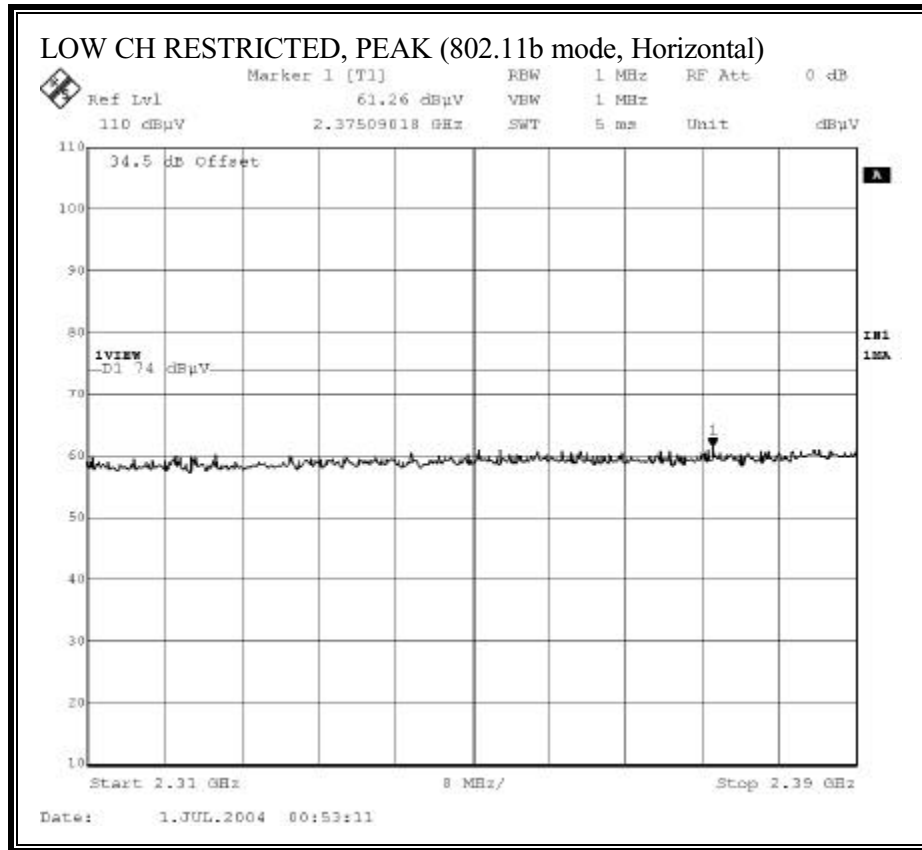
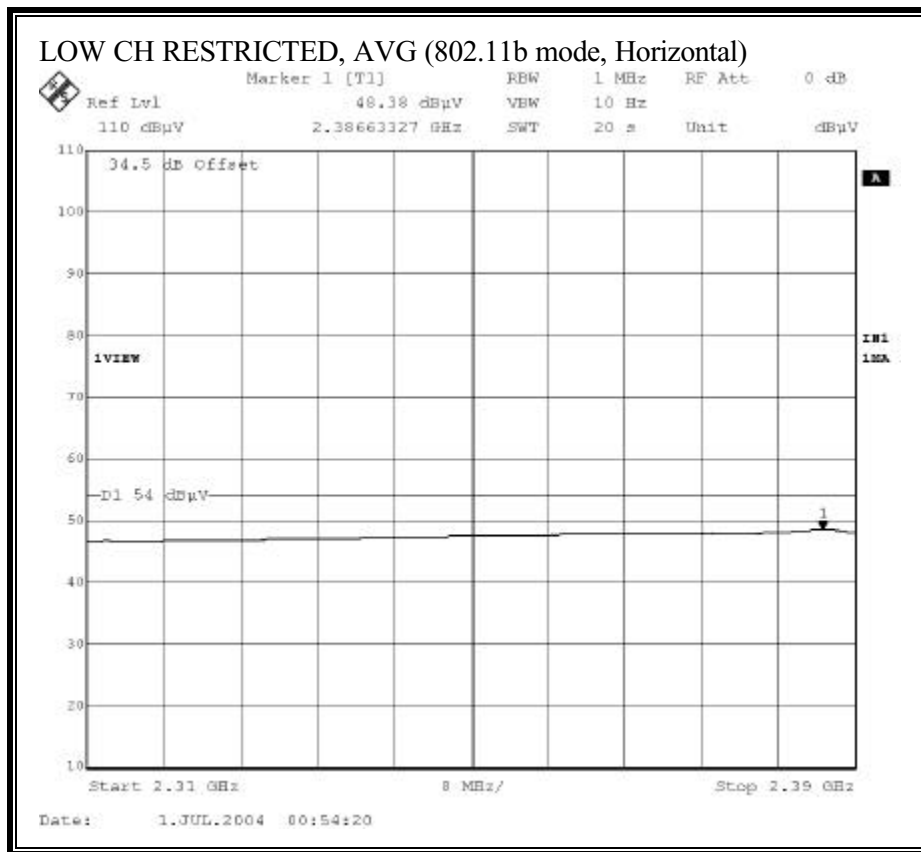


06/30/04 <b>High Frequency Measurement</b> <b>Compliance Certification Services, Morgan Hill Open Field Site</b>																																																																																																																																																																																
<b>Test Engr:</b>		David Garcia																																																																																																																																																																														
<b>Project #:</b>		04U2843																																																																																																																																																																														
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<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 45%;"> <p>Hi Frequency Cable:</p> <div style="display: flex; gap: 10px;"> <input checked="" type="checkbox"/> (2 ft)           <input type="checkbox"/> (2.0 ft)           <input type="checkbox"/> (3 ft)           <input checked="" type="checkbox"/> (12 ft)         </div> </div> <div style="width: 50%;"> <div style="display: flex; justify-content: space-between;"> <div style="text-align: left;"> <p><b>Peak Measurements:</b> 1 MHz Resolution Bandwidth 1MHz Video Bandwidth</p> </div> <div style="text-align: left;"> <p><b>Average Measurements:</b> 1 MHz Resolution Bandwidth 10Hz Video Bandwidth</p> </div> </div> </div> </div>																																																																																																																																																																																
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<table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">f     Measurement Frequency</td> <td style="width: 33%;">Amp    Preamp Gain</td> <td style="width: 33%;">Avg Lim    Average Field Strength Limit</td> </tr> <tr> <td>Dist    Distance to Antenna</td> <td>D Corr    Distance Correct to 3 meters</td> <td>Pk Lim    Peak Field Strength Limit</td> </tr> <tr> <td>Read    Analyzer Reading</td> <td>Avg       Average Field Strength @ 3 m</td> <td>Avg Mar    Margin vs. Average Limit</td> </tr> <tr> <td>AF       Antenna Factor</td> <td>Peak       Calculated Peak Field Strength</td> <td>Pk Mar     Margin vs. Peak Limit</td> </tr> <tr> <td>CL       Cable Loss</td> <td>HPF       High Pass Filter</td> <td></td> </tr> </table>																	f     Measurement Frequency	Amp    Preamp Gain	Avg Lim    Average Field Strength Limit	Dist    Distance to Antenna	D Corr    Distance Correct to 3 meters	Pk Lim    Peak Field Strength Limit	Read    Analyzer Reading	Avg       Average Field Strength @ 3 m	Avg Mar    Margin vs. Average Limit	AF       Antenna Factor	Peak       Calculated Peak Field Strength	Pk Mar     Margin vs. Peak Limit	CL       Cable Loss	HPF       High Pass Filter																																																																																																																																																		
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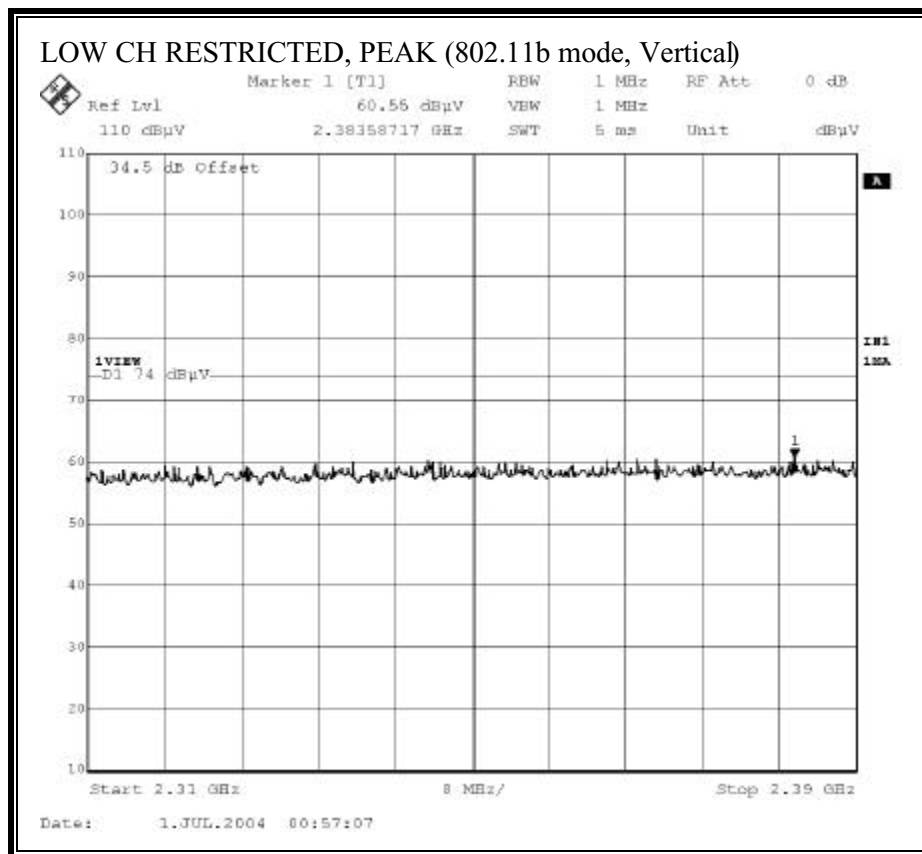
### 7.8.3. TRANSMITTER RADIATED EMISSIONS ABOVE 1 GHz, PORTABLE TABLET CONFIGURATION, TIAN01 ANTENNA SET

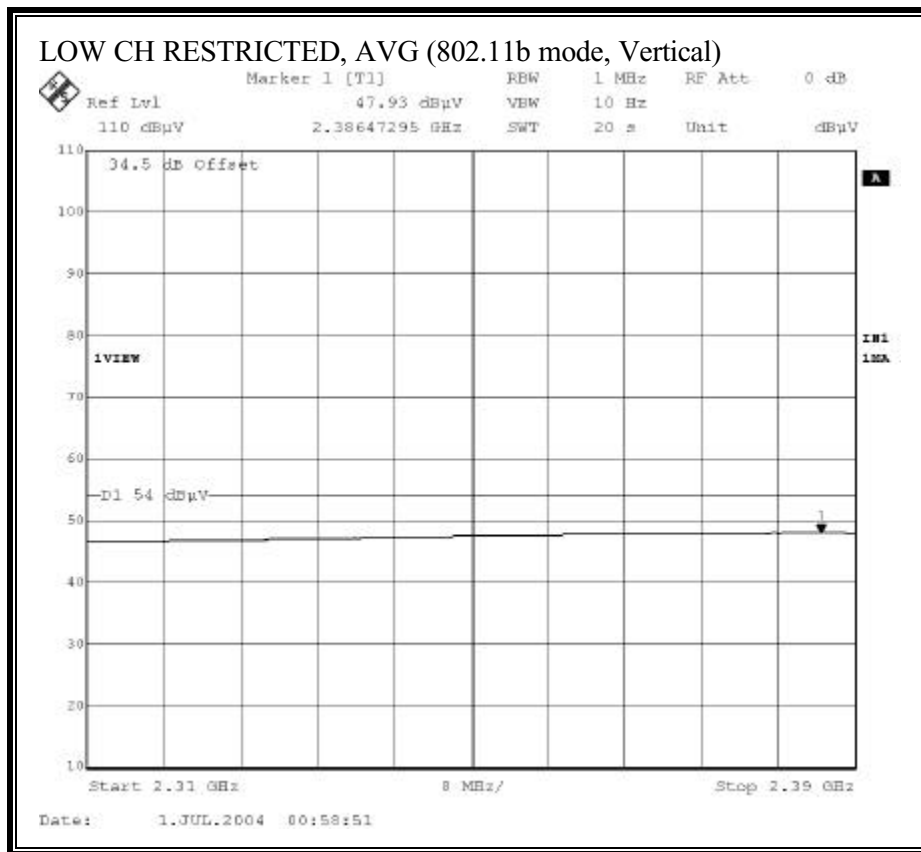
RESTRICTED BANDEDGE (b MODE, LOW CHANNEL, HORIZONTAL)



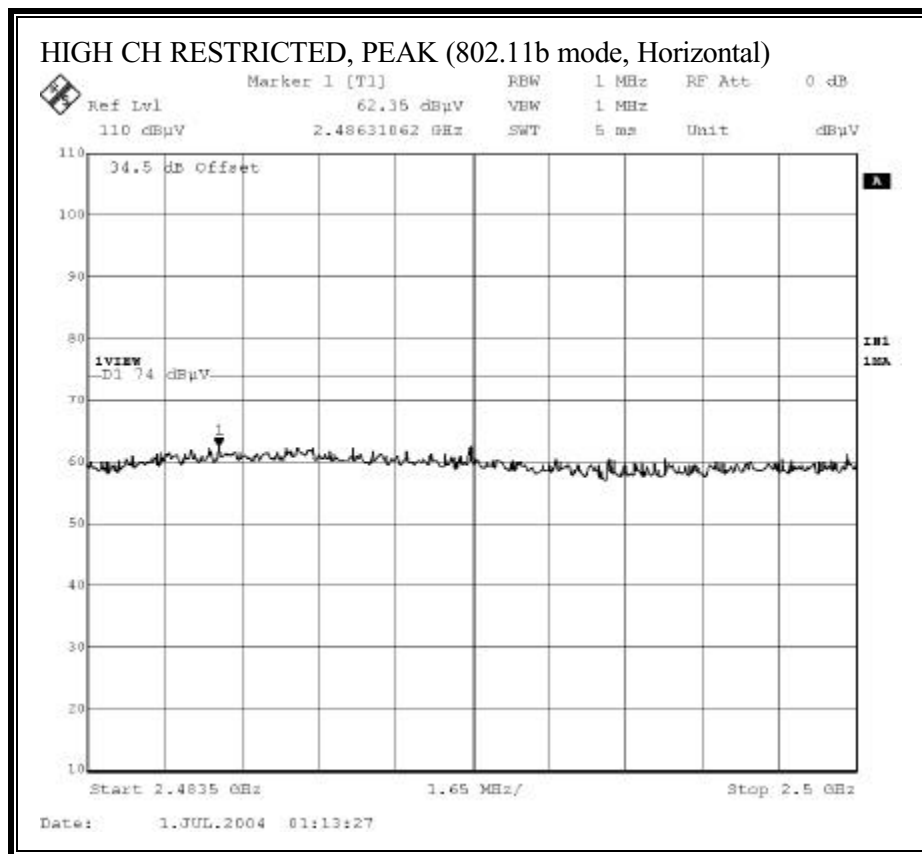


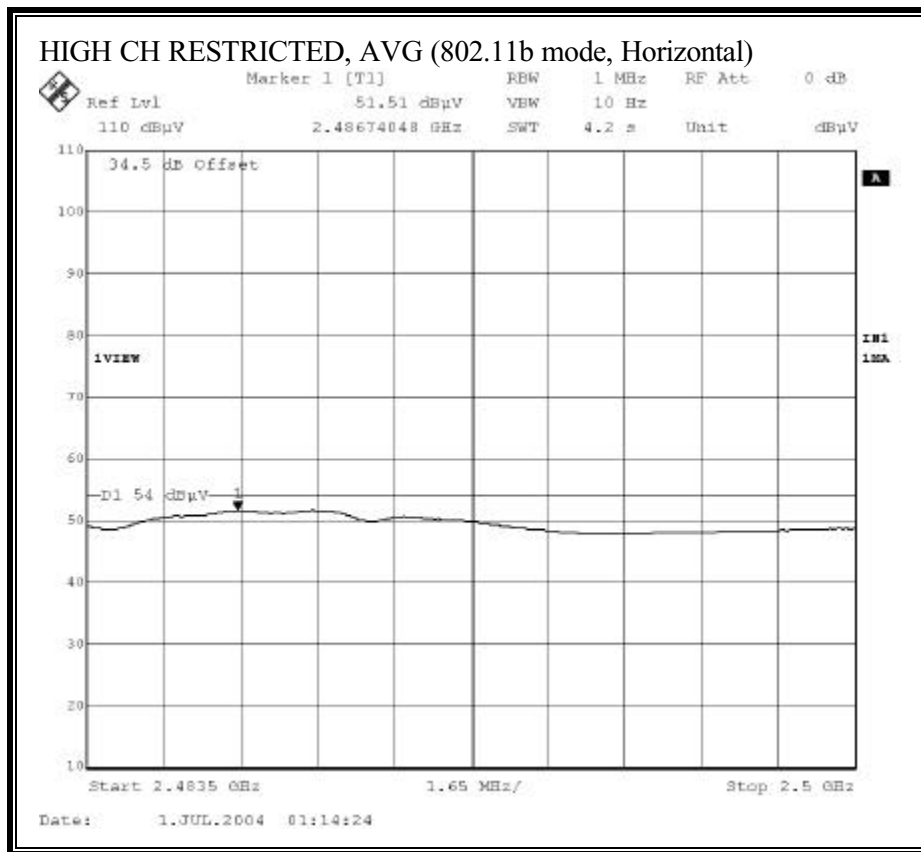
**RESTRICTED BANDEDGE (b MODE, LOW CHANNEL, VERTICAL)**



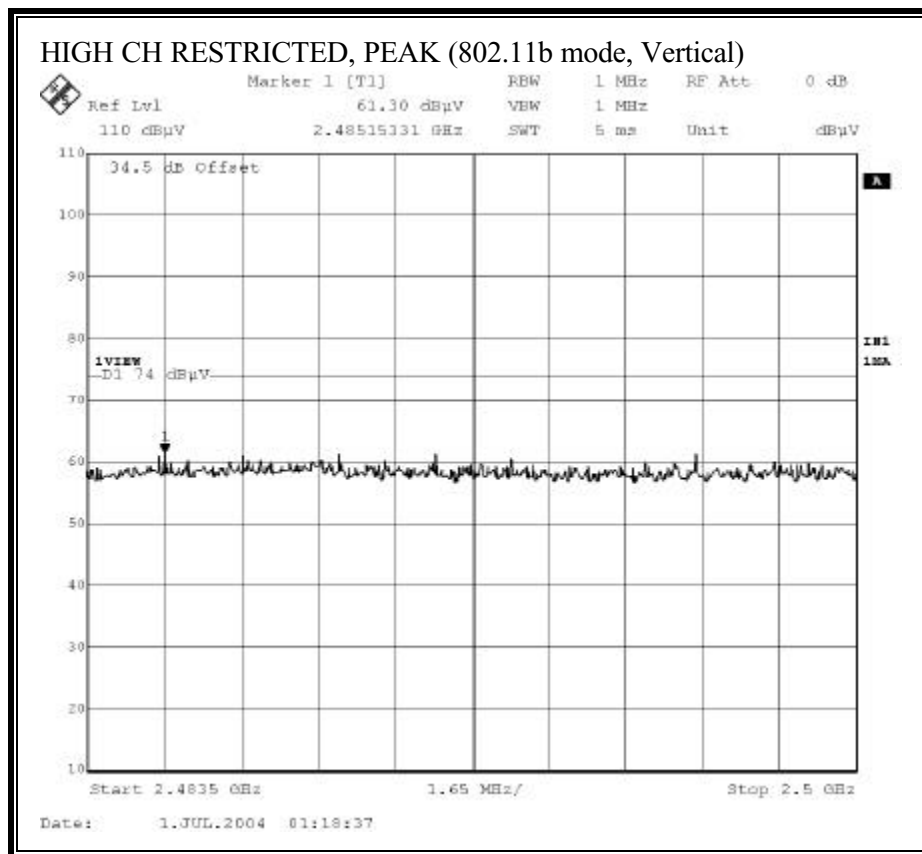


**RESTRICTED BANDEDGE (b MODE, HIGH CHANNEL, HORIZONTAL)**

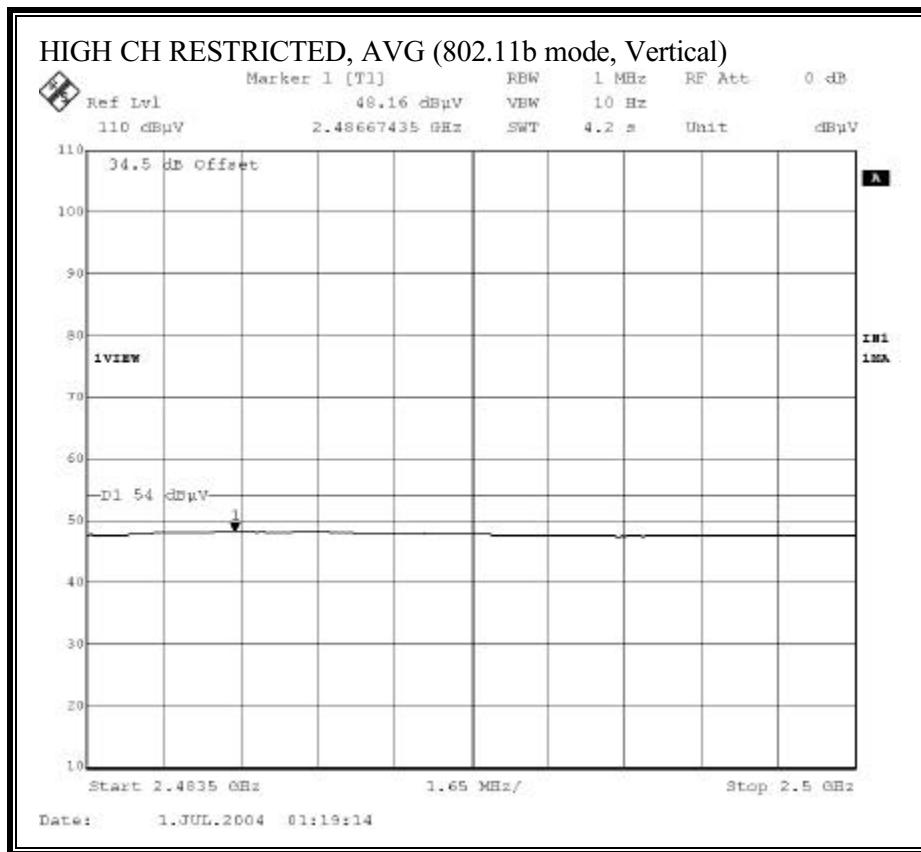




**RESTRICTED BANDEDGE (b MODE, HIGH CHANNEL, VERTICAL)**







## HARMONICS AND SPURIOUS EMISSIONS (b MODE)

07/06/04 <b>High Frequency Measurement</b> <b>Compliance Certification Services, Morgan Hill Open Field Site</b>																			
<b>Test Engr:</b>		David Garcia																	
<b>Project #:</b>		04U2843																	
<b>Company:</b>		INTEL																	
<b>EUT Descrip.:</b>		802.11 a/b/g Mini PCI type 3B Card																	
<b>EUT M/N:</b>		PA3375U-IMP																	
<b>Test Target:</b>		FCC 15.247																	
<b>Mode Oper:</b>		TX 11b mode,x,y,z worst case Position, TIAN Antenna																	
<b>Test Equipment:</b>																			
EMCO Horn 1-18GHz				Spectrum Analyzer				Pre-amplifier 1-26GHz				Pre-amplifier 26-40GHz				Horn > 18GHz			
T119; S/N: 29301 @3m				Agilent E4446A Analyzer				T63 Miteq 646456											
<b>Hi Frequency Cable:</b> <input checked="" type="checkbox"/> (2 ft) <input type="checkbox"/> (2.0 ft) <input type="checkbox"/> (3 ft) <input checked="" type="checkbox"/> (12 ft)																			
<b>Peak Measurements:</b> 1 MHz Resolution Bandwidth 1MHz Video Bandwidth																			
<b>Average Measurements:</b> 1 MHz Resolution Bandwidth 10Hz Video Bandwidth																			
f GHz	Dist feet	Read Pk dBuV	Read Avg, dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	HPF	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes				
<b>2412 Channel</b>																			
4.824	9.8	44.7	35.6	35.0	2.9	-35.3	0.0	1.0	48.2	39.1	74.0	54.0	-25.8	-14.9	V				
4.824	9.8	45.2	36.8	35.0	2.9	-35.3	0.0	1.0	48.7	40.3	74.0	54.0	-25.3	-13.7	H				
<b>2437 Channel</b>																			
4.874	9.8	44.0	32.3	35.0	2.9	-35.3	0.0	1.0	47.5	35.8	74.0	54.0	-26.5	-18.2	V				
7.311	9.8	43.9	32.0	36.7	3.7	-34.6	0.0	1.0	50.6	38.7	74.0	54.0	-23.4	-15.3	V				
4.874	9.8	44.4	31.5	35.0	2.9	-35.3	0.0	1.0	47.9	35.0	74.0	54.0	-26.1	-19.0	H				
7.311	9.8	44.9	33.1	36.7	3.7	-34.6	0.0	1.0	51.6	39.8	74.0	54.0	-22.4	-14.2	H				
<b>2462 Channel</b>																			
4.924	9.8	44.7	33.5	35.0	2.9	-35.3	0.0	1.0	48.3	37.1	74.0	54.0	-25.7	-16.9	V				
7.386	9.8	44.3	32.3	36.7	3.7	-34.5	0.0	1.0	51.1	39.1	74.0	54.0	-22.9	-14.9	V				
4.924	9.8	44.0	33.1	35.0	2.9	-35.3	0.0	1.0	47.6	36.7	74.0	54.0	-26.4	-17.3	H				
7.386	9.8	45.1	32.0	36.7	3.7	-34.5	0.0	1.0	51.9	38.8	74.0	54.0	-22.1	-15.2	H				
f	Measurement Frequency					Amp	Preamp Gain					Avg Lim	Average Field Strength Limit						
Dist	Distance to Antenna					D Corr	Distance Correct to 3 meters					Pk Lim	Peak Field Strength Limit						
Read	Analyzer Reading					Avg	Average Field Strength @ 3 m					Avg Mar	Margin vs. Average Limit						
AF	Antenna Factor					Peak	Calculated Peak Field Strength					Pk Mar	Margin vs. Peak Limit						
CL	Cable Loss					HPF	High Pass Filter												

Note: No other spurious emissions were detected above the system noise in the restricted bands.

