Elliott	EMC Test Data

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		-
Emissions Standard(s):	RSS 210/FCC U-NII (Radiated)	Class:	-
Immunity Standard(s):	-	Environment:	-

EMC Test Data
UNII Radiated Measurements with Universe Antenna

For The

Intel Corporation

Model

533AN-MMW(MMC)

Date of Last Test: 6/17/2008

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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)

Band Edge Field Strength 802.11a Universe Antenna

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: 15-25 °C
Rel. Humidity: 35-55 %

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. 0	16. 7	Band Edge radiated field strength	FCC Part 15.209	50.6dBµV/m @ 5149.9MHz (-3.4dB)
1b	802.11a Chain A	5320MHz	25. 5	16. 5	Band Edge radiated field strength	FCC Part 15.209	49.9dBµV/m @ 5350.1MHz (-4.1dB)
1c	802.11a Chain A	5500MHz	25. 0	17. 9	Band Edge - 5460-5470MHz	FCC Part 15E	53.1 dBuV/m @ 5469.8 MHz (-15.2dB)
					Band Edge radiated field strength	FCC Part 15.209	48.3dBµV/m @ 5459.7MHz (-5.7dB)
2a	802.11a Chain B	5180MHz	31. 5	17. 1	Band Edge radiated field strength	FCC Part 15.209	49.8dBµV/m @ 5149.8MHz (-4.2dB)
2b	802.11a Chain B	5320MHz	26. 0	16. 5	Band Edge radiated field strength	FCC Part 15.209	48.9dBµV/m @ 5350.1MHz (-5.1dB)
2c	802.11a Chain B	5500MHz	26. 0	17. 5	Band Edge - 5460-5470MHz	FCC Part 15E	50.2dBµV/m @ 5469.8MHz (-18.1dB)
					Band Edge radiated field strength	FCC Part 15.209	47.8dBµV/m @ 5459.7MHz (-6.2dB)

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Summary of Results

3a	802.11a Chain C	5180MHz	29.5	15.9	Band Edge radiated field strength	FCC Part 15.209	52.8dBµV/m @ 5150.0MHz (-1.2dB)
3b	802.11a Chain C	5320MHz	27. 5	16. 5	Band Edge radiated field strength	FCC Part 15.209	52.5dBµV/m @ 5350.0MHz (-1.5dB)
3c	802.11a Chain C	5500MHz	27. 0	17. 4	Band Edge - 5460-5470MHz	FCC Part 15E	50.3dBµV/m @ 5459.4MHz (-3.7dB)
					Band Edge radiated field strength	FCC Part 15.209	54.0dBµV/m @ 5469.9MHz (-14.3dB)

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

Sample ID: 0016EA02D4D0
Date of Test: 6/16/2008
Test Engineer: Ben Jing
Test Location: FT Chamber#3

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

Power Setting: 31. 0 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	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5181.350	94.6	V	-	-	AVG	170	1.0	RB = 1MHz, VB = 10Hz
5181.350	102.9	V	-	-	PK	170	1.0	RB = VB = 1MHz
5180.870	97.3	H	-	-	AVG	250	1.0	RB = 1MHz, VB = 10Hz
5180.870	105.2	H	-	-	PK	250	1.0	RB = VB = 1MHz

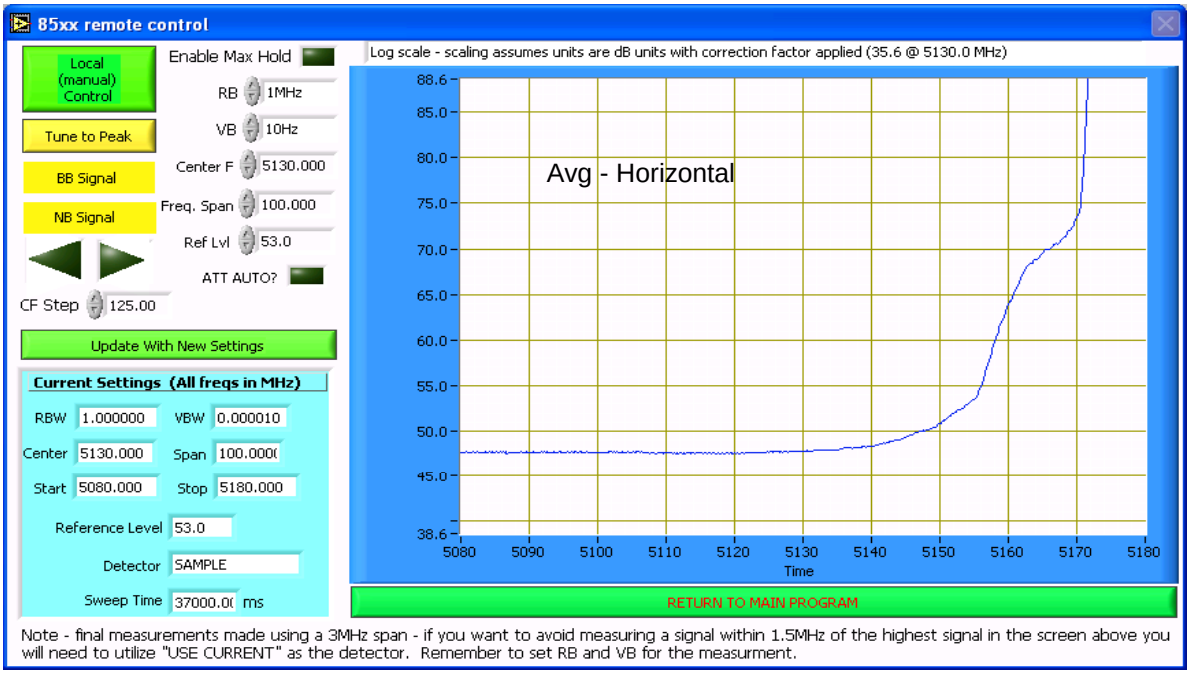
Band Edge Signal Field Strength

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	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5149.870	50.6	H	54.0	-3.4	AVG	248	1.0	Note 1
5149.810	66.8	H	74.0	-7.2	PK	245	1.0	Note 1
5149.700	49.3	V	54.0	-4.7	AVG	166	1.0	Note 1
5149.840	62.3	V	74.0	-11.7	PK	170	1.0	Note 1

Note 1: Target GC = 31.5 and AP = 16.7 dBm, Setting GC = 31.0 and AP = 16.7 dBm.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

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

Power Setting: 25. 5 Average power: 16.5 (for reference purposes)

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

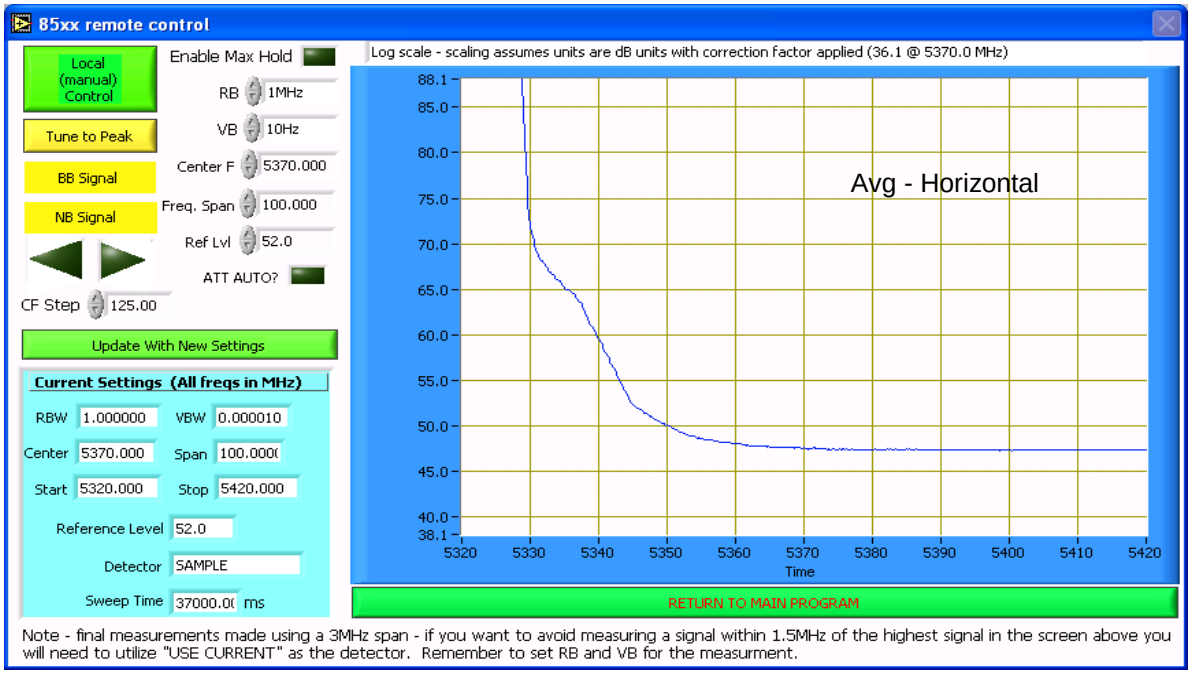
Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5321.040	95.0	V	-	-	AVG	121	1.0	RB = 1MHz, VB = 10Hz
5321.040	103.0	V	-	-	PK	121	1.0	RB = 1MHz, VB = 10Hz
5321.500	98.7	H	-	-	AVG	250	1.0	RB = 1MHz, VB = 10Hz
5321.500	106.8	H	-	-	PK	250	1.0	RB = 1MHz, VB = 10Hz

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	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5350.100	49.9	H	54.0	-4.1	AVG	256	1.2	Note 1
5350.250	66.5	H	74.0	-7.5	PK	258	1.2	Note 1
5350.100	48.5	V	54.0	-5.5	AVG	134	1.0	Note 1
5350.180	63.1	V	74.0	-10.9	PK	129	1.0	Note 1

Note 1:	Target GC = 26.5 and AP = 16.5 dBm, Setting GC = 25.5 and AP = 16.5 dBm.



Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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: 25. 0 Average power: 17.9 (for reference purposes)

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

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5498.730	94.4	V	-	-	AVG	153	1.0	RB = 1MHz, VB = 10Hz
5498.730	102.2	V	-	-	PK	153	1.0	RB = VB = 1MHz
5498.880	96.7	H	-	-	AVG	253	1.0	RB = 1MHz, VB = 10Hz
5498.880	104.9	H	-	-	PK	253	1.0	RB = VB = 1MHz

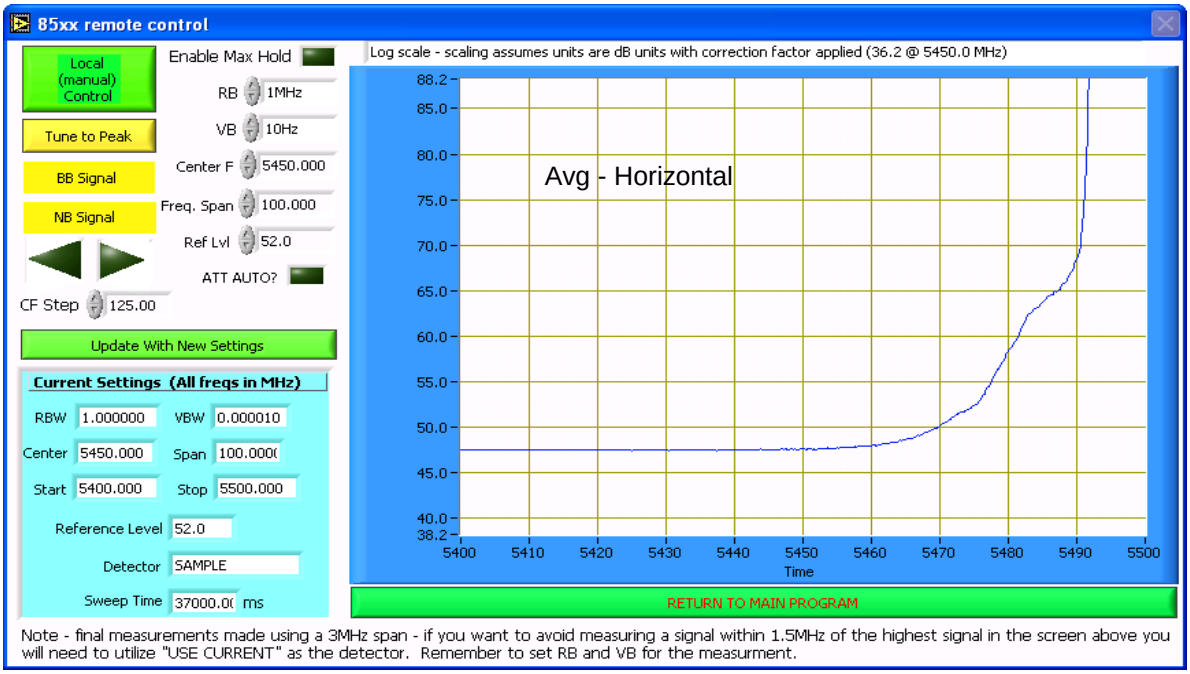
5460 Restricted Band Feld strength limit = 54dBuV/m avg, 74dBuV/m peak at 3m

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5459.720	48.3	H	54.0	-5.7	AVG	261	1.3	
5459.730	61.9	H	74.0	-12.1	PK	253	1.2	
5459.770	48.0	V	54.0	-6.0	AVG	156	1.0	
5459.890	60.4	V	74.0	-13.6	PK	161	1.0	

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

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5469.730	51.1	V	68.3	-17.2	AVG	165	1.2	Note 1
5469.730	64.4	V	88.3	-23.9	PK	165	1.2	Note 1
5469.760	53.1	H	68.3	-15.2	AVG	265	1.2	Note 1
5469.760	68.0	H	88.3	-20.3	PK	265	1.2	Note 1

Note 1:	Target GC = 26.0 and AP = 17.9 dBm, Setting GC = 25.0 and AP = 17.9 dBm.



Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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

Sample ID: 0016EA02D4D0
Date of Test: 6/16/2008
Test Engineer: Ben Jing
Test Location: FT Chamber#3

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

Power Setting: 31. 5 Average power: 17.1 (for reference purposes)

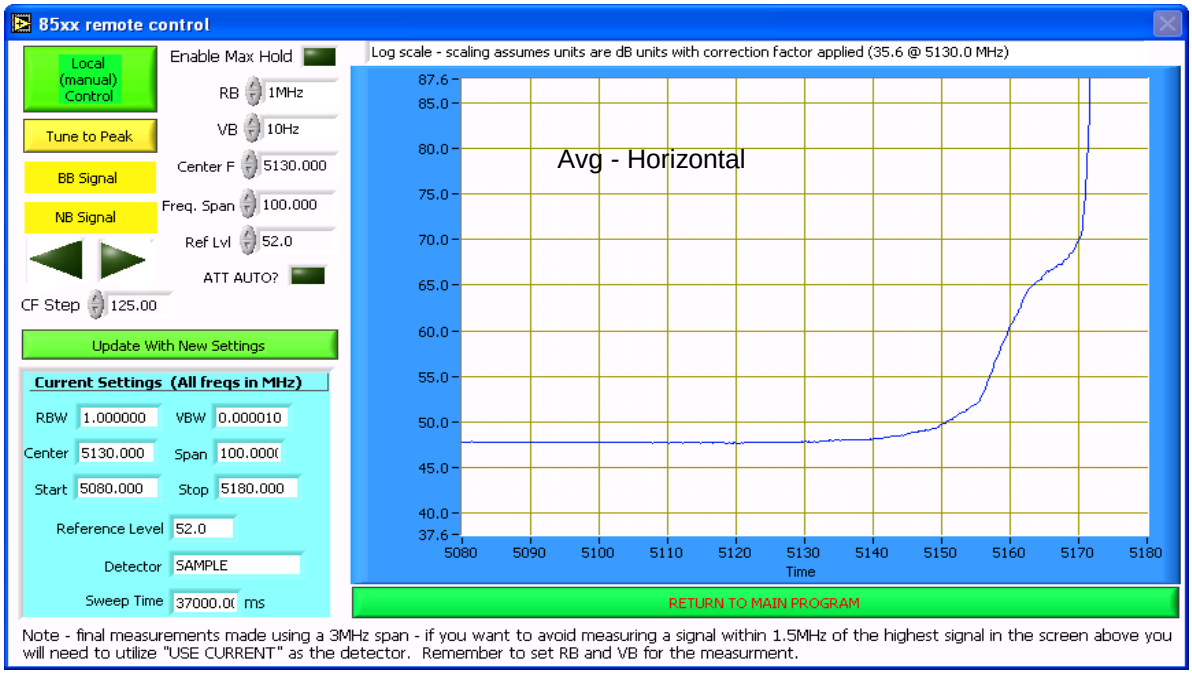
Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5180.920	93.6	V	-	-	AVG	207	1.0	RB = 1MHz, VB = 10Hz
5180.920	101.6	V	-	-	PK	207	1.0	RB = VB = 1MHz
5181.330	95.1	H	-	-	AVG	253	1.0	RB = 1MHz, VB = 10Hz
5181.330	103.4	H	-	-	PK	253	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	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5149.770	49.8	H	54.0	-4.2	AVG	232	1.0	
5149.870	65.0	H	74.0	-9.0	PK	255	1.1	
5149.710	48.7	V	54.0	-5.3	AVG	206	1.0	
5149.800	63.7	V	74.0	-10.3	PK	206	1.0	



Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

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

Power Setting: 26. 0 Average power: 16.5 (for reference purposes)

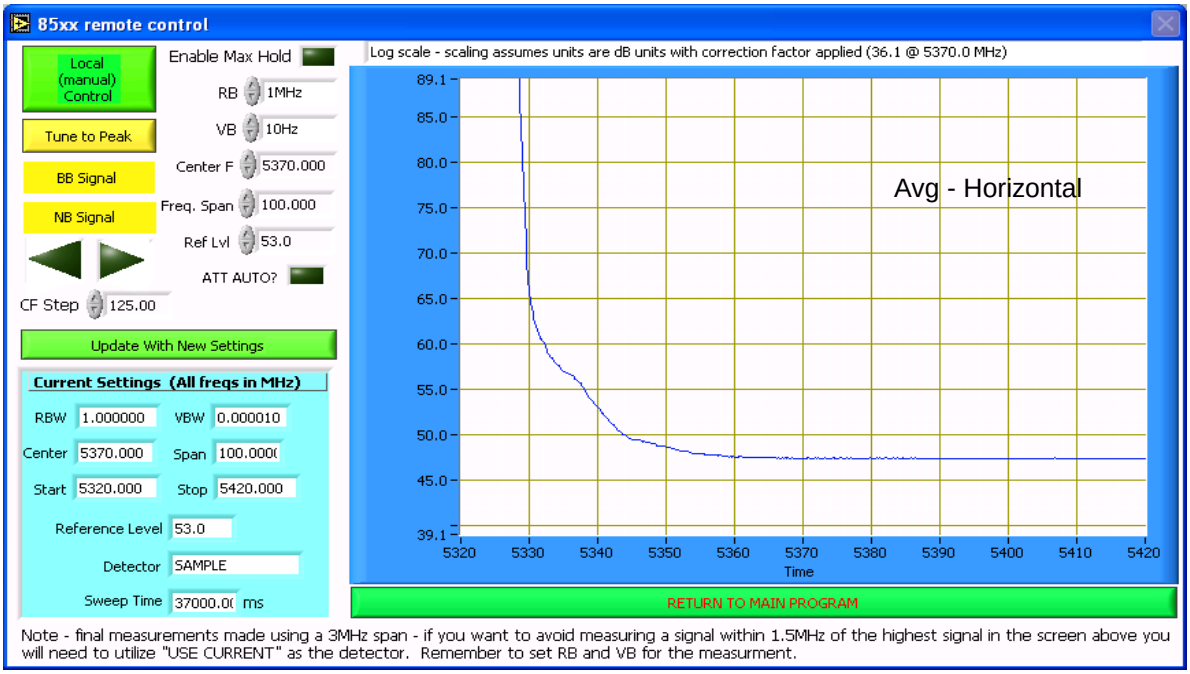
Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5319.130	94.5	V	-	-	AVG	208	1.0	RB = 1MHz, VB = 10Hz
5319.130	102.3	V	-	-	PK	208	1.0	RB = VB = 1MHz
5321.500	95.6	H	-	-	AVG	255	1.0	RB = 1MHz, VB = 10Hz
5321.500	103.9	H	-	-	PK	255	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	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5350.100	48.9	H	54.0	-5.1	AVG	270	1.1	
5350.130	62.8	H	74.0	-11.2	PK	288	1.1	
5350.100	48.6	V	54.0	-5.4	AVG	223	1.0	
5350.110	62.6	V	74.0	-11.4	PK	219	1.0	



Note - final measurements made using a 3MHz span - if you want to avoid measuring a signal within 1.5MHz of the highest signal in the screen above you will need to utilize "USE CURRENT" as the detector. Remember to set RB and VB for the measurment.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
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: 26. 0 Average power: 17.5 (for reference purposes)

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

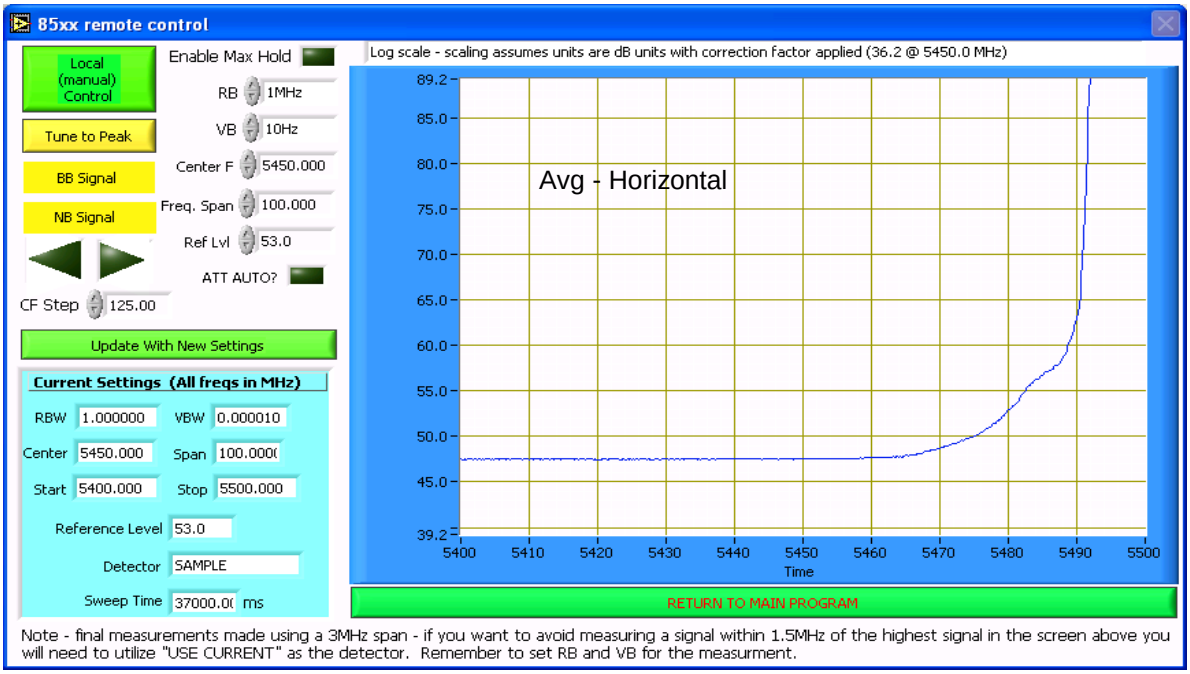
Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5498.500	94.2	V	-	-	AVG	222	1.0	RB = 1MHz, VB = 10Hz
5498.500	102.8	V	-	-	PK	222	1.0	RB = VB = 1MHz
5498.900	95.2	H	-	-	AVG	164	1.0	RB = 1MHz, VB = 10Hz
5498.900	103.8	H	-	-	PK	164	1.0	RB = VB = 1MHz

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

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5459.700	47.8	H	54.0	-6.2	AVG	170	1.2	
5459.790	60.8	H	74.0	-13.2	PK	170	1.2	
5459.720	47.8	V	54.0	-6.2	AVG	244	1.0	
5459.780	60.8	V	74.0	-13.2	PK	220	1.0	

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

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5469.790	50.2	H	68.3	-18.1	AVG	252	1.2	
5469.790	64.5	H	88.3	-23.8	PK	252	1.2	
5469.760	50.0	V	68.3	-18.3	AVG	161	1.2	
5469.760	64.1	V	88.3	-24.2	PK	161	1.2	



Note - final measurements made using a 3MHz span - if you want to avoid measuring a signal within 1.5MHz of the highest signal in the screen above you will need to utilize "USE CURRENT" as the detector. Remember to set RB and VB for the measurment.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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

Sample ID: 0016EA02D4D0
Date of Test: 6/17/2008
Test Engineer: Suhaila Khushzad
Test Location: Chamber # 3

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

Power Setting: 29.5 Average power: 15.9 (for reference purposes)

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

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5173.420	104.6	H	-	-	AVG	238	1.1	RB = 1MHz, VB = 10Hz
5173.420	112.7	H	-	-	PK	238	1.1	RB = VB = 1MHz
5186.170	102.0	V	-	-	AVG	174	1.0	RB = 1MHz, VB = 10Hz
5186.170	110.2	V	-	-	PK	174	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	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5149.950	52.8	H	54.0	-1.2	AVG	238	1.1	Note 1
5148.720	71.0	H	74.0	-3.0	PK	238	1.1	Note 1
5149.230	69.2	V	74.0	-4.8	PK	174	1.0	Note 1
5149.970	51.9	V	54.0	-2.1	AVG	174	1.0	Note 1

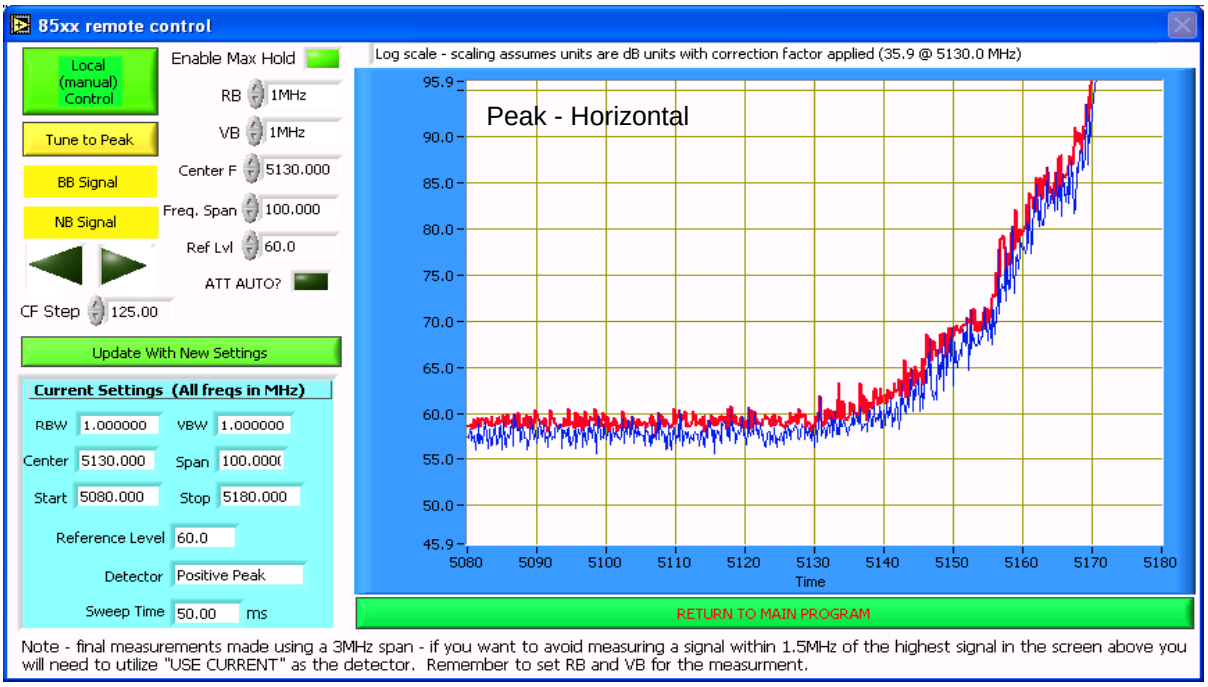
Note 1:	Target GC = 30.5 and AP=16.5 dBm, passing GC=29.5 and AP=15.9 dBm.

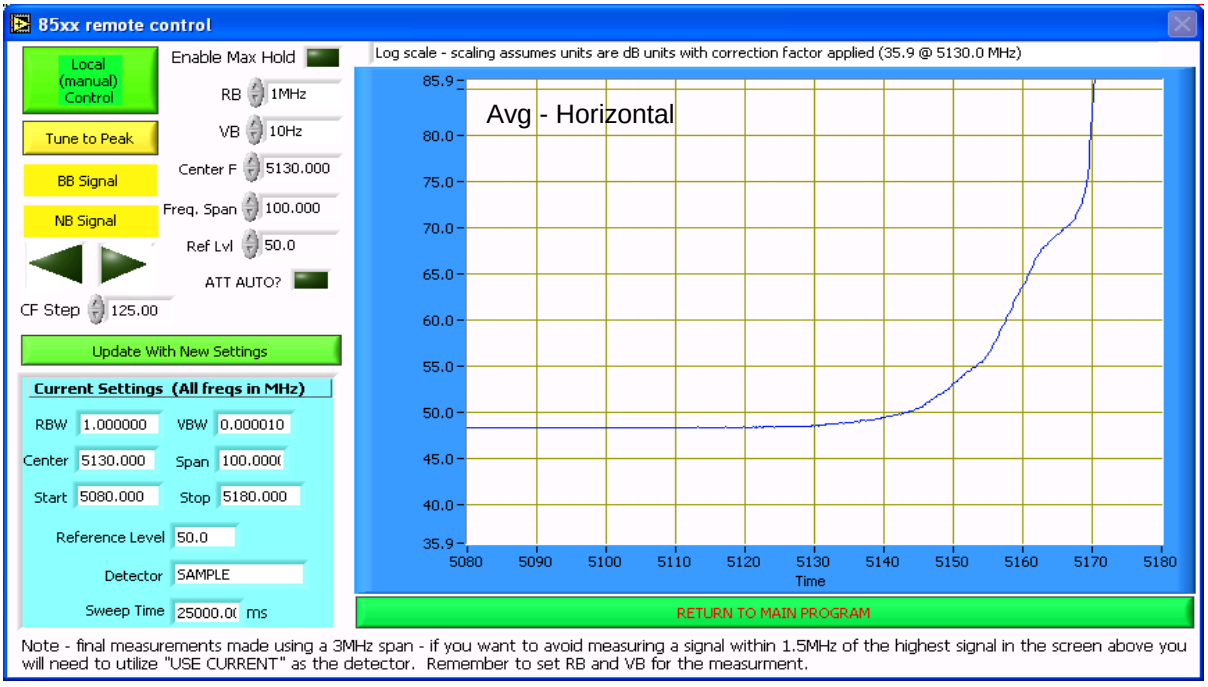
Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

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

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

Power Setting: 29.5 Average power: 15.9 (for reference purposes)





Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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

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	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5313.170	104.4	H	-	-	AVG	175	1.0	RB = 1MHz, VB = 10Hz
5313.170	112.2	H	-	-	PK	175	1.0	RB = VB = 1MHz
5313.170	98.5	V	-	-	AVG	143	1.9	RB = 1MHz, VB = 10Hz
5313.170	106.2	V	-	-	PK	143	1.9	RB = VB = 1MHz

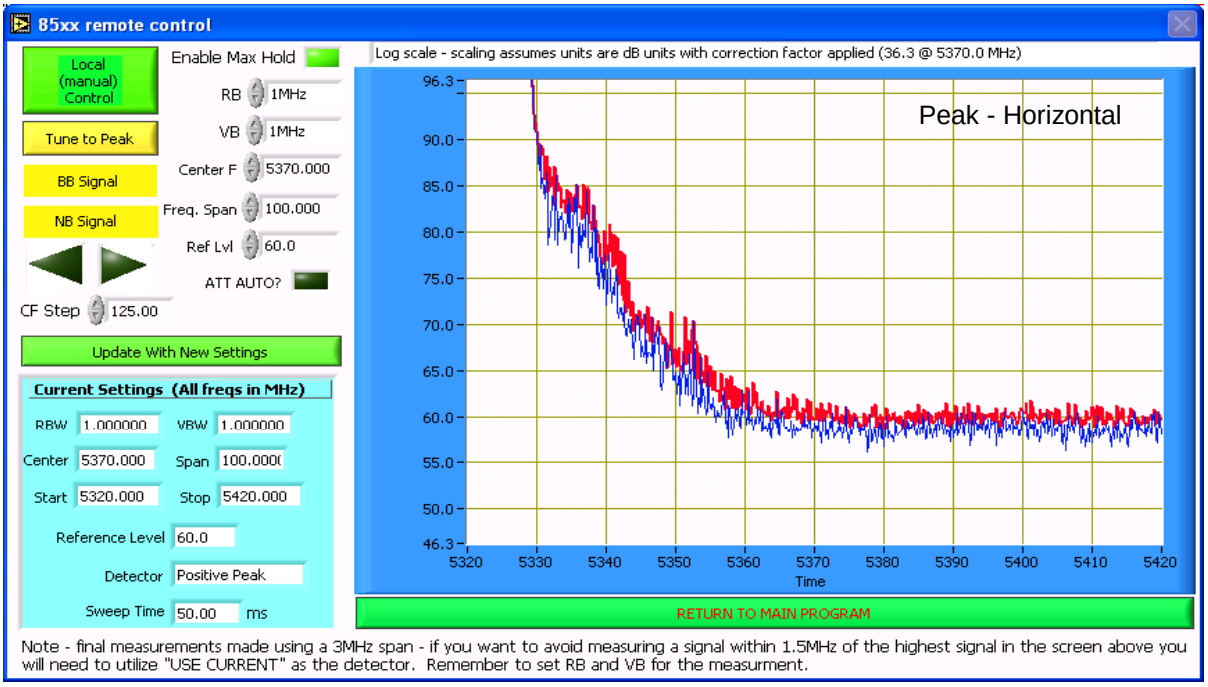
Band Edge Signal Field Strength

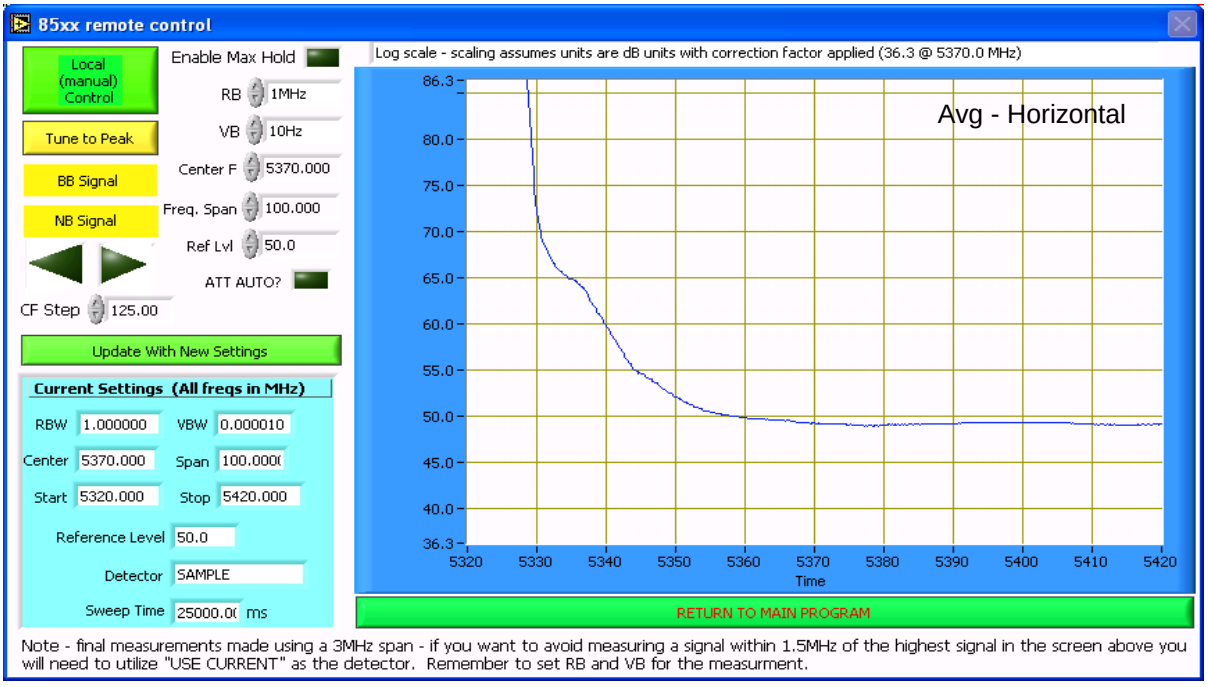
Restricted band starts at allocated band edge (5350MHz), field strength limit is 54dBuV/m average, 74dBuV/m peak.

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5350.040	52.5	H	54.0	-1.5	AVG	175	1.0	
5352.330	71.5	H	74.0	-2.5	PK	175	1.0	
5352.360	67.4	V	74.0	-6.6	PK	143	1.9	
5350.000	50.3	V	54.0	-3.7	AVG	143	1.9	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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
Run #3b: High Channel @ 5320 MHz (band edge at 5350 MHz)
Power Setting: Average power: 16.5 (for reference purposes)





Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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

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

Power Setting: 27 Average power: 16.6 (for reference purposes)

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

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5505.080	103.0	H	-	-	AVG	240	1.0	RB = 1MHz, VB = 10Hz
5505.080	111.2	H	-	-	PK	240	1.0	RB = VB = 1MHz
5503.500	98.7	V	-	-	AVG	175	1.1	RB = 1MHz, VB = 10Hz
5503.500	108.4	V	-	-	PK	175	1.1	RB = VB = 1MHz

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

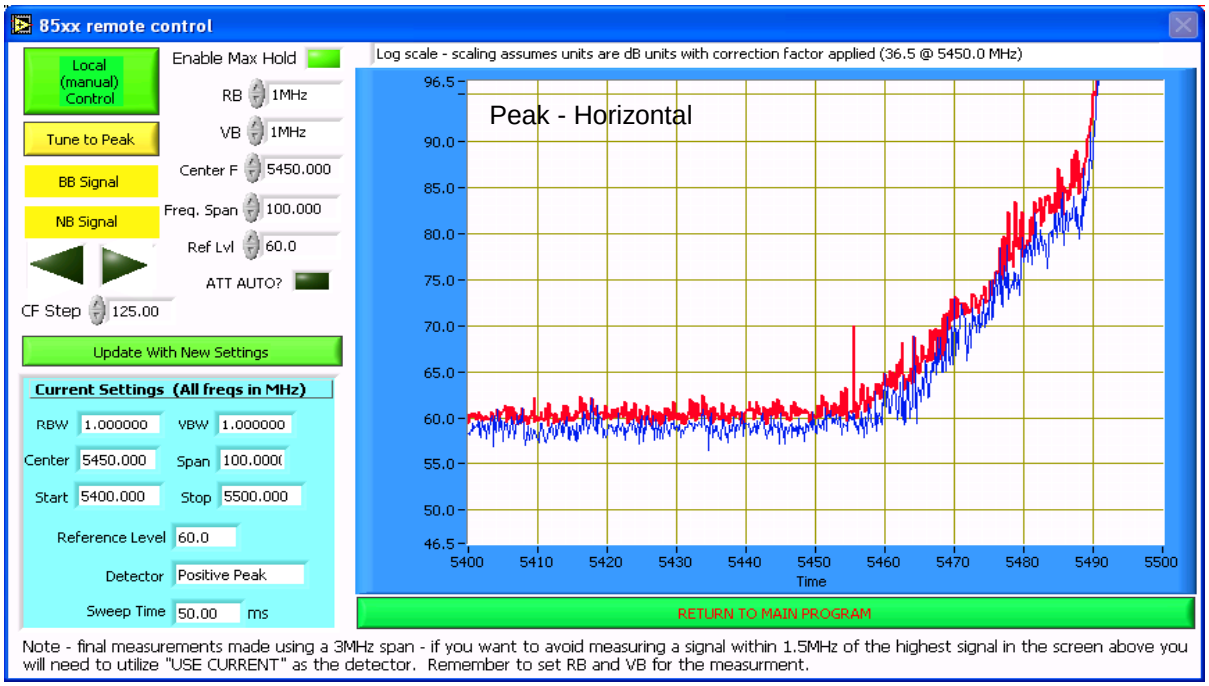
Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5459.370	50.3	H	54.0	-3.7	AVG	240	1.0	
5458.690	65.8	H	74.0	-8.2	PK	240	1.0	
5459.640	66.3	V	74.0	-7.7	PK	175	1.1	
5457.690	49.5	V	54.0	-4.5	AVG	175	1.1	

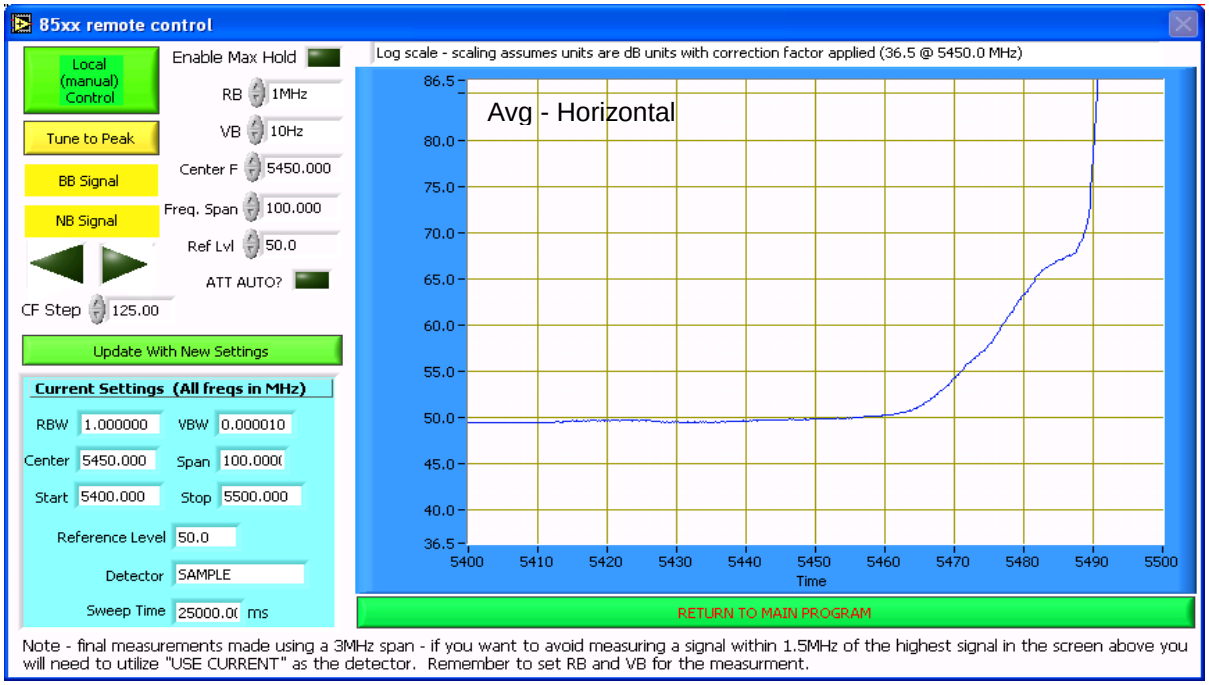
5460 - 5470 MHz, Limit is -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak at 3m)

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5469.930	54.0	H	68.3	-14.3	AVG	240	1.0	
5469.530	73.8	H	88.3	-14.5	PK	240	1.0	
5469.920	51.8	V	68.3	-16.5	AVG	175	1.1	
5469.730	70.1	V	88.3	-18.2	PK	175	1.1	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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
Run #3c: Low Channel @ 5500 MHz (restricted band edge at 5460 MHz, allocated band edge at 5470MHz)
Power Setting: 27 Average power: 16.6 (for reference purposes)





Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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 802.11a Universe Antenna

Summary of Results

Run #	Mode	Channel	Power Setting	Measured Power	Test Performed	Limit	Result / Margin
1	802.11a Chain A	5180 5200 5240	31.5 31.0 29.5	16.5 16.6 16.6	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.407	802.11n20 MHz mode in single chain mode had higher emissions than 802.11a mode when evaluating the device with the ethertronics antenna at both harmonics and LO-related frequencies, therefore 802.11a mode is covered by tests performed in 802.11n20 mode.
2	802.11a Chain A	5260 5280 5320	29.0 28.5 27.0	16.7 16.7 16.5	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.407	
3	802.11a Chain A	5500 5600 5700	25.5 25.5 26.0	16.7 16.6 16.5	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.407	
4	802.11a Chain B	5180 5200 5240	31.0 30.5 30.5	16.5 16.6 16.6	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.407	
5	802.11a Chain B	5260 5280 5320	27.5 27.0 25.5	16.7 16.7 16.5	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.407	
6	802.11a Chain B	5500 5600 5700	24.5 24.5 25.0	16.5 16.5 16.7	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.407	
7	802.11a Chain C	5180 5200 5240	31.0 30.5 30.0	16.5 16.5 16.5	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.407	
8	802.11a Chain C	5260 5280 5320	29.5 29.0 28.5	16.6 16.5 16.5	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.407	
9	802.11a Chain C	5500 5600 5700	26.0 25.5 25.5	16.5 16.5 16.5	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.407	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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)

Band Edge Field Strength 802.11n20 Universe Antenna

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

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

Ambient Conditions:

Temperature: 15-25 °C
Rel. Humidity: 35-55 %

Summary of Results

Run #	Mode	Channel	Power Setting	Measured Power	Test Performed	Limit	Result / Margin
1	802.11n20 Chain A	5180MHz	29.0	16.1	Band Edge radiated field strength	FCC Part 15.209	52.9dBµV/m @ 5150.0MHz (-1.1dB)
	802.11n20 Chain A	5320MHz	25.0	16.7	Band Edge radiated field strength	FCC Part 15.209	52.3dBµV/m @ 5350.0MHz (-1.7dB)
	802.11n20 Chain A	5500MHz	23.5	17.0	Band Edge - 5460-5470MHz	FCC Part 15E	51.2dBµV/m @ 5470.0MHz (-17.1dB)
					Band Edge field strength - 5460MHz	FCC Part 15.209	49.5dBµV/m @ 5459.9MHz (-4.5dB)
2	802.11n20 Chain B	5180MHz	30.0	16.7	Band Edge radiated field strength	FCC Part 15.209	51.3dBµV/m @ 5149.9MHz (-2.7dB)
	802.11n20 Chain B	5320MHz	26.0	16.6	Band Edge radiated field strength	FCC Part 15.209	73.0dBµV/m @ 5352.1MHz (-1.0dB)
	802.11n20 Chain B	5500MHz	25.0	16.6	Band Edge - 5460-5470MHz	FCC Part 15E	68.1dBµV/m @ 5467.0MHz (-20.2dB)
					Band Edge field strength - 5460MHz	FCC Part 15.209	49.5dBµV/m @ 5459.9MHz (-4.5dB)
3	802.11n20 Chain C	5180MHz	29.5	16.1	Band Edge radiated field strength	FCC Part 15.209	53.0dBµV/m @ 5149.8MHz (-1.0dB)
	802.11n20 Chain C	5320MHz	27.0	16.1	Band Edge radiated field strength	FCC Part 15.209	52.4dBµV/m @ 5350.0MHz (-1.6dB)
	802.11n20 Chain C	5500MHz	26.0	16.7	Band Edge - 5460-5470MHz	FCC Part 15E	49.5dBµV/m @ 5457.0MHz (-4.5dB)
					Band Edge field strength - 5460MHz	FCC Part 15.209	51.4dBµV/m @ 5469.8MHz (-16.9dB)

