Class II Permissive Change
Test Report
And Application for Grant of Equipment Authorization

TEST REPORT PERTAINING TO:

Equipment Under Test	Model Number(s)
Intel WiFi Link 5300	533AN_HMW

CONFIGURATION
IEEE 802.11a / 802.11b / 802.11g / 802.11n with a set of Shanghai Universe Communication Electron Co., Ltd 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

ACCREDITED

Certificate Number: 1111.01

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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 = 16.58 MHz *Per Original Filing*
15.247(b)(3)	The maximum peak output power of the intentional radiator shall not exceed 1 watt. The maximum conducted output power is the highest total transmit power occurring in any mode	PASSED	5745 MHz = 24.04 dBm = 253.73 mW 5785 MHz = 24.04 dBm = 253.73 mW 5825 MHz = 23.94 dBm = 247.95 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
15.247(d)	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 (Appendix A)
15.247(d)	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 (Appendix A)
15.247(e)	The 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 = -8.50 dB 5785 MHz = -9.50 dB 5825 MHz = -9.17 dB *Per Original Filing*
15.207	AC Conducted Emissions	PASSED	*See Original Filing*
15.209	Radiated Emissions (30-1000 MHz)	PASSED	

2.0 Summary of Test Results (Continued)

802.11a Mode (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	5745 MHz = 16.00 MHz 5785 MHz = 16.50 MHz 5825 MHz = 16.58 MHz *Per Original Filing*
15.247(b)(3)	The maximum peak output power of the intentional radiator shall not exceed 1 watt. The maximum conducted output power is the highest total transmit power occurring in any mode	PASSED	5745 MHz = 24.34 dBm = 271.87 mW 5785 MHz = 24.34 dBm = 271.87 mW 5825 MHz = 24.44 dBm = 278.20 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
15.247(d)	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 (Appendix A)
15.247(d)	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 (Appendix A)
15.247(e)	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 = -9.00 dB 5785 MHz = -8.83 dB 5825 MHz = -9.33 dB *Per Original Filing*
15.207	AC Conducted Emissions	PASSED	*See Original Filing*
15.209	Radiated Emissions (30-1000 MHz)	PASSED	

2.0 Summary of Test Results (Continued)

802.11a Mode (5745-5825 MHz) Chain C

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 = 16.58 MHz *Per Original Filing*
15.247(b)(3)	The maximum peak output power of the intentional radiator shall not exceed 1 watt. The maximum conducted output power is the highest total transmit power occurring in any mode	PASSED	5745 MHz = 24.44 dBm = 278.20 mW 5785 MHz = 24.54 dBm = 284.69 mW 5825 MHz = 24.34 dBm = 271.87 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
15.247(d)	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 (Appendix A)
15.247(d)	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 (Appendix A)
15.247(e)	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 = -8.17 dB 5785 MHz = -8.17 dB 5825 MHz = -8.67 dB *Per Original Filing*
15.207	AC Conducted Emissions	PASSED	*See Original Filing*
15.209	Radiated Emissions (30-1000 MHz)	PASSED	

2.0 Summary of Test Results (Continued)

802.11b Mode (2400-2483.5 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	2412 MHz = 9.83 MHz 2437 MHz = 10.25 MHz 2462 MHz = 10.83 MHz *Per Original Filing*
15.247(b)(3)	The maximum peak output power of the intentional radiator shall not exceed 1 watt. The maximum conducted output power is the highest total transmit power occurring in any mode	PASSED	2412 MHz = 19.70 dBm = 93.33 mW 2437 MHz = 19.15 dBm = 82.22 mW 2462 MHz = 19.25 dBm = 84.14 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
15.247(d)	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 (Appendix A)
15.247(d)	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 (Appendix A)
15.247(e)	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 = -6.67 dB 2437 MHz = -7.33 dB 2462 MHz = -5.67 dB *Per Original Filing*
15.207	AC Conducted Emissions	PASSED	*See Original Filing*
15.209	Radiated Emissions (30-1000 MHz)	PASSED	

Radiated Emissions previously tested with Ethertronics & Wistron NeWeb Corp. Antennas.

2.0 Summary of Test Results (Continued)

802.11b Mode (2400-2483.5 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	2412 MHz = 9.92 MHz 2437 MHz = 10.25 MHz 2462 MHz = 10.25 MHz *Per Original Filing*
15.247(b)(3)	The maximum peak output power of the intentional radiator shall not exceed 1 watt. The maximum conducted output power is the highest total transmit power occurring in any mode	PASSED	2412 MHz = 19.60 dBm = 91.20 mW 2437 MHz = 19.50 dBm = 89.13 mW 2462 MHz = 19.30 dBm = 85.11 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
15.247(d)	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 (Appendix A)
15.247(d)	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 (Appendix A)
15.247(e)	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 = -7.00 dB 2462 MHz = -8.83 dB *Per Original Filing*
15.207	AC Conducted Emissions	PASSED	*See Original Filing*
15.209	Radiated Emissions (30-1000 MHz)	PASSED	

Radiated Emissions previously tested with Ethertronics & Wistron NeWeb Corp. Antennas.

2.0 Summary of Test Results (Continued)

802.11b Mode (2400-2483.5 MHz) Chain C

EMISSIONS STANDARD			
FCC Part 15 Section	**Description**	**Results**	**Comments**
15.247(a)(2)	The minimum 6dB bandwidth shall be at least 500 kHz.	PASSED	2412 MHz = 10.17 MHz 2437 MHz = 10.17 MHz 2462 MHz = 10.25 MHz *Per Original Filing*
15.247(b)(3)	The maximum peak output power of the intentional radiator shall not exceed 1 watt. The maximum conducted output power is the highest total transmit power occurring in any mode	PASSED	2412 MHz = 19.10 dBm = 81.28 mW 2437 MHz = 19.50 dBm = 89.13 mW 2462 MHz = 19.50 dBm = 89.13 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
15.247(d)	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 (Appendix A)
15.247(d)	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 (Appendix A)
15.247(e)	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 = -9.33 dB 2437 MHz = -7.33 dB 2462 MHz = -8.50 dB *Per Original Filing*
15.207	AC Conducted Emissions	PASSED	*See Original Filing*
15.209	Radiated Emissions (30-1000 MHz)	PASSED	

Radiated Emissions previously tested with Ethertronics & Wistron NeWeb Corp. Antennas.

2.0 Summary of Test Results (Continued)

802.11g Mode (2400-2483.5 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	2412 MHz = 16.42 MHz 2437 MHz = 16.50 MHz 2462 MHz = 16.50 MHz *Per Original Filing*
15.247(b)(3)	The maximum peak output power of the intentional radiator shall not exceed 1 watt. The maximum conducted output power is the highest total transmit power occurring in any mode	PASSED	2412 MHz = 21.44 dBm = 139.43 mW 2437 MHz = 23.74 dBm = 236.79 mW 2462 MHz = 21.34 dBm = 136.26 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
15.247(d)	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 (Appendix A)
15.247(d)	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 (Appendix A)
15.247(e)	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 = -9.50 dB 2437 MHz = -8.00 dB 2462 MHz = -10.17 dB *Per Original Filing*
15.207	AC Conducted Emissions	PASSED	*See Original Filing*
15.209	Radiated Emissions (30-1000 MHz)	PASSED	

Radiated Emissions previously tested with Ethertronics & Wistron NeWeb Corp. Antennas.

2.0 Summary of Test Results (Continued)

802.11g Mode (2400-2483.5 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	2412 MHz = 16.42 MHz 2437 MHz = 16.50 MHz 2462 MHz = 16.50 MHz *Per Original Filing*
15.247(b)(3)	The maximum peak output power of the intentional radiator shall not exceed 1 watt. The maximum conducted output power is the highest total transmit power occurring in any mode	PASSED	2412 MHz = 21.24 dBm = 133.16 mW 2437 MHz = 23.74 dBm = 236.79 mW 2462 MHz = 21.14 dBm = 130.13 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
15.247(d)	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 (Appendix A)
15.247(d)	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 (Appendix A)
15.247(e)	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 = -11.17 dB 2437 MHz = -8.33 dB 2462 MHz = -11.17 dB *Per Original Filing*
15.207	AC Conducted Emissions	PASSED	*See Original Filing*
15.209	Radiated Emissions (30-1000 MHz)	PASSED	

Radiated Emissions previously tested with Ethertronics & Wistron NeWeb Corp. Antennas.

2.0 Summary of Test Results (Continued)

802.11g Mode (2400-2483.5 MHz) Chain C

EMISSIONS STANDARD			
FCC Part 15 Section	**Description**	**Results**	**Comments**
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 *Per Original Filing*
15.247(b)(3)	The maximum peak output power of the intentional radiator shall not exceed 1 watt. The maximum conducted output power is the highest total transmit power occurring in any mode	PASSED	2412 MHz = 21.04 dBm = 127.16 mW 2437 MHz = 23.84 dBm = 242.31 mW 2462 MHz = 21.04 dBm = 127.16 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
15.247(d)	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 (Appendix A)
15.247(d)	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 (Appendix A)
15.247(e)	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 = -10.50 dB 2437 MHz = -8.67 dB 2462 MHz = -10.83 dB *Per Original Filing*
15.207	AC Conducted Emissions	PASSED	*See Original Filing*
15.209	Radiated Emissions (30-1000 MHz)	PASSED	

Radiated Emissions previously tested with Ethertronics & Wistron NeWeb Corp. Antennas.

2.0 Summary of Test Results (Continued)

802.11n Mode 20MHz Wide (2400-2483.5 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	2412 MHz = 17.42 MHz 2437 MHz = 17.75 MHz 2462 MHz = 17.58 MHz *Per Original Filing*
15.247(b)(3)	The maximum peak output power of the intentional radiator shall not exceed 1 watt. The maximum conducted output power is the highest total transmit power occurring in any mode	PASSED	2412 MHz = 21.04 dBm = 127.16 mW 2437 MHz = 23.84 dBm = 242.31 mW 2462 MHz = 20.94 dBm = 124.27 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
15.247(d)	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 (Appendix A)
15.247(d)	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 (Appendix A)
15.247(e)	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 = -10.33 dB 2437 MHz = -8.17 dB 2462 MHz = -10.67 dB *Per Original Filing*
15.207	AC Conducted Emissions	PASSED	*See Original Filing*
15.209	Radiated Emissions (30-1000 MHz)	PASSED	

Radiated Emissions previously tested with Ethertronics & Wistron NeWeb Corp. Antennas.

2.0 Summary of Test Results (Continued)

802.11n Mode 20MHz Wide (2400-2483.5 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	2412 MHz = 17.42 MHz 2437 MHz = 17.75 MHz 2462 MHz = 17.58 MHz *Per Original Filing*
15.247(b)(3)	The maximum peak output power of the intentional radiator shall not exceed 1 watt. The maximum conducted output power is the highest total transmit power occurring in any mode	PASSED	2412 MHz = 20.94 dBm = 124.27 mW 2437 MHz = 23.54 dBm = 226.13 mW 2462 MHz = 21.04 dBm = 127.16 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
15.247(d)	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 (Appendix A)
15.247(d)	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 (Appendix A)
15.247(e)	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 = -10.83 dB 2437 MHz = -8.17 dB 2462 MHz = -11.00 dB *Per Original Filing*
15.207	AC Conducted Emissions	PASSED	*See Original Filing*
15.209	Radiated Emissions (30-1000 MHz)	PASSED	

Radiated Emissions previously tested with Ethertronics & Wistron NeWeb Corp. Antennas.

2.0 Summary of Test Results (Continued)

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

EMISSIONS STANDARD			
FCC Part 15 Section	**Description**	**Results**	**Comments**
15.247(a)(2)	The minimum 6dB bandwidth shall be at least 500 kHz.	PASSED	2412 MHz = 17.67 MHz 2437 MHz = 17.75 MHz 2462 MHz = 17.58 MHz *Per Original Filing*
15.247(b)(3)	The maximum peak output power of the intentional radiator shall not exceed 1 watt. The maximum conducted output power is the highest total transmit power occurring in any mode	PASSED	2412 MHz = 21.24 dBm = 133.16 mW 2437 MHz = 23.74 dBm = 236.79 mW 2462 MHz = 21.24 dBm = 133.16 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
15.247(d)	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 (Appendix A)
15.247(d)	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 (Appendix A)
15.247(e)	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 = -10.50 dB 2437 MHz = -8.67 dB 2462 MHz = -10.83 dB *Per Original Filing*
15.207	AC Conducted Emissions	PASSED	*See Original Filing*
15.209	Radiated Emissions (30-1000 MHz)	PASSED	

Radiated Emissions previously tested with Ethertronics & Wistron NeWeb Corp. Antennas.

2.0 Summary of Test Results (Continued)

802.11n Mode 40MHz Wide (2400-2483.5 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	2422 MHz = 36.25 MHz 2437 MHz = 36.00 MHz 2452 MHz = 36.25 MHz *Per Original Filing*
15.247(b)(3)	The maximum peak output power of the intentional radiator shall not exceed 1 watt. The maximum conducted output power is the highest total transmit power occurring in any mode	PASSED	2422 MHz = 22.54 dBm = 179.62 mW 2437 MHz = 22.64 dBm = 183.81 mW 2452 MHz = 22.54 dBm = 179.62 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
15.247(d)	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 (Appendix A)
15.247(d)	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 (Appendix A)
15.247(e)	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	2422 MHz = -14.50 dB 2437 MHz = -13.00 dB 2452 MHz = -14.67 dB *Per Original Filing*
15.207	AC Conducted Emissions	PASSED	*See Original Filing*
15.209	Radiated Emissions (30-1000 MHz)	PASSED	

Radiated Emissions previously tested with Ethertronics & Wistron NeWeb Corp. Antennas.

2.0 Summary of Test Results (Continued)

802.11n Mode 40MHz Wide (2400-2483.5 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	2422 MHz = 35.75 MHz 2437 MHz = 35.75 MHz 2452 MHz = 35.92 MHz *Per Original Filing*
15.247(b)(3)	The maximum peak output power of the intentional radiator shall not exceed 1 watt. The maximum conducted output power is the highest total transmit power occurring in any mode	PASSED	2422 MHz = 23.04 dBm = 201.54 mW 2437 MHz = 22.94 dBm = 196.95 mW 2452 MHz = 22.84 dBm = 192.47 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
15.247(d)	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 (Appendix A)
15.247(d)	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 (Appendix A)
15.247(e)	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	2422 MHz = -13.50 dB 2437 MHz = -9.33 dB 2452 MHz = -14.33 dB *Per Original Filing*
15.207	AC Conducted Emissions	PASSED	*See Original Filing*
15.209	Radiated Emissions (30-1000 MHz)	PASSED	

Radiated Emissions previously tested with Ethertronics & Wistron NeWeb Corp. Antennas.

2.0 Summary of Test Results (Continued)

802.11n Mode 40MHz Wide (2400-2483.5 MHz) Chain C

EMISSIONS STANDARD			
FCC Part 15 Section	**Description**	**Results**	**Comments**
15.247(a)(2)	The minimum 6dB bandwidth shall be at least 500 kHz.	PASSED	2422 MHz = 36.17 MHz 2437 MHz = 35.67 MHz 2452 MHz = 35.83 MHz *Per Original Filing*
15.247(b)(3)	The maximum peak output power of the intentional radiator shall not exceed 1 watt. The maximum conducted output power is the highest total transmit power occurring in any mode	PASSED	2422 MHz = 22.94 dBm = 196.95 mW 2437 MHz = 22.74 dBm = 188.09 mW 2452 MHz = 23.04 dBm = 201.54 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
15.247(d)	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 (Appendix A)
15.247(d)	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 (Appendix A)
15.247(e)	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	2422 MHz = -14.17 dB 2437 MHz = -12.83 dB 2452 MHz = -14.00 dB *Per Original Filing*
15.207	AC Conducted Emissions	PASSED	*See Original Filing*
15.209	Radiated Emissions (30-1000 MHz)	PASSED	

Radiated Emissions previously tested with Ethertronics & Wistron NeWeb Corp. Antennas.

2.0 Summary of Test Results (Continued)

802.11n Mode 20MHz Wide (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 = 17.33 MHz 5785 MHz = 17.33 MHz 5825 MHz = 17.75 MHz *Per Original Filing*
15.247(b)(3)	The maximum peak output power of the intentional radiator shall not exceed 1 watt. The maximum conducted output power is the highest total transmit power occurring in any mode	PASSED	5745 MHz = 23.94 dBm = 247.95 mW 5785 MHz = 23.99 dBm = 250.82 mW 5825 MHz = 23.94 dBm = 247.95 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
15.247(d)	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 (Appendix A)
15.247(d)	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 (Appendix A)
15.247(e)	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 = -8.83 dB 5785 MHz = -8.83 dB 5825 MHz = -9.00 dB *Per Original Filing*
15.207	AC Conducted Emissions	PASSED	*See Original Filing*
15.209	Radiated Emissions (30-1000 MHz)	PASSED	

2.0 Summary of Test Results (Continued)

802.11n Mode 20MHz 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	5745 MHz = 17.75 MHz 5785 MHz = 17.75 MHz 5825 MHz = 17.75 MHz *Per Original Filing*
15.247(b)(3)	The maximum peak output power of the intentional radiator shall not exceed 1 watt. The maximum conducted output power is the highest total transmit power occurring in any mode	PASSED	5745 MHz = 24.54 dBm = 284.69 mW 5785 MHz = 24.64 dBm = 291.32 mW 5825 MHz = 24.44 dBm = 278.20 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
15.247(d)	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 (Appendix A)
15.247(d)	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 (Appendix A)
15.247(e)	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 = -8.67 dB 5785 MHz = -8.83 dB 5825 MHz = -9.00 dB *Per Original Filing*
15.207	AC Conducted Emissions	PASSED	*See Original Filing*
15.209	Radiated Emissions (30-1000 MHz)	PASSED	

2.0 Summary of Test Results (Continued)

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

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 = 17.75 MHz 5785 MHz = 17.75 MHz 5825 MHz = 17.75 MHz *Per Original Filing*
15.247(b)(3)	The maximum peak output power of the intentional radiator shall not exceed 1 watt. The maximum conducted output power is the highest total transmit power occurring in any mode	PASSED	5745 MHz = 24.34 dBm = 271.87 mW 5785 MHz = 24.44 dBm = 278.20 mW 5825 MHz = 24.04 dBm = 253.73 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
15.247(d)	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 (Appendix A)
15.247(d)	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 (Appendix A)
15.247(e)	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 = -8.67 dB 5785 MHz = -8.67 dB 5825 MHz = -9.17 dB *Per Original Filing*
15.207	AC Conducted Emissions	PASSED	*See Original Filing*
15.209	Radiated Emissions (30-1000 MHz)	PASSED	

2.0 Summary of Test Results (Continued)

802.11n Mode 40MHz Wide (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	5755 MHz = 35.83 MHz 5795 MHz = 35.58 MHz *Per Original Filing*
15.247(b)(3)	The maximum peak output power of the intentional radiator shall not exceed 1 watt. The maximum conducted output power is the highest total transmit power occurring in any mode	PASSED	5755 MHz = 24.10 dBm = 256.91 mW 5795 MHz = 24.15 dBm = 259.88 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
15.247(d)	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 (Appendix A)
15.247(d)	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 (Appendix A)
15.247(e)	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 = -9.67 dB 5795 MHz = -10.00 dB *Per Original Filing*
15.207	AC Conducted Emissions	PASSED	*See Original Filing*
15.209	Radiated Emissions (30-1000 MHz)	PASSED	

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 = 36.00 MHz 5795 MHz = 35.75 MHz *Per Original Filing*
15.247(b)(3)	The maximum peak output power of the intentional radiator shall not exceed 1 watt. The maximum conducted output power is the highest total transmit power occurring in any mode	PASSED	5755 MHz = 24.77 dBm = 299.76 mW 5795 MHz = 24.64 dBm = 290.92 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
15.247(d)	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 (Appendix A)
15.247(d)	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 (Appendix A)
15.247(e)	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 = -10.33 dB 5795 MHz = -10.67 dB *Per Original Filing*
15.207	AC Conducted Emissions	PASSED	*See Original Filing*
15.209	Radiated Emissions (30-1000 MHz)	PASSED	

2.0 Summary of Test Results (Continued)

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

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 = 35.25 MHz 5795 MHz = 35.33 MHz *Per Original Filing*
15.247(b)(3)	The maximum peak output power of the intentional radiator shall not exceed 1 watt. The maximum conducted output power is the highest total transmit power occurring in any mode	PASSED	5755 MHz = 24.41 dBm = 275.91 mW 5795 MHz = 24.43 dBm = 277.19 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
15.247(d)	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 (Appendix A)
15.247(d)	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 (Appendix A)
15.247(e)	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 = -10.50 dB 5795 MHz = -10.67 dB *Per Original Filing*
15.207	AC Conducted Emissions	PASSED	*See Original Filing*
15.209	Radiated Emissions (30-1000 MHz)	PASSED	

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:

10/13/08

Johnny Candelas Date:
Test Technician
Aegis Labs, Inc.

Report Approved By:

10/13/08

Rick Candelas Date:
Quality Assurance & EMC Lab Manager
Aegis Labs, Inc.

3.0 ADMINISTRATIVE DATA AND TEST DESCRIPTION

DEVICE TESTED:	ITE Type: Intel WiFi Link 5300 Model Number(s): 533AN_HMW Serial Number: 0016EA038A16 FCC ID: PD9533ANH
DATE EUT RECEIVED:	October 4th, 2008
TEST DATE(S):	October 6th – 9th, 2008
ORIGIN OF TEST SAMPLE(S):	Production
EQUIPMENT CLASS:	EUT tested as CLASS B device
RESPONSIBLE PARTY:	Intel Corporation 2111 NE 25th Avenue Hillsboro, Oregon 97124
CLIENT CONTACT:	Mr. Robert Paxman
MANUFACTURER:	Intel Corporation
TEST LOCATION:	Aegis Labs, Inc. 32231 Trabuco Creek Road Trabuco Canyon, CA 92678 Open Area Test Site #1 & #2
ACCREDITATION CERTIFICATE(s):	A2LA Certificate Number: 1111.01, Valid through February 10, 2010
PURPOSE OF TEST:	To demonstrate compliance with the standards as described in Sections 1.0 & 2.0 of this report.
UNCERTAINTY BUDGET:	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.
STATEMENT OF CALIBRATION:	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

Equipment Under Test (EUT)	
Trade Name:	Intel WiFi Link 5300
Model Number:	533AN_HMW
Frequency Range:	802.11a = 5745 – 5825 MHz 802.11b/g = 2412 – 2462MHz 802.11n = 2412 – 2462MHz & 5745 – 5825 MHz
Type of Transmission:	Direct Sequence Spread Spectrum
Transfer Rate:	1/5.5/11 Mbps for 802.11b mode 6/36/54 Mbps for 802.11g and 802.11a modes Up to 450 Mbps for 802.11n mode
Number of Channels:	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
Modulation Type:	DBPSK, DQPSK, CCK, OFDM
Antenna Type:	Shanghai Universe Communication Electron Co., Ltd Antennas: PIFA
Antenna Gain (See Note 2):	4.97dBi @ 5 GHz / 3.24dBi @ 2.4 GHz
Transmit Output Power:	Please see Appendix A (Data Sheets) for actual output power.
Power Supply:	3.3VDC from internal source
Number of External Test Ports Exercised:	3 Antenna Ports (Chain A, B, & C)

The Intel WiFi Link 5300 is an embedded IEEE 802.11a/b/g/n wireless network adapter that operates in the 2.4 GHz and 5.0 GHz spectrums. The adapter is capable of delivering up to 450 Mbps Tx/Rx.

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 Shanghai Universe Communication Electron Co., Ltd Antennas. (Refer to the antenna information exhibits).

4.2 EUT Configuration

The EUT was tested installed in the Mini PCI-E slot of an extender board which is then connected to the host computer. The EUT was then connected to a set of antennas via its Chain A, B, & C antenna ports. Data for a set of Shanghai Universe Communication Electron Co., Ltd 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 each chain individually (Chain A, B, then C) and then tested with all chains transmitting simultaneously (Chain ABC). The EUT was placed in continuous transmit mode by a program provided by the manufacturer *(CRTU Version 5.0.51.0000)*.

4.3 List of EUT, Sub-Assemblies and Host Equipment

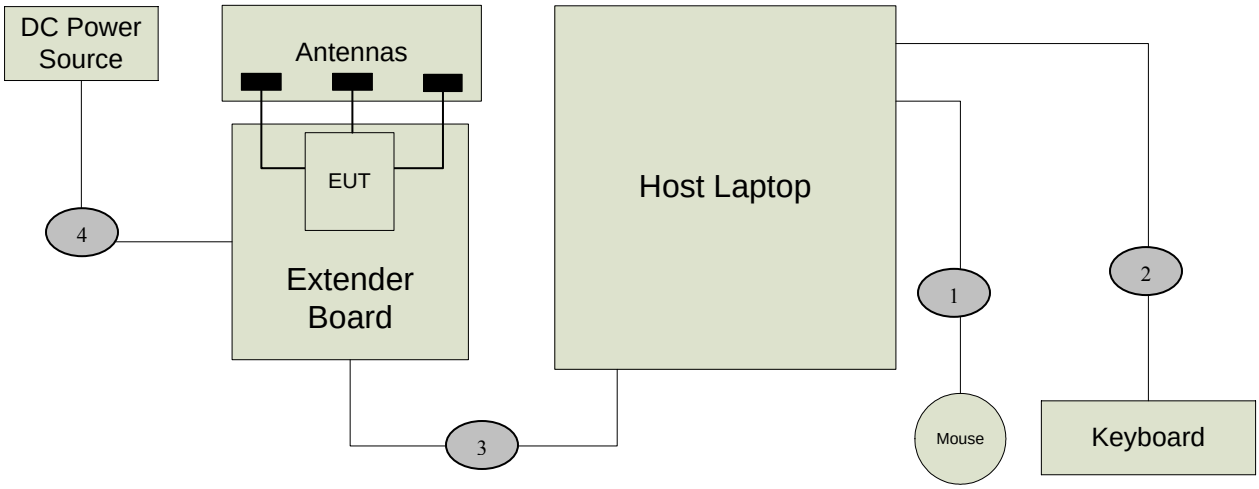
Equipment Under Test			
Manufacturer	**Equipment Name**	**Model or Part Number**	**Serial Number**
Intel Corporation	Intel WiFi Link 5300	533AN_HMW	0016EA038A16

EUT Sub Assemblies			
Manufacturer	**Equipment Name**	**Model or Part Number**	**Serial Number**
Shanghai Universe Communication Electron Co.,Ltd	Chain A Antenna	SUC ANT S11	N/A
	Chain B Antenna	SUC ANT S11	N/A
	Chain C Antenna	SUC ANT S11	N/A

HOST EQUIPMENT LIST			
Manufacturer	**Equipment Name**	**Model or Part Number**	**Serial Number**
Generic	Host Laptop	ENG001	None
Protek	DC Power Source	3006B	AC2018
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: USB Port	Keyboard: Hardwired	N/A	N/A	N/A
2	1.5m	Round, Braid & Foil Shielded	Host Computer: USB Port	Mouse: Hardwired	N/A	N/A	N/A
3	0.5m	Flat, Braid & Foil Shielded	Extender Board: Mini PCIe slot	Host Laptop: Mini PCIe slot	N/A	N/A	N/A
4	0.5m	Round Un-shielded	Extender Board: Power Input	DC Power Source: Power Output	N/A	N/A	N/A

4.5 EMC Test Hardware and Software Measurement Equipment

TEST EQUIPMENT LIST - Emissions					
Equipment Name	**Manufacturer**	**Model Number**	**Serial Number**	**Calibration Due Date**	**Maintenance Calibration Cycle**
Spectrum Analyzer	Agilent	8565EC	3946A00245	07/24/09	1 Year
Antenna – Horn	ETS	3117	00057423	03/28/09	1 Year
Preamp	Miteq	JS42-01001800-25-10P	815980	09/21/09	1 Year
28 Foot Coax	Semflex	S1L29BFS1348	608	07/26/09	1 Year
2.4 GHz Notch Filter	Micro-Tronics	BRM50702-02	003	NCR	NCR
5.725-5.850 GHz Notch Filter	Microwave Circuits	N0257881	3173-01	NCR	NCR
Antenna - 18-26.5 GHz Pre-amplified Horn	Aegis Labs, Inc.	H042	SLK-35-3W	02/08/09	1 Year
Antenna - 26.5-40 GHz Pre-amplified Horn	Aegis Labs, Inc.	H028	GM1260-10	02/08/09	1 Year
Power Meter	Anritsu	ML2487A	6K00001785	05/29/09	1 Year
Wide Bandwidth Sensor	Anritsu	MA2491A	31193	05/29/09	1 Year
12dB Attenuator	Narda	4779-12	203	06/09/09	1 Year
Temperature/Humidity Monitor	Dickson	TH550	7255185	04/13/09	1 Year

NCR – No Calibration Required.

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.

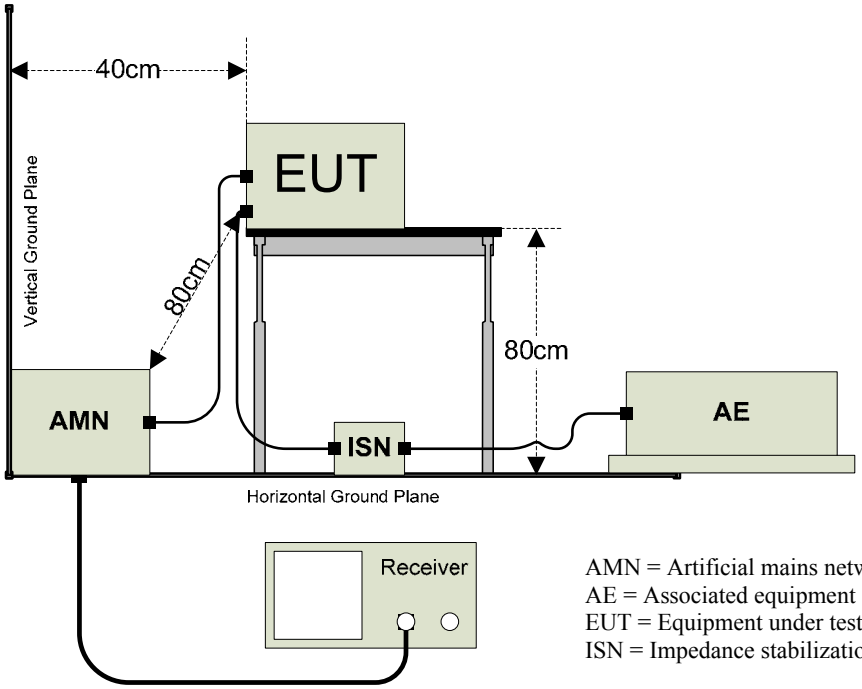
5.2 Conducted Emissions Test Setup

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.



