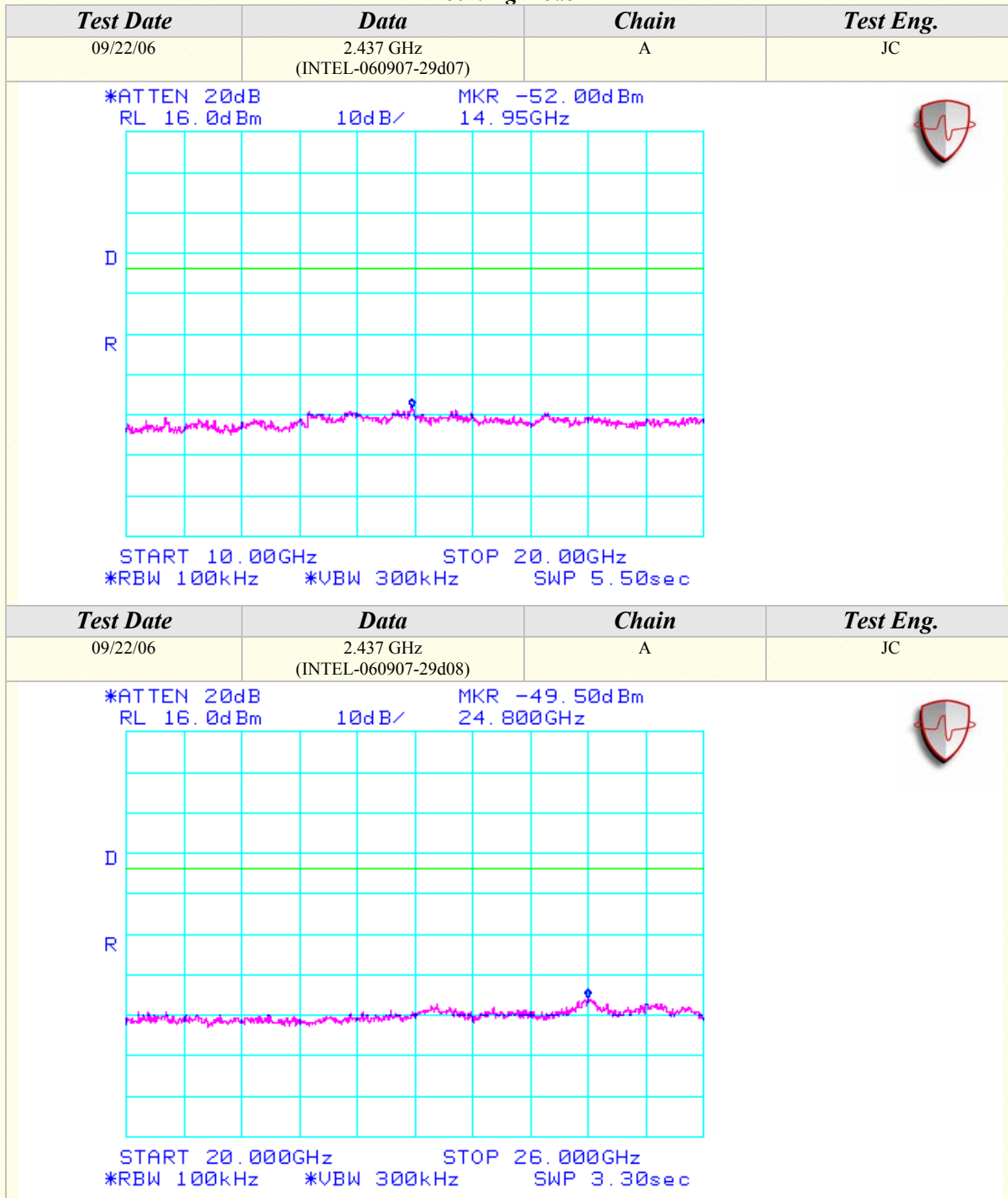
Conducted Out Of Band Emissions (Continued)

802.11g Mode



Conducted Out Of Band Emissions (Continued)

802.11g Mode



Conducted Out Of Band Emissions (Continued)

802.11g Mode

Test Date	Data	Chain	Test Eng.
09/22/06	2.462 GHz (INTEL-060907-29d09)	A	JC
<p>*ATTEN 20dB MKR -57.67dBm RL 16.0dBm 10dB/ 1.718GHz</p> <p>START 30MHz STOP 2.000GHz *RBW 100kHz *UBW 300kHz SWP 1.10sec</p>			
Test Date	Data	Chain	Test Eng.
09/22/06	2.462 GHz (INTEL-060907-29d10)	A	JC
<p>*ATTEN 20dB MKR -37.83dBm RL 16.0dBm 10dB/ 2.040GHz</p> <p>START 2.000GHz STOP 10.000GHz *RBW 100kHz *UBW 300kHz SWP 4.40sec</p>			

Conducted Out Of Band Emissions (Continued)

**802.11g Mode**

<b>Test Date</b>	<b>Data</b>	<b>Chain</b>	<b>Test Eng.</b>
09/22/06	2.462 GHz (INTEL-060907-29d11)	A	JC
<p>*ATTEN 20dB                              MKR -52.33dBm            RL 16.0dBm                           10dB/                           13.18GHz</p> <p>START 10.00GHz                              STOP 20.00GHz            *RBW 100kHz                           *UBW 300kHz                           SWP 5.50sec</p>			
<b>Test Date</b>	<b>Data</b>	<b>Chain</b>	<b>Test Eng.</b>
09/22/06	2.462 GHz (INTEL-060907-29d12)	A	JC
<p>*ATTEN 20dB                              MKR -49.83dBm            RL 16.0dBm                           10dB/                           24.740GHz</p> <p>START 20.000GHz                              STOP 26.000GHz            *RBW 100kHz                           *UBW 300kHz                           SWP 3.30sec</p>			

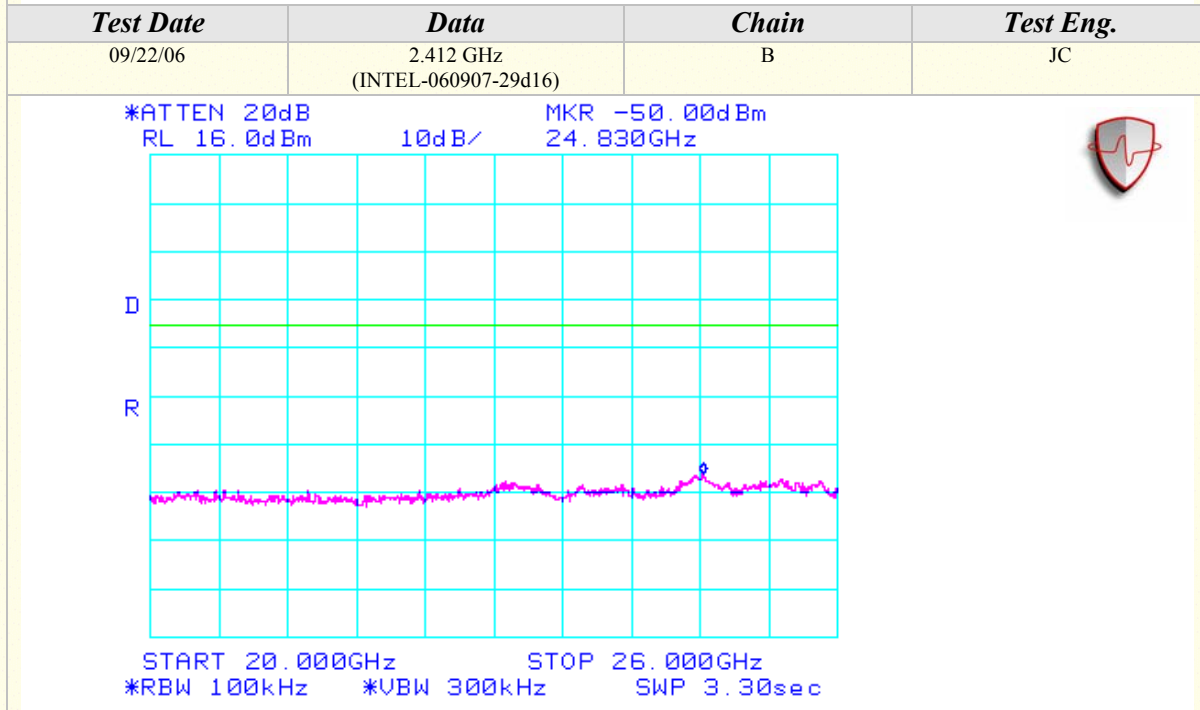
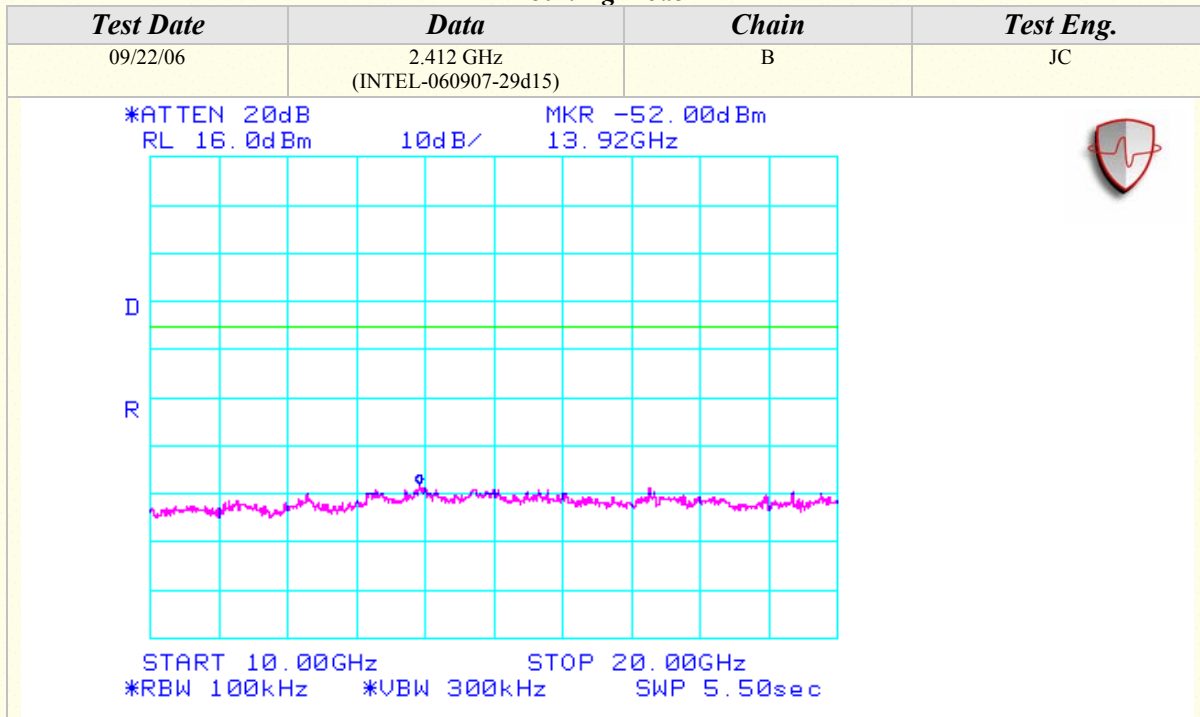






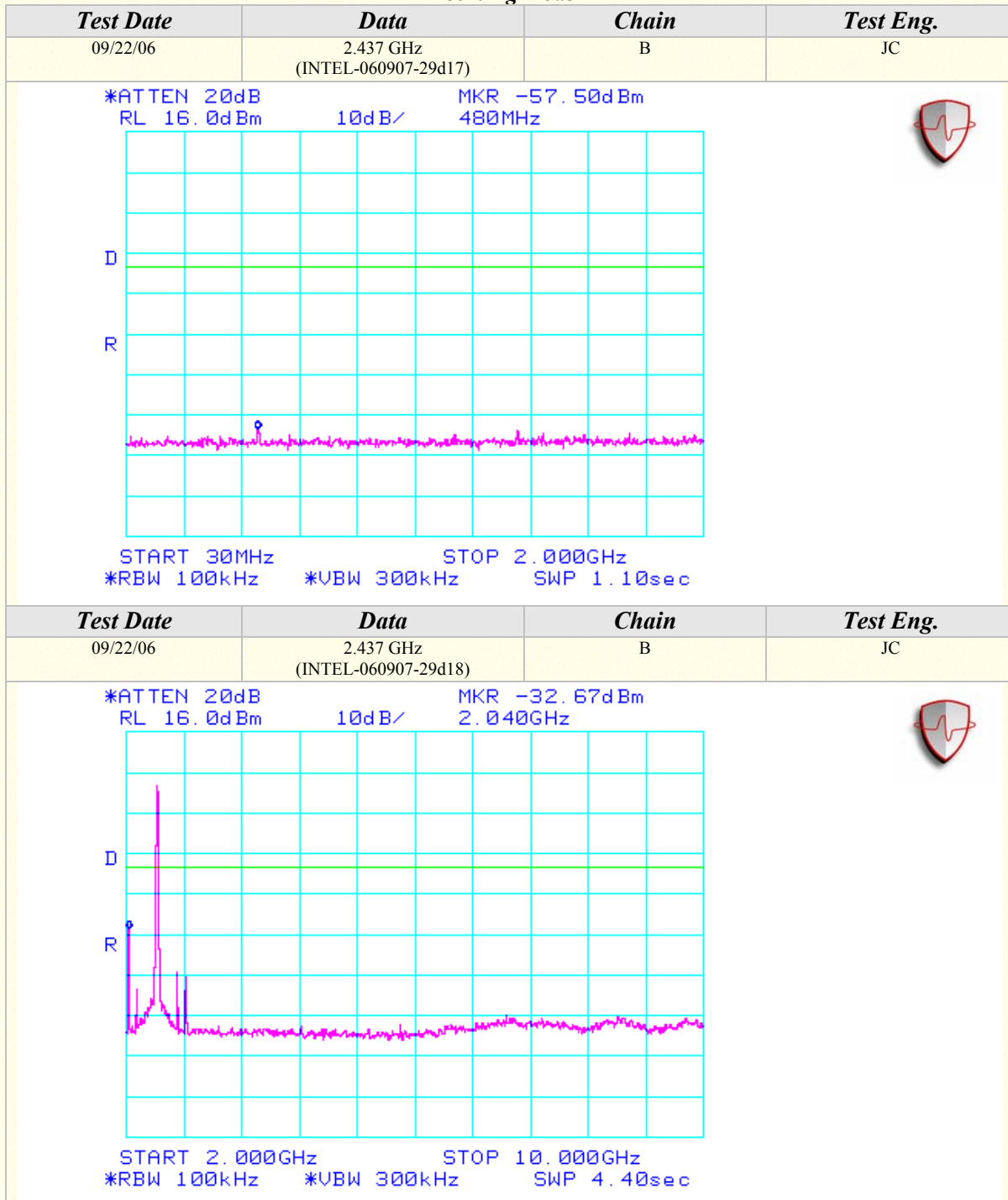
Conducted Out Of Band Emissions (Continued)

802.11g Mode



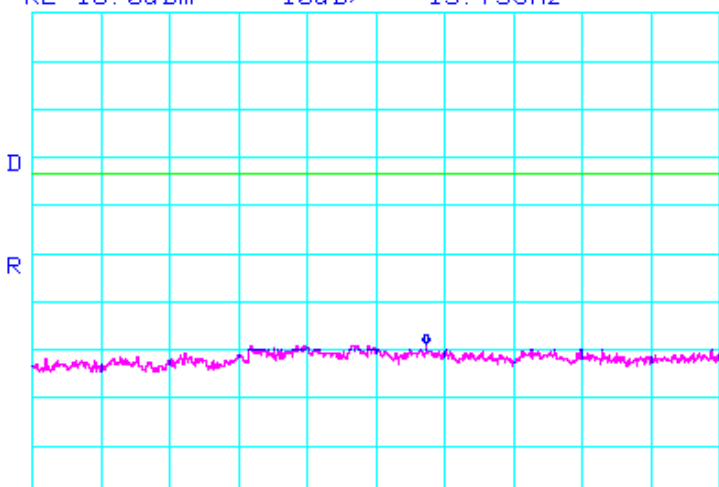
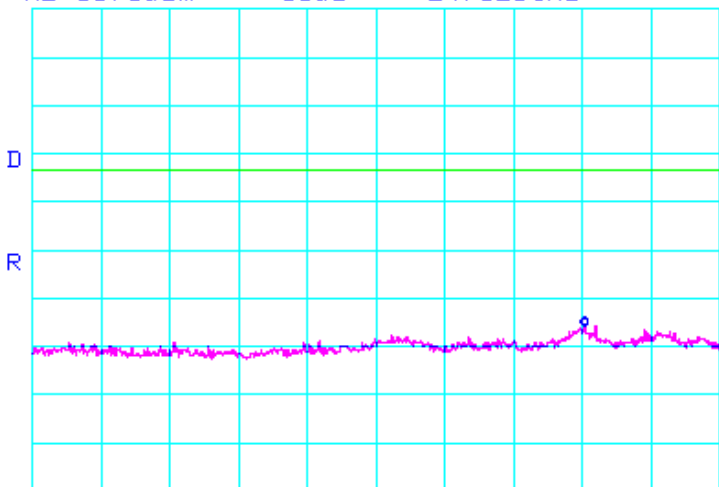
Conducted Out Of Band Emissions (Continued)

802.11g Mode



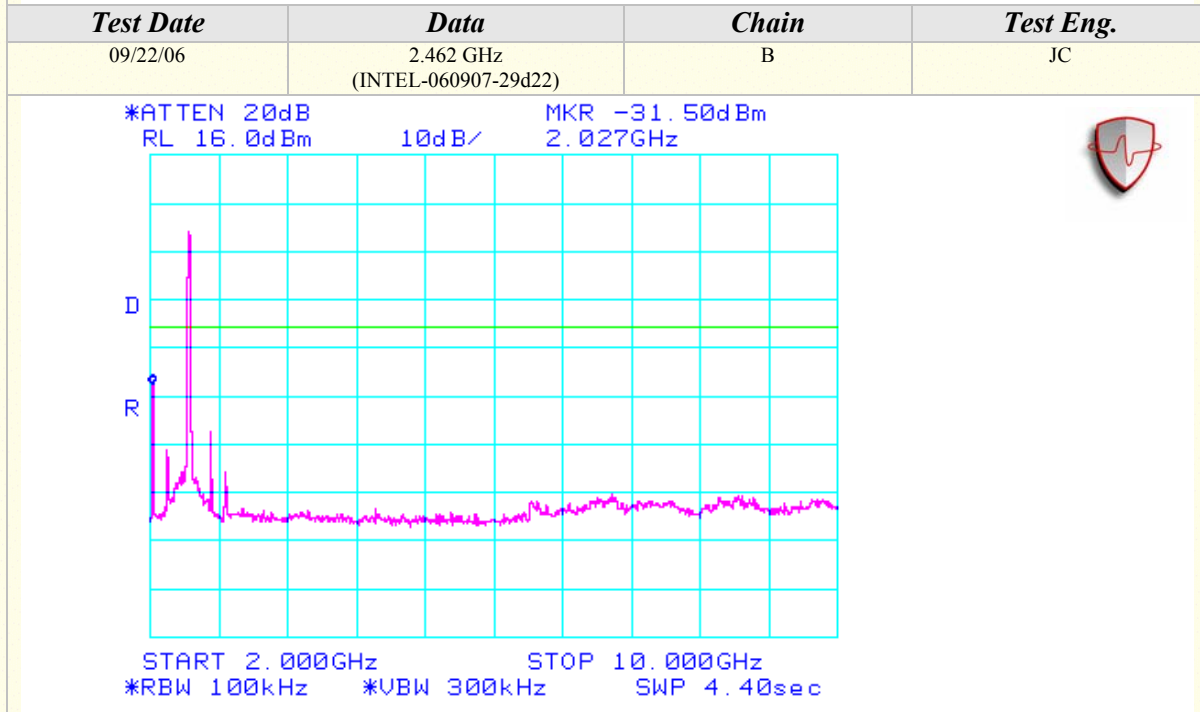
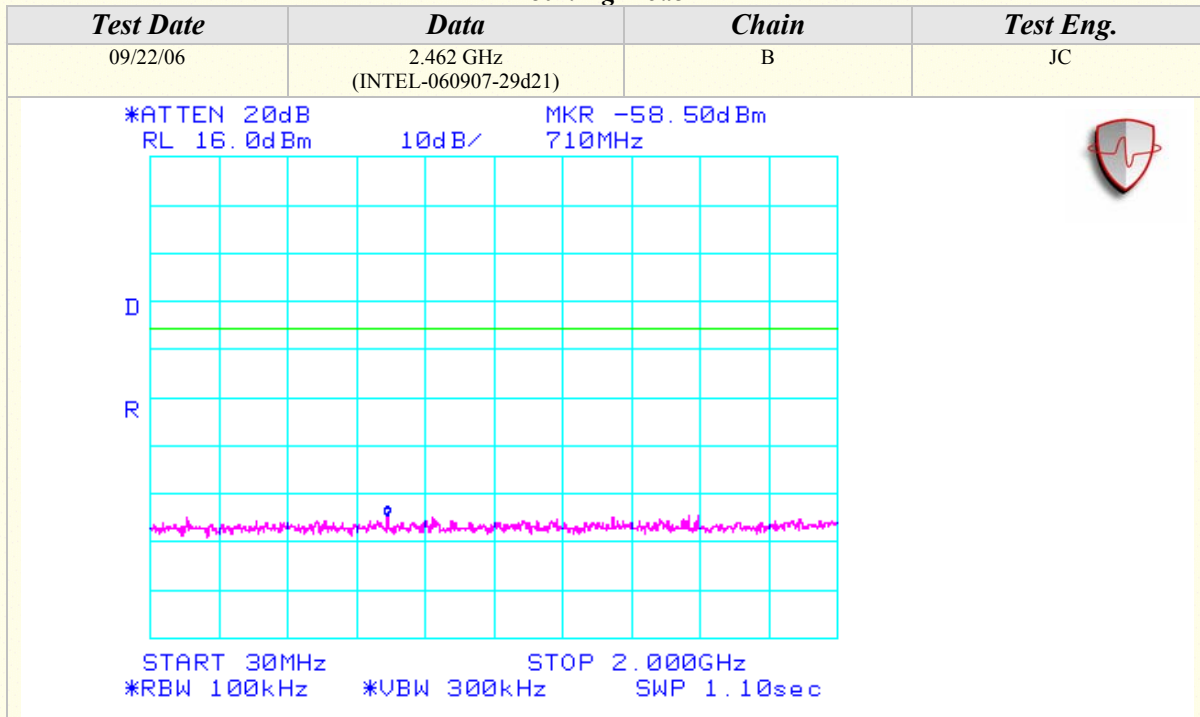
Conducted Out Of Band Emissions (Continued)

