



EMC Test Data

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
Contact:	Robert Paxman	Account Manager:	Dean Eriksen
Emissions Standard(s):	RSS 210/FCC U-NII (Radiated)	Class:	-
Immunity Standard(s):	-	Environment:	-

EMC Test Data
UNII Radiated Measurements - Ethertronics Antenna

For The

Intel Corporation

Model

533AN-MMW(MMC)

Date of Last Test: 5/2/2008

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

RSS 210 and FCC 15.E (U-NII, 5150- 550/5250-5350/5460-5725MHz) Radiated Spurious Emissions - Band Edge 802.11a Mode

Test Specific Details

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the specification listed above.

General Test Configuration

The EUT and all local support equipment were located on the turntable for radiated spurious emissions testing. All remote support equipment was located approximately 30 meters from the EUT with all I/O connections running on top of the groundplane.

For radiated emissions testing the measurement antenna was located 3 meters from the EUT.

Ambient Conditions:
Temperature: 19 °C
Rel. Humidity: 43 %

Modifications Made During Testing

No modifications were made to the EUT during testing

Deviations From The Standard

No deviations were made from the requirements of the standard.

Summary of Results

Run #	Mode	Channel	Power Setting	Measured Power	Test Performed	Limit	Result / Margin
1a	802.11a Chain A	5180MHz	31.5	16.7	Band Edge radiated field strength	FCC Part 15.209	51.5 dBuV/m @ 5149.8 MHz (-2.5dB)
1b	802.11a Chain A	5320MHz	26.5	16.5	Band Edge radiated field strength	FCC Part 15.209	51.6 dBuV/m @ 5350.1 MHz (-2.4dB)
1c	802.11a Chain A	5500MHz	26.0	17.9	Band Edge radiated field strength	FCC Part 15.209 / 15E	72.6 dBuV/m @ 5459.8 MHz (-1.4dB)
2a	802.11a Chain B	5180MHz	31.5	17.1	Band Edge radiated field strength	FCC Part 15.209	52.6 dBuV/m @ 5149.7 MHz (-1.4dB)
2b	802.11a Chain B	5320MHz	26.0	16.5	Band Edge radiated field strength	FCC Part 15.209	53.3 dBuV/m @ 5350.1 MHz (-0.7dB)
2c	802.11a Chain B	5500MHz	26.0	17.5	Band Edge radiated field strength	FCC Part 15.209 / 15E	50.6 dBuV/m @ 5459.7 MHz (-3.4dB)
3a	802.11a Chain C	5180MHz	30.5	16.5	Band Edge radiated field strength	FCC Part 15.209	52.2 dBuV/m @ 5149.9 MHz (-1.8dB)
3b	802.11a Chain C	5320MHz	27.5	16.5	Band Edge radiated field strength	FCC Part 15.209	50.2 dBuV/m @ 5350.1 MHz (-3.8dB)
3c	802.11a Chain C	5500MHz	27.0	17.4	Band Edge radiated field strength	FCC Part 15.209 / 15E	49.9 dBuV/m @ 5459.7 MHz (-4.1dB)



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Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #1: Radiated Spurious Emissions, Band Edges. Operating Mode: 802.11a - Chain A

Date of Test: 3/25/2008 Config. Used: 1
 Test Engineer: Ben Jing Config Change: None
 Test Location: FT Chamber # 5 Host Unit Voltage 120V/60Hz

Run #1a: Low Channel @ 5180 MHz (band edge at 5150 MHz)

Power Setting: 31.5 Average power: 16.7 (for reference purposes)

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5181.440	100.3	V	-	-	AVG	147	1.0	RB = 1MHz, VB = 10Hz
5181.440	108.1	V	-	-	PK	147	1.0	RB = VB = 1MHz
5178.800	99.5	H	-	-	AVG	250	1.0	RB = 1MHz, VB = 10Hz
5178.800	107.9	H	-	-	PK	250	1.0	RB = VB = 1MHz

Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5149.730	65.9	V	74.0	-8.1	PK	149	1.0	GC = 31.5 , AP = 16.7
5149.710	50.3	V	54.0	-3.7	AVG	147	1.0	GC = 31.5 , AP = 16.7
5149.780	68.8	H	74.0	-5.2	PK	256	1.0	GC = 31.5 , AP = 16.7
5149.800	51.5	H	54.0	-2.5	AVG	253	1.0	GC = 31.5 , AP = 16.7

Run #1b: High Channel @ 5320 MHz (band edge at 5350 MHz)

Power Setting: 26.5 Average power: 16.5 (for reference purposes)

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5321.440	101.4	V	-	-	AVG	167	1.2	RB = 1MHz, VB = 10Hz
5321.440	109.4	V	-	-	PK	167	1.2	RB = VB = 1MHz
5321.150	100.8	H	-	-	AVG	247	1.0	RB = 1MHz, VB = 10Hz
5321.150	109.0	H	-	-	PK	247	1.0	RB = VB = 1MHz

Band Edge Signal Field Strength

Restricted band starts at allocated band edge (5350MHz), field strength limit is 54dBuV/m average, 74dBuV/m peak.

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5350.170	71.1	H	74.0	-2.9	PK	250	1.0	GC = 26.5 , AP = 16.5
5350.100	51.6	H	54.0	-2.4	AVG	249	1.0	GC = 26.5 , AP = 16.5
5350.170	70.3	V	74.0	-3.7	PK	175	1.0	GC = 26.5 , AP = 16.5
5350.100	50.4	V	54.0	-3.6	AVG	166	1.0	GC = 26.5 , AP = 16.5



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Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #1c: Low Channel @ 5500 MHz (restricted band edge at 5460 MHz, allocated band edge at 5470MHz)
 Power Setting: 25 Average power: 16.6 (for reference purposes)

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
5498.510	104.4	V	-	-	AVG	181	1.0	RB = 1MHz, VB = 10Hz
5498.510	112.7	V	-	-	PK	181	1.0	RB = VB = 1MHz
5498.680	96.7	H	-	-	AVG	118	1.1	RB = 1MHz, VB = 10Hz
5498.680	104.7	H	-	-	PK	118	1.1	RB = VB = 1MHz

5460 Restricted Band Feld strength limit = 54dBuV/m avg, 74dBuV/m peak at 3m

5460 - 5470 MHz, Limit is -27dBm eirp (compliance demonstrated through conducted measurements)

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
5459.740	64.7	H	74.0	-9.3	PK	117	1.1	GC = 25 , AP = 16.6
5459.700	49.5	H	54.0	-4.5	AVG	117	1.1	GC = 25 , AP = 16.6
5459.760	67.7	V	74.0	-6.3	PK	201	1.0	GC = 25 , AP = 16.6
5459.710	50.0	V	54.0	-4.0	AVG	181	1.0	GC = 25 , AP = 16.6
5459.810	72.6	V	74.0	-1.4	PK	182	1.0	GC = 26 , AP = 17.9
5459.870	51.3	V	54.0	-2.7	AVG	182	1.0	GC = 26 , AP = 17.9
5459.730	64.8	H	74.0	-9.2	PK	124	1.0	GC = 26 , AP = 17.9
5459.700	49.8	H	54.0	-4.2	AVG	115	1.0	GC = 26 , AP = 17.9

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		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #2: Radiated Spurious Emissions, Band Edges. Operating Mode: 802.11a - Chain B

Date of Test: 03/25/2008
 Test Engineer: Ben Jing
 Test Location: FT Chamber # 5

Run #2a: Low Channel @ 5180 MHz (band edge at 5150 MHz)

Power Setting: 30.5 Average power: 16.5 (for reference purposes)

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5181.460	93.5	V	-	-	AVG	108	1.0	RB = 1MHz, VB = 10Hz
5181.460	101.5	V	-	-	PK	108	1.0	RB = VB = 1MHz
5178.670	100.2	H	-	-	AVG	96	1.0	RB = 1MHz, VB = 10Hz
5178.670	108.3	H	-	-	PK	96	1.0	RB = VB = 1MHz

Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5149.720	67.8	H	74.0	-6.2	PK	96	1.0	GC = 30.5 , AP = 16.5
5149.790	49.9	H	54.0	-4.1	AVG	93	1.0	GC = 30.5 , AP = 16.5
5149.730	63.8	V	74.0	-10.2	PK	120	1.0	GC = 30.5 , AP = 16.5
5149.700	49.8	V	54.0	-4.2	AVG	108	1.0	GC = 30.5 , AP = 16.5

Run #2b: High Channel @ 5320 MHz (band edge at 5350 MHz)

Power Setting: 26 Average power: 16.5 (for reference purposes)

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5321.290	102.0	V	-	-	AVG	203	1.0	RB = 1MHz, VB = 10Hz
5321.290	109.8	V	-	-	PK	203	1.0	RB = VB = 1MHz
5321.330	101.2	H	-	-	AVG	96	1.0	RB = 1MHz, VB = 10Hz
5321.330	109.3	H	-	-	PK	96	1.0	RB = VB = 1MHz

Band Edge Signal Field Strength

Restricted band starts at allocated band edge (5350MHz), field strength limit is 54dBuV/m average, 74dBuV/m peak.

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5350.120	70.1	H	74.0	-3.9	PK	102	1.0	GC = 26 , AP = 16.5
5350.110	52.6	H	54.0	-1.4	AVG	97	1.0	GC = 26 , AP = 16.5
5350.110	69.6	V	74.0	-4.4	PK	216	1.0	GC = 26 , AP = 16.5
5350.100	53.3	V	54.0	-0.7	AVG	191	1.0	GC = 26 , AP = 16.5



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Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #2c: Low Channel @ 5500 MHz (restricted band edge at 5460 MHz, allocated band edge at 5470MHz)
 Power Setting: 25 Average power: 16.6 (for reference purposes)

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
5498.770	105.5	V	-	-	AVG	187	1.0	RB = 1MHz, VB = 10Hz
5498.770	113.5	V	-	-	PK	187	1.0	RB = VB = 1MHz
5498.690	95.9	H	-	-	AVG	231	1.2	RB = 1MHz, VB = 10Hz
5498.690	103.9	H	-	-	PK	231	1.2	RB = VB = 1MHz

5460 Restricted Band Feld strength limit = 54dBuV/m avg, 74dBuV/m peak at 3m

5460 - 5470 MHz, Limit is -27dBm eirp (compliance demonstrated through conducted measurements)

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
5459.880	62.9	H	74.0	-11.1	PK	256	1.2	GC = 25 , AP = 16.6
5459.700	49.5	H	54.0	-4.5	AVG	231	1.2	GC = 25 , AP = 16.6
5459.760	69.6	V	74.0	-4.4	PK	194	1.0	GC = 25 , AP = 16.6
5459.720	50.1	V	54.0	-3.9	AVG	185	1.0	GC = 25 , AP = 16.6

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		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #3: Radiated Spurious Emissions, Band Edges. Operating Mode: 802.11a - Chain C

Date of Test: 3/28/2008
 Test Engineer: Ben Jing
 Test Location: FT Chamber # 3

Run #3a: Low Channel @ 5180 MHz (band edge at 5150 MHz)

Power Setting: 30.5 Average power: 16.5 (for reference purposes)

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5182.800	97.9	V	-	-	AVG	174	1.1	RB = 1MHz, VB = 10Hz
5182.800	106.1	V	-	-	PK	174	1.1	RB = VB = 1MHz
5181.290	102.2	H	-	-	AVG	100	1.0	RB = 1MHz, VB = 10Hz
5181.290	110.1	H	-	-	PK	100	1.0	RB = VB = 1MHz

Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5149.770	67.5	H	74.0	-6.5	PK	84	1.0	GC = 30.5 , AP = 16.5
5149.890	52.2	H	54.0	-1.8	AVG	100	1.0	GC = 30.5 , AP = 16.5
5149.820	63.8	V	74.0	-10.2	PK	176	1.1	GC = 30.5 , AP = 16.5
5149.700	48.8	V	54.0	-5.2	AVG	174	1.1	GC = 30.5 , AP = 16.5

Run #3b: High Channel @ 5320 MHz (band edge at 5350 MHz)

Power Setting: 27.5 Average power: 16.5 (for reference purposes)

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5321.480	100.1	V	-	-	AVG	212	1.0	RB = 1MHz, VB = 10Hz
5321.480	108.6	V	-	-	PK	212	1.0	RB = VB = 1MHz
5318.600	100.7	H	-	-	AVG	94	1.2	RB = 1MHz, VB = 10Hz
5318.600	108.5	H	-	-	PK	94	1.2	RB = VB = 1MHz

Band Edge Signal Field Strength

Restricted band starts at allocated band edge (5350MHz), field strength limit is 54dB μ V/m average, 74dB μ V/m peak.

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5350.120	66.2	H	74.0	-7.8	PK	98	1.2	GC = 27.5 , AP = 16.5
5350.100	49.9	H	54.0	-4.1	AVG	97	1.2	GC = 27.5 , AP = 16.5
5350.300	65.5	V	74.0	-8.5	PK	204	1.0	GC = 27.5 , AP = 16.5
5350.100	50.2	V	54.0	-3.8	AVG	200	1.0	GC = 27.5 , AP = 16.5



EMC Test Data

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Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #3c: Low Channel @ 5500 MHz (restricted band edge at 5460 MHz, allocated band edge at 5470MHz)
 Power Setting: 26 Average power: 16.6 (for reference purposes)

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
5498.540	97.6	H	-	-	AVG	237	1.0	RB = 1MHz, VB = 10Hz
5498.540	105.8	H	-	-	PK	237	1.0	RB = VB = 1MHz
5501.270	103.5	V	-	-	AVG	183	1.0	RB = 1MHz, VB = 10Hz
5501.270	111.8	V	-	-	PK	183	1.0	RB = VB = 1MHz

5460 Restricted Band Feld strength limit = 54dBuV/m avg, 74dBuV/m peak at 3m

5460 - 5470 MHz, Limit is -27dBm eirp (compliance demonstrated through conducted measurements)

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
5459.720	63.1	V	74.0	-10.9	PK	178	1.0	GC = 26 , AP = 16.6
5459.700	49.4	V	54.0	-4.6	AVG	194	1.0	GC = 26 , AP = 16.6
5459.700	61.4	H	74.0	-12.6	PK	239	1.0	GC = 26 , AP = 16.6
5459.700	48.6	H	54.0	-5.4	AVG	246	1.0	GC = 26 , AP = 16.6

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		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

**RSS 210 and FCC 15.407 (UNII 5 GHz)
Radiated Spurious Emissions, 1 - 40GHz 802.11a Mode**

Test Specific Details

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the specification listed above.

General Test Configuration

The EUT and all local support equipment were located on the turntable for radiated spurious emissions testing. All remote support equipment was located approximately 30 meters from the EUT with all I/O connections running on top of the groundplane.

For radiated emissions testing the measurement antenna was located 3 meters from the EUT.

Ambient Conditions:
Temperature: 20 °C
Rel. Humidity: 34 %

Modifications Made During Testing

No modifications were made to the EUT during testing

Deviations From The Standard

No deviations were made from the requirements of the standard.

Summary of Results

Run #	Mode	Channel	Power Setting	Measured Power	Test Performed	Limit	Result / Margin
1	802.11a Chain A	5180	31.5	16.5	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.407	55.3dBµV/m @ 6906.7MHz (-13.0dB)
		5200	31.0	16.6			
		5240	29.5	16.6			
2	802.11a Chain A	5260	29.0	16.7	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.407	60.0dBµV/m @ 1747.1MHz (-14.0dB)
		5280	28.5	16.7			
		5320	27.0	16.5			
3	802.11a Chain A	5500	25.5	16.7	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.407	50.3dBµV/m @ 11200.4MHz (-3.7dB)
		5600	25.5	16.6			
		5700	26.0	16.5			
4	802.11a Chain B	5180	31.0	16.5	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.407	59.5dBµV/m @ 1748.3MHz (-14.5dB)
		5200	30.5	16.6			
		5240	30.5	16.6			
5	802.11a Chain B	5260	27.5	16.7	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.407	39.2dBµV/m @ 10640.0MHz (-14.8dB)
		5280	27.0	16.7			
		5320	25.5	16.5			

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Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run	Chain	Freq (MHz)	Level (dBµV/m)	Pol	Limit	Margin	Detector	Azimuth (degrees)	Height (meters)	Comments
6	802.11a Chain B	5500, 5600, 5700	24.5, 24.5, 25.0	V	15.209 / 15.407	-16.8, -16.8, -17.7	AVG	351	1.0	45.5dBµV/m @ 7466.7MHz (-8.5dB)
7	802.11a Chain C	5180, 5200, 5240	31.0, 30.5, 30.0	V	15.209 / 15.407	-15.7, -15.7, -16.8	AVG	145	2.0	42.9dBµV/m @ 7500.1MHz (-11.1dB)
8	802.11a Chain C	5260, 5280, 5320	29.5, 29.0, 28.5	V	15.209 / 15.407	-14.7, -14.7, -15.7	PK	245	1.5	42.4dBµV/m @ 7500.2MHz (-11.6dB)
9	802.11a Chain C	5500, 5600, 5700	26.0, 25.5, 25.5	V	15.209 / 15.407	-33.8, -33.8, -37.1	PK	145	2.0	44.8dBµV/m @ 7599.9MHz (-9.2dB)

Run #1: Radiated Spurious Emissions, 1000 - 40000 MHz. Operating Mode: 802.11a Chain A

Date of Test: 4/7/2008

Test Engineer: Ben Jing

Test Location: FT Chamber # 4

Run #1a: Low Channel @ 5180 MHz

Spurious Emissions

Frequency (MHz)	Level (dBµV/m)	Pol	15.209 / 15.407 Limit	Margin	Detector	Azimuth (degrees)	Height (meters)	Comments
1743.890	36.3	V	54.0	-17.7	AVG	351	1.0	
6906.660	55.3	V	68.3	-13.0	AVG	138	1.0	Note 2
10359.910	39.1	V	68.3	-29.2	AVG	199	1.0	Note 2
1743.890	58.5	V	74.0	-15.5	PK	351	1.0	
6906.660	56.7	V	88.3	-31.6	PK	138	1.0	Note 2
10359.910	51.0	V	88.3	-37.3	PK	199	1.0	Note 2

Run #1b: Center Channel @ 5200 MHz

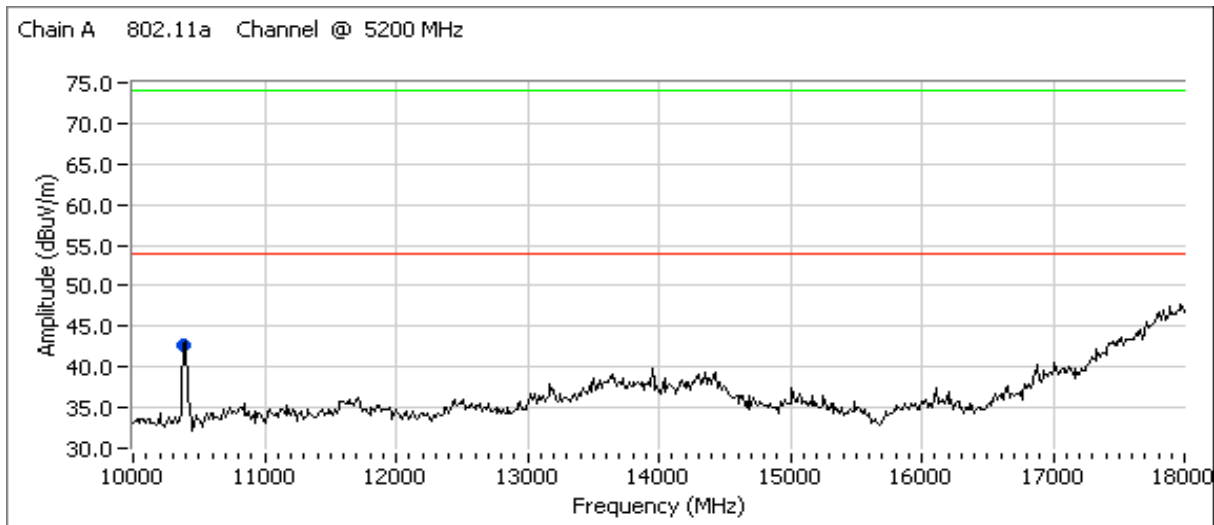
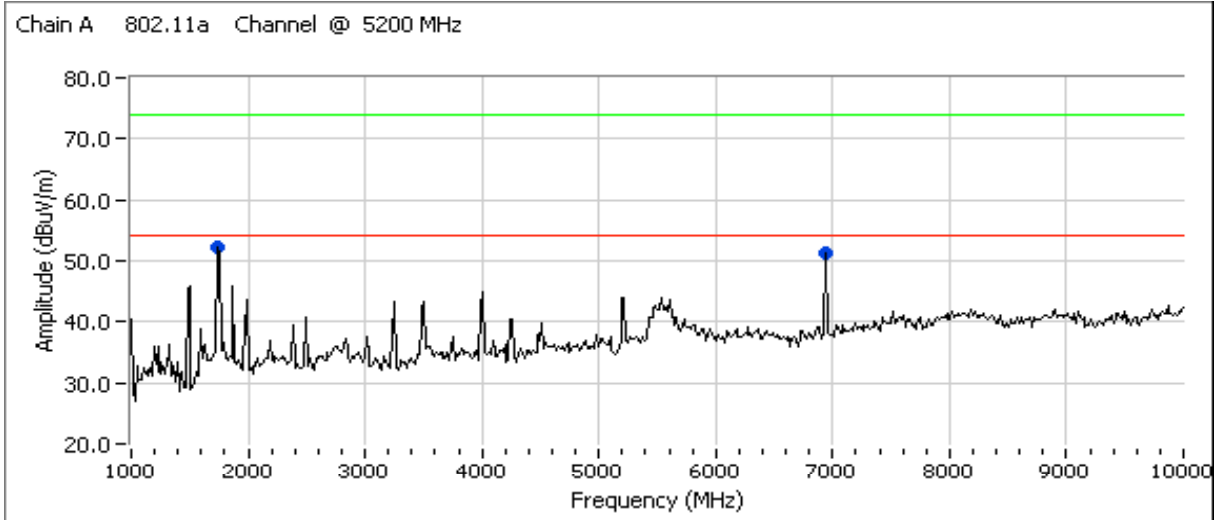
Spurious Emissions

Frequency (MHz)	Level (dBµV/m)	Pol	15.209 / 15.407 Limit	Margin	Detector	Azimuth (degrees)	Height (meters)	Comments
1743.180	37.2	V	54.0	-16.8	AVG	245	1.5	
6933.260	52.6	V	68.3	-15.7	AVG	145	2.0	Note 2
10400.180	39.2	V	68.3	-29.1	AVG	197	1.0	Note 2
1743.180	59.3	V	74.0	-14.7	PK	245	1.5	
6933.260	54.5	V	88.3	-33.8	PK	145	2.0	Note 2
10400.180	51.2	V	88.3	-37.1	PK	197	1.0	Note 2

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBµV/m average, 88.3dBµV/m peak)

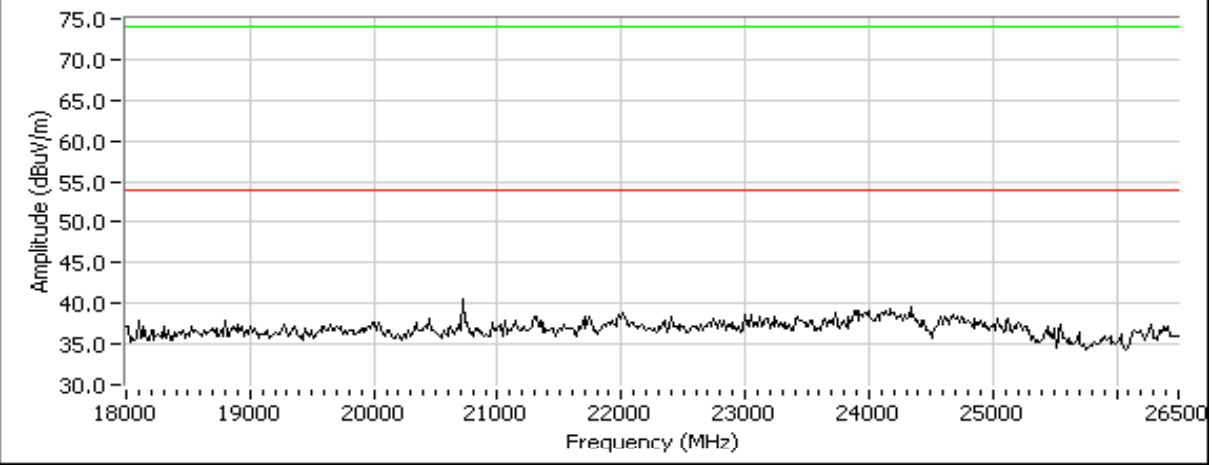
Note 2: Signal is not in a restricted band.

Client: Intel Corporation	Job Number: J70976
Model: 533AN-MMW(MMC)	T-Log Number: T71131
	Account Manager: Dean Eriksen
Contact: Robert Paxman	
Standard: RSS 210/FCC U-NII (Radiated)	Class: N/A

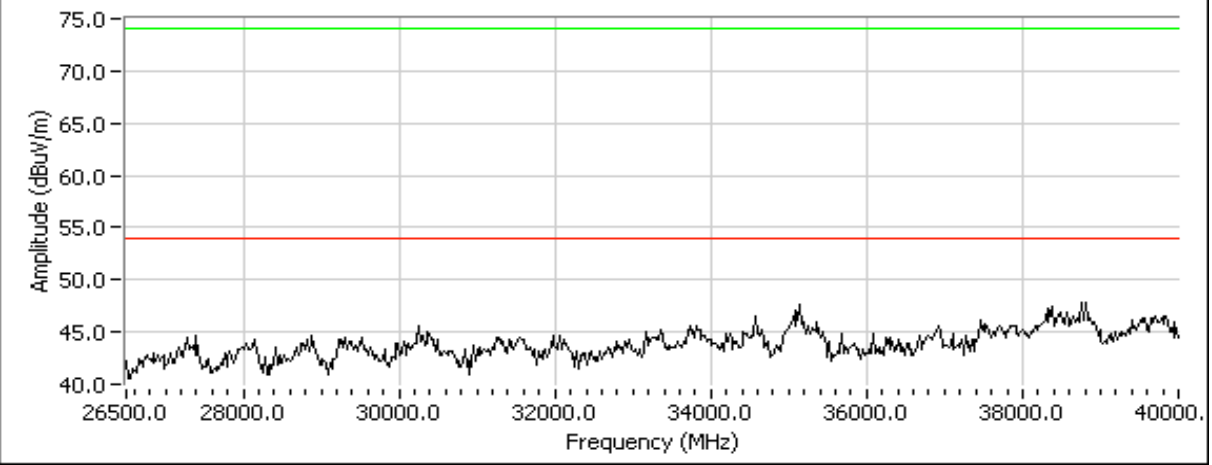


Client: Intel Corporation	Job Number: J70976
Model: 533AN-MMW(MMC)	T-Log Number: T71131
	Account Manager: Dean Eriksen
Contact: Robert Paxman	
Standard: RSS 210/FCC U-NII (Radiated)	Class: N/A

Chain A 802.11a Channel @ 5200 MHz



Chain A 802.11a Channel @ 5200 MHz





EMC Test Data

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #1c: High Channel @ 5240 MHz

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1743.260	36.3	V	54.0	-17.7	AVG	354	1.0	
6986.680	51.3	V	68.3	-17.0	AVG	144	2.0	Note 2
10480.370	40.8	V	68.3	-27.5	AVG	198	1.0	Note 2
1743.260	58.6	V	74.0	-15.4	PK	354	1.0	
6986.680	53.8	V	88.3	-34.5	PK	144	2.0	Note 2
10480.370	53.1	V	88.3	-35.2	PK	198	1.0	Note 2

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Note 2: Signal is not in a restricted band.

Run #2: Radiated Spurious Emissions, 1000 - 40000 MHz. Operating Mode: 802.11a Chain A

Date of Test: 4/8/2008

Test Engineer: Ben Jing

Test Location: FT Chamber # 4

Run #2a: Low Channel @ 5260 MHz

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1747.160	36.1	V	54.0	-17.9	AVG	341	1.0	
3996.720	31.7	V	54.0	-22.3	AVG	288	1.5	
7013.370	48.1	V	68.3	-20.2	AVG	145	1.5	Note 2
10520.440	38.6	V	68.3	-29.7	AVG	211	1.0	Note 2
1747.160	58.8	V	74.0	-15.2	PK	341	1.0	
3996.720	52.5	V	74.0	-21.5	PK	288	1.5	
7013.370	51.2	V	88.3	-37.1	PK	145	1.5	Note 2
10520.440	50.6	V	88.3	-37.7	PK	211	1.0	Note 2

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Note 2: Signal is not in a restricted band.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
Contact:	Robert Paxman	Account Manager:	Dean Eriksen
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #2b: Center Channel @ 5280 MHz

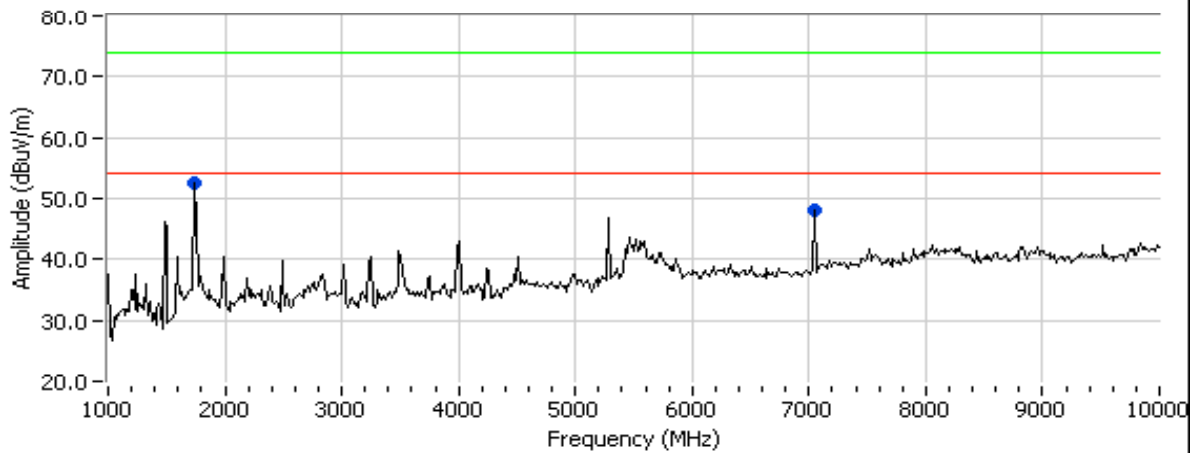
Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1744.130	36.7	V	54.0	-17.3	AVG	110	1.5	
7040.010	47.2	V	68.3	-21.1	AVG	145	2.0	Note 2
10559.940	39.6	V	68.3	-28.7	AVG	144	1.0	Note 2
1744.130	59.6	V	74.0	-14.4	PK	110	1.5	
7040.010	51.5	V	88.3	-36.8	PK	145	2.0	Note 2
10559.940	52.0	V	88.3	-36.3	PK	144	1.0	Note 2

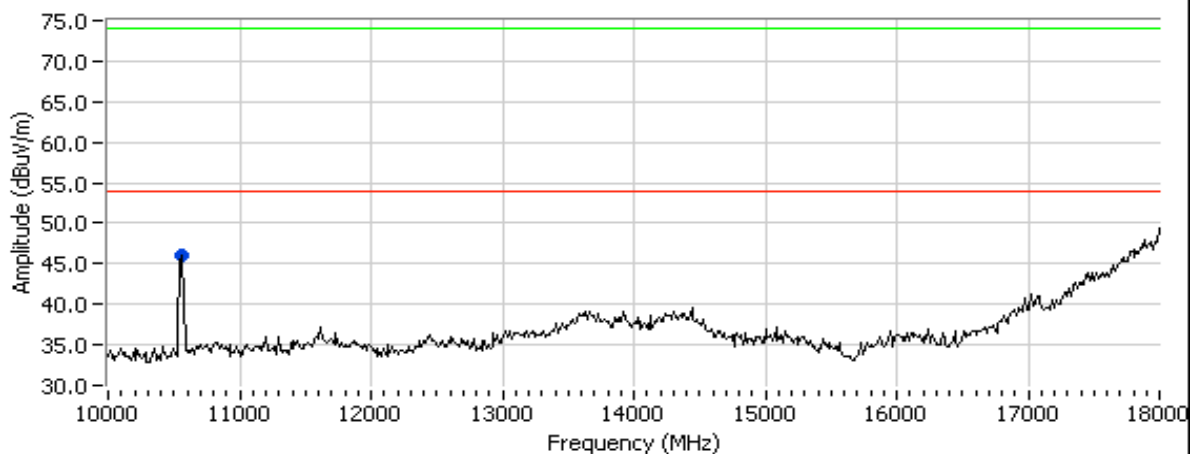
Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Note 2: Signal is not in a restricted band.

