

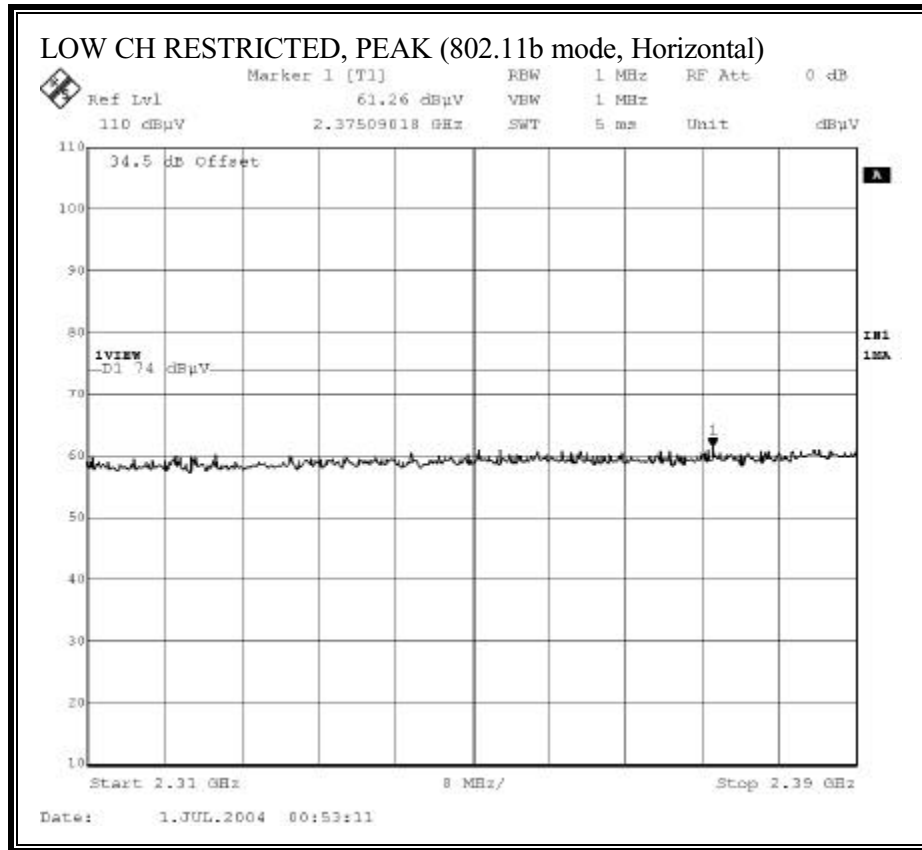
HARMONICS AND SPURIOUS EMISSIONS (a MODE)

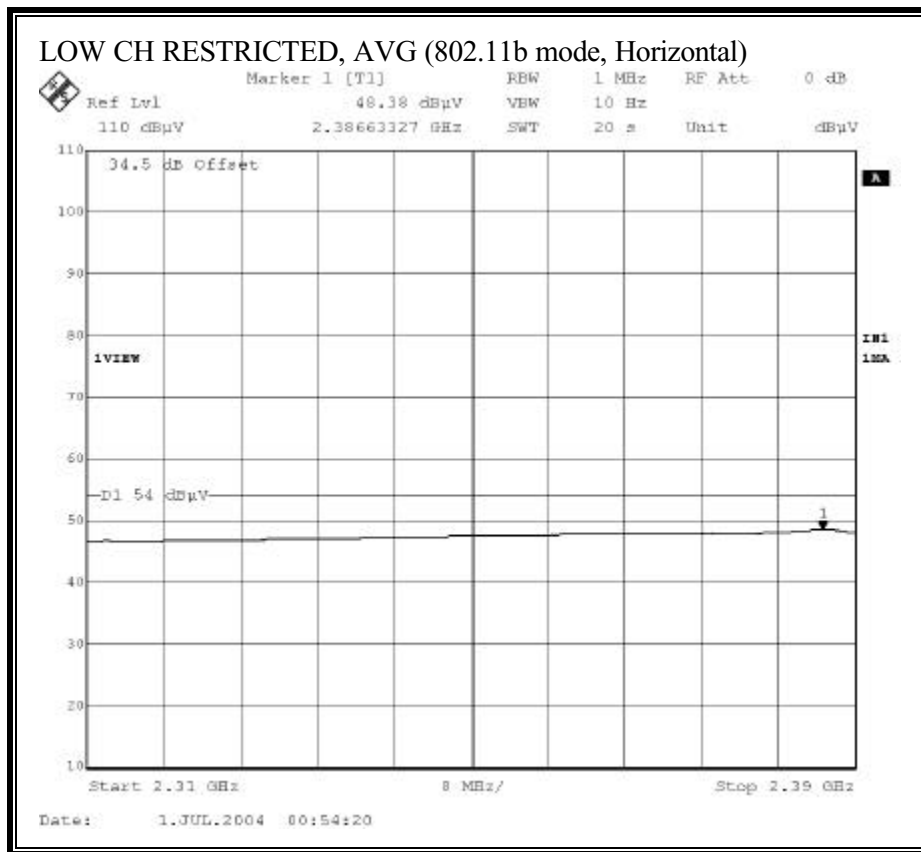
06/30/04 High Frequency Measurement Compliance Certification Services, Morgan Hill Open Field Site															
Test Engr:		David Garcia													
Project #:		04U2843													
Company:		INTEL													
EUT Descrip.:		802.11 a/b/g Mini PCI type 3B Card													
EUT M/N:		PA3375U-IMP													
Test Target:		FCC 15.247													
Mode Oper:		TX 11a mode, 5.8GHz Band; Laptop 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: ☒ (2 ft) ☐ (2.0 ft) ☐ (3 ft) ☒ (12 ft)															
Peak Measurements: 1 MHz Resolution Bandwidth 1 MHz 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	44.2	32.7	39.1	4.8	-34.2	0.0	1.0	54.9	43.4	74.0	54.0	-19.1	-10.6	V
11.490	9.8	43.1	32.4	39.1	4.8	-34.2	0.0	1.0	53.8	43.1	74.0	54.0	-20.2	-10.9	H
5785 Channel															
11.570	9.8	46.1	34.1	39.2	4.8	-34.3	0.0	1.0	56.8	44.8	74.0	54.0	-17.2	-9.2	V
11.570	9.8	45.0	33.6	39.2	4.8	-34.3	0.0	1.0	55.7	44.3	74.0	54.0	-18.3	-9.7	H
5825 Channel															
11.650	9.8	45.2	33.8	39.3	4.8	-34.4	0.0	1.0	55.9	44.5	74.0	54.0	-18.1	-9.5	V
11.650	9.8	44.0	32.9	39.3	4.8	-34.4	0.0	1.0	54.7	43.6	74.0	54.0	-19.3	-10.4	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.

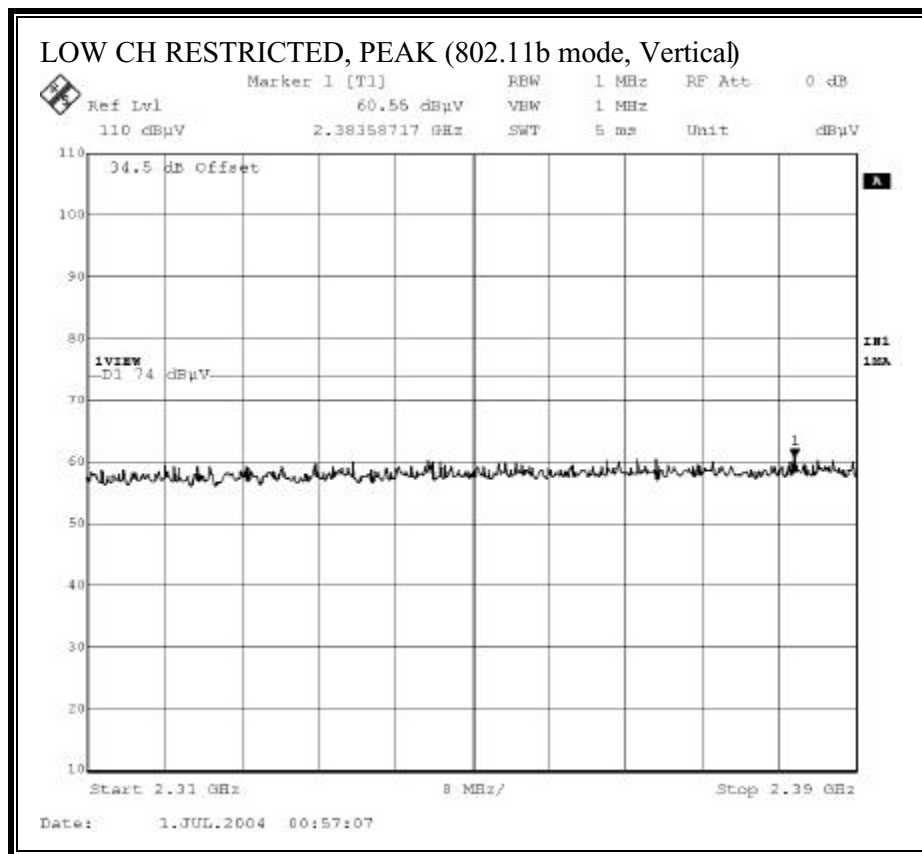
7.8.3. TRANSMITTER RADIATED EMISSIONS ABOVE 1 GHz, PORTABLE TABLET CONFIGURATION, TIAN01 ANTENNA SET

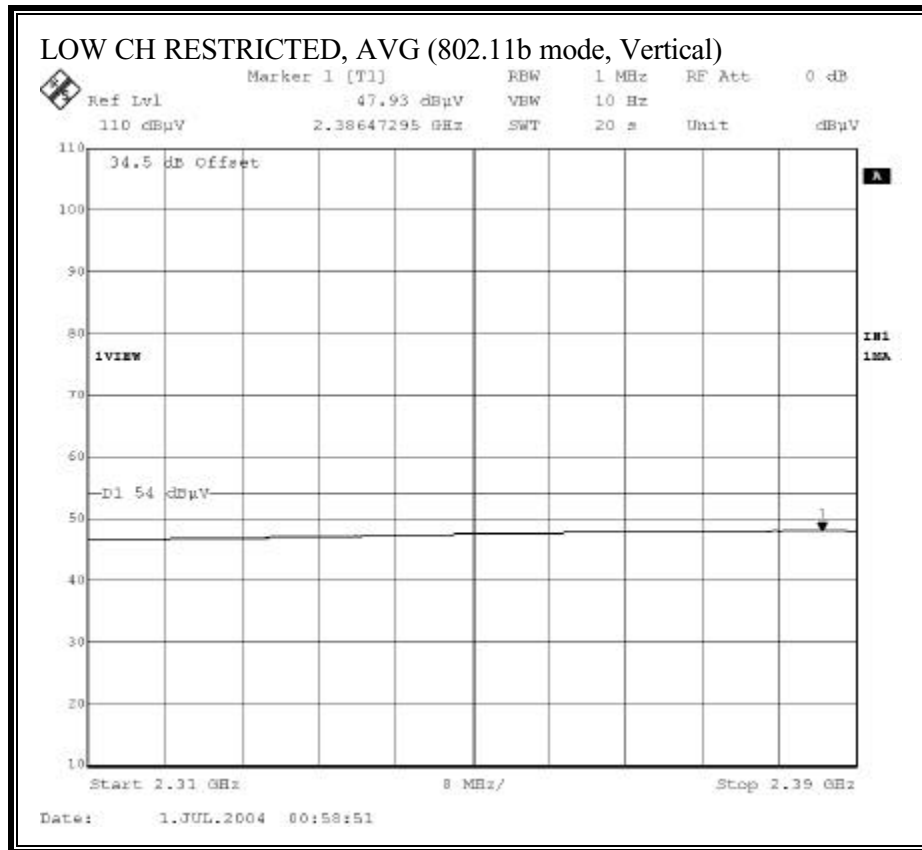
RESTRICTED BANDEDGE (b MODE, LOW CHANNEL, HORIZONTAL)



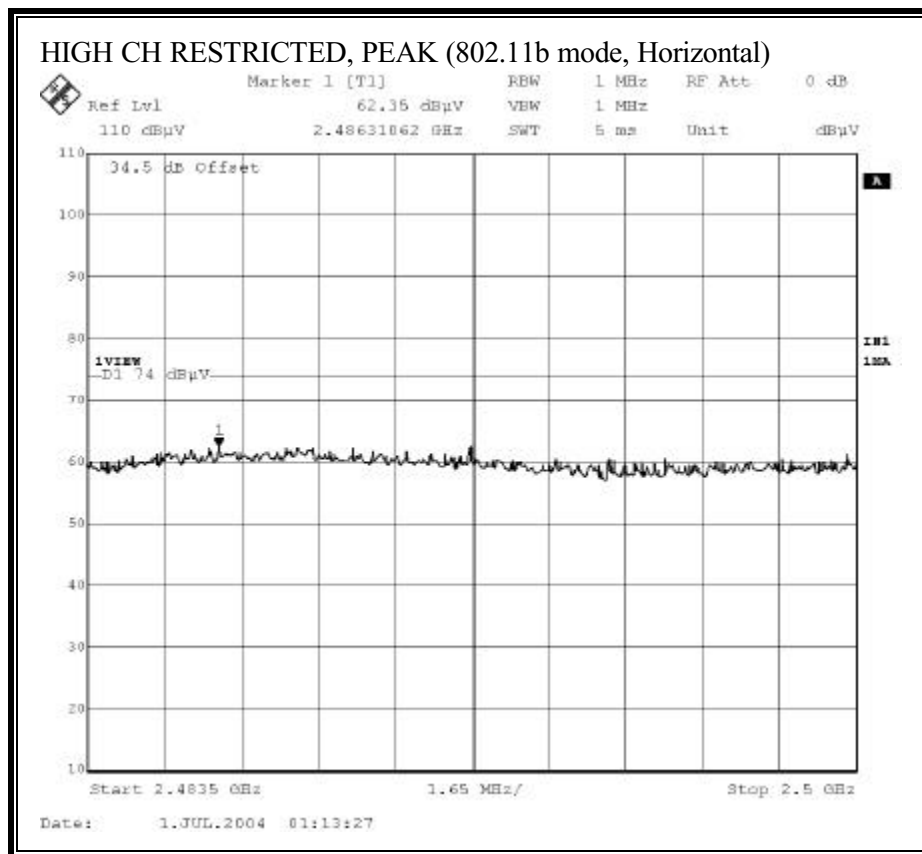


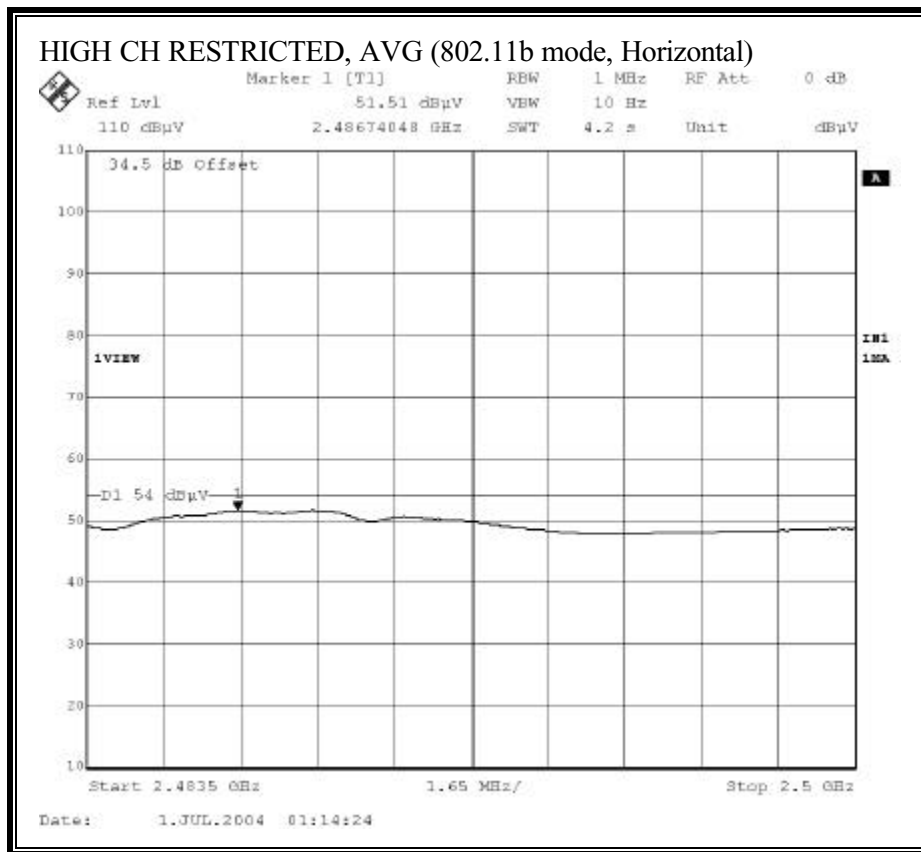
RESTRICTED BANDEDGE (b MODE, LOW CHANNEL, VERTICAL)



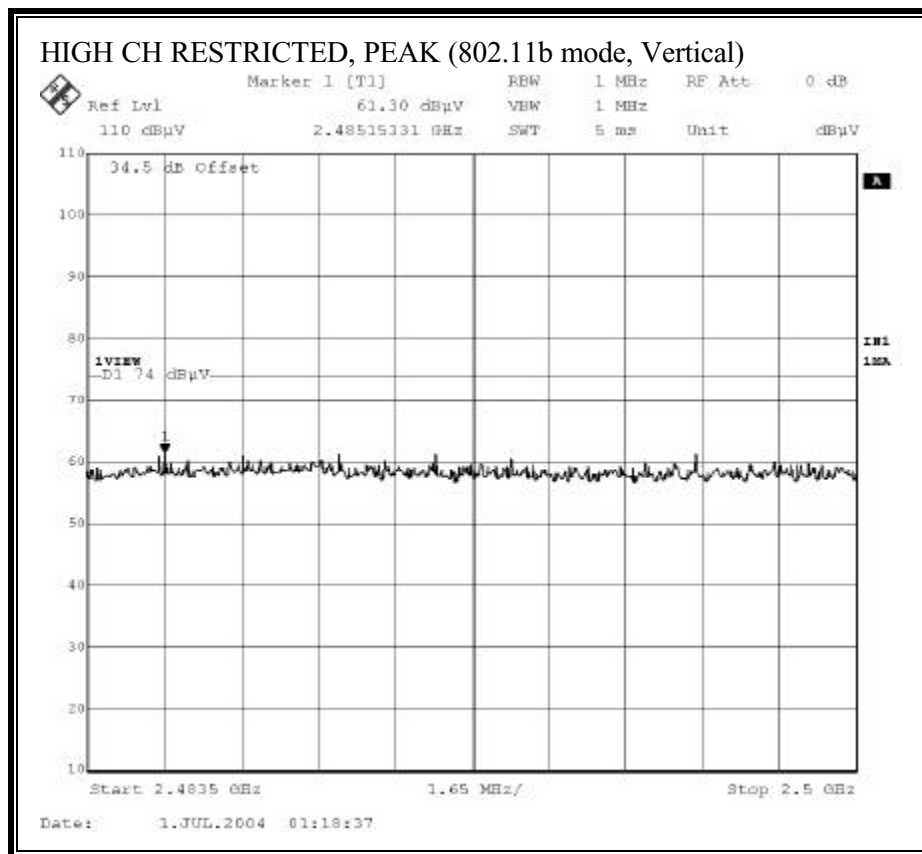


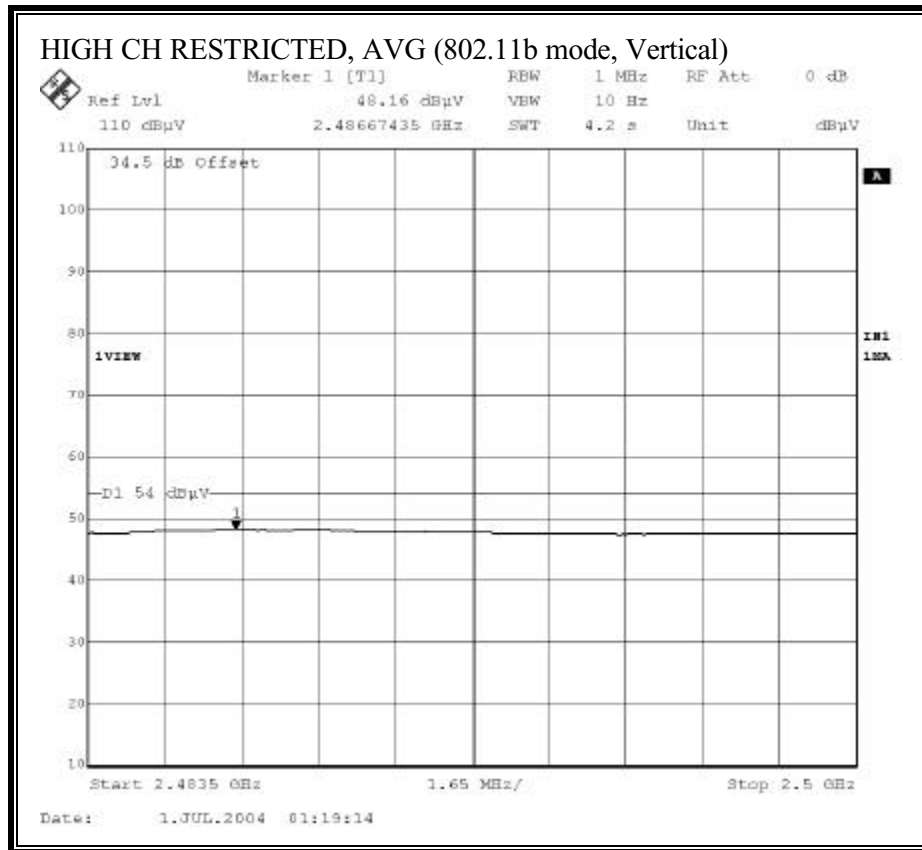
RESTRICTED BANDEDGE (b MODE, HIGH CHANNEL, HORIZONTAL)