802.11g Mode

Test Date	Data	Chain	Test Eng.
09/22/06	2.437 GHz (INTEL-060907-29d19)	B	JC
<p>*ATTEN 20dB MKR -52.83dBm            RL 16.0dBm 10dB/ 15.73GHz</p>  <p>START 10.00GHz STOP 20.00GHz            *RBW 100kHz *VBW 300kHz SWP 5.50sec</p>			
Test Date	Data	Chain	Test Eng.
09/22/06	2.437 GHz (INTEL-060907-29d20)	B	JC
<p>*ATTEN 20dB MKR -49.83dBm            RL 16.0dBm 10dB/ 24.820GHz</p>  <p>START 20.00GHz STOP 26.00GHz            *RBW 100kHz *VBW 300kHz SWP 3.30sec</p>			

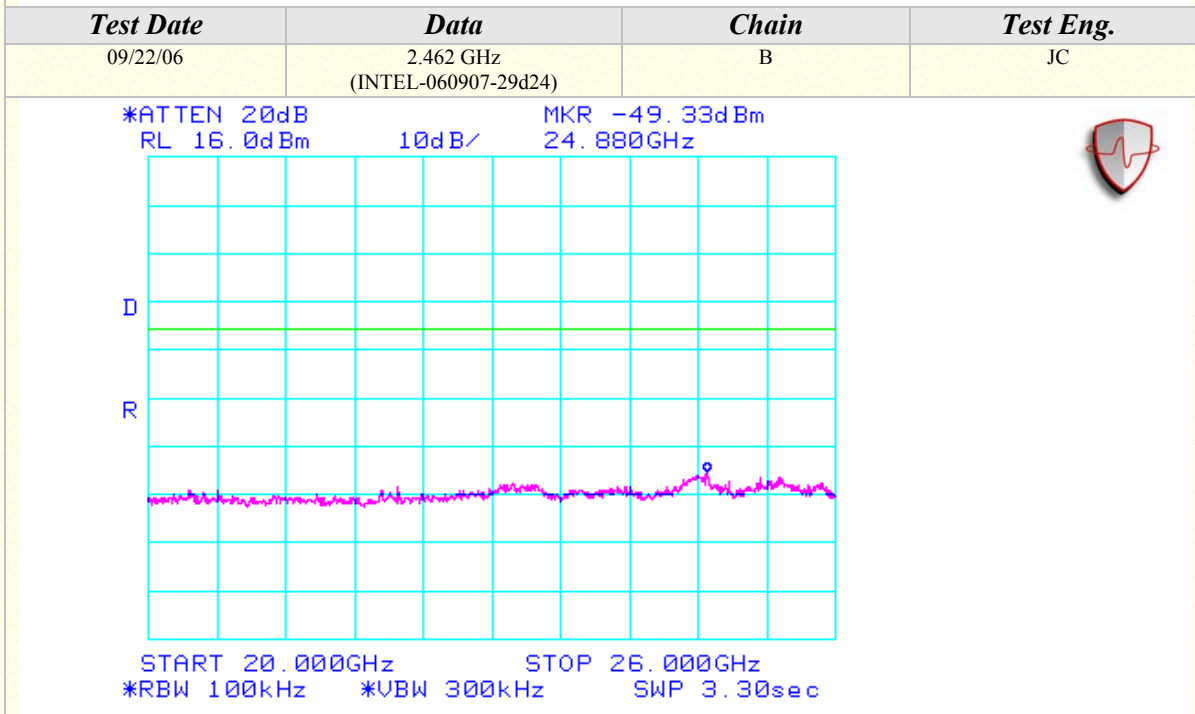
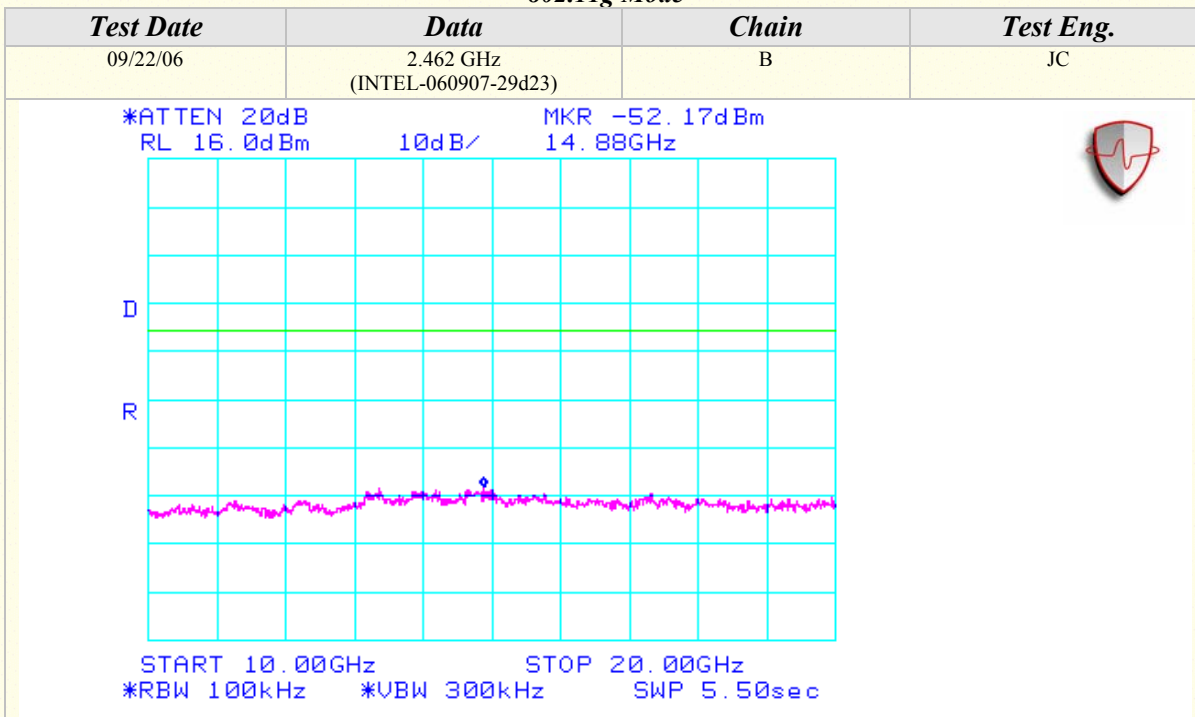
Conducted Out Of Band Emissions (Continued)

802.11g Mode



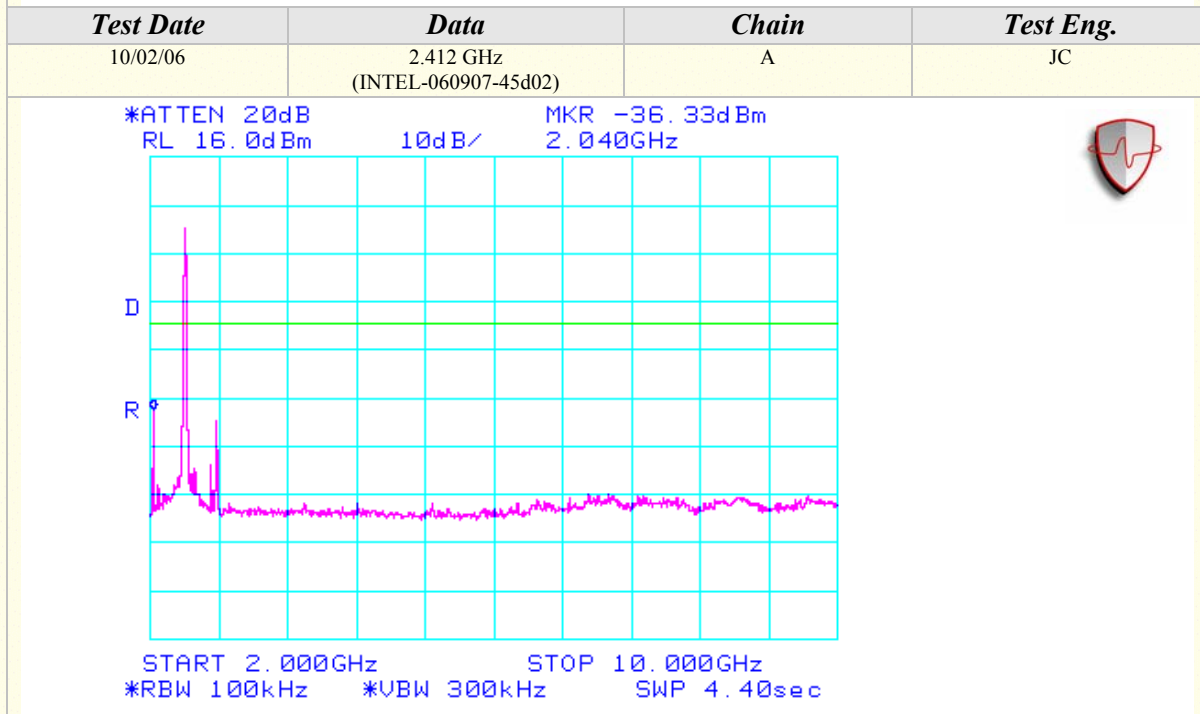
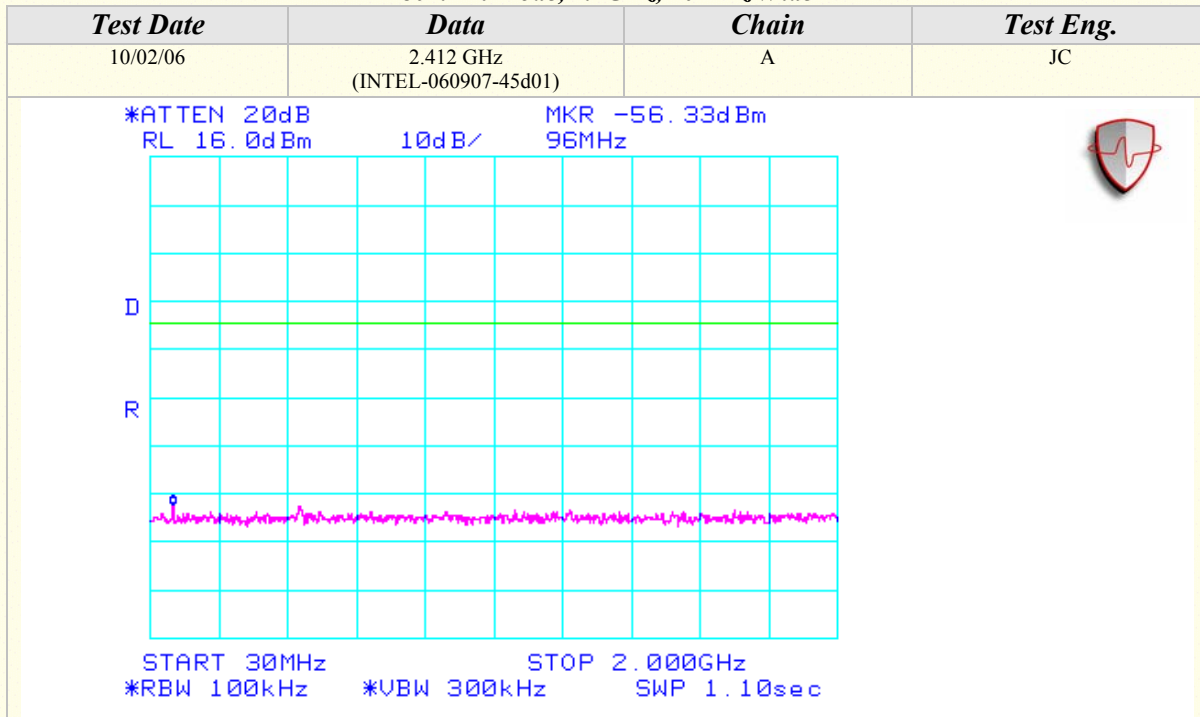
Conducted Out Of Band Emissions (Continued)

802.11g Mode



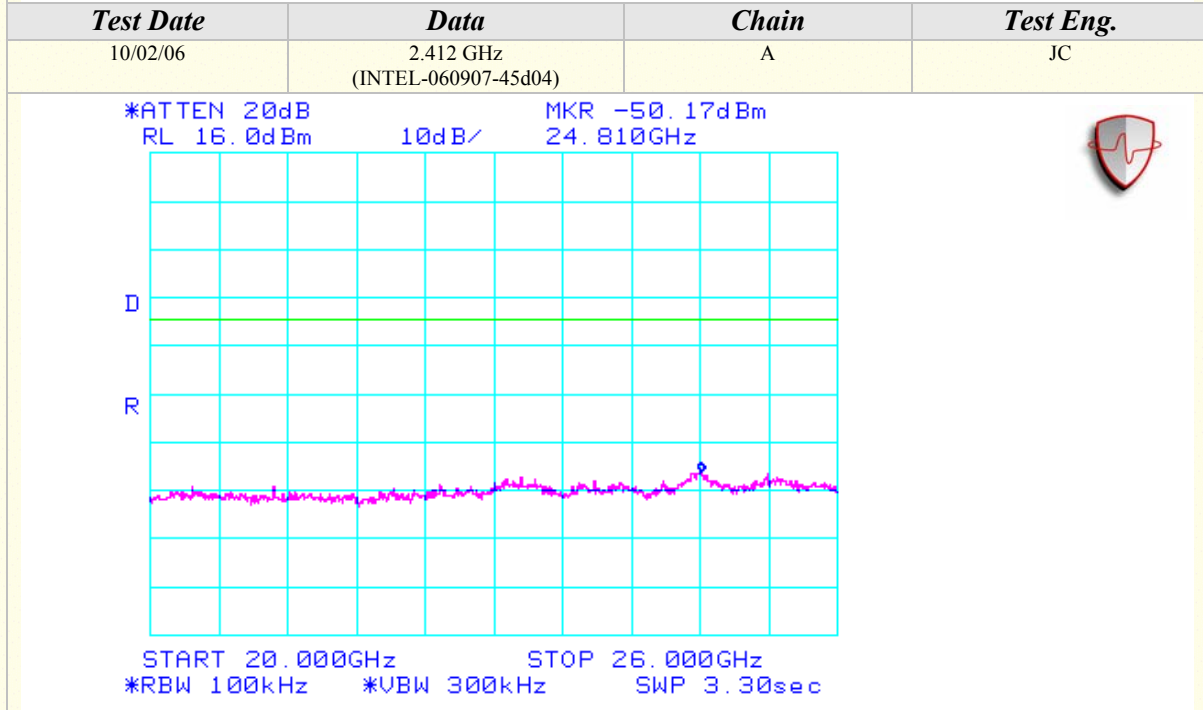
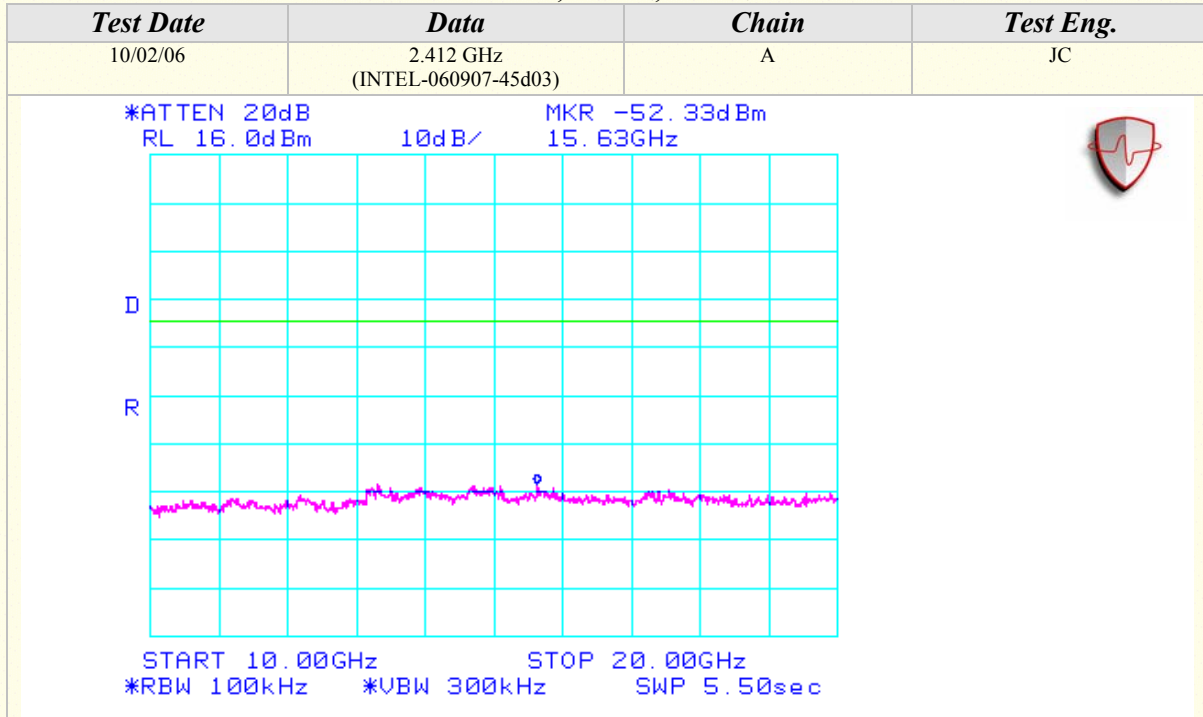
Conducted Out Of Band Emissions (Continued)

802.11n Mode, 2.4GHz, 20MHz Wide



Conducted Out Of Band Emissions (Continued)

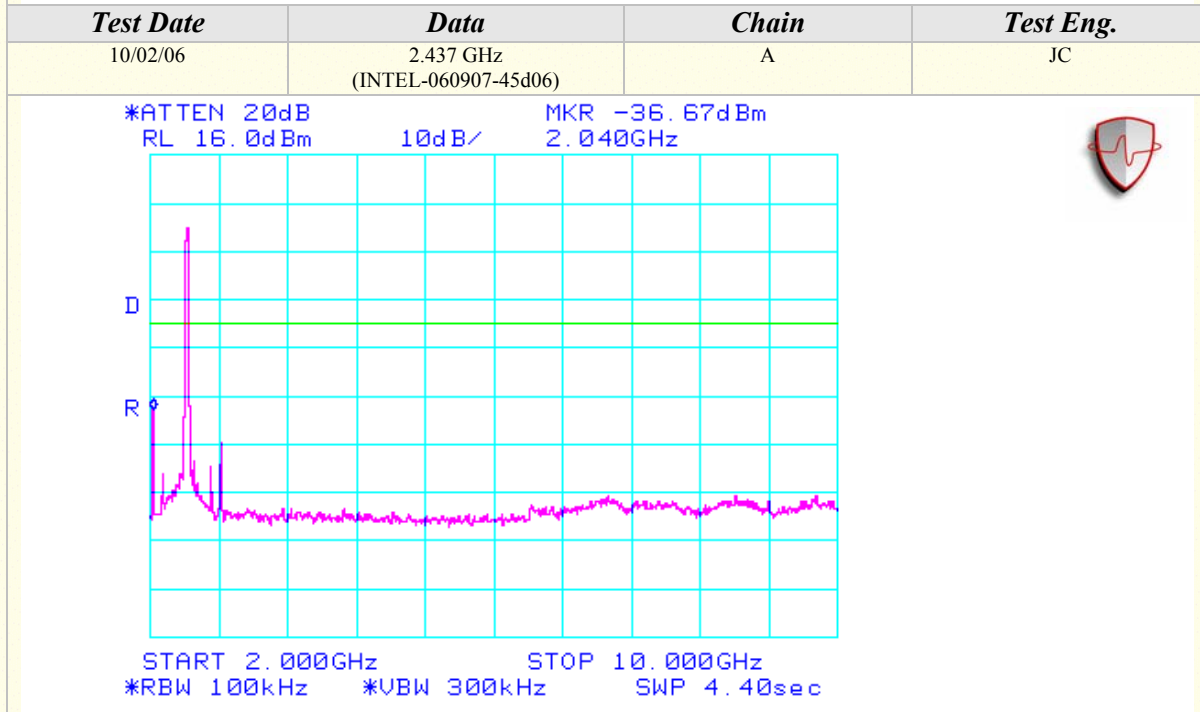
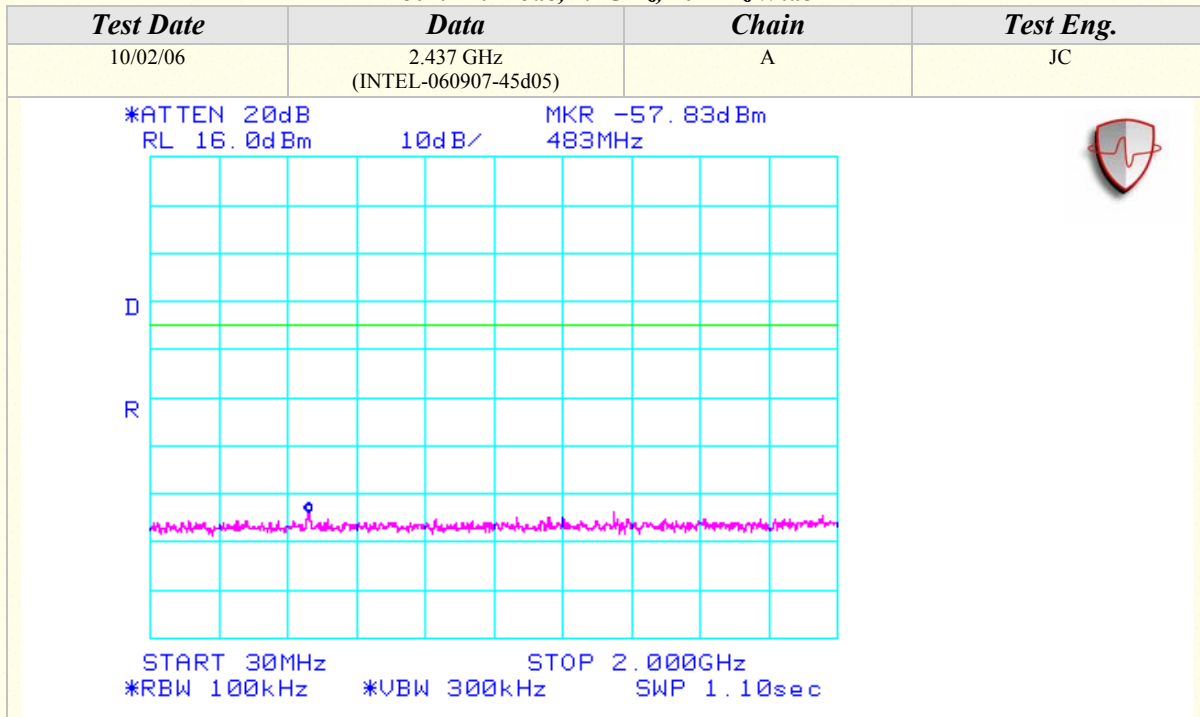
**802.11n Mode, 2.4GHz, 20MHz Wide**