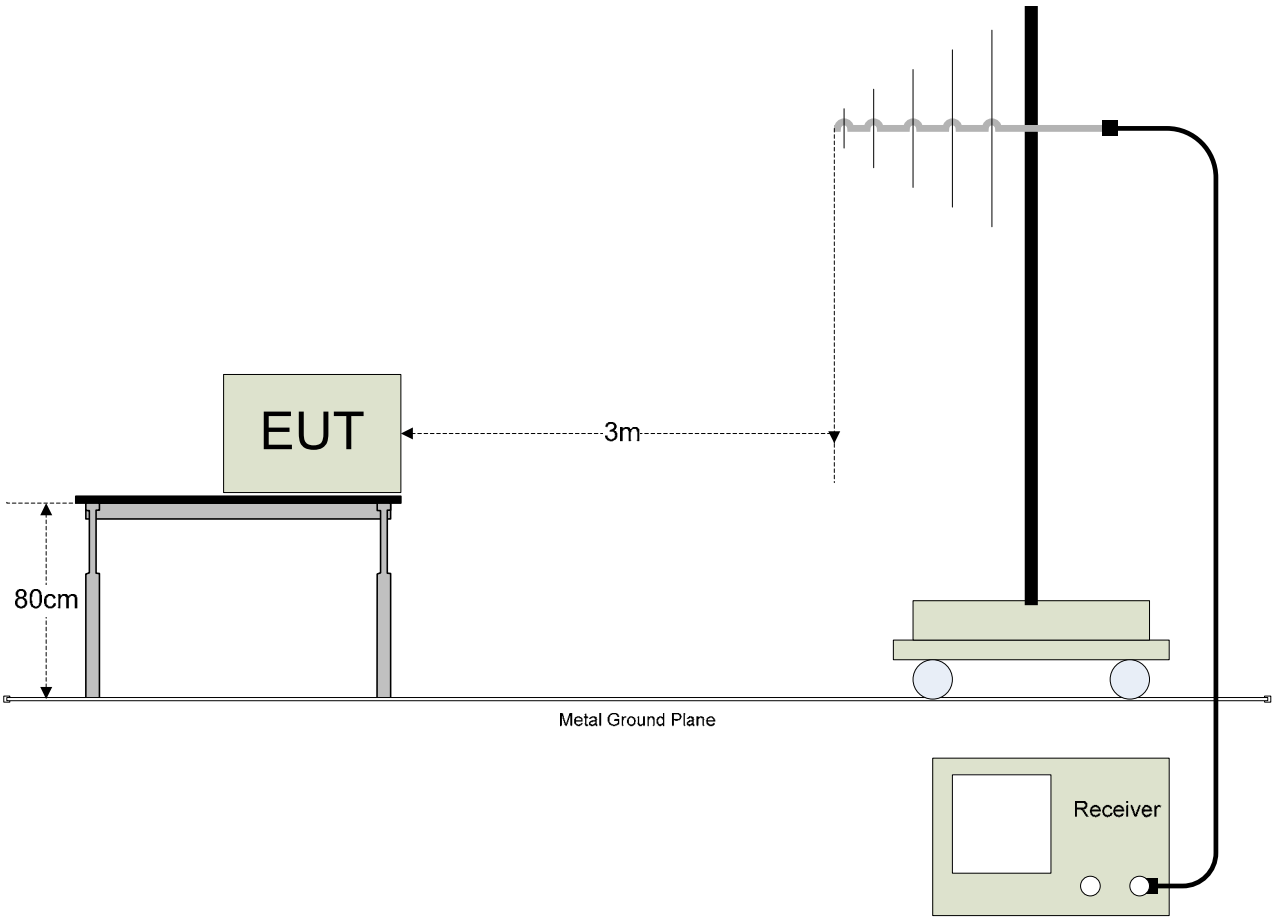
AMN = Artificial mains network
AE = Associated equipment
EUT = Equipment under test
ISN = Impedance stabilization network

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

RADIATED EMISSIONS TEST RESULTS

CLIENT:	Intel Corporation	**DATE:**	06/25/08
EUT:	Intel WiFi Link 5300	**PROJECT NUMBER:**	INTEL-080926
MODEL NUMBER:	533AN_HMW	**TEST ENGINEER:**	KN
SERIAL NUMBER:	0016EA038A16	**SITE #:**	2
CONFIGURATION:	Tested installed in a host computer's mini PCI slot in **802.11a (5745-5825 MHz) mode.**	**TEMPERATURE:**	19° C
		HUMIDITY:	57% RH
		TIME:	8:00 AM

Description:	Radiated RF Emissions (1 GHz – 18 GHz)
Results:	**PASSED** Horizontal and Vertical Antenna Polarizations Class B Limits
Note:	Radiated Emissions Measurements were performed on the EUT with power supply set at the following voltage and frequency. • 120VAC / 60 Hz.

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

Corrected Meter Reading = 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:

CML = 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 **Shanghai Universe Communication Electron Co., Ltd Antennas
Aegis Labs, Inc. File #: INTEL-080926-01

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/m)*	*Limits (dBuV/m)*	*Diff (dB) +=FAIL*	*Comments*
5745.00	61.00	100	315			3.98	35.09	100.08			**Ch. 149**
5745.00				50.83	A	3.98	35.09	89.91			
5785.00	58.17	100	135			4.00	35.16	97.32			**Ch. 157**
5785.00				47.83	A	4.00	35.16	86.98			
5825.00	59.17	100	135			4.01	35.22	98.40			**Ch. 165**
5825.00				48.50	A	4.01	35.22	87.73			

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/m)*	*Limits (dBuV/m)*	*Diff (dB) +=FAIL*	*Comments*
5745.00	62.83	100	270			3.98	34.94	101.75			**Ch. 149**
5745.00				49.33	A	3.98	34.94	88.25			
5785.00	61.33	100	270			4.00	35.01	100.34			**Ch. 157**
5785.00				51.17	A	4.00	35.01	90.18			
5825.00	62.33	100	315			4.01	35.09	101.43			**Ch. 165**
5825.00				51.50	A	4.01	35.09	90.60			

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 **Shanghai Universe Communication Electron Co., Ltd Antennas
Aegis Labs, Inc. File #: INTEL-080926-01

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/m)*	*Limits (dBuV/m)*	*Diff (dB) +=FAIL*	*Comments*
5725.00	32.00	100	315			3.98	35.06	71.04	80.08	-9.04	**Ch. 149**
5850.00	31.67	100	135			4.02	35.26	70.95	78.40	-7.45	**Ch. 165**

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/m)*	*Limits (dBuV/m)*	*Diff (dB) +=FAIL*	*Comments*
5725.00	31.33	100	270			3.98	34.91	70.21	81.75	-11.54	**Ch. 149**
5850.00	32.17	100	315			4.02	35.13	71.32	81.43	-10.11	**Ch. 165**

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:

$BE = Fm - \Delta m$

Where
BE = Band Edge Field Strength
Fm = Measured Fundamental (Peak or Average)
Δm = Measured Conducted Band Edge Delta (Peak or Average)

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 **Shanghai Universe Communication Electron Co., Ltd Antennas
Aegis Labs, Inc. File #: INTEL-080926-02

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/m)*	*Limits (dBuV/m)*	*Diff (dB) +=FAIL*	*Comments*
5745.00	66.00	100	270			3.98	35.09	105.08			**Ch. 149**
5745.00				56.00	A	3.98	35.09	95.08			
5785.00	64.83	100	270			4.00	35.16	103.98			**Ch. 157**
5785.00				54.67	A	4.00	35.16	93.82			
5825.00	64.00	100	270			4.01	35.22	103.23			**Ch. 165**
5825.00				53.50	A	4.01	35.22	92.73			

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/m)*	*Limits (dBuV/m)*	*Diff (dB) +=FAIL*	*Comments*
5745.00	61.67	100	135			3.98	34.94	100.59			**Ch. 149**
5745.00				51.83	A	3.98	34.94	90.75			
5785.00	58.17	100	135			4.00	35.01	97.18			**Ch. 157**
5785.00				48.00	A	4.00	35.01	87.01			
5825.00	58.67	100	135			4.01	35.09	97.77			**Ch. 165**
5825.00				49.00	A	4.01	35.09	88.10			

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 **Shanghai Universe Communication Electron Co., Ltd Antennas
Aegis Labs, Inc. File #: INTEL-080926-02

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/m)*	*Limits (dBuV/m)*	*Diff (dB) +=FAIL*	*Comments*
5725.00	35.67	100	270			3.98	35.06	74.71	85.08	-10.37	**Ch. 149**
5850.00	30.17	100	270			4.02	35.26	69.45	83.23	-13.78	**Ch. 165**

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/m)*	*Limits (dBuV/m)*	*Diff (dB) +=FAIL*	*Comments*
5725.00	31.67	100	135			3.98	34.91	70.55	80.59	-10.04	**Ch. 149**
5850.00	30.00	100	135			4.02	35.13	69.15	77.77	-8.62	**Ch. 165**

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 = Fm – Δm

Where
BE = Band Edge Field Strength
Fm = Measured Fundamental (Peak or Average)
Δm = Measured Conducted Band Edge Delta (Peak or Average)

Radiated Emissions Test Results (Continued)

*Fundamental Measurements in **802.11a mode (5745-5825 MHz)***
Channels 149, 157, & 165
Continuous TX** at **Chain C** Antenna port with **Shanghai Universe Communication Electron Co., Ltd Antennas
Aegis Labs, Inc. File #: INTEL-080926-03

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/m)*	*Limits (dBuV/m)*	*Diff (dB) +=FAIL*	*Comments*
5745.00	63.50	100	135			3.98	35.09	102.58			**Ch. 149**
5745.00				52.83	A	3.98	35.09	91.91			
5785.00	60.67	100	135			4.00	35.16	99.82			**Ch. 157**
5785.00				50.83	A	4.00	35.16	89.98			
5825.00	60.17	100	135			4.01	35.22	99.40			**Ch. 165**
5825.00				51.00	A	4.01	35.22	90.23			

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/m)*	*Limits (dBuV/m)*	*Diff (dB) +=FAIL*	*Comments*
5745.00	62.50	100	225			3.98	34.94	101.42			**Ch. 149**
5745.00				52.17	A	3.98	34.94	91.09			
5785.00	63.50	100	225			4.00	35.01	102.51			**Ch. 157**
5785.00				53.67	A	4.00	35.01	92.68			
5825.00	63.17	100	225			4.01	35.09	102.27			**Ch. 165**
5825.00				53.17	A	4.01	35.09	92.27			

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 C** Antenna port with **Shanghai Universe Communication Electron Co., Ltd Antennas
Aegis Labs, Inc. File #: INTEL-080926-03

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/m)*	*Limits (dBuV/m)*	*Diff (dB) +=FAIL*	*Comments*
5725.00	32.67	100	135		3.98	35.06	71.71	82.58	-10.87	**Ch. 149**
5850.00	30.00	100	135		4.02	35.26	69.28	79.40	-10.12	**Ch. 165**

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/m)*	*Limits (dBuV/m)*	*Diff (dB) +=FAIL*	*Comments*
5725.00	32.33	100	225		3.98	34.91	71.21	81.42	-10.21	**Ch. 149**
5850.00	32.33	100	225		4.02	35.13	71.48	82.27	-10.79	**Ch. 165**

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 = Fm – Δm

Where
BE = Band Edge Field Strength
Fm = Measured Fundamental (Peak or Average)
Δm = Measured Conducted Band Edge Delta (Peak or Average)

Radiated Emissions Test Results (Continued)

Spurious Emissions Measurements in ***802.11a mode (5745-5825 MHz)***
Channels 149, 157, & 165
Continuous TX *at* ***Chain A, B, & C*** *Antenna ports with* ***Shanghai Universe Communication Electron Co., Ltd Antennas***
Aegis Labs, Inc. File #: INTEL-080926-74

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*	*Channel/ Chain Tested*
3856.66	51.33	100	135			46.53	3.22	33.26	41.28	74.00	-32.72	**Ch. 157/**
3856.66				40.95	A	46.53	3.22	33.26	30.90	54.00	-23.10	**A**
7713.32	52.30	100	135			44.86	4.67	36.14	48.25	74.00	-25.75	
7713.32				41.07	A	44.86	4.67	36.14	37.02	54.00	-16.98	
11570.00	54.67	100	315			44.95	5.93	38.50	54.15	74.00	-19.85	
11570.00				42.06	A	44.95	5.93	38.50	41.54	54.00	-12.46	
3856.66	52.33	100	315			46.53	3.22	33.26	42.28	74.00	-31.72	**Ch. 157/**
3856.66				41.15	A	46.53	3.22	33.26	31.10	54.00	-22.90	**B**
7713.32	50.67	100	135			44.86	4.67	36.14	46.62	74.00	-27.38	
7713.32				40.77	A	44.86	4.67	36.14	36.72	54.00	-17.28	
11570.00	56.83	100	135			44.95	5.93	38.50	56.31	74.00	-17.69	
11570.00				43.92	A	44.95	5.93	38.50	43.40	54.00	-10.60	
3856.66	54.00	100	135			46.53	3.22	33.26	43.95	74.00	-30.05	**Ch.157/**
3856.66				44.54	A	46.53	3.22	33.26	34.49	54.00	-19.51	**C**
7713.32	50.17	100	135			44.86	4.67	36.14	46.12	74.00	-27.88	
7713.32				38.42	A	44.86	4.67	36.14	34.37	54.00	-19.63	
11570.00	53.67	100	135			44.95	5.93	38.50	53.15	74.00	-20.85	
11570.00				41.15	A	44.95	5.93	38.50	40.63	54.00	-13.37	
3830.00	51.83	100	0			46.53	3.23	33.23	41.76	74.00	-32.24	**Ch. 149/**
3830.00				38.86	A	46.53	3.23	33.23	28.79	54.00	-25.21	**B**
7660.00	51.17	100	315			44.86	4.65	36.13	47.09	74.00	-26.91	
7660.00				40.01	A	44.86	4.65	36.13	35.93	54.00	-18.07	
11490.00	55.17	100	225			45.02	5.90	38.39	54.44	74.00	-19.56	
11490.00				42.46	A	45.02	5.90	38.39	41.73	54.00	-12.27	
3883.33	52.33	100	135			46.52	3.22	33.28	42.31	74.00	-31.69	**Ch.165/**
3883.33				41.96	A	46.52	3.22	33.28	31.94	54.00	-22.06	**B**
7766.66	50.67	100	135			44.86	4.68	36.15	46.64	74.00	-27.36	
7766.66				39.83	A	44.86	4.68	36.15	35.80	54.00	-18.20	
11650.00	64.50	100	135			44.86	5.95	38.61	64.20	74.00	-9.80	
11650.00				48.52	A	44.86	5.95	38.61	48.22	54.00	-5.78	

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*	*Channel/ Chain Tested*
3856.66	52.83	100	45			46.53	3.22	33.26	42.78	74.00	-31.22	**Ch. 157/**
3856.66				41.07	A	46.53	3.22	33.26	31.02	54.00	-22.98	**A**
7713.32	53.00	100	45			44.86	4.67	36.14	48.95	74.00	-25.05	
7713.32				45.24	A	44.86	4.67	36.14	41.19	54.00	-12.81	
11570.00	56.17	100	90			44.95	5.93	38.50	55.65	74.00	-18.35	
11570.00				43.41	A	44.95	5.93	38.50	42.89	54.00	-11.11	
3856.66	53.50	100	180			46.53	3.22	33.26	43.45	74.00	-30.55	**Ch. 157/**
3856.66				46.10	A	46.53	3.22	33.26	36.05	54.00	-17.95	**B**
7713.32	52.50	100	45			44.86	4.67	36.14	48.45	74.00	-25.55	
7713.32				41.88	A	44.86	4.67	36.14	37.83	54.00	-16.17	
11570.00	60.17	100	90			44.95	5.93	38.50	59.65	74.00	-14.35	
11570.00				45.99	A	44.95	5.93	38.50	45.47	54.00	-8.53	
3856.66	52.83	100	90			46.53	3.22	33.26	42.78	74.00	-31.22	**Ch.157/**
3856.66				43.43	A	46.53	3.22	33.26	33.38	54.00	-20.62	**C**
7713.32	52.67	100	45			44.86	4.67	36.14	48.62	74.00	-25.38	
7713.32				45.02	A	44.86	4.67	36.14	40.97	54.00	-13.03	
11570.00	60.50	100	45			44.95	5.93	38.50	59.98	74.00	-14.02	
11570.00				47.46	A	44.95	5.93	38.50	46.94	54.00	-7.06	
3830.00	51.07	100	45			46.53	3.23	33.23	41.00	74.00	-33.00	**Ch. 149/**
3830.00				40.20	A	46.53	3.23	33.23	30.13	54.00	-23.87	**C**
7660.00	52.50	100	45			44.86	4.65	36.13	48.42	74.00	-25.58	
7660.00				41.68	A	44.86	4.65	36.13	37.60	54.00	-16.40	
11490.00	56.83	100	90			45.02	5.90	38.39	56.10	74.00	-17.90	
11490.00				44.42	A	45.02	5.90	38.39	43.69	54.00	-10.31	
3883.33	54.83	100	45			46.52	3.22	33.28	44.81	74.00	-29.19	**Ch.165/**
3883.33				43.14	A	46.52	3.22	33.28	33.12	54.00	-20.88	**C**
7766.66	51.67	100	0			44.86	4.68	36.15	47.64	74.00	-26.36	
7766.66				43.21	A	44.86	4.68	36.15	39.18	54.00	-14.82	
11650.00	62.00	100	0			44.86	5.95	38.61	61.70	74.00	-12.30	
11650.00				49.70	A	44.86	5.95	38.61	49.40	54.00	-4.60	

RADIATED EMISSIONS TEST RESULTS

CLIENT:	Intel Corporation	**DATE:**	06/25/08
EUT:	Intel WiFi Link 5300	**PROJECT NUMBER:**	INTEL-080926
MODEL NUMBER:	533AN_HMW	**TEST ENGINEER:**	KN
SERIAL NUMBER:	0016EA038A16	**SITE #:**	2
CONFIGURATION:	Tested installed in a host computer's mini PCI slot in **802.11b (2400-2483.5 MHz) mode.**	**TEMPERATURE:**	19° C
		HUMIDITY:	57% RH
		TIME:	8:00 AM

Description:	Radiated RF Emissions (1 GHz – 18 GHz)
Results:	**PASSED** Horizontal and Vertical Antenna Polarizations Class B Limits
Note:	Radiated Emissions Measurements were performed on the EUT with power supply set at the following voltage and frequency. • 120VAC / 60 Hz.

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

Corrected Meter Reading = 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:

CML = 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 **Tyco Stamped PIFA Antennas
Aegis Labs, Inc. File #: INTEL-080926-98

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/m)*	*Limits (dBuV/m)*	*Diff (dB) +=FAIL*	*Comments*
2412.00	63.00	100	90			2.53	32.19	97.72			**Ch. 1**
2412.00				59.83	A	2.53	32.19	94.55			
2437.00	63.50	100	90			2.54	32.22	98.26			**Ch. 6**
2437.00				60.33	A	2.54	32.22	95.09			
2462.00	64.83	100	90			2.55	32.25	99.64			**Ch. 11**
2462.00				61.50	A	2.55	32.25	96.31			

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/m)*	*Limits (dBuV/m)*	*Diff (dB) +=FAIL*	*Comments*
2412.00	68.33	100	180			2.53	31.92	102.78			**Ch. 1**
2412.00				65.17	A	2.53	31.92	99.62			
2437.00	66.50	100	180			2.54	31.97	101.01			**Ch. 6**
2437.00				63.50	A	2.54	31.97	98.01			
2462.00	67.83	100	180			2.55	32.02	102.41			**Ch. 11**
2462.00				64.67	A	2.55	32.02	99.25			

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 **Tyco Stamped PIFA Antennas
Aegis Labs, Inc. File #: INTEL-080926-98

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/m)*	*Limits (dBuV/m)*	*Diff (dB) +=FAIL*	*Comments*
2390.00								45.56	74.00	-28.44	**Ch. 1**
2390.00					A			35.55	54.00	-18.45	
2400.00	32.33	100	90			2.52	32.18	67.03	77.72	-10.69	
2483.50								48.31	74.00	-25.69	**Ch. 11**
2483.50					A			36.81	54.00	-17.19	

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/m)*	*Limits (dBuV/m)*	*Diff (dB) +=FAIL*	*Comments*
2390.00								50.62	74.00	-23.38	**Ch. 1**
2390.00					A			40.62	54.00	-13.38	
2400.00	33.50	100	180			2.52	31.90	67.92	82.78	-14.86	
2483.50								51.08	74.00	-22.93	**Ch. 11**
2483.50					A			39.75	54.00	-14.26	

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:

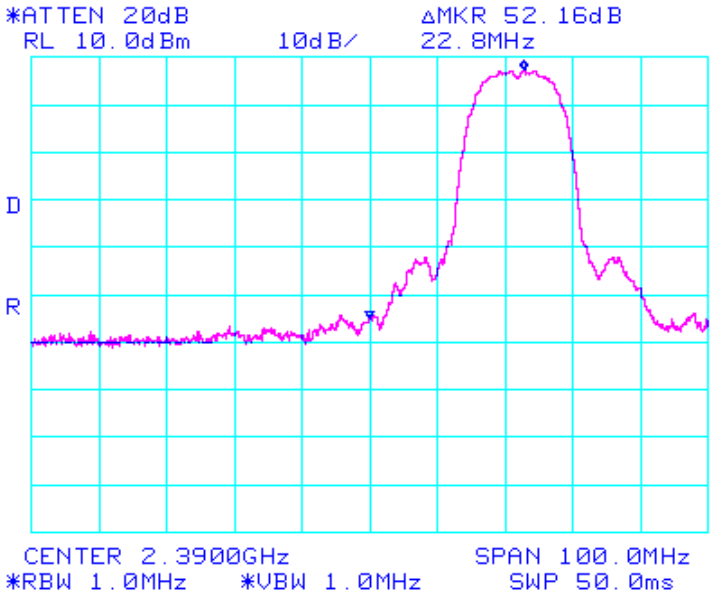
$BE = Fm - \Delta m$

Where
BE = Band Edge Field Strength
Fm = Measured Fundamental (Peak or Average)
Δm = Measured Conducted Band Edge Delta (Peak or Average)

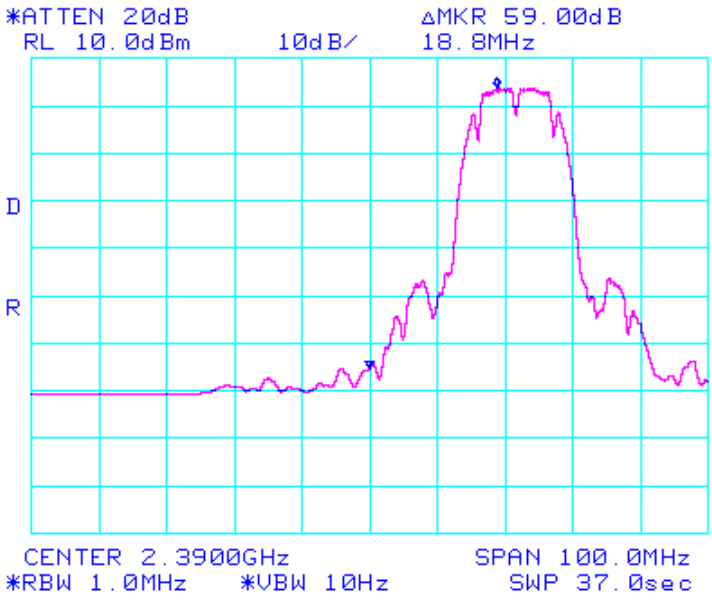
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.412 GHz band edge **PEAK DELTA**	RC



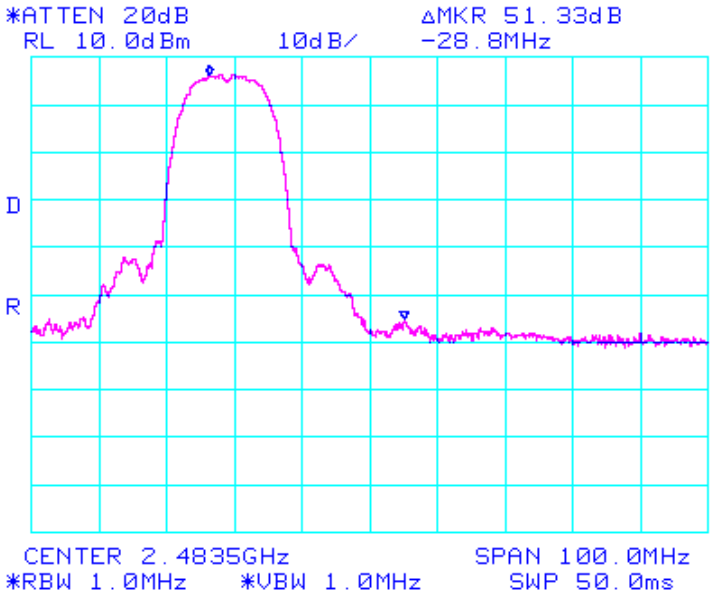
Test Date	*Data*	*Test Eng.*
04/08/08	2.412 GHz band edge **AVERAGE DELTA**	RC



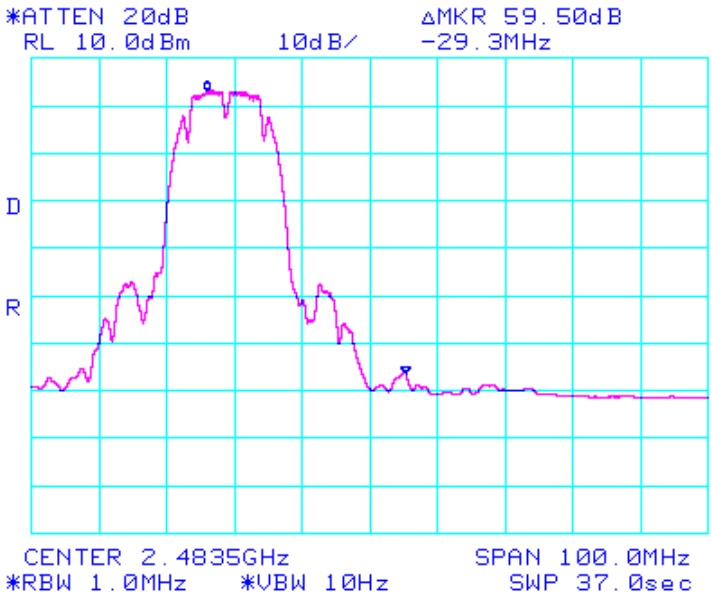
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.462 GHz band edge **PEAK DELTA**	RC



Test Date	*Data*	*Test Eng.*
04/08/08	2.462 GHz band edge **AVERAGE DELTA**	RC



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 **Tyco Stamped PIFA Antennas
Aegis Labs, Inc. File #: INTEL-080926-99

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*
2412.00	53.67	100	225			2.53	32.19	88.39			**Ch. 1**
2412.00				43.17	A	2.53	32.19	77.89			
2437.00	52.33	100	135			2.54	32.22	87.09			**Ch. 6**
2437.00				42.67	A	2.54	32.22	77.43			
2462.00	51.83	100	135			2.55	32.25	86.64			**Ch. 11**
2462.00				42.17	A	2.55	32.25	76.98			

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*
2412.00	64.00	100	225			2.53	31.92	98.45			**Ch. 1**
2412.00				60.50	A	2.53	31.92	94.95			
2437.00	63.17	100	225			2.54	31.97	97.68			**Ch. 6**
2437.00				60.17	A	2.54	31.97	94.68			
2462.00	62.50	100	225			2.55	32.02	97.08			**Ch. 11**
2462.00				59.17	A	2.55	32.02	93.75			

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 **Tyco Stamped PIFA Antennas
Aegis Labs, Inc. File #: INTEL-080926-99

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								35.72	74.00	-38.28	**Ch. 1**
2390.00					A			18.39	54.00	-35.61	
2400.00	30.50	100	225			2.52	32.18	65.20	68.39	-3.19	
2483.50								35.80	74.00	-38.20	**Ch. 11**
2483.50					A			20.31	54.00	-33.69	

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								45.78	74.00	-28.22	**Ch. 1**
2390.00					A			35.45	54.00	-18.55	
2400.00	32.33	100	180			2.52	31.90	66.75	78.45	-11.70	
2483.50								46.24	74.00	-27.77	**Ch. 11**
2483.50					A			37.08	54.00	-16.93	

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:

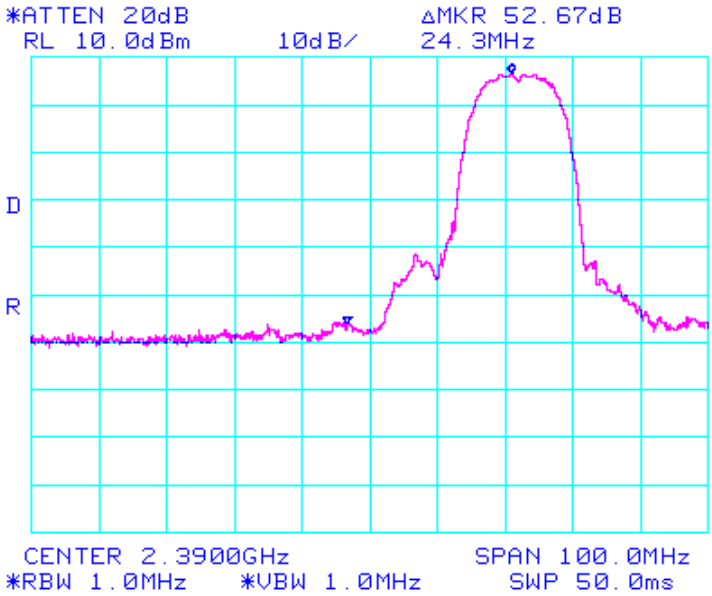
BE = Fm – Δm

Where
BE = Band Edge Field Strength
Fm = Measured Fundamental (Peak or Average)
Δm = Measured Conducted Band Edge Delta (Peak or Average)

