

5 GHz BAND**SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)****HORIZONTAL**

561F Monterey Road
Morgan Hill, CA 95037
Tel: (408) 463-0888
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Data#: 26 File#: 30-1000.EMI Date: 04-22-2006 Time: 12:26:22
Audix ATC

Condition: FCC CLASS-B HORIZONTAL
Test Operator : Vien Tran
Project # : 06U10233
Company : Broadcom
EUT : 2x2 Dual Band MIMO Device
Model No : BCM94321MCAG Rev. 3
S/N : 107
Configuration : EUT and Laptop
Mode of operation: Tx 5 GHz Band Legacy_Worst Case

Page: 1

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	30.000	10.25	20.45	30.70	40.00	-9.30	Peak
2	124.090	22.03	15.23	37.26	43.50	-6.24	Peak
3	204.600	22.80	13.91	36.71	43.50	-6.79	Peak
4	575.140	19.36	21.20	40.56	46.00	-5.44	Peak
5	643.040	18.98	22.23	41.21	46.00	-4.79	QP
6	643.040	22.77	22.23	45.00	46.00	-1.00	Peak
7	681.840	19.01	22.86	41.87	46.00	-4.13	Peak

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

561F Monterey Road
Morgan Hill, CA 95037
Tel: (408) 463-0888
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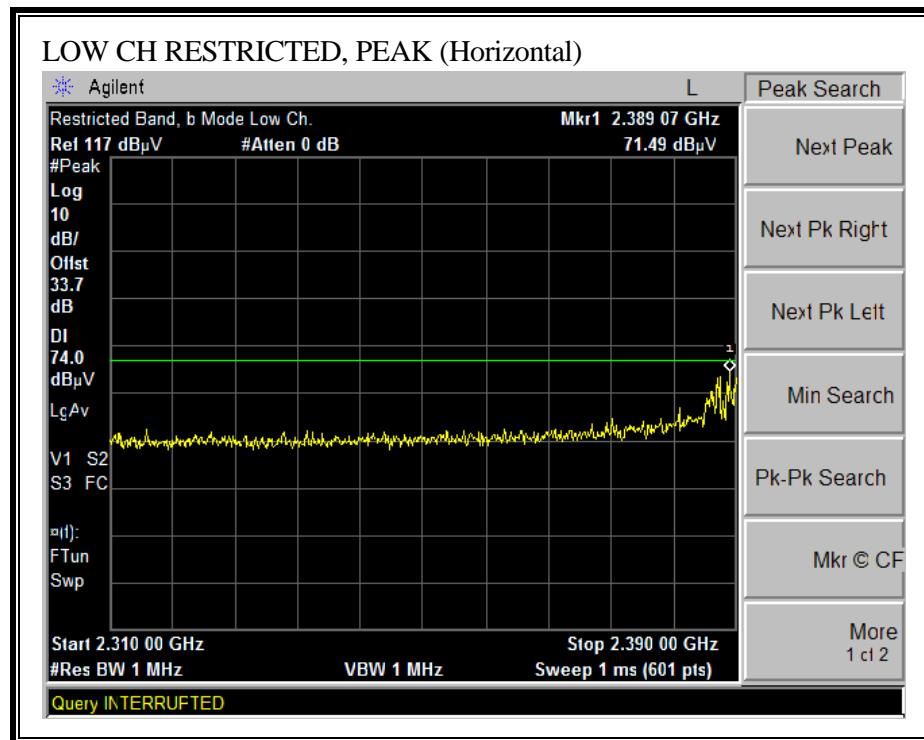
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Audix ATC

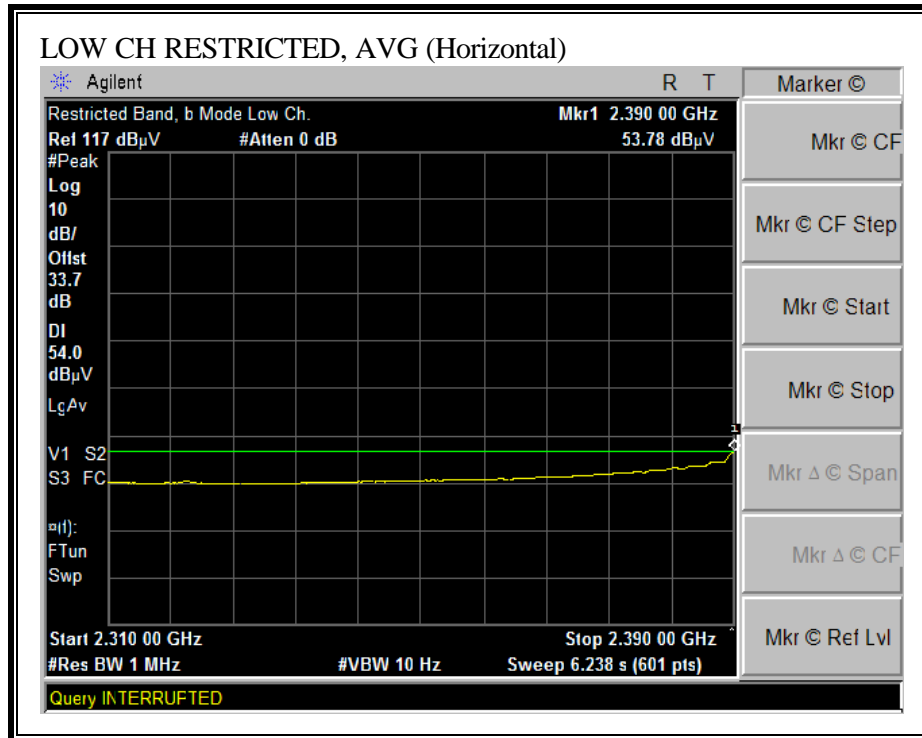
Condition: FCC CLASS-B VERTICAL

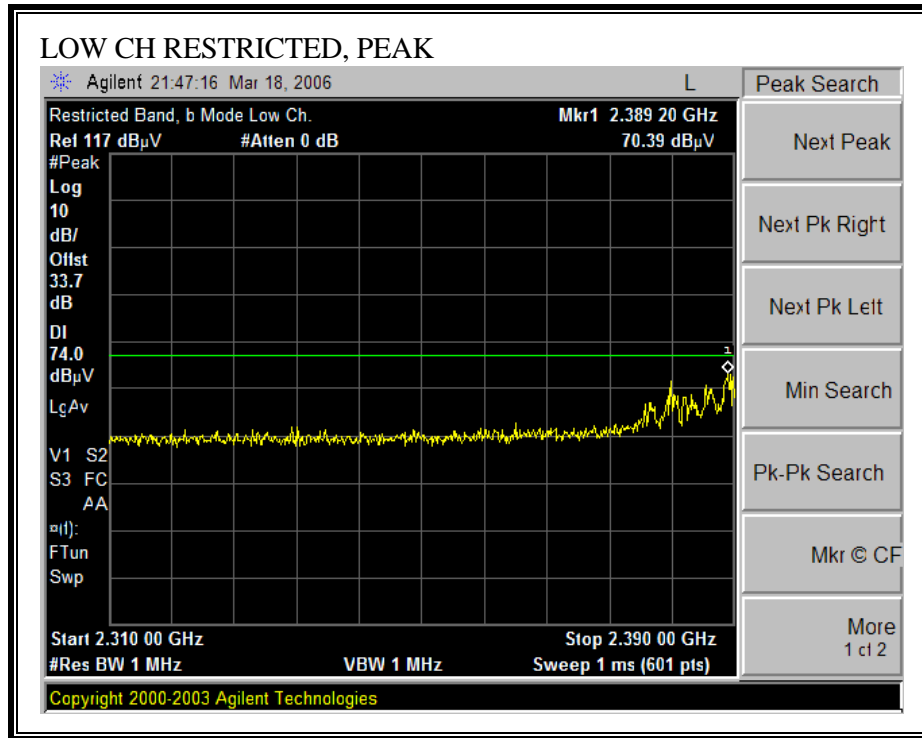
Test Operator : Vien Tran
Project # : 06U10233
Company : Broadcom
EUT : 2x2 Dual Band MIMO Device
Model No : BCM94321MCAG Rev. 3
S/N : 107
Configuration : EUT and Laptop
Mode of operation: Tx 5 GHz Band Legacy_Worst Case

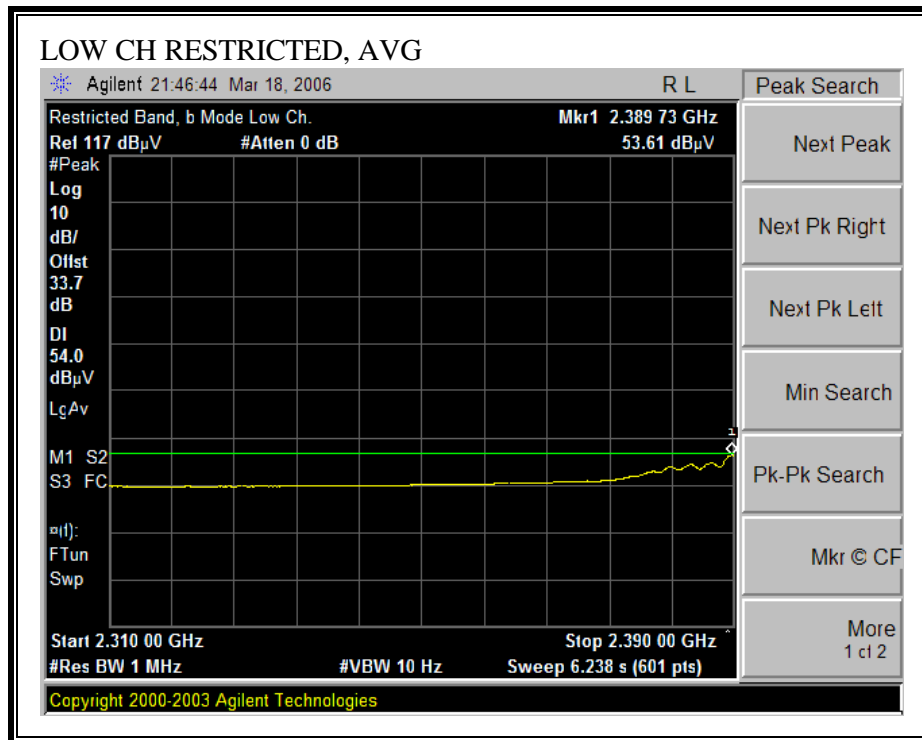
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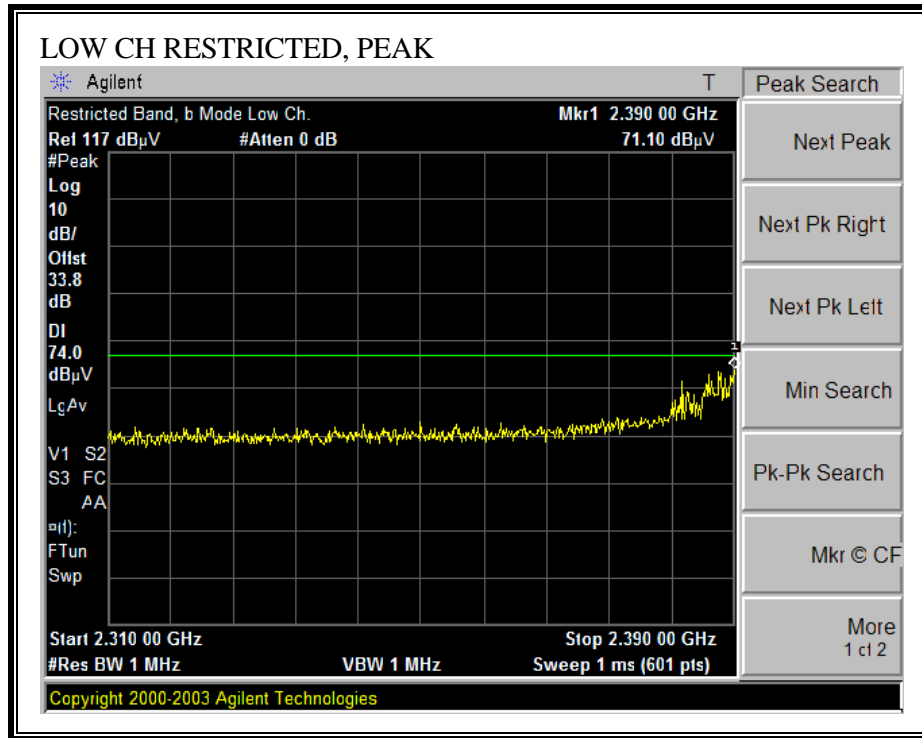
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	63.950	23.56	8.97	32.54	40.00	-7.46	Peak
2	124.090	24.88	15.23	40.11	43.50	-3.39	QP
3 *	124.090	28.68	15.23	43.91	43.50	0.41	Peak
4	407.330	20.73	18.21	38.94	46.00	-7.06	Peak
5	574.170	20.64	21.18	41.81	46.00	-4.19	Peak
6	643.040	20.36	22.23	42.59	46.00	-3.41	Peak
7	705.120	17.50	23.16	40.66	46.00	-5.34	Peak

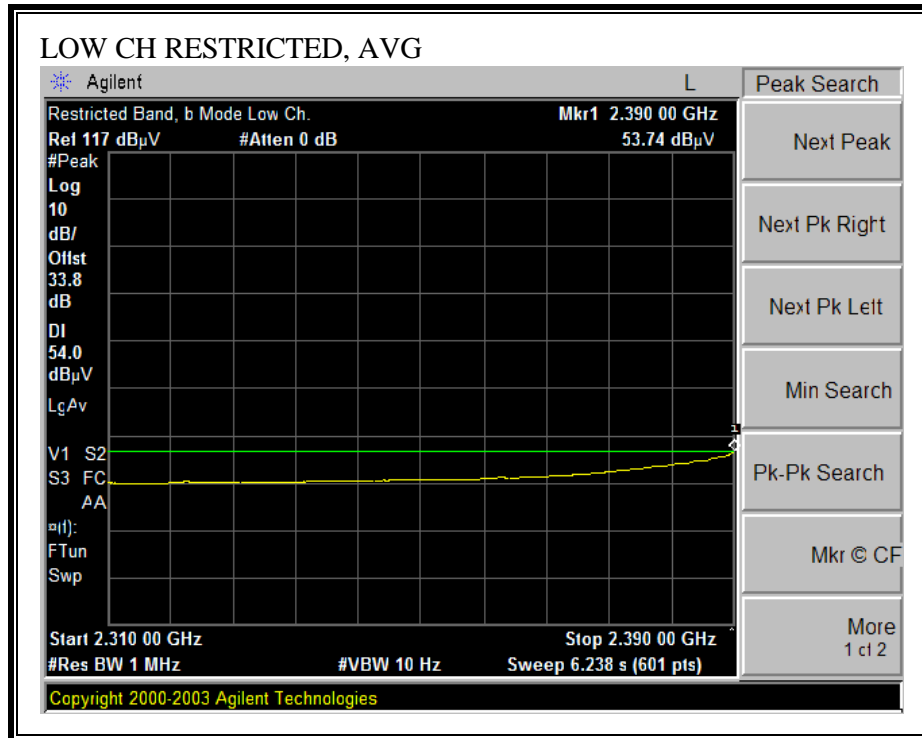
MIMO MODE**7.13.5. TRANSMITTER ABOVE 1 GHz FOR 2400 TO 2483.5 MHz BAND****20 MHz TX BANDWIDTH****RESTRICTED BANDEDGE (LOW CHANNEL, 2412 MHz, HORIZONTAL)**

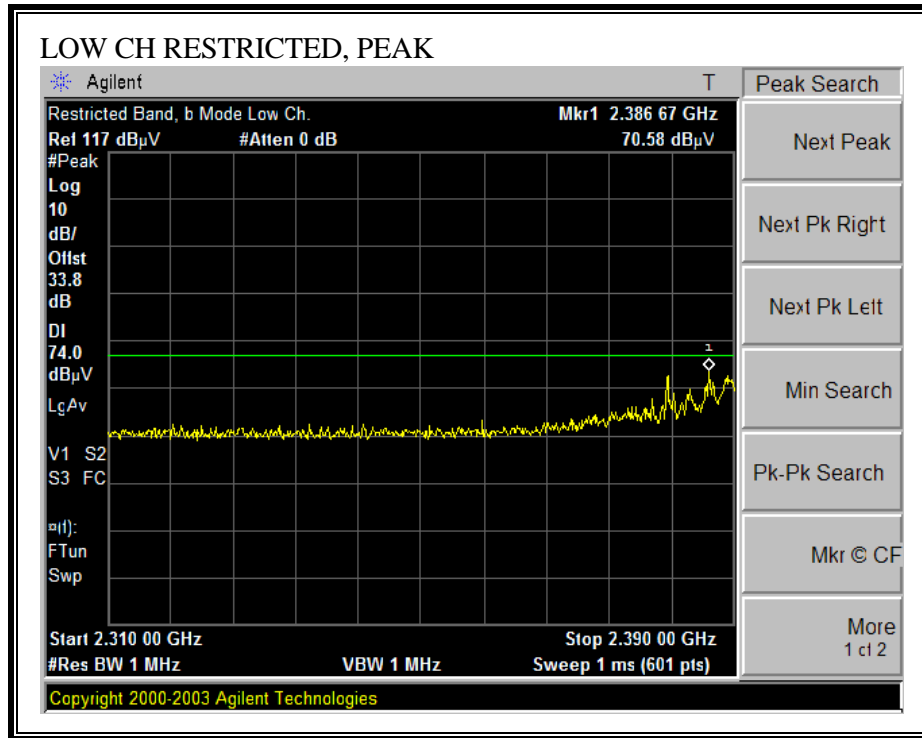


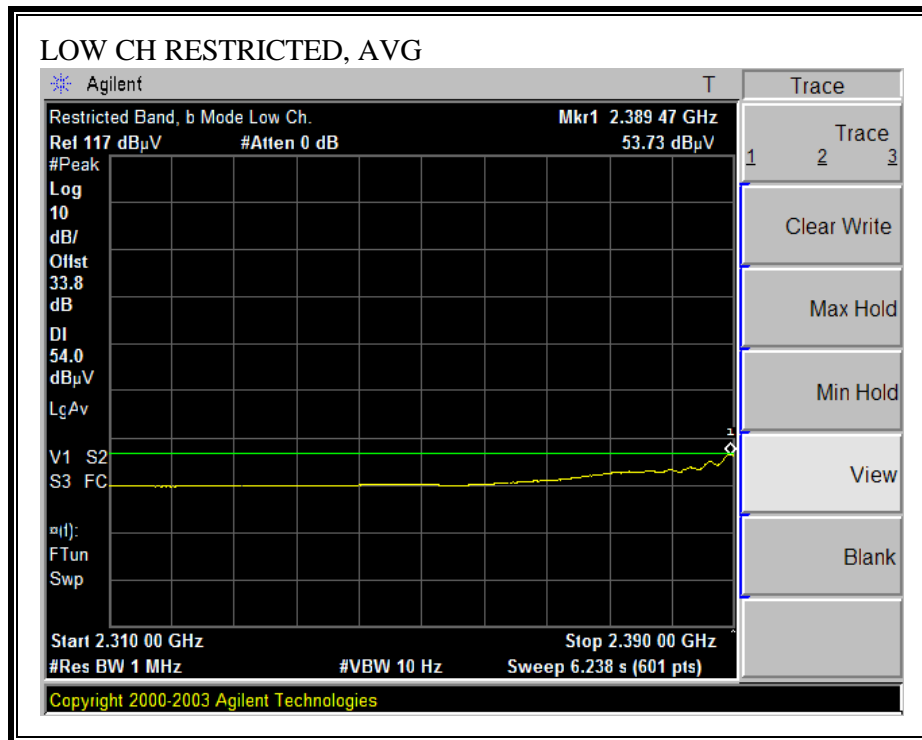
RESTRICTED BANDEDGE (LOW CHANNEL, 2412 MHz, VERTICAL)

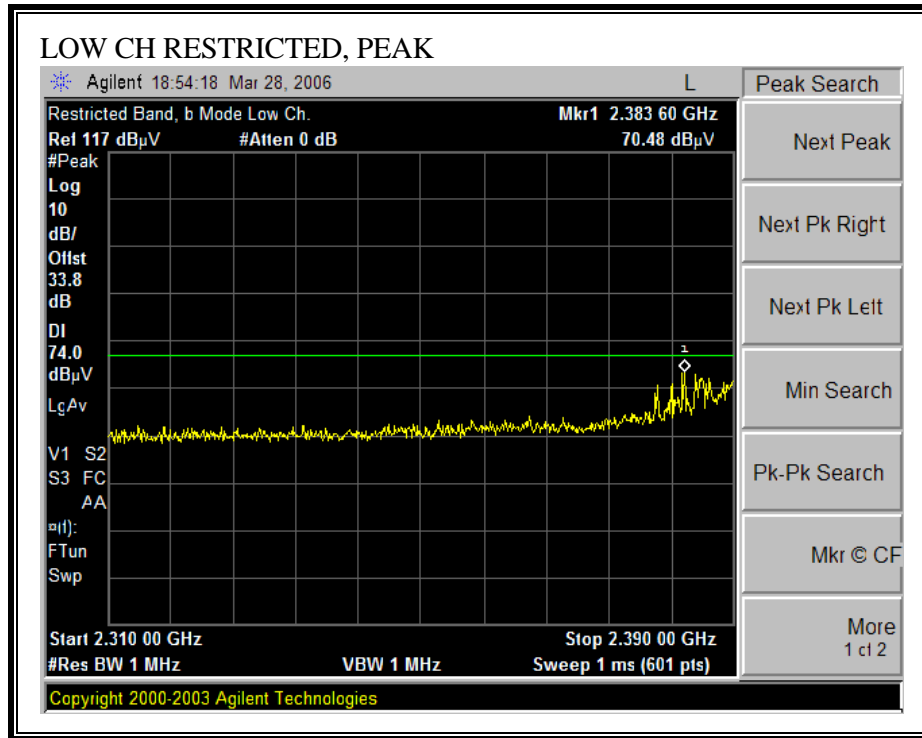


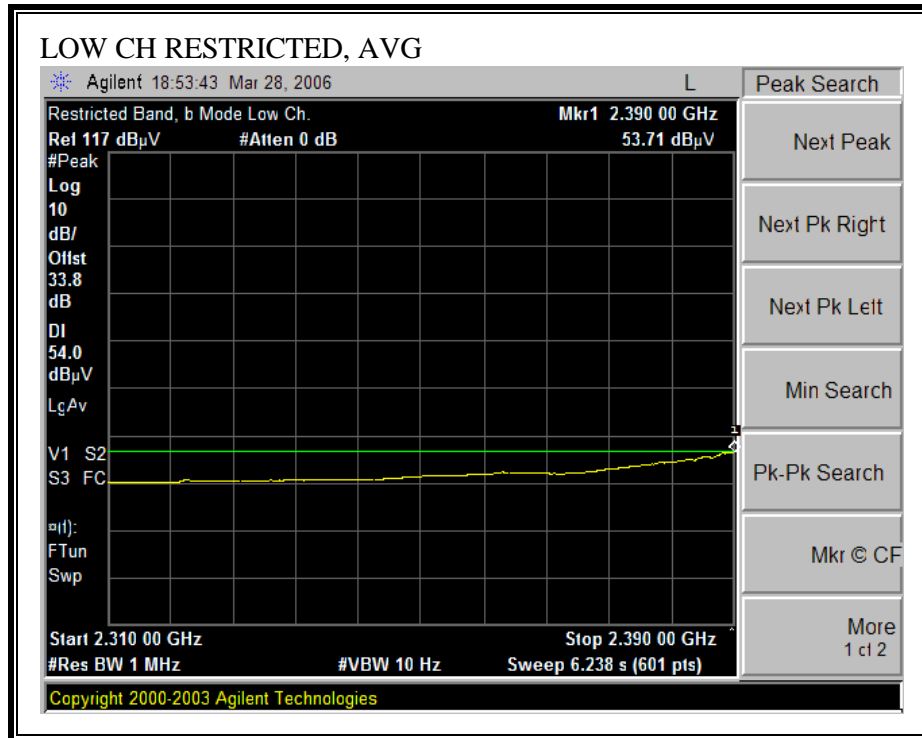
RESTRICTED BANDEDGE (LOW CHANNEL, 2417 MHz, HORIZONTAL)

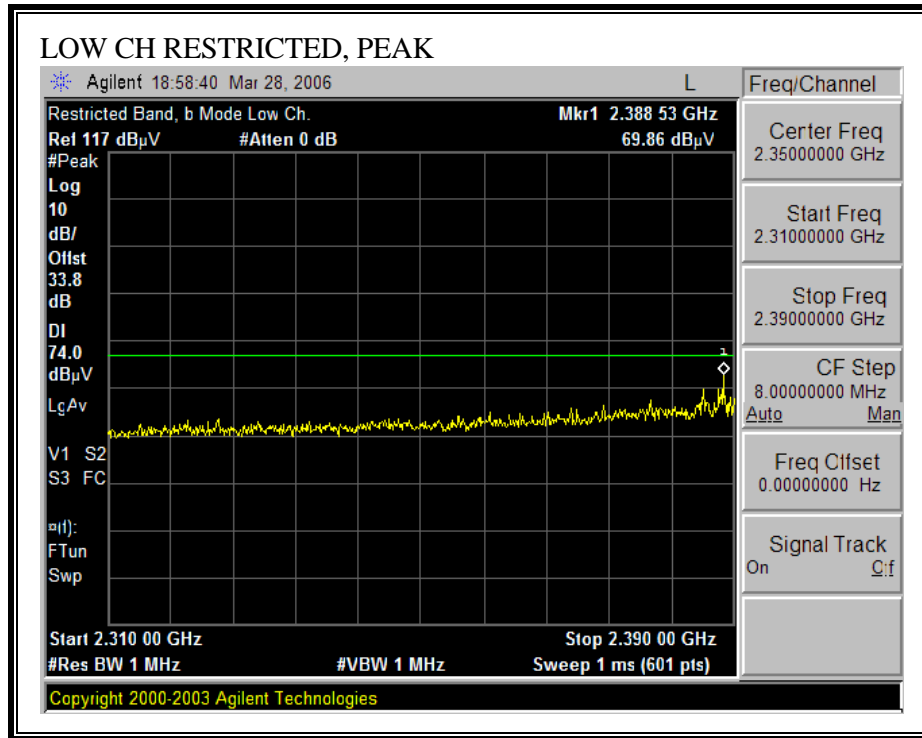


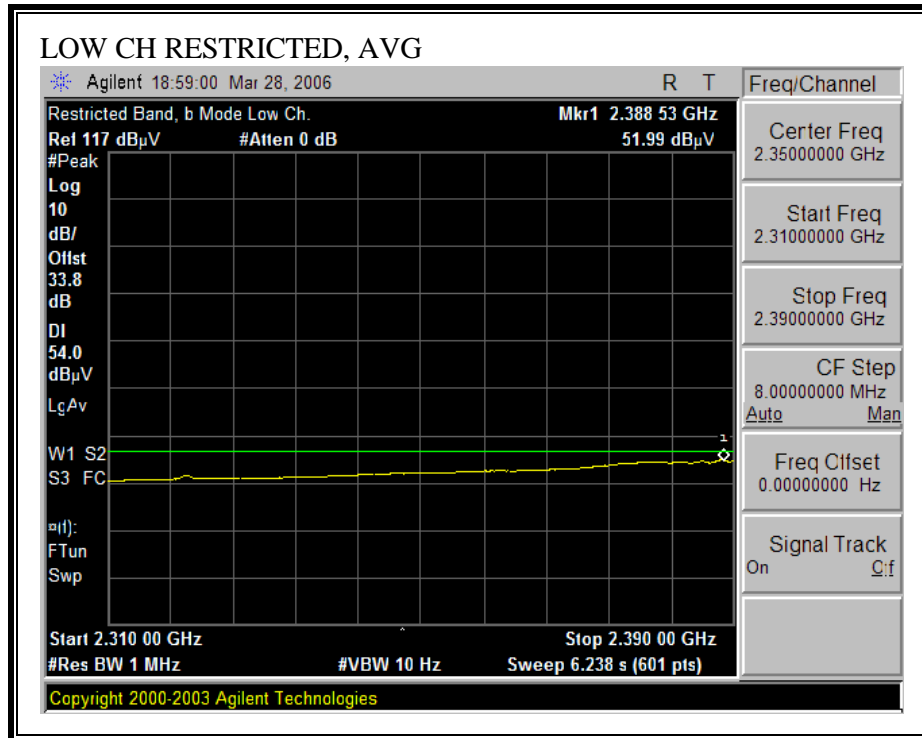
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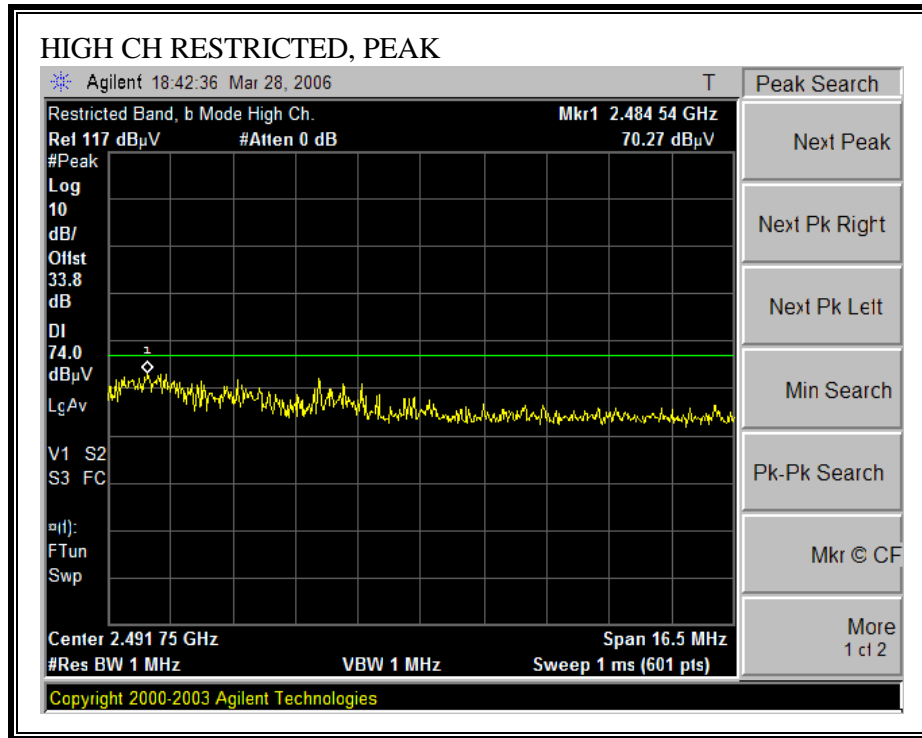