RESTRICTED BANDEDGE (b MODE, HIGH CHANNEL, VERTICAL)



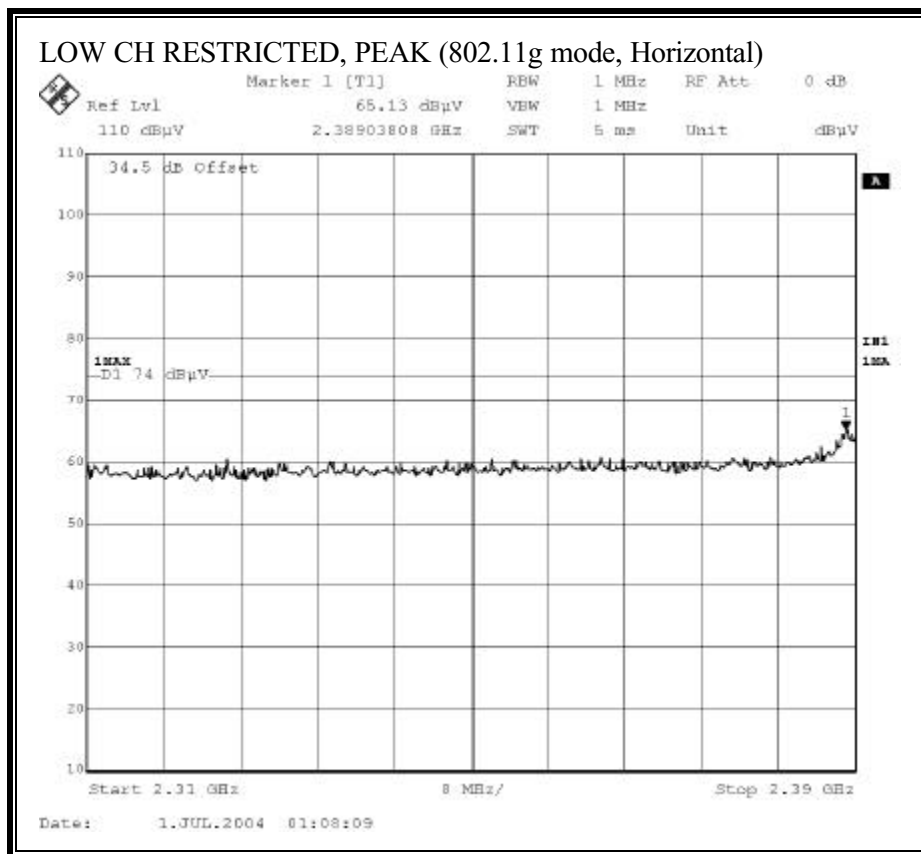


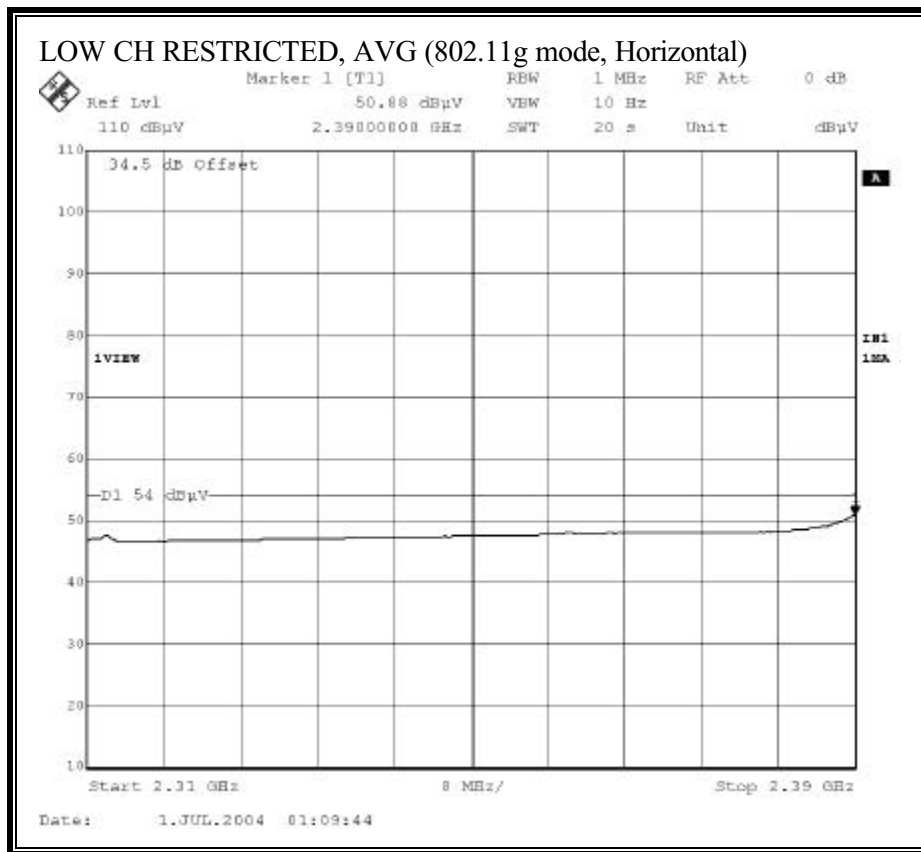
HARMONICS AND SPURIOUS EMISSIONS (b MODE)

07/06/04 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 11b 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: ☒ (2 ft) ☐ (2.0 ft) ☐ (3 ft) ☒ (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	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	
2437 Channel																
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	
2462 Channel																
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																

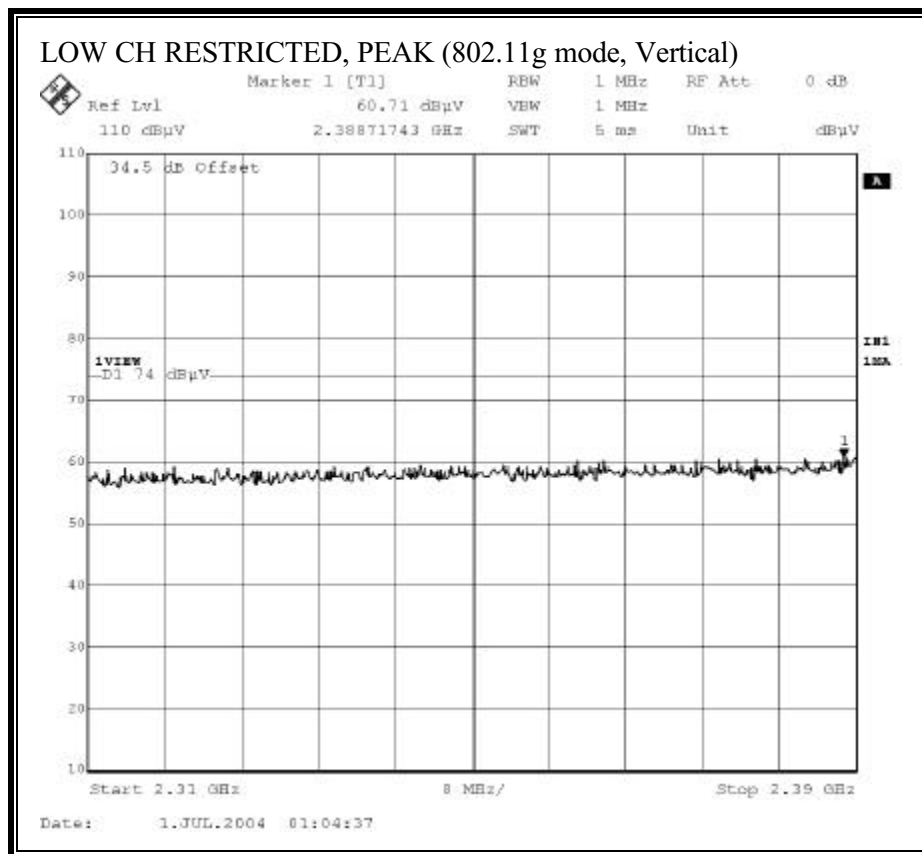
Note: No other spurious emissions were detected above the system noise in the restricted bands.

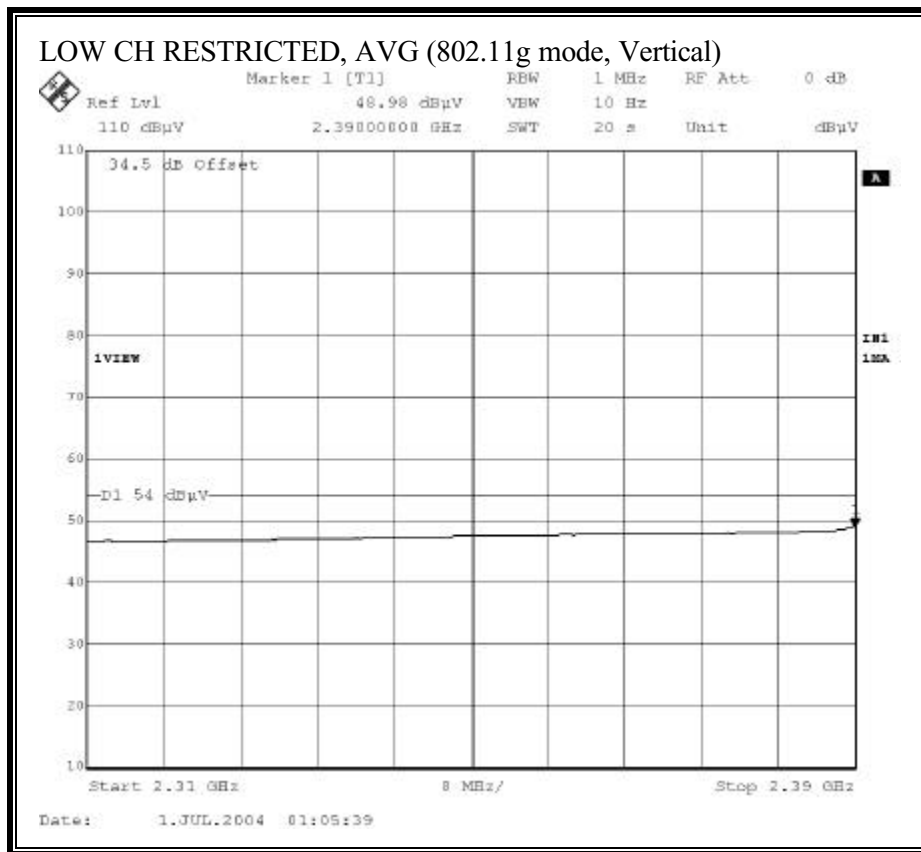
RESTRICTED BANDEDGE (g MODE, LOW CHANNEL, HORIZONTAL)



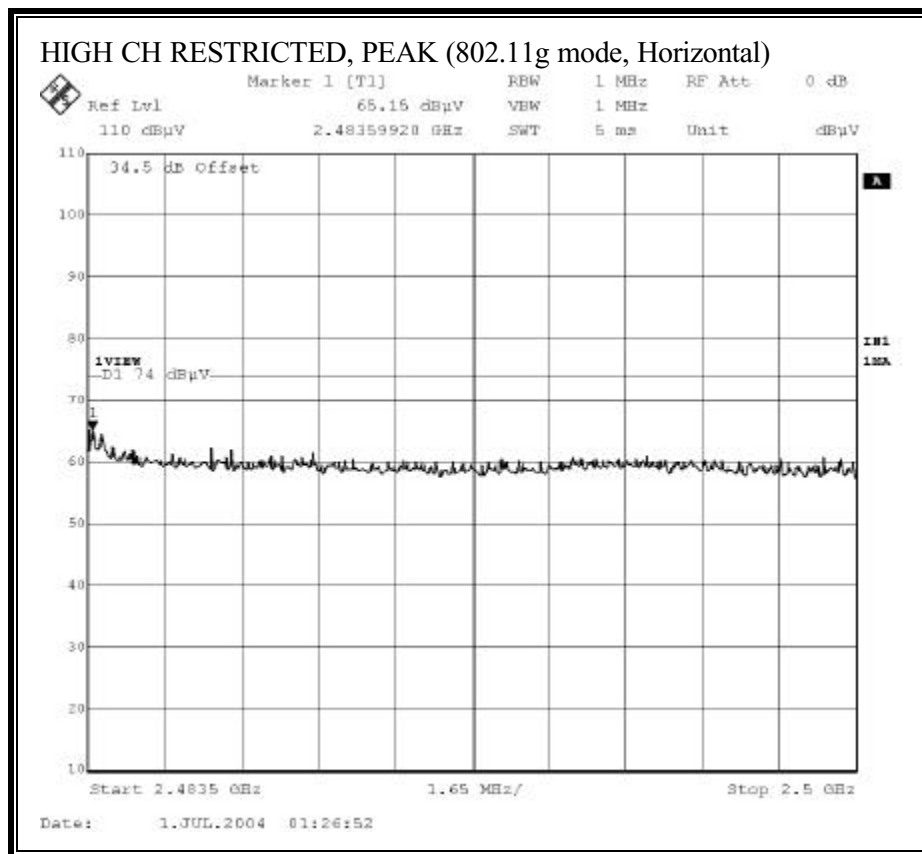


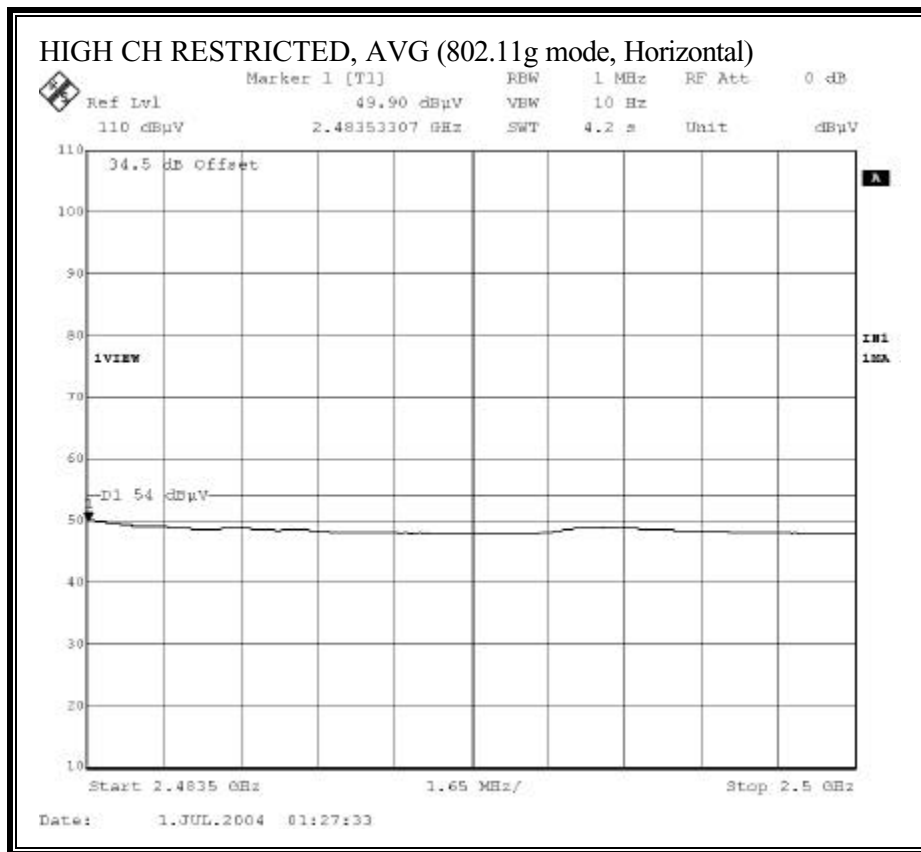
RESTRICTED BANDEDGE (g MODE, LOW CHANNEL, VERTICAL)



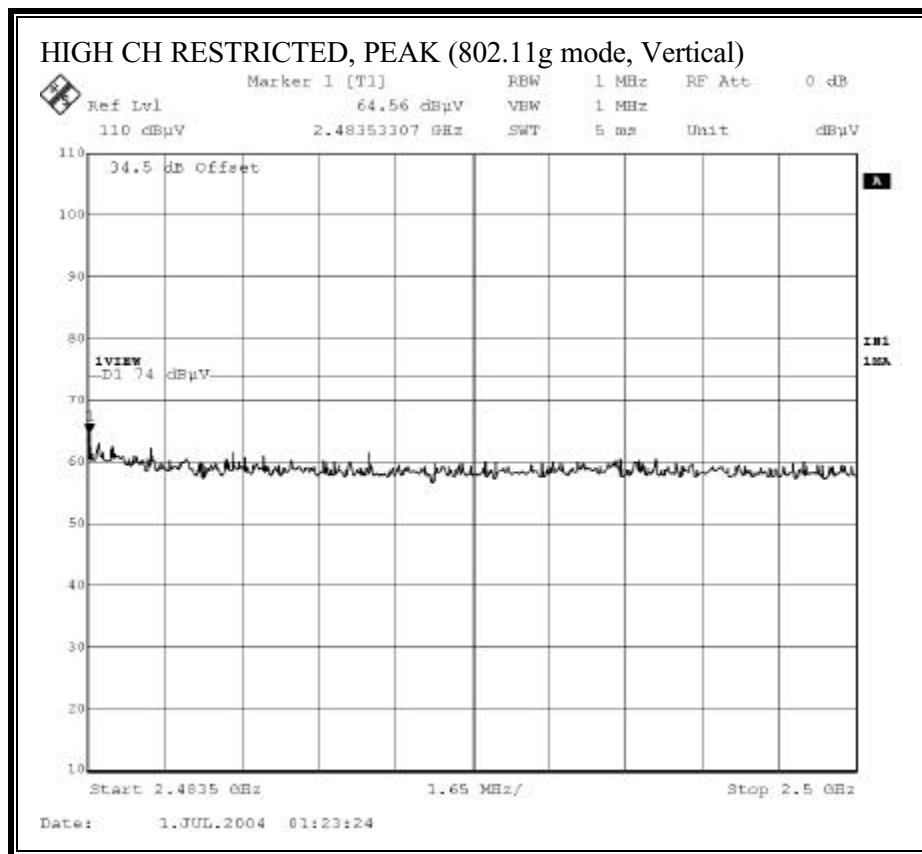


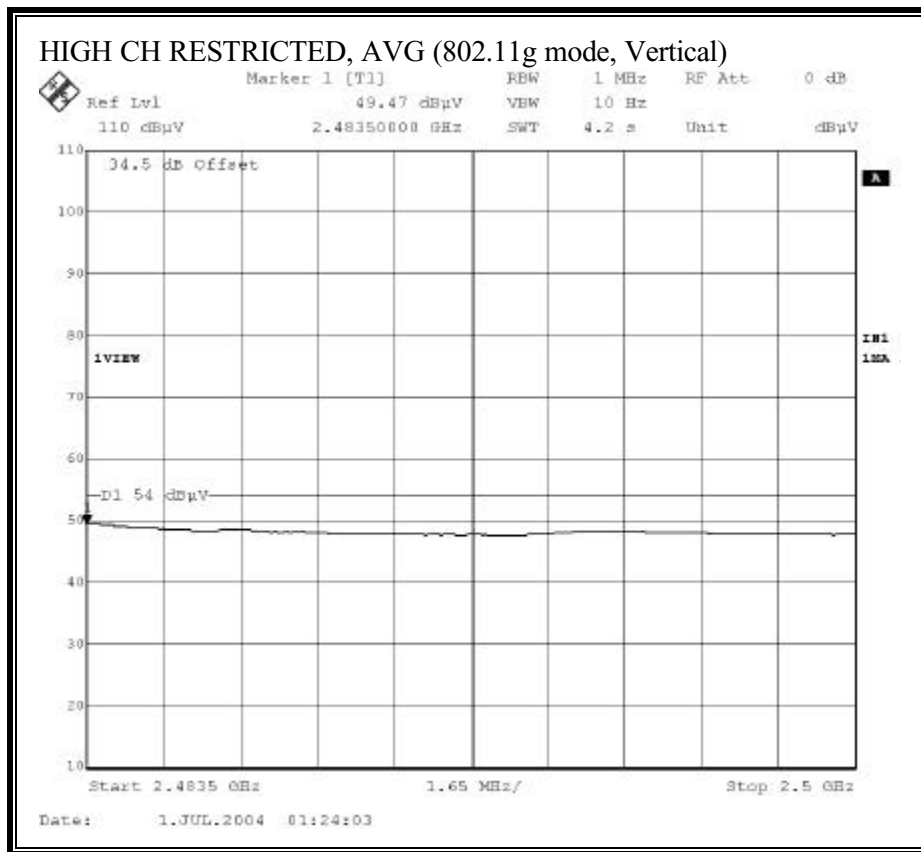
RESTRICTED BANDEDGE (g MODE, HIGH CHANNEL, HORIZONTAL)





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

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:

☒ (2 ft)	☐ (2.0 ft)	☐ (3 ft)	☒ (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	45.1	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
2437 Channel															
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
2462 Channel															
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:

☒ (2 ft)	☐ (2.0 ft)	☐ (3 ft)	☒ (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	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.