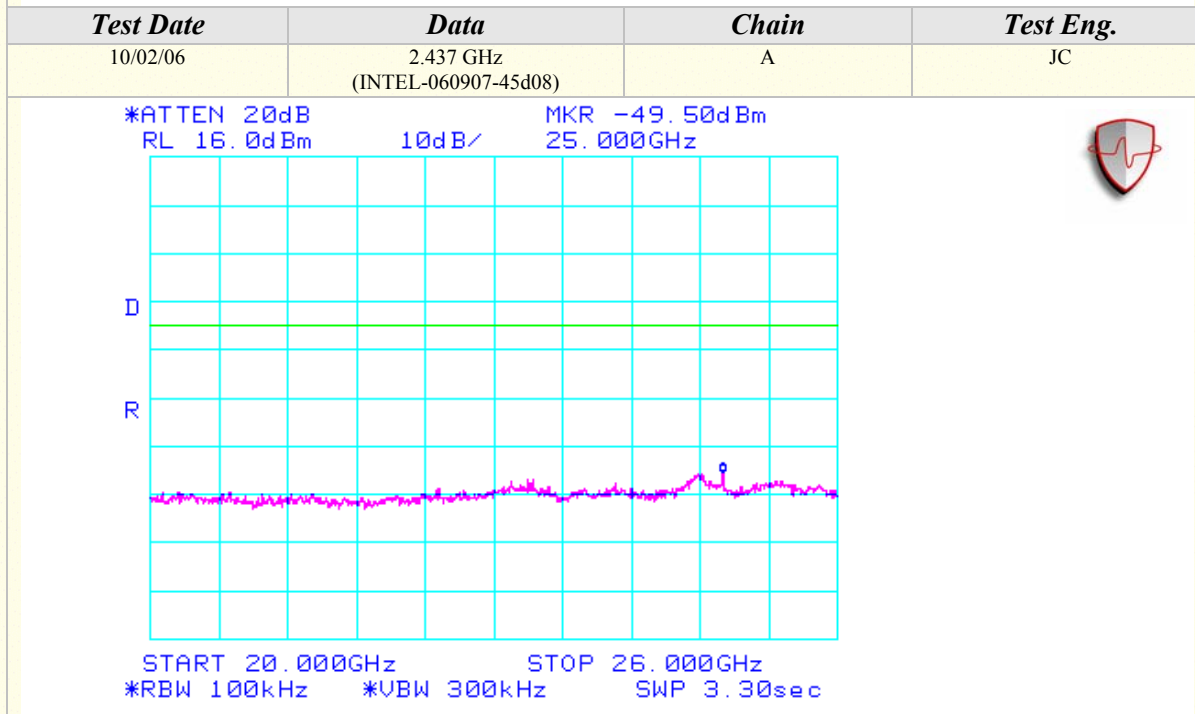
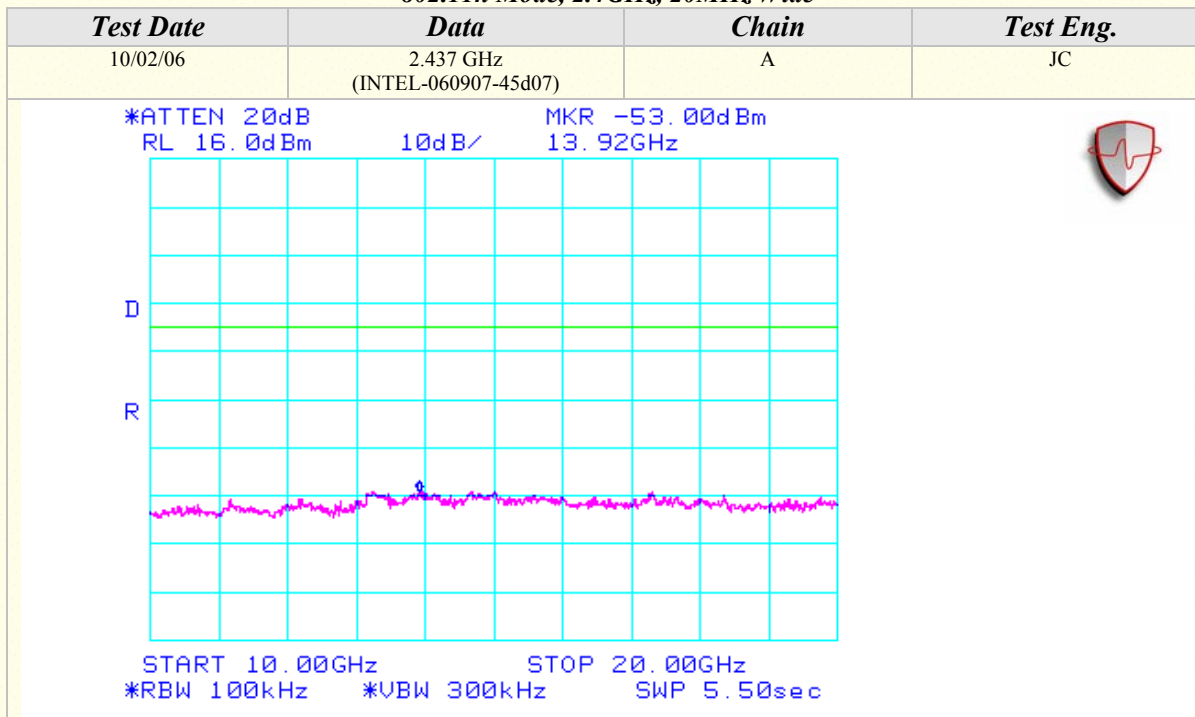
### Conducted Out Of Band Emissions (Continued)

#### 802.11n Mode, 2.4GHz, 20MHz Wide



Conducted Out Of Band Emissions (Continued)

802.11n Mode, 2.4GHz, 20MHz Wide



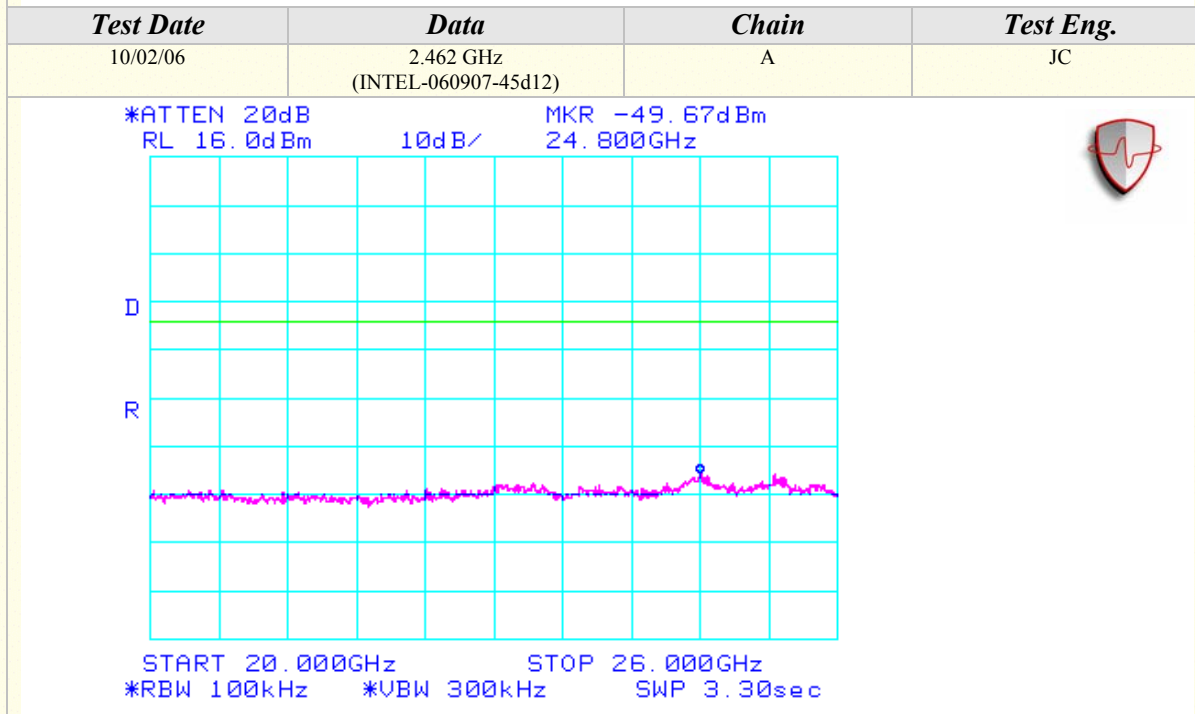
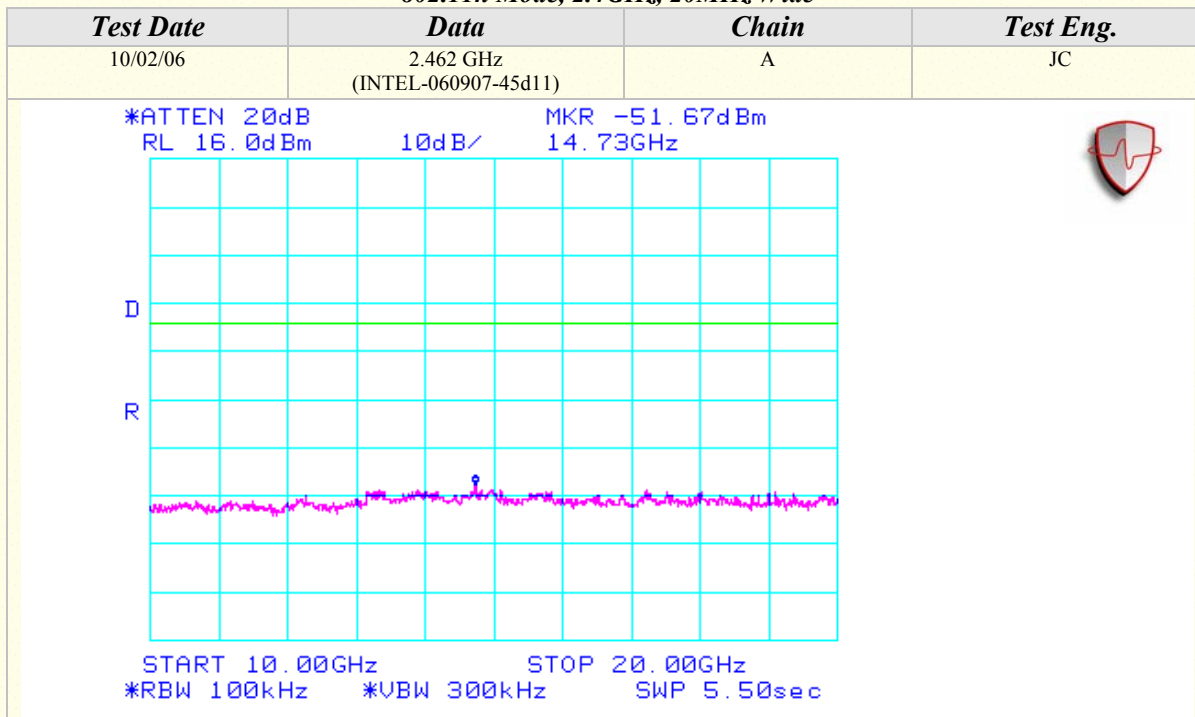
Conducted Out Of Band Emissions (Continued)

*802.11n Mode, 2.4GHz, 20MHz Wide*

<i>Test Date</i>	<i>Data</i>	<i>Chain</i>	<i>Test Eng.</i>
10/02/06	2.462 GHz (INTEL-060907-45d09)	A	JC
<p>*ATTEN 20dB                    MKR -56.83dBm            RL 16.0dBm                10dB/                509MHz</p> <p>START 30MHz                          STOP 2.000GHz            *RBW 100kHz            *UBW 300kHz        SWP 1.10sec</p>			
<i>Test Date</i>	<i>Data</i>	<i>Chain</i>	<i>Test Eng.</i>
10/02/06	2.462 GHz (INTEL-060907-45d10)	A	JC
<p>*ATTEN 20dB                    MKR -35.67dBm            RL 16.0dBm                10dB/                2.040GHz</p> <p>START 2.000GHz                        STOP 10.000GHz            *RBW 100kHz            *UBW 300kHz        SWP 4.40sec</p>			

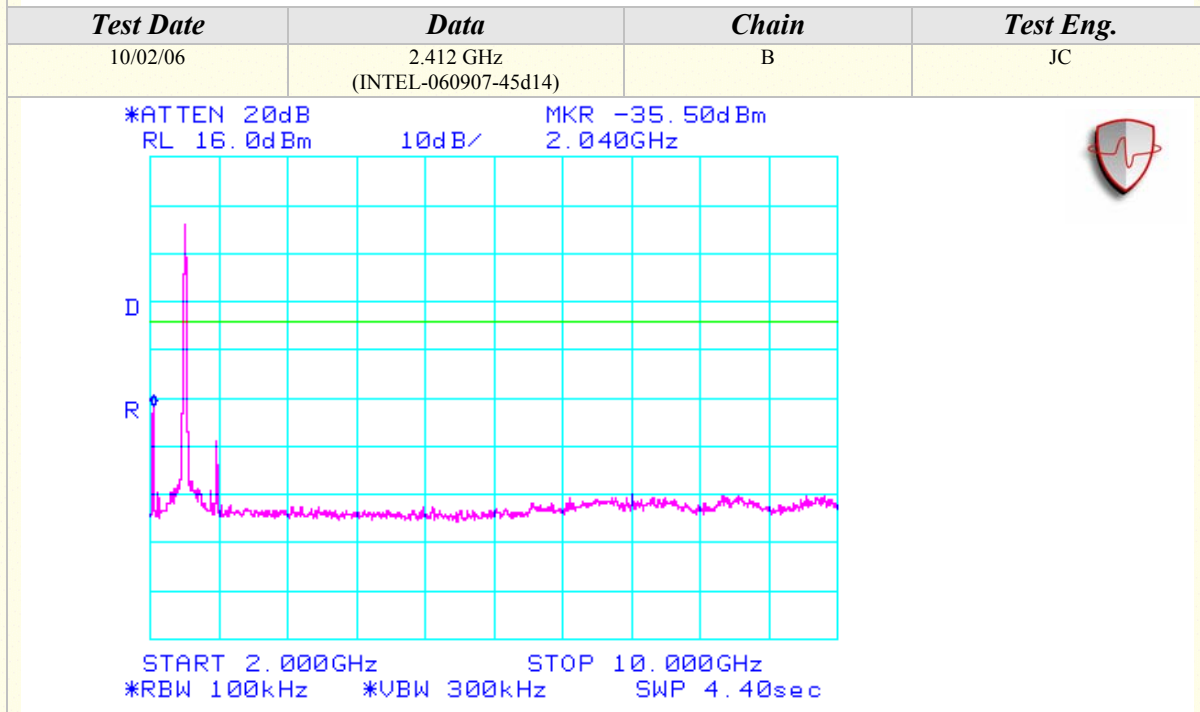
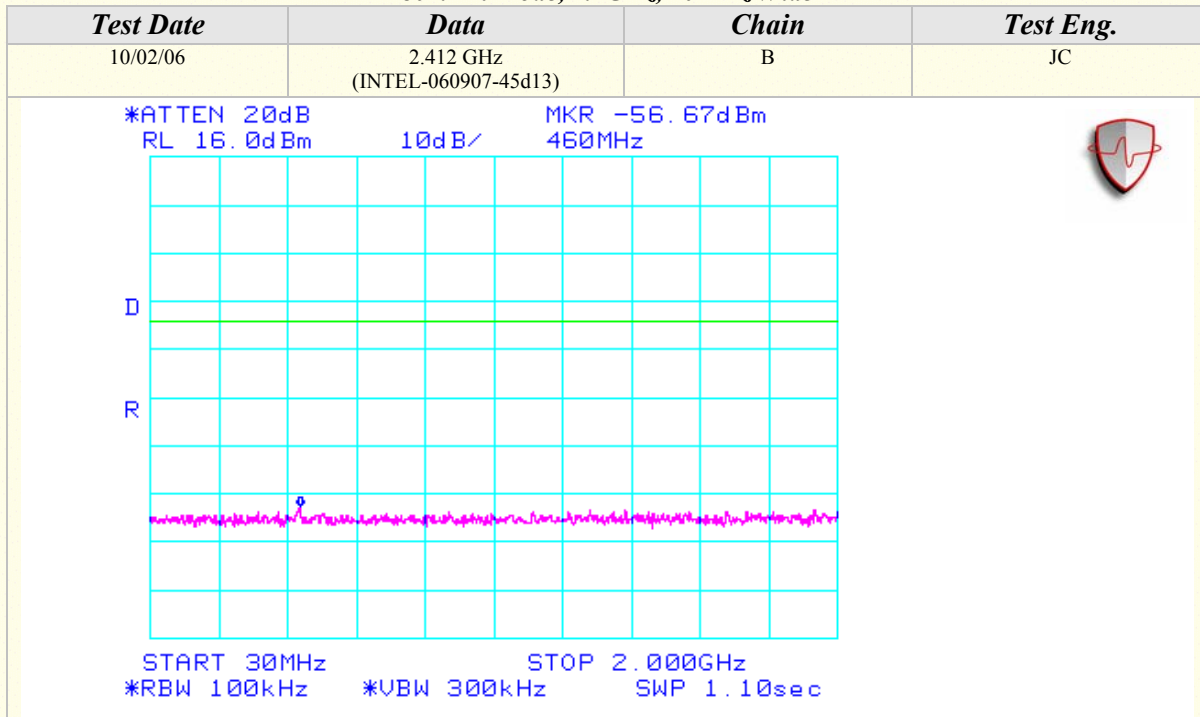
Conducted Out Of Band Emissions (Continued)

802.11n Mode, 2.4GHz, 20MHz Wide



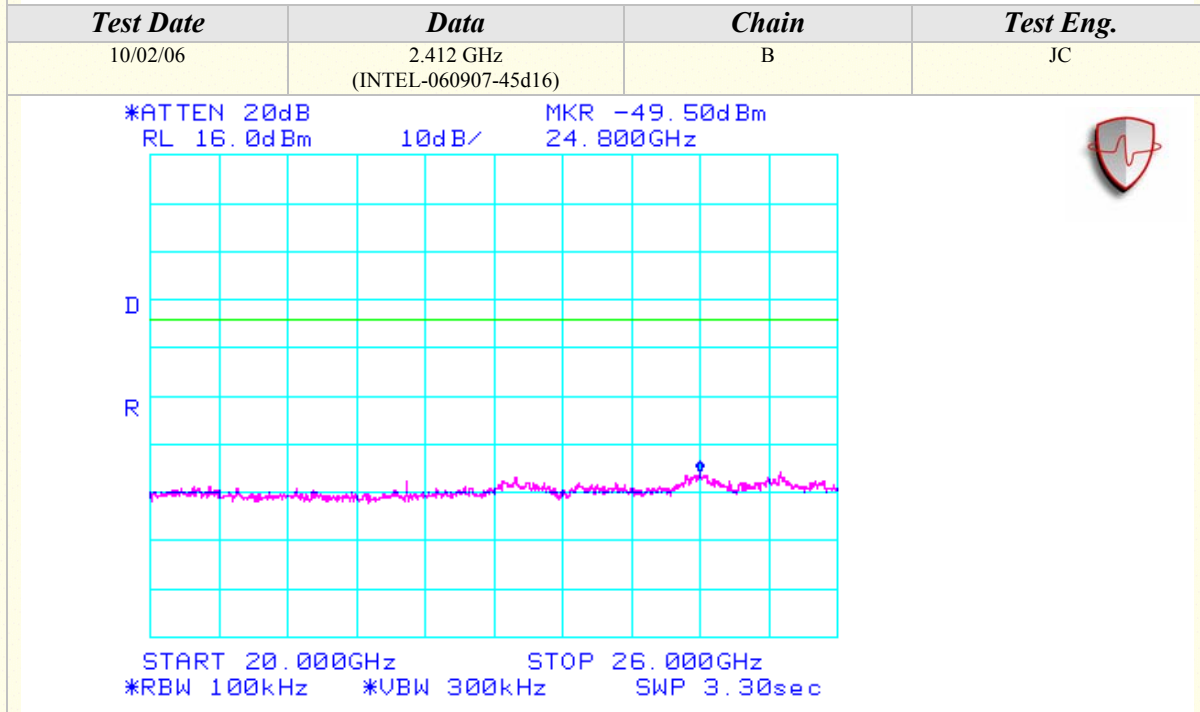
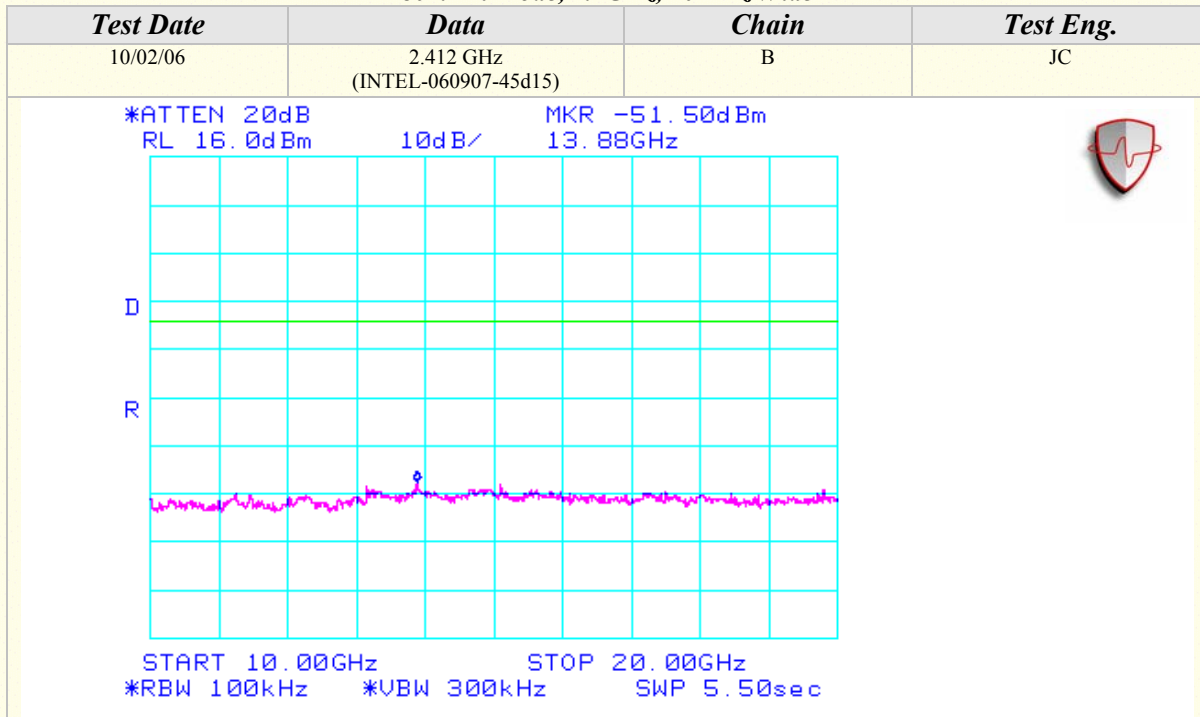
Conducted Out Of Band Emissions (Continued)