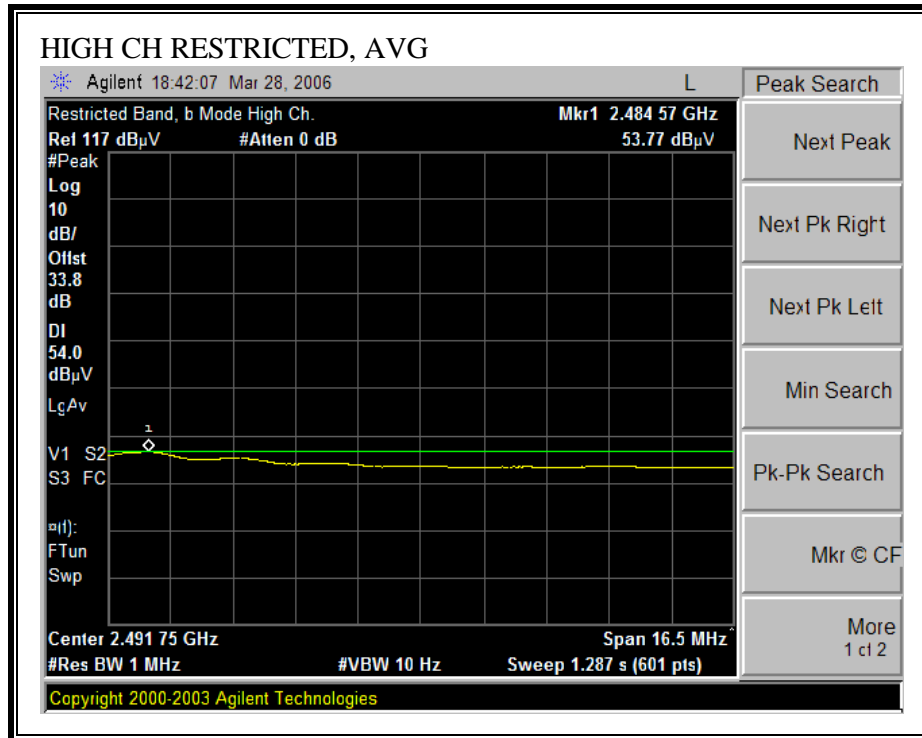
RESTRICTED BANDEDGE (LOW CHANNEL, 2422 MHz, HORIZONTAL)

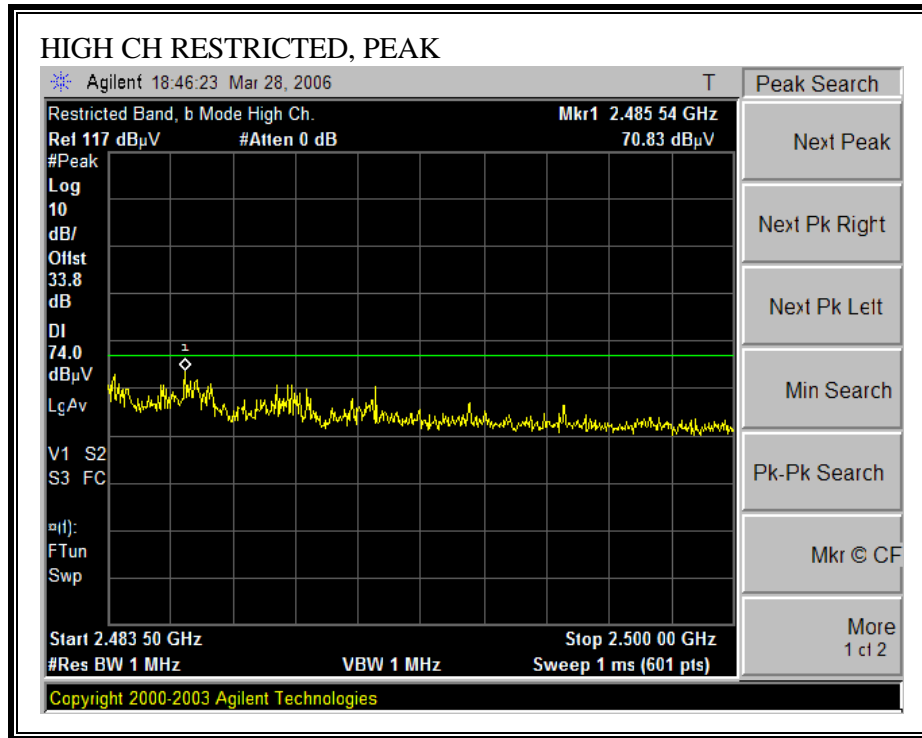


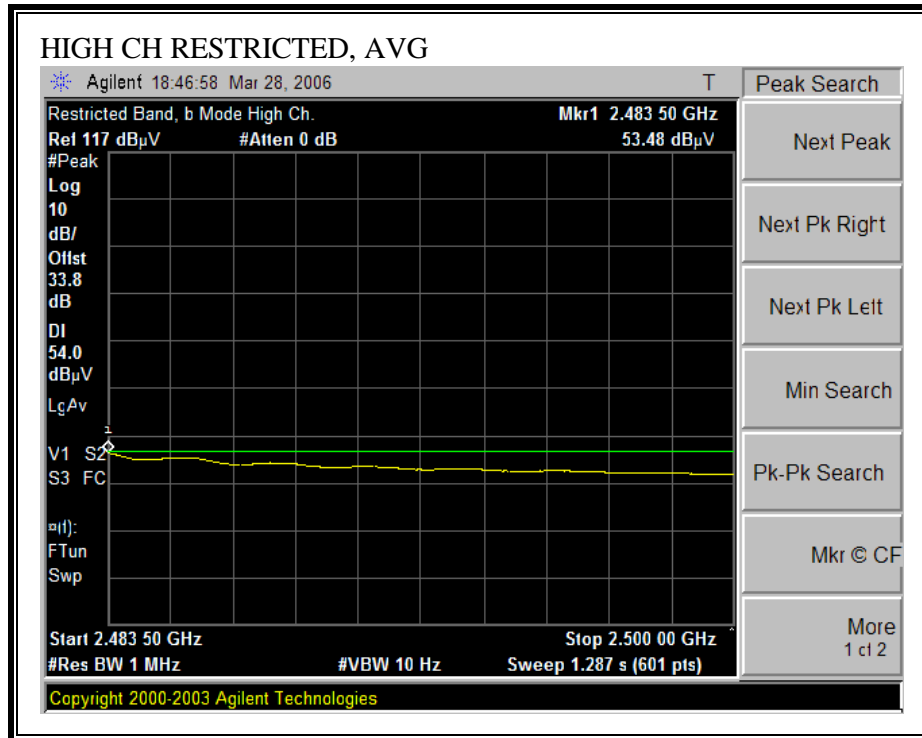
RESTRICTED BANDEDGE (LOW CHANNEL, 2417 MHz, VERTICAL)

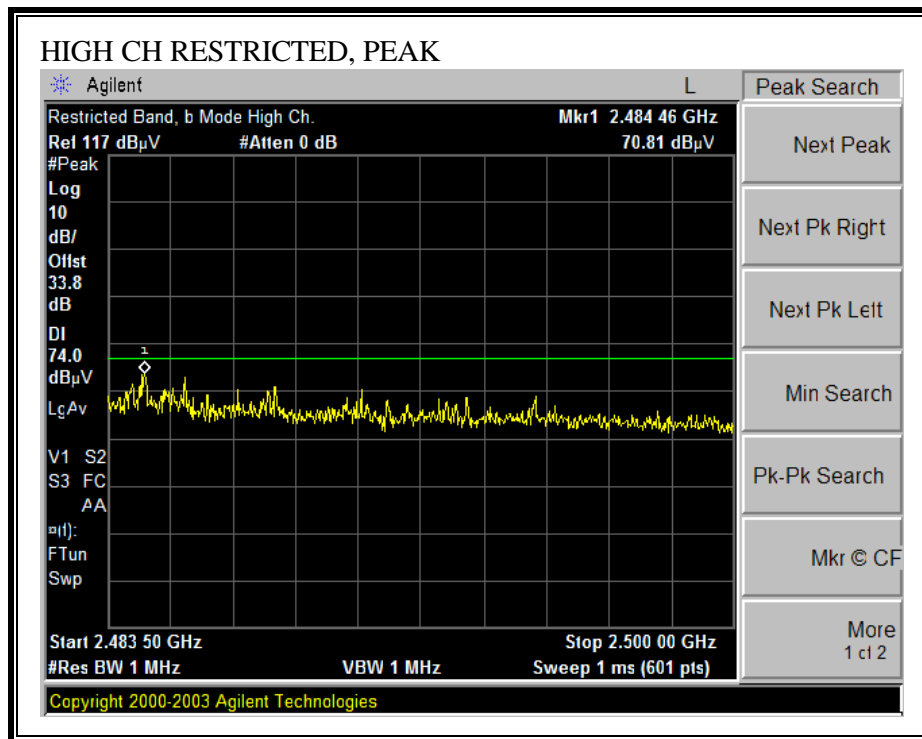


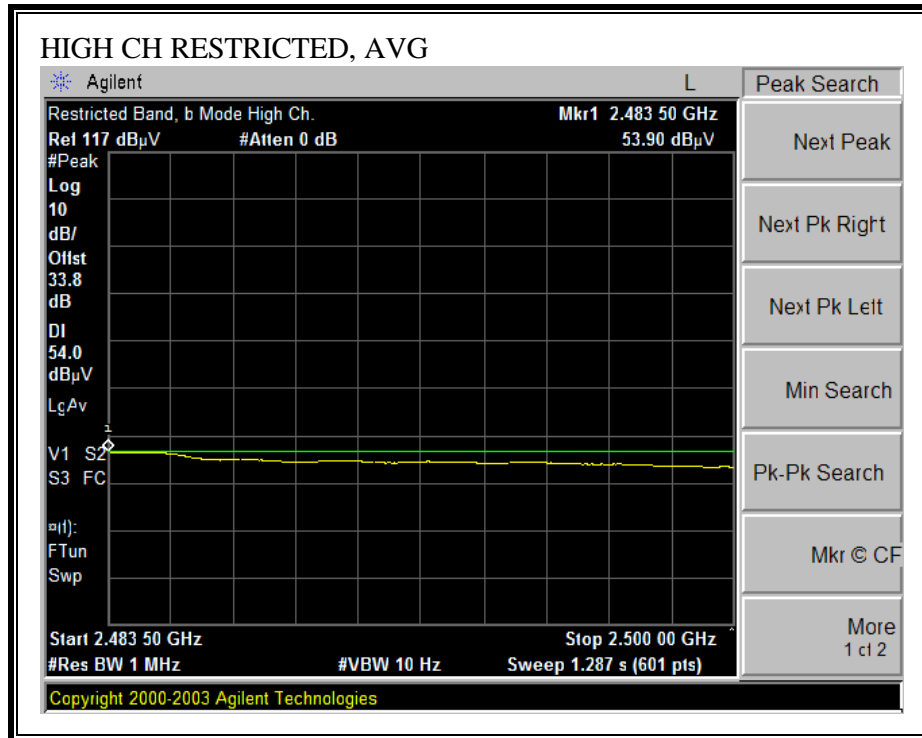
RESTRICTED BANDEDGE (HIGHCHANNEL, 2457 MHz, HORIZONTAL)

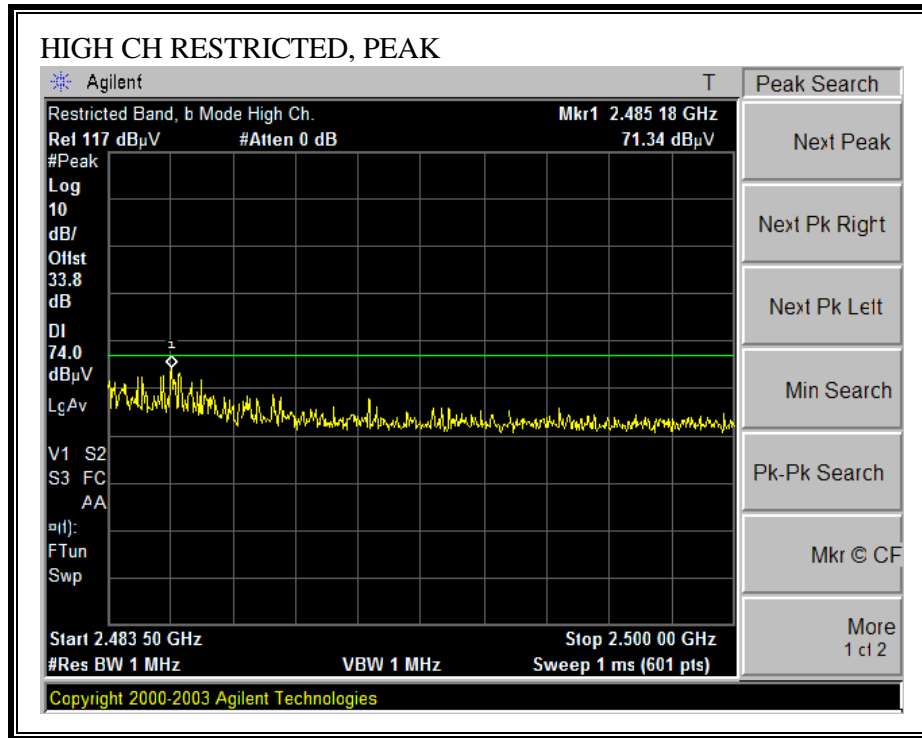


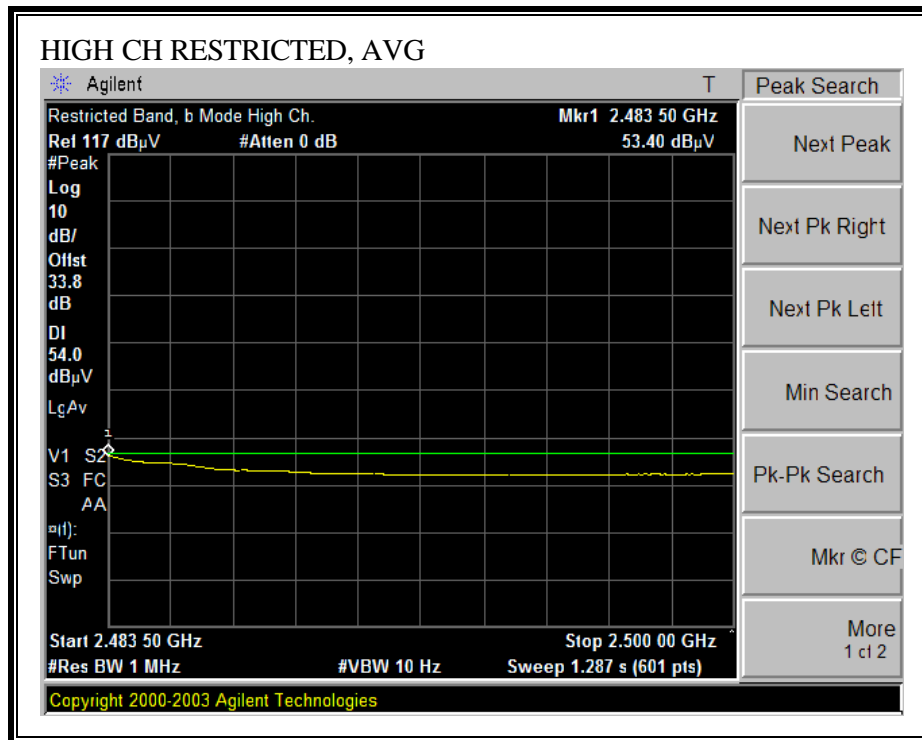
RESTRICTED BANDEDGE (HIGH CHANNEL, 2457 MHz, VERTICAL)



RESTRICTED BANDEDGE (HIGH CHANNEL, 2462 MHz, HORIZONTAL)

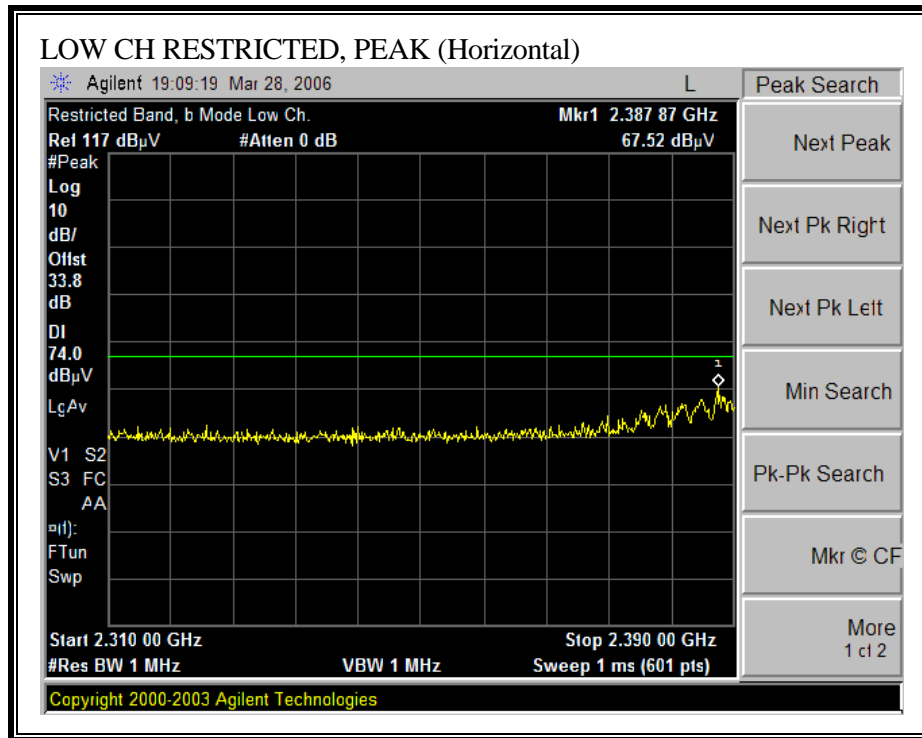


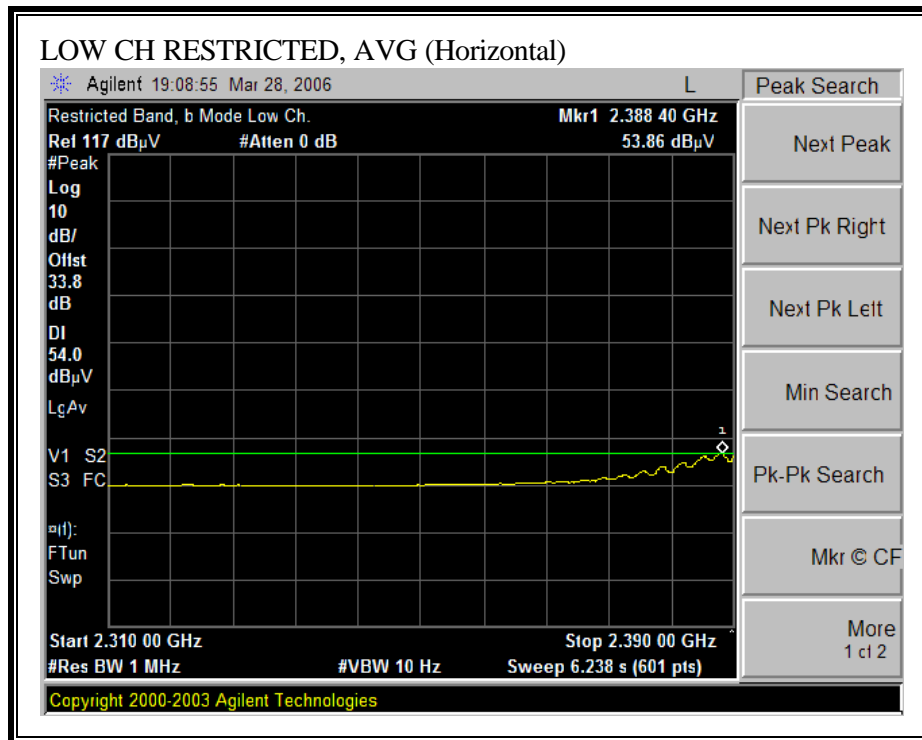
RESTRICTED BANDEDGE (HIGH CHANNEL, 2462 MHz, VERTICAL)