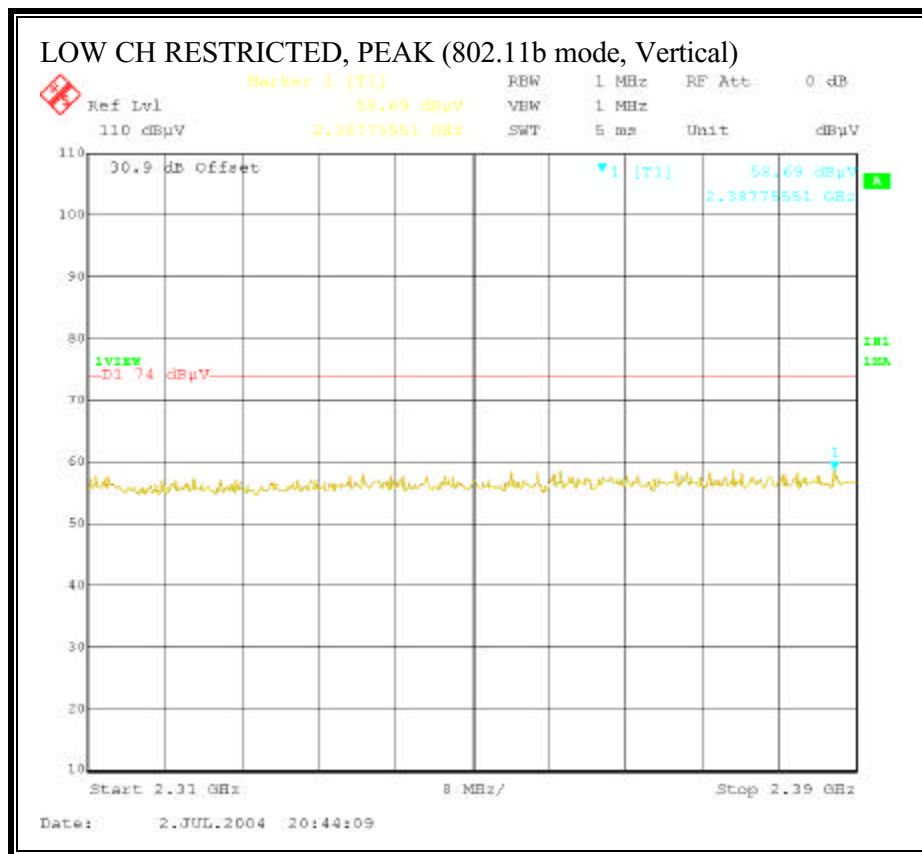
7.8.4. TRANSMITTER RADIATED EMISSIONS ABOVE 1 GHz, MOBILE LAPTOP CONFIGURATION, HTL017 ANTENNA SET

RESTRICTED BANDEDGE (b MODE, LOW CHANNEL, HORIZONTAL)



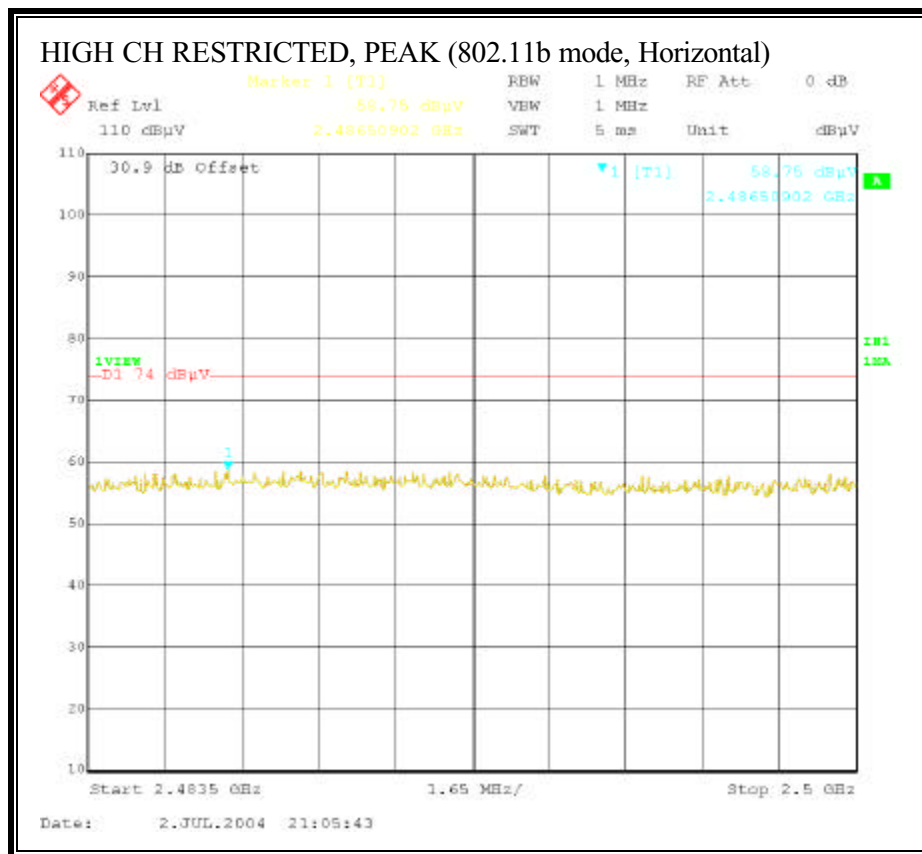


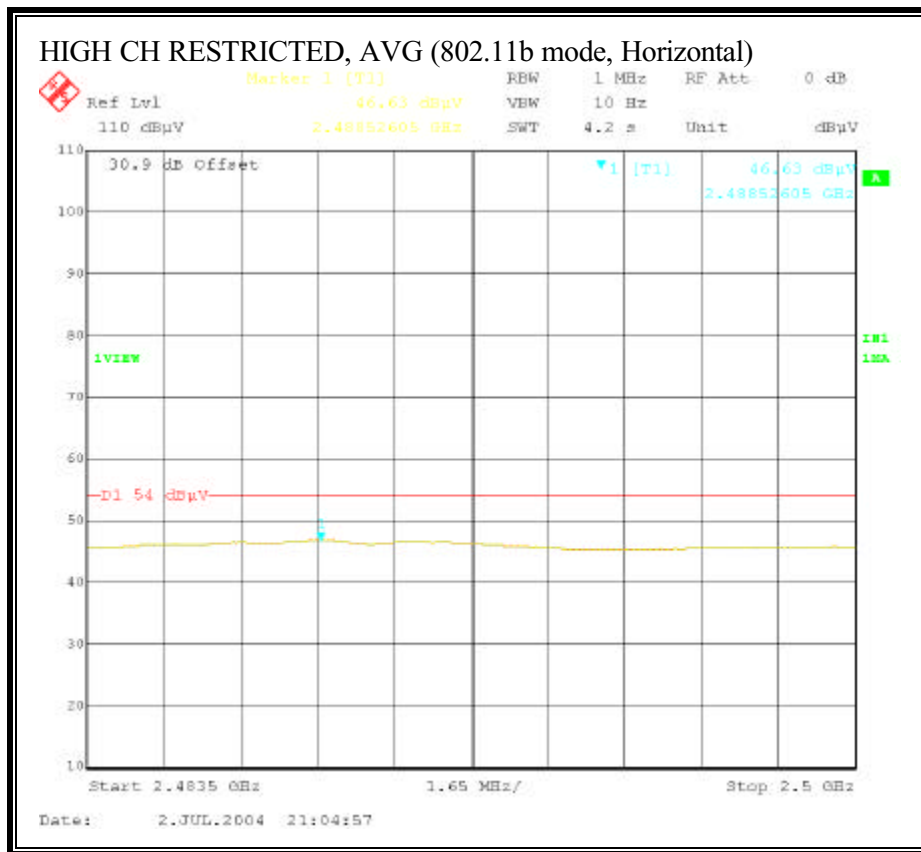
RESTRICTED BANDEDGE (b MODE, LOW CHANNEL, VERTICAL)



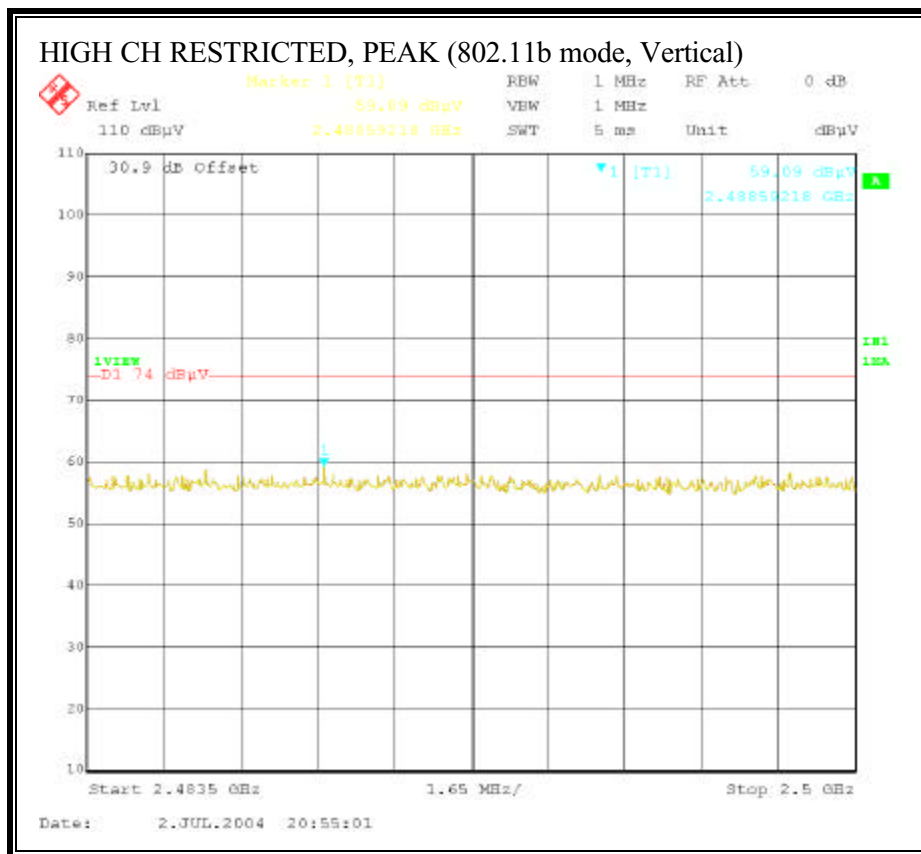


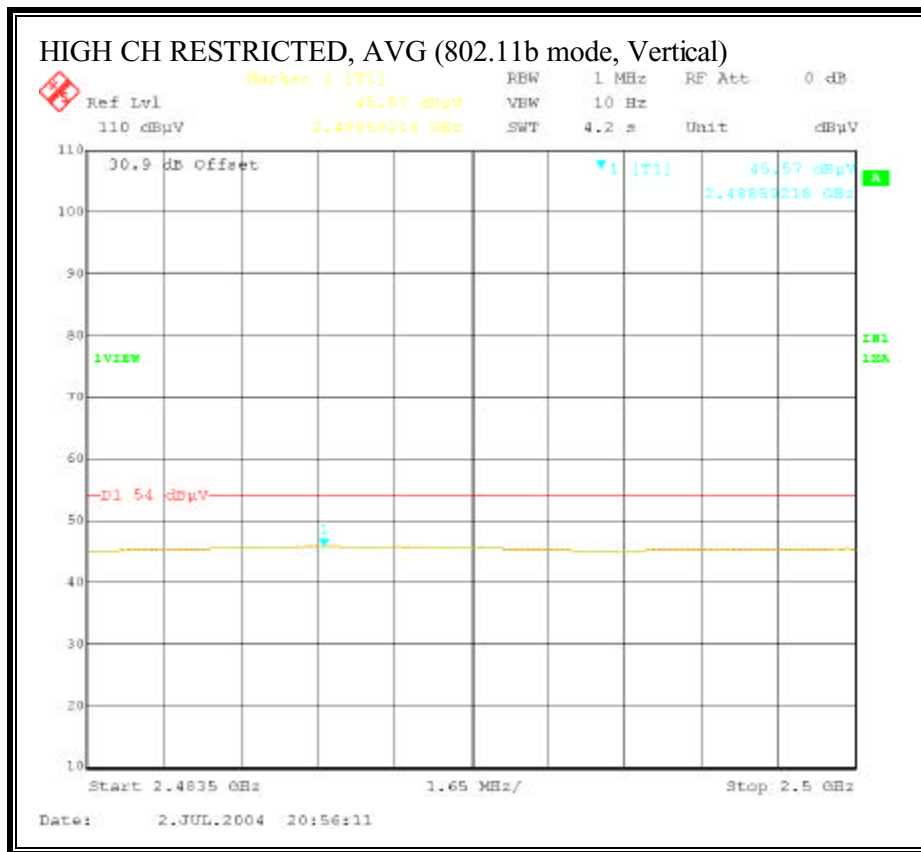
RESTRICTED BANDEDGE (b MODE, HIGH CHANNEL, HORIZONTAL)





RESTRICTED BANDEDGE (b MODE, HIGH CHANNEL, VERTICAL)



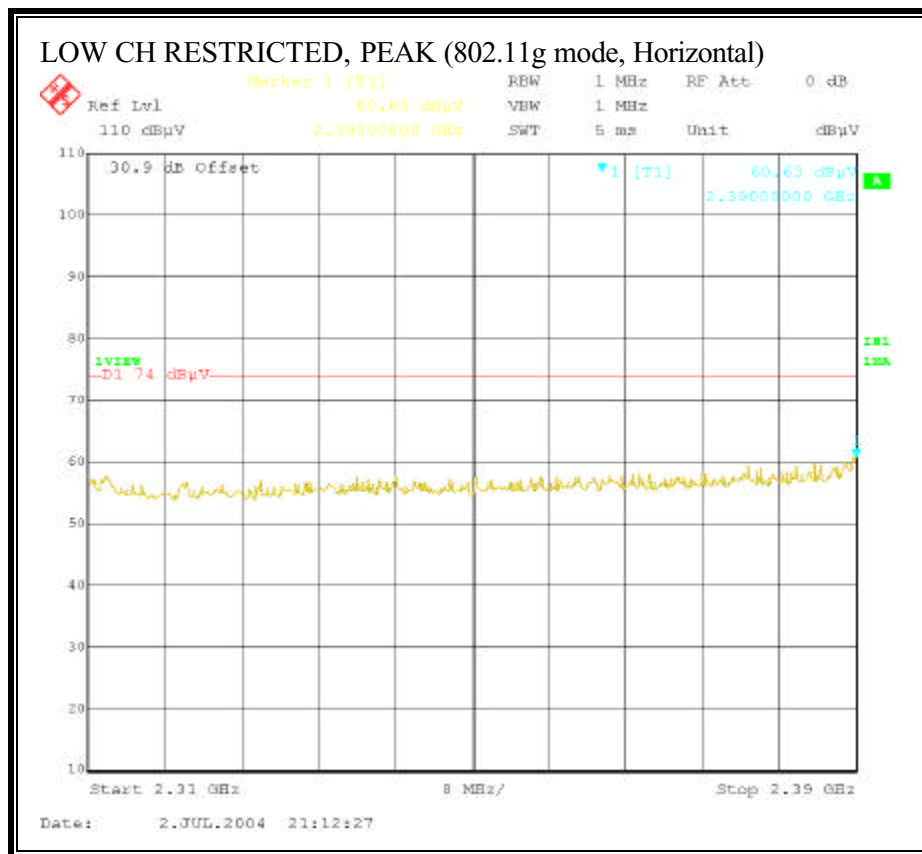


HARMONICS AND SPURIOUS EMISSIONS (b MODE)

07/02/04 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, HTL-017 Antenna																	
EUT M/N:		PA3375U-IMP																	
Test Target:		FCC 15.247																	
Mode Oper:		TX 11b mode, Laptop Position																	
Test Equipment:																			
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: ☒ (2 ft) ☐ (2.0 ft) ☐ (3 ft) ☒ (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	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				
2437 Channel																			
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				
2462 Channel																			
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												

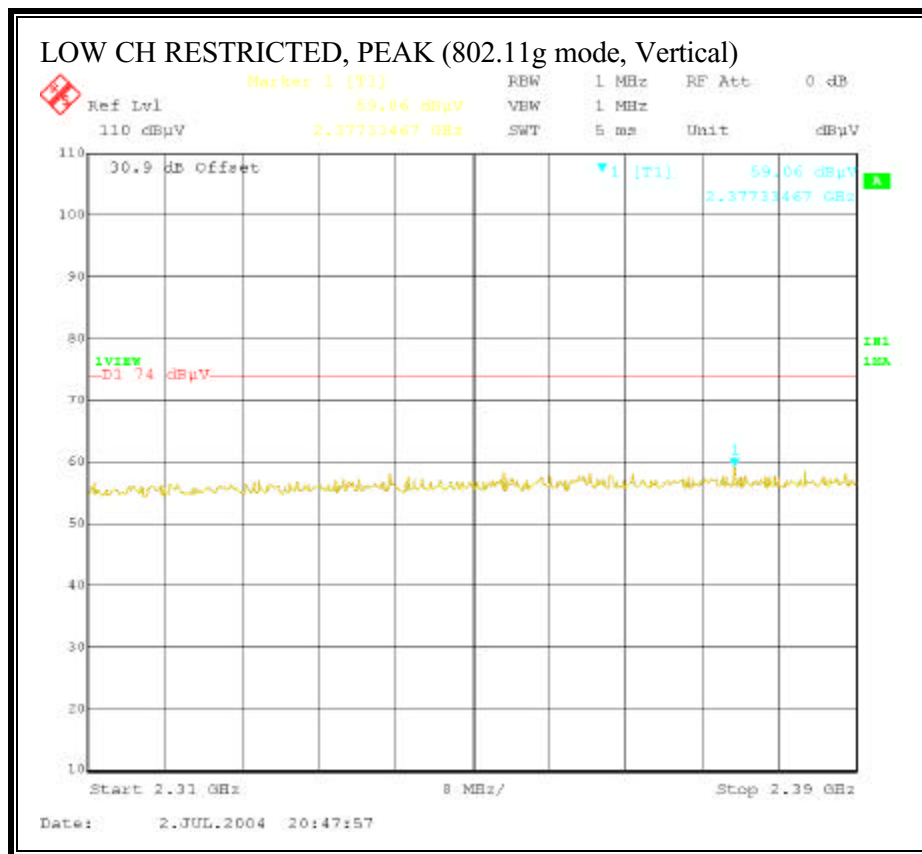
Note: No other spurious emissions were detected above the system noise in the restricted bands.