*802.11n Mode, 2.4GHz, 20MHz Wide*



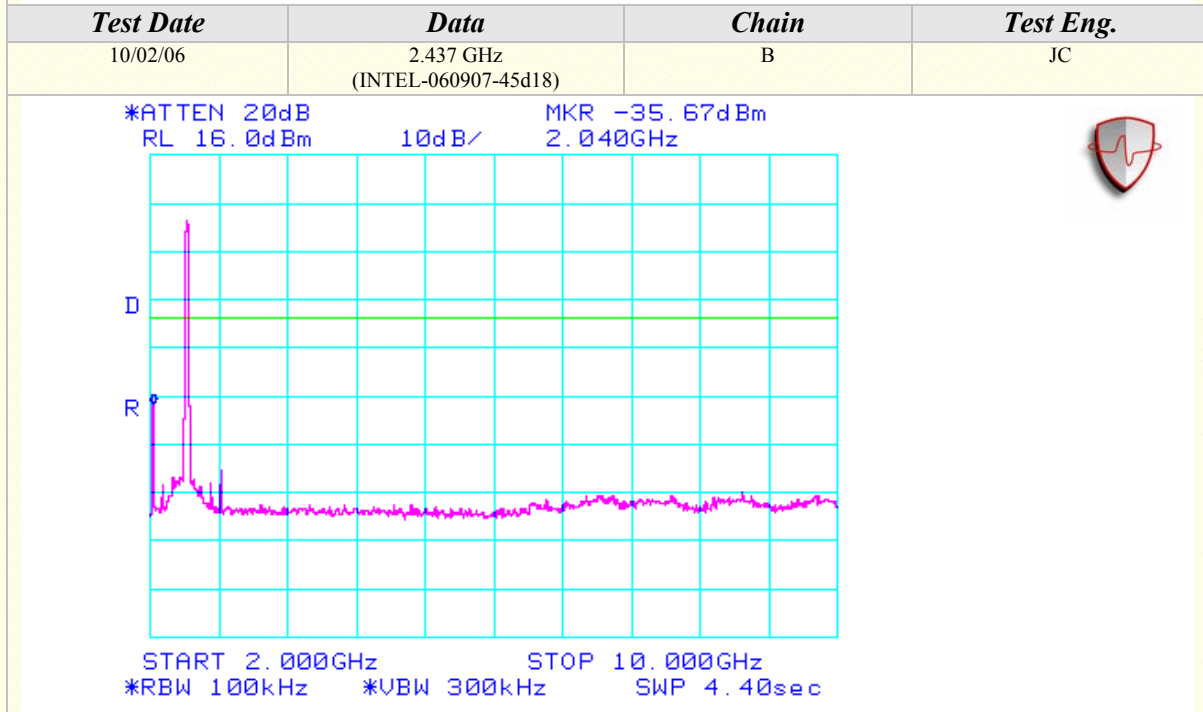
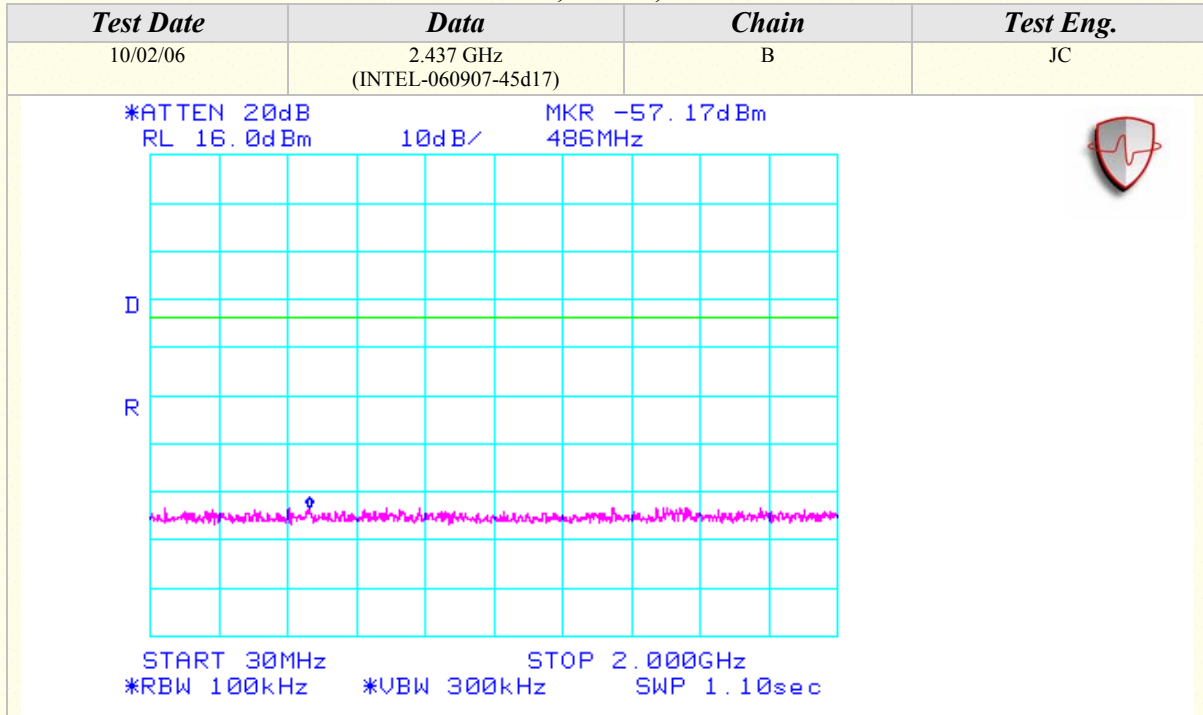
Conducted Out Of Band Emissions (Continued)

802.11n Mode, 2.4GHz, 20MHz Wide



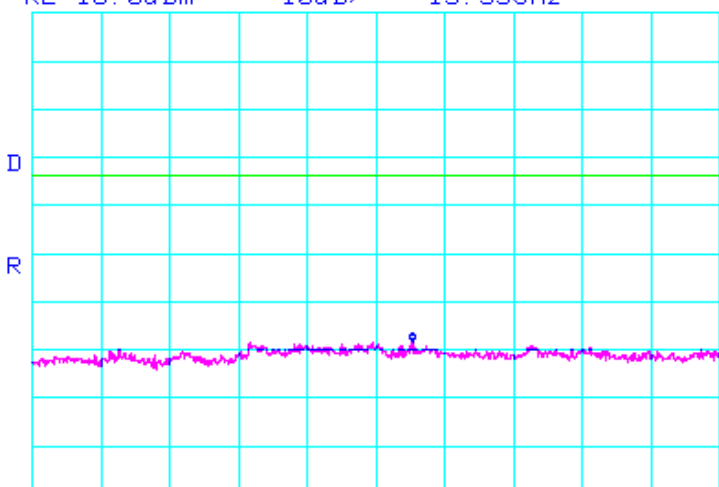
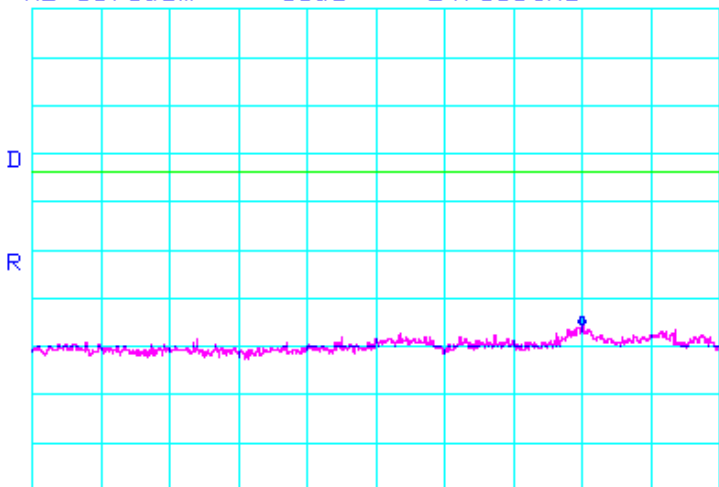
## Conducted Out Of Band Emissions (Continued)

## 802.11n Mode, 2.4GHz, 20MHz Wide



### Conducted Out Of Band Emissions (Continued)

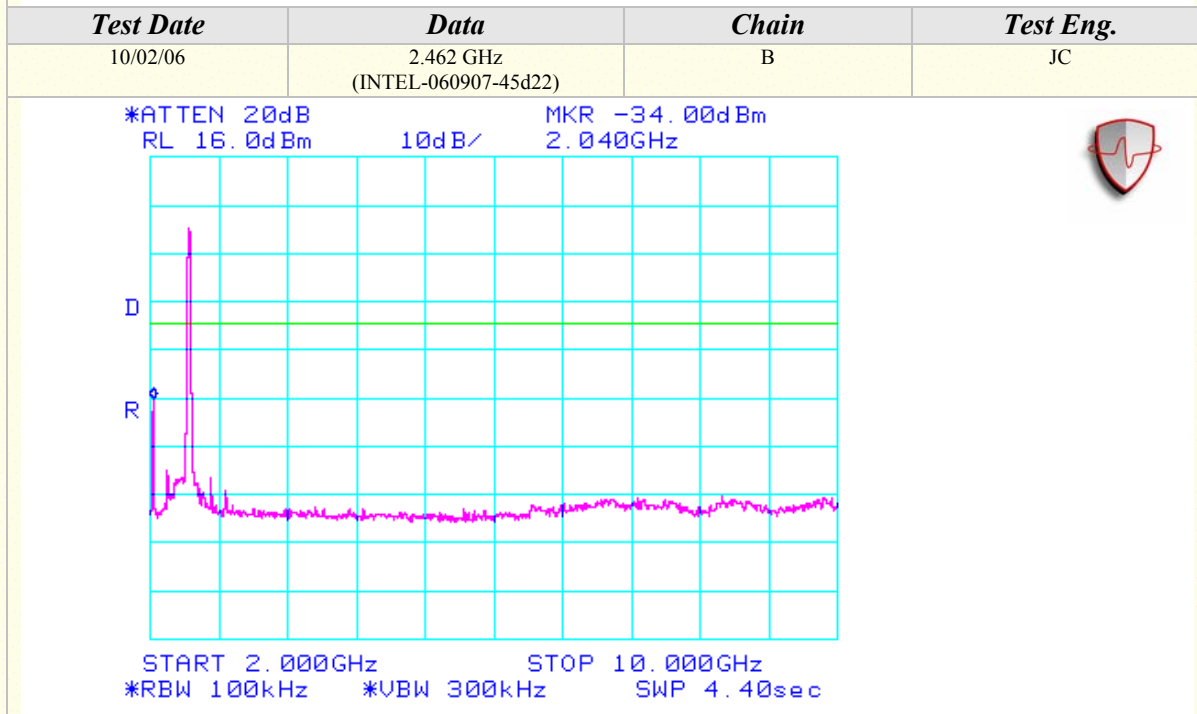
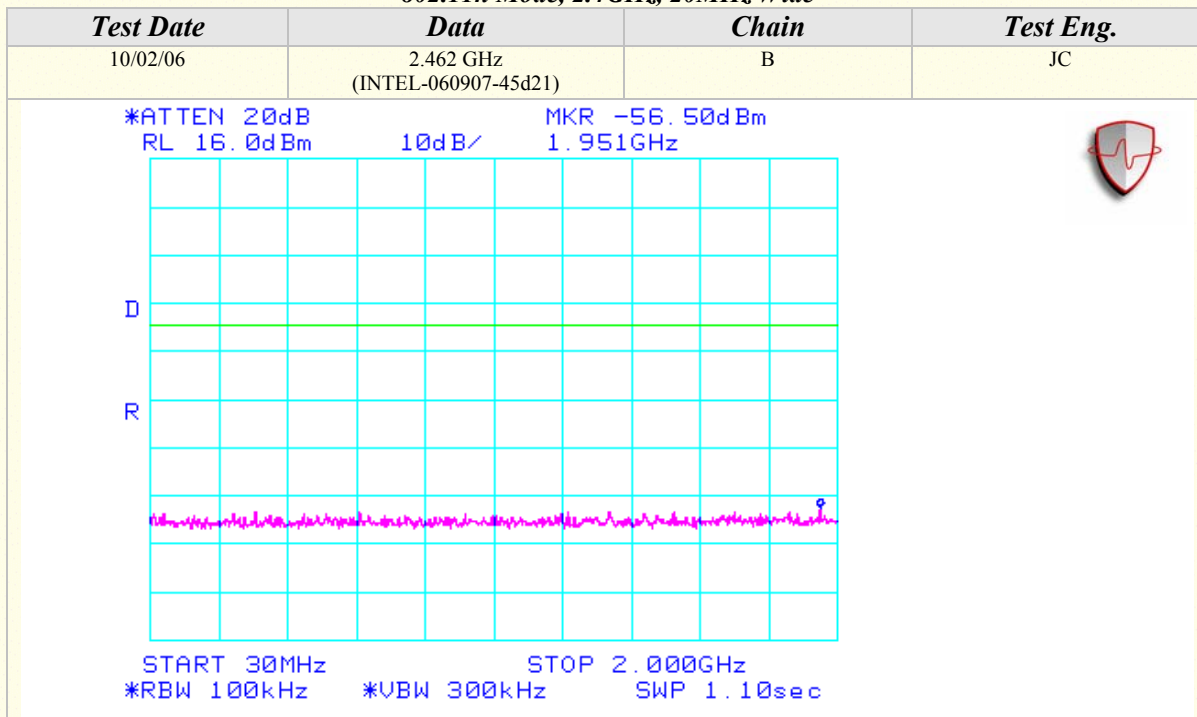
#### 802.11n Mode, 2.4GHz, 20MHz Wide

<i>Test Date</i>	<i>Data</i>	<i>Chain</i>	<i>Test Eng.</i>
10/02/06	2.437 GHz (INTEL-060907-45d19)	B	JC
<p>*ATTEN 20dB                                   MKR -52.33dBm            RL 16.0dBm                                10dB/                    15.53GHz</p>  <p>START 10.00GHz                               STOP 20.00GHz            *RBW 100kHz                               *UBW 300kHz           SWP 5.50sec</p>			
<i>Test Date</i>	<i>Data</i>	<i>Chain</i>	<i>Test Eng.</i>
10/02/06	2.437 GHz (INTEL-060907-45d20)	B	JC
<p>*ATTEN 20dB                                   MKR -49.83dBm            RL 16.0dBm                                10dB/                    24.800GHz</p>  <p>START 20.000GHz                             STOP 26.000GHz            *RBW 100kHz                               *UBW 300kHz           SWP 3.30sec</p>			



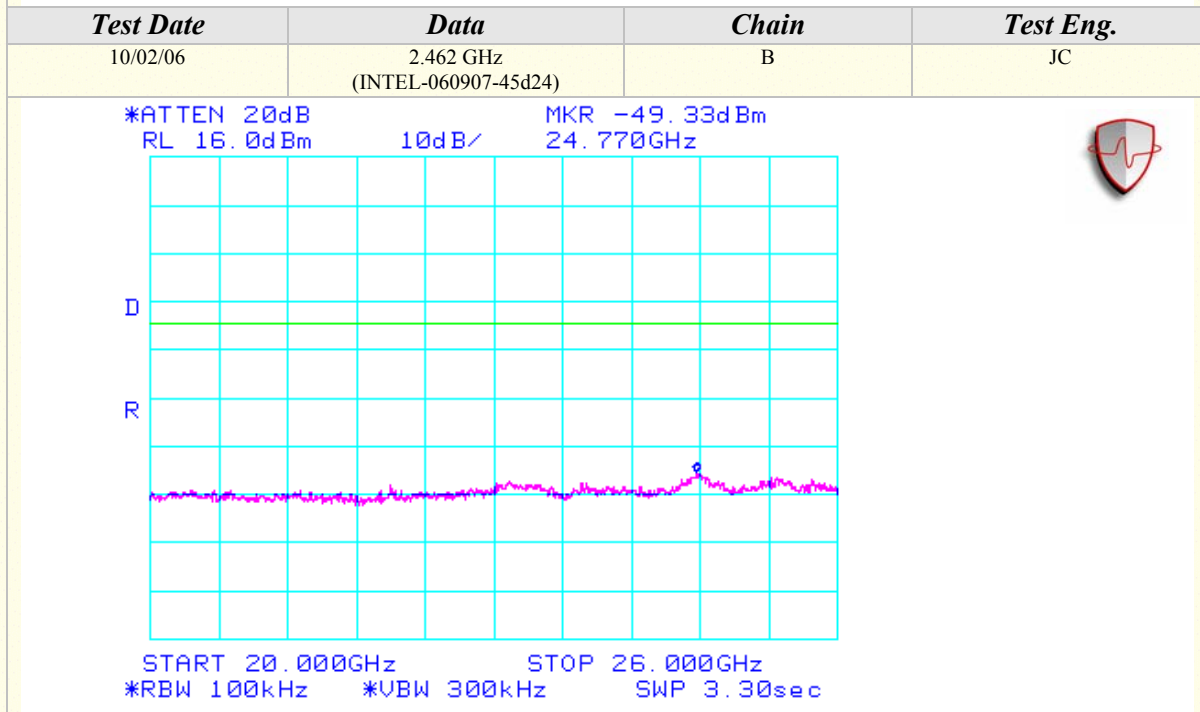
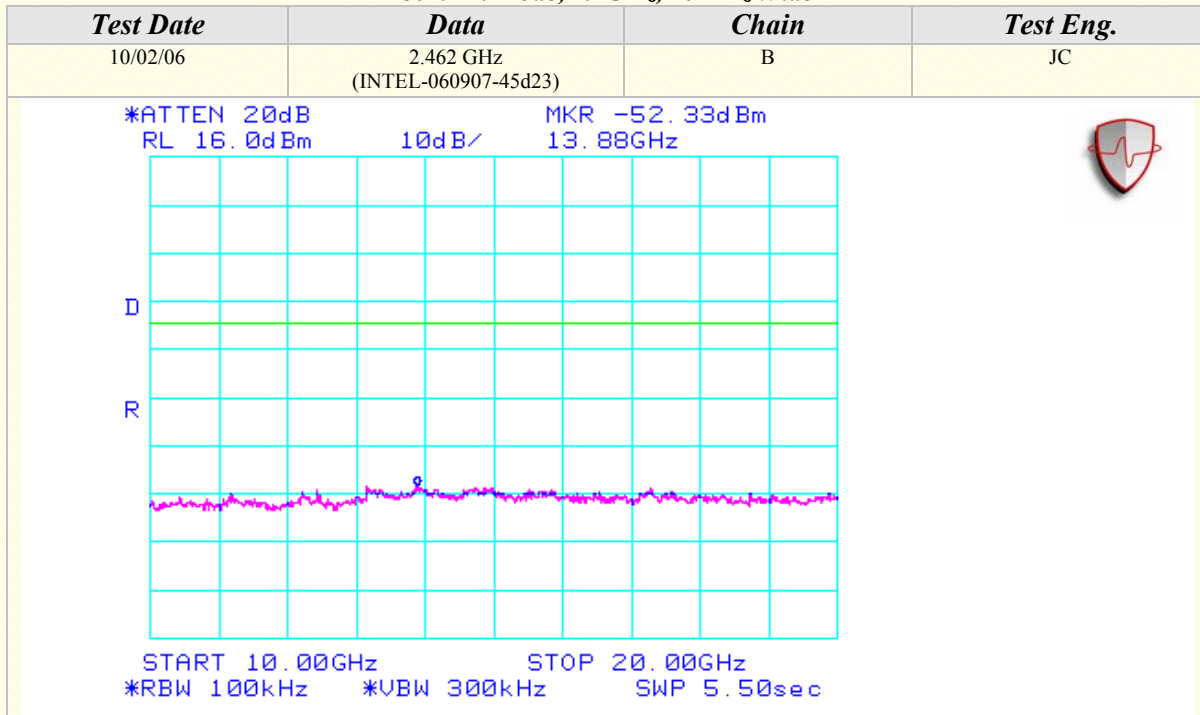
Conducted Out Of Band Emissions (Continued)