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Summary of Results

4	802.11n20 Chain A+B	5180MHz	28.5 27.5	13.5 13.7	Band Edge radiated field strength	FCC Part 15.209	50.2dBµV/m @ 5149.9MHz (-3.8dB)
	802.11n20 Chain A+B	5320MHz	25.5 24.5	13.5 13.5	Band Edge radiated field strength	FCC Part 15.209	51.0dBµV/m @ 5350.1MHz (-3.0dB)
	802.11n20 Chain A+B	5500MHz	21.5 23.5	13.6 13.5	Band Edge - 5460-5470MHz	FCC Part 15E	50.5dBµV/m @ 5469.8MHz (-17.8dB)
					Band Edge field strength - 5460MHz	FCC Part 15.209	49.3 dBuV/m @ 5459.7 MHz (-4.7dB)
5	802.11n20 Chain A+C	5180MHz	28.0 28.5	13.5 13.6	Band Edge field strength	FCC Part 15.209	50.1 dBuV/m @ 5149.7 MHz (-3.9dB)
	802.11n20 Chain A+C	5320MHz	24.0 26.0	13.6 13.5	Band Edge field strength	FCC Part 15.209	50.1 dBuV/m @ 5350.1 MHz (-3.9dB)
	802.11n20 Chain A+C	5500MHz	22.5 24.5	13.7 13.5	Band Edge - 5460-5470MHz	FCC Part 15E	51.0 dBuV/m @ 5469.8 MHz (-17.3dB)
					Band Edge field strength - 5460MHz	FCC Part 15.209	49.5 dBuV/m @ 5459.7 MHz (-4.5dB)
6	802.11n20 Chain B+C	5180MHz	28.5 28.5	13.6 13.5	Band Edge field strength	FCC Part 15.209	50.1 dBuV/m @ 5149.7 MHz (-3.9dB)
	802.11n20 Chain B+C	5320MHz	24.5 26.0	13.6 13.5	Band Edge field strength	FCC Part 15.209	49.4dBµV/m @ 5351.2MHz (-4.6dB)
	802.11n20 Chain B+C	5500MHz	23.5 24.5	13.6 13.5	Band Edge - 5460-5470MHz	FCC Part 15E	49.6dBµV/m @ 5469.0MHz (-18.7dB)
					Band Edge field strength - 5460MHz	FCC Part 15.209	49.7dBµV/m @ 5459.7MHz (-4.3dB)
7	802.11n20 A+B+C	5180MHz	30.5 30.0 30.5	12.0 12.0 12.2	Band Edge field strength	FCC Part 15.209	50.4dBµV/m @ 5149.9MHz (-3.6dB)
	802.11n20 A+B+C	5320MHz	27.0 26.0 27.0	12.2 12.2 12.0	Band Edge field strength	FCC Part 15.209	50.0dBµV/m @ 5351.3MHz (-4.0dB)
	802.11n20 A+B+C	5500MHz	25.5 25.5 26.0	12.0 12.2 12.1	Band Edge - 5460-5470MHz	FCC Part 15E	49.4 dBuV/m @ 5469.8 MHz (-18.9dB)
					Band Edge field strength - 5460MHz	FCC Part 15.209	48.0dBµV/m @ 5459.7MHz (-6.0dB)

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:	T71850 Band Edge
		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)
Sample ID:
Date of Test: 6/12/2008
Test Engineer: Peter Sales
Test Location: Fremont Chamber #3

Power Setting and average measurement (for reference)						
Chain A		Chain B		Chain C		
Setting	Avg	Setting	Avg	Setting	Avg	
29.0	16.1					Measured Settings
32.0	16.6					Reduced from measured settings

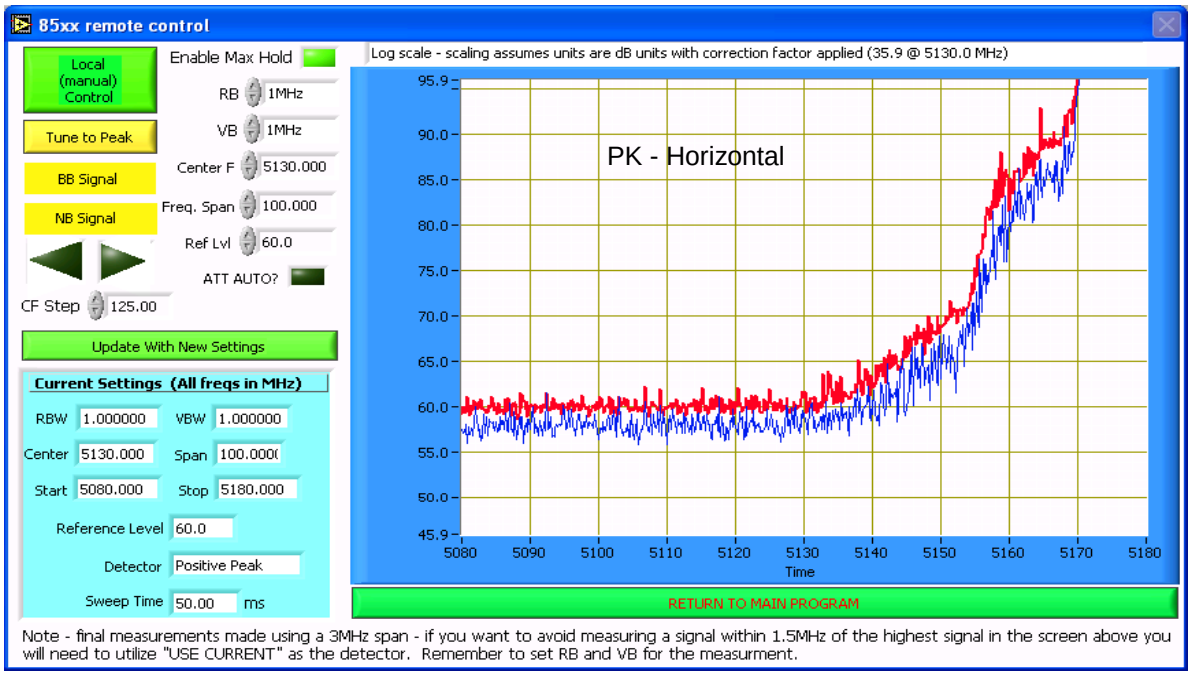
Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

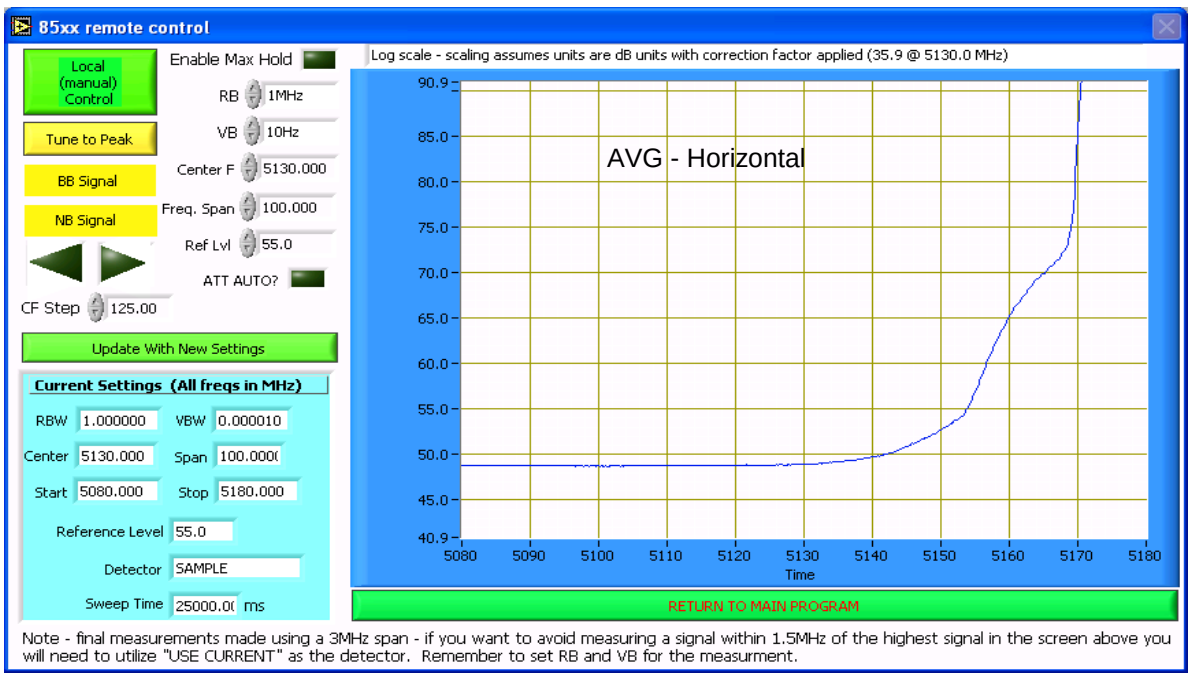
Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5183.600	96.9	V	-	-	AVG	360	1.0	
5183.600	105.9	V	-	-	PK	360	1.0	
5178.900	103.8	H	-	-	AVG	76	1.2	
5178.900	112.0	H	-	-	PK	76	1.2	

Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5149.980	52.9	H	54.0	-1.1	AVG	76	1.2	
5147.910	70.9	H	74.0	-3.1	PK	76	1.2	
5149.260	62.2	V	74.0	-11.8	PK	360	1.0	
5149.580	49.3	V	54.0	-4.7	AVG	360	1.0	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

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

Sample ID:
Date of Test: 6/12/2008
Test Engineer: Peter Sales
Test Location: Fremont Chamber #3

Power Setting and average measurement (for reference)						
Chain A		Chain B		Chain C		
Setting	Avg	Setting	Avg	Setting	Avg	
25.0	16.7					Measured Settings
27.0	16.7					Reduced from measured settings

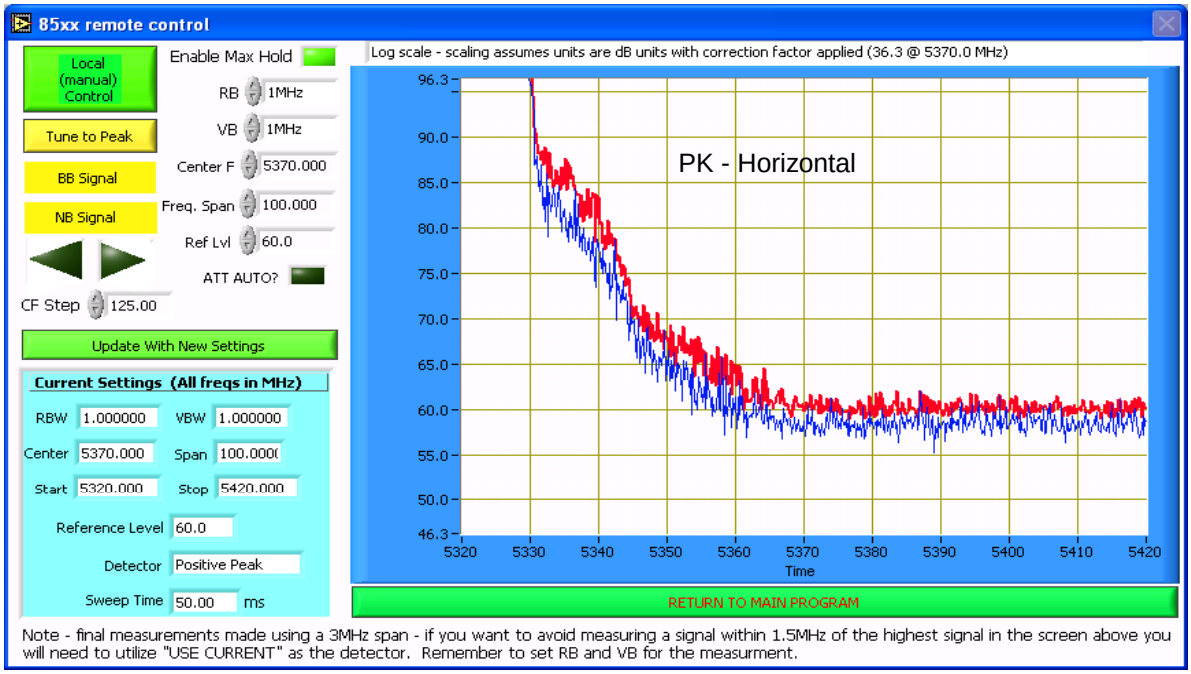
Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

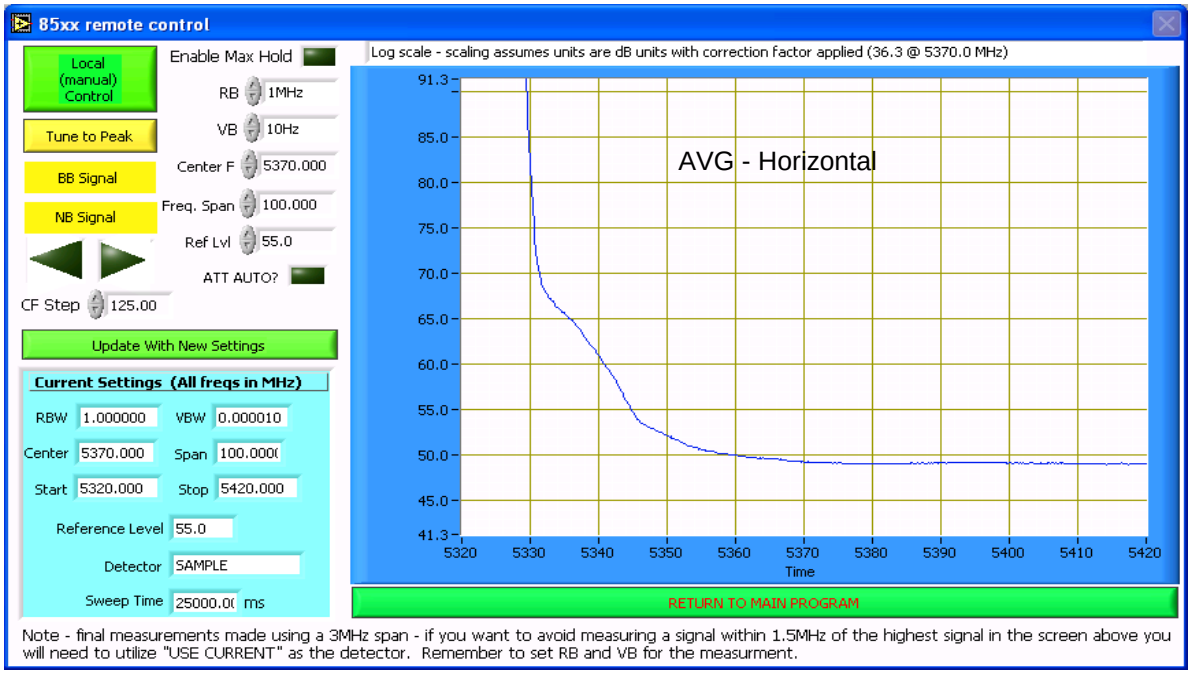
Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5314.400	104.3	H	-	-	AVG	76	1.2	
5314.400	112.5	H	-	-	PK	76	1.2	
5316.230	99.4	V	-	-	AVG	7	1.0	
5316.230	107.8	V	-	-	PK	7	1.0	

Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5350.540	66.7	V	74.0	-7.3	PK	7	1.0	
5350.000	50.5	V	54.0	-3.5	AVG	7	1.0	
5352.710	70.0	H	74.0	-4.0	PK	76	1.2	
5350.000	52.3	H	54.0	-1.7	AVG	76	1.2	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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:	T71850 Band Edge
		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)

Sample ID:
Date of Test: 6/13/2008
Test Engineer: Peter Sales
Test Location: Fremont Chamber #3

Power Setting and average measurement (for reference)						
Chain A		Chain B		Chain C		
Setting	Avg	Setting	Avg	Setting	Avg	
23.5	17.0					Measured Settings
27.0	16.7					Reduced from measured settings

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	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5495.400	95.4	V	-	-	AVG	316	1.0	
5495.400	104.0	V	-	-	PK	316	1.0	
5507.470	97.5	H	-	-	AVG	88	1.0	
5507.470	105.5	H	-	-	PK	88	1.0	

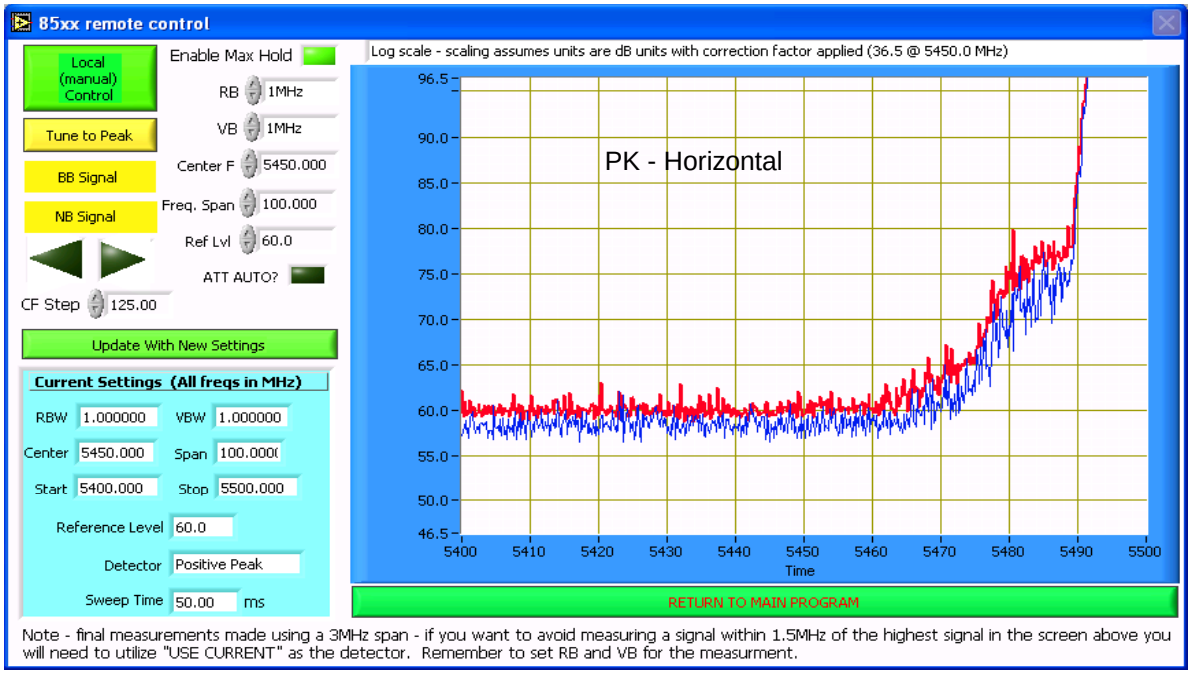
5460 Restricted Band Feld strength limit = 54dBuV/m avg, 74dBuV/m peak at 3m

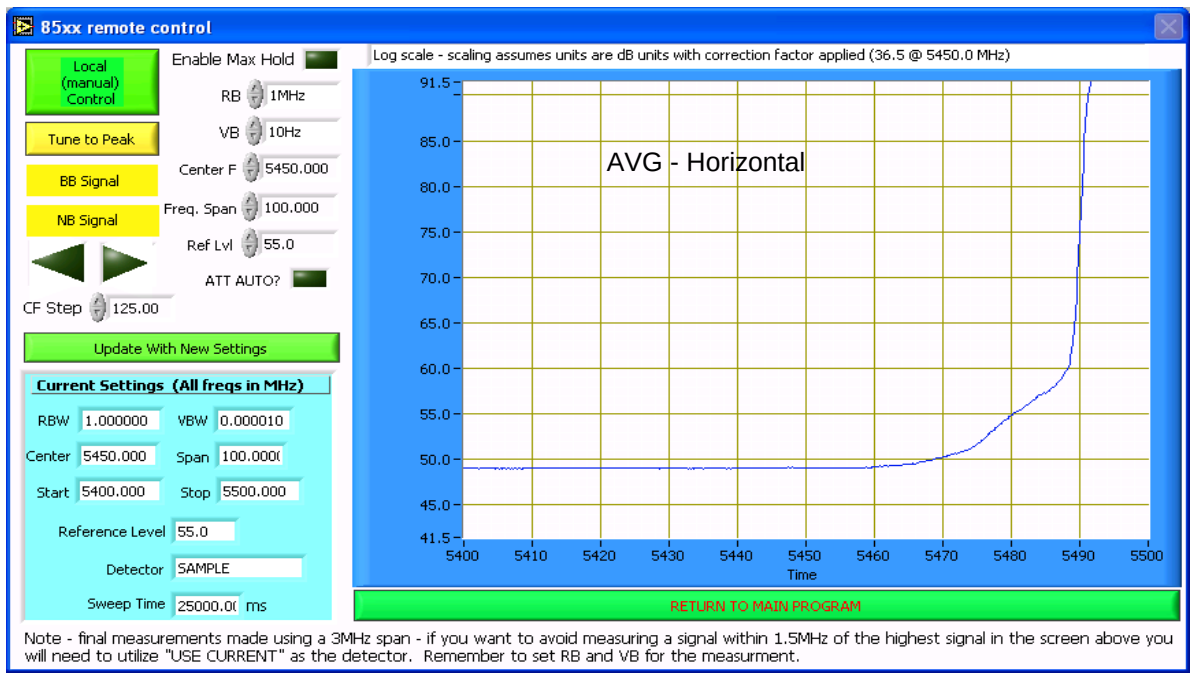
Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5458.650	62.7	H	74.0	-11.3	PK	88	1.0	
5459.850	49.5	H	54.0	-4.5	AVG	88	1.0	
5459.330	62.9	V	74.0	-11.1	PK	316	1.0	
5457.160	49.5	V	54.0	-4.5	AVG	316	1.0	

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

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5468.810	67.6	V	88.3	-20.7	PK	316	1.0	
5469.980	51.0	V	68.3	-17.3	AVG	316	1.0	
5467.690	67.1	H	88.3	-21.2	PK	294	1.0	
5469.990	51.2	H	68.3	-17.1	AVG	294	1.0	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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:	T71850 Band Edge
		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 #2a: Low Channel @ 5180 MHz (band edge at 5150 MHz)

Sample ID:
Date of Test: 6/13/2008
Test Engineer: Peter Sales
Test Location: Fremont Chamber #3

Power Setting and average measurement (for reference)						
Chain A		Chain B		Chain C		
Setting	Avg	Setting	Avg	Setting	Avg	
		30	16.7			Measured Settings
		30.5	16.5			Reduced from measured settings

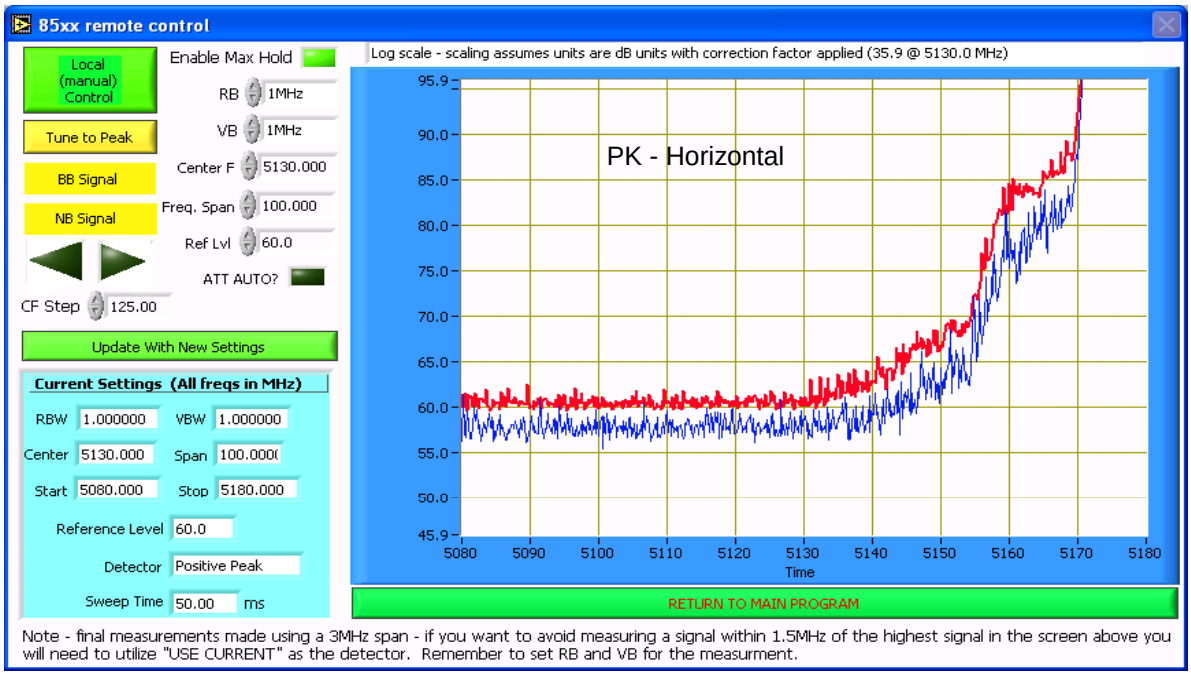
Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

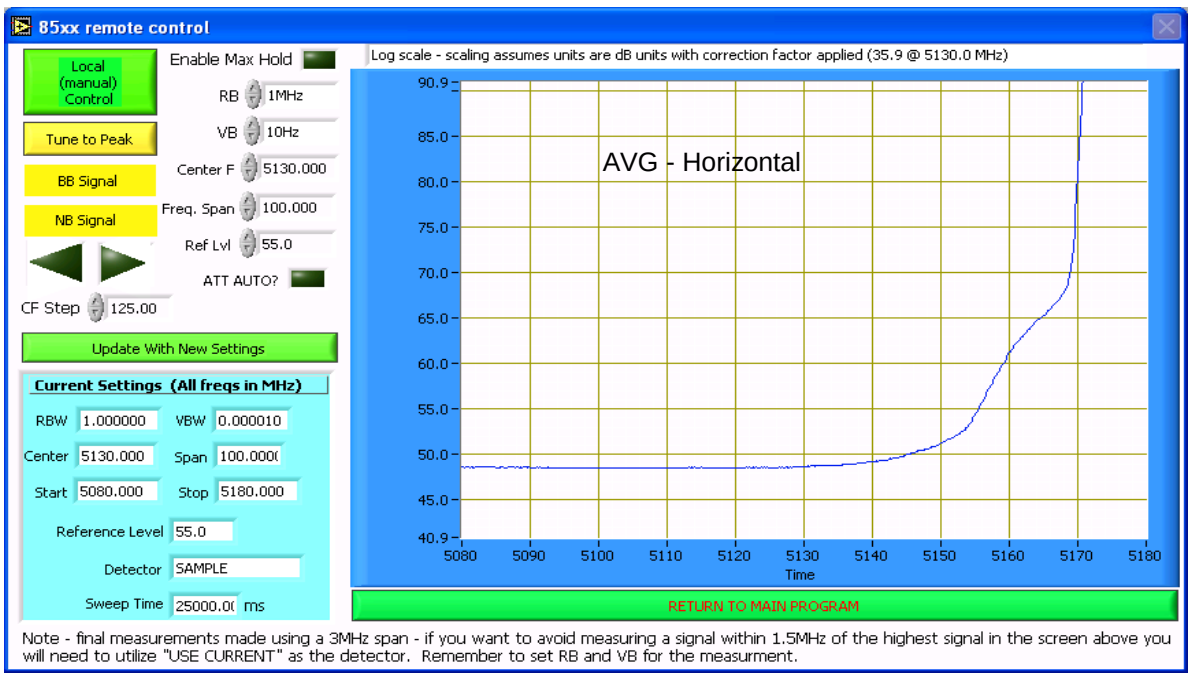
Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5188.000	100.8	H	-	-	AVG	37	1.3	
5188.000	108.9	H	-	-	PK	37	1.3	
5178.740	96.1	V	-	-	AVG	304	1.7	
5178.740	104.2	V	-	-	PK	304	1.7	

Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5149.120	66.4	V	74.0	-7.6	PK	304	1.7	
5149.650	49.7	V	54.0	-4.3	AVG	304	1.7	
5149.580	69.2	H	74.0	-4.8	PK	36	1.3	
5149.920	51.3	H	54.0	-2.7	AVG	36	1.3	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

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

Sample ID:
Date of Test: 6/13/2008
Test Engineer: Peter Sales
Test Location: Fremont Chamber #3

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

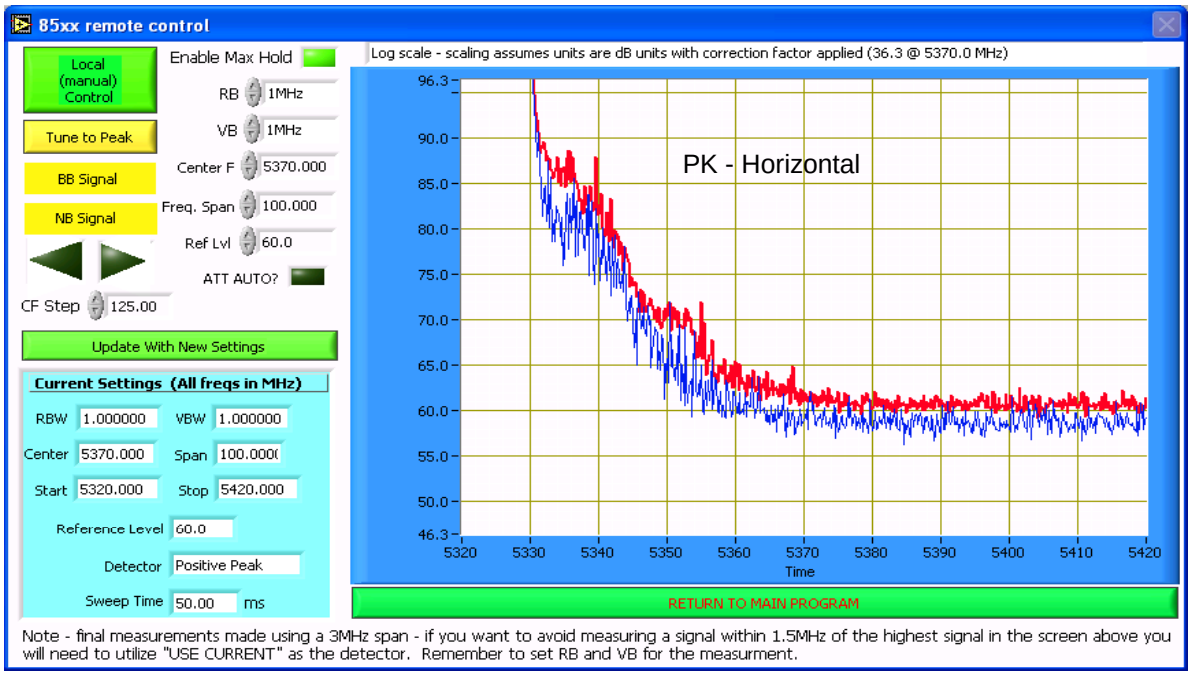
Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

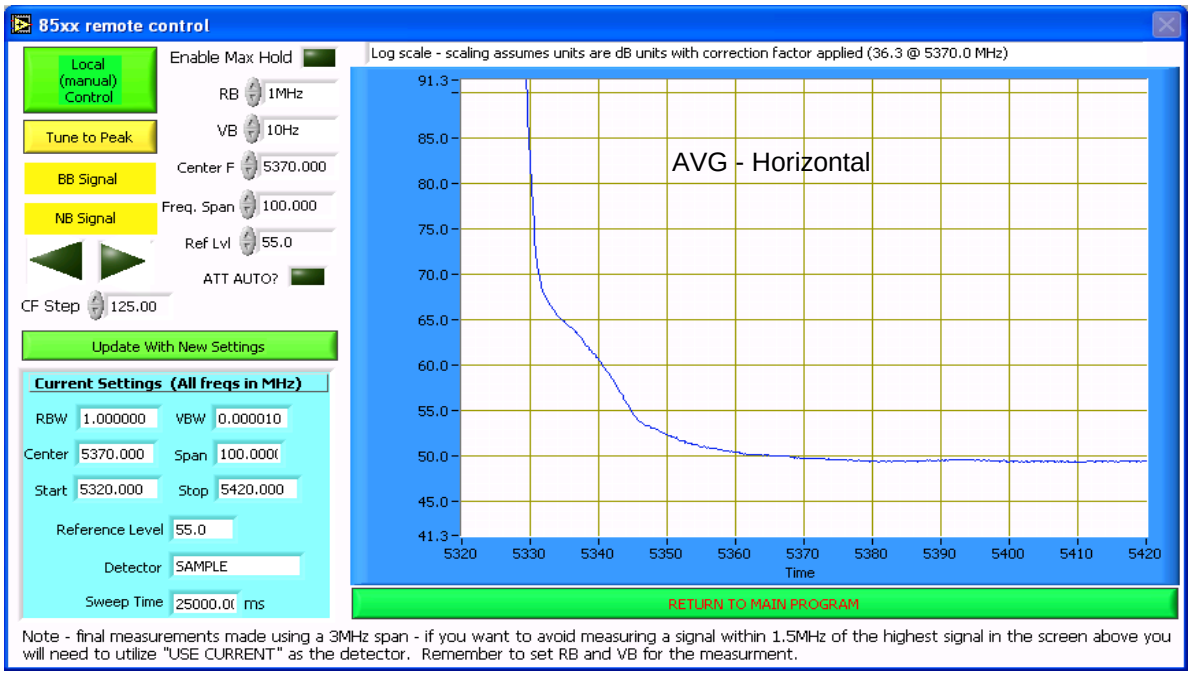
Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5325.900	104.0	H	-	-	AVG	65	1.1	
5325.900	112.6	H	-	-	PK	65	1.1	
5327.370	97.2	V	-	-	AVG	360	1.1	
5327.370	105.5	V	-	-	PK	360	1.1	

Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5352.480	67.8	V	74.0	-6.2	PK	360	1.1	
5350.000	50.5	V	54.0	-3.5	AVG	360	1.1	
5352.110	73.0	H	74.0	-1.0	PK	64	1.1	
5350.000	52.6	H	54.0	-1.4	AVG	64	1.1	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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:	T71850 Band Edge
		Account Manager:	Dean Eriksen
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)

Sample ID:
Date of Test: 6/13/2008
Test Engineer: Peter Sales
Test Location: Fremont Chamber #3

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
		25.5	16.6		

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	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5502.900	100.6	H	-	-	AVG	67	1.1	
5502.900	109.0	H	-	-	PK	67	1.1	
5504.700	98.1	V	-	-	AVG	17	2.0	
5504.700	106.8	V	-	-	PK	17	2.0	

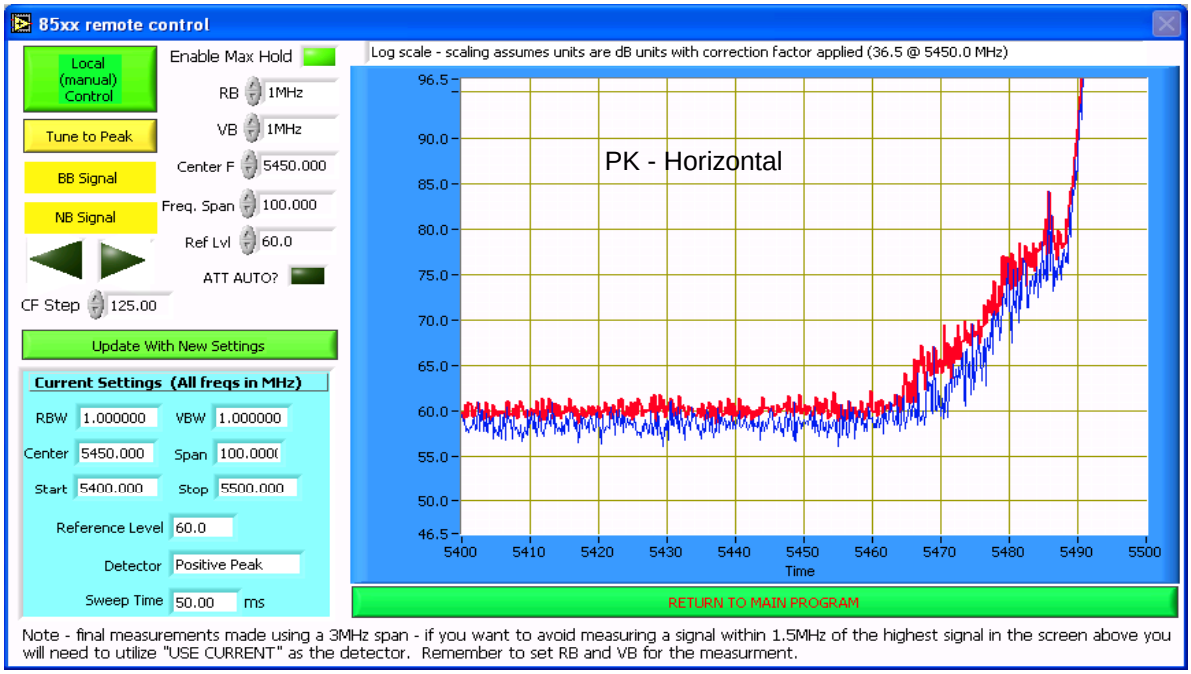
5460 Restricted Band Feld strength limit = 54dBuV/m avg, 74dBuV/m peak at 3m

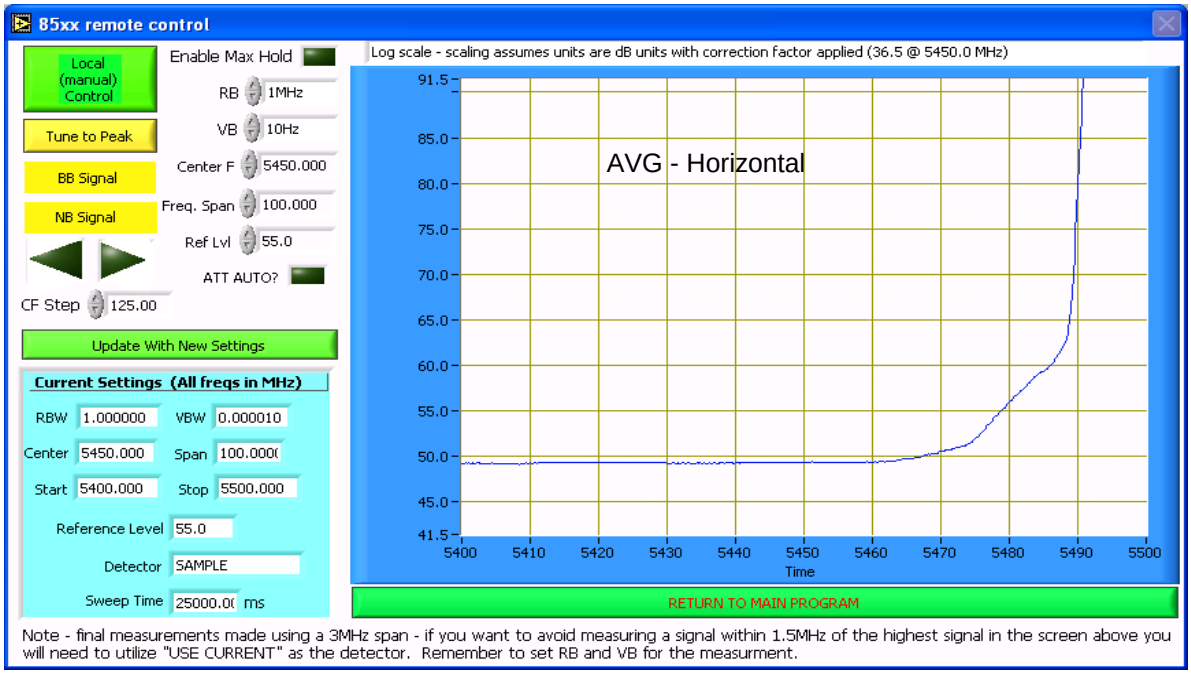
Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5457.940	61.9	V	74.0	-12.1	PK	17	2.0	
5457.020	49.3	V	54.0	-4.7	AVG	17	2.0	
5457.090	62.5	H	74.0	-11.5	PK	67	1.1	
5459.910	49.5	H	54.0	-4.5	AVG	67	1.1	

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

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5467.040	68.1	H	88.3	-20.2	PK	61	1.2	
5469.610	50.4	H	89.3	-38.9	AVG	61	1.2	
5468.920	65.2	V	90.3	-25.1	PK	3	1.9	
5469.330	49.9	V	91.3	-41.4	AVG	3	1.9	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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:	T71850 Band Edge
		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 #3a: Low Channel @ 5180 MHz (band edge at 5150 MHz)

Sample ID: MAC:0016EA02D4D0
Date of Test: 6/13/2008
Test Engineer: Suhaila Khushzad
Test Location: Chamber # 3

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
				29.5	16.1

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	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5186.750	104.4	H	-	-	AVG	244	1.1	
5186.750	112.7	H	-	-	PK	244	1.1	
5172.250	101.4	V	-	-	AVG	186	1.1	
5172.250	109.8	V	-	-	PK	186	1.1	

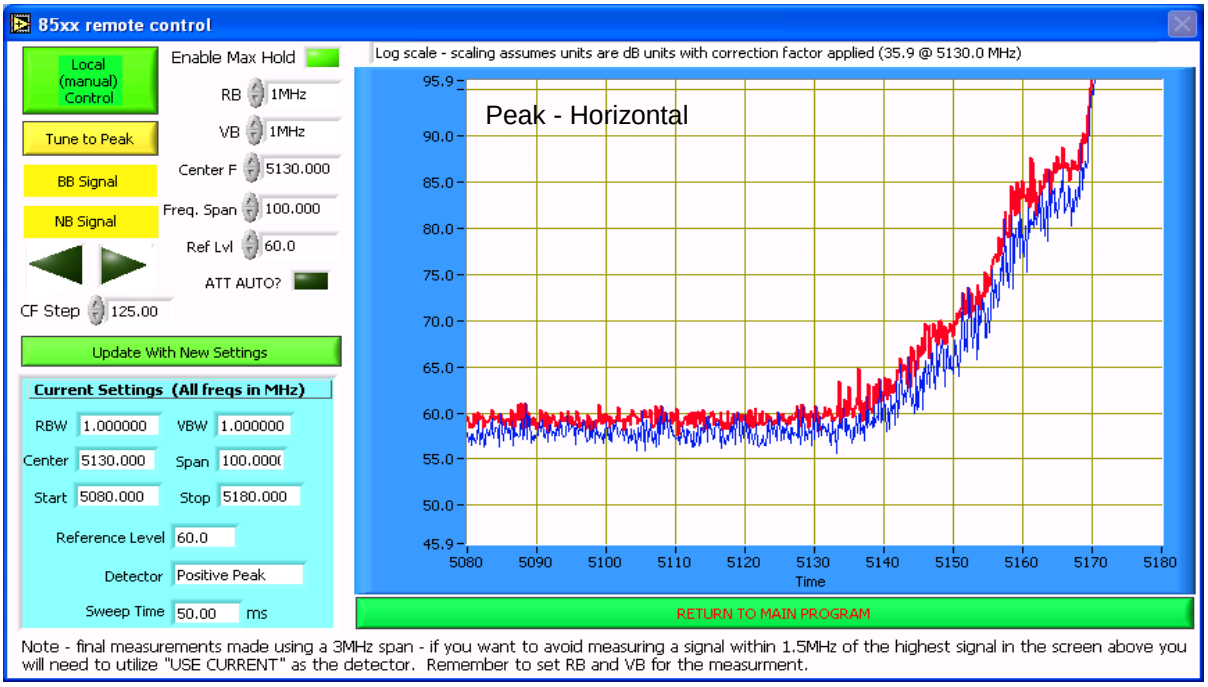
Band Edge Signal Field Strength

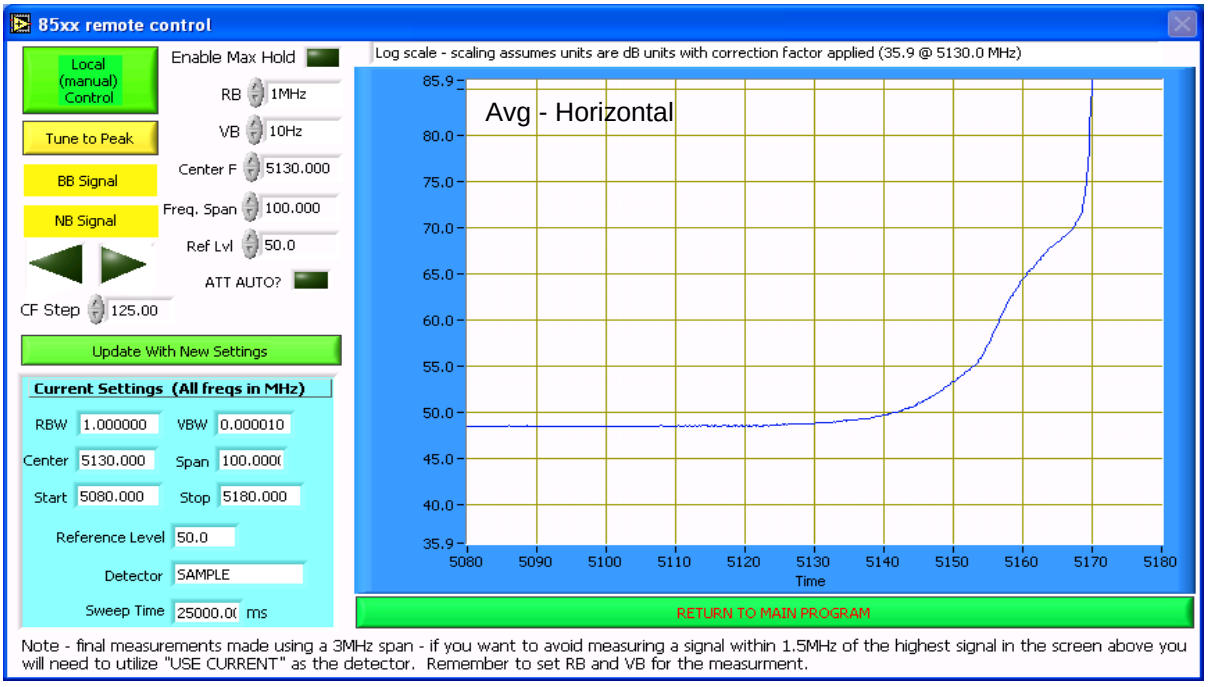
Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5149.790	53.0	H	54.0	-1.0	AVG	244	1.1	Note 1
5149.110	71.0	H	74.0	-3.0	PK	244	1.1	Note 1
5148.050	69.4	V	74.0	-4.6	PK	186	1.1	Note 1
5149.880	52.0	V	54.0	-2.0	AVG	186	1.1	Note 1

Note 1:	Target GC = 31 and AP=16.7 dBm, passing GC=29.5 and AP=16.1 dBm.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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 #3a: Low Channel @ 5180 MHz (band edge at 5150 MHz)





Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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 #3b: High Channel @ 5320 MHz (band edge at 5350 MHz)

Sample ID: MAC:0016EA02D4D0
Date of Test: 6/13/2008
Test Engineer: Suhaila Khushzad
Test Location: Chamber # 3

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
				27	16.1

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	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5312.080	103.0	H	-	-	AVG	243	1.0	
5312.080	111.1	H	-	-	PK	243	1.0	
5312.830	100.8	V	-	-	AVG	190	1.1	
5312.830	108.9	V	-	-	PK	190	1.1	