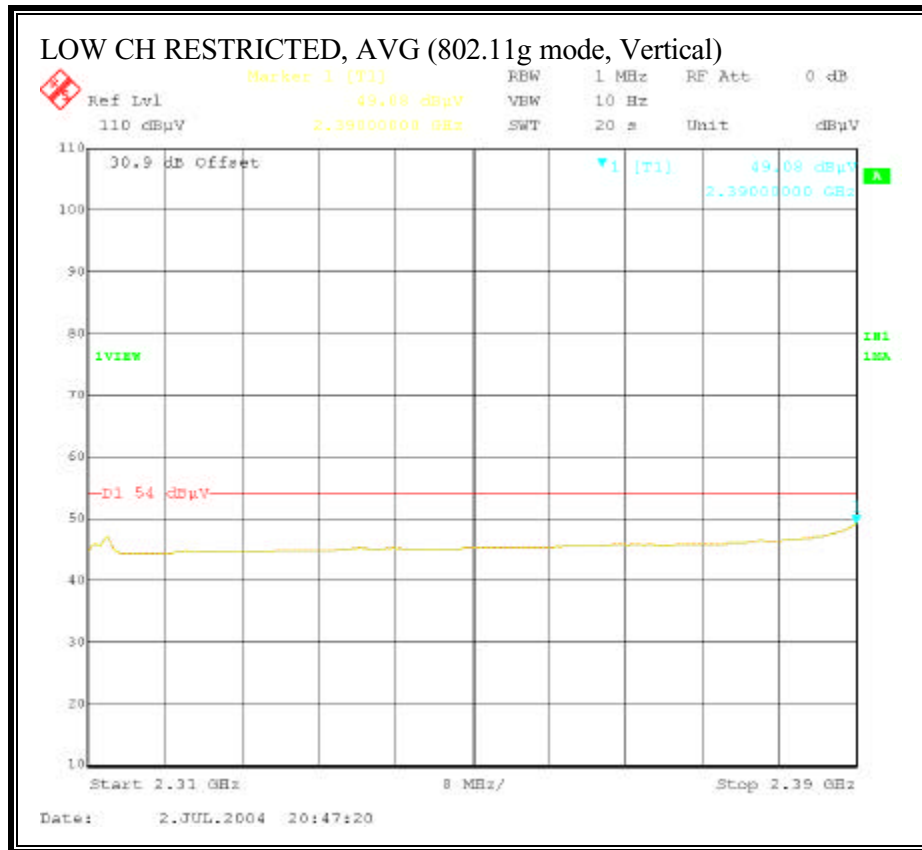
RESTRICTED BANDEDGE (g MODE, LOW CHANNEL, HORIZONTAL)



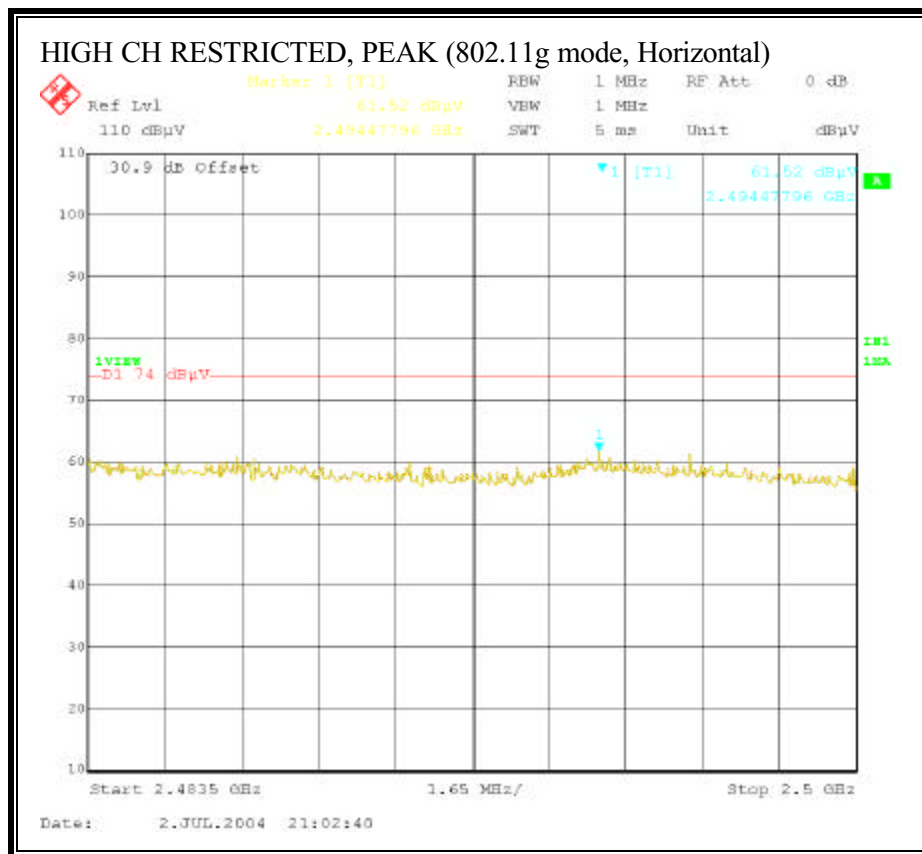


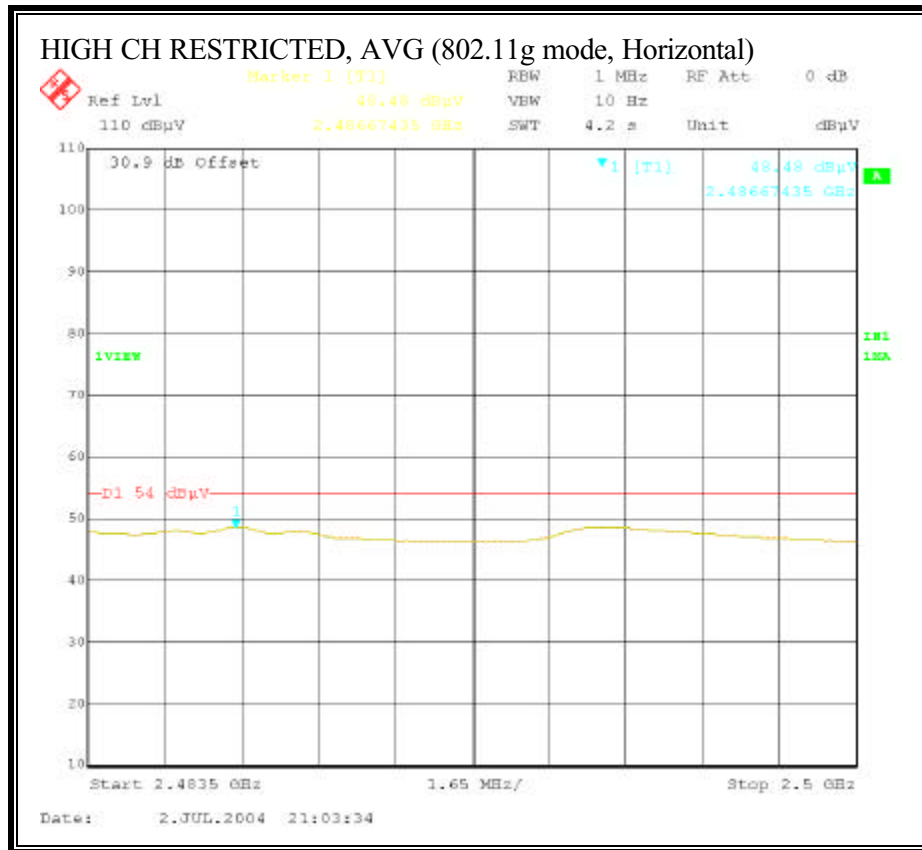
RESTRICTED BANDEDGE (g MODE, LOW CHANNEL, VERTICAL)



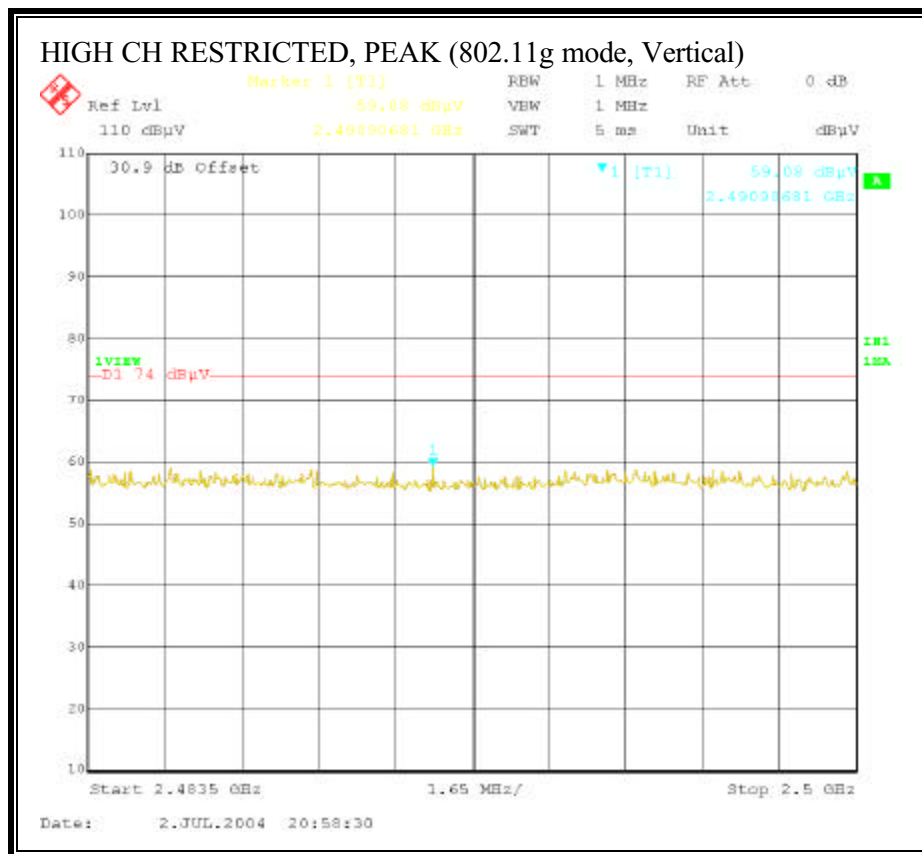


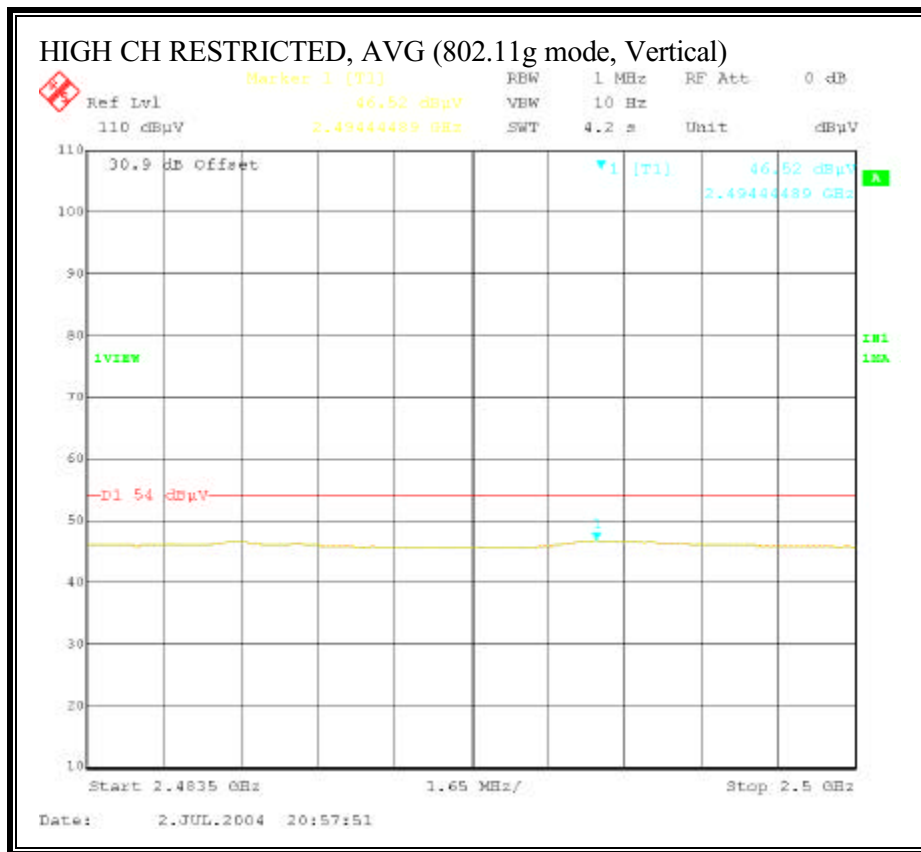
RESTRICTED BANDEDGE (g MODE, HIGH CHANNEL, HORIZONTAL)





RESTRICTED BANDEDGE (g MODE, HIGH CHANNEL, VERTICAL)





HARMONICS AND SPURIOUS EMISSIONS (g MODE)

07/01/04 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, HTL-017 Antenna													
Test Equipment:															
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: ☒ (2 ft) ☐ (2.0 ft) ☐ (3 ft) ☒ (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.

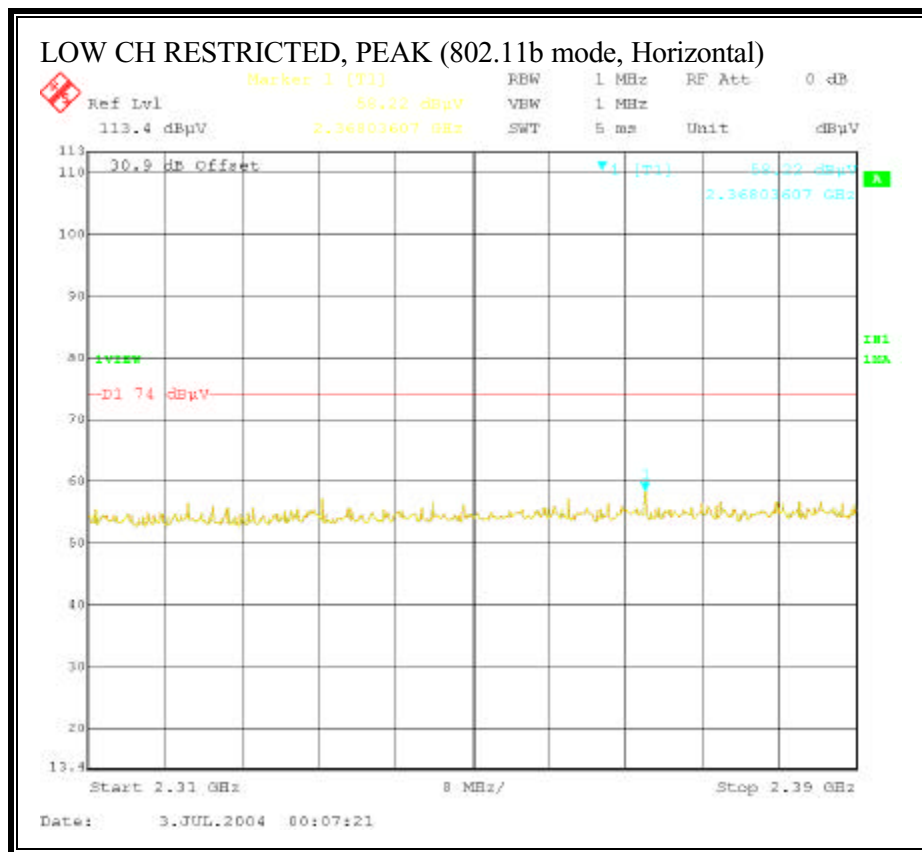
HARMONICS AND SPURIOUS EMISSIONS (a MODE)

07/02/04 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 11a mode, 5.8GHz Band; Laptop Position, HTL-017 Antenna													
Test Equipment:															
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: ☒ (2 ft) ☐ (2.0 ft) ☐ (3 ft) ☒ (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	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)





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

Marker 1 [T1] 56.71 dBmV 2.34430862 GHz

Ref Lvl 113.4 dBmV 113.4 dB Offset

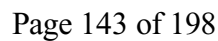
REW 1 MHz RF Att 0 dB

VIEW 1 MHz

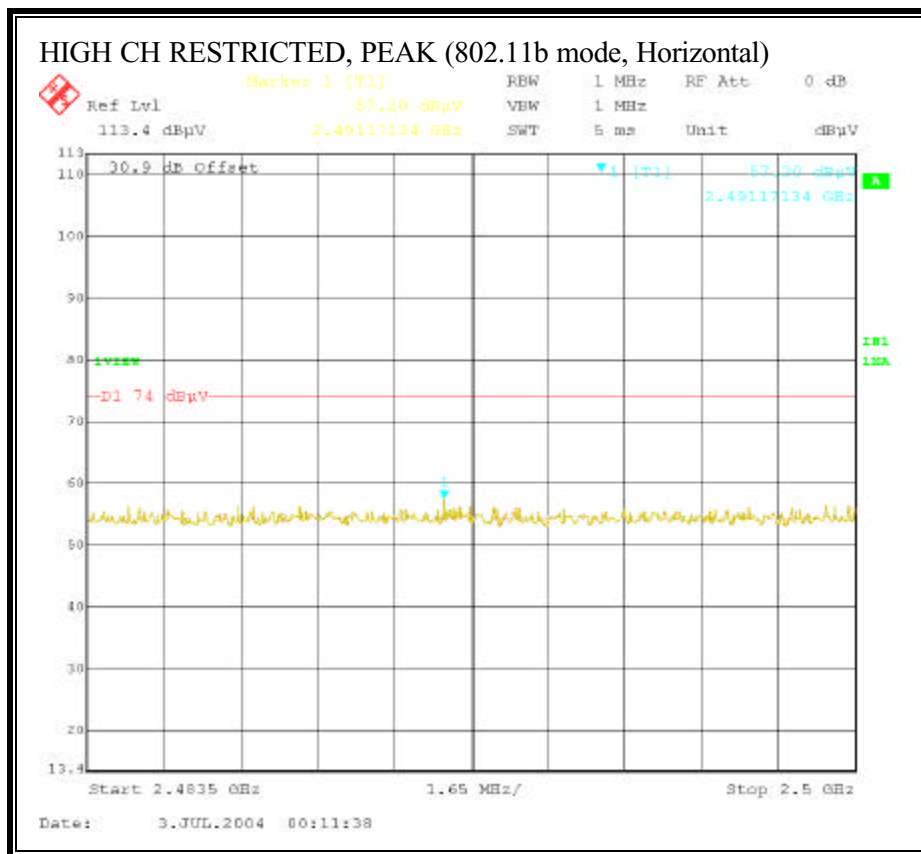
SWT 5 ms Unit dBmV

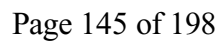
Start 2.31 GHz 8 MHz/ Stop 2.39 GHz

Date: 3.JUL.2004 00:04:20



RESTRICTED BANDEDGE (b MODE, HIGH CHANNEL, HORIZONTAL)





HIGH CH RESTRICTED, PEAK (802.11b mode, Vertical)

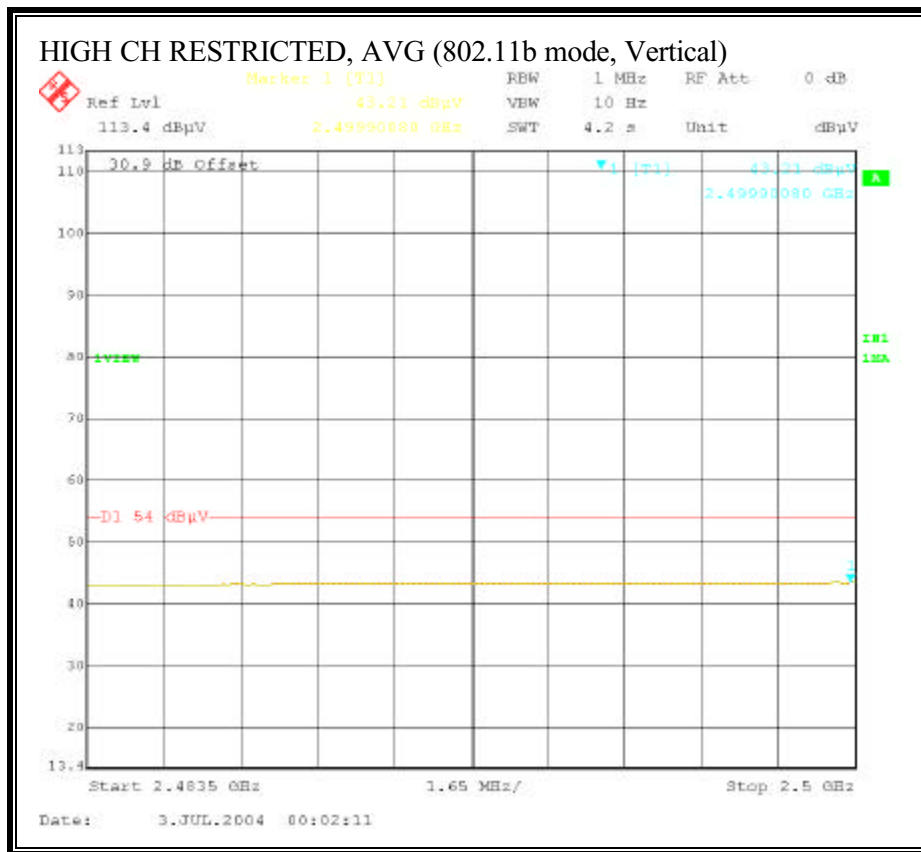
REF Lvl: 113.4 dBuV
 Marker 1 [T1]: 57.24 dBuV
 REW: 1 MHz
 VEW: 1 MHz
 SWT: 5 ms
 RF Att: 0 dB
 Unit: dBuV

30.9 dB Offset
 2.48965030 GHz
 57.24 dBuV
 2.48965030 GHz

113.4
 110
 100
 90
 80
 70
 60
 50
 40
 30
 20
 13.4

Start 2.4835 GHz
 1.65 MHz
 Stop 2.5 GHz

Date: 3.JUL.2004 00:01:34



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 @3m	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)

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 Mode 2412MHz, PWR Setup 15.5															
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 Mode 2437MHz, PWR Setup 17															
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 Mode 2462MHz, PWR Setup 17															
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.