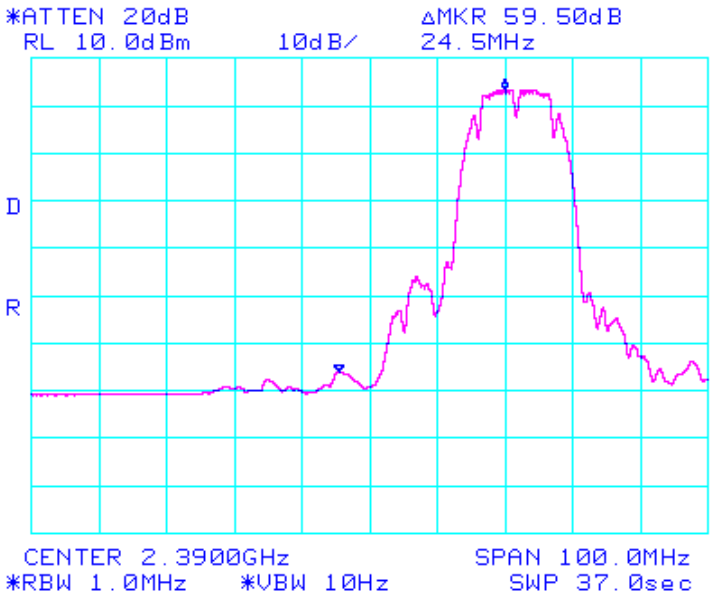
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.412 GHz band edge **PEAK DELTA**	RC



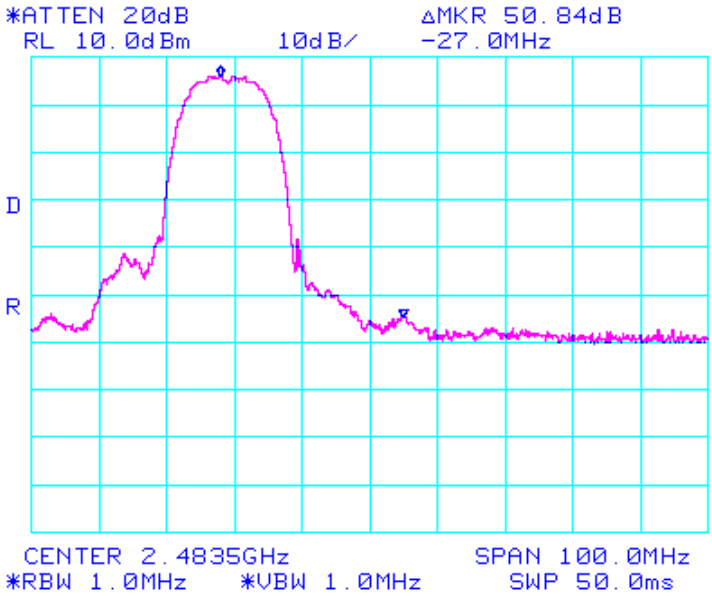
Test Date	*Data*	*Test Eng.*
04/08/08	2.412 GHz band edge **AVERAGE DELTA**	RC



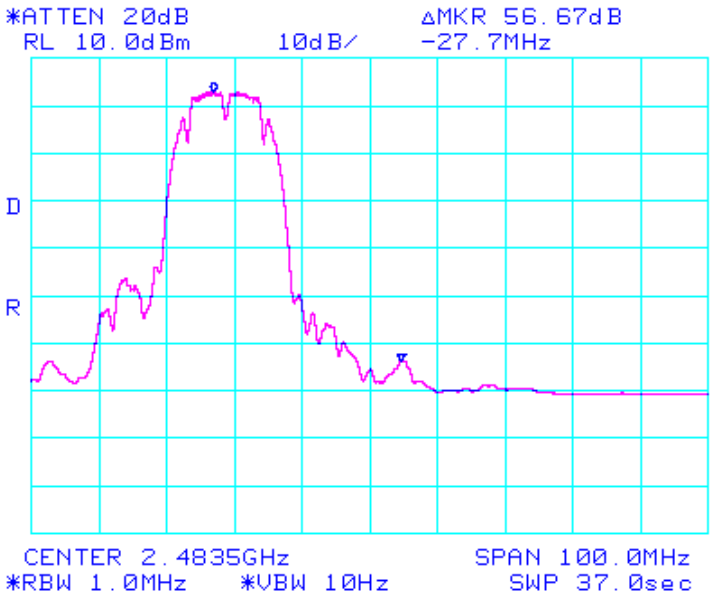
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.462 GHz band edge **PEAK DELTA**	RC



Test Date	*Data*	*Test Eng.*
04/08/08	2.462 GHz band edge **AVERAGE DELTA**	RC



Radiated Emissions Test Results (Continued)

*Fundamental Measurements in **802.11b mode (2400-2483.5 MHz)***
Channels 1, 6, & 11
Continuous TX** at **Chain C** Antenna port with **Tyco Stamped PIFA Antennas
Aegis Labs, Inc. File #: INTEL-080926-100

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*
2412.00	58.67	100	225			2.53	32.19	93.39			**Ch. 1**
2412.00				55.17	A	2.53	32.19	89.89			
2437.00	57.17	100	225			2.54	32.22	91.93			**Ch. 6**
2437.00				54.00	A	2.54	32.22	88.76			
2462.00	58.33	100	225			2.55	32.25	93.14			**Ch. 11**
2462.00				55.17	A	2.55	32.25	89.98			

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*
2412.00	66.50	100	0			2.53	31.92	100.95			**Ch. 1**
2412.00				63.17	A	2.53	31.92	97.62			
2437.00	66.83	100	0			2.54	31.97	101.34			**Ch. 6**
2437.00				63.67	A	2.54	31.97	98.18			
2462.00	66.67	100	0			2.55	32.02	101.25			**Ch. 11**
2462.00				63.33	A	2.55	32.02	97.91			

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 C** Antenna port with **Tyco Stamped PIFA Antennas
Aegis Labs, Inc. File #: INTEL-080926-100

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								37.89	74.00	-36.11	**Ch. 1**
2390.00					A			27.89	54.00	-26.11	
2400.00	30.67	100	225			2.52	32.18	65.37	73.39	-8.02	
2483.50								42.31	74.00	-31.69	**Ch. 11**
2483.50					A			33.32	54.00	-20.68	

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								45.45	74.00	-28.55	**Ch. 1**
2390.00					A			35.62	54.00	-18.38	
2400.00	31.50	100	0			2.52	31.90	65.92	80.95	-15.03	
2483.50								50.42	74.00	-23.59	**Ch. 11**
2483.50					A			41.25	54.00	-12.76	

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:

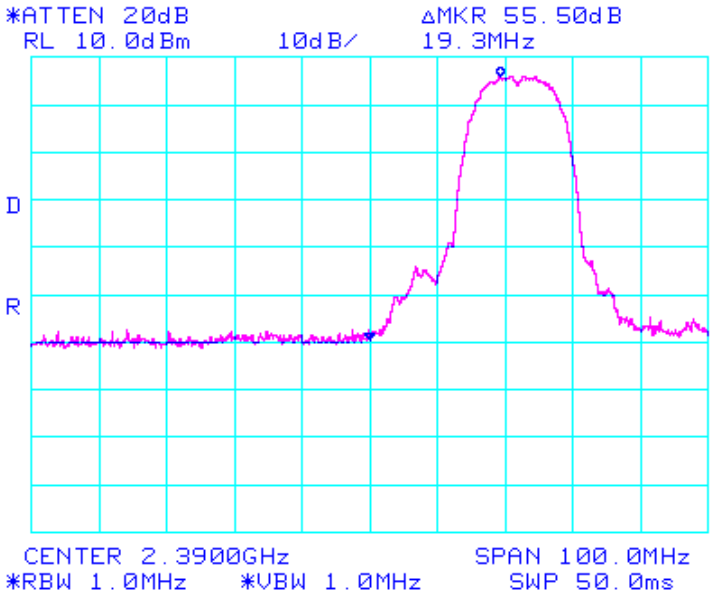
BE = Fm – Δm

Where
BE = Band Edge Field Strength
Fm = Measured Fundamental (Peak or Average)
Δm = Measured Conducted Band Edge Delta (Peak or Average)

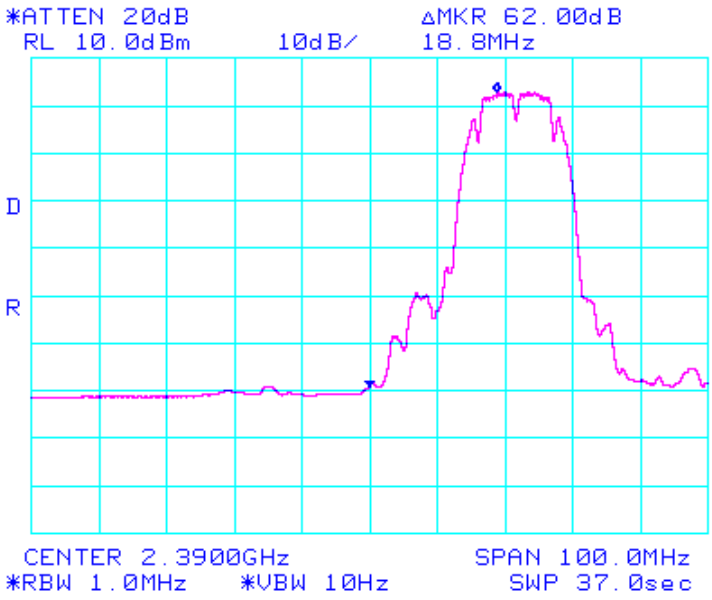
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.412 GHz band edge **PEAK DELTA**	RC



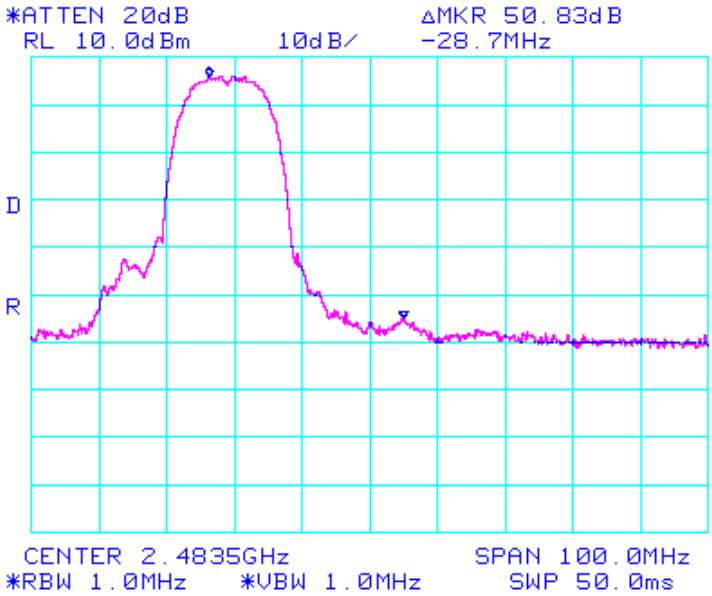
Test Date	*Data*	*Test Eng.*
04/08/08	2.412 GHz band edge **AVERAGE DELTA**	RC



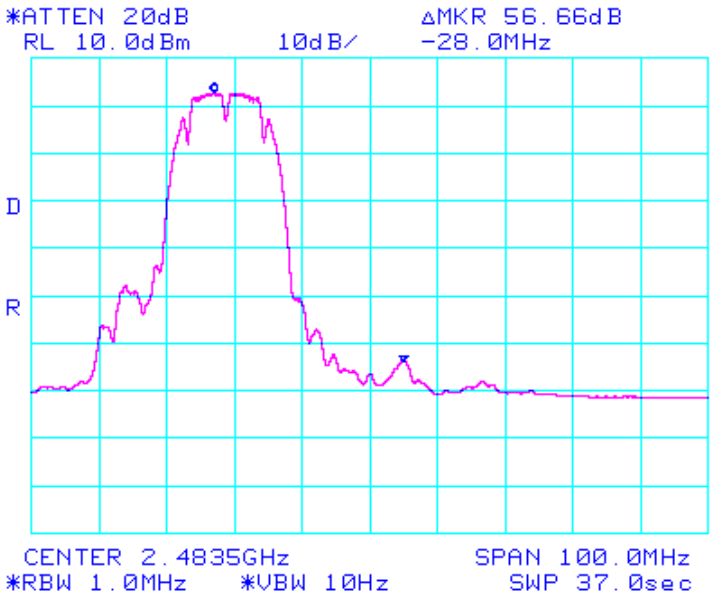
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.462 GHz band edge **PEAK DELTA**	RC



Test Date	*Data*	*Test Eng.*
04/08/08	2.462 GHz band edge **AVERAGE DELTA**	RC



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, B, & C** Antenna ports with **Tyco Stamped PIFA Antennas
Aegis Labs, Inc. File #: INTEL-080926-101

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*	*Channel/ Chain Tested*
4873.99	53.83	100	225			44.35	3.64	34.18	47.29	74.00	-26.71	**Ch. 6 /**
4873.99				43.17	A	44.35	3.64	34.23	36.68	54.00	-17.32	**A**
6498.64	53.67	100	180			44.49	4.22	35.60	48.99	74.00	-25.01	
4873.99	52.33	100	225			44.35	3.64	34.18	45.79	74.00	-28.21	**Ch. 6 /**
4873.99				42.33	A	44.35	3.64	34.23	35.84	54.00	-18.16	**B**
6498.64	54.00	100	180			44.49	4.22	35.60	49.32	74.00	-24.68	
4873.99	53.67	100	180			44.35	3.64	34.18	47.13	74.00	-26.87	**Ch. 6 /**
4873.99				52.17	A	44.35	3.64	34.23	45.68	54.00	-8.32	**C**
6498.64	54.50	100	180			44.49	4.22	35.60	49.82	74.00	-24.18	
3216.00	53.00	100	225			46.46	2.91	32.69	42.14	74.00	-31.86	**Ch. 1/**
4824.00	53.00	100	180			44.70	3.59	34.21	46.10	74.00	-27.90	**C**
4824.00				51.83	A	44.70	3.59	34.24	44.96	54.00	-9.04	
6432.00	53.33	100	180			44.48	4.20	35.59	48.63	74.00	-25.37	
9648.00	51.33	100	180			45.70	5.27	36.78	47.68	74.00	-26.32	
4923.99	53.33	100	180			44.17	3.67	34.15	46.98	86.68	-39.70	**Ch. 11/**
4923.99				44.17	A	44.17	3.67	34.22	37.89	54.00	-16.11	**C**
6565.32	52.67	100	180			44.58	4.25	35.61	47.95	86.68	-38.73	

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*	*Channel/ Chain Tested*
4873.99	53.83	100	135			44.35	3.64	34.23	47.34	74.00	-26.66	**Ch. 6 /**
4873.99				43.17	A	44.35	3.64	34.23	36.68	54.00	-17.32	**A**
6498.64	52.33	100	180			44.49	4.22	35.60	47.65	74.00	-26.35	
4873.98	53.00	100	180			44.35	3.64	34.23	46.51	74.00	-27.49	**Ch. 6 /**
4873.99				42.17	A	44.35	3.64	34.23	35.68	54.00	-18.32	**B**
6498.64	51.33	100	135			44.49	4.22	35.60	46.65	74.00	-27.35	
4873.98	54.00	100	225			44.35	3.64	34.23	47.51	74.00	-26.49	**Ch. 6 /**
4873.99				44.67	A	44.35	3.64	34.23	38.18	54.00	-15.82	**C**
6498.64	52.67	100	135			44.49	4.22	35.60	47.99	74.00	-26.01	
4824.00	53.17	100	180			44.70	3.59	34.24	46.30	74.00	-27.70	**Ch. 1/**
4824.00				42.17	A	44.70	3.59	34.24	35.30	54.00	-18.70	**A**
6432.00	53.17	100	135			44.48	4.20	35.57	48.46	74.00	-25.54	
4924.00	53.67	100	135			44.17	3.67	34.22	47.39	74.00	-26.61	**Ch. 11/**
4924.00				43.67	A	44.17	3.67	34.22	37.39	54.00	-16.61	**A**
6565.16	52.50	100	45			44.58	4.25	35.60	47.77	74.00	-26.23	

RADIATED EMISSIONS TEST RESULTS

CLIENT:	Intel Corporation	**DATE:**	06/25/08
EUT:	Intel WiFi Link 5300	**PROJECT NUMBER:**	INTEL-080926
MODEL NUMBER:	533AN_HMW	**TEST ENGINEER:**	KN
SERIAL NUMBER:	0016EA038A16	**SITE #:**	2
CONFIGURATION:	Tested installed in a host computer's mini PCI slot in **802.11g (2400-2483.5 MHz) mode.**	**TEMPERATURE:**	19° C
		HUMIDITY:	57% RH
		TIME:	8:00 AM

Description:	Radiated RF Emissions (1 GHz – 18 GHz)
Results:	**PASSED** Horizontal and Vertical Antenna Polarizations Class B Limits
Note:	Radiated Emissions Measurements were performed on the EUT with power supply set at the following voltage and frequency. • 120VAC / 60 Hz.

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

Corrected Meter Reading = 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:

CML = Specification Limit - F - C + D

Radiated Emissions Test Results (Continued)

*Fundamental Measurements in **802.11g mode (2400-2483.5 MHz)***
Channels 1, 2, 6, 10, & 11
Continuous TX** at **Chain A** Antenna port with **Tyco Stamped PIFA Antennas
Aegis Labs, Inc. File #: INTEL-080926-98

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*
2412.00	62.83	100	90			2.53	32.19	97.55			**Ch. 1**
2412.00				53.00	A	2.53	32.19	87.72			
2417.00	63.50	100	90			2.53	32.20	98.23			**Ch. 2**
2417.00				53.50	A	2.53	32.20	88.23			
2437.00	64.33	100	90			2.54	32.22	99.09			**Ch. 6**
2437.00				54.83	A	2.54	32.22	89.59			
2457.00	65.17	100	90			2.55	32.25	99.97			**Ch. 10**
2457.00				55.00	A	2.55	32.25	89.80			
2462.00	63.83	125	90			2.55	32.25	98.64			**Ch. 11**
2462.00				53.67	A	2.55	32.25	88.48			

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*
2412.00	67.50	100	180			2.53	31.92	101.95			**Ch. 1**
2412.00				57.67	A	2.53	31.92	92.12			
2417.00	69.00	100	180			2.53	31.93	103.46			**Ch. 2**
2417.00				59.00	A	2.53	31.93	93.46			
2437.00	68.33	100	180			2.54	31.97	102.84			**Ch. 6**
2437.00				58.83	A	2.54	31.97	93.34			
2457.00	69.17	100	180			2.55	32.01	103.73			**Ch. 10**
2457.00				59.17	A	2.55	32.01	93.73			
2462.00	67.67	100	180			2.55	32.02	102.25			**Ch. 11**
2462.00				57.67	A	2.55	32.02	92.25			

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 **802.11g mode (2400-2483.5 MHz)***
Channels 1, 2, 10, & 11
Continuous TX** at **Chain A** Antenna port with **Tyco Stamped PIFA Antennas
Aegis Labs, Inc. File #: INTEL-080926-98

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								61.88	74.00	-12.12	**Ch. 1**
2390.00					A			40.05	54.00	-13.95	
2400.00	36.50	100	90			2.52	32.18	71.20	77.55	-6.35	
2390.00								57.40	74.00	-16.60	**Ch. 2**
2390.00					A			39.23	54.00	-14.77	
2400.00	34.17	100	90			2.52	32.18	68.87	78.23	-9.36	
2483.50								62.30	74.00	-11.70	**Ch. 10**
2483.50					A			43.30	54.00	-10.70	
2483.50								63.14	74.00	-10.86	**Ch. 11**
2483.50					A			40.15	54.00	-13.85	

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								66.28	74.00	-7.72	**Ch. 1**
2390.00					A			44.45	54.00	-9.55	
2400.00	40.83	100	180			2.52	31.90	75.25	81.95	-6.70	
2390.00								62.63	74.00	-11.37	**Ch. 2**
2390.00					A			44.46	54.00	-9.54	
2400.00	42.33	100	180			2.52	31.90	76.75	83.46	-6.71	
2483.50								66.06	74.00	-7.94	**Ch. 10**
2483.50					A			47.23	54.00	-6.77	
2483.50								66.75	74.00	-7.26	**Ch. 11**
2483.50					A			43.92	54.00	-10.09	

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:

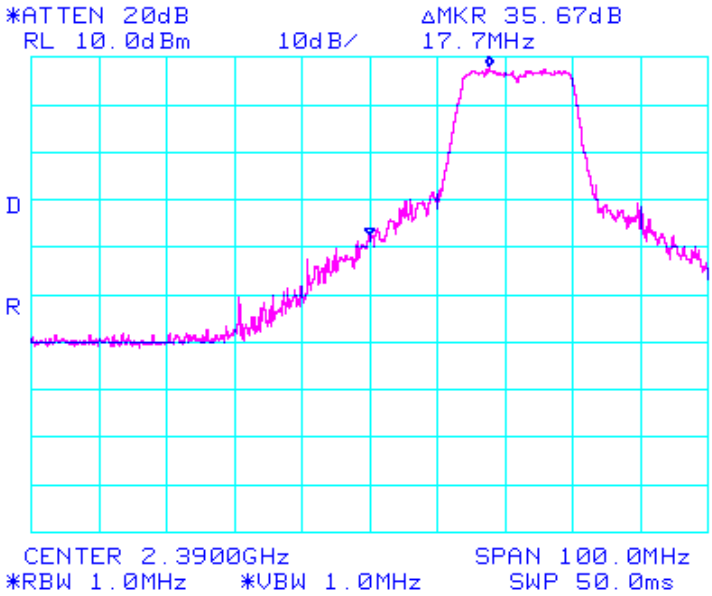
BE = Fm – Δm

Where
BE = Band Edge Field Strength
Fm = Measured Fundamental (Peak or Average)
Δm = Measured Conducted Band Edge Delta (Peak or Average)

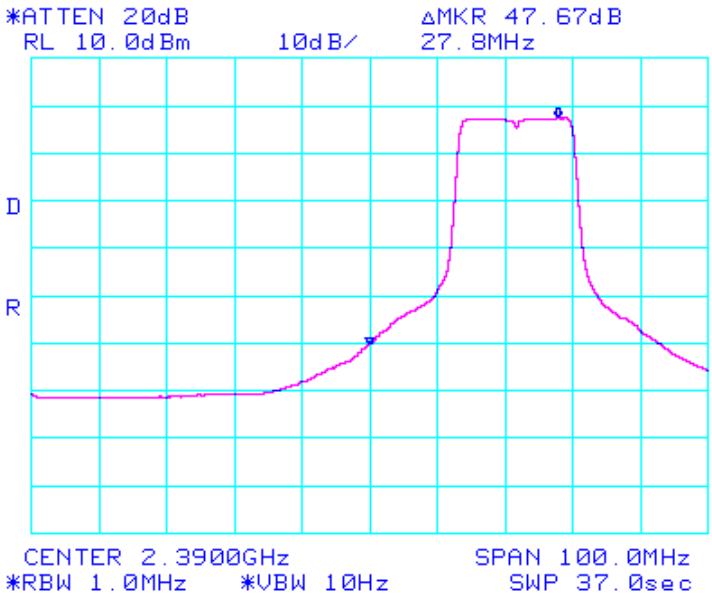
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.412 GHz band edge **PEAK DELTA**	RC



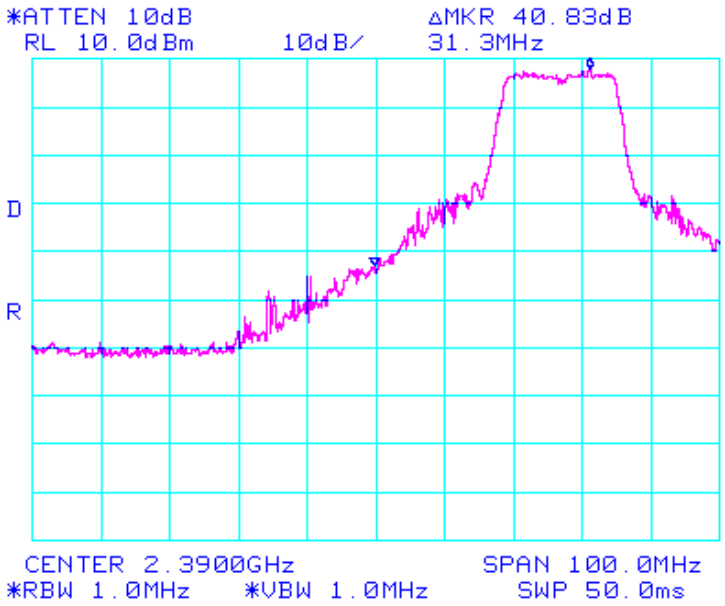
Test Date	*Data*	*Test Eng.*
04/08/08	2.412 GHz band edge **AVERAGE DELTA**	RC



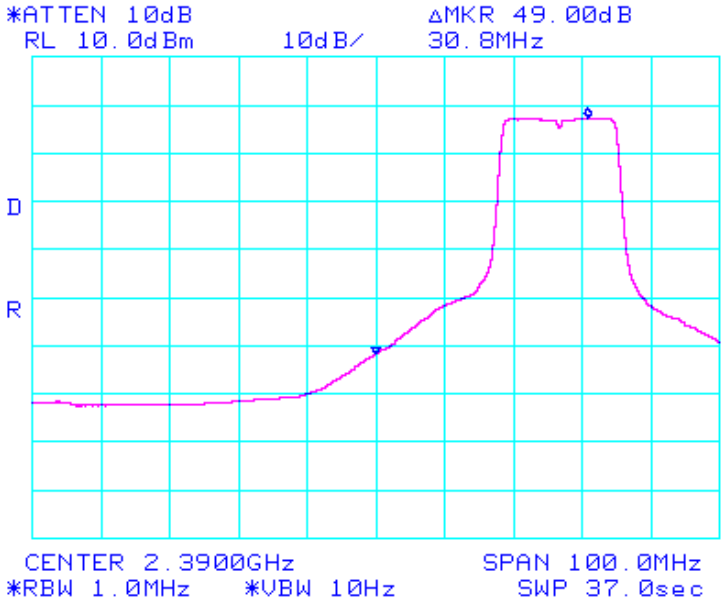
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.417 GHz band edge **PEAK DELTA**	RC



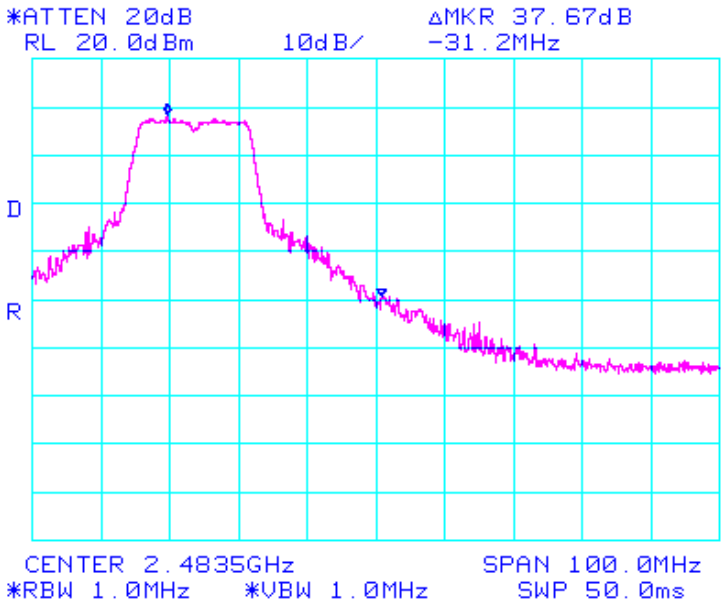
Test Date	*Data*	*Test Eng.*
04/08/08	2.417 GHz band edge **AVERAGE DELTA**	RC



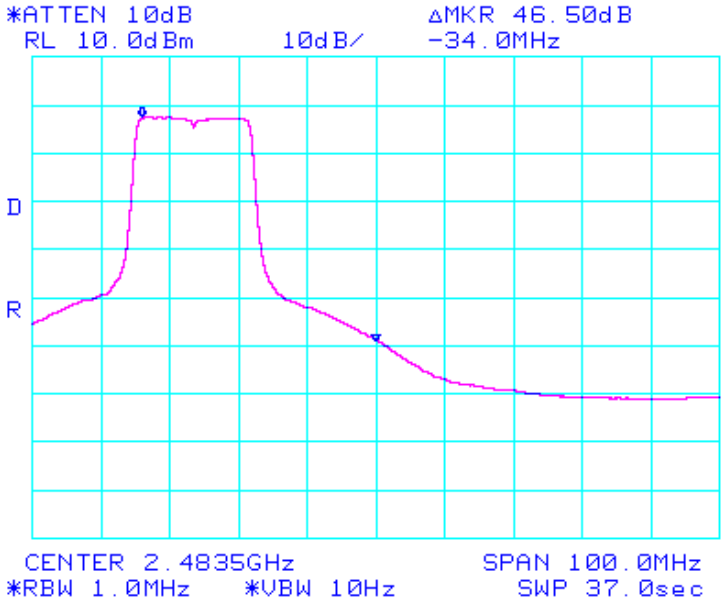
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.457 GHz band edge **PEAK DELTA**	RC