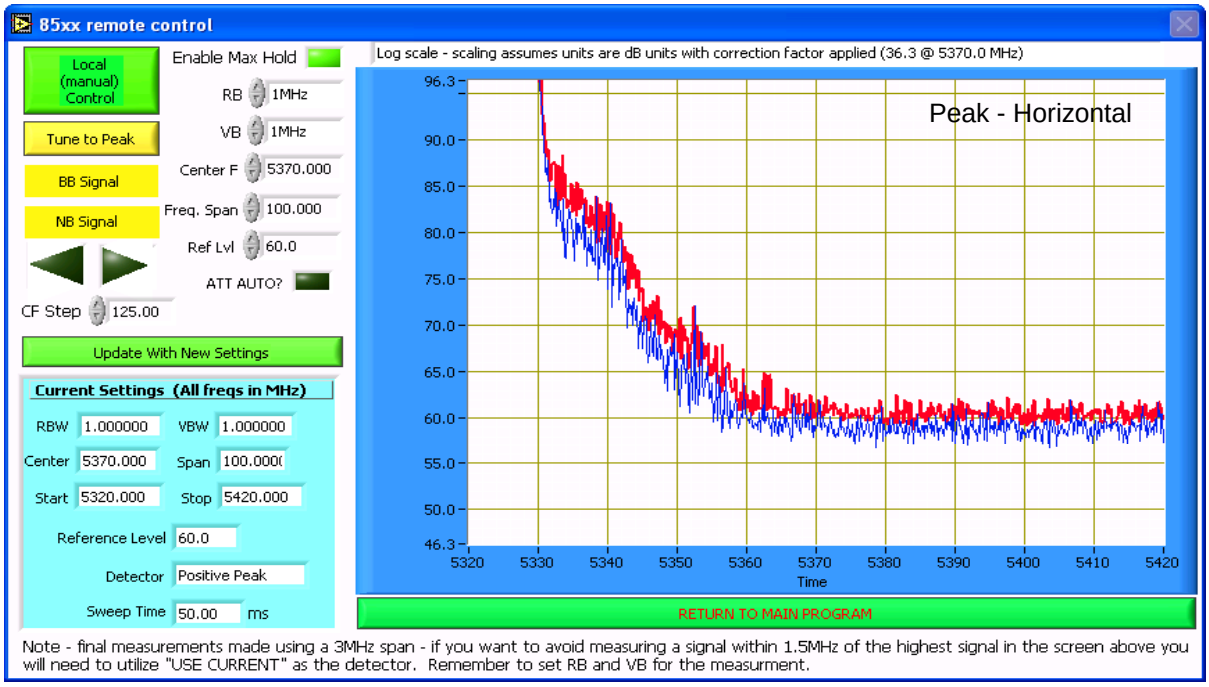
Band Edge Signal Field Strength

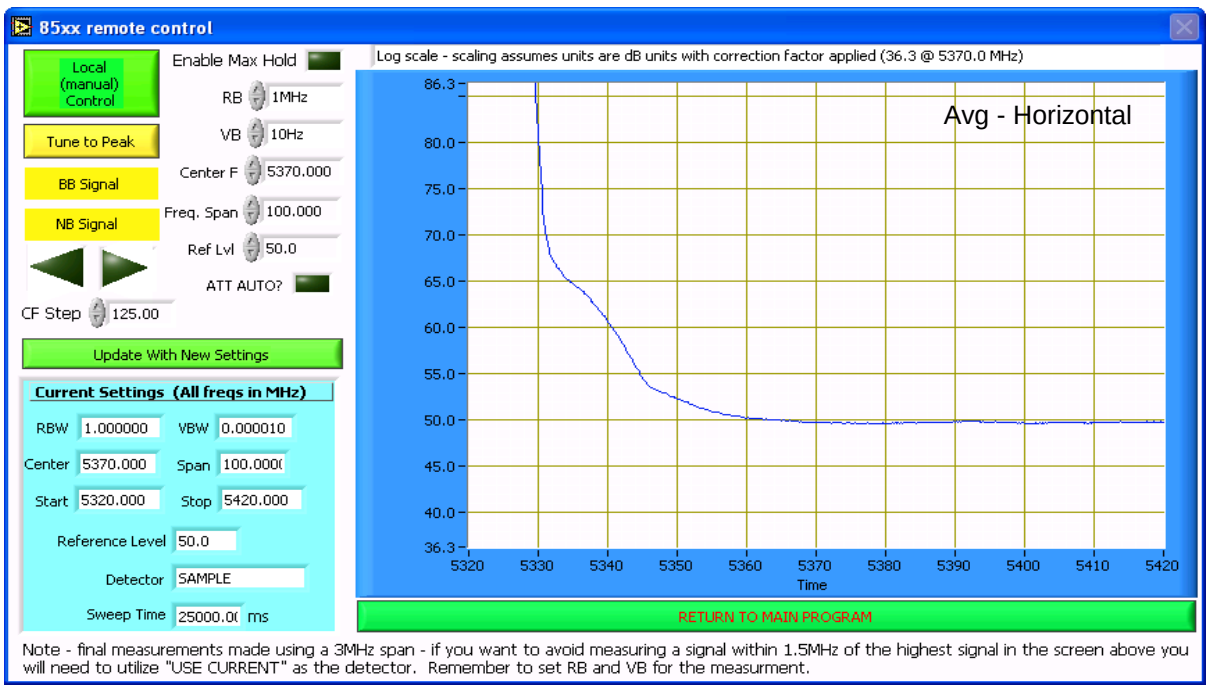
Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5350.000	52.4	H	54.0	-1.6	AVG	243	1.0	Note 2
5352.900	72.3	H	74.0	-1.7	PK	243	1.0	Note 2
5350.760	68.5	V	74.0	-5.5	PK	190	1.1	Note 2
5350.000	50.5	V	54.0	-3.5	AVG	190	1.1	Note 2

Note 2:	Target GC = 28 and AP=16.6 dBm, passing GC=27 and AP=16.1 dBm.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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 #3b: High Channel @ 5320 MHz (band edge at 5350 MHz)





Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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)

Sample ID: MAC:0016EA02D4D0
Date of Test: 6/13/2008
Test Engineer: Suhaila Khushzad
Test Location: Chamber # 3

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
				26	16.7

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	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5492.250	100.5	H	-	-	AVG	106	1.0	
5492.250	108.5	H	-	-	PK	106	1.0	
5506.000	97.2	V	-	-	AVG	169	1.2	
5506.000	105.4	V	-	-	PK	169	1.2	

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

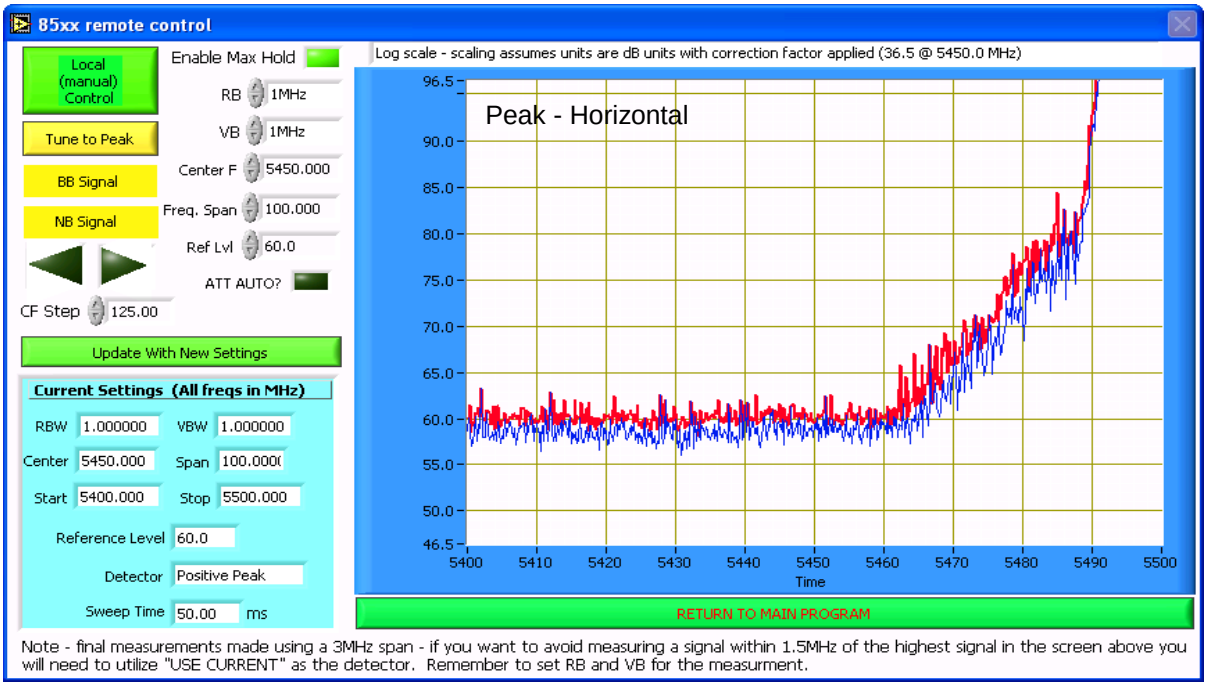
Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5457.010	49.5	H	54.0	-4.5	AVG	106	1.0	
5457.620	63.2	H	74.0	-10.8	PK	106	1.0	
5457.020	49.2	V	54.0	-4.8	AVG	169	1.3	
5458.820	62.4	V	74.0	-11.6	PK	169	1.3	

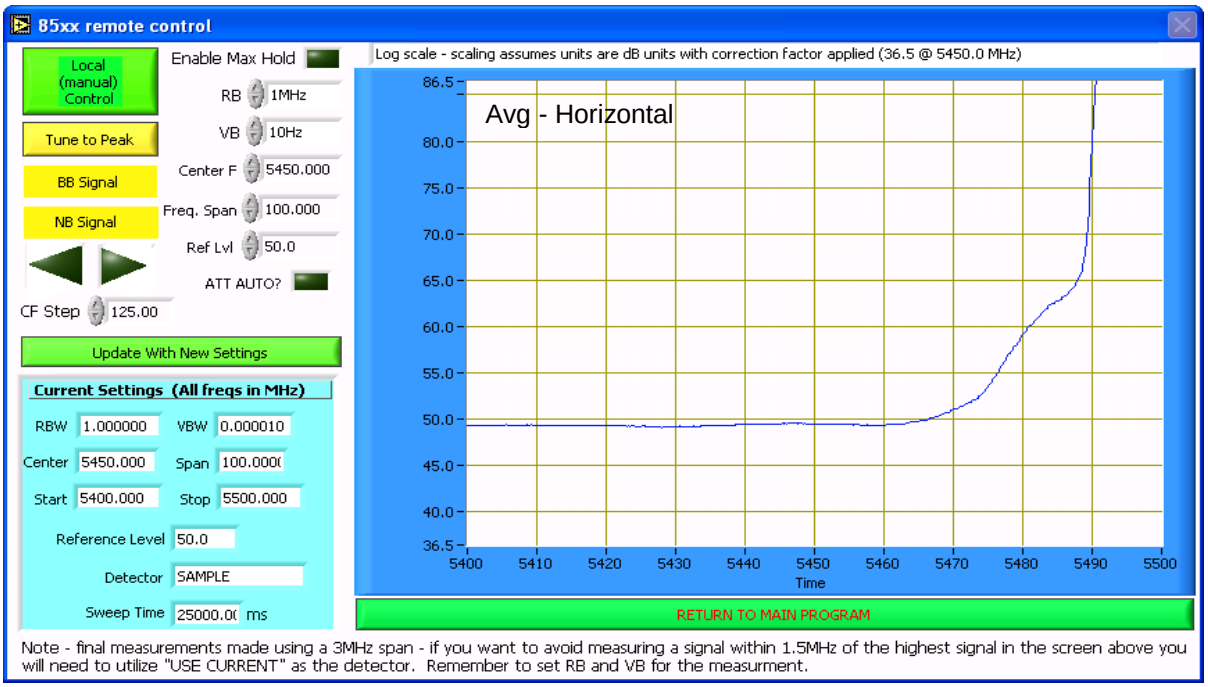
5460 - 5470 MHz, Limit is -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak at 3m)

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5469.750	51.4	H	68.3	-16.9	AVG	106	1.0	
5469.240	68.9	H	88.3	-19.4	PK	106	1.0	
5468.740	67.2	V	88.3	-21.1	??	169	1.3	
5469.860	50.7	V	68.3	-17.6	??	169	1.3	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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)





Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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

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

Sample ID: MAC:0016EA02D4D0

Date of Test: 6/13/2008

Test Engineer: Suhaila Khushzad

Test Location: Chamber # 3

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

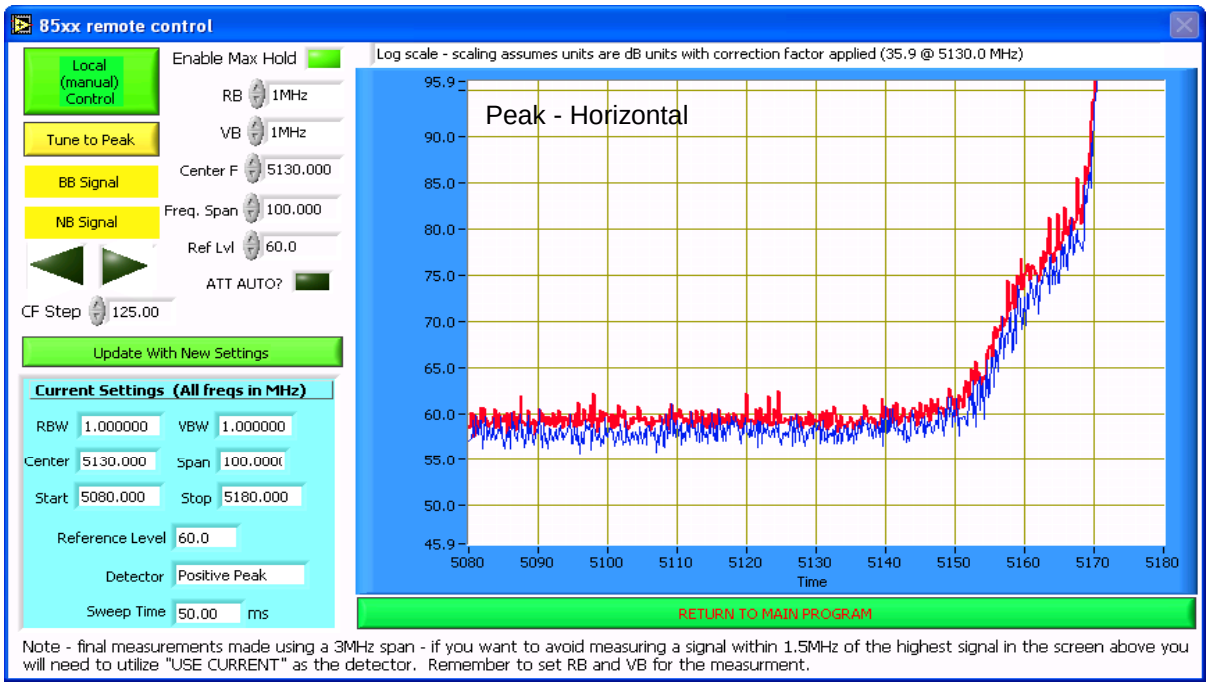
Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5174.670	102.7	H	-	-	AVG	231	1.0	
5174.670	113.1	H	-	-	PK	231	1.0	
5184.080	100.0	V	-	-	AVG	223	1.0	
5184.080	109.4	V	-	-	PK	223	1.0	

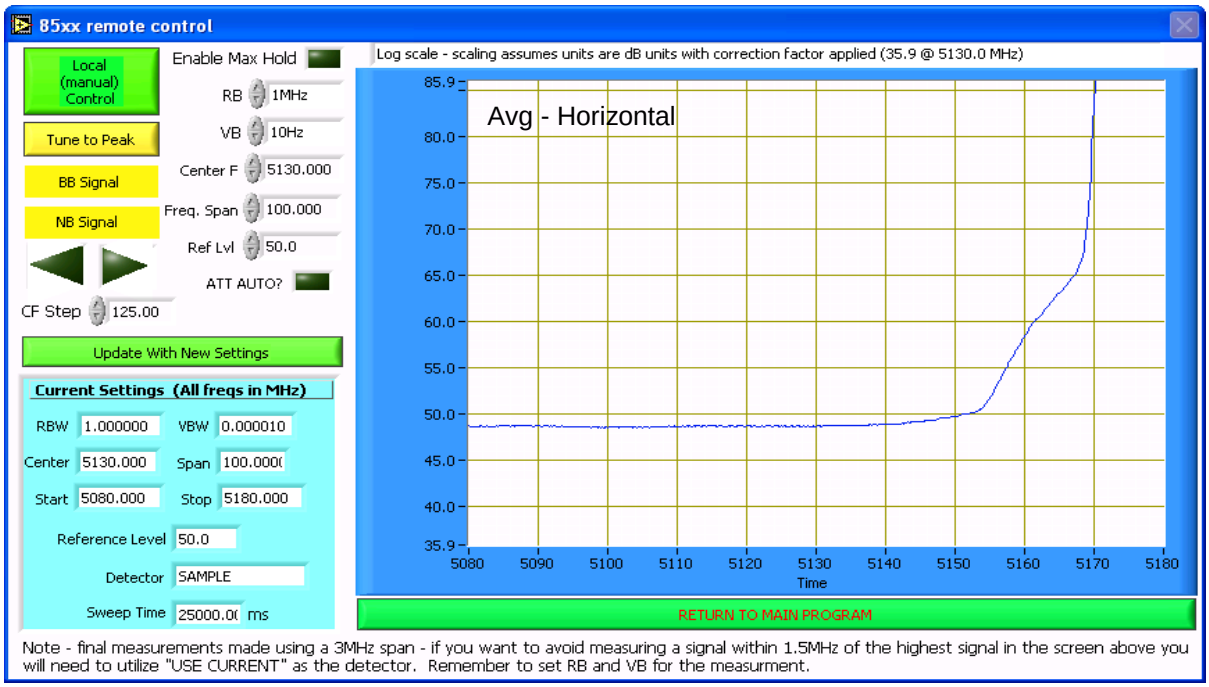
Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5149.900	50.2	H	54.0	-3.8	AVG	231	1.0	
5149.750	66.3	H	74.0	-7.7	PK	231	1.0	
5148.400	61.9	V	74.0	-12.1	PK	223	1.0	
5148.870	49.2	V	54.0	-4.8	AVG	223	1.0	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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
Run #4a: Low Channel @ 5180 MHz (band edge at 5150 MHz)





Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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
Run #4b: High Channel @ 5320 MHz (band edge at 5350 MHz)

Sample ID: MAC:0016EA02D4D0
Date of Test: 6/13/2008
Test Engineer: Suhaila Khushzad
Test Location: Chamber # 3

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

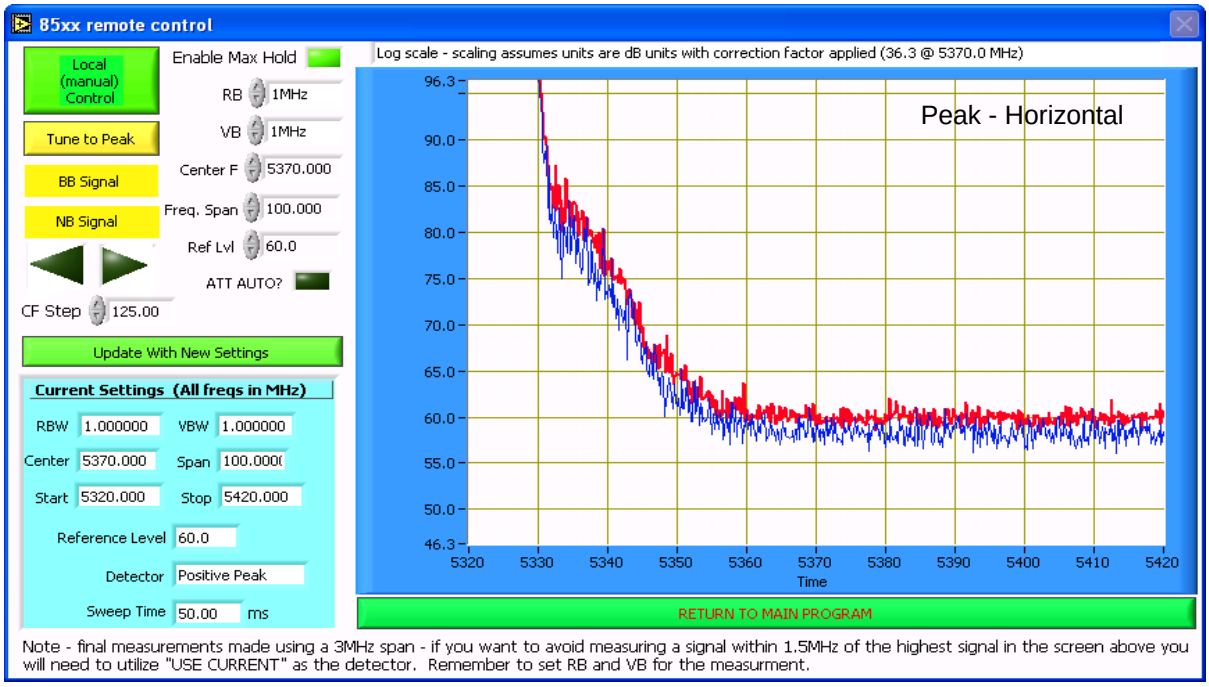
Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5316.750	104.4	H	-	-	AVG	255	1.2	
5316.750	114.5	H	-	-	PK	255	1.2	
5316.080	102.2	V	-	-	AVG	199	1.1	
5316.080	112.4	V	-	-	PK	199	1.1	

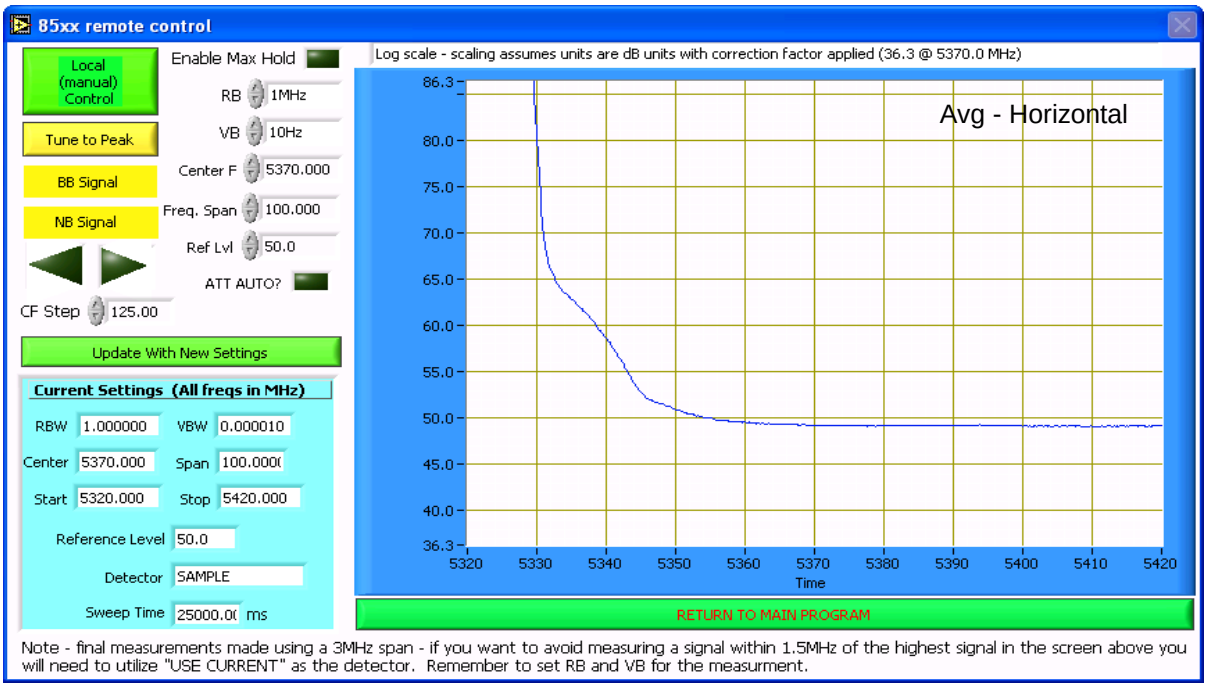
Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5350.050	51.0	H	54.0	-3.0	AVG	255	1.2	
5352.130	68.5	H	74.0	-5.5	PK	255	1.2	
5351.340	65.6	V	74.0	-8.4	PK	199	1.1	
5350.070	50.1	V	54.0	-3.9	AVG	199	1.1	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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
Run #4b: High Channel @ 5320 MHz (band edge at 5350 MHz)





Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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

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

Sample ID: MAC:0016EA02D4D0
Date of Test: 6/13/2008
Test Engineer: Ben Jing
Test Location: Chamber # 3

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
21.5	13.6	23.5	13.5		

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	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5498.540	97.6	V	-	-	AVG	148	1.2	RB = 1MHz, VB = 10Hz
5498.540	106.8	V	-	-	PK	148	1.2	RB = VB = 1MHz
5498.520	98.0	H	-	-	AVG	234	1.2	RB = 1MHz, VB = 10Hz
5498.520	108.5	H	-	-	PK	234	1.2	RB = VB = 1MHz

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

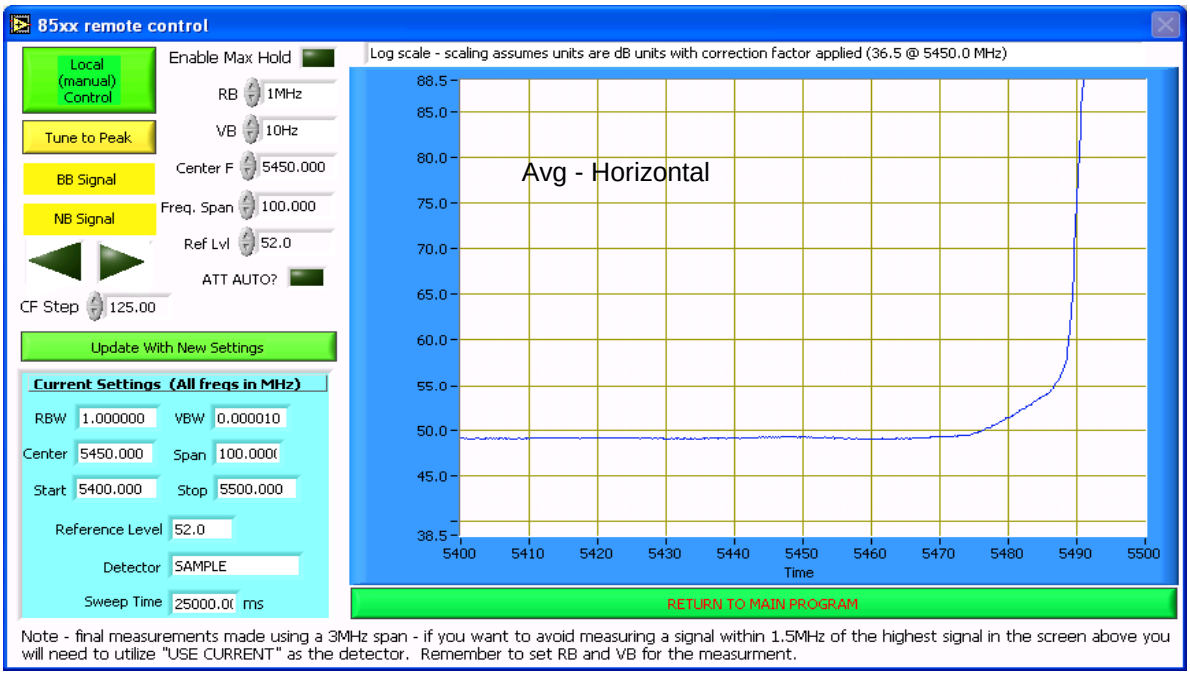
Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5459.830	61.5	V	74.0	-12.5	PK	180	1.2	Note 1
5459.780	49.2	V	54.0	-4.8	AVG	180	1.2	Note 1
5459.770	62.0	H	74.0	-12.0	PK	249	1.2	Note 1
5459.700	49.3	H	54.0	-4.7	AVG	249	1.2	Note 1

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

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5469.790	50.5	H	68.3	-17.8	AVG	233	1.1	
5469.790	61.6	H	88.3	-26.7	PK	233	1.1	
5469.870	50.5	V	68.3	-17.8	AVG	160	1.1	
5469.870	61.2	V	88.3	-27.1	PK	160	1.1	

Note 1:	Target Chain A : GC = 23.5 , AP=13.6 dBm ; Setting Chain A : GC= 21.5 , AP=13.6 dBm.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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:	T71850 Band Edge
		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)

Sample ID: MAC:0016EA02D4D0
Date of Test: 6/13/2008
Test Engineer: Ben Jing
Test Location: Chamber # 3

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
28. 0	13.5			28.5	13.6

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

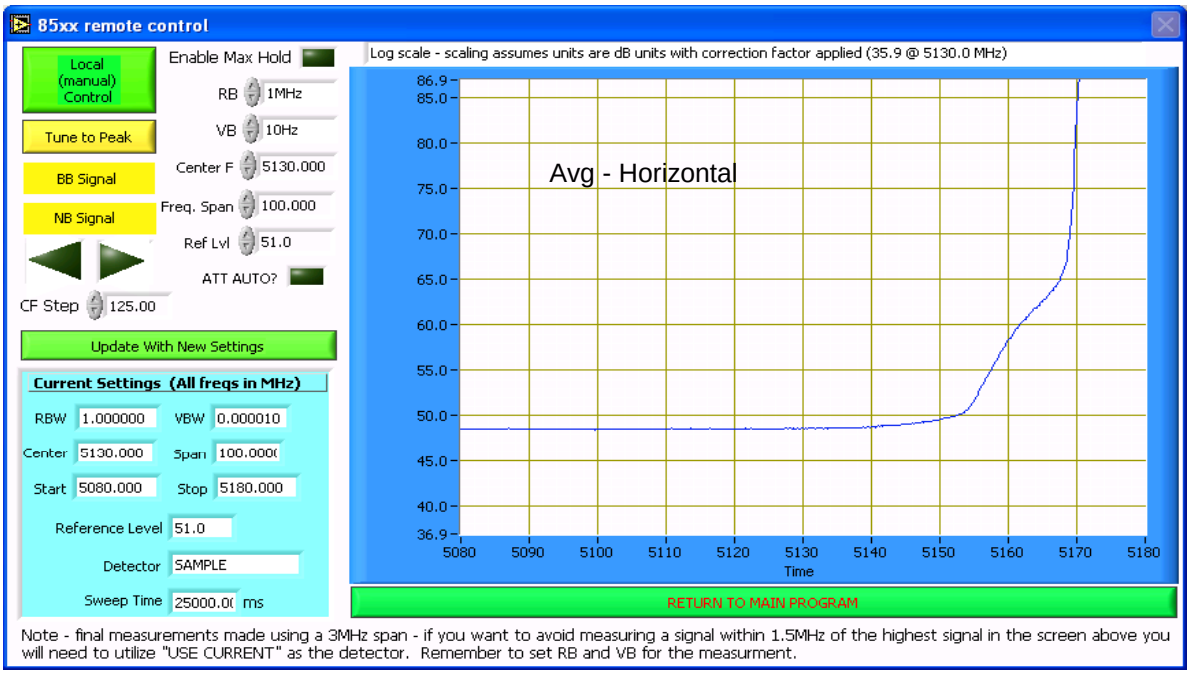
Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5178.560	97.7	V	-	-	AVG	154	1.0	RB = 1MHz, VB = 10Hz
5178.560	107.2	V	-	-	PK	154	1.0	RB = VB = 1MHz
5178.780	102.7	H	-	-	AVG	243	1.0	RB = 1MHz, VB = 10Hz
5178.780	113.8	H	-	-	PK	243	1.0	RB = VB = 1MHz

Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5149.840	51.4	V	74.0	-22.6	PK	170	1.0	Note 1
5149.740	49.2	V	54.0	-4.8	AVG	179	1.1	Note 1
5149.710	50.1	H	54.0	-3.9	AVG	242	1.0	Note 1
5149.890	67.2	H	74.0	-6.8	PK	240	1.0	Note 1

Note 1:	Target Chain A : GC = 29.0 , AP=13.5 dBm ; Setting Chain A : GC= 28.0 , AP=13.5 dBm.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

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

Sample ID: MAC:0016EA02D4D0
Date of Test: 6/13/2008
Test Engineer: Ben Jing
Test Location: Chamber # 3

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
24. 0	13.6			26. 0	13.5

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

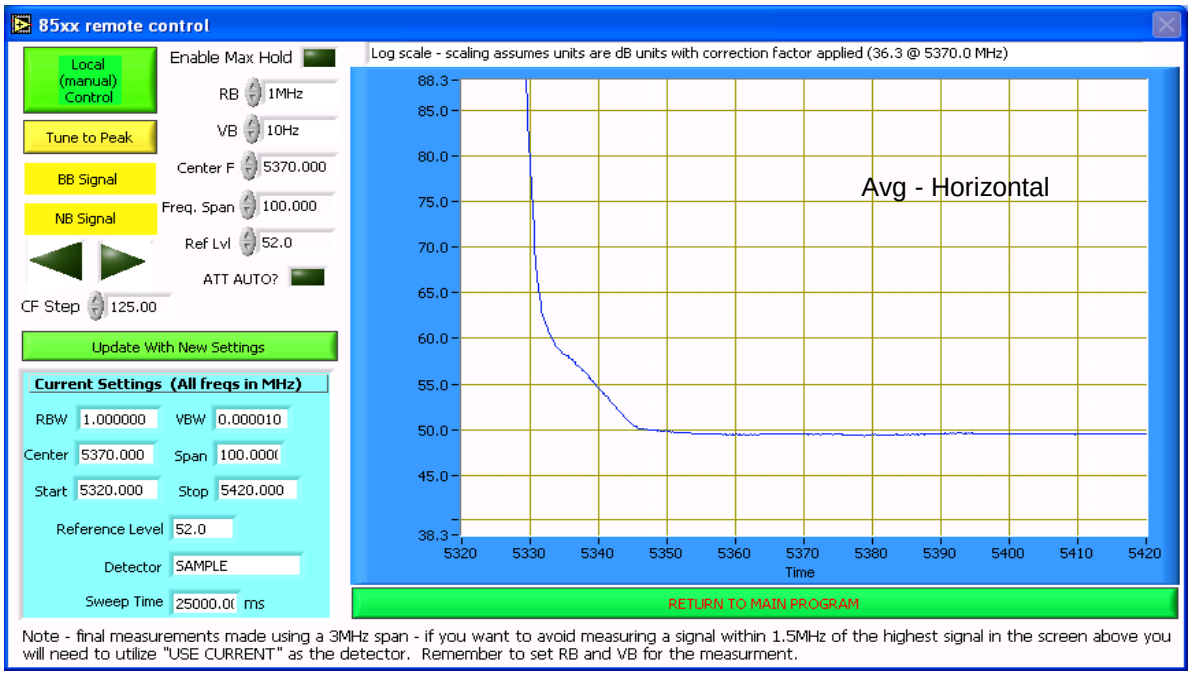
Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5318.650	101.1	V	-	-	AVG	208	1.1	RB = 1MHz, VB = 10Hz
5318.650	111.7	V	-	-	PK	208	1.1	RB = VB = 1MHz
5318.630	102.2	H	-	-	AVG	247	1.0	RB = 1MHz, VB = 10Hz
5318.630	112.4	H	-	-	PK	247	1.0	RB = VB = 1MHz

Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5350.100	49.5	V	54.0	-4.5	??	210	1.1	Note 1
5350.170	63.4	V	74.0	-10.6	??	213	1.1	Note 1
5350.100	50.1	H	54.0	-3.9	??	245	1.0	Note 1
5350.240	64.9	H	74.0	-9.1	??	245	1.0	Note 1

Note 1:	Target Chain A : GC = 25.5 , AP=13.6 dBm ; Setting Chain A : GC= 24.0 , AP=13.6 dBm.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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:	T71850 Band Edge
		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)

Sample ID: MAC:0016EA02D4D0
Date of Test: 6/13/2008
Test Engineer: Ben Jing
Test Location: Chamber # 3

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	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5501.040	97.0	V	-	-	AVG	166	1.0	RB = 1MHz, VB = 10Hz
5501.040	106.1	V	-	-	PK	166	1.0	RB = VB = 1MHz
5498.830	98.9	H	-	-	AVG	245	1.0	RB = 1MHz, VB = 10Hz
5498.830	109.4	H	-	-	PK	245	1.0	RB = VB = 1MHz

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

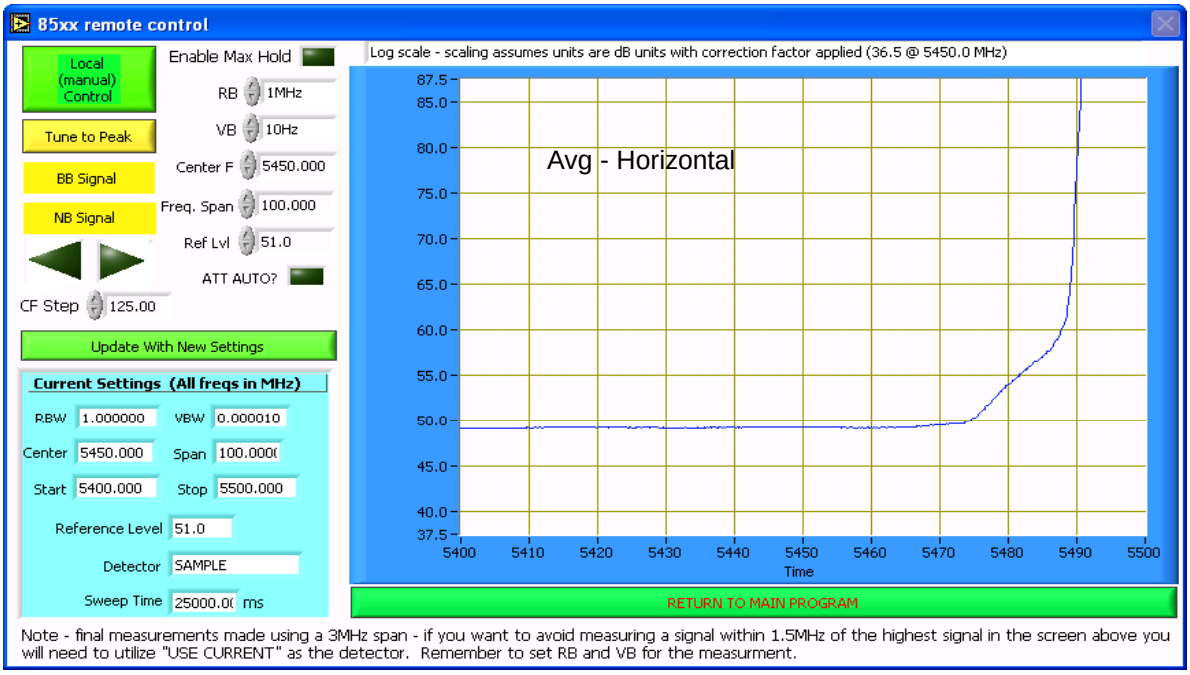
Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5459.700	49.2	V	54.0	-4.8	AVG	176	1.0	Note 1
5459.820	61.5	V	74.0	-12.5	PK	174	1.0	Note 1
5459.710	49.5	H	54.0	-4.5	AVG	247	1.0	Note 1
5459.810	62.3	H	74.0	-11.7	PK	244	1.0	Note 1

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

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5469.710	50.4	V	68.3	-17.9	AVG	177	1.0	
5469.710	61.6	V	88.3	-26.7	PK	177	1.0	
5469.830	51.0	H	68.3	-17.3	AVG	250	1.1	
5469.830	64.0	H	88.3	-24.3	PK	250	1.1	

Note 1:	Target Chain A : GC = 24.0 , AP=13.7 dBm ; Setting Chain A : GC= 22.5 , AP=13.7 dBm.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

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)

Sample ID: MAC:0016EA02D4D0
Date of Test: 6/13/2008
Test Engineer: Ben Jing
Test Location: Chamber # 3

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
		28. 5	13.6	28. 5	13.5

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

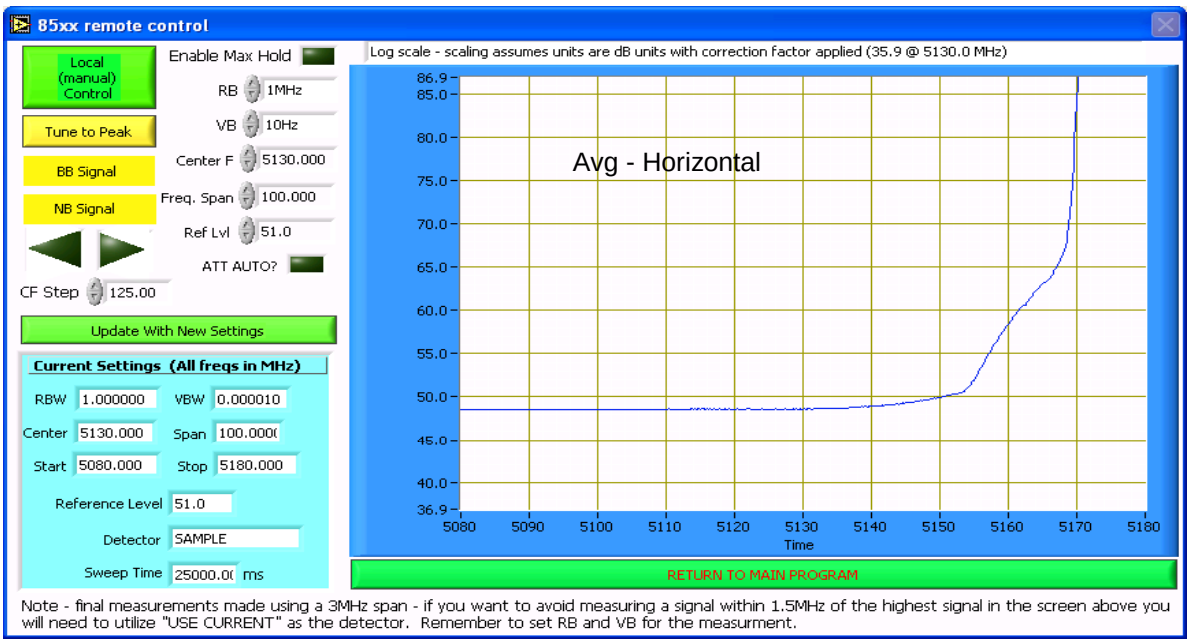
Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5178.570	99.1	V	-	-	AVG	204	1.0	
5178.570	110.2	V	-	-	PK	204	1.0	
5178.510	102.8	H	-	-	AVG	243	1.0	
5178.510	113.2	H	-	-	PK	243	1.0	

Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5149.780	49.2	V	54.0	-4.8	AVG	198	1.0	
5149.710	62.9	V	74.0	-11.1	PK	199	1.0	
5149.700	50.1	H	54.0	-3.9	AVG	246	1.0	
5149.750	65.4	H	74.0	-8.6	PK	250	1.2	

Note 1:	Chain B Target : GC = 29.0 , AP=13.5 dBm ; Chain B Setting : GC= 28.5 , AP=13.5 dBm.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

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

Sample ID: MAC:0016EA02D4D0
Date of Test: 6/16/2008
Test Engineer: Joseph Cadigal
Test Location: Chamber # 3

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
		25	13.6	26	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	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5327.000	96.8	V	-	-	AVG	34	1.3	
5327.000	106.6	V	-	-	PK	34	1.3	
5327.330	98.8	H	-	-	AVG	70	1.0	
5327.330	108.9	H	-	-	PK	70	1.0	

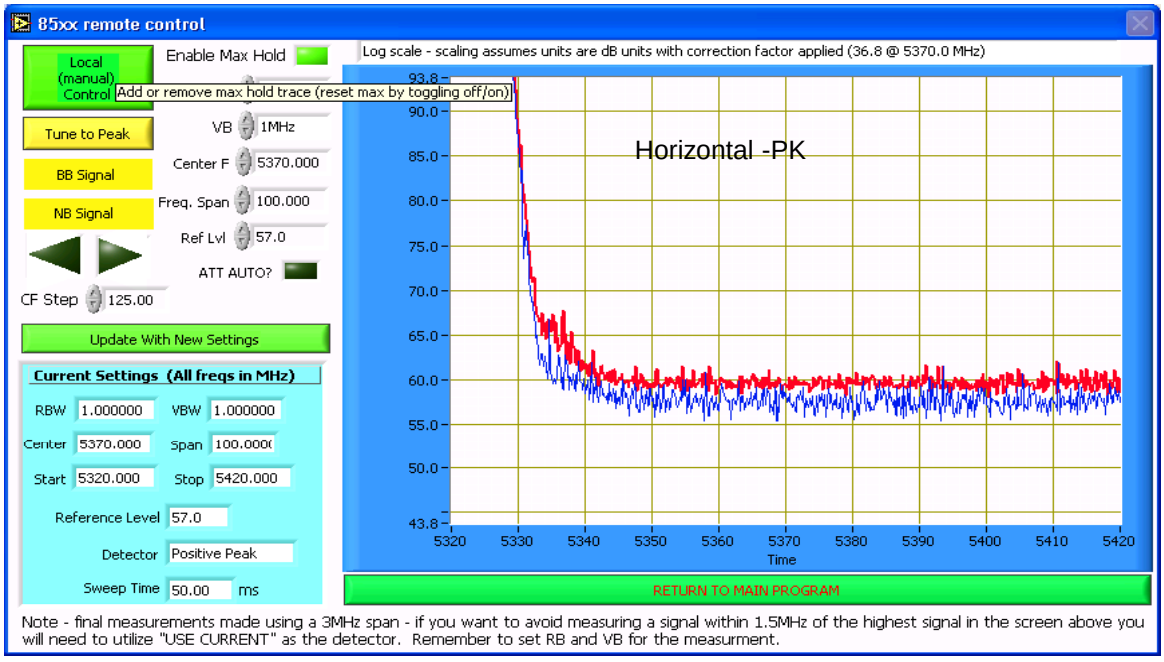
Band Edge Signal Field Strength

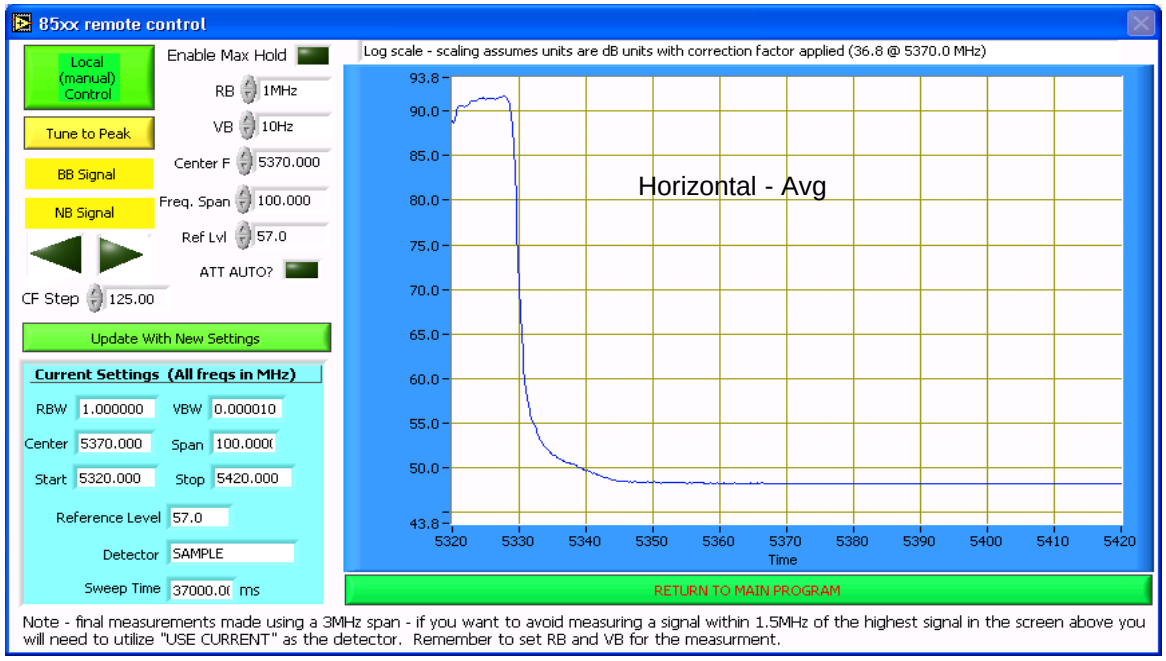
Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5351.230	49.4	H	54.0	-4.6	AVG	12	1.0	
5351.230	60.3	H	74.0	-13.7	PK	12	1.0	
5350.370	48.5	V	54.0	-5.5	AVG	18	1.3	
5350.370	60.8	V	74.0	-13.2	PK	18	1.3	

Note 1:	Chain B Target : GC = 24.5 , AP=13.6 dBm ; Chain B Setting : GC= 25 , AP=13.6 dBm.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

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





Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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)

Sample ID: MAC:0016EA02D4D0
Date of Test: 6/16/2008
Test Engineer: Joseph Cadigal
Test Location: Chamber # 3

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	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5493.330	93.7	V	-	-	AVG	329	1.1	
5493.330	104.4	V	-	-	PK	329	1.1	
5493.500	97.7	H	-	-	AVG	76	1.2	
5493.500	107.9	H	-	-	PK	76	1.2	

