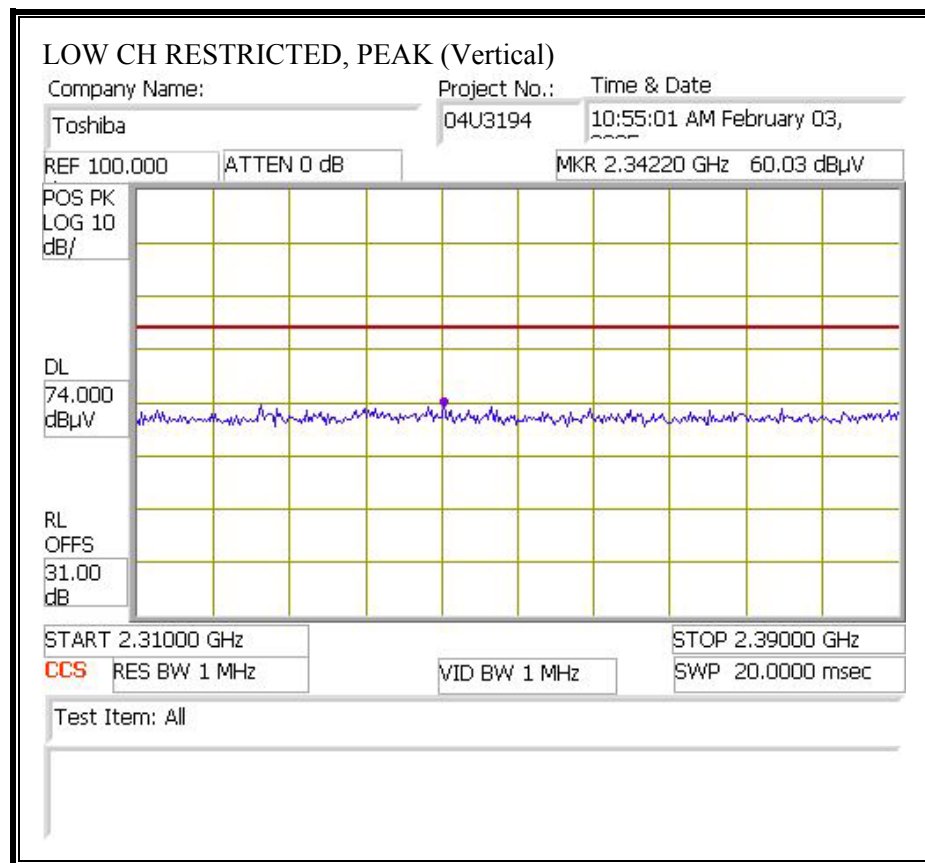
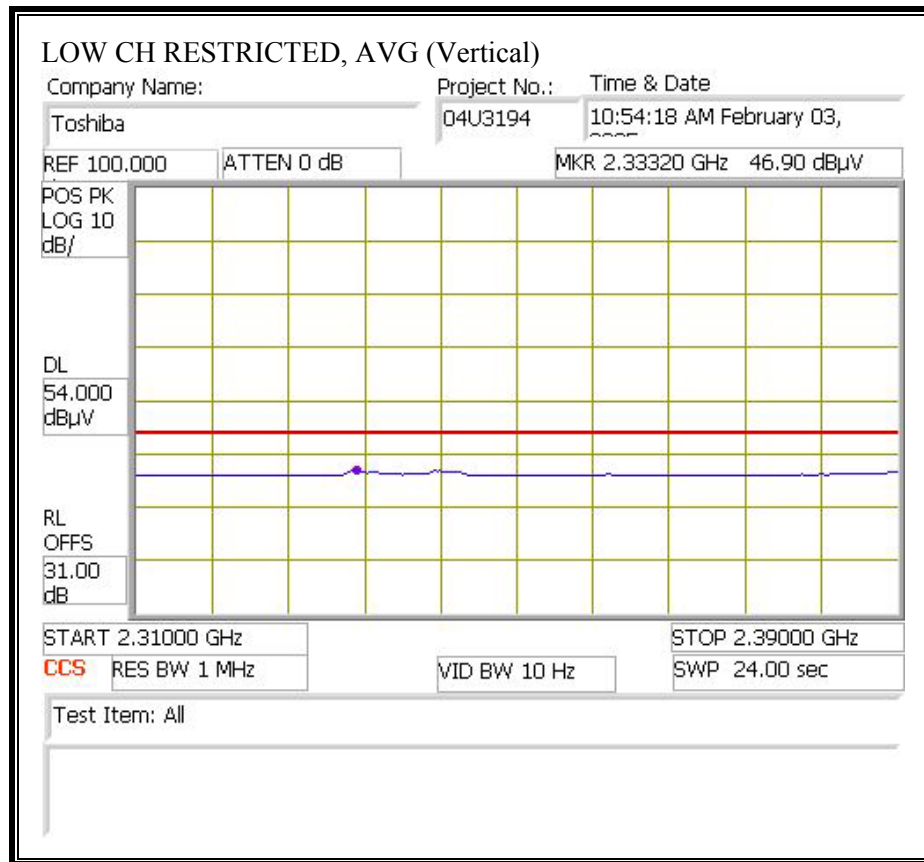
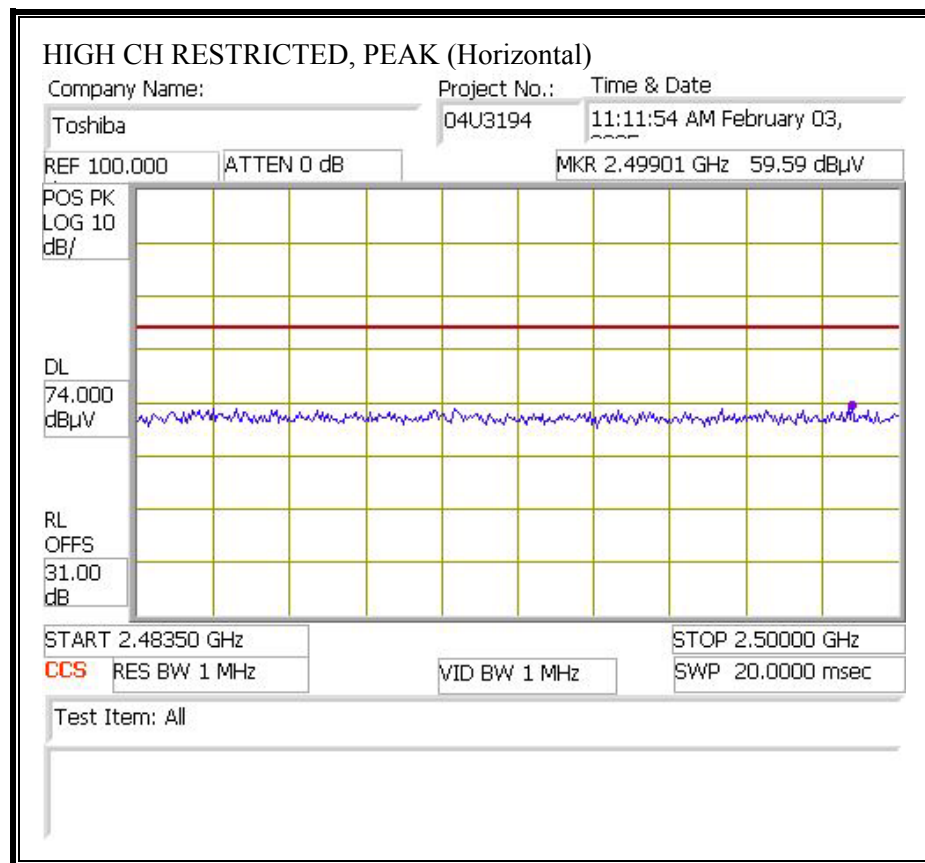