LOW CH RESTRICTED, PEAK (802.11g mode, Horizontal)

Marker 1 [T1] REW 1 MHz RF Att 0 dB

Ref Lvl 65.13 dBuV VEW 1 MHz

110 dBuV 2.38903808 GHz SWT 5 ms Unit dBuV

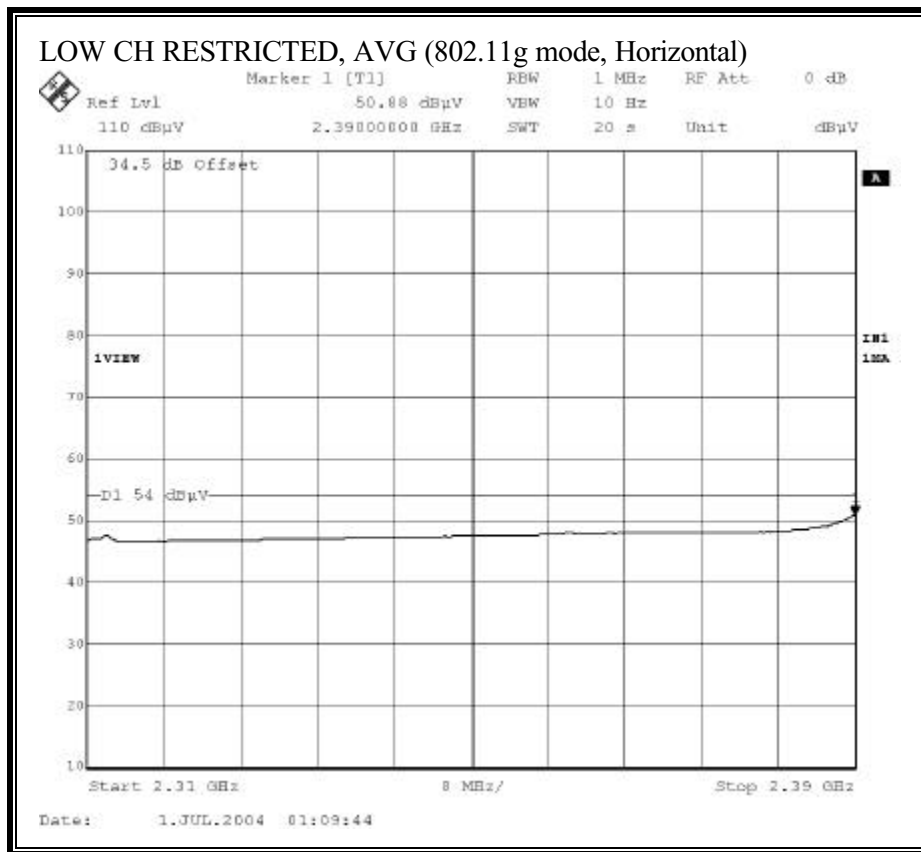
34.5 dB Offset

1MAX -D1 74 dBuV

IN1 1MA

Start 2.31 GHz 8 MHz/ Stop 2.39 GHz

Date: 1.JUL.2004 01:08:09



LOW CH RESTRICTED, PEAK (802.11g mode, Vertical)

Marker 1 [T1] REW 1 MHz RF Att 0 dB

Ref Lvl 60.71 dBuV VEW 1 MHz

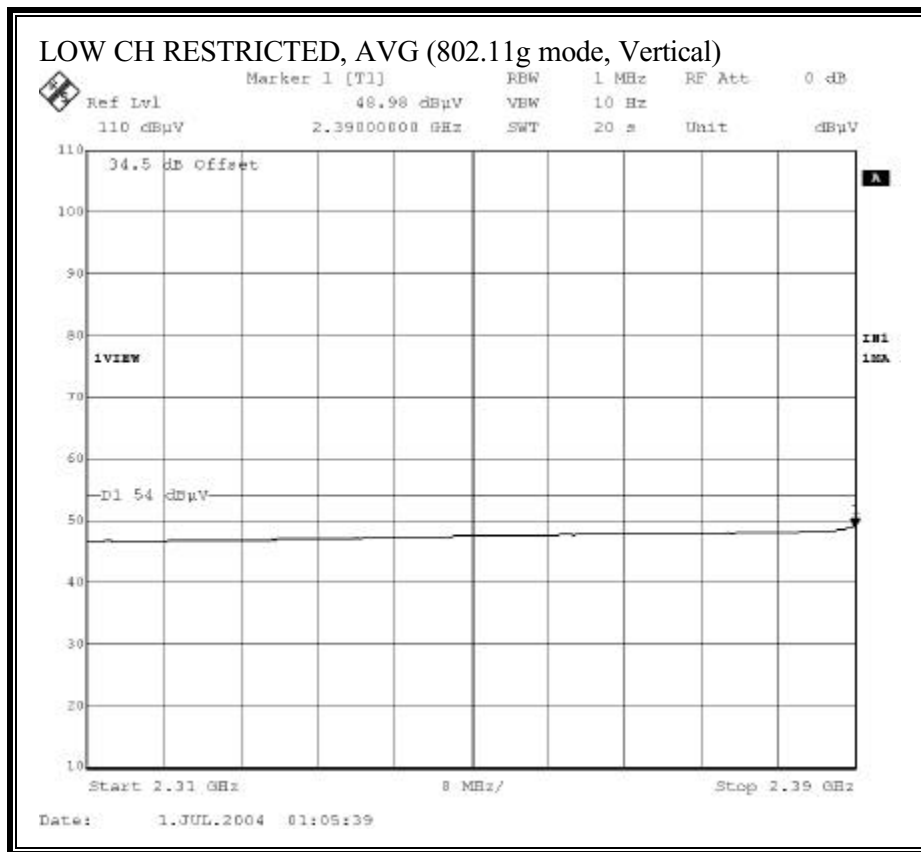
110 dBuV 2.38871743 GHz SWT 5 ms Unit dBuV

34.5 dB Offset

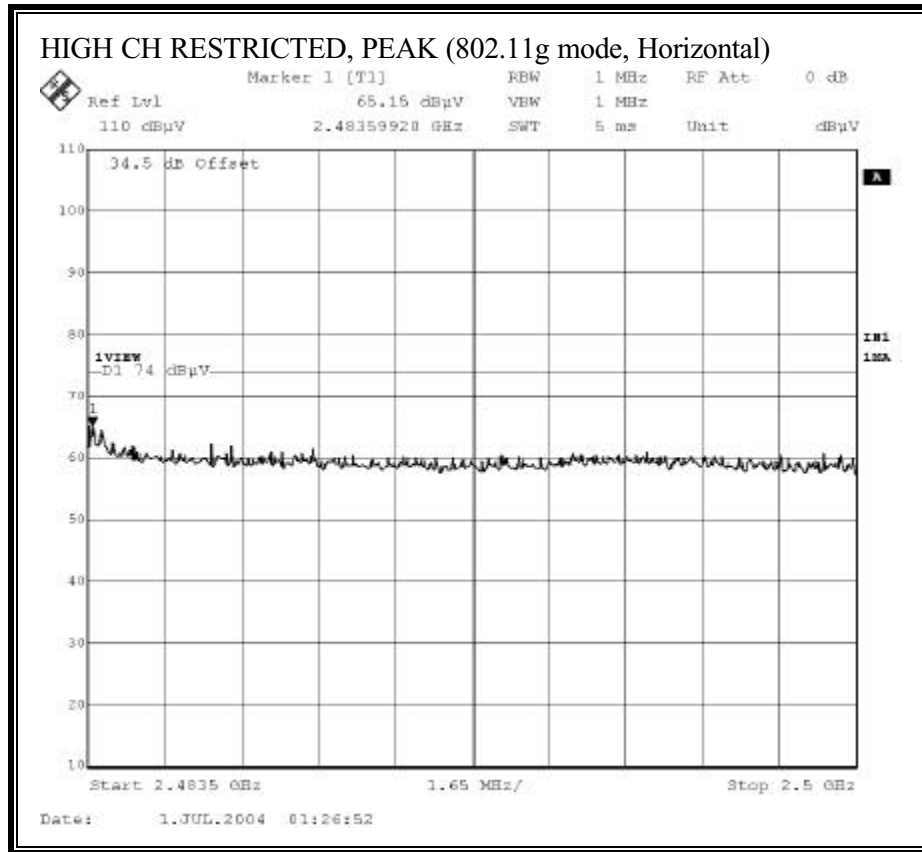
1VIEW D1 74 dBuV

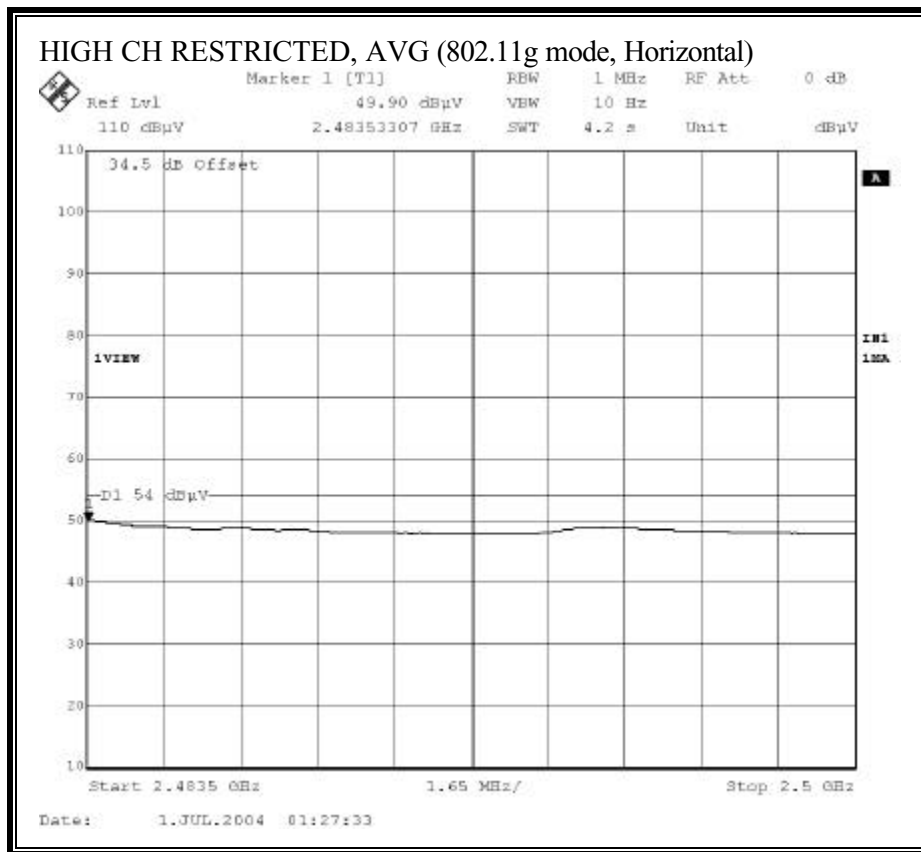
Start 2.31 GHz 8 MHz/ Stop 2.39 GHz

Date: 1.JUL.2004 01:04:37



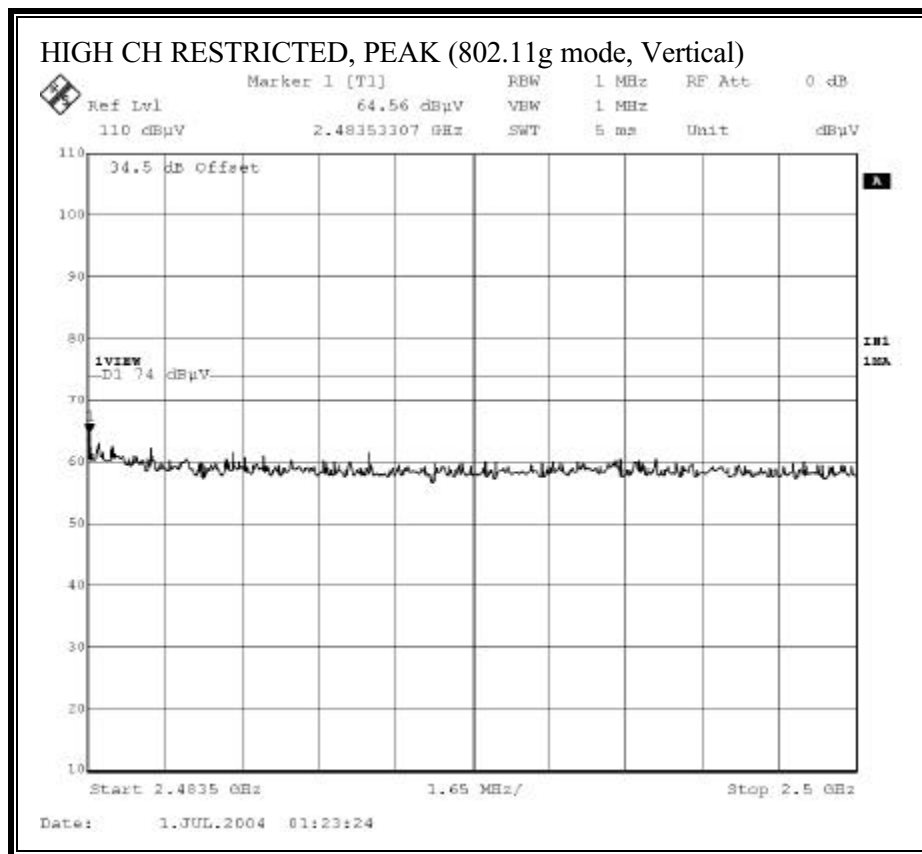
**RESTRICTED BANDEDGE (g MODE, HIGH CHANNEL, HORIZONTAL)**

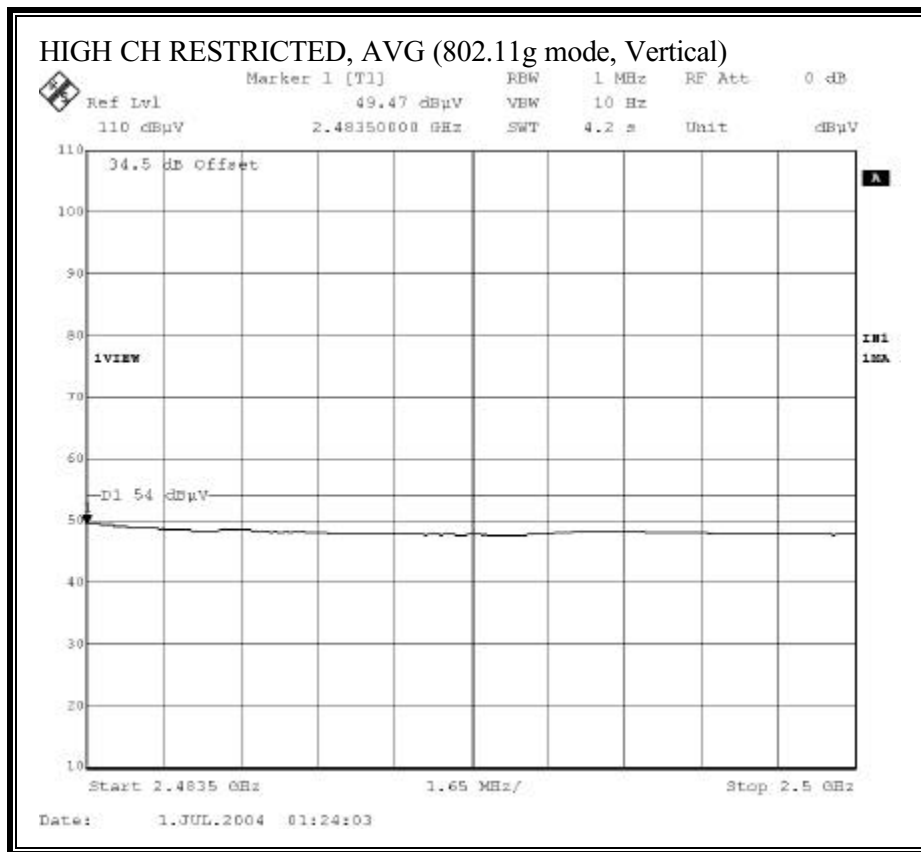






**RESTRICTED BANDEDGE (g MODE, HIGH CHANNEL, VERTICAL)**





### HARMONICS AND SPURIOUS EMISSIONS (g MODE)

07/06/04 **High Frequency Measurement**  
**Compliance Certification Services, Morgan Hill Open Field Site**

**Test Engr:** David Garcia  
**Project #:** 04U2843  
**Company:** INTEL  
**EUT Descrip.:** 802.11 a/b/g Mini PCI type 3B Card  
**EUT M/N:** PA3375U-1MP  
**Test Target:** FCC 15.247  
**Mode Oper:** TX 11g mode, x,y,z worst case Position, TIAN Antenna

**Test Equipment:**

EMCO Horn 1-18GHz	Spectrum Analyzer	Pre-amplifier 1-26GHz	Pre-amplifier 26-40GHz	Horn > 18GHz
T119; S/N: 29301 @3m	Agilent E4446A Analyzer	T63 Miteq 646456		

Hi Frequency Cable:

<input checked="" type="checkbox"/> (2 ft)	<input type="checkbox"/> (2.0 ft)	<input type="checkbox"/> (3 ft)	<input checked="" type="checkbox"/> (12 ft)
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**Peak Measurements:**  
1 MHz Resolution Bandwidth  
1MHz Video Bandwidth

**Average Measurements:**  
1 MHz Resolution Bandwidth  
10Hz Video Bandwidth

f GHz	Dist feet	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	HPF	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes
<b>2412 Channel</b>															
4.824	9.8	45.1	33.2	35.0	2.9	-35.3	0.0	1.0	48.6	36.7	74.0	54.0	-25.4	-17.3	V
4.824	9.8	44.4	32.3	35.0	2.9	-35.3	0.0	1.0	47.9	35.8	74.0	54.0	-26.1	-18.2	H
<b>2437 Channel</b>															
4.874	9.8	44.2	32.1	35.0	2.9	-35.3	0.0	1.0	47.7	35.6	74.0	54.0	-26.3	-18.4	V
7.311	9.8	44.1	32.2	36.7	3.7	-34.6	0.0	1.0	50.8	38.9	74.0	54.0	-23.2	-15.1	V
4.874	9.8	43.8	31.7	35.0	2.9	-35.3	0.0	1.0	47.3	35.2	74.0	54.0	-26.7	-18.8	H
7.311	9.8	44.0	31.6	36.7	3.7	-34.6	0.0	1.0	50.7	38.3	74.0	54.0	-23.3	-15.7	H
<b>2462 Channel</b>															
4.924	9.8	44.0	32.0	35.0	2.9	-35.3	0.0	1.0	47.6	35.6	74.0	54.0	-26.4	-18.4	V
7.386	9.8	43.5	32.4	36.7	3.7	-34.5	0.0	1.0	50.3	39.2	74.0	54.0	-23.7	-14.8	V
4.924	9.8	44.0	32.8	35.0	2.9	-35.3	0.0	1.0	47.6	36.4	74.0	54.0	-26.4	-17.6	H
7.386	9.8	44.1	32.1	36.7	3.7	-34.5	0.0	1.0	50.9	38.9	74.0	54.0	-23.1	-15.1	H

f	Measurement Frequency	Amp	Preamp Gain	Avg Lim	Average Field Strength Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters	Pk Lim	Peak Field Strength Limit
Read	Analyzer Reading	Avg	Average Field Strength @ 3 m	Avg Mar	Margin vs. Average Limit
AF	Antenna Factor	Peak	Calculated Peak Field Strength	Pk Mar	Margin vs. Peak Limit
CL	Cable Loss	HPF	High Pass Filter		

Note: No other spurious emissions were detected above the system noise in the restricted bands.

## HARMONICS AND SPURIOUS EMISSIONS (a MODE)

07/06/04 High Frequency Measurement

Compliance Certification Services, Morgan Hill Open Field Site

Test Engr: David Garcia  
Project #: 04U2843  
Company: INTEL  
EUT Descrip.: 802.11 a/b/g Mini PCI type 3B Card  
EUT M/N: PA3375U-1MP  
Test Target: FCC 15.247  
Mode Oper: TX 11a mode, 5.8GHz Band; x,y,z worst case Position, TIAN Antenna

### Test Equipment:

EMCO Horn 1-18GHz	Spectrum Analyzer	Pre-amplifier 1-26GHz	Pre-amplifier 26-40GHz	Horn > 18GHz
T119; S/N: 29301 @3m	Agilent E4446A Analyzer	T63 Miteq 646456		

Hi Frequency Cable:

<input checked="" type="checkbox"/> (2 ft)	<input type="checkbox"/> (2.0 ft)	<input type="checkbox"/> (3 ft)	<input checked="" type="checkbox"/> (12 ft)
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**Peak Measurements:**  
1 MHz Resolution Bandwidth  
1MHz Video Bandwidth

**Average Measurements:**  
1 MHz Resolution Bandwidth  
10Hz Video Bandwidth

f GHz	Dist feet	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	HPF	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes
5745 Channel															
11.490	9.8	44.0	32.2	39.1	4.8	-34.2	0.0	1.0	54.7	42.9	74.0	54.0	-19.3	-11.1	V
11.490	9.8	43.1	32.6	39.1	4.8	-34.2	0.0	1.0	53.8	43.3	74.0	54.0	-20.2	-10.7	H
5785 Channel															
11.570	9.8	45.0	34.0	39.2	4.8	-34.3	0.0	1.0	55.7	44.7	74.0	54.0	-18.3	-9.3	V
11.570	9.8	44.3	33.0	39.2	4.8	-34.3	0.0	1.0	55.0	43.7	74.0	54.0	-19.0	-10.3	H
5825 Channel															
11.650	9.8	44.8	33.4	39.3	4.8	-34.4	0.0	1.0	55.5	44.1	74.0	54.0	-18.5	-9.9	V
11.650	9.8	44.0	32.6	39.3	4.8	-34.4	0.0	1.0	54.7	43.3	74.0	54.0	-19.3	-10.7	H

f	Measurement Frequency	Amp	Preamp Gain	Avg Lim	Average Field Strength Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters	Pk Lim	Peak Field Strength Limit
Read	Analyzer Reading	Avg	Average Field Strength @ 3 m	Avg Mar	Margin vs. Average Limit
AF	Antenna Factor	Peak	Calculated Peak Field Strength	Pk Mar	Margin vs. Peak Limit
CL	Cable Loss	HPF	High Pass Filter		

Note: No other spurious emissions were detected above the system noise in the restricted bands.