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

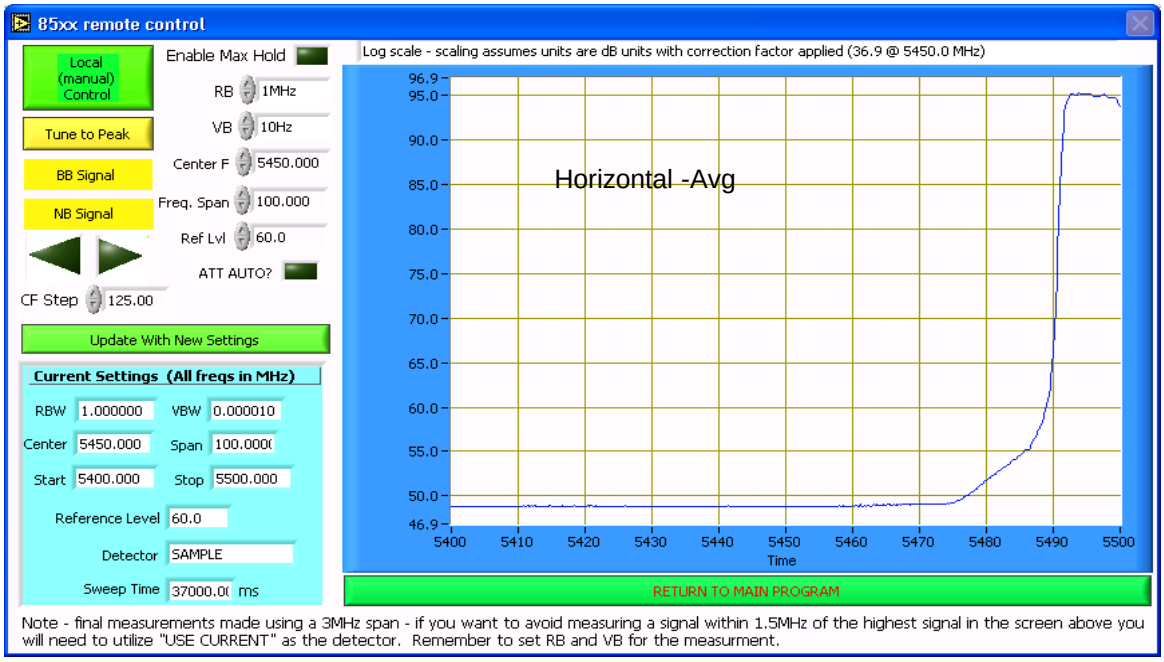
Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5459.680	49.7	H	54.0	-4.3	AVG	75	1.2	
5459.680	61.3	H	74.0	-12.7	PK	75	1.2	
5459.920	49.4	V	54.0	-4.6	AVG	334	1.6	
5459.920	60.6	V	74.0	-13.4	PK	334	1.6	

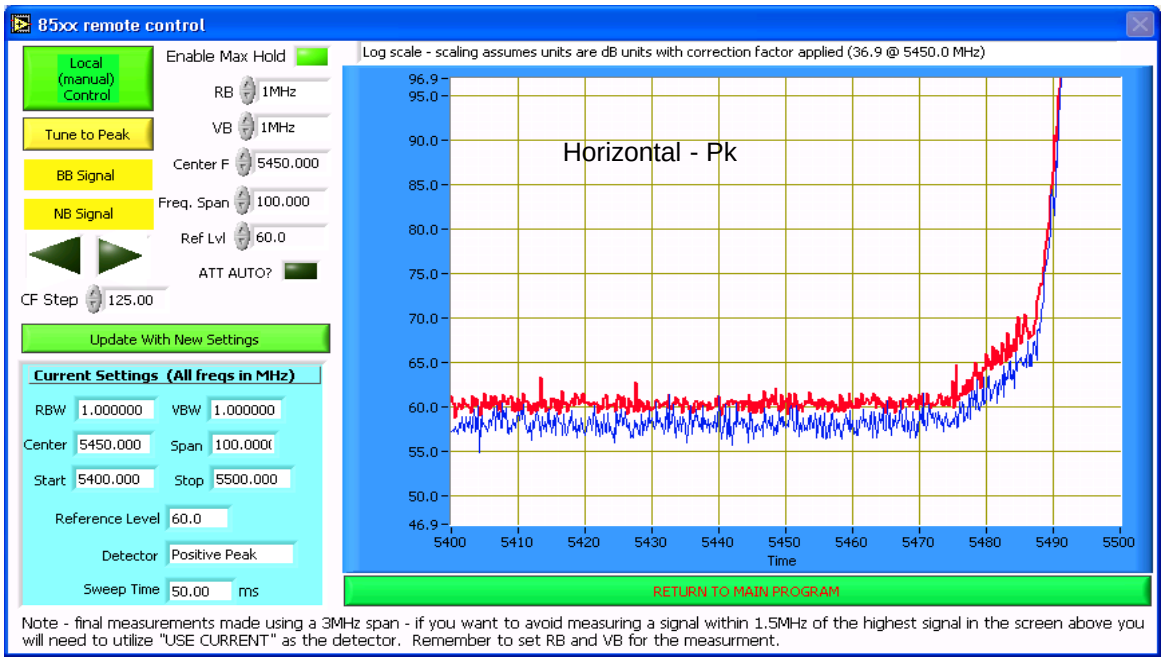
5460 - 5470 MHz, Limit is -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak at 3m)

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5468.960	49.6	H	68.3	-18.7	AVG	61	1.0	
5468.960	61.5	H	88.3	-26.8	PK	61	1.0	
5468.940	49.5	V	68.3	-18.8	AVG	7	1.0	
5468.940	61.6	V	88.3	-26.7	PK	7	1.0	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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)





Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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

Sample ID: MAC:0016EA02D4D0
Date of Test: 6/16/2008
Test Engineer: Joseph Cadigal
Test Location: Chamber # 3

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	12.0	30.5	12.2

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

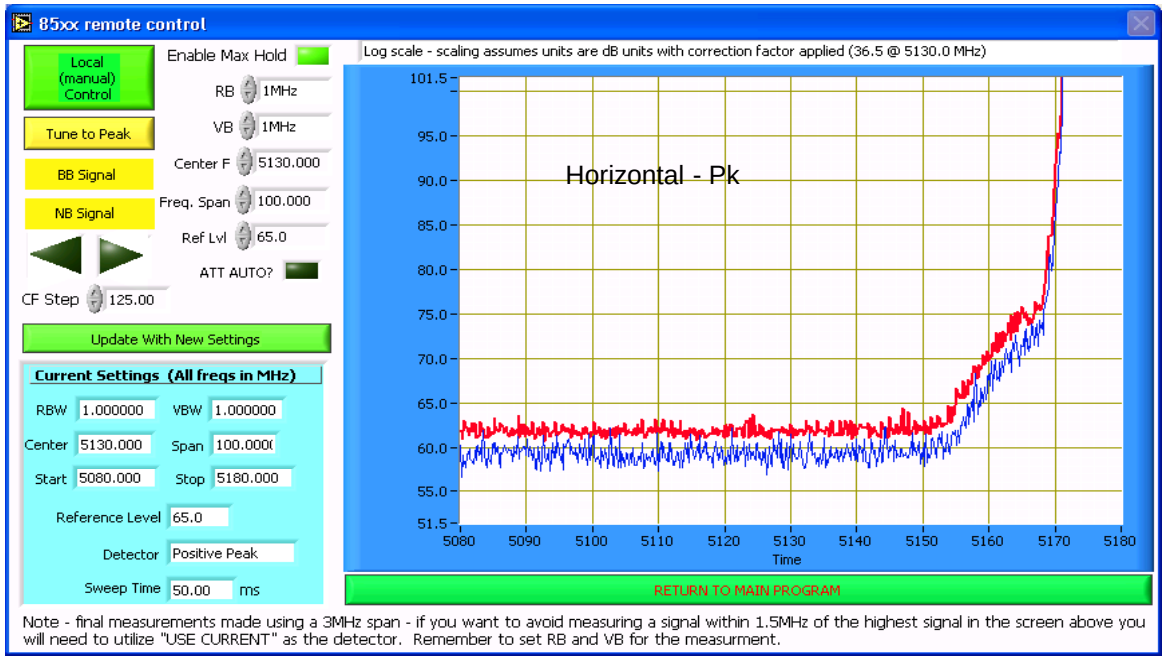
Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5185.670	94.0	H	-	-	AVG	36	1.0	
5185.670	106.0	H	-	-	PK	36	1.0	
5187.670	93.9	V	-	-	AVG	35	1.0	
5187.670	105.5	V	-	-	PK	35	1.0	

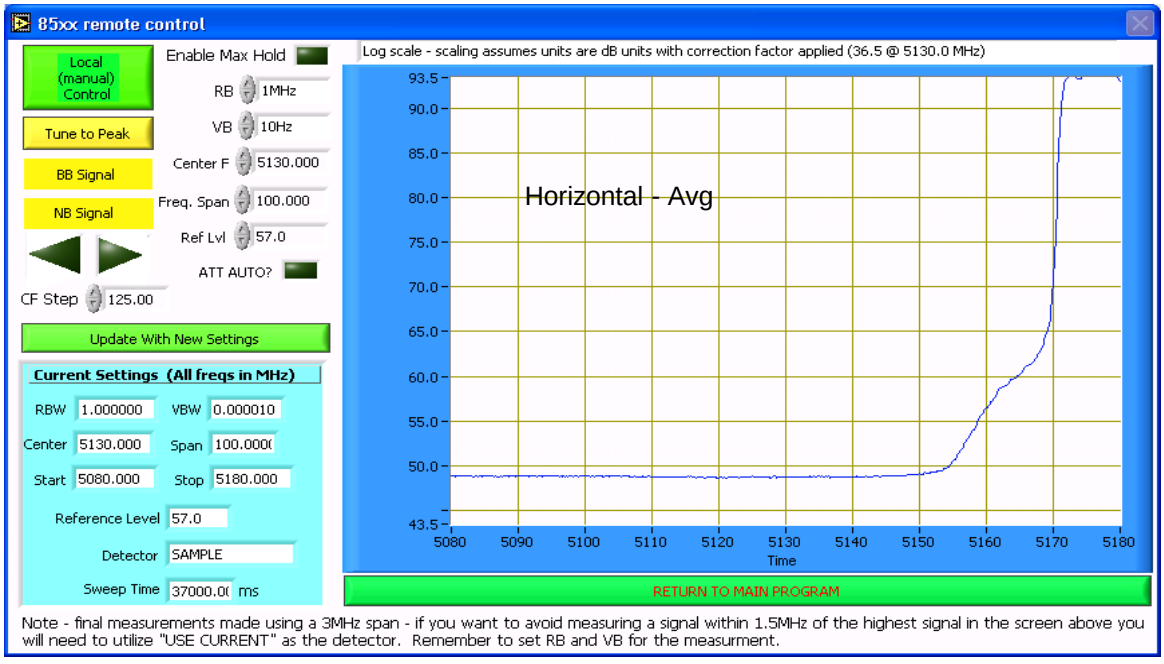
Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5149.870	50.4	H	54.0	-3.6	AVG	56	1.0	
5149.870	63.1	H	74.0	-10.9	PK	56	1.0	
5149.460	49.8	V	54.0	-4.2	AVG	18	1.5	
5149.460	60.9	V	74.0	-13.1	PK	18	1.5	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

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





Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

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

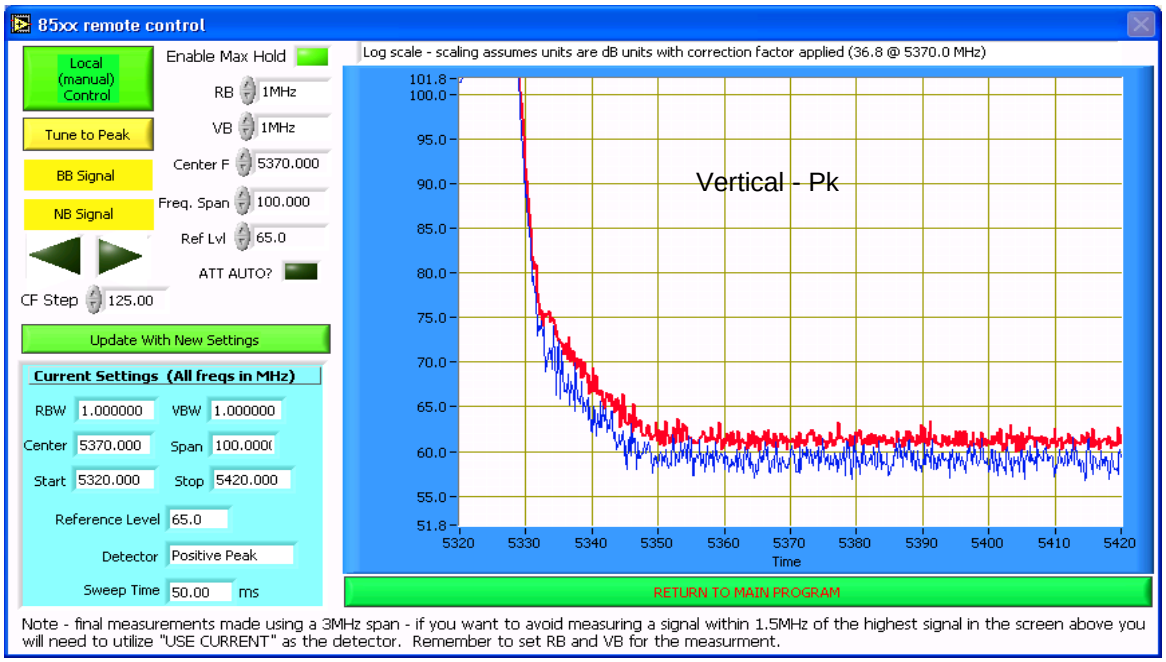
Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
27	12.2	27	12.2	27	12.0

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	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5327.830	96.9	V	-	-	AVG	344	1.2	
5327.830	107.5	V	-	-	PK	344	1.2	
5326.170	99.9	H	-	-	AVG	70	1.0	
5326.170	111.8	H	-	-	PK	70	1.0	

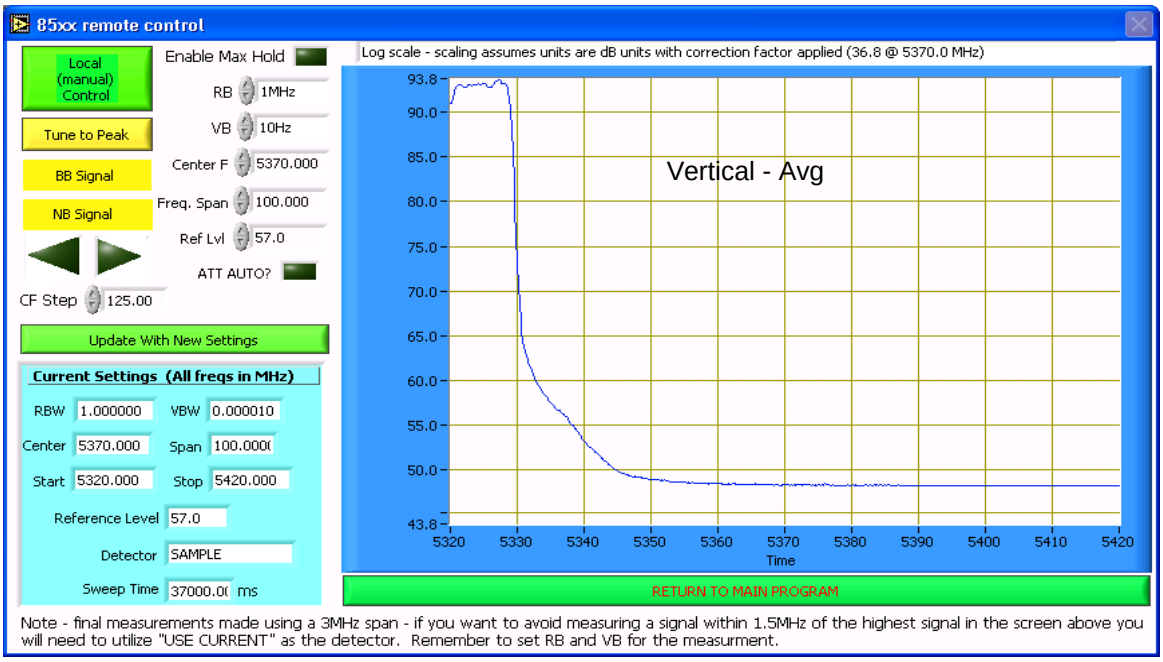
Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5351.290	50.0	V	54.0	-4.0	AVG	5	1.2	
5351.290	62.3	V	74.0	-11.7	PK	5	1.2	
5351.040	49.5	H	54.0	-4.5	AVG	295	1.0	
5351.040	60.7	H	74.0	-13.3	PK	295	1.0	



Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

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



Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Sample ID: MAC:0016EA02D4D0
Date of Test: 6/16/2008
Test Engineer: Ben Jing
Test Location: Chamber # 3

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	12.1

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	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5498.830	92.1	V	-	-	AVG	147	1.0	
5498.830	102.5	V	-	-	PK	147	1.0	
5499.060	95.8	H	-	-	AVG	258	1.0	
5499.060	106.5	H	-	-	PK	258	1.0	

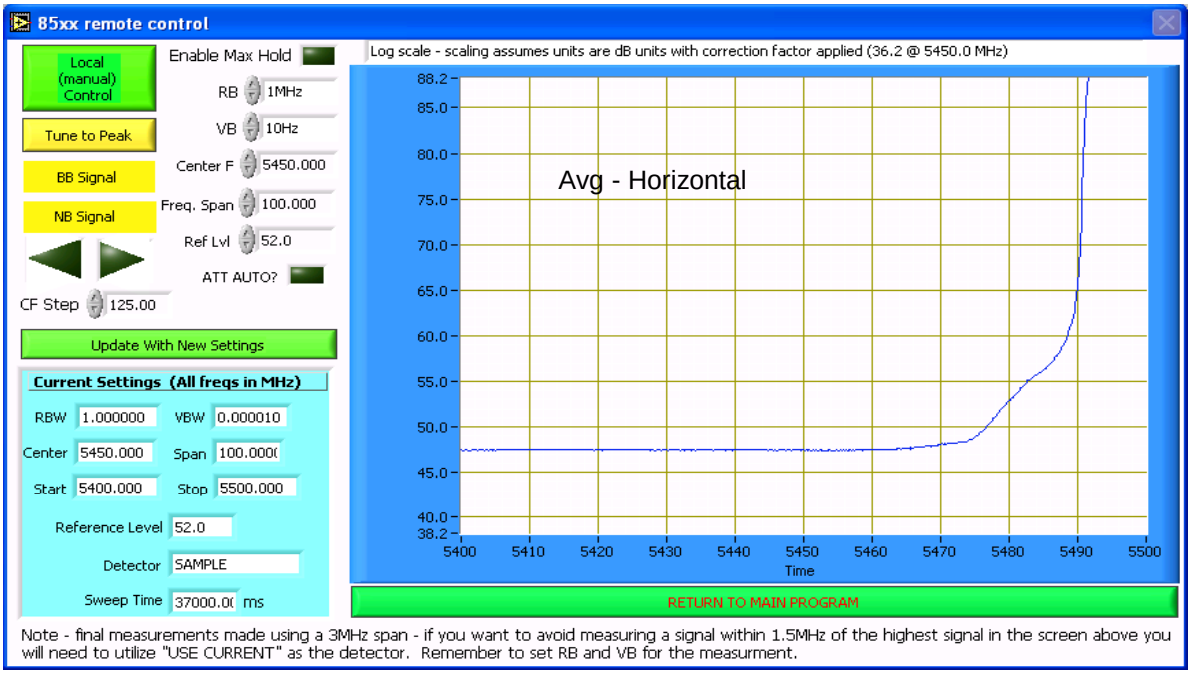
5460 Restricted Band Feld strength limit = 54dBuV/m avg, 74dBuV/m peak at 3m

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5459.700	48.0	H	54.0	-6.0	AVG	257	1.3	
5459.830	61.8	H	74.0	-12.2	PK	263	1.2	
5459.700	47.8	V	54.0	-6.2	AVG	155	1.1	
5458.830	60.8	V	74.0	-13.2	PK	165	1.1	

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

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5469.880	48.9	V	68.3	-19.4	AVG	179	1.1	
5469.880	60.8	V	88.3	-27.5	PK	179	1.1	
5469.830	49.4	H	68.3	-18.9	AVG	247	1.1	
5469.830	61.2	H	88.3	-27.1	PK	247	1.1	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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:	T71850 Band Edge
		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 802.11n 20MHz Universe Antenna

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

Note - the dual chain mode was not tested as the triple-chain mode was tested at the higher dual chain output power in the 5.6GHz band and the single chain power in the other bands.

Note - the center channels in the 5150-5250 and 5250-5350MHz bands was tested primarily to verify the emissions related to the fixed LO common to all operating frequencies. Harmonics of the intentional signal at bottom and top frequencies in the band are covered by the measurements in triple chain mode which were performed with the power s=at the highest single chain power level.

Run #	Mode	Channel	Power Setting	Measured Power	Test Performed	Limit	Result / Margin
1a	802.11n20 Chain A	5200	29.5	17.0	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.407	50.5dBµV/m @ 6933.3MHz (-17.8dB)
1b	802.11n20 Chain A	5280	26.5	17.0	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.407	37.0dBµV/m @ 1497.7MHz (-17.0dB)
1c,d,e	802.11n20 Chain A	5500 5600 5700	24.5 24.5 24.5	17.5 17.5 16.5	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.407	44.2dBµV/m @ 10996.9MHz (-9.8dB)
2a	802.11n20 Chain B	5200	28.0	16.5	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.407	38.5dBµV/m @ 7500.0MHz (-15.5dB)
2b	802.11n20 Chain B	5280	25.0	16.5	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.407	38.2dBµV/m @ 1497.9MHz (-15.8dB)
2c,d,e	802.11n20 Chain B	5500 5600 5700	25.0 25.0 25.0	16.5 16.5 16.7	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.407	47.3dBµV/m @ 7599.9MHz (-6.7dB)
3a	802.11a Chain C	5200	29.5	16.5	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.407	37.0dBµV/m @ 1498.1MHz (-17.0dB)
3b	802.11a Chain C	5280	28.5	16.5	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.407	38.9dBµV/m @ 1497.9MHz (-15.1dB)

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Summary of Results

Run #	Mode	Channel	Power Setting	Measured Power	Test Performed	Limit	Result / Margin
3c,d,e	802.11a Chain C	5500 5600 5700	25.5 25.0 25.0	16.5 16.5 16.5	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.407	48.8 dBuV/m @ 10999 MHz (-5.2dB)
4	802.11n20 Chain A+B+C	5180	A: 33. 5 B: 34. 5 C: 35. 0	A: 16.5 B: 16.5 C: 16.5	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.407	53.8 dBµV/m @ 6906.6 MHz(-14.5dB)
		5200	A: B: C:	A: 16.5 B: 16.5 C: 16.5	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.408	38.5 dBµV/m @ 7500.0MHz (-15.5dB)
		5240	A: B: C:	A: 16.5 B: 16.5 C: 16.5	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.409	30.0 dBµV/m @ 1497.8MHz (-24.0dB)
5	802.11n20 Chain A+B+C	5260	A: 31. 0 B: 32. 0 C: 33. 5	A: 16.5 B: 16.5 C: 16.5	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.407	38.0dBµV/m @ 1497.8MHz (-16.0dB)
		5280	A: 30. 5 B: 31. 5 C: 33. 5	A: 16.5 B: 16.5 C: 16.5	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.408	57.9 dBuV/m @ 3993.8 MHz (-16.1dB)
		5320	A: 29. 5 B: 31. 5 C: 33. 0	A: 16.5 B: 16.5 C: 16.5	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.409	45.6 dBuV/m @ 10642.8 MHz (-8.4dB)
6	802.11n20 Chain A+B+C	5500	A: 25.5 B: 26 C: 26.0	A: 15.5 B: 13.8 C: 13.5	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.407	46.3dBµV/m @ 10999.2MHz (-7.7dB)
		5600	A: 26.5 B: 29.0 C: 29.0	A: 16.4 B: 15.8 C: 16.3	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.408	44.0dBµV/m @ 11200.5MHz (-10.0dB)
		5700	A: 26.5 B: 29.0 C: 29.0	A: 15.2 B: 16 C: 16	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.409	48.6dBµV/m @ 11399.1MHz (-5.4dB)

Modifications Made During Testing

No modifications were made to the EUT during testing

Deviations From The Standard

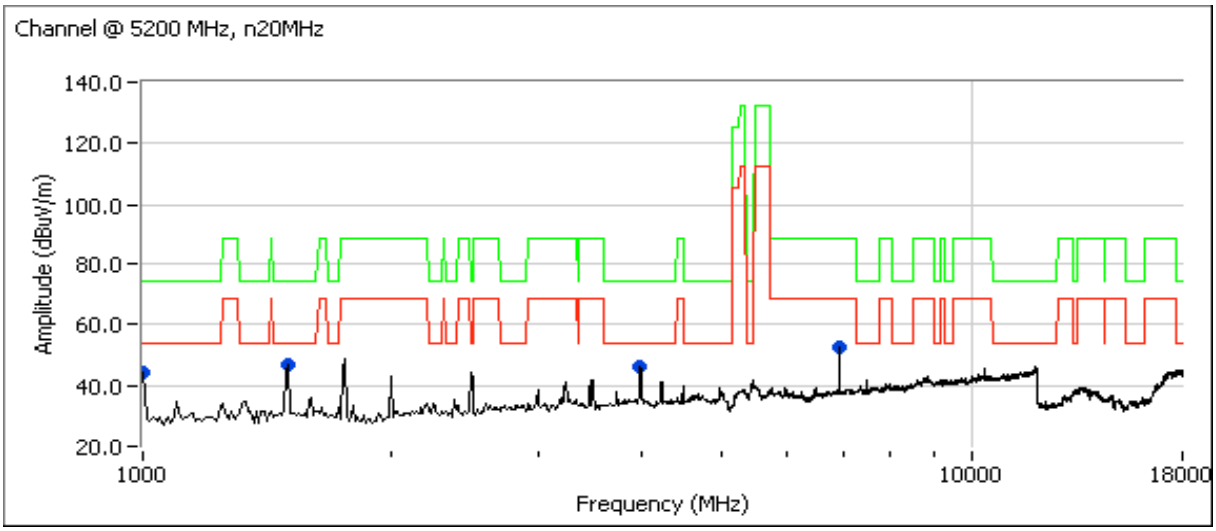
No deviations were made from the requirements of the standard.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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 20MHz Chain A

Sample ID: MAC:0016EA02D4D0
Date of Test: 6/17/2008
Suhaila Khushzad
Test Engineer: Jack Plotner
Peter Sales
Test Location: Chamber # 3

Run #1a: Center Channel @ 5200 MHz



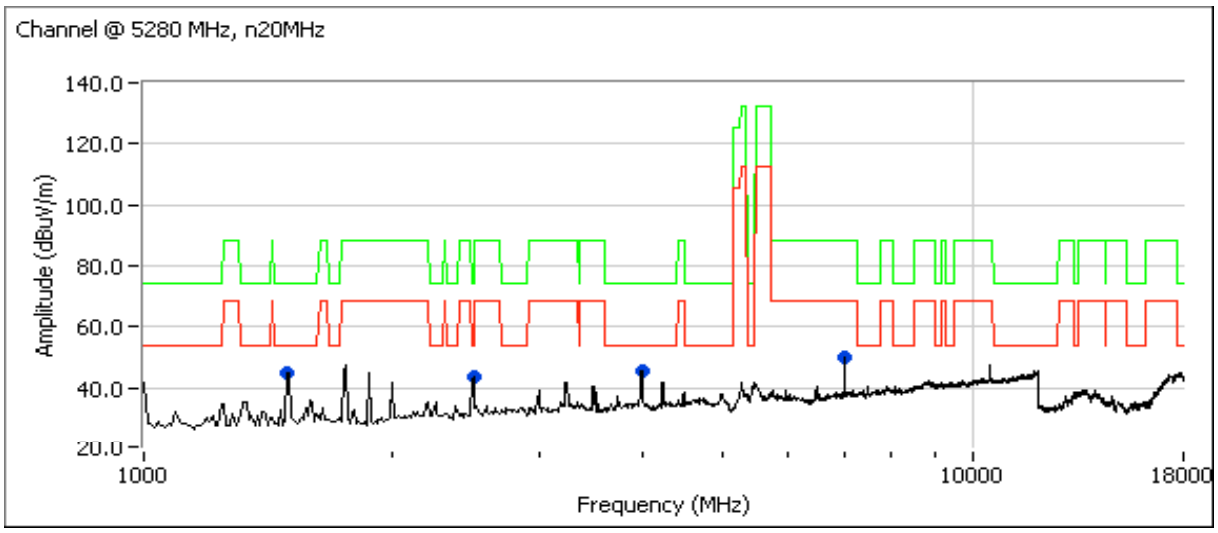
Spurious Emissions

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
6933.310	50.5	V	68.3	-17.8	AVG	203	1.2	
6933.310	53.7	V	88.3	-34.6	PK	203	1.2	
999.179	25.8	H	54.0	-28.2	AVG	41	1.0	
999.179	41.4	H	74.0	-32.6	PK	41	1.0	
1497.720	34.8	V	54.0	-19.2	AVG	114	1.0	
1497.720	51.9	V	74.0	-22.1	PK	114	1.0	
3997.580	33.9	V	54.0	-20.1	AVG	85	1.3	
3997.580	53.8	V	74.0	-20.2	PK	85	1.3	
1746.750	31.2	V	68.3	-37.1	AVG	223	1.0	
1746.750	52.0	V	88.3	-36.3	PK	223	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:	T71850 Band Edge
		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 20MHz Chain A
Run #1b: Center Channel @ 5280 MHz



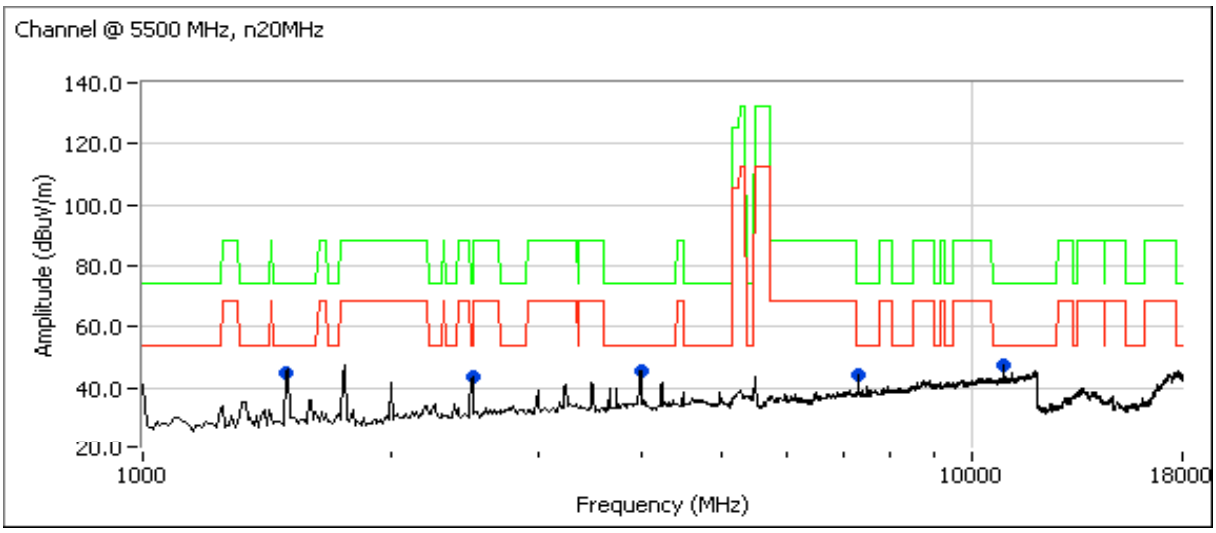
Spurious Emissions

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
1497.690	37.0	H	54.0	-17.0	AVG	217	1.0	
1497.690	50.2	H	74.0	-23.8	PK	217	1.0	
7039.800	45.3	H	68.3	-23.0	AVG	185	1.0	
7039.800	49.8	H	88.3	-38.5	PK	185	1.0	
7039.670	48.3	V	68.3	-20.0	AVG	210	1.0	
7039.670	51.8	V	88.3	-36.5	PK	210	1.0	
1497.860	38.7	V	54.0	-15.3	AVG	73	1.2	
1497.860	54.8	V	74.0	-19.2	PK	73	1.2	
3996.810	34.7	V	54.0	-19.3	AVG	104	1.6	
3996.810	56.2	V	74.0	-17.8	PK	104	1.6	
2496.720	34.0	V	54.0	-20.0	AVG	93	1.0	
2496.720	50.9	V	74.0	-23.1	PK	93	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:	T71850 Band Edge
		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 20MHz Chain A
Run # 1c: Low Channel @ 5500 MHz



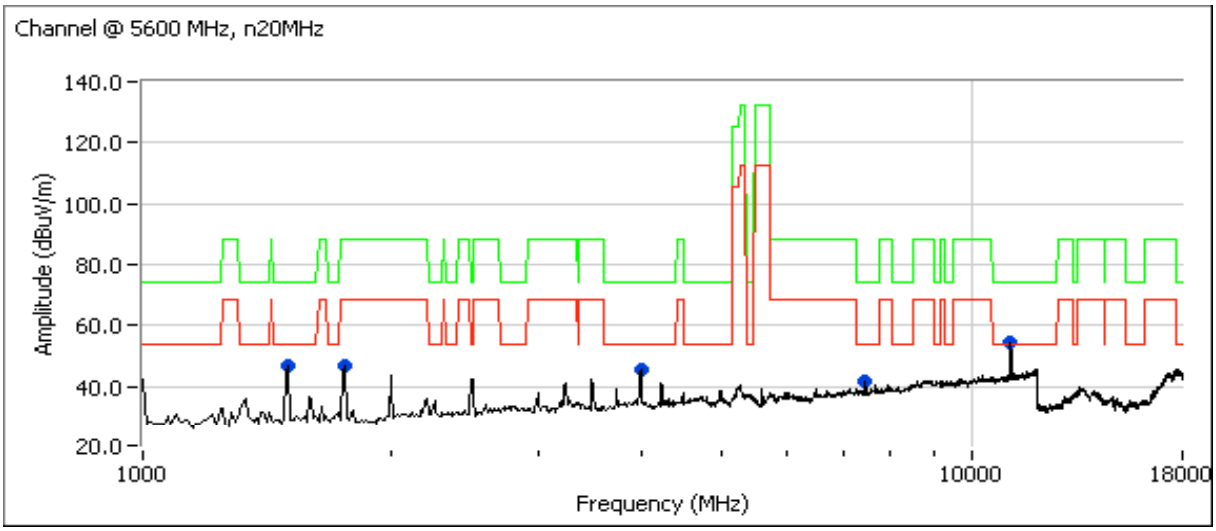
Spurious Emissions

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
10996.910	44.2	V	54.0	-9.8	AVG	145	1.0	
10996.910	57.2	V	74.0	-16.8	PK	145	1.0	
1497.890	36.2	H	54.0	-17.8	AVG	132	1.0	
1497.890	51.0	H	74.0	-23.0	PK	132	1.0	
3995.740	34.4	V	54.0	-19.6	AVG	87	1.6	
3995.740	54.4	V	74.0	-19.6	PK	87	1.6	
2490.400	33.4	V	54.0	-20.6	AVG	91	1.0	
2490.400	50.0	V	74.0	-24.0	PK	91	1.0	
7291.670	33.0	V	54.0	-21.0	AVG	225	1.3	
7291.670	43.7	V	74.0	-30.3	PK	225	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)

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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 20MHz Chain A
Run # 1d: Center Channel @ 5600 MHz



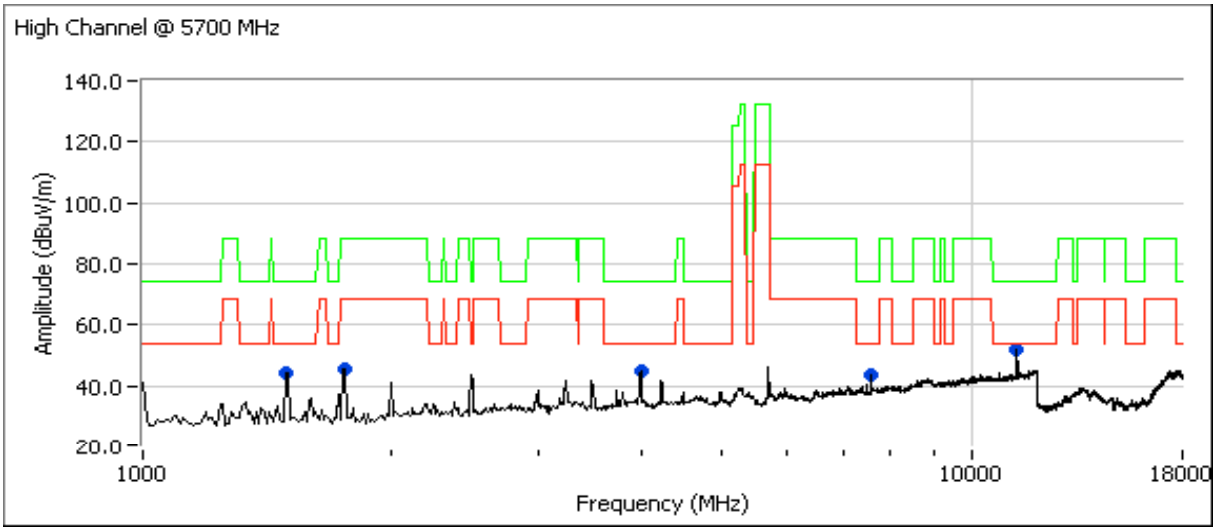
Spurious Emissions

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
11200.340	50.6	V	54.0	-3.4	AVG	94	1.9	
11200.340	63.3	V	74.0	-10.7	PK	94	1.9	
7466.590	41.6	V	54.0	-12.4	AVG	222	1.0	
1497.650	38.0	H	54.0	-16.0	PK	222	1.0	
3994.320	54.3	V	74.0	-19.7	AVG	153	1.0	Note 2
3994.320	34.3	V	54.0	-19.7	PK	153	1.0	Note 2
1497.650	51.0	H	74.0	-23.0	AVG	152	1.0	
7466.590	48.0	V	74.0	-26.0	PK	152	1.0	
1747.280	29.3	H	68.3	-39.0	AVG	258	1.0	
1747.280	46.2	H	88.3	-42.1	PK	258	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:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run # 1e: High Channel @ 5700 MHz Operating Mode: 802.11n 20MHz Chain A
Spurious Emissions

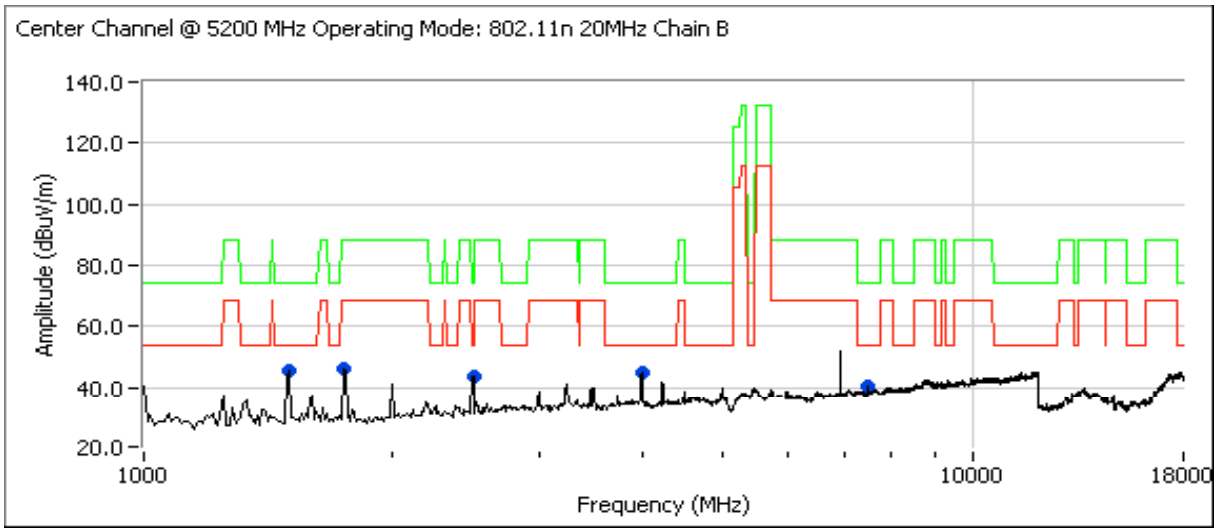


Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
11400.120	44.9	V	54.0	-9.1	AVG	218	1.0	
7599.990	43.2	V	54.0	-10.8	PK	218	1.0	
1497.820	37.4	H	54.0	-16.6	AVG	181	1.3	
11400.120	56.6	V	74.0	-17.4	PK	181	1.3	
3994.470	33.1	V	54.0	-20.9	AVG	241	1.3	Note 2
3994.470	51.9	V	74.0	-22.1	PK	241	1.3	Note 2
1497.820	51.0	H	74.0	-23.0	AVG	177	1.0	
7599.990	49.3	V	74.0	-24.7	PK	177	1.0	
1744.240	32.1	V	68.3	-36.2	AVG	185	1.3	
1744.240	52.0	V	88.3	-36.3	PK	185	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.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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: 802.11n 20MHz Chain B
Run #2a: Center Channel @ 5200 MHz
Spurious Emissions

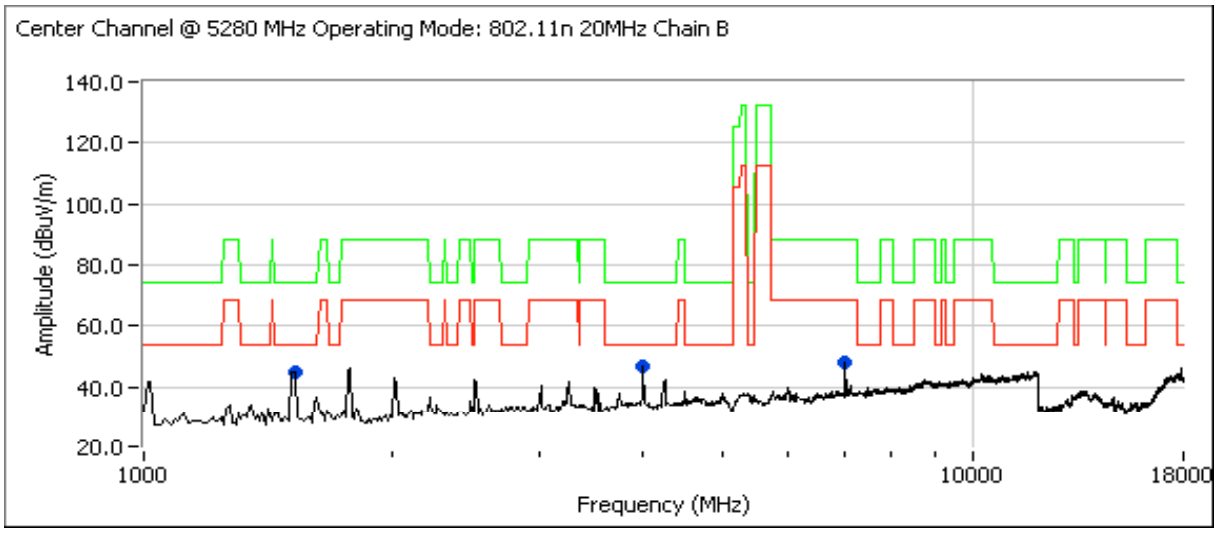


Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
3996.590	34.2	V	54.0	-19.8	AVG	84	1.3	
3996.590	53.9	V	74.0	-20.1	PK	84	1.3	
1744.140	32.4	V	68.3	-35.9	AVG	227	1.0	
1744.140	54.5	V	88.3	-33.8	PK	227	1.0	
1497.810	37.9	H	54.0	-16.1	AVG	220	1.0	
1497.810	52.0	H	74.0	-22.0	PK	220	1.0	
2490.090	33.6	V	54.0	-20.4	AVG	94	1.0	
2490.090	50.6	V	74.0	-23.4	PK	94	1.0	
7499.980	38.5	V	54.0	-15.5	AVG	78	1.0	
7499.980	45.9	V	74.0	-28.1	PK	78	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:	T71850 Band Edge
		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: 802.11n 20MHz Chain B
Run #2b: Center Channel @ 5280 MHz
Spurious Emissions

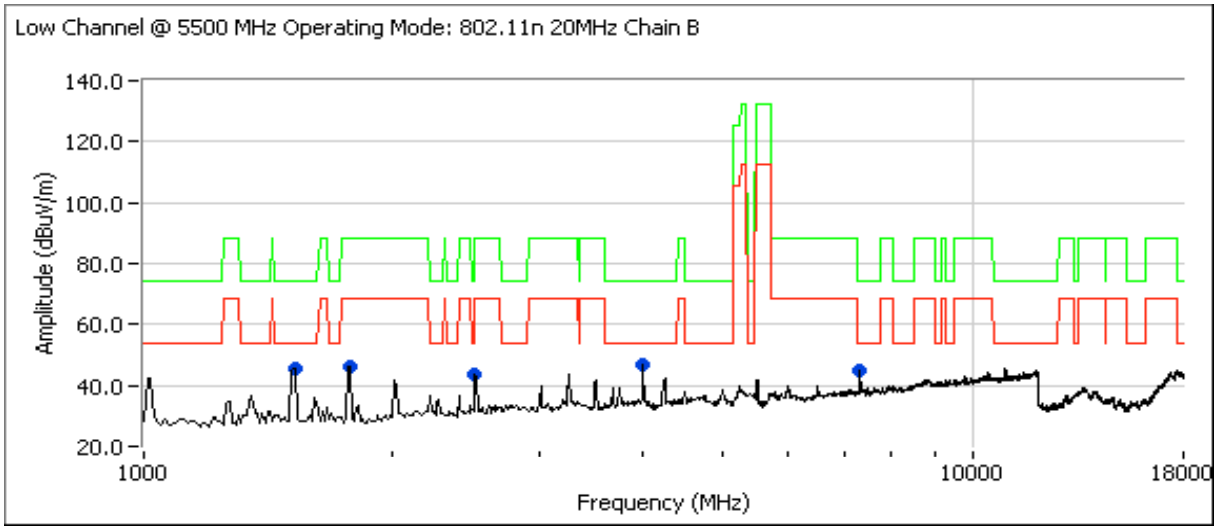


Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
1497.910	38.2	V	54.0	-15.8	AVG	75	1.0	
1497.910	54.1	V	74.0	-19.9	PK	75	1.0	
7039.870	47.6	V	68.3	-20.7	AVG	148	1.6	
3993.450	33.0	H	54.0	-21.0	PK	148	1.6	
3993.450	52.8	H	74.0	-21.2	AVG	223	1.6	
3993.450	52.8	H	74.0	-21.2	PK	223	1.6	
7039.870	51.2	V	88.3	-37.1	PK	148	1.6	

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:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #2c: Low Channel @ 5500 MHz
Spurious Emissions

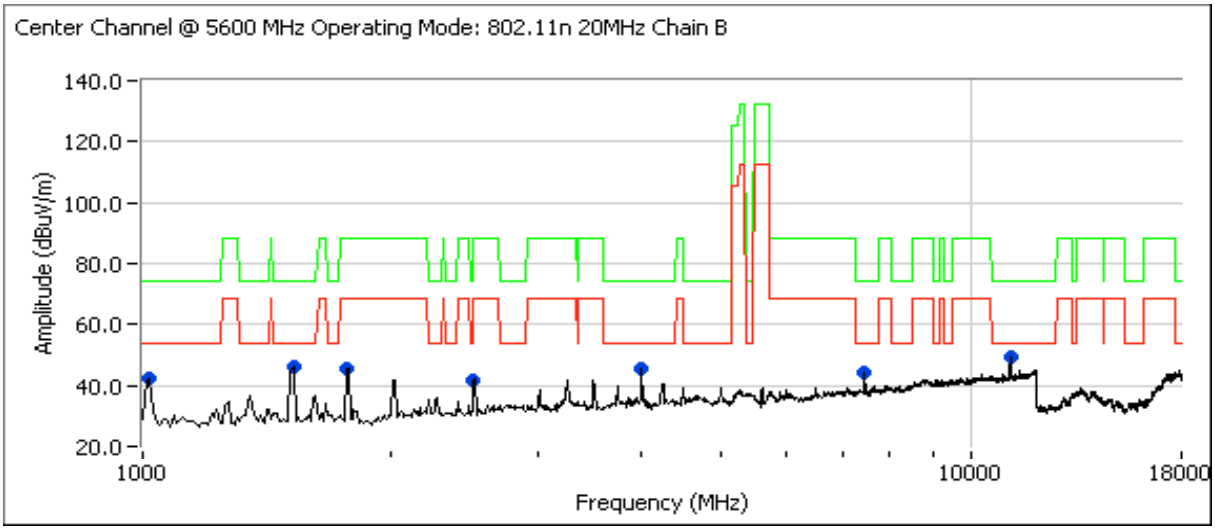


Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
1762.260	46.3	V	68.3	-22.0	Peak	226	1.0	Note 2
2498.320	43.3	V	68.3	-25.0	Peak	119	1.0	Note 2
3992.010	46.6	V	54.0	-7.4	Peak	105	1.9	Note 2
1497.880	37.2	V	54.0	-16.8	AVG	71	1.7	
1497.880	53.8	V	74.0	-20.2	PK	71	1.7	
7333.310	44.3	V	54.0	-9.7	AVG	197	1.6	
7333.310	49.4	V	74.0	-24.6	PK	197	1.6	