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

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

Ref Lvl 58.04 dBuV VEW 1 MHz

113.4 dBuV 2.38839679 GHz SWT 5 ms Unit dBuV

113.4 dB Offset

110 dB

100 dB

90 dB

80 dB

70 dB

60 dB

50 dB

40 dB

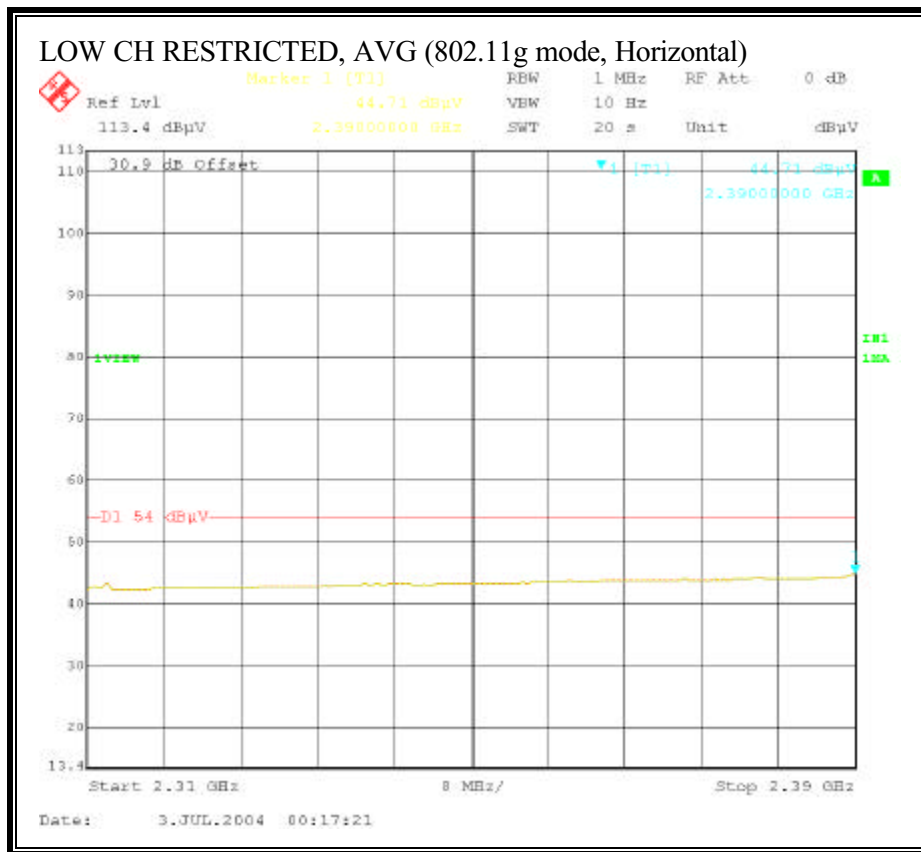
30 dB

20 dB

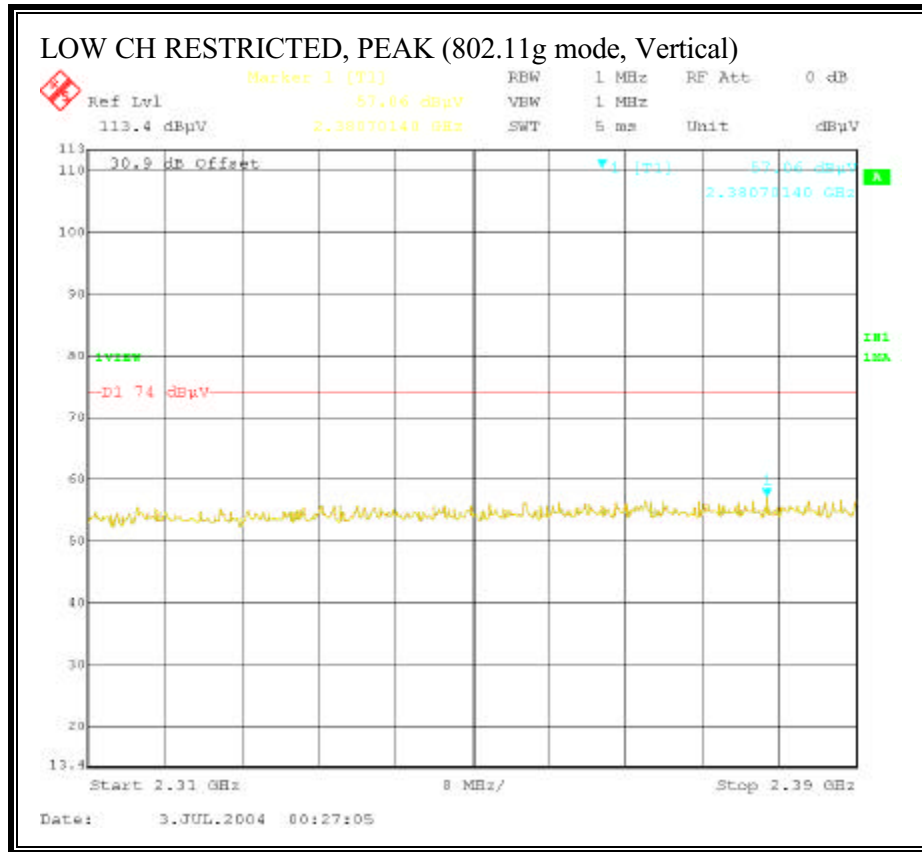
13.4 dB

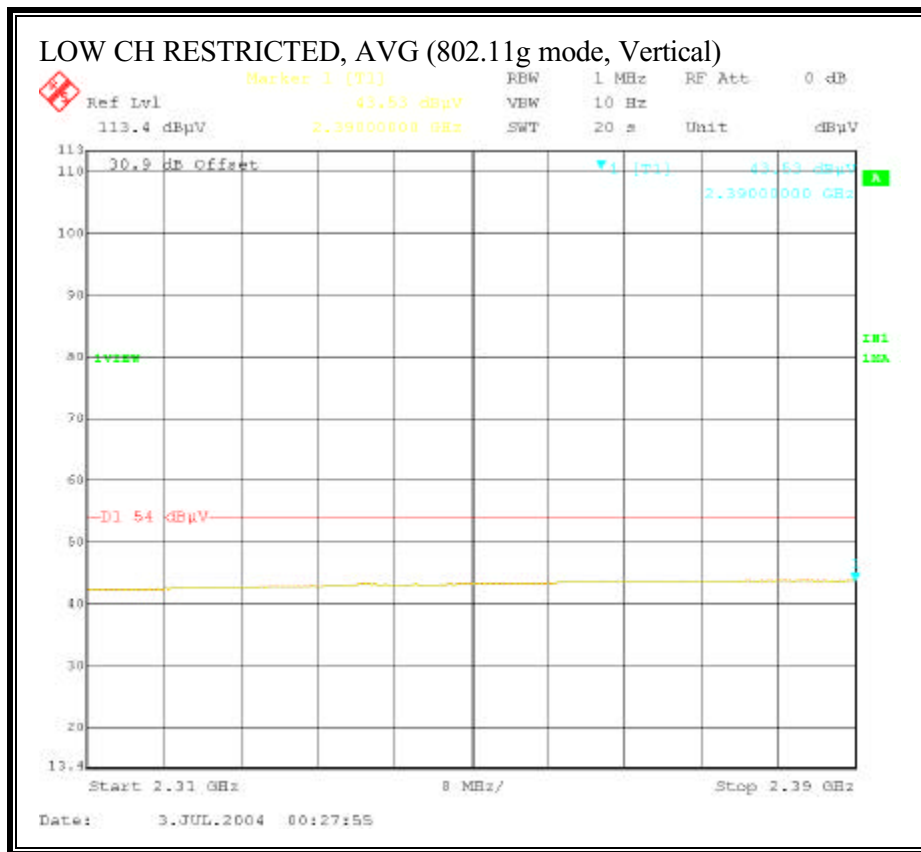
Start 2.31 GHz 8 MHz/ Stop 2.39 GHz

Date: 3.JUL.2004 00:16:23

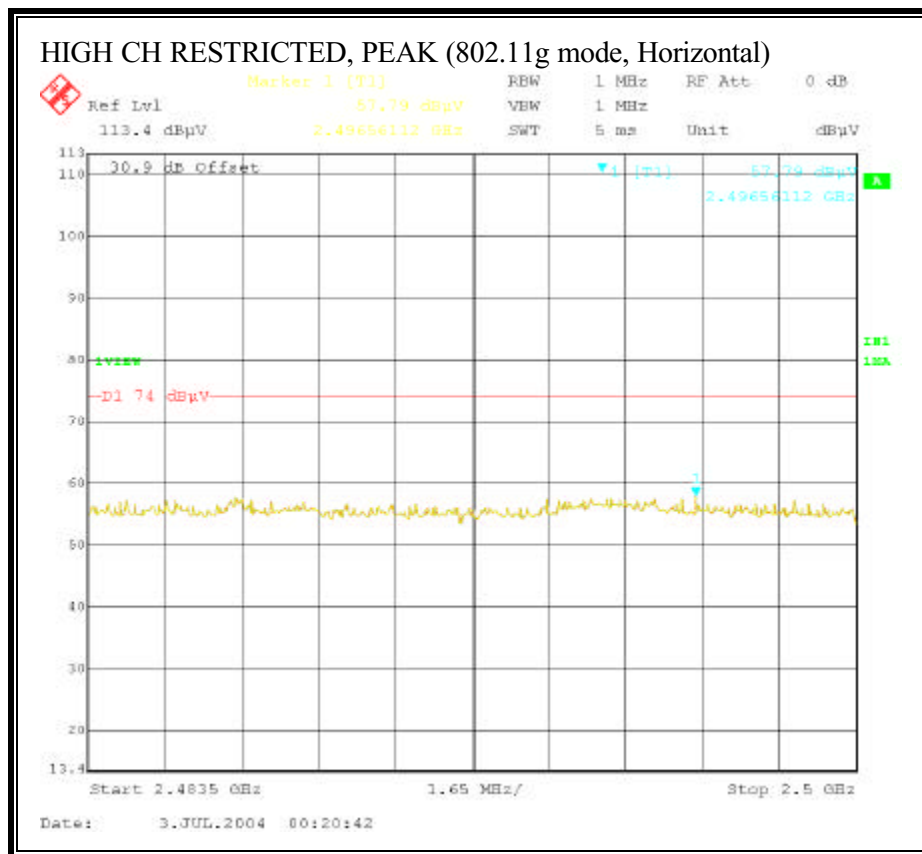


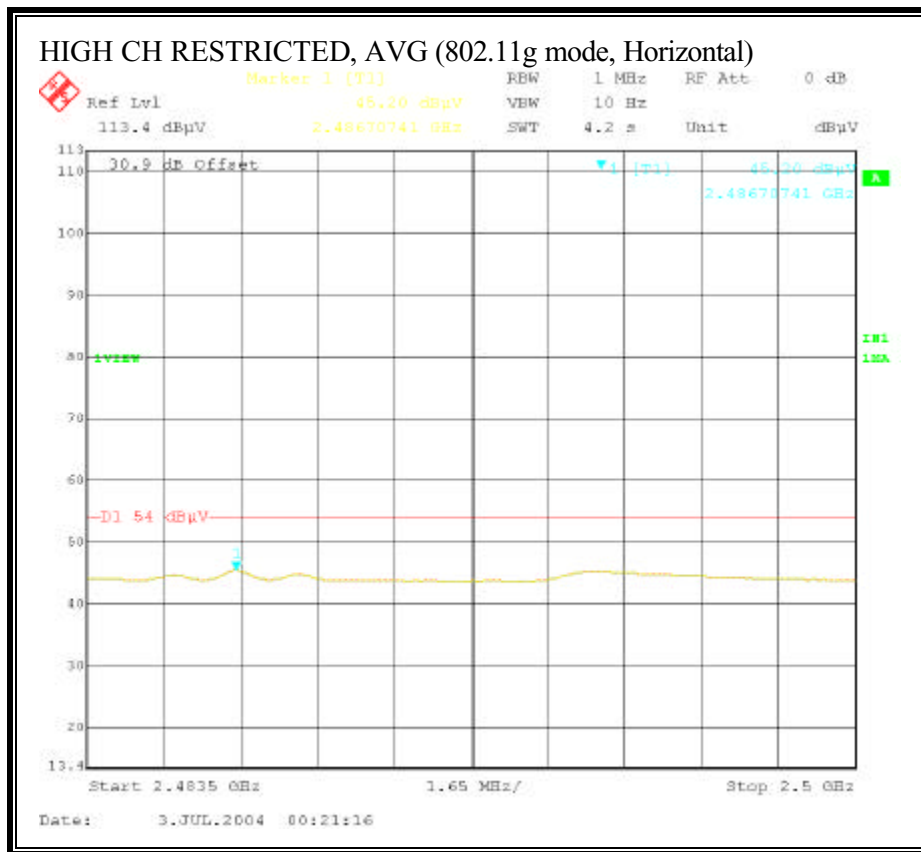
RESTRICTED BANDEDGE (g MODE, LOW CHANNEL, VERTICAL)



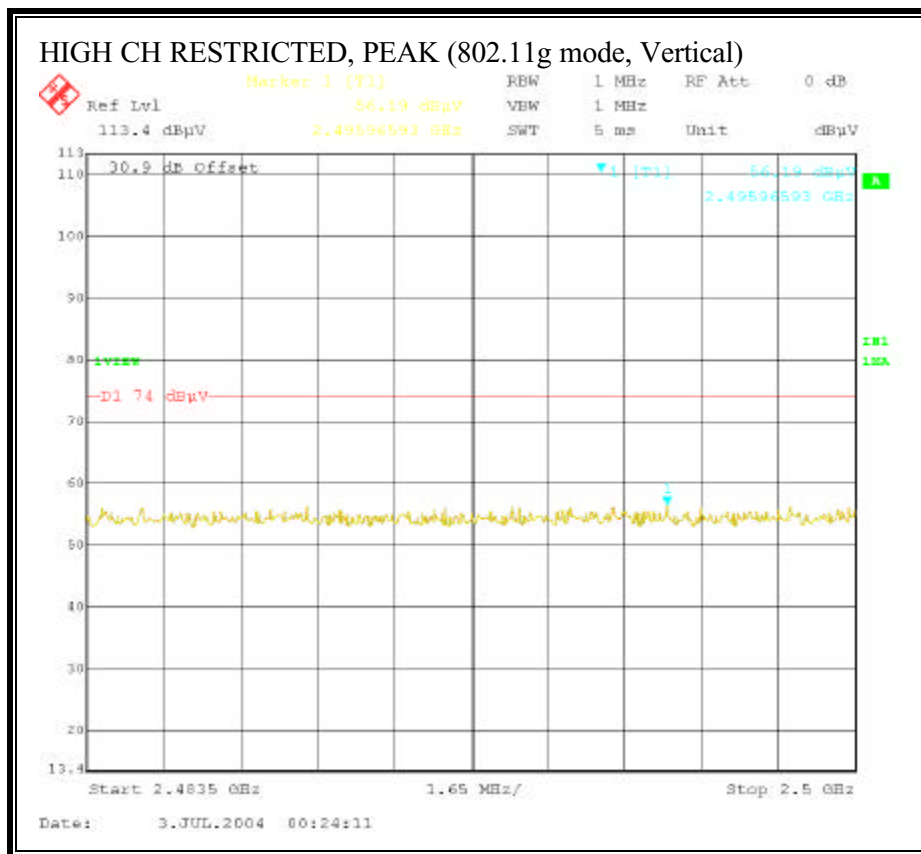


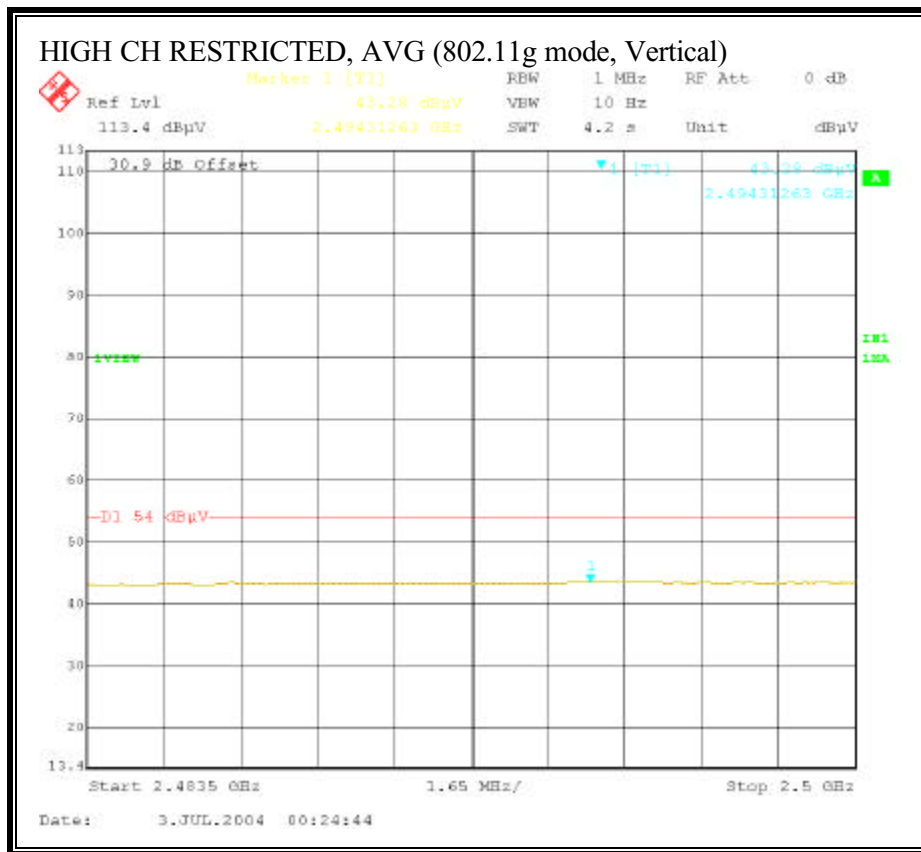
RESTRICTED BANDEDGE (g MODE, HIGH CHANNEL, HORIZONTAL)





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

☒ (2 ft)	☐ (2.0 ft)	☐ (3 ft)	☒ (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.

7.8.6. CO-LOCATED TRANSMITTER RADIATED EMISSIONS WITH TIAN01 ANTENNA SET

SUPPLEMENTAL TEST PROCEDURE

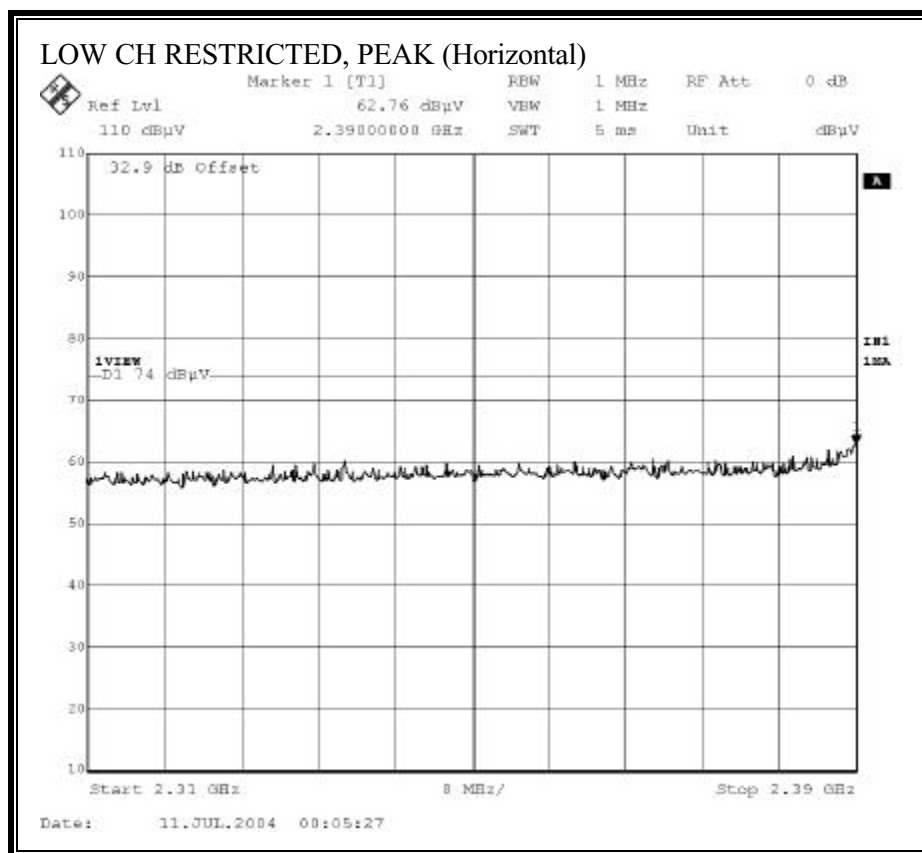
The EUT is placed on a non-conducting table 80 cm above the ground plane. The dominant transmitter is set to the worst case channel. The spurious emissions performance of the dominant transmitter is investigated as the settings of the non-dominant transmitter are varied. Worst case results are reported.