802.11n Mode, 2.4GHz, 20MHz Wide



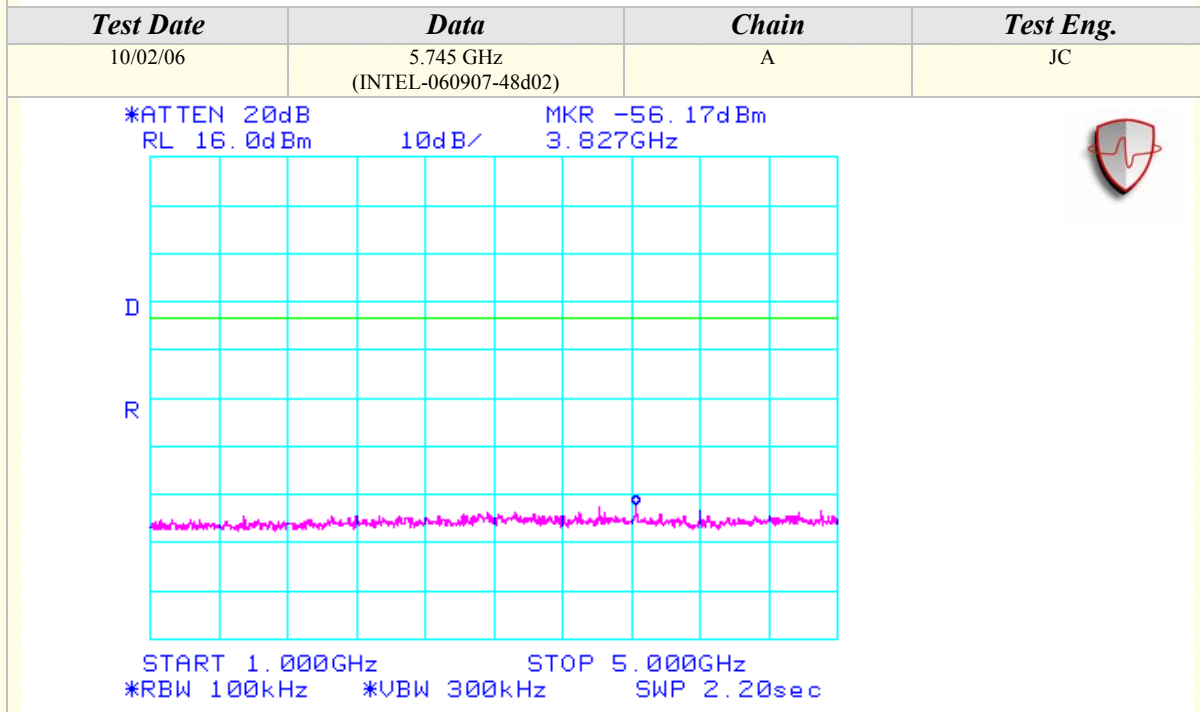
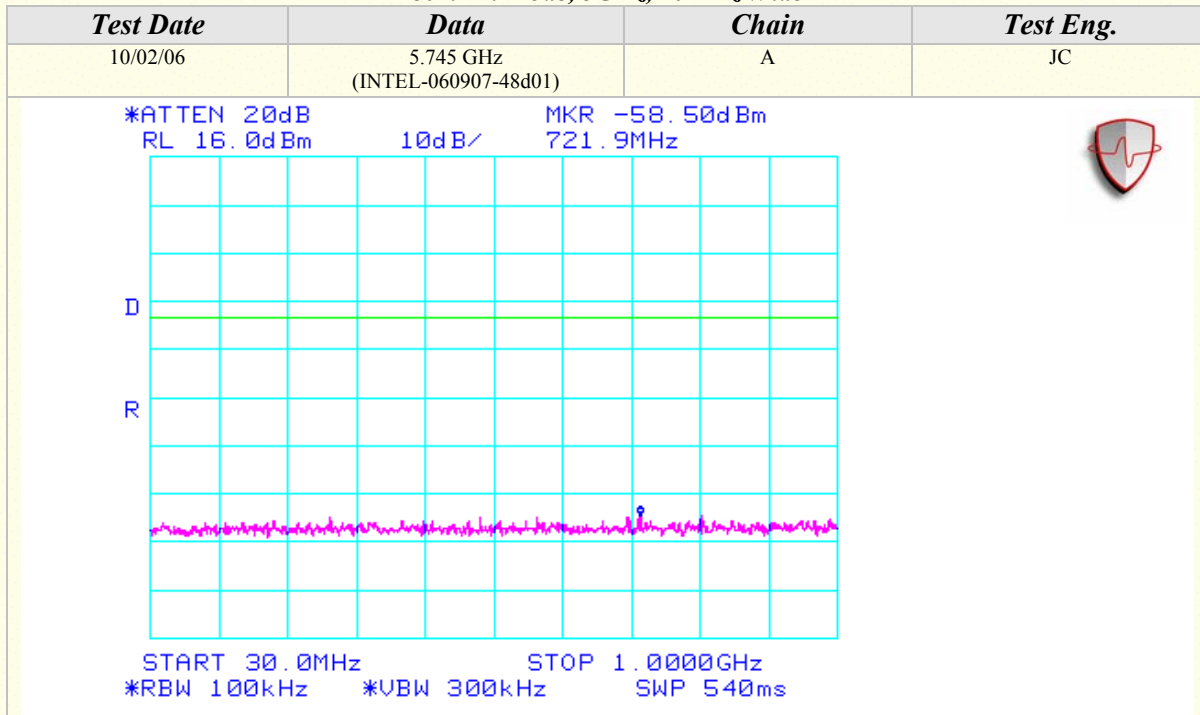
Conducted Out Of Band Emissions (Continued)

802.11n Mode, 2.4GHz, 20MHz Wide



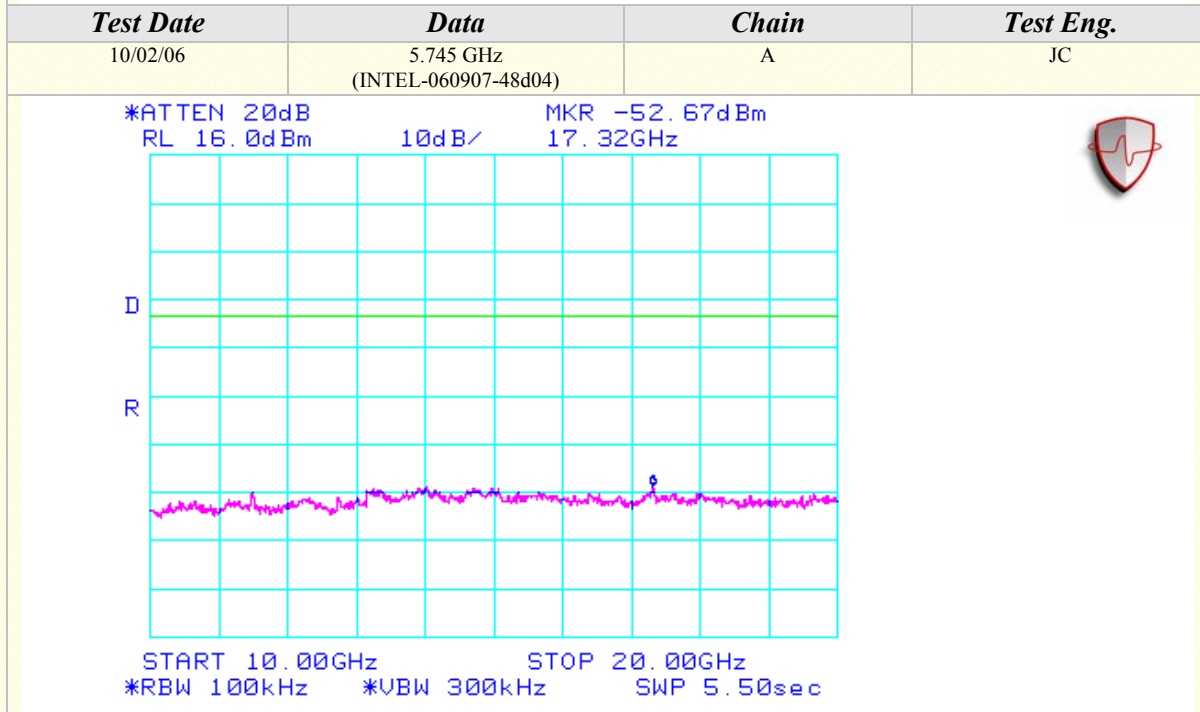
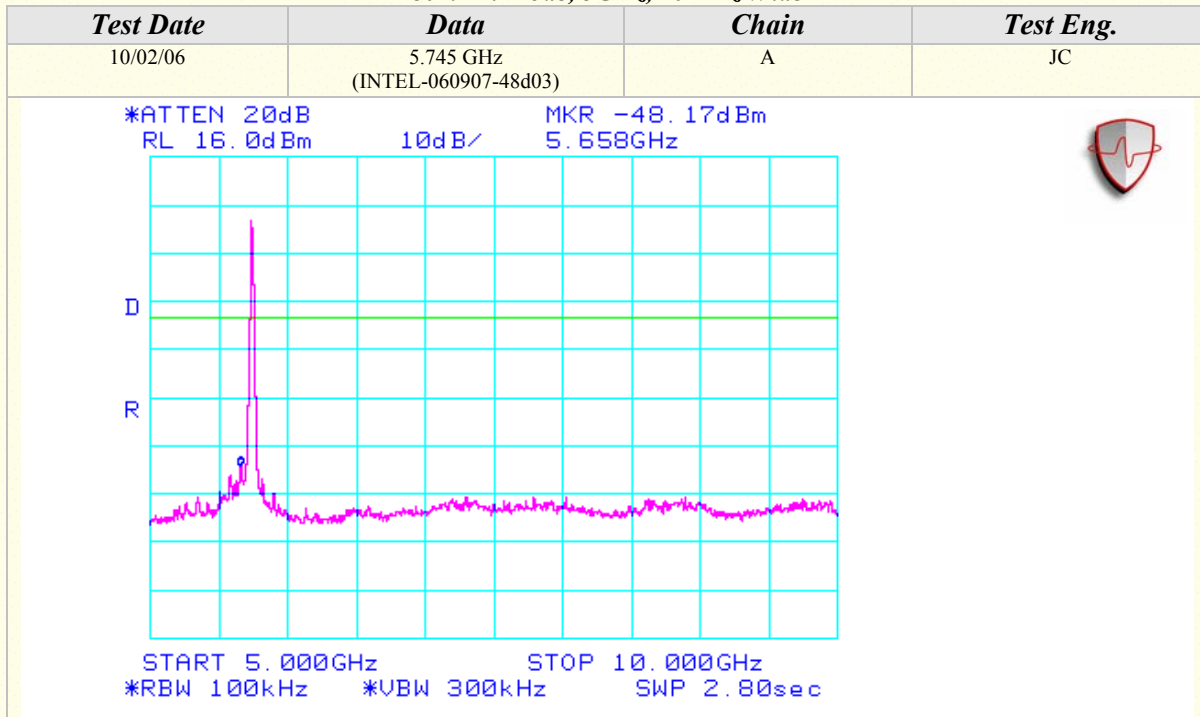
Conducted Out Of Band Emissions (Continued)

**802.11n Mode, 5GHz, 20MHz Wide**



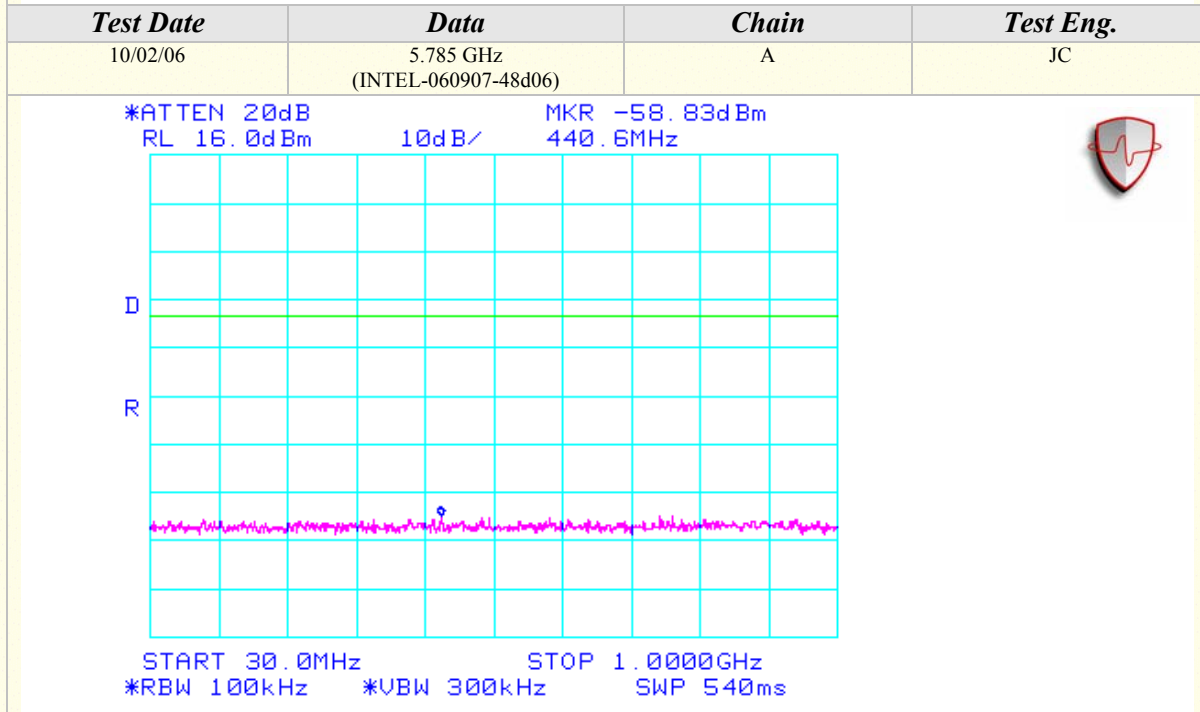
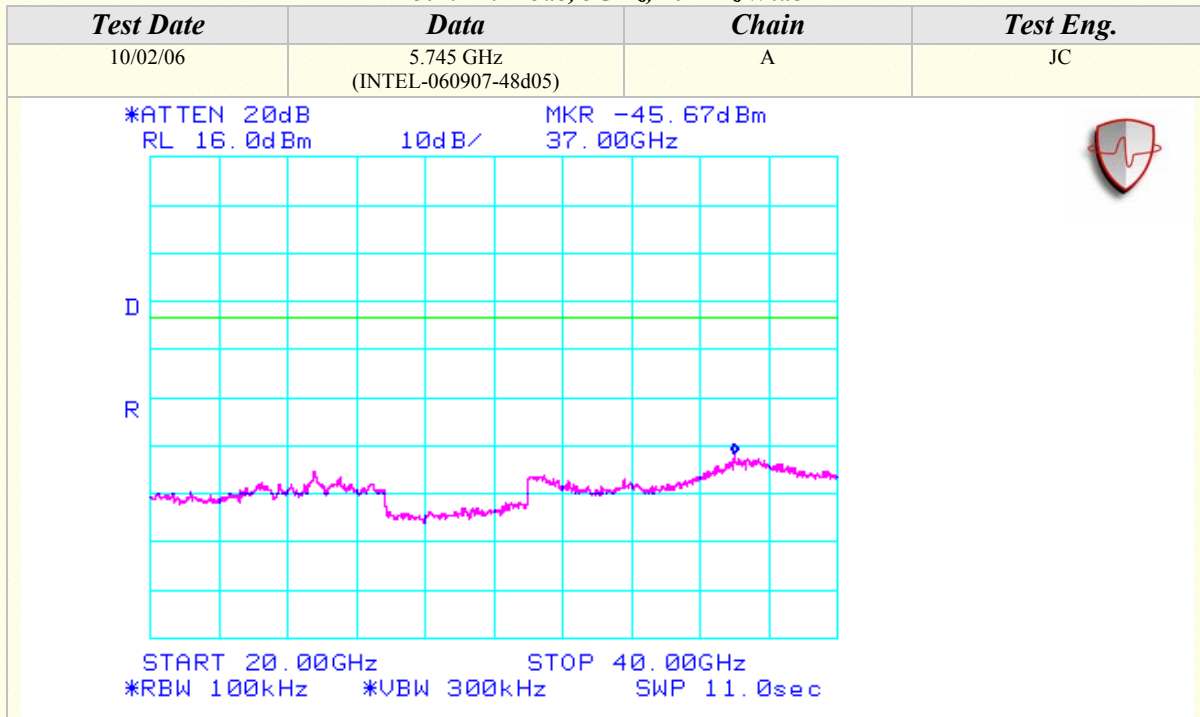
Conducted Out Of Band Emissions (Continued)

802.11n Mode, 5GHz, 20MHz Wide



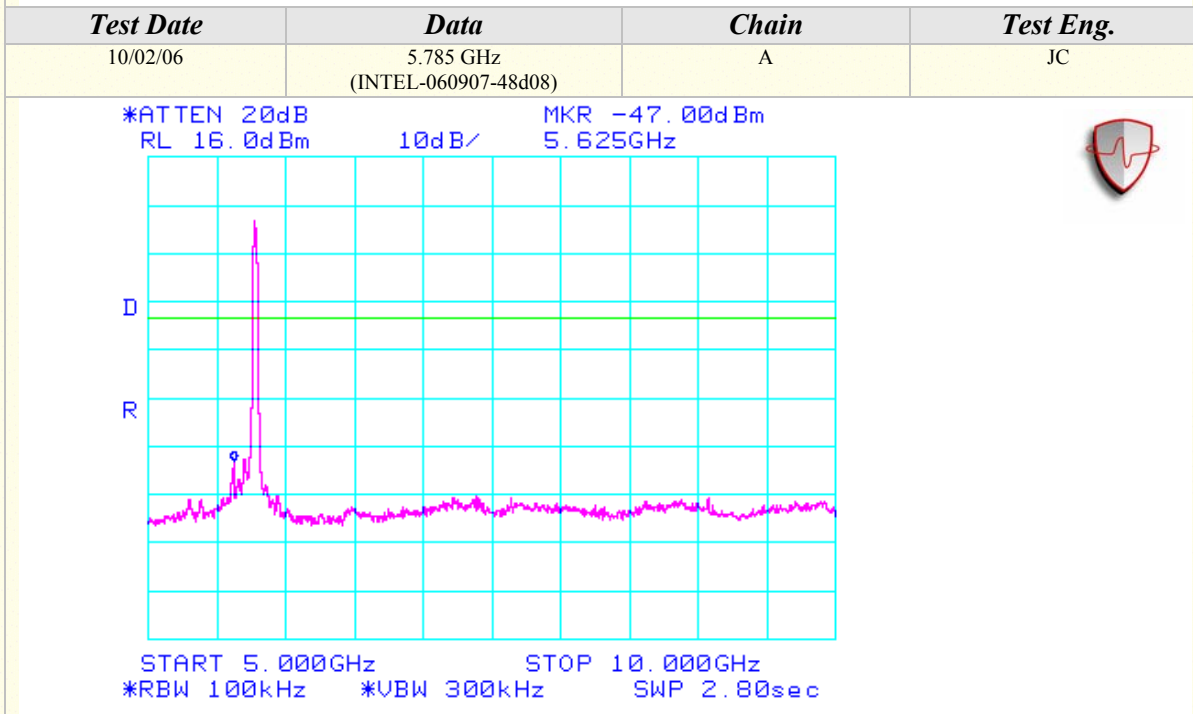
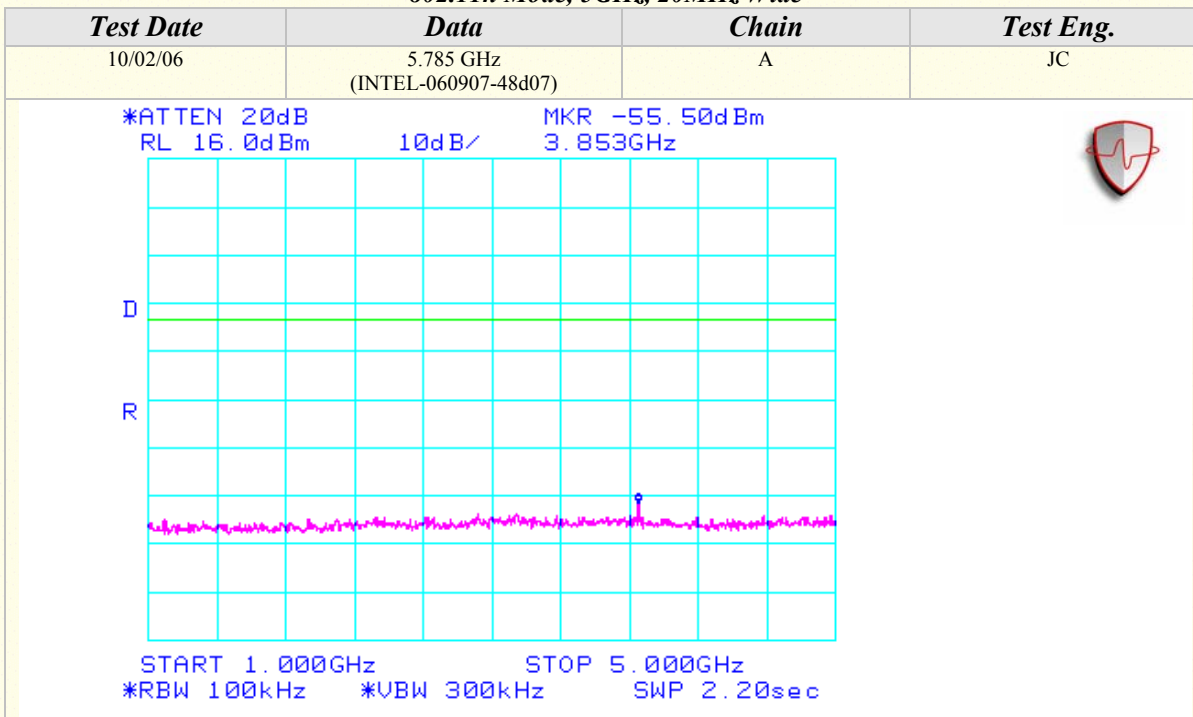
Conducted Out Of Band Emissions (Continued)

802.11n Mode, 5GHz, 20MHz Wide



Conducted Out Of Band Emissions (Continued)