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:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #2d: Center Channel @ 5600 MHz
Spurious Emissions

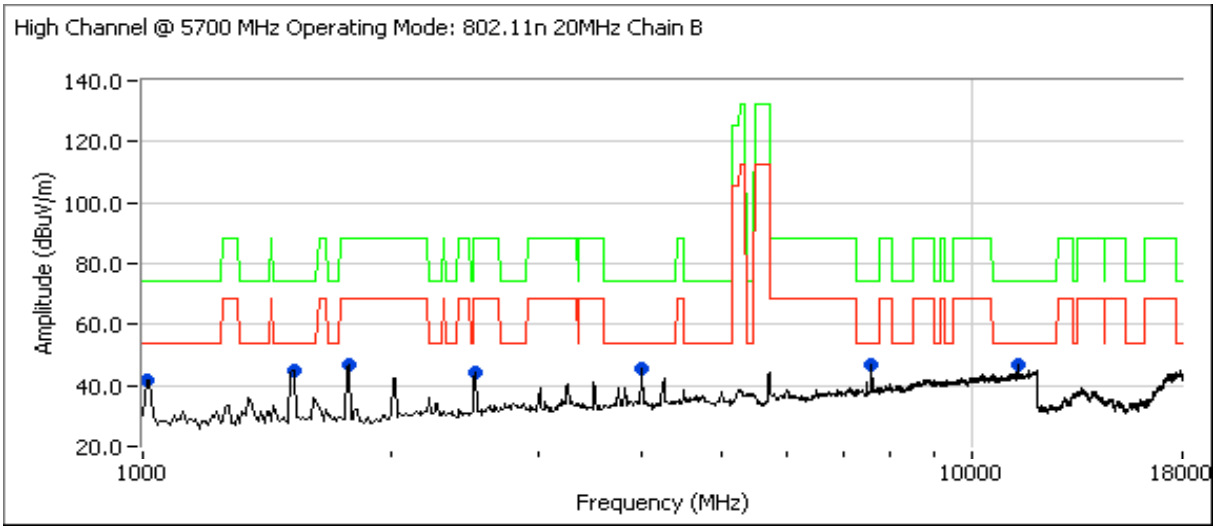


Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
1748.470	45.4	H	68.3	-22.9	Peak	117	1.0	Note 2
999.537	26.2	V	54.0	-27.8	AVG	65	1.3	
999.537	40.7	V	74.0	-33.3	PK	65	1.3	
3992.180	34.0	V	54.0	-20.0	AVG	93	1.6	
3992.180	53.8	V	74.0	-20.2	PK	93	1.6	
1497.990	37.4	H	54.0	-16.6	AVG	129	1.0	
1497.990	52.0	H	74.0	-22.0	PK	129	1.0	
7466.580	42.9	V	54.0	-11.1	AVG	207	1.6	
7466.580	49.0	V	74.0	-25.0	PK	207	1.6	
11200.180	45.1	H	54.0	-8.9	AVG	232	1.3	
11200.180	57.2	H	74.0	-16.8	PK	232	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.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #2e: High Channel @ 5700 MHz
Spurious Emissions



Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
1747.750	47.0	H	68.3	-21.3	Peak	117	1.0	Note 2
2535.370	44.0	V	68.3	-24.3	Peak	96	1.0	Note 2
999.289	26.5	V	54.0	-27.5	AVG	65	1.3	
999.289	40.7	V	74.0	-33.3	PK	65	1.3	
3993.150	33.7	V	54.0	-20.3	AVG	90	1.6	
3993.150	53.4	V	74.0	-20.6	PK	90	1.6	
1497.630	37.5	H	54.0	-16.5	AVG	134	1.0	
1497.630	50.5	H	74.0	-23.5	PK	134	1.0	
11400.150	44.3	V	54.0	-9.7	AVG	181	1.6	
11400.150	57.4	V	74.0	-16.6	PK	181	1.6	
7599.940	47.3	V	54.0	-6.7	AVG	210	1.6	
7599.940	51.5	V	74.0	-22.5	PK	210	1.6	

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:	T71850 Band Edge
		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: 802.11n 20MHz Chain C

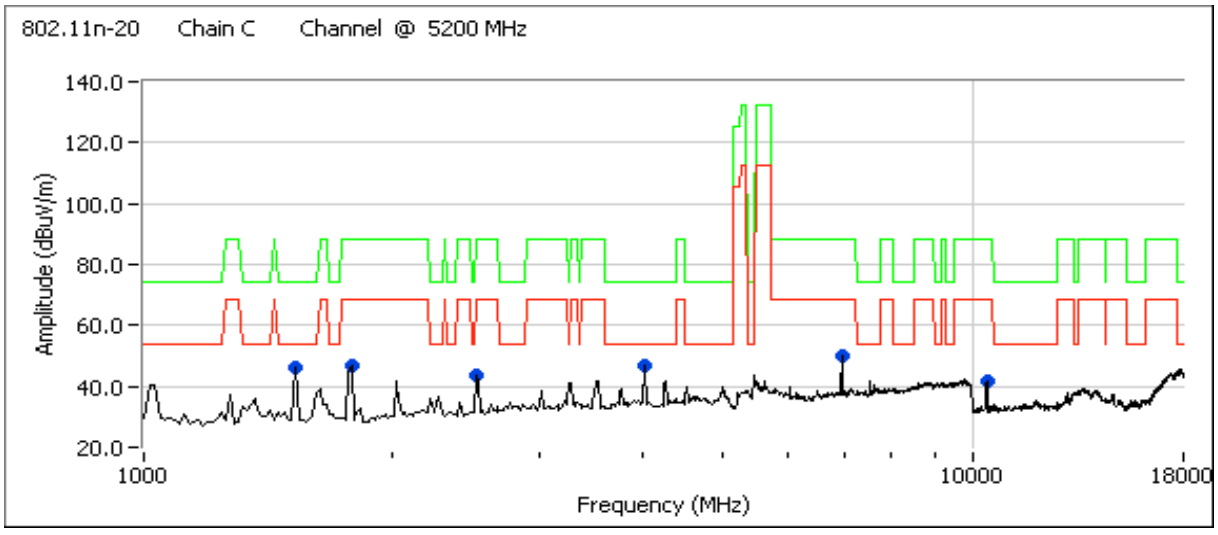
Sample ID: MAC:0016EA02D4D0
Date of Test: 6/18/2008
Test Engineer: Ben Jing
Test Location: Chamber # 5

Run #3a: Center Channel @ 5200 MHz

Spurious Emissions

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
1498.070	37.0	V	54.0	-17.0	AVG	43	1.0	
1498.070	54.3	V	74.0	-19.7	PK	43	1.0	
1782.970	29.7	V	68.3	-38.6	AVG	188	1.9	
1782.970	39.0	V	88.3	-49.3	PK	188	1.9	
2496.950	34.4	V	54.0	-19.6	AVG	78	1.3	
2496.950	51.5	V	74.0	-22.5	PK	78	1.3	
3997.300	33.2	H	54.0	-20.8	AVG	111	1.9	
3997.300	52.9	H	74.0	-21.1	PK	111	1.9	
6933.310	48.5	V	68.3	-19.8	AVG	169	1.6	
6933.310	52.3	V	88.3	-36.0	PK	169	1.6	
10400.130	40.1	V	68.3	-28.2	AVG	191	1.0	
10400.130	52.1	V	88.3	-36.2	PK	191	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.

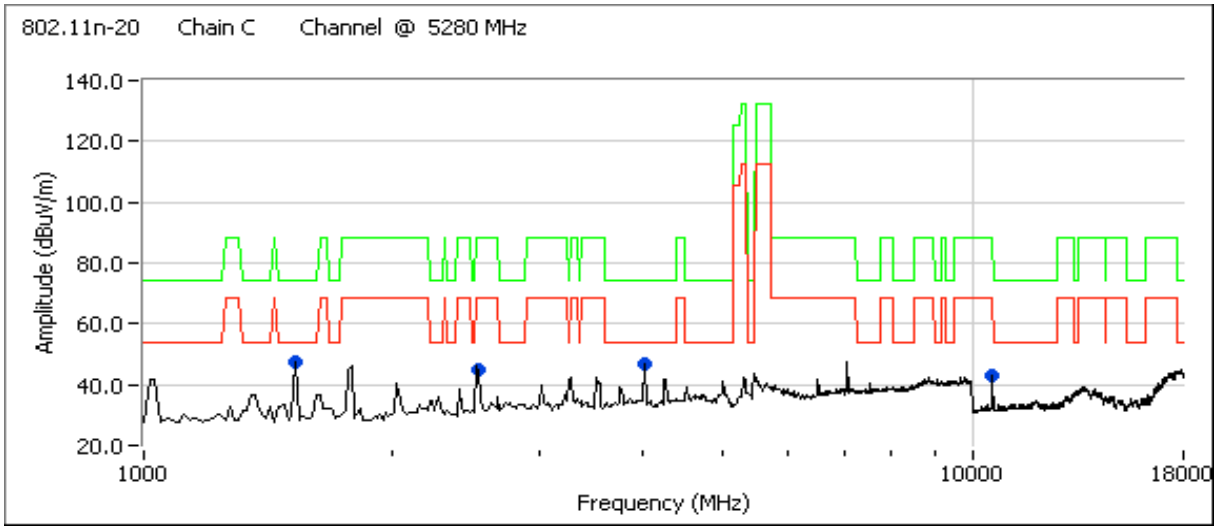


Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #3b: Center Channel @ 5280 MHz
Spurious Emissions

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
1497.850	38.9	V	54.0	-15.1	AVG	233	1.6	
1497.850	53.5	V	74.0	-20.5	PK	233	1.6	
2497.590	34.4	V	54.0	-19.6	AVG	85	1.0	
2497.590	53.5	V	74.0	-20.5	PK	85	1.0	
3986.750	35.1	V	54.0	-18.9	AVG	72	1.0	
3986.750	55.8	V	74.0	-18.2	PK	72	1.0	
10560.360	40.1	V	68.3	-28.2	AVG	204	1.0	
10560.360	51.8	V	88.3	-36.5	PK	204	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.

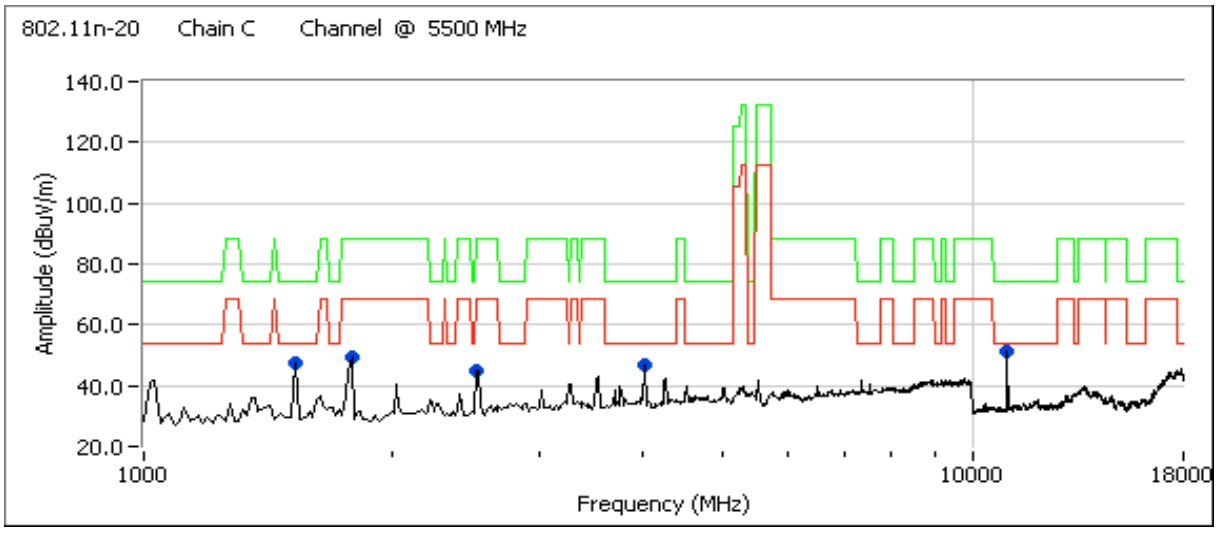


Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #3c: Low Channel @ 5500 MHz
Spurious Emissions

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
1497.790	39.2	H	54.0	-14.8	AVG	56	1.0	
1497.790	56.1	H	74.0	-17.9	PK	56	1.0	
1748.040	33.8	V	68.3	-34.5	AVG	60	1.0	
1748.040	54.5	V	88.3	-33.8	PK	60	1.0	
2496.960	35.2	V	54.0	-18.8	AVG	84	1.0	
2496.960	52.6	V	74.0	-21.4	PK	84	1.0	
3994.290	34.7	V	54.0	-19.3	AVG	73	1.0	
3994.290	55.0	V	74.0	-19.0	PK	73	1.0	
10998.990	48.8	V	54.0	-5.2	AVG	180	1.0	
10998.990	61.7	V	74.0	-12.3	PK	180	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.

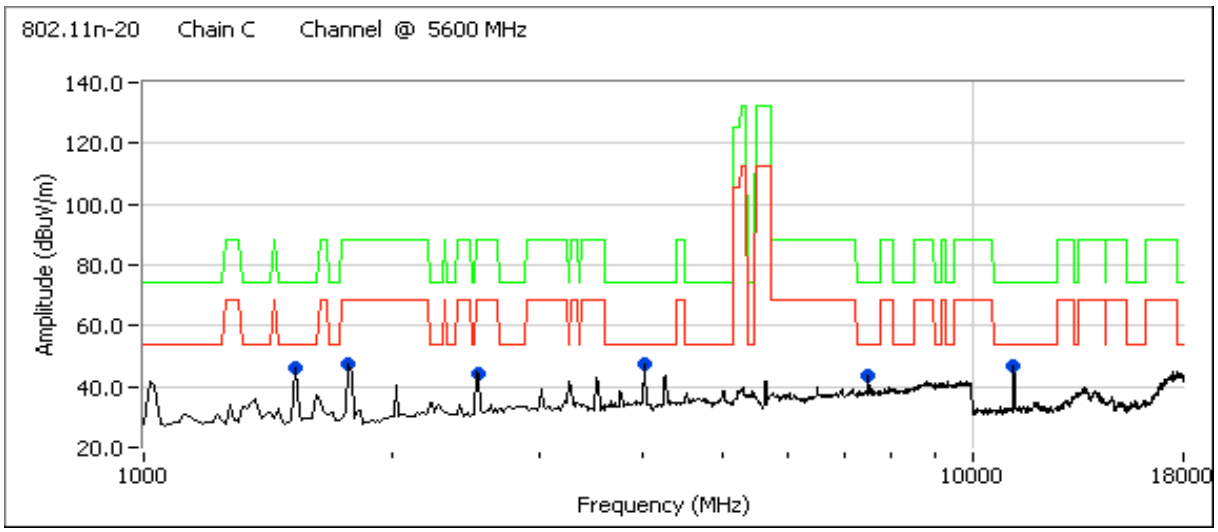


Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #3d: Center Channel @ 5600 MHz
Spurious Emissions

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
1497.890	34.6	H	54.0	-19.4	AVG	168	1.3	
1497.890	49.6	H	74.0	-24.4	PK	168	1.3	
1747.670	33.6	V	68.3	-34.7	AVG	61	1.0	
1747.670	54.7	V	88.3	-33.6	PK	61	1.0	
2490.970	34.9	V	54.0	-19.1	AVG	84	1.0	
2490.970	52.9	V	74.0	-21.1	PK	84	1.0	
3993.510	35.8	V	54.0	-18.2	AVG	76	1.3	
3993.510	56.6	V	74.0	-17.4	PK	76	1.3	
7466.610	42.0	V	54.0	-12.0	AVG	172	1.3	
7466.610	48.7	V	74.0	-25.3	PK	172	1.3	
11200.130	45.0	V	54.0	-9.0	AVG	195	1.0	
11200.130	58.1	V	74.0	-15.9	PK	195	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.

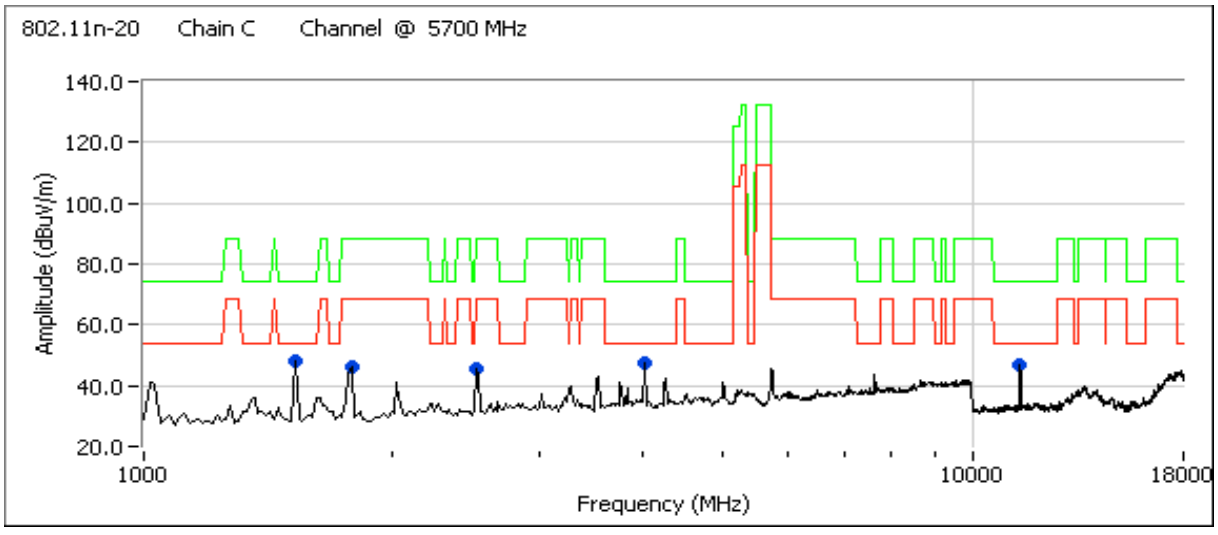


Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #3e: High Channel @ 5700 MHz
Spurious Emissions

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
1498.060	38.3	H	54.0	-15.7	AVG	52	1.0	
1498.060	52.6	H	74.0	-21.4	PK	52	1.0	
1747.680	33.7	V	68.3	-34.6	AVG	61	1.0	
1747.680	53.8	V	88.3	-34.5	PK	61	1.0	
2496.930	34.6	V	54.0	-19.4	AVG	84	1.3	
2496.930	52.3	V	74.0	-21.7	PK	84	1.3	
3994.100	35.3	V	54.0	-18.7	AVG	79	1.0	
3994.100	56.4	V	74.0	-17.6	PK	79	1.0	
11399.000	46.3	V	54.0	-7.7	AVG	181	1.3	
11399.000	59.2	V	74.0	-14.8	PK	181	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.



Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #4: Radiated Spurious Emissions, 1000 - 40000 MHz. Operating Mode: 802.11n20 Chain A+B+C
Output power per chain set at, or above, the single-chain mode output power of 16.5dBm per chain.

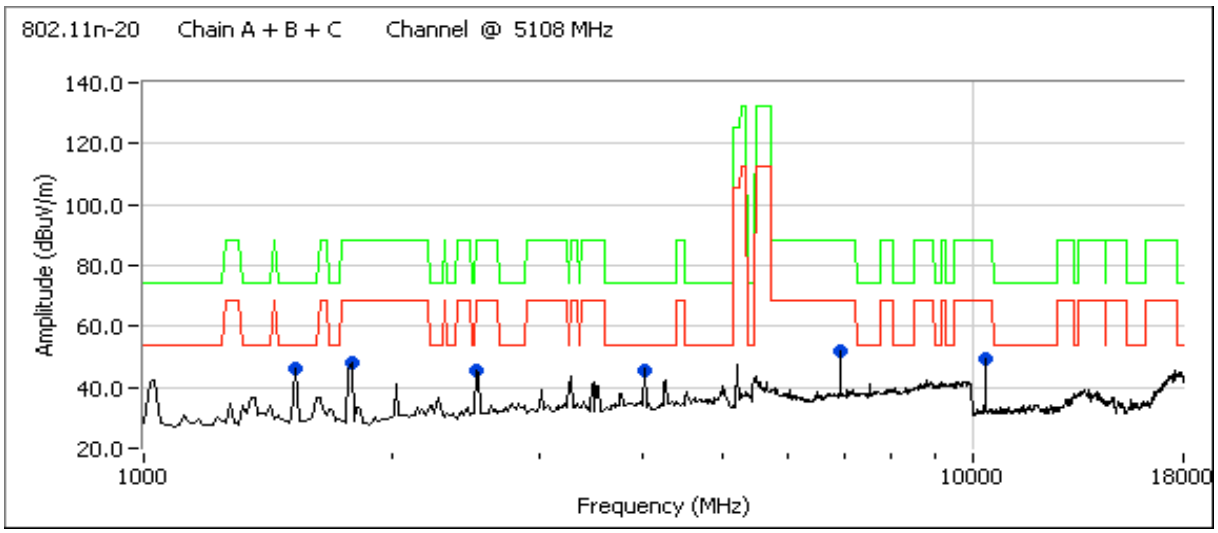
Run #4a: Low Channel @ 5180 MHz

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
33. 5	16.5	34. 5	16.5	35. 0	16.5

Spurious Emissions

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
1497.930	37.1	H	54.0	-16.9	AVG	88	1.3	
1497.930	51.0	H	74.0	-23.0	PK	88	1.3	
1782.840	27.4	V	68.3	-40.9	AVG	242	1.0	
1782.840	37.1	V	88.3	-51.2	PK	242	1.0	
2497.360	35.5	V	54.0	-18.5	AVG	85	1.0	
2497.360	53.4	V	74.0	-20.6	PK	85	1.0	
3996.370	33.8	V	54.0	-20.2	AVG	71	1.0	
3996.370	52.8	V	74.0	-21.2	PK	71	1.0	
6906.600	53.8	V	68.3	-14.5	AVG	222	1.3	
6906.600	55.8	V	88.3	-32.5	PK	222	1.3	
10360.130	46.7	V	68.3	-21.6	AVG	165	1.0	
10360.130	57.4	V	88.3	-30.9	PK	165	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.

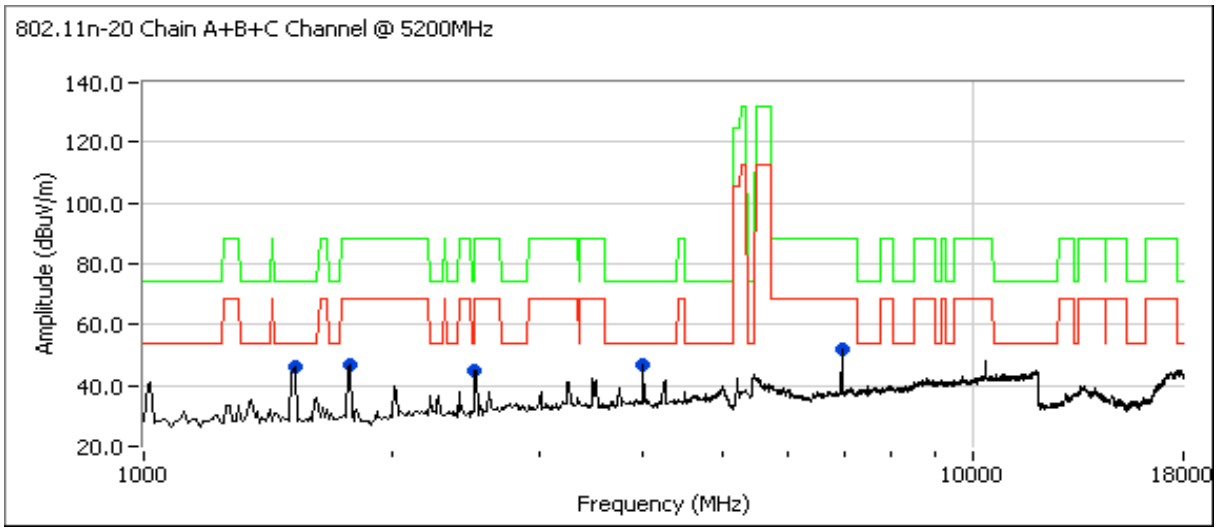


Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Sample ID:
Date of Test: 6/19/2008
Test Engineer: Peter Sales
Test Location: Fremont Chamber #5

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
33.5	16.6	34.0	16.7	35.0	16.5



Spurious Emissions

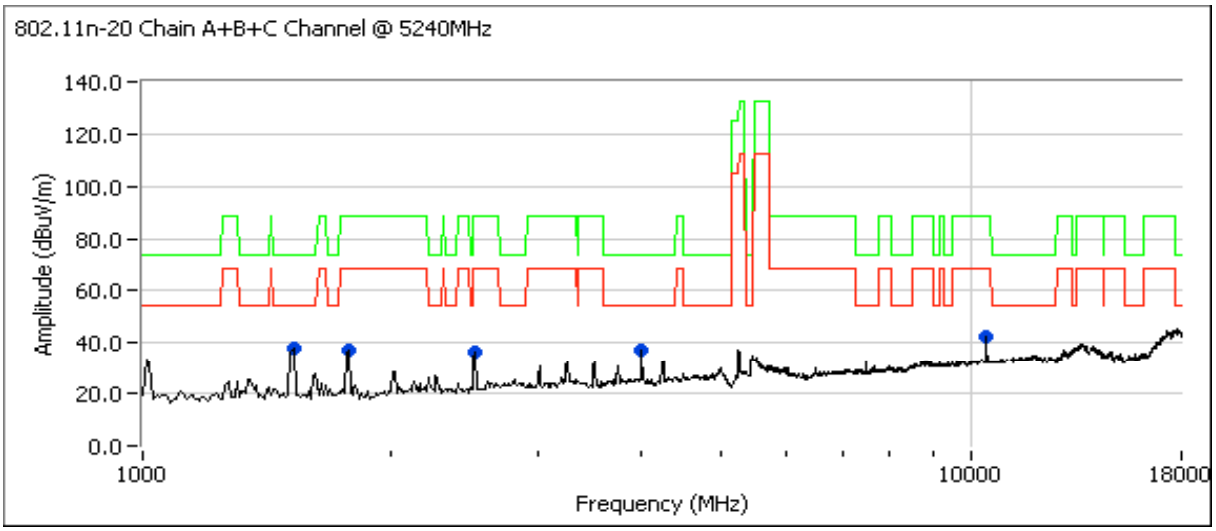
Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
1747.990	47.0	V	68.3	-21.3	Peak	212	1.0	Note 2
6933.330	51.9	V	68.3	-16.4	Peak	228	1.3	Note 2
1497.710	39.1	H	54.0	-14.9	AVG	49	1.0	
1497.710	55.7	H	74.0	-18.3	PK	49	1.0	
2497.010	34.7	V	54.0	-19.3	AVG	83	1.0	
2497.010	52.9	V	74.0	-21.1	PK	83	1.0	
3986.560	34.2	H	54.0	-19.8	AVG	117	1.9	
3986.560	53.5	H	74.0	-20.5	PK	117	1.9	

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:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

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
32.0	16.6	32.5	16.5	34.0	16.5



Spurious Emissions

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
1748.690	37.6	H	68.3	-30.7	Peak	129	1.3	Note 2
2498.450	36.4	V	68.3	-31.9	Peak	84	1.3	
3985.090	36.9	V	54.0	-17.1	Peak	78	1.6	
10477.260	42.6	V	68.3	-25.7	Peak	184	1.9	Note 2
1497.840	30.0	V	54.0	-24.0	AVG	229	1.3	
1497.840	43.9	V	74.0	-30.1	PK	229	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.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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
Output power per chain set at, or above, the single-chain mode output power of 16.5dBm per chain.

Sample ID:
Date of Test: 6/19/2008
Test Engineer: Ben Jing
Test Location: Fremont Chamber #5

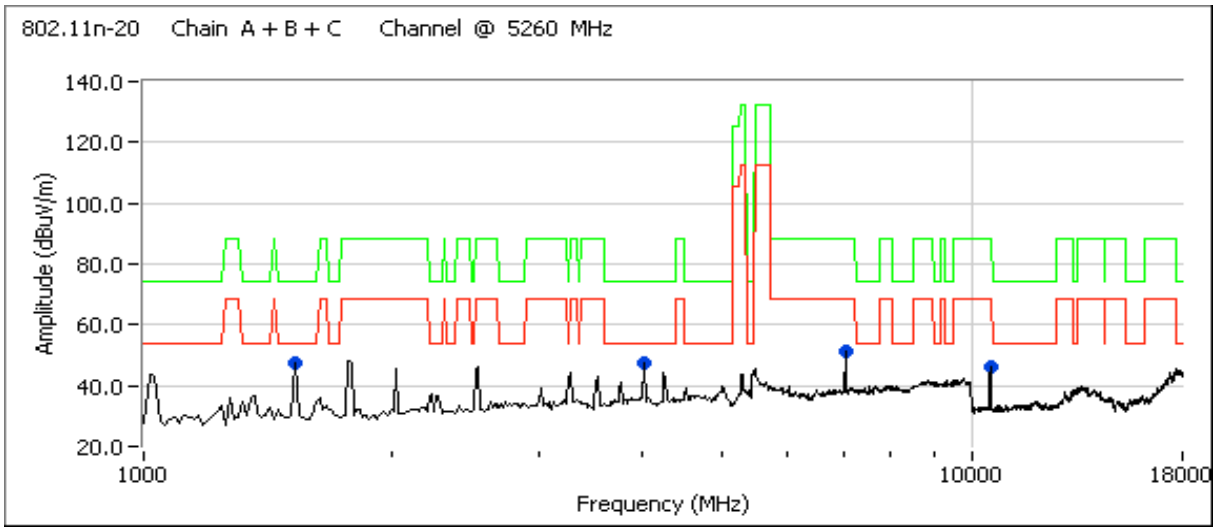
Run #5a: Low Channel @ 5260 MHz

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
31.0	16.6	32.0	16.5	33.5	16.5

Spurious Emissions

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
1497.830	38.0	H	54.0	-16.0	AVG	133	1.3	
1497.830	53.3	H	74.0	-20.7	PK	133	1.3	
3986.600	35.8	V	54.0	-18.2	AVG	77	1.3	
3986.600	56.0	V	74.0	-18.0	PK	77	1.3	
7013.330	50.9	H	68.3	-17.4	AVG	193	1.0	
7013.330	53.7	H	88.3	-34.6	PK	193	1.0	
10520.520	42.5	V	68.3	-25.8	AVG	180	1.0	
10520.520	54.5	V	88.3	-33.8	PK	180	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:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

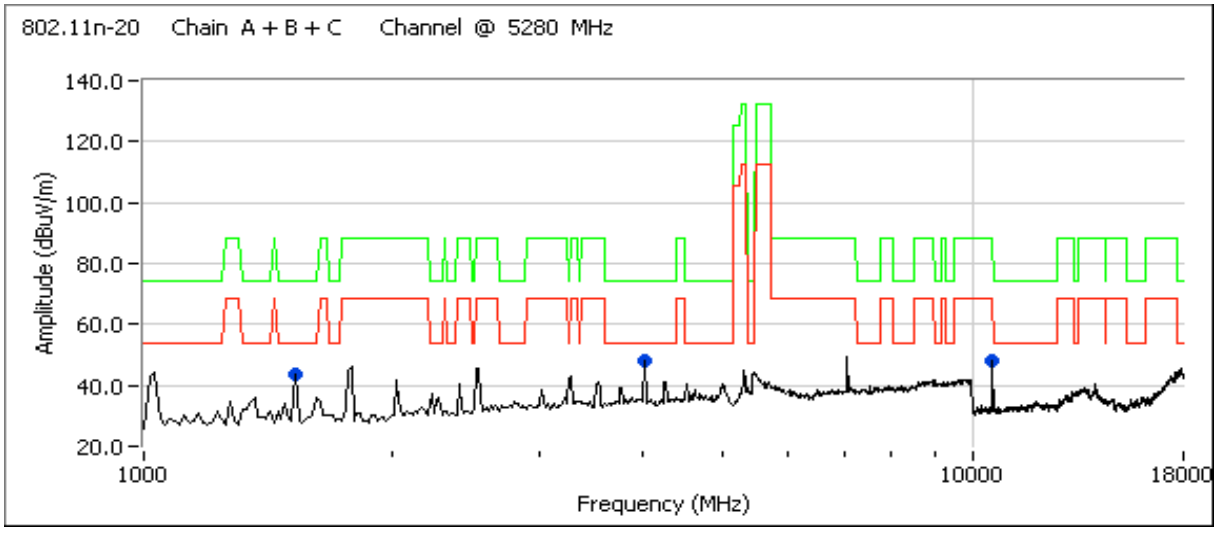
Run #5b: Center Channel @ 5280 MHz

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
30.5	16.5	31.5	16.5	33.5	16.5

Spurious Emissions

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
1497.570	36.1	H	54.0	-17.9	AVG	144	1.3	
1497.570	50.7	H	74.0	-23.3	PK	144	1.3	
3993.800	36.8	V	54.0	-17.2	AVG	69	1.3	
3993.800	57.9	V	74.0	-16.1	PK	69	1.3	
10559.770	45.5	V	68.3	-22.8	AVG	177	1.0	
10559.770	56.6	V	88.3	-31.7	PK	177	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:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

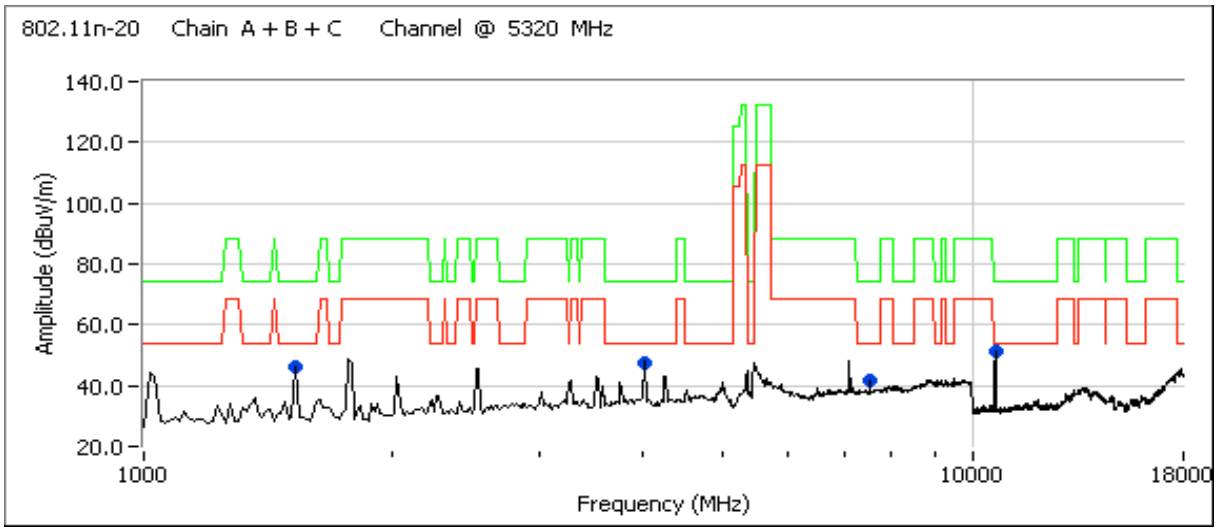
Run #5c: High Channel @ 5320 MHz

Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
29.5	16.5	31.5	16.5	33.0	16.5

Spurious Emissions

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
1497.840	36.5	H	54.0	-17.5	AVG	146	1.3	
1497.840	51.3	H	74.0	-22.7	PK	146	1.3	
3992.990	34.4	V	54.0	-19.6	AVG	107	1.6	
3992.990	53.6	V	74.0	-20.4	PK	107	1.6	
7500.060	38.0	V	54.0	-16.0	AVG	128	1.3	
7500.060	47.1	V	74.0	-26.9	PK	128	1.3	
10642.750	45.6	V	54.0	-8.4	AVG	183	1.0	
10642.750	56.4	V	74.0	-17.6	PK	183	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.



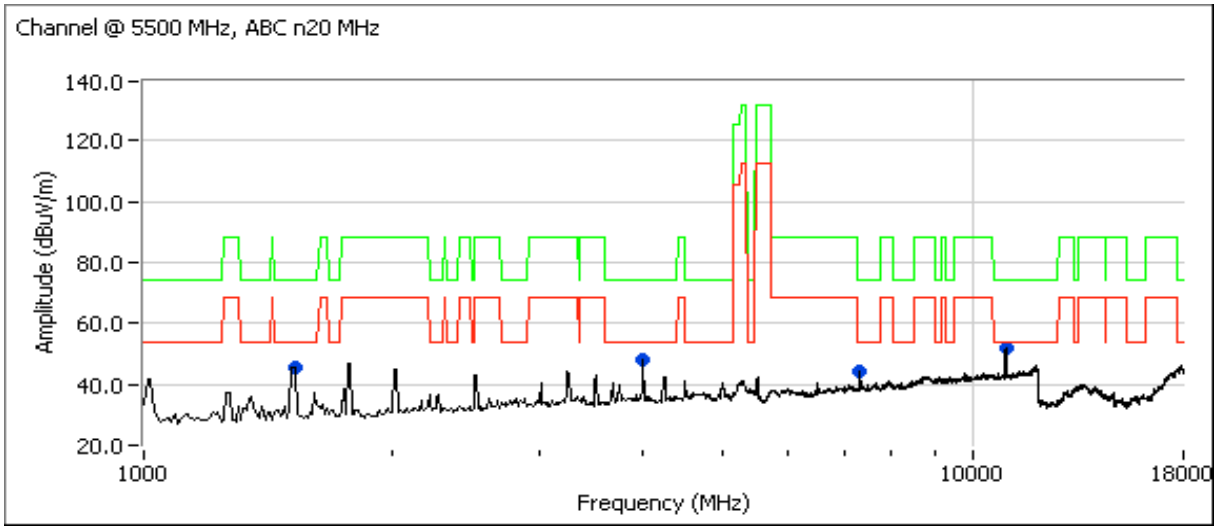
Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #6: Radiated Spurious Emissions, 1000 - 18000 MHz. Operating Mode: 802.11n20 Chain A+B+C
Output power per chain set at, or above, the dual-chain mode output power of 13.5dBm per chain.

Sample ID: MAC:0016EA02D4D0
Date of Test: 6/20/2008
Test Engineer: Suhaila Khushzad
Test Location: Chamber # 5

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
25.5	15.7	26	13.8	26	13.5



Spurious Emissions

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
10999.150	46.3	V	54.0	-7.7	AVG	192	1.0	
10999.150	59.7	V	74.0	-14.3	PK	192	1.0	
1497.950	37.1	V	54.0	-16.9	AVG	146	1.0	
1497.950	50.9	V	74.0	-23.1	PK	146	1.0	
3986.280	34.8	V	54.0	-19.2	AVG	114	1.0	
3986.280	54.0	V	74.0	-20.0	PK	114	1.0	
7333.400	42.3	V	54.0	-11.7	AVG	142	2.2	
7333.400	49.4	V	74.0	-24.6	PK	142	2.2	

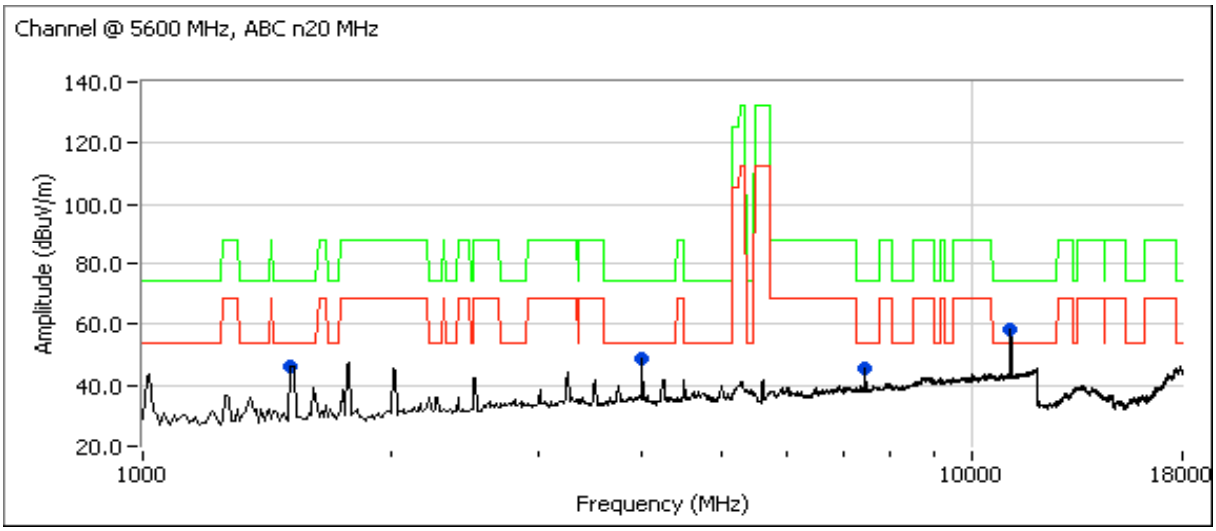
Note 1: For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #6: Radiated Spurious Emissions, 1000 - 18000 MHz. Operating Mode: 802.11n20 Chain A+B+C
Output power per chain set at, or above, the dual-chain mode output power of 13.5dBm per chain.

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
26.5	16.4	29	15.8	29	16.3



Spurious Emissions

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
11200.480	44.0	H	54.0	-10.0	AVG	224	1.0	
11200.480	55.4	H	74.0	-18.6	PK	224	1.0	
7466.870	42.3	V	54.0	-11.7	AVG	151	1.0	
7466.870	49.2	V	74.0	-24.8	PK	151	1.0	
1497.930	37.8	H	54.0	-16.2	AVG	140	1.0	
1497.930	53.9	H	74.0	-20.1	PK	140	1.0	
3997.030	34.7	V	54.0	-19.3	AVG	84	1.0	
3997.030	54.6	V	74.0	-19.4	PK	84	1.0	

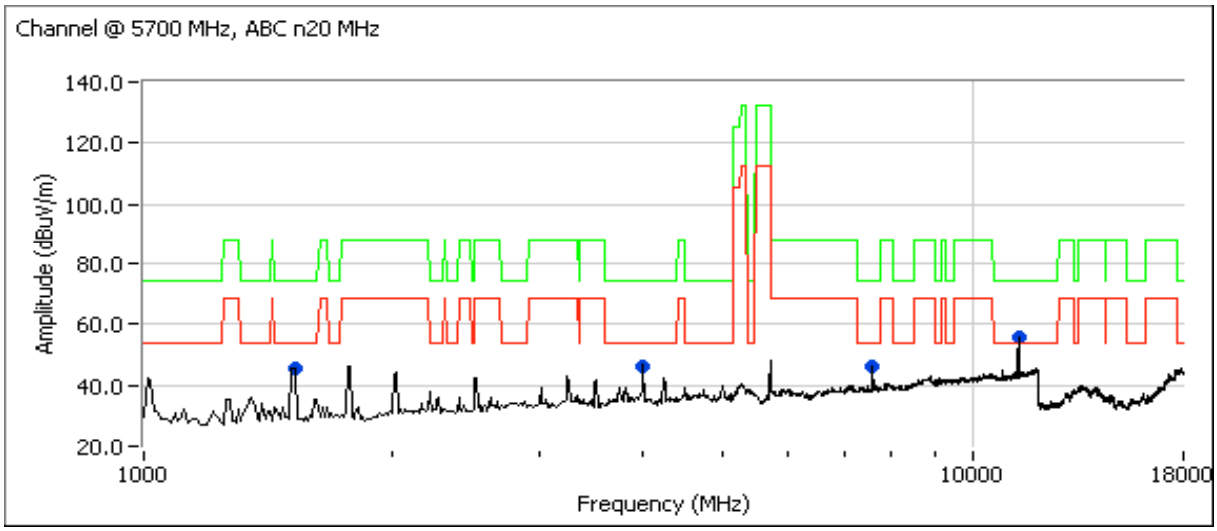
Note 1:	For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set to -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak)

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #6: Radiated Spurious Emissions, 1000 - 18000 MHz. Operating Mode: 802.11n20 Chain A+B+C
Output power per chain set at, or above, the dual-chain mode output power of 13.5dBm per chain.