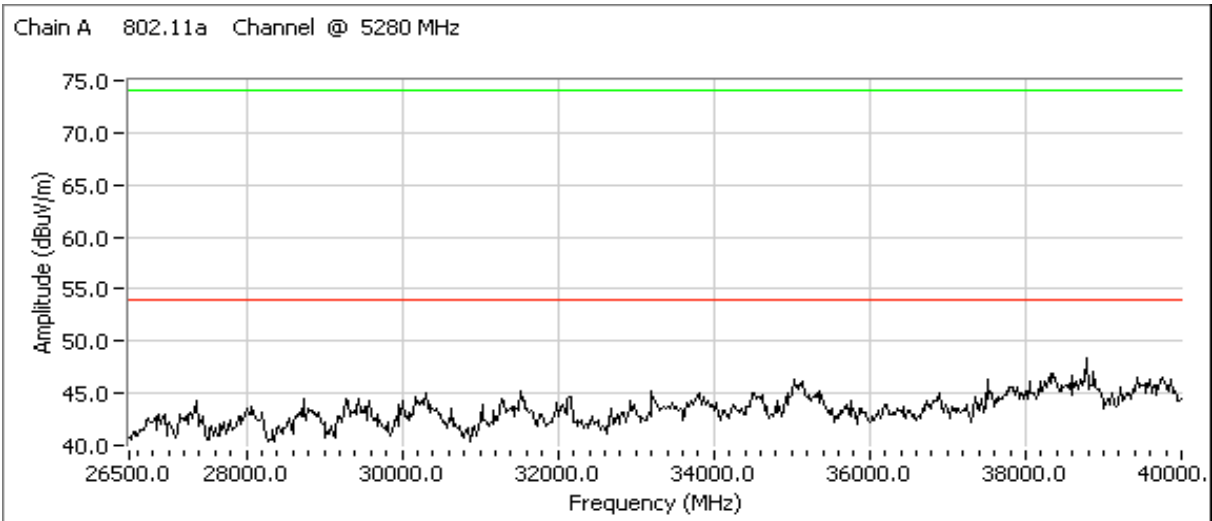
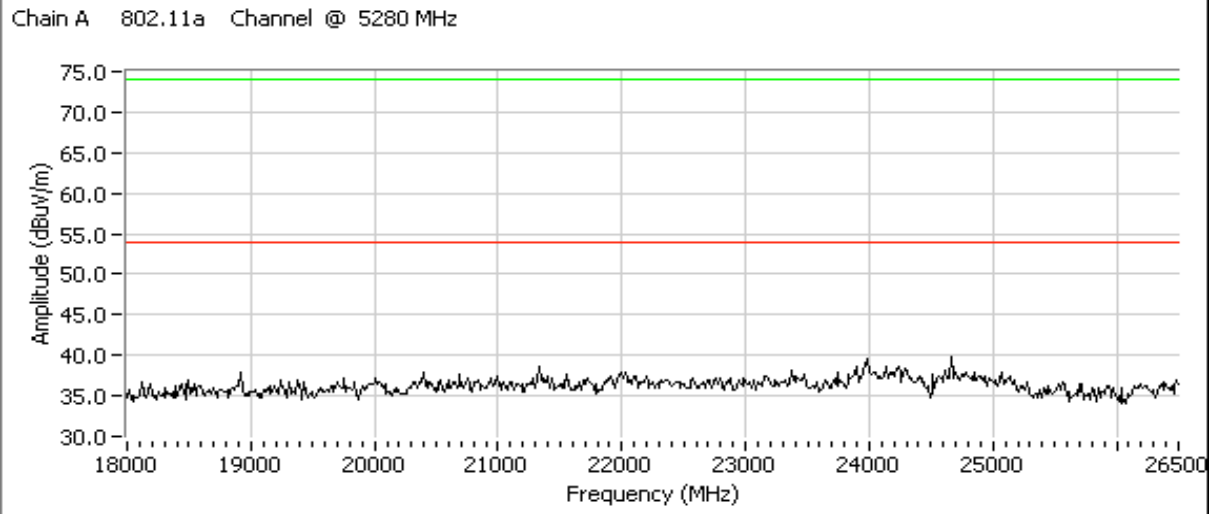
Chain A 802.11a Channel @ 5280 MHz



Chain A 802.11a Channel @ 5280 MHz



Client: Intel Corporation	Job Number: J70976
Model: 533AN-MMW(MMC)	T-Log Number: T71131
	Account Manager: Dean Eriksen
Contact: Robert Paxman	
Standard: RSS 210/FCC U-NII (Radiated)	Class: N/A





EMC Test Data

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #2c: High Channel @ 5320 MHz

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1747.130	37.3	V	54.0	-16.7	AVG	243	1.5	
7093.330	47.8	V	68.3	-20.5	AVG	142	1.5	Note 2
10640.360	39.2	V	54.0	-14.8	AVG	192	1.0	
1747.130	60.0	V	74.0	-14.0	PK	243	1.5	
7093.330	51.3	V	88.3	-37.0	PK	142	1.5	Note 2
10640.360	51.7	V	74.0	-22.3	PK	192	1.0	

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Note 2: Signal is not in a restricted band but the more stringent restricted band limit was used.

Run #3: Radiated Spurious Emissions, 1000 - 40000 MHz. Operating Mode: 802.11a Chain A

Date of Test: 4/9/2008

Test Engineer: Rafael Varelas

Test Location: FT Chamber # 4

Run #3a: Low Channel @ 5500 MHz

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1494.200	33.4	H	54.0	-20.6	AVG	73	1.0	
3997.680	33.3	H	54.0	-20.7	AVG	122	1.9	
10999.840	46.7	H	54.0	-7.3	AVG	234	1.0	
1494.200	54.1	H	74.0	-19.9	PK	73	1.0	
3997.680	54.7	H	74.0	-19.3	PK	122	1.9	
10999.840	59.6	H	74.0	-14.4	PK	234	1.0	

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

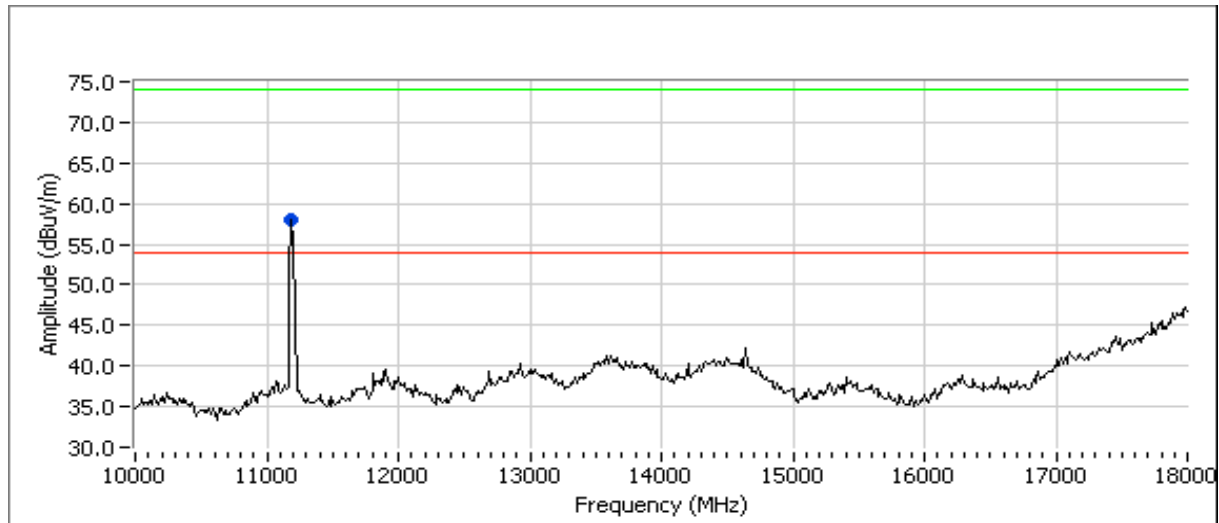
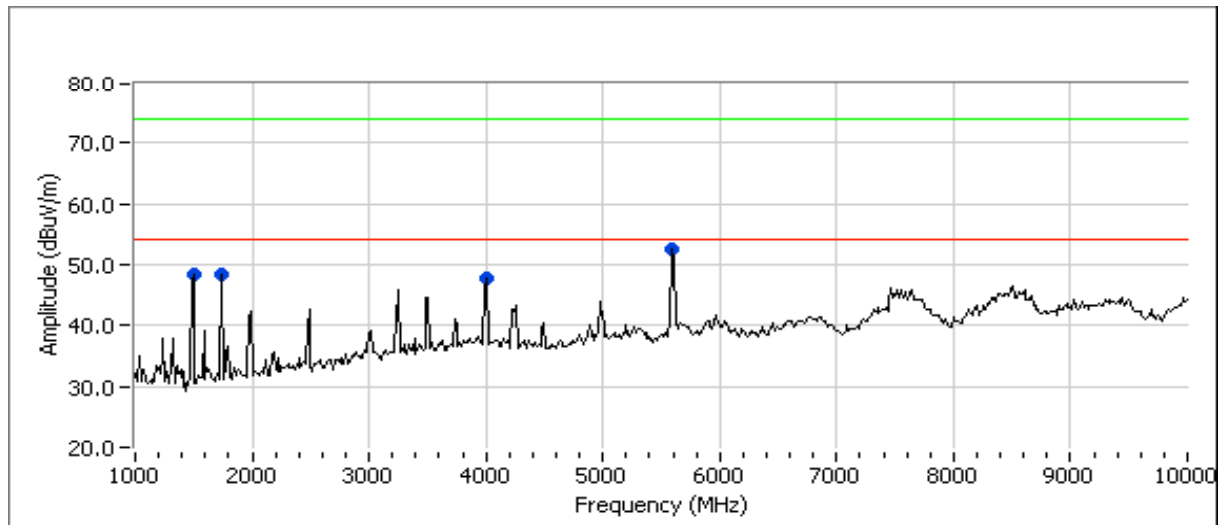
Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
Contact:	Robert Paxman	Account Manager:	Dean Eriksen
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #3b: Center Channel @ 5600 MHz

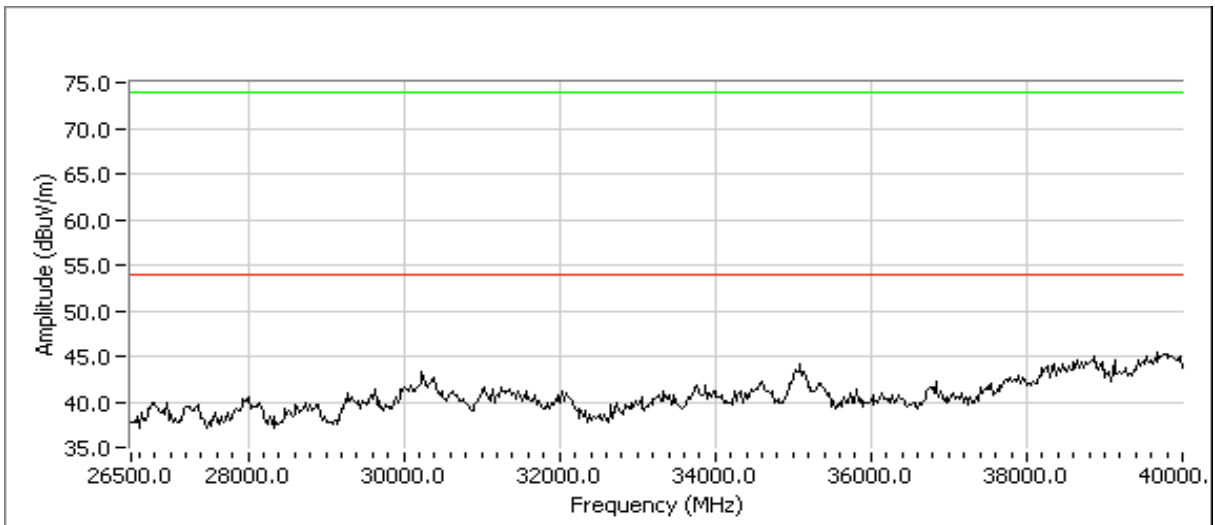
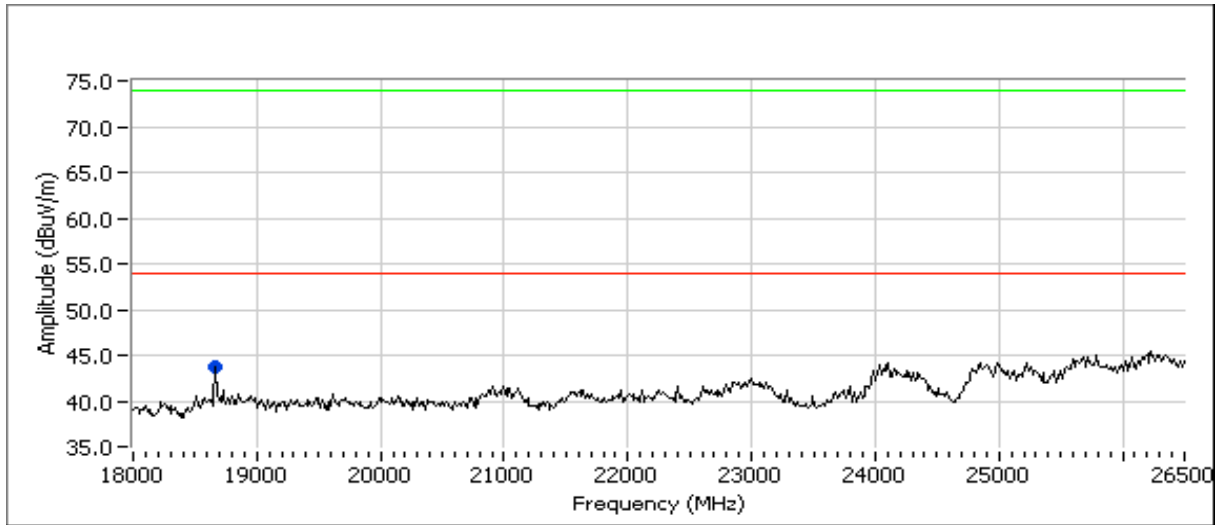
Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1497.740	35.6	V	54.0	-18.4	AVG	116	1.0	
3998.750	32.8	H	54.0	-21.2	AVG	121	1.9	
11200.400	50.3	V	54.0	-3.7	AVG	168	1.0	
18665.830	43.8	V	54.0	-10.2	Peak	122	1.0	
1497.740	52.5	V	74.0	-21.5	PK	116	1.0	
3998.750	54.1	H	74.0	-19.9	PK	121	1.9	
11200.400	62.8	V	74.0	-11.2	PK	168	1.0	

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp



Client: Intel Corporation	Job Number: J70976
Model: 533AN-MMW(MMC)	T-Log Number: T71131
Contact: Robert Paxman	Account Manager: Dean Eriksen
Standard: RSS 210/FCC U-NII (Radiated)	Class: N/A





EMC Test Data

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #3c: High Channel @ 5700 MHz

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1495.090	33.4	H	54.0	-20.6	AVG	75	1.0	
1744.320	32.4	V	54.0	-21.6	AVG	65	1.0	
3999.120	32.3	H	54.0	-21.7	AVG	129	1.9	
11400.250	48.4	V	54.0	-5.6	AVG	92	1.0	
1495.090	54.8	H	74.0	-19.2	PK	75	1.0	
1744.320	53.9	V	74.0	-20.1	PK	65	1.0	
3999.120	53.4	H	74.0	-20.6	PK	129	1.9	
11400.250	60.2	V	74.0	-13.8	PK	92	1.0	

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp

Note 2: Signal is not in a restricted band but the more stringent restricted band limit was used.



EMC Test Data

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Date of Test: 4/7/2008
 Test Engineer: Ben Jing
 Test Location: FT Chamber # 4

Run #4: Radiated Spurious Emissions, 1000 - 40000 MHz. Operating Mode: 802.11a Chain B

Run #4a: Low Channel @ 5180 MHz

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1748.250	36.5	V	54.0	-17.5	AVG	109	1.5	
6906.710	50.6	V	68.3	-17.7	AVG	150	1.0	Note 2
10360.010	42.2	H	68.3	-26.1	AVG	144	1.0	Note 2
1748.250	59.5	V	74.0	-14.5	PK	109	1.5	
6906.710	52.9	V	88.3	-35.4	PK	150	1.0	Note 2
10360.010	46.1	H	88.3	-42.2	PK	144	1.0	Note 2

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Note 2: Signal is not in a restricted band.

Run #4b: Center Channel @ 5200 MHz

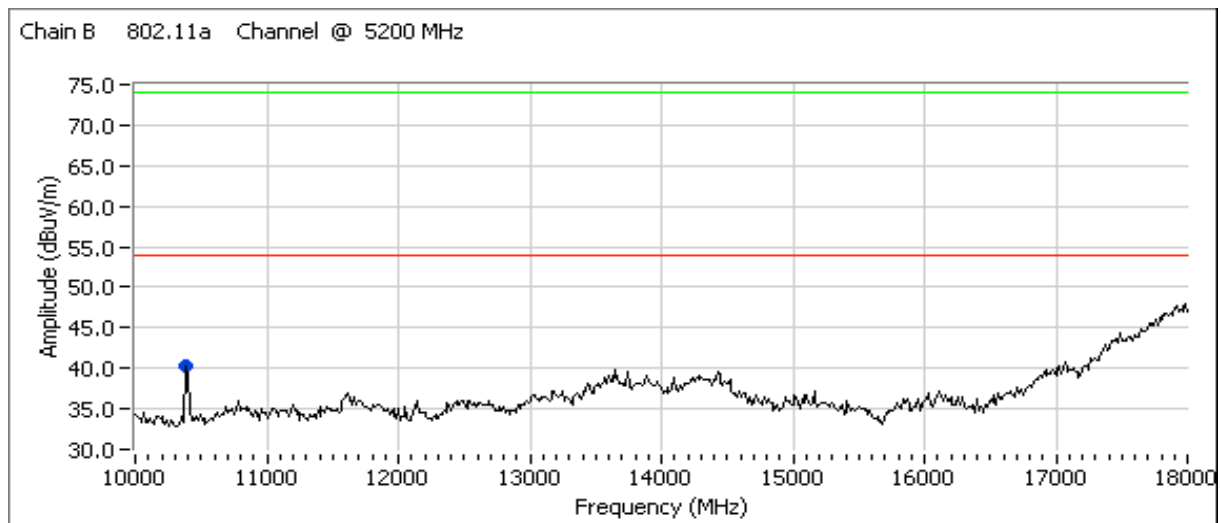
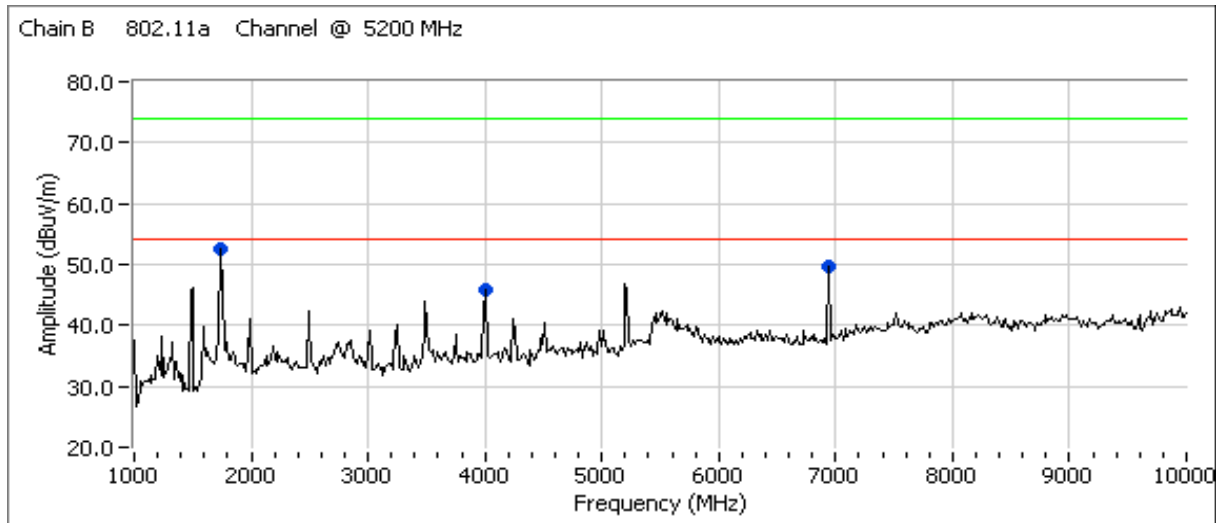
Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1743.330	36.8	V	54.0	-17.2	AVG	242	2.0	
3995.740	31.8	V	54.0	-22.2	AVG	246	1.5	
6933.370	50.3	V	68.3	-18.0	AVG	150	1.0	Note 2
10400.020	35.8	V	68.3	-32.5	AVG	235	1.0	Note 2
1743.330	57.7	V	74.0	-16.3	PK	242	2.0	
3995.740	52.3	V	74.0	-21.7	PK	246	1.5	
6933.370	52.6	V	88.3	-35.7	PK	150	1.0	Note 2
10400.020	43.7	V	88.3	-44.6	PK	235	1.0	Note 2

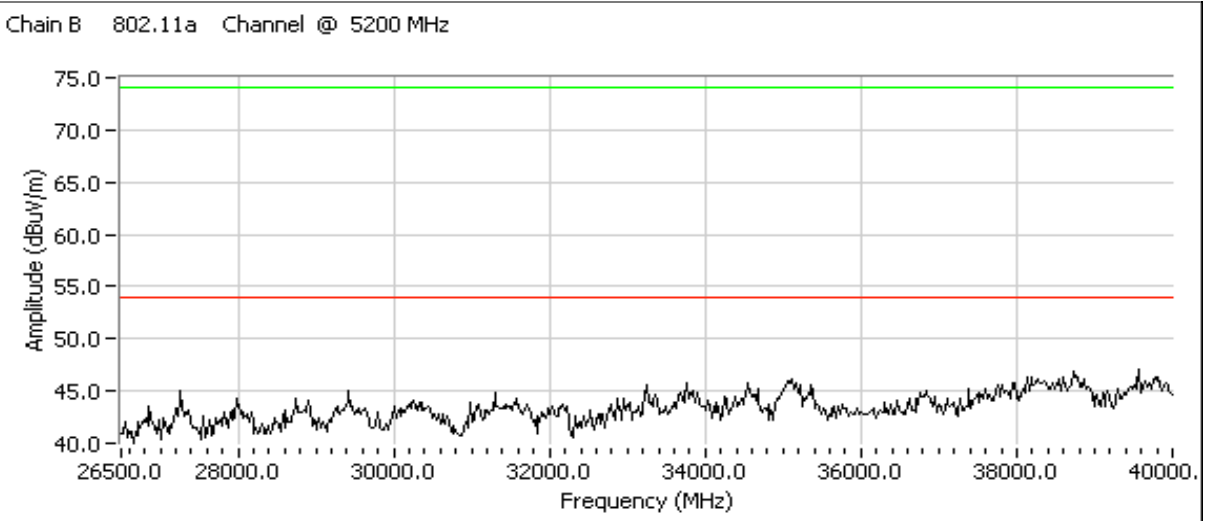
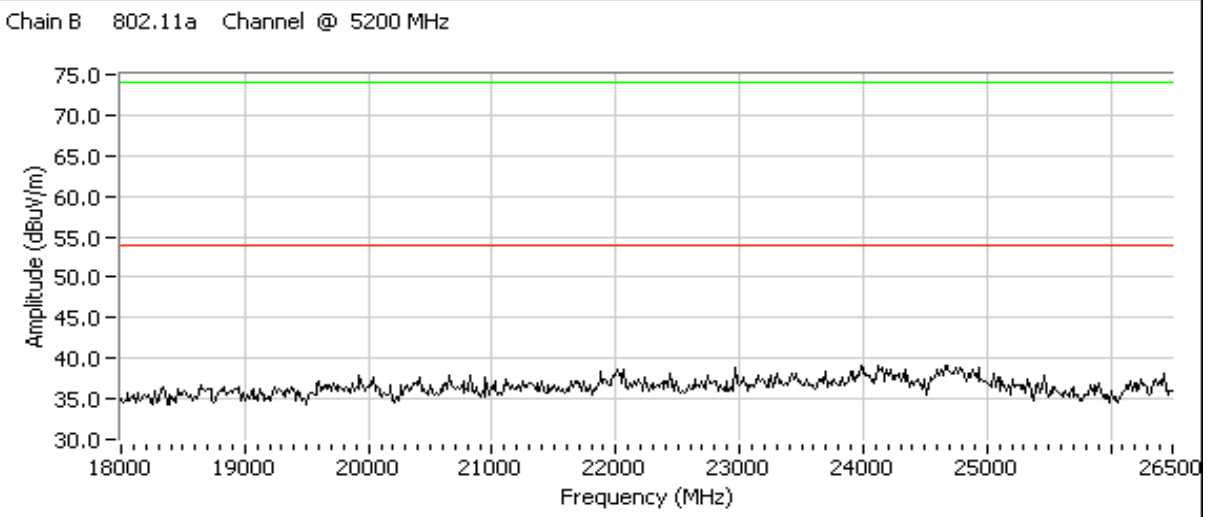
Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Note 2: Signal is not in a restricted band.

Client: Intel Corporation	Job Number: J70976
Model: 533AN-MMW(MMC)	T-Log Number: T71131
Contact: Robert Paxman	Account Manager: Dean Eriksen
Standard: RSS 210/FCC U-NII (Radiated)	Class: N/A



Client: Intel Corporation	Job Number: J70976
Model: 533AN-MMW(MMC)	T-Log Number: T71131
Contact: Robert Paxman	Account Manager: Dean Eriksen
Standard: RSS 210/FCC U-NII (Radiated)	Class: N/A



Run #4c: High Channel @ 5240 MHz

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
1748.010	37.3	V	68.3	-31.0	AVG	246	1.5	Note 2
6986.670	49.9	V	68.3	-18.4	AVG	149	1.0	Note 2
10479.990	36.6	V	68.3	-31.7	AVG	195	1.0	Note 2
1748.010	59.9	V	88.3	-28.4	PK	246	1.5	Note 2
6986.670	52.4	V	88.3	-35.9	PK	149	1.0	Note 2
10479.990	47.9	V	88.3	-40.4	PK	195	1.0	Note 2

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Note 2: Signal is not in a restricted band.



EMC Test Data

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Date of Test: 4/9/2008
 Test Engineer: Rafael Varelas
 Test Location: FT Chamber # 4

Run #5: Radiated Spurious Emissions, 1000 - 40000 MHz. Operating Mode: 802.11a Chain B

Run #5a: Low Channel @ 5260 MHz

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1494.560	33.4	H	54.0	-20.6	AVG	75	1.0	
3996.750	33.0	H	54.0	-21.0	AVG	123	1.6	
7013.310	47.5	V	68.3	-20.8	AVG	227	1.3	Note 2
10520.000	42.8	V	68.3	-25.5	Peak	125	1.3	Note 2 Pk reading, avg limit
1494.560	54.5	H	74.0	-19.5	PK	75	1.0	
3996.750	53.9	H	74.0	-20.1	PK	123	1.6	
7013.310	50.7	V	88.3	-37.6	PK	227	1.3	Note 2

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Note 2: Signal is not in a restricted band .

Run #5b: Center Channel @ 5280 MHz

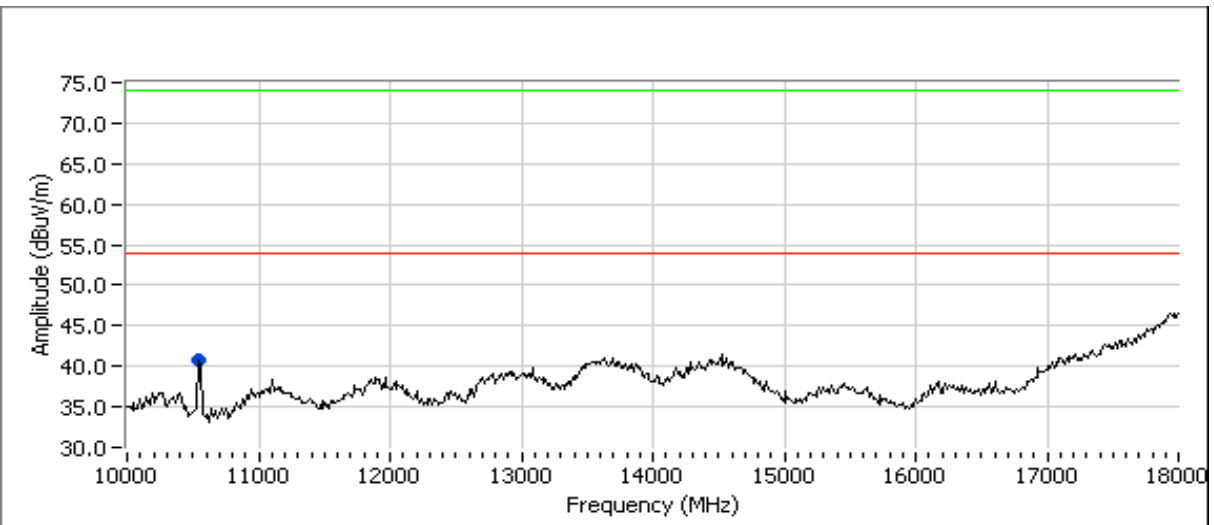
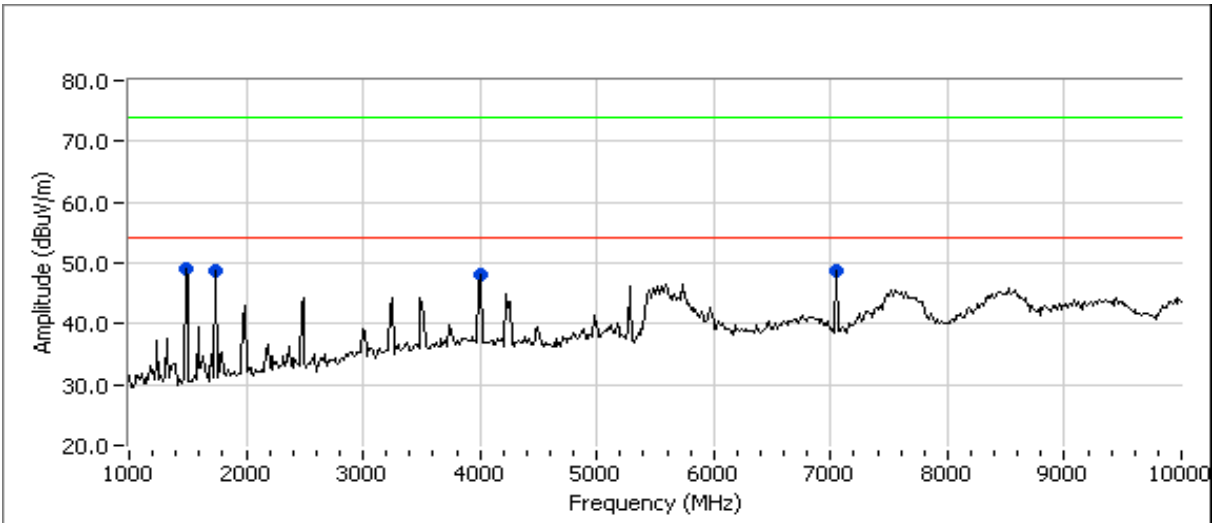
Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1498.460	35.1	H	54.0	-18.9	AVG	71	1.0	
1743.580	32.5	V	68.3	-35.8	AVG	64	1.0	Note 2
3996.410	32.5	V	54.0	-21.5	AVG	196	1.3	
7039.990	48.6	V	68.3	-19.7	AVG	234	1.3	Note 2
10559.980	40.7	V	68.3	-27.6	Peak	163	1.0	Note 2 Pk reading, avg limit
1498.460	54.4	H	74.0	-19.6	PK	71	1.0	
1743.580	54.1	V	88.3	-34.2	PK	64	1.0	Note 2
3996.410	51.0	V	74.0	-23.0	PK	196	1.3	
7039.990	51.4	V	88.3	-36.9	PK	234	1.3	Note 2

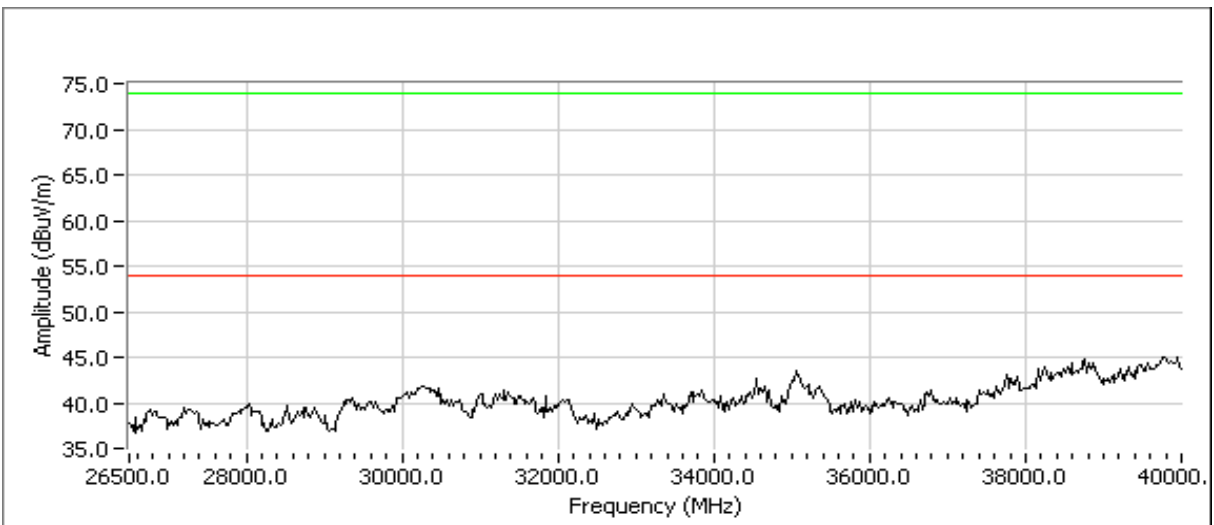
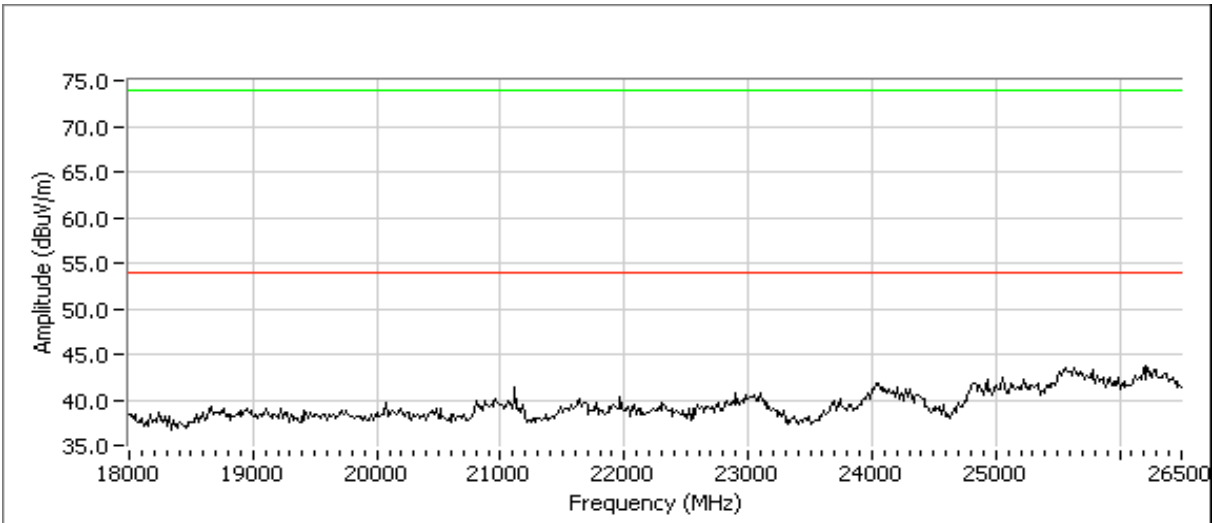
Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp

Note 2: Signal is not in a restricted band but the more stringent restricted band limit was used.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
Contact:	Robert Paxman	Account Manager:	Dean Eriksen
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A



Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
Contact:	Robert Paxman	Account Manager:	Dean Eriksen
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A





EMC Test Data

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #5c: High Channel @ 5320 MHz

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1497.710	35.3	H	54.0	-18.7	AVG	73	1.0	
1747.610	31.5	V	68.3	-36.8	AVG	69	1.0	Note 2
3996.710	33.6	H	54.0	-20.4	AVG	131	1.9	
7093.270	48.5	V	68.3	-19.8	AVG	231	1.3	Note 2
10640.000	39.2	V	54.0	-14.8	Peak	172	1.0	
1497.710	54.4	H	74.0	-19.6	PK	73	1.0	
1747.610	53.0	V	88.3	-35.3	PK	69	1.0	Note 2
3996.710	55.3	H	74.0	-18.7	PK	131	1.9	
7093.270	52.2	V	88.3	-36.1	PK	231	1.3	Note 2

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Note 2: Signal is not in a restricted band but the more stringent restricted band limit was used.