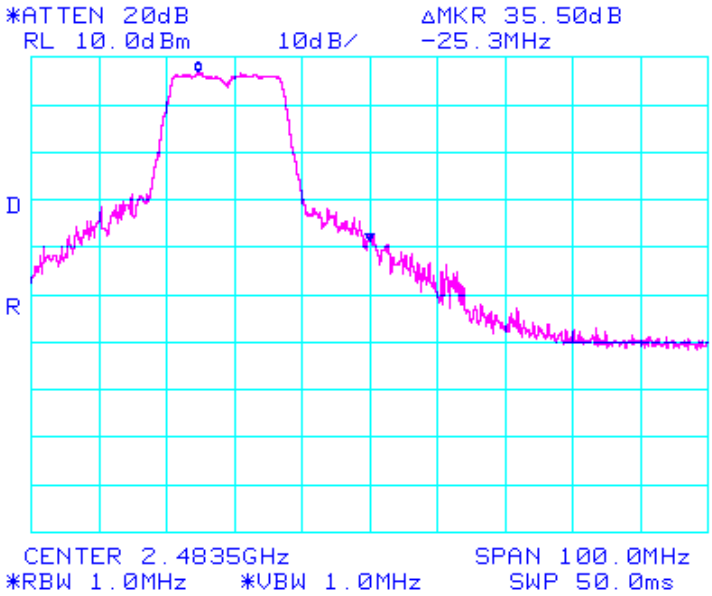
Test Date	*Data*	*Test Eng.*
04/08/08	2.457 GHz band edge **AVERAGE DELTA**	RC



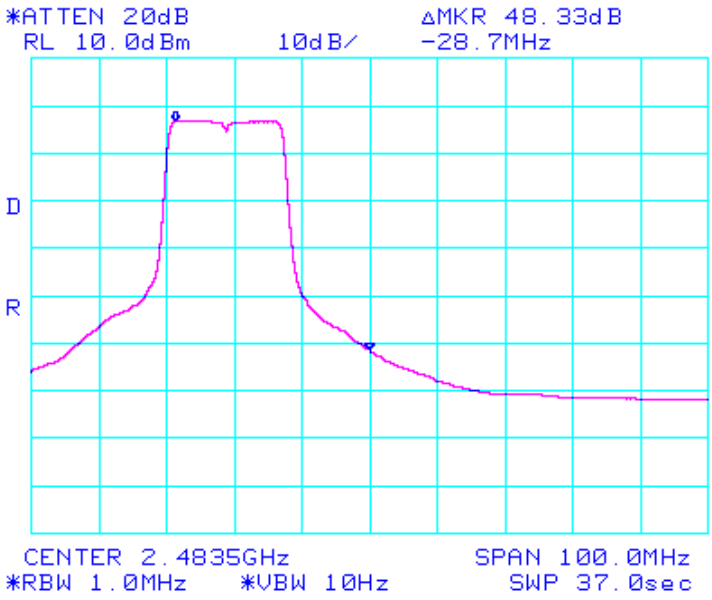
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.462 GHz band edge **PEAK DELTA**	RC



Test Date	*Data*	*Test Eng.*
04/08/08	2.462 GHz band edge **AVERAGE DELTA**	RC



Radiated Emissions Test Results (Continued)

*Fundamental Measurements in **802.11g mode (2400-2483.5 MHz)***
Channels 1, 2, 6, 10, & 11
Continuous TX** at **Chain B** Antenna port with **Tyco Stamped PIFA Antennas
Aegis Labs, Inc. File #: INTEL-080926-99

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*
2412.00	57.83	100	135			2.53	32.19	92.55			**Ch. 1**
2412.00				48.67	A	2.53	32.19	83.39			
2417.00	60.33	100	135			2.53	32.20	95.06			**Ch. 2**
2417.00				51.00	A	2.53	32.20	85.73			
2437.00	59.33	100	135			2.54	32.22	94.09			**Ch. 6**
2437.00				49.83	A	2.54	32.22	84.59			
2457.00	59.17	100	180			2.55	32.25	93.97			**Ch. 10**
2457.00				49.83	A	2.55	32.25	84.63			
2462.00	57.83	125	180			2.55	32.25	92.64			**Ch. 11**
2462.00				47.83	A	2.55	32.25	82.64			

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*
2412.00	63.17	100	225			2.53	31.92	97.62			**Ch. 1**
2412.00				53.33	A	2.53	31.92	87.78			
2417.00	64.00	100	225			2.53	31.93	98.46			**Ch. 2**
2417.00				54.67	A	2.53	31.93	89.13			
2437.00	63.83	100	180			2.54	31.97	98.34			**Ch. 6**
2437.00				54.50	A	2.54	31.97	89.01			
2457.00	64.50	100	225			2.55	32.01	99.06			**Ch. 10**
2457.00				54.33	A	2.55	32.01	88.89			
2462.00	62.00	145	225			2.55	32.02	96.58			**Ch. 11**
2462.00				52.00	A	2.55	32.02	86.58			

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 **802.11g mode (2400-2483.5 MHz)***
Channels 1, 2, 10, & 11
Continuous TX** at **Chain B** Antenna port with **Tyco Stamped PIFA Antennas
Aegis Labs, Inc. File #: INTEL-080926-99

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								55.22	74.00	-18.78	**Ch. 1**
2390.00					A			33.05	54.00	-20.95	
2400.00	31.17	100	135			2.52	32.18	65.87	72.55	-6.68	
2390.00								51.23	74.00	-22.77	**Ch. 2**
2390.00					A			34.23	54.00	-19.77	
2400.00	33.17	100	135			2.52	32.18	67.87	75.06	-7.19	
2483.50								51.30	74.00	-22.70	**Ch. 10**
2483.50					A			33.80	54.00	-20.20	
2483.50								53.47	74.00	-20.53	**Ch. 11**
2483.50					A			32.31	54.00	-21.69	

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								60.29	74.00	-13.71	**Ch. 1**
2390.00					A			37.44	54.00	-16.56	
2400.00	32.67	100	225			2.52	31.90	67.09	77.62	-10.53	
2390.00								54.63	74.00	-19.37	**Ch. 2**
2390.00					A			37.63	54.00	-16.37	
2400.00	39.00	100	225			2.52	31.90	73.42	78.46	-5.04	
2483.50								56.39	74.00	-17.61	**Ch. 10**
2483.50					A			38.06	54.00	-15.94	
2483.50								57.41	74.00	-16.60	**Ch. 11**
2483.50					A			36.25	54.00	-17.76	

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:

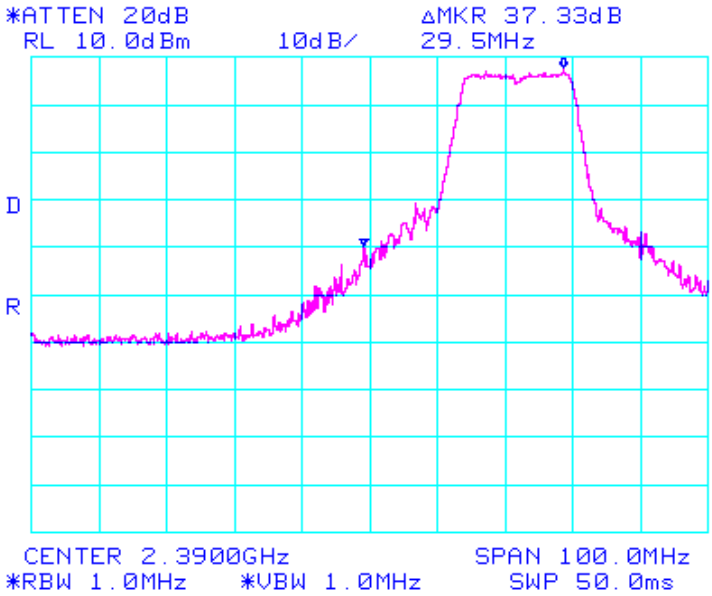
$BE = Fm - \Delta m$

Where
BE = Band Edge Field Strength
Fm = Measured Fundamental (Peak or Average)
Δm = Measured Conducted Band Edge Delta (Peak or Average)

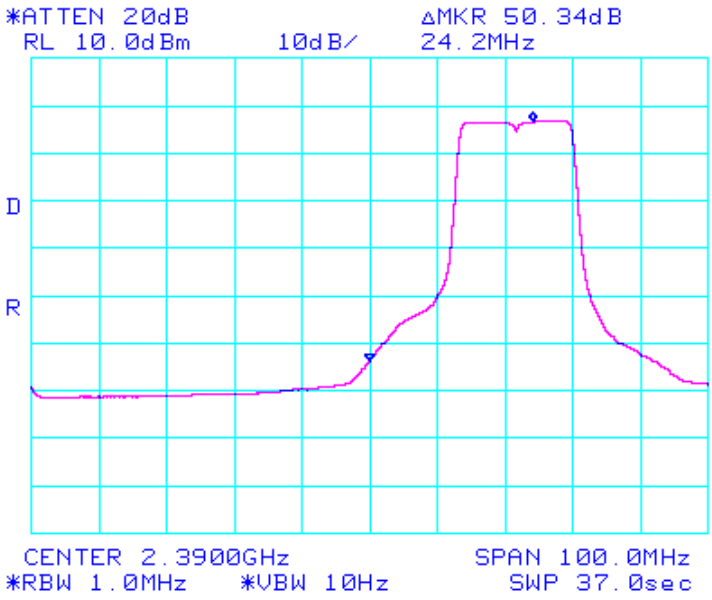
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.412 GHz band edge **PEAK DELTA**	RC



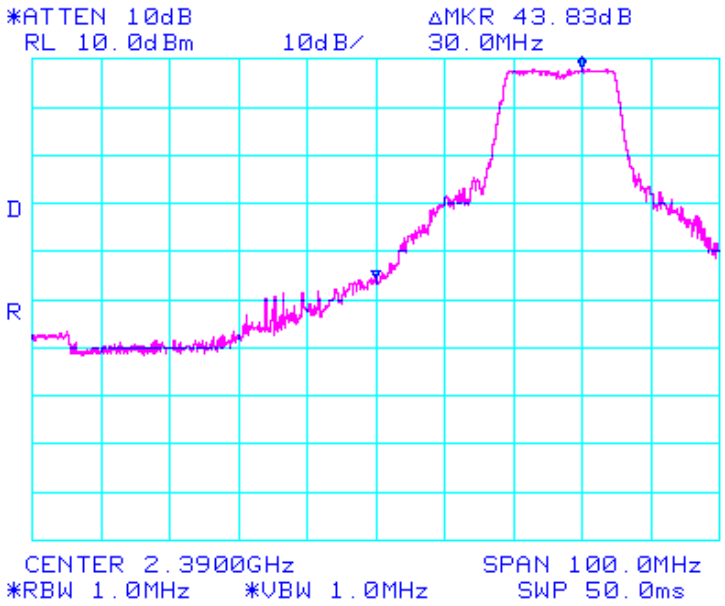
Test Date	*Data*	*Test Eng.*
04/08/08	2.412 GHz band edge **AVERAGE DELTA**	RC



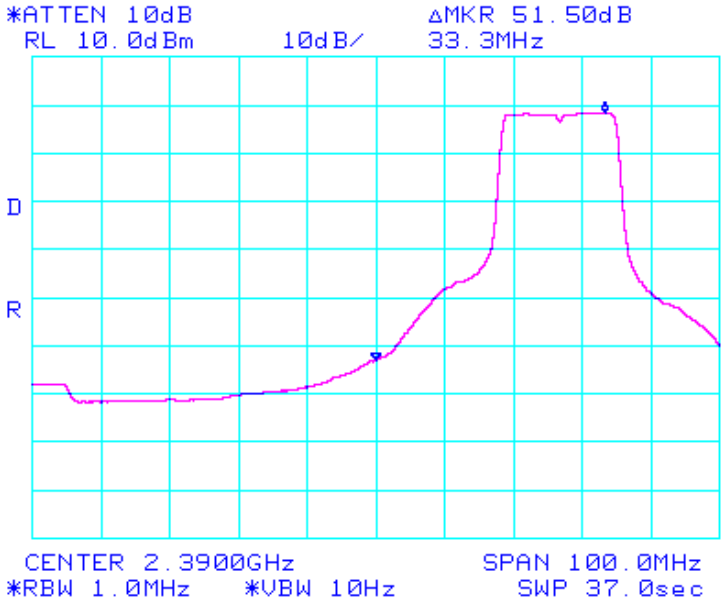
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.417 GHz band edge **PEAK DELTA**	RC



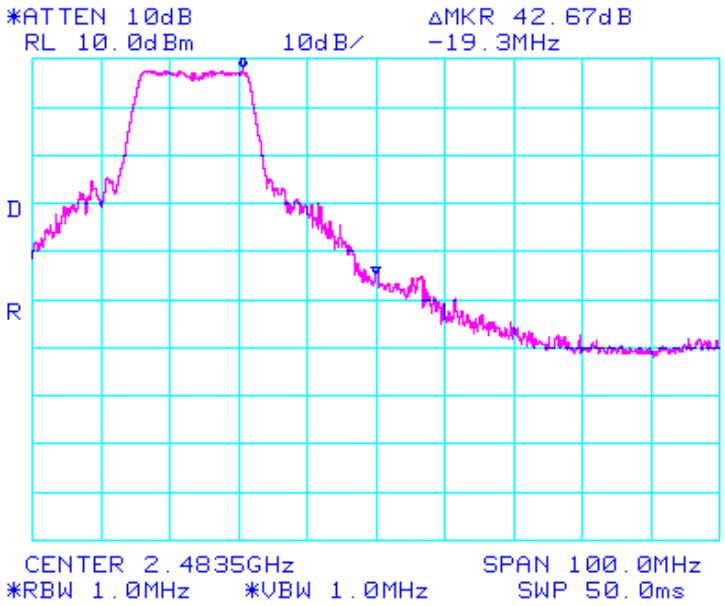
Test Date	*Data*	*Test Eng.*
04/08/08	2.417 GHz band edge **AVERAGE DELTA**	RC



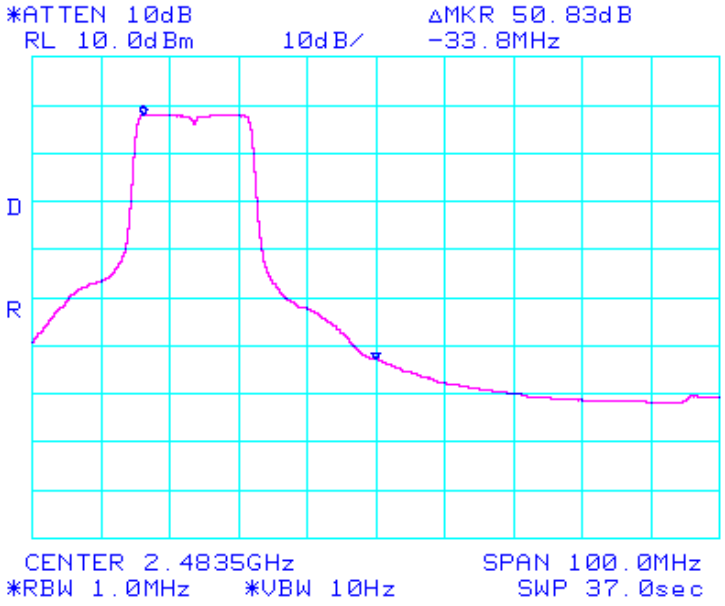
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.457 GHz band edge **PEAK DELTA**	RC



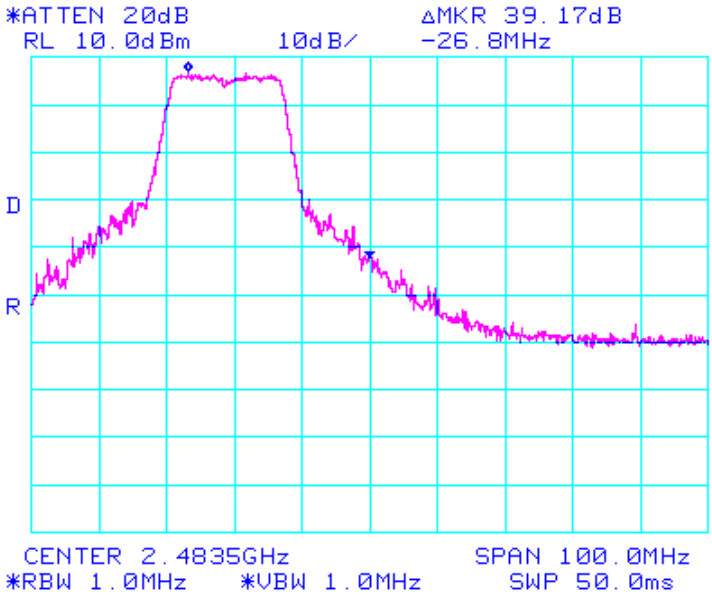
Test Date	*Data*	*Test Eng.*
04/08/08	2.457 GHz band edge **AVERAGE DELTA**	RC



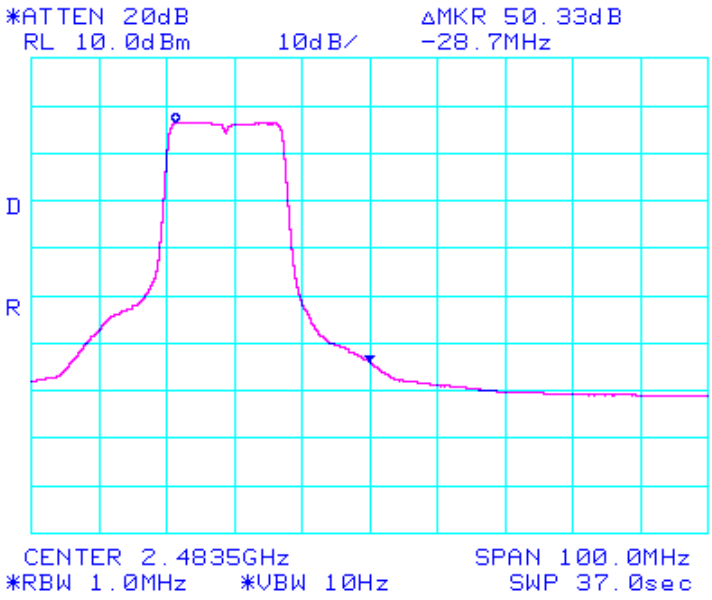
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.462 GHz band edge **PEAK DELTA**	RC



Test Date	*Data*	*Test Eng.*
04/08/08	2.462 GHz band edge **AVERAGE DELTA**	RC



Radiated Emissions Test Results (Continued)

*Fundamental Measurements in **802.11g mode (2400-2483.5 MHz)***
Channels 1, 2, 6, 10, & 11
Continuous TX** at **Chain C** Antenna port with **Tyco Stamped PIFA Antennas
Aegis Labs, Inc. File #: INTEL-080926-100

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*
2412.00	57.33	100	225			2.53	32.19	92.05			**Ch. 1**
2412.00				47.83	A	2.53	32.19	82.55			
2417.00	60.00	100	225			2.53	32.20	94.73			**Ch. 2**
2417.00				49.67	A	2.53	32.20	84.40			
2437.00	58.67	100	225			2.54	32.22	93.43			**Ch. 6**
2437.00				49.00	A	2.54	32.22	83.76			
2457.00	60.33	100	225			2.55	32.25	95.13			**Ch. 10**
2457.00				49.67	A	2.55	32.25	84.47			
2462.00	57.83	125	225			2.55	32.25	92.64			**Ch. 11**
2462.00				48.00	A	2.55	32.25	82.81			

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*
2412.00	66.00	100	0			2.53	31.92	100.45			**Ch. 1**
2412.00				56.50	A	2.53	31.92	90.95			
2417.00	68.67	100	0			2.53	31.93	103.13			**Ch. 2**
2417.00				58.67	A	2.53	31.93	93.13			
2437.00	67.17	100	0			2.54	31.97	101.68			**Ch. 6**
2437.00				57.67	A	2.54	31.97	92.18			
2457.00	67.50	100	0			2.55	32.01	102.06			**Ch. 10**
2457.00				57.83	A	2.55	32.01	92.39			
2462.00	66.33	100	0			2.55	32.02	100.91			**Ch. 11**
2462.00				55.83	A	2.55	32.02	90.41			

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 **802.11g mode (2400-2483.5 MHz)***
Channels 1, 2, 10, & 11
Continuous TX** at **Chain C** Antenna port with **Tyco Stamped PIFA Antennas
Aegis Labs, Inc. File #: INTEL-080926-100

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								53.22	74.00	-20.78	**Ch. 1**
2390.00					A			31.72	54.00	-22.28	
2400.00	30.67	100	225			2.52	32.18	65.37	72.05	-6.68	
2390.00								52.73	74.00	-21.27	**Ch. 2**
2390.00					A			38.40	54.00	-15.60	
2400.00	32.67	100	225			2.52	32.18	67.37	74.73	-7.36	
2483.50								54.47	74.00	-19.53	**Ch. 10**
2483.50					A			37.97	54.00	-16.03	
2483.50								55.31	74.00	-18.69	**Ch. 11**
2483.50					A			31.31	54.00	-22.69	

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								61.62	74.00	-12.38	**Ch. 1**
2390.00					A			40.12	54.00	-13.88	
2400.00	35.17	100	0			2.52	31.90	69.59	80.45	-10.86	
2390.00								61.13	74.00	-12.87	**Ch. 2**
2390.00					A			47.13	54.00	-6.87	
2400.00	36.50	100	0			2.52	31.90	70.92	83.13	-12.21	
2483.50								61.40	74.00	-12.60	**Ch. 10**
2483.50					A			45.89	54.00	-8.11	
2483.50								63.58	74.00	-10.43	**Ch. 11**
2483.50					A			38.91	54.00	-15.10	

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:

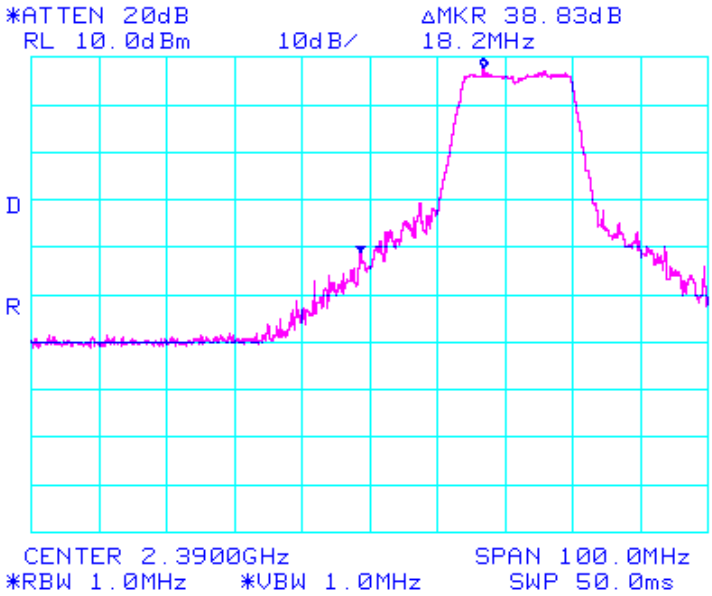
BE = Fm – Δm

Where
BE = Band Edge Field Strength
Fm = Measured Fundamental (Peak or Average)
Δm = Measured Conducted Band Edge Delta (Peak or Average)

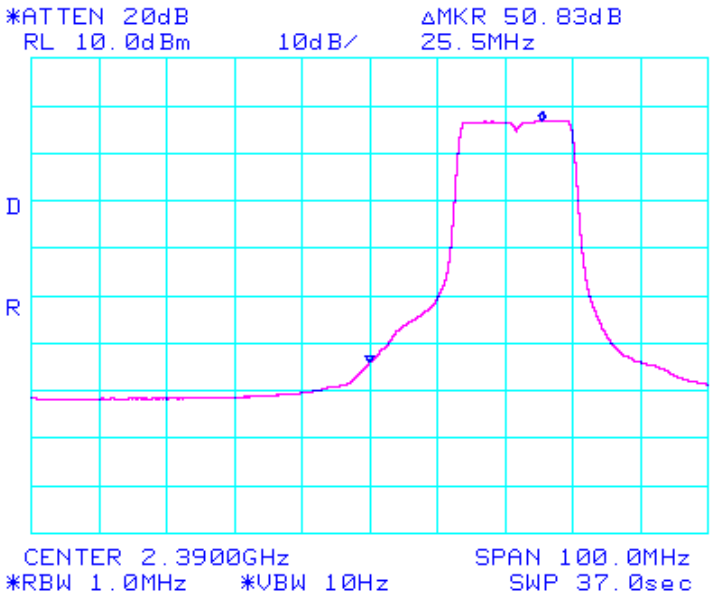
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.412 GHz band edge **PEAK DELTA**	RC



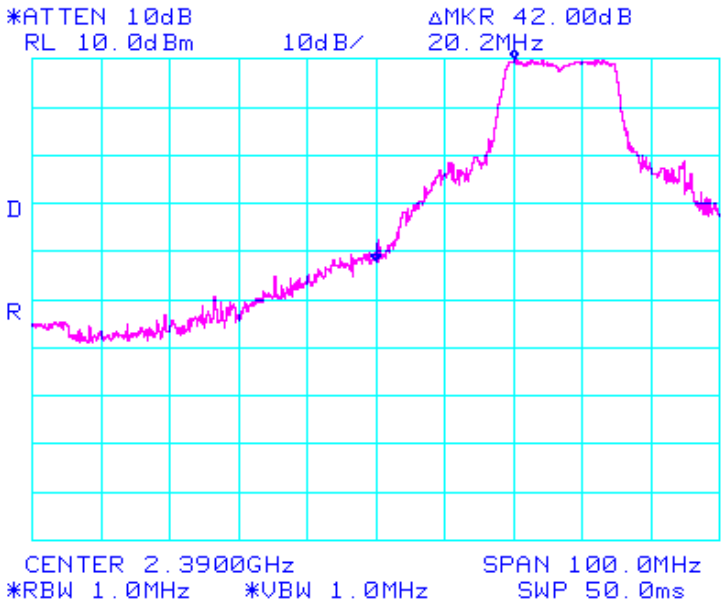
Test Date	*Data*	*Test Eng.*
04/08/08	2.412 GHz band edge **AVERAGE DELTA**	RC



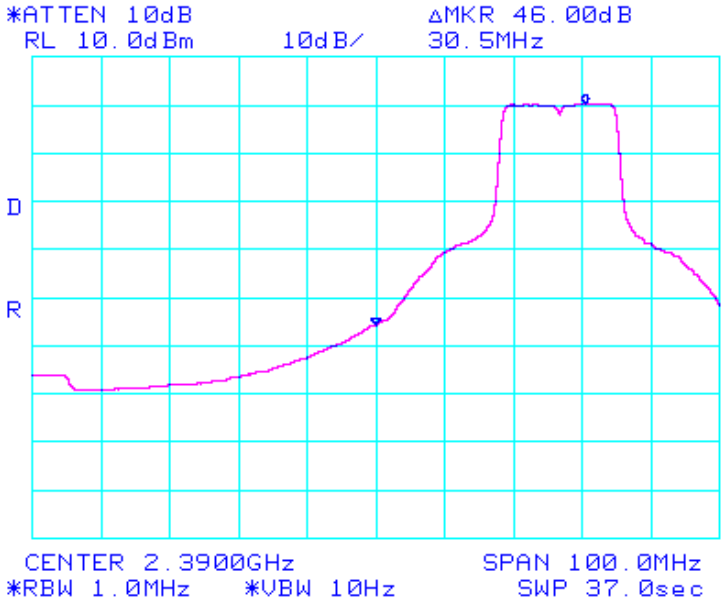
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.417 GHz band edge **PEAK DELTA**	RC



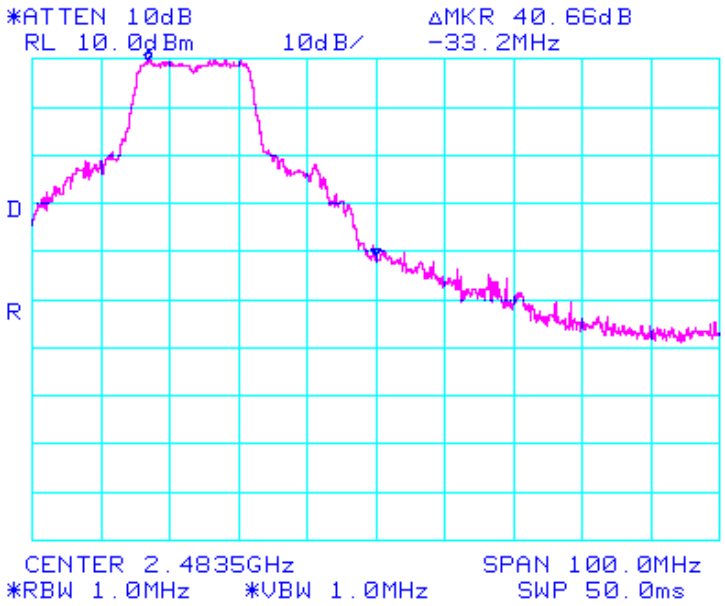
Test Date	*Data*	*Test Eng.*
04/08/08	2.417 GHz band edge **AVERAGE DELTA**	RC



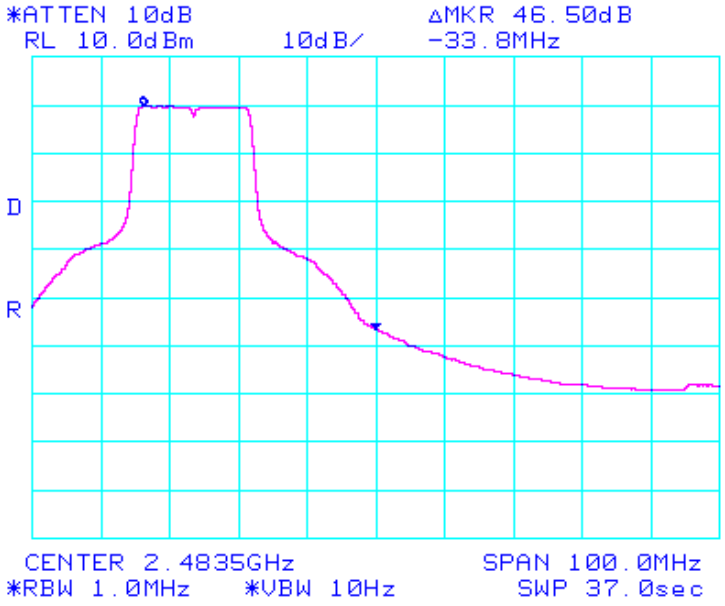
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.457 GHz band edge **PEAK DELTA**	RC



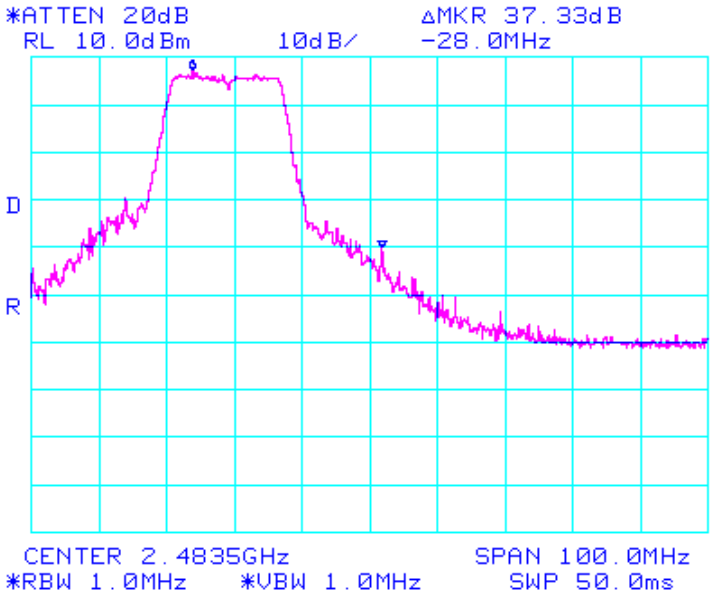
Test Date	*Data*	*Test Eng.*
04/08/08	2.457 GHz band edge **AVERAGE DELTA**	RC



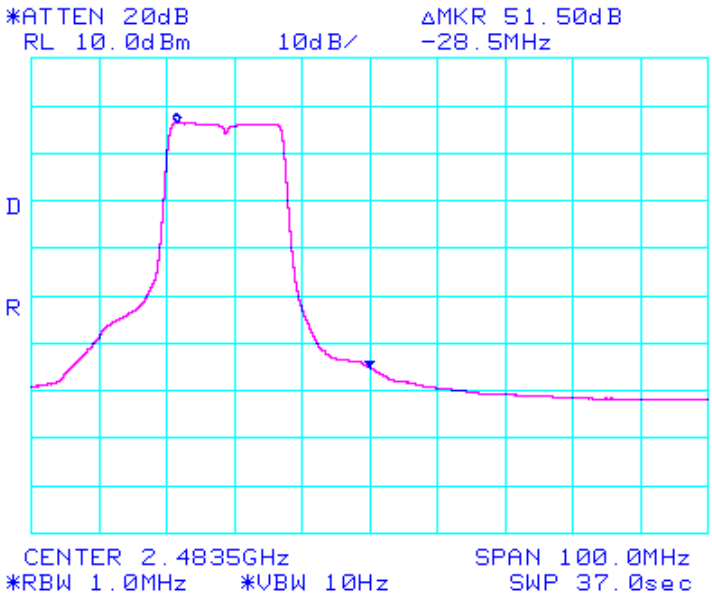
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.462 GHz band edge **PEAK DELTA**	RC



Test Date	*Data*	*Test Eng.*
04/08/08	2.462 GHz band edge **AVERAGE DELTA**	RC



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, B, & C** Antenna ports with **Tyco Stamped PIFA. Antennas
Aegis Labs, Inc. File #: INTEL-080926-101

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*	*Channel/ Chain Tested*
4873.99	51.33	100	180			44.35	3.64	34.18	44.79	74.00	-29.21	**Ch. 6/**
4873.99				41.33	A	44.35	3.64	34.23	34.84	54.00	-19.16	**C**
6498.64	54.17	100	180			44.49	4.22	35.60	49.49	74.00	-24.51	

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*	*Channel/ Chain Tested*
3249.32	54.17	100	0			46.49	2.94	32.75	43.37	74.00	-30.63	**Ch. 6/**
6498.64	53.17	100	135			44.49	4.22	35.60	48.49	74.00	-25.51	**A**

Only tested mid channel because that was worst case from all other 2.4GHz range.