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
26.5	15.2	29	16.0	29	16.0



Spurious Emissions

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
11399.130	48.6	H	54.0	-5.4	AVG	243	2.5	
11399.130	60.1	H	74.0	-13.9	PK	243	2.5	
11399.880	47.9	V	54.0	-6.1	AVG	188	1.3	
11399.880	58.5	V	74.0	-15.5	PK	188	1.3	
1497.950	38.0	H	54.0	-16.0	AVG	135	1.0	
1497.950	54.3	H	74.0	-19.7	PK	135	1.0	
3994.280	35.3	V	54.0	-18.7	AVG	123	1.2	
3994.280	55.0	V	74.0	-19.0	PK	123	1.2	
7600.170	43.9	V	54.0	-10.1	AVG	213	1.3	
7600.170	49.7	V	74.0	-24.3	PK	213	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)

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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)

Band Edge Field Strength 802.11n40 Universe Antenna

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

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

Ambient Conditions:

Temperature: 15-25 °C
Rel. Humidity: 35-55 %

Summary of Results

Run #	Mode	Channel	Power Setting	Measured Power	Test Performed	Limit	Result / Margin
1a	802.11n40 Chain A	5190MHz	27.0	14.5	Band Edge radiated field strength	FCC Part 15.209	52.3dBµV/m @ 5149.8MHz (-1.7dB)
1b	802.11n40 Chain A	5310MHz	23.5	15.0	Band Edge radiated field strength	FCC Part 15.209	52.7dBµV/m @ 5350.0MHz (-1.3dB)
1c	802.11n40 Chain A	5510MHz	23.0	17.2	Band Edge - 5460-5470MHz	FCC Part 15E	52.8dBµV/m @ 5460.0MHz (-1.2dB)
					Band Edge radiated field strength	FCC Part 15.209	57.7dBµV/m @ 5469.9MHz (-10.6dB)
2a	802.11n40 Chain B	5190MHz	23.0	14.3	Band Edge radiated field strength	FCC Part 15.209	50.1dBµV/m @ 5129.7MHz (-3.9dB)
2b	802.11n40 Chain B	5310MHz	24.0	14.2	Band Edge radiated field strength	FCC Part 15.209	49.8dBµV/m @ 5371.4MHz (-4.2dB)
2c	802.11n40 Chain B	5510MHz	24.0	15.4	Band Edge - 5460-5470MHz	FCC Part 15E	50.7dBµV/m @ 5458.9MHz (-3.3dB)
					Band Edge radiated field strength	FCC Part 15.209	53.7dBµV/m @ 5468.9MHz (-14.6dB)
3a	802.11n40 Chain C	5190MHz	26.0	13.7	Band Edge radiated field strength	FCC Part 15.209	51.9dBµV/m @ 5149.85MHz (-2.1dB)
3b	802.11n40 Chain C	5310MHz	24.5	13.7	Band Edge radiated field strength	FCC Part 15.209	51.8dBµV/m @ 5350.05MHz (-2.2dB)
3c	802.11n40 Chain C	5510MHz	25.0	16.6	Band Edge - 5460-5470MHz	FCC Part 15E	50.8dBµV/m @ 5460.05MHz (-3.2dB)
					Band Edge radiated field strength	FCC Part 15.209	77.2dBµV/m @ 5469.95MHz (-11.1dB)

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Summary of Results

Run #	Mode	Channel	Power Setting	Measured Power	Test Performed	Limit	Result / Margin
4	802.11n40 Chain A+B	5190MHz	27, 28	14.0, 14.5	Band Edge radiated field strength	FCC Part 15.209	53dBµV/m @ 5149.95MHz (-1.0dB)
	802.11n40 Chain A+B	5310MHz	23, 24	13.6, 13.7	Band Edge radiated field strength	FCC Part 15.209	50.5dBµV/m @ 5350.05MHz (-3.5dB)
	802.11n40 Chain A+B	5510MHz	23.0, 25.5	14.9, 14.7	Band Edge - 5460-5470MHz	FCC Part 15E	48.9dBµV/m @ 5459.95MHz (-5.1dB)
					Band Edge radiated field strength	FCC Part 15.209	50.9dBµV/m @ 5470.0MHz (-17.4dB)
5	802.11n40 Chain A+C	5190MHz	26, 27.5	12.7, 13.2	Band Edge radiated field strength	FCC Part 15.209	52.2dBµV/m @ 5149.95MHz (-1.8dB)
	802.11n40 Chain A+C	5310MHz	24, 26.5	14.1, 14.2	Band Edge radiated field strength	FCC Part 15.209	52.1dBµV/m @ 5350.05MHz (-1.9dB)
	802.11n40 Chain A+C	5510MHz	23.5, 23.5	16, 14	Band Edge - 5460-5470MHz	FCC Part 15E	50.5dBµV/m @ 5460.0MHz (-3.5dB)
					Band Edge radiated field strength	FCC Part 15.209	73.7dBµV/m @ 5468.3MHz (-14.6dB)
6	802.11n40 Chain B+C	5190MHz	23.5, 23.5	10.5, 10.4	Band Edge radiated field strength	FCC Part 15.209	53.8dBuV/m @ 5149.96MHz (-.2dB)
	802.11n40 Chain B+C	5310MHz	22.5, 23.5	12.3, 12.1	Band Edge radiated field strength	FCC Part 15.209	53.2dBuV/m @ 5352.98MHz (-.8dB)
	802.11n40 Chain B+C	5510MHz	24, 23.5	14.0, 14.0	Band Edge - 5460-5470MHz	FCC Part 15E	56.5dBµV/m @ 5468.6MHz (-11.8dB)
					Band Edge radiated field strength	FCC Part 15.209	52.1dBµV/m @ 5458.9MHz (-1.9dB)
7	802.11n40 A+B+C	5190MHz	25.5, 27.0, 27.5	9.6, 10.8, 10.5	Band Edge radiated field strength	FCC Part 15.209	52.8dBµV/m @ 5149.8MHz (-1.2dB)
	802.11n40 A+B+C	5310MHz	24.0, 25.5, 27.5	12.0, 12.2, 12.5	Band Edge radiated field strength	FCC Part 15.209	52.6dBµV/m @ 5350.0MHz (-1.4dB)
	802.11n40 A+B+C	5510MHz	24.5, 25.0, 26.0	12.4, 12.6, 12.5	Band Edge - 5460-5470MHz	FCC Part 15E	58.5dBµV/m @ 5469.8MHz (-9.8dB)
					Band Edge radiated field strength	FCC Part 15.209	51.9dBµV/m @ 5459.9MHz (-2.1dB)

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:	T71850 Band Edge
		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

Sample ID: MAC:0016EA02D560
Date of Test: 6/7/2008
Test Engineer: Suhaila Khushzad
Test Location: Chamber # 3

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

Power Setting: 27 Average power: 14.5 (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	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5191.110	92.6	H	-	-	AVG	256	1.0	
5191.110	100.9	H	-	-	PK	256	1.0	
5201.730	90.8	V	-	-	AVG	178	2.2	
5201.730	99.4	V	-	-	PK	178	2.2	

Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5149.830	52.3	H	54.0	-1.7	AVG	256	1.0	Note 1
5149.580	69.1	H	74.0	-4.9	PK	256	1.0	Note 1
5149.990	50.8	V	54.0	-3.2	AVG	178	2.2	Note 1
5148.710	65.9	V	74.0	-8.1	PK	178	2.2	Note 1

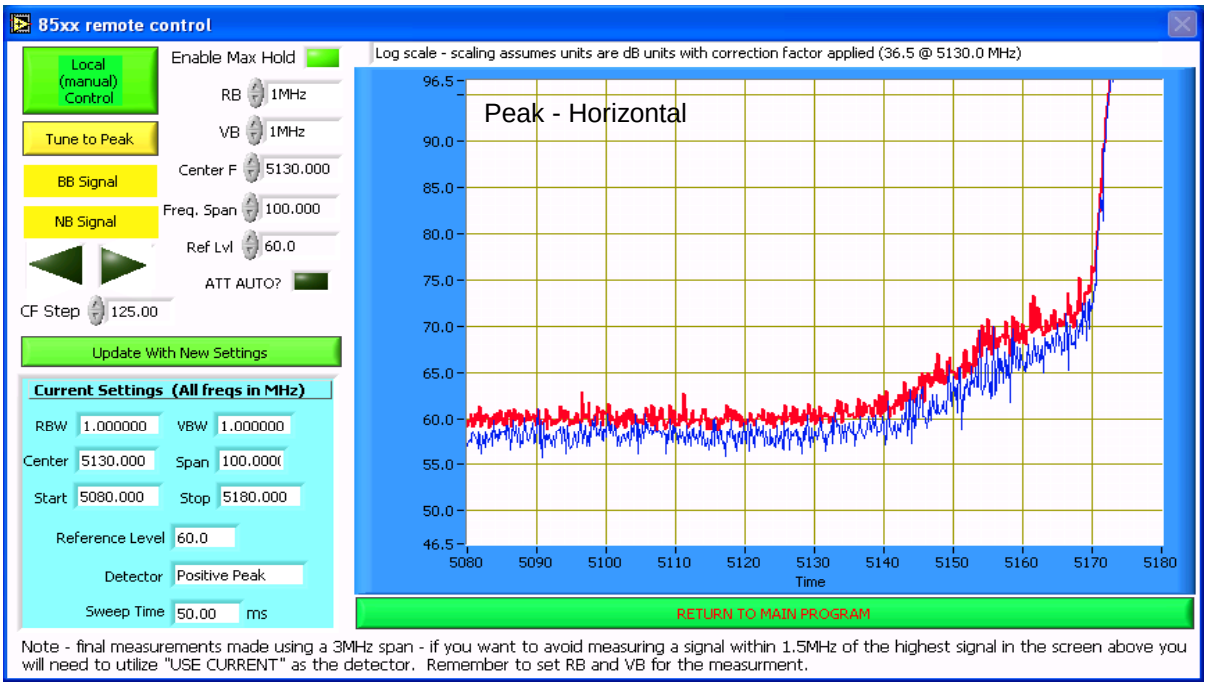
Note 1: Target GC = 29 and AP=15.3 dBm, passing GC=27 and AP=14.5 dBm.

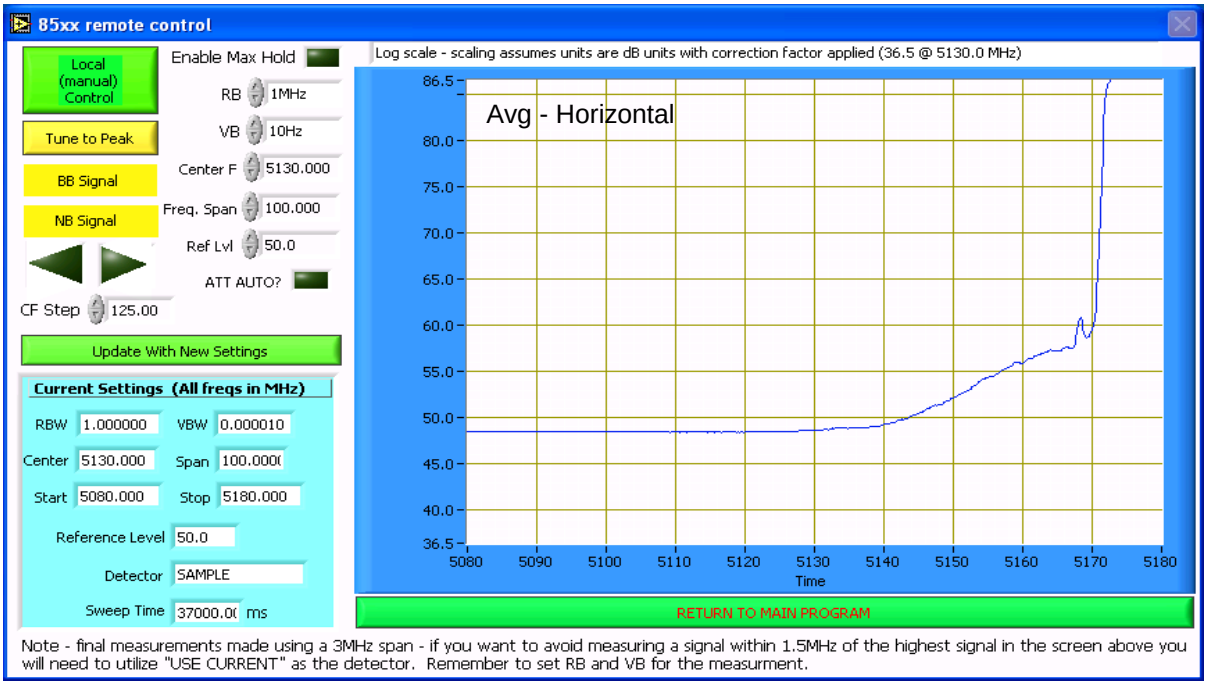
Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

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

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

Power Setting: 27 Average power: 14.5 (for reference purposes)





Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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
Run #1b: High Channel @ 5310 MHz (band edge at 5350 MHz)
Power Setting: 23.5 Average power: 15 (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	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5311.380	93.3	H	-	-	AVG	234	1.1	
5311.380	101.9	H	-	-	PK	234	1.1	
5326.130	91.4	V	-	-	AVG	179	2.0	
5326.130	100.3	V	-	-	PK	179	2.0	

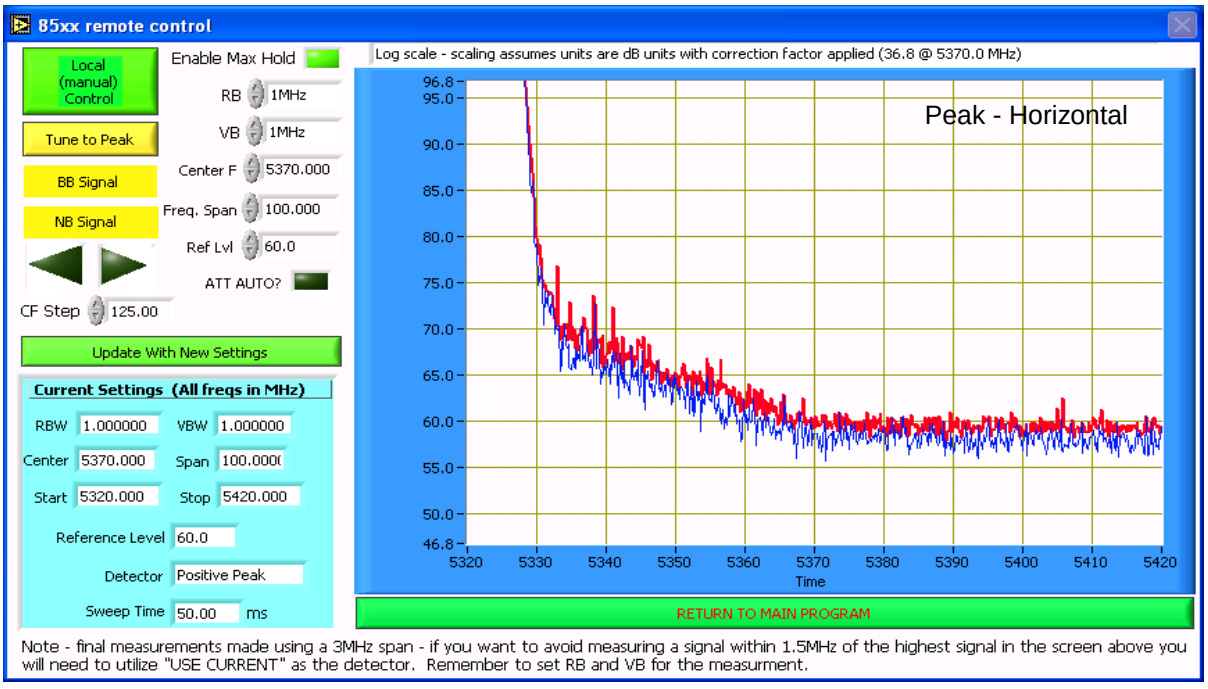
Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5350.000	52.7	H	54.0	-1.3	AVG	234	1.1	Note 2
5351.650	68.8	H	74.0	-5.2	PK	234	1.1	Note 2
5350.000	51.2	V	54.0	-2.8	AVG	179	2.0	Note 2
5351.240	66.7	V	74.0	-7.3	PK	179	2.0	Note 2

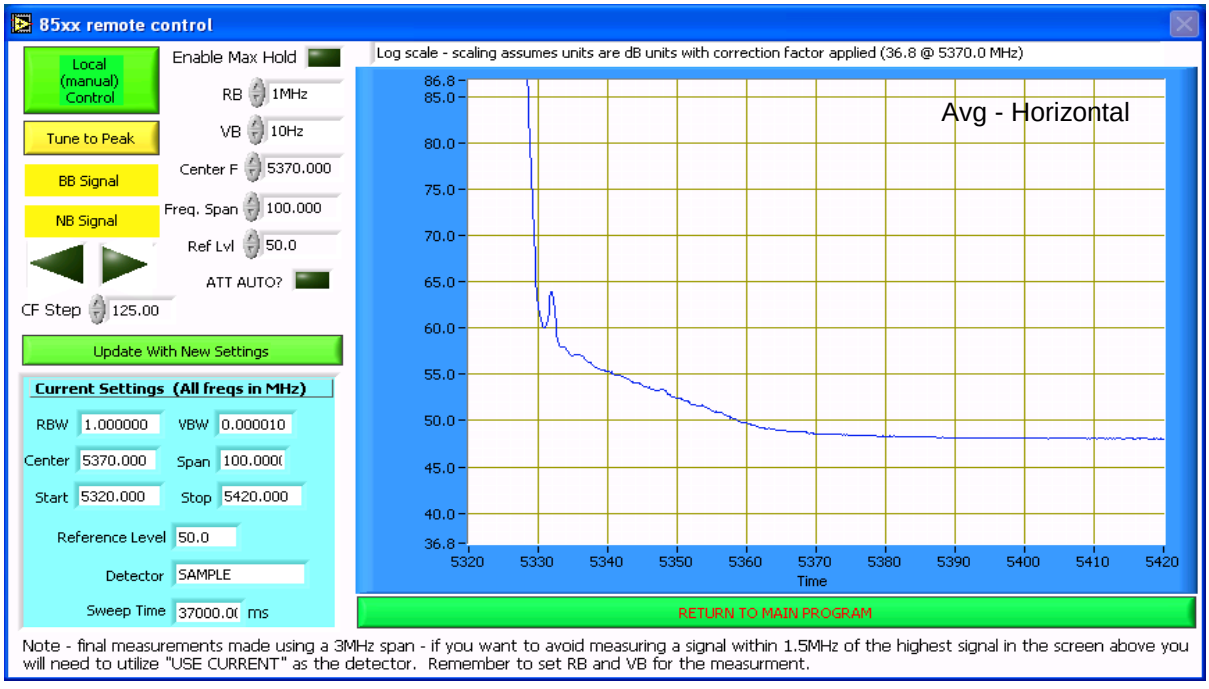
Note 2:	Target GC = 26 and AP=16.6 dBm, passing GC=23.5 and AP=15 dBm.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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
Run #1b: High Channel @ 5310 MHz (band edge at 5350 MHz)
Power Setting: 23.5 Average power: 15 (for reference purposes)



Note - final measurements made using a 3MHz span - if you want to avoid measuring a signal within 1.5MHz of the highest signal in the screen above you will need to utilize "USE CURRENT" as the detector. Remember to set RB and VB for the measurment.



Note - final measurements made using a 3MHz span - if you want to avoid measuring a signal within 1.5MHz of the highest signal in the screen above you will need to utilize "USE CURRENT" as the detector. Remember to set RB and VB for the measurment.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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
Run #1c: Low Channel @ 5510 MHz (restricted band edge at 5460 MHz, allocated band edge at 5470MHz)
Power Setting: 23 Average power: 17.2 (for reference purposes)

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

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5498.130	94.0	H	-	-	AVG	235	1.0	
5498.130	102.6	H	-	-	PK	235	1.0	
5494.000	92.0	V	-	-	AVG	160	1.1	
5494.000	100.2	V	-	-	PK	160	1.1	

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

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5459.970	52.8	H	54.0	-1.2	AVG	235	1.0	
5459.920	68.1	H	74.0	-5.9	PK	235	1.0	
5459.830	50.0	V	54.0	-4.0	AVG	160	1.1	
5459.850	66.8	V	74.0	-7.2	PK	160	1.1	

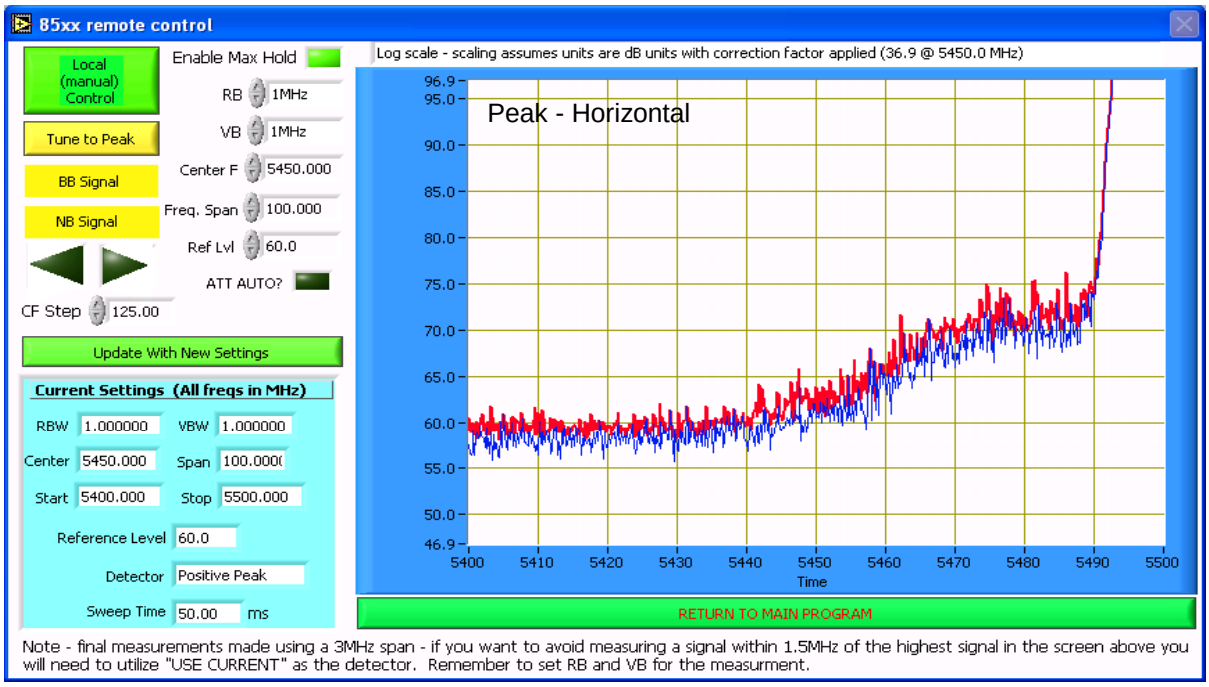
5460 - 5470 MHz, Limit is -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak at 3m)

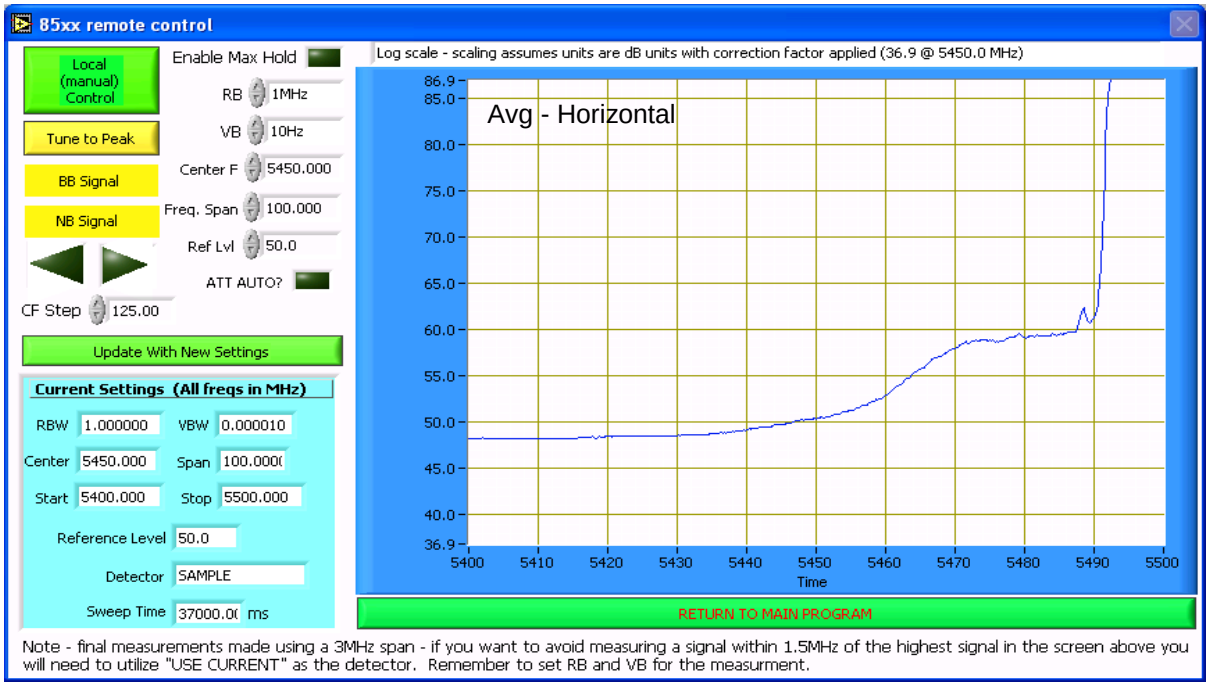
Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5469.860	57.7	H	68.3	-10.6	AVG	235	1.0	Note 3
5469.000	75.1	H	88.3	-13.2	PK	235	1.0	Note 3
5469.430	55.7	V	68.3	-12.6	AVG	160	1.1	Note 3
5467.920	71.3	V	88.3	-17.0	PK	160	1.1	Note 3

Note 3:	Target GC = 24.5, passing GC=23 and AP=17.2 dBm.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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
Run #1c: Low Channel @ 5510 MHz (restricted band edge at 5460 MHz, allocated band edge at 5470MHz)
Power Setting: 23 Average power: ?? (for reference purposes)





Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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 40MHz - Chain B

Sample ID: 0016EA02D4D0
Date of Test: 6/10/2008
Test Engineer: Joseph Cadigal
Test Location: FT Chamber#3

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

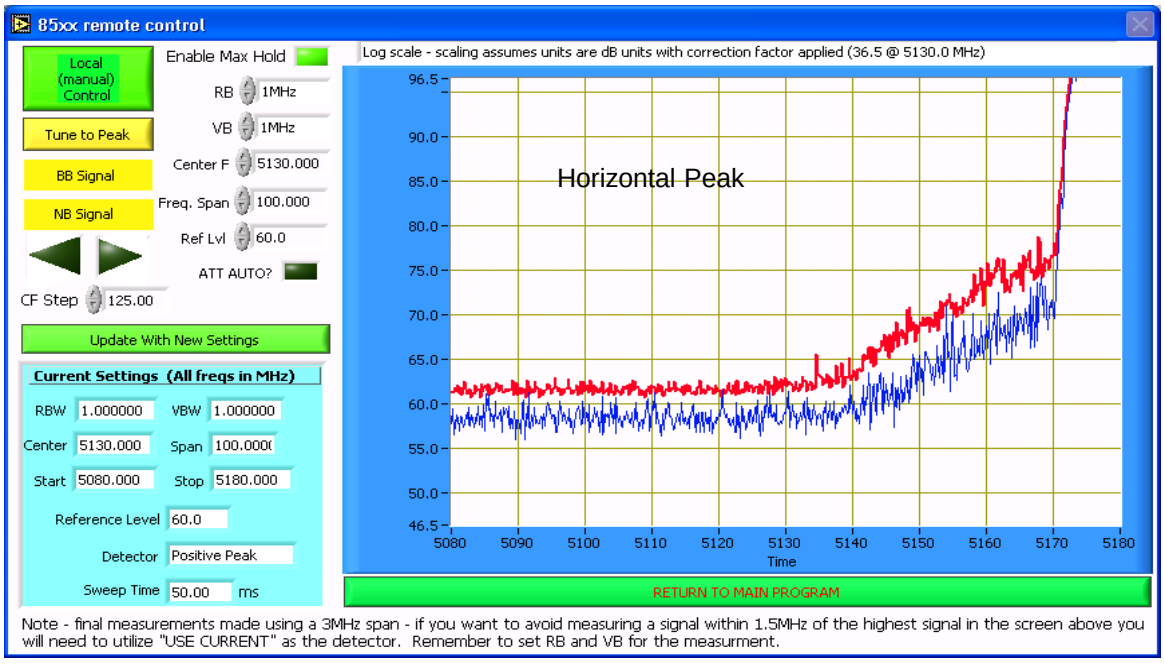
Power Setting: 23 Average power: 14.3 (for reference purposes)

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	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5205.170	91.2	V	-	-	AVG	17	1.0	
5205.170	104.6	V	-	-	PK	17	1.0	
5200.500	93.7	H	-	-	AVG	59	1.0	
5200.500	102.7	H	-	-	PK	59	1.0	

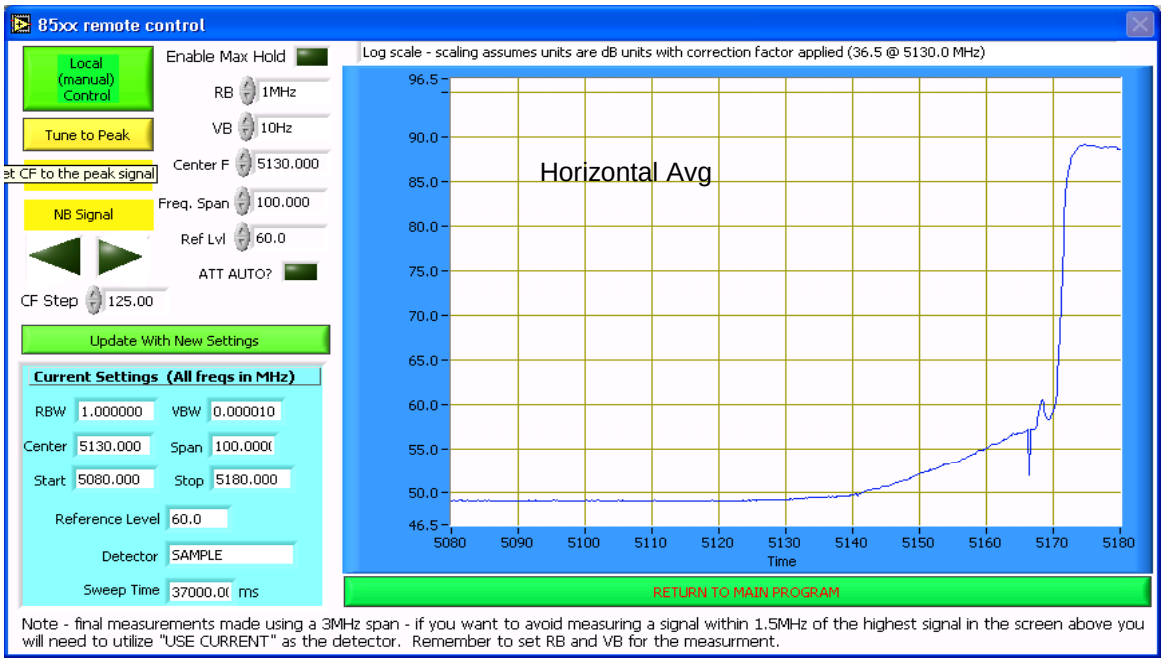
Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5129.730	50.1	H	54.0	-3.9	AVG	60	1.0	
5129.730	61.4	H	74.0	-12.6	PK	60	1.0	
5129.730	49.8	V	54.0	-4.2	AVG	16	1.0	
5129.730	61.7	V	74.0	-12.3	PK	16	1.0	



Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

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



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

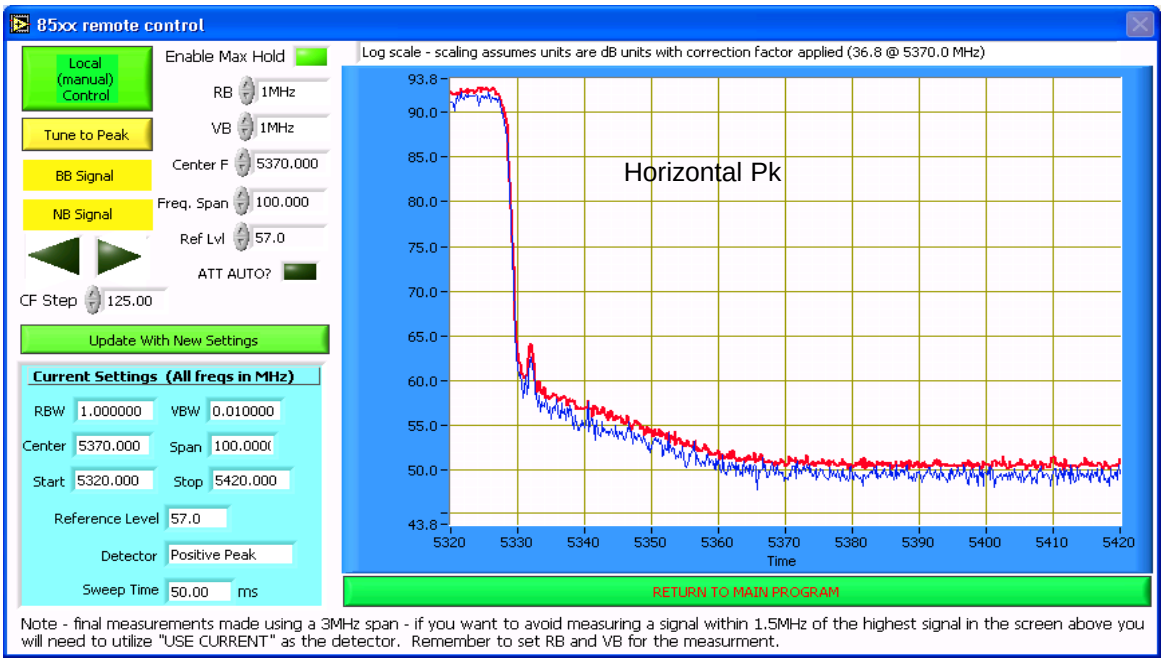
Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5300.330	95.8	H	-	-	AVG	42	1.0	
5300.330	104.8	H	-	-	PK	42	1.0	
5298.170	95.8	V	-	-	AVG	342	1.0	
5298.170	105.8	V	-	-	PK	342	1.0	

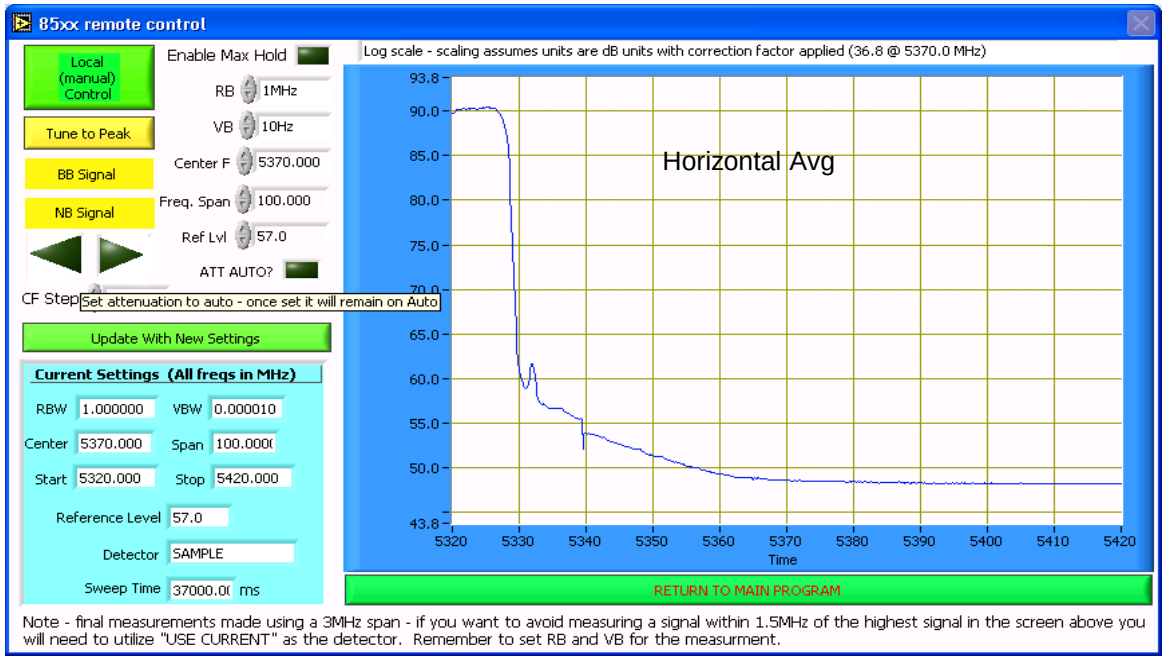
Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5371.380	49.8	H	54.0	-4.2	AVG	41	1.0	
5371.380	62.3	H	74.0	-11.7	PK	41	1.0	
5370.650	49.6	V	54.0	-4.4	AVG	342	1.0	
5370.650	61.5	V	74.0	-12.5	PK	342	1.0	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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)





Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

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 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5495.670	93.7	H	-	-	AVG	348	1.0	
5495.670	102.3	H	-	-	PK	348	1.0	
5499.670	93.5	V	-	-	AVG	334	1.0	
5499.670	102.3	V	-	-	PK	334	1.0	

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

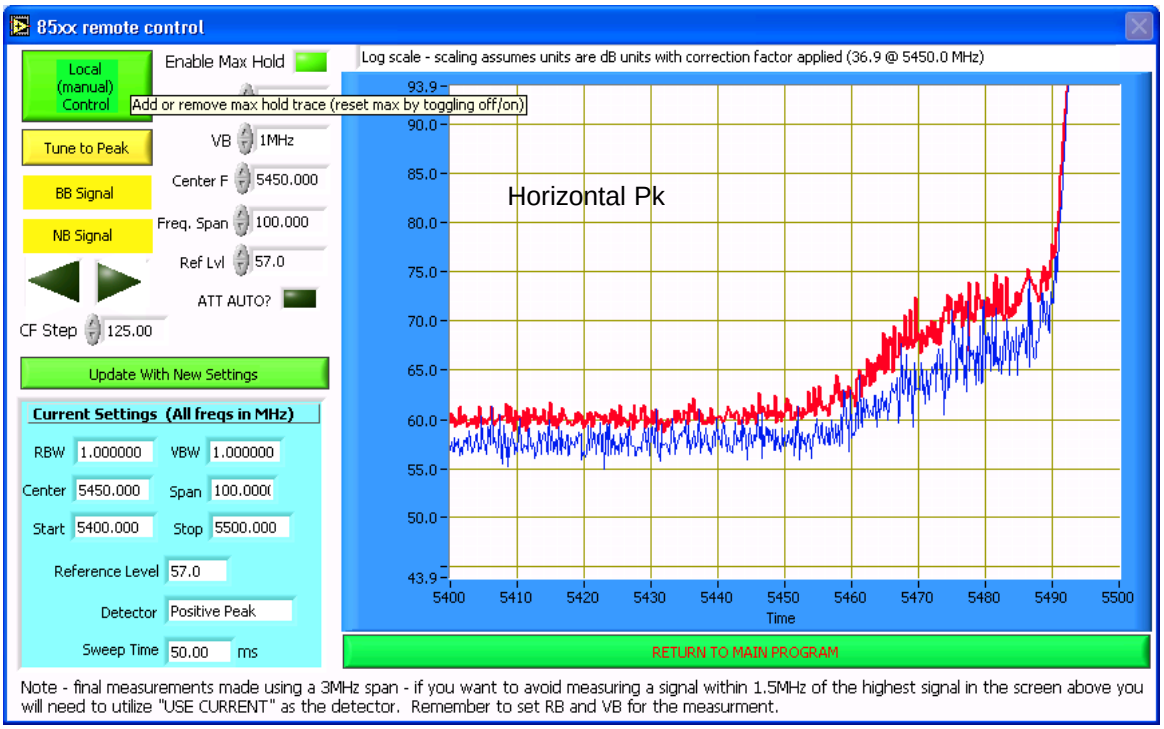
Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5458.900	50.7	H	54.0	-3.3	AVG	348	1.0	
5458.900	64.1	H	74.0	-9.9	PK	348	1.0	
5458.550	50.5	V	54.0	-3.5	AVG	334	1.0	
5458.550	63.6	V	74.0	-10.4	PK	334	1.0	

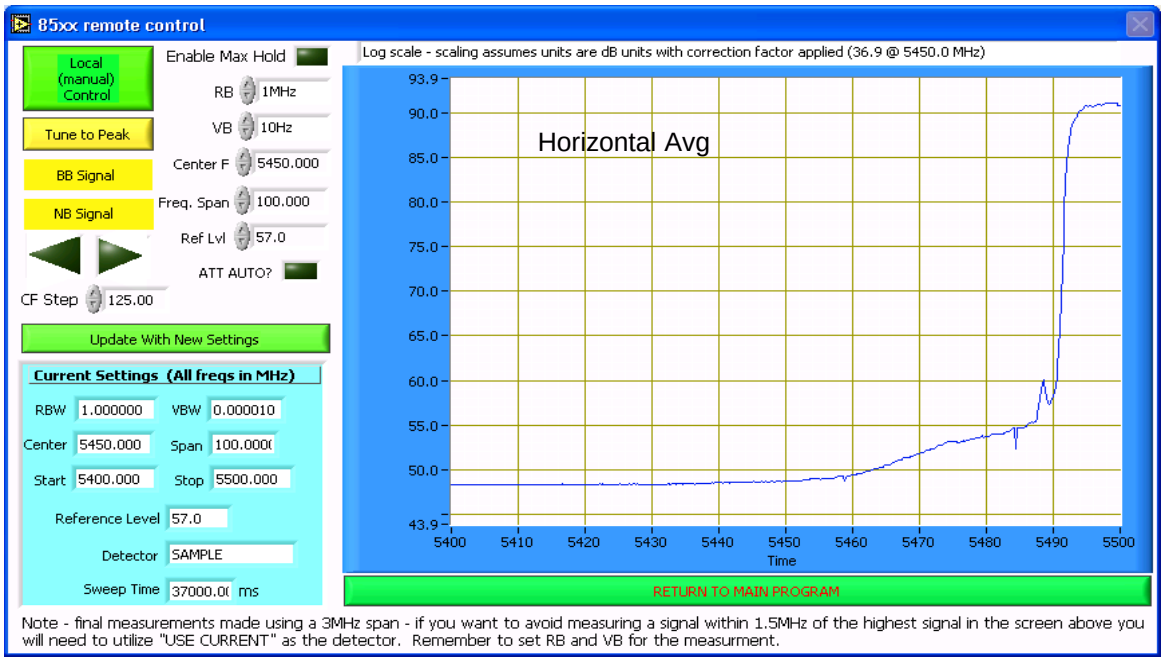
5460 - 5470 MHz, Limit is -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak at 3m)

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5468.870	53.7	H	68.3	-14.6	AVG	348	1.0	
5468.870	71.0	H	88.3	-17.3	PK	348	1.0	
5469.190	53.7	V	68.3	-14.6	AVG	334	1.0	
5469.190	72.1	V	88.3	-16.2	PK	334	1.0	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

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





Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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

Sample ID: 0016EA02D4D0
Date of Test: 6/10/2008
Test Engineer: Rafael Varelas
Test Location: FT Chamber#3

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

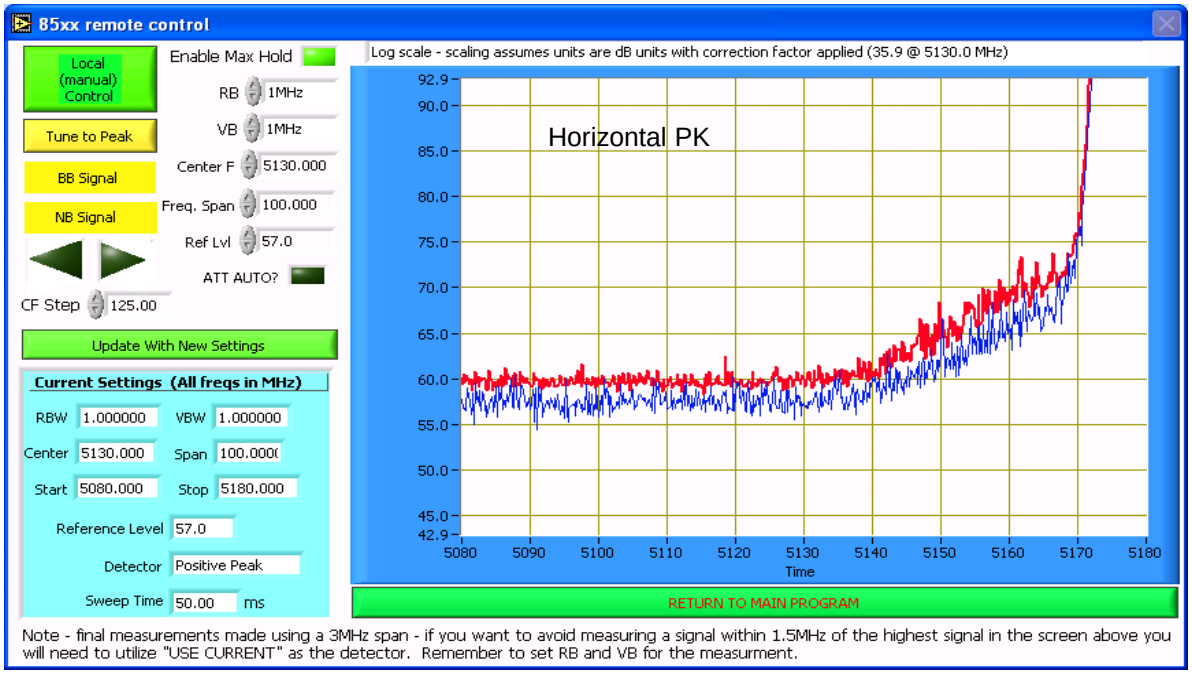
Power Setting: 26 Average power: 13.7 (for reference purposes)

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

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5201.070	90.0	V	-	-	AVG	16	1.0	
5201.070	98.6	V	-	-	PK	16	1.0	
5199.470	93.7	H	-	-	AVG	59	1.1	
5199.470	102.5	H	-	-	PK	59	1.1	

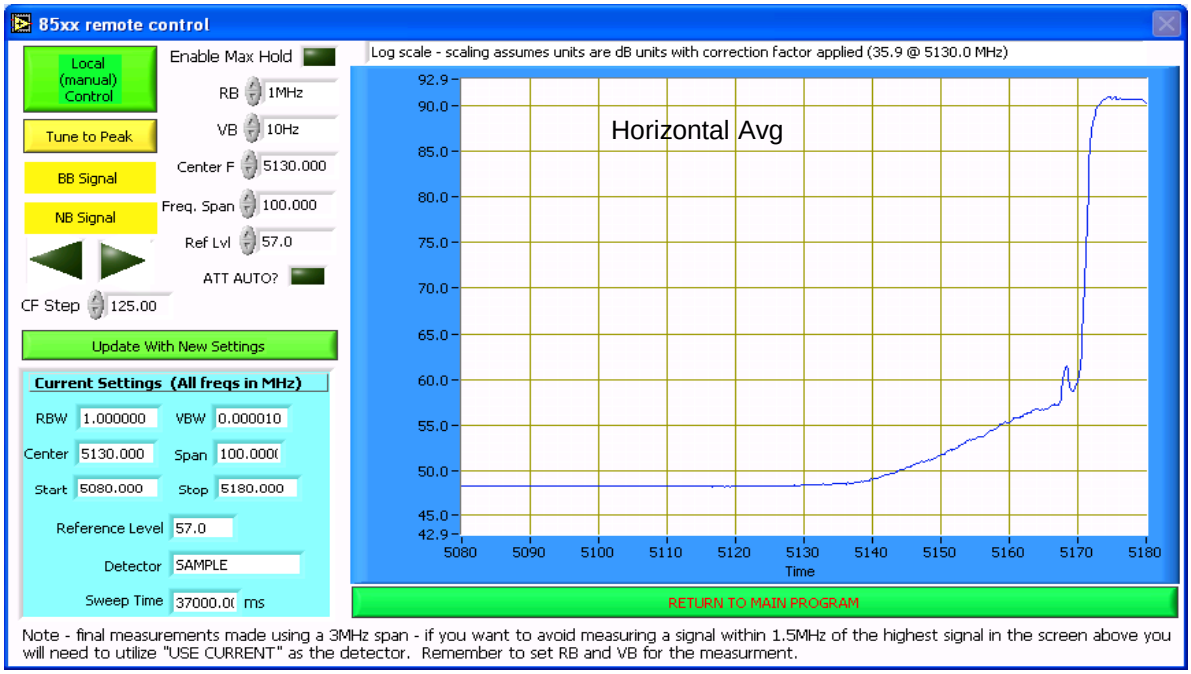
Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5149.630	49.9	V	54.0	-4.1	Avg	16	1.0	
5149.790	63.7	V	74.0	-10.3	PK	16	1.0	
5149.770	51.9	H	54.0	-2.1	Avg	59	1.0	
5147.900	67.8	H	74.0	-6.2	PK	59	1.0	



Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #3a: Continued



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

Power Setting: 24.5 Average power: 13.7 (for reference purposes)

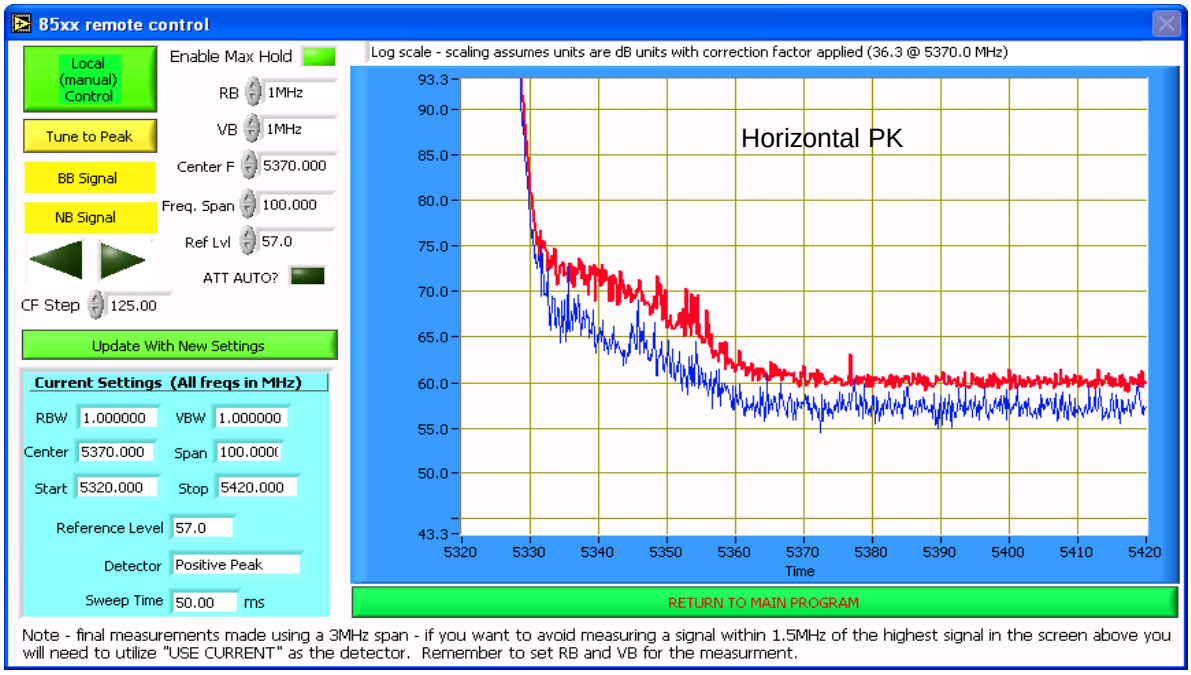
Fundamental Signal Field Strength: Peak and average values measured in 1 MHz, for reference only