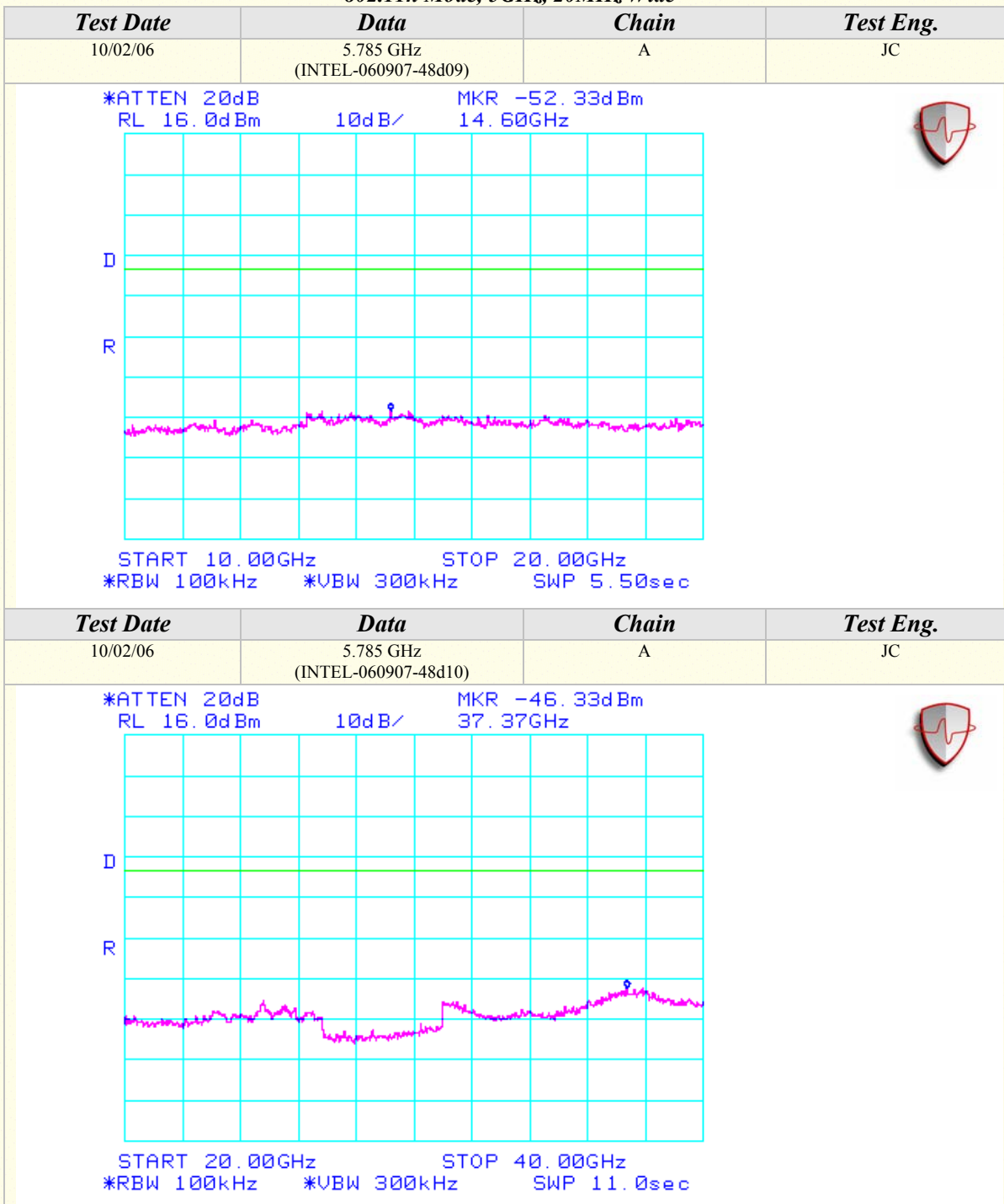
**802.11n Mode, 5GHz, 20MHz Wide**





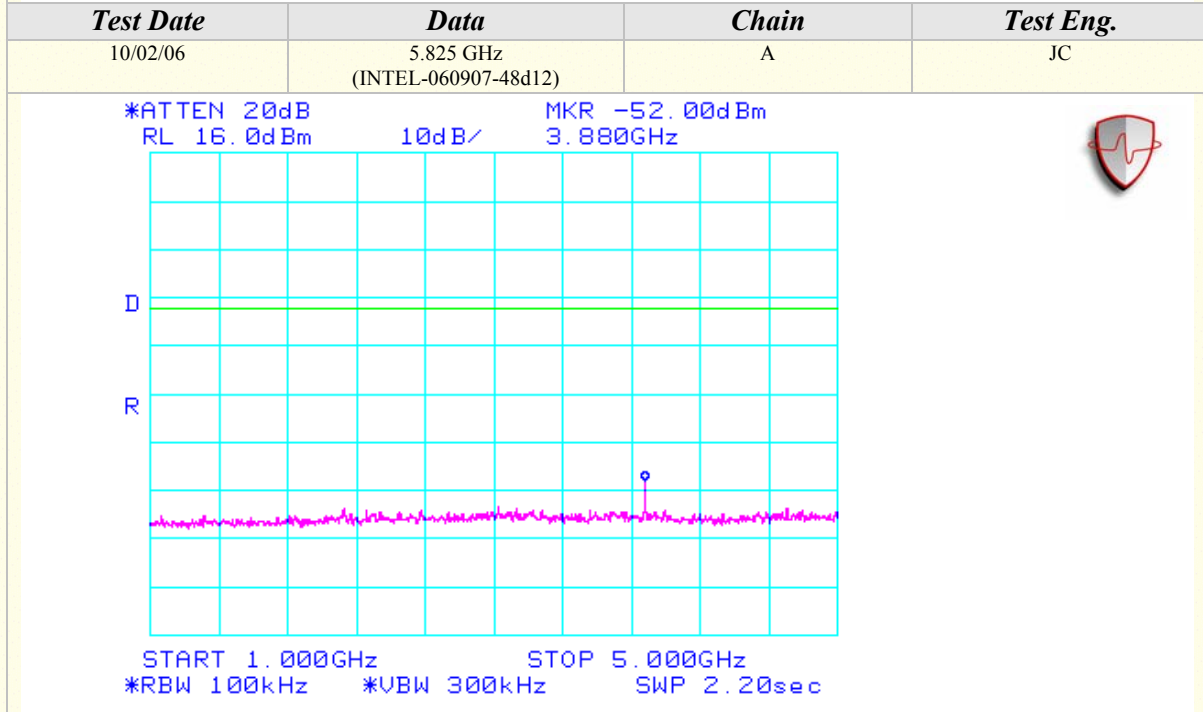
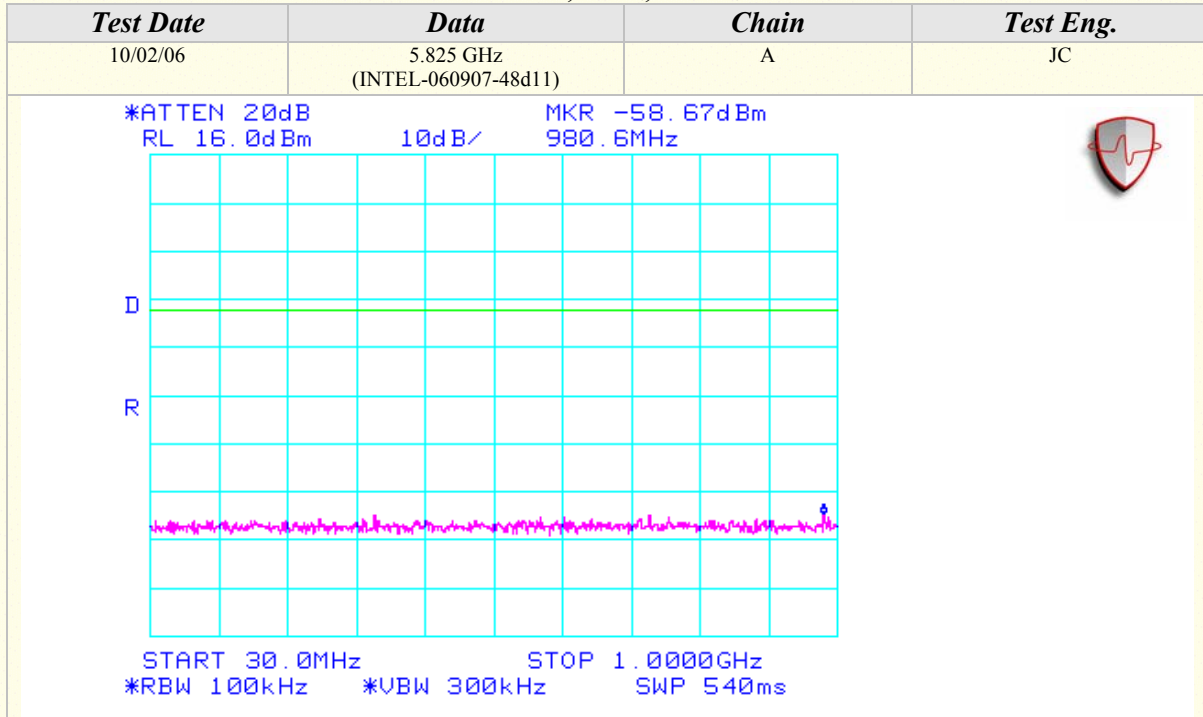
Conducted Out Of Band Emissions (Continued)

802.11n Mode, 5GHz, 20MHz Wide



### Conducted Out Of Band Emissions (Continued)

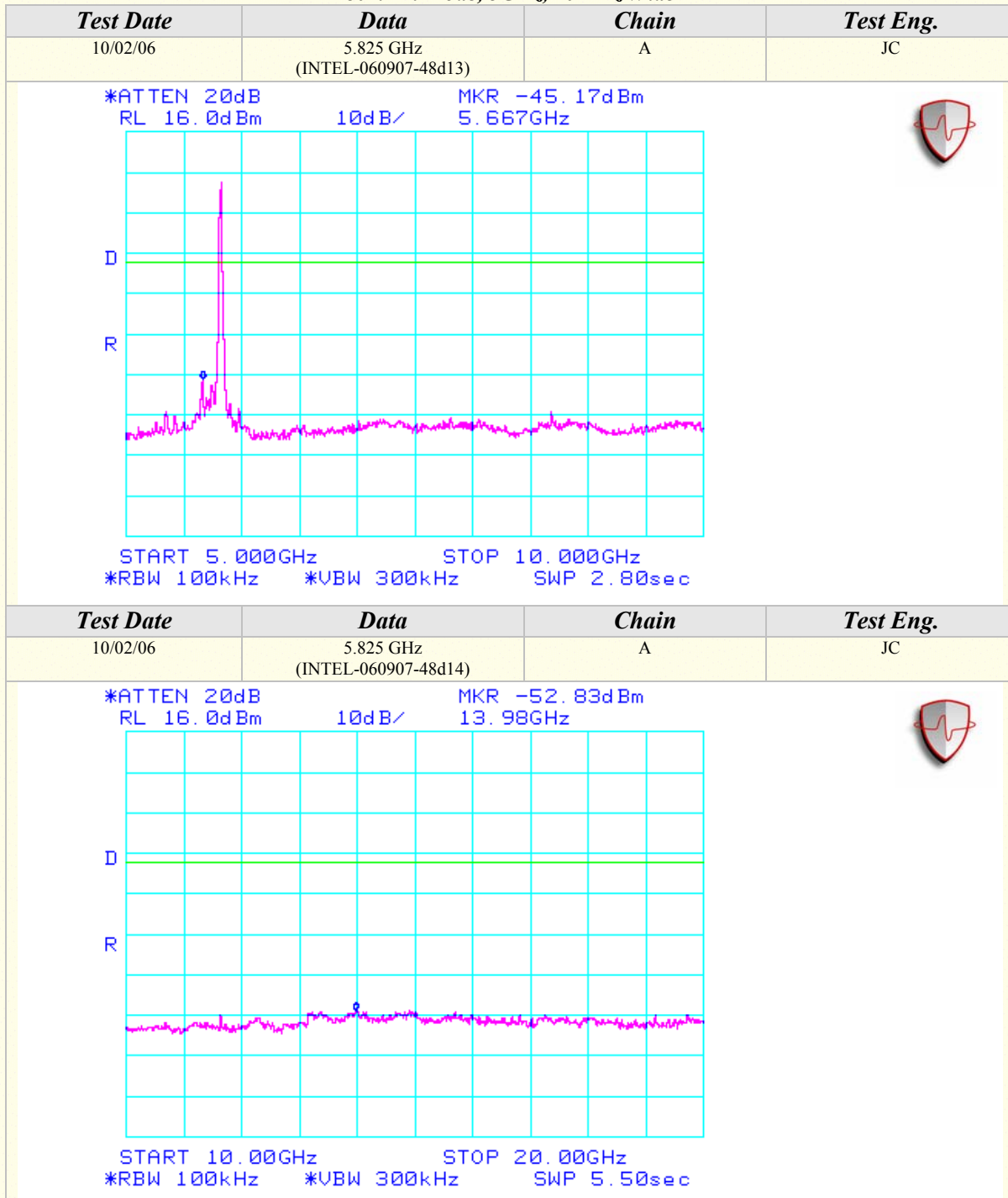
#### 802.11n Mode, 5GHz, 20MHz Wide





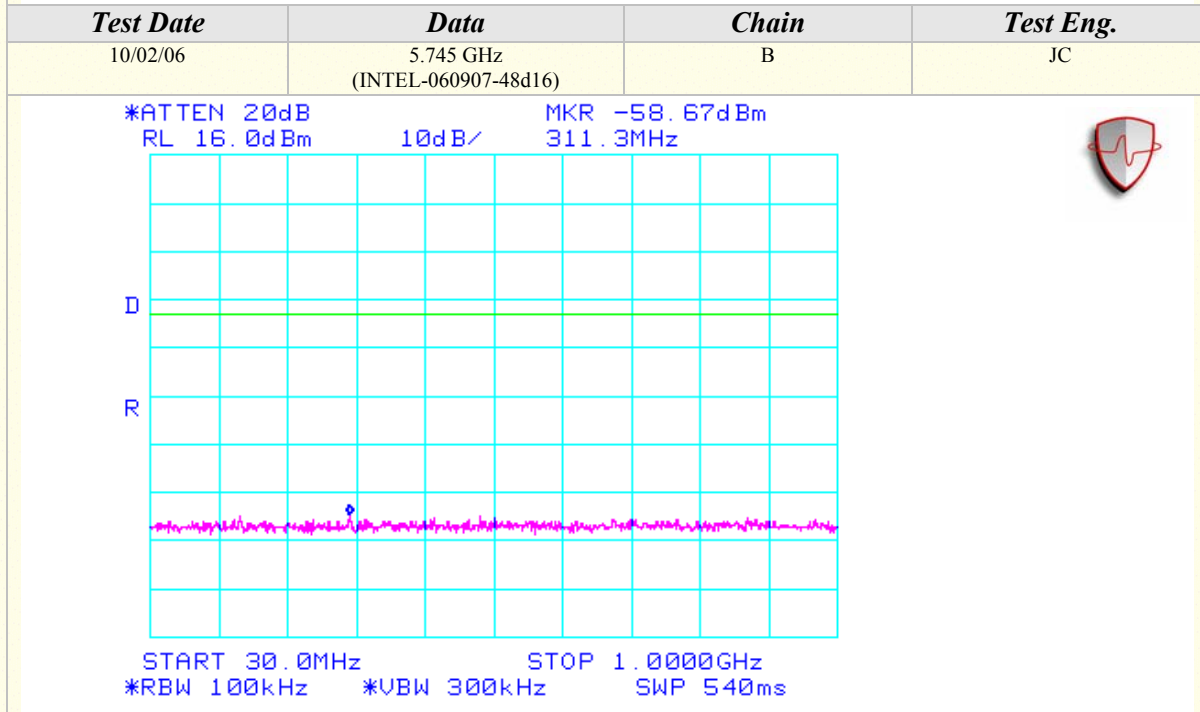
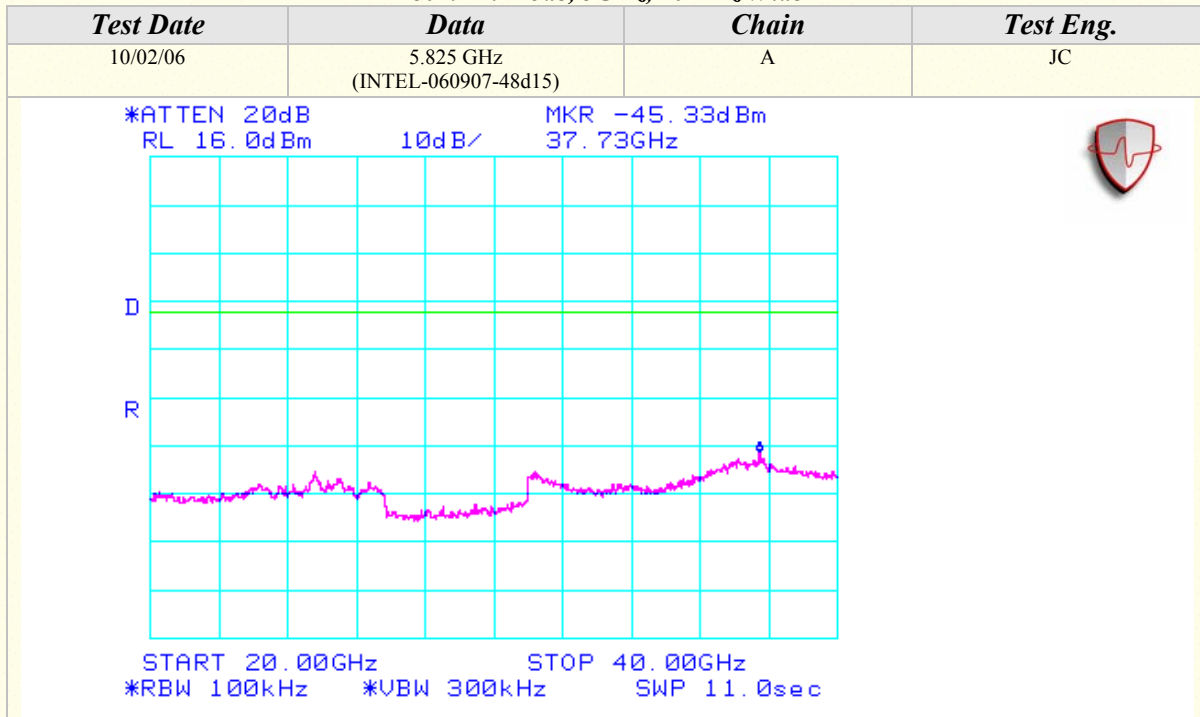
Conducted Out Of Band Emissions (Continued)

802.11n Mode, 5GHz, 20MHz Wide



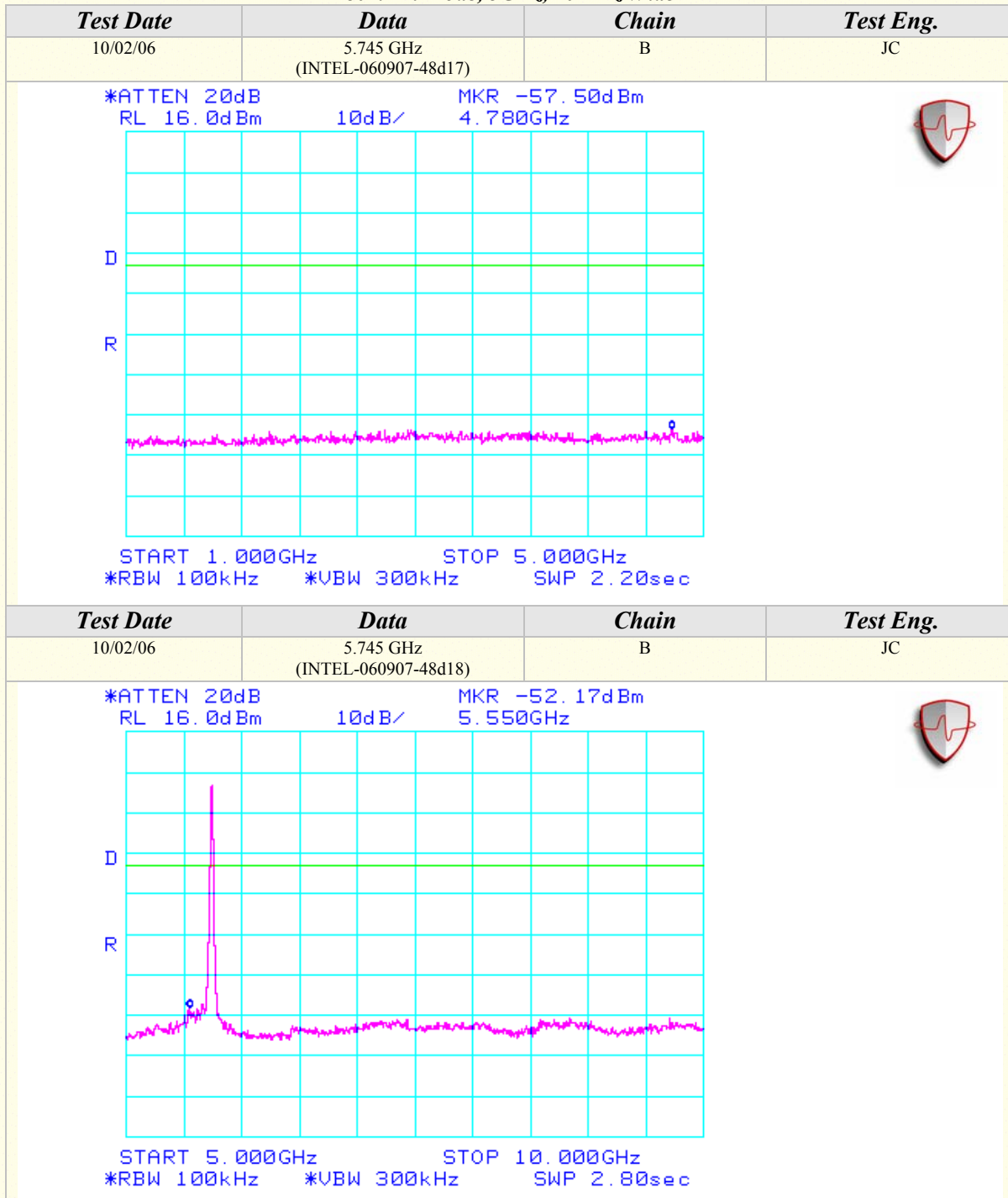
Conducted Out Of Band Emissions (Continued)

**802.11n Mode, 5GHz, 20MHz Wide**



Conducted Out Of Band Emissions (Continued)