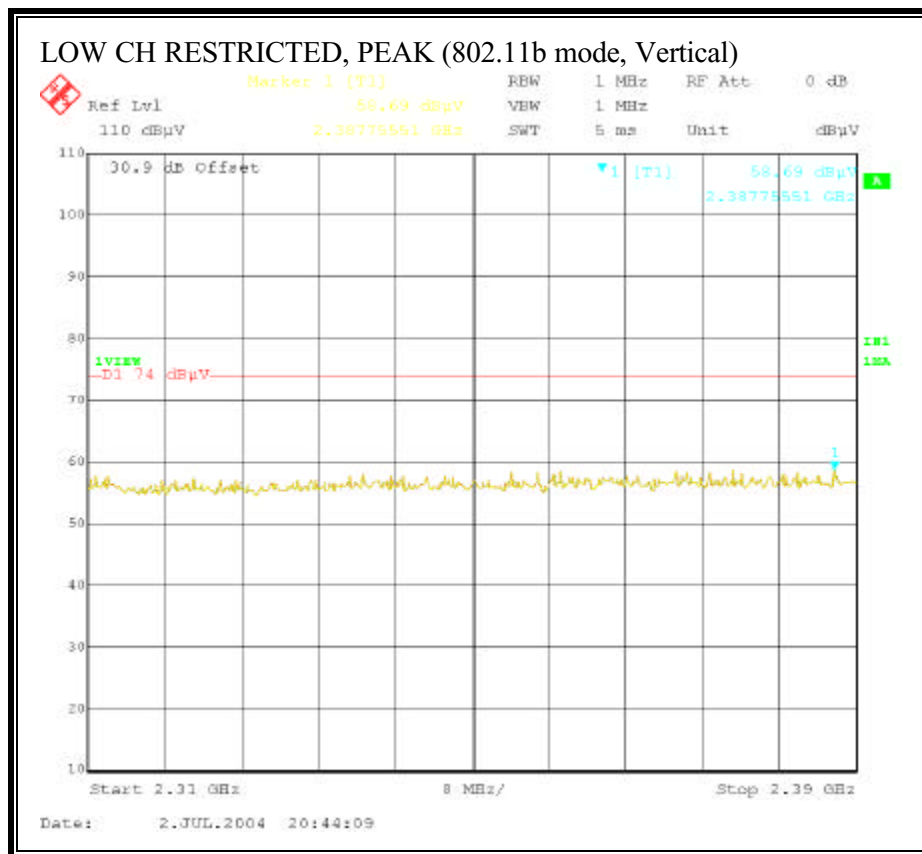
#### 7.8.4. TRANSMITTER RADIATED EMISSIONS ABOVE 1 GHz, MOBILE LAPTOP CONFIGURATION, HTL017 ANTENNA SET

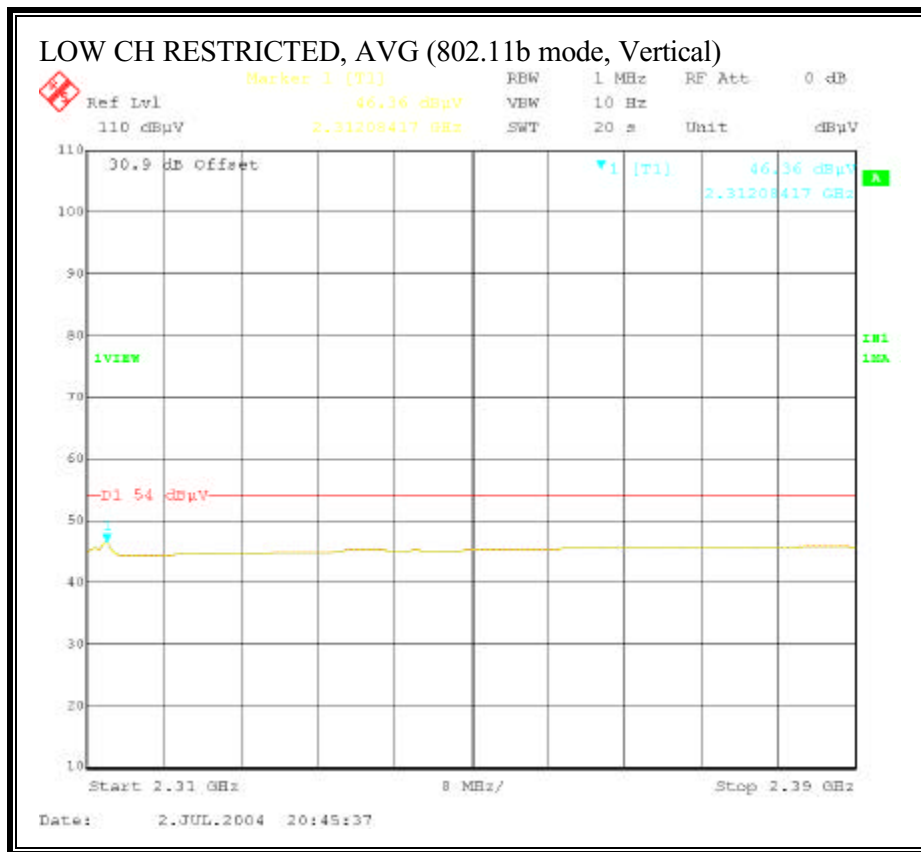
RESTRICTED BANDEDGE (b MODE, LOW CHANNEL, HORIZONTAL)





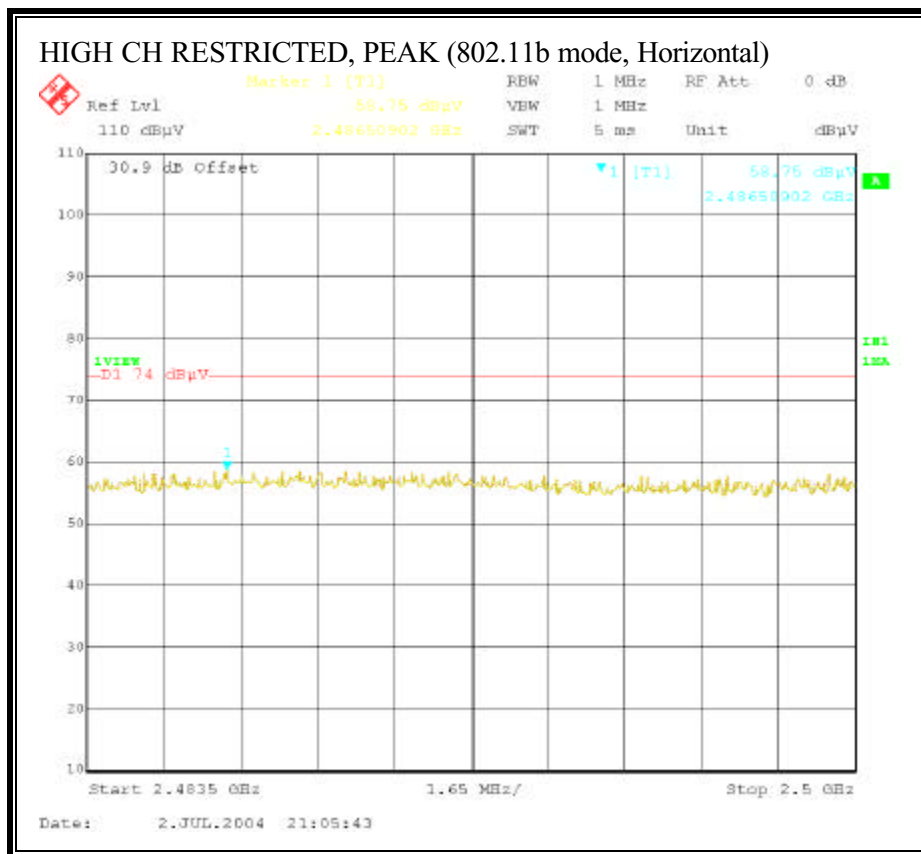
**RESTRICTED BANDEDGE (b MODE, LOW CHANNEL, VERTICAL)**

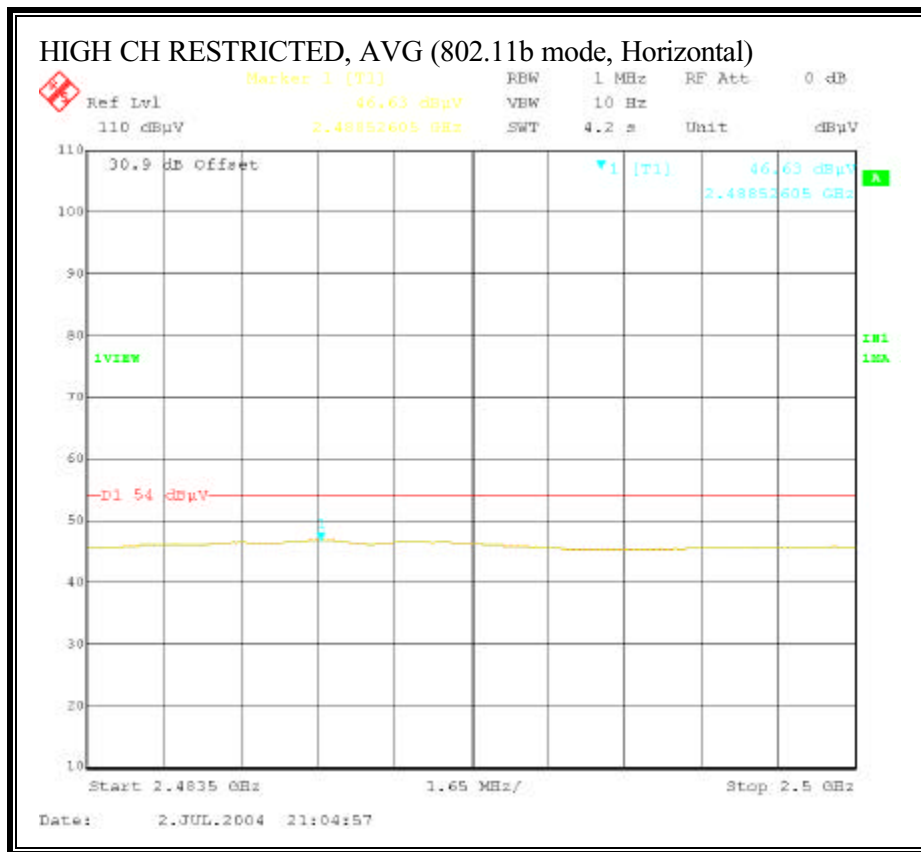




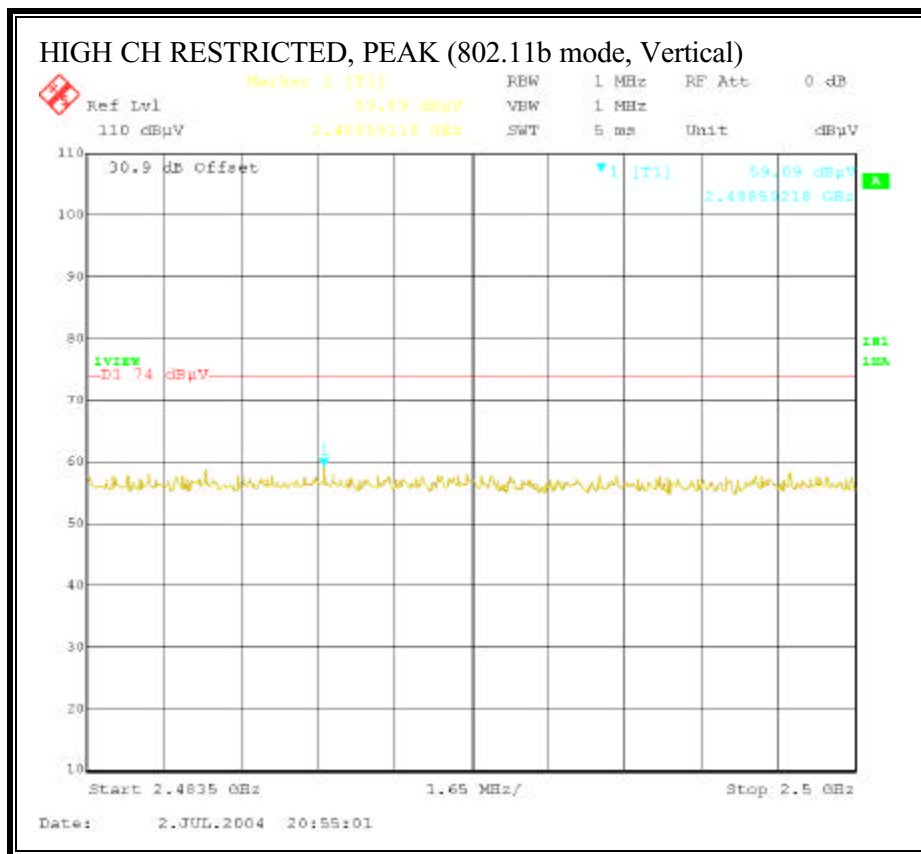


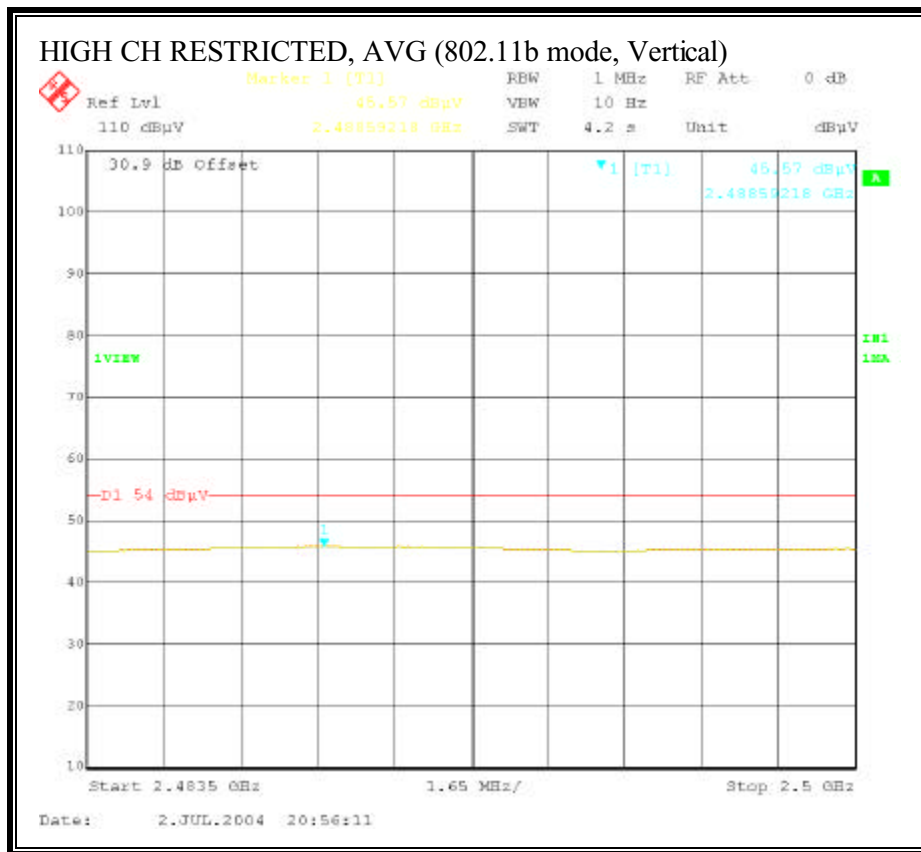
**RESTRICTED BANDEDGE (b MODE, HIGH CHANNEL, HORIZONTAL)**





**RESTRICTED BANDEDGE (b MODE, HIGH CHANNEL, VERTICAL)**



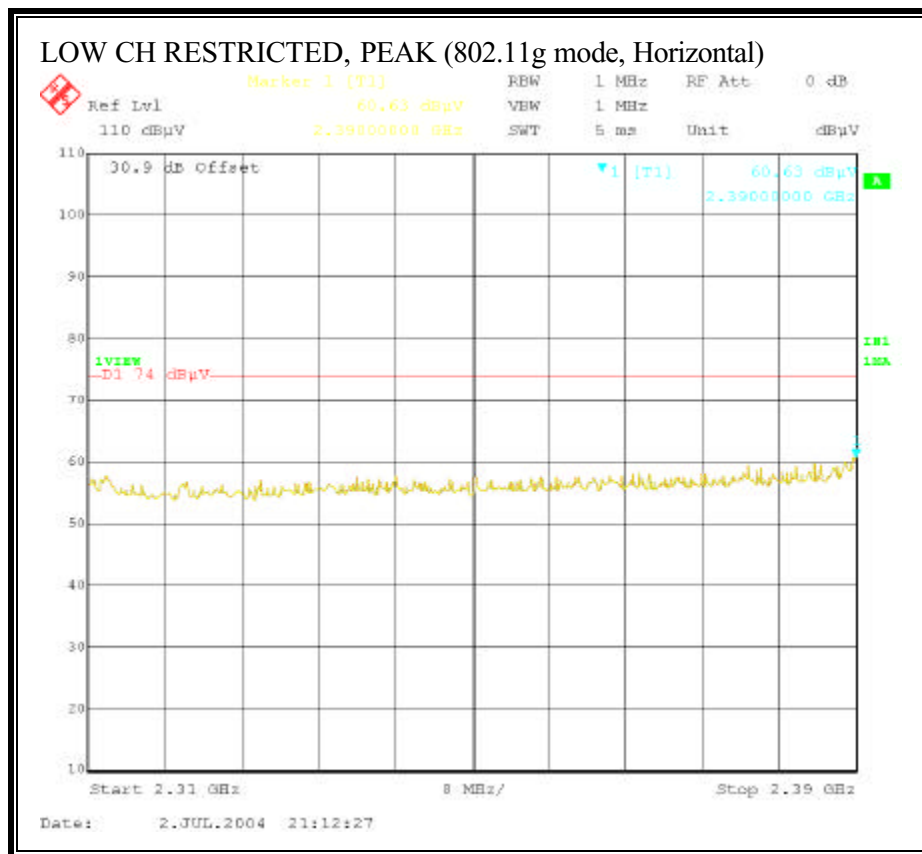


**HARMONICS AND SPURIOUS EMISSIONS (b MODE)**

07/02/04 <b>High Frequency Measurement</b> <b>Compliance Certification Services, Morgan Hill Open Field Site</b>																			
<b>Test Engr:</b>		David Garcia																	
<b>Project #:</b>		04U2843																	
<b>Company:</b>		INTEL																	
<b>EUT Descrip.:</b>		802.11 a/b/g Mini PCI type 3B Card, HTL-017 Antenna																	
<b>EUT M/N:</b>		PA3375U-IMP																	
<b>Test Target:</b>		FCC 15.247																	
<b>Mode Oper:</b>		TX 11b mode, Laptop Position																	
<b>Test Equipment:</b>																			
EMCO Horn 1-18GHz				Spectrum Analyzer				Pre-amplifier 1-26GHz				Pre-amplifier 26-40GHz				Horn > 18GHz			
T73; S/N: 6717 @3m				Agilent E4446A Analyzer				T63 Miteq 646456											
Hi Frequency Cable: <input checked="" type="checkbox"/> (2 ft) <input type="checkbox"/> (2.0 ft) <input type="checkbox"/> (3 ft) <input checked="" type="checkbox"/> (12 ft)																			
<b>Peak Measurements:</b> 1 MHz Resolution Bandwidth 1MHz Video Bandwidth																			
<b>Average Measurements:</b> 1 MHz Resolution Bandwidth 10Hz Video Bandwidth																			
f GHz	Dist feet	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	HPF	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes				
<b>2412 Channel</b>																			
4.824	9.8	46.6	40.0	33.4	2.9	-35.3	0.0	1.0	48.5	41.9	74.0	54.0	-25.5	-12.1	V				
4.824	9.8	47.3	42.6	33.4	2.9	-35.3	0.0	1.0	49.2	44.5	74.0	54.0	-24.8	-9.5	H				
<b>2437 Channel</b>																			
4.874	9.8	44.5	32.5	33.4	2.9	-35.3	0.0	1.0	46.5	34.5	74.0	54.0	-27.5	-19.5	V				
7.311	9.8	45.3	32.4	35.8	3.7	-34.6	0.0	1.0	51.2	38.3	74.0	54.0	-22.8	-15.7	V				
4.874	9.8	44.8	31.5	33.4	2.9	-35.3	0.0	1.0	46.8	33.5	74.0	54.0	-27.2	-20.5	H				
7.311	9.8	44.9	33.2	35.8	3.7	-34.6	0.0	1.0	50.8	39.1	74.0	54.0	-23.2	-14.9	H				
<b>2462 Channel</b>																			
4.924	9.8	45.0	33.8	33.5	2.9	-35.3	0.0	1.0	47.1	35.9	74.0	54.0	-26.9	-18.1	V				
7.386	9.8	44.6	32.3	36.0	3.7	-34.5	0.0	1.0	50.7	38.4	74.0	54.0	-23.3	-15.6	V				
4.924	9.8	44.2	33.7	33.5	2.9	-35.3	0.0	1.0	46.3	35.8	74.0	54.0	-27.7	-18.2	H				
7.386	9.8	45.3	32.0	36.0	3.7	-34.5	0.0	1.0	51.4	38.1	74.0	54.0	-22.6	-15.9	H				
f	Measurement Frequency					Amp	Preamp Gain					Avg Lim	Average Field Strength Limit						
Dist	Distance to Antenna					D Corr	Distance Correct to 3 meters					Pk Lim	Peak Field Strength Limit						
Read	Analyzer Reading					Avg	Average Field Strength @ 3 m					Avg Mar	Margin vs. Average Limit						
AF	Antenna Factor					Peak	Calculated Peak Field Strength					Pk Mar	Margin vs. Peak Limit						
CL	Cable Loss					HPF	High Pass Filter												

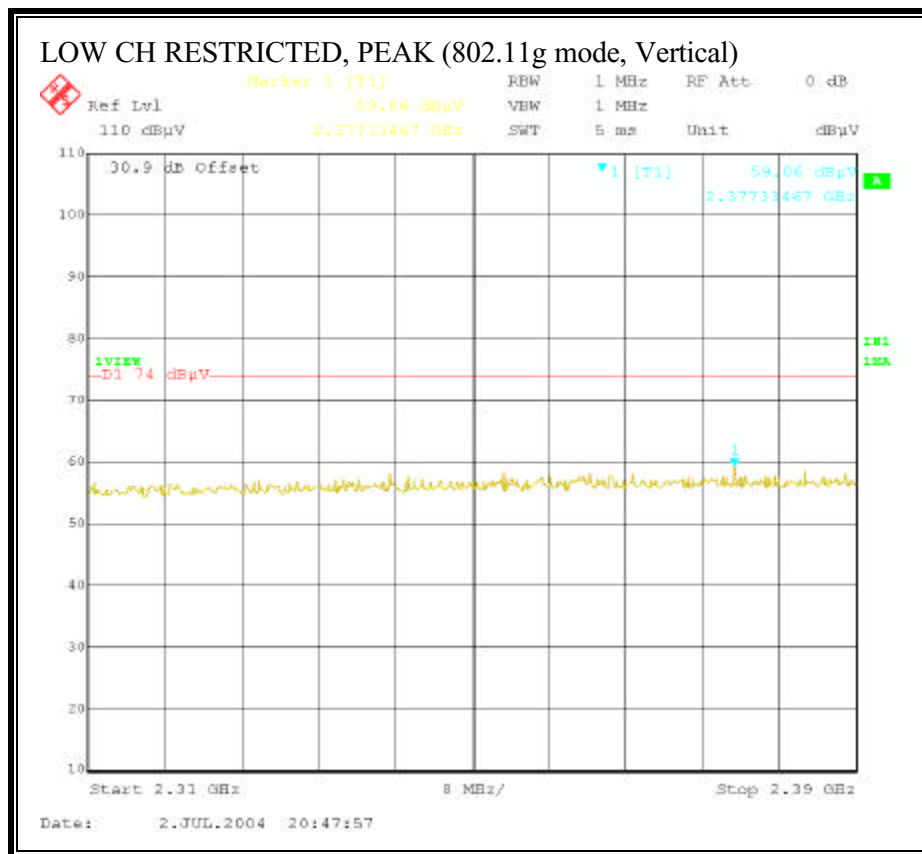
Note: No other spurious emissions were detected above the system noise in the restricted bands.