RADIATED EMISSIONS TEST RESULTS

CLIENT:	Intel Corporation	**DATE:**	06/25/08
EUT:	Intel WiFi Link 5300	**PROJECT NUMBER:**	INTEL-080926
MODEL NUMBER:	533AN_HMW	**TEST ENGINEER:**	KN
SERIAL NUMBER:	0016EA038A16	**SITE #:**	2
CONFIGURATION:	Tested installed in a host computer's mini PCI slot in **802.11n (2400-2483.5 MHz) mode 20MHz Wide.**	**TEMPERATURE:**	19° C
		HUMIDITY:	57% RH
		TIME:	8:00 AM

Description:	Radiated RF Emissions (1 GHz – 18 GHz)
Results:	**PASSED** Horizontal and Vertical Antenna Polarizations Class B Limits
Note:	Radiated Emissions Measurements were performed on the EUT with power supply set at the following voltage and frequency. • 120VAC / 60 Hz.

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

Corrected Meter Reading = 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:

CML = Specification Limit - F - C + D

Radiated Emissions Test Results (Continued)

*Fundamental Measurements in **802.11n mode 20MHz Wide (2400-2483.5 MHz)***
Channels 1, 2, 6, 10, & 11
Continuous TX** at **Chain A** Antenna port with **Tyco Stamped PIFA Antennas
Aegis Labs, Inc. File #: INTEL-080926-98

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*
2412.00	62.33	100	90			2.53	32.19	97.05			**Ch. 1**
2412.00				51.67	A	2.53	32.19	86.39			
2417.00	64.50	100	90			2.53	32.20	99.23			**Ch. 2**
2417.00				54.00	A	2.53	32.20	88.73			
2437.00	64.83	100	90			2.54	32.22	99.59			**Ch. 6**
2437.00				54.17	A	2.54	32.22	88.93			
2457.00	66.00	100	90			2.55	32.25	100.80			**Ch. 10**
2457.00				55.67	A	2.55	32.25	90.47			
2462.00	64.33	100	90			2.55	32.25	99.14			**Ch. 11**
2462.00				53.50	A	2.55	32.25	88.31			

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*
2412.00	67.67	100	180			2.53	31.92	102.12			**Ch. 1**
2412.00				57.00	A	2.53	31.92	91.45			
2417.00	66.83	100	225			2.53	31.93	101.29			**Ch. 2**
2417.00				56.00	A	2.53	31.93	90.46			
2437.00	68.33	100	180			2.54	31.97	102.84			**Ch. 6**
2437.00				57.33	A	2.54	31.97	91.84			
2457.00	67.33	100	225			2.55	32.01	101.89			**Ch. 10**
2457.00				57.33	A	2.55	32.01	91.89			
2462.00	66.33	145	225			2.55	32.02	100.91			**Ch. 11**
2462.00				55.33	A	2.55	32.02	89.91			

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 ***802.11n mode 20MHz Wide (2400-2483.5 MHz)***
Channels 1, 2, 10, & 11
Continuous TX *at* ***Chain A*** *Antenna port with* ***Tyco Stamped PIFA Antennas***
Aegis Labs, Inc. File #: INTEL-080926-98

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								61.05	74.00	-12.95	**Ch. 1**
2390.00					A			38.89	54.00	-15.11	
2400.00	36.33	100	90			2.52	32.18	71.03	77.05	-6.02	
2390.00								60.90	74.00	-13.10	**Ch. 2**
2390.00					A			40.57	54.00	-13.43	
2400.00	36.50	100	90			2.52	32.18	71.20	79.23	-8.03	
2483.50								64.30	74.00	-9.70	**Ch. 10**
2483.50					A			45.30	54.00	-8.70	
2483.50								62.47	74.00	-11.53	**Ch. 11**
2483.50					A			39.81	54.00	-14.19	

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								66.12	74.00	-7.88	**Ch. 1**
2390.00					A			43.95	54.00	-10.05	
2400.00	39.33	100	180			2.52	31.90	73.75	82.12	-8.37	
2390.00								62.96	74.00	-11.04	**Ch. 2**
2390.00					A			42.30	54.00	-11.70	
2400.00	39.83	100	180			2.52	31.90	74.25	81.29	-7.04	
2483.50								65.39	74.00	-8.61	**Ch. 10**
2483.50					A			46.72	54.00	-7.28	
2483.50								64.24	74.00	-9.77	**Ch. 11**
2483.50					A			41.41	54.00	-12.60	

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:

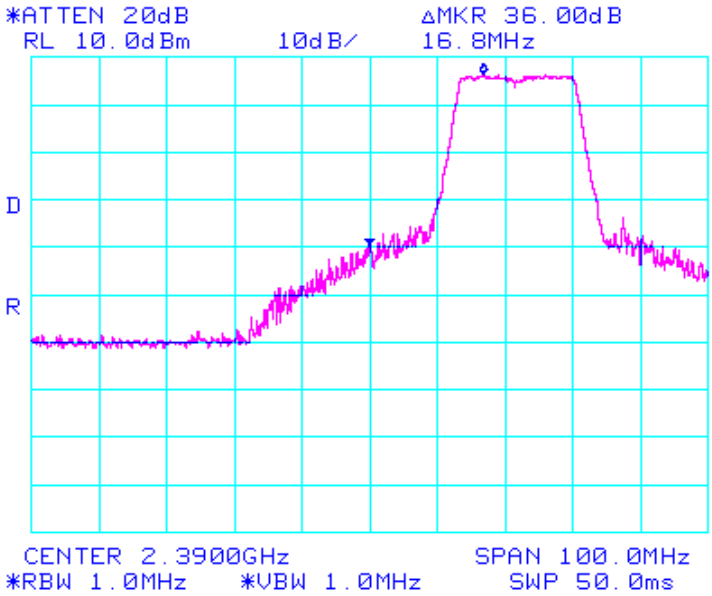
BE = Fm – Δm

Where
BE = Band Edge Field Strength
Fm = Measured Fundamental (Peak or Average)
Δm = Measured Conducted Band Edge Delta (Peak or Average)

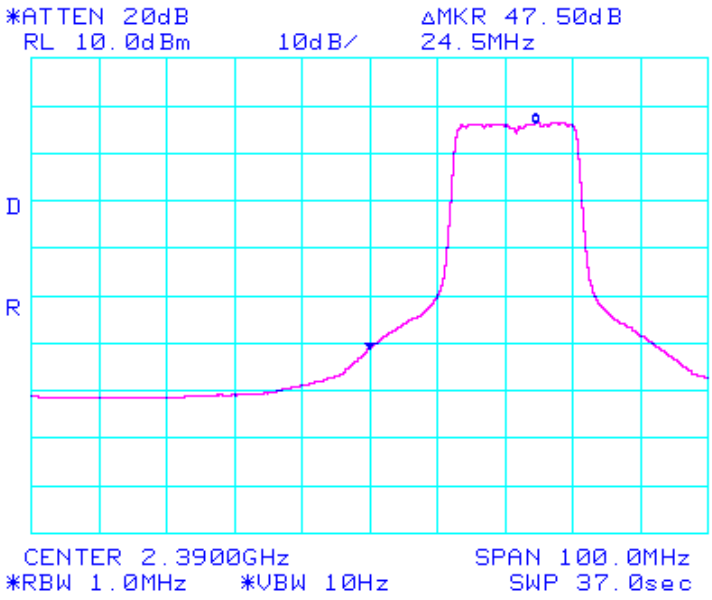
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.412 GHz band edge **PEAK DELTA**	RC



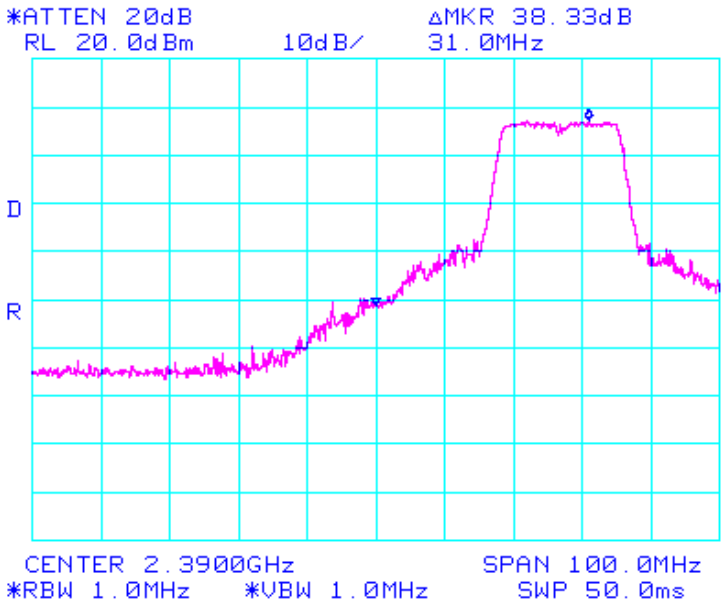
Test Date	*Data*	*Test Eng.*
04/08/08	2.412 GHz band edge **AVERAGE DELTA**	RC



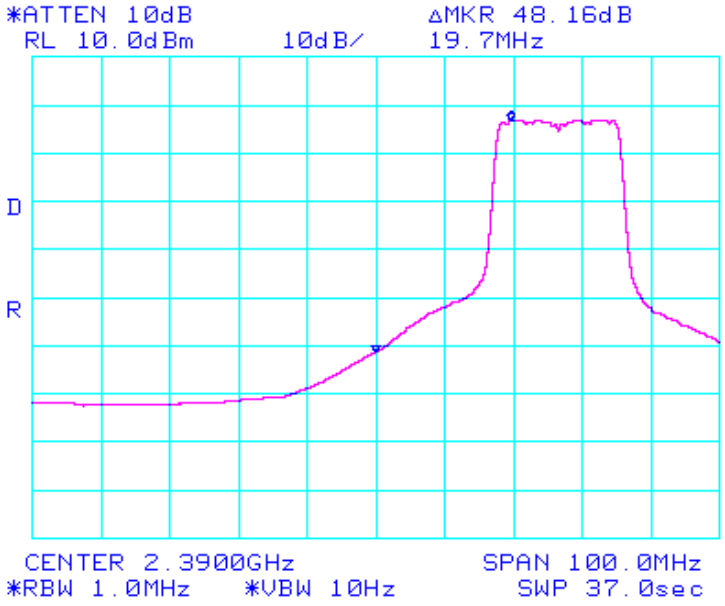
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.417 GHz band edge **PEAK DELTA**	RC



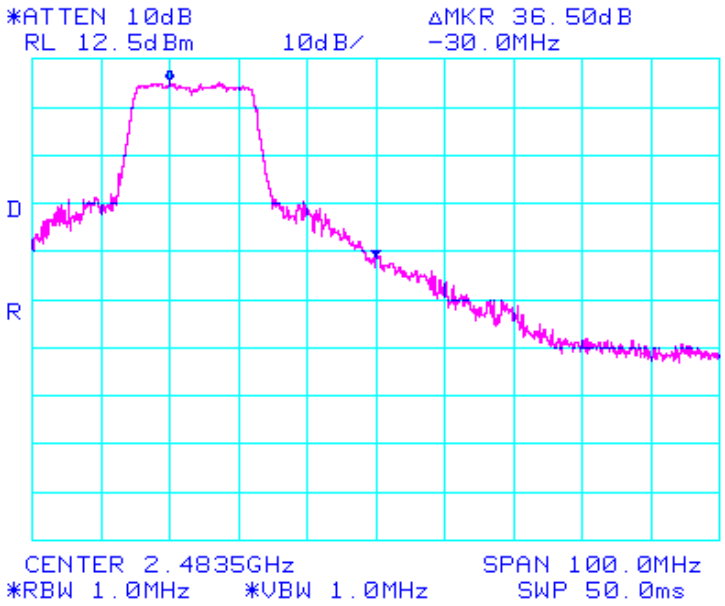
Test Date	*Data*	*Test Eng.*
04/08/08	2.417 GHz band edge **AVERAGE DELTA**	RC



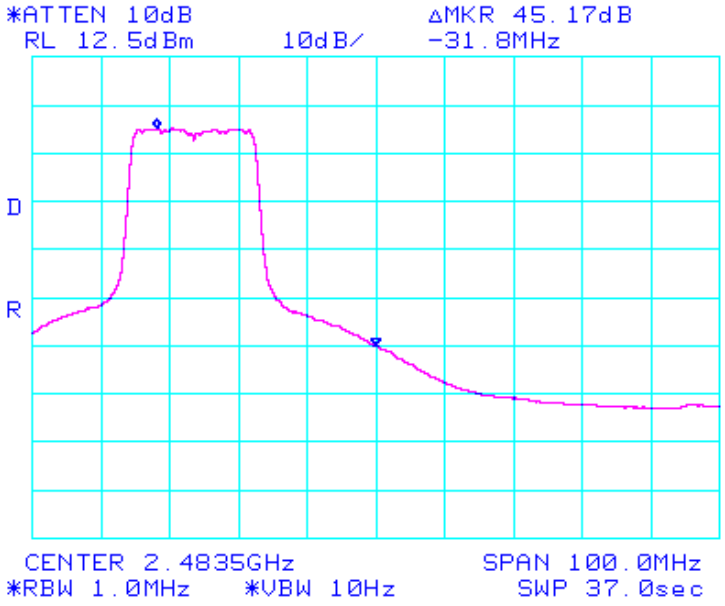
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.457 GHz band edge **PEAK DELTA**	RC



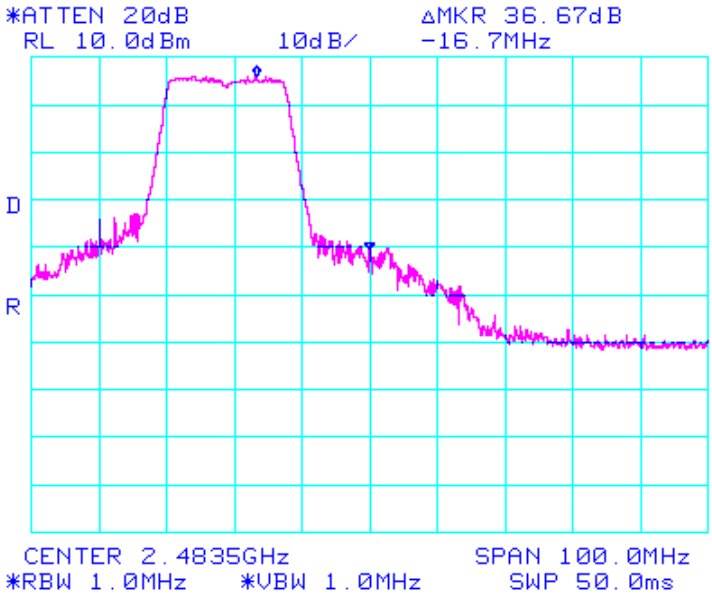
Test Date	*Data*	*Test Eng.*
04/08/08	2.457 GHz band edge **AVERAGE DELTA**	RC



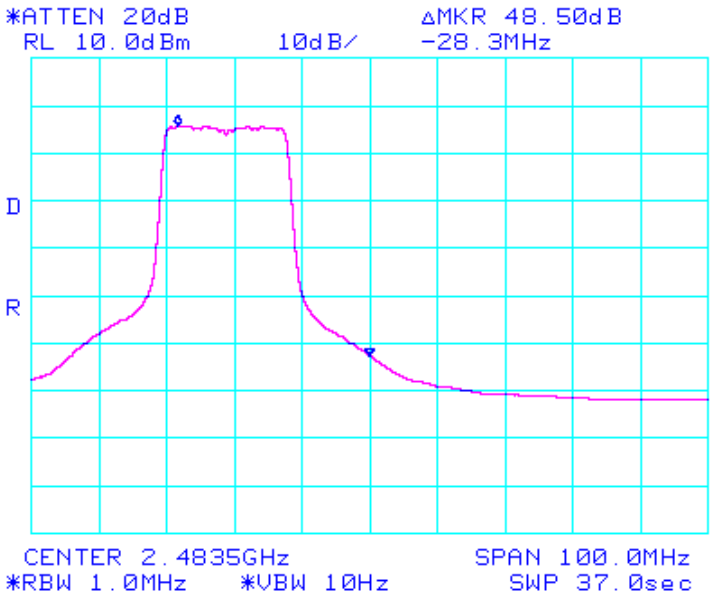
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.462 GHz band edge **PEAK DELTA**	RC



Test Date	*Data*	*Test Eng.*
04/08/08	2.462 GHz band edge **AVERAGE DELTA**	RC



Radiated Emissions Test Results (Continued)

*Fundamental Measurements in **802.11n mode 20MHz Wide (2400-2483.5 MHz)***
Channels 1, 2, 6, 10, & 11
Continuous TX** at **Chain B** Antenna port with **Tyco Stamped PIFA Antennas
Aegis Labs, Inc. File #: INTEL-080926-99

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*
2412.00	60.00	100	180			2.53	32.19	94.72			**Ch. 1**
2412.00				48.83	A	2.53	32.19	83.55			
2417.00	61.50	100	135			2.53	32.20	96.23			**Ch. 2**
2417.00				50.50	A	2.53	32.20	85.23			
2437.00	59.50	100	180			2.54	32.22	94.26			**Ch. 6**
2437.00				49.00	A	2.54	32.22	83.76			
2457.00	59.83	100	180			2.55	32.25	94.63			**Ch. 10**
2457.00				49.67	A	2.55	32.25	84.47			
2462.00	57.83	100	180			2.55	32.25	92.64			**Ch. 11**
2462.00				47.17	A	2.55	32.25	81.98			

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*
2412.00	62.50	100	225			2.53	31.92	96.95			**Ch. 1**
2412.00				52.17	A	2.53	31.92	86.62			
2417.00	62.17	100	225			2.53	31.93	96.63			**Ch. 2**
2417.00				51.33	A	2.53	31.93	85.79			
2437.00	60.50	100	180			2.54	31.97	95.01			**Ch. 6**
2437.00				50.00	A	2.54	31.97	84.51			
2457.00	62.83	100	0			2.55	32.01	97.39			**Ch. 10**
2457.00				52.17	A	2.55	32.01	86.73			
2462.00	58.83	145	0			2.55	32.02	93.41			**Ch. 11**
2462.00				48.00	A	2.55	32.02	82.58			

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 ***802.11n mode 20MHz Wide (2400-2483.5 MHz)***
Channels 1, 2, 10, & 11
Continuous TX *at* ***Chain B*** *Antenna port with* ***Tyco Stamped PIFA Antennas***
Aegis Labs, Inc. File #: INTEL-080926-99

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								55.72	74.00	-18.28	**Ch. 1**
2390.00					A			35.22	54.00	-18.78	
2400.00	31.50	100	180			2.52	32.18	66.20	74.72	-8.52	
2390.00								55.40	74.00	-18.60	**Ch. 2**
2390.00					A			34.23	54.00	-19.77	
2400.00	38.33	100	135			2.52	32.18	73.03	76.23	-3.20	
2483.50								53.47	74.00	-20.53	**Ch. 10**
2483.50					A			35.13	54.00	-18.87	
2483.50								53.81	74.00	-20.19	**Ch. 11**
2483.50					A			32.48	54.00	-21.52	

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								57.95	74.00	-16.05	**Ch. 1**
2390.00					A			38.29	54.00	-15.71	
2400.00	34.67	100	225			2.52	31.90	69.09	76.95	-7.86	
2390.00								55.80	74.00	-18.20	**Ch. 2**
2390.00					A			34.79	54.00	-19.21	
2400.00	34.33	100	225			2.52	31.90	68.75	76.63	-7.88	
2483.50								56.23	74.00	-17.77	**Ch. 10**
2483.50					A			37.39	54.00	-16.61	
2483.50								54.58	74.00	-19.43	**Ch. 11**
2483.50					A			33.08	54.00	-20.93	

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:

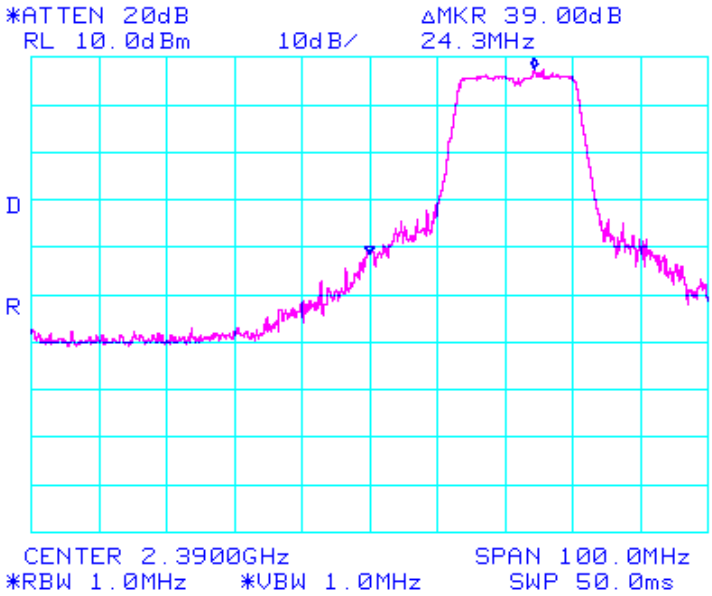
BE = Fm – Δm

Where
BE = Band Edge Field Strength
Fm = Measured Fundamental (Peak or Average)
Δm = Measured Conducted Band Edge Delta (Peak or Average)

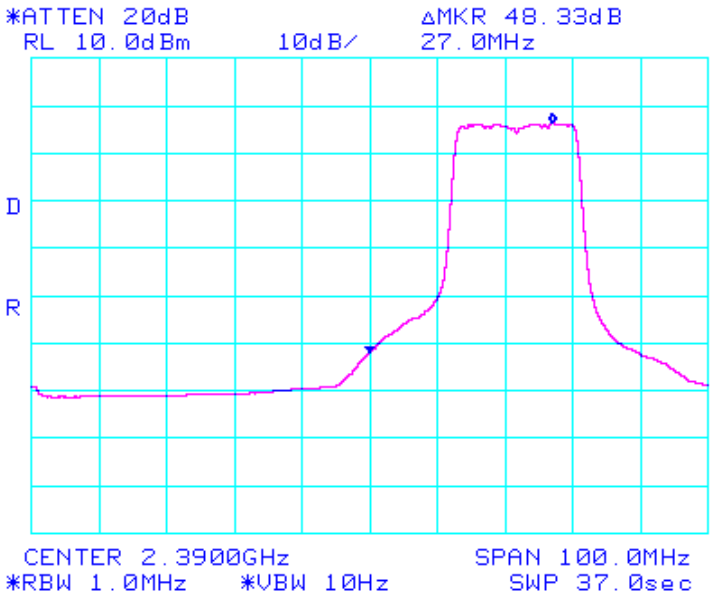
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.412 GHz band edge **PEAK DELTA**	RC



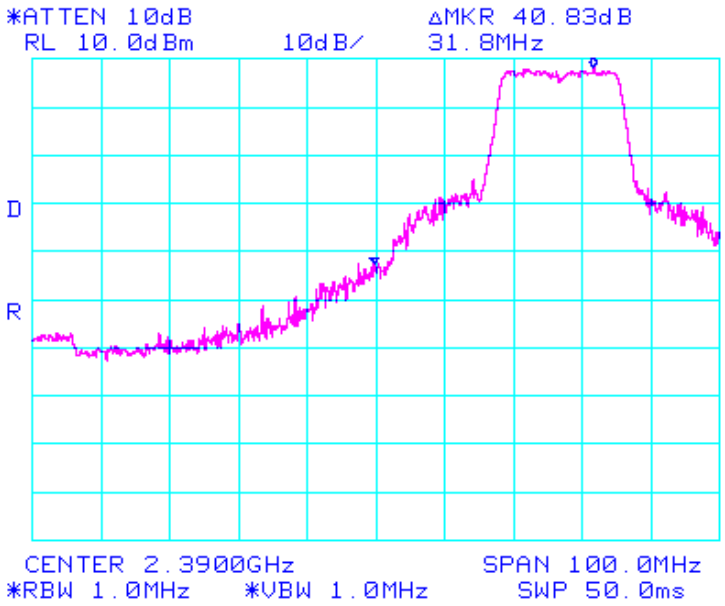
Test Date	*Data*	*Test Eng.*
04/08/08	2.412 GHz band edge **AVERAGE DELTA**	RC



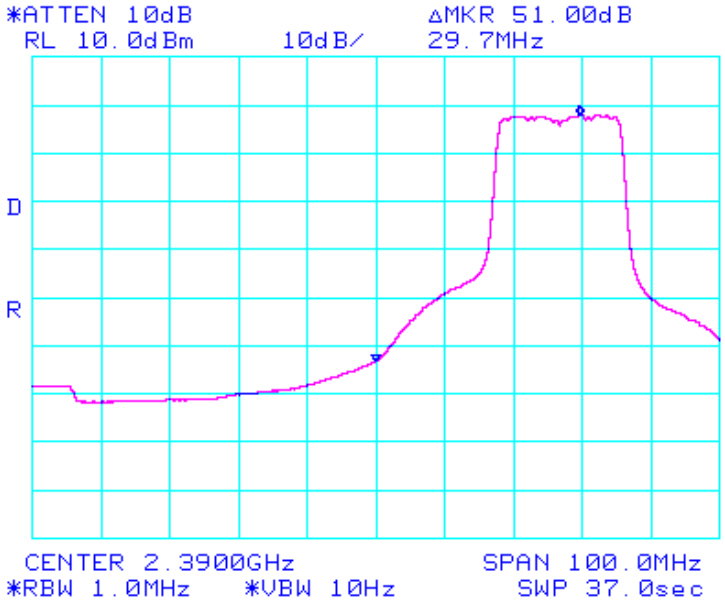
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.417 GHz band edge **PEAK DELTA**	RC