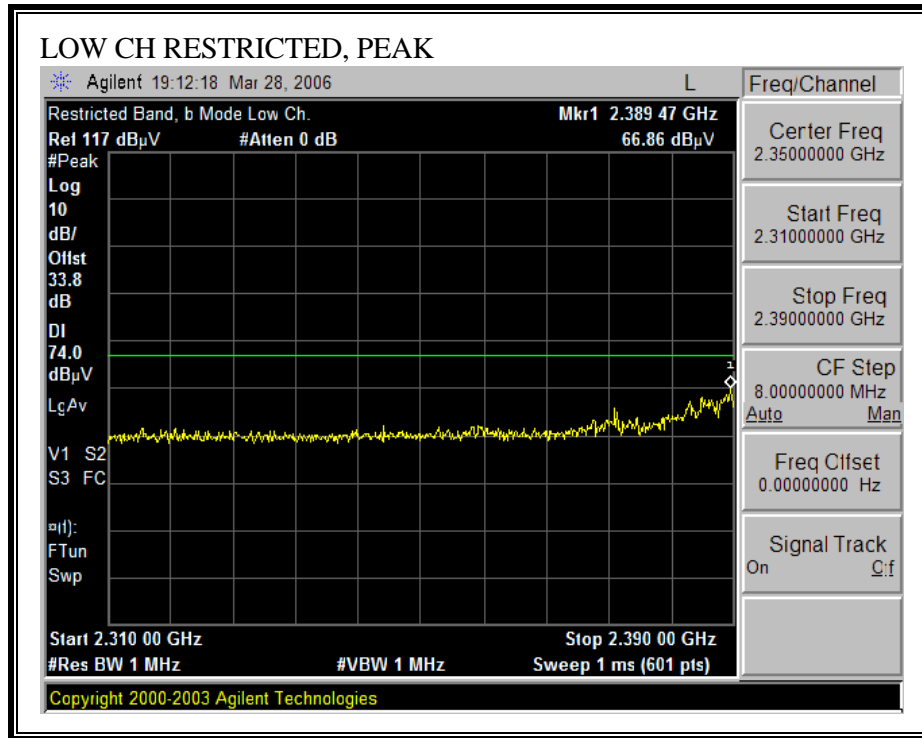


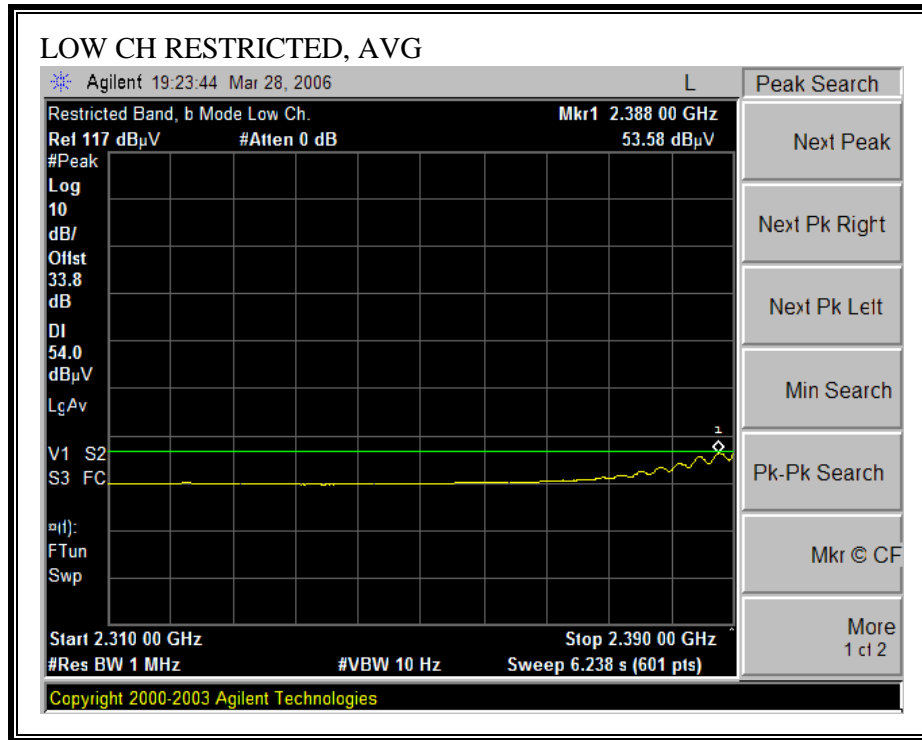
HARMONICS AND SPURIOUS EMISSIONS – 20 MHz TX BANDWIDTH

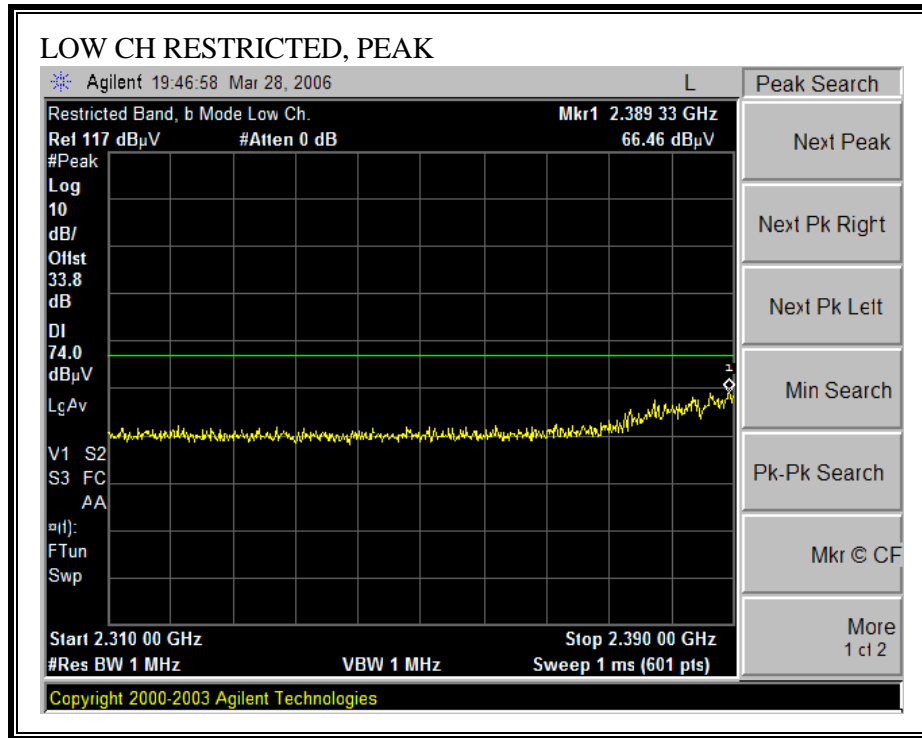
03/28/06 High Frequency Measurement																	
Compliance Certification Services, Morgan Hill Open Field Site																	
Test Engineer:		Vien Tran															
Project #:		06U10233															
Company:		Broadcom															
EUT Description:		2x2 Dual Band MIMO Device															
EUT M/N:		BCM94321MCAG Rev 3.0															
EUT S/N:		107															
Test Target:		FCC 15.247															
Mode Of Operation:		2.4 GHz Band_Tx 20 MHz BANDWIDTH															
Test Equipment:																	
Horn 1-18GHz				Pre-amplifier 1-26GHz				Pre-amplifier 26-40GHz				Horn > 18GHz				Limit	
T120; S/N: 29310 @3m				T87 Miteq 924342												FCC 15.209	
Hi Frequency Cables																	
2 foot cable				3 foot cable				12 foot cable				HPF				Reject Filter	
				Vien 187215002				Vien 197209005				HPF_4.0GHz					
Peak Measurements RBW=VBW=1MHz Average Measurements RBW=1MHz ; VBW=10Hz																	
f GHz	Dist (m)	Read Pk dBuV	Read Avg. dBuV	AF dBm	CL dB	Amp dB	D Corr dB	Filtr dB	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes (V/H)		
Low Ch. 2412 MHz 17dBm																	
4.824	3.0	62.3	55.3	33.9	2.9	-45.3	0.0	0.6	54.4	45.4	74	54	-19.6	-8.6	Y		
7.236	3.0	54.4	45.4	35.9	4.2	-43.3	0.0	0.6	51.7	42.7	74	54	-22.3	-11.3	H		
9.648	3.0	52.1	40.9	37.6	4.7	-39.9	0.0	0.8	55.4	44.2	74	54	-18.6	-9.8	H		
12.060	3.0	46.9	35.7	38.6	4.8	-40.0	0.0	0.9	51.3	40.1	74	54	-22.7	-13.9	H		
4.824	3.0	69.0	61.3	33.9	2.9	-45.3	0.0	0.6	61.1	53.4	74	54	-12.9	-0.6	H		
7.236	3.0	60.0	48.8	35.9	4.2	-43.3	0.0	0.6	57.3	46.1	74	54	-16.7	-7.9	H		
9.648	3.0	54.8	43.6	37.6	4.7	-39.9	0.0	0.8	58.1	46.9	74	54	-15.9	-7.1	H		
12.060	3.0	49.6	37.9	38.6	4.8	-40.0	0.0	0.9	53.9	42.2	74	54	-20.1	-11.8	H		
Mid Ch. 2437 MHz 17dBm																	
4.874	3.0	59.6	51.1	34.0	3.0	-45.3	0.0	0.6	51.8	43.3	74	54	-22.2	-10.7	H		
7.311	3.0	47.4	36.6	35.9	4.2	-43.3	0.0	0.6	44.8	34.0	74	54	-29.2	-20.0	H		
9.748	3.0	44.2	33.4	37.7	4.7	-39.6	0.0	0.8	47.8	37.0	74	54	-26.2	-17.0	H		
12.185	3.0	41.4	30.7	38.6	4.9	-40.1	0.0	0.9	45.7	35.0	74	54	-28.3	-19.0	H		
4.874	3.0	68.2	59.7	34.0	3.0	-45.3	0.0	0.6	60.4	51.9	74	54	-13.6	-2.1	H		
7.311	3.0	56.0	45.2	35.9	4.2	-43.3	0.0	0.6	53.5	42.7	74	54	-20.5	-11.3	H		
9.748	3.0	52.8	42.0	37.7	4.7	-39.6	0.0	0.8	56.4	45.6	74	54	-17.6	-8.4	H		
12.185	3.0	50.0	39.3	38.6	4.9	-40.1	0.0	0.9	54.3	43.6	74	54	-19.7	-10.4	H		
High Ch. 2462 MHz 17dBm																	
4.924	3.0	62.0	52.5	34.0	3.1	-45.4	0.0	0.6	54.3	44.8	74	54	-19.7	-9.2	Y		
7.366	3.0	53.0	43.5	35.9	4.2	-43.1	0.0	0.6	50.7	41.2	74	54	-23.3	-12.8	Y		
9.804	3.0	48.7	36.8	37.4	4.7	-40.2	0.0	0.8	51.4	39.5	74	54	-22.6	-14.5	Y		
12.310	3.0	45.7	34.1	38.7	4.9	-40.2	0.0	0.9	50.1	40.5	74	54	-23.9	-13.5	Y		
4.924	3.0	68.8	60.7	34.0	3.1	-45.4	0.0	0.6	61.1	53.0	74	54	-12.9	-1.0	H		
7.366	3.0	57.7	45.8	35.9	4.2	-43.1	0.0	0.6	55.3	43.4	74	54	-18.7	-10.6	H		
9.804	3.0	54.7	45.1	37.4	4.7	-40.2	0.0	0.8	57.4	47.8	74	54	-16.6	-6.2	H		
12.310	3.0	52.0	41.0	38.7	4.9	-40.2	0.0	0.9	56.3	45.3	74	54	-17.7	-8.7	H		
Note: No other emissions were detected above the noise floor																	

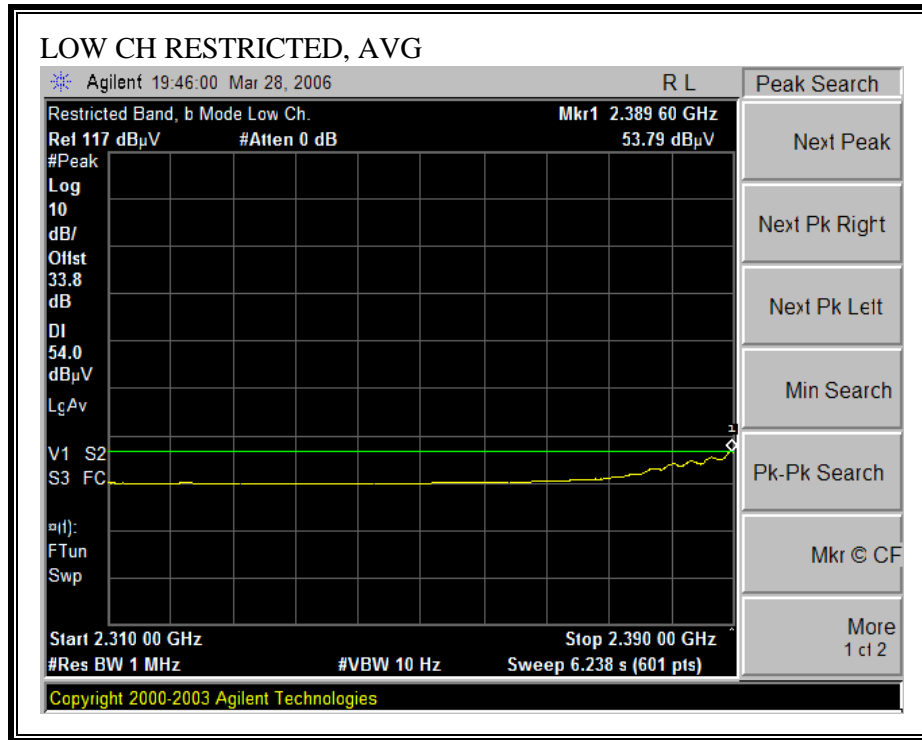
40 MHz TX BANDWIDTH**RESTRICTED BANDEGE (LOW CHANNEL, 2422 MHz, HORIZONTAL)**

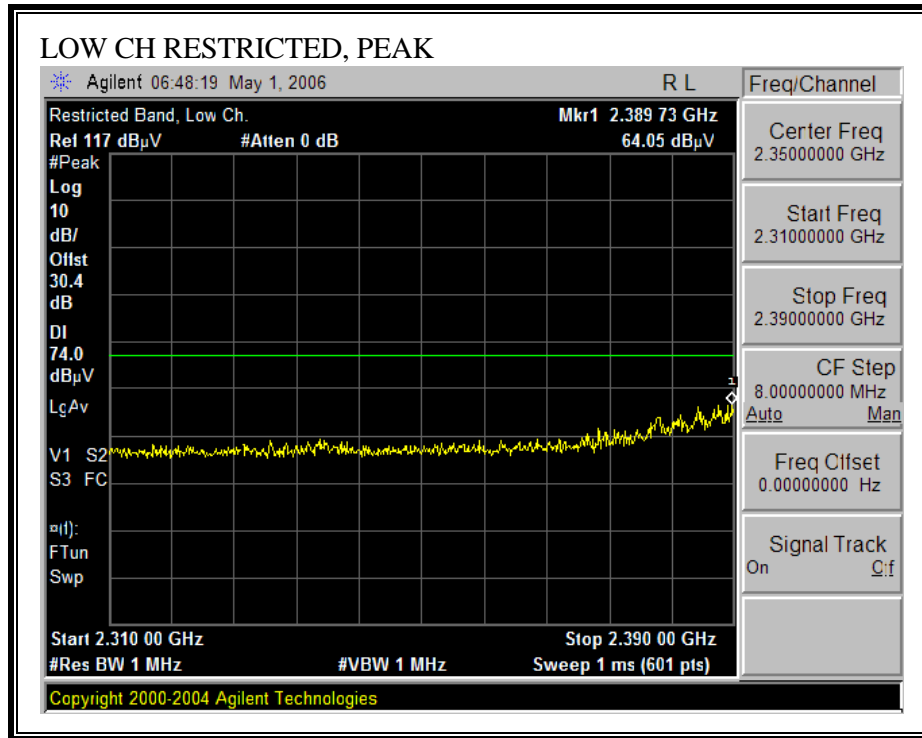


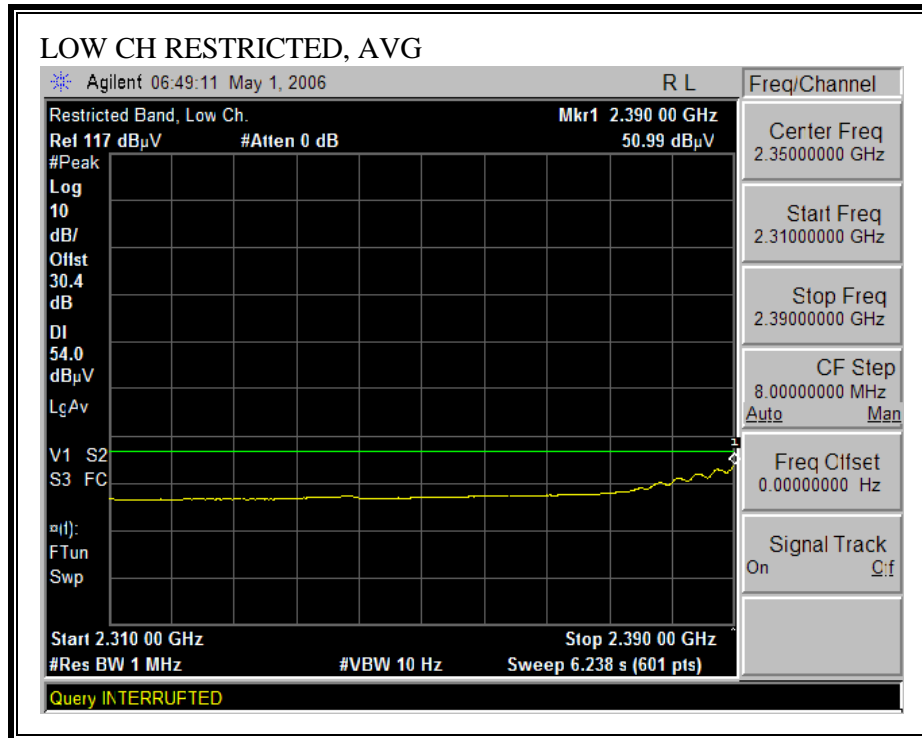
RESTRICTED BANDEDGE (LOW CHANNEL, 2422 MHz, VERTICAL)

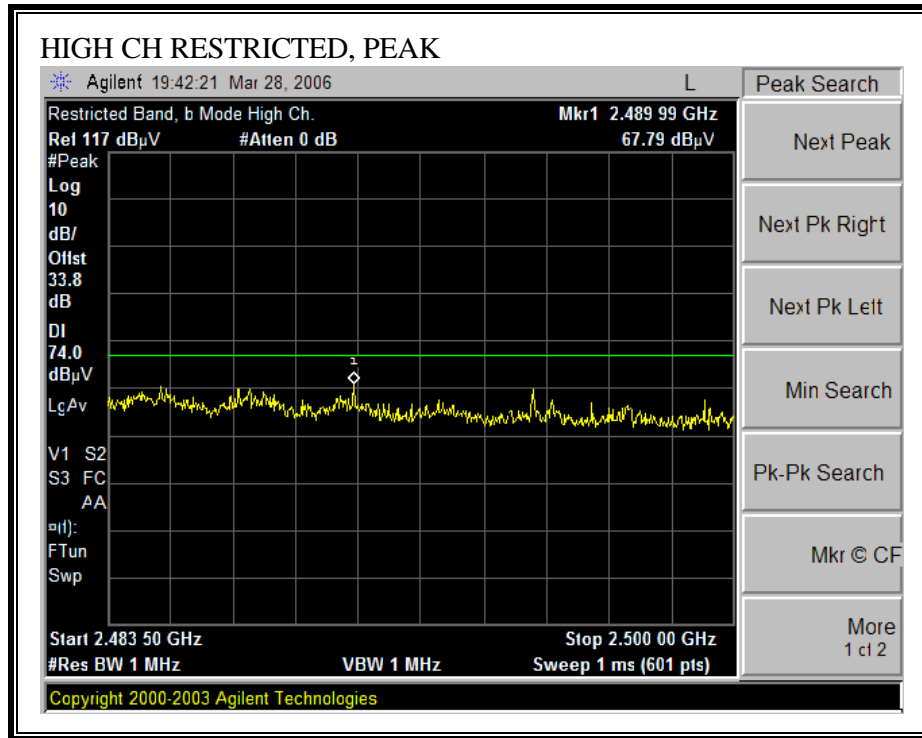


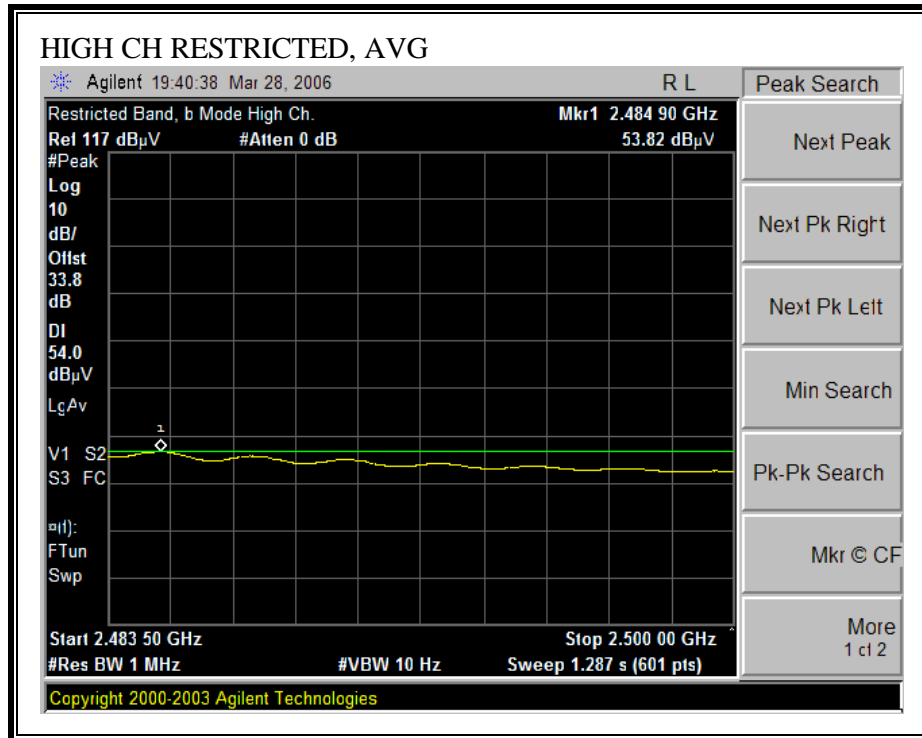
RESTRICTED BANDEDGE (LOW CHANNEL, 2427 MHz, HORIZONTAL)

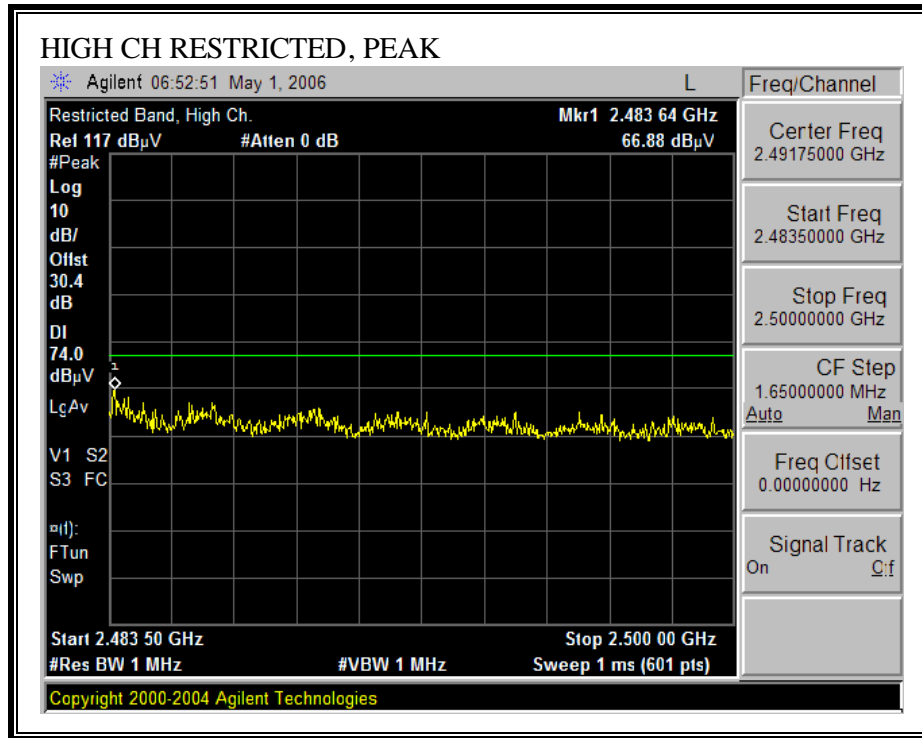


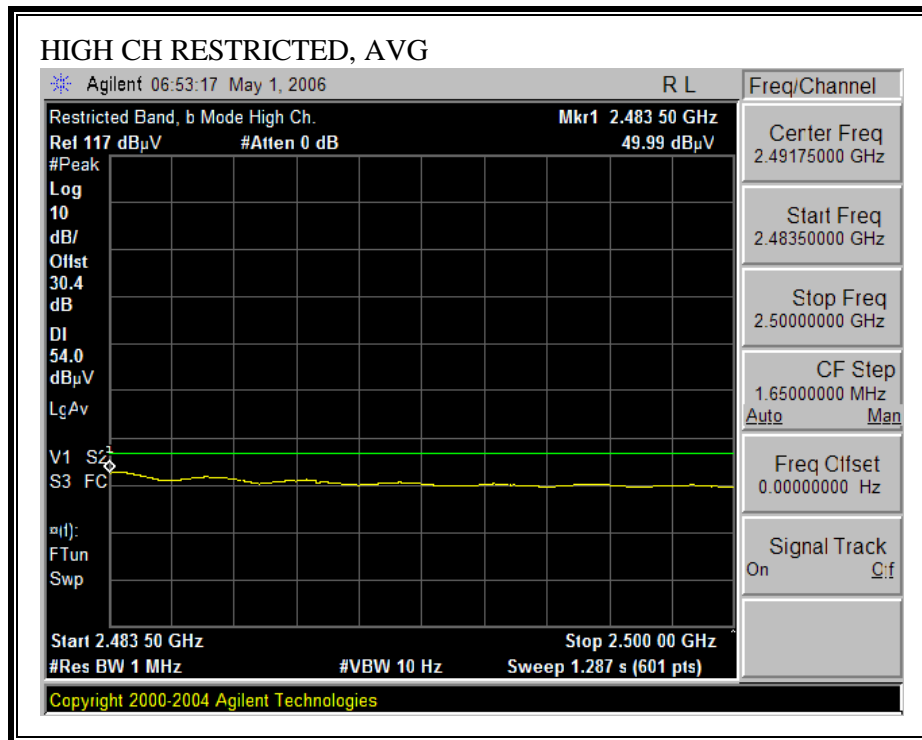
RESTRICTED BANDEDGE (LOW CHANNEL, 2427 MHz, VERTICAL)

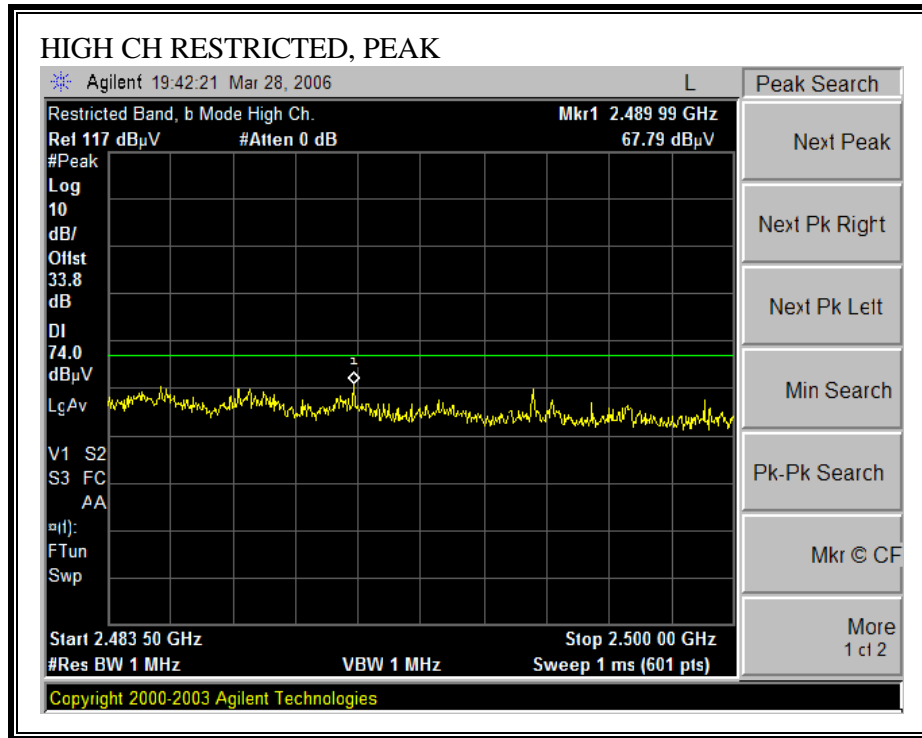


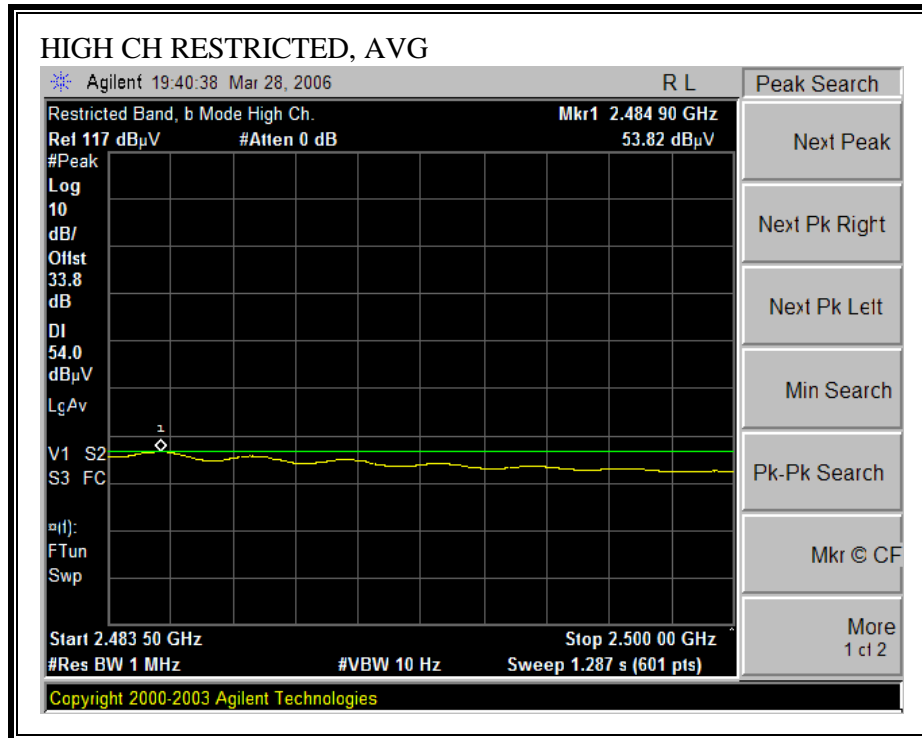
RESTRICTED BANDEDGE (HIGHCHANNEL, 2442 MHz, HORIZONTAL)