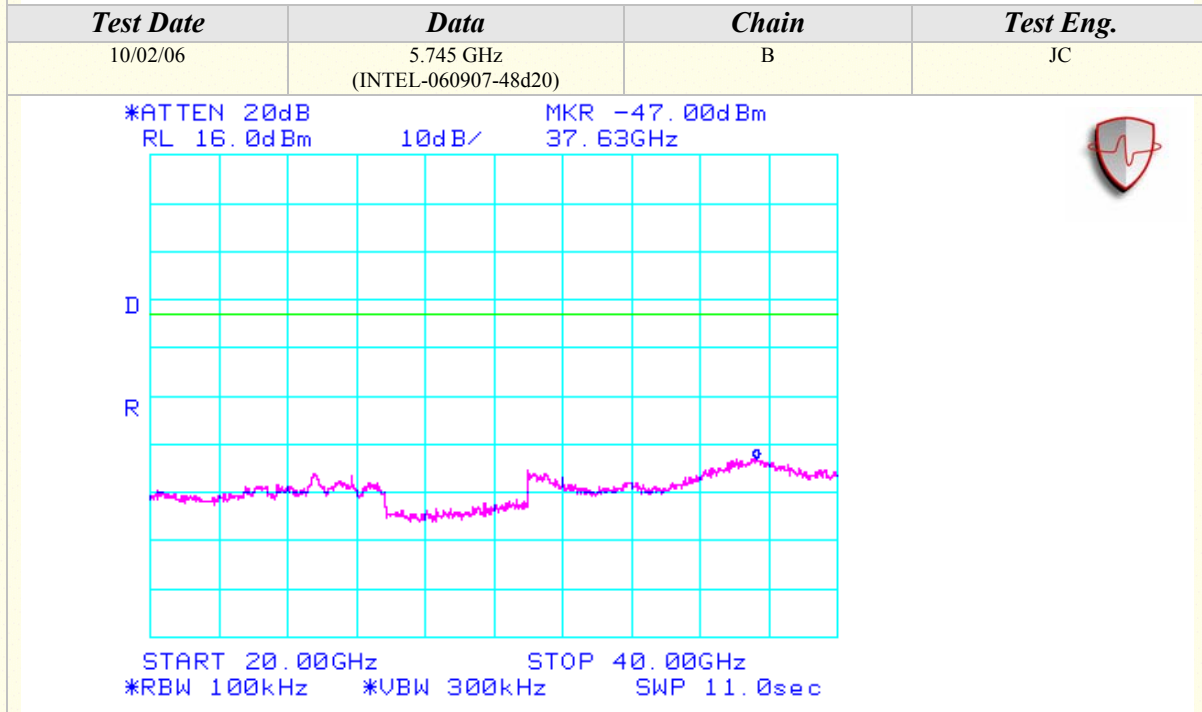
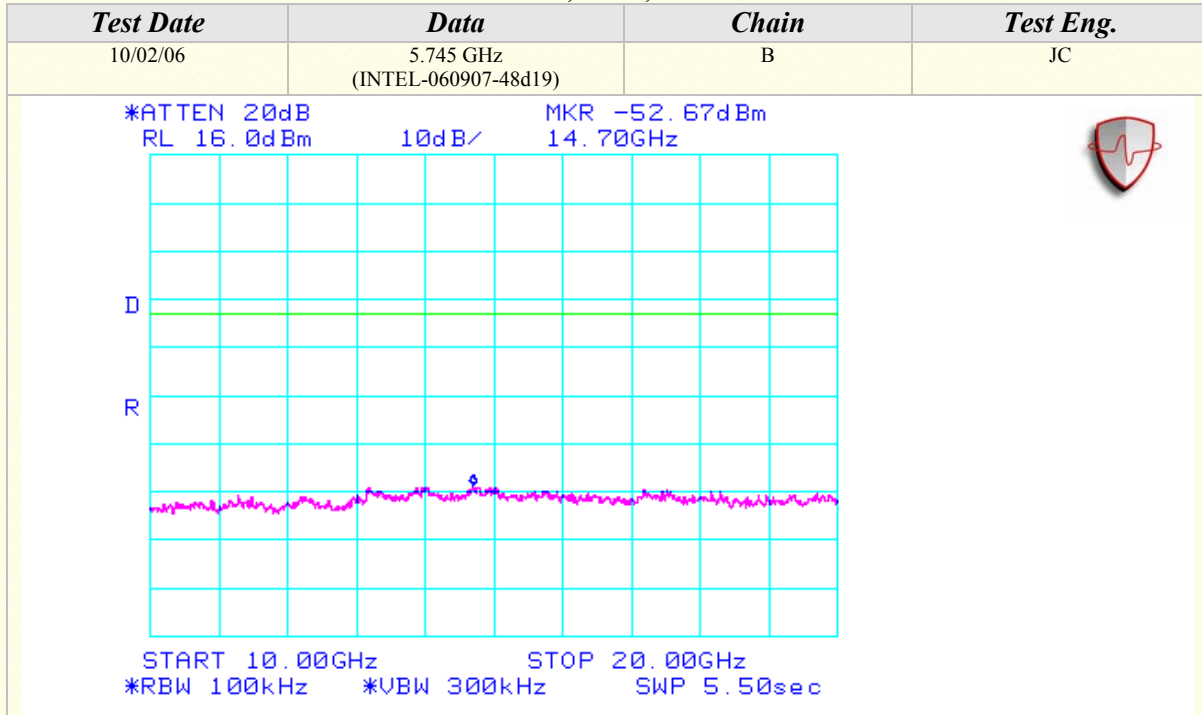
802.11n Mode, 5GHz, 20MHz Wide





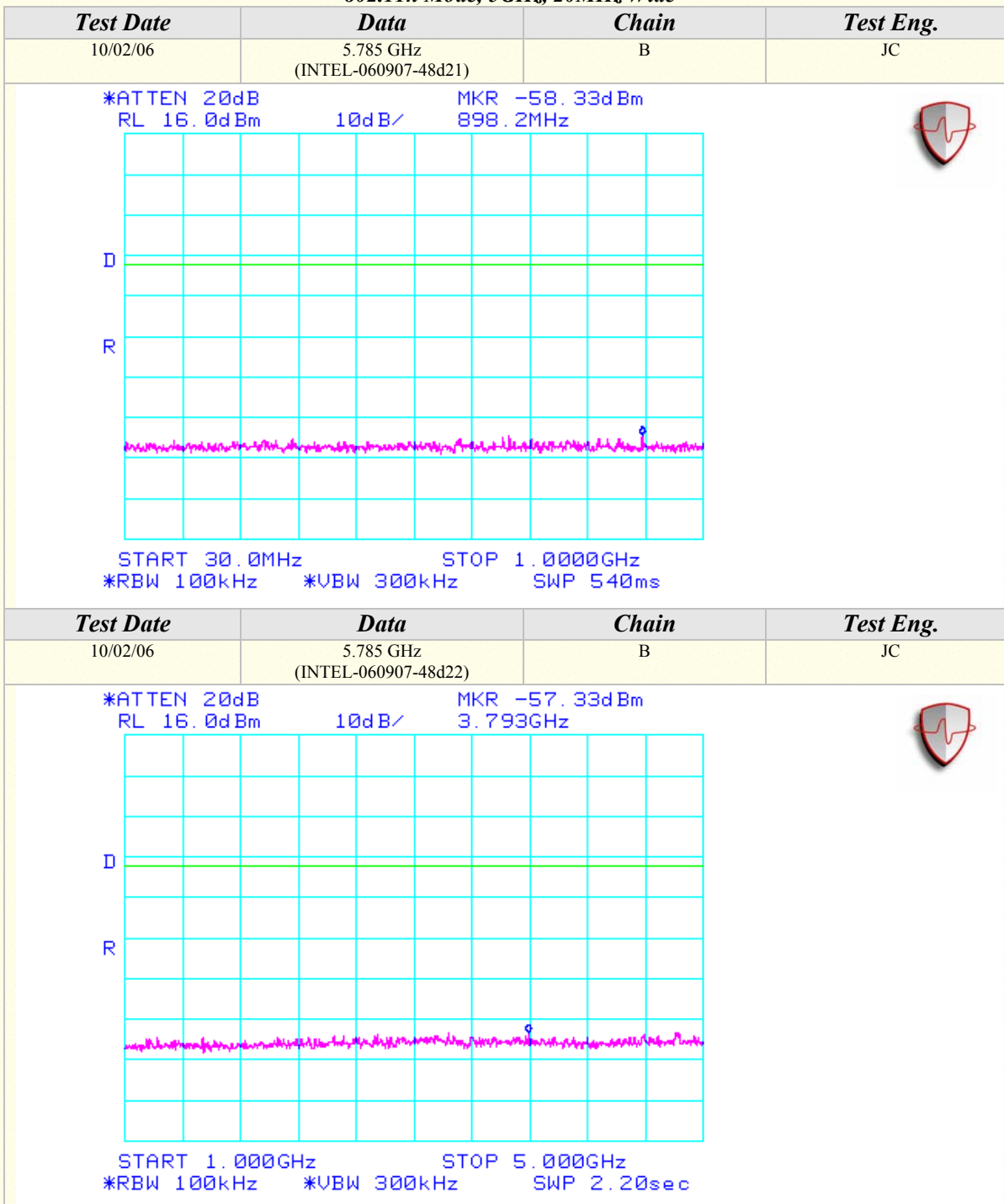
Conducted Out Of Band Emissions (Continued)

802.11n Mode, 5GHz, 20MHz Wide



Conducted Out Of Band Emissions (Continued)

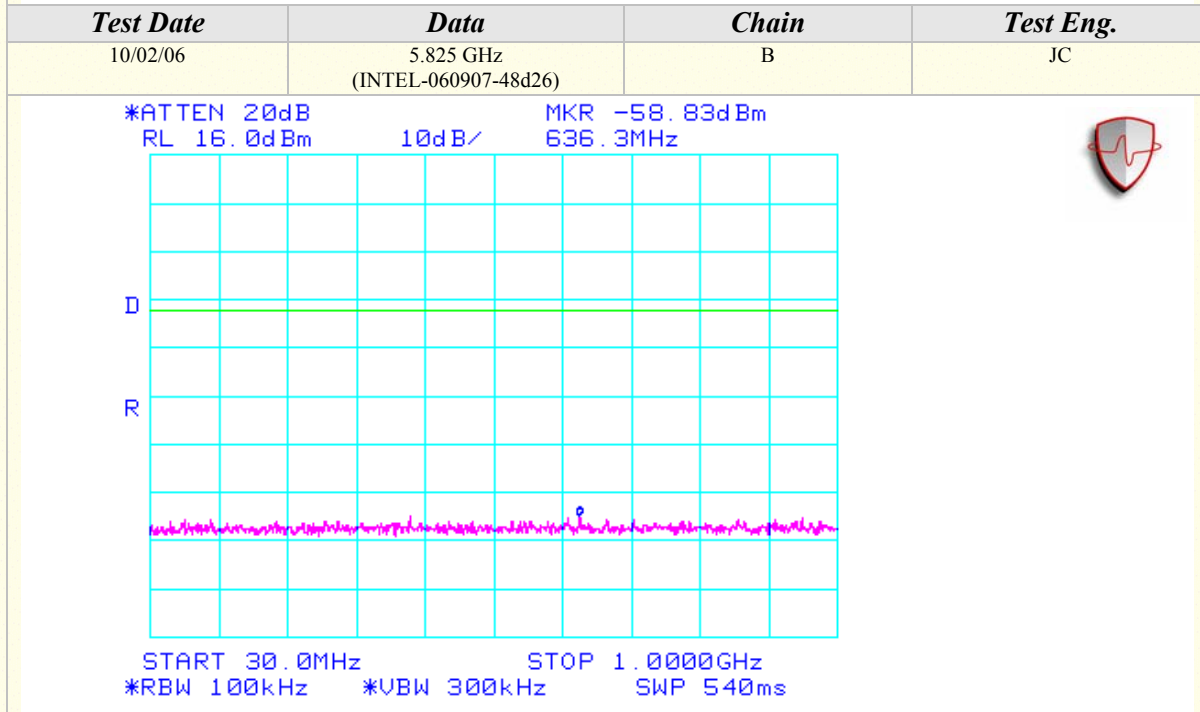
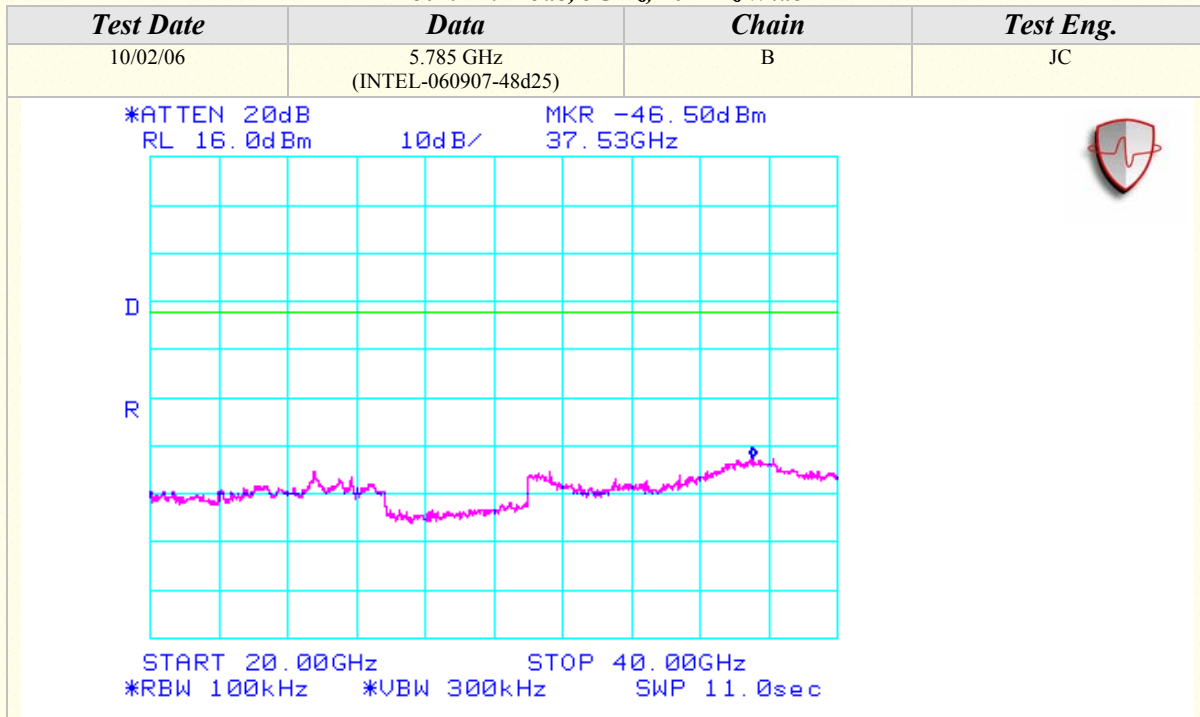
802.11n Mode, 5GHz, 20MHz Wide





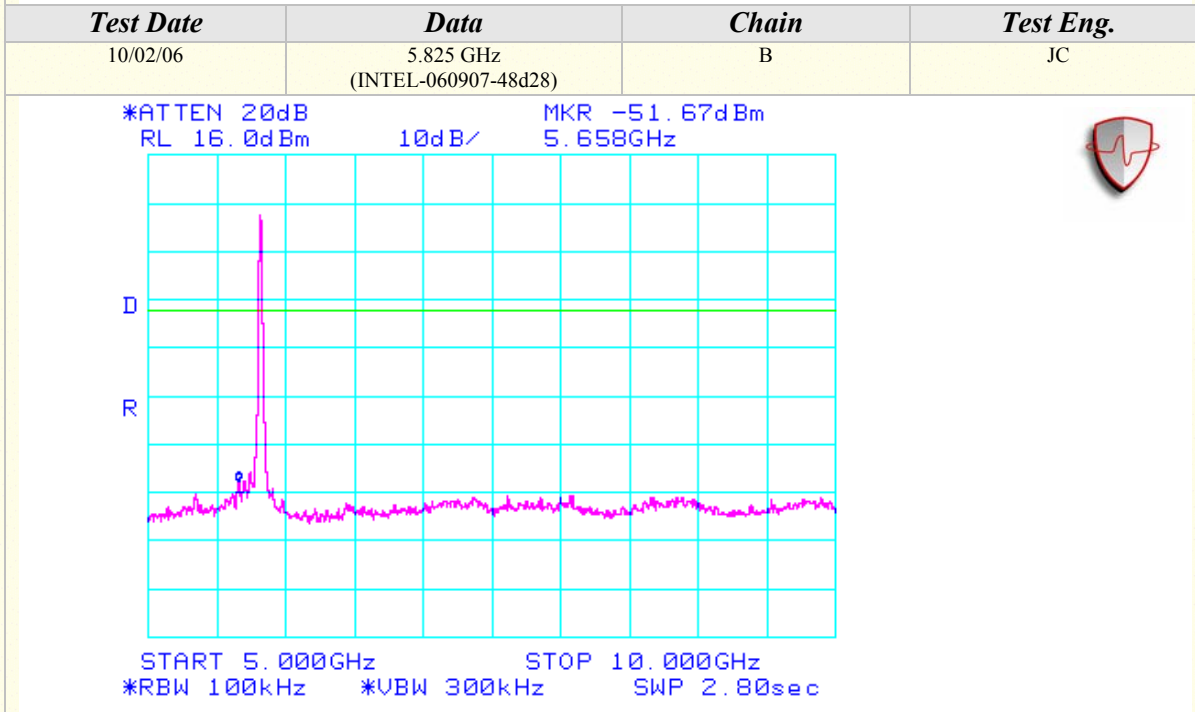
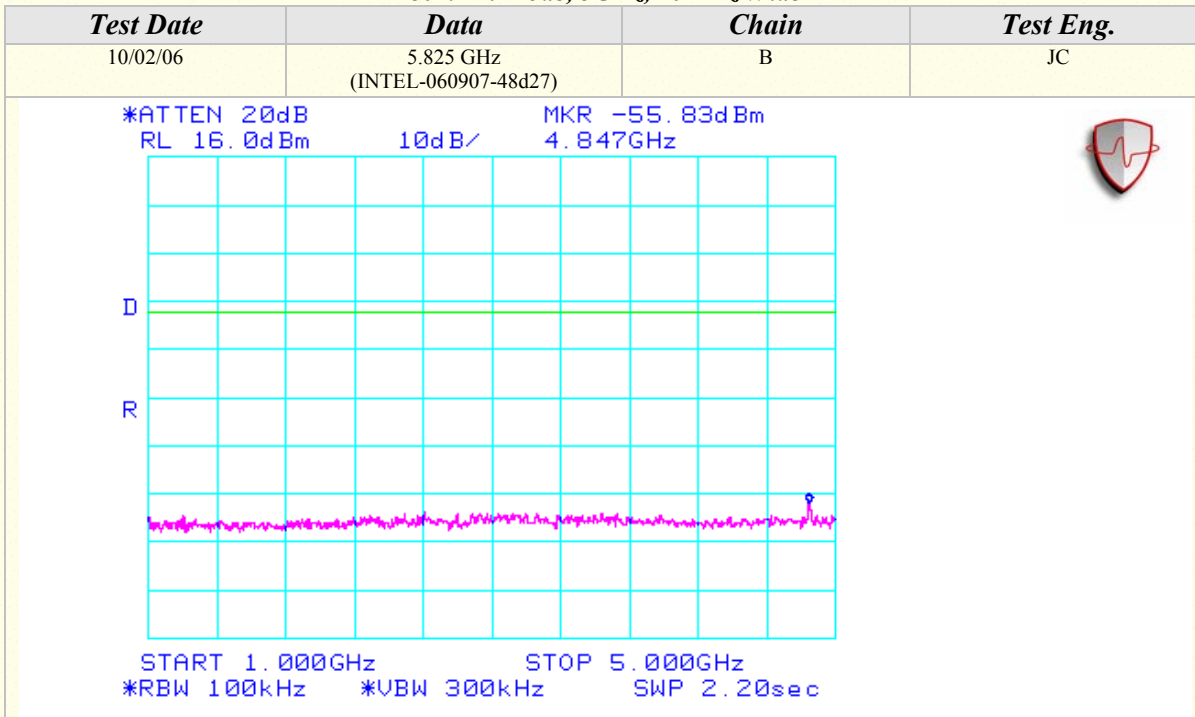
Conducted Out Of Band Emissions (Continued)

802.11n Mode, 5GHz, 20MHz Wide



Conducted Out Of Band Emissions (Continued)

802.11n Mode, 5GHz, 20MHz Wide





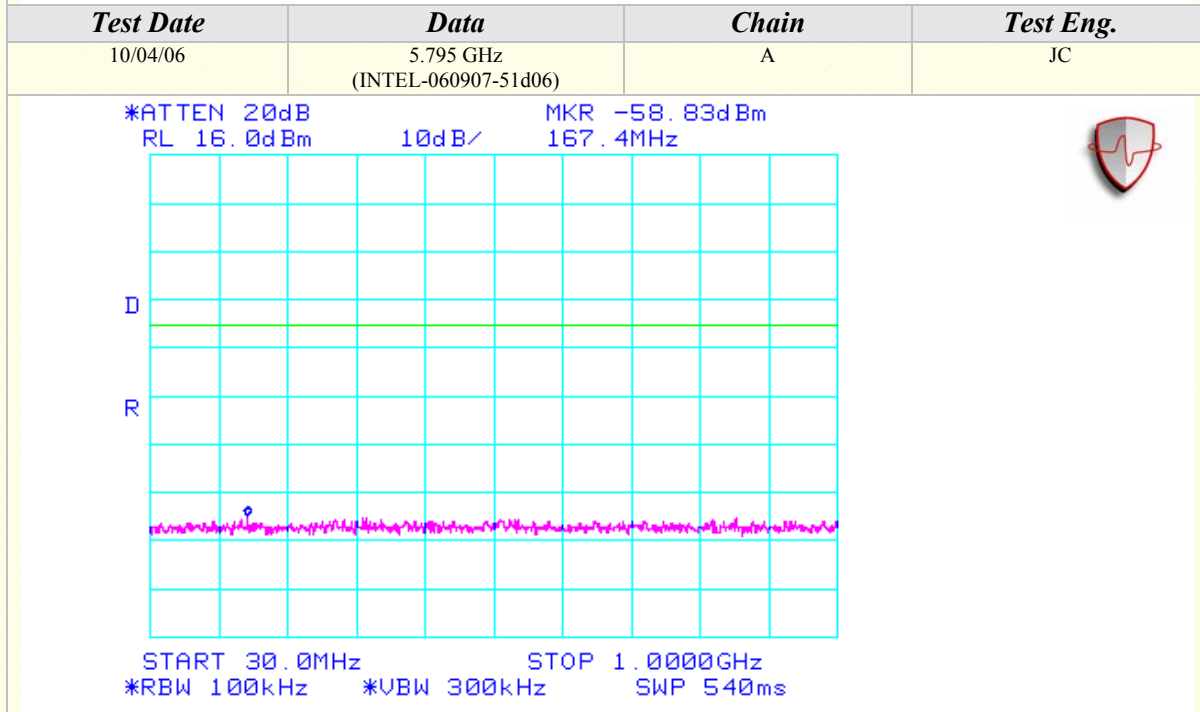
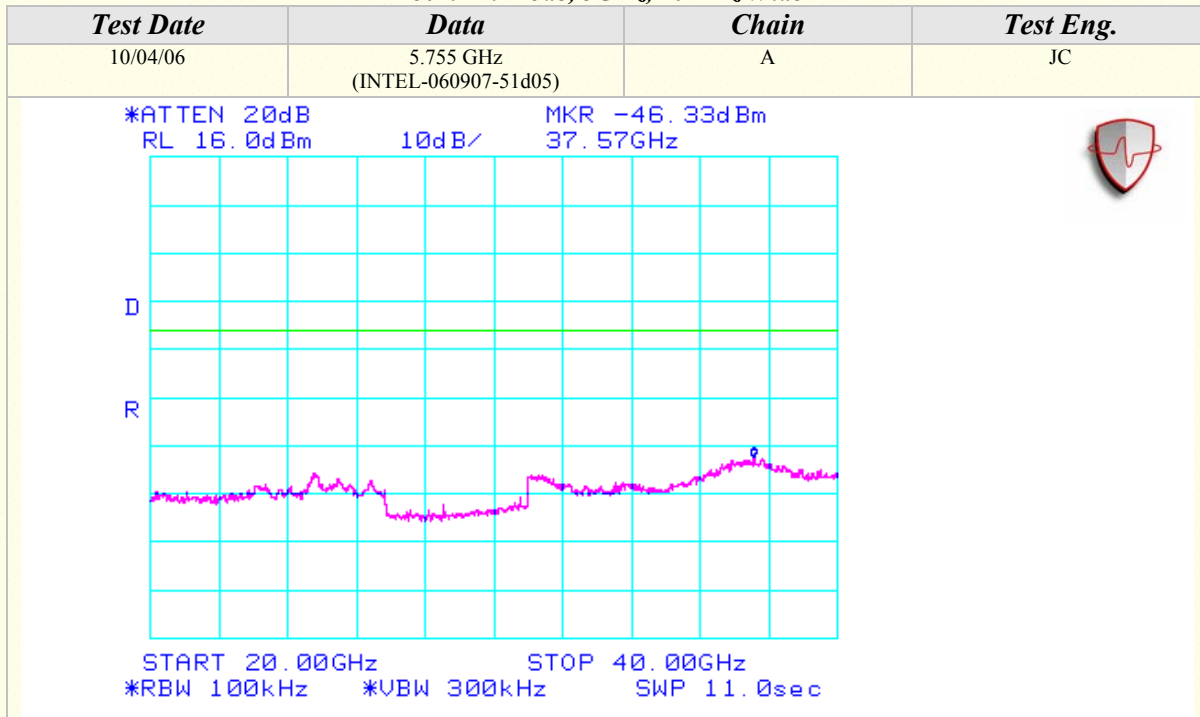