**RESTRICTED BANDEDGE (g MODE, LOW CHANNEL, HORIZONTAL)**

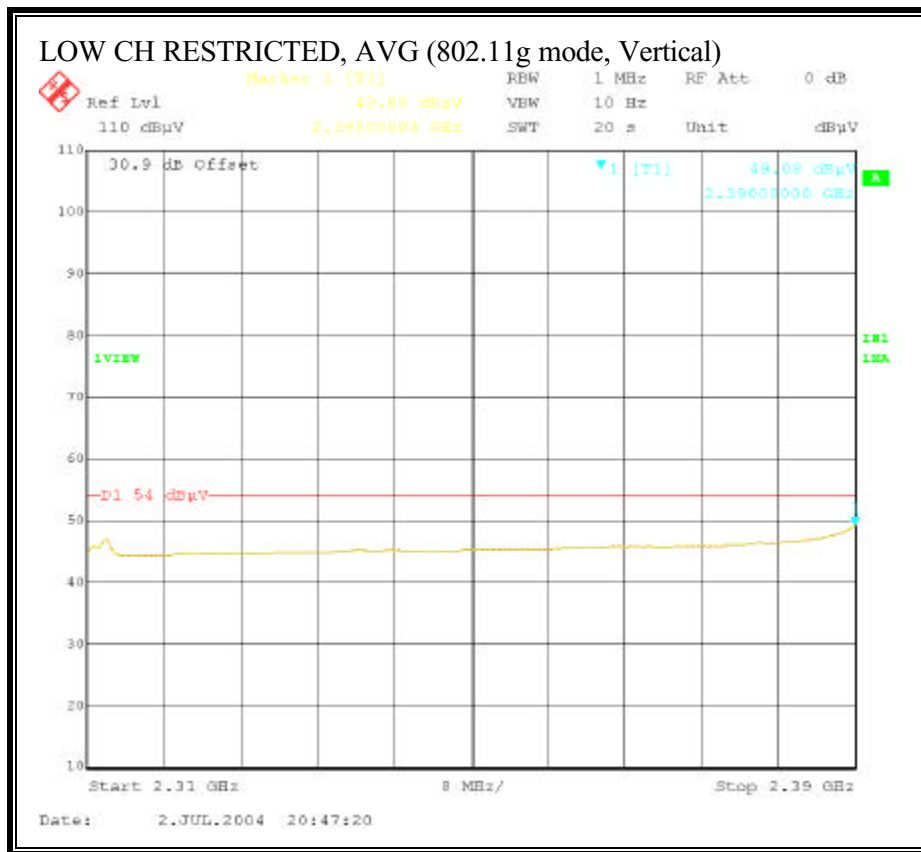




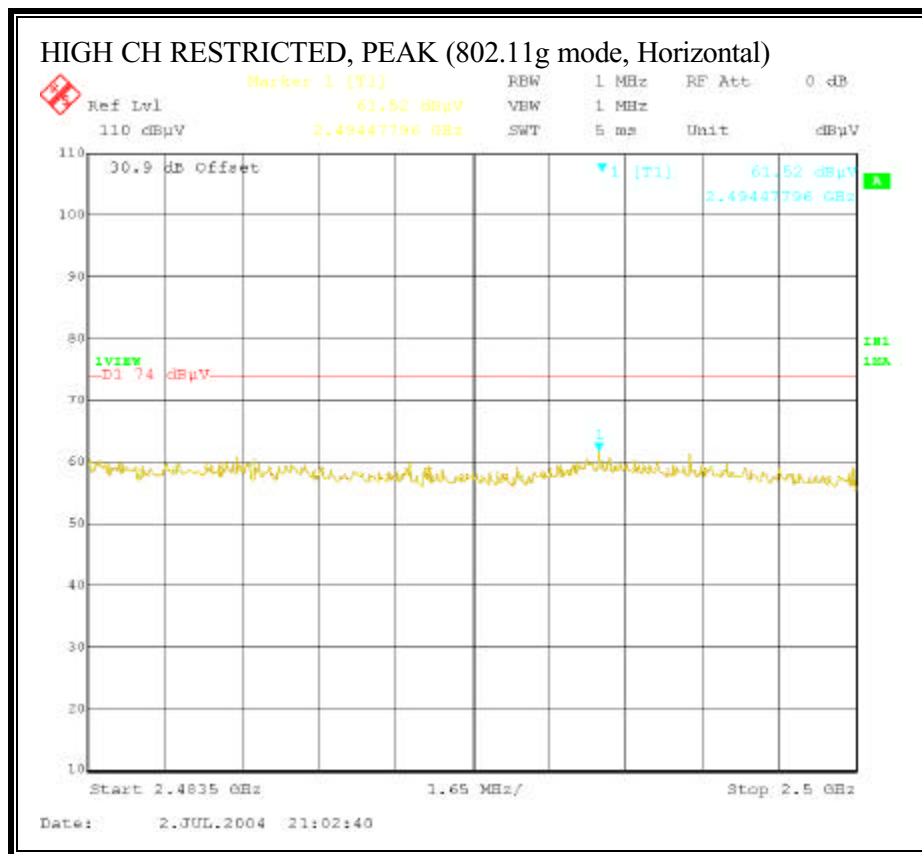
**RESTRICTED BANDEDGE (g MODE, LOW CHANNEL, VERTICAL)**

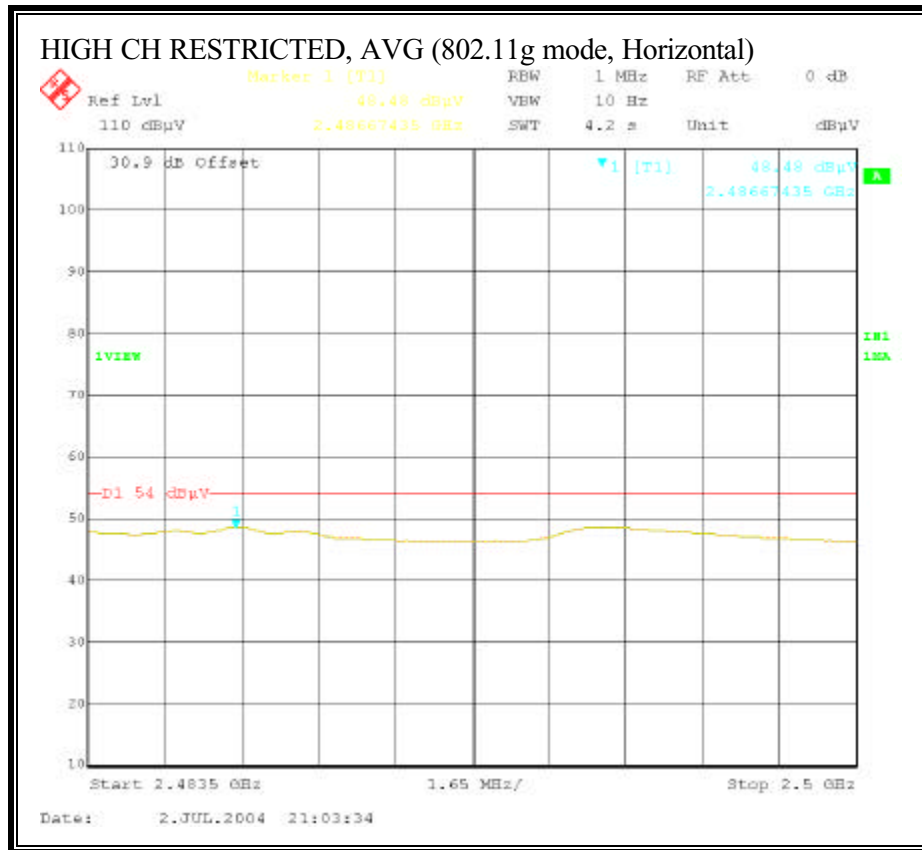




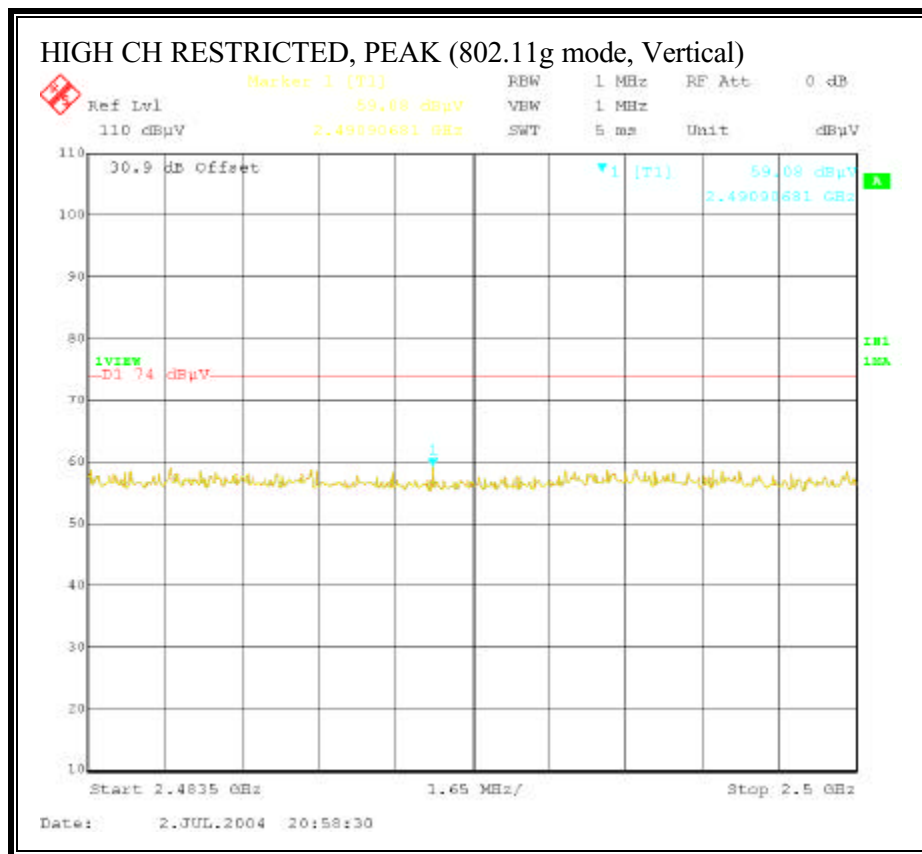


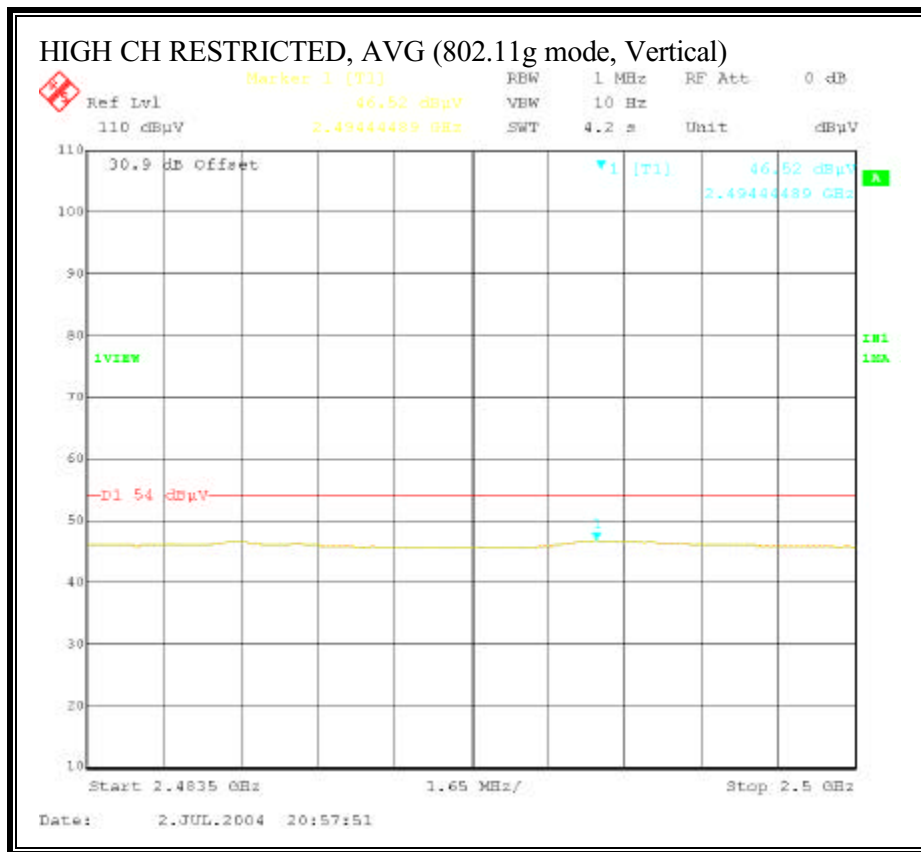
**RESTRICTED BANDEDGE (g MODE, HIGH CHANNEL, HORIZONTAL)**





**RESTRICTED BANDEDGE (g MODE, HIGH CHANNEL, VERTICAL)**





**HARMONICS AND SPURIOUS EMISSIONS (g MODE)**

07/01/04 <b>High Frequency Measurement</b> <b>Compliance Certification Services, Morgan Hill Open Field Site</b>															
<b>Test Engr:</b>		David Garcia													
<b>Project #:</b>		04U2843													
<b>Company:</b>		INTEL													
<b>EUT Descrip.:</b>		802.11 a/b/g Mini PCI type 3B Card													
<b>EUT M/N:</b>		PA3375U-IMP													
<b>Test Target:</b>		FCC 15.247													
<b>Mode Oper:</b>		TX 11g mode, Laptop Position, HTL-017 Antenna													
<b>Test Equipment:</b>															
EMCO Horn 1-18GHz		Spectrum Analyzer		Pre-amplifier 1-26GHz		Pre-amplifier 26-40GHz		Horn > 18GHz							
T73; S/N: 6717 @3m		Agilent E4446A Analyzer		T63 Miteq 646456											
Hi Frequency Cable: <input checked="" type="checkbox"/> (2 ft) <input type="checkbox"/> (2.0 ft) <input type="checkbox"/> (3 ft) <input checked="" type="checkbox"/> (12 ft)															
Peak Measurements: 1 MHz Resolution Bandwidth 1MHz Video Bandwidth															
Average Measurements: 1 MHz Resolution Bandwidth 10Hz Video Bandwidth															
f GHz	Dist feet	Read Pk dBuV	Read Avg, dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	HPF	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes
2412 Channel															
4.824	9.8	45.6	32.3	33.4	2.9	-35.3	0.0	1.0	47.5	34.2	74.0	54.0	-26.5	-19.8	V
4.824	9.8	45.7	32.5	33.4	2.9	-35.3	0.0	1.0	47.6	34.4	74.0	54.0	-26.4	-19.6	H
2437 Channel															
4.874	9.8	43.8	32.1	33.4	2.9	-35.3	0.0	1.0	45.8	34.1	74.0	54.0	-28.2	-19.9	V
7.311	9.8	44.0	32.2	35.8	3.7	-34.6	0.0	1.0	49.9	38.1	74.0	54.0	-24.1	-15.9	V
4.874	9.8	43.2	31.0	33.4	2.9	-35.3	0.0	1.0	45.2	33.0	74.0	54.0	-28.8	-21.0	H
7.311	9.8	43.0	32.2	35.8	3.7	-34.6	0.0	1.0	48.9	38.1	74.0	54.0	-25.1	-15.9	H
2462 Channel															
4.924	9.8	46.3	33.2	33.5	2.9	-35.3	0.0	1.0	48.4	35.3	74.0	54.0	-25.6	-18.7	V
7.386	9.8	43.2	32.1	36.0	3.7	-34.5	0.0	1.0	49.3	38.2	74.0	54.0	-24.7	-15.8	V
4.924	9.8	49.5	36.2	33.5	2.9	-35.3	0.0	1.0	51.6	38.3	74.0	54.0	-22.4	-15.7	H
7.386	9.8	44.0	33.7	36.0	3.7	-34.5	0.0	1.0	50.1	39.8	74.0	54.0	-23.9	-14.2	H
f      Measurement Frequency      Amp      Preamp Gain      Avg Lim      Average Field Strength Limit															
Dist      Distance to Antenna      D Corr      Distance Correct to 3 meters      Pk Lim      Peak Field Strength Limit															
Read      Analyzer Reading      Avg      Average Field Strength @ 3 m      Avg Mar      Margin vs. Average Limit															
AF      Antenna Factor      Peak      Calculated Peak Field Strength      Pk Mar      Margin vs. Peak Limit															
CL      Cable Loss      HPF      High Pass Filter															

Note: No other spurious emissions were detected above the system noise in the restricted bands.

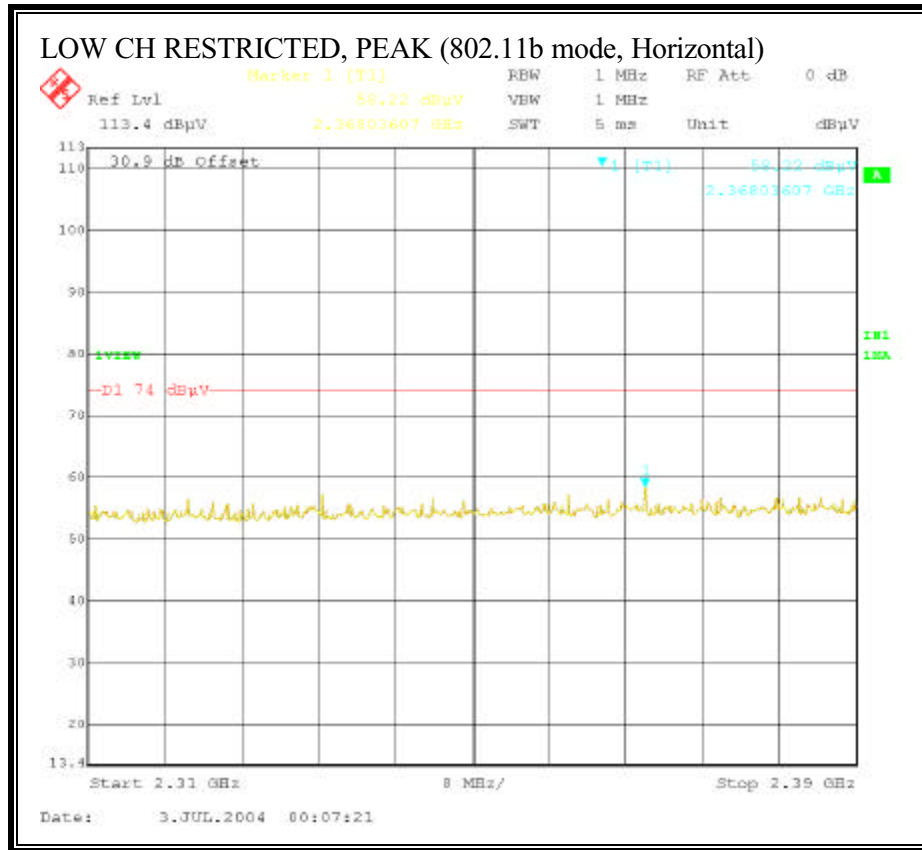
**HARMONICS AND SPURIOUS EMISSIONS (a MODE)**

07/02/04 <b>High Frequency Measurement</b> <b>Compliance Certification Services, Morgan Hill Open Field Site</b>															
<b>Test Engr:</b>		David Garcia													
<b>Project #:</b>		04U2843													
<b>Company:</b>		INTEL													
<b>EUT Descrip.:</b>		802.11 a/b/g Mini PCI type 3B Card													
<b>EUT M/N:</b>		PA3375U-IMP													
<b>Test Target:</b>		FCC 15.247													
<b>Mode Oper:</b>		TX 11a mode, 5.8GHz Band; Laptop Position, HTL-017 Antenna													
<b>Test Equipment:</b>															
EMCO Horn 1-18GHz		Spectrum Analyzer				Pre-amplifier 1-26GHz				Pre-amplifier 26-40GHz				Horn > 18GHz	
T73; S/N: 6717 @3m		Agilent E4446A Analyzer				T63 Miteq 646456									
Hi Frequency Cable: <input checked="" type="checkbox"/> (2 ft) <input type="checkbox"/> (2.0 ft) <input type="checkbox"/> (3 ft) <input checked="" type="checkbox"/> (12 ft)															
<b>Peak Measurements:</b> 1 MHz Resolution Bandwidth 1MHz Video Bandwidth															
<b>Average Measurements:</b> 1 MHz Resolution Bandwidth 10Hz Video Bandwidth															
f GHz	Dist feet	Read Pk dBuV	Read Avg, dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	HPF	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes
5745 Channel															
11.490	9.8	44.1	32.7	38.8	4.8	-34.2	0.0	1.0	54.4	43.0	74.0	54.0	-19.6	-11.0	V
11.490	9.8	43.1	32.1	38.8	4.8	-34.2	0.0	1.0	53.4	42.4	74.0	54.0	-20.6	-11.6	H
5785 Channel															
11.570	9.8	46.0	34.1	38.8	4.8	-34.3	0.0	1.0	56.3	44.4	74.0	54.0	-17.7	-9.6	V
11.570	9.8	44.6	33.2	38.8	4.8	-34.3	0.0	1.0	54.9	43.5	74.0	54.0	-19.1	-10.5	H
5825 Channel															
11.650	9.8	45.1	33.5	38.9	4.8	-34.4	0.0	1.0	55.4	43.8	74.0	54.0	-18.6	-10.2	V
11.650	9.8	44.2	32.9	38.9	4.8	-34.4	0.0	1.0	54.5	43.2	74.0	54.0	-19.5	-10.8	H
f	Measurement Frequency			Amp	Preamp Gain			Avg Lim	Average Field Strength Limit						
Dist	Distance to Antenna			D Corr	Distance Correct to 3 meters			Pk Lim	Peak Field Strength Limit						
Read	Analyzer Reading			Avg	Average Field Strength @ 3 m			Avg Mar	Margin vs. Average Limit						
AF	Antenna Factor			Peak	Calculated Peak Field Strength			Pk Mar	Margin vs. Peak Limit						
CL	Cable Loss			HPF	High Pass Filter										

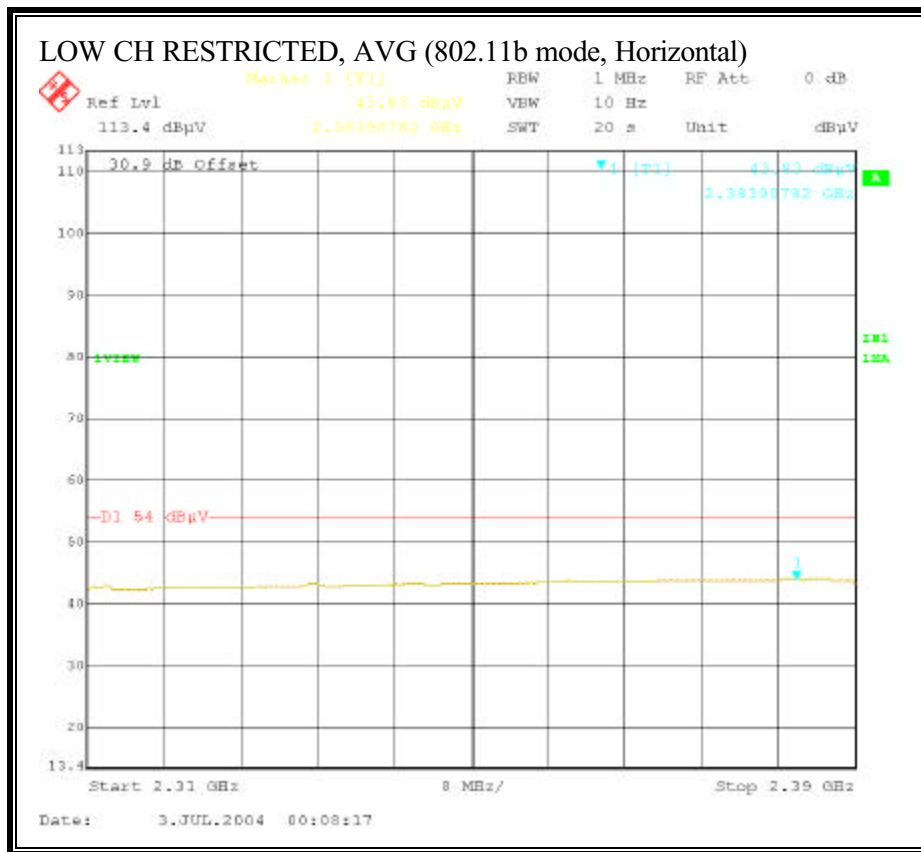
Note: No other spurious emissions were detected above the system noise in the restricted bands.

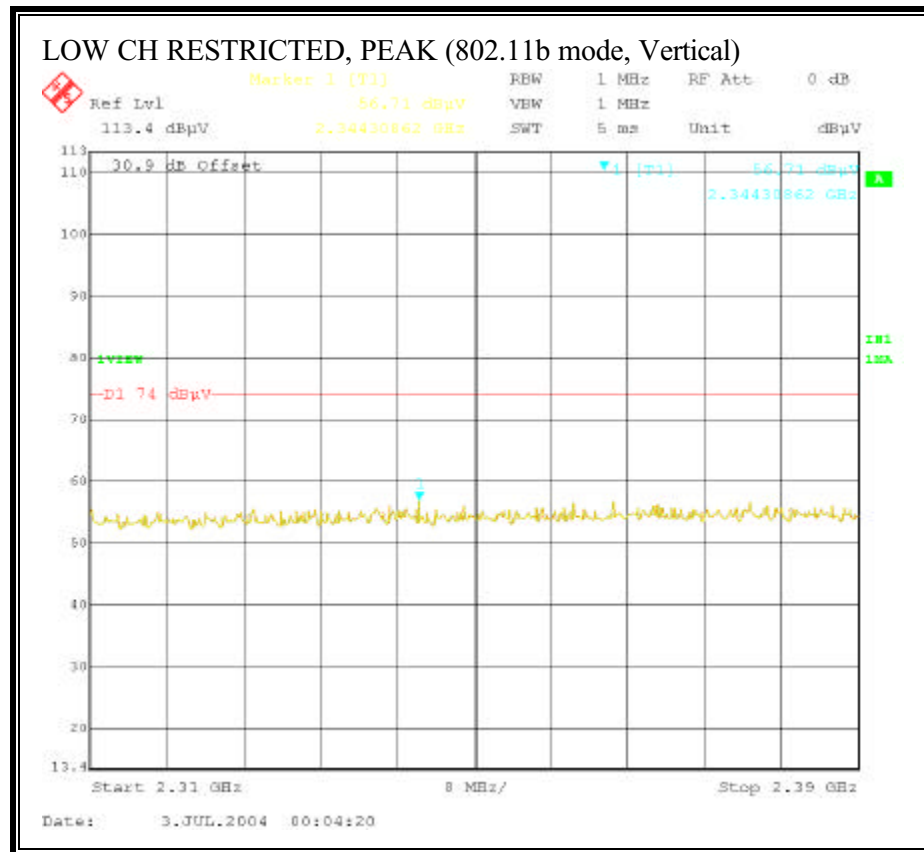
### 7.8.5. TRANSMITTER RADIATED EMISSIONS ABOVE 1 GHz, PORTABLE TABLET CONFIGURATION, HTL017 ANTENNA SET

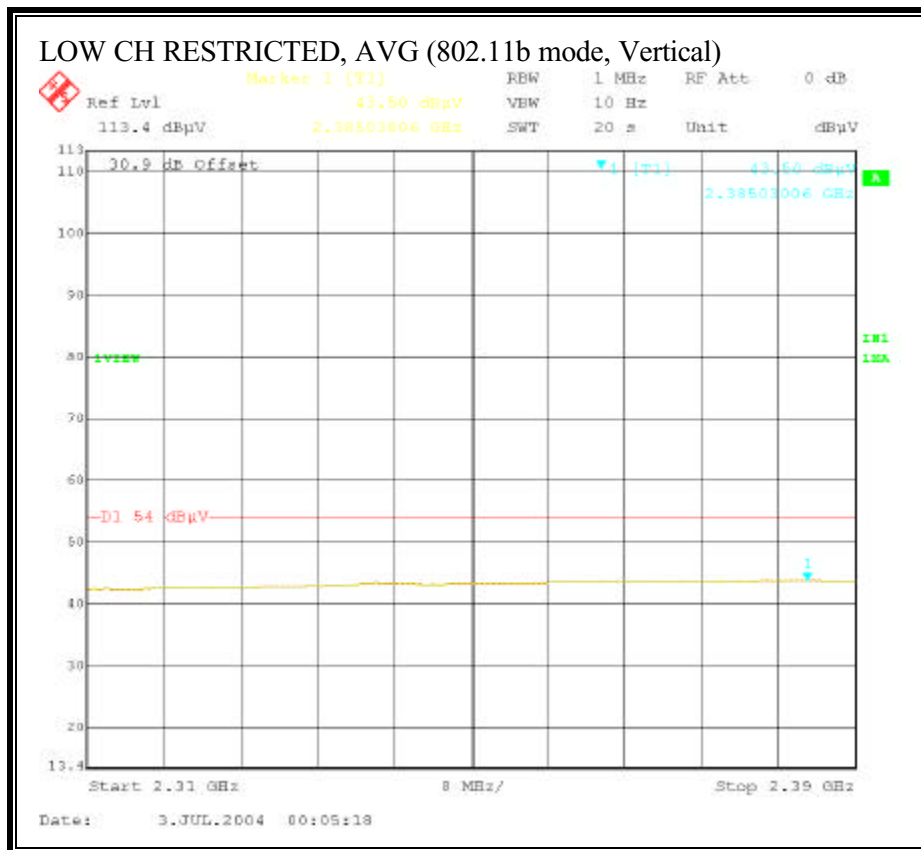
RESTRICTED BANDEDGE (b MODE, LOW CHANNEL, HORIZONTAL)