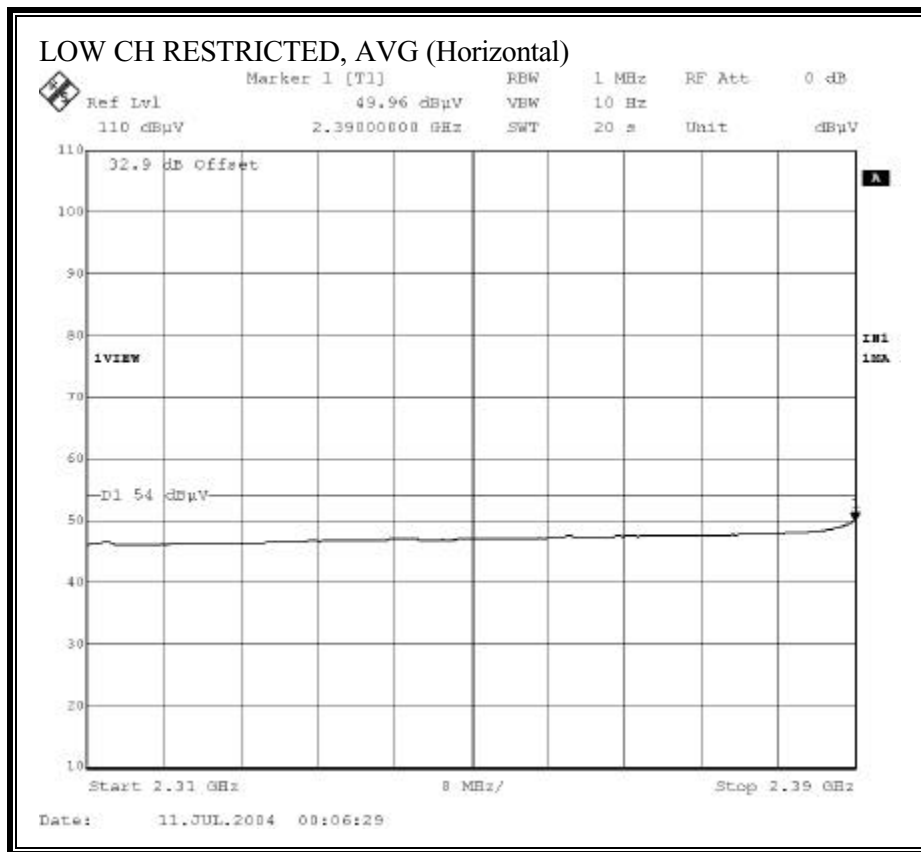
RESULTS

No non-compliance noted:

The WLAN is the dominant transmitter.

WORST-CASE RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)





LOW CH RESTRICTED, PEAK (Vertical)

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

Ref Lvl 60.23 dBuV VEW 1 MHz

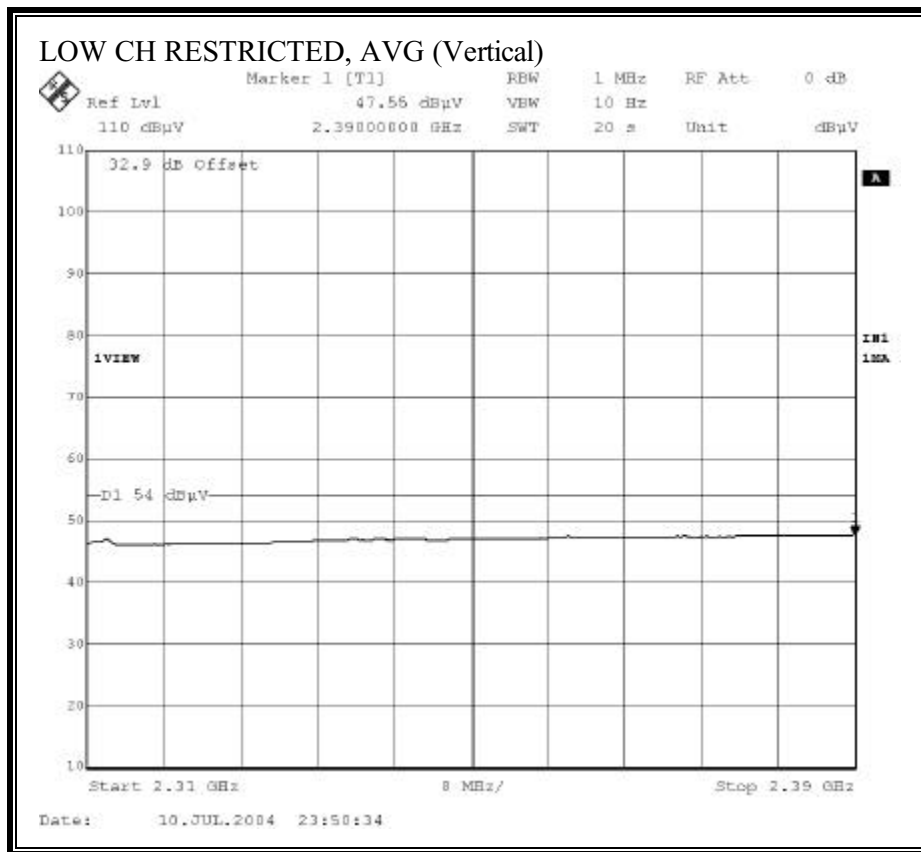
110 dBuV 2.37860128 GHz SWT 5 ms Unit dBuV

32.9 dB Offset

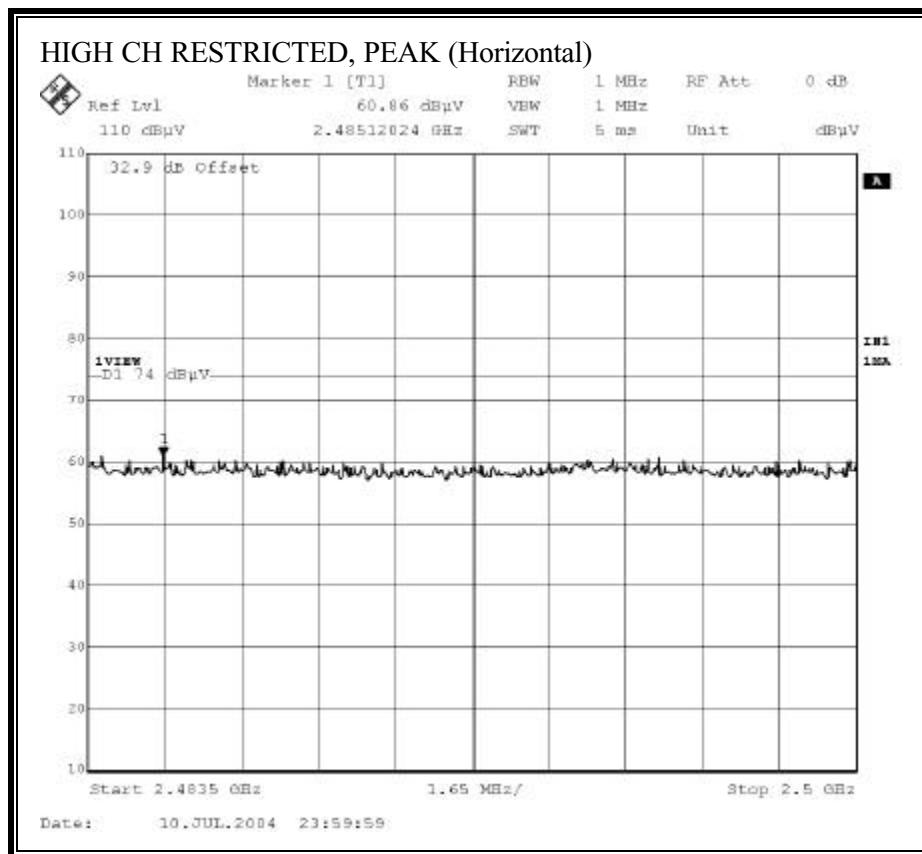
1VIEW -D1 74 dBuV

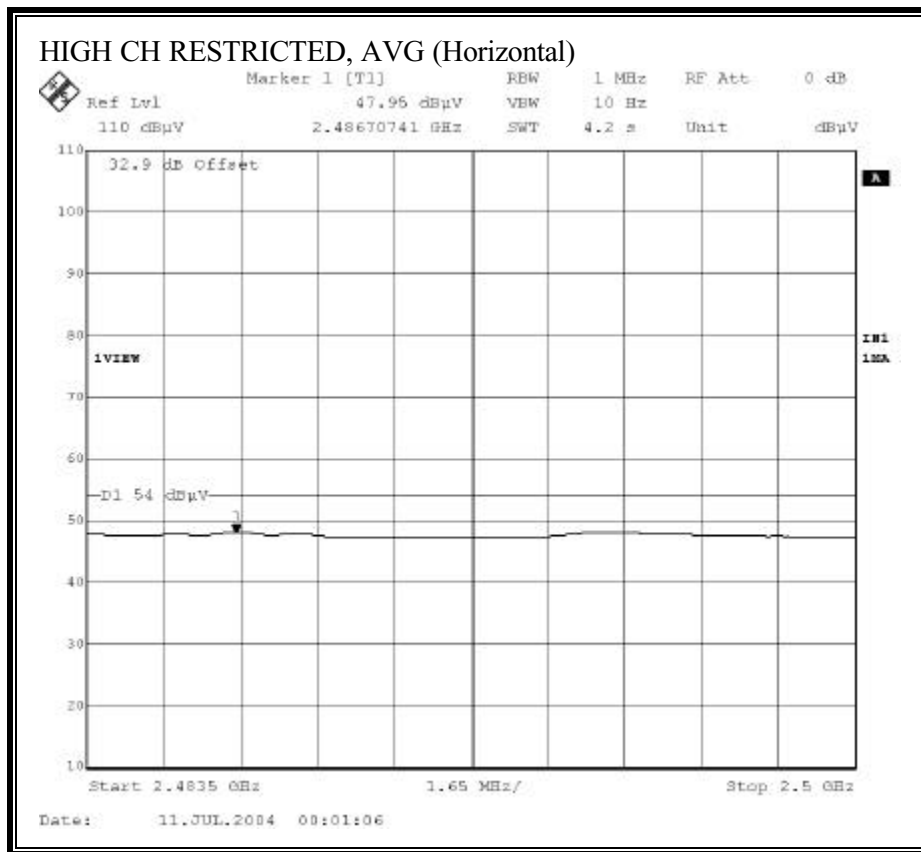
Start 2.31 GHz 8 MHz/ Stop 2.39 GHz

Date: 10.JUL.2004 23:49:21

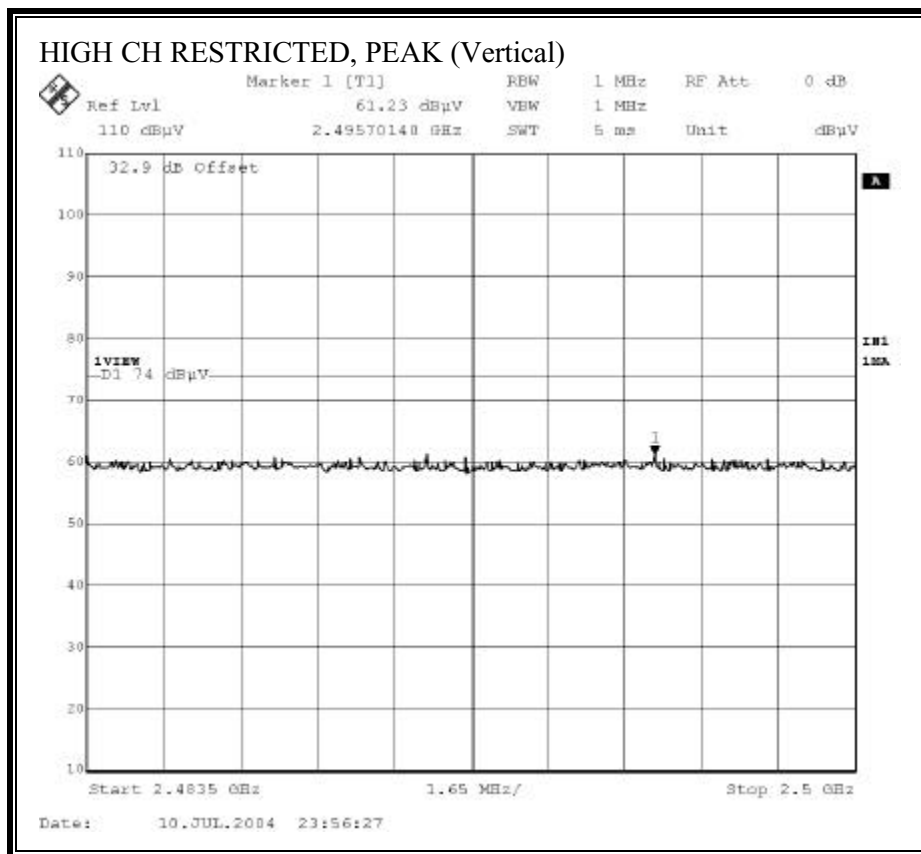


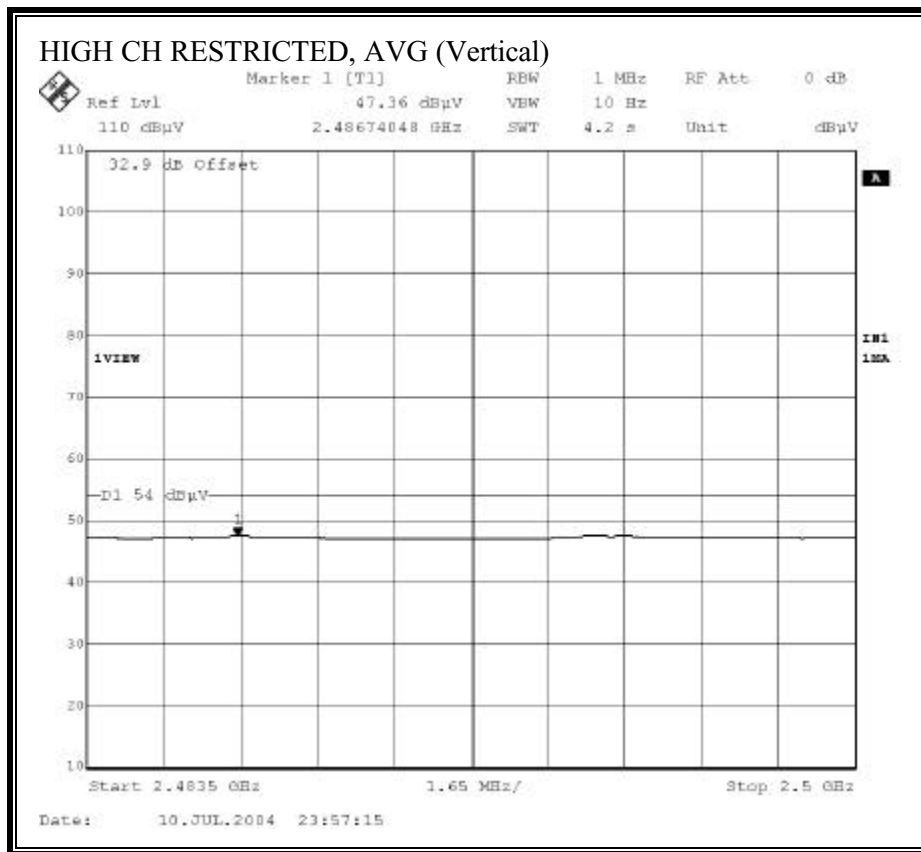
WORST-CASE RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)





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)				
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	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

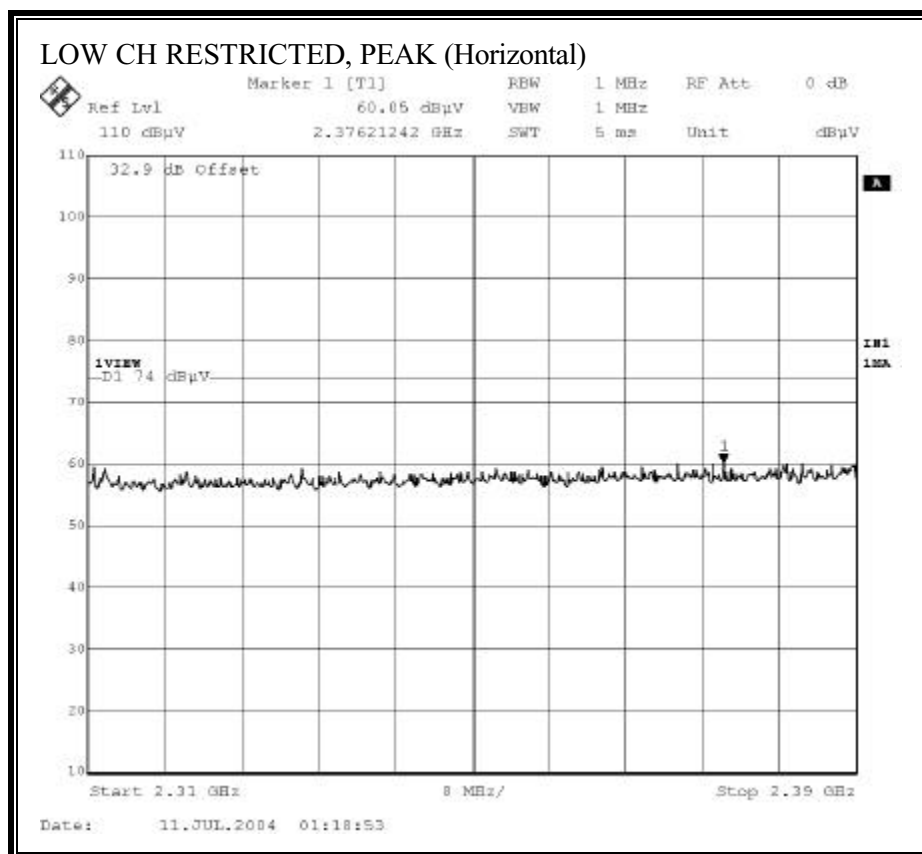
The EUT is placed on a non-conducting table 80 cm above the ground plane. The antenna The dominant transmitter is set to the worst case channel. The spurious emissions performance of the dominant transmitter is investigated as the settings of the non-dominant transmitter are varied. Worst case results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

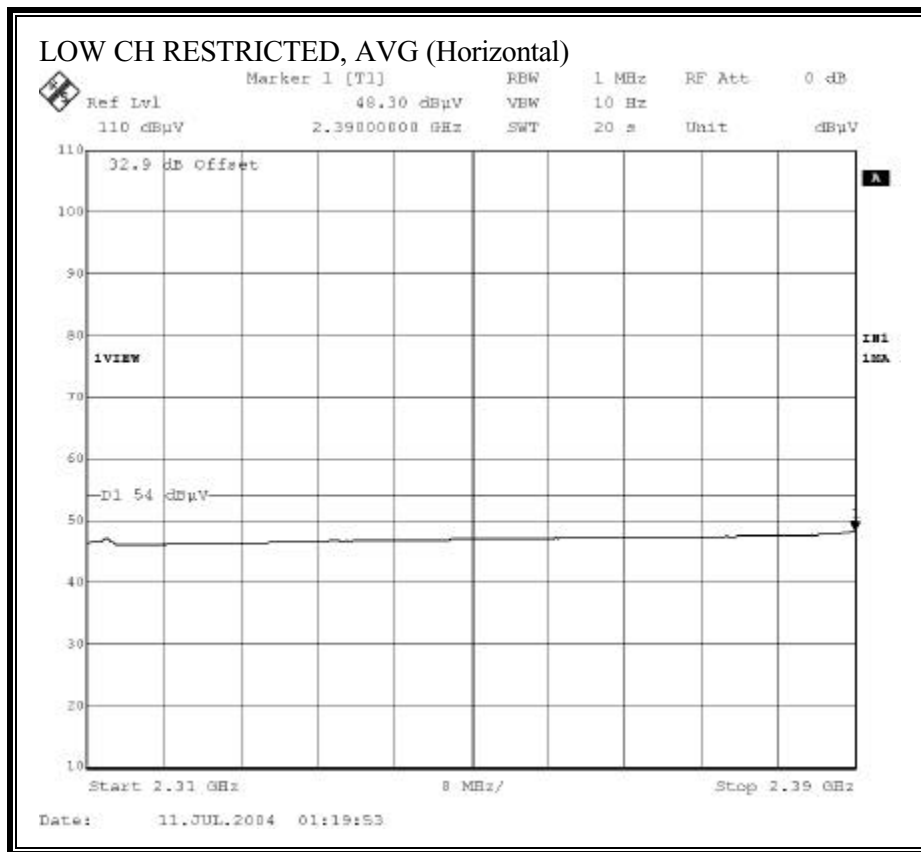
RESULTS

No non-compliance noted:

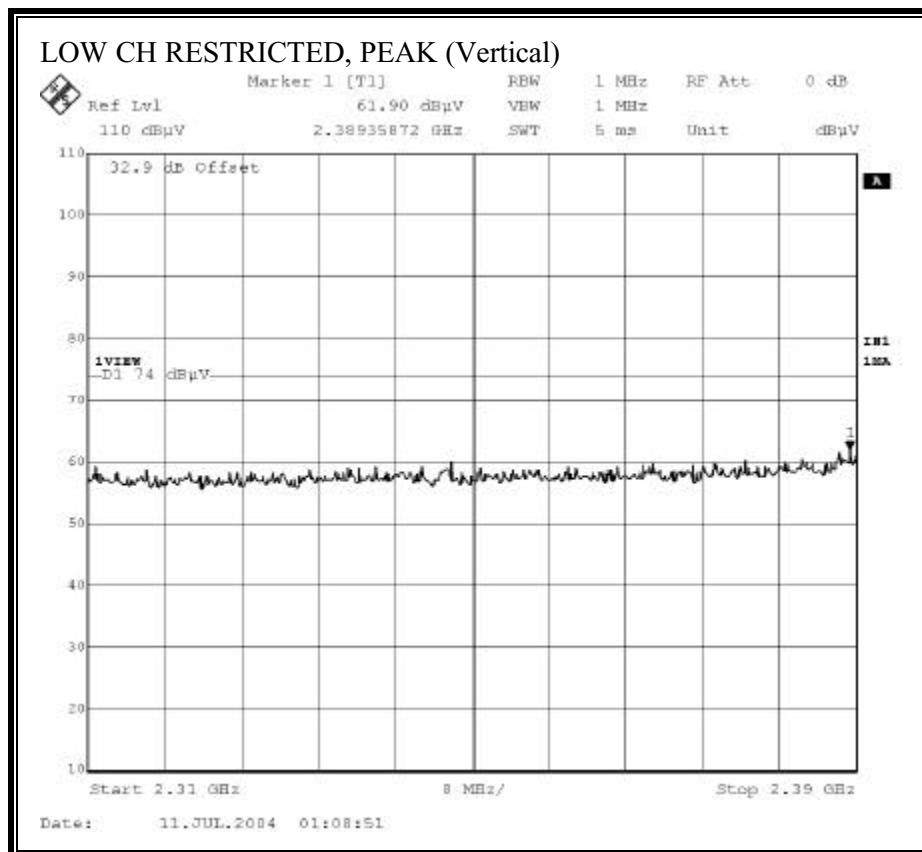
The WLAN is the dominant transmitter.