Run #6: Radiated Spurious Emissions, 1000 - 40000 MHz. Operating Mode: 802.11a Chain B

Date of Test: 4/9/2008

Test Engineer: Rafael Varelas

Test Location: FT Chamber # 4

Run #6a: Low Channel @ 5500 MHz

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1497.690	35.3	H	54.0	-18.7	AVG	69	1.0	
3993.620	33.4	H	54.0	-20.6	AVG	122	1.9	
7333.350	43.6	V	54.0	-10.4	AVG	173	1.9	
10998.570	41.7	V	54.0	-12.3	AVG	230	1.0	
1497.690	54.5	H	74.0	-19.5	PK	69	1.0	
3993.620	55.0	H	74.0	-19.0	PK	122	1.9	
7333.350	49.4	V	74.0	-24.6	PK	173	1.9	
10998.570	53.2	V	74.0	-20.8	PK	230	1.0	

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

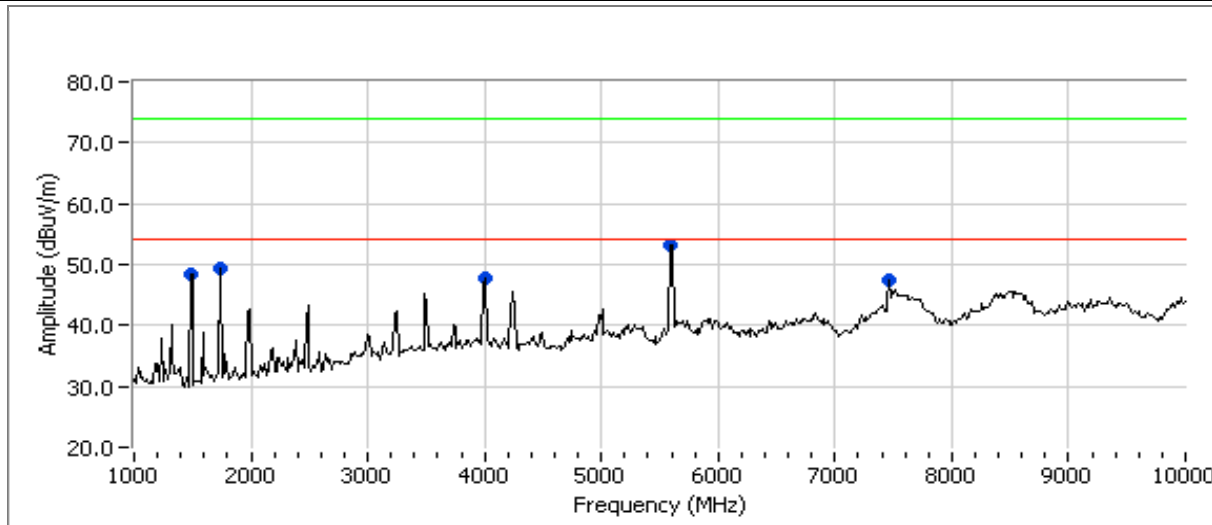
Run #6b: Center Channel @ 5600 MHz

Spurious Emissions

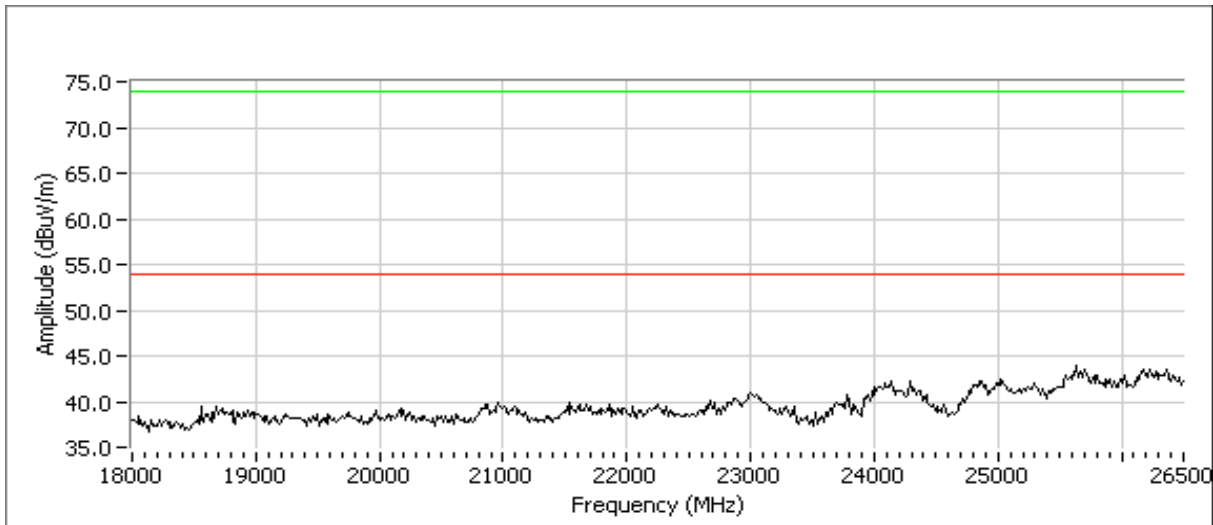
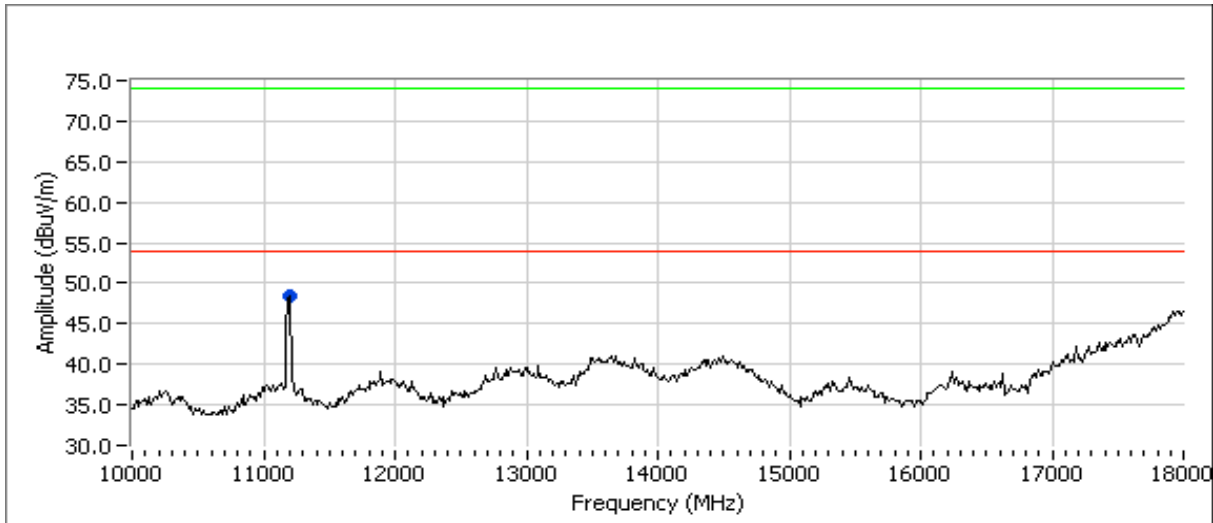
Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1494.440	33.5	H	54.0	-20.5	AVG	74	1.0	
3993.950	33.6	H	54.0	-20.4	AVG	124	1.9	
7466.650	45.5	V	54.0	-8.5	AVG	240	1.9	
11200.570	44.7	V	54.0	-9.3	AVG	210	1.0	
1494.440	54.7	H	74.0	-19.3	PK	74	1.0	
3993.950	55.1	H	74.0	-18.9	PK	124	1.9	
7466.650	51.7	V	74.0	-22.3	PK	240	1.9	
11200.570	56.8	V	74.0	-17.2	PK	210	1.0	

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

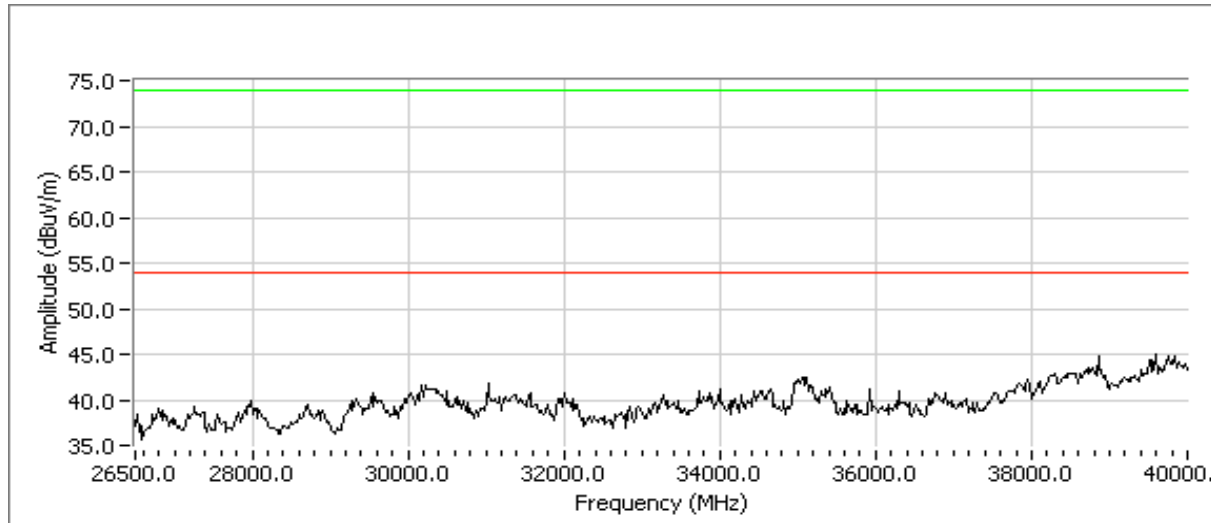
Note 2: Signal is not in a restricted band but the more stringent restricted band limit was used.



Client: Intel Corporation	Job Number: J70976
Model: 533AN-MMW(MMC)	T-Log Number: T71131
Contact: Robert Paxman	Account Manager: Dean Eriksen
Standard: RSS 210/FCC U-NII (Radiated)	Class: N/A



Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
Contact:	Robert Paxman	Account Manager:	Dean Eriksen
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A



Run #6c: High Channel @ 5700 MHz

Spurious Emissions

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBuV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
1497.670	35.7	H	54.0	-18.3	AVG	70	1.0	
3996.530	33.5	H	54.0	-20.5	AVG	131	1.9	
7599.980	43.2	V	54.0	-10.8	AVG	252	1.3	
11400.020	42.1	V	54.0	-11.9	AVG	206	1.0	
1497.670	54.5	H	74.0	-19.5	PK	70	1.0	
3996.530	54.8	H	74.0	-19.2	PK	131	1.9	
7599.980	50.7	V	74.0	-23.3	PK	252	1.3	
11400.020	53.7	V	74.0	-20.3	PK	206	1.0	

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Note 2: Signal is not in a restricted band but the more stringent restricted band limit was used.



EMC Test Data

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #7: Radiated Spurious Emissions, 1000 - 40000 MHz. Operating Mode: 802.11a Chain C

Date of Test: 4/10/2008

Test Engineer: Ben Jing

Test Location: FT Chamber # 4

Run #7a: Low Channel @ 5180 MHz

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector PK/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1743.730	31.6	V	54.0	-22.4	AVG	197	1.0	
6906.690	56.9	V	68.3	-11.4	AVG	196	1.0	Note 2
10359.980	42.4	V	68.3	-25.9	AVG	196	1.0	Note 2
1743.730	52.0	V	74.0	-22.0	PK	197	1.0	
6906.690	58.4	V	88.3	-29.9	PK	196	1.0	Note 2
10359.980	49.9	V	88.3	-38.4	PK	196	1.0	Note 2

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Note 2: Signal is not in a restricted band.

Run #7b: Center Channel @ 5200 MHz

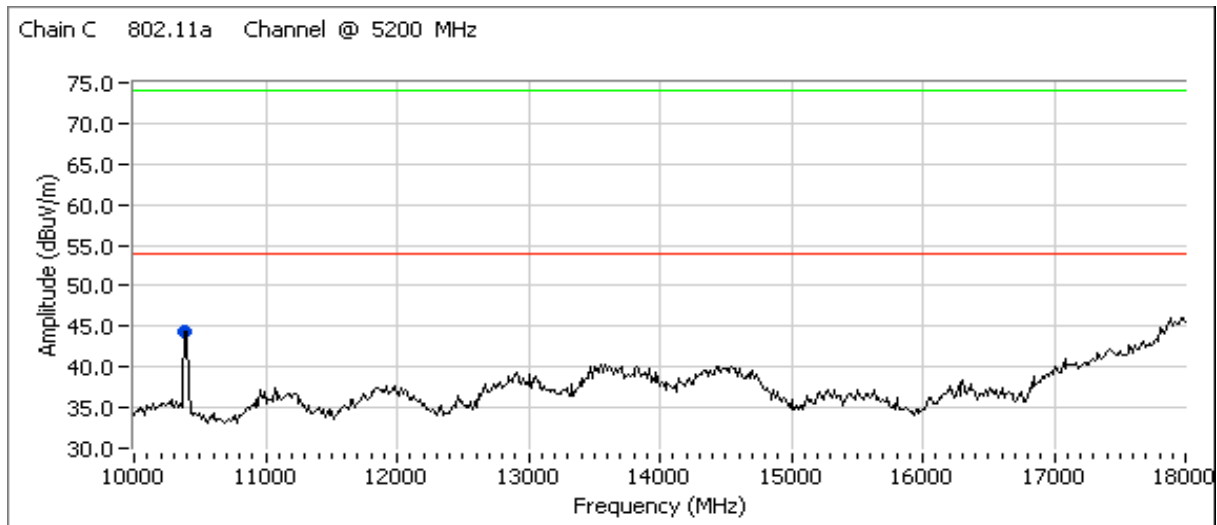
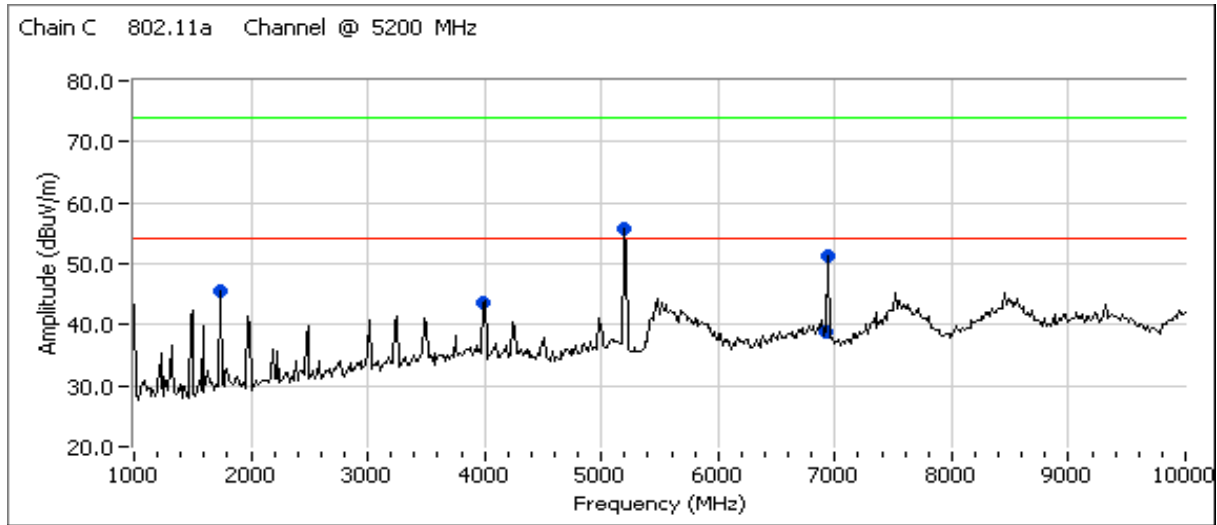
Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector PK/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1747.140	30.9	V	54.0	-23.1	AVG	237	1.5	
3995.690	32.3	V	54.0	-21.7	AVG	240	1.0	
6933.290	53.9	V	68.3	-14.4	AVG	207	1.0	Note 2
10399.980	40.6	V	68.3	-27.7	AVG	140	1.3	Note 2
1747.140	51.1	V	74.0	-22.9	PK	237	1.5	
3995.690	48.5	V	74.0	-25.5	PK	240	1.0	
6933.290	56.2	V	88.3	-32.1	PK	207	1.0	Note 2
10399.980	48.1	V	88.3	-40.2	PK	140	1.3	Note 2

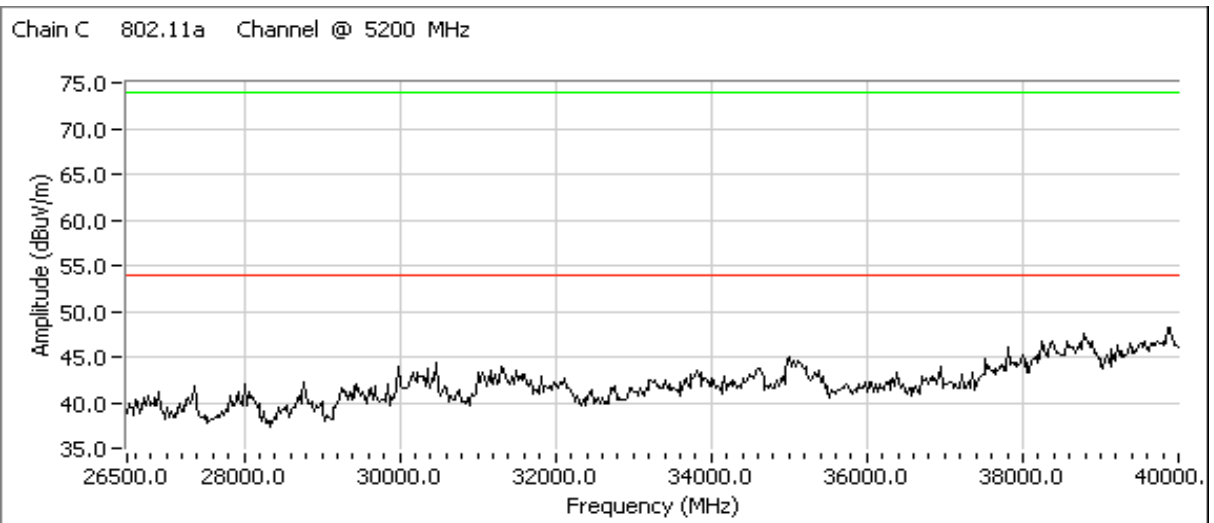
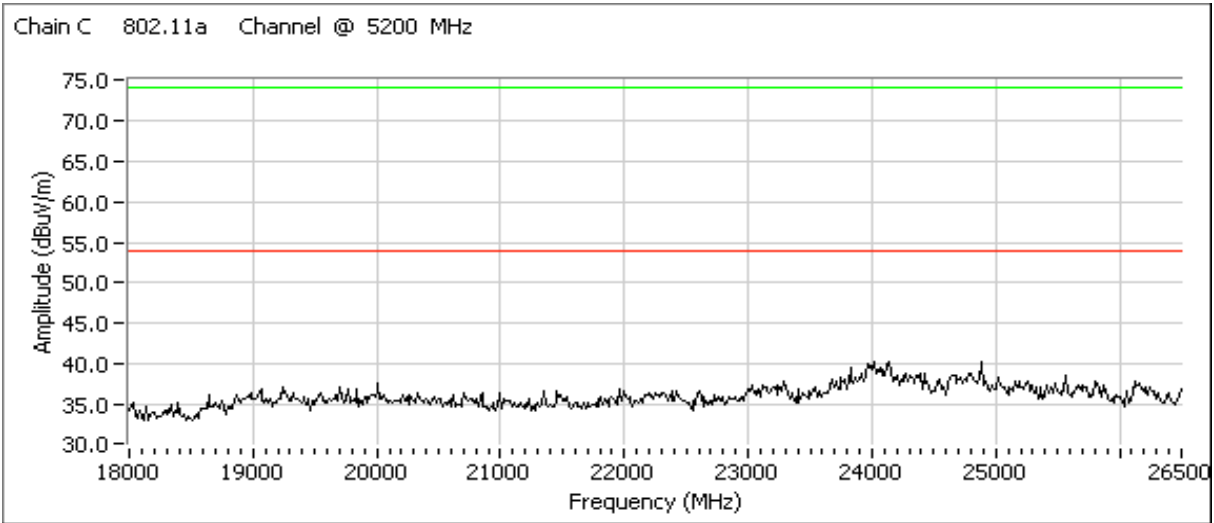
Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Note 2: Signal is not in a restricted band but the more stringent restricted band limit was used.

Client: Intel Corporation	Job Number: J70976
Model: 533AN-MMW(MMC)	T-Log Number: T71131
Contact: Robert Paxman	Account Manager: Dean Eriksen
Standard: RSS 210/FCC U-NII (Radiated)	Class: N/A



Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
Contact:	Robert Paxman	Account Manager:	Dean Eriksen
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A



Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #7c: High Channel @ 5240 MHz

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1743.350	31.0	V	68.3	-37.3	AVG	284	1.5	Note 2
3997.190	33.3	V	54.0	-20.7	AVG	259	1.0	
6986.640	48.6	V	68.3	-19.7	AVG	116	1.5	Note 2
7500.050	42.9	V	54.0	-11.1	AVG	208	1.0	
10479.880	39.5	V	68.3	-28.8	AVG	194	1.3	Note 2
1743.350	52.3	V	88.3	-36.0	PK	284	1.5	Note 2
3997.190	53.0	V	74.0	-21.0	PK	259	1.0	
6986.640	51.6	V	88.3	-36.7	PK	116	1.5	Note 2
7500.050	50.7	V	74.0	-23.3	PK	208	1.0	
10479.880	51.0	V	88.3	-37.3	PK	194	1.3	Note 2

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Note 2: Signal is not in a restricted band.

Run #8: Radiated Spurious Emissions, 1000 - 40000 MHz. Operating Mode: 802.11a Chain C

Run #8a: Low Channel @ 5260 MHz

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1497.450	32.2	V	54.0	-21.8	AVG	60	1.0	
1747.000	31.2	V	68.3	-37.1	AVG	285	1.5	Note 2
5454.890	40.8	V	54.0	-13.2	AVG	175	1.0	
7013.310	47.0	V	68.3	-21.3	AVG	116	1.5	Note 2
7500.160	42.4	V	54.0	-11.6	AVG	168	1.0	
10519.930	40.3	V	68.3	-28.0	AVG	252	1.0	Note 2
1497.450	49.6	V	74.0	-24.4	PK	60	1.0	
1747.000	52.5	V	88.3	-35.8	PK	285	1.5	Note 2
5454.890	52.0	V	74.0	-22.0	PK	175	1.0	
7013.310	50.7	V	88.3	-37.6	PK	116	1.5	Note 2
7500.160	50.2	V	74.0	-23.8	PK	168	1.0	
10519.930	51.9	V	88.3	-36.4	PK	252	1.0	Note 2

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Note 2: Signal is not in a restricted band.

Client: Intel Corporation	Job Number: J70976
Model: 533AN-MMW(MMC)	T-Log Number: T71131
	Account Manager: Dean Eriksen
Contact: Robert Paxman	
Standard: RSS 210/FCC U-NII (Radiated)	Class: N/A

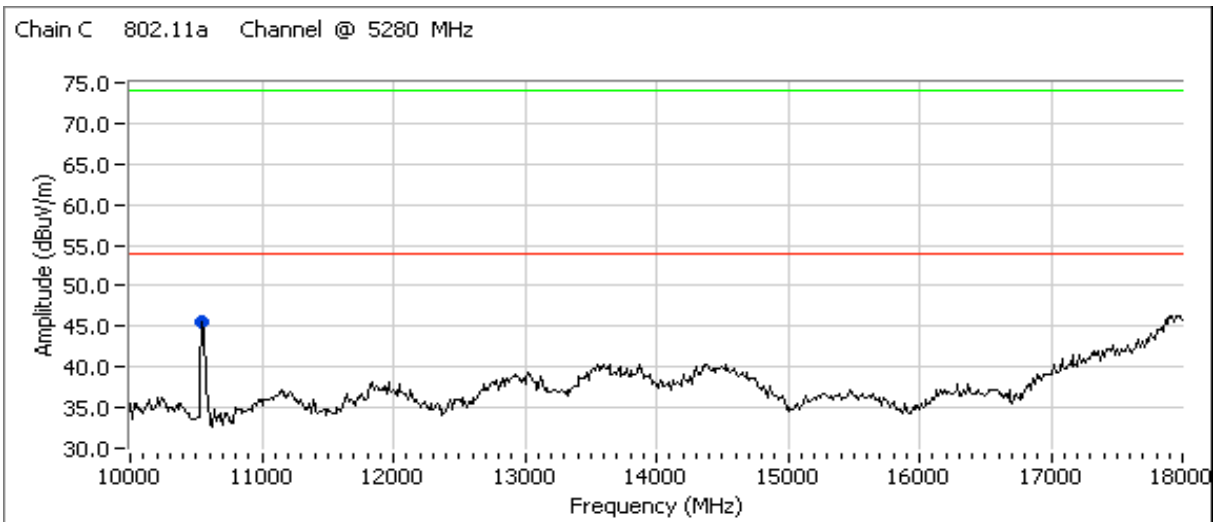
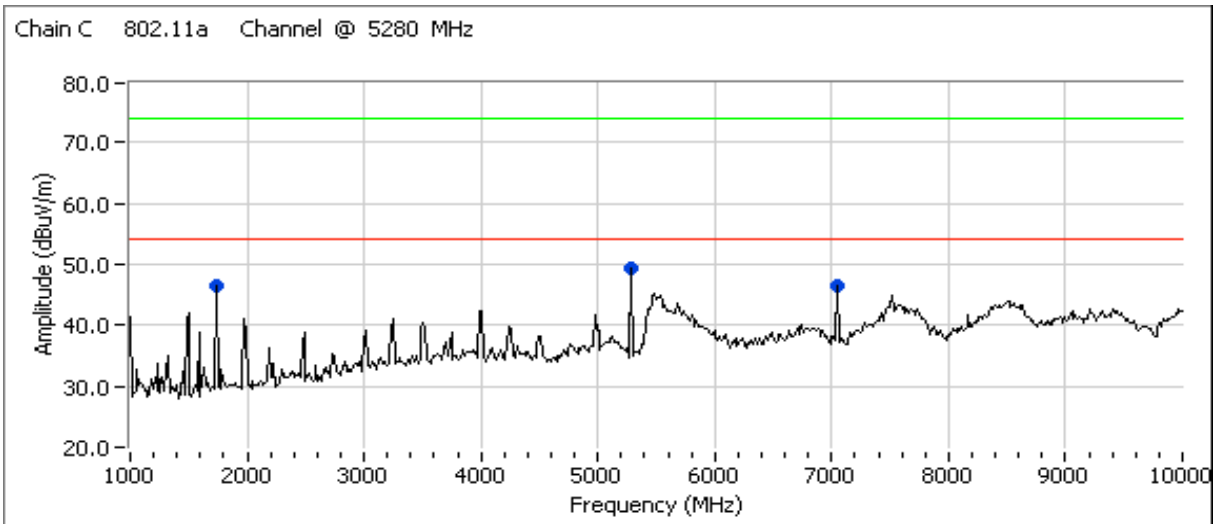
Run #8b: Center Channel @ 5280 MHz

Spurious Emissions

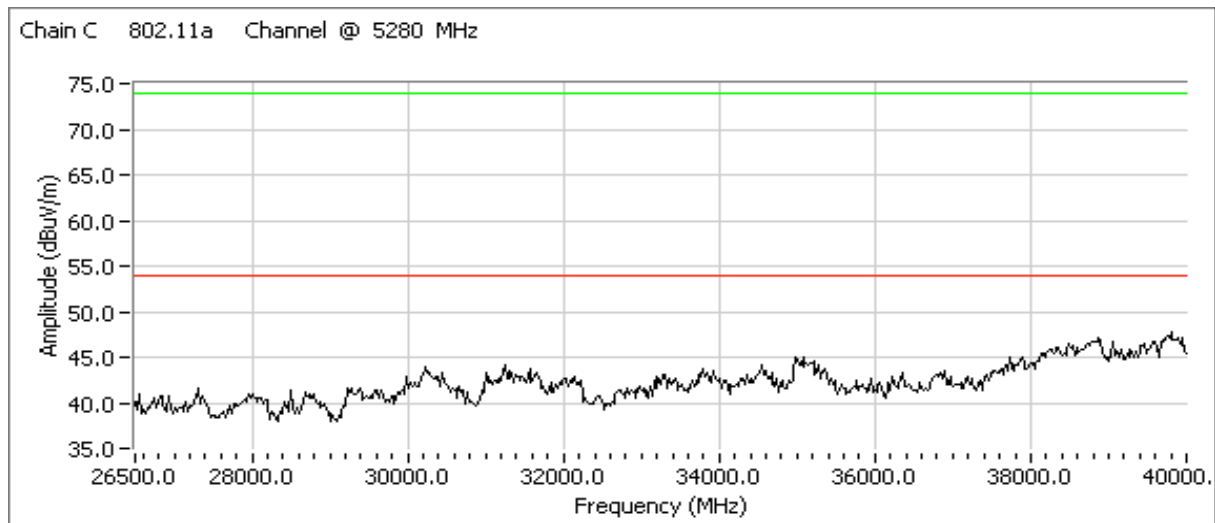
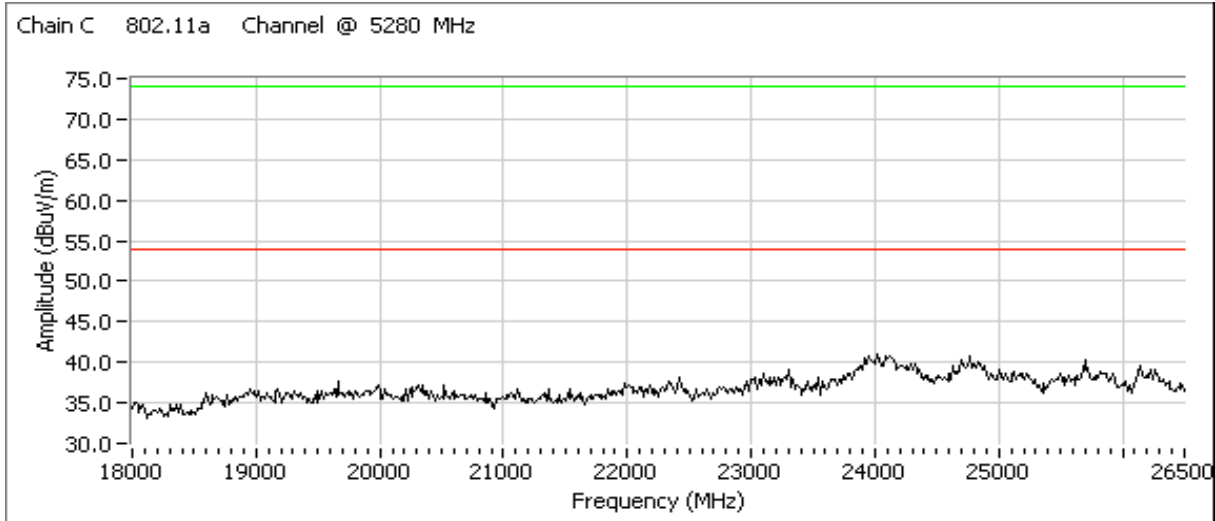
Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1743.340	30.9	V	68.3	-37.4	AVG	206	1.0	Note 2
7039.960	41.2	V	68.3	-27.1	AVG	129	1.5	Note 2
10559.980	38.5	V	68.3	-29.8	AVG	183	1.0	Note 2
1743.340	52.5	V	88.3	-35.8	PK	206	1.0	Note 2
7039.960	47.4	V	88.3	-40.9	PK	129	1.5	Note 2
10559.980	50.7	V	88.3	-37.6	PK	183	1.0	Note 2

Note 1: For emissions not in restricted bands the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Note 2: Signal is not in a restricted band but the more stringent restricted band limit was used.



Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
Contact:	Robert Paxman	Account Manager:	Dean Eriksen
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A





EMC Test Data

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #8c: High Channel @ 5320 MHz

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1744.450	31.9	V	68.3	-36.4	AVG	197	1.0	Note 2
3996.620	32.7	V	54.0	-21.3	AVG	275	1.5	
5486.990	41.4	V	54.0	-12.6	AVG	167	1.0	
7093.280	46.2	V	68.3	-22.1	AVG	179	1.0	Note 2
10639.700	38.9	V	54.0	-15.1	AVG	236	1.0	
3996.620	52.1	V	74.0	-21.9	Peak	275	1.5	
1744.450	51.9	V	88.3	-36.4	PK	197	1.0	Note 2
5486.990	52.9	V	74.0	-21.1	PK	167	1.0	
7093.280	50.6	V	88.3	-37.7	PK	179	1.0	Note 2
10639.700	50.6	V	74.0	-23.4	PK	236	1.0	

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Note 2: Signal is not in a restricted band.

Run #9: Radiated Spurious Emissions, 1000 - 40000 MHz. Operating Mode: 802.11a Chain C

Date of Test: 4/11/2008

Test Engineer: Ben Jing

Test Location: FT Chamber # 5

Run #9a: Low Channel @ 5500 MHz

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1497.870	31.1	V	54.0	-22.9	AVG	1	1.0	
3990.360	32.6	V	54.0	-21.4	AVG	290	1.0	
7333.280	42.9	V	54.0	-11.1	AVG	152	2.0	
11000.130	43.9	V	54.0	-10.1	AVG	123	1.0	
1497.870	48.8	V	74.0	-25.2	PK	1	1.0	
3990.360	51.8	V	74.0	-22.2	PK	290	1.0	
7333.280	49.2	V	74.0	-24.8	PK	152	2.0	
11000.130	56.1	V	74.0	-17.9	PK	123	1.0	

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

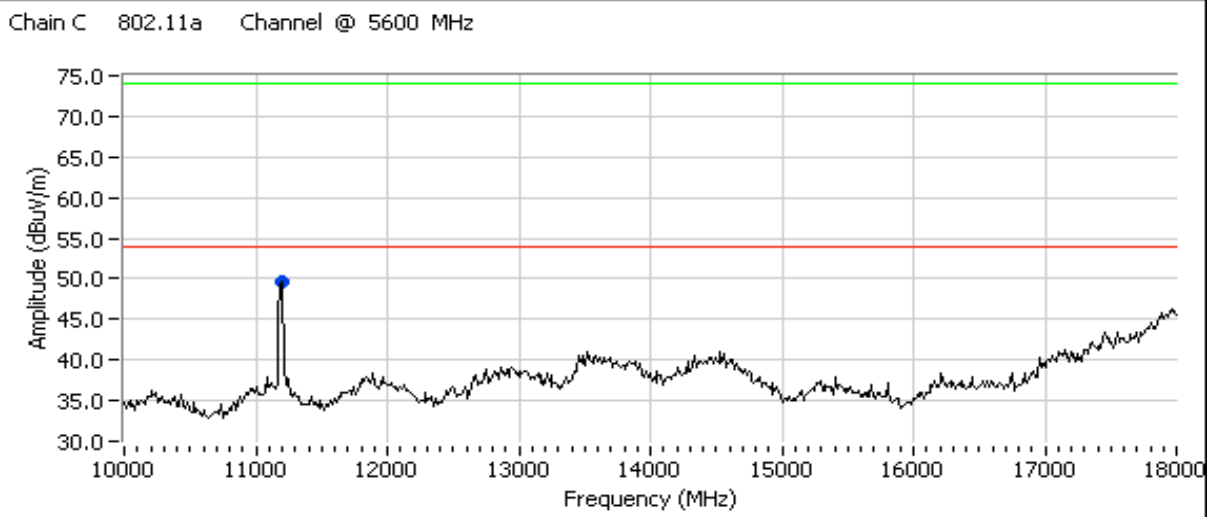
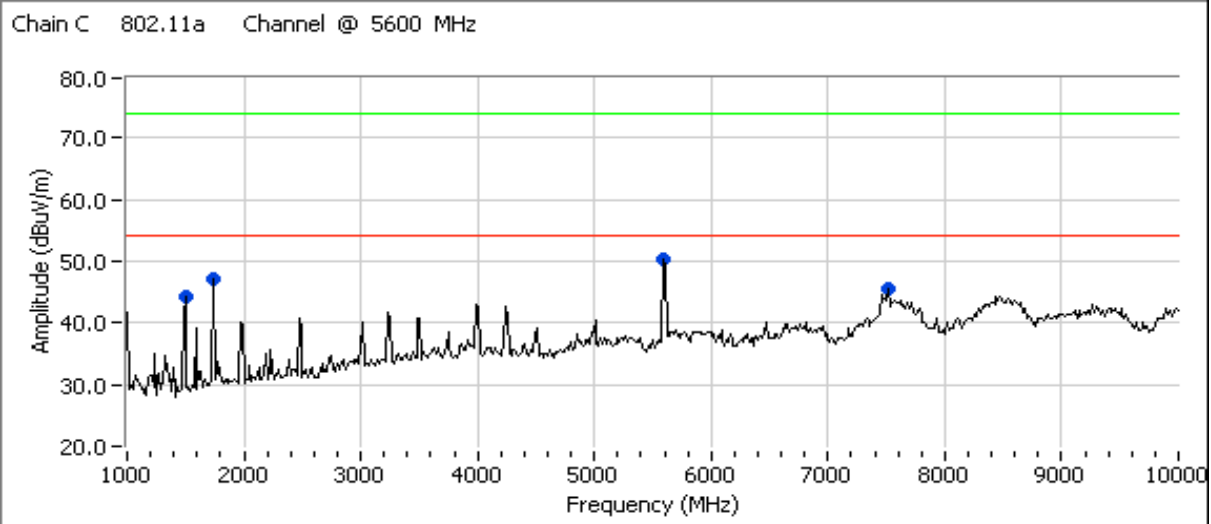
Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
Contact:	Robert Paxman	Account Manager:	Dean Eriksen
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #9b: Center Channel @ 5600 MHz

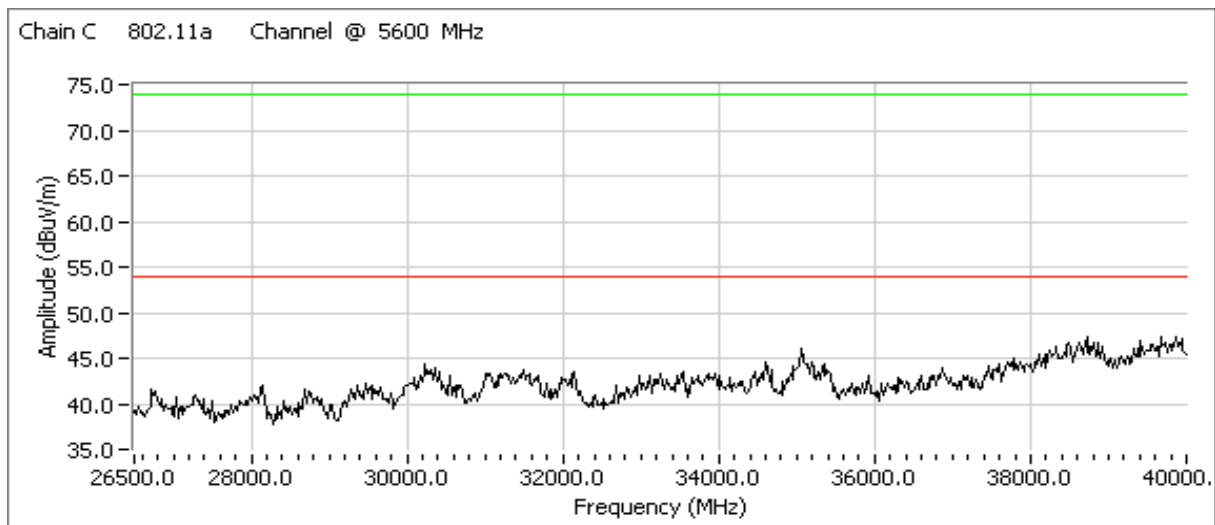
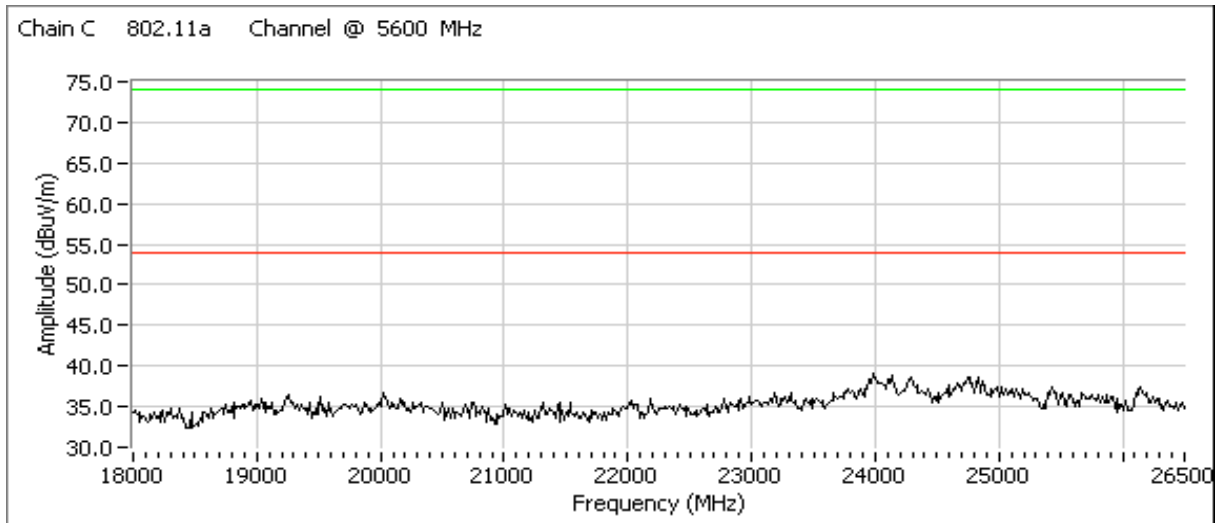
Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1497.720	35.8	V	54.0	-18.2	AVG	180	2.0	
7466.710	42.4	V	54.0	-11.6	AVG	127	1.0	
11201.700	44.3	V	54.0	-9.7	AVG	135	1.0	
1497.720	49.0	V	74.0	-25.0	PK	180	2.0	
7466.710	51.1	V	74.0	-22.9	PK	127	1.0	
11201.700	56.4	V	74.0	-17.6	PK	135	1.0	

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)



Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
Contact:	Robert Paxman	Account Manager:	Dean Eriksen
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A





EMC Test Data

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #9C: High Channel @ 5700 MHz

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1497.680	35.4	V	54.0	-18.6	AVG	185	2.0	
3996.760	33.5	V	54.0	-20.5	AVG	240	1.0	
7599.940	44.8	V	54.0	-9.2	AVG	221	1.0	
11398.220	43.3	V	54.0	-10.7	AVG	139	1.0	
1497.680	49.3	V	74.0	-24.7	PK	185	2.0	
3996.760	53.8	V	74.0	-20.2	PK	240	1.0	
7599.940	52.2	V	74.0	-21.8	PK	221	1.0	
11398.220	56.6	V	74.0	-17.4	PK	139	1.0	

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

**RSS 210 and FCC 15.E (U-NII, 5150- 550/5250-5350/5460-5725MHz)
Radiated Spurious Emissions - Band Edge 802.11n 20MHz Mode**

Test Specific Details

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the specification listed above.

Config. Used: 1
Config Change: None
Host Unit Voltage Powered From Host System

General Test Configuration

The EUT and all local support equipment were located on the turntable for radiated spurious emissions testing. All remote support equipment was located approximately 30 meters from the EUT with all I/O connections running on top of the groundplane.

For radiated emissions testing the measurement antenna was located 3 meters from the EUT.

Ambient Conditions: Temperature: 20 °C
 Rel. Humidity: 55 %

Summary of Results

Run #	Mode	Channel	Power Setting	Measured Power	Test Performed	Limit	Result / Margin
1	802.11n20 Chain A	5180MHz	32.0	16.6	Band Edge radiated field strength	FCC Part 15.209	52.0dBµV/m @ 5150.0MHz (-2.0dB)
	802.11n20 Chain A	5320MHz	27.0	16.7	Band Edge radiated field strength	FCC Part 15.209	51.0dBµV/m @ 5350.0MHz (-3.0dB)
	802.11n20 Chain A	5500MHz	25.0	16.6	Band Edge radiated field strength	FCC Part 15.209 / 15E	48.6dBµV/m @ 5458.3MHz (-5.4dB)
2	802.11n20 Chain B	5180MHz	30.5	16.5	Band Edge radiated field strength	FCC Part 15.209	51.1dBµV/m @ 5150.0MHz (-2.9dB)
	802.11n20 Chain B	5320MHz	26.0	16.6	Band Edge radiated field strength	FCC Part 15.209	51.9dBµV/m @ 5350.0MHz (-2.1dB)
	802.11n20 Chain B	5500MHz	25.0	16.6	Band Edge radiated field strength	FCC Part 15.209 / 15E	49.1dBµV/m @ 5459.2MHz (-4.9dB)
3	802.11n20 Chain C	5180MHz	31.0	16.7	Band Edge radiated field strength	FCC Part 15.209	51.1dBµV/m @ 5149.7MHz (-2.9dB)
	802.11n20 Chain C	5320MHz	28.0	16.6	Band Edge radiated field strength	FCC Part 15.209	52.1dBµV/m @ 5350.0MHz (-1.9dB)
	802.11n20 Chain C	5500MHz	26.0	16.7	Band Edge radiated field strength	FCC Part 15.209 / 15E	48.9dBµV/m @ 5457.3MHz (-5.1dB)

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #	Mode	Channel	Power Setting	Measured Power	Test Performed	Limit	Result / Margin
4	802.11n20 Chain A+B	5180MHz	28.5 27.5	13.5 13.7	Band Edge radiated field strength	FCC Part 15.209	48.6 dBuV/m @ 5148.0 MHz (-5.4dB)
	802.11n20 Chain A+B	5320MHz	25.5 24.5	13.5 13.5	Band Edge radiated field strength	FCC Part 15.209	49.1 dBuV/m @ 5350.1 MHz (-4.9dB)
	802.11n20 Chain A+B	5500MHz	23.5 23.5	13.6 13.5	Band Edge radiated field strength	FCC Part 15.209 / 15E	49.6 dBuV/m @ 5459.7 MHz (-4.4dB)
5	802.11n20 Chain A+C	5180MHz	29.0 28.5	13.5 13.6	Band Edge radiated field strength	FCC Part 15.209	48.6 dBuV/m @ 5149.7 MHz (-5.4dB)
	802.11n20 Chain A+C	5320MHz	25.5 26.0	13.6 13.5	Band Edge radiated field strength	FCC Part 15.209	50.3 dBuV/m @ 5350.2 MHz (-3.7dB)
	802.11n20 Chain A+C	5500MHz	24.0 24.5	13.7 13.5	Band Edge radiated field strength	FCC Part 15.209 / 15E	49.7 dBuV/m @ 5459.7 MHz (-4.3dB)
6	802.11n20 Chain B+C	5180MHz	28.5 29.0	13.6 13.5	Band Edge radiated field strength	FCC Part 15.209	48.2 dBuV/m @ 5149.7 MHz (-5.8dB)
	802.11n20 Chain B+C	5320MHz	24.5 26.0	13.6 13.5	Band Edge radiated field strength	FCC Part 15.209	48.9 dBuV/m @ 5350.1 MHz (-5.1dB)
	802.11n20 Chain B+C	5500MHz	23.5 24.5	13.6 13.5	Band Edge radiated field strength	FCC Part 15.209 / 15E	49.3 dBuV/m @ 5459.7 MHz (-4.7dB)
7	802.11n20 A+B+C	5180MHz	30.5 30.0 30.5	12.0 12.0 12.2	Band Edge radiated field strength	FCC Part 15.209	48.7 dBuV/m @ 5149.8 MHz (-5.3dB)
	802.11n20 A+B+C	5320MHz	27.0 26.0 27.0	12.2 12.2 12.0	Band Edge radiated field strength	FCC Part 15.209	49.0 dBuV/m @ 5350.1 MHz (-5.0dB)
	802.11n20 A+B+C	5500MHz	25.5 25.5 26.0	12.0 12.2 12.1	Band Edge radiated field strength	FCC Part 15.209 / 15E	49.1 dBuV/m @ 5459.9 MHz (-4.9dB)

Modifications Made During Testing

No modifications were made to the EUT during testing

Deviations From The Standard

No deviations were made from the requirements of the standard.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #1: Radiated Spurious Emissions, Band Edges. Operating Mode: 802.11n 20MHz - Chain A

Run #1a: Low Channel @ 5180 MHz (band edge at 5150 MHz)

Date of Test: 3/24/2008

Test Engineer: Rafael Varelas

Test Location: FT Chamber #3

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
32	16.6				

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5183.870	99.2	H	-	-	AVG	256	1.3	GC: 32.0, Avg Power: 16.6
5183.870	107.5	H	-	-	PK	256	1.3	GC: 32.0, Avg Power: 16.6

Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5149.980	52.0	H	54.0	-2.0	Avg	257	1.0	GC: 32.0, Avg Power: 16.6
5150.000	68.6	H	74.0	-5.4	PK	257	1.0	GC: 32.0, Avg Power: 16.6
5149.710	49.3	V	54.0	-4.7	Avg	64	1.2	GC: 32.0, Avg Power: 16.6
5147.060	63.3	V	74.0	-10.7	PK	64	1.2	GC: 32.0, Avg Power: 16.6

Run #1b: High Channel @ 5320 MHz (band edge at 5350 MHz)

Date of Test: 3/25/2008

Test Engineer: Suhaila Khushzad

Test Location: FT Chamber #3

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
27.0	16.7				

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5321.420	98.4	H	-	-	AVG	103	1.0	GC: 27, Avg Power: 16.7
5321.420	106.5	H	-	-	PK	103	1.0	GC: 27, Avg Power: 16.7
5326.420	98.3	V	-	-	AVG	159	1.9	GC: 27, Avg Power: 16.7
5326.420	106.6	V	-	-	PK	159	1.9	GC: 27, Avg Power: 16.7

Band Edge Signal Field Strength

Restricted band starts at allocated band edge (5350MHz), field strength limit is 54dBuV/m average, 74dBuV/m peak.

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5350.020	51.0	V	54.0	-3.0	Avg	159	1.9	GC: 27, Avg Power: 16.7
5352.630	68.7	V	74.0	-5.3	Pk	159	1.9	GC: 27, Avg Power: 16.7
5350.050	49.8	H	54.0	-4.2	Avg	103	1.0	GC: 27, Avg Power: 16.7
5351.960	67.4	H	74.0	-6.6	Pk	103	1.0	GC: 27, Avg Power: 16.7



EMC Test Data

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #1c: Low Channel @ 5500 MHz (restricted band edge at 5460 MHz, allocated band edge at 5470MHz)

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
25.0	16.6				

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5493.250	96.4	H	-	-	AVG	126	1.0	GC: 25, Avg Power: 16.6
5493.250	104.6	H	-	-	PK	126	1.0	GC: 25, Avg Power: 16.6
5492.920	100.2	V	-	-	AVG	215	1.7	GC: 25, Avg Power: 16.6
5492.920	108.3	V	-	-	PK	215	1.7	GC: 25, Avg Power: 16.6

5460 Restricted Band Feld strength limit = 54dBuV/m avg, 74dBuV/m peak at 3m

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5458.250	48.6	V	54.0	-5.4	Avg	215	1.7	GC: 25, Avg Power: 16.6
5459.600	62.6	V	74.0	-11.4	Pk	215	1.7	GC: 25, Avg Power: 16.6
5458.090	48.3	H	54.0	-5.7	Avg	126	1.0	GC: 25, Avg Power: 16.6
5459.700	61.2	H	74.0	-12.8	Pk	126	1.0	GC: 25, Avg Power: 16.6

5460 - 5470 MHz, Limit is -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak at 3m)

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5469.730	50.3	V	68.3	-18.0	Avg	215	1.7	GC: 25, Avg Power: 16.6
5467.420	69.4	V	88.3	-18.9	Pk	215	1.7	GC: 25, Avg Power: 16.6
5469.940	49.1	H	68.3	-19.2	Avg	126	1.0	GC: 25, Avg Power: 16.6
5468.660	64.8	H	88.3	-23.5	Pk	126	1.0	GC: 25, Avg Power: 16.6

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #2: Radiated Spurious Emissions, Band Edges. Operating Mode: 802.11n 20MHz - Chain B

Date of Test: 3/25/2008

Test Engineer: Suhaila Khushzad

Test Location: FT Chamber #3

Run #2a: Low Channel @ 5180 MHz (band edge at 5150 MHz)

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
		30.5	16.5		

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5172.920	98.2	V	-	-	AVG	203	1.0	GC: 30.5, Avg Power: 16.5
5172.920	106.5	V	-	-	PK	203	1.0	GC: 30.5, Avg Power: 16.5
5185.080	99.0	H	-	-	AVG	106	1.1	GC: 30.5, Avg Power: 16.5
5185.080	107.5	H	-	-	PK	106	1.1	GC: 30.5, Avg Power: 16.5

Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5149.980	51.1	H	54.0	-2.9	AVG	106	1.1	GC: 30.5, Avg Power: 16.5
5149.860	67.5	H	74.0	-6.5	PK	106	1.1	GC: 30.5, Avg Power: 16.5
5149.690	50.5	V	54.0	-3.5	AVG	204	1.0	GC: 30.5, Avg Power: 16.5
5147.850	67.0	V	74.0	-7.0	PK	204	1.0	GC: 30.5, Avg Power: 16.5

Run #2b: High Channel @ 5320 MHz (band edge at 5350 MHz)

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
		26.0	16.6		

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5315.000	98.8	H	-	-	AVG	127	1.3	GC: 26, Avg Power: 16.6
5315.000	107.6	H	-	-	PK	127	1.3	GC: 26, Avg Power: 16.6
5317.580	100.0	V	-	-	AVG	164	1.0	GC: 26, Avg Power: 16.6
5317.580	109.0	V	-	-	PK	164	1.0	GC: 26, Avg Power: 16.6

Band Edge Signal Field Strength

Restricted band starts at allocated band edge (5350MHz), field strength limit is 54dBuV/m average, 74dBuV/m peak.

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5350.000	51.9	V	54.0	-2.1	AVG	164	1.0	GC: 26, Avg Power: 16.6
5350.280	70.9	V	74.0	-3.1	PK	164	1.0	GC: 26, Avg Power: 16.6
5350.020	50.4	H	54.0	-3.6	AVG	126	1.3	GC: 26, Avg Power: 16.6
5350.210	68.3	H	74.0	-5.7	PK	126	1.3	GC: 26, Avg Power: 16.6

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #2: Radiated Spurious Emissions, Band Edges. Operating Mode: 802.11n 20MHz - Chain B
 Run #2c: Low Channel @ 5500 MHz (restricted band edge at 5460 MHz, allocated band edge at 5470MHz)

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
		25.0	16.6		

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5504.670	98.2	H	-	-	AVG	103	1.2	GC: 25, Avg Power: 16.6
5504.670	106.6	H	-	-	PK	103	1.2	GC: 25, Avg Power: 16.6
5502.500	103.3	V	-	-	AVG	223	1.0	GC: 25, Avg Power: 16.6
5502.500	113.0	V	-	-	PK	223	1.0	GC: 25, Avg Power: 16.6

5460 Restricted Band Feld strength limit = 54dBuV/m avg, 74dBuV/m peak at 3m

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5459.170	49.1	H	54.0	-4.9	AVG	102	1.2	GC: 25, Avg Power: 16.6
5457.050	62.7	H	74.0	-11.3	PK	102	1.2	GC: 25, Avg Power: 16.6
5459.420	48.8	V	54.0	-5.2	AVG	223	1.0	GC: 25, Avg Power: 16.6
5457.190	62.5	V	74.0	-11.5	PK	223	1.0	GC: 25, Avg Power: 16.6

5460 - 5470 MHz, Limit is -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak at 3m)

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5469.810	51.7	V	68.3	-16.6	AVG	223	1.0	GC: 25, Avg Power: 16.6
5468.650	72.5	V	88.3	-15.8	PK	223	1.0	GC: 25, Avg Power: 16.6
5469.940	50.2	H	68.3	-18.1	AVG	102	1.2	GC: 25, Avg Power: 16.6
5468.900	68.1	H	88.3	-20.2	PK	102	1.2	GC: 25, Avg Power: 16.6



EMC Test Data

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #3: Radiated Spurious Emissions, Band Edges. Operating Mode: 802.11n 20MHz - Chain C

Date of Test: 3/25/2008

Test Engineer: Suhaila Khushzad

Test Location: FT Chamber # 4

Run #3a: Low Channel @ 5180 MHz (band edge at 5150 MHz)

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
				31.0	16.7

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5173.500	100.3	H	-	-	AVG	118	1.4	GC: 31, Avg Power: 16.7
5173.500	108.7	H	-	-	PK	118	1.4	GC: 31, Avg Power: 16.7
5188.250	95.7	V	-	-	AVG	220	1.1	GC: 31, Avg Power: 16.7
5188.250	103.7	V	-	-	PK	220	1.1	GC: 31, Avg Power: 16.7

Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5149.710	51.1	H	54.0	-2.9	Avg	118	1.4	GC: 31, Avg Power: 16.7
5148.000	66.7	H	74.0	-7.3	Pk	118	1.4	GC: 31, Avg Power: 16.7
5149.920	49.2	V	54.0	-4.8	Avg	220	1.1	GC: 31, Avg Power: 16.7
5147.170	62.0	V	74.0	-12.0	Pk	220	1.1	GC: 31, Avg Power: 16.7

Client: Intel Corporation	Job Number: J70976
Model: 533AN-MMW(MMC)	T-Log Number: T71131
Contact: Robert Paxman	Account Manager: Dean Eriksen
Standard: RSS 210/FCC U-NII (Radiated)	Class: N/A

Run #3: Radiated Spurious Emissions, Band Edges. Operating Mode: 802.11n 20MHz - Chain C
 Run #3b: High Channel @ 5320 MHz (band edge at 5350 MHz)

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
				28.0	16.6

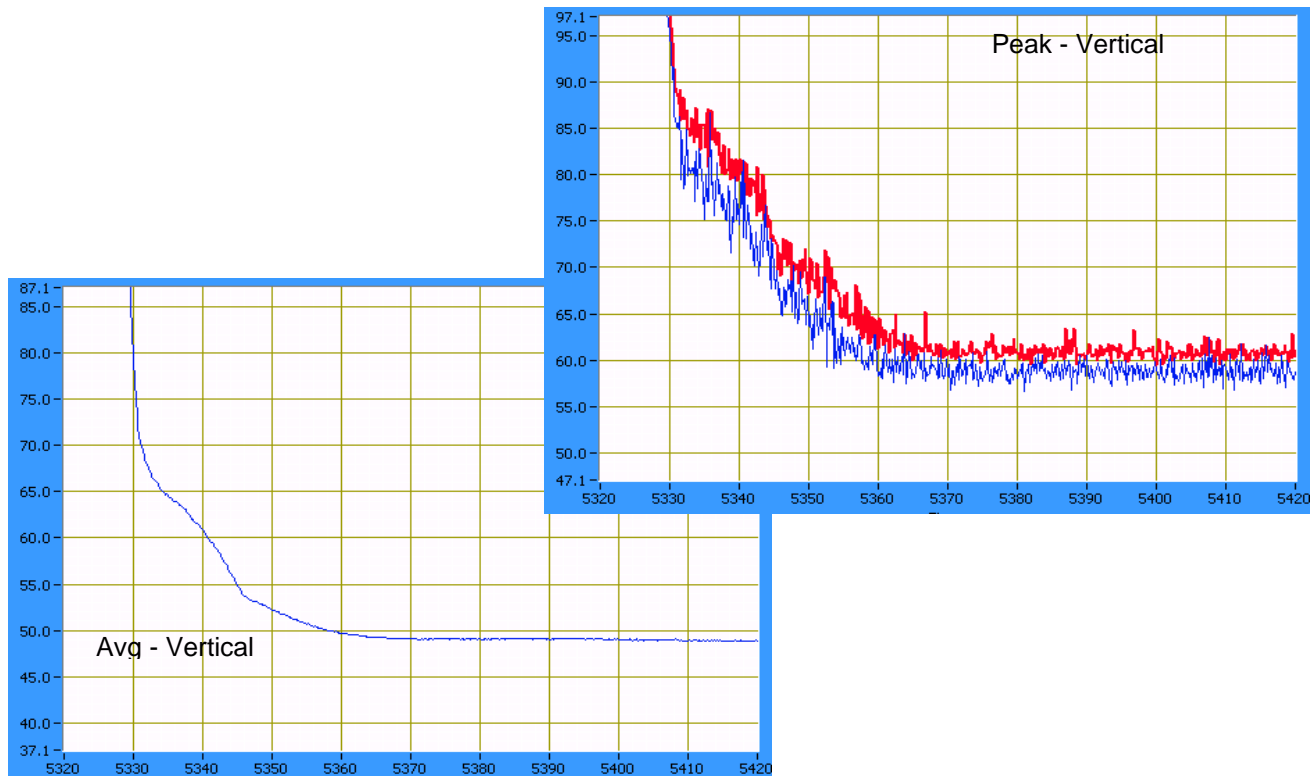
Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.247		Detector PK/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
5325.170	102.7	V	-	-	AVG	206	1.0	GC: 28, Avg Power: 16.6
5325.170	111.2	V	-	-	PK	206	1.0	GC: 28, Avg Power: 16.6
5315.080	99.7	H	-	-	AVG	111	1.3	GC: 28, Avg Power: 16.6
5315.080	108.5	H	-	-	PK	111	1.3	GC: 28, Avg Power: 16.6

Band Edge Signal Field Strength

Restricted band starts at allocated band edge (5350MHz), field strength limit is 54dBuV/m average, 74dBuV/m peak.

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.247		Detector PK/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
5350.000	52.1	V	54.0	-1.9	Avg	207	1.0	GC: 28, Avg Power: 16.6
5350.410	71.6	V	74.0	-2.4	Pk	207	1.0	GC: 28, Avg Power: 16.6
5350.000	50.0	H	54.0	-4.0	Avg	111	1.3	GC: 28, Avg Power: 16.6
5350.360	67.5	H	74.0	-6.5	Pk	111	1.3	GC: 28, Avg Power: 16.6



Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #3: Radiated Spurious Emissions, Band Edges. Operating Mode: 802.11n 20MHz - Chain C

Run #3c: Low Channel @ 5500 MHz (restricted band edge at 5460 MHz, allocated band edge at 5470MHz)

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
				26.0	16.7

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5507.170	104.7	V	-	-	AVG	185	1.0	GC: 26, Avg Power: 16.7
5507.170	112.9	V	-	-	PK	185	1.0	GC: 26, Avg Power: 16.7
5503.170	99.9	H	-	-	AVG	249	1.1	GC: 26, Avg Power: 16.7
5503.170	109.0	H	-	-	PK	249	1.1	GC: 26, Avg Power: 16.7

5460 Restricted Band Field strength limit = 54dBuV/m avg, 74dBuV/m peak at 3m

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5457.310	48.9	V	54.0	-5.1	Avg	185	1.0	GC: 26, Avg Power: 16.7
5459.500	62.4	V	74.0	-11.6	Pk	185	1.0	GC: 26, Avg Power: 16.7
5457.840	48.9	H	54.0	-5.1	Avg	249	1.1	GC: 26, Avg Power: 16.7
5459.750	61.9	H	74.0	-12.1	Pk	249	1.1	GC: 26, Avg Power: 16.7

5460 - 5470 MHz, Limit is -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak at 3m)

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5469.650	49.9	H	68.3	-18.4	Avg	249	1.1	GC: 26, Avg Power: 16.7
5469.520	68.9	H	88.3	-19.4	Pk	249	1.1	GC: 26, Avg Power: 16.7
5469.860	49.9	V	68.3	-18.4	Avg	185	1.0	GC: 26, Avg Power: 16.7
5467.000	68.3	V	88.3	-20.0	Pk	185	1.0	GC: 26, Avg Power: 16.7

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #4: Radiated Spurious Emissions, Band Edges. Operating Mode: 802.11n 20MHz - Chain A+B

Date of Test: 4/23/2008

Test Engineer: John Caizzi

Test Location: FT Chamber 5

Run #4a: Low Channel @ 5180 MHz (band edge at 5150 MHz)

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
28.5	13.5	27.5	13.7		

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	V/H	Limit	Margin	Pk/QP/Avg	degrees	meters	
5175.420	97.4	H	-	-	AVG	96	1.2	RB = 1MHz, VB = 10Hz
5175.420	107.9	H	-	-	PK	96	1.2	RB = VB = 1MHz

Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5148.290	62.0	H	74.0	-12.0	PK	96	1.2	
5149.210	48.4	H	54.0	-5.6	AVG	96	1.2	
5148.040	48.6	V	54.0	-5.4	AVG	215	1.0	
5149.770	60.6	V	74.0	-13.4	PK	215	1.0	

Date of Test: 4/23/2008

Test Engineer: Ben Jing

Test Location: FT Chamber 4

Run #4b: High Channel @ 5320 MHz (band edge at 5350 MHz)

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
25.5	13.5	24.5	13.5		

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5318.530	97.7	V	-	-	AVG	191	1.0	RB = 1MHz, VB = 10Hz
5318.530	107.3	V	-	-	PK	191	1.0	RB = VB = 1MHz

Band Edge Signal Field Strength

Restricted band starts at allocated band edge (5350MHz), field strength limit is 54dBuV/m average, 74dBuV/m peak.