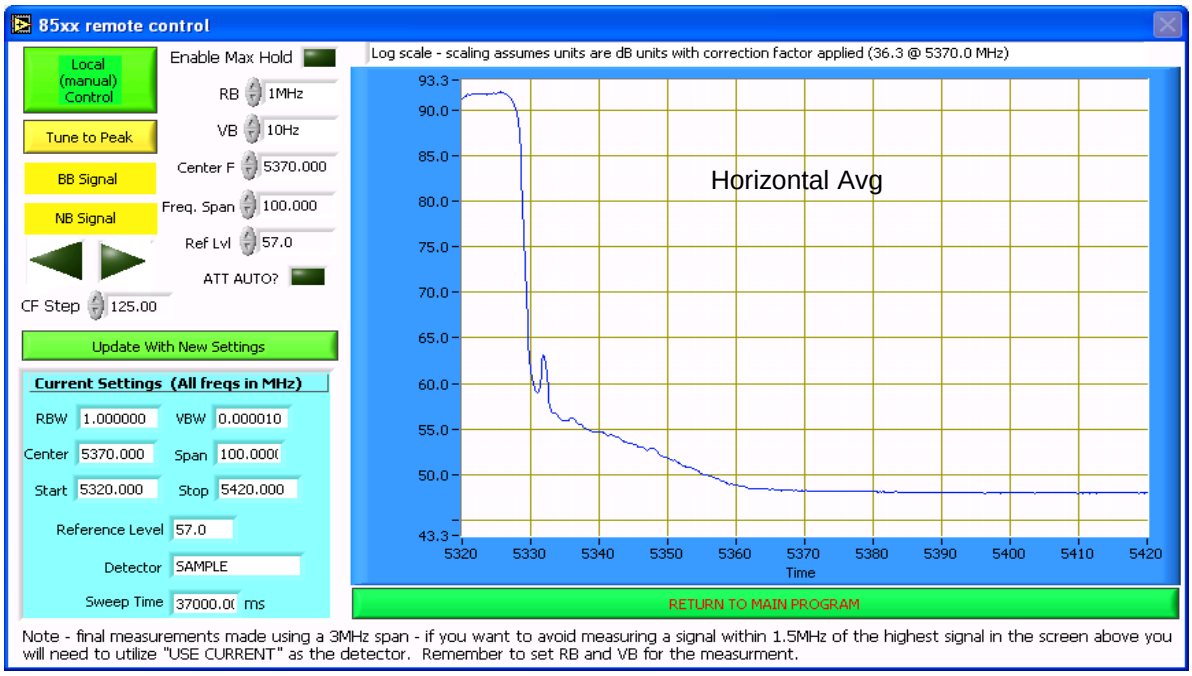
Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5325.470	90.9	V	-	-	AVG	17	1.0	
5325.470	99.2	V	-	-	PK	17	1.0	
5321.730	95.7	H	-	-	Avg	68	1.1	
5321.730	104.4	H	-	-	PK	68	1.1	

Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5360.000	51.1	V	54.0	-2.9	AVG	17	1.1	
5350.190	70.6	V	74.0	-3.4	PK	17	1.1	
5350.000	53.8	H	54.0	-0.2	Avg	68	1.0	Power 15.0, Setting 25.5
5350.000	51.8	H	54.0	-2.2	Avg	68	1.1	Power 13.7, Setting 24.5
5350.550	68.3	H	74.0	-5.7	PK	68	1.1	Power 13.7, Setting 24.5

Run #3b: Continued





Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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: 25 Average power: 16.6 (for reference purposes)

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

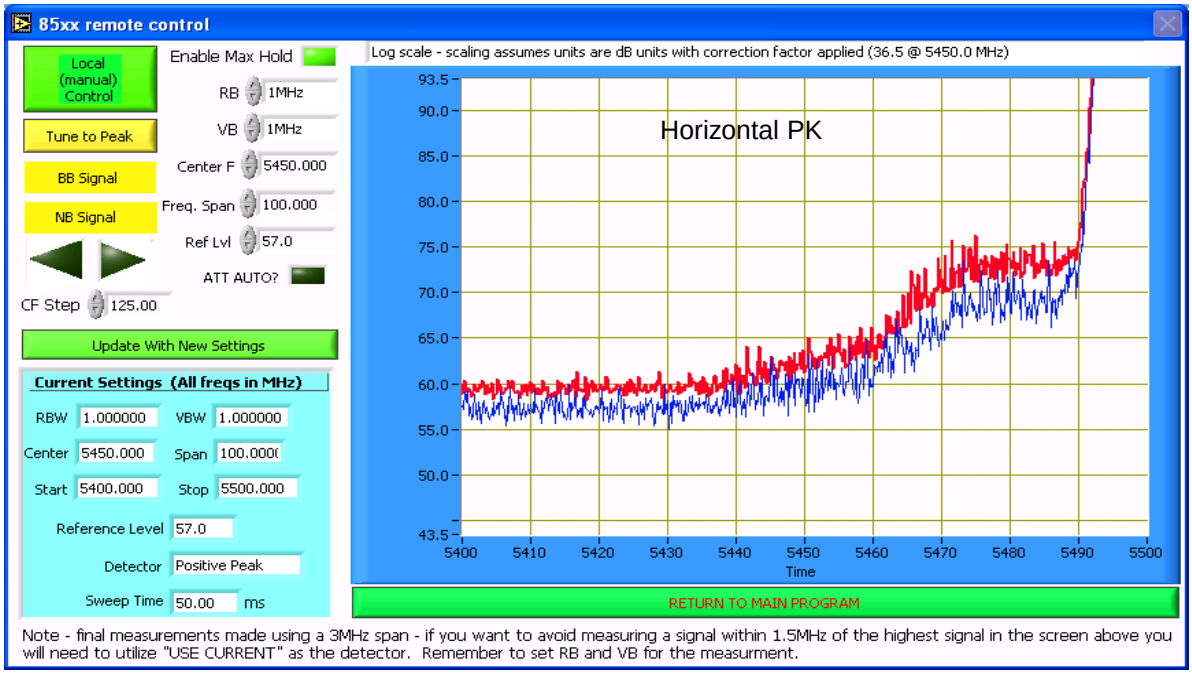
Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5524.670	89.6	V	-	-	AVG	330	1.6	
5524.670	98.4	V	-	-	PK	330	1.6	
5499.130	94.8	H	-	-	AVG	360	1.0	
5499.130	104.4	H	-	-	PK	360	1.0	

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

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5459.590	48.9	V	54.0	-5.1	Avg	330	1.6	
5459.980	62.6	V	74.0	-11.4	PK	330	1.6	
5459.970	50.8	H	54.0	-3.2	Avg	360	1.0	
5459.730	67.6	H	74.0	-6.4	PK	360	1.0	

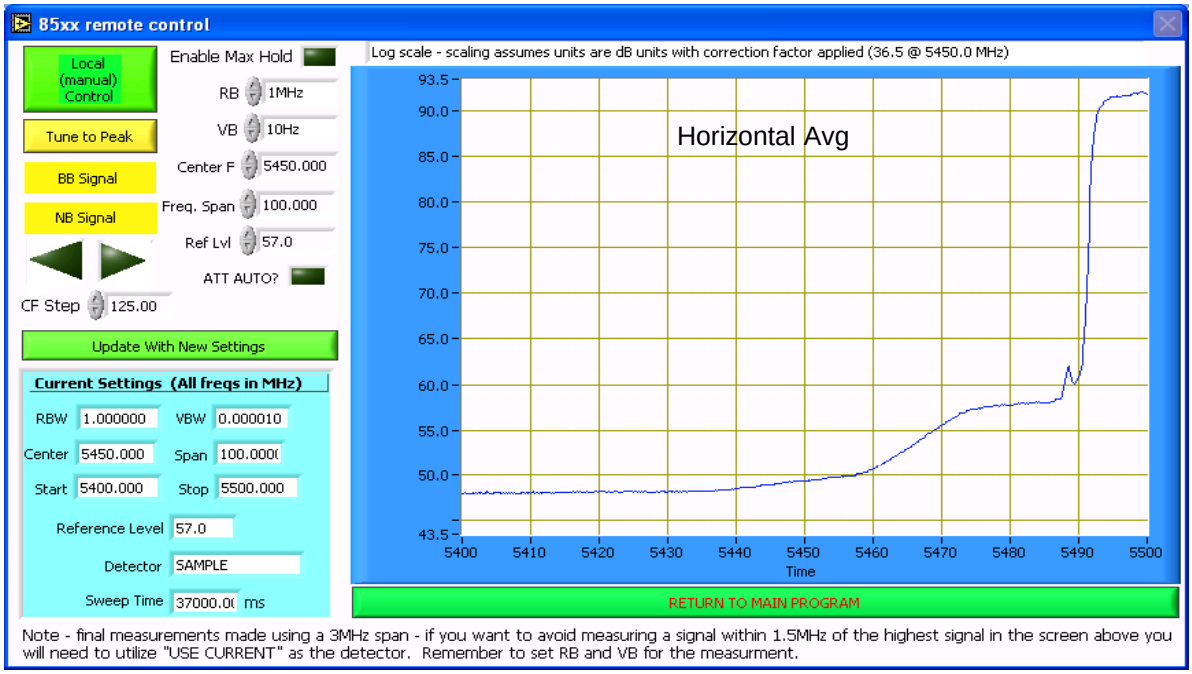
5460 - 5470 MHz, Limit is -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak at 3m)

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5469.900	51.9	V	68.3	-16.4	Avg	330	1.6	
5469.110	69.8	V	88.3	-18.5	PK	330	1.6	
5469.970	55.7	H	68.3	-12.6	Avg	360	1.0	
5469.940	77.2	H	88.3	-11.1	PK	360	1.0	



Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #3c: Continued



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

Sample ID: 0016EA02D4D0
Date of Test: 6/10/2008
Test Engineer: Rafael Varelas
Test Location: FT 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
27.0	14.0	28.0	14.5		

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

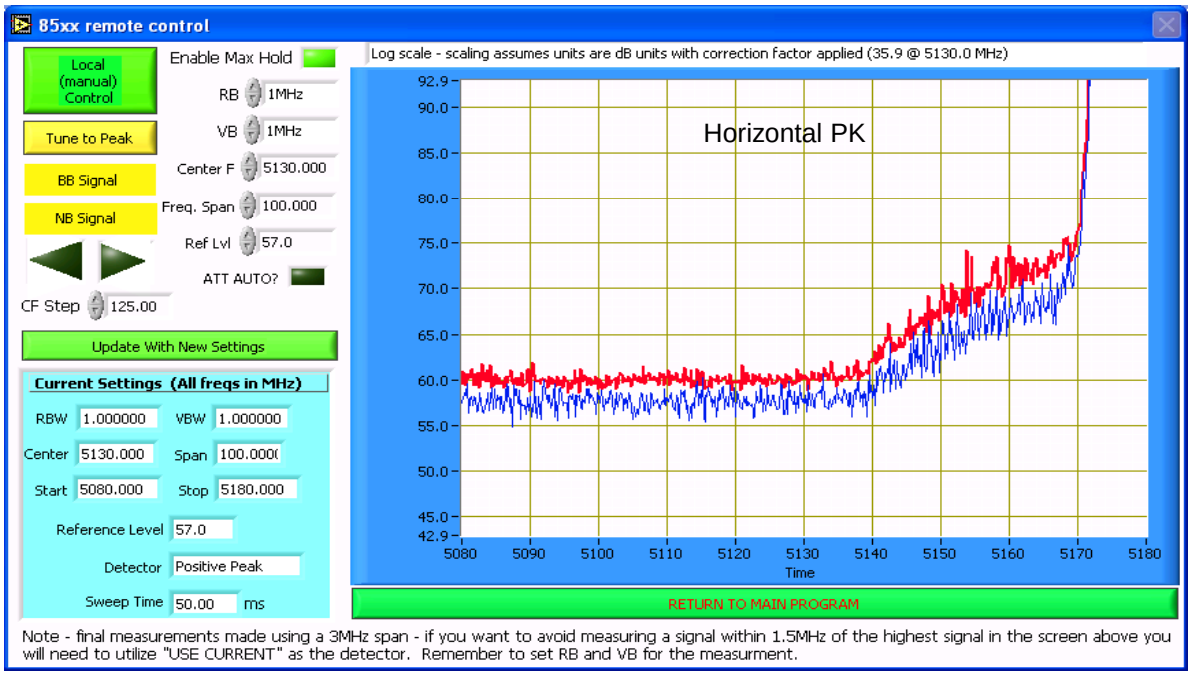
Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5202.530	91.7	V	-	-	AVG	323	1.7	
5202.530	101.9	V	-	-	PK	323	1.7	
5200.530	95.0	H	-	-	AVG	54	1.0	
5200.530	105.1	H	-	-	PK	54	1.0	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #4a: Continued

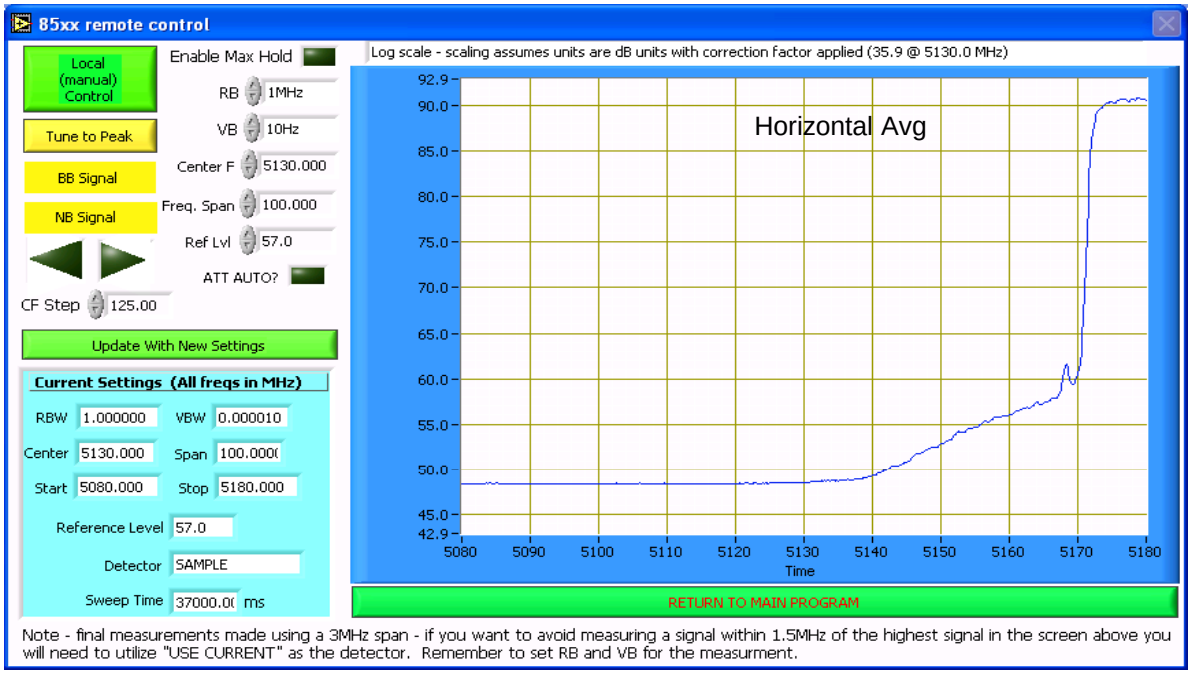
Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5149.900	50.2	V	54.0	-3.8	Avg	323	1.8	
5147.530	64.4	V	74.0	-9.6	PK	323	1.8	
5149.900	53.0	H	54.0	-1.0	Avg	54	1.0	
5149.520	72.0	H	74.0	-2.0	PK	54	1.0	



Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #4a: Continued



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
23.0	13.6	25.0	13.7		

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

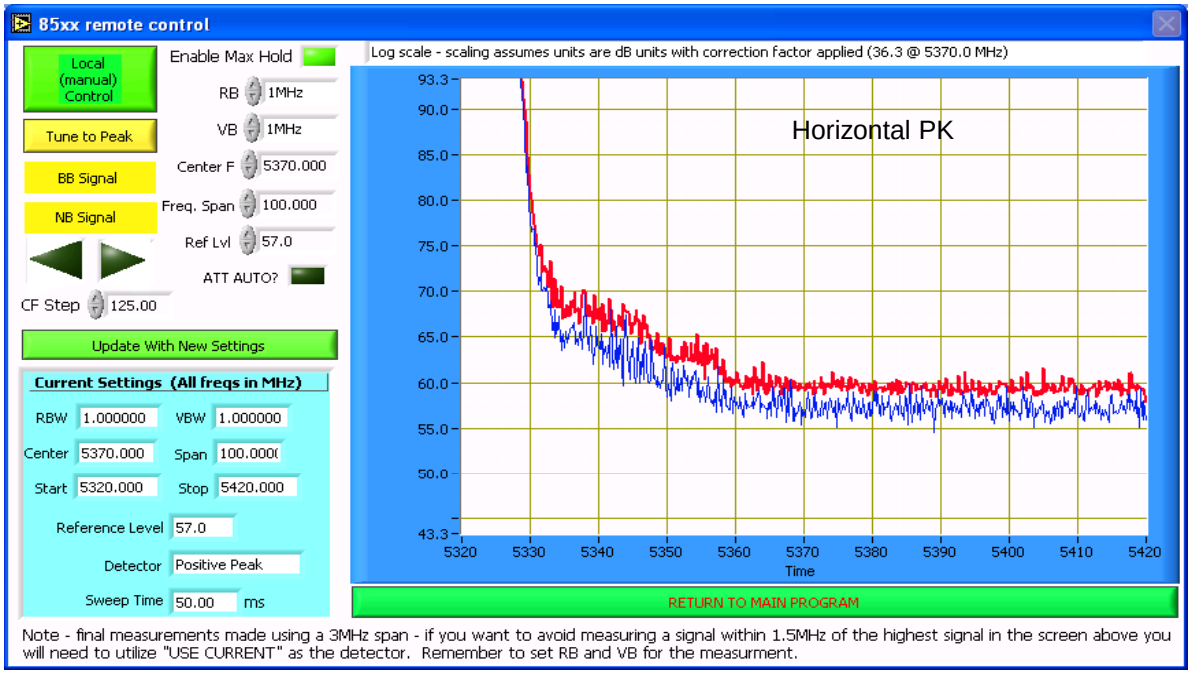
Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5298.670	94.1	V	-	-	AVG	26	1.0	
5298.670	104.5	V	-	-	PK	26	1.0	
5298.870	95.7	H	-	-	AVG	82	1.0	
5298.870	106.1	H	-	-	PK	82	1.0	

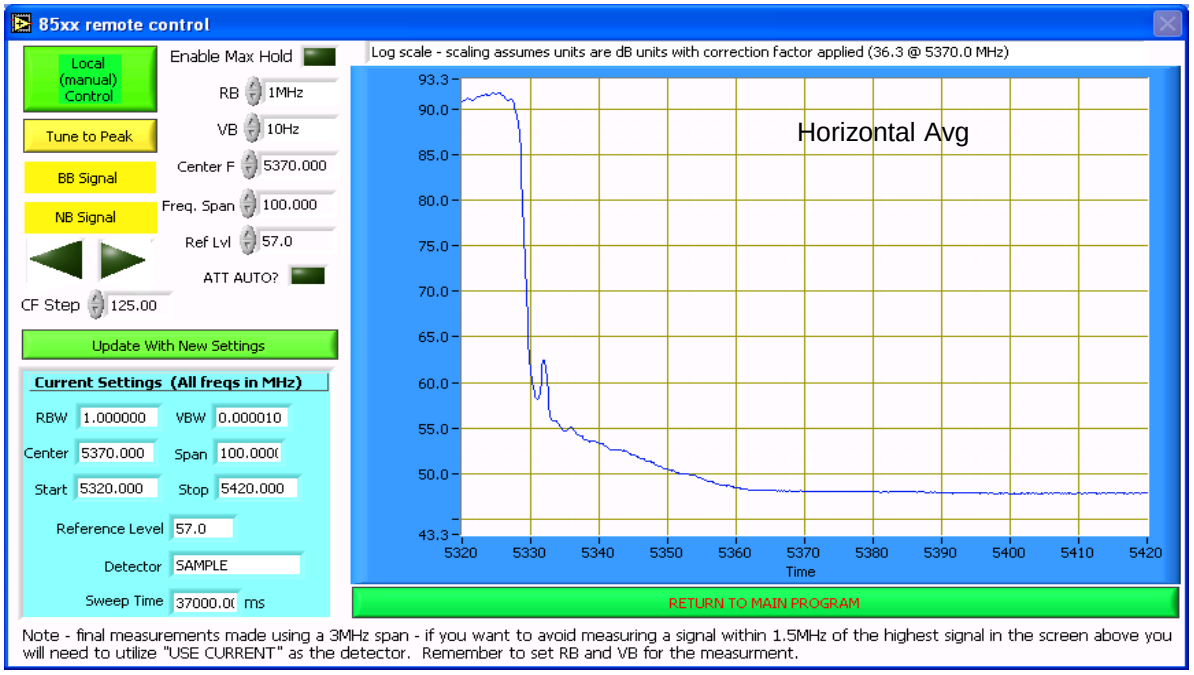
Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5350.010	50.0	V	54.0	-4.0	Avg	26	1.0	
5350.810	65.5	V	74.0	-8.5	PK	26	1.0	
5350.000	50.5	H	54.0	-3.5	Avg	82	1.0	
5350.080	68.0	H	74.0	-6.0	PK	82	1.0	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #4b: Continued





Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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
23.0	14.9	25.5	14.7		

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	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5497.130	93.9	V	-	-	AVG	333	1.6	
5497.130	103.7	V	-	-	PK	333	1.6	
5498.270	94.1	H	-	-	AVG	58	1.0	
5498.270	103.8	H	-	-	PK	58	1.0	

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

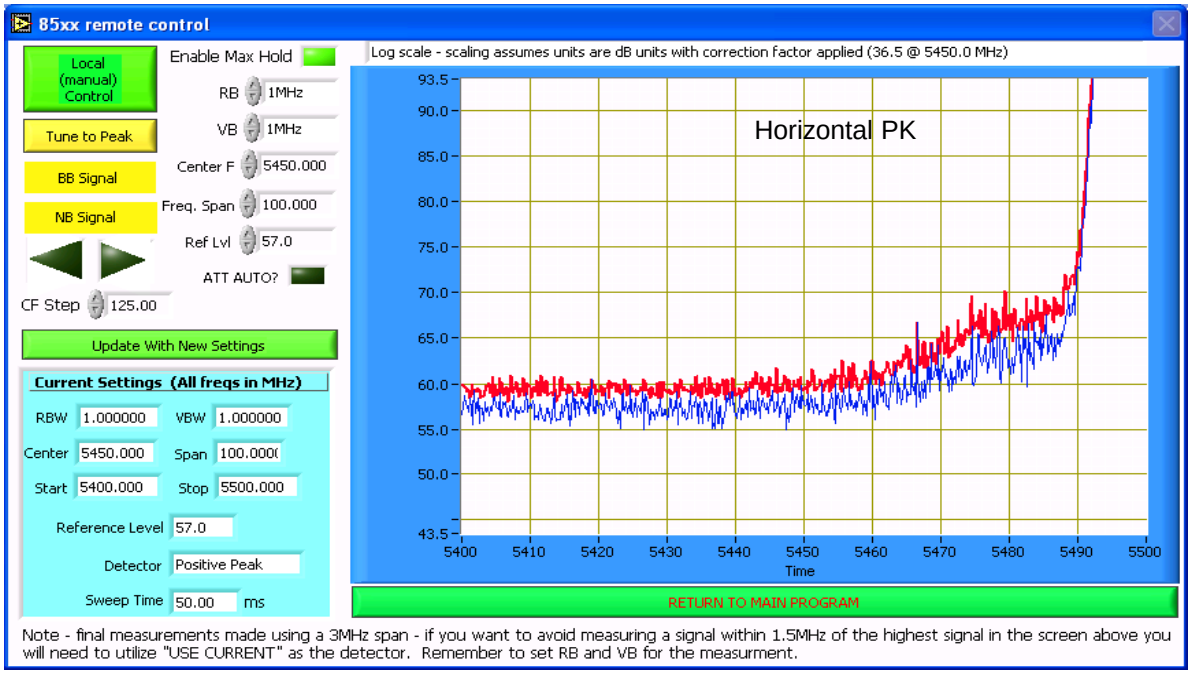
Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5458.810	48.8	V	54.0	-5.2	Avg	333	1.6	
5459.020	62.8	V	74.0	-11.2	PK	333	1.6	
5459.910	48.9	H	54.0	-5.1	Avg	58	1.0	
5458.530	62.7	H	74.0	-11.3	PK	58	1.0	

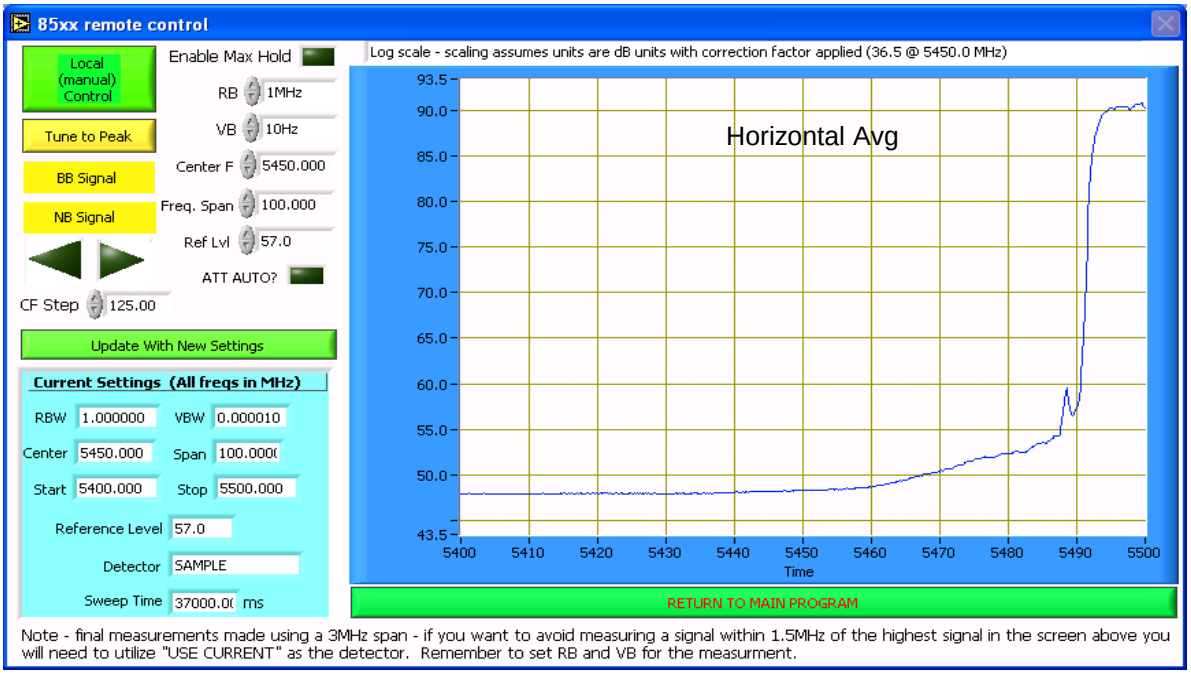
5460 - 5470 MHz, Limit is -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak at 3m)

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5469.980	50.9	V	68.3	-17.4	Avg	333	1.6	
5467.730	66.2	V	88.3	-22.1	PK	333	1.6	
5468.590	48.8	V	68.3	-19.5	Avg	58	1.0	
5467.850	62.2	V	88.3	-26.1	PK	58	1.0	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #4c: Continued





Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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

Sample ID: 0016EA02D4D0
Date of Test: 6/10/2008
Test Engineer: Rafael Varelas
Test Location: FT 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
26.0	12.7			27.5	13.2

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

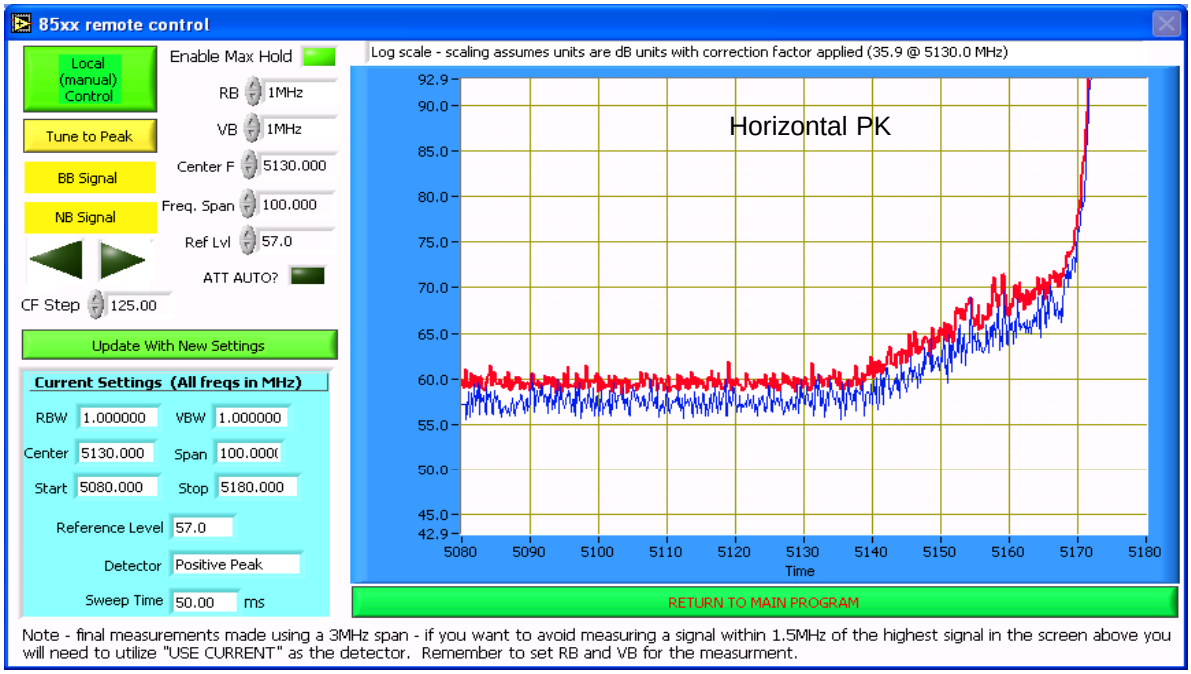
Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5204.870	92.9	V	-	-	AVG	340	1.4	
5204.870	103.6	V	-	-	PK	340	1.4	
5201.670	95.2	H	-	-	AVG	59	1.1	
5201.670	106.2	H	-	-	PK	59	1.1	

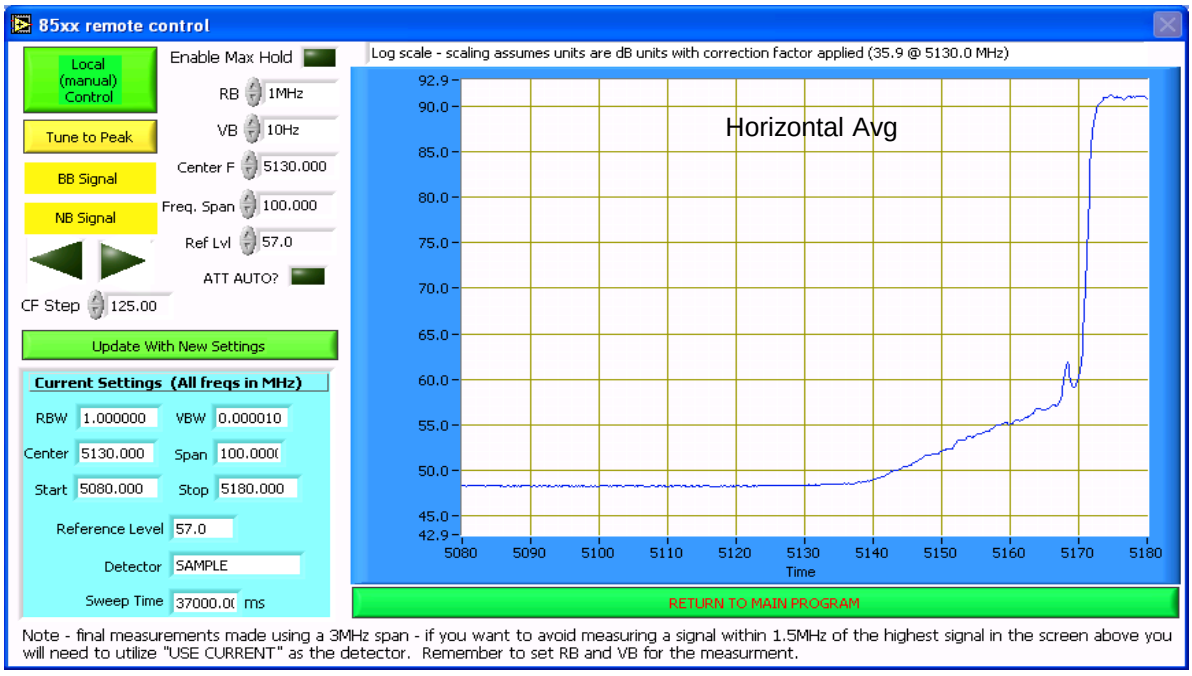
Band Edge Signal Field Strength

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5149.840	51.3	V	54.0	-2.7	Avg	340	1.4	
5147.530	68.3	V	74.0	-5.7	PK	340	1.4	
5149.900	54.0	H	54.0	0.0	Avg	59	1.1	Setting=27.0, 28.5,Avg PWR=13.8, 14.3
5149.880	52.2	H	54.0	-1.8	Avg	59	1.1	
5149.740	68.8	H	74.0	-5.2	PK	59	1.1	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #5a: Continued





Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

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

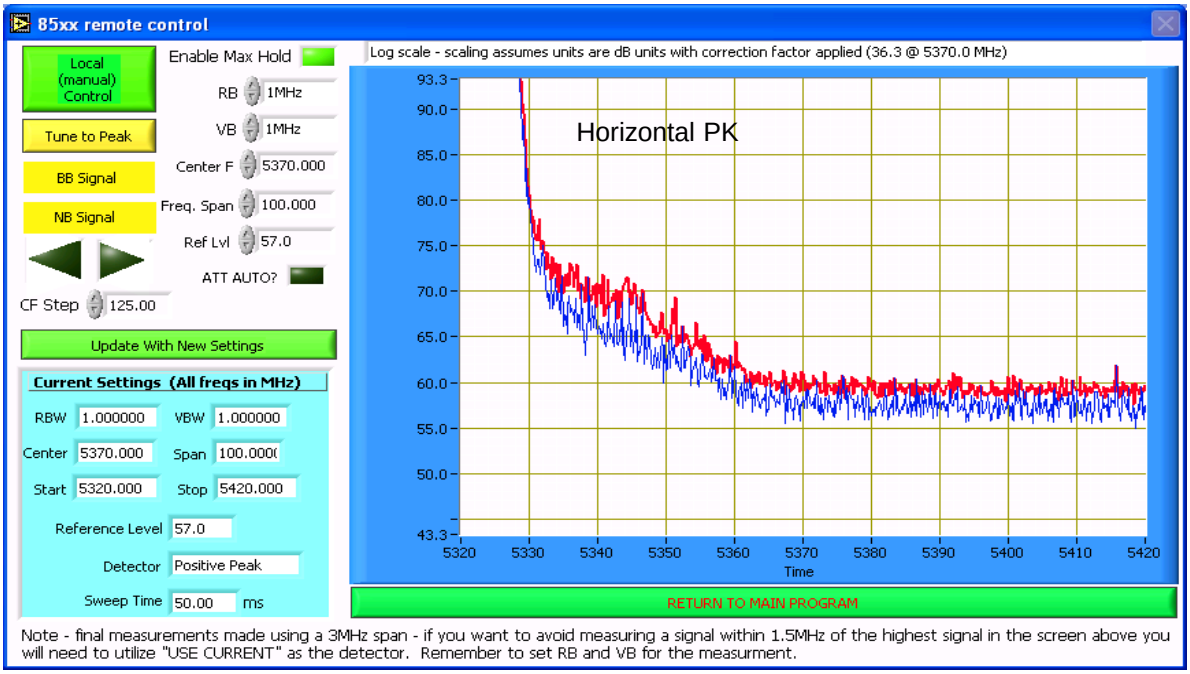
Power Setting and average measurement (for reference)					
Chain A		Chain B		Chain C	
Setting	Avg	Setting	Avg	Setting	Avg
24.0	14.1			26.5	14.2

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	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5324.930	94.8	V	-	-	AVG	23	1.5	
5324.930	104.6	V	-	-	PK	23	1.5	
5298.270	95.9	H	-	-	AVG	53	1.0	
5298.270	105.5	H	-	-	PK	53	1.0	

Band Edge Signal Field Strength

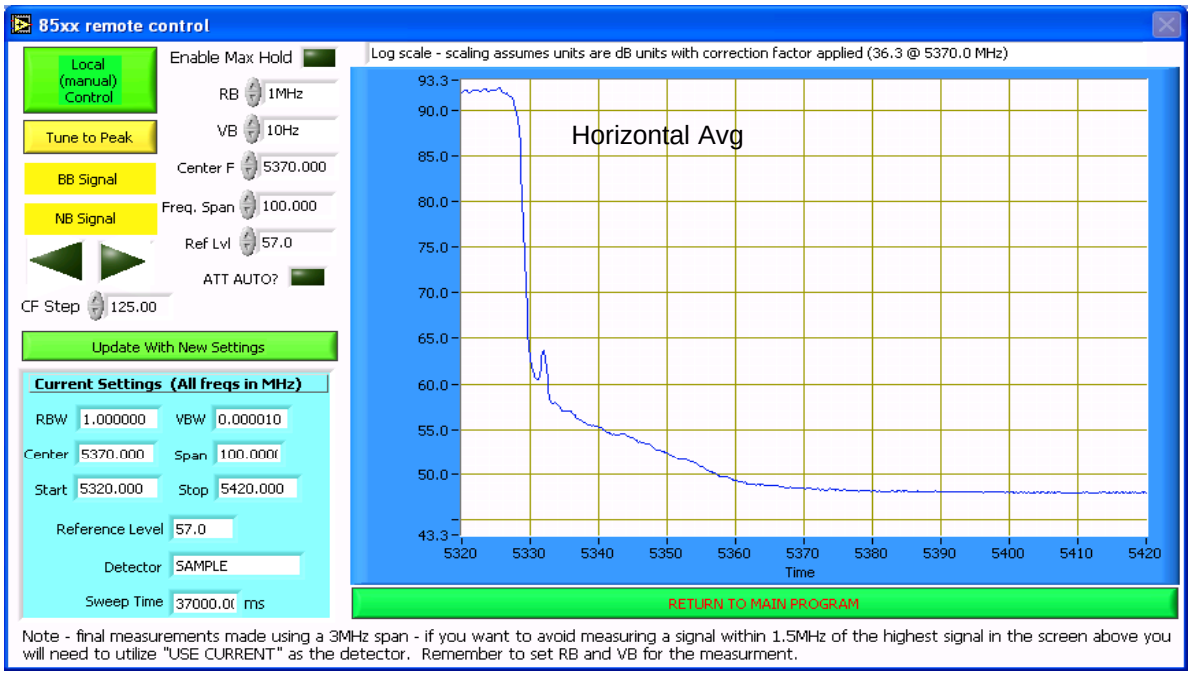
Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5350.000	51.5	V	54.0	-2.5	Avg	23	1.4	
5351.040	67.8	V	74.0	-6.2	PK	23	1.4	
5350.040	52.1	H	54.0	-1.9	Avg	53	1.0	
5350.560	69.0	H	74.0	-5.0	PK	53	1.0	



Note - final measurements made using a 3MHz span - if you want to avoid measuring a signal within 1.5MHz of the highest signal in the screen above you will need to utilize "USE CURRENT" as the detector. Remember to set RB and VB for the measurment.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

Run #5b: Continued



Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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)

Sample ID: 0016EA02D4D0
Date of Test: 6/13/2008
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
23.5	16.0			23.5	14.0

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

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5498.130	95.6	V	-	-	AVG	153	1.0	
5498.130	105.8	V	-	-	PK	153	1.0	
5499.070	97.6	H	-	-	AVG	107	1.0	
5499.070	107.4	H	-	-	PK	107	1.0	

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

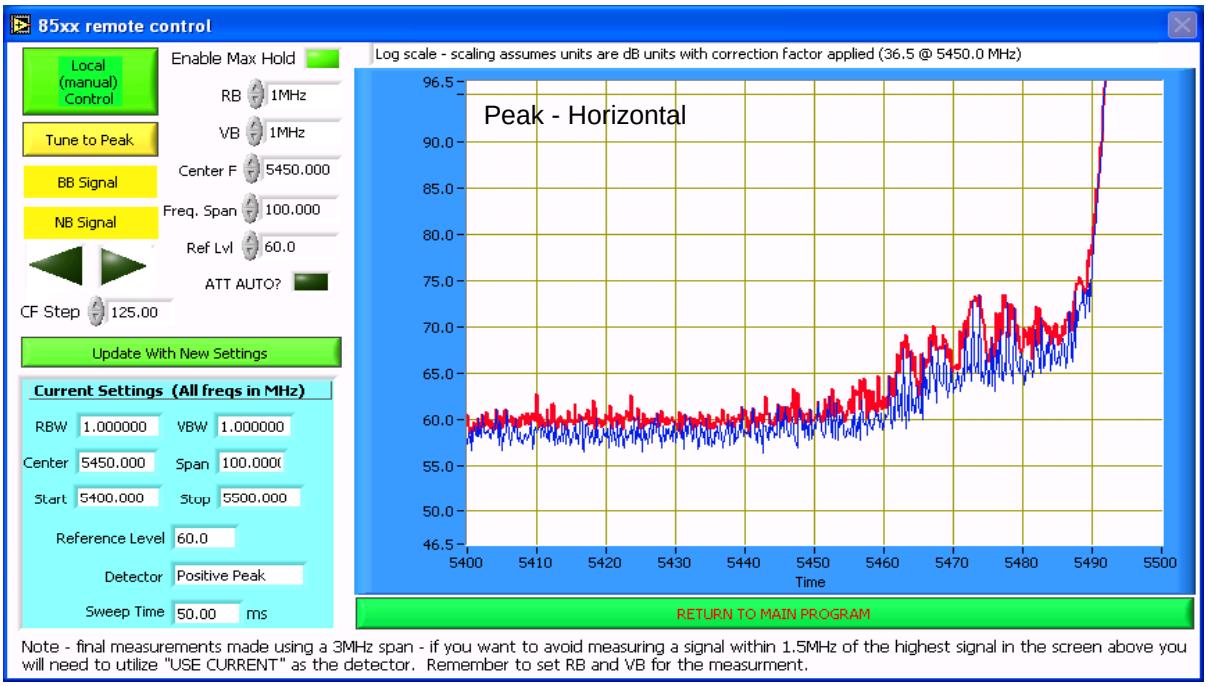
Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5459.990	50.5	H	54.0	-3.5	AVG	108	1.0	
5457.180	65.6	H	74.0	-8.4	PK	108	1.0	
5459.850	66.9	V	74.0	-7.1	PK	153	1.0	
5459.720	50.4	V	54.0	-3.6	AVG	153	1.0	

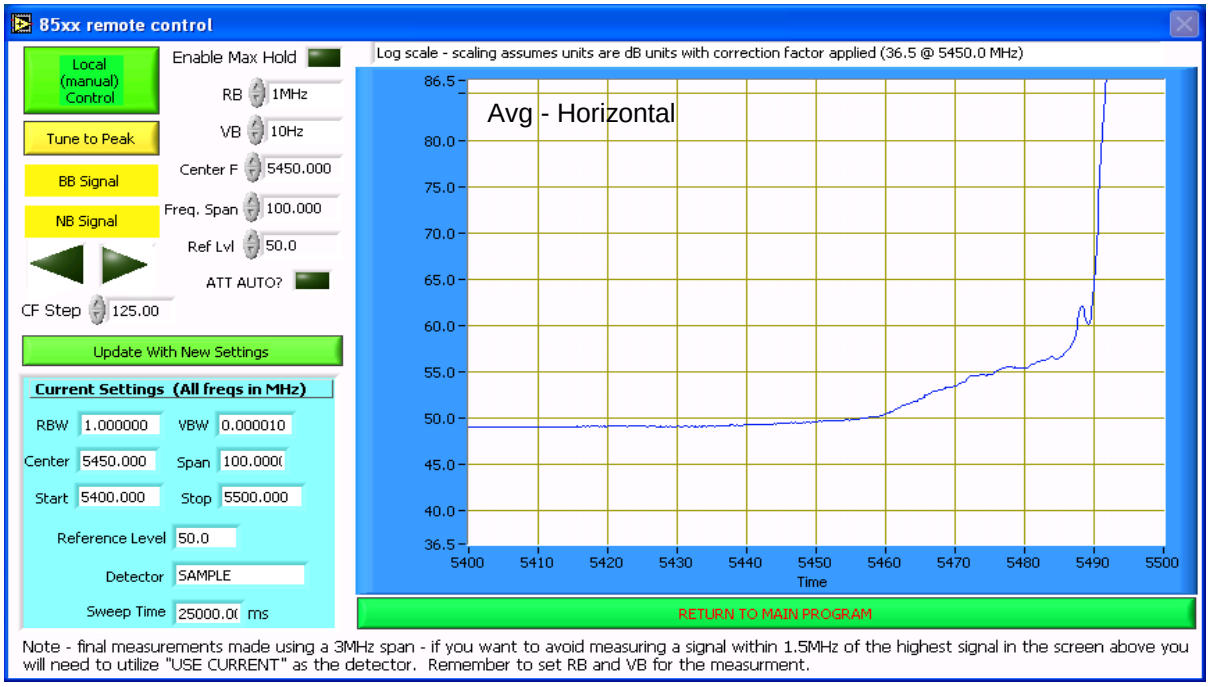
5460 - 5470 MHz, Limit is -27dBm eirp (68.3dBuV/m average, 88.3dBuV/m peak at 3m)

Frequency	Level	Pol	15.209 / 15.407		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5468.270	73.7	V	88.3	-14.6	PK	153	1.0	
5469.790	53.1	V	68.3	-15.2	AVG	153	1.0	
5469.480	73.4	H	88.3	-14.9	PK	108	1.0	
5469.790	53.6	H	68.3	-14.7	AVG	108	1.0	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

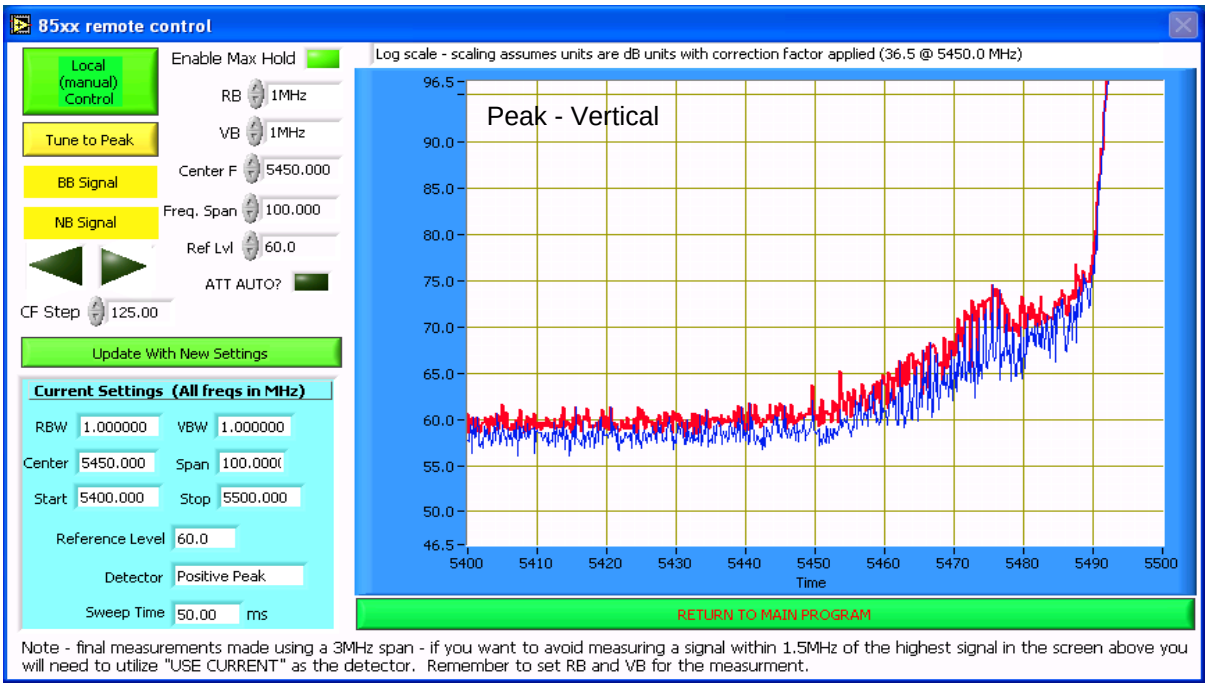
Run #5c: Low Channel @ 5510 MHz (restricted band edge at 5460 MHz, allocated band edge at 5470MHz)

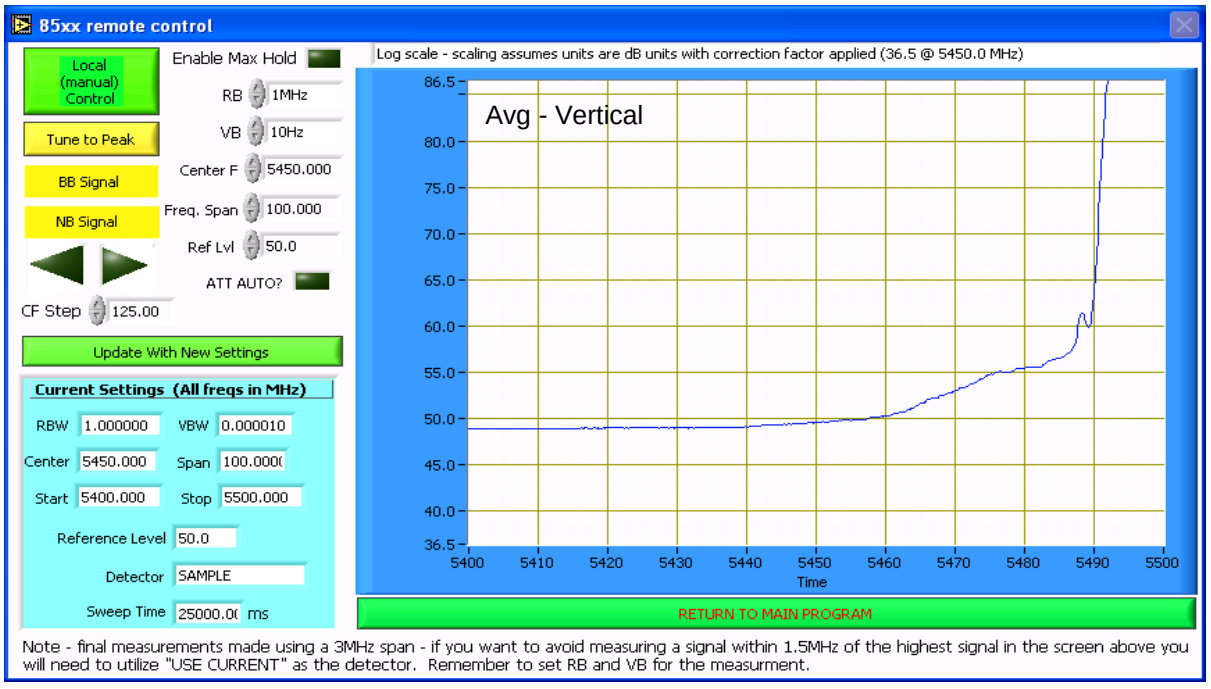




Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	N/A

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





Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		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 802.11n 40MHz Universe Antenna

Summary of Results

Run #	Mode	Channel	Power Setting	Measured Power	Test Performed	Limit	Result / Margin
1	802.11n40 Chain A	5190 5230	29 29	15.3 16.5	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.247(c)	Tests with ethertronics antenna indiacted spurious emissions were higher when operating in 802.11n mode witth a 20MHz bandwidth.
2	802.11n40 Chain A	5270 5310	27.5 26.0	16.5 16.6	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.247(c)	
3	802.11n40 Chain A	5510 5590 5670	24.5 25.0 25.5	16.3 16.7 16.7	Radiated Emissions, 1 - 40 GHz	FCC Part 15.209 / 15.247(c)	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	-

Radiated Emissions - Receiver Spurious, Universe Antenna

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: 23 °C
Rel. Humidity: 34 %

Summary of Results

Run #	Test Performed	Limit	Result	Margin
1 - Receive Chain A	RE, 1000 - 18000 MHz, Maximized Emissions	RSS GEN	Pass	49.9dBµV/m @ 6933.3MHz (-4.1dB)
2 - Receive Chain B	RE, 1000 - 18000 MHz, Maximized Emissions	RSS GEN	Pass	50.8 dBuV/m @ 6933.4 MHz (-3.2dB)
3 - Receive Chain C	RE, 1000 - 18000 MHz, Maximized Emissions	RSS GEN	Pass	50.7 dBuV/m @ 6933.3 MHz (-3.3dB)
All Receiver chains	Emissions were signficantly higher with only a single receive chain active than with mutyliple chains active. Worst case mode is the single-chain mode.			