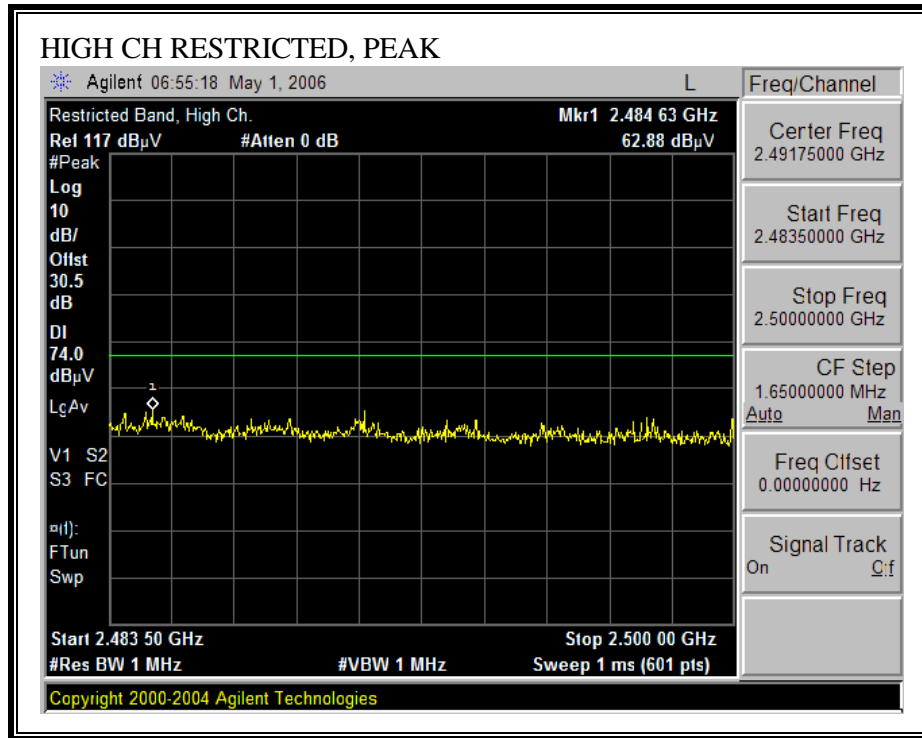


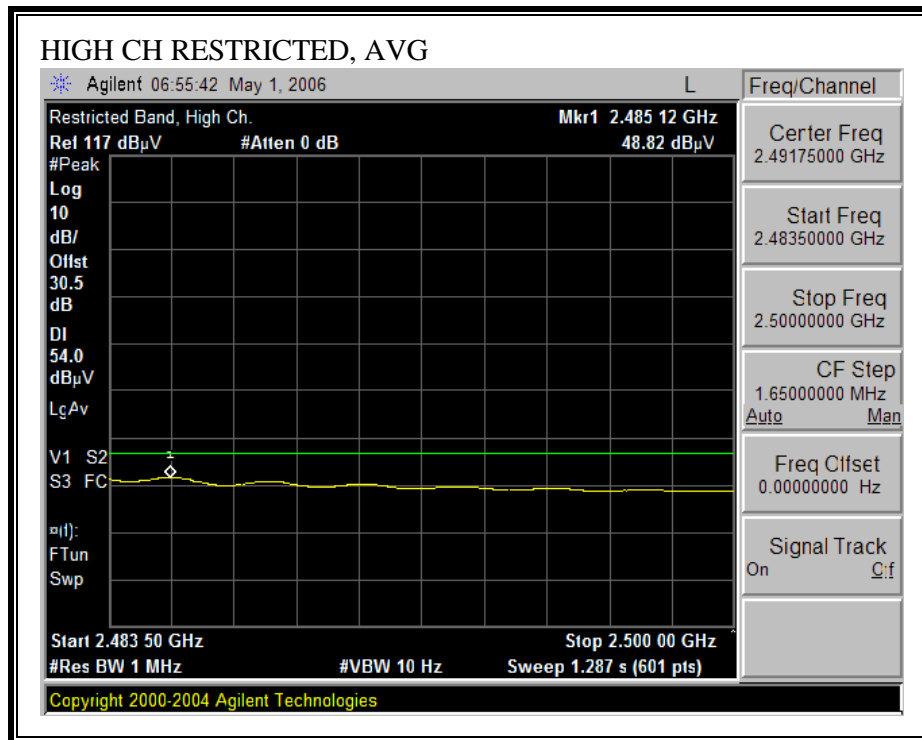
RESTRICTED BANDEDGE (HIGH CHANNEL, 2442 MHz, VERTICAL)

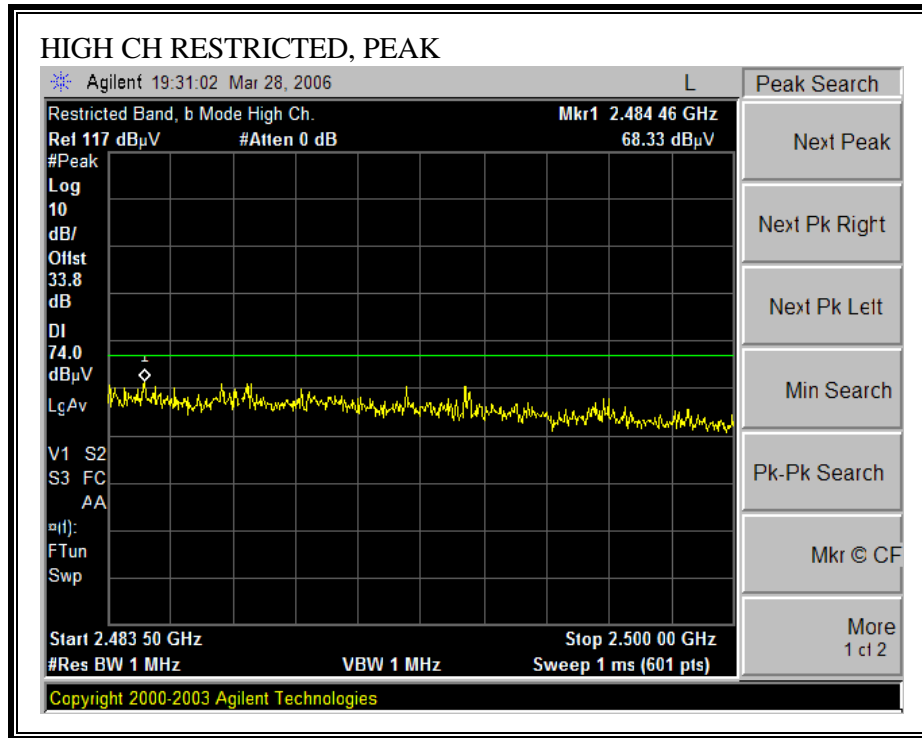


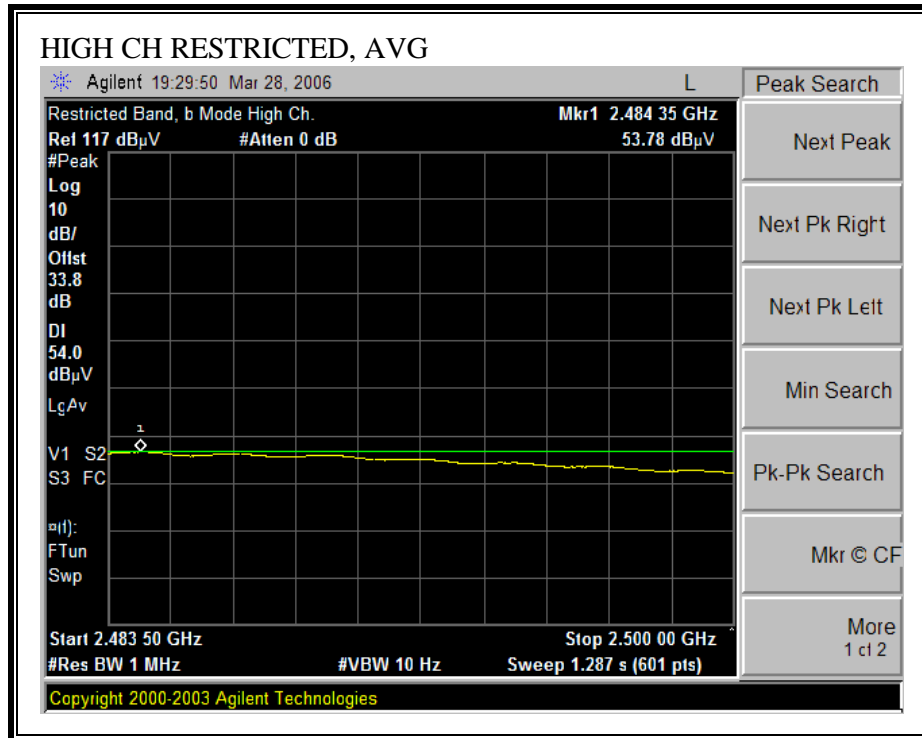
RESTRICTED BANDEDGE (HIGHCHANNEL, 2447 MHz, HORIZONTAL)

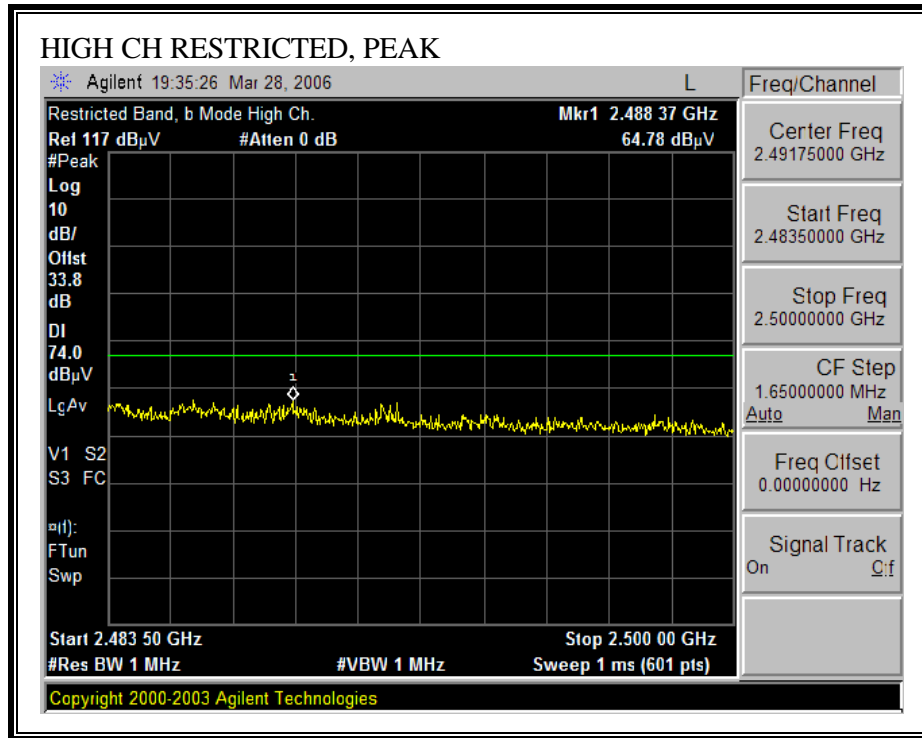


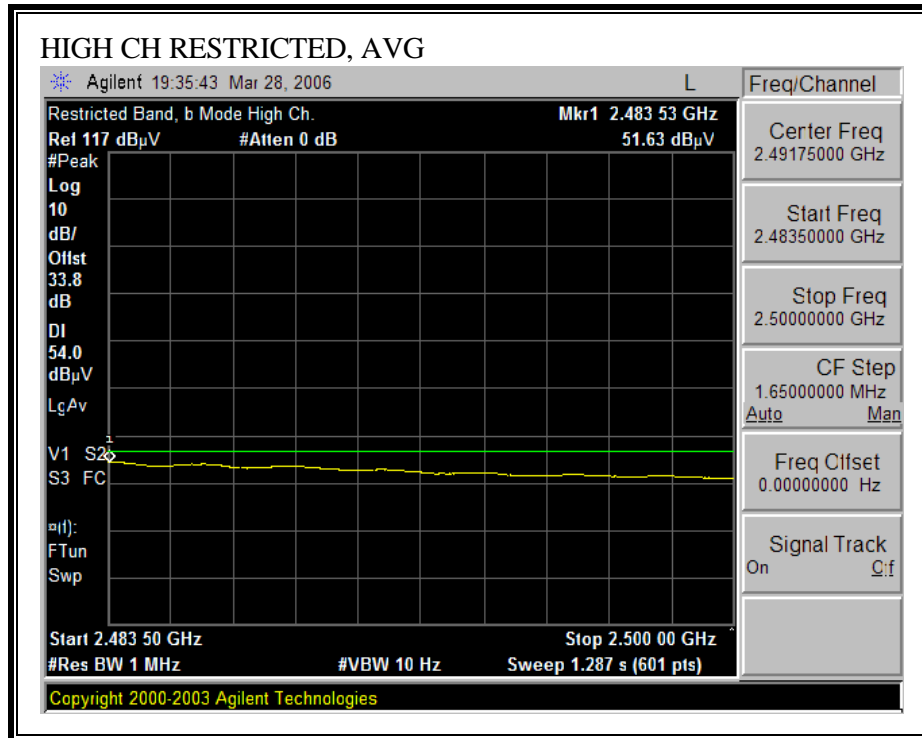
RESTRICTED BANDEDGE (HIGH CHANNEL, 2447 MHz, VERTICAL)



RESTRICTED BANDEDGE (HIGH CHANNEL, 2452 MHz, HORIZONTAL)



RESTRICTED BANDEDGE (HIGH CHANNEL, 2452 MHz, VERTICAL)



HARMONICS AND SPURIOUS EMISSIONS – 40 MHz TX BANDWIDTH

03/28/06 High Frequency Measurement																
Compliance Certification Services, Morgan Hill Open Field Site																
Test Engineer:		Vien Tran														
Project #:		06U10233														
Company:		Broadcom														
EUT Description:		2x2 Dual Band MIMO Device														
EUT M/N:		BCM94321MCAG Rev 3.0														
EUT S/N:		107														
Test Target:		FCC 15.247														
Mode Of Operation:		2.4 GHz Band_Tx 40 MHz BANDWIDTH														
Test Equipment:																
Horn 1-18GHz			Pre-amplifier 1-26GHz			Pre-amplifier 26-40GHz			Horn > 18GHz			Limit				
T120; S/N: 29310 @3m			T87 Miteq 924342									FCC 15.209				
Hi Frequency Cables																
2 foot cable			3 foot cable			12 foot cable			HPF			Reject Filter			Peak Measurements RBW=VBW=1MHz	
			Vien 187215002			Vien 197209005			HPF_4.0GHz						Average Measurements RBW=1MHz ; VBW=10Hz	
f GHz	Dist (m)	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Filtr dB	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes (V/H)	
Low Ch 3, 2422 MHz 15dBm																
4.844	3.0	57.3	51.5	33.9	3.0	-45.3	0.0	0.6	49.5	43.7	74	54	-24.5	-10.3	V	
7.266	3.0	48.8	43.0	35.9	4.2	-43.3	0.0	0.6	46.1	40.3	74	54	-27.9	-13.7	V	
9.688	3.0	45.8	33.9	37.6	4.7	-39.8	0.0	0.8	49.2	37.3	74	54	-24.8	-16.7	V	
4.844	3.0	63.0	60.0	33.9	3.0	-45.3	0.0	0.6	55.2	52.2	74	54	-18.8	-1.8	H	
7.266	3.0	54.3	42.4	35.9	4.2	-43.3	0.0	0.6	51.7	39.8	74	54	-23.3	-14.2	H	
9.688	3.0	47.0	38.9	37.6	4.7	-39.8	0.0	0.8	50.4	42.3	74	54	-23.6	-11.7	H	
Mid Ch . 2437 MHz 15dBm																
4.874	3.0	54.8	53.2	34.0	3.0	-45.3	0.0	0.6	47.0	45.4	74	54	-27.0	-8.6	V	
7.311	3.0	43.1	32.5	35.9	4.2	-43.2	0.0	0.6	40.5	29.9	74	54	-33.5	-24.1	V	
9.748	3.0	40.7	32.1	37.7	4.7	-39.6	0.0	0.8	44.3	35.7	74	54	-29.7	-18.3	V	
4.874	3.0	63.2	61.6	34.0	3.0	-45.3	0.0	0.6	55.4	53.8	74	54	-18.6	-0.2	H	
7.311	3.0	51.5	40.9	35.9	4.2	-43.2	0.0	0.6	49.0	38.4	74	54	-25.0	-15.6	H	
9.748	3.0	49.1	40.5	37.7	4.7	-39.6	0.0	0.8	52.7	44.1	74	54	-21.3	-9.9	H	
High Ch 9, 2452 MHz 15dBm																
4.904	3.0	54.3	51.8	34.0	3.0	-45.3	0.0	0.6	46.6	44.1	74	54	-27.4	-9.9	V	
7.356	3.0	45.3	33.3	35.9	4.2	-43.1	0.0	0.6	42.8	30.8	74	54	-31.2	-23.2	V	
9.808	3.0	44.1	33.7	37.8	4.7	-39.5	0.0	0.8	47.9	37.5	74	54	-26.1	-16.5	V	
4.904	3.0	62.2	59.7	34.0	3.0	-45.3	0.0	0.6	54.5	52.0	74	54	-19.5	-2.0	H	
7.356	3.0	53.2	41.2	35.9	4.2	-43.1	0.0	0.6	50.8	38.8	74	54	-23.2	-15.2	H	
9.808	3.0	52.0	41.6	37.8	4.7	-39.5	0.0	0.8	55.8	45.4	74	54	-18.2	-8.6	H	
Note: No other emissions were detected above the noise floor																
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									

7.13.6. TRANSMITTER ABOVE 1 GHz FOR 5725 TO 5850 MHz BAND**HARMONICS AND SPURIOUS EMISSIONS – 20 MHz TX BANDWIDTH**

03/27/06 High Frequency Measurement																
Compliance Certification Services, Morgan Hill Open Field Site																
Test Engineer:		Vien Tran														
Project #:		06U10233														
Company:		Broadcom														
EUT Description:		2x2 Dual Band MIMO Device														
EUT M/N:		BCM94321MCAG Rev 3.0														
EUT S/N:		107														
Test Target:		FCC 15.247														
Mode Of Operation:		5.8 GHz Band_20 MHz Tx Bandwidth														
Test Equipment:																
Horn 1-18GHz			Pre-amplifier 1-26GHz			Pre-amplifier 26-40GHz			Horn > 18GHz			Limit				
T60; S/N: 2238 @3m			T145 Agilent 3008A0056									FCC 15.209				
Hi Frequency Cables																
2 foot cable			3 foot cable			12 foot cable			HPF			Reject Filter			Peak Measurements RBW=VBW=1MHz Average Measurements RBW=1MHz ; VBW=10Hz	
			Vien 187215002			Vien 197209005			HPF_7.6GHz			R_001				
f GHz	Dist (m)	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Filtr dB	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes (V/H)	
Ch 149, 5745 MHz 15.7dBm																
11.490	3.0	46.6	35.1	38.2	4.8	-33.1	0.0	0.7	\$9.2	45.7	74	54	-16.8	-3.3	V	
17.235	3.0	43.0	31.6	43.5	6.1	-32.0	0.0	0.6	61.3	49.9	74	54	-12.7	-4.1	V, Noise Floor	
11.490	3.0	47.5	35.6	38.2	4.8	-33.1	0.0	0.7	\$8.1	46.2	74	54	-15.9	-7.8	H	
17.235	3.0	43.0	31.8	43.5	6.1	-32.0	0.0	0.6	61.3	50.1	74	54	-12.7	-3.9	H, Noise Floor	
Ch 157, 5785 MHz 15dBm																
11.570	3.0	46.2	34.5	38.2	4.8	-33.0	0.0	0.7	\$6.9	45.2	74	54	-17.1	-3.8	V	
17.355	3.0	42.6	31.3	43.9	6.1	-32.0	0.0	0.6	61.3	50.0	74	54	-12.7	-4.0	V, Noise Floor	
11.570	3.0	48.8	36.3	38.2	4.8	-33.0	0.0	0.7	\$9.5	47.0	74	54	-14.5	-7.0	H	
17.355	3.0	43.1	31.0	43.9	6.1	-32.0	0.0	0.6	61.8	49.7	74	54	-12.2	-4.3	H, Noise Floor	
Ch 165, 5825 MHz 15dBm																
11.650	3.0	47.2	36.7	38.3	4.8	-32.9	0.0	0.7	\$8.1	47.6	74	54	-15.9	-6.4	V	
17.475	3.0	43.4	31.3	44.3	6.2	-32.0	0.0	0.6	62.4	50.3	74	54	-11.6	-3.7	V, Noise Floor	
11.650	3.0	48.4	36.3	38.3	4.8	-32.9	0.0	0.7	\$9.3	47.2	74	54	-14.7	-6.8	H	
17.475	3.0	42.9	30.9	44.3	6.2	-32.0	0.0	0.6	61.9	49.9	74	54	-12.1	-4.1	H, Noise Floor	
Note: No other emissions were detected above the noise floor																
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									

HARMONICS AND SPURIOUS EMISSIONS – 40 MHz TX BANDWIDTH

05/02/06 High Frequency Measurement															
Compliance Certification Services, Morgan Hill Open Field Site															
Test Engineer:		Vien Tran													
Project #:		06U10233													
Company:		Broadcom													
EUT Description:		2x2 Dual Band MIMO Device													
EUT M/N:		BCM94321MC													
EUT S/N:		107													
Test Target:		FCC 15.247													
Mode Of Operation:		5.8 GHz Band_40 MHz TX Bandwidth_CH151 & CH159													
Test Equipment:															
Horn 1-18GHz		Pre-amplifier 1-26GHz		Pre-amplifier 26-40GHz		Horn > 18GHz				Limit					
T73; S/N: 6717 @3m		T144 Miteq 3008A00931								FCC 15.209					
Hi Frequency Cables															
2 foot cable		3 foot cable		12 foot cable		HPF		Reject Filter		Peak Measurements RBW=VBW=1MHz Average Measurements RBW=1MHz ; VBW=10Hz					
		Vien 187215002		Vien 197209005		HPF_7.6GHz									
f GHz	Dist (m)	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Filtr dB	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes (V/H)
Ch 151, 5755 MHz 17dBm															
11.510	3.0	51.5	39.6	38.3	4.8	-35.8	0.0	0.7	59.5	47.6	74	54	-14.5	-6.4	V
17.265	3.0	46.6	33.5	42.5	6.1	-33.8	0.0	0.6	62.1	49.0	74	54	-11.9	-5.0	V
11.510	3.0	49.7	37.8	38.3	4.8	-35.8	0.0	0.7	57.7	45.8	74	54	-16.3	-8.2	H
17.265	3.0	45.3	33.2	42.5	6.1	-33.8	0.0	0.6	60.8	48.7	74	54	-13.2	-5.3	H
Ch 159, 5795 MHz 17dBm															
11.590	3.0	50.7	39.4	38.3	4.8	-35.8	0.0	0.7	58.8	47.5	74	54	-15.2	-6.5	V
17.385	3.0	45.6	32.6	43.2	6.1	-33.8	0.0	0.6	61.8	48.8	74	54	-12.2	-5.2	V
11.590	3.0	48.9	36.4	38.3	4.8	-35.8	0.0	0.7	57.0	44.5	74	54	-17.0	-9.5	H
17.385	3.0	45.0	31.6	43.2	6.1	-33.8	0.0	0.6	61.2	47.8	74	54	-12.8	-6.2	H
Note: No other emissions were detected above the noise floor															
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										

7.13.7. WORST-CASE RADIATED EMISSIONS BELOW 1 GHz**2.4 GHz BAND****SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)****HORIZONTAL**

561F Monterey Road
Morgan Hill, CA 95037
Tel: (408) 463-0888
Fax: (408) 463-0885

Data#: 6 File#: 30-1000.EMI Date: 04-22-2006 Time: 10:32:49
Audix ATC

Condition: FCC CLASS-B HORIZONTAL

Test Operator : Vien Tran
Project # : 06U10233
Company : Broadcom
EUT : 2x2 Dual Band MIMO Device
Model No : BCM94321MCAG Rev. 3
S/N : 107
Configuration : EUT and Laptop
Mode of operation: Tx 2.4 GHz Band MIMO_Worst Case

Page: 1

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	30.000	9.20	20.45	29.65	40.00	-10.35	Peak
2	208.480	22.72	13.30	36.02	43.50	-7.48	Peak
3	290.930	26.73	15.33	42.06	46.00	-3.94	Peak
4	406.360	22.28	18.20	40.47	46.00	-5.53	Peak
5	434.490	20.13	18.84	38.97	46.00	-7.03	Peak
6	574.170	16.09	21.18	37.27	46.00	-8.73	Peak

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

561F Monterey Road
Morgan Hill, CA 95037
Tel: (408) 463-0888
Fax: (408) 463-0885

Data#: 3 File#: 30-1000.EMI Date: 04-22-2006 Time: 10:22:22
Audix ATC

Condition: FCC CLASS-B VERTICAL
Test Operator : Vien Tran
Project # : 06U10233
Company : Broadcom
EUT : 2x2 Dual Band MIMO Device
Model No : BCM94321MCAG Rev. 3
S/N : 107
Configuration : EUT and Laptop
Mode of operation: Tx 2.4 GHz Band MIMO_Worst Case

Page: 1

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	51.340	26.16	9.05	35.21	40.00	-4.79	Peak
2	126.030	20.49	15.25	35.74	43.50	-7.76	Peak
3	293.840	22.97	15.42	38.39	46.00	-7.61	Peak
4	343.310	18.64	16.68	35.33	46.00	-10.67	Peak
5	406.360	22.22	18.20	40.41	46.00	-5.59	Peak
6	574.170	17.16	21.18	38.33	46.00	-7.67	Peak

5 GHz BAND**SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)****HORIZONTAL**

561F Monterey Road
Morgan Hill, CA 95037
Tel: (408) 463-0888
Fax: (408) 463-0885

Data#: 16 File#: 30-1000.EMI Date: 04-22-2006 Time: 11:48:19
Audix ATC

Condition: FCC CLASS-B HORIZONTAL

Test Operator : Vien Tran
Project # : 06U10233
Company : Broadcom
EUT : 2x2 Dual Band MIMO Device
Model No : BCM94321MCAG Rev. 3
S/N : 107
Configuration : EUT and Laptop
Mode of operation: Tx 5 GHz Band MIMO_Worst Case

Page: 1

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	30.000	10.02	20.45	30.47	40.00	-9.53	Peak
2	124.090	21.68	15.23	36.91	43.50	-6.59	Peak
3	290.930	23.93	15.33	39.26	46.00	-6.74	Peak
4	361.740	21.45	17.20	38.65	46.00	-7.35	Peak
5	643.040	21.88	22.23	44.11	46.00	-1.89	Peak
6	681.840	19.55	22.86	42.41	46.00	-3.59	Peak