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5350.100	48.9	H	54.0	-5.1	AVG	100	1.0	
5350.100	62.0	H	74.0	-12.0	PK	100	1.0	
5350.140	61.8	V	74.0	-12.2	PK	193	1.0	
5350.100	49.1	V	54.0	-4.9	AVG	195	1.0	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #4c: Low Channel @ 5500 MHz (restricted band edge at 5460 MHz, allocated band edge at 5470MHz)

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
23.5	13.5	23.5	13.5		

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.247		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
5501.290	103.2	V	-	-	AVG	161	1.0	RB = 1MHz, VB = 10Hz
5501.290	112.7	V	-	-	PK	161	1.0	RB = VB = 1MHz
5500.930	94.1	H	-	-	AVG	130	1.0	RB = 1MHz, VB = 10Hz
5500.930	103.8	H	-	-	PK	130	1.0	RB = VB = 1MHz

5460 Restricted Band Feld strength limit = 54dBuV/m avg, 74dBuV/m peak at 3m

5460 - 5470 MHz, Limit is -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak at 3m)

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.247		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
5459.800	61.9	H	74.0	-12.1	PK	134	1.0	
5459.700	49.0	H	54.0	-5.0	AVG	128	1.0	
5459.880	62.8	V	74.0	-11.2	PK	165	1.0	
5459.700	49.6	V	54.0	-4.4	AVG	159	1.0	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #5: Radiated Spurious Emissions, Band Edges. Operating Mode: 802.11n 20MHz - Chain A+C

Run #5a: Low Channel @ 5180 MHz (band edge at 5150 MHz)

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
29.0	13.5			28.5	13.6

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	PK/QP/Avg	degrees	meters	
5181.410	93.8	V	-	-	AVG	139	1.0	RB = 1MHz, VB = 10Hz
5181.410	103.6	V	-	-	PK	139	1.0	RB = VB = 1MHz
5181.420	98.8	H	-	-	AVG	116	1.0	RB = 1MHz, VB = 10Hz
5181.420	108.8	H	-	-	PK	116	1.0	RB = VB = 1MHz

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	PK/QP/Avg	degrees	meters	
5149.730	60.5	H	74.0	-13.5	PK	128	1.0	
5149.700	48.6	H	54.0	-5.4	AVG	122	1.0	
5149.750	60.8	V	74.0	-13.2	PK	141	1.0	
5149.700	48.5	V	54.0	-5.5	AVG	140	1.0	

Run #5b: High Channel @ 5320 MHz (band edge at 5350 MHz)

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
25.5	13.6			26.0	13.5

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	PK/QP/Avg	degrees	meters	
5318.900	98.9	V	-	-	AVG	228	1.0	RB = 1MHz, VB = 10Hz
5318.900	109.7	V	-	-	PK	228	1.0	RB = VB = 1MHz
5318.690	100.2	H	-	-	AVG	117	1.0	RB = 1MHz, VB = 10Hz
5318.690	110.1	H	-	-	PK	117	1.0	RB = VB = 1MHz

Band Edge Signal Field Strength

Restricted band starts at allocated band edge (5350MHz), field strength limit is 54dBuV/m average, 74dBuV/m peak.

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	PK/QP/Avg	degrees	meters	
5350.250	61.9	V	74.0	-12.1	PK	230	1.0	
5350.100	49.1	V	54.0	-4.9	AVG	229	1.0	
5350.220	50.3	H	54.0	-3.7	AVG	120	1.0	
5350.220	61.5	H	74.0	-12.5	PK	120	1.0	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #5c: Low Channel @ 5500 MHz (restricted band edge at 5460 MHz, allocated band edge at 5470MHz)

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
24.0	13.7			24.5	13.5

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.247		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
5501.410	96.7	H	-	-	AVG	251	1.0	RB = 1MHz, VB = 10Hz
5501.410	106.9	H	-	-	PK	251	1.0	RB = VB = 1MHz
5501.040	102.8	V	-	-	AVG	161	1.0	RB = 1MHz, VB = 10Hz
5501.040	112.1	V	-	-	PK	161	1.0	RB = VB = 1MHz

5460 Restricted Band Feld strength limit = 54dBuV/m avg, 74dBuV/m peak at 3m

5460 - 5470 MHz, Limit is -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak at 3m)

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.247		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
5459.860	61.9	V	74.0	-12.1	PK	161	1.0	
5459.730	49.7	V	54.0	-4.3	AVG	161	1.0	
5459.880	60.9	H	74.0	-13.1	PK	254	1.0	
5459.700	48.8	H	54.0	-5.2	AVG	249	1.0	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Date of Test: 4/25/2008
 Test Engineer: Ben Jing
 Test Location: FT Chamber # 4

Run #6: Radiated Spurious Emissions, Band Edges. Operating Mode: 802.11n 20MHz - Chain B+C

Run #6a: Low Channel @ 5180 MHz (band edge at 5150 MHz)

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
		28.5	13.6	29.0	13.5

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5181.180	94.7	V	-	-	AVG	158	1.0	RB = 1MHz, VB = 10Hz
5181.180	104.0	V	-	-	PK	158	1.0	RB = VB = 1MHz
5180.920	97.8	H	-	-	AVG	102	1.0	RB = 1MHz, VB = 10Hz
5180.920	107.0	H	-	-	PK	102	1.0	RB = VB = 1MHz

Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5149.870	60.3	V	74.0	-13.7	PK	165	1.0	
5149.700	47.7	V	54.0	-6.3	AVG	156	1.0	
5149.900	60.7	H	74.0	-13.3	PK	100	1.0	
5149.720	48.2	H	54.0	-5.8	AVG	103	1.0	

Run #6b: High Channel @ 5320 MHz (band edge at 5350 MHz)

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
		24.5	13.6	26.0	13.5

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5318.750	97.3	H	-	-	AVG	105	1.0	RB = 1MHz, VB = 10Hz
5318.750	107.5	H	-	-	PK	105	1.0	RB = VB = 1MHz
5319.290	99.2	V	-	-	AVG	219	1.0	RB = 1MHz, VB = 10Hz
5319.290	108.8	V	-	-	PK	219	1.0	RB = VB = 1MHz

Band Edge Signal Field Strength

Restricted band starts at allocated band edge (5350MHz), field strength limit is 54dBuV/m average, 74dBuV/m peak.

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5350.200	62.4	V	74.0	-11.6	PK	218	1.0	
5350.130	48.9	V	54.0	-5.1	AVG	218	1.0	
5350.230	61.8	H	74.0	-12.2	PK	102	1.0	
5350.100	48.7	H	54.0	-5.3	AVG	106	1.0	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #6c: Low Channel @ 5500 MHz (restricted band edge at 5460 MHz, allocated band edge at 5470MHz)

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
		23.5	13.6	24.5	13.5

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.247		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
5501.430	96.5	H	-	-	AVG	250	1.0	RB = 1MHz, VB = 10Hz
5501.430	106.2	H	-	-	PK	250	1.0	RB = VB = 1MHz
5501.460	102.4	V	-	-	AVG	191	1.0	RB = 1MHz, VB = 10Hz
5501.460	113.3	V	-	-	PK	191	1.0	RB = VB = 1MHz

5460 Restricted Band Feld strength limit = 54dBuV/m avg, 74dBuV/m peak at 3m

5460 - 5470 MHz, Limit is -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak at 3m)

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.247		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
5459.780	61.8	V	74.0	-12.2	PK	191	1.0	
5459.700	49.3	V	54.0	-4.7	AVG	191	1.0	
5459.700	62.3	H	74.0	-11.7	PK	252	1.0	
5459.700	48.7	H	54.0	-5.3	AVG	248	1.0	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #7: Radiated Spurious Emissions, Band Edges. Operating Mode: 802.11n 20MHz - Chain A+B+C

Run #7a: Low Channel @ 5180 MHz (band edge at 5150 MHz)

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
30.5	12.0	30.0	12.0	30.5	12.2

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	PK/QP/Avg	degrees	meters	
5181.400	97.6	H	-	-	AVG	101	1.0	RB = 1MHz, VB = 10Hz
5181.400	107.4	H	-	-	PK	101	1.0	RB = VB = 1MHz
5181.040	93.2	V	-	-	AVG	218	1.0	RB = 1MHz, VB = 10Hz
5181.040	104.8	V	-	-	PK	218	1.0	RB = VB = 1MHz

Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	PK/QP/Avg	degrees	meters	
5149.770	61.2	H	74.0	-12.8	Pk	101	1.0	
5149.800	48.7	H	54.0	-5.3	Avg	101	1.0	
5149.890	62.2	V	74.0	-11.8	Pk	219	1.0	
5149.710	48.5	V	54.0	-5.5	Avg	219	1.0	

Run #7b: High Channel @ 5320 MHz (band edge at 5350 MHz)

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
27.0	12.2	26.0	12.2	27.0	12.0

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	PK/QP/Avg	degrees	meters	
5321.290	97.1	H	-	-	AVG	105	1.0	RB = 1MHz, VB = 10Hz
5321.290	106.8	H	-	-	PK	105	1.0	RB = VB = 1MHz
5318.570	97.8	V	-	-	AVG	219	1.0	RB = 1MHz, VB = 10Hz
5318.570	107.8	V	-	-	PK	219	1.0	RB = VB = 1MHz

Band Edge Signal Field Strength

Restricted band starts at allocated band edge (5350MHz), field strength limit is 54dBuV/m average, 74dBuV/m peak.

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	PK/QP/Avg	degrees	meters	
5350.130	62.2	V	74.0	-11.8	Pk	219	1.0	
5350.100	49.0	V	54.0	-5.0	Avg	219	1.0	
5350.250	61.9	H	74.0	-12.1	Pk	106	1.0	
5350.140	48.8	H	54.0	-5.2	Avg	106	1.0	



EMC Test Data

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #7c: Low Channel @ 5500 MHz (restricted band edge at 5460 MHz, allocated band edge at 5470MHz)

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
25.5	12.0	25.5	12.2	26.0	12.1

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.247		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
5501.480	95.3	H	-	-	AVG	247	1.0	RB = 1MHz, VB = 10Hz
5501.480	105.6	H	-	-	PK	247	1.0	RB = VB = 1MHz
5498.670	101.2	V	-	-	AVG	175	1.0	RB = 1MHz, VB = 10Hz
5498.670	111.3	V	-	-	PK	175	1.0	RB = VB = 1MHz

5460 Restricted Band Feld strength limit = 54dBuV/m avg, 74dBuV/m peak at 3m

5460 - 5470 MHz, Limit is -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak at 3m)

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.247		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
5459.790	62.0	V	74.0	-12.0	PK	175	1.0	
5459.890	49.1	V	54.0	-4.9	AVG	175	1.0	
5459.810	61.5	H	74.0	-12.5	PK	248	1.0	
5459.700	48.6	H	54.0	-5.4	AVG	248	1.0	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

**RSS 210 and FCC 15.E (U-NII, 5150- 550/5250-5350/5460-5725MHz)
Radiated Spurious Emissions, 1 - 40GHz 802.11n 20MHz Mode**

Test Specific Details

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the specification listed above.

General Test Configuration

The EUT and all local support equipment were located on the turntable for radiated spurious emissions testing. All remote support equipment was located approximately 30 meters from the EUT with all I/O connections running on top of the groundplane.

For radiated emissions testing the measurement antenna was located 3 meters from the EUT.

Ambient Conditions: Temperature: 20 °C
 Rel. Humidity: 34 %

Summary of Results

Run #	Mode	Channel	Power Setting	Measured Power	Test Performed	Limit	Result / Margin		
1	802.11n20 Chain A	5200	31.0	16.7	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.407	53.0dBµV/m @ 11200.2MHz (-1.0dB)		
		5280	28.0	16.6					
		5600	25.5	16.5					
2	802.11n20 Chain B	5200	30.0	16.7	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.407	47.4dBµV/m @ 7466.6MHz (-6.6dB)		
		5280	27.5	16.7					
		5600	25.0	16.5					
3	802.11n20 Chain C	5200	30.0	16.5	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.407	45.5dBµV/m @ 7466.7MHz (-8.5dB)		
		5280	28.0	16.7					
		5600	25.5	16.6					
4	802.11n20 Chain A+B+C	5180	dual-chain or single- chain power setting (i.e. higher power than the triple-chain power used by the end product)		Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.407	40.5dBµV/m @ 10360.0MHz (-13.5dB)		
		5200							
		5240							
5	802.11n20 Chain A+B+C	5260			dual-chain or single- chain power setting (i.e. higher power than the triple-chain power used by the end product)		Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.407	45.4dBµV/m @ 5453.9MHz (-8.6dB)
		5280							
		5320							
6	802.11n20 Chain A+B+C	5500	dual-chain or single- chain power setting (i.e. higher power than the triple-chain power used by the end product)				Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.407	51.7dBµV/m @ 11200.1MHz (-2.3dB)
		5600							
		5700							

Note - the dual chain mode was not tested as the triple-chain mode was tested at the higher dual chain output power. Testing all three chains together showed center channel to be worst case in the 5470-5725MHz band



Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Modifications Made During Testing

No modifications were made to the EUT during testing

Deviations From The Standard

No deviations were made from the requirements of the standard.

Date of Test: 4/11/2008
 Test Engineer: Ben Jing
 Test Location: FT Chamber # 5

Run #1: Radiated Spurious Emissions, 1000 - 40000 MHz. Operating Mode: 802.11n 20MHz Chain A

Run #1a: Center Channel @ 5200 MHz

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1500.000	34.1	V	54.0	-19.9	AVG	252	1.0	
1743.170	32.4	V	68.3	-35.9	AVG	208	1.0	Note 2
6933.340	49.2	V	68.3	-19.1	AVG	243	1.5	Note 2
10559.100	42.7	V	68.3	-25.6	AVG	185	1.0	Note 2
1500.000	48.9	V	74.0	-25.1	PK	252	1.0	
1743.170	52.2	V	88.3	-36.1	PK	208	1.0	Note 2
6933.340	52.3	V	88.3	-36.0	PK	243	1.5	Note 2
10559.100	55.6	V	88.3	-32.7	PK	185	1.0	Note 2

Run #1b: Center Channel @ 5280 MHz

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1497.540	34.2	V	54.0	-19.8	AVG	106	2.0	
1744.270	31.7	V	68.3	-36.6	AVG	208	1.0	Note 2
7039.980	47.2	V	68.3	-21.1	AVG	144	1.0	Note 2
10559.660	40.4	V	68.3	-27.9	AVG	61	1.0	Note 2
1497.540	47.9	V	74.0	-26.1	PK	106	2.0	
1744.270	52.0	V	88.3	-36.3	PK	208	1.0	Note 2
7039.980	50.7	V	88.3	-37.6	PK	144	1.0	Note 2
10559.660	53.5	V	88.3	-34.8	PK	61	1.0	Note 2

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Note 2: Signal is not in a restricted band but the more stringent restricted band limit was used.



EMC Test Data

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run # 1c: Center Channel @ 5600 MHz

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1497.640	35.8	V	54.0	-18.2	AVG	181	2.0	
7466.650	45.7	V	54.0	-8.3	AVG	166	1.5	
11200.230	53.0	V	54.0	-1.0	AVG	183	1.0	
1497.640	49.2	V	74.0	-24.8	PK	181	2.0	
7466.650	51.6	V	74.0	-22.4	PK	166	1.5	
11200.230	65.6	V	74.0	-8.4	PK	183	1.0	

Run # 2: Radiated Spurious Emissions, 1000 - 40000 MHz. Operating Mode: 802.11n 20MHz Chain B

Run #2a: Center Channel @ 5200 MHz

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1744.100	31.7	V	68.3	-36.6	AVG	212	1.0	Note 2
1996.800	33.5	V	68.3	-34.8	AVG	246	1.0	Note 2
4233.880	32.7	V	54.0	-21.3	AVG	238	1.0	
6933.270	49.9	V	68.3	-18.4	AVG	234	1.5	Note 2
10400.020	41.8	V	68.3	-26.5	AVG	214	1.0	Note 2
1744.100	52.2	V	88.3	-36.1	PK	212	1.0	Note 2
1996.800	48.0	V	88.3	-40.3	PK	246	1.0	Note 2
4233.880	51.5	V	74.0	-22.5	PK	238	1.0	
6933.270	52.7	V	74.0	-21.3	PK	234	1.5	Note 2
10400.020	49.8	V	88.3	-38.5	PK	214	1.0	Note 2

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Note 2: Signal is not in a restricted band but the more stringent restricted band limit was used.



EMC Test Data

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #2b: Center Channel @ 5280 MHz

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1497.600	35.5	V	54.0	-18.5	AVG	185	1.0	
1744.050	32.2	V	68.3	-36.1	AVG	208	1.0	Note 2
3994.180	33.4	V	54.0	-20.6	AVG	241	1.0	
7039.960	45.7	V	68.3	-22.6	AVG	188	1.5	Note 2
10560.040	38.2	V	68.3	-30.1	AVG	239	1.0	Note 2
1497.600	48.0	V	74.0	-26.0	PK	185	1.0	
1744.050	52.9	V	88.3	-35.4	PK	208	1.0	Note 2
3994.180	54.0	V	74.0	-20.0	PK	241	1.0	
7039.960	49.6	V	88.3	-38.7	PK	188	1.5	Note 2
10560.040	47.5	V	88.3	-40.8	PK	239	1.0	Note 2

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Note 2: Signal is not in a restricted band but the more stringent restricted band limit was used.

Run #2c: Center Channel @ 5600 MHz

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1497.680	36.0	V	54.0	-18.0	AVG	220	2.0	
7466.640	47.4	V	54.0	-6.6	AVG	118	1.5	
11199.720	46.6	V	54.0	-7.4	AVG	174	1.0	
1497.680	47.1	V	74.0	-26.9	PK	220	2.0	
7466.640	53.1	V	74.0	-20.9	PK	118	1.5	
11199.720	59.5	V	74.0	-14.5	PK	174	1.0	



EMC Test Data

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Date of Test: 4/14/2008
 Test Engineer: Ben Jing
 Test Location: FT Chamber # 4

Run # 3: Radiated Spurious Emissions, 1000 - 40000 MHz. Operating Mode: 802.11n 20MHz Chain C

Run #3a: Center Channel @ 5200 MHz

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1497.810	34.6	H	54.0	-19.4	AVG	249	1.0	
1743.170	32.3	V	68.3	-36.0	AVG	91	1.5	Note 2
1992.390	30.3	V	68.3	-38.0	AVG	247	1.0	Note 2
6933.400	51.9	H	68.3	-16.4	AVG	155	1.0	Note 2
10399.970	38.9	V	68.3	-29.4	AVG	200	1.0	Note 2
1497.810	53.0	H	74.0	-21.0	PK	249	1.0	
1743.170	54.1	V	88.3	-34.2	PK	91	1.5	Note 2
1992.390	48.4	V	88.3	-39.9	PK	247	1.0	Note 2
6933.400	54.3	H	88.3	-34.0	PK	155	1.0	Note 2
10399.970	48.9	V	88.3	-39.4	PK	200	1.0	Note 2

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Note 2: Signal is not in a restricted band but the more stringent restricted band limit was used.

Run #3b: Center Channel @ 5280 MHz

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1497.660	37.3	H	54.0	-16.7	AVG	209	1.0	
1744.410	28.4	H	68.3	-39.9	AVG	248	2.0	Note 2
2490.040	30.5	H	54.0	-23.5	AVG	226	1.0	
3995.430	33.8	V	54.0	-20.2	AVG	271	1.0	
7040.020	44.2	H	68.3	-24.1	AVG	145	1.0	Note 2
10560.070	37.9	V	68.3	-30.4	AVG	217	1.0	Note 2
1497.660	56.0	H	74.0	-18.0	PK	209	1.0	
1744.410	48.0	H	88.3	-40.3	PK	248	2.0	Note 2
2490.040	51.6	H	74.0	-22.4	PK	226	1.0	
3995.430	54.2	V	74.0	-19.8	PK	271	1.0	
7040.020	49.1	H	88.3	-39.2	PK	145	1.0	Note 2
10560.070	49.5	V	88.3	-38.8	PK	217	1.0	Note 2

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Note 2: Signal is not in a restricted band but the more stringent restricted band limit was used.



EMC Test Data

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #3c: Center Channel @ 5600 MHz

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1497.960	37.5	H	54.0	-16.5	AVG	208	1.0	
7466.710	45.5	V	54.0	-8.5	AVG	158	1.5	
11200.100	44.0	V	54.0	-10.0	AVG	143	1.0	
1497.960	55.5	H	74.0	-18.5	PK	208	1.0	
7466.710	52.0	V	74.0	-22.0	PK	158	1.5	
11200.100	56.8	V	74.0	-17.2	PK	143	1.0	

Run #4: Radiated Spurious Emissions, 1000 - 40000 MHz. Operating Mode: 802.11n20 Chain A+B+C

Run #4a: Low Channel @ 5180 MHz

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
35.0	16.5	34.0	16.7	34.0	16.5

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1497.860	36.6	H	54.0	-17.4	AVG	210	1.0	
1748.280	31.5	H	68.3	-36.8	AVG	211	1.5	Note 2
3994.890	34.2	V	54.0	-19.8	AVG	262	1.0	
6906.640	54.0	V	68.3	-14.3	AVG	112	1.0	Note 2
10359.970	40.5	V	54.0	-13.5	AVG	107	1.0	Note 2
1497.860	56.4	H	74.0	-17.6	PK	210	1.0	
1748.280	52.0	H	88.3	-36.3	PK	211	1.5	Note 2
3994.890	55.6	V	74.0	-18.4	PK	262	1.0	
6906.640	56.0	V	88.3	-32.3	PK	112	1.0	Note 2
10359.970	51.7	V	88.3	-36.6	PK	107	1.0	Note 2

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Note 2: Signal is not in a restricted band but the more stringent restricted band limit was used.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #4b: Center Channel @ 5200 MHz

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
35.0	16.6	34.0	16.7	34.0	16.5

Spurious Emissions

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
1497.600	34.6	H	54.0	-19.4	AVG	248	1.0	
1743.640	32.6	V	68.3	-35.7	AVG	305	1.5	Note 2
3997.100	33.3	V	54.0	-20.7	AVG	235	1.0	
6933.300	49.4	V	68.3	-18.9	AVG	133	1.5	Note 2
10399.440	40.4	V	68.3	-27.9	AVG	255	1.0	Note 2
1497.600	53.1	H	74.0	-20.9	PK	248	1.0	
1743.640	52.2	V	88.3	-36.1	PK	305	1.5	Note 2
3997.100	53.7	V	74.0	-20.3	PK	235	1.0	
6933.300	52.4	V	88.3	-35.9	PK	133	1.5	Note 2
10399.440	52.1	V	88.3	-36.2	PK	255	1.0	Note 2

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Note 2: Signal is not in a restricted band but the more stringent restricted band limit was used.

Run #4c: High Channel @ 5240 MHz

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
33.5	16.6	32.5	16.5	33.0	16.5

Spurious Emissions

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
1497.740	37.1	H	54.0	-16.9	AVG	213	1.0	
1747.130	32.3	V	68.3	-36.0	AVG	247	1.5	Note 2
6986.660	50.5	V	68.3	-17.8	AVG	121	1.5	Note 2
10479.190	43.3	V	68.3	-25.0	AVG	186	1.0	Note 2
1497.740	55.5	H	74.0	-18.5	PK	213	1.0	
1747.130	54.1	V	88.3	-34.2	PK	247	1.5	Note 2
6986.660	53.0	V	88.3	-35.3	PK	121	1.5	Note 2
10479.190	54.7	V	88.3	-33.6	PK	186	1.0	Note 2

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Note 2: Signal is not in a restricted band but the more stringent restricted band limit was used.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #5: Radiated Spurious Emissions, 1000 - 40000 MHz. Operating Mode: 802.11n20 Chain A+B+C

Run #5a: Low Channel @ 5260 MHz

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
33.0	16.6	32.0	16.7	33.0	16.6

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector PK/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1497.670	37.0	H	54.0	-17.0	AVG	211	1.0	
1746.980	30.2	V	68.3	-38.1	AVG	118	1.0	Note 2
5453.900	45.4	V	54.0	-8.6	AVG	220	1.0	
7013.360	50.2	V	68.3	-18.1	AVG	119	1.5	Note 2
10519.330	41.8	V	68.3	-26.5	AVG	169	1.0	Note 2
1497.670	55.1	H	74.0	-18.9	PK	211	1.0	
1746.980	49.7	V	88.3	-38.6	PK	118	1.0	Note 2
5453.900	56.8	V	74.0	-17.2	PK	220	1.0	
7013.360	53.0	V	88.3	-35.3	PK	119	1.5	Note 2
10519.330	52.8	V	88.3	-35.5	PK	169	1.0	Note 2

Run #5b: Center Channel @ 5280 MHz

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
32.5	16.5	31.5	16.7	32.5	16.5

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector PK/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1497.620	36.9	H	54.0	-17.1	AVG	210	1.0	
1743.670	30.4	V	68.3	-37.9	AVG	116	1.0	Note 2
5456.440	43.6	V	54.0	-10.4	AVG	216	1.0	
7039.980	47.6	V	68.3	-20.7	AVG	61	1.5	Note 2
10559.040	39.7	V	68.3	-28.6	AVG	56	1.0	Note 2
1497.620	56.0	H	74.0	-18.0	PK	210	1.0	
1743.670	49.3	V	88.3	-39.0	PK	116	1.0	Note 2
5456.440	56.1	V	74.0	-17.9	PK	216	1.0	
7039.980	51.0	V	88.3	-37.3	PK	61	1.5	Note 2
10559.040	50.9	V	88.3	-37.4	PK	56	1.0	Note 2

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Note 2: Signal is not in a restricted band but the more stringent restricted band limit was used.



EMC Test Data

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #5c: High Channel @ 5320 MHz

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
31.5	16.6	30.5	16.6	32.0	16.6

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector PK/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1497.680	36.3	H	54.0	-17.7	AVG	210	1.0	
1744.320	32.0	V	54.0	-22.0	AVG	246	1.5	
5481.600	45.0	V	68.3	-23.3	AVG	188	1.0	Note 2
7093.310	47.6	V	68.3	-20.7	AVG	141	1.0	Note 2
7499.980	43.0	V	54.0	-11.0	AVG	244	1.0	
10641.180	40.7	V	54.0	-13.3	AVG	190	1.0	
1497.680	54.9	H	74.0	-19.1	PK	210	1.0	
1744.320	53.6	V	88.3	-34.7	PK	246	1.5	Note 2
5481.600	56.3	V	88.3	-32.0	PK	188	1.0	Note 2
7093.310	51.2	V	88.3	-37.1	PK	141	1.0	Note 2
7499.980	51.2	V	74.0	-22.8	PK	244	1.0	
10641.180	53.5	V	74.0	-20.5	PK	190	1.0	

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dB μ V/m average, 88.3dB μ V/m peak)

Note 2: Signal is not in a restricted band but the more stringent restricted band limit was used.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Date of Test: 4/15/2008
 Test Engineer: Ben Jing
 Test Location: FT Chamber # 5

Run #6: Radiated Spurious Emissions, 1000 - 40000 MHz. Operating Mode: 802.11n20 Chain A+B+C

Run #6a: Low Channel @ 5500 MHz

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
29.5	16.5	29.5	16.5	30.5	16.5

Spurious Emissions

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
1747.310	34.9	V	68.3	-33.4	AVG	348	1.0	Note 2
3994.140	33.8	V	54.0	-20.2	AVG	264	1.5	
7333.280	44.1	V	54.0	-9.9	AVG	152	1.5	
11000.800	50.1	V	54.0	-3.9	AVG	164	1.0	
1747.310	56.3	V	88.3	-32.0	PK	348	1.0	Note 2
3994.140	53.7	V	74.0	-20.3	PK	264	1.5	
7333.280	50.0	V	74.0	-24.0	PK	152	1.5	
11000.800	61.5	V	74.0	-12.5	PK	164	1.0	

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dB μ V/m average, 88.3dB μ V/m peak)

Note 2: Signal is not in a restricted band but the more stringent restricted band limit was used.

Run #6b: Center Channel @ 5600 MHz

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
28.5	15.5	27.5	15.5	28.5	15.5

Spurious Emissions

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
11200.080	51.7	V	54.0	-2.3	AVG	129	1.0	2nd harmonic
11200.080	63.8	V	74.0	-10.2	PK	129	1.0	

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dB μ V/m average, 88.3dB μ V/m peak)

Note 2: Signal is not in a restricted band but the more stringent restricted band limit was used.



EMC Test Data

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #6c: High Channel @ 5700 MHz

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
31.0	16.5	30.5	16.6	30.5	16.5

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.407		Detector PK/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1497.570	35.1	V	54.0	-18.9	AVG	131	1.0	
1743.160	33.7	V	68.3	-34.6	AVG	0	1.0	Note 2
3993.660	33.0	V	54.0	-21.0	AVG	290	1.5	
7599.990	46.8	V	54.0	-7.2	AVG	269	1.5	
11398.870	51.5	V	54.0	-2.5	AVG	140	1.0	
1497.570	51.6	V	74.0	-22.4	PK	131	1.0	
1743.160	55.7	V	88.3	-32.6	PK	0	1.0	Note 2
3993.660	51.9	V	74.0	-22.1	PK	290	1.5	
7599.990	52.3	V	74.0	-21.7	PK	269	1.5	
11398.870	63.1	V	74.0	-10.9	PK	140	1.0	

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Note 2: Signal is not in a restricted band but the more stringent restricted band limit was used.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

**RSS 210 and FCC 15.E (U-NII, 5150- 550/5250-5350/5460-5725MHz)
Radiated Spurious Emissions - Band Edge 802.11n 40MHz Mode**

Test Specific Details

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the specification listed above.

Config. Used: 1
Config Change: None
Host Unit Voltage Powered From Host System

General Test Configuration

The EUT and all local support equipment were located on the turntable for radiated spurious emissions testing. All remote support equipment was located approximately 30 meters from the EUT with all I/O connections running on top of the groundplane.

For radiated emissions testing the measurement antenna was located 3 meters from the EUT.