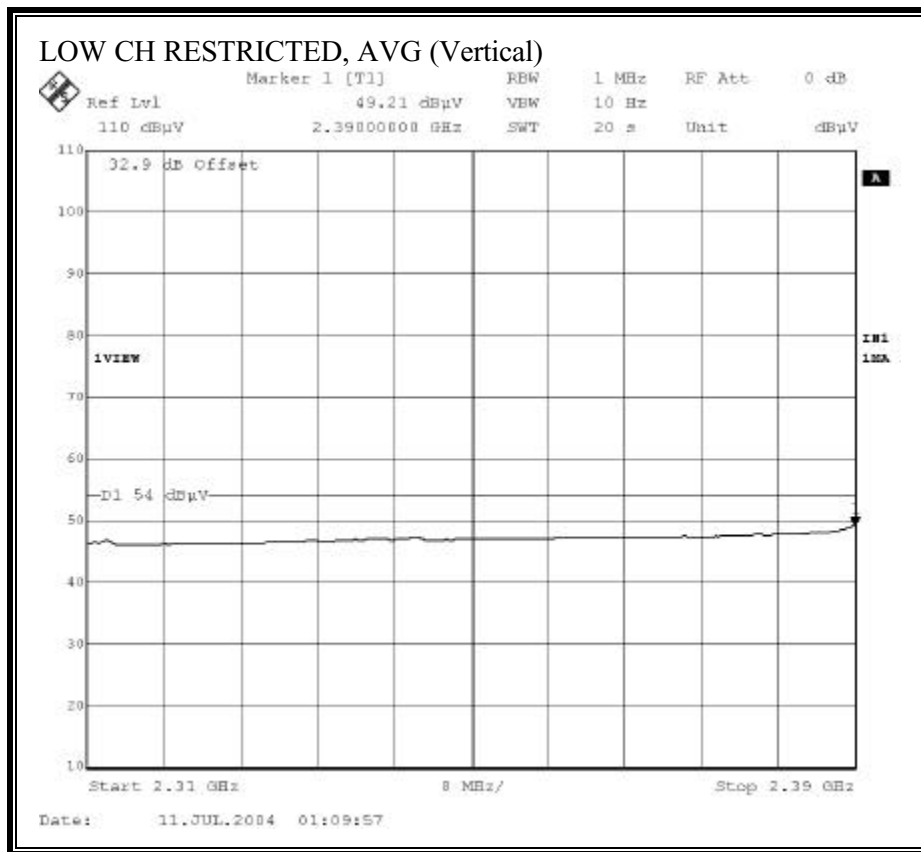
WORST-CASE RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



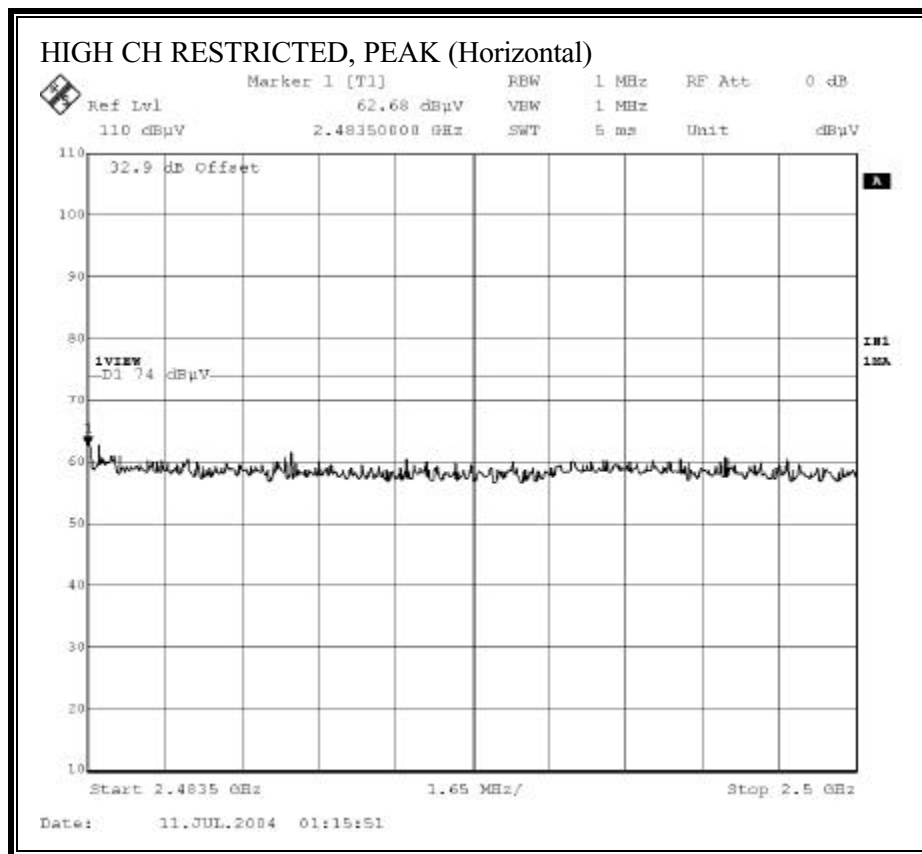


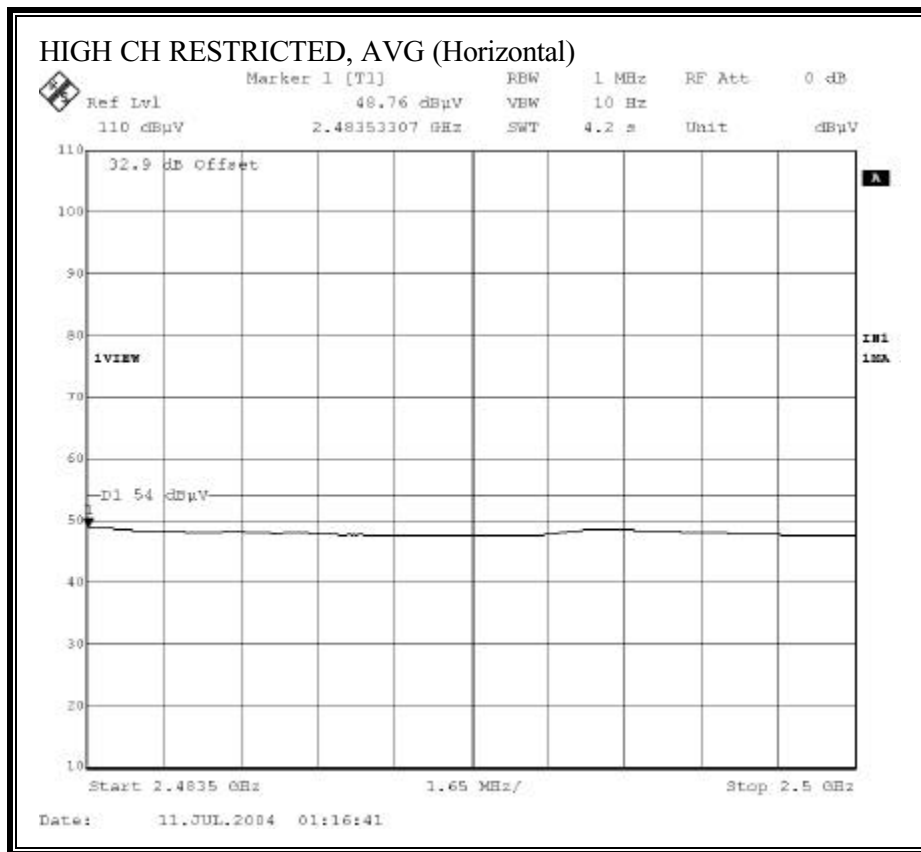
WORST-CASE RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



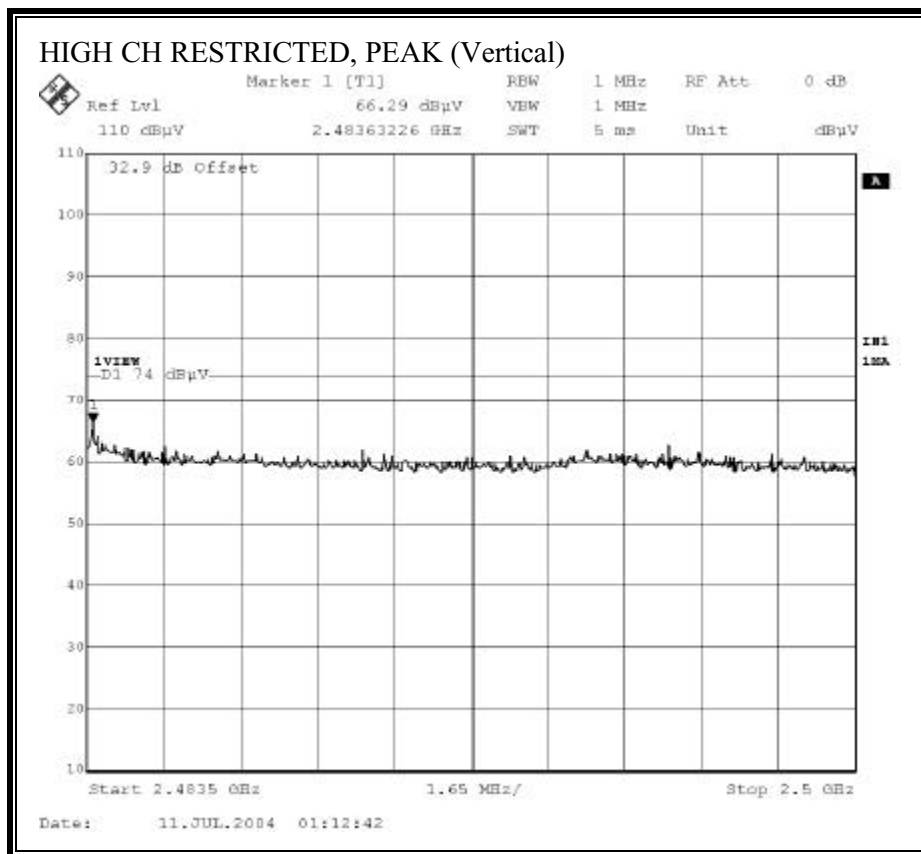


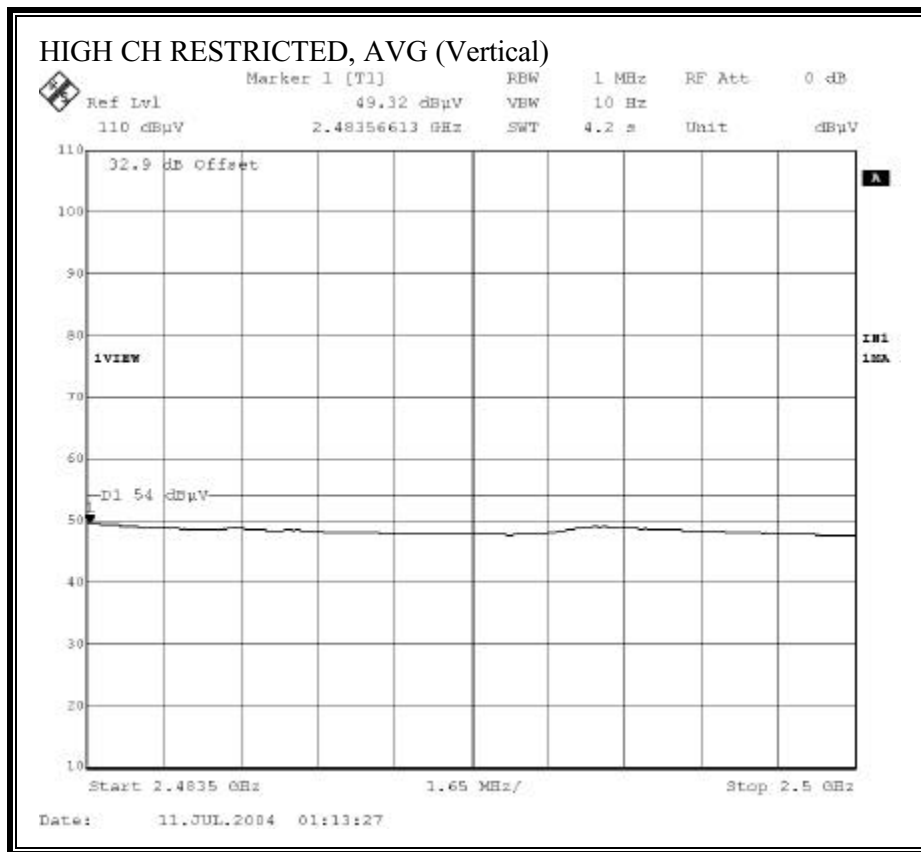
WORST-CASE RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)





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

Spectrum Analyzer

Pre-amplifier 1-26GHz

Pre-amplifier 26-40GHz

Horn > 18GHz

T73; S/N: 6717 @3m

Agilent E4446A Analyzer

T63 Minieq 646456

☒ (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	Dist	Read Pk	Read Avg	AF	CL	Amp	D Corr	HPF	Peak	Avg	Pk Lim	Avg Lim	Pk Mar	Avg Mar	Notes
GHz	feet	dBuV	dBuV	dB/m	dB	dB	dB		dBuV/m	dBuV/m	dBuV/m	dBuV/m	dB	dB	
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.

Page 176 of 198

COMPLIANCE CERTIFICATION SERVICES
561F MONTEREY ROAD, MORGAN HILL, CA 95037 USA

DOCUMENT NO: CCSUP4031A
TEL: (408) 463-0885 FAX: (408) 463-0888

This report shall not be reproduced except in full, without the written approval of CCS. This document may be altered or revised by Compliance Certification Services personnel only, and shall be noted in the revision section of the document.

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

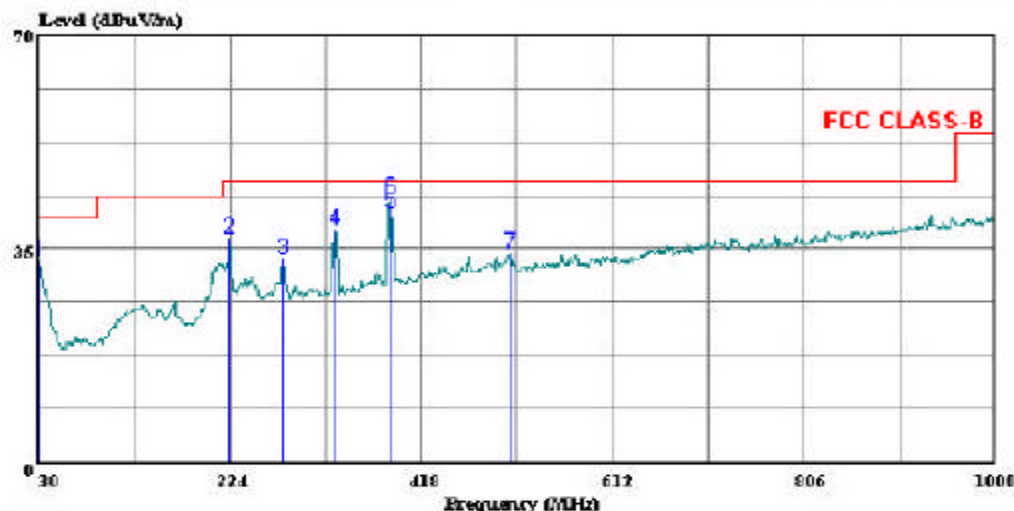
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)

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

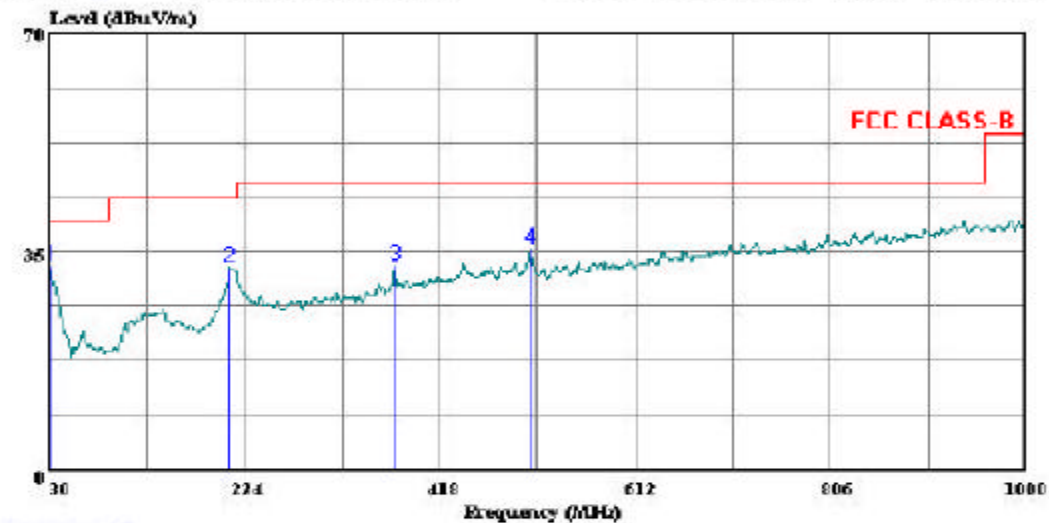
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, VERTICAL)

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



(Audix A.TC)

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

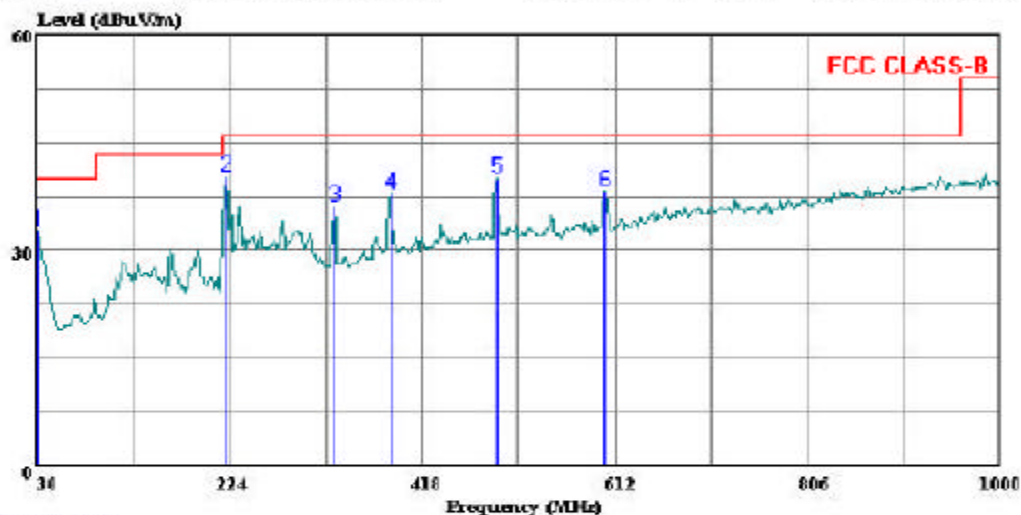
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)