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

561F Monterey Road
Morgan Hill, CA 95037
Tel: (408) 463-0888
Fax: (408) 463-0885

Data#: 18 File#: 30-1000.EMI Date: 04-22-2006 Time: 11:52:24
Audix ATC

Condition: FCC CLASS-B VERTICAL

Test Operator : Vien Tran

Project # : 06U10233

Company : Broadcom

EUT : 2x2 Dual Band MIMO Device

Model No : BCM94321MCAG Rev. 3

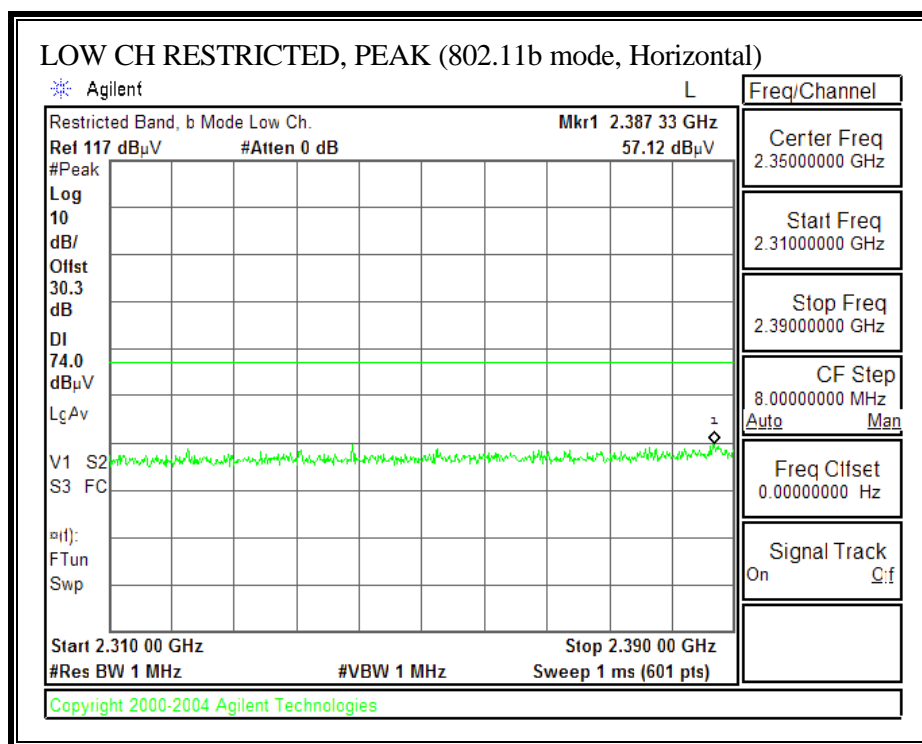
S/N : 107

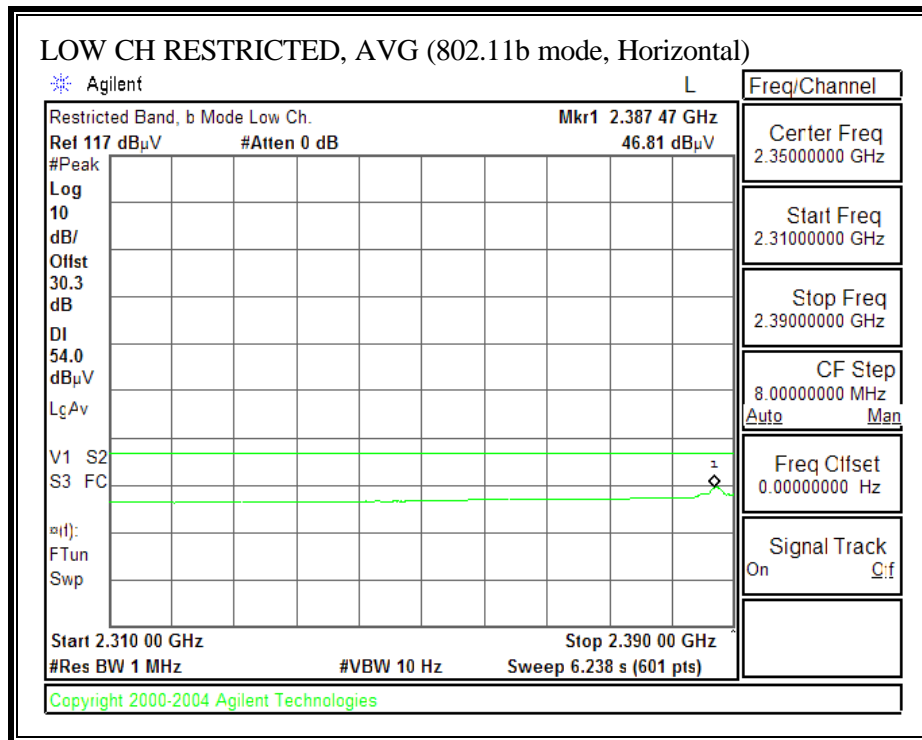
Configuration : EUT and Laptop

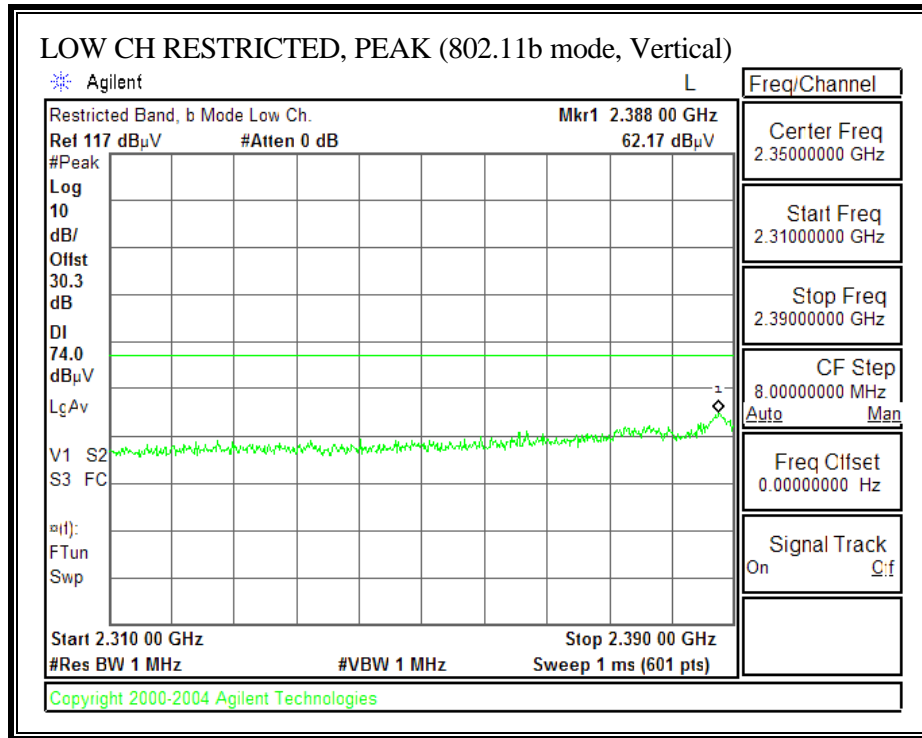
Mode of operation: Tx 5 GHz Band MIMO_Worst Case

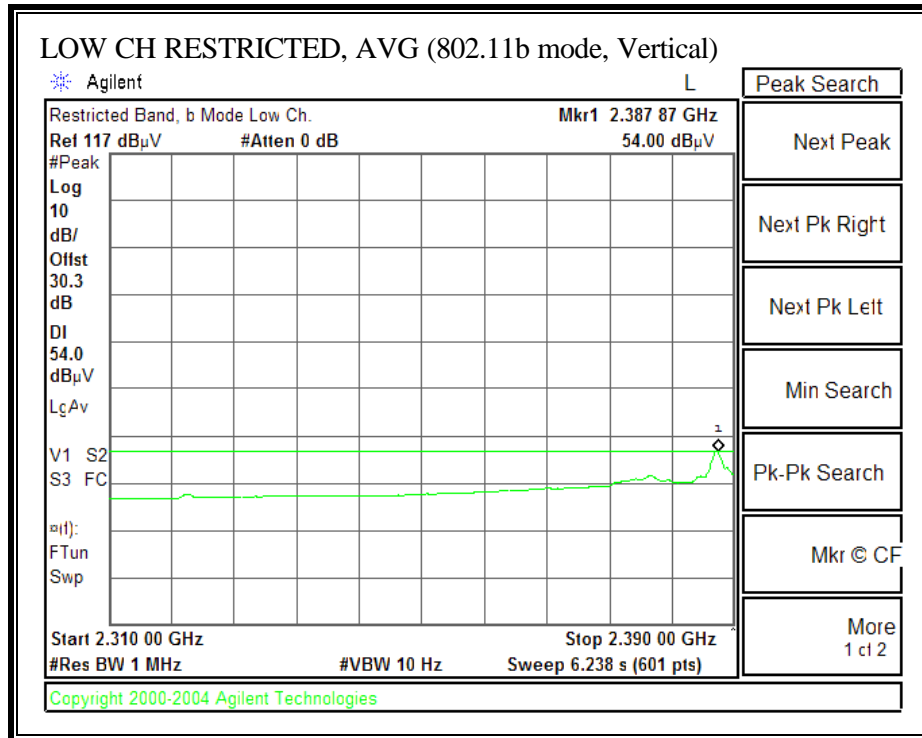
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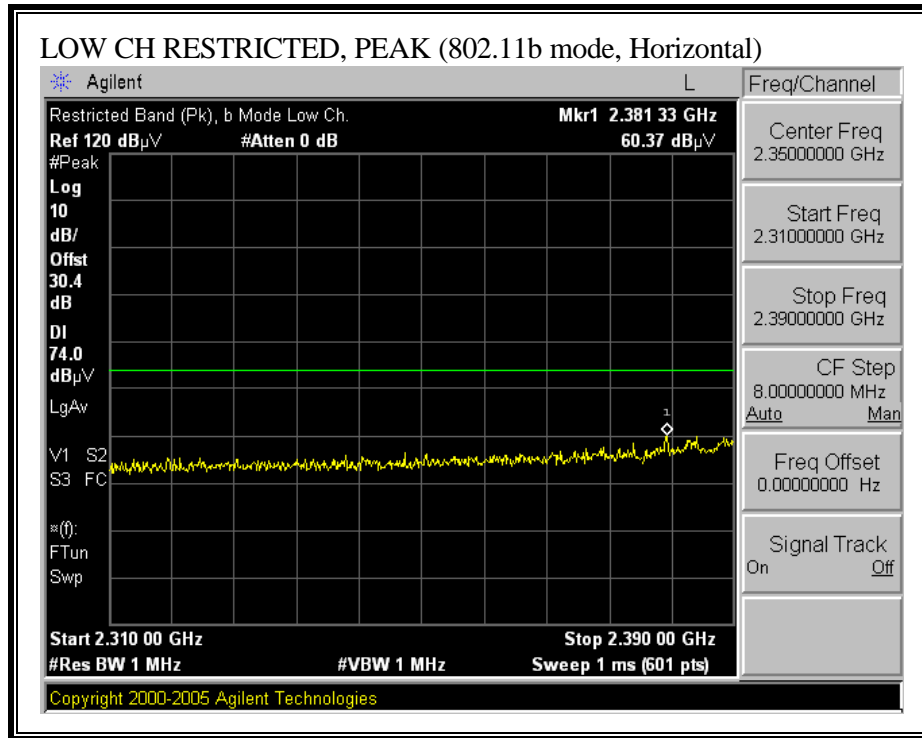
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	62.980	24.18	8.90	33.08	40.00	-6.92	Peak
2	126.030	20.38	15.25	35.63	43.50	-7.87	Peak
3	406.360	20.65	18.20	38.85	46.00	-7.15	Peak
4	573.200	20.48	21.16	41.64	46.00	-4.36	Peak
5	642.070	19.87	22.21	42.08	46.00	-3.92	Peak
6	707.060	17.27	23.20	40.47	46.00	-5.53	Peak

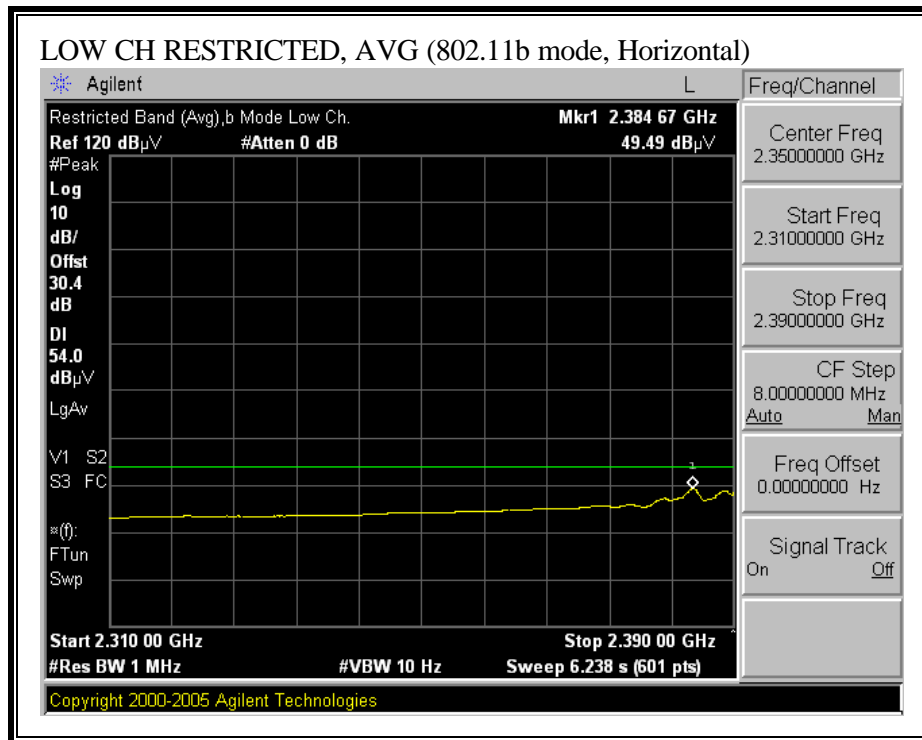
FOXCONN, PCB ANTENNA**LEGACY MODE****7.13.8. TRANSMITTER ABOVE 1 GHz FOR 2400 TO 2483.5 MHz BAND****RESTRICTED BANDEDGE (b MODE, LOW CHANNEL, 2412 MHz, HORIZONTAL)**

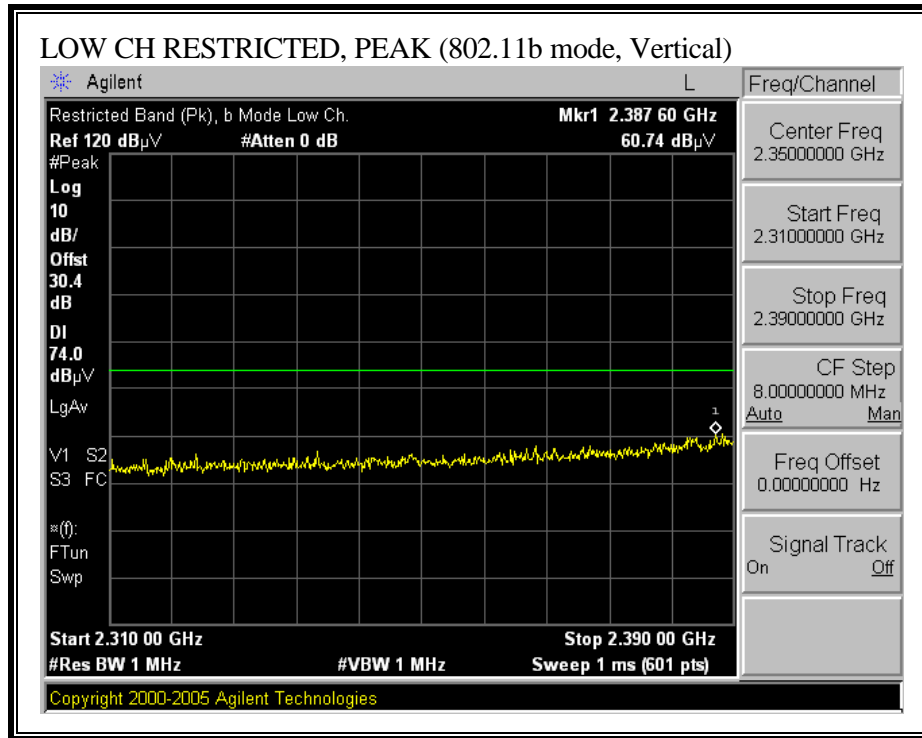


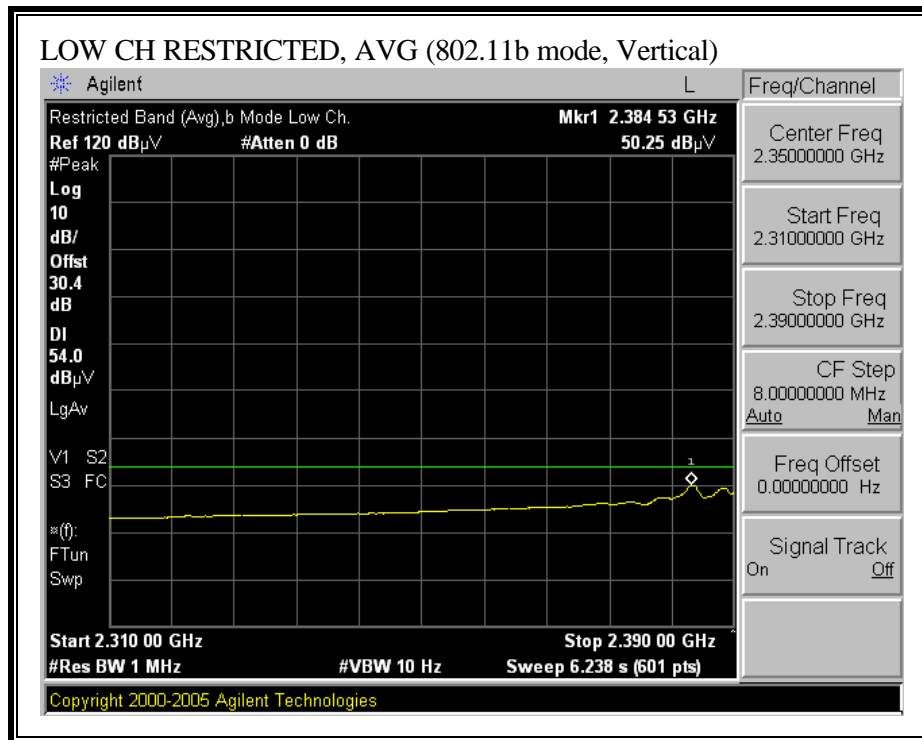
RESTRICTED BANDEDGE (b MODE, LOW CHANNEL, 2412 MHz, VERTICAL)

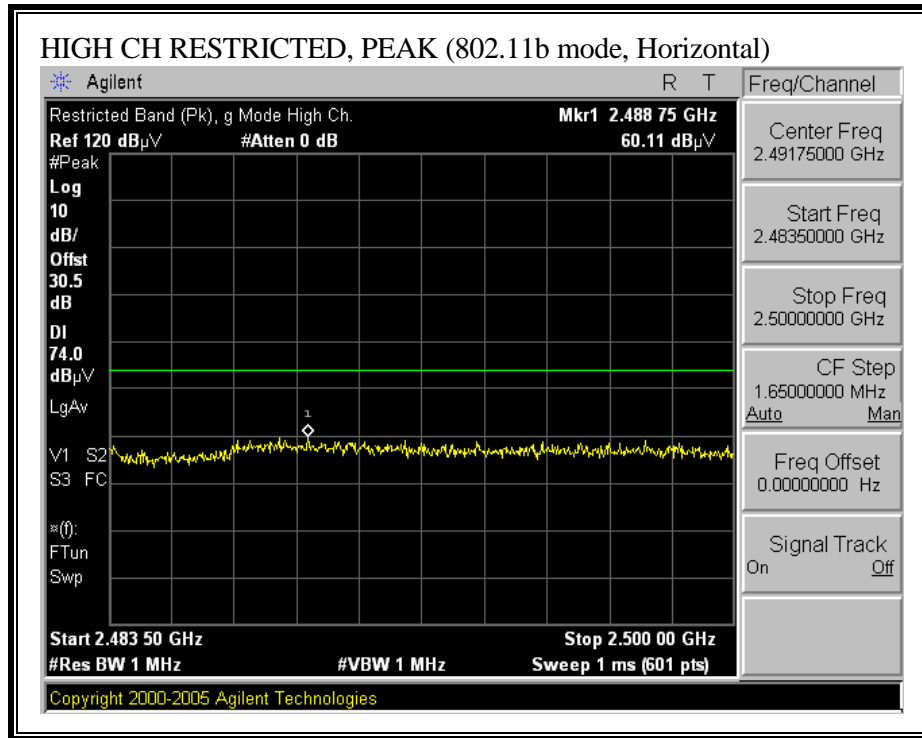


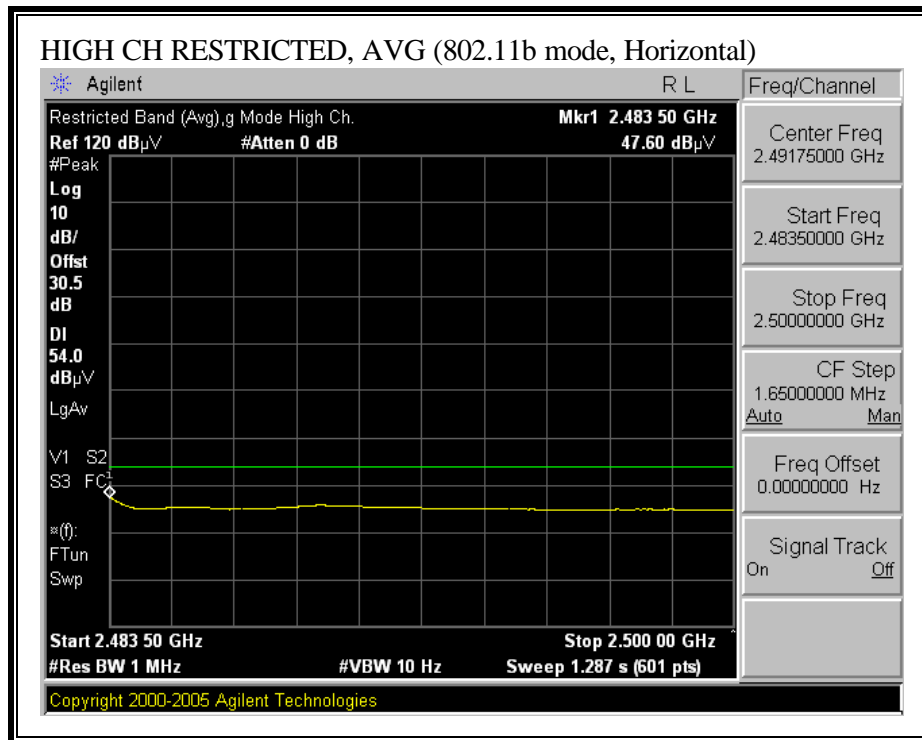
RESTRICTED BANDEDGE (b MODE, LOW CHANNEL, 2417 MHz, HORIZONTAL)

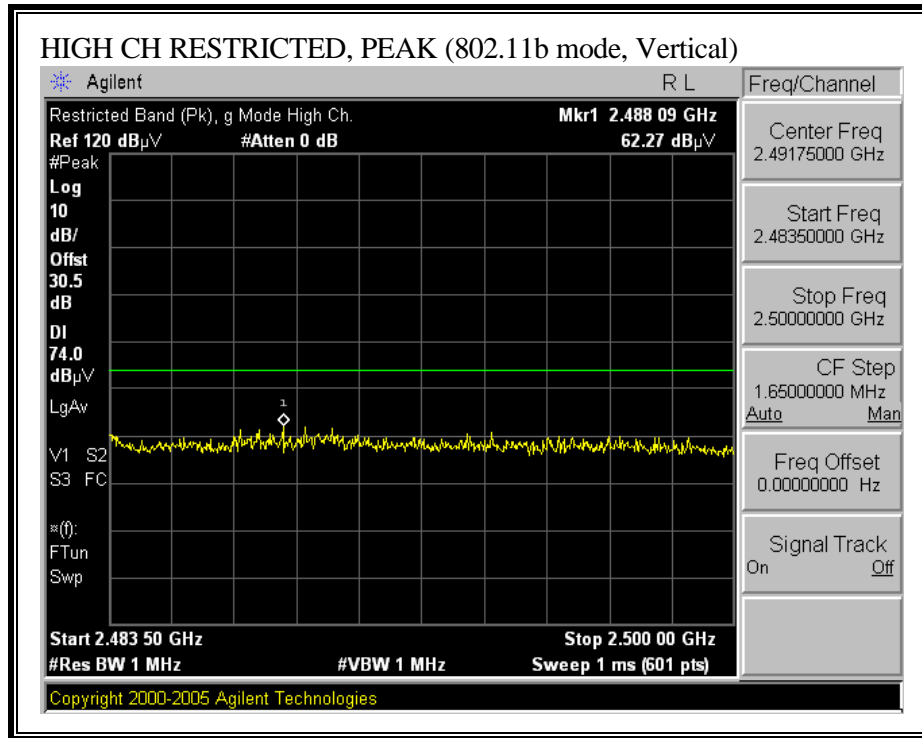


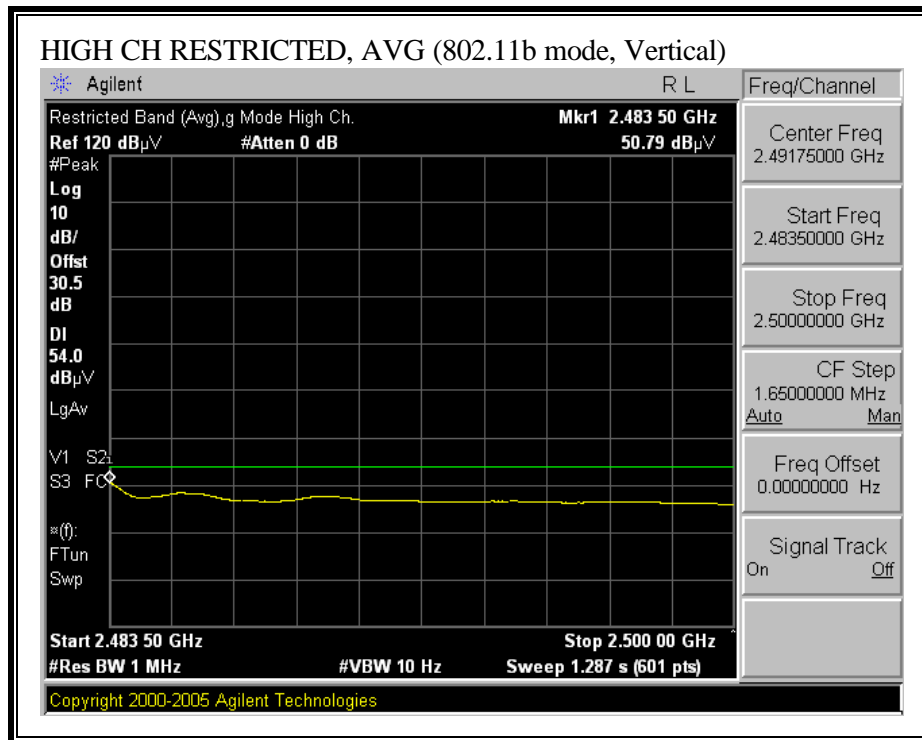
RESTRICTED BANDEDGE (b MODE, LOW CHANNEL, 2417 MHz, VERTICAL)