Ambient Conditions: Temperature: 19 °C
 Rel. Humidity: 45 %

Summary of Results

Run #	Mode	Channel	Power Setting	Measured Power	Test Performed	Limit	Result / Margin
1a	802.11n40 Chain A	5190MHz	29.0	15.3	Band Edge radiated field strength	FCC Part 15.209	52.2dBµV/m @ 5150.0MHz (-1.8dB)
1b	802.11n40 Chain A	5310MHz	26.0	16.6	Band Edge radiated field strength	FCC Part 15.209	51.9dBµV/m @ 5350.3MHz (-2.1dB)
1c	802.11n40 Chain A	5510MHz	24.5	16.3	Band Edge radiated field strength	FCC Part 15.209 / 15E	52.2dBµV/m @ 5459.8MHz (-1.8dB)
2a	802.11n40 Chain B	5190MHz	27.5	14.3	Band Edge radiated field strength	FCC Part 15.209	52.7dBµV/m @ 5149.9MHz (-1.3dB)
2b	802.11n40 Chain B	5310MHz	24.0	14.2	Band Edge radiated field strength	FCC Part 15.209	52.869.7 @ 5350MHz (-1.2dB)
2c	802.11n40 Chain B	5510MHz	24.0	15.4	Band Edge radiated field strength	FCC Part 15.209 / 15E	52.4dBµV/m @ 5459.8MHz (-1.6dB)
3a	802.11n40 Chain C	5190MHz	27.0	13.5	Band Edge radiated field strength	FCC Part 15.209	52.5dBµV/m @ 5149.9MHz (-1.5dB)
3b	802.11n40 Chain C	5310MHz	26.0	14.6	Band Edge radiated field strength	FCC Part 15.209	52.7dBµV/m @ 5350.0MHz (-1.3dB)
3c	802.11n40 Chain C	5510MHz	26.0	16.5	Band Edge radiated field strength	FCC Part 15.209 / 15E	52.8dBµV/m @ 5460.0MHz (-1.2dB)

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #	Mode	Channel	Power Setting	Measured Power	Test Performed	Limit	Result / Margin
4	802.11n40 Chain A+B	5190MHz	28.5, 28	13.8, 14.4	Band Edge radiated field strength	FCC Part 15.209	52.6dBµV/m @ 5150.0MHz (-1.4dB)
	802.11n40 Chain A+B	5310MHz	25, 24	13.4, 13.5	Band Edge radiated field strength	FCC Part 15.209	52.6dBµV/m @ 5350.0MHz (-1.4dB)
	802.11n40 Chain A+B	5510MHz	23.5, 23	14.4, 14.5	Band Edge radiated field strength	FCC Part 15.209 / 15E	50.7dBµV/m @ 5459.9MHz (-3.3dB)
5	802.11n40 Chain A+C	5190MHz	29, 28.5	13.7, 14.1	Band Edge radiated field strength	FCC Part 15.209	52.5dBµV/m @ 5149.9MHz (-1.5dB)
	802.11n40 Chain A+C	5310MHz	25.5, 26	13.7, 14	Band Edge radiated field strength	FCC Part 15.209	51.8dBµV/m @ 5350.0MHz (-2.2dB)
	802.11n40 Chain A+C	5510MHz	23.5, 23.5	14, 14	Band Edge radiated field strength	FCC Part 15.209 / 15E	50.5dBµV/m @ 5459.9MHz (-3.5dB)
6	802.11n40 Chain B+C	5190MHz	28, 28.5	14, 14.1	Band Edge radiated field strength	FCC Part 15.209	53.0dBµV/m @ 5149.8MHz (-1.0dB)
	802.11n40 Chain B+C	5310MHz	24, 26	13.7, 14	Band Edge radiated field strength	FCC Part 15.209	50.9dBµV/m @ 5350.0MHz (-3.1dB)
	802.11n40 Chain B+C	5510MHz	22.5, 23.0	14.0, 14.0	Band Edge radiated field strength	FCC Part 15.209 / 15E	50.4dBµV/m @ 5459.9MHz (-3.6dB)
7	802.11n40 A+B+C	5190MHz	29.5, 29.0, 29.0	12.0, 12.5, 12.5	Band Edge radiated field strength	FCC Part 15.209	50.8 dBuV/m @ 5149.7 MHz (-3.2dB)
	802.11n40 A+B+C	5310MHz	26.0, 25.5, 27.5	12.0, 12.2, 12.5	Band Edge radiated field strength	FCC Part 15.209	52.6dBµV/m @ 5350.1MHz (-1.4dB)
	802.11n40 A+B+C	5510MHz	24.5, 25.0, 26.0	12.4, 12.6, 12.5	Band Edge radiated field strength	FCC Part 15.209 / 15E	52.8dBµV/m @ 5459.8MHz (-1.2dB)

Modifications Made During Testing

No modifications were made to the EUT during testing

Deviations From The Standard

No deviations were made from the requirements of the standard.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #1: Radiated Spurious Emissions, Band Edges. Operating Mode: 802.11n 40MHz - Chain A

Date of Test: 3/24/2008
 Test Engineer: Suhaila Khushzad
 Test Location: Chamber # 5

Run #1a: Low Channel @ 5190 MHz (band edge at 5150 MHz)

Power Setting: 29 Average power: 15.3 (for reference purposes)

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5200.580	95.5	H	-	-	AVG	238	1.0	GC: 30, Avg Power: 16.5
5200.580	104.4	H	-	-	PK	238	1.0	GC: 30, Avg Power: 16.5
5200.250	94.3	H	-	-	AVG	237	1.0	GC: 29, Avg Power: 15.3
5200.250	103.3	H	-	-	PK	237	1.0	GC: 29, Avg Power: 15.3
5201.080	89.5	V	-	-	AVG	95	1.1	GC: 29, Avg Power: 15.3
5201.080	98.4	V	-	-	PK	95	1.1	GC: 29, Avg Power: 15.3

Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5149.960	52.2	H	54.0	-1.8	Avg	237	1.0	GC: 29, Avg Power: 15.3
5149.520	69.0	H	74.0	-5.0	Pk	237	1.0	GC: 29, Avg Power: 15.3
5149.900	50.7	V	54.0	-3.3	Avg	95	1.1	GC: 29, Avg Power: 15.3
5148.850	67.6	V	74.0	-6.4	Pk	95	1.1	GC: 29, Avg Power: 15.3

Run #1b: High Channel @ 5310 MHz (band edge at 5350 MHz)

Power Setting: 25 Average power: 14.9 (for reference purposes)

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5311.420	91.1	V	-	-	AVG	139	1.7	GC: 25, Avg Power: 14.9
5311.420	99.2	V	-	-	PK	139	1.7	GC: 25, Avg Power: 14.9
5321.670	92.4	H	-	-	AVG	235	1.0	GC: 25, Avg Power: 14.9
5321.670	101.6	H	-	-	PK	235	1.0	GC: 25, Avg Power: 14.9

Band Edge Signal Field Strength

Restricted band starts at allocated band edge (5350MHz), field strength limit is 54dBuV/m average, 74dBuV/m peak.

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5350.000	52.1	V	54.0	-1.9	Avg	139	1.7	GC: 25, Avg Power: 14.9
5350.860	68.9	V	74.0	-5.1	Pk	139	1.7	GC: 25, Avg Power: 14.9
5350.630	49.7	H	54.0	-4.3	Avg	235	1.0	GC: 25, Avg Power: 14.9
5351.600	64.8	H	74.0	-9.2	Pk	235	1.0	GC: 25, Avg Power: 14.9

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #1c: Low Channel @ 5510 MHz (restricted band edge at 5460 MHz, allocated band edge at 5470MHz)

Power Setting: 24.5 Average power: 16.3 (for reference purposes)

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5525.600	98.8	V	-	-	AVG	175	1.5	GC: 24.5, Avg Power: 16.3
5525.600	107.4	V	-	-	PK	175	1.5	GC: 24.5, Avg Power: 16.3
5508.520	91.6	H	-	-	AVG	187	1.0	GC: 24.5, Avg Power: 16.3
5508.520	100.3	H	-	-	PK	187	1.0	GC: 24.5, Avg Power: 16.3

5460 Restricted Band Feld strength limit = 54dBuV/m avg, 74dBuV/m peak at 3m

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5459.840	52.2	V	54.0	-1.8	Avg	174	1.5	GC: 24.5, Avg Power: 16.3
5457.390	69.9	V	74.0	-4.1	PK	174	1.5	GC: 24.5, Avg Power: 16.3
5459.240	49.1	H	54.0	-4.9	Avg	187	1.0	GC: 24.5, Avg Power: 16.3
5458.640	62.4	H	74.0	-11.6	PK	187	1.0	GC: 24.5, Avg Power: 16.3

5460 - 5470 MHz, Limit is -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak at 3m)

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5469.980	56.8	V	68.3	-11.5	Avg	175	1.5	GC: 24.5, Avg Power: 16.3
5468.640	72.9	V	88.3	-15.4	PK	175	1.5	GC: 24.5, Avg Power: 16.3
5469.980	51.4	H	68.3	-16.9	Avg	187	1.0	GC: 24.5, Avg Power: 16.3
5468.830	65.2	H	88.3	-23.1	PK	187	1.0	GC: 24.5, Avg Power: 16.3

Run #2: Radiated Spurious Emissions, Band Edges. Operating Mode: 802.11n 40MHz - Chain B

Date of Test: 3/24/2008

Test Engineer: Rafael Varelas

Test Location: FT Chamber #3

Run #2a: Low Channel @ 5190 MHz (band edge at 5150 MHz)

Power Setting: 27.5 Average power: 14.3 (for reference purposes)

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5201.930	95.3	H	-	-	AVG	103	1.0	GC: 27.5, Avg Power: 14.3
5201.930	103.9	H	-	-	PK	103	1.0	GC: 27.5, Avg Power: 14.3
5205.070	92.5	V	-	-	AVG	147	1.0	GC: 27.5, Avg Power: 14.3
5205.070	101.0	V	-	-	PK	147	1.0	GC: 27.5, Avg Power: 14.3

Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5149.930	52.7	H	54.0	-1.3	Avg	103	1.0	GC: 27.5, Avg Power: 14.3
5147.530	70.2	H	74.0	-3.8	PK	103	1.0	GC: 27.5, Avg Power: 14.3
5150.000	50.3	V	54.0	-3.7	Avg	147	1.0	GC: 27.5, Avg Power: 14.3
5149.250	66.2	V	74.0	-7.8	PK	147	1.0	GC: 27.5, Avg Power: 14.3

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #2b: High Channel @ 5310 MHz (band edge at 5350 MHz)

Power Setting: 24 Average power: 14.2 (for reference purposes)

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5319.730	96.0	H	-	-	AVG	103	1.1	GC: 24.0, Avg Power: 14.2
5319.730	104.9	H	-	-	PK	103	1.1	GC: 24.0, Avg Power: 14.2
5310.470	95.9	V	-	-	AVG	159	1.5	GC: 24.0, Avg Power: 14.2
5310.470	105.0	V	-	-	PK	159	1.5	GC: 24.0, Avg Power: 14.2

Band Edge Signal Field Strength

Restricted band starts at allocated band edge (5350MHz), field strength limit is 54dBuV/m average, 74dBuV/m peak.

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5350.000	52.5	H	54.0	-1.5	Avg	103	1.1	GC: 24.0, Avg Power: 14.2
5351.460	69.7	H	74.0	-4.3	PK	103	1.1	GC: 24.0, Avg Power: 14.2
5350.020	52.8	V	54.0	-1.2	Avg	159	1.5	GC: 24.0, Avg Power: 14.2
5351.080	72.1	V	74.0	-1.9	PK	159	1.5	GC: 24.0, Avg Power: 14.2

Run #2c: Low Channel @ 5510 MHz (restricted band edge at 5460 MHz, allocated band edge at 5470MHz)

Power Setting: 24 Average power: 15.4 (for reference purposes)

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5494.800	100.0	V	-	-	AVG	221	1.0	GC: 24.0, Avg Power: 15.4
5494.800	108.7	V	-	-	PK	221	1.0	GC: 24.0, Avg Power: 15.4
5496.130	95.4	H	-	-	AVG	110	1.0	GC: 24.0, Avg Power: 15.4
5496.130	104.3	H	-	-	PK	110	1.0	GC: 24.0, Avg Power: 15.4

5460 Restricted Band Feld strength limit = 54dBuV/m avg, 74dBuV/m peak at 3m

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5459.760	52.4	V	54.0	-1.6	Avg	221	1.0	GC: 24.0, Avg Power: 15.4
5457.310	70.1	V	74.0	-3.9	PK	221	1.0	GC: 24.0, Avg Power: 15.4
5459.970	50.8	H	54.0	-3.2	Avg	110	1.0	GC: 24.0, Avg Power: 15.4
5457.080	67.4	H	74.0	-6.6	PK	110	1.0	GC: 24.0, Avg Power: 15.4

5460 - 5470 MHz, Limit is -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak at 3m)

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5469.980	57.6	V	68.3	-10.7	Avg	221	1.0	GC: 24.0, Avg Power: 15.4
5468.960	75.5	V	88.3	-12.8	PK	221	1.0	GC: 24.0, Avg Power: 15.4
5469.790	54.6	H	68.3	-13.7	Avg	110	1.0	GC: 24.0, Avg Power: 15.4
5469.700	72.9	H	88.3	-15.4	PK	110	1.0	GC: 24.0, Avg Power: 15.4

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #3: Radiated Spurious Emissions, Band Edges. Operating Mode: 802.11n 40MHz - Chain C

Date of Test: 3/24/2008
 Test Engineer: Rafael Varelas
 Test Location: FT Chamber #3

Run #3a: Low Channel @ 5190 MHz (band edge at 5150 MHz)

Power Setting: 27 Average power: 13.5 (for reference purposes)

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5203.930	95.9	H	-	-	AVG	107	1.4	GC: 27.0, Avg Power: 13.5
5203.930	104.3	H	-	-	PK	107	1.4	GC: 27.0, Avg Power: 13.5
5205.600	94.1	V	-	-	AVG	186	1.0	GC: 27.0, Avg Power: 13.5
5205.600	102.9	V	-	-	PK	186	1.0	GC: 27.0, Avg Power: 13.5

Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5149.920	52.5	H	54.0	-1.5	Avg	107	1.4	GC: 27.0, Avg Power: 13.5
5149.410	69.6	H	74.0	-4.4	PK	107	1.4	GC: 27.0, Avg Power: 13.5
5149.650	50.6	V	54.0	-3.4	Avg	186	1.0	GC: 27.0, Avg Power: 13.5
5149.690	68.7	V	74.0	-5.3	PK	186	1.0	GC: 27.0, Avg Power: 13.5

Run #3b: High Channel @ 5310 MHz (band edge at 5350 MHz)

Power Setting: 26 Average power: 14.6 (for reference purposes)

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5310.270	96.4	H	-	-	AVG	112	1.5	GC: 26.0, Avg Power: 14.6
5310.270	104.9	H	-	-	PK	112	1.5	GC: 26.0, Avg Power: 14.6
5293.530	96.7	V	-	-	AVG	199	1.0	GC: 26.0, Avg Power: 14.6
5293.530	105.3	V	-	-	PK	199	1.0	GC: 26.0, Avg Power: 14.6

Band Edge Signal Field Strength

Restricted band starts at allocated band edge (5350MHz), field strength limit is 54dBuV/m average, 74dBuV/m peak.

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5350.000	52.7	H	54.0	-1.3	Avg	112	1.5	GC: 26.0, Avg Power: 14.6
5350.810	71.2	H	74.0	-2.8	PK	112	1.5	GC: 26.0, Avg Power: 14.6
5350.020	52.2	V	54.0	-1.8	Avg	199	1.0	GC: 26.0, Avg Power: 14.6
5351.270	69.6	V	74.0	-4.4	PK	199	1.0	GC: 26.0, Avg Power: 14.6

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #3c: Low Channel @ 5510 MHz (restricted band edge at 5460 MHz, allocated band edge at 5470MHz)

Power Setting: 26 Average power: 16.5 (for reference purposes)

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBuV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5525.200	95.4	H	-	-	AVG	242	1.0	GC: 26.0, Avg Power: 16.5
5525.200	104.1	H	-	-	PK	242	1.0	GC: 26.0, Avg Power: 16.5
5525.330	100.7	V	-	-	AVG	167	1.0	GC: 26.0, Avg Power: 16.5
5525.330	109.1	V	-	-	PK	167	1.0	GC: 26.0, Avg Power: 16.5

5460 Restricted Band Feld strength limit = 54dBuV/m avg, 74dBuV/m peak at 3m

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBuV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5460.000	52.8	V	54.0	-1.2	Avg	167	1.0	GC: 26.0, Avg Power: 16.5
5459.850	69.8	V	74.0	-4.2	PK	167	1.0	GC: 26.0, Avg Power: 16.5
5459.720	49.9	H	54.0	-4.1	Avg	243	1.0	GC: 26.0, Avg Power: 16.5
5457.470	64.4	H	74.0	-9.6	PK	243	1.0	GC: 26.0, Avg Power: 16.5

5460 - 5470 MHz, Limit is -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak at 3m)

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBuV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5469.980	56.8	V	68.3	-11.5	Avg	167	1.0	GC: 26.0, Avg Power: 16.5
5469.750	74.7	V	88.3	-13.6	PK	167	1.0	GC: 26.0, Avg Power: 16.5
5470.000	52.4	H	68.3	-15.9	Avg	243	1.0	GC: 26.0, Avg Power: 16.5
5468.990	69.5	H	88.3	-18.8	PK	243	1.0	GC: 26.0, Avg Power: 16.5

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Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #4: Radiated Spurious Emissions, Band Edges. Operating Mode: 802.11n 40MHz - Chain A+B

Date of Test: 4/21/2008

Test Engineer: Suhaila Khushzad & John Caizzi

Test Location: Chamber # 3

Run #4a: Low Channel @ 5190 MHz (band edge at 5150 MHz)

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
28.5	13.8	28.0	14.4		

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5191.270	92.6	H	-	-	AVG	105	1.0	RB = 1MHz, VB = 10Hz
5191.270	102.2	H	-	-	PK	105	1.0	RB = VB = 1MHz
5199.750	91.5	V	-	-	AVG	155	1.1	RB = 1MHz, VB = 10Hz
5199.750	102.5	V	-	-	PK	155	1.1	RB = VB = 1MHz

Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5149.960	52.6	H	54.0	-1.4	AVG	105	1.0	
5148.520	68.8	H	74.0	-5.2	PK	105	1.0	
5149.850	50.5	V	54.0	-3.5	AVG	155	1.1	
5149.890	65.6	V	74.0	-8.4	PK	155	1.1	

Run #4b: High Channel @ 5310 MHz (band edge at 5350 MHz)

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
25.0	13.4	24.0	13.5		

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5311.230	94.9	V	-	-	AVG	154	1.2	RB = 1MHz, VB = 10Hz
5311.230	103.9	V	-	-	PK	154	1.2	RB = VB = 1MHz
5322.330	96.1	H	-	-	AVG	100	1.2	RB = 1MHz, VB = 10Hz
5322.330	106.4	H	-	-	PK	100	1.2	RB = VB = 1MHz

Band Edge Signal Field Strength

Restricted band starts at allocated band edge (5350MHz), field strength limit is 54dBuV/m average, 74dBuV/m peak.

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5350.000	52.6	V	54.0	-1.4	AVG	154	1.2	
5352.690	69.8	V	74.0	-4.2	PK	154	1.2	
5350.010	50.9	H	54.0	-3.1	AVG	100	1.2	
5351.840	65.4	H	74.0	-8.6	PK	100	1.2	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #4c: Low Channel @ 5510 MHz (restricted band edge at 5460 MHz, allocated band edge at 5470MHz)

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
23.5	14.4	23.0	14.5		

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.247		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
5494.830	94.4	H	-	-	AVG	260	1.0	RB = 1MHz, VB = 10Hz
5494.830	104.4	H	-	-	PK	260	1.0	RB = VB = 1MHz
5524.420	99.0	V	-	-	AVG	189	1.0	RB = 1MHz, VB = 10Hz
5524.420	109.3	V	-	-	PK	189	1.0	RB = VB = 1MHz

5460 Restricted Band Feld strength limit = 54dBuV/m avg, 74dBuV/m peak at 3m

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.247		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
5459.920	50.7	V	54.0	-3.3	AVG	189	1.0	
5458.960	64.7	V	74.0	-9.3	PK	189	1.0	
5459.790	49.8	H	54.0	-4.2	AVG	260	1.0	
5459.770	63.0	H	74.0	-11.0	PK	260	1.0	

5460 - 5470 MHz, Limit is -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak at 3m)

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.247		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
5469.720	65.1	H	88.3	-23.2	PK	260	1.0	
5469.960	51.7	H	68.3	-16.6	AVG	260	1.0	
5467.730	67.5	V	88.3	-20.8	PK	189	1.0	
5469.930	53.1	V	68.3	-15.2	AVG	189	1.0	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #5: Radiated Spurious Emissions, Band Edges. Operating Mode: 802.11n 40MHz - Chain A+C

Date of Test: 4/21/2008

Test Engineer: Suhaila Khushzad & John Caizzi

Test Location: Chamber # 3

Run #5a: Low Channel @ 5190 MHz (band edge at 5150 MHz)

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
29.0	13.7			28.5	14.1

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5204.250	93.8	V	-	-	AVG	181	1.0	RB = 1MHz, VB = 10Hz
5204.250	103.5	V	-	-	PK	181	1.0	RB = VB = 1MHz
5201.500	96.3	H	-	-	AVG	110	1.0	RB = 1MHz, VB = 10Hz
5201.500	106.9	H	-	-	PK	110	1.0	RB = VB = 1MHz

Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5149.920	52.5	H	54.0	-1.5	AVG	110	1.0	
5149.580	69.0	H	74.0	-5.0	PK	110	1.0	
5149.940	50.4	V	54.0	-3.6	AVG	180	1.0	
5148.080	65.5	V	74.0	-8.5	PK	180	1.0	

Run #5b: High Channel @ 5310 MHz (band edge at 5350 MHz)

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
25.5	13.7			26.0	14.0

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5320.330	96.5	V	-	-	AVG	188	1.1	RB = 1MHz, VB = 10Hz
5320.330	106.9	V	-	-	PK	188	1.1	RB = VB = 1MHz
5294.830	95.1	H	-	-	AVG	244	1.0	RB = 1MHz, VB = 10Hz
5294.830	105.7	H	-	-	PK	244	1.0	RB = VB = 1MHz

Band Edge Signal Field Strength

Restricted band starts at allocated band edge (5350MHz), field strength limit is 54dBuV/m average, 74dBuV/m peak.

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5350.000	51.8	H	54.0	-2.2	AVG	244	1.0	
5351.630	68.4	H	74.0	-5.6	PK	244	1.0	
5350.000	51.1	V	54.0	-2.9	AVG	187	1.1	
5351.500	67.6	V	74.0	-6.4	PK	187	1.1	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #5c: Low Channel @ 5510 MHz (restricted band edge at 5460 MHz, allocated band edge at 5470MHz)

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
23.5	14.0			23.5	14.0

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5525.500	94.3	H	-	-	AVG	250	1.0	RB = 1MHz, VB = 10Hz
5525.500	104.6	H	-	-	PK	250	1.0	RB = VB = 1MHz
5511.210	96.9	V	-	-	AVG	184	1.3	RB = 1MHz, VB = 10Hz
5511.210	108.3	V	-	-	PK	184	1.3	RB = VB = 1MHz

5460 Restricted Band Feld strength limit = 54dBuV/m avg, 74dBuV/m peak at 3m

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5459.870	50.5	V	54.0	-3.5	AVG	184	1.3	
5459.420	63.8	V	74.0	-10.2	PK	184	1.2	
5459.270	49.1	H	54.0	-4.9	AVG	250	1.0	
5457.770	63.5	H	74.0	-10.5	PK	250	1.0	

5460 - 5470 MHz, Limit is -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak at 3m)

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5469.870	53.9	V	68.3	-14.4	AVG	184	1.3	
5468.830	67.7	V	88.3	-20.6	PK	184	1.3	
5469.460	49.9	H	68.3	-18.4	AVG	250	1.0	
5468.640	63.7	H	88.3	-24.6	PK	250	1.0	

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Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Date of Test: 4/21/2008
 Test Engineer: Suhaila Khushzad & John Caizzi
 Test Location: Chamber # 3

Run #6a: Low Channel @ 5190 MHz (band edge at 5150 MHz)

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
		28.0	14.0	28.5	14.1

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	PK/QP/Avg	degrees	meters	
5191.280	95.1	H	-	-	AVG	107	1.2	RB = 1MHz, VB = 10Hz
5191.280	104.4	H	-	-	PK	107	1.2	RB = VB = 1MHz
5205.250	94.8	V	-	-	AVG	181	1.0	RB = 1MHz, VB = 10Hz
5205.250	104.8	V	-	-	PK	181	1.0	RB = VB = 1MHz

Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	PK/QP/Avg	degrees	meters	
5149.830	53.0	H	54.0	-1.0	AVG	106	1.2	
5149.600	70.9	H	74.0	-3.1	PK	106	1.2	
5149.980	51.5	V	54.0	-2.5	AVG	181	1.0	
5149.370	68.6	V	74.0	-5.4	PK	181	1.0	

Run #6b: High Channel @ 5310 MHz (band edge at 5350 MHz)

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
		24.0	13.7	26.0	14.0

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	PK/QP/Avg	degrees	meters	
5320.750	94.5	H	-	-	AVG	247	1.6	RB = 1MHz, VB = 10Hz
5320.750	104.9	H	-	-	PK	247	1.6	RB = VB = 1MHz
5326.080	95.3	V	-	-	AVG	193	1.0	RB = 1MHz, VB = 10Hz
5326.080	104.8	V	-	-	PK	193	1.0	RB = VB = 1MHz

Band Edge Signal Field Strength

Restricted band starts at allocated band edge (5350MHz), field strength limit is 54dBuV/m average, 74dBuV/m peak.

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	PK/QP/Avg	degrees	meters	
5350.000	50.9	H	54.0	-3.1	AVG	247	1.6	
5350.080	64.1	H	74.0	-9.9	PK	247	1.6	
5350.080	50.6	V	54.0	-3.4	AVG	163	1.0	
5351.440	67.8	V	74.0	-6.2	PK	163	1.0	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #6c: Low Channel @ 5510 MHz (restricted band edge at 5460 MHz, allocated band edge at 5470MHz)

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
		22.5	14.0	23.0	14.0

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5524.170	95.6	H	-	-	AVG	245	1.0	RB = 1MHz, VB = 10Hz
5524.170	105.5	H	-	-	PK	245	1.0	RB = VB = 1MHz
5511.330	97.2	V	-	-	AVG	161	1.0	RB = 1MHz, VB = 10Hz
5511.330	108.2	V	-	-	PK	161	1.0	RB = VB = 1MHz

5460 Restricted Band Field strength limit = 54dBuV/m avg, 74dBuV/m peak at 3m

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5459.900	50.4	V	54.0	-3.6	AVG	161	1.0	
5457.180	63.9	V	74.0	-10.1	PK	161	1.0	
5459.750	62.3	H	74.0	-11.7	PK	246	1.0	
5459.970	48.6	H	54.0	-5.4	AVG	246	1.0	

5460 - 5470 MHz, Limit is -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak at 3m)

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5468.250	67.4	V	88.3	-20.9	PK	161	1.0	
5469.900	53.3	V	68.3	-15.0	AVG	161	1.0	
5469.170	63.2	H	88.3	-25.1	PK	246	1.0	
5469.830	49.7	H	68.3	-18.6	AVG	246	1.0	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #7: Radiated Spurious Emissions, Band Edges. Operating Mode: 802.11n 40MHz - Chain A+B+C

Date of Test: 4/22/2008

Test Engineer: Suhaila Khushzad & John Caizzi

Test Location: Chamber # 3

Run #7a: Low Channel @ 5190 MHz (band edge at 5150 MHz)

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
29.5	12.0	29.0	12.5	29.0	12.5

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5190.880	93.1	V	54.0	39.1	AVG	201	1.0	RB = 1MHz, VB = 10Hz
5190.880	101.8	V	74.0	27.8	PK	201	1.0	RB = VB = 1MHz
5202.170	93.7	H	54.0	39.7	AVG	258	1.0	RB = 1MHz, VB = 10Hz
5202.170	105.2	H	74.0	31.2	PK	258	1.0	RB = VB = 1MHz

Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5149.560	64.5	H	74.0	-9.5	PK	257	1.0	
5149.670	50.8	H	54.0	-3.2	AVG	257	1.0	
5149.990	62.8	V	74.0	-11.2	PK	200	1.0	
5149.720	49.1	V	54.0	-4.9	AVG	200	1.0	

Run #7b: High Channel @ 5310 MHz (band edge at 5350 MHz)

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
26.0	12.0	25.5	12.2	27.5	12.5

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5311.500	91.8	H	-	-	AVG	108	1.0	RB = 1MHz, VB = 10Hz
5311.500	102.8	H	-	-	PK	108	1.0	RB = VB = 1MHz
5308.800	93.9	V	-	-	AVG	213	1.0	RB = 1MHz, VB = 10Hz
5308.800	105.5	V	-	-	PK	213	1.0	RB = VB = 1MHz

Band Edge Signal Field Strength

Restricted band starts at allocated band edge (5350MHz), field strength limit is 54dBuV/m average, 74dBuV/m peak.

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5350.100	52.6	V	54.0	-1.4	AVG	213	1.0	
5350.190	66.7	V	74.0	-7.3	PK	207	1.0	
5350.100	51.3	H	54.0	-2.7	AVG	107	1.0	
5350.260	65.2	H	74.0	-8.8	PK	110	1.0	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #7c: Low Channel @ 5510 MHz (restricted band edge at 5460 MHz, allocated band edge at 5470MHz)

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
24.5	12.4	25.0	12.6	26.0	12.5

Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5511.460	98.4	V	-	-	AVG	185	1.0	RB = 1MHz, VB = 10Hz
5511.460	108.6	V	-	-	PK	185	1.0	RB = VB = 1MHz
5508.500	91.2	H	-	-	AVG	238	1.0	RB = 1MHz, VB = 10Hz
5508.500	103.0	H	-	-	PK	238	1.0	RB = VB = 1MHz

5460 Restricted Band Feld strength limit = 54dBuV/m avg, 74dBuV/m peak at 3m

5460 - 5470 MHz, Limit is -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak at 3m)

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dB μ V/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5459.780	52.8	V	54.0	-1.2	AVG	181	1.0	
5459.710	66.6	V	74.0	-7.4	PK	186	1.0	
5459.730	62.9	H	74.0	-11.1	PK	99	1.0	
5459.800	49.6	H	54.0	-4.4	AVG	97	1.0	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

**RSS 210 and FCC 15.E (U-NII, 5150- 550/5250-5350/5460-5725MHz)
Radiated Spurious Emissions, 1 - 40GHz 802.11n 40MHz Mode**

Test Specific Details

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the specification listed above.

Date of Test: 4/18/2008

Config. Used: 1

Test Engineer: Rafael Varelas

Config Change: None

Test Location: Chamber # 5

Host Unit Voltage Powered From Host System

General Test Configuration

The EUT and all local support equipment were located on the turntable for radiated spurious emissions testing. All remote support equipment was located approximately 30 meters from the EUT with all I/O connections running on top of the groundplane.

For radiated emissions testing the measurement antenna was located 3 meters from the EUT.

Ambient Conditions:

Temperature: 18.7 °C

Rel. Humidity: 39 %

Summary of Results

Data to demonstrate n20 is worst case

Run #	Mode	Channel	Power Setting	Measured Power	Test Performed	Limit	Result / Margin
1	802.11n40 Chain A	5190	29	15.3	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.247(c)	39.7dBµV/m @ 20760.5MHz (-14.3dB)
		5230	29	16.5			
2	802.11n40 Chain A	5270	27.5	16.5	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.247(c)	39.1dBµV/m @ 10620.0MHz (-14.9dB)
		5310	26.0	16.6			
3	802.11n40 Chain A	5510	24.5	16.3	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.247(c)	45.8dBµV/m @ 11340.2MHz (-8.2dB)
		5590	25.0	16.7			
		5670	25.5	16.7			

Modifications Made During Testing

No modifications were made to the EUT during testing

Deviations From The Standard

No deviations were made from the requirements of the standard.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #1: Radiated Spurious Emissions, 1000 - 40000 MHz. Operating Mode: 802.11n 40MHz Chain A

Run #1a: Low Channel @ 5190 MHz

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.247		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1497.680	35.3	H	54.0	-18.7	AVG	120	1.3	
1747.580	31.1	V	68.3	-37.2	AVG	66	1.6	Note 2
3993.000	30.4	V	54.0	-23.6	AVG	79	1.3	
6919.960	48.7	V	68.3	-19.6	AVG	198	1.6	Note 2
10380.330	42.0	V	68.3	-26.3	Peak	226	1.3	Note 2 Peak reading, avg limit
20760.500	39.7	V	54.0	-14.3	Peak	108	1.0	Peak reading, average limit
1497.680	51.0	H	74.0	-23.0	PK	120	1.3	
1747.580	53.8	V	88.3	-34.5	PK	66	1.6	Note 2
3993.000	51.8	V	74.0	-22.2	PK	79	1.3	
6919.960	51.1	V	88.3	-37.2	PK	198	1.6	Note 2

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Note 2: Signal is not in a restricted band.

Run #1b: High Channel @ 5230 MHz

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.247		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1497.900	36.2	H	54.0	-17.8	AVG	121	1.3	
1744.310	31.2	V	68.3	-37.1	AVG	69	1.6	Note 2
3997.000	30.5	V	54.0	-23.5	AVG	116	1.6	
6973.320	48.3	V	68.3	-20.0	AVG	233	1.3	Note 2
10460.040	37.7	V	68.3	-30.6	AVG	148	1.3	Note 2
20920.330	39.1	V	54.0	-14.9	Peak	125	1.0	Peak reading, average limit
1497.900	52.3	H	74.0	-21.7	PK	121	1.3	
1744.310	54.4	V	88.3	-33.9	PK	69	1.6	Note 2
3997.000	50.9	V	74.0	-23.1	PK	116	1.6	
6973.320	50.8	V	88.3	-37.5	PK	233	1.3	Note 2
10460.040	49.6	V	88.3	-38.7	PK	148	1.3	Note 2

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Note 2: Signal is not in a restricted band.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #2: Radiated Spurious Emissions, 1000 - 40000 MHz. Operating Mode: 802.11n40 Chain A

Run #2a: Low Channel @ 5270 MHz

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.247		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1497.900	36.2	H	54.0	-17.8	AVG	124	1.3	
1747.210	30.9	V	68.3	-37.4	AVG	153	1.6	Note 2
3997.040	30.7	H	54.0	-23.3	AVG	126	1.9	
7026.690	45.2	V	68.3	-23.1	AVG	229	1.3	Note 2
10540.000	41.1	V	68.3	-27.2	Peak	187	1.3	Note 2 Pk reading, avg limit
1497.900	53.1	H	74.0	-20.9	PK	124	1.3	
1747.210	53.4	V	88.3	-34.9	PK	153	1.6	Note 2
3997.040	52.1	H	74.0	-21.9	PK	126	1.9	
7026.690	48.3	V	88.3	-40.0	PK	229	1.3	Note 2

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Note 2: Signal is not in a restricted band.

Run #2b: High Channel @ 5310 MHz

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.247		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1497.570	35.9	H	54.0	-18.1	AVG	122	1.3	
1744.100	30.7	V	68.3	-37.6	AVG	178	1.6	Note 2
3996.370	30.9	V	54.0	-23.1	AVG	78	1.3	
7080.020	45.7	V	68.3	-22.6	AVG	191	1.0	Note 2
10620.000	39.1	V	54.0	-14.9	Peak	187	1.3	Pk reading, avg limit
1497.570	52.9	H	74.0	-21.1	PK	122	1.3	
1744.100	50.1	V	88.3	-38.2	PK	178	1.6	Note 2
3996.370	53.0	V	74.0	-21.0	PK	78	1.3	
7080.020	49.6	V	88.3	-38.7	PK	191	1.0	Note 2

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Note 2: Signal is not in a restricted band.