Modifications Made During Testing

No modifications were made to the EUT during testing

Deviations From The Standard

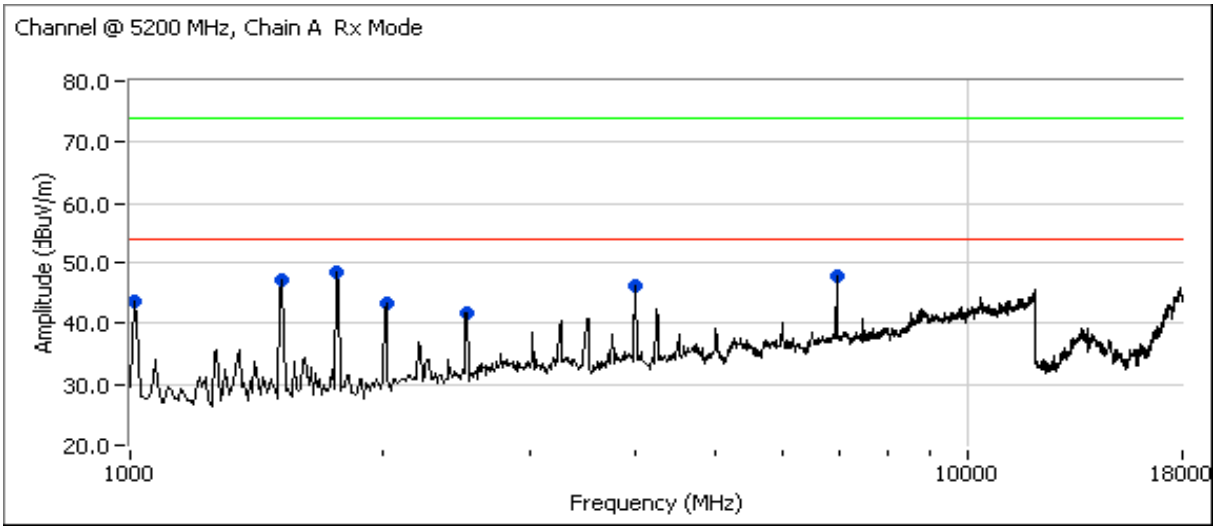
No deviations were made from the requirements of the standard.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	-

Run #1: Maximized readings, 1000 - 18000 MHz, Receive Chain A

Date of Test: 6/20/2008
Test Engineer: Suhaila Khushzad
Test Location: Chamber # 5

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

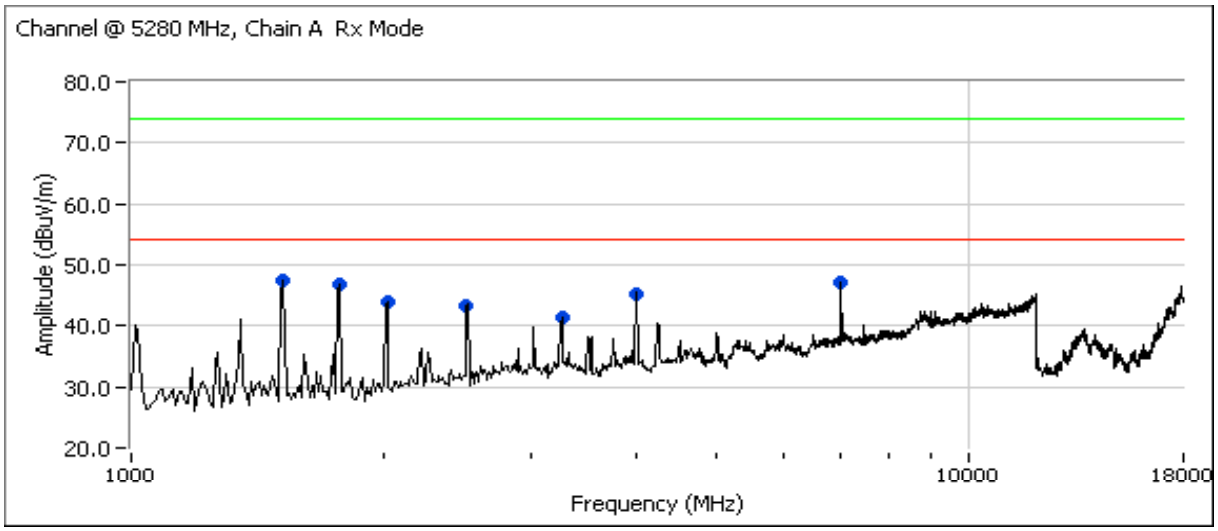


Receiver Tuned to 5200 MHz - Chain A

Frequency	Level	Pol	RSS GEN		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
6933.330	49.9	V	54.0	-4.1	AVG	231	1.2	
6933.330	53.0	V	74.0	-21.0	PK	231	1.2	
6933.380	43.0	H	54.0	-11.0	AVG	187	1.0	
6933.380	49.0	H	74.0	-25.0	PK	187	1.0	
1044.054	22.8	H	54.0	-31.2	AVG	275	1.0	
1044.054	33.8	H	74.0	-40.2	PK	275	1.0	
1497.740	37.5	H	54.0	-16.5	AVG	155	1.0	
1497.740	53.8	H	74.0	-20.2	PK	155	1.0	
1743.880	34.1	H	54.0	-19.9	AVG	161	1.3	
1743.880	54.6	H	74.0	-19.4	PK	161	1.3	
1997.190	35.2	V	54.0	-18.8	AVG	114	1.0	
1997.190	51.6	V	74.0	-22.4	PK	114	1.0	
2497.610	32.2	V	54.0	-21.8	AVG	68	1.3	
2497.610	47.6	V	74.0	-26.4	PK	68	1.3	
3993.650	34.3	V	54.0	-19.7	AVG	80	1.4	
3993.650	55.2	V	74.0	-18.8	PK	80	1.4	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	-

Run #1: Maximized readings, 1000 - 18000 MHz, Receive Chain A



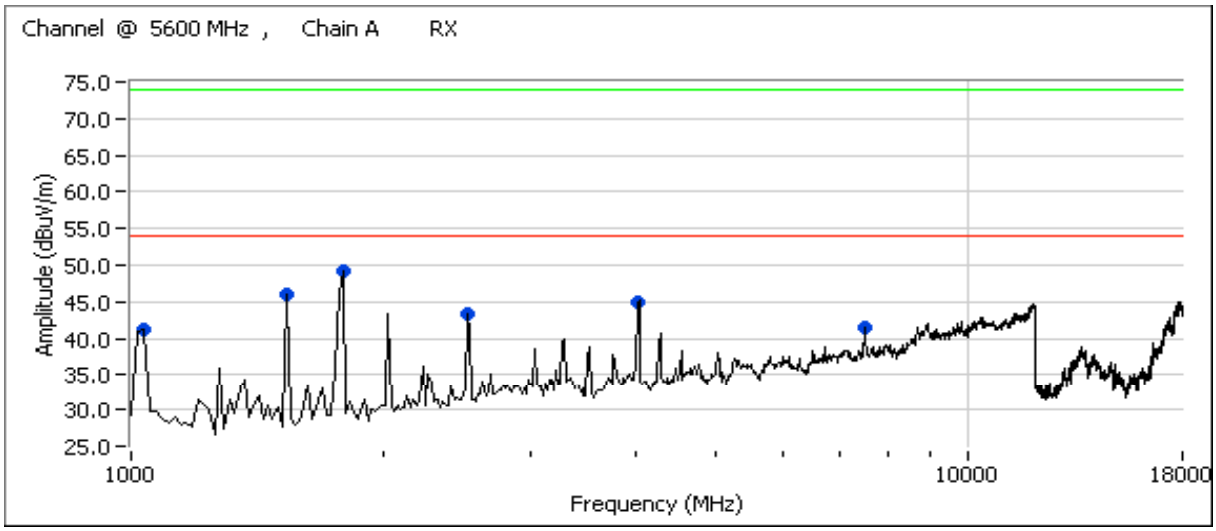
Receiver Tuned to 5280 MHz - Chain A

Frequency	Level	Pol	RSS GEN		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
7039.970	46.5	V	54.0	-7.5	AVG	234	1.0	
7039.970	50.6	V	74.0	-23.4	PK	234	1.0	
1497.770	37.5	H	54.0	-16.5	AVG	196	1.0	
1497.770	52.7	H	74.0	-21.3	PK	196	1.0	
1747.560	32.2	H	54.0	-21.8	AVG	157	1.8	
1747.560	49.3	H	74.0	-24.7	PK	157	1.8	
1996.700	34.3	V	54.0	-19.7	AVG	117	1.0	
1996.700	51.0	V	74.0	-23.0	PK	117	1.0	
2497.780	33.8	V	54.0	-20.2	AVG	87	1.0	
2497.780	50.9	V	74.0	-23.1	PK	87	1.0	
3245.690	33.1	V	54.0	-20.9	AVG	90	1.0	
3245.690	49.7	V	74.0	-24.3	PK	90	1.0	
3985.810	33.6	V	54.0	-20.4	AVG	83	1.4	
3985.810	54.1	V	74.0	-19.9	PK	83	1.4	

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:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	-

Date of Test: 6/20/2008
Test Engineer: Ben Jing
Test Location: Chamber # 5



Receiver Tuned to 5600 MHz - Chain A

Frequency	Level	Pol	RSS GEN		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
1497.680	36.5	H	54.0	-17.5	AVG	223	1.0	
1497.680	51.1	H	74.0	-22.9	PK	223	1.0	
1743.620	32.4	V	54.0	-21.6	AVG	259	1.0	
1743.620	52.2	V	74.0	-21.8	PK	259	1.0	
2490.280	33.3	V	54.0	-20.7	AVG	85	1.3	
2490.280	50.3	V	74.0	-23.7	PK	85	1.3	
3983.420	33.2	H	54.0	-20.8	AVG	60	1.6	
3983.420	53.0	H	74.0	-21.0	PK	60	1.6	
7466.550	30.3	V	54.0	-23.7	AVG	183	1.0	
7466.550	37.1	V	74.0	-36.9	PK	183	1.0	

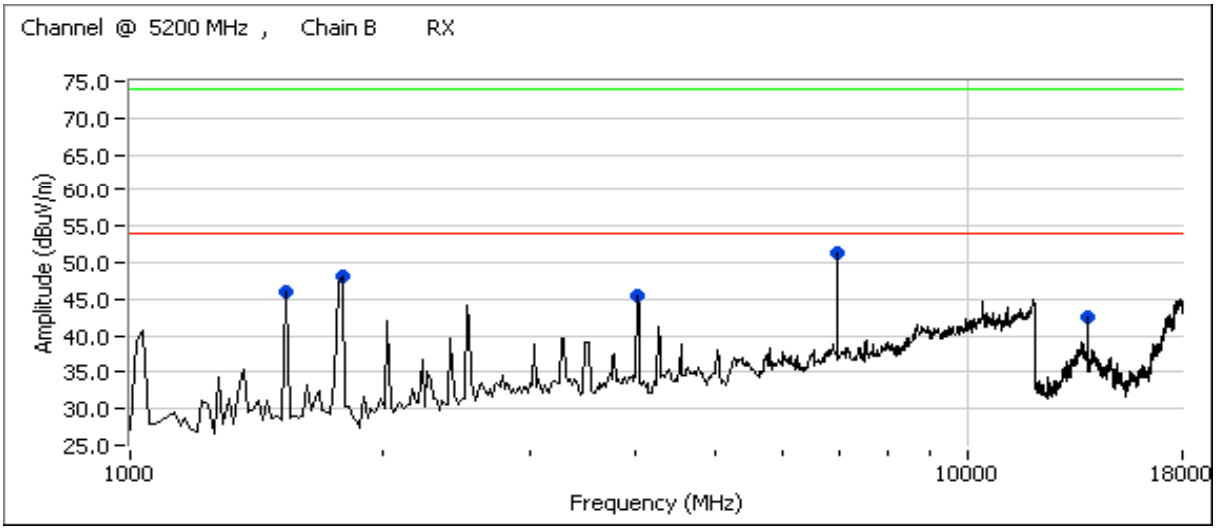
Note 1:	Above 1 GHz, the FCC specifies the limit as an average measurement. In addition, the FCC states that the peak reading of any emission above 1 GHz, can not exceed the average limit by more than 20 dB.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	-

Run #2: Maximized readings, 1000 - 18000 MHz, Receive Chain B

Date of Test: 6/20/2008
Test Engineer: Ben Jing
Test Location: Chamber # 5

Frequency Range	Test Distance	Limit Distance	Extrapolation Factor
1000 - 12000 MHz	3	3	0.0
12000 - 18000 MHz	1	3	-9.5

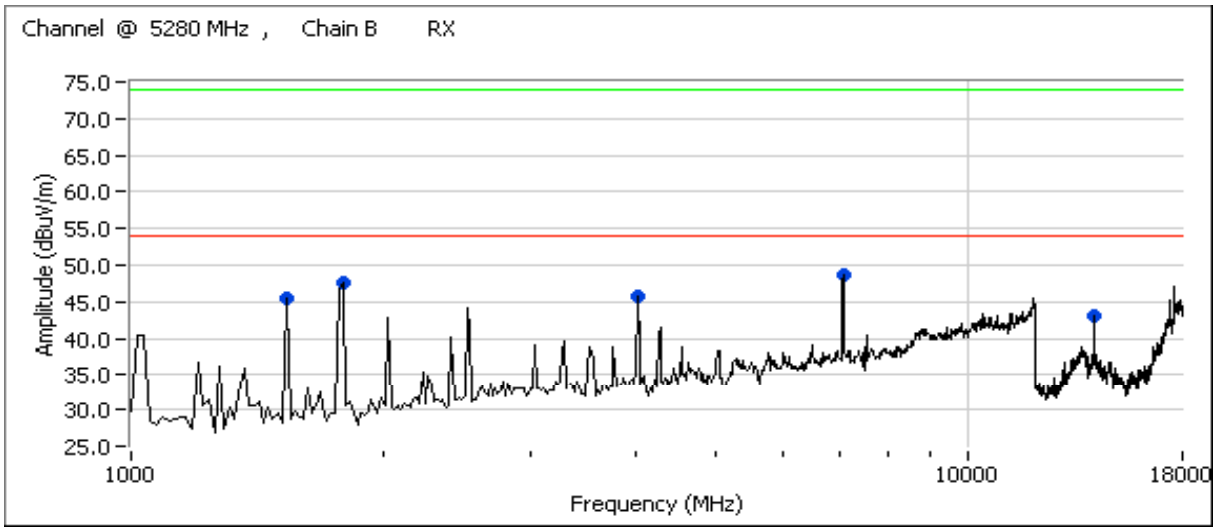


Receiver Tuned to 5200 MHz - Chain B

Frequency	Level	Pol	RSS GEN		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
1497.850	37.0	H	54.0	-17.0	AVG	158	1.3	
1497.850	52.8	H	74.0	-21.2	PK	158	1.3	
1747.450	35.0	V	54.0	-19.0	AVG	227	1.0	
1747.450	55.6	V	74.0	-18.4	PK	227	1.0	
3996.930	34.0	V	54.0	-20.0	AVG	96	1.6	
3996.930	54.1	V	74.0	-19.9	PK	96	1.6	
6933.350	50.8	V	54.0	-3.2	AVG	242	1.0	
6933.350	53.9	V	74.0	-20.1	PK	242	1.0	
13866.600	41.9	V	54.0	-12.1	AVG	168	1.0	
13866.600	47.9	V	74.0	-26.1	PK	168	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:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	-

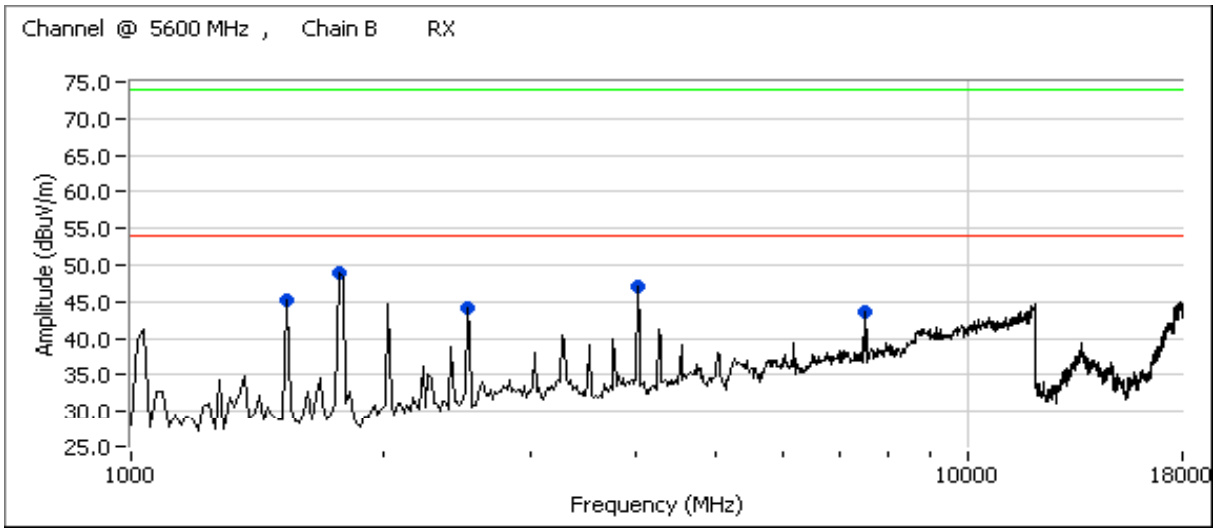


Receiver Tuned to 5280 MHz - Chain B

Frequency	Level	Pol	RSS GEN		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
1497.830	37.6	H	54.0	-16.4	AVG	191	1.3	
1497.830	52.9	H	74.0	-21.1	PK	191	1.3	
1747.740	34.7	V	54.0	-19.3	AVG	86	1.0	
1747.740	52.8	V	74.0	-21.2	PK	86	1.0	
3993.500	34.4	V	54.0	-19.6	AVG	97	1.6	
3993.500	55.7	V	74.0	-18.3	PK	97	1.6	
7040.010	49.0	V	54.0	-5.0	AVG	246	1.6	
7040.010	52.3	V	74.0	-21.7	PK	246	1.6	
14079.960	41.4	V	54.0	-12.6	AVG	189	1.0	
14079.960	47.9	V	74.0	-26.1	PK	189	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:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	-



Receiver Tuned to 5600 MHz - Chain B

Frequency	Level	Pol	RSS GEN		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
1497.810	37.9	H	54.0	-16.1	AVG	226	1.0	
1497.810	52.4	H	74.0	-21.6	PK	226	1.0	
1748.150	33.7	V	54.0	-20.3	AVG	66	1.0	
1748.150	55.1	V	74.0	-18.9	PK	66	1.0	
2497.380	34.3	V	54.0	-19.7	AVG	77	1.3	
2497.380	51.5	V	74.0	-22.5	PK	77	1.3	
3987.260	34.7	V	54.0	-19.3	AVG	93	1.6	
3987.260	55.5	V	74.0	-18.5	PK	93	1.6	
7466.570	44.7	V	54.0	-9.3	AVG	170	1.3	
7466.570	49.5	V	74.0	-24.5	PK	170	1.3	

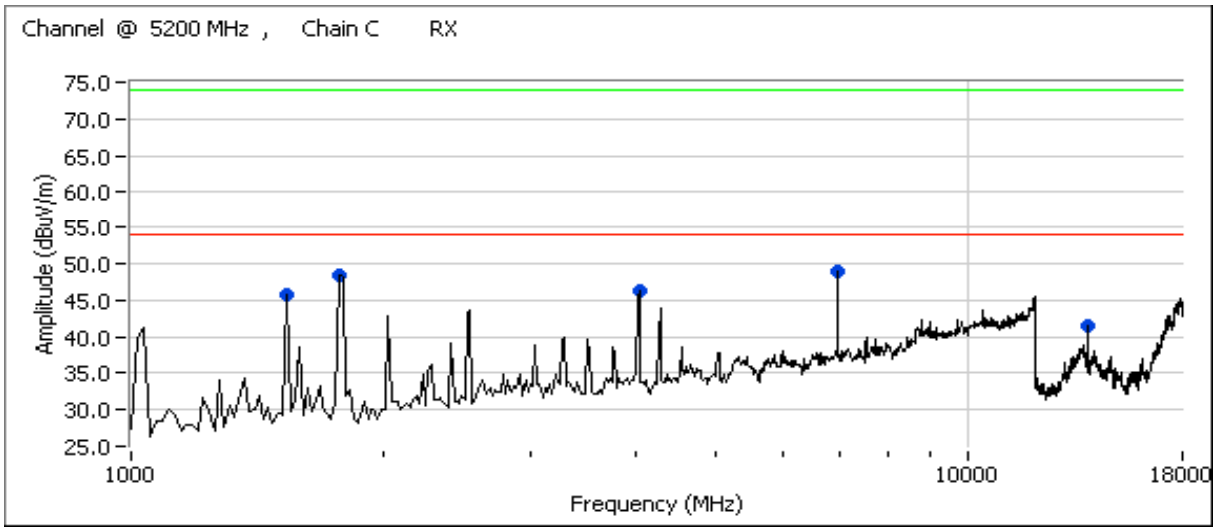
Note 1:	Above 1 GHz, the FCC specifies the limit as an average measurement. In addition, the FCC states that the peak reading of any emission above 1 GHz, can not exceed the average limit by more than 20 dB.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	-

Run #3: Maximized readings, 1000 - 18000 MHz, Receive Chain C

Date of Test: 6/20/2008
Test Engineer: Ben Jing
Test Location: Chamber # 5

Frequency Range	Test Distance	Limit Distance	Extrapolation Factor
1000 - 12000 MHz	3	3	0.0
12000 - 18000 MHz	1	3	-9.5

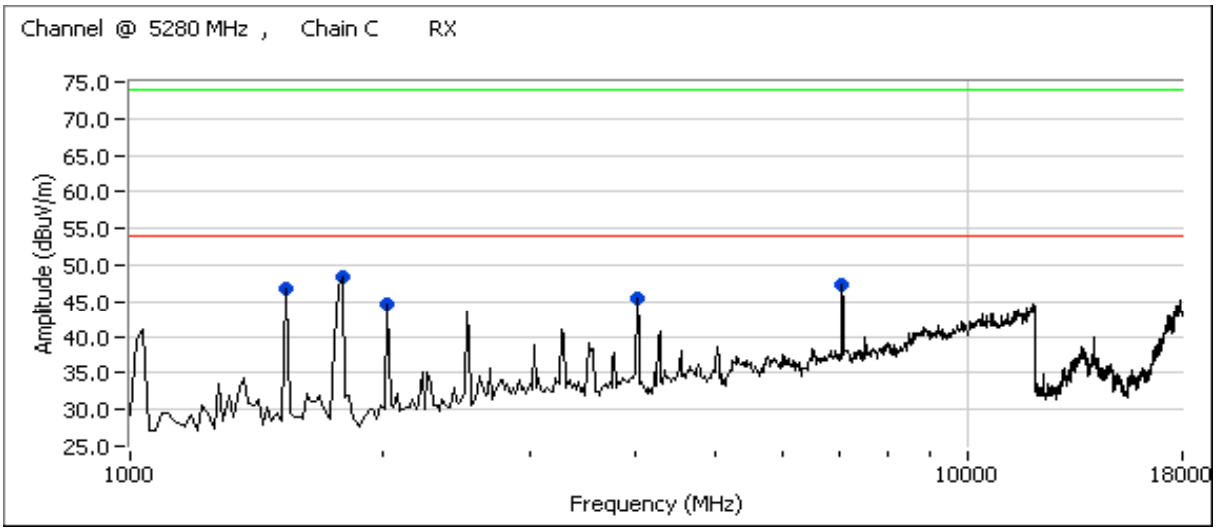


Receiver Tuned to 5200 MHz - Chain C

Frequency	Level	Pol	RSS GEN		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
1498.000	37.3	H	54.0	-16.7	AVG	227	1.0	
1498.000	52.8	H	74.0	-21.2	PK	227	1.0	
1743.300	32.9	V	54.0	-21.1	AVG	260	1.0	
1743.300	53.4	V	74.0	-20.6	PK	260	1.0	
3994.440	34.8	V	54.0	-19.2	AVG	101	1.6	
3994.440	55.4	V	74.0	-18.6	PK	101	1.6	
6933.250	50.7	V	54.0	-3.3	AVG	224	1.3	
6933.250	53.3	V	74.0	-20.7	PK	224	1.3	
13866.570	40.4	V	54.0	-13.6	AVG	175	1.0	
13866.570	47.0	V	74.0	-27.0	PK	175	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:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	-

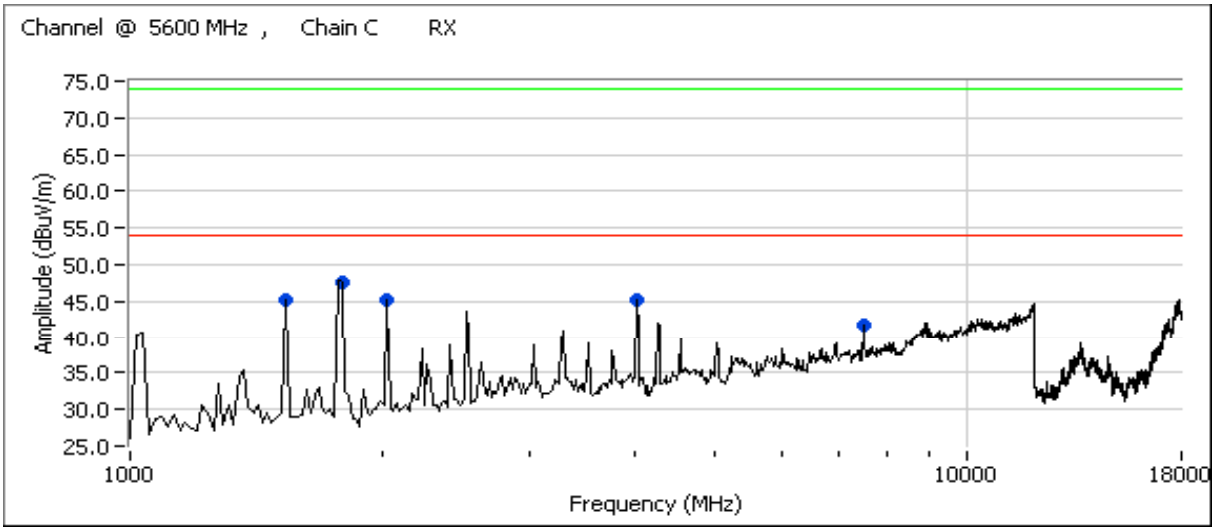


Receiver Tuned to 5280 MHz - Chain C

Frequency	Level	Pol	RSS GEN		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
1497.910	37.0	H	54.0	-17.0	AVG	223	1.0	
1497.910	51.4	H	74.0	-22.6	PK	223	1.0	
1743.950	32.4	V	54.0	-21.6	AVG	255	1.0	
1743.950	52.2	V	74.0	-21.8	PK	255	1.0	
1997.780	33.8	V	54.0	-20.2	AVG	63	1.0	
1997.780	49.4	V	74.0	-24.6	PK	63	1.0	
3985.790	34.1	V	54.0	-19.9	AVG	105	1.6	
3985.790	54.3	V	74.0	-19.7	PK	105	1.6	
7040.080	45.6	V	54.0	-8.4	AVG	233	1.6	
7040.080	50.9	V	74.0	-23.1	PK	233	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:	T71850 Band Edge
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	RSS 210/FCC U-NII (Radiated)	Class:	-



Receiver Tuned to 5600 MHz - Chain C

Frequency	Level	Pol	RSS GEN		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
1497.850	37.2	H	54.0	-16.8	AVG	220	1.6	
1497.850	51.8	H	74.0	-22.2	PK	220	1.6	
1747.580	34.3	V	54.0	-19.7	AVG	66	1.0	
1747.580	53.8	V	74.0	-20.2	PK	66	1.0	
1996.730	35.3	V	54.0	-18.7	AVG	152	1.0	
1996.730	48.1	V	74.0	-25.9	PK	152	1.0	
3993.660	34.1	V	54.0	-19.9	AVG	96	1.6	
3993.660	54.9	V	74.0	-19.1	PK	96	1.6	
7466.710	40.3	V	54.0	-13.7	AVG	183	1.0	
7466.710	47.3	V	74.0	-26.7	PK	183	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:	T71133
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		-
Emissions Standard(s):	FCC	Class:	-
Immunity Standard(s):	-	Environment:	-

EMC Test Data

For The

Intel Corporation

Model

533AN-MMW(MMC)

Date of Last Test: 5/5/2008

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71133
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC	Class:	N/A

Conducted Emissions

(Elliott Laboratories Fremont Facility, Semi-Anechoic Chamber)

Test Specific Details

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

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

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

General Test Configuration

For tabletop equipment, the EUT and host system was located on a wooden table inside the semi-anechoic chamber, 40 cm from a vertical coupling plane and 80cm from the LISN. A second LISN was used for all local support equipment. Remote support equipment was located outside of the semi-anechoic chamber. Any cables running to remote support equipment where routed through metal conduit and when possible passed through a ferrite clamp upon exiting the chamber.

Ambient Conditions:

Temperature: 21 °C
Rel. Humidity: 36 %

Summary of Results

Run #	Test Performed	Limit	Result	Margin
1 (DTS)	CE, AC Power,120V/60Hz	FCC 15.207 / RSS GEN	Pass	47.4dBµV @ 0.522MHz (-8.6dB)
2 (UNII)	CE, AC Power,120V/60Hz	FCC 15.207 / RSS GEN	Pass	47.4dBµV @ 0.524MHz (-8.6dB)

Modifications Made During Testing

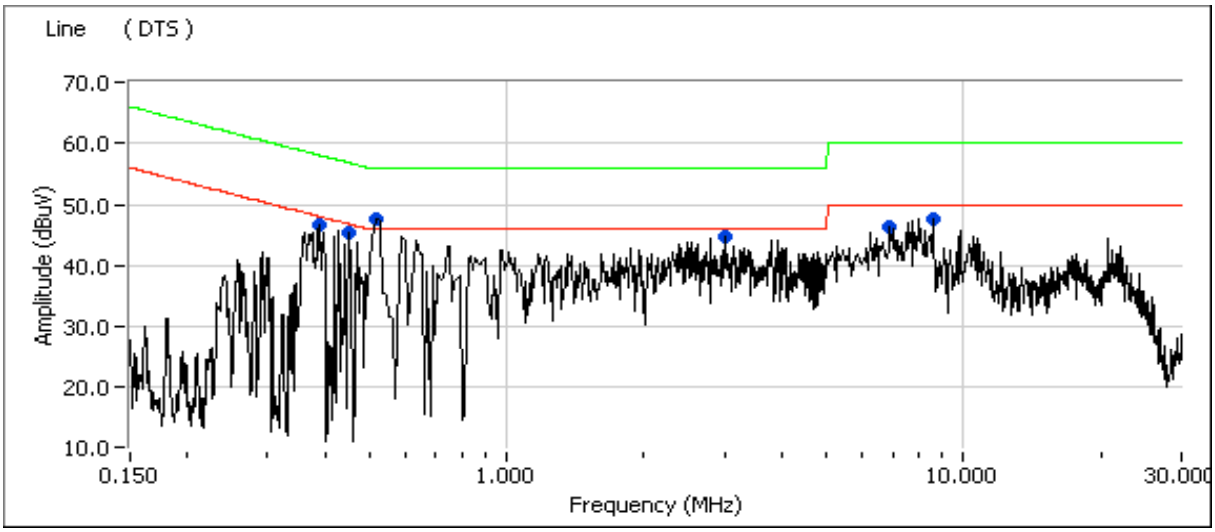
No modifications were made to the EUT during testing

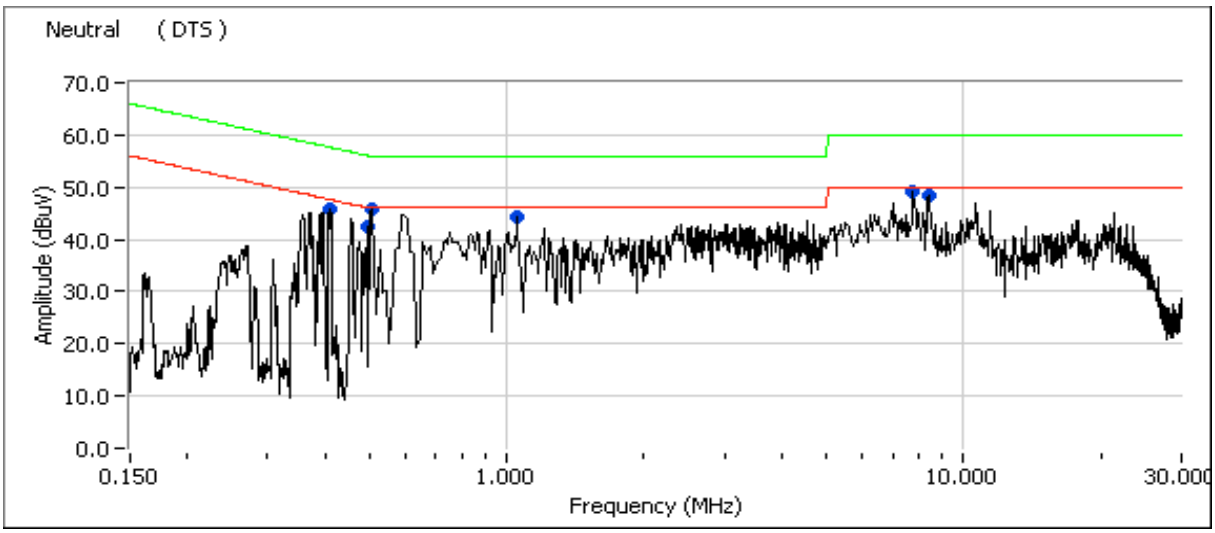
Deviations From The Standard

No deviations were made from the requirements of the standard.

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71133
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC	Class:	N/A

Run #1: DTS AC Power Port Conducted Emissions, 0.15 - 30MHz, 120V/60Hz
Target power ; All chains active .





Elliott

EMC Test Data

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71133
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC	Class:	N/A

Preliminary peak readings captured during pre-scan (peak readings vs. average limit)

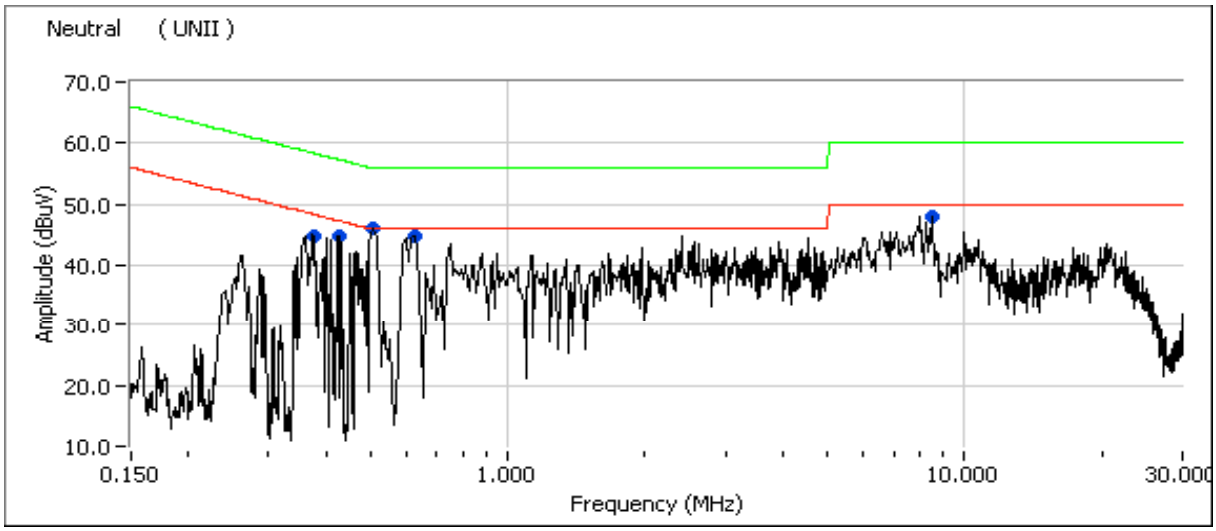
Frequency	Level	AC	FCC 15.207		Detector	Comments
MHz	dBµV	Line	Limit	Margin	QP/Ave	
0.524	47.8	Line	46.0	1.8	Peak	
0.522	45.9	Neutral	46.0	-0.1	Peak	
7.733	49.1	Neutral	50.0	-0.9	Peak	
3.013	44.7	Line	46.0	-1.3	Peak	
0.389	46.6	Line	48.1	-1.5	Peak	
0.450	45.3	Line	46.9	-1.6	Peak	
1.047	44.4	Neutral	46.0	-1.6	Peak	
0.413	45.9	Neutral	47.6	-1.7	Peak	
8.393	48.3	Neutral	50.0	-1.7	Peak	
8.500	47.8	Line	50.0	-2.2	Peak	
6.918	46.4	Line	50.0	-3.6	Peak	
0.497	42.4	Neutral	46.1	-3.7	Peak	

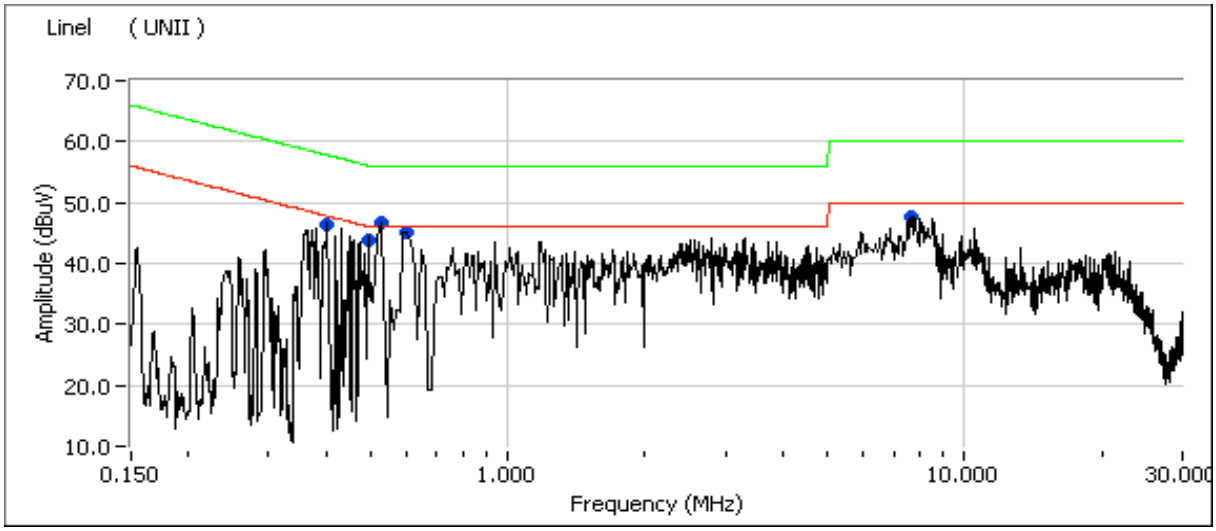
Final quasi-peak and average readings

Frequency	Level	AC	FCC 15.207		Detector	Comments
MHz	dBµV	Line	Limit	Margin	QP/Ave	
0.522	47.4	Neutral	56.0	-8.6	QP	
0.524	46.8	Line	56.0	-9.2	QP	
0.450	44.9	Line	56.9	-12.0	QP	
0.497	43.9	Neutral	56.0	-12.1	QP	
0.389	44.5	Line	58.1	-13.6	QP	
0.413	42.5	Neutral	57.6	-15.1	QP	
1.047	40.7	Neutral	56.0	-15.3	QP	
3.013	38.0	Line	56.0	-18.0	QP	
8.500	41.4	Line	60.0	-18.6	QP	
0.522	27.0	Neutral	46.0	-19.0	AVG	
8.393	40.9	Neutral	60.0	-19.1	QP	
0.497	26.5	Neutral	46.0	-19.5	AVG	
8.500	30.3	Line	50.0	-19.7	AVG	
7.733	40.2	Neutral	60.0	-19.8	QP	
8.393	29.9	Neutral	50.0	-20.1	AVG	
6.918	39.7	Line	60.0	-20.3	QP	
3.013	25.3	Line	46.0	-20.7	AVG	
0.524	25.0	Line	46.0	-21.0	AVG	
7.733	29.0	Neutral	50.0	-21.0	AVG	
0.389	27.0	Line	48.1	-21.1	AVG	
1.047	23.9	Neutral	46.0	-22.1	AVG	
0.450	24.2	Line	46.9	-22.7	AVG	
6.918	27.0	Line	50.0	-23.0	AVG	
0.413	19.8	Neutral	47.6	-27.8	AVG	

Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71133
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC	Class:	N/A

Run #2: UNII AC Power Port Conducted Emissions, 0.15 - 30MHz, 120V/60Hz
Target power ; All chains active .





Client:	Intel Corporation	Job Number:	J70976
Model:	533AN-MMW(MMC)	T-Log Number:	T71133
		Account Manager:	Dean Eriksen
Contact:	Robert Paxman		
Standard:	FCC	Class:	N/A

Preliminary peak readings captured during pre-scan (peak readings vs. average limit)

Frequency	Level	AC	FCC 15.207		Detector	Comments
MHz	dBµV	Line	Limit	Margin	QP/Ave	
0.524	46.7	Line	46.0	0.7	Peak	
0.500	46.1	Neutral	46.0	0.1	Peak	
0.592	45.0	Line	46.0	-1.0	Peak	
0.624	44.9	Neutral	46.0	-1.1	Peak	
0.403	46.4	Line	47.8	-1.4	Peak	
8.516	48.0	Neutral	50.0	-2.0	Peak	
0.499	43.9	Line	46.0	-2.1	Peak	
7.668	47.7	Line	50.0	-2.3	Peak	
0.427	44.9	Neutral	47.3	-2.4	Peak	
0.375	44.9	Neutral	48.4	-3.5	Peak	

Final quasi-peak and average readings

Frequency	Level	AC	FCC 15.207		Detector	Comments
MHz	dBµV	Line	Limit	Margin	QP/Ave	
0.524	47.4	Line	56.0	-8.6	QP	
0.499	45.5	Line	56.0	-10.5	QP	
0.500	45.2	Neutral	56.0	-10.8	QP	
0.624	43.4	Neutral	56.0	-12.6	QP	
0.375	44.7	Neutral	58.4	-13.7	QP	
0.403	43.7	Line	57.8	-14.1	QP	
0.592	41.8	Line	56.0	-14.2	QP	
0.427	41.0	Neutral	57.3	-16.3	QP	
0.592	28.6	Line	46.0	-17.4	AVG	
0.375	30.3	Neutral	48.4	-18.1	AVG	
8.516	41.0	Neutral	60.0	-19.0	QP	
0.500	26.9	Neutral	46.0	-19.1	AVG	
0.524	26.7	Line	46.0	-19.3	AVG	
0.624	26.6	Neutral	46.0	-19.4	AVG	
0.499	26.6	Line	46.0	-19.4	AVG	
7.668	40.3	Line	60.0	-19.7	QP	
8.516	29.8	Neutral	50.0	-20.2	AVG	
7.668	29.6	Line	50.0	-20.4	AVG	
0.403	21.5	Line	47.8	-26.3	AVG	
0.427	18.0	Neutral	47.3	-29.3	AVG	