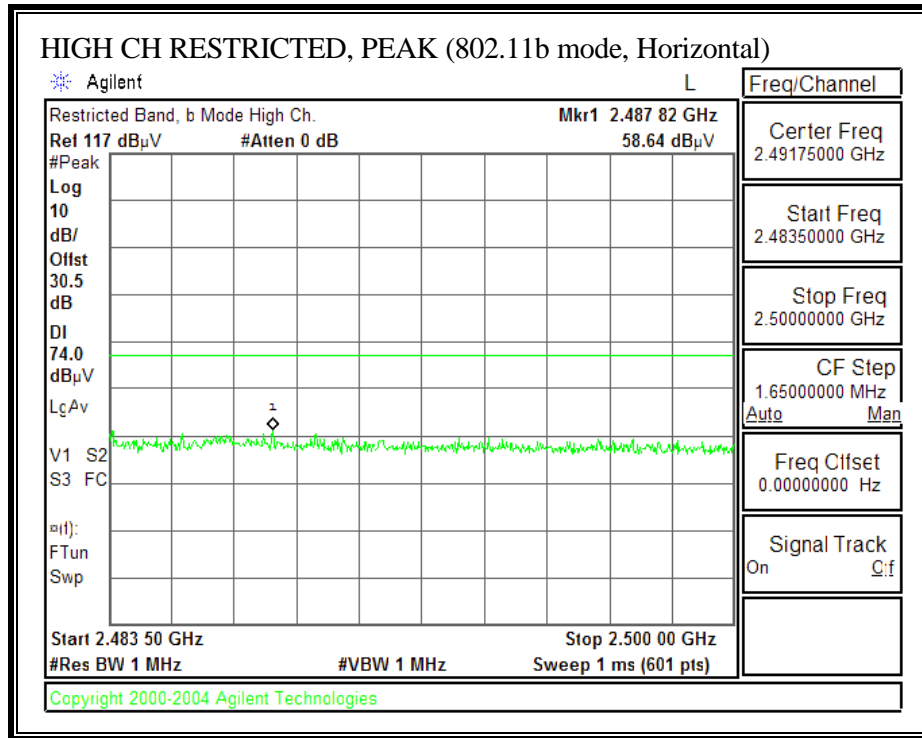


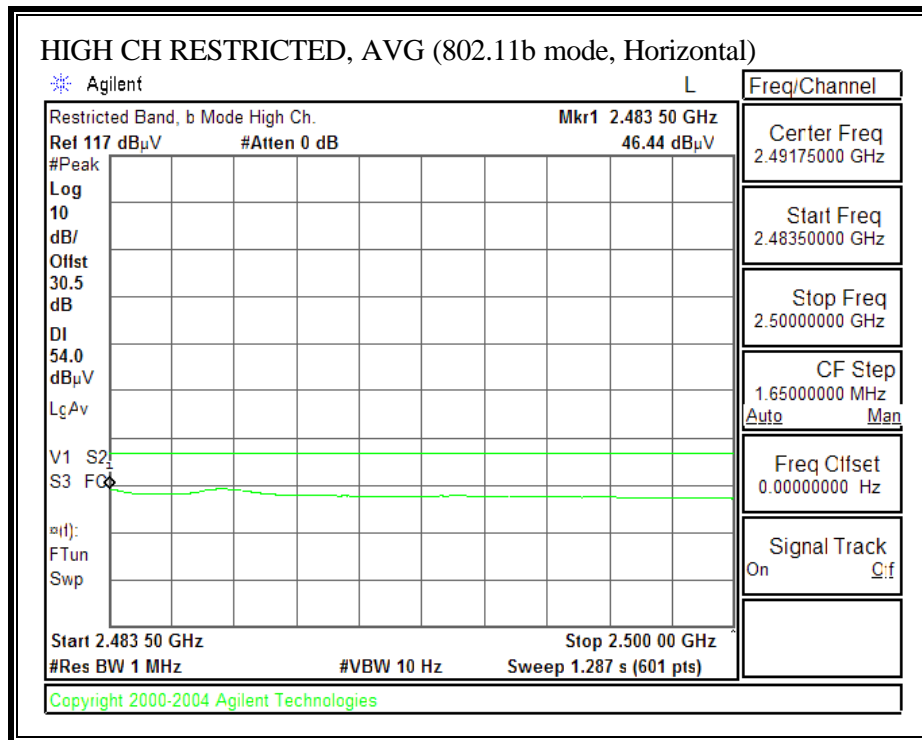
RESTRICTED BANDEDGE (b MODE, HIGH CHANNEL, 2457 MHz, HORIZONTAL)

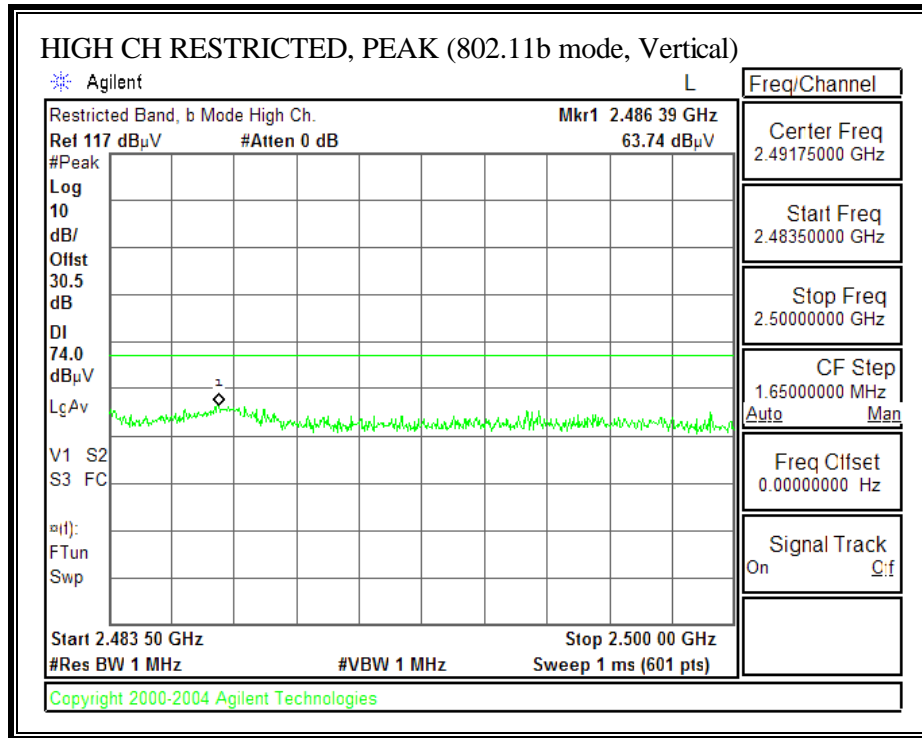


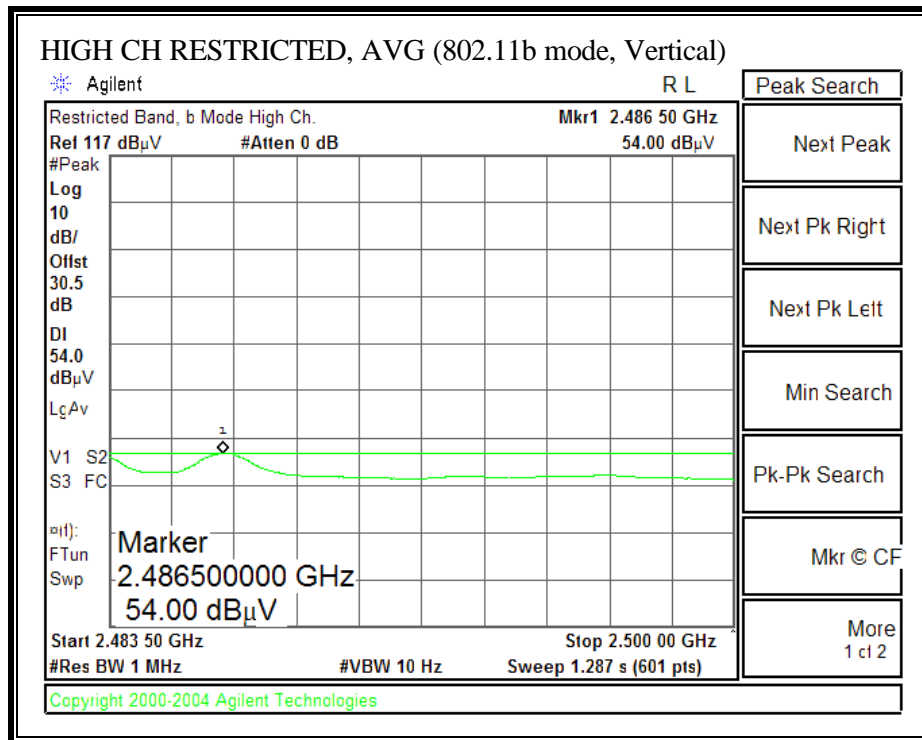
RESTRICTED BANDEDGE (b MODE, HIGH CHANNEL, 2457 MHz, VERTICAL)



RESTRICTED BANDEDGE (b MODE, HIGH CHANNEL, 2462 MHz, HORIZONTAL)

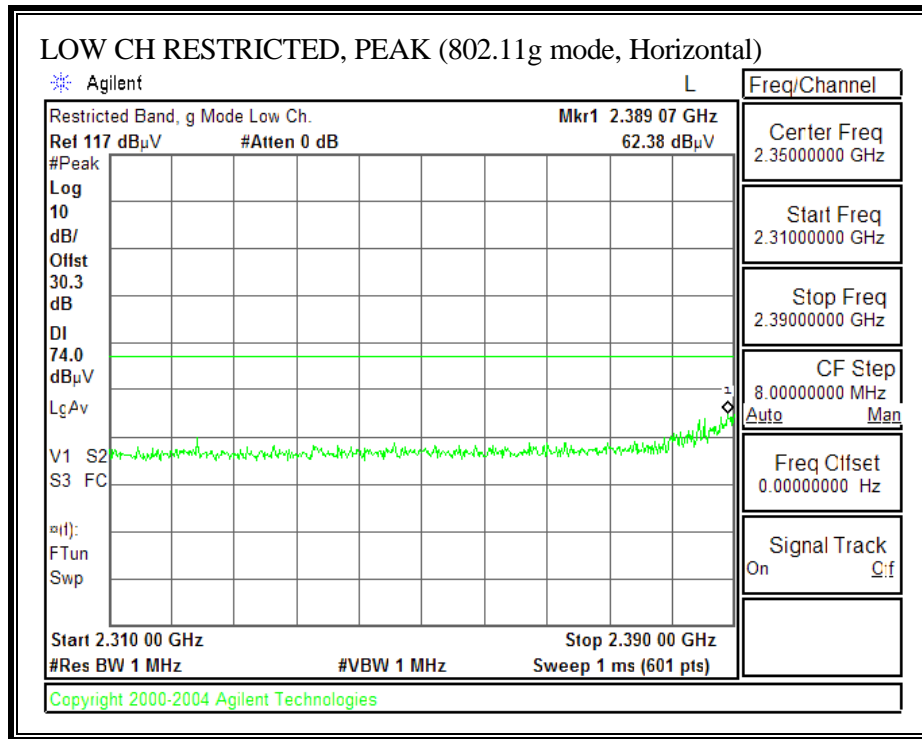


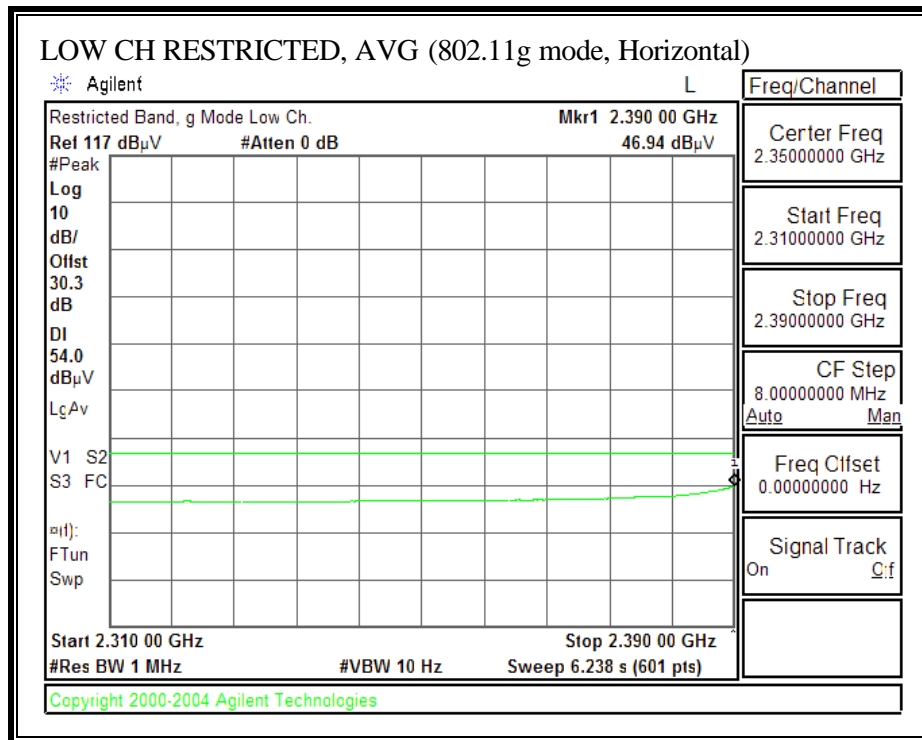
RESTRICTED BANDEDGE (b MODE, HIGH CHANNEL, 2462 MHz, VERTICAL)

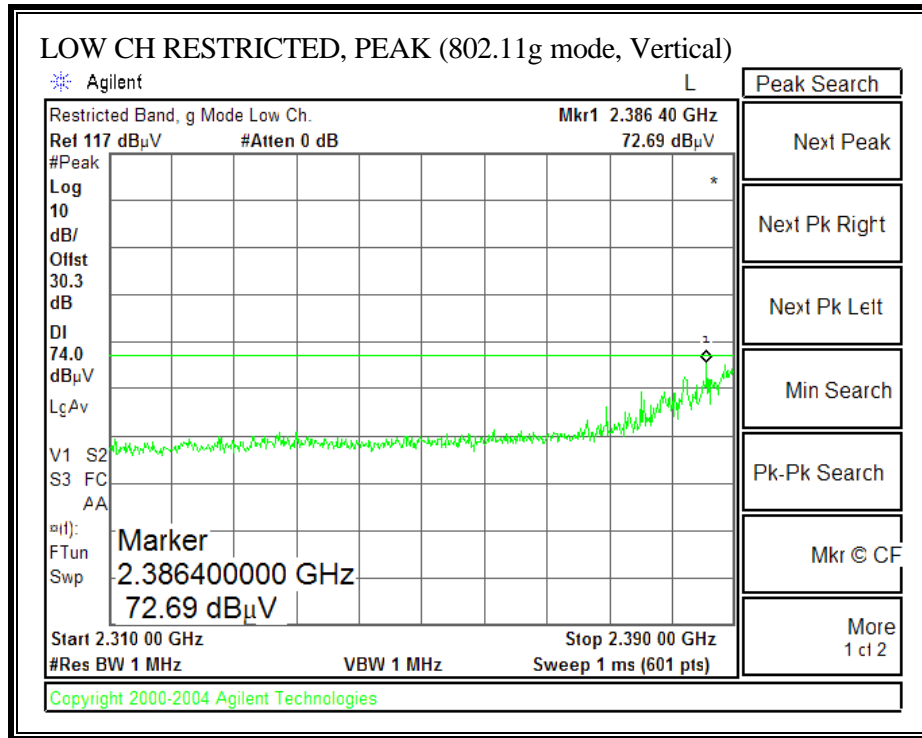


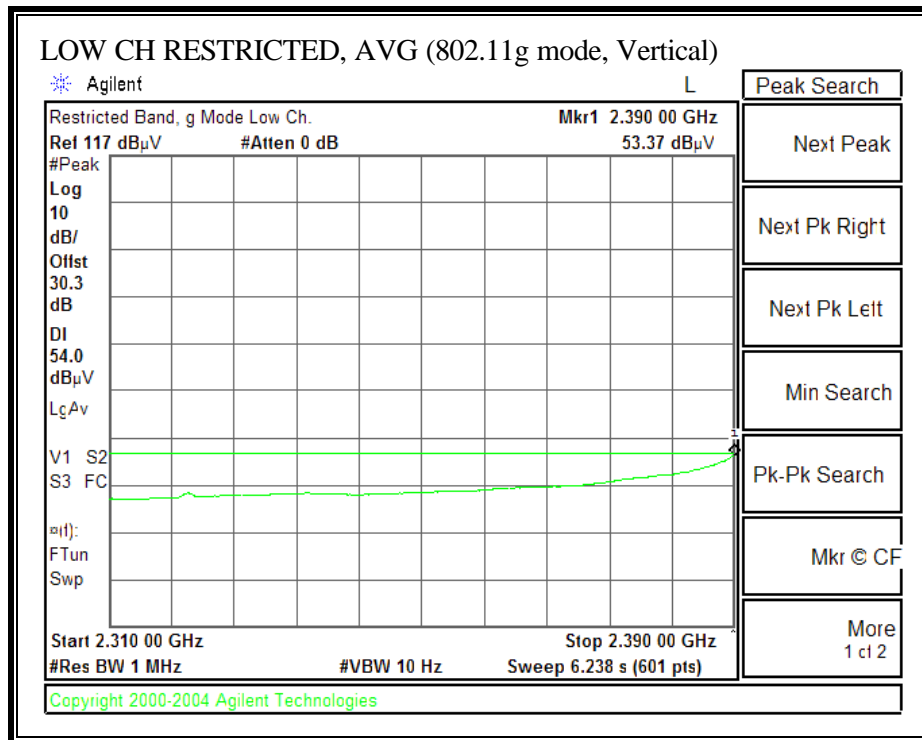
HARMONICS AND SPURIOUS EMISSIONS (b MODE)

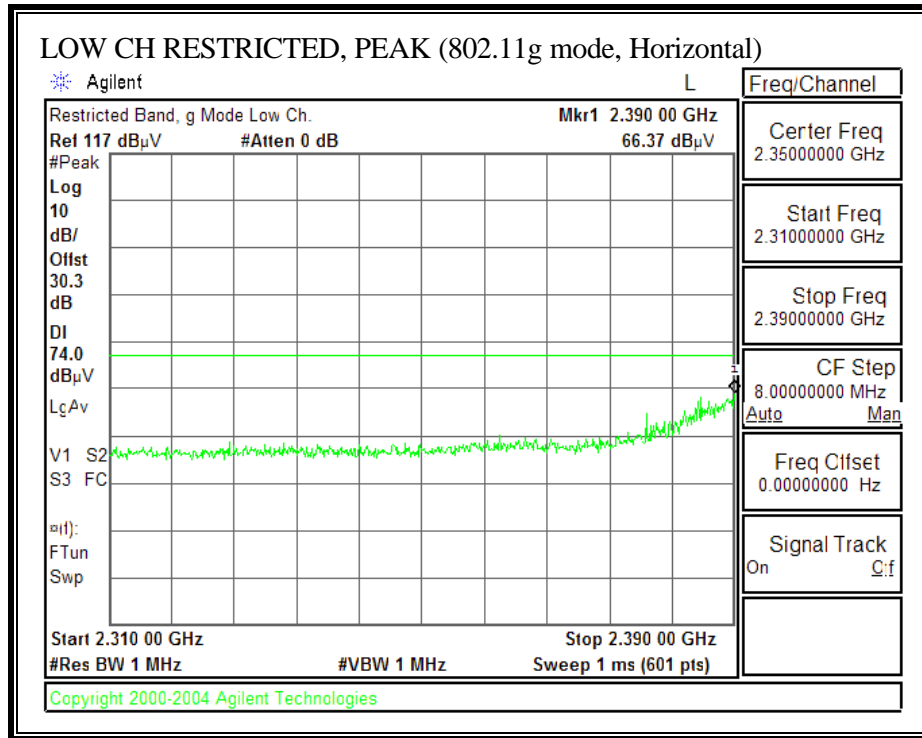
High Frequency Measurement															
Compliance Certification Services, Morgan Hill Open Field Site															
Company: Broadcom Project #: 06U10233 Date: 05/09/06 Test Engineer: Vien Tran Configuration: EUT & Low Gain Antenna_BCM94321MC, S/N 318 Mode: Tx Legacy 11b Mode Average Power Meter: Low = 19 dBm, Mid = 19 dBm, High = 19 dBm															
Test Equipment:															
Horn 1-18GHz		Pre-amplifier 1-26GHz		Pre-amplifier 26-40GHz		Horn > 18GHz		Limit							
T73; S/N: 6717 @3m		T144 Miteq 3008A00931						FCC 15.205							
Hi Frequency Cables <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> 2 foot cable [] </div> <div style="text-align: center;"> 3 foot cable Vien 187215002 </div> <div style="text-align: center;"> 12 foot cable Vien 197209005 </div> <div style="text-align: center;"> HPF HPF_4.0GHz </div> <div style="text-align: center;"> Reject Filter [] </div> <div> Peak Measurements RBW=VBW=1MHz Average Measurements RBW=1MHz ; VBW=10Hz </div> </div>															
f GHz	Dist (m)	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Filtr dB	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes (V/H)
Low Channel, 2412 MHz															
4.824	3.0	55.2	52.6	33.3	2.9	-36.5	0.0	0.6	55.6	53.0	74	54	-18.4	-1.0	V
12.060	3.0	43.7	32.8	37.7	4.8	-35.4	0.0	0.9	51.7	40.8	74	54	-32.3	-33.2	V
4.824	3.0	58.5	43.9	33.3	2.9	-36.5	0.0	0.6	58.9	44.3	74	54	-35.3	-9.7	H
12.060	3.0	46.2	36.4	37.7	4.8	-35.4	0.0	0.9	54.2	44.4	74	54	-39.8	-9.6	H
Mid Channel, 2437 MHz															
4.874	3.0	55.0	52.8	33.4	3.0	-36.5	0.0	0.6	55.5	53.3	74	54	-38.4	-4.7	V
7.311	3.0	52.4	48.1	35.0	4.2	-36.2	0.0	0.6	56.0	51.7	74	54	-38.0	-2.3	V
12.185	3.0	44.7	35.2	37.6	4.9	-35.4	0.0	0.9	52.7	43.2	74	54	-31.3	-30.8	V
4.874	3.0	49.5	45.6	33.4	3.0	-36.5	0.0	0.6	50.0	46.1	74	54	-34.0	-7.9	H
7.311	3.0	44.2	35.3	35.0	4.2	-36.2	0.0	0.6	47.8	38.9	74	54	-36.2	-35.1	H
12.185	3.0	43.9	34.8	37.6	4.9	-35.4	0.0	0.9	51.9	42.8	74	54	-32.3	-31.2	H
High Channel, 2462 MHz															
4.924	3.0	50.6	46.8	33.4	3.1	-36.5	0.0	0.6	51.2	47.4	74	54	-32.8	-6.6	V
7.386	3.0	50.4	45.9	35.0	4.2	-36.2	0.0	0.6	54.0	49.5	74	54	-30.0	-4.5	V
12.310	3.0	45.7	37.8	37.6	4.9	-35.4	0.0	0.9	53.7	45.8	74	54	-30.3	-8.2	V
4.924	3.0	50.0	46.6	33.4	3.1	-36.5	0.0	0.6	50.6	47.2	74	54	-33.4	-6.8	H
7.386	3.0	46.2	38.8	35.0	4.2	-36.2	0.0	0.6	49.8	42.4	74	54	-34.2	-31.6	H
12.310	3.0	43.7	34.6	37.6	4.9	-35.4	0.0	0.9	51.7	42.6	74	54	-32.3	-31.4	H
No other emissions were detected above system noise floor.															
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											

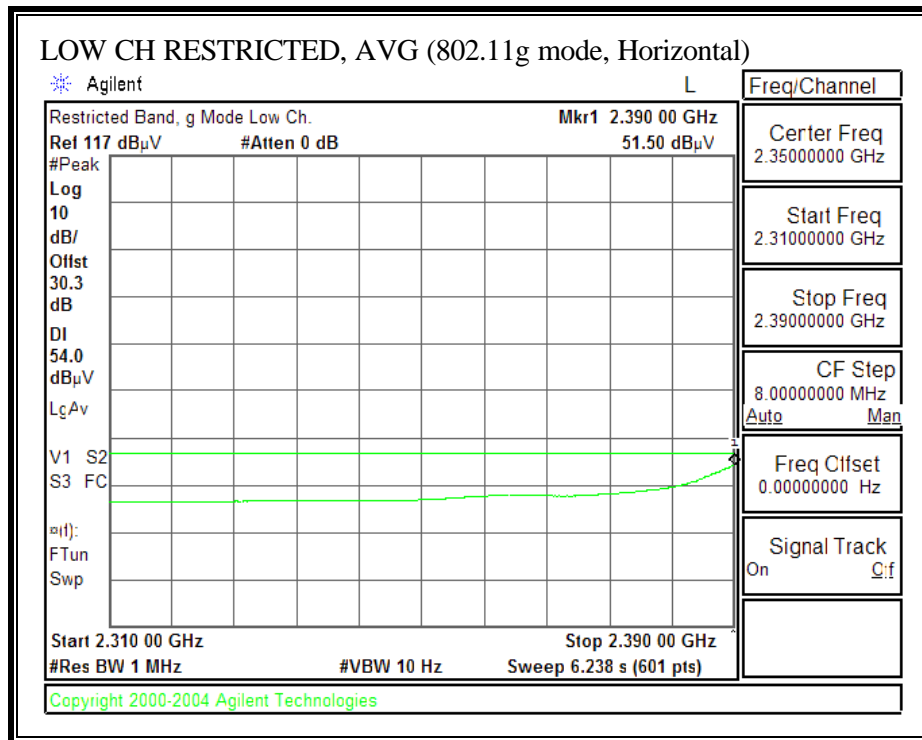
RESTRICTED BANDEDGE (g MODE, LOW CHANNEL, 2412 MHz, HORIZONTAL)

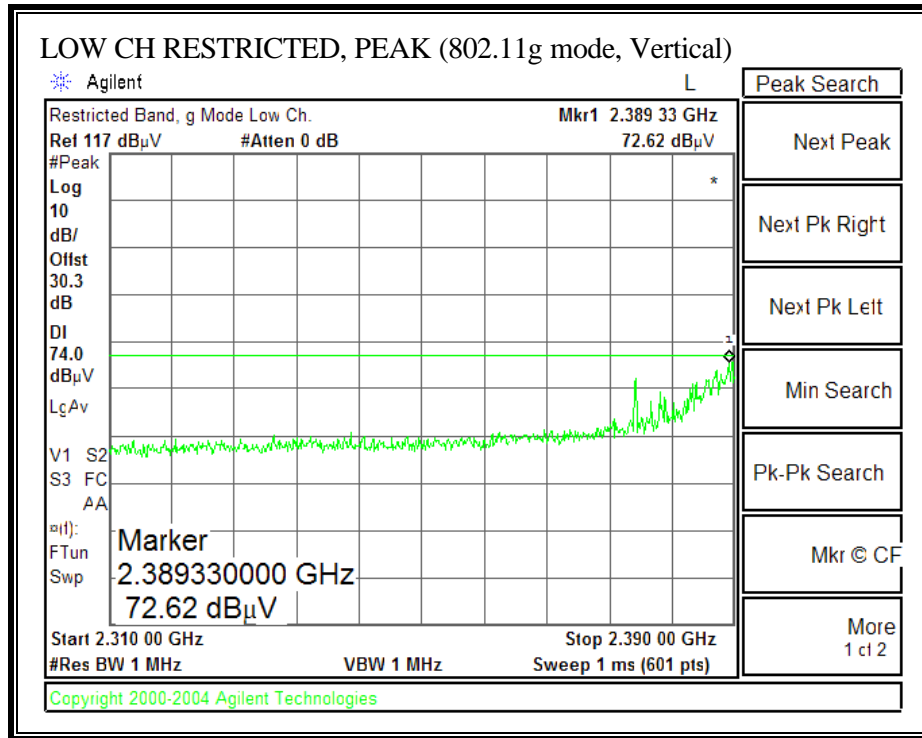


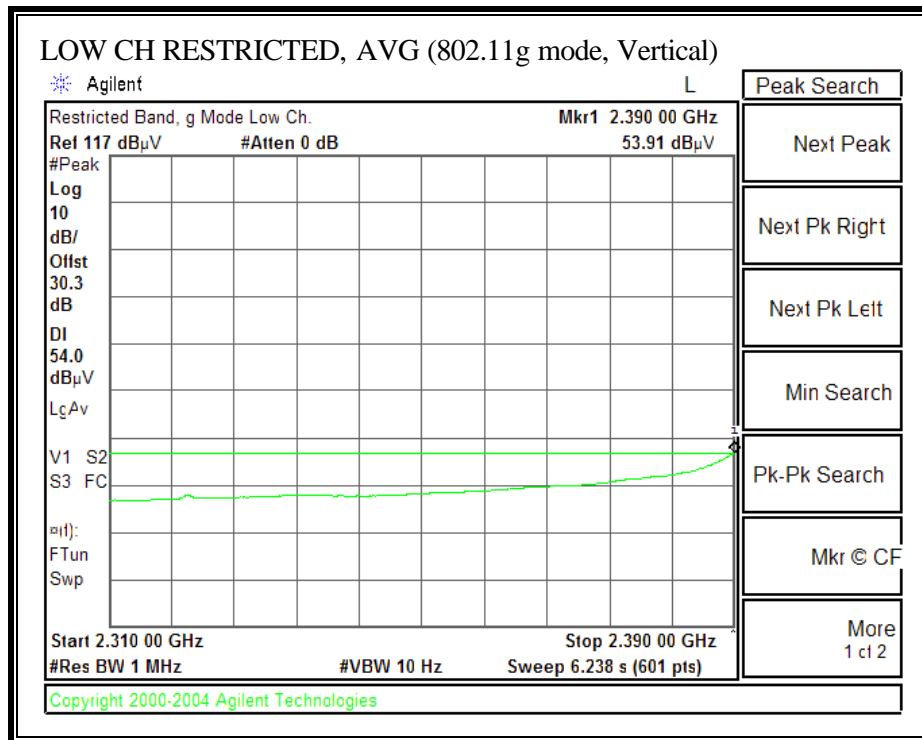
RESTRICTED BANDEDGE (g MODE, LOW CHANNEL, 2412 MHz, VERTICAL)