EMC Test Data

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #3: Radiated Spurious Emissions, 1000 - 40000 MHz. Operating Mode: 802.11n40 Chain A

Run #3a: Low Channel @ 5510 MHz

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.247		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1497.870	33.9	H	54.0	-20.1	AVG	118	1.0	
1747.980	31.2	V	68.3	-37.1	AVG	142	1.0	Note 2
3996.540	31.6	V	54.0	-22.4	AVG	75	1.3	
11019.860	41.3	V	54.0	-12.7	AVG	220	1.3	
7345.000	41.3	V	54.0	-12.7	Peak	254	1.6	Pk reading, avg limit
1497.870	51.3	H	74.0	-22.7	PK	118	1.0	
1747.980	53.2	V	88.3	-35.1	PK	142	1.0	Note 2
3996.540	54.1	V	74.0	-19.9	PK	75	1.3	
11019.860	53.3	V	74.0	-20.7	PK	220	1.3	

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Note 2: Signal is not in a restricted band.

Run #3b: Center Channel @ 5590 MHz

Spurious Emissions

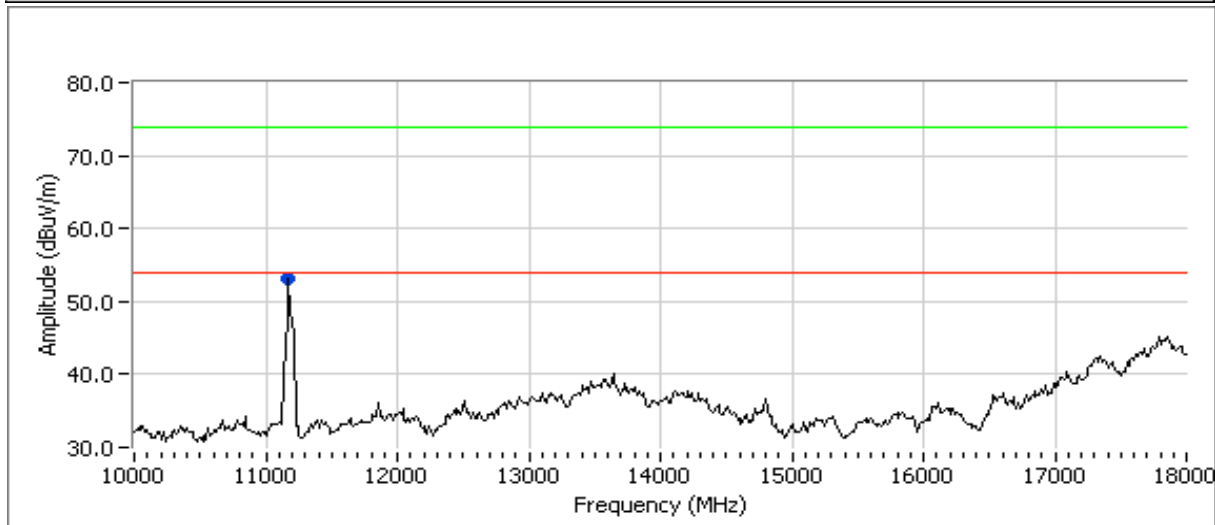
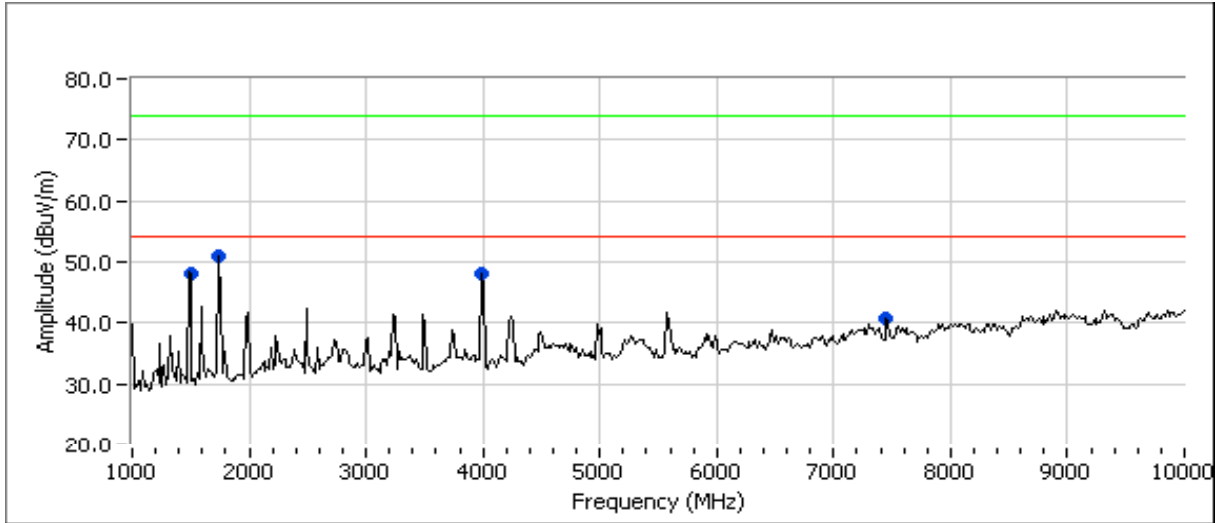
Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.247		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1497.700	36.8	H	54.0	-17.2	AVG	122	1.3	
1743.960	31.0	V	68.3	-37.3	AVG	177	1.6	Note 2
3996.980	30.6	V	54.0	-23.4	AVG	77	1.3	
7453.280	38.4	V	54.0	-15.6	AVG	251	1.3	
11179.740	44.7	V	54.0	-9.3	AVG	118	1.0	
1497.700	53.8	H	74.0	-20.2	PK	122	1.3	
1743.960	49.9	V	88.3	-38.4	PK	177	1.6	Note 2
3996.980	52.8	V	74.0	-21.2	PK	77	1.3	
7453.280	45.4	V	74.0	-28.6	PK	251	1.3	
11179.740	56.3	V	74.0	-17.7	PK	118	1.0	

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Note 2: Signal is not in a restricted band.

Note 3: plots shown on next page for 1 - 18GHz, no emissions within 20dB of the limit above 18GHz.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
Contact:	Robert Paxman	Account Manager:	Dean Eriksen
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A





EMC Test Data

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #3c: High Channel @ 5670 MHz

Spurious Emissions

Frequency MHz	Level dB μ V/m	Pol v/h	15.209 / 15.247		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1497.820	34.4	H	54.0	-19.6	AVG	113	1.0	
1743.180	31.5	V	68.3	-36.8	AVG	65	1.6	Note 2
3995.620	31.4	V	54.0	-22.6	AVG	57	1.3	
7559.980	37.9	V	54.0	-16.1	AVG	103	1.6	
11340.150	45.8	V	54.0	-8.2	AVG	147	1.0	
1497.820	53.5	H	74.0	-20.5	PK	113	1.0	
1743.180	53.1	V	88.3	-35.2	PK	65	1.6	Note 2
3995.620	52.8	V	74.0	-21.2	PK	57	1.3	
7559.980	45.2	V	74.0	-28.8	PK	103	1.6	
11340.150	58.4	V	74.0	-15.6	PK	147	1.0	

Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Note 2: Signal is not in a restricted band.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
Contact:	Robert Paxman	Account Manager:	Dean Eriksen
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	-

Radiated Emissions

Test Specific Details

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the specification listed above.

Config. Used: 1
 Config Change: None
 Host Unit Voltage 120V/60Hz

General Test Configuration

The EUT and all local support equipment were located on the turntable for radiated emissions testing. Remote support equipment was located approximately 30 meters from the test area with all I/O connections running on top of the groundplane.

The test distance and extrapolation factor (if applicable) are detailed under each run description.

Note, **preliminary** testing indicates that the emissions were maximized by orientation of the EUT and elevation of the measurement antenna. **Maximized** testing indicated that the emissions were maximized by orientation of the EUT, elevation of the measurement antenna, and manipulation of the EUT's interface cables.

Ambient Conditions: Temperature: 21 °C
 Rel. Humidity: 34 %

Summary of Results

Run #	Test Performed	Limit	Result	Margin
1 Receiver/Transmitter	30 - 1000MHz, Preliminary - verify emissions below 1GHz independent of Tx/Rx frequency	RSS GEN / FCC 15.107	Pass	33.3dBµV/m @ 30.210MHz (-6.7dB)
2	RE, 30 - 1000MHz, Maximized Emissions	RSS GEN / FCC 15.107	Pass	38.0dBµV/m @ 199.789MHz (-5.5dB)
3 - Single Receiver chain	RE, 1000 - 18000 MHz, Maximized Emissions	RSS GEN	Pass	53.3dBµV/m @ 6933.3MHz (-0.7dB)
4 - All Receiver chains	RE, 1000 - 18000 MHz, Maximized Emissions	RSS GEN	Pass	42.6dBµV/m @ 10400.0MHz (-11.4dB)

Modifications Made During Testing

No modifications were made to the EUT during testing

Deviations From The Standard

No deviations were made from the requirements of the standard.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	-

Date of Test: 4/30/2008
 Test Engineer: Ben Jing
 Test Location: FT Chamber # 4

Run #1: Preliminary Radiated Emissions, 30-1000 MHz

Frequency Range	Test Distance	Limit Distance	Extrapolation Factor
30 - 1000 MHz	3	3	0.0

Note 1: Scans made for each center frequency. Data provided for each scan, plot for worst case (receiver tuned to 5600 MHz).

Run #1a Transmitter tuned to 5200 MHz, all chains active

Frequency MHz	Level dB μ V/m	Pol v/h	FCC 15.209/RSS 210		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
32.362	33.2	V	40.0	-6.8	QP	277	1.0	
199.672	35.1	H	43.5	-8.4	QP	176	1.0	
59.700	29.0	V	40.0	-11.0	QP	21	1.0	
749.209	34.7	V	46.0	-11.3	QP	244	1.3	
784.463	34.6	H	46.0	-11.4	QP	254	1.0	
103.069	31.6	H	43.5	-11.9	QP	154	1.6	
299.627	33.4	H	46.0	-12.6	QP	206	1.0	
570.523	31.4	H	46.0	-14.6	QP	26	1.0	
427.896	31.0	V	46.0	-15.0	QP	212	1.3	
345.507	28.4	H	46.0	-17.6	QP	322	1.0	
993.739	28.8	H	54.0	-25.2	QP	232	1.0	
258.214	19.6	H	46.0	-26.4	QP	306	1.3	

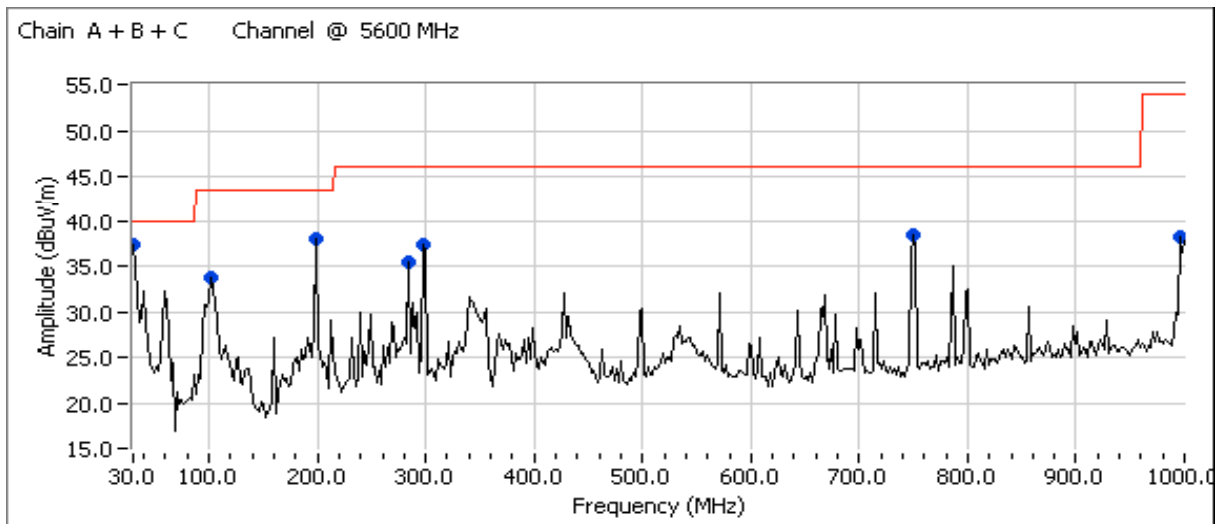
Run #1b Transmitter tuned to 5280 MHz, all chains active

Frequency MHz	Level dB μ V/m	Pol v/h	FCC 15.209/RSS 210		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
32.035	33.3	V	40.0	-6.7	QP	284	1.0	
199.497	34.8	H	43.5	-8.7	QP	159	1.0	
298.799	36.4	H	46.0	-9.6	QP	205	1.0	
713.146	35.4	H	46.0	-10.6	QP	229	1.3	
748.824	34.1	V	46.0	-11.9	QP	240	1.6	
103.866	29.8	V	43.5	-13.7	QP	251	1.6	
427.896	30.9	V	46.0	-15.1	QP	216	1.6	
345.666	29.8	H	46.0	-16.2	QP	303	1.0	
996.864	35.9	H	54.0	-18.1	QP	332	1.0	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
Contact:	Robert Paxman	Account Manager:	Dean Eriksen
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	-

Run #1c Transmitter tuned to 5600 MHz, all chains active

Frequency MHz	Level dB μ V/m	Pol v/h	FCC 15.209/RSS 210		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
30.210	33.3	V	40.0	-6.7	QP	239	1.0	
199.789	36.6	H	43.5	-6.9	QP	157	1.6	
298.753	37.6	H	46.0	-8.4	QP	205	1.0	
748.789	34.3	H	46.0	-11.7	QP	235	1.6	
285.273	32.0	H	46.0	-14.0	QP	211	1.0	
103.539	29.4	V	43.5	-14.1	QP	37	1.0	
997.144	35.8	H	54.0	-18.2	QP	333	1.0	



Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	-

Run #2: Maximized Readings From Run #1

Frequency Range	Test Distance	Limit Distance	Extrapolation Factor
30 - 1000 MHz	3	3	0.0

Transmitter tuned to 5600 MHz, all chains active

Frequency MHz	Level dB μ V/m	Pol v/h	FCC 15.209/RSS 210		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
199.789	38.0	H	43.5	-5.5	QP	169	2.0	
30.210	33.4	V	40.0	-6.6	QP	218	1.0	
298.753	37.6	H	46.0	-8.4	QP	205	1.0	
748.789	34.3	H	46.0	-11.7	QP	235	1.6	
285.273	32.0	H	46.0	-14.0	QP	211	1.0	
103.539	29.4	V	43.5	-14.1	QP	37	1.0	
997.144	35.8	H	54.0	-18.2	QP	333	1.0	

Note 1: Transmitter tuned to 5600 MHz (all chains active) was the worst case mode for emissions below 1GHz.

Client: Intel Corporation	Job Number: J70976
Model: 533AN-MMW(MMC)	T-Log Number: T71131
	Account Manager: Dean Eriksen
Contact: Robert Paxman	
Standard: RSS 210/FCC U-NII (Radiated)	Class: -

Date of Test: 4/28/2008
 Test Engineer: Ben Jing
 Test Location: FT Chamber # 4

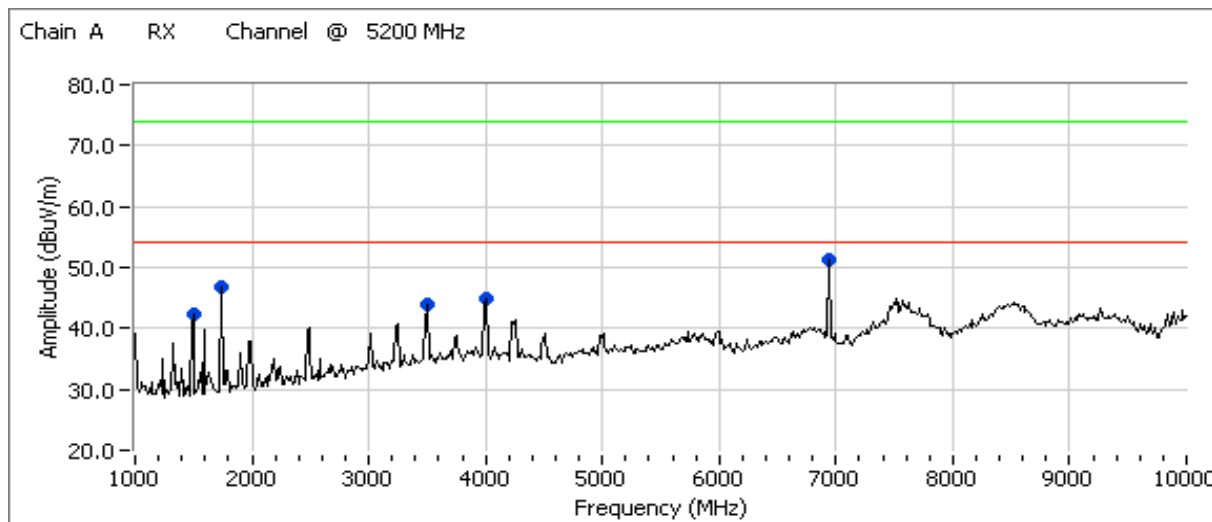
Run #3: Maximized readings, 1000 - 18000 MHz, Single Receiver Active

Frequency Range	Test Distance	Limit Distance	Extrapolation Factor
1000 - 10000 MHz	3	3	0.0
10000 - 18000 MHz	1	3	-9.5

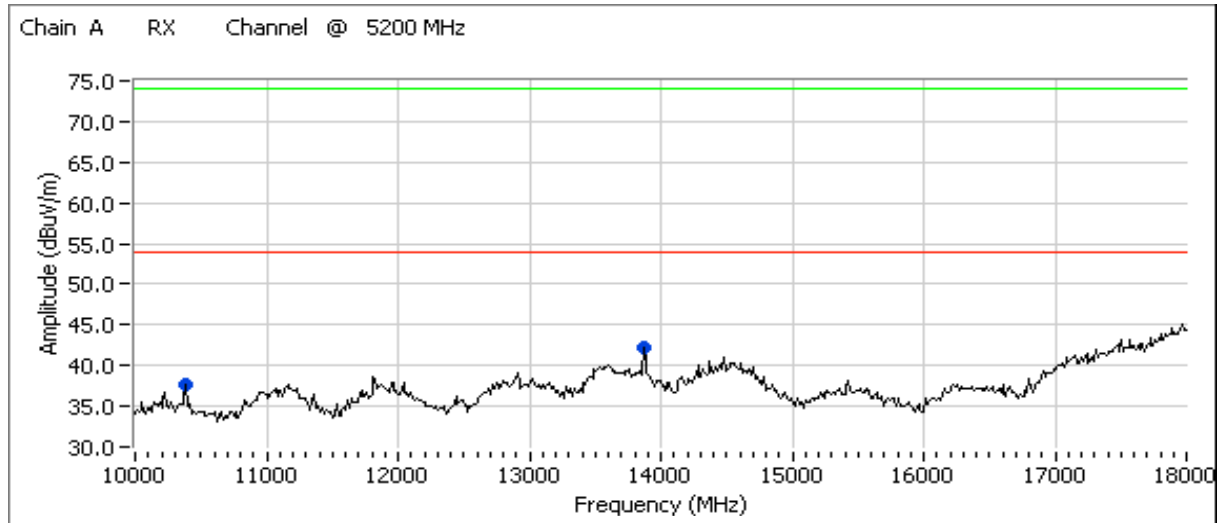
Receiver Tuned to 5200 MHz - Chain A

Frequency MHz	Level dB μ V/m	Pol v/h	RSS GEN		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
6933.330	51.2	V	54.0	-2.8	AVG	145	1.0	
13866.660	41.8	V	54.0	-12.2	AVG	161	1.0	
1746.870	55.0	V	74.0	-19.0	PK	0	1.0	
10400.020	33.8	V	54.0	-20.2	AVG	117	1.3	
6933.330	53.7	V	74.0	-20.3	PK	145	1.0	
1746.870	33.5	V	54.0	-20.5	AVG	0	1.0	
3994.810	32.8	V	54.0	-21.2	AVG	292	1.6	
3994.810	52.6	V	74.0	-21.4	PK	292	1.6	
1500.000	32.1	V	54.0	-21.9	AVG	170	1.6	
3497.030	31.1	H	54.0	-22.9	AVG	257	1.3	
3497.030	50.8	H	74.0	-23.2	PK	257	1.3	
13866.660	47.4	V	74.0	-26.6	PK	161	1.0	
10400.020	41.1	V	74.0	-32.9	PK	117	1.3	
1500.000	39.0	V	74.0	-35.0	PK	170	1.6	

Note 1: Above 1 GHz, the FCC specifies the limit as an average measurement. In addition, the FCC states that the peak reading of any emission above 1 GHz, can not exceed the average limit by more than 20 dB.



Client: Intel Corporation	Job Number: J70976
Model: 533AN-MMW(MMC)	T-Log Number: T71131
Contact: Robert Paxman	Account Manager: Dean Eriksen
Standard: RSS 210/FCC U-NII (Radiated)	Class: -

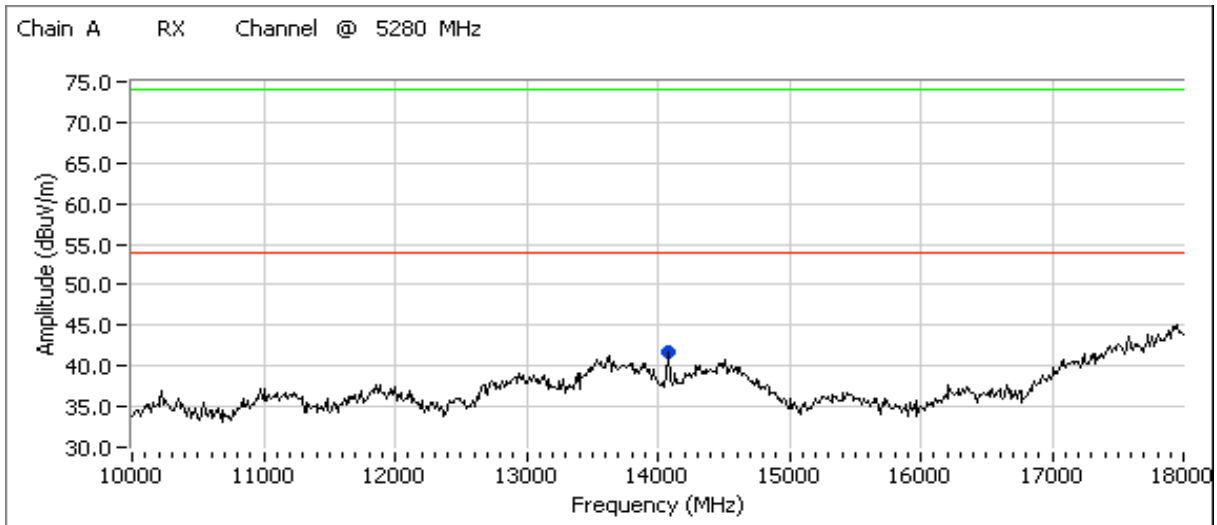
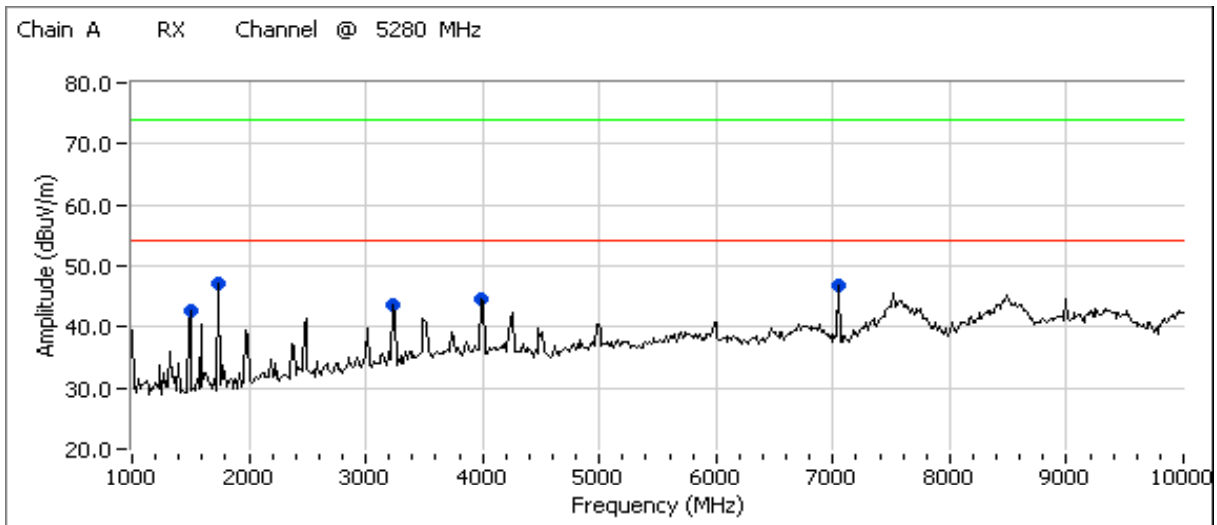


Receiver Tuned to 5280 MHz - Chain A

Frequency MHz	Level dB μ V/m	Pol v/h	RSS GEN		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
7039.960	47.8	V	54.0	-6.2	AVG	145	1.0	
14080.000	38.9	V	54.0	-15.1	AVG	220	1.0	
3994.580	54.7	V	74.0	-19.3	PK	268	1.3	
3994.580	34.2	V	54.0	-19.8	AVG	268	1.3	
1497.800	32.7	V	54.0	-21.3	AVG	72	1.3	
1744.330	52.6	V	74.0	-21.4	PK	32	1.0	
3247.440	32.4	V	54.0	-21.6	AVG	139	1.6	
1744.330	31.8	V	54.0	-22.2	AVG	32	1.0	
7039.960	50.9	V	74.0	-23.1	PK	145	1.0	
3247.440	49.5	V	74.0	-24.5	PK	139	1.6	
1497.800	49.2	V	74.0	-24.8	PK	72	1.3	
14080.000	45.9	V	74.0	-28.1	PK	220	1.0	

Note 1: Above 1 GHz, the FCC specifies the limit as an average measurement. In addition, the FCC states that the peak reading of any emission above 1 GHz, can not exceed the average limit by more than 20 dB.

Client: Intel Corporation	Job Number: J70976
Model: 533AN-MMW(MMC)	T-Log Number: T71131
Contact: Robert Paxman	Account Manager: Dean Eriksen
Standard: RSS 210/FCC U-NII (Radiated)	Class: -

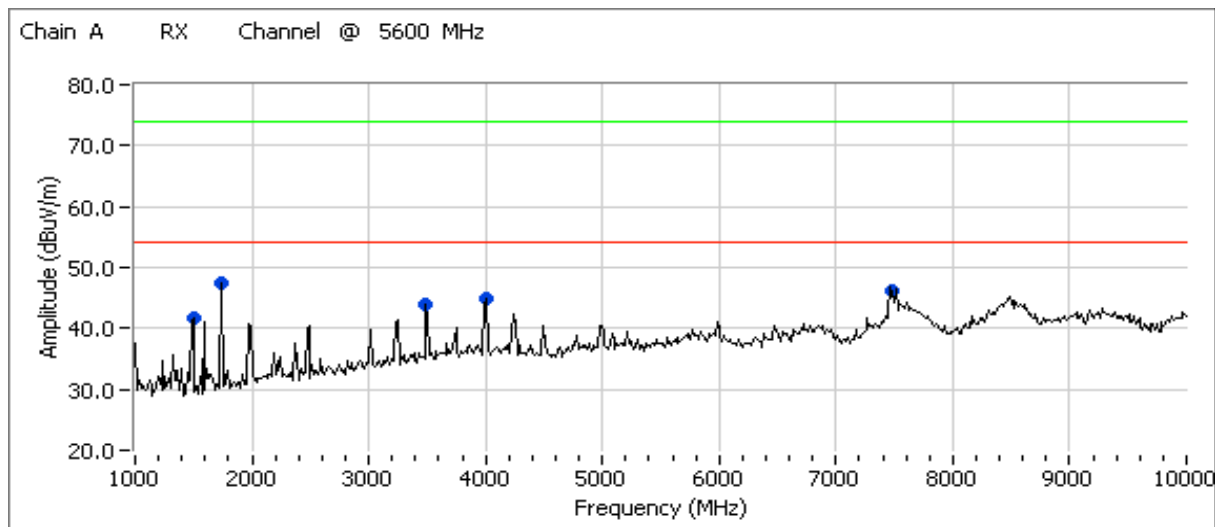


Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
Contact:	Robert Paxman	Account Manager:	Dean Eriksen
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	-

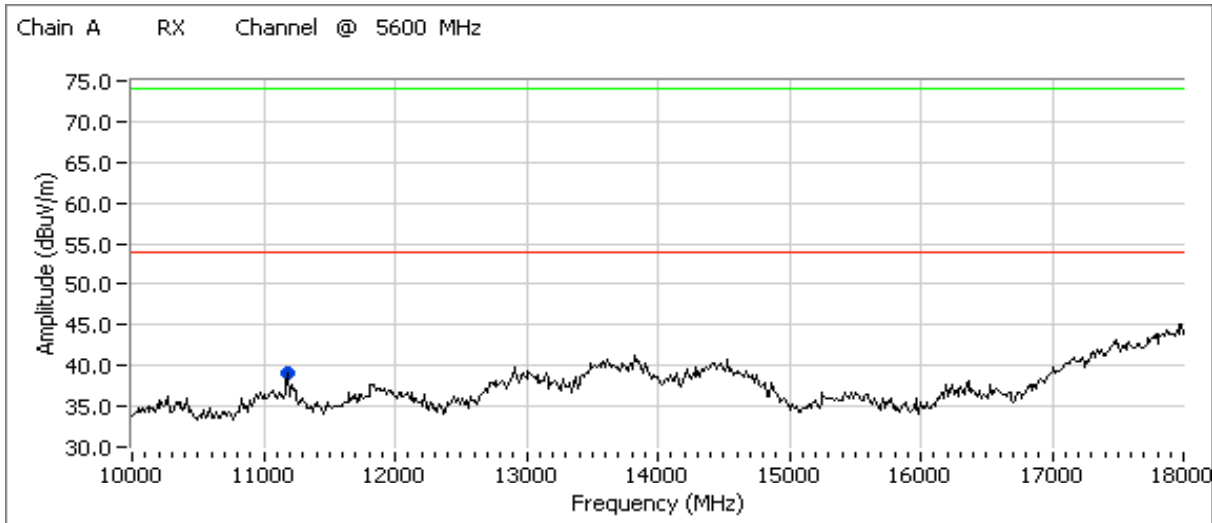
Receiver Tuned to 5600 MHz - Chain A

Frequency MHz	Level dB μ V/m	Pol v/h	RSS GEN		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
7466.760	45.4	V	54.0	-8.6	AVG	130	1.3	
11199.910	35.5	V	54.0	-18.5	AVG	226	1.0	
3996.490	33.7	H	54.0	-20.3	AVG	261	1.3	
1744.150	53.1	V	74.0	-20.9	PK	274	1.3	
1744.150	33.0	V	54.0	-21.0	AVG	274	1.3	
3996.490	52.8	H	74.0	-21.2	PK	261	1.3	
1498.570	32.7	V	54.0	-21.3	AVG	73	1.3	
7466.760	52.2	V	74.0	-21.8	PK	130	1.3	
3491.210	30.7	V	54.0	-23.3	AVG	258	1.0	
1498.570	49.6	V	74.0	-24.4	PK	73	1.3	
3491.210	47.6	V	74.0	-26.4	PK	258	1.0	
11199.910	44.5	V	74.0	-29.5	PK	226	1.0	

Note 1: Above 1 GHz, the FCC specifies the limit as an average measurement. In addition, the FCC states that the peak reading of any emission above 1 GHz, can not exceed the average limit by more than 20 dB.