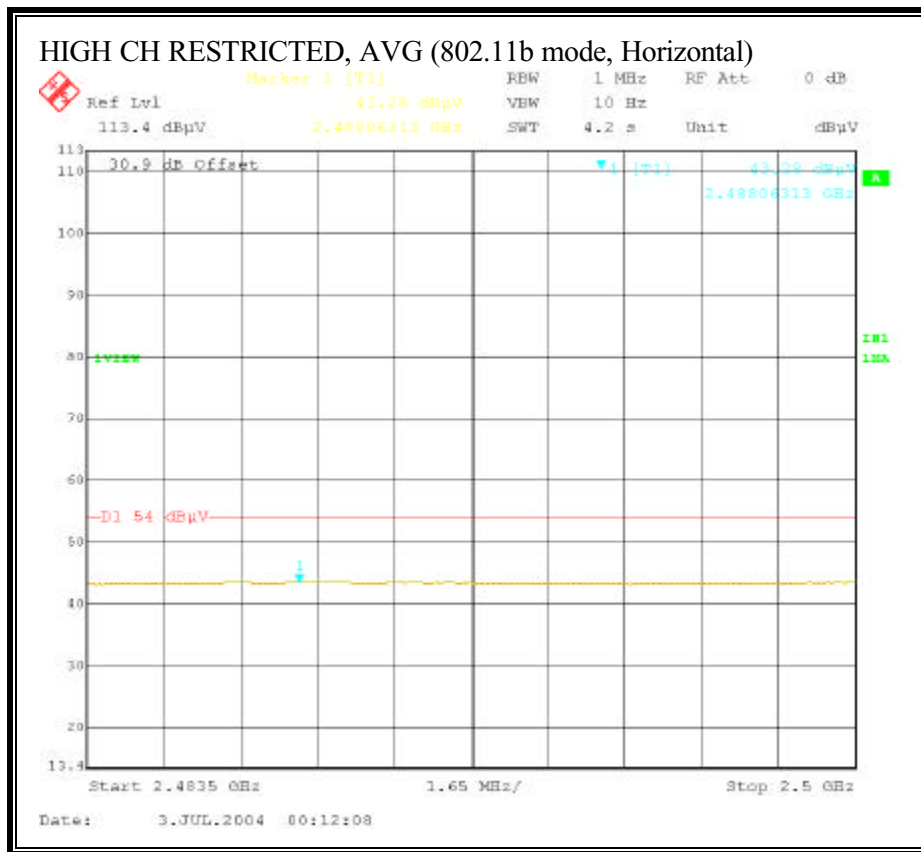




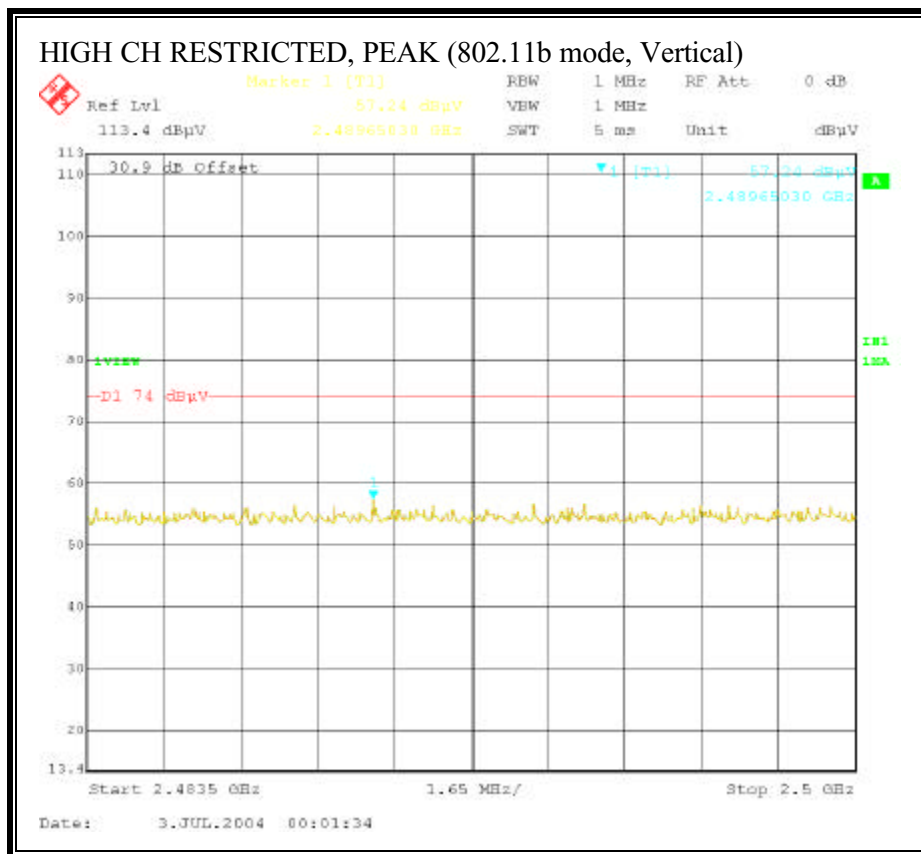


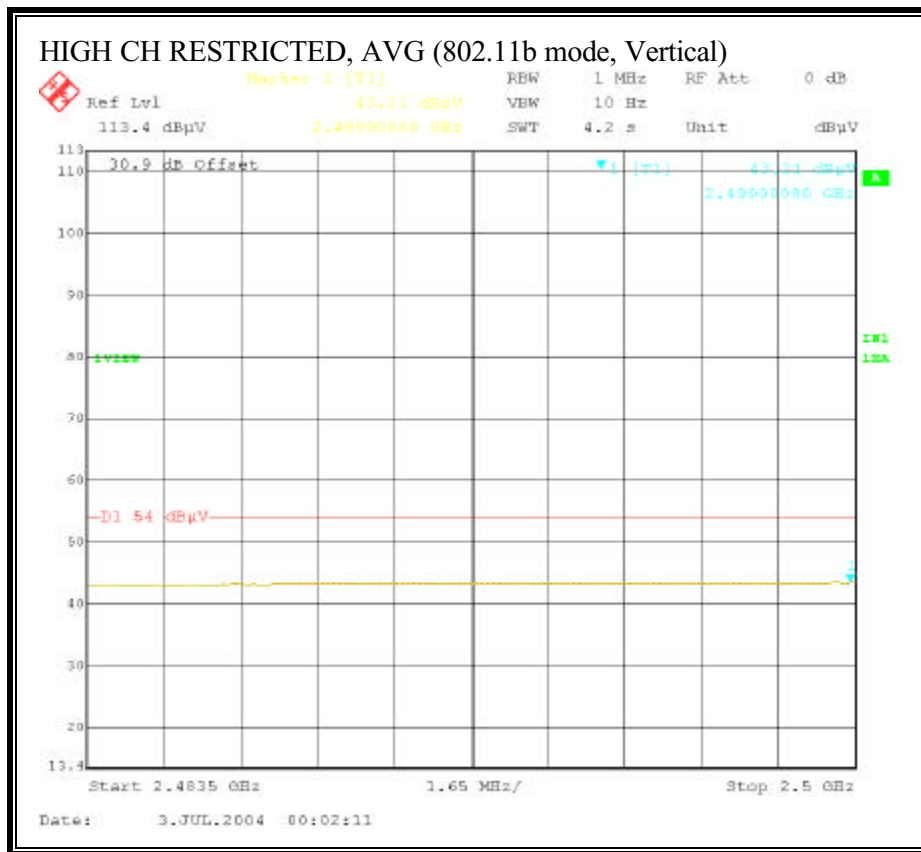


[illegible]



**RESTRICTED BANDEDGE (b MODE, HIGH CHANNEL, VERTICAL)**





**HARMONICS AND SPURIOUS EMISSIONS (b MODE)**

07/06/04    **High Frequency Measurement**  
Compliance Certification Services, Morgan Hill Open Field Site A

Test Engr: Ben Du  
Project #: 04U2843  
Company: Intel  
EUT Descr.: 11a/b/g mini PCI 3B card  
EUT M/N: PA3375U-1MPC  
Test Target: FCC 15.247  
Mode Oper: tx w/ antenna HTL, 11b mode

**Test Equipment:**

EMCO Horn 1-18GHz T119; S/N: 29301 @3n	Spectrum Analyzer Agilent E4446A Analyzer	Pre-amplifier 1-26GHz T63 Miteq 646456	Pre-amplifier 26-40GHz	Horn > 18GHz
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Hi Frequency Cables: (2 ~ 3 ft) (4 ~ 6 ft) (12 ft)

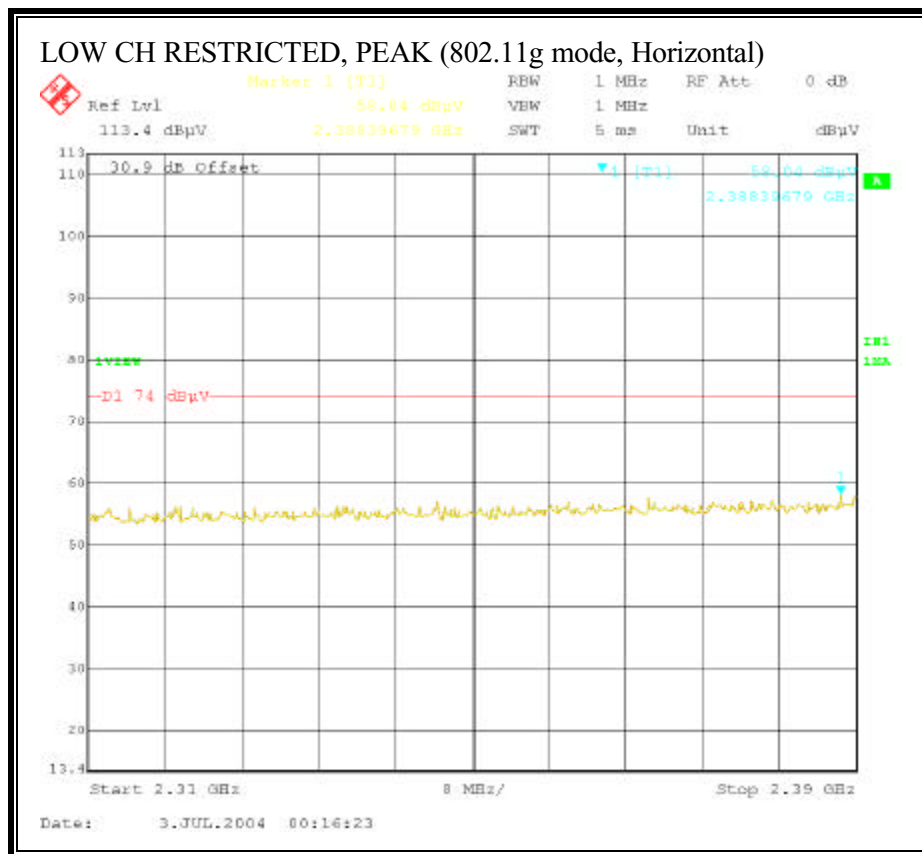
f GHz	Dist feet	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	HPF	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes
<b>B Mode 2412MHz, PWR Setup 15.5</b>															
4.750	9.8	45.7	33.9	34.9	3.1	-35.3	0.0	1.0	49.3	37.5	74.0	54.0	-24.7	-16.5	V
4.822	9.8	46.9	35.2	35.0	3.1	-35.3	0.0	1.0	50.6	39.0	74.0	54.0	-23.4	-15.0	H
<b>B Mode 2437MHz, PWR Setup 17</b>															
4.873	9.8	49.8	34.9	35.0	3.2	-35.3	0.0	1.0	53.6	38.7	74.0	54.0	-20.4	-15.3	V
4.873	9.8	44.3	32.1	35.0	3.2	-35.3	0.0	1.0	48.1	35.9	74.0	54.0	-25.9	-18.1	H
<b>B Mode 2462MHz, PWR Setup 17</b>															
4.923	9.8	46.0	32.8	35.0	3.2	-35.3	0.0	1.0	49.9	36.7	74.0	54.0	-24.1	-17.3	V
7.385	9.8	45.6	33.0	36.7	4.0	-34.5	0.0	1.0	52.7	40.1	74.0	54.0	-21.3	-13.9	V
4.923	9.8	50.0	34.1	35.0	3.2	-35.3	0.0	1.0	53.8	38.0	74.0	54.0	-20.2	-16.0	H
7.387	9.8	49.7	34.1	36.7	4.0	-34.5	0.0	1.0	56.8	41.2	74.0	54.0	-17.2	-12.8	H

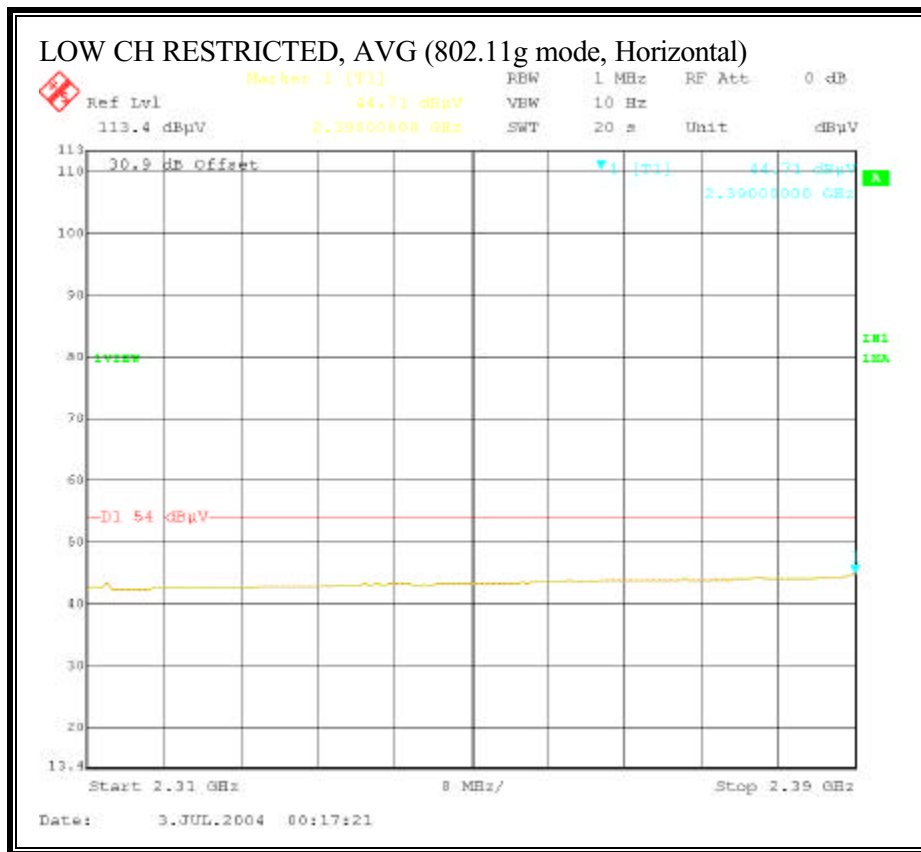
f	Measurement Frequency	Amp	Preamp Gain	Avg Lim	Average Field Strength Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters	Pk Lim	Peak Field Strength Limit
Read	Analyzer Reading	Avg	Average Field Strength @ 3 m	Avg Mar	Margin vs. Average Limit
AF	Antenna Factor	Peak	Calculated Peak Field Strength	Pk Mar	Margin vs. Peak Limit
CL	Cable Loss	HPF	High Pass Filter		

Note: No other spurious emissions were detected above the system noise in the restricted bands.

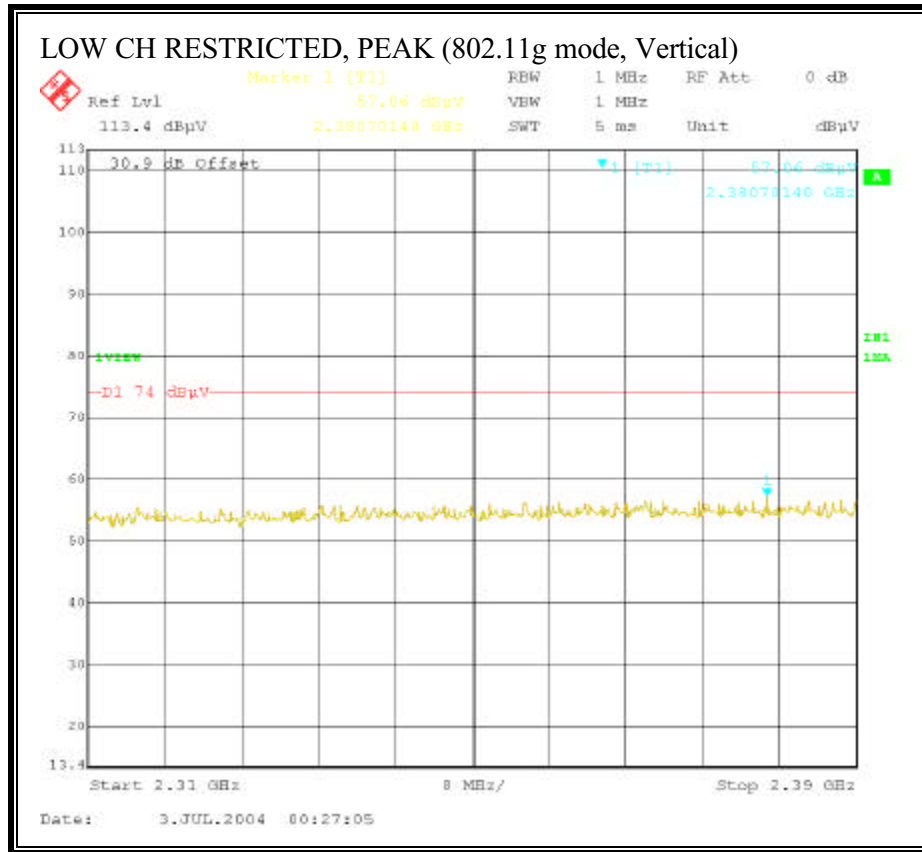


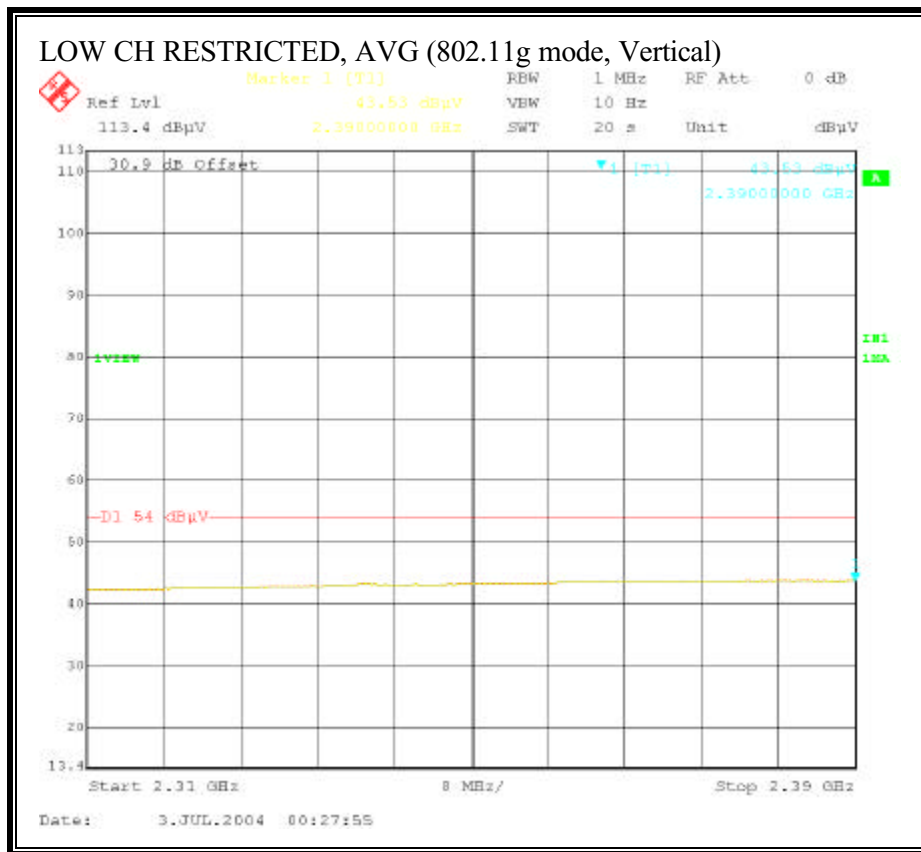
**RESTRICTED BANDEDGE (g MODE, LOW CHANNEL, HORIZONTAL)**



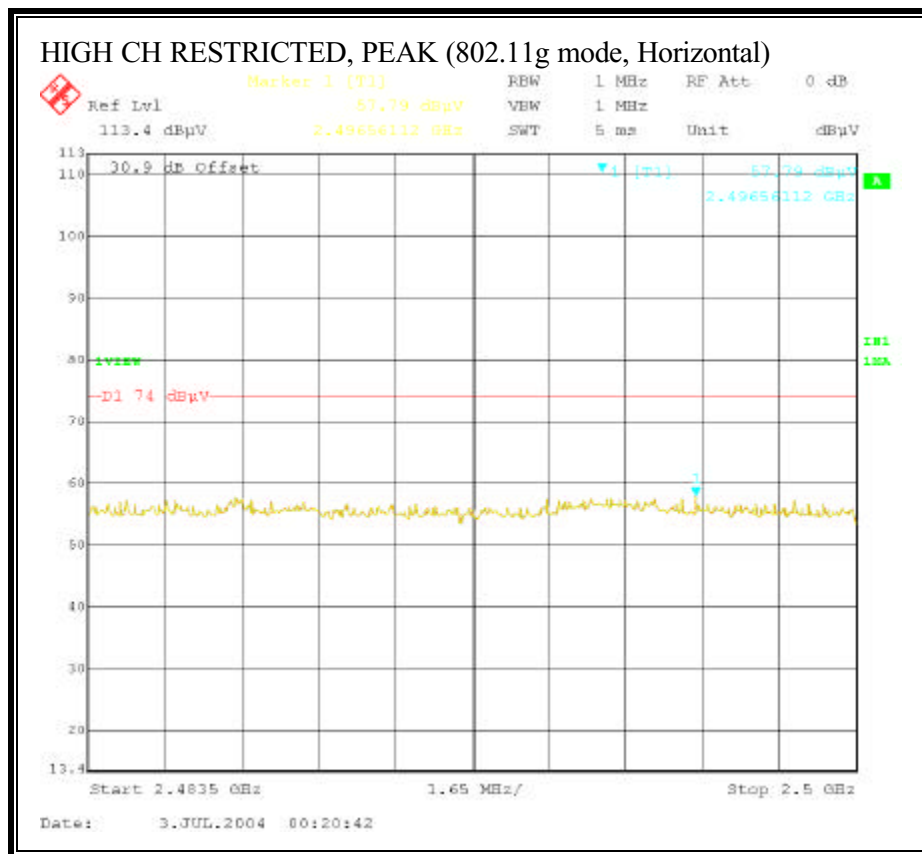


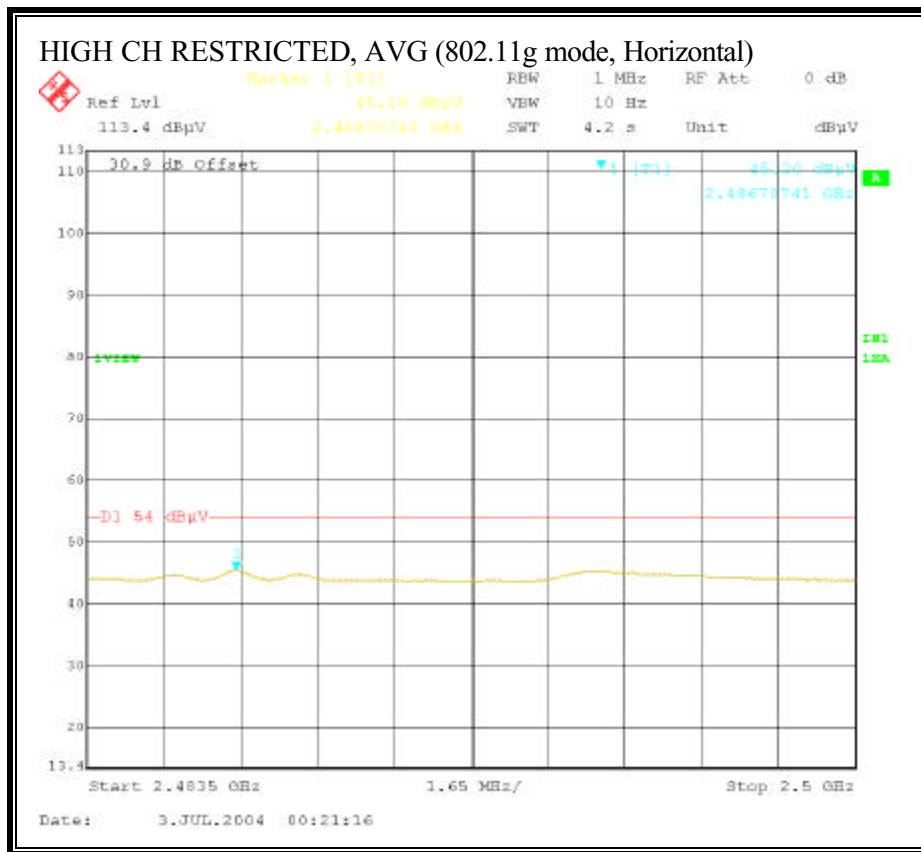
**RESTRICTED BANDEDGE (g MODE, LOW CHANNEL, VERTICAL)**



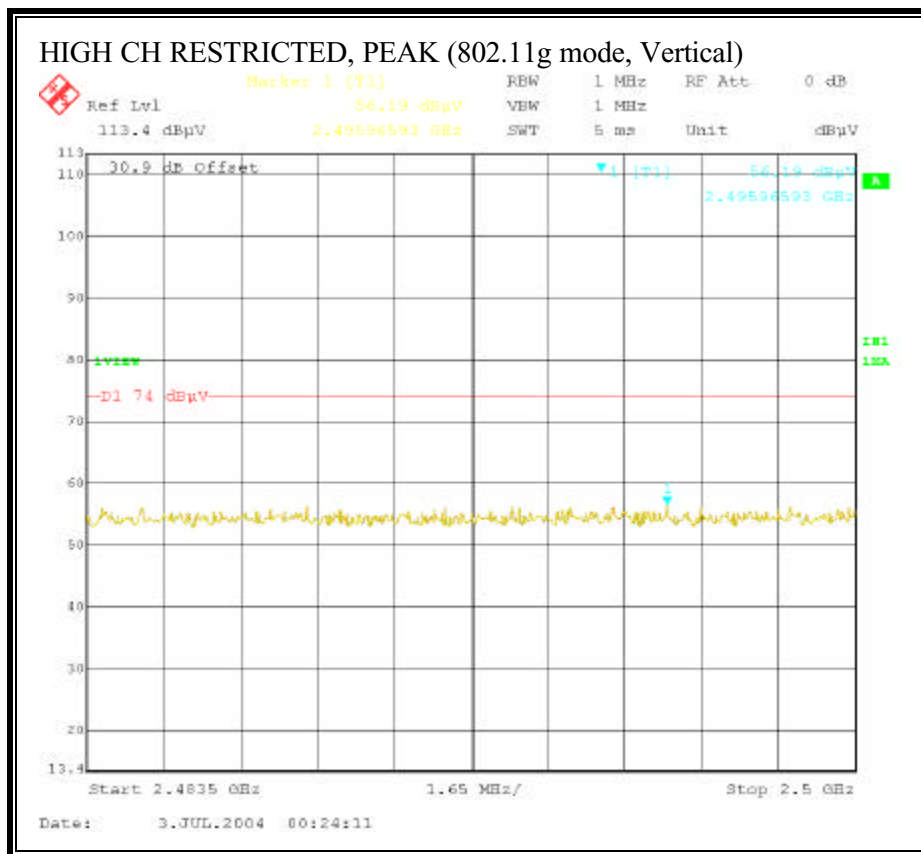


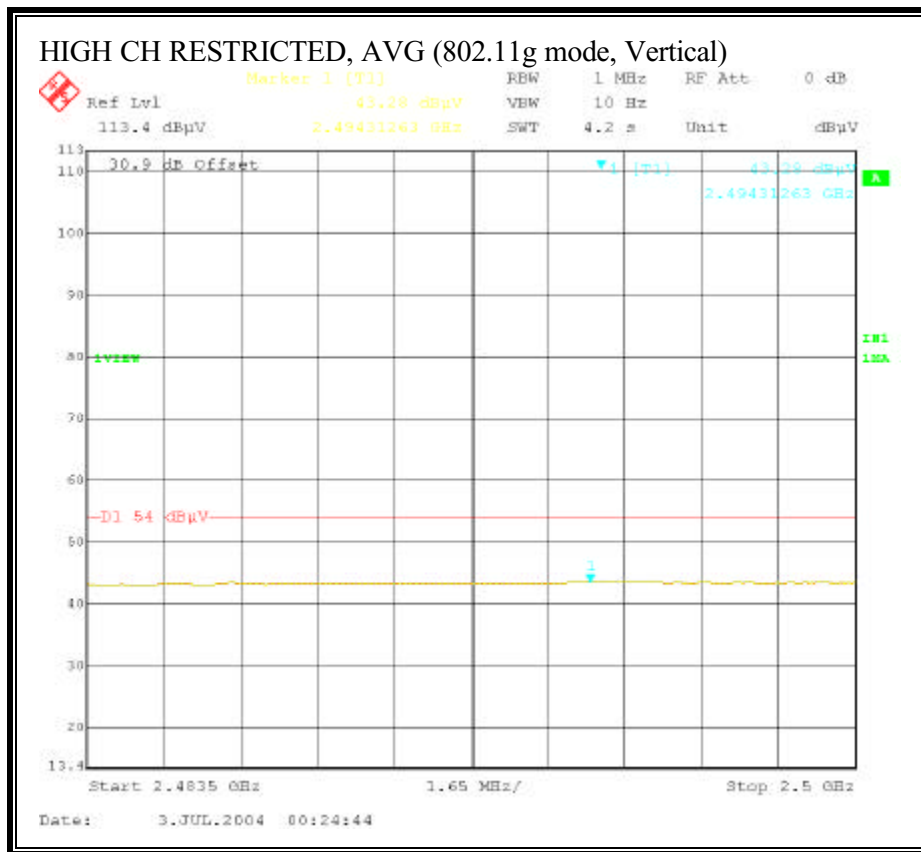
**RESTRICTED BANDEDGE (g MODE, HIGH CHANNEL, HORIZONTAL)**





**RESTRICTED BANDEDGE (g MODE, HIGH CHANNEL, VERTICAL)**







**HARMONICS AND SPURIOUS EMISSIONS (g MODE)**

07/06/04 High Frequency Measurement  
Compliance Certification Services, Morgan Hill Open Field Site A

Test Engr: Ben Du  
Project #: 04U2843  
Company: Intel  
EUT Descr.: 11a/b/g mini PCI 3B card  
EUT M/N: PA3375U-1MPC  
Test Target: FCC 15.247  
Mode Oper: tx w/ ante HTL. 11g mode.