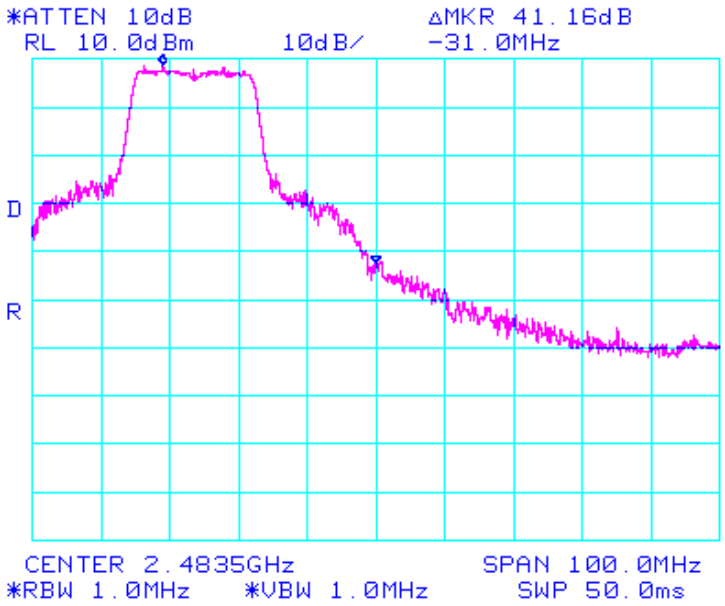
Test Date	*Data*	*Test Eng.*
04/08/08	2.417 GHz band edge **AVERAGE DELTA**	RC



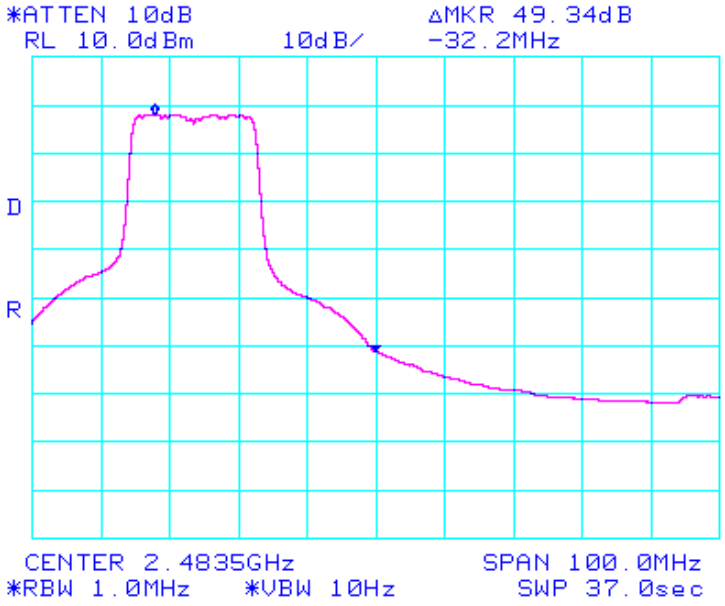
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.457 GHz band edge **PEAK DELTA**	RC



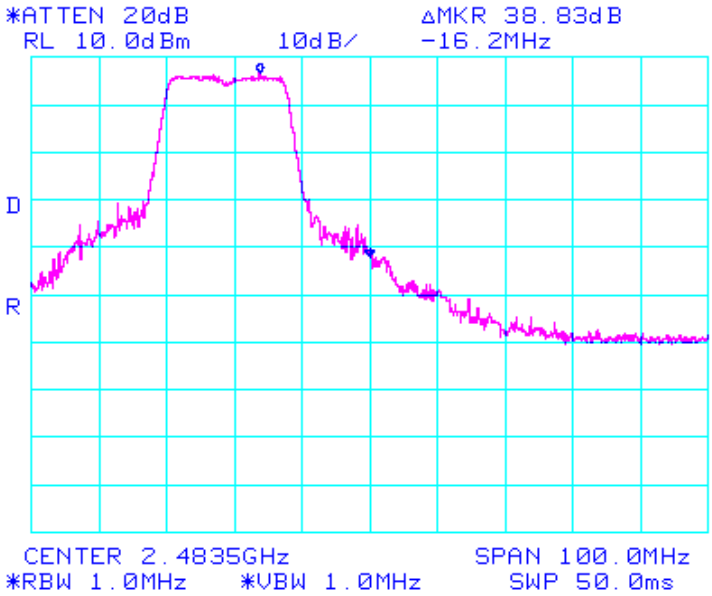
Test Date	*Data*	*Test Eng.*
04/08/08	2.457 GHz band edge **AVERAGE DELTA**	RC



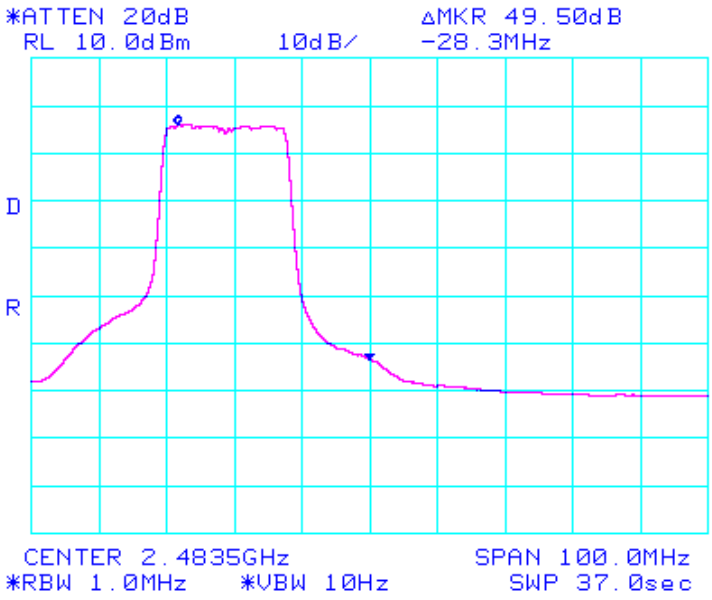
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.462 GHz band edge **PEAK DELTA**	RC



Test Date	*Data*	*Test Eng.*
04/08/08	2.462 GHz band edge **AVERAGE DELTA**	RC



Radiated Emissions Test Results (Continued)

*Fundamental Measurements in **802.11n mode 20MHz Wide (2400-2483.5 MHz)***
Channels 1, 2, 6, 10, & 11
Continuous TX** at **Chain C** Antenna port with **Tyco Stamped PIFA Antennas
Aegis Labs, Inc. File #: INTEL-080926-100

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*
2412.00	57.17	100	315			2.53	32.19	91.89			**Ch. 1**
2412.00				46.50	A	2.53	32.19	81.22			
2417.00	60.00	100	225			2.53	32.20	94.73			**Ch. 2**
2417.00				49.33	A	2.53	32.20	84.06			
2437.00	59.33	100	225			2.54	32.22	94.09			**Ch. 6**
2437.00				48.50	A	2.54	32.22	83.26			
2457.00	59.67	100	225			2.55	32.25	94.47			**Ch. 10**
2457.00				49.17	A	2.55	32.25	83.97			
2462.00	57.67	100	225			2.55	32.25	92.48			**Ch. 11**
2462.00				46.33	A	2.55	32.25	81.14			

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*
2412.00	66.83	100	0			2.53	31.92	101.28			**Ch. 1**
2412.00				56.17	A	2.53	31.92	90.62			
2417.00	68.83	100	0			2.53	31.93	103.29			**Ch. 2**
2417.00				58.17	A	2.53	31.93	92.63			
2437.00	67.50	100	0			2.54	31.97	102.01			**Ch. 6**
2437.00				57.00	A	2.54	31.97	91.51			
2457.00	68.50	100	0			2.55	32.01	103.06			**Ch. 10**
2457.00				57.50	A	2.55	32.01	92.06			
2462.00	67.00	145	0			2.55	32.02	101.58			**Ch. 11**
2462.00				55.83	A	2.55	32.02	90.41			

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 ***802.11n mode 20MHz Wide (2400-2483.5 MHz)***
Channels 1, 2, 10, & 11
Continuous TX *at* ***Chain C*** *Antenna port with* ***Tyco Stamped PIFA Antennas***
Aegis Labs, Inc. File #: INTEL-080926-100

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								53.89	74.00	-20.11	**Ch. 1**
2390.00					A			31.89	54.00	-22.11	
2400.00	31.50	100	315			2.52	32.18	66.20	71.89	-5.69	
2390.00								55.39	74.00	-18.61	**Ch. 2**
2390.00					A			39.22	54.00	-14.78	
2400.00	31.67	100	225			2.52	32.18	66.37	74.73	-8.36	
2483.50								51.64	74.00	-22.36	**Ch. 10**
2483.50					A			37.97	54.00	-16.03	
2483.50								56.31	74.00	-17.69	**Ch. 11**
2483.50					A			30.48	54.00	-23.52	

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								63.28	74.00	-10.72	**Ch. 1**
2390.00					A			41.29	54.00	-12.71	
2400.00	36.50	100	0			2.52	31.90	70.92	81.28	-10.36	
2390.00								63.95	74.00	-10.05	**Ch. 2**
2390.00					A			47.79	54.00	-6.21	
2400.00	37.17	100	0			2.52	31.90	71.59	83.29	-11.70	
2483.50								60.23	74.00	-13.77	**Ch. 10**
2483.50					A			46.06	54.00	-7.94	
2483.50								65.41	74.00	-8.60	**Ch. 11**
2483.50					A			39.75	54.00	-14.26	

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:

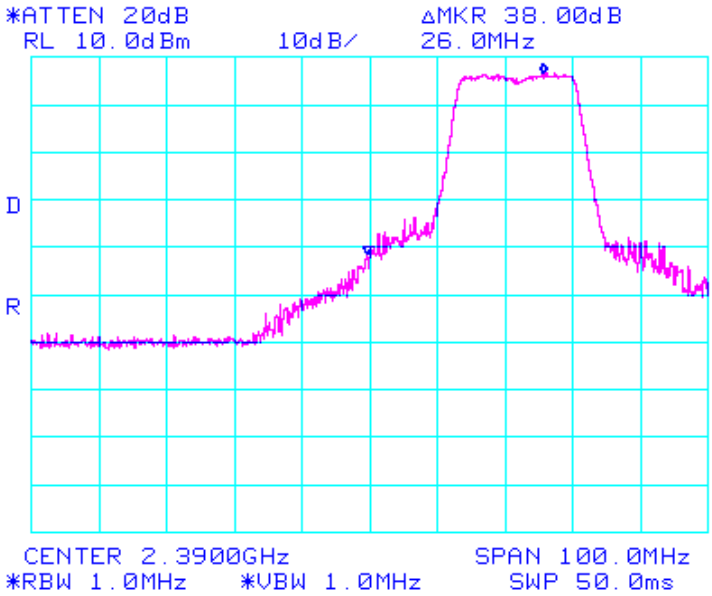
BE = Fm – Δm

Where
BE = Band Edge Field Strength
Fm = Measured Fundamental (Peak or Average)
Δm = Measured Conducted Band Edge Delta (Peak or Average)

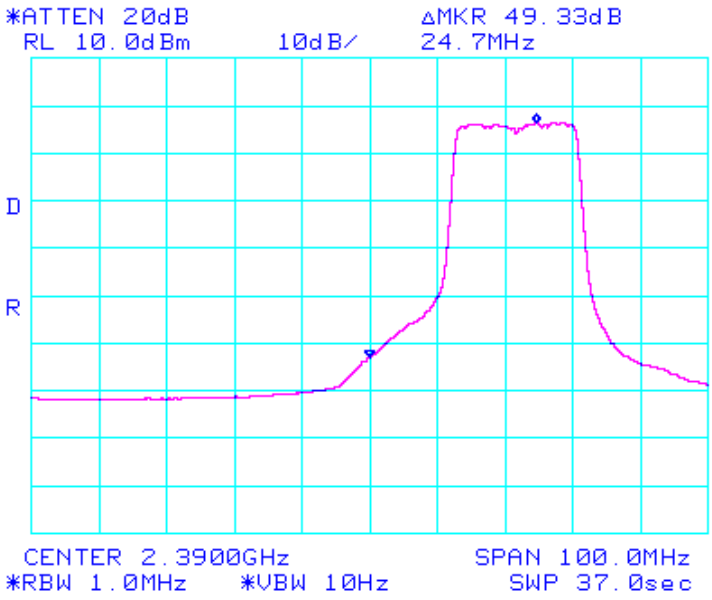
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.412 GHz band edge **PEAK DELTA**	RC



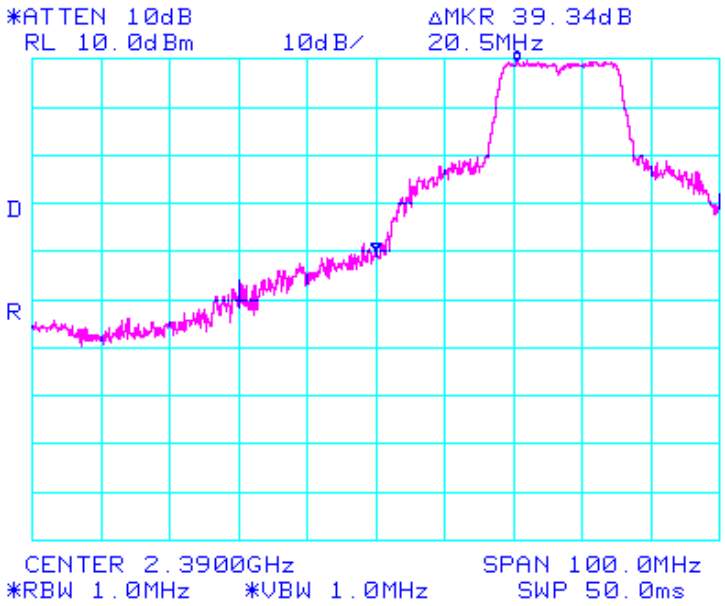
Test Date	*Data*	*Test Eng.*
04/08/08	2.412 GHz band edge **AVERAGE DELTA**	RC



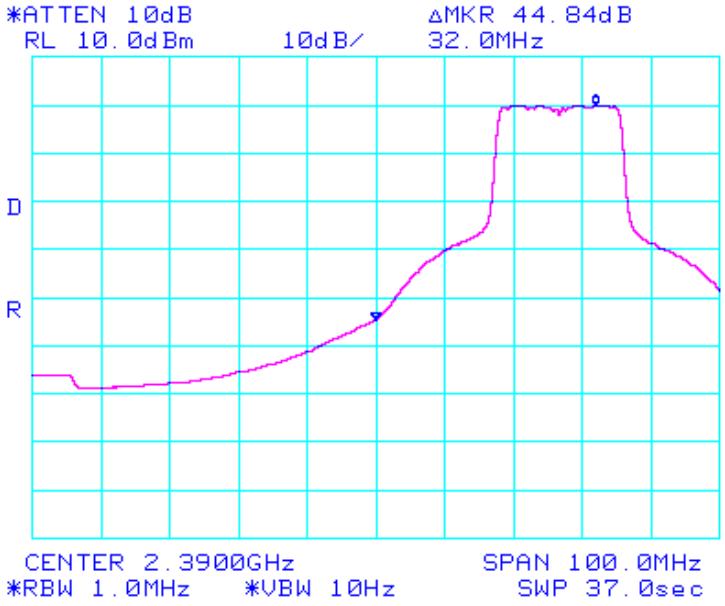
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.417 GHz band edge **PEAK DELTA**	RC



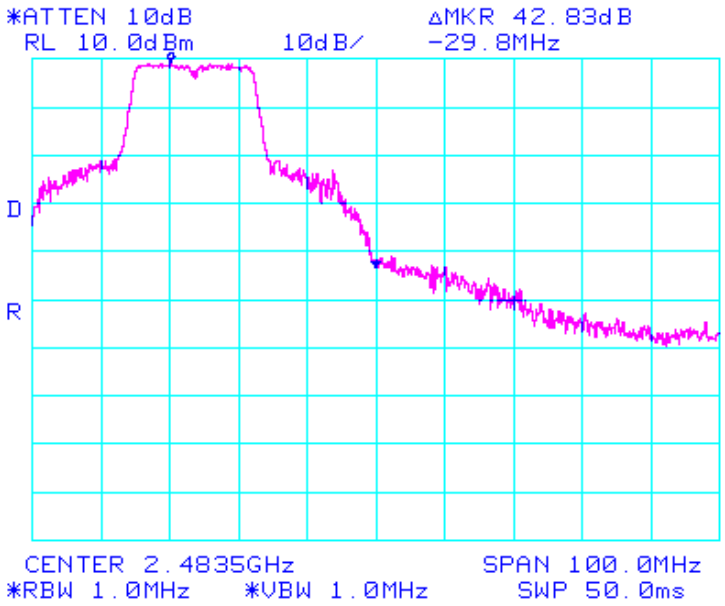
Test Date	*Data*	*Test Eng.*
04/08/08	2.417 GHz band edge **AVERAGE DELTA**	RC



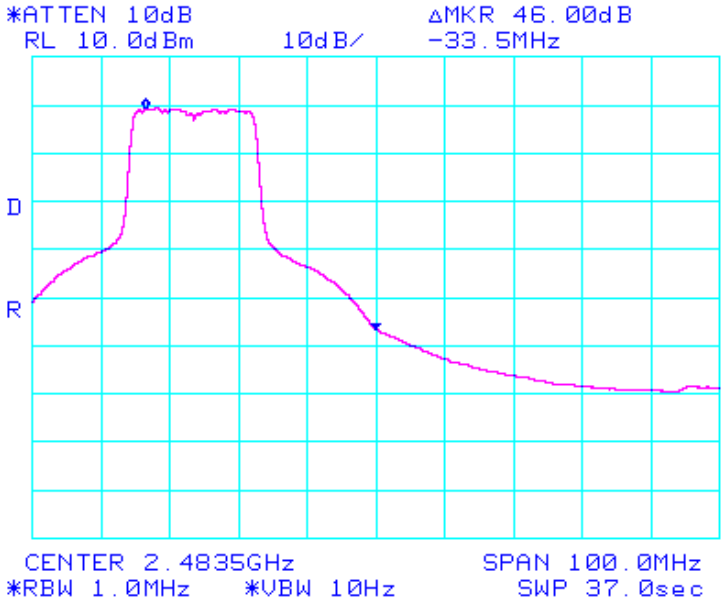
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.457 GHz band edge **PEAK DELTA**	RC



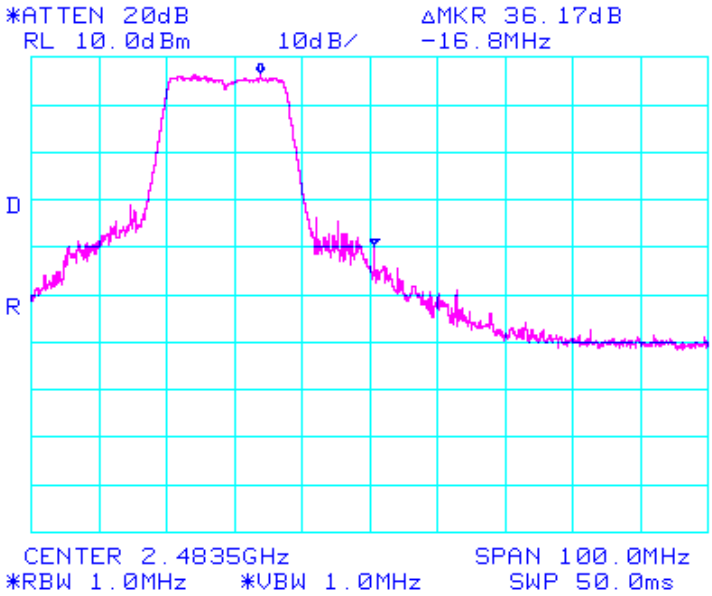
Test Date	*Data*	*Test Eng.*
04/08/08	2.457 GHz band edge **AVERAGE DELTA**	RC



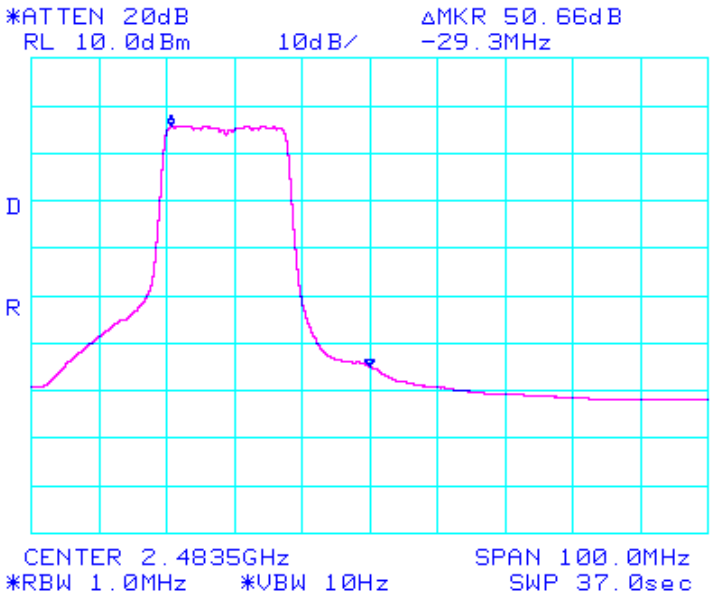
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.462 GHz band edge **PEAK DELTA**	RC



Test Date	*Data*	*Test Eng.*
04/08/08	2.462 GHz band edge **AVERAGE DELTA**	RC



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, B, & C*** *Antenna ports with* ***Tyco Stamped PIFA Antennas***
Aegis Labs, Inc. File #: INTEL-080926-102

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*	*Channel/ Chain Tested*
6498.64	53.67	100	180		50.83	4.22	35.60	42.66	74.00	-31.34	**Ch. 6 / A**
6498.64	53.83	100	180		50.83	4.22	35.60	42.82	74.00	-31.18	**Ch. 6 / B**
6498.64	53.83	100	180		50.83	4.22	35.60	42.82	74.00	-31.18	**Ch. 6 / C**
3216.00	53.00	100	315		50.80	2.91	32.69	37.80	74.00	-36.20	**Ch. 1/ A**
6498.64	54.17	100	180		50.83	4.22	35.60	43.16	74.00	-30.84	
6565.32	52.67	100	225		50.78	4.25	35.61	41.75	74.00	-32.25	**Ch. 11/ A**

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*	*Channel/ Chain Tested*
3249.32	52.50	100	225		50.79	2.94	32.75	37.40	74.00	-36.60	**Ch. 6 /**
6498.64	53.17	100	135		50.83	4.22	35.60	42.16	74.00	-31.84	**A**
3249.32	52.50	100	135		50.79	2.94	32.75	37.40	74.00	-36.60	**Ch. 6 /**
6498.64	53.50	100	135		50.83	4.22	35.60	42.49	74.00	-31.51	**B**
3249.32	53.83	100	45		50.79	2.94	32.75	38.73	74.00	-35.27	**Ch. 6 /**
6498.64	52.17	100	135		50.83	4.22	35.60	41.16	74.00	-32.84	**C**
3216.00	52.67	100	225		50.80	2.91	32.73	37.51	74.00	-36.49	**Ch. 1/ B**
6432.00	52.33	100	135		50.90	4.20	35.57	41.20	74.00	-32.80	
6565.32	51.17	100	135		50.78	4.25	35.60	40.24	74.00	-33.76	**Ch. 11/ B**

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 **Triple Chain ABC** Antenna ports with **Tyco Stamped PIFA Antennas
Aegis Labs, Inc. File #: INTEL-080926-102

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*	*Channel/ Chain Tested*
6498.54	54.83	100	180		50.83	4.22	35.60	43.82	74.00	-30.18	**Ch. 6 / ABC**
6432.00	54.00	100	180		50.90	4.20	35.59	42.89	74.00	-31.11	**Ch. 1/ABC**
6565.32	52.83	100	180		50.78	4.25	35.61	41.91	74.00	-32.09	**Ch. 11/ABC**

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*	*Channel/ Chain Tested*
3249.32	54.00	100	45		50.79	2.94	32.75	38.90	74.00	-35.10	**Ch. 6 / ABC**
6498.64	53.17	100	135		50.83	4.22	35.60	42.16	74.00	-31.84	
3216.00	51.67	100	135		50.80	2.91	32.73	36.51	74.00	-37.49	**Ch. 1/ABC**
6432.00	53.67	100	315		50.90	4.20	35.57	42.54	74.00	-31.46	
6565.32	52.33	100	45		50.78	4.25	35.60	41.40	74.00	-32.60	**Ch. 11/ABC**

RADIATED EMISSIONS TEST RESULTS

CLIENT:	Intel Corporation	**DATE:**	06/25/08
EUT:	Intel WiFi Link 5300	**PROJECT NUMBER:**	INTEL-080926
MODEL NUMBER:	533AN_HMW	**TEST ENGINEER:**	KN
SERIAL NUMBER:	0016EA038A16	**SITE #:**	2
CONFIGURATION:	Tested installed in a host computer's mini PCI slot in **802.11n (2400-2483.5 MHz) mode 40MHz Wide.**	**TEMPERATURE:**	19° C
		HUMIDITY:	57% RH
		TIME:	8:00 AM

Description:	Radiated RF Emissions (1 GHz – 18 GHz)
Results:	**PASSED** Horizontal and Vertical Antenna Polarizations Class B Limits
Note:	Radiated Emissions Measurements were performed on the EUT with power supply set at the following voltage and frequency. • 120VAC / 60 Hz.

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

Corrected Meter Reading = 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:

CML = Specification Limit - F - C + D

Radiated Emissions Test Results (Continued)

*Fundamental Measurements in **802.11n mode 40MHz Wide (2400-2483.5 MHz)***
Channels 3, 4, 6, 8, & 9
Continuous TX** at **Chain A** Antenna port with **Tyco Stamped PIFA Antennas
Aegis Labs, Inc. File #: INTEL-080926-98

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*
2422.00	60.50	100	90			2.53	32.21	95.24			**Ch. 3**
2422.00				50.00	A	2.53	32.21	84.74			
2427.00	62.33	100	90			2.53	32.21	97.08			**Ch. 4**
2427.00				51.67	A	2.53	32.21	86.42			
2437.00	62.67	100	90			2.54	32.22	97.43			**Ch. 6**
2437.00				52.17	A	2.54	32.22	86.93			
2447.00	62.83	100	90			2.54	32.24	97.61			**Ch. 8**
2447.00				52.33	A	2.54	32.24	87.11			
2452.00	60.50	100	90			2.55	32.24	95.29			**Ch. 9**
2452.00				50.00	A	2.55	32.24	84.79			

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*
2422.00	63.50	100	225			2.53	31.94	97.98			**Ch. 3**
2422.00				52.67	A	2.53	31.94	87.15			
2427.00	64.83	100	225			2.53	31.95	99.32			**Ch. 4**
2427.00				54.50	A	2.53	31.95	88.99			
2437.00	64.67	100	225			2.54	31.97	99.18			**Ch. 6**
2437.00				54.50	A	2.54	31.97	89.01			
2447.00	65.67	100	225			2.54	31.99	100.21			**Ch. 8**
2447.00				55.33	A	2.54	31.99	89.87			
2452.00	65.00	145	225			2.55	32.00	99.55			**Ch. 9**
2452.00				54.17	A	2.55	32.00	88.72			

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 ***802.11n mode 40MHz Wide (2400-2483.5 MHz)***
Channels 3, 4, 8, & 9
Continuous TX *at* ***Chain A*** *Antenna port with* ***Tyco Stamped PIFA Antennas***
Aegis Labs, Inc. File #: INTEL-080926-98

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								59.57	74.00	-14.43	**Ch. 3**
2390.00					A			43.07	54.00	-10.93	
2400.00	32.83	100	90			2.52	32.18	67.53	75.24	-7.71	
2390.00								67.09	74.00	-6.91	**Ch. 4**
2390.00					A			46.36	54.00	-7.64	
2400.00	36.50	100	90			2.52	32.18	71.20	77.08	-5.88	
2483.50								69.04	74.00	-4.96	**Ch. 8**
2483.50					A			44.81	54.00	-9.19	
2483.50								61.12	74.00	-12.88	**Ch. 9**
2483.50					A			40.79	54.00	-13.21	

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								62.31	74.00	-11.70	**Ch. 3**
2390.00					A			45.48	54.00	-8.52	
2400.00	33.83	100	225			2.52	31.90	68.25	77.98	-9.72	
2390.00								69.33	74.00	-4.67	**Ch. 4**
2390.00					A			48.93	54.00	-5.07	
2400.00	40.33	100	225			2.52	31.90	74.75	79.32	-4.57	
2483.50								71.64	74.00	-2.36	**Ch. 8**
2483.50					A			47.57	54.00	-6.43	
2483.50								65.38	74.00	-8.62	**Ch. 9**
2483.50					A			44.72	54.00	-9.28	

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:

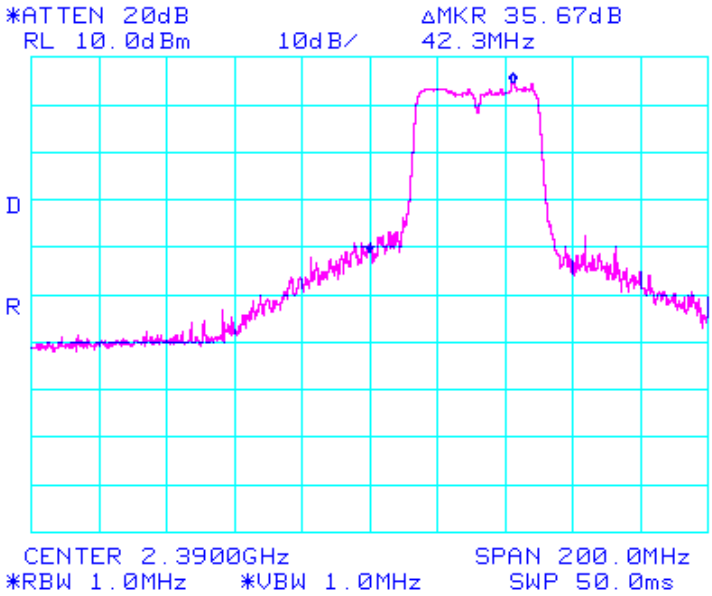
BE = Fm – Δm

Where
BE = Band Edge Field Strength
Fm = Measured Fundamental (Peak or Average)
Δm = Measured Conducted Band Edge Delta (Peak or Average)