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

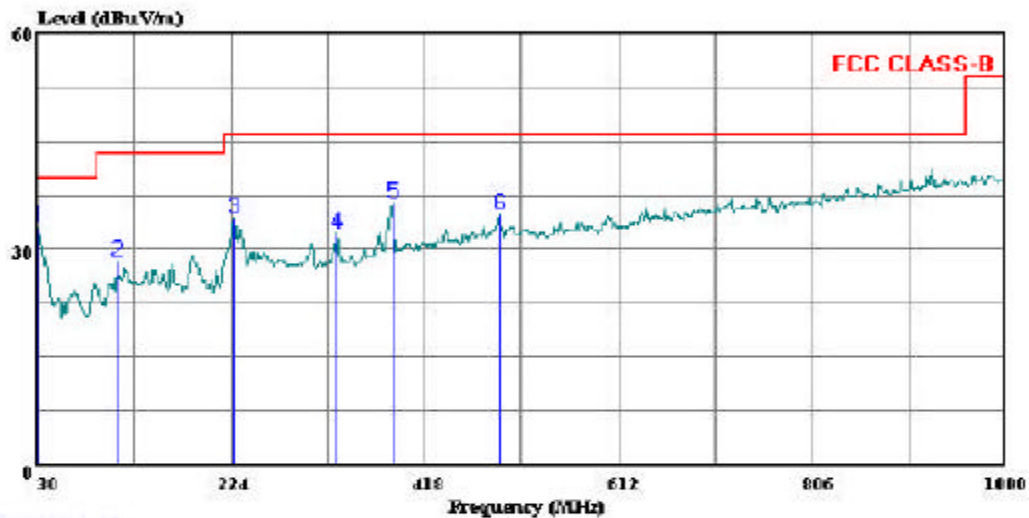
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, VERTICAL)

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 μ 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

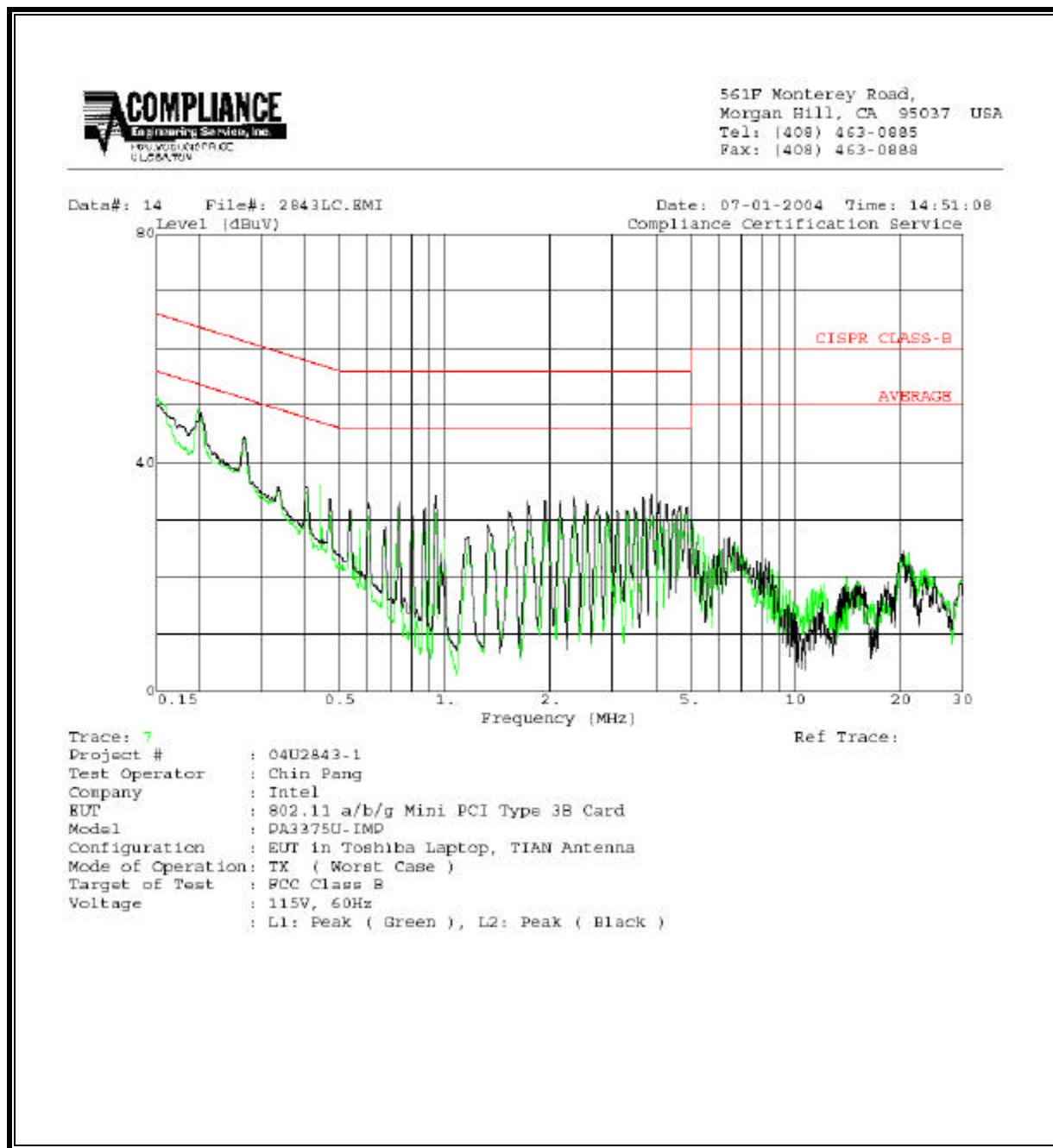
No non-compliance noted:

RESULTS

6 WORST EMISSIONS

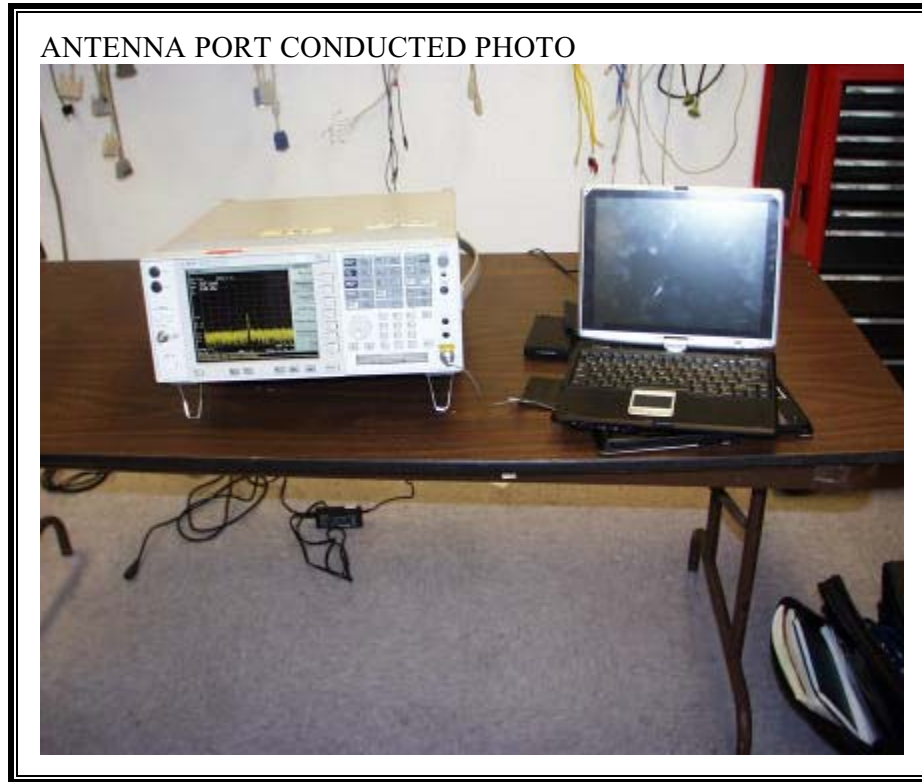
CONDUCTED EMISSIONS DATA (115VAC 60Hz)									
Freq.	Reading			Closs	Limit	EN_B	Margin		Remark
(MHz)	PK (dBuV)	QP (dBuV)	AV (dBuV)	(dB)	QP	AV	QP (dB)	AV (dB)	L1 / L2
0.15	51.80	--	--	0.00	65.94	55.94	-14.14	-4.14	L1
0.20	49.16	--	--	0.00	64.63	54.63	-15.47	-5.47	L1
4.85	31.02	--	--	0.00	56.00	46.00	-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



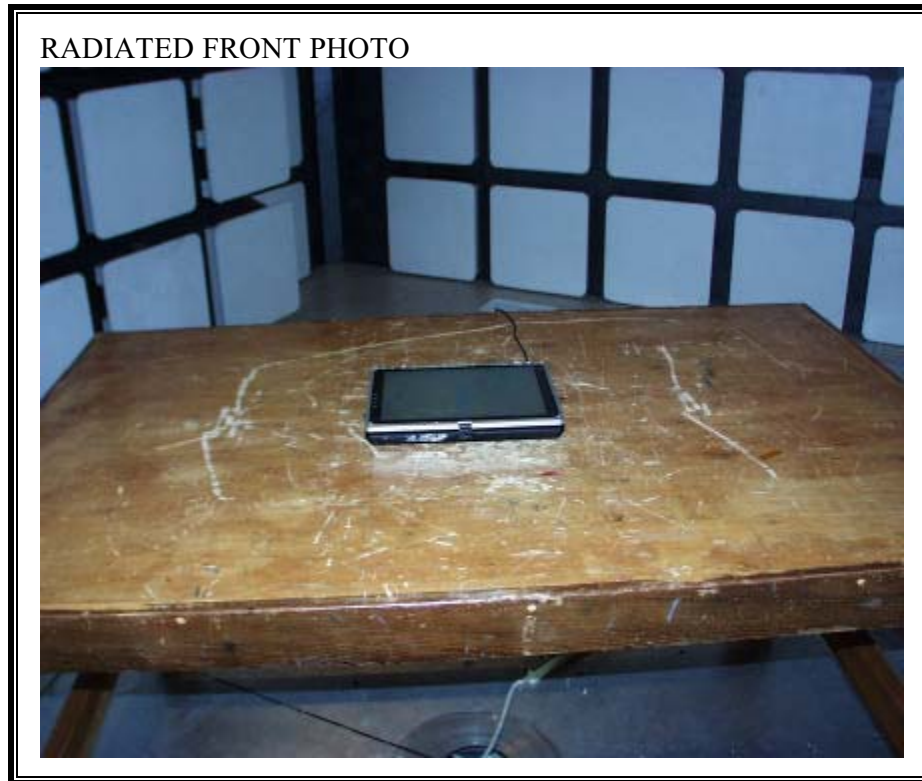
RADIATED RF MEASUREMENT SETUP (MOBILE LAPTOP CONFIGURATION)



RADIATED BACK PHOTO



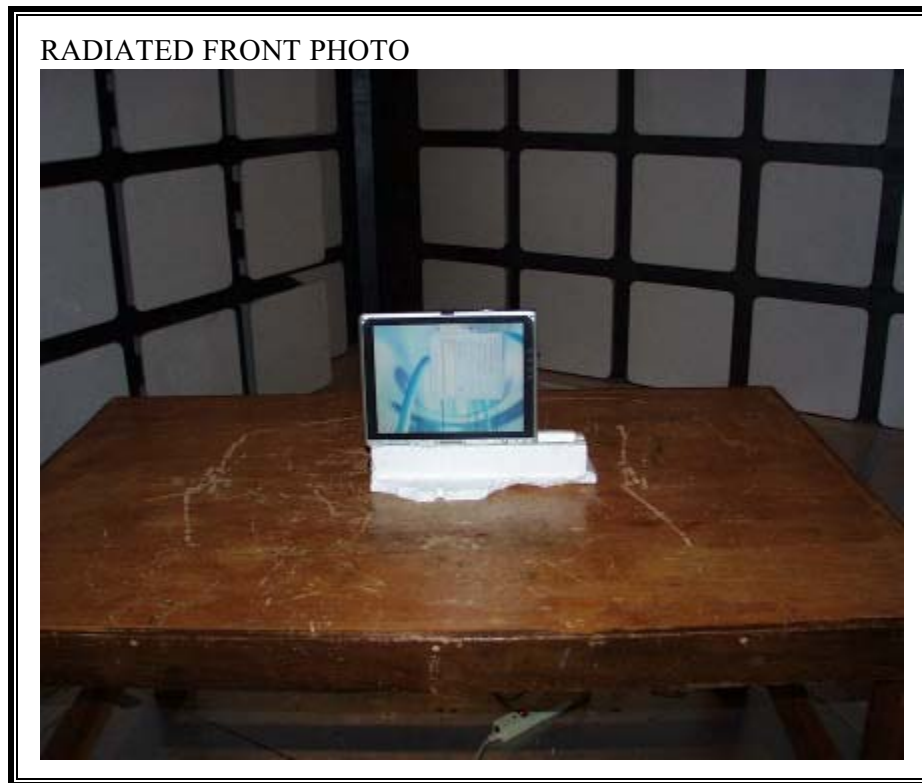
RADIATED RF MEASUREMENT SETUP (PORTABLE TABLET CONFIGURATION, X ORIENTATION)



RADIATED BACK PHOTO



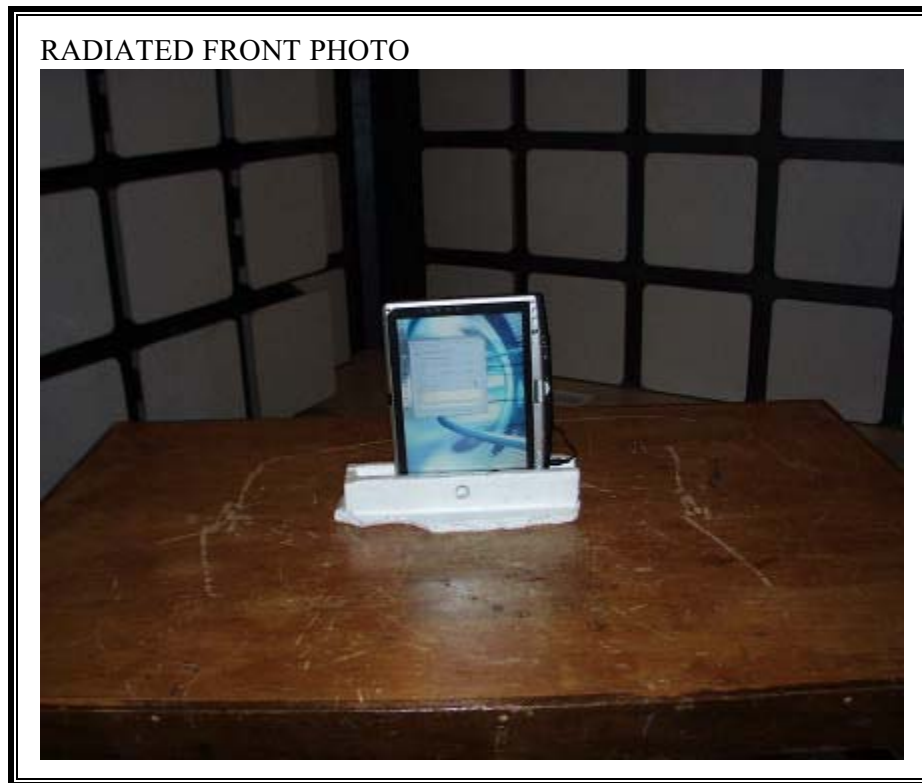
RADIATED RF MEASUREMENT SETUP (PORTABLE TABLET CONFIGURATION, Y ORIENTATION)



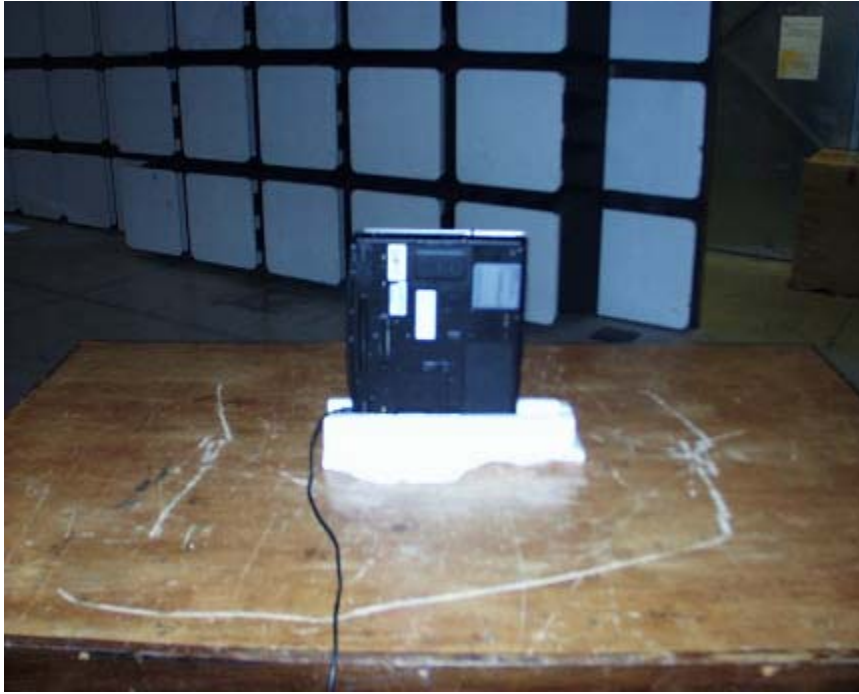
RADIATED BACK PHOTO



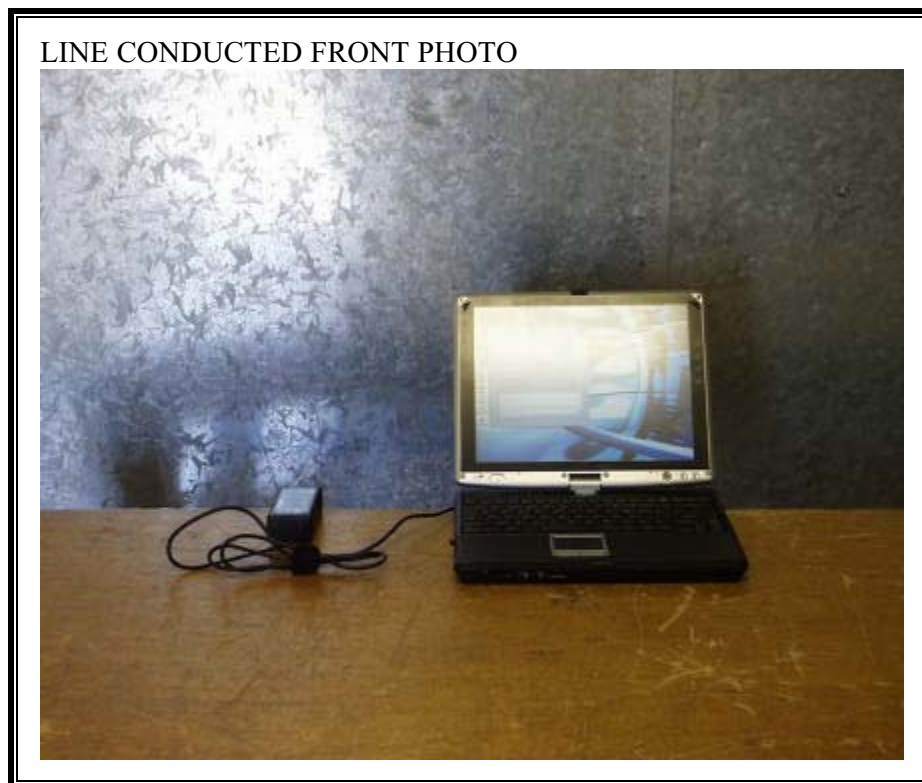
RADIATED RF MEASUREMENT SETUP (PORTABLE TABLET CONFIGURATION, Z ORIENTATION)



RADIATED BACK PHOTO



POWERLINE CONDUCTED EMISSIONS MEASUREMENT SETUP



LINE CONDUCTED BACK PHOTO



END OF REPORT