**Test Equipment:**

EMCO Horn 1-18GHz T119; S/N: 29301 @3n	Spectrum Analyzer Agilent E4446A Analyzer	Pre-amplifier 1-26GHz T63 Miteq 646456	Pre-amplifier 26-40GHz	Horn > 18GHz
Hi Frequency Cables: (2 ~ 3 ft) (4 ~ 6 ft) (12 ft)				
<b>Peak Measurements:</b> 1 MHz Resolution Bandwidth 1 MHz Video Bandwidth			<b>Average Measurements:</b> 1 MHz Resolution Bandwidth 10 Hz Video Bandwidth	

f GHz	Dist feet	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	HPF	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes
G Mode 2412MHz, PWR Setup 17.5															
4.827	9.8	44.6	32.9	35.0	3.1	-35.3	0.0	1.0	48.3	36.6	74.0	54.0	-25.7	-17.4	V
4.822	9.8	46.9	35.2	35.0	3.1	-35.3	0.0	1.0	50.6	39.0	74.0	54.0	-23.4	-15.0	H
G Mode 2437MHz, PWR Setup 17															
4.873	9.8	45.9	33.4	35.0	3.2	-35.3	0.0	1.0	49.7	37.2	74.0	54.0	-24.3	-16.8	V
4.873	9.8	44.3	32.5	35.0	3.2	-35.3	0.0	1.0	48.1	36.3	74.0	54.0	-25.9	-17.7	H
B Mode 2462MHz, PWR Setup 17															
4.973	9.8	44.3	32.0	35.1	3.2	-35.3	0.0	1.0	48.3	36.0	74.0	54.0	-25.7	-18.0	V
7.385	9.8	43.2	33.0	36.7	4.0	-34.5	0.0	1.0	50.3	40.1	74.0	54.0	-23.7	-13.9	V
4.968	9.8	49.0	33.2	35.1	3.2	-35.3	0.0	1.0	52.9	37.2	74.0	54.0	-21.1	-16.8	H
7.387	9.8	44.8	32.3	36.7	4.0	-34.5	0.0	1.0	51.9	39.4	74.0	54.0	-22.1	-14.6	H

f	Measurement Frequency	Amp	Preamp Gain	Avg Lim	Average Field Strength Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters	Pk Lim	Peak Field Strength Limit
Read	Analyzer Reading	Avg	Average Field Strength @ 3 m	Avg Mar	Margin vs. Average Limit
AF	Antenna Factor	Peak	Calculated Peak Field Strength	Pk Mar	Margin vs. Peak Limit
CL	Cable Loss	HPF	High Pass Filter		

Note: No other spurious emissions were detected above the system noise in the restricted bands.

**HARMONICS AND SPURIOUS EMISSIONS (a MODE)**

07/06/04 **High Frequency Measurement**

Compliance Certification Services, Morgan Hill Open Field Site

**Test Engr:** David Garcia  
**Project #:** 04U2843  
**Company:** INTEL  
**EUT Descrip.:** 802.11 a/b/g Mini PCI type 3B Card  
**EUT M/N:** PA3375U-1MP  
**Test Target:** FCC 15.247  
**Mode Oper:** TX 11a mode, 5.8GHz Band; Worst case x,y,z position, HTL-017 Antenna

**Test Equipment:**

EMCO Horn 1-18GHz	Spectrum Analyzer	Pre-amplifier 1-26GHz	Pre-amplifier 26-40GHz	Horn > 18GHz
T119; S/N: 29301 @3m	Agilent E4446A Analyzer	T63 Miteq 646456		

Hi Frequency Cable:

<input checked="" type="checkbox"/> (2 ft)	<input type="checkbox"/> (2.0 ft)	<input type="checkbox"/> (3 ft)	<input checked="" type="checkbox"/> (12 ft)
--	-----------------------------------	---------------------------------	---

**Peak Measurements:**  
1 MHz Resolution Bandwidth  
1MHz Video Bandwidth

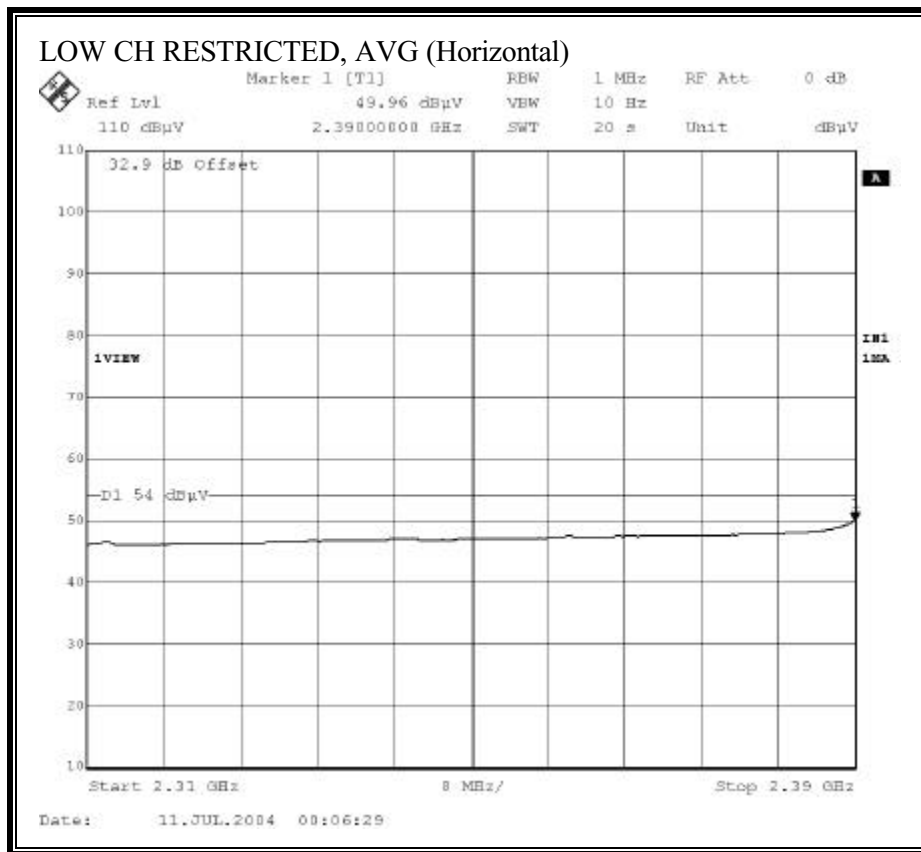
**Average Measurements:**  
1 MHz Resolution Bandwidth  
10Hz Video Bandwidth

f GHz	Dist feet	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	HPF	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes
5745 Channel															
11.490	9.8	43.6	32.3	39.1	4.8	-34.2	0.0	1.0	54.3	43.0	74.0	54.0	-19.7	-11.0	V
11.490	9.8	42.9	32.0	39.1	4.8	-34.2	0.0	1.0	53.6	42.7	74.0	54.0	-20.4	-11.3	H
5785 Channel															
11.570	9.8	44.2	33.7	39.2	4.8	-34.3	0.0	1.0	54.9	44.4	74.0	54.0	-19.1	-9.6	V
11.570	9.8	43.5	33.1	39.2	4.8	-34.3	0.0	1.0	54.2	43.8	74.0	54.0	-19.8	-10.2	H
5825 Channel															
11.650	9.8	44.0	33.3	39.3	4.8	-34.4	0.0	1.0	54.7	44.0	74.0	54.0	-19.3	-10.0	V
11.650	9.8	43.0	31.6	39.3	4.8	-34.4	0.0	1.0	53.7	42.3	74.0	54.0	-20.3	-11.7	H

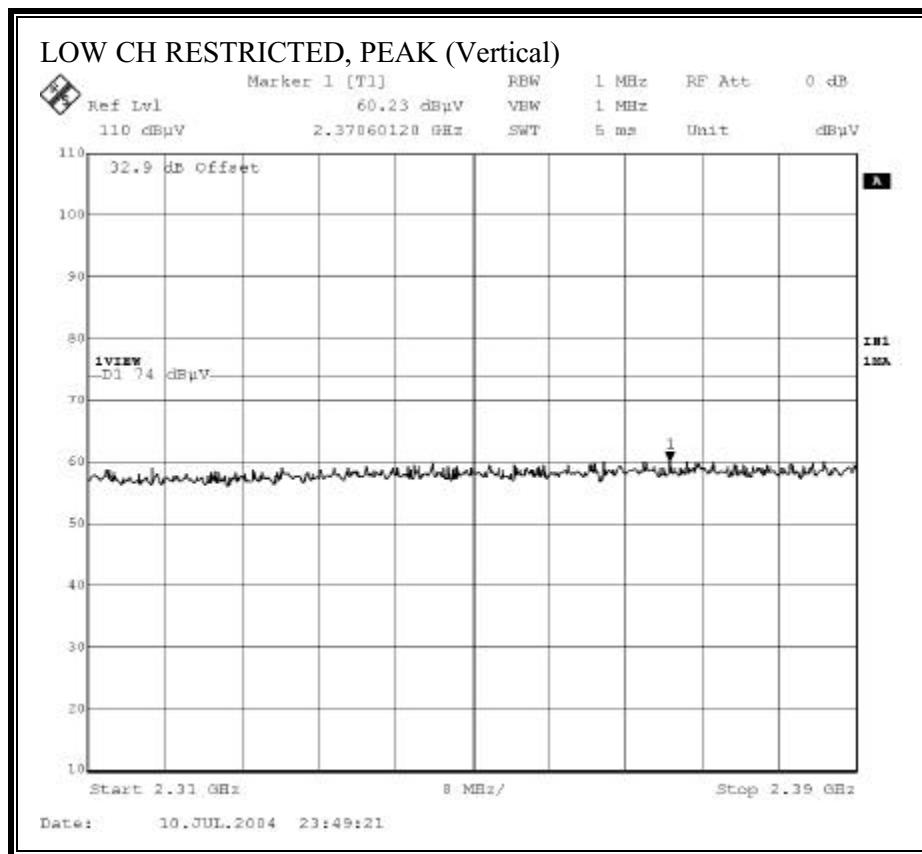
f	Measurement Frequency	Amp	Preamp Gain	Avg Lim	Average Field Strength Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters	Pk Lim	Peak Field Strength Limit
Read	Analyzer Reading	Avg	Average Field Strength @ 3 m	Avg Mar	Margin vs. Average Limit
AF	Antenna Factor	Peak	Calculated Peak Field Strength	Pk Mar	Margin vs. Peak Limit
CL	Cable Loss	HPF	High Pass Filter		

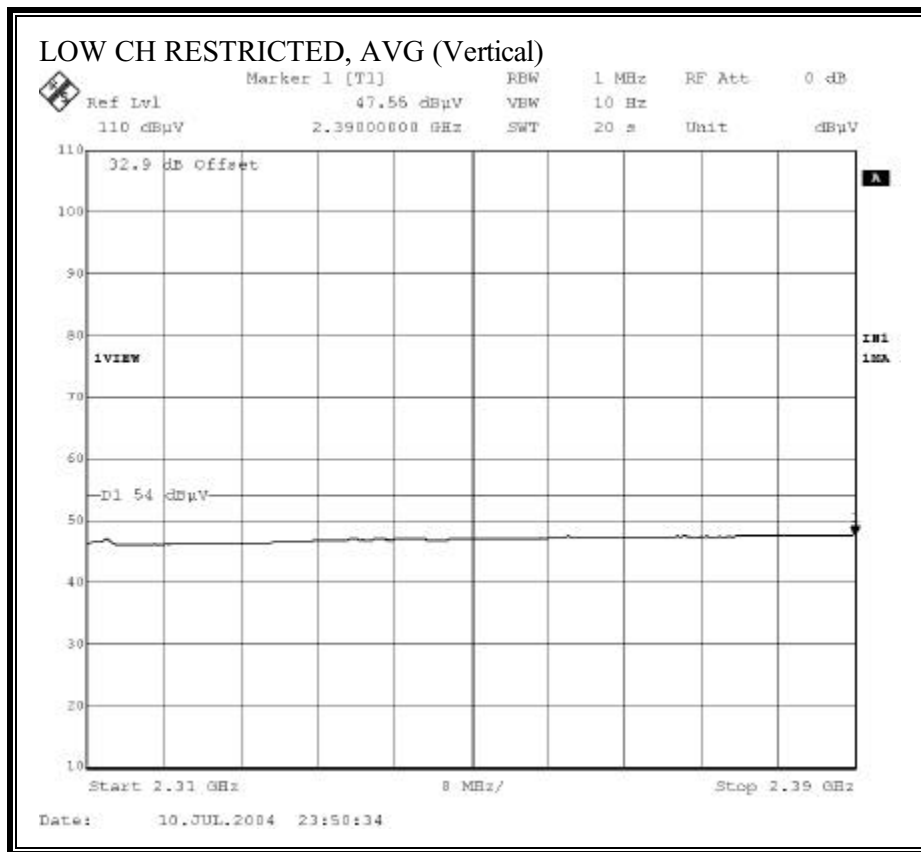
Note: No other spurious emissions were detected above the system noise in the restricted bands.



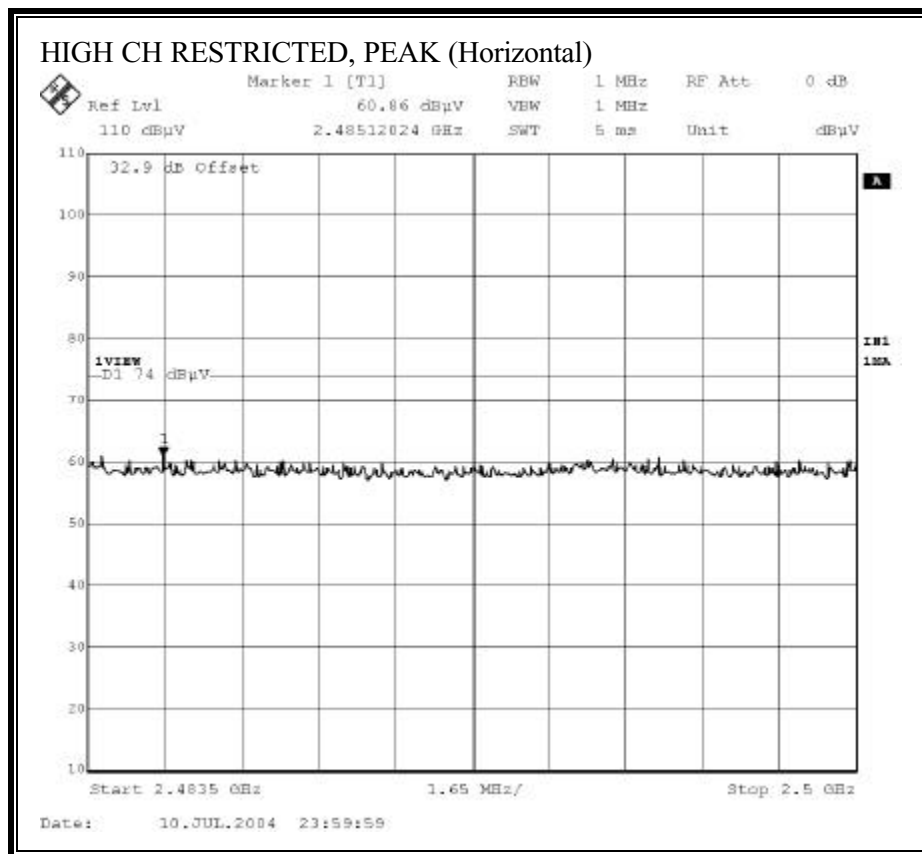


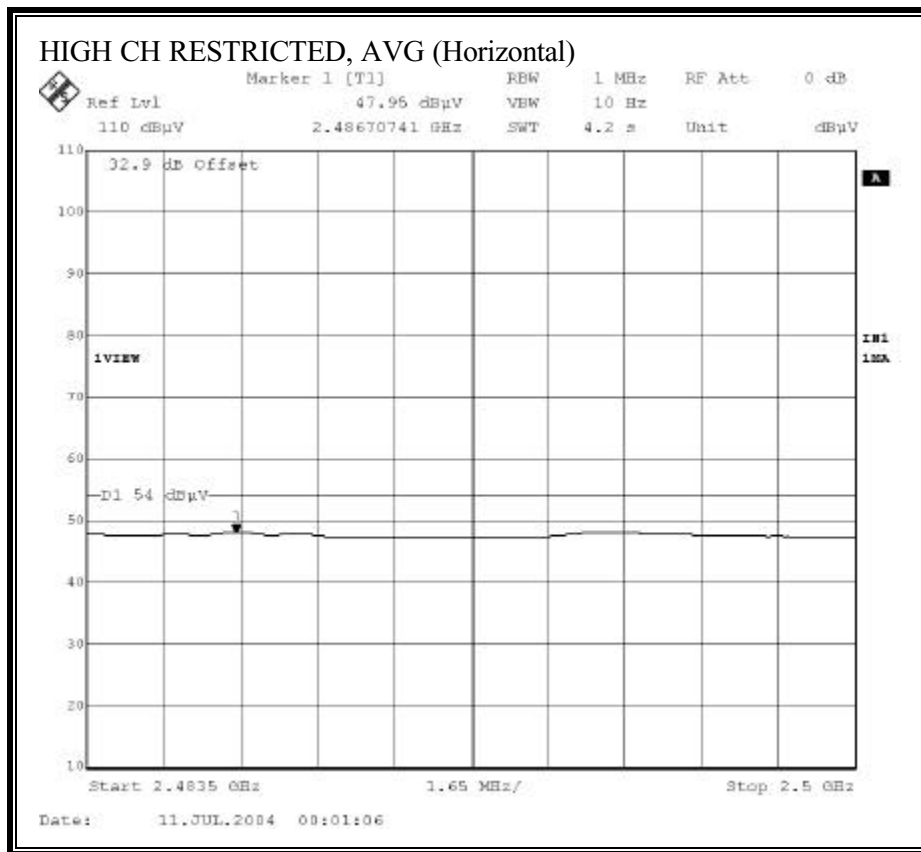
**WORST-CASE RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)**





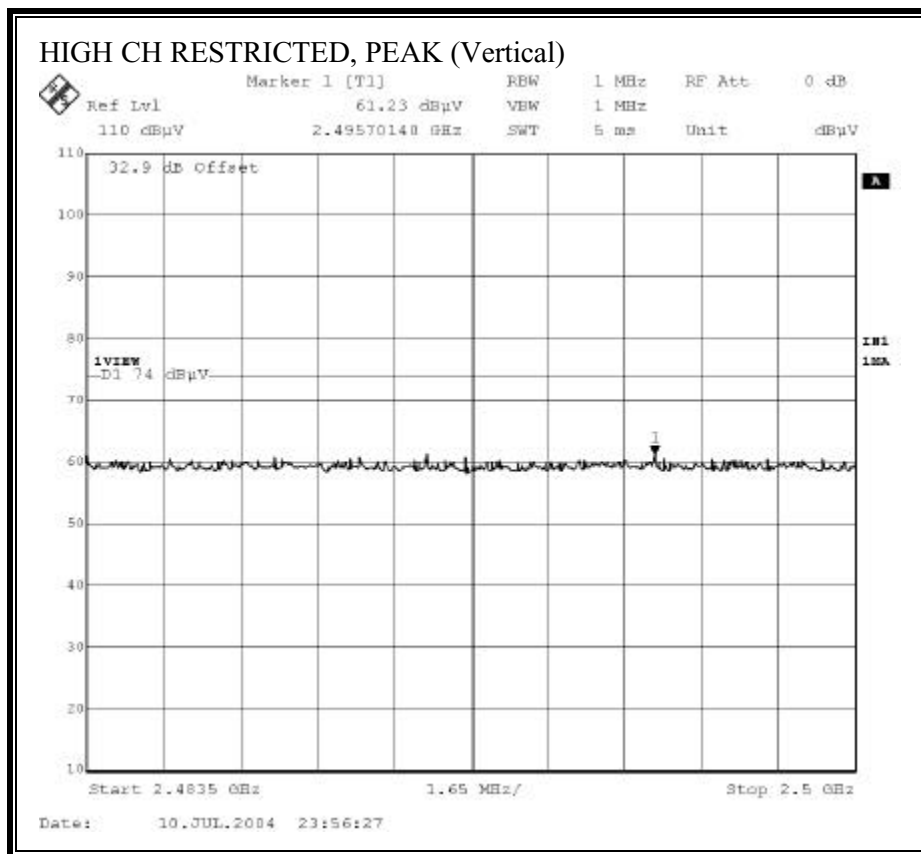
**WORST-CASE RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)**

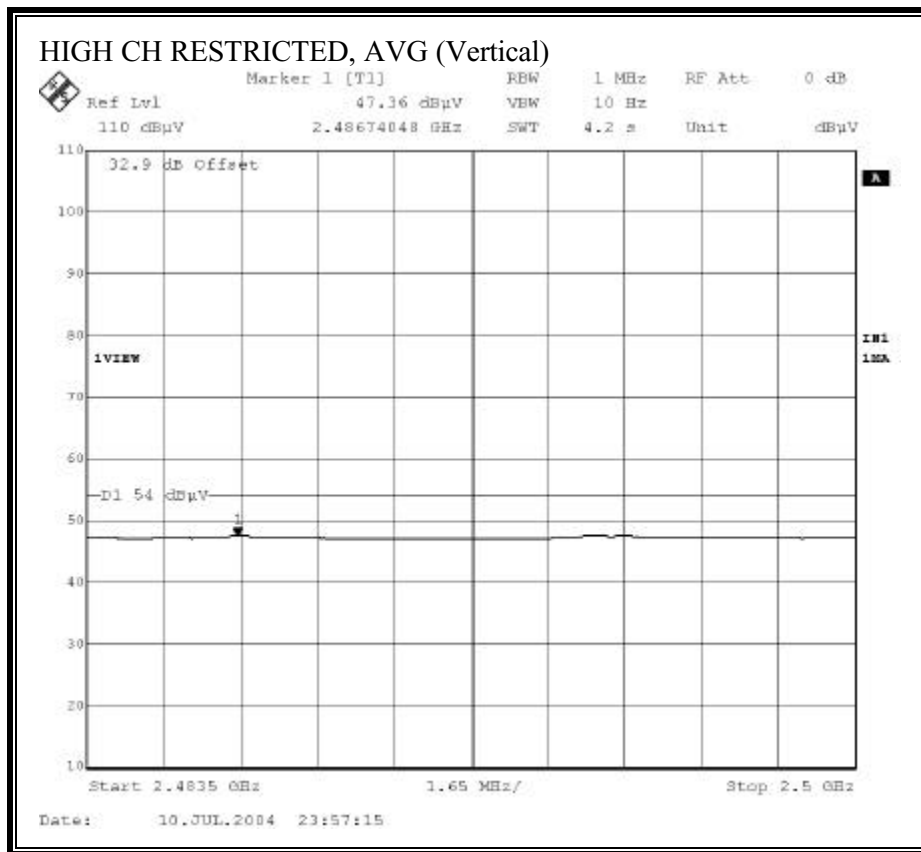






**WORST-CASE RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)**





**WORST-CASE HARMONICS AND SPURIOUS EMISSIONS**

07/10/04 **High Frequency Measurement**  
Compliance Certification Services, Morgan Hill Open Field Site

**Test Engr:** David Garcia  
**Project #:** 04U2843  
**Company:** INTEL  
**EUT Descrip.:** 802.11 a/b/g Mini PCI type 3B Card  
**EUT M/N:** PA3375U-1MP  
**Test Target:** FCC 15.247  
**Mode Oper:** TX 11g mode, Laptop Position, TIAN Antenna  
Co-Location Bluetooth at 2441MHz, WLAN at 2437MHz

**Test Equipment:**

EMCO Horn 1-18GHz	Spectrum Analyzer	Pre-amplifier 1-26GHz	Pre-amplifier 26-40GHz	Horn > 18GHz
T119; S/N: 29301 @3m	Agilent E4446A Analyzer	T63 Miteq 646456		

Frequency Cables	(2.0 ft)	(3 ft)	(12 ft)
------------------	----------	--------	---------

<b>Peak Measurements:</b>	<b>Average Measurements:</b>
1 MHz Resolution Bandwidth	1 MHz Resolution Bandwidth
1 MHz Video Bandwidth	10 Hz Video Bandwidth

f GHz	Dist feet	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	HPF	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes
2437 Channel															
4.874	9.8	45.0	32.0	35.0	2.9	-35.3	0.0	1.0	48.5	35.5	74.0	54.0	-25.5	-18.5	V
7.311	9.8	44.3	32.4	36.7	3.7	-34.6	0.0	1.0	51.0	39.1	74.0	54.0	-23.0	-14.9	V
4.874	9.8	44.4	32.0	35.0	2.9	-35.3	0.0	1.0	47.9	35.5	74.0	54.0	-26.1	-18.5	H
7.311	9.8	43.8	31.9	36.7	3.7	-34.6	0.0	1.0	50.5	38.6	74.0	54.0	-23.5	-15.4	H

f	Measurement Frequency	Amp	Preamp Gain	Avg Lim	Average Field Strength Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters	Pk Lim	Peak Field Strength Limit
Read	Analyzer Reading	Avg	Average Field Strength @ 3 m	Avg Mar	Margin vs. Average Limit
AF	Antenna Factor	Peak	Calculated Peak Field Strength	Pk Mar	Margin vs. Peak Limit
CL	Cable Loss	HPF	High Pass Filter		

Note: No other spurious emissions were detected above the system noise in the restricted bands.