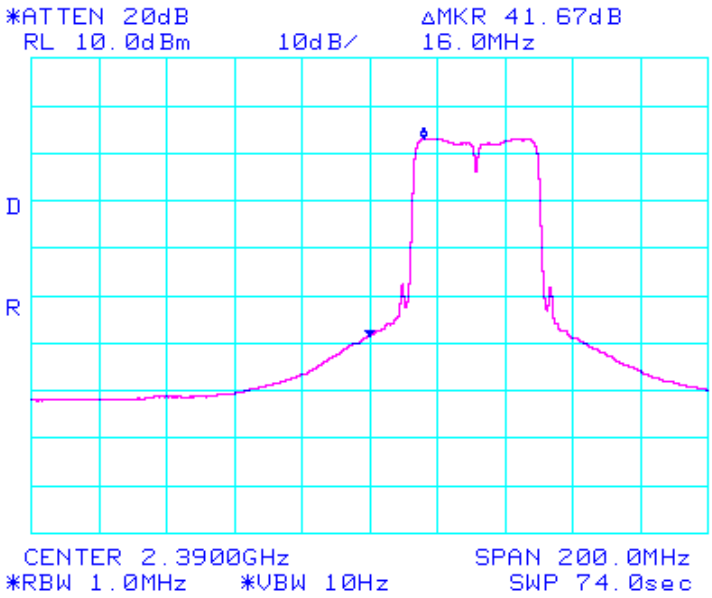
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.422 GHz band edge **PEAK DELTA**	RC



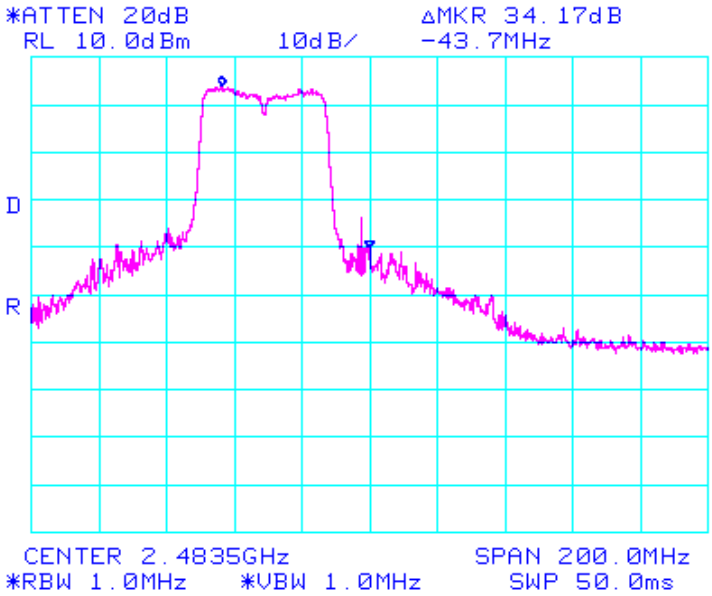
Test Date	*Data*	*Test Eng.*
04/08/08	2.422 GHz band edge **AVERAGE DELTA**	RC



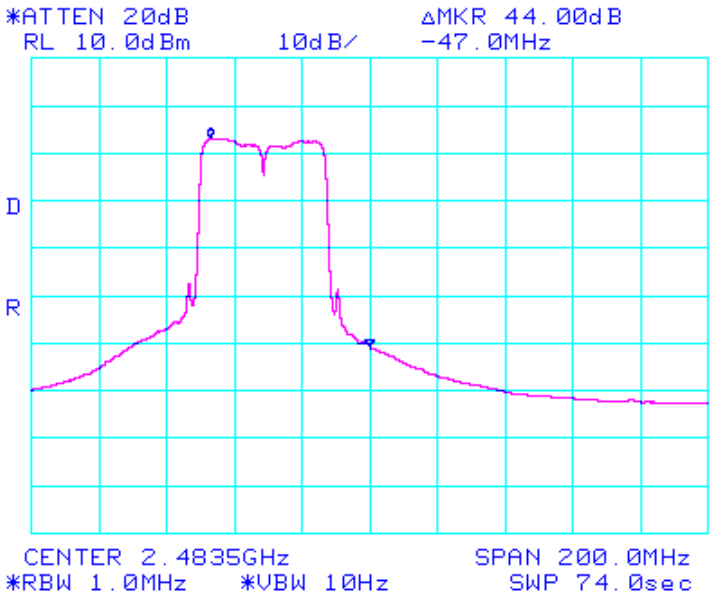
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.452 GHz band edge **PEAK DELTA**	RC



Test Date	*Data*	*Test Eng.*
04/08/08	2.452 GHz band edge **AVERAGE DELTA**	RC



Radiated Emissions Test Results (Continued)

*Fundamental Measurements in **802.11n mode 40MHz Wide (2400-2483.5 MHz)***
Channels 3, 4, 6, 8 & 9
Continuous TX** at **Chain B** Antenna port with **Tyco Stamped PIFA Antennas
Aegis Labs, Inc. File #: INTEL-080926-99

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*
2422.00	57.33	100	135			2.53	32.21	92.07			**Ch. 3**
2422.00				47.50	A	2.53	32.21	82.24			
2427.00	60.50	100	180			2.53	32.21	95.25			**Ch. 4**
2427.00				50.00	A	2.53	32.21	84.75			
2437.00	59.17	100	180			2.54	32.22	93.93			**Ch. 6**
2437.00				48.67	A	2.54	32.22	83.43			
2447.00	59.50	100	180			2.54	32.24	94.28			**Ch. 8**
2447.00				48.83	A	2.54	32.24	83.61			
2452.00	57.50	100	180			2.55	32.24	92.29			**Ch. 9**
2452.00				46.33	A	2.55	32.24	81.12			

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*
2422.00	58.67	100	180			2.53	31.94	93.15			**Ch. 3**
2422.00				47.67	A	2.53	31.94	82.15			
2427.00	60.50	100	180			2.53	31.95	94.99			**Ch. 4**
2427.00				49.17	A	2.53	31.95	83.66			
2437.00	59.67	100	0			2.54	31.97	94.18			**Ch. 6**
2437.00				49.50	A	2.54	31.97	84.01			
2447.00	59.33	100	0			2.54	31.99	93.87			**Ch. 8**
2447.00				48.33	A	2.54	31.99	82.87			
2452.00	57.83	100	0			2.55	32.00	92.38			**Ch. 9**
2452.00				47.33	A	2.55	32.00	81.88			

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 ***802.11n mode 40MHz Wide (2400-2483.5 MHz)***
Channels 3, 4, 8 & 9
Continuous TX *at* ***Chain B*** *Antenna port with* ***Tyco Stamped PIFA Antennas***
Aegis Labs, Inc. File #: INTEL-080926-99

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								59.24	74.00	-14.76	**Ch. 3**
2390.00					A			42.24	54.00	-11.76	
2400.00	30.33	100	135			2.52	32.18	65.03	72.07	-7.04	
2390.00								66.99	74.00	-7.01	**Ch. 4**
2390.00					A			45.35	54.00	-8.65	
2400.00	39.17	100	135			2.52	32.18	73.87	75.25	-1.38	
2483.50								66.06	74.00	-7.94	**Ch. 8**
2483.50					A			40.88	54.00	-13.12	
2483.50								60.12	74.00	-13.88	**Ch. 9**
2483.50					A			37.29	54.00	-16.71	

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								60.32	74.00	-13.69	**Ch. 3**
2390.00					A			42.15	54.00	-11.86	
2400.00	32.00	100	180			2.52	31.90	66.42	73.15	-6.73	
2390.00								66.73	74.00	-7.27	**Ch. 4**
2390.00					A			44.26	54.00	-9.74	
2400.00	34.67	100	180			2.52	31.90	69.09	74.99	-5.90	
2483.50								65.65	74.00	-8.35	**Ch. 8**
2483.50					A			40.14	54.00	-13.86	
2483.50								60.21	74.00	-13.79	**Ch. 9**
2483.50					A			38.05	54.00	-15.95	

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:

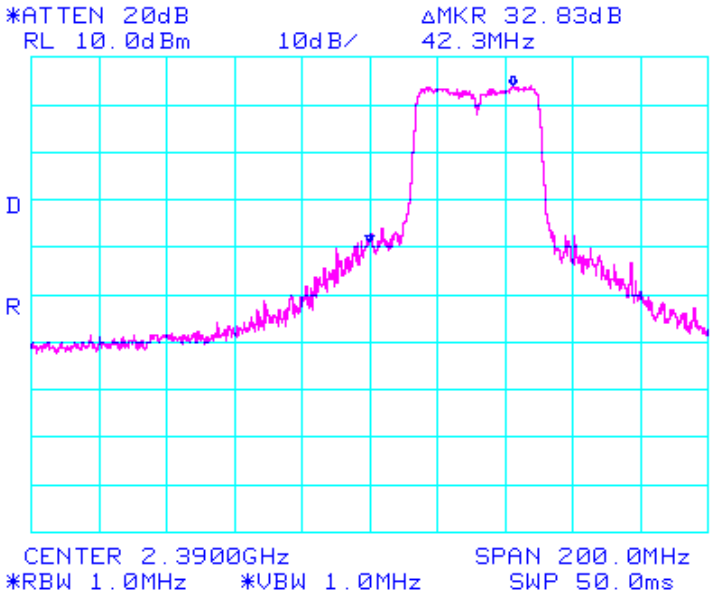
BE = Fm – Δm

Where
BE = Band Edge Field Strength
Fm = Measured Fundamental (Peak or Average)
Δm = Measured Conducted Band Edge Delta (Peak or Average)

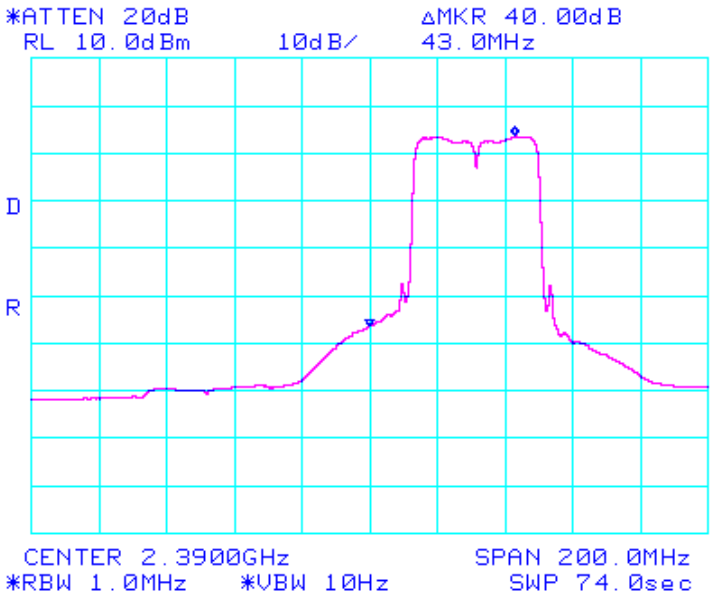
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.422 GHz band edge **PEAK DELTA**	RC



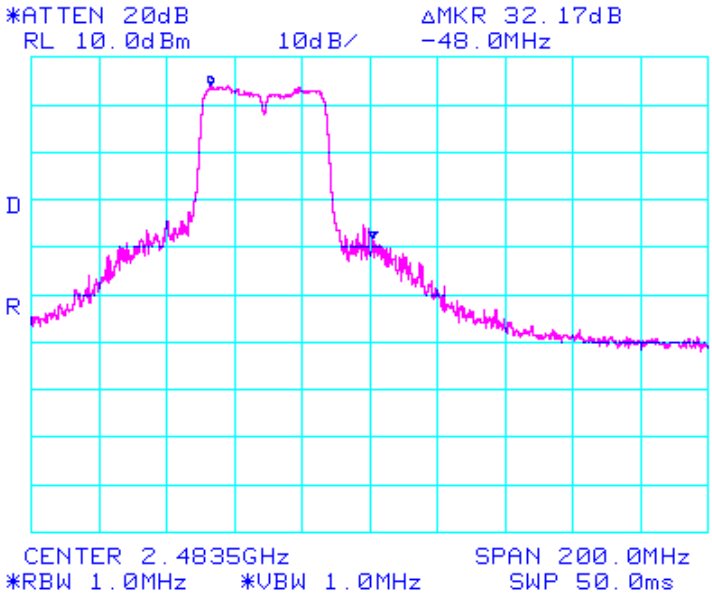
Test Date	*Data*	*Test Eng.*
04/08/08	2.422 GHz band edge **AVERAGE DELTA**	RC



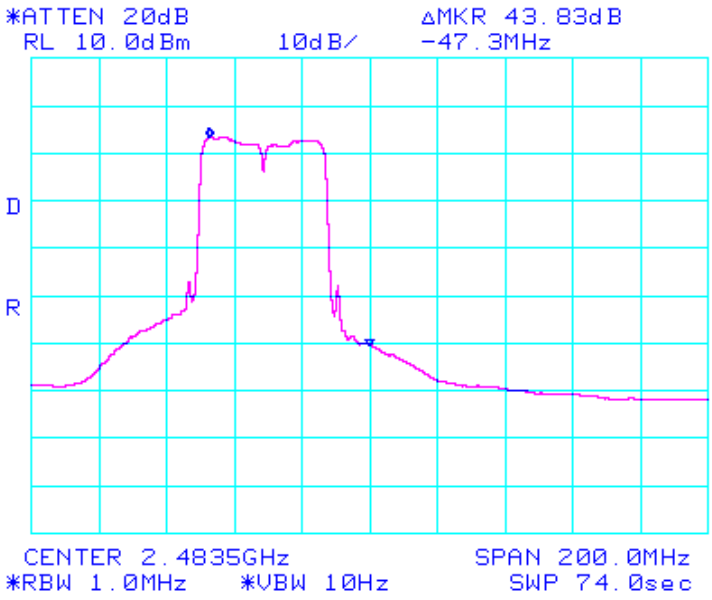
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.452 GHz band edge **PEAK DELTA**	RC



Test Date	*Data*	*Test Eng.*
04/08/08	2.452 GHz band edge **AVERAGE DELTA**	RC



Radiated Emissions Test Results (Continued)

*Fundamental Measurements in **802.11n mode 40MHz Wide (2400-2483.5 MHz)***
Channels 3, 4, 6, 8 & 9
Continuous TX** at **Chain C** Antenna port with **Tyco Stamped PIFA Antennas
Aegis Labs, Inc. File #: INTEL-080926-100

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*
2422.00	55.83	100	225			2.53	32.21	90.57			**Ch. 3**
2422.00				45.33	A	2.53	32.21	80.07			
2427.00	56.83	100	225			2.53	32.21	91.58			**Ch. 4**
2427.00				46.33	A	2.53	32.21	81.08			
2437.00	57.17	100	315			2.54	32.22	91.93			**Ch. 6**
2437.00				46.50	A	2.54	32.22	81.26			
2447.00	58.00	100	315			2.54	32.24	92.78			**Ch. 8**
2447.00				47.17	A	2.54	32.24	81.95			
2452.00	57.00	100	315			2.55	32.24	91.79			**Ch. 9**
2452.00				46.33	A	2.55	32.24	81.12			

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*
2422.00	63.50	100	0			2.53	31.94	97.98			**Ch. 3**
2422.00				53.17	A	2.53	31.94	87.65			
2427.00	65.17	100	0			2.53	31.95	99.66			**Ch. 4**
2427.00				54.67	A	2.53	31.95	89.16			
2437.00	65.50	100	0			2.54	31.97	100.01			**Ch. 6**
2437.00				54.83	A	2.54	31.97	89.34			
2447.00	64.83	100	0			2.54	31.99	99.37			**Ch. 8**
2447.00				54.00	A	2.54	31.99	88.54			
2452.00	64.33	100	0			2.55	32.00	98.88			**Ch. 9**
2452.00				53.67	A	2.55	32.00	88.22			

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 ***802.11n mode 40MHz Wide (2400-2483.5 MHz)***
Channels 3, 4, 8 & 9
Continuous TX *at* ***Chain C*** *Antenna port with* ***Tyco Stamped PIFA Antennas***
Aegis Labs, Inc. File #: INTEL-080926-100

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								58.24	74.00	-15.76	**Ch. 3**
2390.00					A			38.24	54.00	-15.76	
2400.00	31.17	100	225			2.52	32.18	65.87	70.57	-4.70	
2390.00								59.85	74.00	-14.15	**Ch. 4**
2390.00					A			41.71	54.00	-12.29	
2400.00	31.17	100	225			2.52	32.18	65.87	71.58	-5.71	
2483.50								63.68	74.00	-10.32	**Ch. 8**
2483.50					A			36.88	54.00	-17.12	
2483.50								57.62	74.00	-16.38	**Ch. 9**
2483.50					A			34.79	54.00	-19.21	

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								65.65	74.00	-8.36	**Ch. 3**
2390.00					A			45.82	54.00	-8.18	
2400.00	34.17	100	0			2.52	31.90	68.59	77.98	-9.38	
2390.00								67.93	74.00	-6.07	**Ch. 4**
2390.00					A			49.79	54.00	-4.21	
2400.00	36.00	100	0			2.52	31.90	70.42	79.66	-9.24	
2483.50								70.27	74.00	-3.73	**Ch. 8**
2483.50					A			43.47	54.00	-10.53	
2483.50								64.71	74.00	-9.29	**Ch. 9**
2483.50					A			41.89	54.00	-12.11	

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:

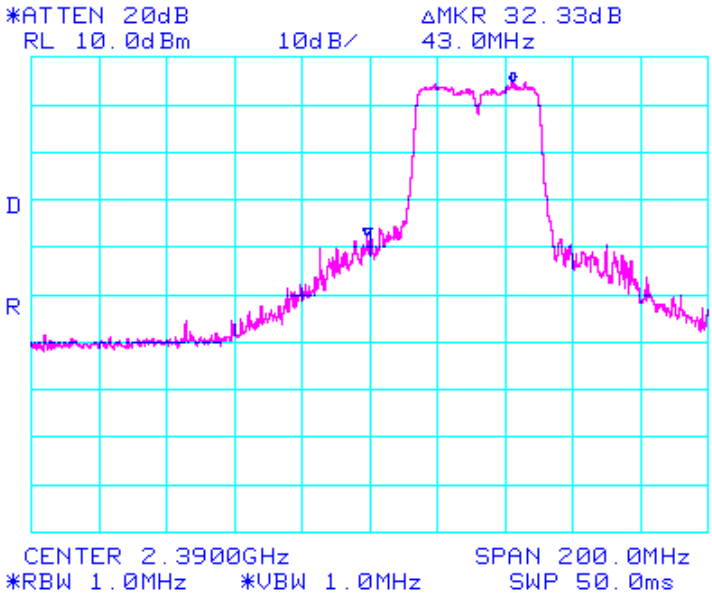
BE = Fm – Δm

Where
BE = Band Edge Field Strength
Fm = Measured Fundamental (Peak or Average)
Δm = Measured Conducted Band Edge Delta (Peak or Average)

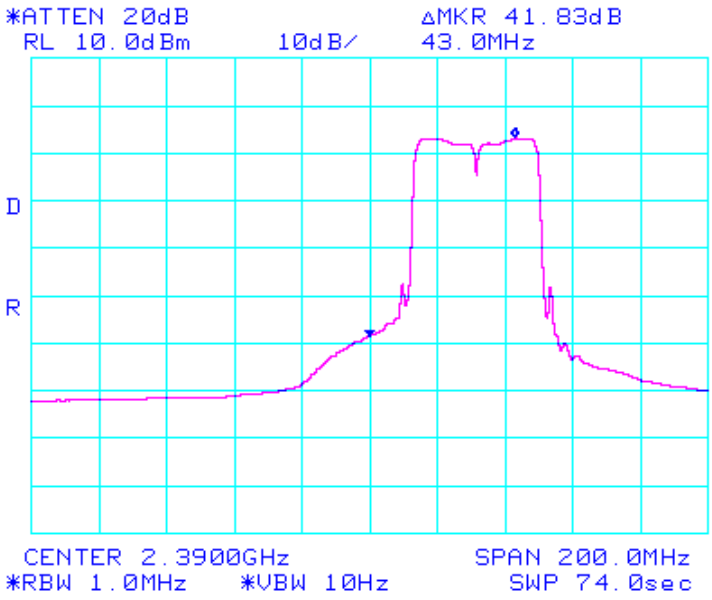
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.422 GHz band edge **PEAK DELTA**	RC



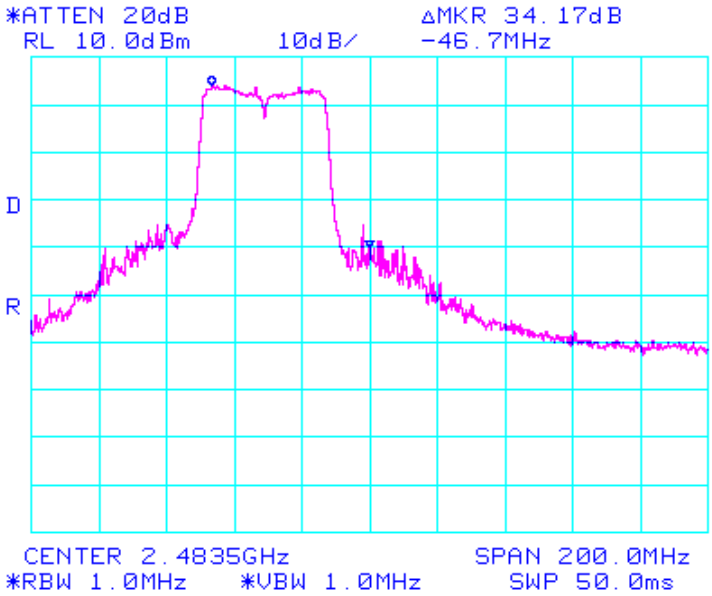
Test Date	*Data*	*Test Eng.*
04/08/08	2.422 GHz band edge **AVERAGE DELTA**	RC



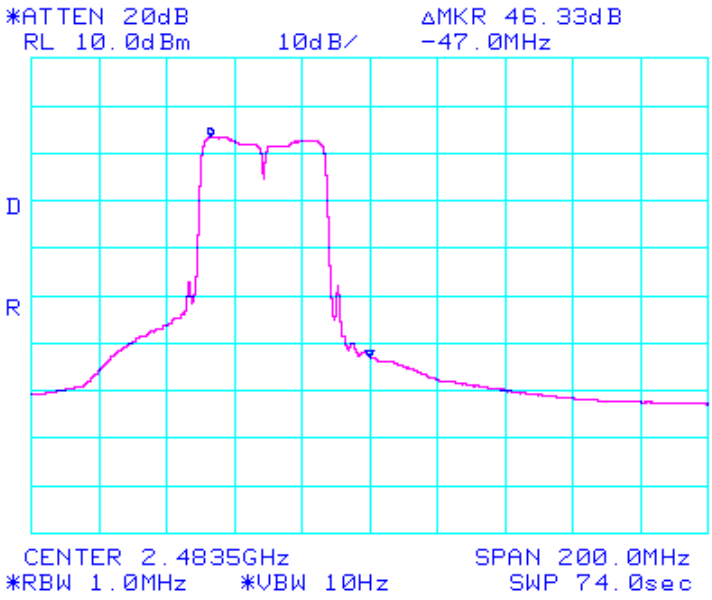
Radiated Emissions Test Results (Continued)

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

Test Date	*Data*	*Test Eng.*
04/08/08	2.452 GHz band edge **PEAK DELTA**	RC



Test Date	*Data*	*Test Eng.*
04/08/08	2.452 GHz band edge **AVERAGE DELTA**	RC



Radiated Emissions Test Results (Continued)

Spurious Emissions Measurements in ***802.11n mode 40MHz Wide (2400-2483.5 MHz)***
Channels 3, 6, & 9
Continuous TX *at* ***Chain A, B, & C*** *Antenna ports with* ***Tyco Stamped PIFA Antennas***
Aegis Labs, Inc. File #: INTEL-080926-102

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*	*Channel/ Chain Tested*
6498.64	53.33	100	180		50.83	4.22	35.60	42.32	74.00	-31.68	**Ch. 6 / A**
6498.64	53.67	100	180		50.83	4.22	35.60	42.66	74.00	-31.34	**Ch. 6 / B**
6498.64	54.00	100	180		50.83	4.22	35.60	42.99	74.00	-31.01	**Ch. 6 / C**
6458.64	53.50	100	180		50.87	4.21	35.59	42.43	74.00	-31.57	**Ch. 3/ C**
6538.64	52.00	100	180		50.80	4.24	35.61	41.04	74.00	-32.96	**Ch. 9/ C**

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*	*Channel/ Chain Tested*
3249.32	54.83	100	45		50.79	2.94	32.75	39.73	74.00	-34.27	**Ch. 6 / A**
6498.64	53.00	100	135		50.83	4.22	35.60	41.99	74.00	-32.01	
3249.32	53.00	100	45		50.79	2.94	32.75	37.90	74.00	-36.10	**Ch. 6 / B**
6498.64	52.33	100	135		50.83	4.22	35.60	41.32	74.00	-32.68	
3249.32	54.33	100	45		50.79	2.94	32.75	39.23	74.00	-34.77	**Ch. 6 / C**
6498.64	52.17	100	135		50.83	4.22	35.60	41.16	74.00	-32.84	
6458.64	52.33	100	135		50.87	4.21	35.58	41.25	74.00	-32.75	**Ch. 3 / A**
6538.64	52.00	100	135		50.80	4.24	35.60	41.04	74.00	-32.96	**Ch. 9 / A**

RADIATED EMISSIONS TEST RESULTS

CLIENT:	Intel Corporation	**DATE:**	06/25/08
EUT:	Intel WiFi Link 5300	**PROJECT NUMBER:**	INTEL-080926
MODEL NUMBER:	533AN_HMW	**TEST ENGINEER:**	KN
SERIAL NUMBER:	0016EA038A16	**SITE #:**	2
CONFIGURATION:	Tested installed in a host computer's mini PCI slot in **802.11n (5745-5825 MHz) mode 20MHz Wide.**	**TEMPERATURE:**	19° C
		HUMIDITY:	57% RH
		TIME:	8:00 AM

Description:	Radiated RF Emissions (1 GHz – 18 GHz)
Results:	**PASSED** Horizontal and Vertical Antenna Polarizations Class B Limits
Note:	Radiated Emissions Measurements were performed on the EUT with power supply set at the following voltage and frequency. • 120VAC / 60 Hz.