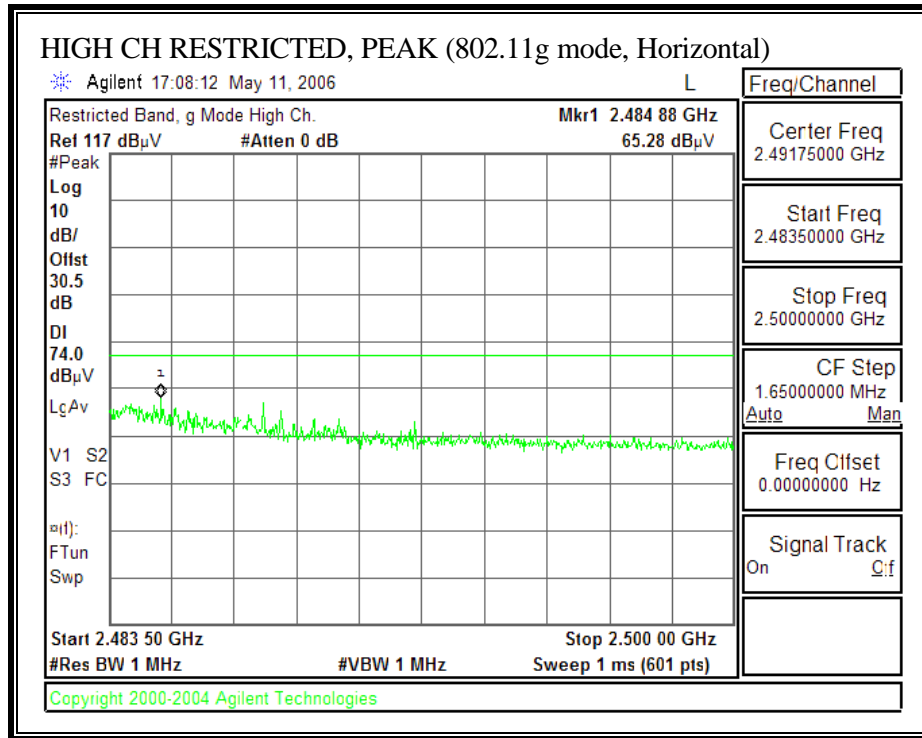


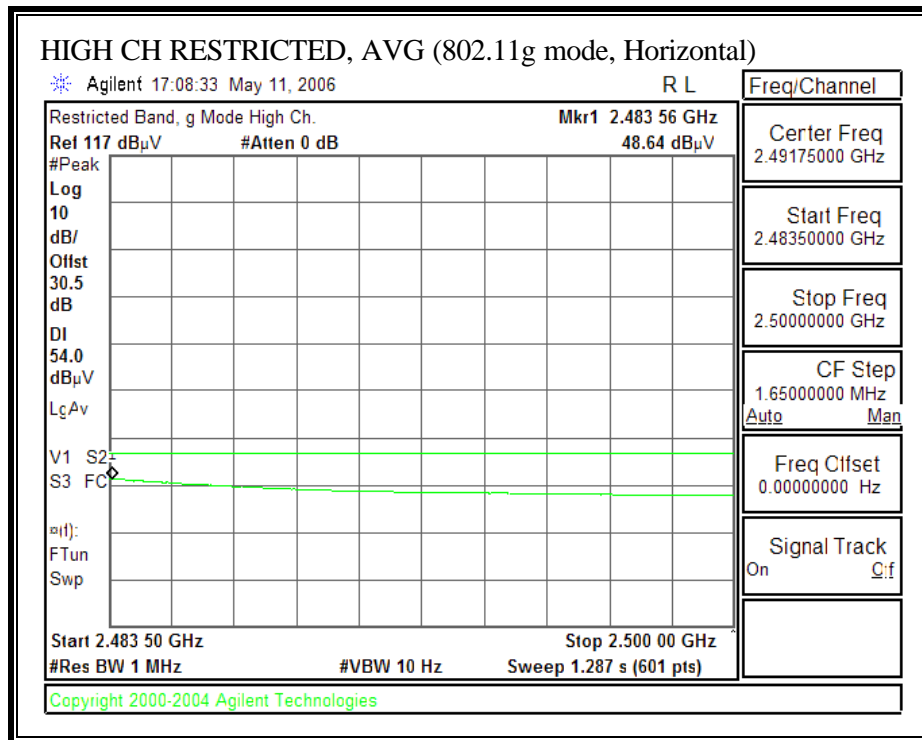
RESTRICTED BANDEDGE (g MODE, LOW CHANNEL, 2417 MHz, HORIZONTAL)

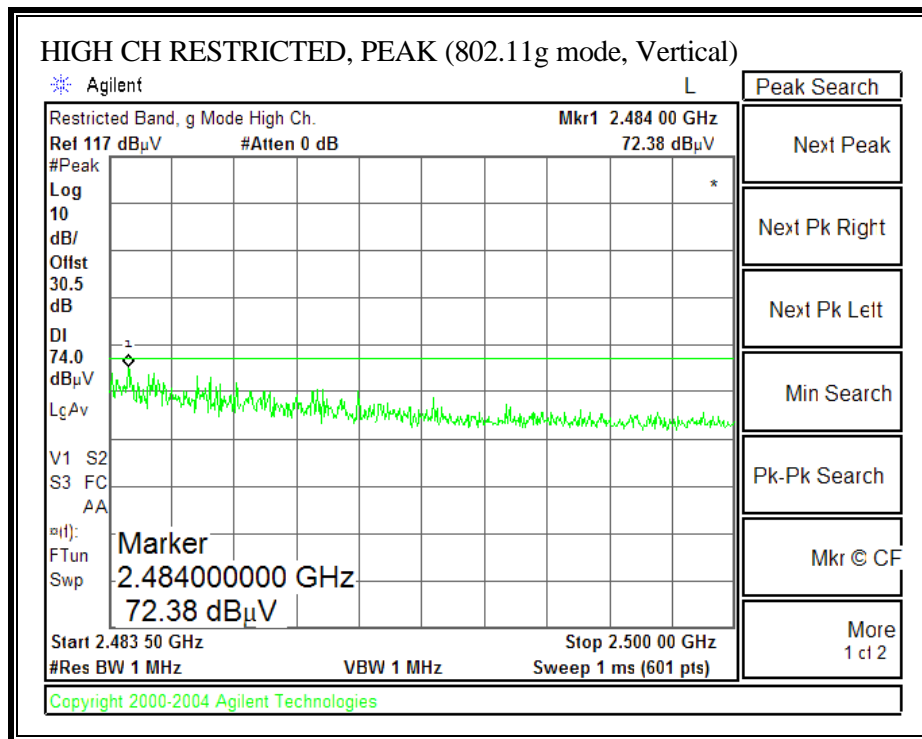


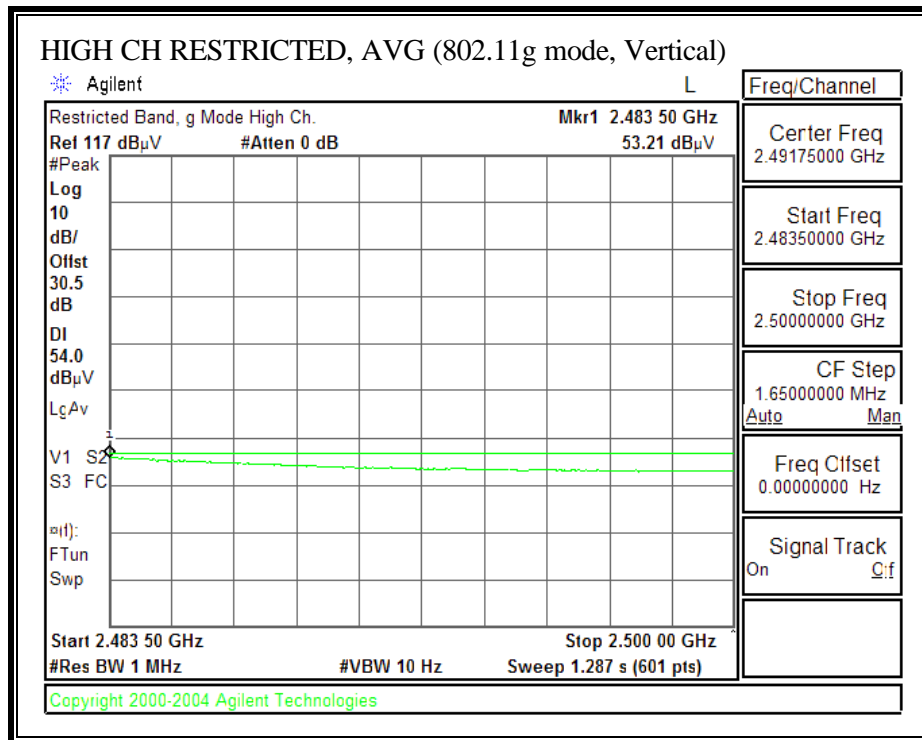
RESTRICTED BANDEDGE (g MODE, LOW CHANNEL, 2417 MHz, VERTICAL)

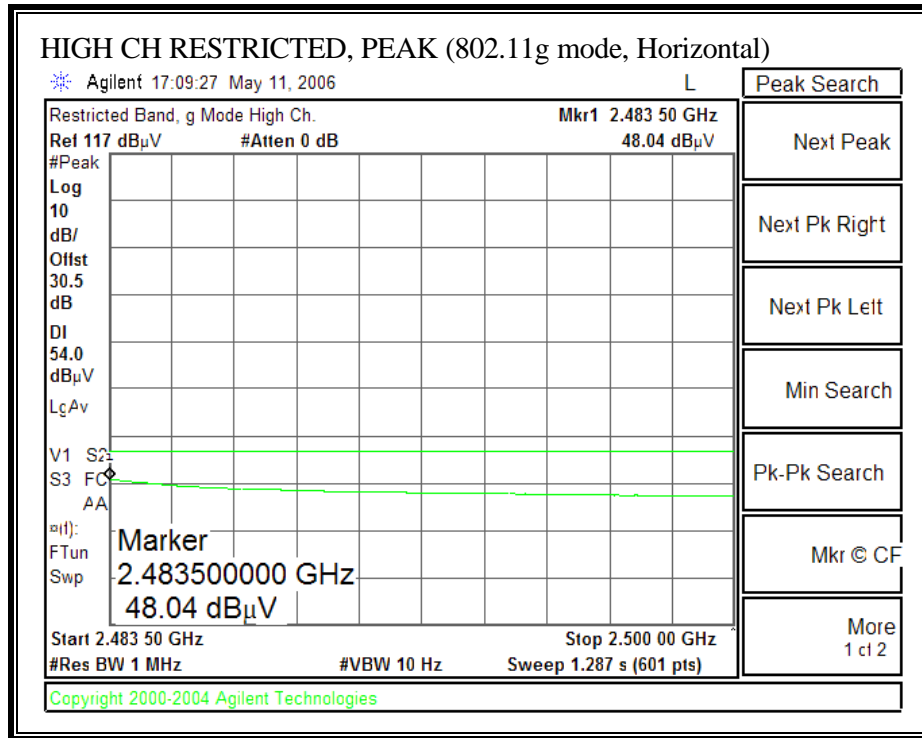


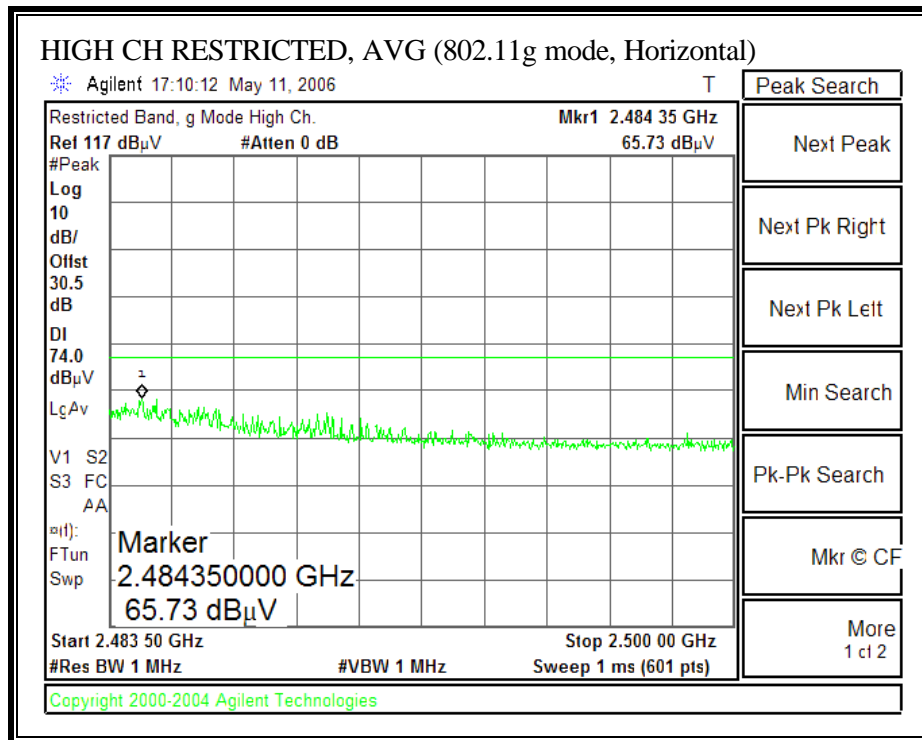
RESTRICTED BANDEDGE (g MODE, HIGH CHANNEL, 2457 MHz, HORIZONTAL)

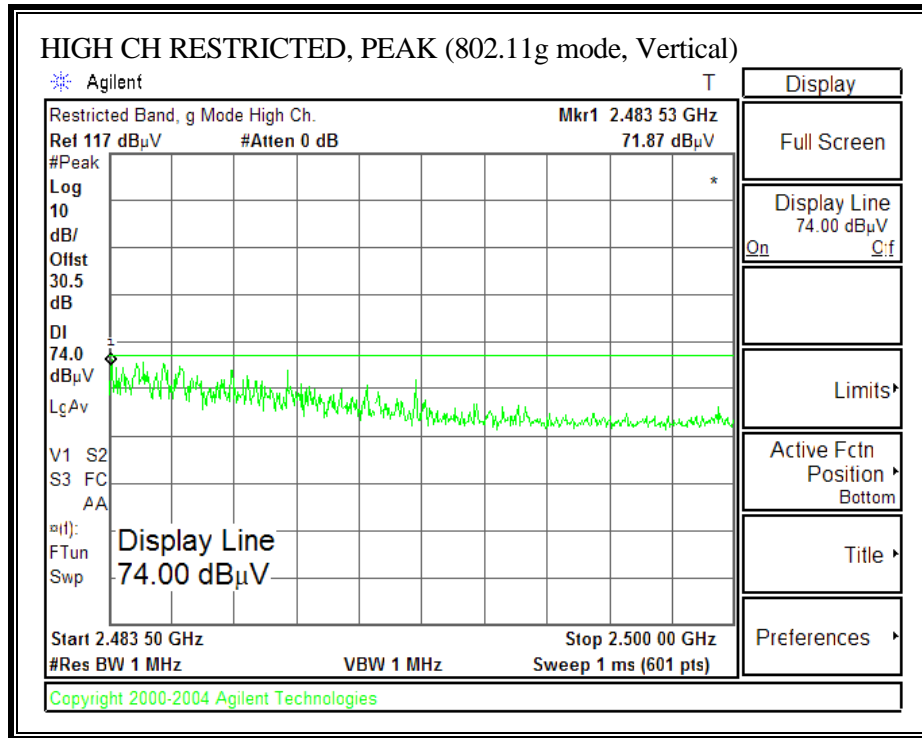


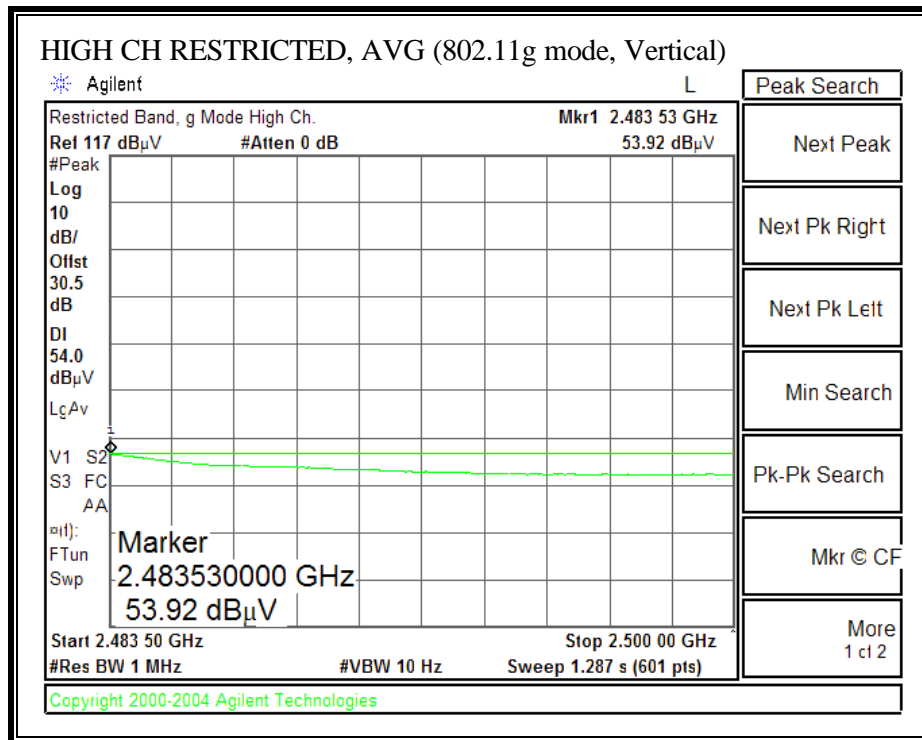
RESTRICTED BANDEDGE (g MODE, HIGH CHANNEL, 2457 MHz, VERTICAL)



RESTRICTED BANDEDGE (g MODE, HIGH CHANNEL, 2462 MHz, HORIZONTAL)



RESTRICTED BANDEDGE (g MODE, HIGH CHANNEL, 2462 MHz, VERTICAL)



HARMONICS AND SPURIOUS EMISSIONS (g MODE)

High Frequency Measurement															
Compliance Certification Services, Morgan Hill Open Field Site															
Company: Broadcom Project #: 06U10233 Date: 05/09/06 Test Engineer: Vien Tran Configuration: EUT & Low Gain Antenna_BCM94321MC, S/N 318 Mode: Tx Legacy 11g Mode Average Power Meter: Low = 19 dBm, Mid = 19 dBm, High = 19 dBm															
Test Equipment:															
Horn 1-18GHz		Pre-amplifier 1-26GHz		Pre-amplifier 26-40GHz		Horn > 18GHz		Limit							
T73; S/N: 6717 @3m		T144 Miteq 3008A00931						FCC 15.205							
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> Hi Frequency Cables <div style="display: flex; justify-content: space-around;"> <div style="background-color: #e0f7fa; padding: 5px; border: 1px solid black;">2 foot cable</div> <div style="background-color: #e0f7fa; padding: 5px; border: 1px solid black;">3 foot cable</div> <div style="background-color: #e0f7fa; padding: 5px; border: 1px solid black;">12 foot cable</div> </div> <div style="display: flex; justify-content: space-around; margin-top: 5px;"> <div style="border: 1px solid black; width: 100px; height: 20px;"></div> <div style="border: 1px solid black; width: 100px; height: 20px; text-align: center;">Vien 187215002</div> <div style="border: 1px solid black; width: 100px; height: 20px; text-align: center;">Vien 197209005</div> </div> </div> <div style="width: 50%;"> <div style="display: flex; justify-content: space-around;"> <div style="background-color: #e0f7fa; padding: 5px; border: 1px solid black;">HPF</div> <div style="background-color: #e0f7fa; padding: 5px; border: 1px solid black;">Reject Filter</div> </div> <div style="display: flex; justify-content: space-around; margin-top: 5px;"> <div style="border: 1px solid black; width: 100px; height: 20px; text-align: center;">HPF_4.0GHz</div> <div style="border: 1px solid black; width: 100px; height: 20px;"></div> </div> </div> </div> <div style="margin-top: 5px;"> Peak Measurements RBW=VBW=1MHz Average Measurements RBW=1MHz ; VBW=10Hz </div>															
f GHz	Dist (m)	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Fldr dB	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes (V/H)
Low Channel, 2412 MHz															
4.824	3.0	52.2	42.8	33.3	2.9	-36.5	0.0	0.6	52.6	43.2	74	54	-21.4	-10.8	V
12.060	3.0	45.0	34.2	37.7	4.8	-35.4	0.0	0.9	53.0	42.2	74	54	-31.0	-11.8	V
4.824	3.0	51.2	47.2	33.3	2.9	-36.5	0.0	0.6	51.6	47.6	74	54	-33.4	-6.4	H
12.060	3.0	47.9	35.1	37.7	4.8	-35.4	0.0	0.9	55.9	43.1	74	54	-18.1	-10.9	H
Mid Channel, 2437 MHz															
4.874	3.0	52.1	42.4	33.4	3.0	-36.5	0.0	0.6	52.6	42.9	74	54	-31.4	-11.1	V
7.311	3.0	55.2	42.6	35.0	4.2	-36.2	0.0	0.6	58.8	46.2	74	54	-15.3	-7.8	V
12.185	3.0	45.8	34.1	37.6	4.9	-35.4	0.0	0.9	53.8	42.1	74	54	-32.3	-11.9	V
4.874	3.0	51.7	48.1	33.4	3.0	-36.5	0.0	0.6	52.2	48.6	74	54	-31.8	5.4	H
7.311	3.0	46.0	34.9	35.0	4.2	-36.2	0.0	0.6	49.6	38.5	74	54	-34.4	-15.9	H
12.185	3.0	47.6	36.7	37.6	4.9	-35.4	0.0	0.9	55.6	44.7	74	54	-18.4	4.3	H
High Channel, 2462 MHz															
4.924	3.0	49.2	40.2	33.4	3.1	-36.5	0.0	0.6	49.8	40.8	74	54	-34.3	-13.3	V
7.386	3.0	52.4	40.7	35.0	4.2	-36.2	0.0	0.6	56.0	44.3	74	54	-18.0	4.9	V
12.310	3.0	46.9	35.4	37.6	4.9	-35.4	0.0	0.9	54.9	43.4	74	54	-19.1	-10.6	V
4.924	3.0	51.9	48.2	33.4	3.1	-36.5	0.0	0.6	52.5	48.8	74	54	-31.5	5.3	H
7.386	3.0	48.4	37.1	35.0	4.2	-36.2	0.0	0.6	52.0	40.7	74	54	-33.0	-13.3	H
12.310	3.0	49.6	37.8	37.6	4.9	-35.4	0.0	0.9	57.6	45.8	74	54	-16.4	8.3	H
No other emissions were detected above system noise floor.															
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										

7.13.9. TRANSMITTER ABOVE 1 GHz FOR 5725 TO 5850 MHz BAND**HARMONICS AND SPURIOUS EMISSIONS (802.11a MODE)**

High Frequency Measurement															
Compliance Certification Services, Morgan Hill Open Field Site															
Company: Broadcom															
Project #: 06U10233															
Date: 05/10/06															
Test Engineer: Vien Tran															
Configuration: EUT & Low Gain Antenna_BCM94321MC, S/N 316															
Mode: Tx Legacy 11a Mode_5.8 GHz Band															
Average Power Meter: Low = 17.5 dBm, Mid = 17.5 dBm, High = 17.5dBm															
Test Equipment:															
Horn 1-18GHz		Pre-amplifier 1-26GHz		Pre-amplifier 26-40GHz		Horn > 18GHz		Limit							
T73; S/N: 6717 @3m		T144 Miteq 3008A00931		T88 Miteq 26-40GHz		T89; ARA 18-26GHz; S/N:1049		FCC 15.209							
Hi Frequency Cables															
2 foot cable		3 foot cable		12 foot cable		HPF		Reject Filter		Peak Measurements RBW=VBW=1MHz Average Measurements RBW=1MHz ; VBW=10Hz					
		Vien 187215002		Vien 197209005		HPF_7.6GHz									
f GHz	Dist (m)	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Filtr dB	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes (V/H)
LOW CH, 5745 MHz															
11.490	3.0	51.7	40.5	37.5	4.8	-35.9	0.0	0.7	58.8	47.6	74	54	-15.2	-6.4	V
17.235	3.0	43.0	33.5	41.7	6.1	-33.8	0.0	0.6	57.8	48.3	74	54	-16.2	-5.7	V
11.490	3.0	52.0	41.5	37.5	4.8	-35.9	0.0	0.7	59.1	48.6	74	54	-14.9	-5.4	H
17.235	3.0	44.9	33.6	41.7	6.1	-33.8	0.0	0.6	59.7	48.4	74	54	-14.3	-5.6	H
MID CH, 5785 MHz															
11.570	3.0	49.4	37.9	37.5	4.8	-35.8	0.0	0.7	56.6	45.1	74	54	-17.4	-8.9	H
17.355	3.0	43.0	33.9	42.2	6.1	-33.8	0.0	0.6	58.2	49.1	74	54	-15.8	-4.9	V
11.570	3.0	51.9	39.5	37.5	4.8	-35.8	0.0	0.7	59.1	46.7	74	54	-14.9	-7.3	V
17.355	3.0	43.0	33.5	42.2	6.1	-33.8	0.0	0.6	58.2	48.7	74	54	-15.8	-5.3	H
HI CH, 5825 MHz															
11.650	3.0	48.5	36.8	37.5	4.8	-35.7	0.0	0.7	55.8	44.1	74	54	-18.2	-9.9	V
17.475	3.0	42.9	33.5	42.7	6.2	-33.8	0.0	0.6	58.5	49.1	74	54	-15.5	-4.9	V
11.650	3.0	48.1	37.8	37.5	4.8	-35.7	0.0	0.7	55.4	45.1	74	54	-18.6	-8.9	H
17.475	3.0	43.5	33.2	42.7	6.2	-33.8	0.0	0.6	59.1	48.8	74	54	-14.9	-5.2	H
No other emissions were detected above system noise floor.															
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											