## 7.8.7. CO-LOCATED TRANSMITTER RADIATED EMISSIONS WITH HTL017 ANTENNA SET

### SUPPLEMENTAL TEST PROCEDURE

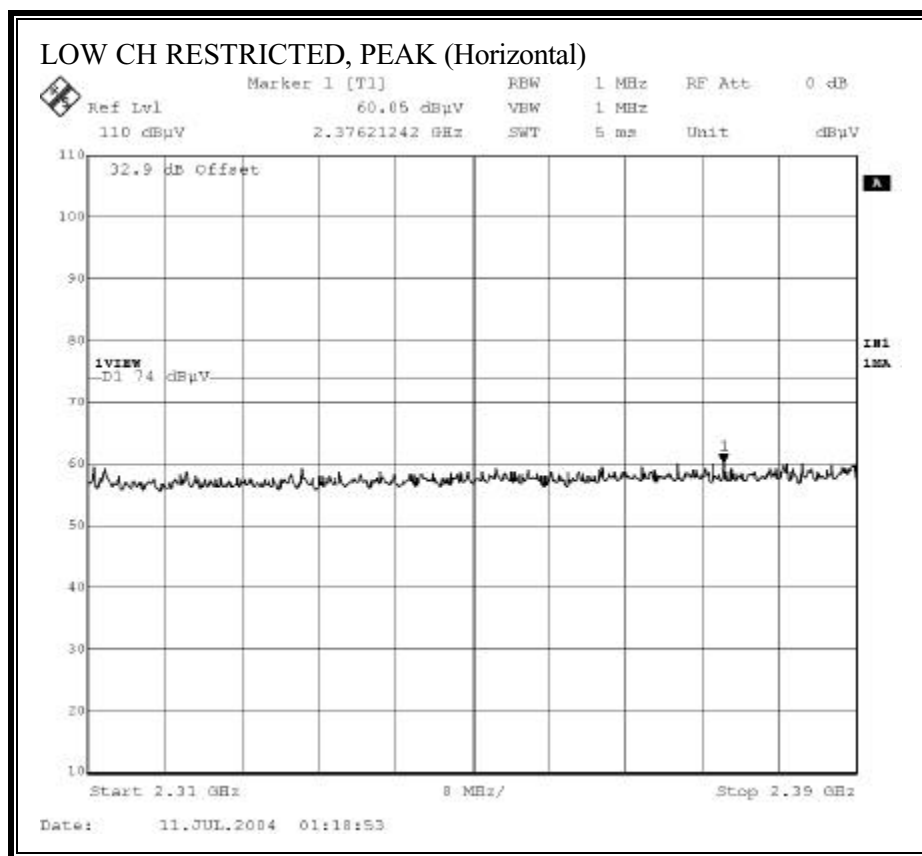
The EUT is placed on a non-conducting table 80 cm above the ground plane. The antenna The dominant transmitter is set to the worst case channel. The spurious emissions performance of the dominant transmitter is investigated as the settings of the non-dominant transmitter are varied. Worst case results are reported.

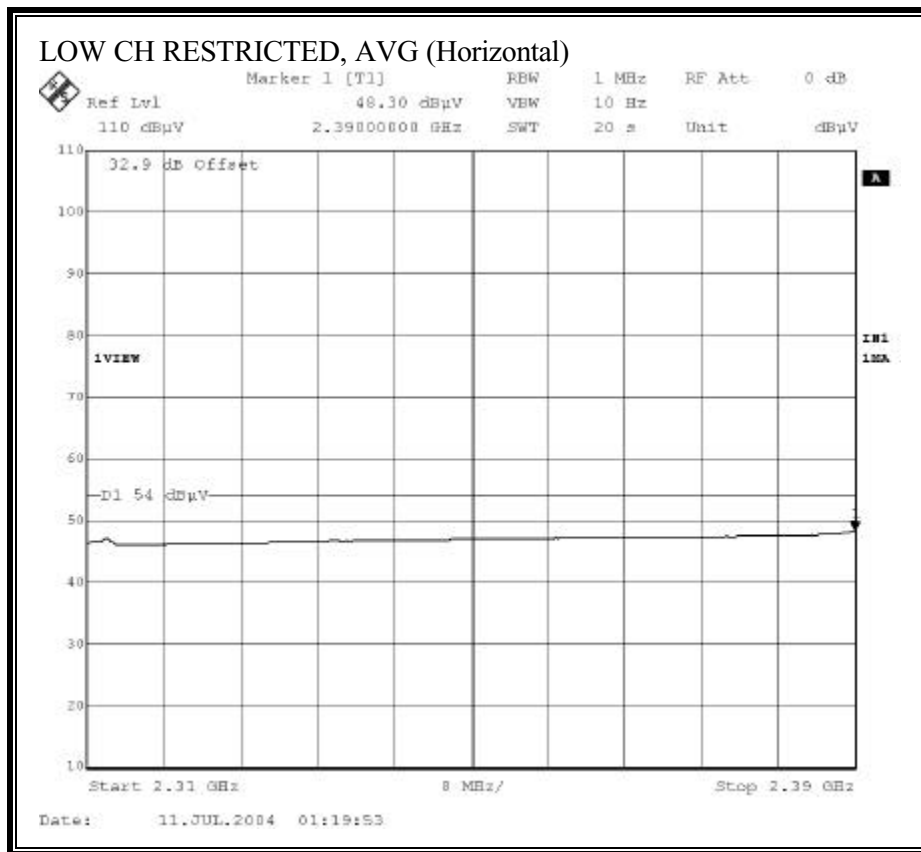
### RESULTS

No non-compliance noted:

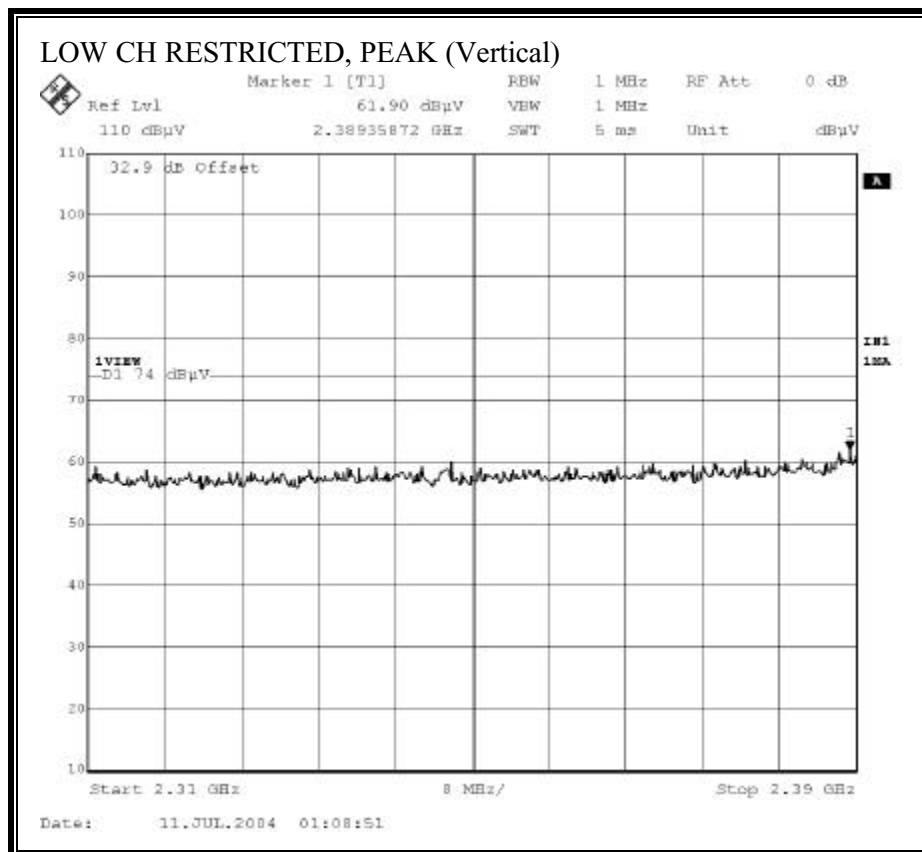
The WLAN is the dominant transmitter.

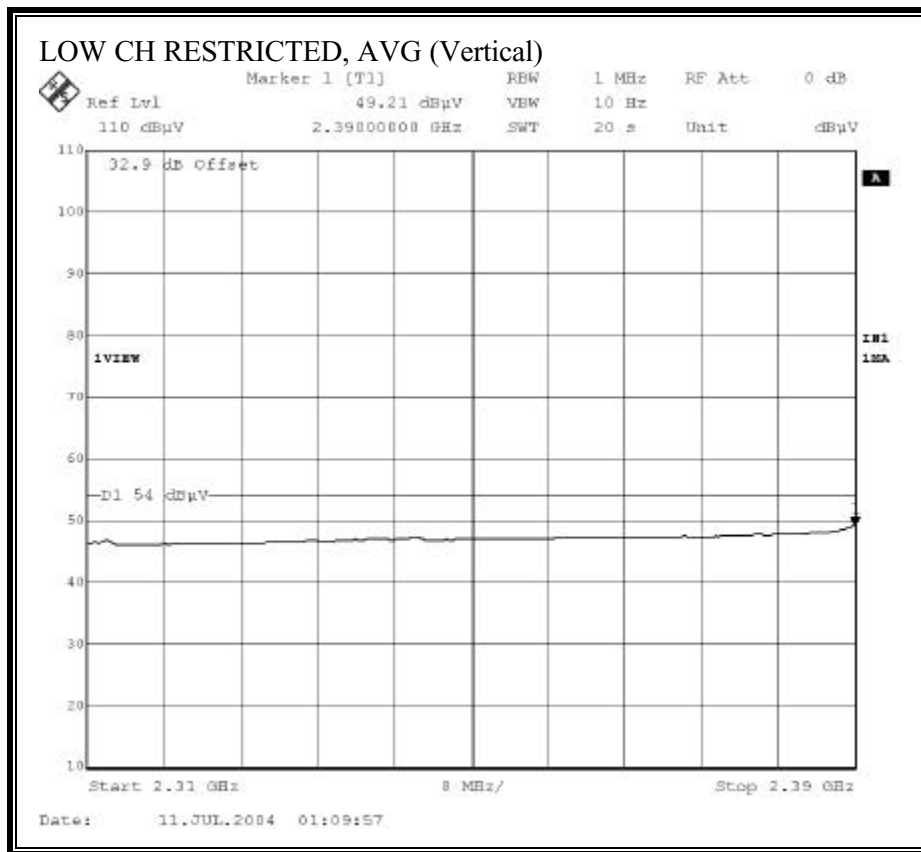
### WORST-CASE RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



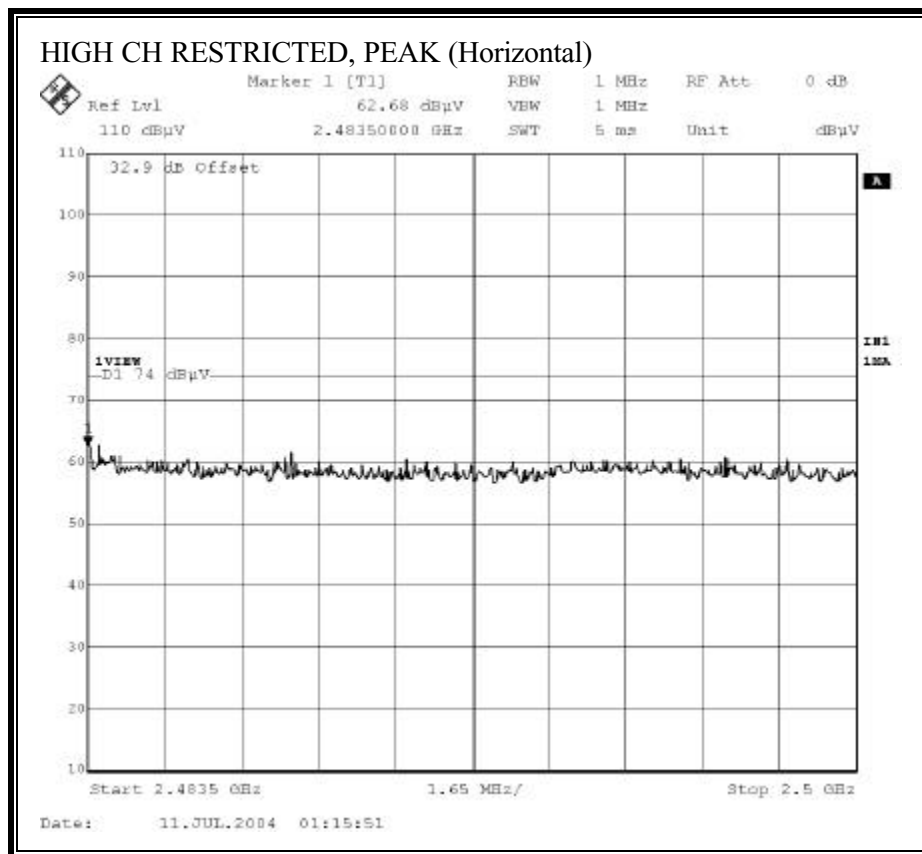


**WORST-CASE RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)**

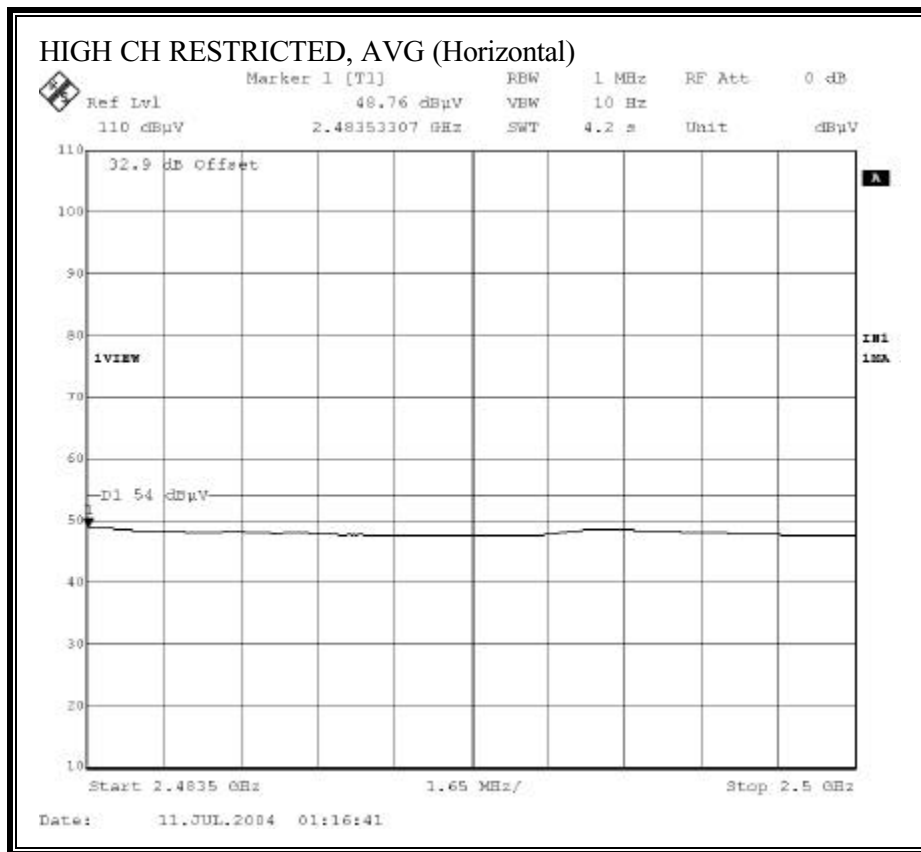




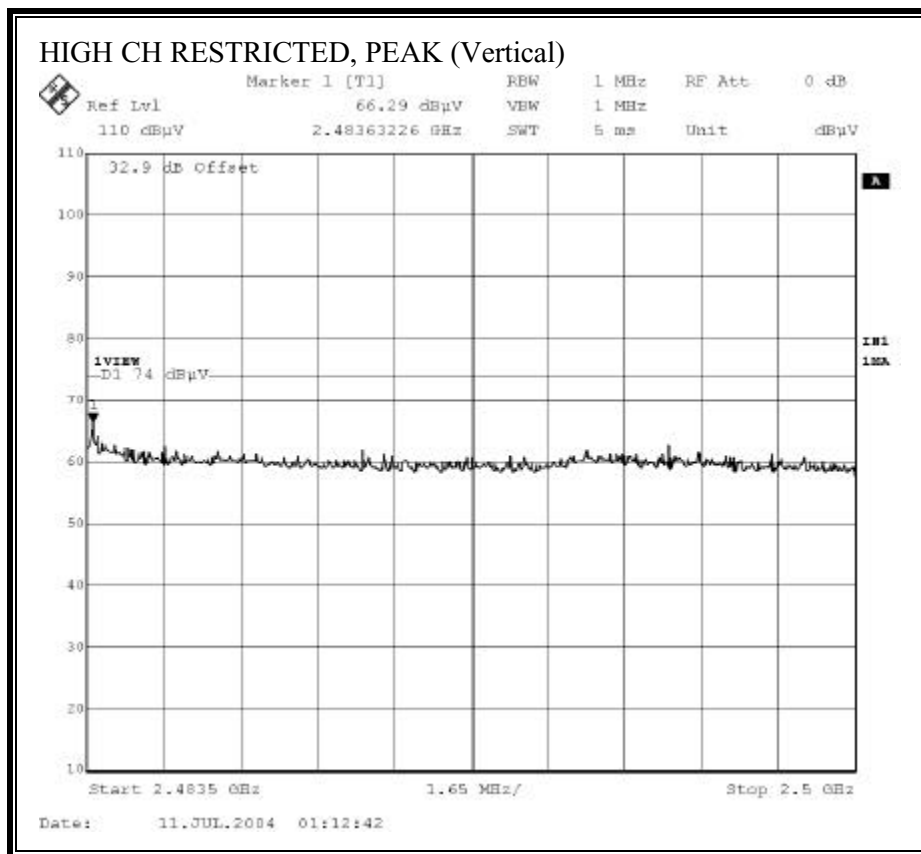
**WORST-CASE RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)**







**WORST-CASE RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)**





# **WORST-CASE HARMONICS AND SPURIOUS EMISSIONS**

07/10/04 High Frequency Measurement  
Compliance Certification Services, Morgan Hill Open Field Site

Test Engr: David Garcia  
Project #: 04U2843  
Company: INTEL  
EUT Descrip.: 802.11 a/b/g Mini PCI type 3B Card  
EUT M/N: PA3375U-IMP  
Test Target: FCC 15.247  
Mode Oper: TX 11g mode, Laptop Position, HTU-017 Antenna  
Coloration w/Bluetooth set to mid channel

Test Equipment:

EMCO Horn 1-18GHz  
T73; S/N: 6717 @3m

Spectrum Analyzer  
Agilent E4446A Analyzer

Pre-amplifier 1-26GHz  
T63 Minieq 646456

Pre-amplifier 26-40GHz

Horn > 18GHz

HF Frequency Cables  
☒ (2 ft) ☐ (2.0 ft) ☐ (3 ft) ☒ (12 ft)

Limit  
FCC 15.205

Peak Measurements:  
1 MHz Resolution Bandwidth  
1 MHz Video Bandwidth

Average Measurements:  
1 MHz Resolution Bandwidth  
10 Hz Video Bandwidth

f GHz	Dist feet	Read Pk dBuV	Read Avg dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	HPF	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes
2437 Channel															
4.874	9.8	44.0	32.0	33.4	2.9	-35.3	0.0	1.0	46.0	34.0	74.0	54.0	-28.0	-20.0	V
7.311	9.8	44.3	32.8	35.8	3.7	-34.6	0.0	1.0	50.2	38.7	74.0	54.0	-23.8	-15.3	V
4.874	9.8	43.7	31.0	33.4	2.9	-35.3	0.0	1.0	45.7	33.0	74.0	54.0	-28.3	-21.0	H
7.311	9.8	43.0	32.4	35.8	3.7	-34.6	0.0	1.0	48.9	38.3	74.0	54.0	-25.1	-15.7	H

f Measurement Frequency  
Dist Distance to Antenna  
Read Analyzer Reading  
AF Antenna Factor  
CL Cable Loss  
Amp Preamp Gain  
D Corr Distance Correct to 3 meters  
Avg Average Field Strength @ 3 m  
Peak Calculated Peak Field Strength  
HPF High Pass Filter  
Avg Lim Average Field Strength Limit  
Pk Lim Peak Field Strength Limit  
Avg Mar Margin vs. Average Limit  
Pk Mar Margin vs. Peak Limit

Note: No other spurious emissions were detected above the system noise in the restricted bands.