Client: Intel Corporation	Job Number: J70976
Model: 533AN-MMW(MMC)	T-Log Number: T71131
Contact: Robert Paxman	Account Manager: Dean Eriksen
Standard: RSS 210/FCC U-NII (Radiated)	Class: -

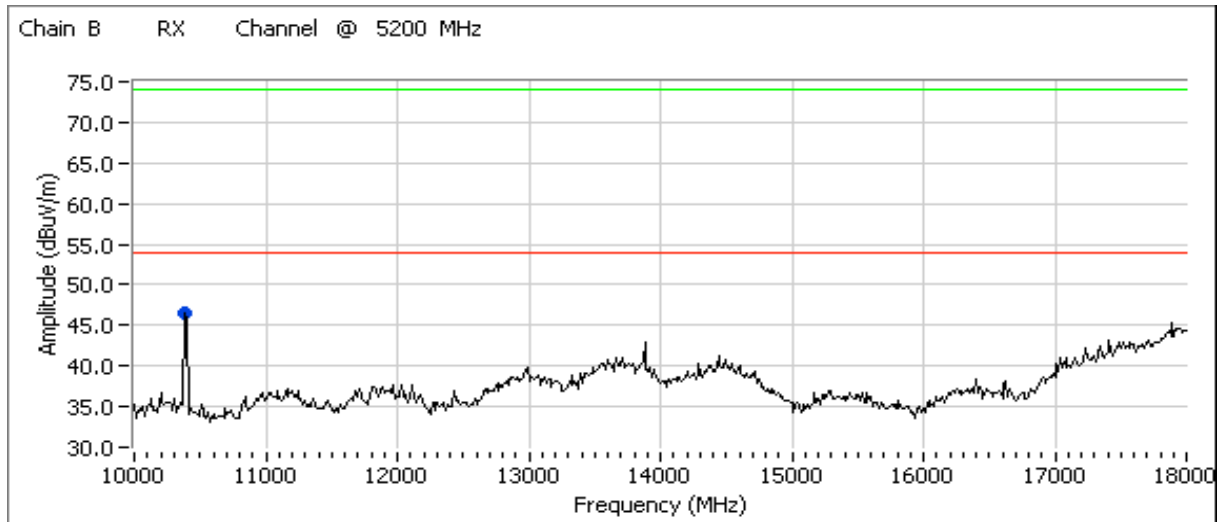
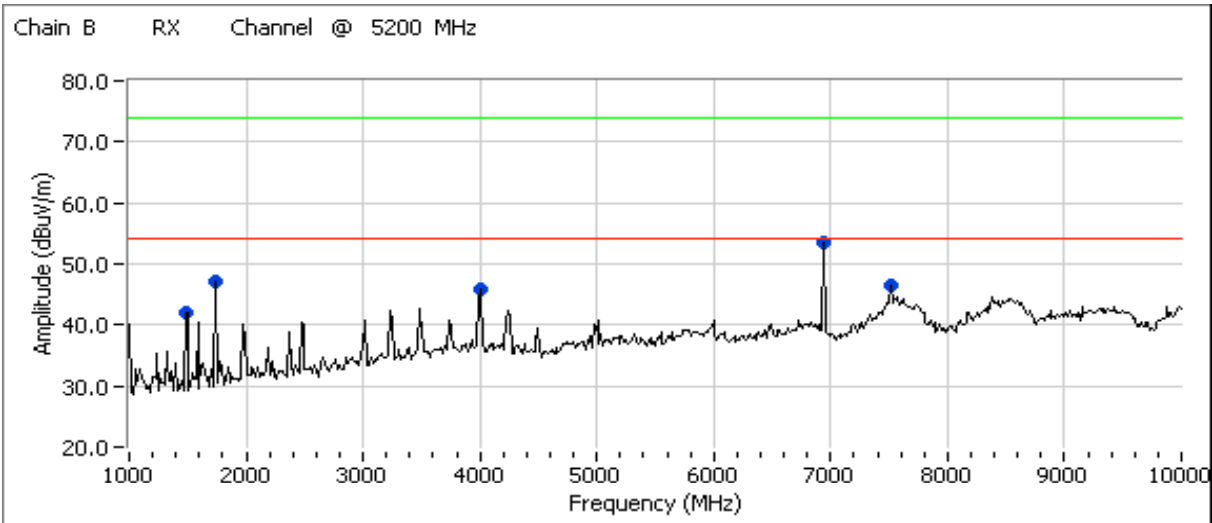


Receiver Tuned to 5200 MHz - Chain B

Frequency MHz	Level dB μ V/m	Pol v/h	RSS GEN		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
6933.310	53.3	V	54.0	-0.7	AVG	111	1.6	
6933.310	55.4	V	74.0	-18.6	PK	111	1.6	
7500.010	43.5	V	54.0	-10.5	AVG	215	1.0	
7500.010	51.3	V	74.0	-22.7	PK	215	1.0	
1497.470	36.4	V	54.0	-17.6	AVG	240	1.3	
1497.470	49.4	V	74.0	-24.6	PK	240	1.3	
1746.870	32.2	V	54.0	-21.8	AVG	271	1.3	
1746.870	52.6	V	74.0	-21.4	PK	271	1.3	
3987.930	33.9	V	54.0	-20.1	AVG	272	1.3	
3987.930	53.3	V	74.0	-20.7	PK	272	1.3	
10399.960	46.9	V	54.0	-7.1	AVG	234	1.0	
10399.960	49.6	V	74.0	-24.4	PK	234	1.0	

Note 1: Above 1 GHz, the FCC specifies the limit as an average measurement. In addition, the FCC states that the peak reading of any emission above 1 GHz, can not exceed the average limit by more than 20 dB.

Client: Intel Corporation	Job Number: J70976
Model: 533AN-MMW(MMC)	T-Log Number: T71131
Contact: Robert Paxman	Account Manager: Dean Eriksen
Standard: RSS 210/FCC U-NII (Radiated)	Class: -

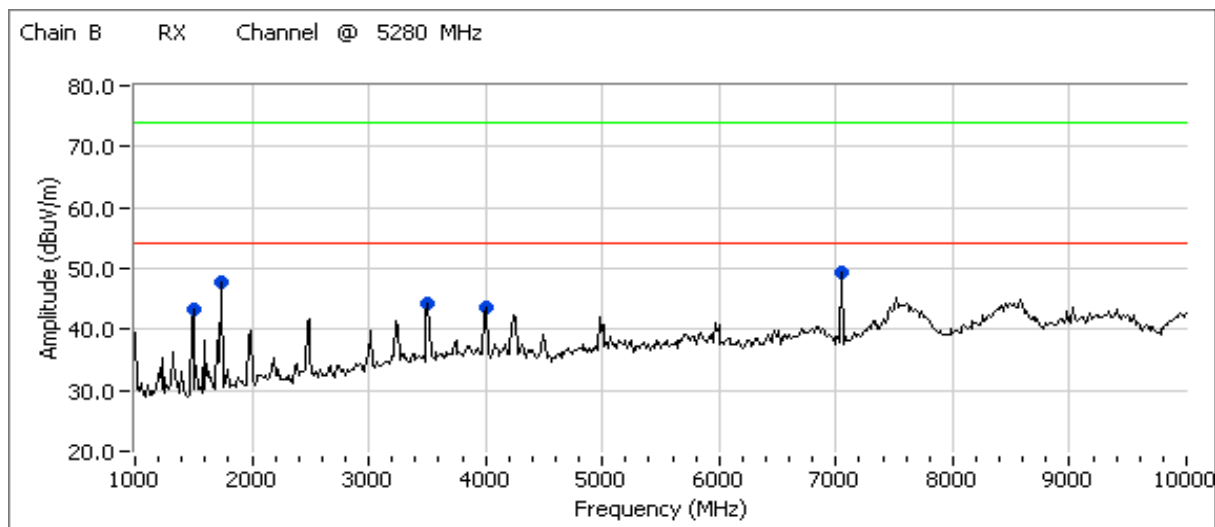


Client: Intel Corporation	Job Number: J70976
Model: 533AN-MMW(MMC)	T-Log Number: T71131
	Account Manager: Dean Eriksen
Contact: Robert Paxman	
Standard: RSS 210/FCC U-NII (Radiated)	Class: -

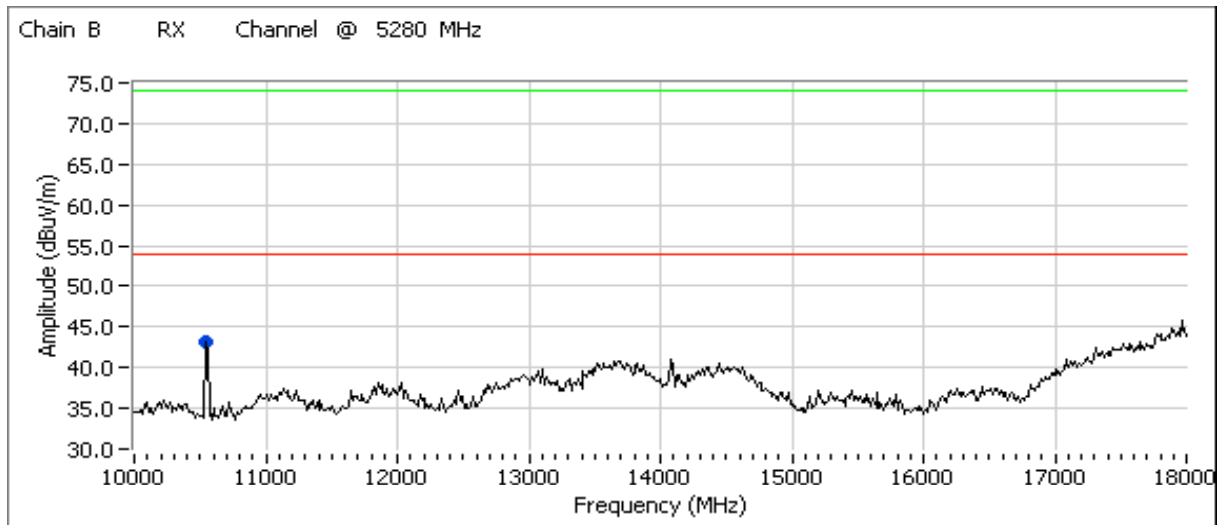
Receiver Tuned to 5280 MHz - Chain B

Frequency MHz	Level dB μ V/m	Pol v/h	RSS GEN		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1498.360	32.2	V	54.0	-21.8	AVG	70	1.0	
1498.360	51.3	V	74.0	-22.7	PK	70	1.0	
7040.020	48.1	V	54.0	-5.9	AVG	123	1.6	
7040.020	52.1	V	74.0	-21.9	PK	123	1.6	
1747.830	34.0	V	54.0	-20.0	AVG	212	1.0	
1747.830	55.0	V	74.0	-19.0	PK	212	1.0	
3519.990	41.0	H	54.0	-13.0	AVG	243	1.3	
3519.990	46.0	H	74.0	-28.0	PK	243	1.3	
3995.060	33.3	V	54.0	-20.7	AVG	294	1.3	
3995.060	51.4	V	74.0	-22.6	PK	294	1.3	
10559.990	42.0	V	54.0	-12.0	AVG	235	1.0	
10559.990	45.9	V	74.0	-28.1	PK	235	1.0	

Note 1: Above 1 GHz, the FCC specifies the limit as an average measurement. In addition, the FCC states that the peak reading of any emission above 1 GHz, can not exceed the average limit by more than 20 dB.



Client: Intel Corporation	Job Number: J70976
Model: 533AN-MMW(MMC)	T-Log Number: T71131
	Account Manager: Dean Eriksen
Contact: Robert Paxman	
Standard: RSS 210/FCC U-NII (Radiated)	Class: -

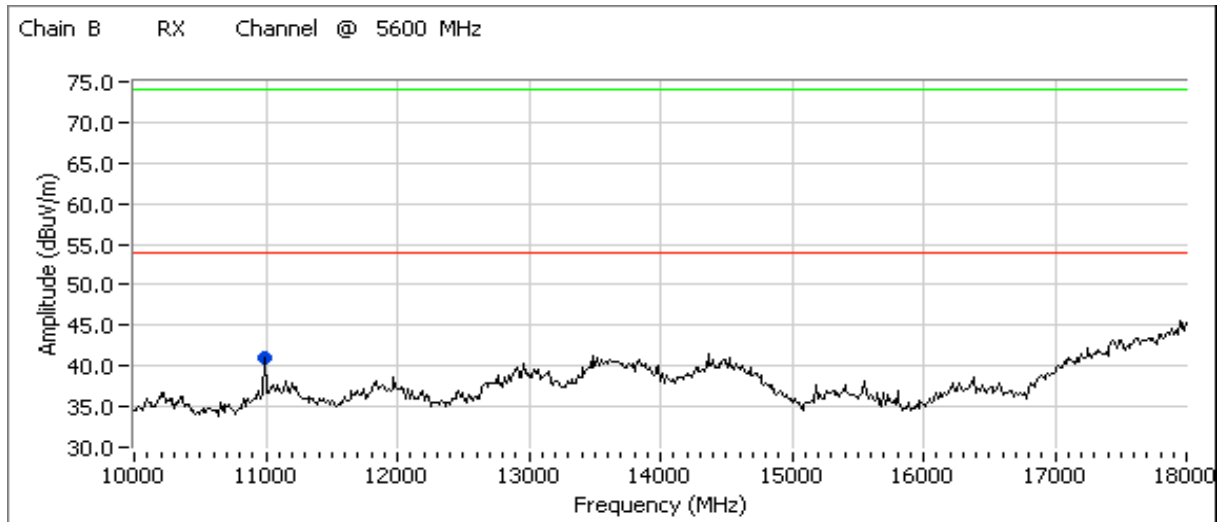
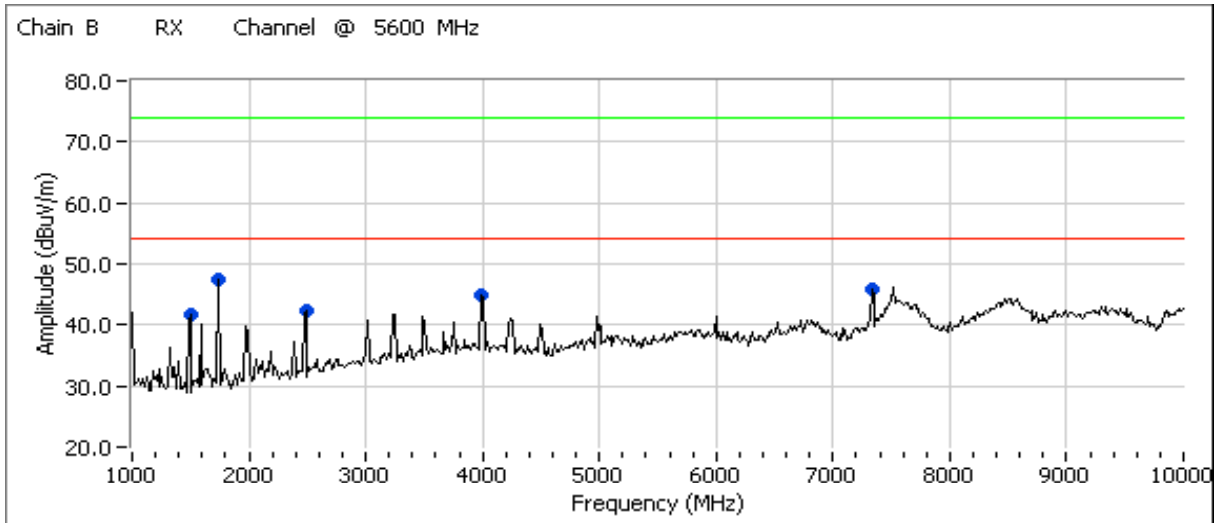


Receiver Tuned to 5600 MHz - Chain B

Frequency MHz	Level dB μ V/m	Pol v/h	RSS GEN		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
7333.310	47.5	V	54.0	-6.5	AVG	153	1.3	
11000.110	38.3	V	54.0	-15.7	AVG	202	1.0	
7333.310	53.3	V	74.0	-20.7	PK	153	1.3	
3983.710	32.8	V	54.0	-21.2	AVG	145	1.3	
1498.280	32.6	V	54.0	-21.4	AVG	73	1.3	
1746.710	31.8	V	54.0	-22.2	AVG	127	1.3	
1746.710	51.6	V	74.0	-22.4	PK	127	1.3	
2490.450	31.2	V	54.0	-22.8	AVG	252	1.0	
2490.450	50.2	V	74.0	-23.8	PK	252	1.0	
1498.280	49.3	V	74.0	-24.7	PK	73	1.3	
11000.110	45.4	V	74.0	-28.6	PK	202	1.0	
3983.710	44.4	V	74.0	-29.6	PK	145	1.3	

Note 1: Above 1 GHz, the FCC specifies the limit as an average measurement. In addition, the FCC states that the peak reading of any emission above 1 GHz, can not exceed the average limit by more than 20 dB.

Client: Intel Corporation	Job Number: J70976
Model: 533AN-MMW(MMC)	T-Log Number: T71131
Contact: Robert Paxman	Account Manager: Dean Eriksen
Standard: RSS 210/FCC U-NII (Radiated)	Class: -

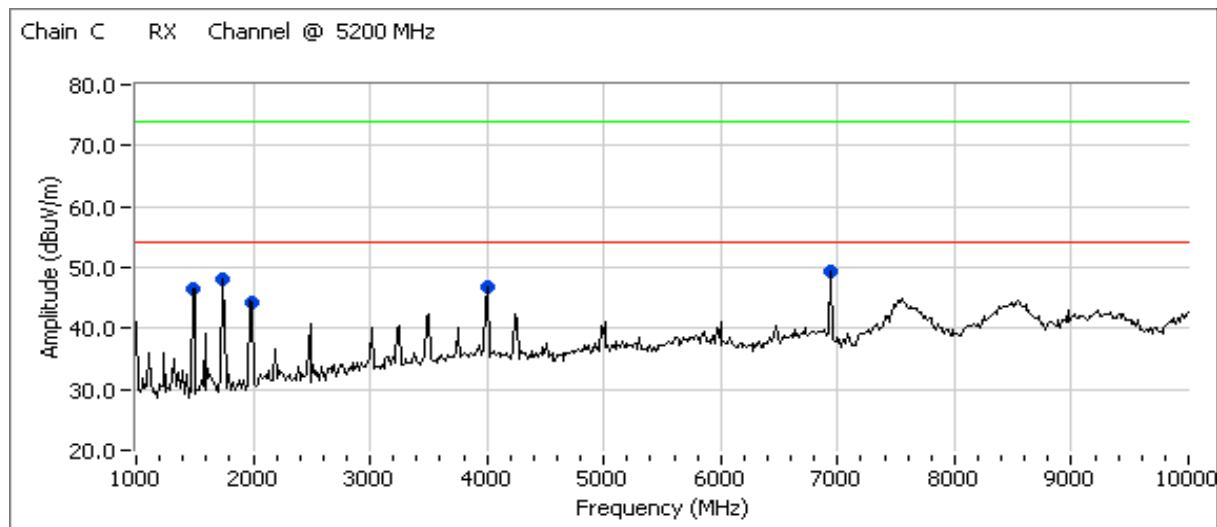


Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
Contact:	Robert Paxman	Account Manager:	Dean Eriksen
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	-

Receiver Tuned to 5200 MHz - Chain C

Frequency MHz	Level dB μ V/m	Pol v/h	RSS GEN		Detector Pk/OP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
1494.740	34.1	V	54.0	-19.9	AVG	23	1.0	
1743.440	33.1	V	54.0	-20.9	AVG	150	1.0	
1997.750	30.4	V	54.0	-23.6	AVG	287	1.0	
3996.120	34.0	V	54.0	-20.0	AVG	268	1.3	
6933.290	49.5	V	54.0	-4.5	AVG	60	1.6	
10399.970	40.9	V	54.0	-13.1	AVG	237	1.0	
1494.740	53.7	V	74.0	-20.3	PK	23	1.0	
1743.440	52.9	V	74.0	-21.1	PK	150	1.0	
1997.750	48.5	V	74.0	-25.5	PK	287	1.0	
3996.120	55.0	V	74.0	-19.0	PK	268	1.3	
6933.290	52.6	V	74.0	-21.4	PK	60	1.6	
10399.970	44.9	V	74.0	-29.1	PK	237	1.0	

Note 1: Above 1 GHz, the FCC specifies the limit as an average measurement. In addition, the FCC states that the peak reading of any emission above 1 GHz, can not exceed the average limit by more than 20 dB.

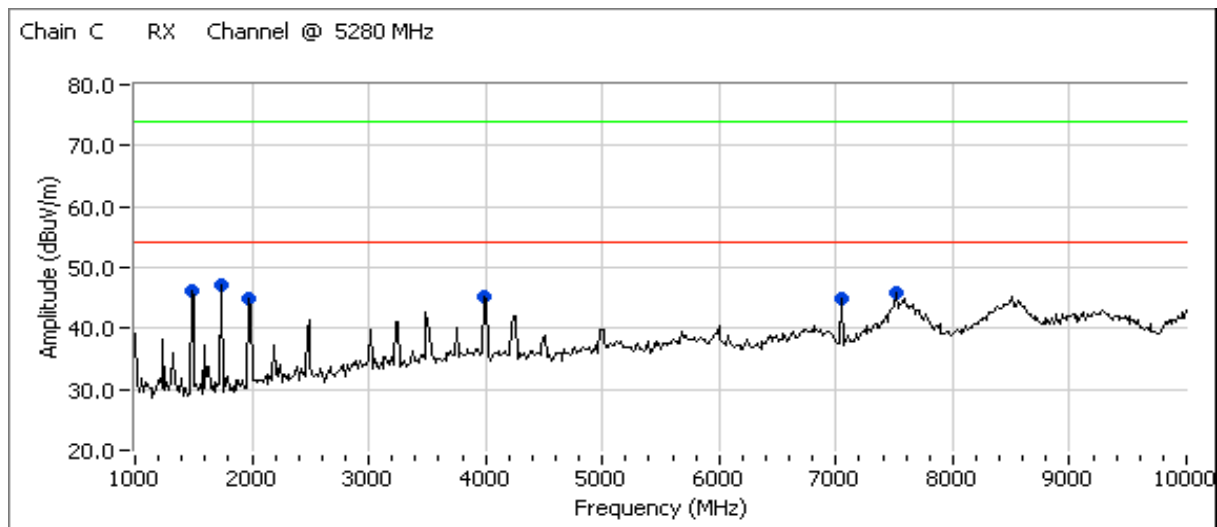


Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
Contact:	Robert Paxman	Account Manager:	Dean Eriksen
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	-

Receiver Tuned to 5280 MHz - Chain C

Frequency MHz	Level dB μ V/m	Pol v/h	RSS GEN		Detector Pk/OP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
7039.960	45.7	V	54.0	-8.3	AVG	105	1.3	
7499.930	44.3	V	54.0	-9.7	AVG	215	1.0	
10559.930	37.6	V	54.0	-16.4	AVG	234	1.0	
3991.490	54.6	V	74.0	-19.4	PK	274	1.3	
1498.030	53.6	V	74.0	-20.4	PK	2	1.0	
3991.490	33.6	V	54.0	-20.4	AVG	274	1.3	
1744.250	53.3	V	74.0	-20.7	PK	144	1.0	
1498.030	33.0	V	54.0	-21.0	AVG	2	1.0	
1744.250	32.7	V	54.0	-21.3	AVG	144	1.0	
7499.930	51.2	V	74.0	-22.8	PK	215	1.0	
7039.960	50.1	V	74.0	-23.9	PK	105	1.3	
1991.950	29.6	V	54.0	-24.4	AVG	288	1.0	
1991.950	47.3	V	74.0	-26.7	PK	288	1.0	
10559.930	42.2	V	74.0	-31.8	PK	234	1.0	

Note 1: Above 1 GHz, the FCC specifies the limit as an average measurement. In addition, the FCC states that the peak reading of any emission above 1 GHz, can not exceed the average limit by more than 20 dB.

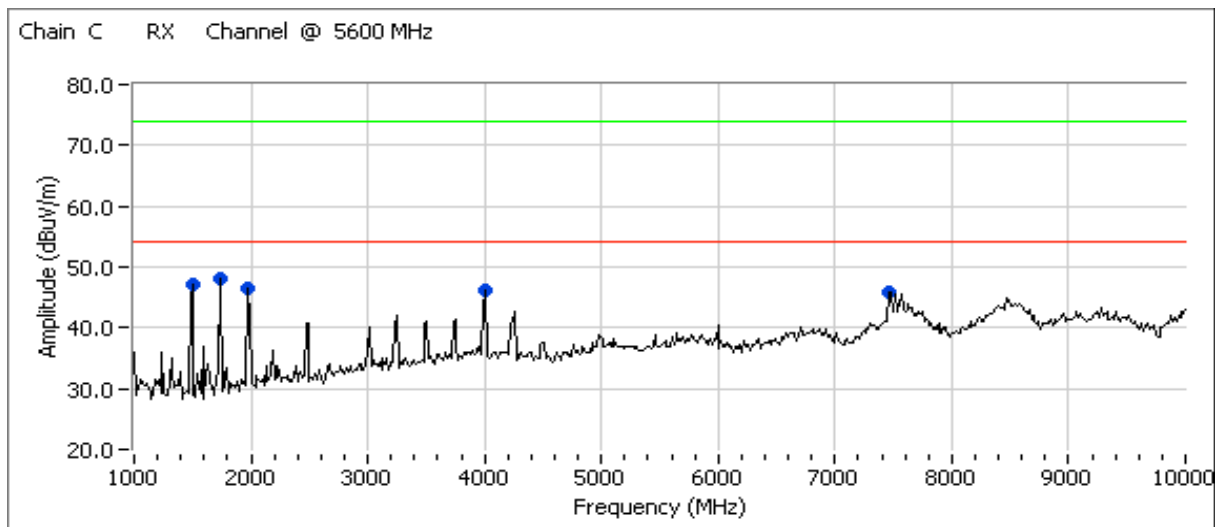


Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
Contact:	Robert Paxman	Account Manager:	Dean Eriksen
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	-

Receiver Tuned to 5500 MHz - Chain C

Frequency MHz	Level dB μ V/m	Pol v/h	RSS GEN		Detector Pk/OP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
7466.680	47.5	V	54.0	-6.5	AVG	157	1.0	
3994.400	54.6	V	74.0	-19.4	PK	264	1.3	
11200.030	34.6	V	54.0	-19.4	AVG	278	1.0	
1497.520	33.8	V	54.0	-20.2	AVG	2	1.0	
3994.400	33.6	V	54.0	-20.4	AVG	264	1.3	
7466.680	53.4	V	74.0	-20.6	PK	157	1.0	
1996.720	33.4	V	54.0	-20.6	AVG	245	1.0	
1497.520	52.7	V	74.0	-21.3	PK	2	1.0	
1996.720	51.5	V	74.0	-22.5	PK	245	1.0	
1747.640	31.1	V	54.0	-22.9	AVG	281	1.6	
1747.640	51.0	V	74.0	-23.0	PK	281	1.6	
11200.030	43.0	V	74.0	-31.0	PK	278	1.0	

Note 1: Above 1 GHz, the FCC specifies the limit as an average measurement. In addition, the FCC states that the peak reading of any emission above 1 GHz, can not exceed the average limit by more than 20 dB.



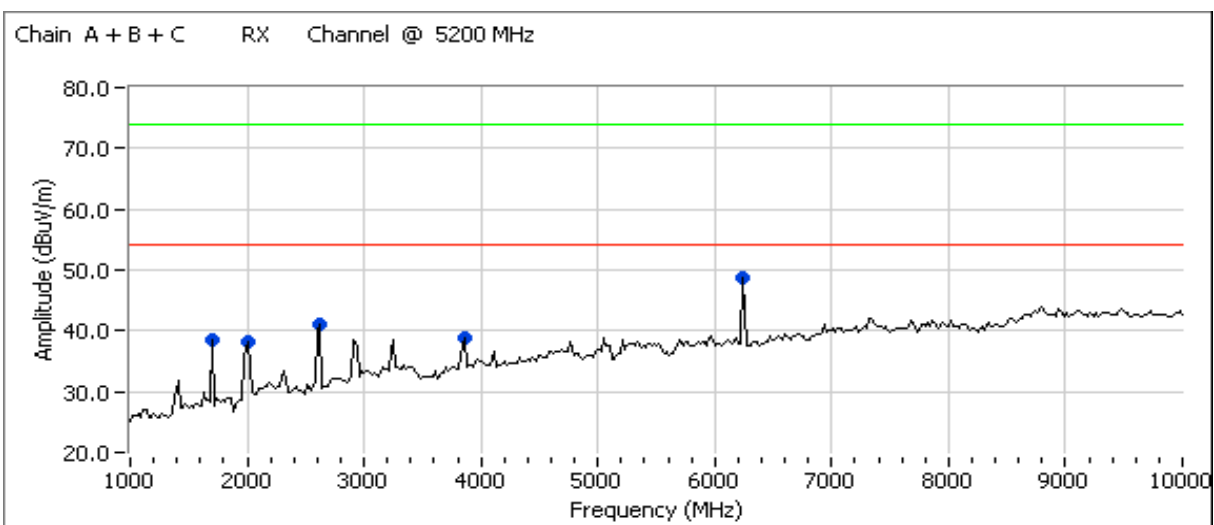
Client: Intel Corporation	Job Number: J70976
Model: 533AN-MMW(MMC)	T-Log Number: T71131
	Account Manager: Dean Eriksen
Contact: Robert Paxman	
Standard: RSS 210/FCC U-NII (Radiated)	Class: -

Date of Test: 5/1/2008
 Test Engineer: Ben Jing
 Test Location: FT Chamber # 3

Run #4: Maximized readings, 1000 - 18000 MHz, All Receivers Active
Receiver Tuned to 5200 MHz - All chains active

Frequency MHz	Level dB μ V/m	Pol v/h	RSS GEN		Detector Pk/QP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
10400.010	42.6	V	54.0	-11.4	AVG	183	1.3	
6000.110	37.3	V	54.0	-16.7	AVG	100	1.3	
3994.370	33.1	V	54.0	-20.9	AVG	261	1.3	
1743.150	32.0	V	54.0	-22.0	AVG	196	1.0	
3994.370	52.0	V	74.0	-22.0	PK	261	1.3	
1997.870	30.7	H	54.0	-23.3	AVG	241	1.0	
2497.940	29.4	V	54.0	-24.6	AVG	270	1.6	
1743.150	48.7	V	74.0	-25.3	PK	196	1.0	
1997.870	48.0	H	74.0	-26.0	PK	241	1.0	
10400.010	46.2	V	74.0	-27.8	PK	183	1.3	
2497.940	44.6	V	74.0	-29.4	PK	270	1.6	
6000.110	44.1	V	74.0	-29.9	PK	100	1.3	

Note 1: Above 1 GHz, the FCC specifies the limit as an average measurement. In addition, the FCC states that the peak reading of any emission above 1 GHz, can not exceed the average limit by more than 20 dB.

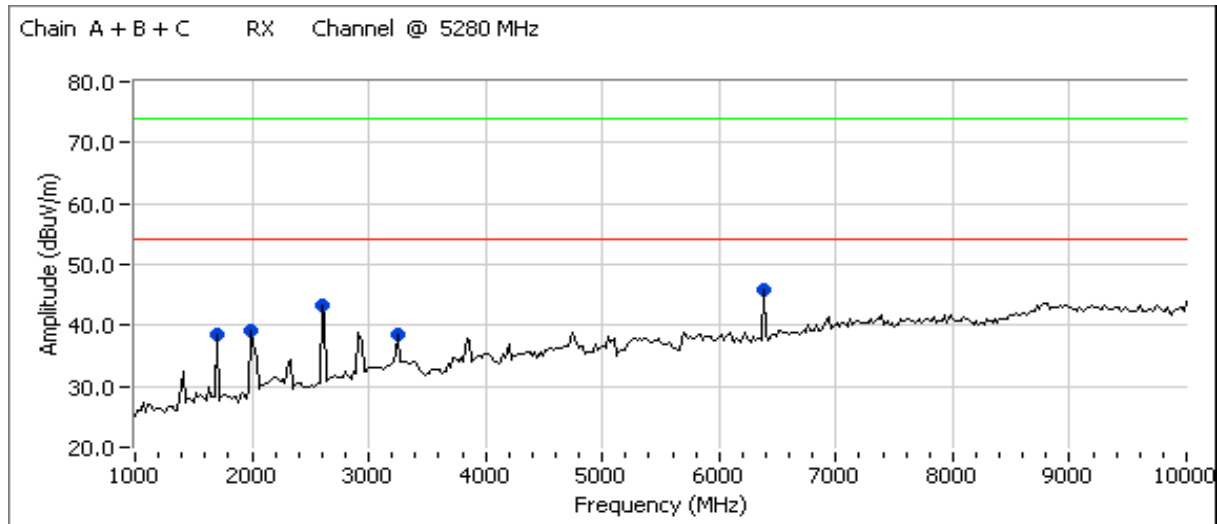


Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
Contact:	Robert Paxman	Account Manager:	Dean Eriksen
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	-

Receiver Tuned to 5280 MHz - All chains active

Frequency MHz	Level dB μ V/m	Pol v/h	RSS GEN		Detector Pk/OP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
10560.030	40.6	V	54.0	-13.4	AVG	138	1.3	
6000.040	34.5	V	54.0	-19.5	AVG	107	1.6	
1996.760	32.1	V	54.0	-21.9	AVG	228	1.3	
3236.800	31.4	V	54.0	-22.6	AVG	226	1.0	
1747.190	31.3	V	54.0	-22.7	AVG	197	1.0	
2489.710	28.8	H	54.0	-25.2	AVG	243	1.3	
3236.800	47.0	V	74.0	-27.0	PK	226	1.0	
1747.190	46.9	V	74.0	-27.1	PK	197	1.0	
1996.760	46.4	V	74.0	-27.6	PK	228	1.3	
10560.030	44.9	V	74.0	-29.1	PK	138	1.3	
2489.710	44.0	H	74.0	-30.0	PK	243	1.3	
6000.040	42.5	V	74.0	-31.5	PK	107	1.6	

Note 1: Above 1 GHz, the FCC specifies the limit as an average measurement. In addition, the FCC states that the peak reading of any emission above 1 GHz, can not exceed the average limit by more than 20 dB.



Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71131
Contact:	Robert Paxman	Account Manager:	Dean Eriksen
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	-

Receiver Tuned to 5600 MHz - All chains active

Frequency MHz	Level dB μ V/m	Pol v/h	RSS GEN		Detector Pk/OP/Avg	Azimuth degrees	Height meters	Comments
			Limit	Margin				
11200.000	39.8	V	54.0	-14.2	AVG	205	1.0	
3733.410	37.1	V	54.0	-16.9	AVG	231	1.0	
1996.740	34.5	V	54.0	-19.5	AVG	173	1.3	
2491.620	29.1	V	54.0	-24.9	AVG	204	1.3	
1711.550	25.4	V	54.0	-28.6	AVG	99	1.0	
3733.410	44.6	V	74.0	-29.4	PK	231	1.0	
2491.620	44.5	V	74.0	-29.5	PK	204	1.3	
1996.740	44.3	V	74.0	-29.7	PK	173	1.3	
11200.000	44.1	V	74.0	-29.9	PK	205	1.0	
1711.550	36.0	V	74.0	-38.0	PK	99	1.0	

Note 1: Above 1 GHz, the FCC specifies the limit as an average measurement. In addition, the FCC states that the peak reading of any emission above 1 GHz, can not exceed the average limit by more than 20 dB.