7.13.10. WORST-CASE RADIATED EMISSIONS BELOW 1 GHz**2.4 GHz BAND****SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)****HORIZONTAL**

561F Monterey Road
Morgan Hill, CA 95037
Tel: (408) 463-0888
Fax: (408) 463-0885

Data#: 6 File#: 30-1000 Apple.EMI Date: 05-15-2006 Time: 13:55:21
Audix ATC

Condition: FCC CLASS-B HORIZONTAL

Test Operator: : Vien Tran

Company: : Broadcom

Project #: : 06U10233

EUT Description: : 2x2 Dual Band MIMO Device_Card #316,
: with Apple PCB Antenna

Model No: : BCM94321_Rev 4.0

S/N: : 316

Configuration : EUT/ minimum peripherals

Mode of Operation: Tx Legacy 2.4 GHz Band_Worst Case

TEST Target: : FCC Class B

Page: 1

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	30.000	9.08	20.45	29.53	40.00	-10.47	Peak
2	104.690	29.80	12.38	42.18	43.50	-1.32	Peak
3	304.510	26.57	15.78	42.35	46.00	-3.65	Peak
4	405.390	23.21	18.18	41.39	46.00	-4.61	Peak
5	575.140	20.30	21.20	41.50	46.00	-4.50	Peak
6	643.040	18.75	22.23	40.98	46.00	-5.02	Peak

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

561F Monterey Road
Morgan Hill, CA 95037
Tel: (408) 463-0888
Fax: (408) 463-0885

Data#: 2 File#: 30-1000 Apple.EMI Date: 05-15-2006 Time: 13:34:40
Audix ATC

Condition: FCC CLASS-B VERTICAL

Test Operator: : Vien Tran

Company: : Broadcom

Project #: : 06U10233

EUT Description: : 2x2 Dual Band MIMO Device_Card #316,
: with Apple PCB Antenna

Model No: : BCM94321_Rev 4.0

S/N: : 316

Configuration : EUT/ minimum peripherals

Mode of Operation: Tx Legacy 2.4 GHz Band_Worst Case

TEST Target: : FCC Class B

Page: 1

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	31.940	14.19	19.94	34.13	40.00	-5.87	Peak
2	101.780	29.23	11.77	41.00	43.50	-2.50	Peak
3	304.510	25.49	15.78	41.27	46.00	-4.73	Peak
4	406.360	21.16	18.20	39.35	46.00	-6.65	Peak
5	506.270	22.63	20.29	42.93	46.00	-3.07	Peak
6	574.170	18.51	21.18	39.68	46.00	-6.32	Peak

5 GHz BAND**SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)****HORIZONTAL**

561F Monterey Road
Morgan Hill, CA 95037
Tel: (408) 463-0888
Fax: (408) 463-0885

Data#: 8 File#: 30-1000 Apple.EMI Date: 05-15-2006 Time: 14:05:10
Audix ATC

Condition: FCC CLASS-B HORIZONTAL

Test Operator: : Vien Tran

Company: : Broadcom

Project #: : 06U10233

EUT Description: : 2x2 Dual Band MIMO Device_Card #316,
: with Apple PCB Antenna

Model No: : BCM94321_Rev 4.0

S/N: : 316

Configuration : EUT/ minimum peripherals

Mode of Operation: Tx Legacy 5.2 GHz Band_Worst Case

TEST Target: : FCC Class B

Page: 1

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	31.940	9.41	19.94	29.35	40.00	-10.65	Peak
2	103.720	29.50	12.23	41.73	43.50	-1.77	Peak
3	304.510	26.60	15.78	42.37	46.00	-3.63	Peak
4	406.360	23.26	18.20	41.46	46.00	-4.54	Peak
5	504.330	22.41	20.26	42.67	46.00	-3.33	Peak
6	573.200	18.61	21.16	39.77	46.00	-6.23	Peak
7	681.840	17.76	22.86	40.62	46.00	-5.38	Peak

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

561F Monterey Road
Morgan Hill, CA 95037
Tel: (408) 463-0888
Fax: (408) 463-0885

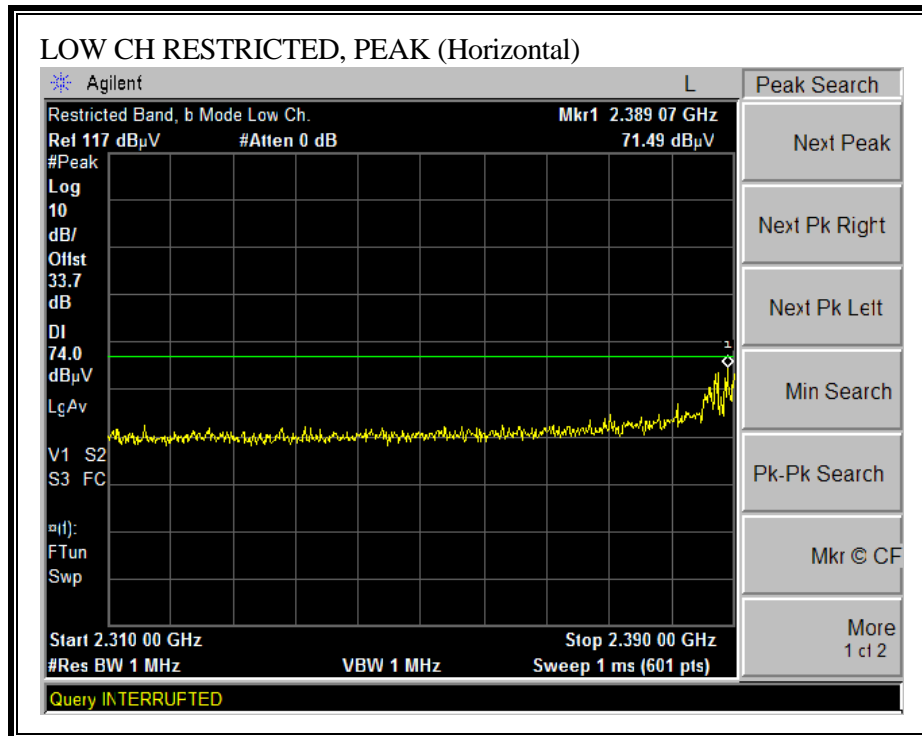
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Audix ATC

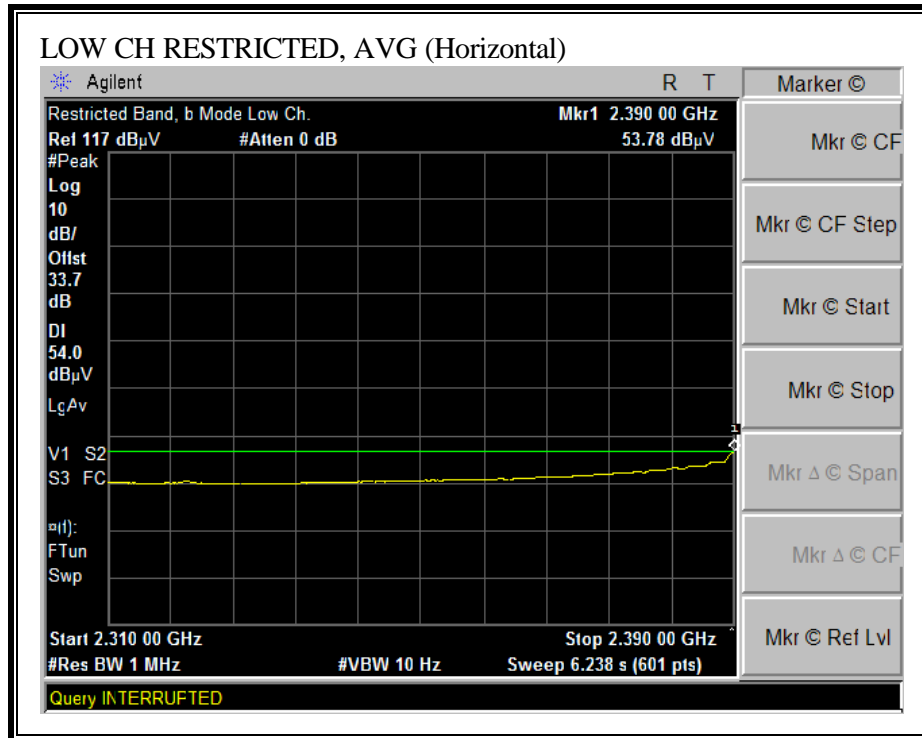
Condition: FCC CLASS-B VERTICAL

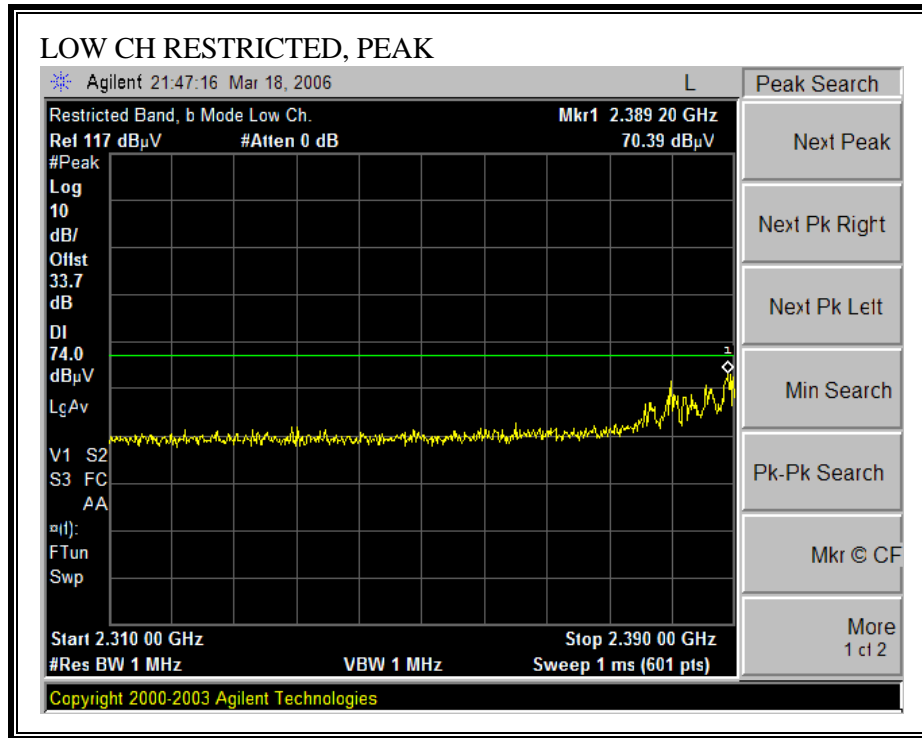
Test Operator: : Vien Tran
Company: : Broadcom
Project #: : 06U10233
EUT Description: : 2x2 Dual Band MIMO Device_Card #316,
: with Apple PCB Antenna
Model No: : BCM94321_Rev 4.0
S/N: : 316
Configuration : EUT/ minimum peripherals
Mode of Operation: Tx Legacy 5.2 GHz Band_Worst Case
TEST Target: : FCC Class B

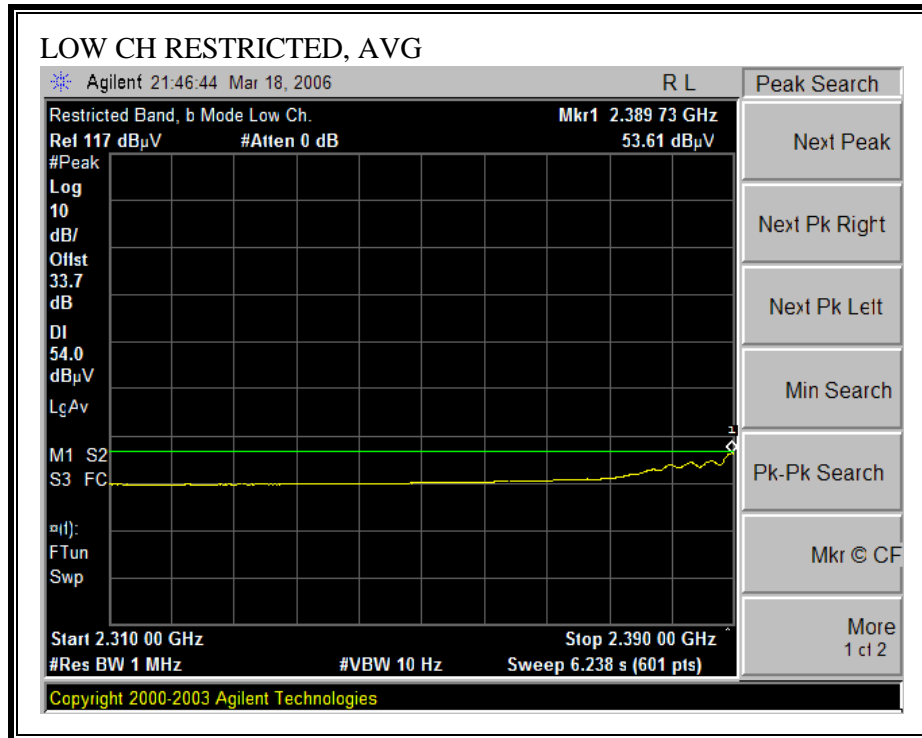
Page: 1

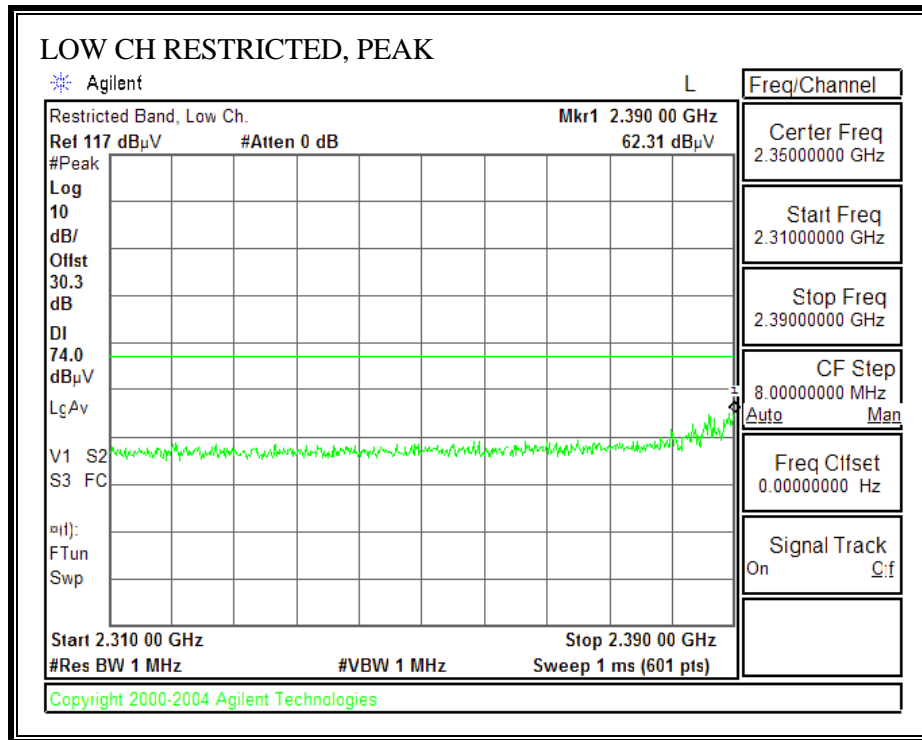
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	31.940	14.47	19.94	34.41	40.00	-5.59	Peak
2	104.690	28.30	12.38	40.68	43.50	-2.82	Peak
3	406.360	21.02	18.20	39.21	46.00	-6.79	Peak
4	506.270	21.95	20.29	42.25	46.00	-3.75	Peak
5	572.230	17.37	21.14	38.51	46.00	-7.49	Peak
6	807.940	14.83	24.69	39.52	46.00	-6.48	Peak
7	983.510	13.34	26.76	40.09	54.00	-13.91	Peak

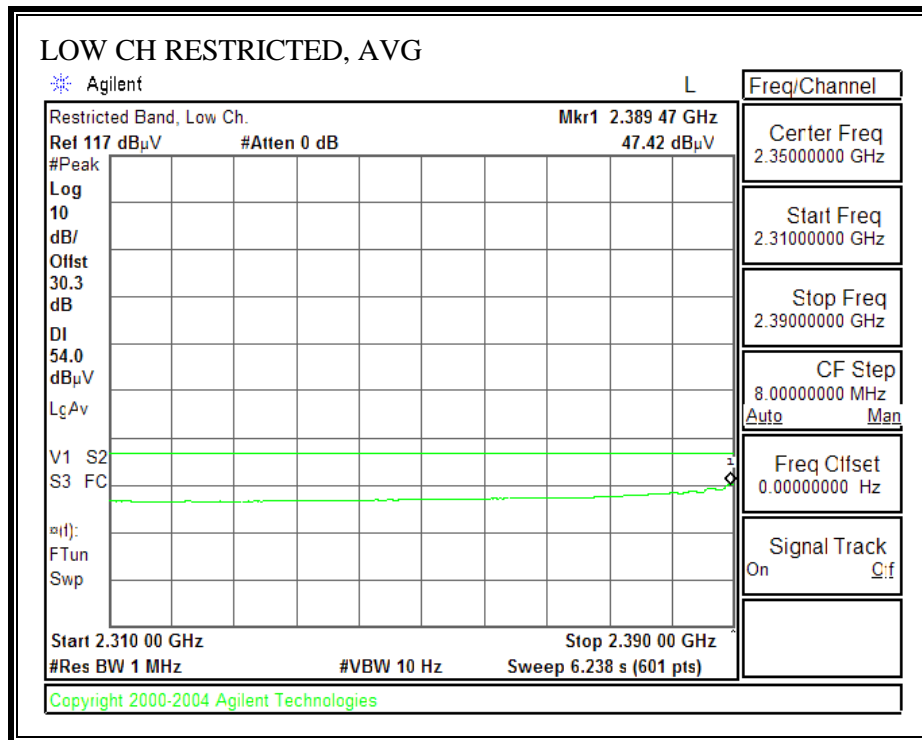
MIMO MODE**7.13.11. TRANSMITTER ABOVE 1 GHz FOR 2400 TO 2483.5 MHz BAND****20 MHz TX BANDWIDTH****RESTRICTED BANDEDGE (LOW CHANNEL, 2412 MHz, HORIZONTAL)**

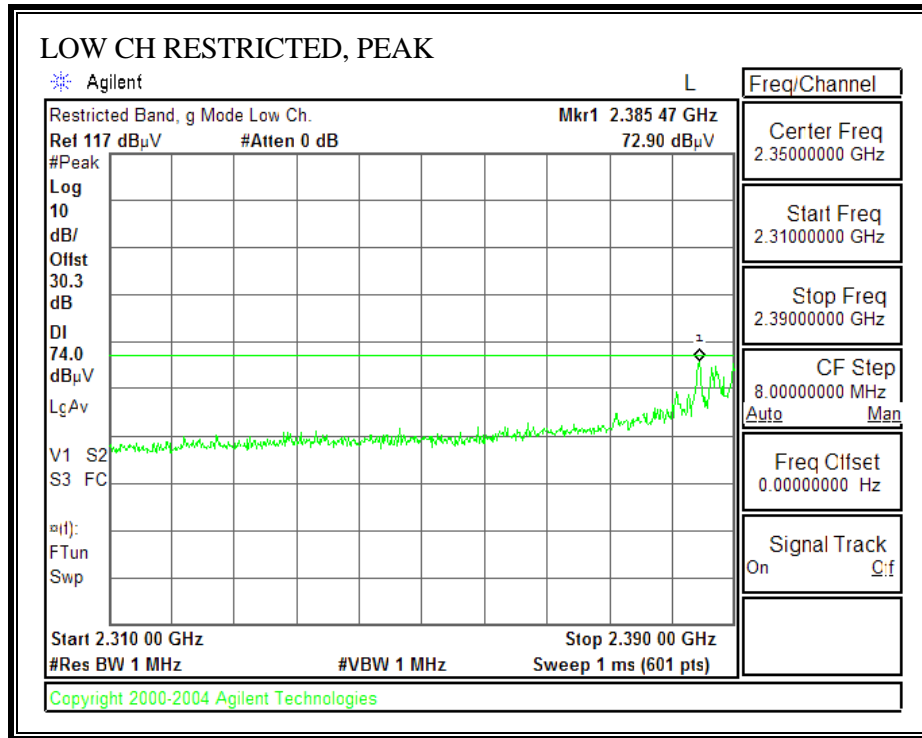


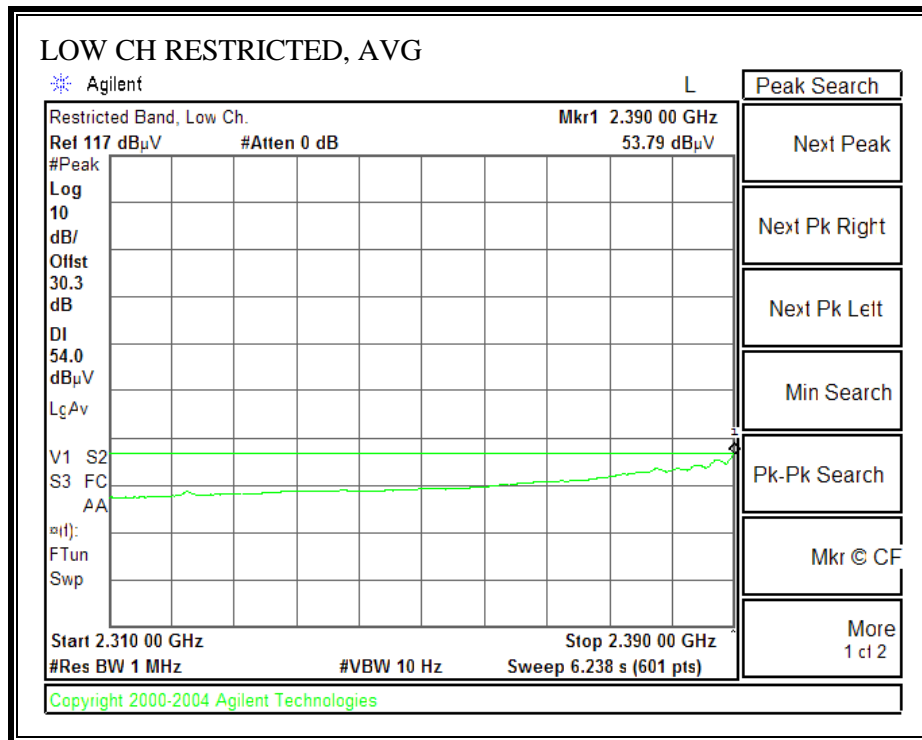
RESTRICTED BANDEDGE (LOW CHANNEL, 2412 MHz, VERTICAL)

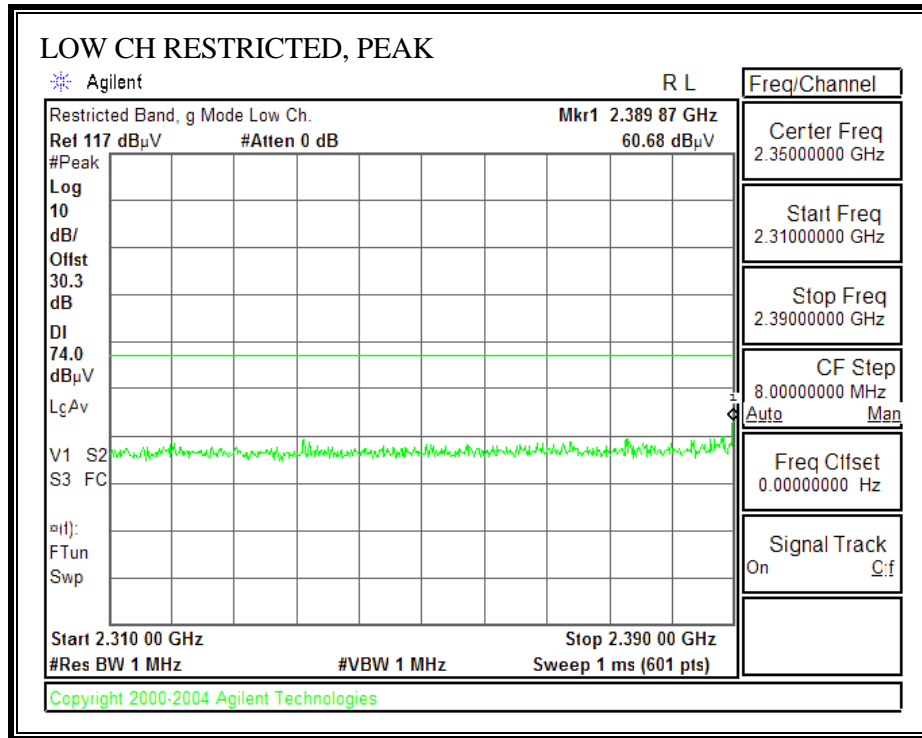


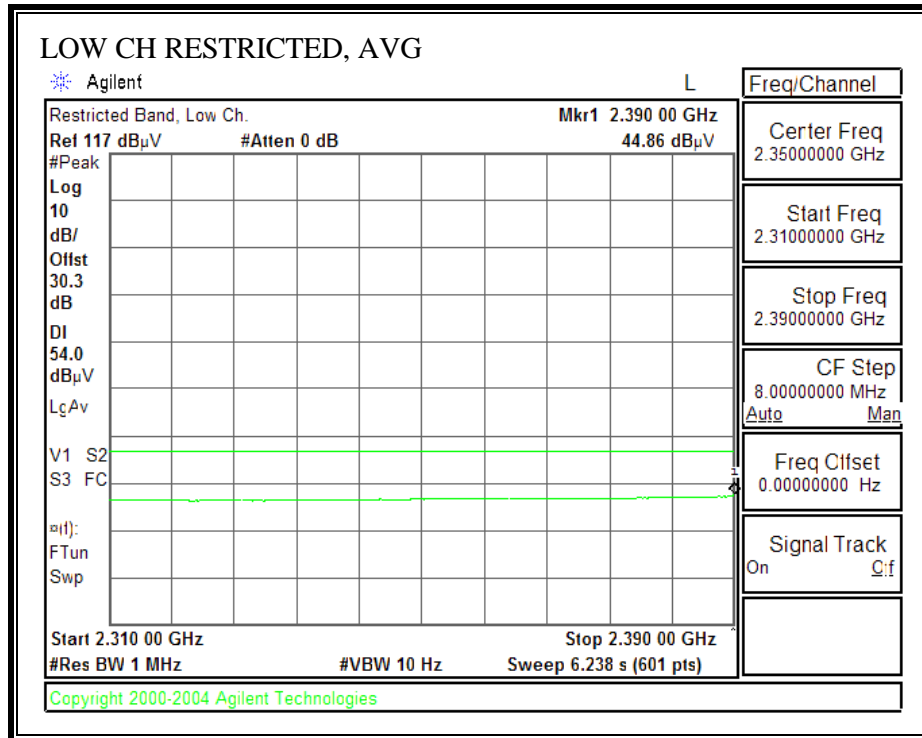
RESTRICTED BANDEDGE (LOW CHANNEL, 2417 MHz, HORIZONTAL)



RESTRICTED BANDEDGE (LOW CHANNEL, 2417 MHz, VERTICAL)



RESTRICTED BANDEDGE (LOW CHANNEL, 2422 MHz, HORIZONTAL)



RESTRICTED BANDEDGE (LOW CHANNEL, 2422 MHz, VERTICAL)