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

Corrected Meter Reading = 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:

CML = 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 **Shanghai Universe Communication Electron Co., Ltd Antennas
Aegis Labs, Inc. File #: INTEL-080926-01

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*
5745.00	60.83	100	135			3.98	35.09	99.91			**Ch. 149**
5745.00				50.67	A	3.98	35.09	89.75			
5785.00	58.83	100	135			4.00	35.16	97.98			**Ch. 157**
5785.00				48.67	A	4.00	35.16	87.82			
5825.00	58.00	100	135			4.01	35.22	97.23			**Ch. 165**
5825.00				47.83	A	4.01	35.22	87.06			

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*
5745.00	62.00	100	315			3.98	34.94	100.92			**Ch. 149**
5745.00				52.00	A	3.98	34.94	90.92			
5785.00	61.17	100	315			4.00	35.01	100.18			**Ch. 157**
5785.00				51.17	A	4.00	35.01	90.18			
5825.00	61.17	100	315			4.01	35.09	100.27			**Ch. 165**
5825.00				47.83	A	4.01	35.09	86.93			

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 **802.11n mode 20MHz Wide (5745-5825 MHz)***
Channels 149 & 165
Continuous TX** at **Chain A** Antenna port with **Shanghai Universe Communication Electron Co., Ltd Antennas
Aegis Labs, Inc. File #: INTEL-080926-01

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*
5725.00	35.67	100	135			3.98	35.06	74.71	79.91	-5.20	**Ch. 149**
5850.00	30.50	100	135			4.02	35.26	69.78	77.23	-7.45	**Ch. 165**

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*
5725.00	34.67	100	315			3.98	34.91	73.55	80.92	-7.37	**Ch. 149**
5850.00	35.67	100	315			4.02	35.13	74.82	80.27	-5.45	**Ch. 165**

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 = Fm – Δm

Where
BE = Band Edge Field Strength
Fm = Measured Fundamental (Peak or Average)
Δm = Measured Conducted Band Edge Delta (Peak or Average)

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 **Shanghai Universe Communication Electron Co., Ltd Antennas
Aegis Labs, Inc. File #: INTEL-080926-02

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*
5745.00	65.33	100	270			3.98	35.09	104.41			**Ch. 149**
5745.00				50.67	A	3.98	35.09	89.75			
5785.00	63.33	100	270			4.00	35.16	102.48			**Ch. 157**
5785.00				55.17	A	4.00	35.16	94.32			
5825.00	63.33	100	270			4.01	35.22	102.56			**Ch. 165**
5825.00				53.33	A	4.01	35.22	92.56			

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*
5745.00	59.50	100	135			3.98	34.94	98.42			**Ch. 149**
5745.00				51.00	A	3.98	34.94	89.92			
5785.00	59.83	100	135			4.00	35.01	98.84			**Ch. 157**
5785.00				48.83	A	4.00	35.01	87.84			
5825.00	58.50	100	135			4.01	35.09	97.60			**Ch. 165**
5825.00				48.33	A	4.01	35.09	87.43			

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 **802.11n mode 20MHz Wide (5745-5825 MHz)***
Channels 149 & 165
Continuous TX** at **Chain B** Antenna port with **Shanghai Universe Communication Electron Co., Ltd Antennas
Aegis Labs, Inc. File #: INTEL-080926-02

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*
5725.00	35.00	100	270			3.98	35.06	74.04	84.41	-10.37	**Ch. 149**
5850.00	30.17	100	270			4.02	35.26	69.45	82.56	-13.11	**Ch. 165**

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*
5725.00	30.33	100	135			3.98	34.91	69.21	78.42	-9.21	**Ch. 149**
5850.00	30.17	100	135			4.02	35.13	69.32	77.60	-8.28	**Ch. 165**

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:

$BE = Fm - \Delta m$

Where
BE = Band Edge Field Strength
Fm = Measured Fundamental (Peak or Average)
Δm = Measured Conducted Band Edge Delta (Peak or Average)

Radiated Emissions Test Results (Continued)

*Fundamental Measurements in **802.11n mode 20MHz Wide (5745-5825 MHz)***
Channels 149, 157, & 165
Continuous TX** at **Chain C** Antenna port with **Shanghai Universe Communication Electron Co., Ltd Antennas
Aegis Labs, Inc. File #: INTEL-080926-03

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*
5745.00	62.33	100	135			3.98	35.09	101.41			**Ch. 149**
5745.00				52.50	A	3.98	35.09	91.58			
5785.00	60.33	100	135			4.00	35.16	99.48			**Ch. 157**
5785.00				51.17	A	4.00	35.16	90.32			
5825.00	60.33	100	135			4.01	35.22	99.56			**Ch. 165**
5825.00				51.00	A	4.01	35.22	90.23			

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*
5745.00	64.50	100	225			3.98	34.94	103.42			**Ch. 149**
5745.00				54.33	A	3.98	34.94	93.25			
5785.00	63.83	100	225			4.00	35.01	102.84			**Ch. 157**
5785.00				53.83	A	4.00	35.01	92.84			
5825.00	64.33	100	225			4.01	35.09	103.43			**Ch. 165**
5825.00				53.17	A	4.01	35.09	92.27			

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 **802.11n mode 20MHz Wide (5745-5825 MHz)***
Channels 149 & 165
Continuous TX** at **Chain C** Antenna port with **Shanghai Universe Communication Electron Co., Ltd Antennas
Aegis Labs, Inc. File #: INTEL-080926-03

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*
5725.00	33.67	100	135			3.98	35.06	72.71	81.41	-8.70	**Ch. 149**
5850.00	30.50	100	135			4.02	35.26	69.78	79.56	-9.78	**Ch. 165**

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*
5725.00	36.67	100	225			3.98	34.91	75.55	83.42	-7.87	**Ch. 149**
5850.00	31.00	100	225			4.02	35.13	70.15	83.43	-13.28	**Ch. 165**

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:

$BE = Fm - \Delta m$

Where
BE = Band Edge Field Strength
Fm = Measured Fundamental (Peak or Average)
Δm = Measured Conducted Band Edge Delta (Peak or Average)

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, B, & C*** *Antenna ports with* ***Shanghai Universe Communication Electron Co., Ltd Antennas***
Aegis Labs, Inc. File #: INTEL-080926-04

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*	*Channel/ Chain Tested*
3856.66	51.17	100	135			46.53	3.22	33.23	41.10	74.00	-32.90	**Ch. 157/**
3856.66				39.60	A	46.53	3.22	33.23	29.53	54.00	-24.47	**A**
7713.29	51.00	100	135			44.86	4.67	36.04	46.85	74.00	-27.15	
7713.29				39.20	A	44.86	4.67	36.04	35.05	54.00	-18.95	
11569.98	53.50	100	180			44.95	5.93	38.73	53.21	74.00	-20.79	
11569.98				40.62	A	44.95	5.93	38.73	40.33	54.00	-13.67	
3856.66	52.30	100	135			46.53	3.22	33.23	42.23	74.00	-31.77	**Ch. 157/**
3856.66				40.59	A	46.53	3.22	33.23	30.52	54.00	-23.48	**B**
7713.29	51.30	100	225			44.86	4.67	36.04	47.15	74.00	-26.85	
7713.29				40.28	A	44.86	4.67	36.04	36.13	54.00	-17.87	
11569.85	57.60	100	0			44.95	5.93	38.73	57.31	74.00	-16.69	
11569.85				46.10	A	44.95	5.93	38.73	45.81	54.00	-8.19	
3856.66	52.68	100	0			46.53	3.22	33.23	42.61	74.00	-31.39	**Ch.157/**
3856.66				40.80	A	46.53	3.22	33.23	30.73	54.00	-23.27	**C**
7713.29	51.70	100	180			44.86	4.67	36.04	47.55	74.00	-26.45	
7713.29				41.34	A	44.86	4.67	36.04	37.19	54.00	-16.81	
11569.85	56.83	100	180			44.95	5.93	38.73	56.54	74.00	-17.46	
11569.85				46.66	A	44.95	5.93	38.73	46.37	54.00	-7.63	
7660.00	50.17	100	225			44.86	4.65	36.03	45.99	74.00	-28.01	**Ch. 149/**
7660.00				38.63	A	44.86	4.65	36.03	34.45	54.00	-19.55	**C**
11490.00	51.17	100	180			45.02	5.90	38.68	50.74	74.00	-23.26	
11490.00				39.04	A	45.02	5.90	38.68	38.61	54.00	-15.39	
3883.33	51.17	100	180			46.52	3.22	33.26	41.12	74.00	-32.88	**Ch.165/**
3883.33				40.20	A	46.52	3.22	33.26	30.15	54.00	-23.85	**C**
7766.66	52.32	100	0			44.86	4.68	36.05	48.19	74.00	-25.81	
7766.66				40.09	A	44.86	4.68	36.05	35.96	54.00	-18.04	
11649.99	59.50	100	135			44.86	5.95	38.76	59.35	74.00	-14.65	
11649.99				48.50	A	44.86	5.95	38.76	48.35	54.00	-5.65	

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*	*Channel/ Chain Tested*
3856.66	51.83	100	180			46.53	3.22	33.23	41.76	74.00	-32.24	**Ch. 157/**
3856.66				41.15	A	46.53	3.22	33.23	31.08	54.00	-22.92	**A**
7713.29	52.83	100	0			44.86	4.67	36.04	48.68	74.00	-25.32	
7713.29				45.29	A	44.86	4.67	36.04	41.14	54.00	-12.86	
11569.98	55.00	100	0			44.95	5.93	38.73	54.71	74.00	-19.29	
11569.98				44.35	A	44.95	5.93	38.73	44.06	54.00	-9.94	
3856.66	53.00	100	315			46.53	3.22	33.23	42.93	74.00	-31.07	**Ch. 157/**
3856.66				42.56	A	46.53	3.22	33.23	32.49	54.00	-21.51	**B**
7713.29	52.33	100	0			44.86	4.67	36.04	48.18	74.00	-25.82	
7713.29				43.23	A	44.86	4.67	36.04	39.08	54.00	-14.92	
11569.85	60.50	100	135			44.95	5.93	38.73	60.21	74.00	-13.79	
11569.85				47.10	A	44.95	5.93	38.73	46.81	54.00	-7.19	
3856.66	53.33	100	135			46.53	3.22	33.23	43.26	74.00	-30.74	**Ch.157/**
3856.66				43.52	A	46.53	3.22	33.23	33.45	54.00	-20.55	**C**
7713.29	52.83	100	45			44.86	4.67	36.04	48.68	74.00	-25.32	
7713.29				44.86	A	44.86	4.67	36.04	40.71	54.00	-13.29	
11569.85	58.00	100	135			44.95	5.93	38.73	57.71	74.00	-16.29	
11569.85				44.77	A	44.95	5.93	38.73	44.48	54.00	-9.52	
7660.00	51.67	100	0			44.86	4.65	36.03	47.49	74.00	-26.51	**Ch. 149/**
7660.00				42.71	A	44.86	4.65	36.03	38.53	54.00	-15.47	**B**
11490.00	59.17	100	135			45.02	5.90	38.68	58.74	74.00	-15.26	
11490.00				45.01	A	45.02	5.90	38.68	44.58	54.00	-9.42	
3883.33	52.83	100	135			46.52	3.22	33.26	42.78	74.00	-31.22	**Ch.165/**
3883.33				43.65	A	46.52	3.22	33.26	33.60	54.00	-20.40	**B**
7766.66	51.67	100	0			44.86	4.68	36.05	47.54	74.00	-26.46	
7766.66				44.32	A	44.86	4.68	36.05	40.19	54.00	-13.81	
11649.99	59.50	100	225			44.86	5.95	38.76	59.35	74.00	-14.65	
11649.99				45.10	A	44.86	5.95	38.76	44.95	54.00	-9.05	

Radiated Emissions Test Results (Continued)

Spurious Emissions Measurements in ***802.11n mode 20MHz Wide (5745-5825 MHz)***
Channels 149, 157, & 165
Continuous TX *at* ***Triple Chain ABC*** *Antenna ports with* ***Shanghai Universe Communication Electron Co., Ltd Antennas***
Aegis Labs, Inc. File #: INTEL-080926-04

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*	*Channel/ Chain Tested*
3830.00	51.67	100	0			46.53	3.23	33.20	41.57	74.00	-32.43	**Ch. 149/**
3830.00				39.90	A	46.53	3.23	33.20	29.80	54.00	-24.20	**ABC**
7660.00	50.50	100	0			44.86	4.65	36.03	46.32	74.00	-27.68	
7660.00				40.00	A	44.86	4.65	36.03	35.82	54.00	-18.18	
11490.00	54.17	100	45			45.02	5.90	38.68	53.74	74.00	-20.26	
11490.00				41.32	A	45.02	5.90	38.68	40.89	54.00	-13.11	
3856.66	52.00	100	45			46.53	3.22	33.23	41.93	74.00	-32.07	**Ch. 157/**
3856.66				39.86	A	46.53	3.22	33.23	29.79	54.00	-24.21	**ABC**
7713.29	51.33	100	135			44.86	4.67	36.04	47.18	74.00	-26.82	
7713.29				41.00	A	44.86	4.67	36.04	36.85	54.00	-17.15	
11569.85	56.81	100	135			44.95	5.93	38.73	56.52	74.00	-17.48	
11569.85				45.41	A	44.95	5.93	38.73	45.12	54.00	-8.88	
3883.33	53.15	100	45			46.52	3.22	33.26	43.10	74.00	-30.90	**Ch.165/**
3883.33				41.80	A	46.52	3.22	33.26	31.75	54.00	-22.25	**ABC**
7766.66	51.80	100	180			44.86	4.68	36.05	47.67	74.00	-26.33	
7766.66				40.40	A	44.86	4.68	36.05	36.27	54.00	-17.73	
11569.85	57.00	100	135			44.95	5.93	38.73	56.71	74.00	-17.29	
11569.85				45.89	A	44.95	5.93	38.73	45.60	54.00	-8.40	

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*	*Channel/ Chain Tested*
3830.00	51.17	100	0			46.53	3.23	33.20	41.07	74.00	-32.93	**Ch. 149/**
3830.00				40.89	A	46.53	3.23	33.20	30.79	54.00	-23.21	**ABC**
7660.00	50.67	100	0			44.86	4.65	36.03	46.49	74.00	-27.51	
7660.00				40.12	A	44.86	4.65	36.03	35.94	54.00	-18.06	
11490.00	55.00	100	135			45.02	5.90	38.68	54.57	74.00	-19.43	
11490.00				42.66	A	45.02	5.90	38.68	42.23	54.00	-11.77	
3856.66	53.00	100	45			46.53	3.22	33.23	42.93	74.00	-31.07	**Ch. 157/**
3856.66				44.48	A	46.53	3.22	33.23	34.41	54.00	-19.59	**ABC**
7713.29	51.33	100	270			44.86	4.67	36.04	47.18	74.00	-26.82	
7713.29				42.04	A	44.86	4.67	36.04	37.89	54.00	-16.11	
11569.85	58.17	100	135			44.95	5.93	38.73	57.88	74.00	-16.12	
11569.85				45.49	A	44.95	5.93	38.73	45.20	54.00	-8.80	
3883.33	53.00	100	45			46.52	3.22	33.26	42.95	74.00	-31.05	**Ch.165/**
3883.33				44.15	A	46.52	3.22	33.26	34.10	54.00	-19.90	**ABC**
7766.66	51.17	100	270			44.86	4.68	36.05	47.04	74.00	-26.96	
7766.66				41.40	A	44.86	4.68	36.05	37.27	54.00	-16.73	
11569.85	58.17	100	135			44.95	5.93	38.73	57.88	74.00	-16.12	
11569.85				45.49	A	44.95	5.93	38.73	45.20	54.00	-8.80	

RADIATED EMISSIONS TEST RESULTS

CLIENT:	Intel Corporation	**DATE:**	06/25/08
EUT:	Intel WiFi Link 5300	**PROJECT NUMBER:**	INTEL-080926
MODEL NUMBER:	533AN_HMW	**TEST ENGINEER:**	KN
SERIAL NUMBER:	0016EA038A16	**SITE #:**	2
CONFIGURATION:	Tested installed in a host computer's mini PCI slot in **802.11n (5745-5825 MHz) mode 40MHz Wide.**	**TEMPERATURE:**	19° C
		HUMIDITY:	57% RH
		TIME:	8:00 AM

Description:	Radiated RF Emissions (1 GHz – 18 GHz)
Results:	**PASSED** Horizontal and Vertical Antenna Polarizations Class B Limits
Note:	Radiated Emissions Measurements were performed on the EUT with power supply set at the following voltage and frequency. • 120VAC / 60 Hz.

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

Corrected Meter Reading = 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:

CML = 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 **Shanghai Universe Communication Electron Co., Ltd Antennas
Aegis Labs, Inc. File #: INTEL-080926-01

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*
5755.00	59.33	100	135			3.99	35.11	98.42			**Ch. 151**
5755.00				48.83	A	3.99	35.11	87.92			
5795.00	56.83	100	135			4.00	35.17	96.00			**Ch. 159**
5795.00				41.33	A	4.00	35.17	80.50			

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*
5755.00	59.67	100	315			3.99	34.96	98.62			**Ch. 151**
5755.00				49.50	A	3.99	34.96	88.45			
5795.00	59.50	100	315			4.00	35.03	98.53			**Ch. 159**
5795.00				48.83	A	4.00	35.03	87.86			

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 **802.11n mode 40MHz Wide (5745-5825 MHz)***
Channels 151 & 159
Continuous TX** at **Chain A** Antenna port with **Shanghai Universe Communication Electron Co., Ltd Antennas
Aegis Labs, Inc. File #: INTEL-080926-01

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*
5725.00	34.83	100	135		3.98	35.06	73.87	78.42	-4.56	**Ch. 151**
5850.00	30.17	100	90		4.02	35.26	69.45	76.00	-6.55	**Ch. 159**

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*
5725.00	34.33	100	315		3.98	34.91	73.21	78.62	-5.41	**Ch. 151**
5850.00	31.33	100	225		4.02	35.13	70.48	78.53	-8.05	**Ch. 159**

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:

$BE = Fm - \Delta m$

Where
BE = Band Edge Field Strength
Fm = Measured Fundamental (Peak or Average)
Δm = Measured Conducted Band Edge Delta (Peak or Average)

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* ***Shanghai Universe Communication Electron Co., Ltd Antennas***
Aegis Labs, Inc. File #: INTEL-080926-02

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*
5755.00	63.83	100	270			3.99	35.11	102.92			**Ch. 151**
5755.00				53.50	A	3.99	35.11	92.59			
5795.00	60.67	100	270			4.00	35.17	99.84			**Ch. 159**
5795.00				50.50	A	4.00	35.17	89.67			

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*
5755.00	58.50	100	90			3.99	34.96	97.45			**Ch. 151**
5755.00				48.67	A	3.99	34.96	87.62			
5795.00	56.33	100	135			4.00	35.03	95.36			**Ch. 159**
5795.00				45.50	A	4.00	35.03	84.53			

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 ***802.11n mode 40MHz Wide (5745-5825 MHz)***
Channels 151 & 159
Continuous TX *at* ***Chain B*** *Antenna port with* ***Shanghai Universe Communication Electron Co., Ltd Antennas***
Aegis Labs, Inc. File #: INTEL-080926-02

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*
5725.00	37.00	100	270			3.98	35.06	76.04	82.92	-6.89	**Ch. 151**
5850.00	32.33	100	90			4.02	35.26	71.61	79.84	-8.23	**Ch. 159**

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*
5725.00	33.83	100	90			3.98	34.91	72.71	77.45	-4.74	**Ch. 151**
5850.00	31.17	100	135			4.02	35.13	70.32	75.36	-5.04	**Ch. 159**

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:

$BE = Fm - \Delta m$

Where
BE = Band Edge Field Strength
Fm = Measured Fundamental (Peak or Average)
Δm = Measured Conducted Band Edge Delta (Peak or Average)

Radiated Emissions Test Results (Continued)

*Fundamental Measurements in **802.11n mode 40MHz Wide (5745-5825 MHz)***
Channels 151 & 159
Continuous TX** at **Chain C** Antenna port with **Shanghai Universe Communication Electron Co., Ltd Antennas
Aegis Labs, Inc. File #: INTEL-080926-03

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*
5755.00	59.33	100	135			3.99	35.11	98.42			**Ch. 151**
5755.00				49.50	A	3.99	35.11	88.59			
5795.00	58.00	100	135			4.00	35.17	97.17			**Ch. 159**
5795.00				47.83	A	4.00	35.17	87.00			

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*
5755.00	61.00	100	225			3.99	34.96	99.95			**Ch. 151**
5755.00				51.50	A	3.99	34.96	90.45			
5795.00	59.33	100	225			4.00	35.03	98.36			**Ch. 159**
5795.00				49.50	A	4.00	35.03	88.53			

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 ***802.11n mode 40MHz Wide (5745-5825 MHz)***
Channels 151 & 159
Continuous TX *at* ***Chain C*** *Antenna port with* ***Shanghai Universe Communication Electron Co., Ltd Antennas***
Aegis Labs, Inc. File #: INTEL-080926-03

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*
5725.00	33.33	100	135			3.98	35.06	72.37	78.42	-6.06	**Ch. 151**
5850.00	30.17	100	135			4.02	35.26	69.45	77.17	-7.72	**Ch. 159**

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*
5725.00	33.83	100	225			3.98	34.91	72.71	79.95	-7.24	**Ch. 151**
5850.00	30.17	100	225			4.02	35.13	69.32	78.36	-9.04	**Ch. 159**

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:

$BE = Fm - \Delta m$

Where
BE = Band Edge Field Strength
Fm = Measured Fundamental (Peak or Average)
Δm = Measured Conducted Band Edge Delta (Peak or Average)

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, B, & C*** *Antenna ports with* ***Shanghai Universe Communication Electron Co., Ltd Antennas***
Aegis Labs, Inc. File #: INTEL-080926-04

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*	*Channel/ Chain Tested*
3836.66	51.08	100	225			46.53	3.23	33.20	40.98	74.00	-33.02	**Ch. 151/**
3836.66				39.68	A	46.53	3.23	33.20	29.58	54.00	-24.42	**A**
11509.98	52.00	100	135			45.01	5.91	38.70	51.61	74.00	-22.39	
11509.98				40.80	A	45.01	5.91	38.70	40.41	54.00	-13.59	
3836.66	50.33	100	180			46.53	3.23	33.20	40.23	74.00	-33.77	**Ch. 151/**
3836.66				38.88	A	46.53	3.23	33.20	28.78	54.00	-25.22	**B**
11509.98	52.00	100	180			45.01	5.91	38.70	51.61	74.00	-22.39	
11509.98				40.12	A	45.01	5.91	38.70	39.73	54.00	-14.27	
3856.66	51.00	100	180			46.53	3.22	33.23	40.93	74.00	-33.07	**Ch.151/**
3856.66				40.20	A	46.53	3.22	33.23	30.13	54.00	-23.87	**C**
11509.98	53.25	100	135			45.01	5.91	38.70	52.86	74.00	-21.14	
11509.98				42.10	A	45.01	5.91	38.70	41.71	54.00	-12.29	

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*	*Channel/ Chain Tested*
3836.66	51.67	100	225			46.53	3.23	33.20	41.57	74.00	-32.43	**Ch. 159/**
3836.66				39.53	A	46.53	3.23	33.20	29.43	54.00	-24.57	**A**
11509.98	52.67	100	225			45.01	5.91	38.70	52.28	74.00	-21.72	
11509.98				40.41	A	45.01	5.91	38.70	40.02	54.00	-13.98	
3836.66	50.83	100	180			46.53	3.23	33.20	40.73	74.00	-33.27	**Ch. 159/**
3836.66				38.33	A	46.53	3.23	33.20	28.23	54.00	-25.77	**B**
11509.98	52.58	100	315			45.01	5.91	38.70	52.19	74.00	-21.81	
11509.98				39.48	A	45.01	5.91	38.70	39.09	54.00	-14.91	
3856.66	51.00	100	180			46.53	3.22	33.23	40.93	74.00	-33.07	**Ch.159/**
3856.66				38.58	A	46.53	3.22	33.23	28.51	54.00	-25.49	**C**
11509.98	52.83	100	315			45.01	5.91	38.70	52.44	74.00	-21.56	
11509.98				39.17	A	45.01	5.91	38.70	38.78	54.00	-15.22	

PEAK TRANSMIT POWER

CLIENT:	Intel Corporation	**DATE:**	10/07/08
EUT:	Intel WiFi Link 5300	**PROJECT NUMBER:**	INTEL-080926
MODEL NUMBER:	533AN_HMW	**TEST ENGINEER:**	RC/KN
SERIAL NUMBER:	0016EA038A16	**SITE #:**	1
CONFIGURATION:	Tested installed in a host computer's mini PCI slot	**TEMPERATURE:**	25 deg. C
		HUMIDITY:	29% RH
		TIME:	9:00 AM

Description:	The maximum peak output power of the intentional radiator shall not exceed 1 watt.
Results:	Passed (See Data Sheet)
Note:	Conducted Emissions Measurements were performed on the EUT with power supply set at the following voltage and frequency. • 120VAC / 60 Hz.

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	16.14	**41.15**	24.04	**253.73**
802.11a	157	5785	A	6	16.14	**41.15**	24.04	**253.73**
802.11a	165	5825	A	6	16.04	**40.21**	23.94	**247.95**
802.11a	149	5745	B	6	16.34	**43.09**	24.34	**271.87**
802.11a	157	5785	B	6	16.34	**43.09**	24.34	**271.87**
802.11a	165	5825	B	6	16.44	**44.09**	24.44	**278.20**
802.11a	149	5745	C	6	16.24	**42.11**	24.44	**278.20**
802.11a	157	5785	C	6	16.54	**45.12**	24.54	**284.69**
802.11a	165	5825	C	6	16.14	**41.15**	24.34	**271.87**
802.11b	1	2412	A	1	16.50	**44.67**	19.70	**93.33**
802.11b	6	2437	A	1	16.15	**41.21**	19.15	**82.22**
802.11b	11	2462	A	1	16.30	**42.66**	19.25	**84.14**
802.11b	1	2412	B	1	16.50	**44.67**	19.60	**91.20**
802.11b	6	2437	B	1	16.40	**43.65**	19.50	**89.13**
802.11b	11	2462	B	1	16.20	**41.69**	19.30	**85.11**
802.11b	1	2412	C	1	16.10	**40.74**	19.10	**81.28**
802.11b	6	2437	C	1	16.50	**44.67**	19.50	**89.13**
802.11b	11	2462	C	1	16.50	**44.67**	19.50	**89.13**
802.11g	1	2412	A	6	14.64	**29.13**	21.44	**139.43**
802.11g	2	2417	A	6	16.54	**45.12**	23.54	**226.13**
802.11g	6	2437	A	6	16.64	**46.17**	23.74	**236.79**
802.11g	10	2457	A	6	16.64	**46.17**	23.69	**234.08**
802.11g	11	2462	A	6	14.44	**27.82**	21.34	**136.26**
802.11g	1	2412	B	6	14.24	**26.57**	21.24	**133.16**
802.11g	2	2417	B	6	16.54	**45.12**	23.84	**242.31**
802.11g	6	2437	B	6	16.44	**44.09**	23.74	**236.79**
802.11g	10	2457	B	6	16.24	**42.11**	23.54	**226.13**
802.11g	11	2462	B	6	14.14	**25.96**	21.14	**130.13**
802.11g	1	2412	C	6	14.14	**25.96**	21.04	**127.16**
802.11g	2	2417	C	6	16.64	**46.17**	24.04	**253.73**
802.11g	6	2437	C	6	16.44	**44.09**	23.84	**242.31**
802.11g	10	2457	C	6	16.24	**42.11**	23.64	**231.40**
802.11g	11	2462	C	6	14.14	**25.96**	21.04	**127.16**

Peak Transmit Power (Continued)

Mode	Channel	Frequency (MHz)	Chain	Data Rate (Mbps)	Average Power (dBm)	Average Power (mW)	Peak Power (dBm)	Peak Power (mW)
802.11n	1	2412	A	HT0	14.14	**25.96**	21.04	**127.16**
802.11n	2	2417	A	HT0	16.24	**42.11**	23.64	**231.40**
802.11n	6	2437	A	HT0	16.54	**45.12**	23.84	**242.31**
802.11n	10	2457	A	HT0	16.54	**45.12**	23.74	**236.79**
802.11n	11	2462	A	HT0	13.84	**24.23**	20.94	**124.27**
802.11n	1	2412	B	HT0	13.94	**24.80**	20.94	**124.27**
802.11n	2	2417	B	HT0	16.34	**43.09**	23.64	**231.40**
802.11n	6	2437	B	HT0	16.24	**42.11**	23.54	**226.13**
802.11n	10	2457	B	HT0	16.44	**44.09**	23.74	**236.79**
802.11n	11	2462	B	HT0	14.04	**25.37**	21.04	**127.16**
802.11n	1	2412	C	HT0	13.94	**24.80**	21.24	**133.16**
802.11n	2	2417	C	HT0	16.44	**44.09**	23.84	**242.31**
802.11n	6	2437	C	HT0	16.34	**43.09**	23.74	**236.79**
802.11n	10	2457	C	HT0	16.24	**42.11**	23.64	**231.40**
802.11n	11	2462	C	HT0	14.04	**25.37**	21.24	**133.16**
802.11n (40MHz)	3(F)	2422	A	HT0	13.74	**23.68**	22.54	**179.62**
802.11n (40MHz)	6(F)	2437	A	HT0	13.54	**22.61**	22.64	**183.81**
802.11n (40MHz)	9(F)	2452	A	HT0	13.74	**23.68**	22.54	**179.62**
802.11n (40MHz)	3(F)	2422	B	HT0	14.24	**26.57**	23.04	**201.54**
802.11n (40MHz)	6(F)	2437	B	HT0	14.14	**25.96**	22.94	**196.95**
802.11n (40MHz)	9(F)	2452	B	HT0	14.04	**25.37**	22.84	**192.47**
802.11n (40MHz)	3(F)	2422	C	HT0	13.94	**24.80**	22.94	**196.95**
802.11n (40MHz)	6(F)	2437	C	HT0	13.74	**23.68**	22.74	**188.09**
802.11n (40MHz)	9(F)	2452	C	HT0	14.14	**25.96**	23.04	**201.54**
802.11n	149	5745	A	HT0	16.04	**40.21**	23.94	**247.95**
802.11n	157	5785	A	HT0	16.14	**41.15**	23.99	**250.82**
802.11n	165	5825	A	HT0	16.04	**40.21**	23.94	**247.95**
802.11n	149	5745	B	HT0	16.19	**41.63**	24.54	**284.69**
802.11n	157	5785	B	HT0	16.29	**42.60**	24.64	**291.32**
802.11n	165	5825	B	HT0	16.24	**42.11**	24.44	**278.20**
802.11n	149	5745	C	HT0	16.14	**41.15**	24.34	**271.87**
802.11n	157	5785	C	HT0	16.44	**44.09**	24.44	**278.20**
802.11n	165	5825	C	HT0	16.04	**40.21**	24.04	**253.73**
802.11n (40MHz)	151(F)	5755	A	HT0	16.50	**44.65**	23.40	**218.78**
802.11n (40MHz)	159(F)	5795	A	HT0	16.57	**45.37**	23.10	**204.17**
802.11n (40MHz)	151(F)	5755	B	HT0	16.63	**46.00**	23.00	**199.53**
802.11n (40MHz)	159(F)	5795	B	HT0	16.51	**44.75**	22.80	**190.55**
802.11n (40MHz)	151(F)	5755	C	HT0	16.35	**43.13**	23.00	**199.53**
802.11n (40MHz)	159(F)	5795	C	HT0	16.16	**41.28**	23.10	**204.17**

Peak Transmit Power (Continued)

Triple Chain ABC Aggregate Power

Mode	Channel	Frequency (MHz)	Chain	Data Rate (Mbps)	Avg. Output Power (dBm)	Avg. Output Power (mW)	Peak Output Power (dBm)	Peak Output Power (mW)
802.11n (20MHz)	1	2412	ABC	HT16	16.49	**44.58**	26.36	**432.06**
802.11n (20MHz)	6	2437	ABC	HT16	16.58	**45.47**	26.36	**432.78**
802.11n (20MHz)	11	2462	ABC	HT16	16.45	**44.15**	26.41	**437.46**
802.11n (40MHz)	3(F)	2422	ABC	HT16	16.49	**44.60**	26.36	**432.33**
802.11n (40MHz)	6(F)	2437	ABC	HT16	16.51	**44.75**	26.24	**420.60**
802.11n (40MHz)	9(F)	2452	ABC	HT16	16.51	**44.73**	26.31	**427.73**
802.11n (20MHz)	149	5745	ABC	HT16	16.53	**44.94**	26.44	**440.94**
802.11n (20MHz)	157	5785	ABC	HT16	16.34	**43.00**	26.18	**414.62**
802.11n (20MHz)	165	5825	ABC	HT16	16.41	**43.75**	26.19	**416.14**
802.11n (40MHz)	151(F)	5755	ABC	HT16	16.49	**44.53**	26.31	**427.13**
802.11n (40MHz)	159(F)	5795	ABC	HT16	16.47	**44.32**	26.11	**408.13**

NOTE: The output power measurement is conducted.

(F) = Fat Channel

APPENDIX B

MODIFICATIONS AND RECOMMENDATIONS

1.0	NONE