Conducted Out Of Band Emissions (Continued)

802.11n Mode, 5GHz, 40MHz Wide



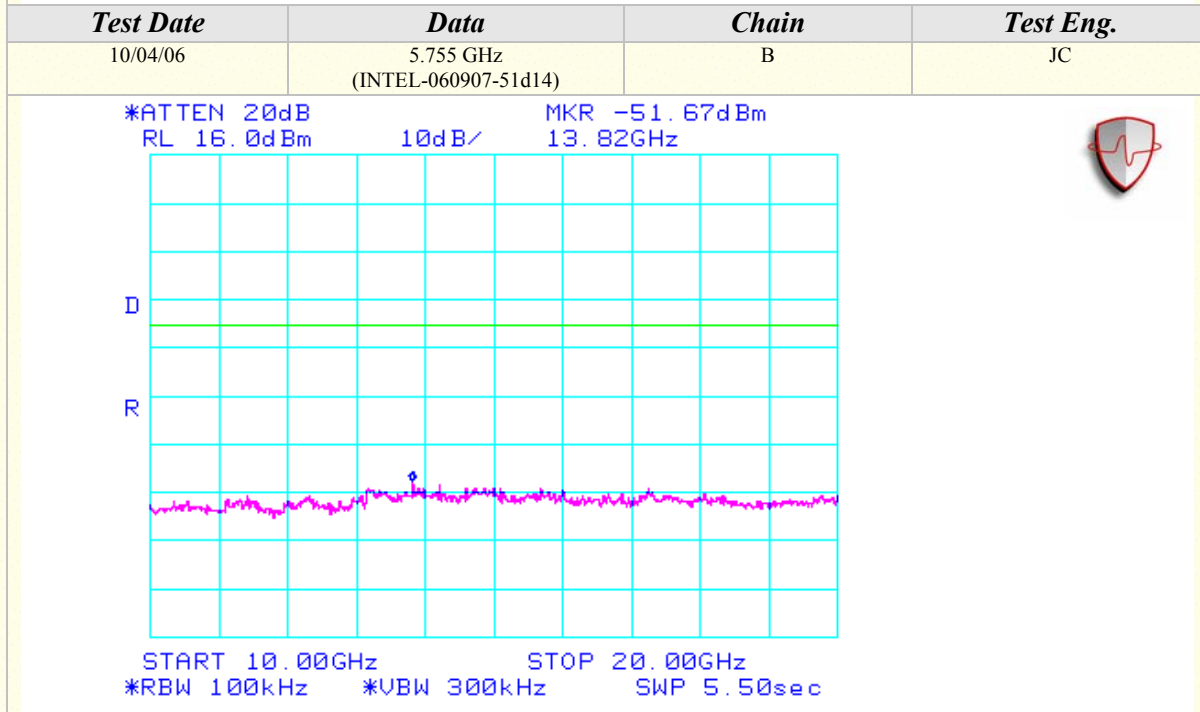
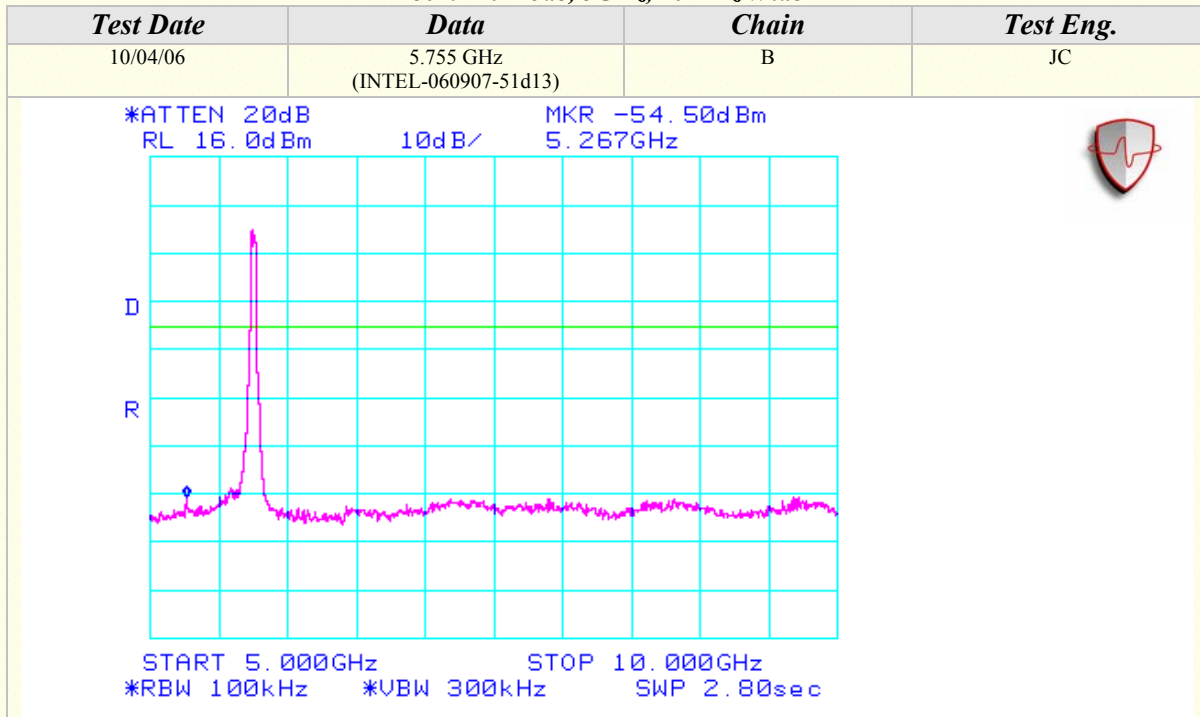






Conducted Out Of Band Emissions (Continued)

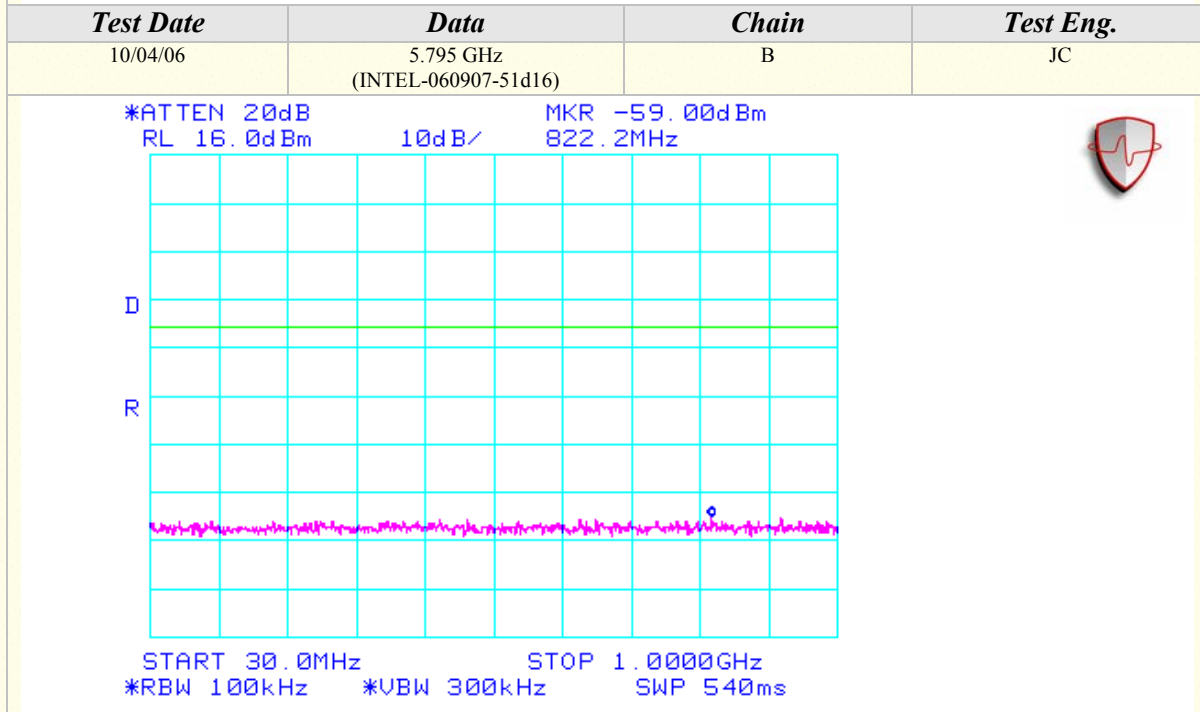
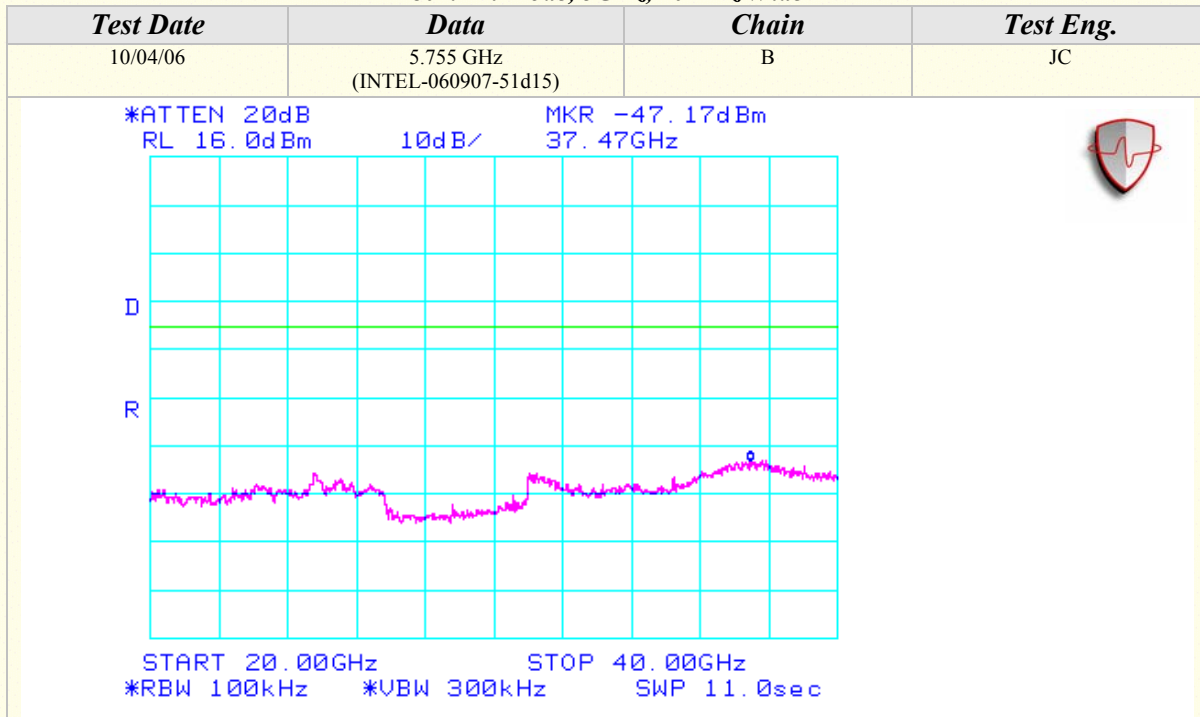
802.11n Mode, 5GHz, 40MHz Wide





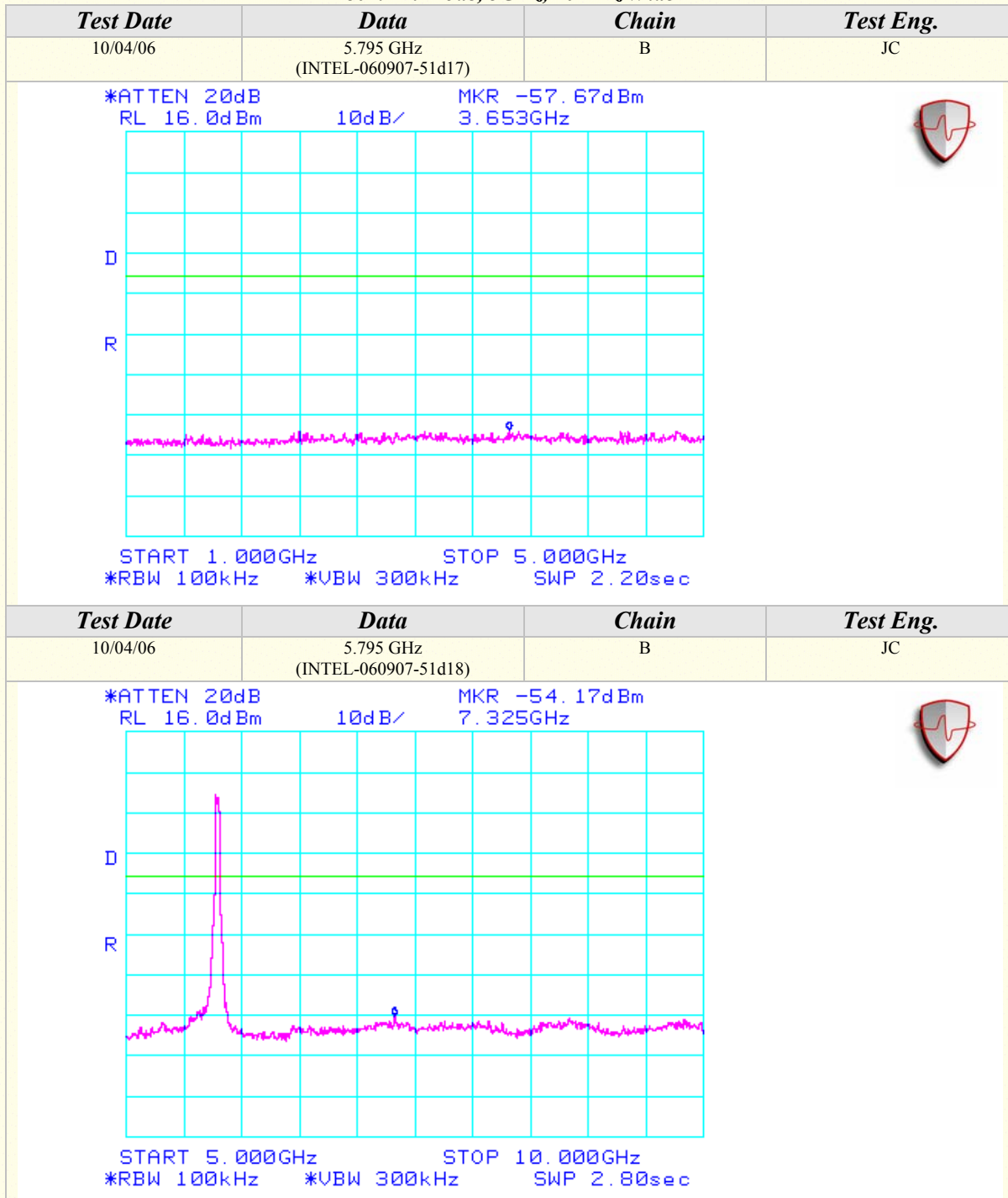
Conducted Out Of Band Emissions (Continued)

802.11n Mode, 5GHz, 40MHz Wide



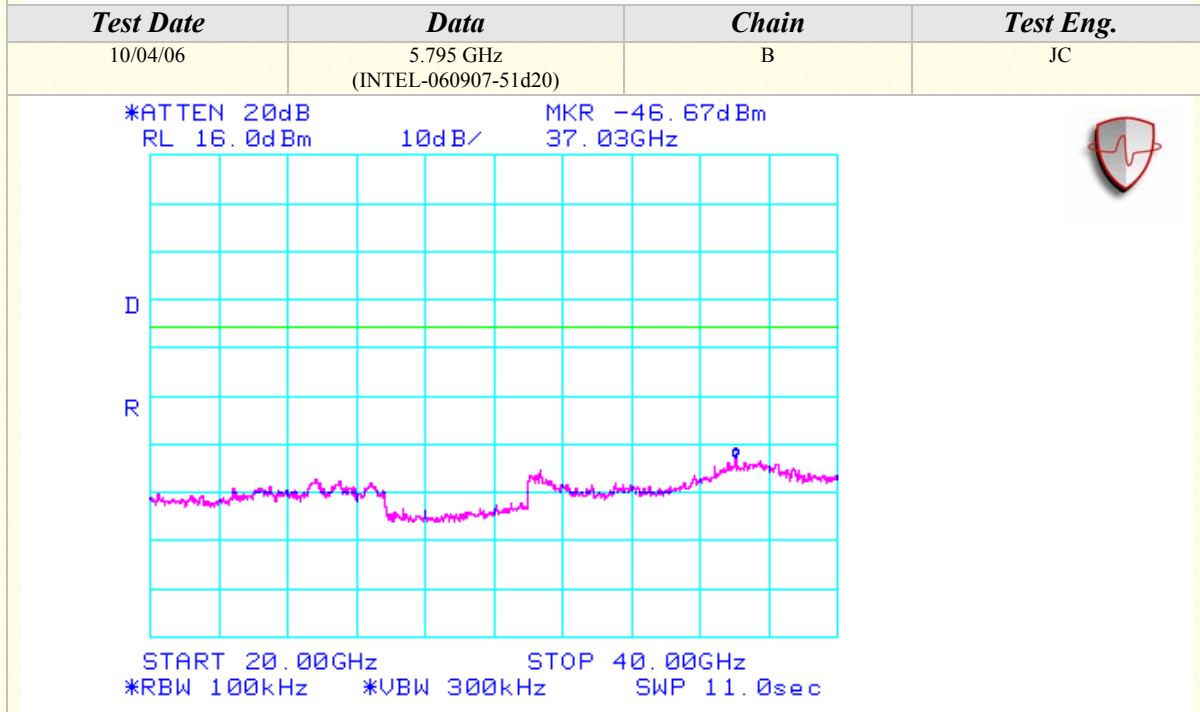
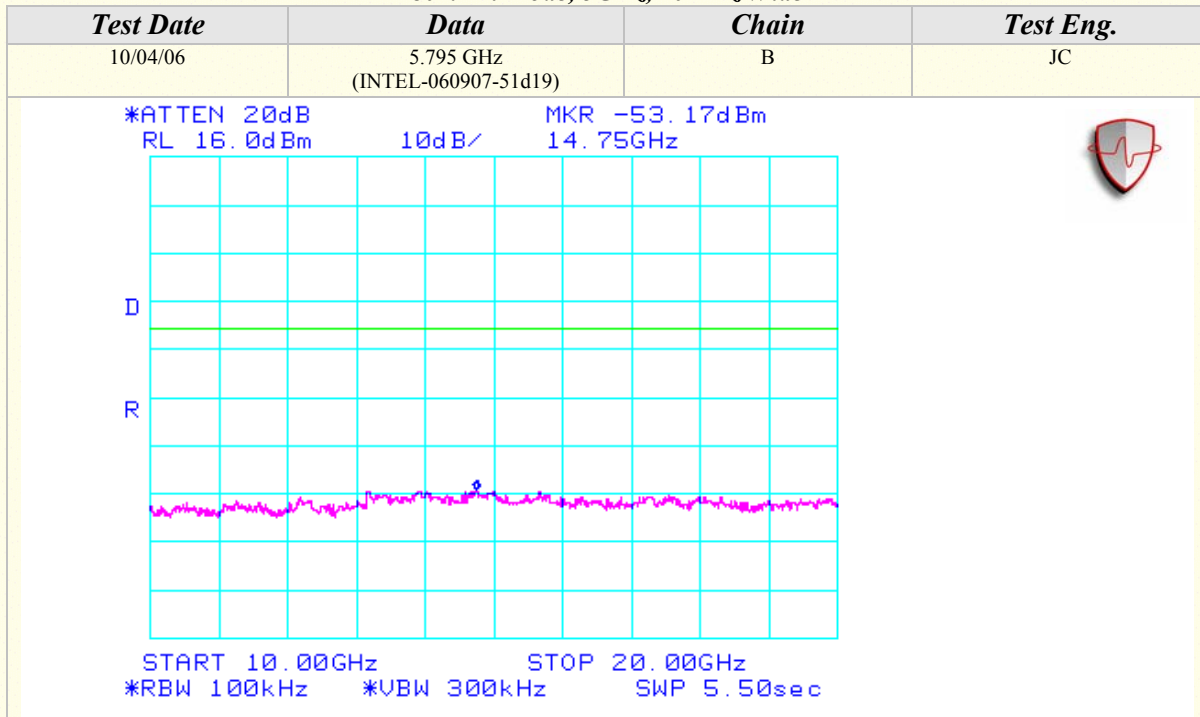
Conducted Out Of Band Emissions (Continued)

802.11n Mode, 5GHz, 40MHz Wide



Conducted Out Of Band Emissions (Continued)

802.11n Mode, 5GHz, 40MHz Wide





## APPENDIX B

### *MODIFICATIONS AND RECOMMENDATIONS*

<b>1.0</b>	NONE