### 7.8.8. WORST-CASE RADIATED EMISSIONS BELOW 1 GHz, WITH TIAN01 ANTENNA SET

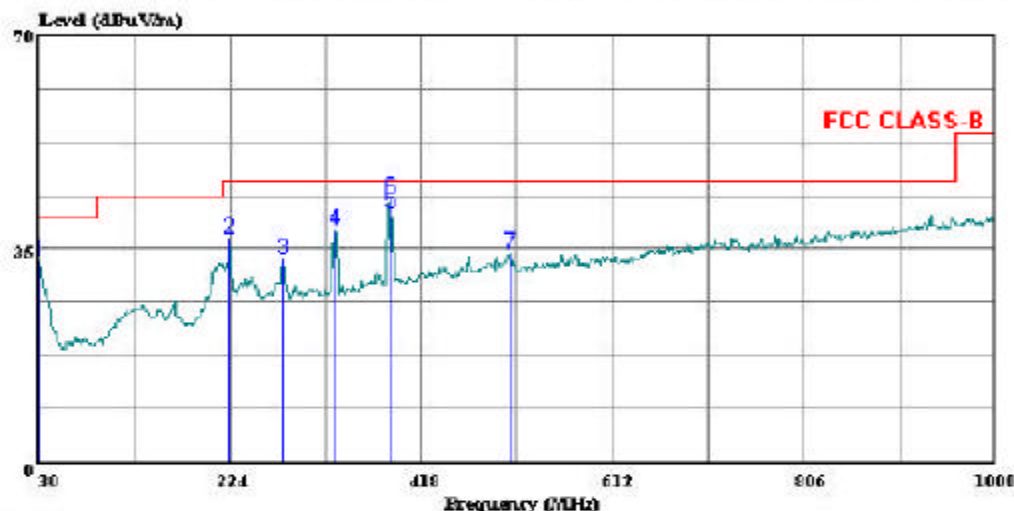
#### SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)

##### HORIZONTAL PLOT



561F Monterey Road  
San Jose, CA 95131  
Tel: (408) 463-0888  
Fax: (408) 463-0885

Data#: 4 File#: 04U2843.EMI Date: 07-01-2004 Time: 12:04:17



(Auxiliary ATC)

Trace: 1

Ref Trace:

Condition: FCC CLASS-B SUNOL BILOG 12/22/04 HORIZONTAL

Test Operator: : David Garcia

Project #: : 04U2843-1

Company: : INTEL

EUT: : 802.11 a/b/g Mini PCI Card

Model No: : PA3375U-1MPC

Configuration: : EUT installed in Laptop/Tablet, TIAN Antenna

Target of Test: : FCC Class B

Mode of Operation: PC Only, TX

Page: 1

# HORIZONTAL DATA

	Freq	Remark	Read Level	Factor	Level	Limit Line	Over Limit
	MHz		dBuV	dB	dBuV/m	dBuV/m	dB
1	30.000	Peak	10.03	22.95	32.98	40.00	-7.02
2	223.030	Peak	23.63	13.03	36.66	46.00	-9.34
3	276.380	Peak	17.93	15.37	33.30	46.00	-12.71
4	329.730	Peak	21.74	16.44	38.18	46.00	-7.82
5	385.990	QP	23.00	17.85	40.85	46.00	-5.15
6	385.990	Peak	25.40	17.87	43.27	46.00	-2.73
7	507.240	Peak	13.64	20.70	34.34	46.00	-11.66

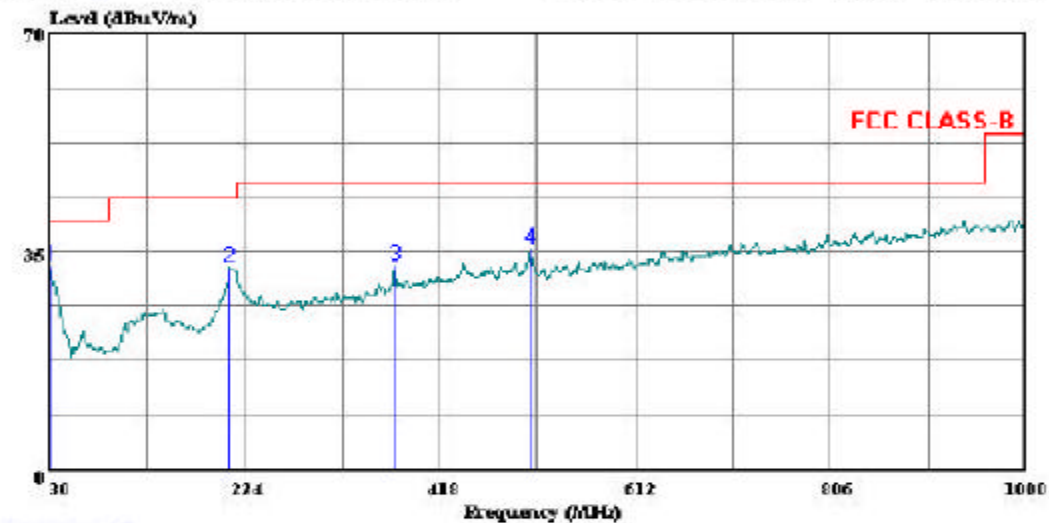
**SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, VERTICAL)**

VERTICAL PLOT



561F Monterey Road  
San Jose, CA 95131  
Tel: (408) 463-0888  
Fax: (408) 463-0885

Data#: 6 File#: 04U2843.EMI Date: 07-01-2004 Time: 12:14:47



(Auxiliary A.T.C)

Trace: 5

Ref Trace:

Condition: FCC CLASS-B SUNOL BILOG 12/22/04 VERTICAL  
Test Operator: : David Garcia  
Project #: : 04U2843-1  
Company: : INTEL  
EUT: : 802.11 a/b/g Mini PCI Card  
Model No: : PA3375U-1MPC  
Configuration: : EUT installed in Laptop/Tablet TIAN Antenna  
Target of Test: : FCC Class B  
Mode of Operation: PC Only, TX

Page: 1

VERTICAL DATA

	Freq	Remark	Read Level	Factor	Level	Limit Line	Over Limit
	MHz		dBuV	dB	dBuV/m	dBuV/m	dB
1	30.000	Peak	9.68	22.95	32.63	40.00	-7.37
2	208.480	Peak	19.44	13.01	32.45	43.50	-11.05
3	373.380	Peak	15.03	17.55	32.58	46.00	-13.42
4	507.240	Peak	14.85	20.70	35.55	46.00	-10.45



### 7.8.9. WORST-CASE RADIATED EMISSIONS BELOW 1 GHz, WITH HTL017 ANTENNA SET

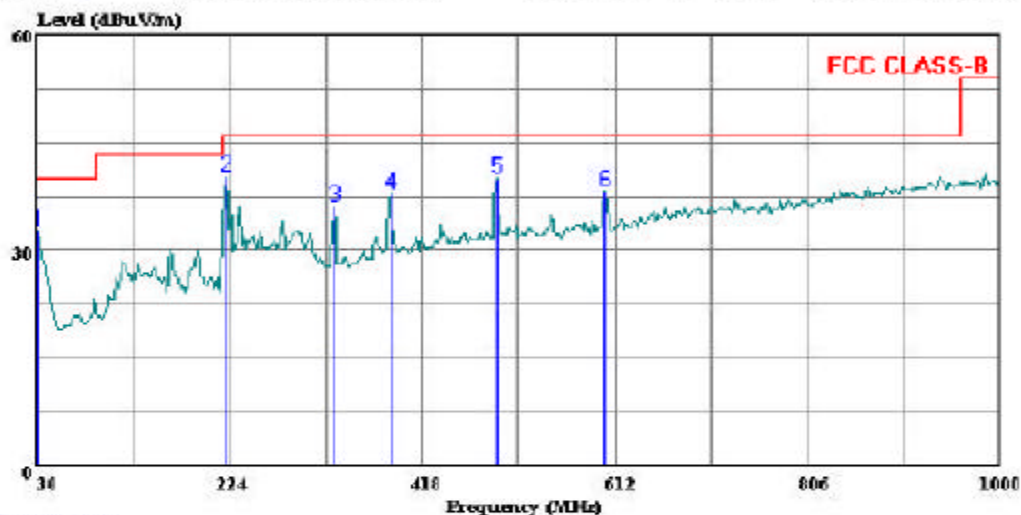
#### SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)

##### HORIZONTAL PLOT



561F Monterey Road  
San Jose, CA 95131  
Tel: (408) 463-0888  
Fax: (408) 463-0885

Data#: 2 File#: HTL2843.EMI Date: 07-06-2004 Time: 22:16:18



(Auxiliary A TC)

Trace: 1

Ref Trace:

Condition: FCC CLASS-B SUNOL BILOG 12/22/04 HORIZONTAL  
Test Operator: : David Garcia  
Project #: : 04U2843  
Company: : INTEL (RP)  
EUT: : 802.11 a/b/g Mini PCI type 3B Card,  
: Toshiba Laptop/Tablet HTL-017 Antenna  
Model No: : PA3375U-1MPC=Intel Card  
Configuration: : EUT stand alone  
Target of Test: : FCC Class B  
Mode of Operation: TX, a Mode, Mid Ch.

Page: 1

# HORIZONTAL DATA

	Freq	Remark	Read Level	Factor	Level	Limit Line	Over Limit
	MHz		dBuV	dB	dBuV/m	dBuV/m	dB
1	30.000	Peak	9.79	22.95	32.74	40.00	-7.26
2	221.090	Peak	27.32	13.00	40.32	46.00	-5.68
3	329.730	Peak	19.57	16.44	36.01	46.00	-9.99
4	385.990	Peak	20.06	17.87	37.93	46.00	-8.07
5	492.690	Peak	19.48	20.46	39.94	46.00	-6.06
6	601.330	Peak	16.35	21.96	38.31	46.00	-7.69

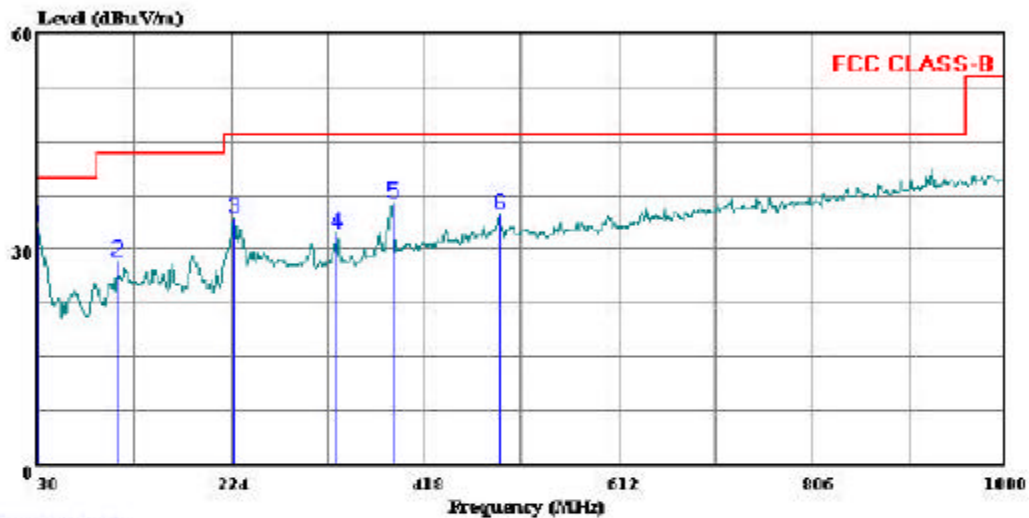
**SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, VERTICAL)**

VERTICAL PLOT



561F Monterey Road  
San Jose, CA 95131  
Tel: (408) 463-0888  
Fax: (408) 463-0885

Data#: 4 File#: HTL2843.EMI Date: 07-06-2004 Time: 22:24:18



(Auxiliary ATC)

Trace: 3

Ref Trace:

Condition: FCC CLASS-B SUNOL BILOG 12/22/04 VERTICAL  
Test Operator: : David Garcia  
Project #: : 04U2843  
Company: : INTEL (RP)  
EUT: : 802.11 a/b/g Mini PCI type 3B Card,  
: Toshiba Laptop/Tablet HTL-017 Antenna  
Model No: : PA3375U-1MPC=Intel Card  
Configuration: : EUT stand alone  
Target of Test: : FCC Class B  
Mode of Operation: TX, a Mode, Mid Ch.

Page: 1

# VERTICAL DATA

	Freq	Remark	Read Level	Factor	Level	Limit Line	Over Limit
	MHz		dBuV	dB	dBuV/m	dBuV/m	dB
1	30.000	Peak	9.98	22.95	32.93	40.00	-7.07
2	109.540	Peak	14.89	13.29	28.18	43.50	-15.32
3	225.940	Peak	21.08	13.11	34.19	46.00	-11.81
4	329.730	Peak	15.86	16.44	32.30	46.00	-13.70
5	385.990	Peak	18.42	17.87	36.29	46.00	-9.71
6	492.690	Peak	14.28	20.46	34.74	46.00	-11.26

## 7.9. POWERLINE CONDUCTED EMISSIONS

### LIMIT

§15.207 (a) Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50  $\mu$ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal.

The lower limit applies at the boundary between the frequency ranges.

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

\* Decreases with the logarithm of the frequency.

### TEST PROCEDURE

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.4.

The resolution bandwidth is set to 9 kHz for both peak detection and quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

Line conducted data is recorded for both NEUTRAL and HOT lines.

### RESULTS

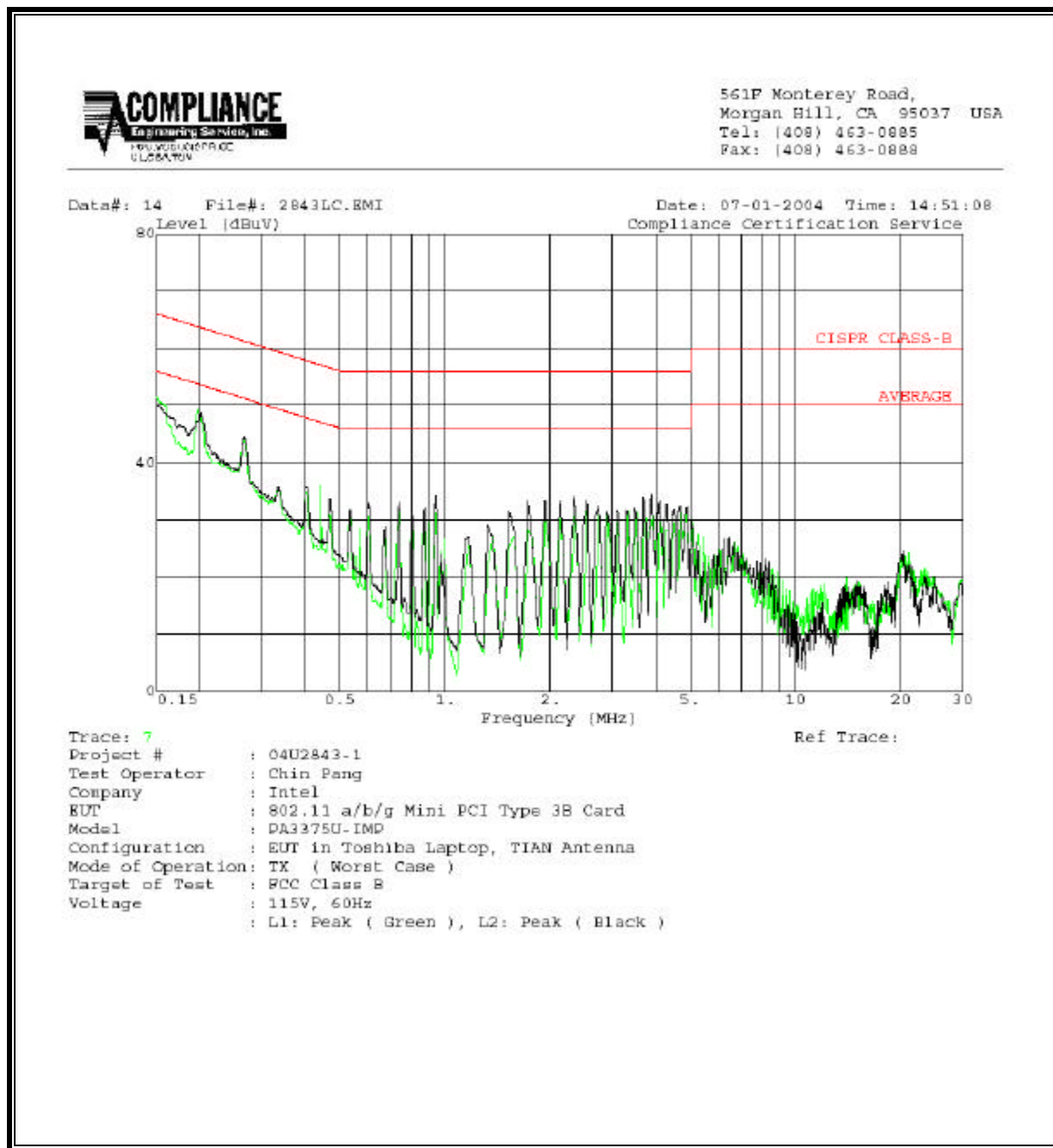
No non-compliance noted:

## RESULTS

### 6 WORST EMISSIONS

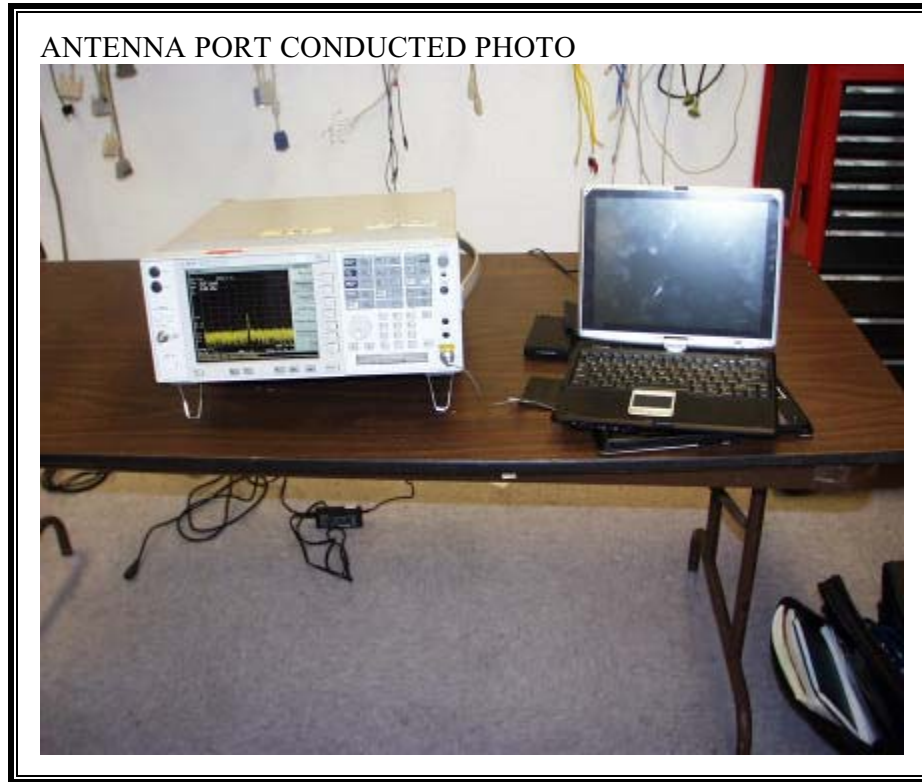
CONDUCTED EMISSIONS DATA (115VAC 60Hz)									
Freq.	Reading			Closs	Limit	EN_B	Margin		Remark
(MHz)	PK (dBuV)	QP (dBuV)	AV (dBuV)	(dB)	QP	AV	QP (dB)	AV (dB)	L1 / L2
0.15	51.80	--	--	0.00	65.94	55.94	-14.14	-4.14	L1
0.20	49.16	--	--	0.00	64.63	54.63	-15.47	-5.47	L1
4.85	31.02	--	--	0.00	56.00	46.00	-24.98	-14.98	L1
0.15	50.66	--	--	0.00	66.00	56.00	-15.34	-5.34	L2
0.20	49.12	--	--	0.00	64.57	54.57	-15.45	-5.45	L2
3.88	34.30	--	--	0.00	56.00	46.00	-21.70	-11.70	L2
6 Worst Data									

**LINE 1 AND LINE 2 RESULTS**



## 8. SETUP PHOTOS

### ANTENNA PORT CONDUCTED RF MEASUREMENT SETUP





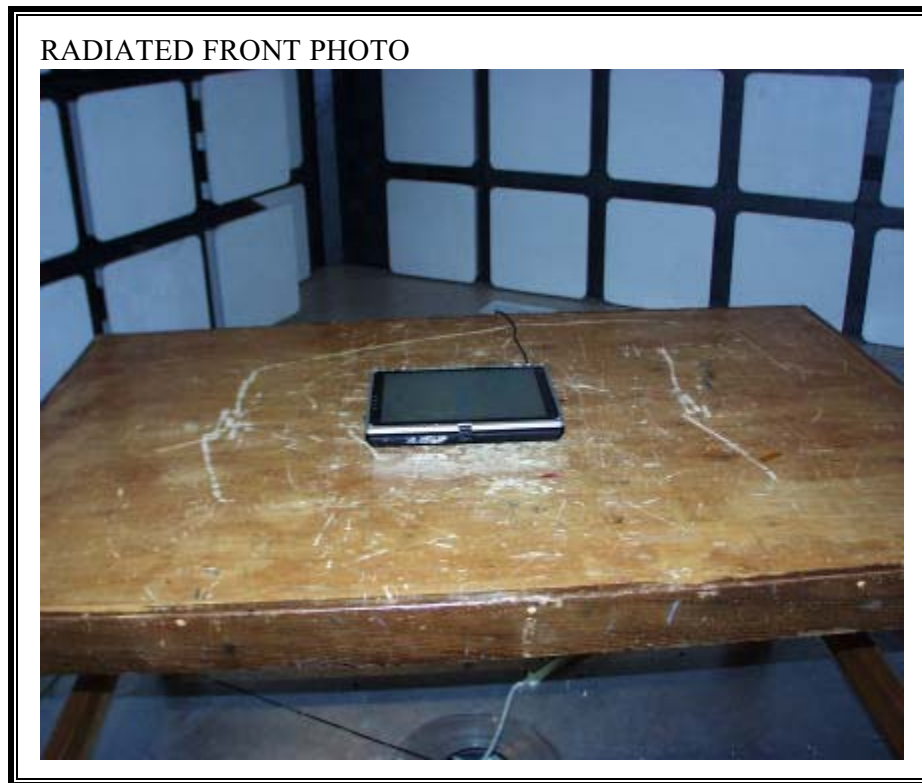
**RADIATED RF MEASUREMENT SETUP (MOBILE LAPTOP CONFIGURATION)**



RADIATED BACK PHOTO



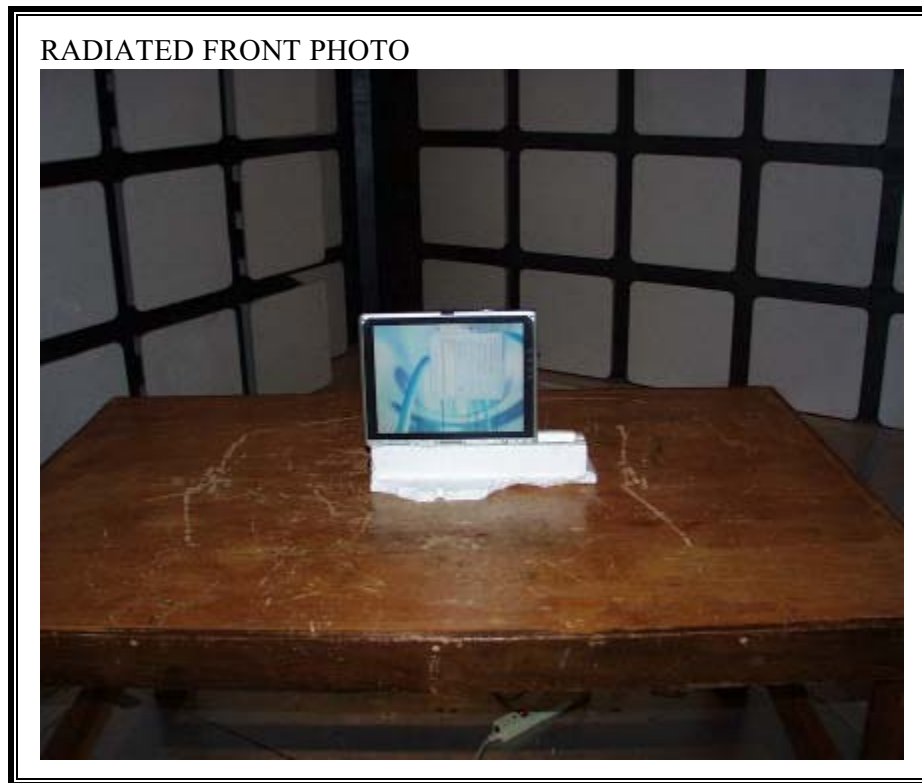
**RADIATED RF MEASUREMENT SETUP (PORTABLE TABLET CONFIGURATION, X ORIENTATION)**



RADIATED BACK PHOTO



**RADIATED RF MEASUREMENT SETUP (PORTABLE TABLET CONFIGURATION, Y ORIENTATION)**

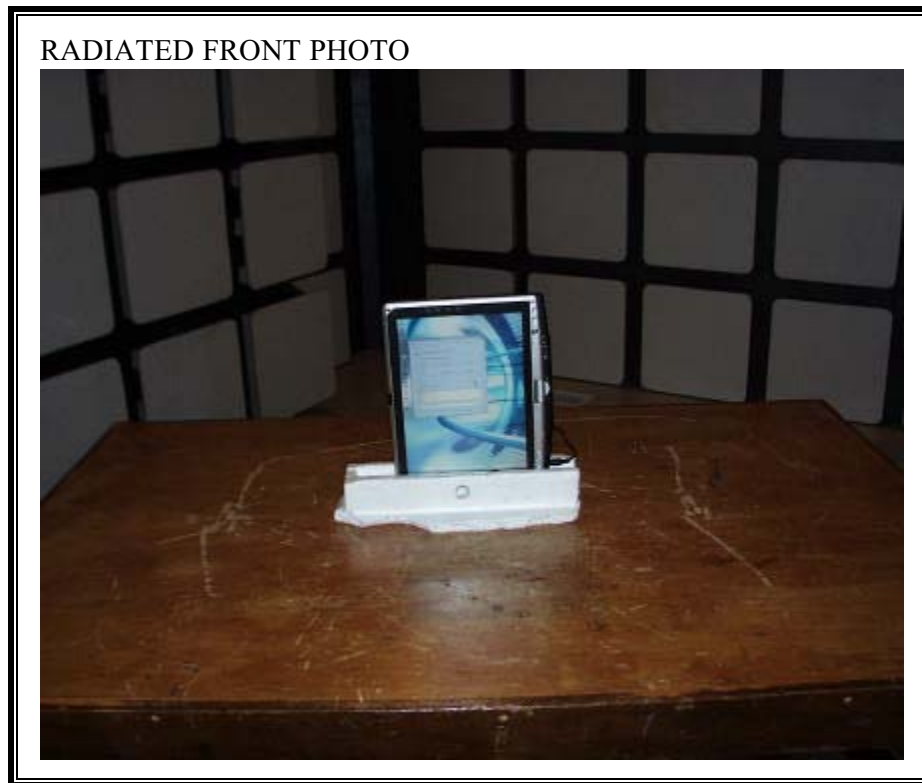


RADIATED BACK PHOTO

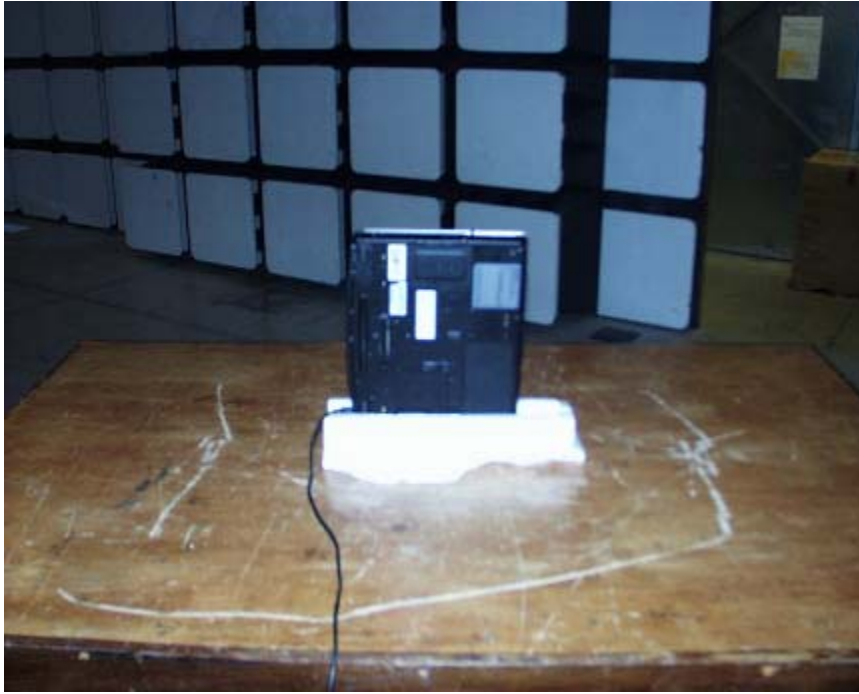




**RADIATED RF MEASUREMENT SETUP (PORTABLE TABLET CONFIGURATION, Z ORIENTATION)**



RADIATED BACK PHOTO





**POWERLINE CONDUCTED EMISSIONS MEASUREMENT SETUP**



LINE CONDUCTED BACK PHOTO



**END OF REPORT**