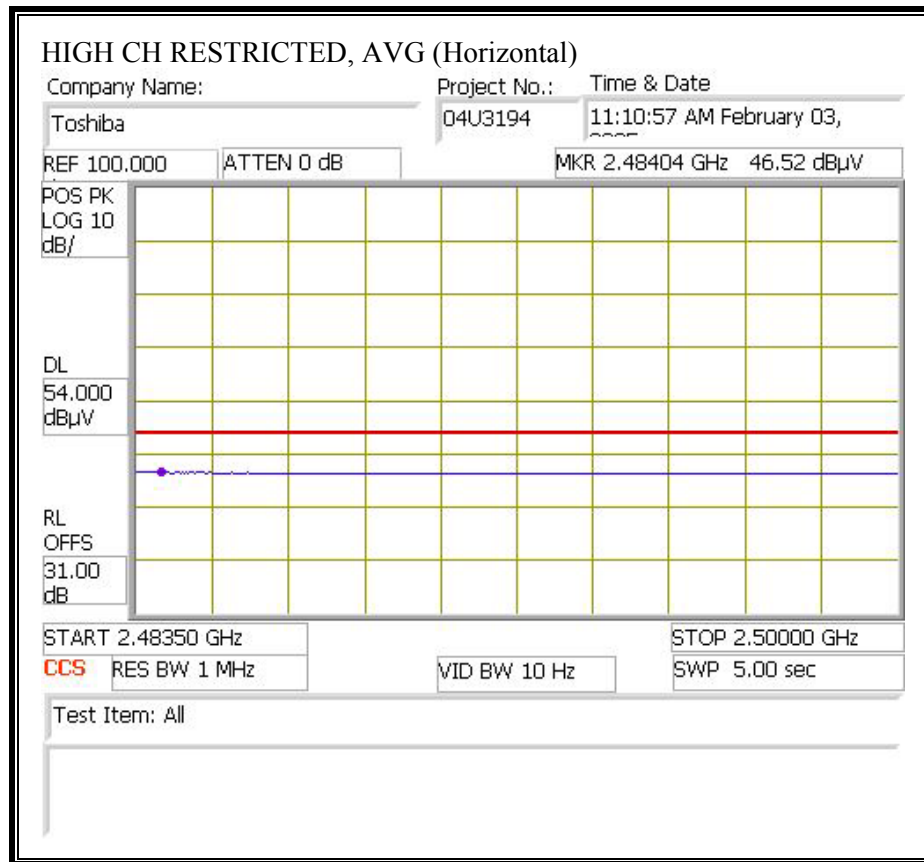
WORST-CASE RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



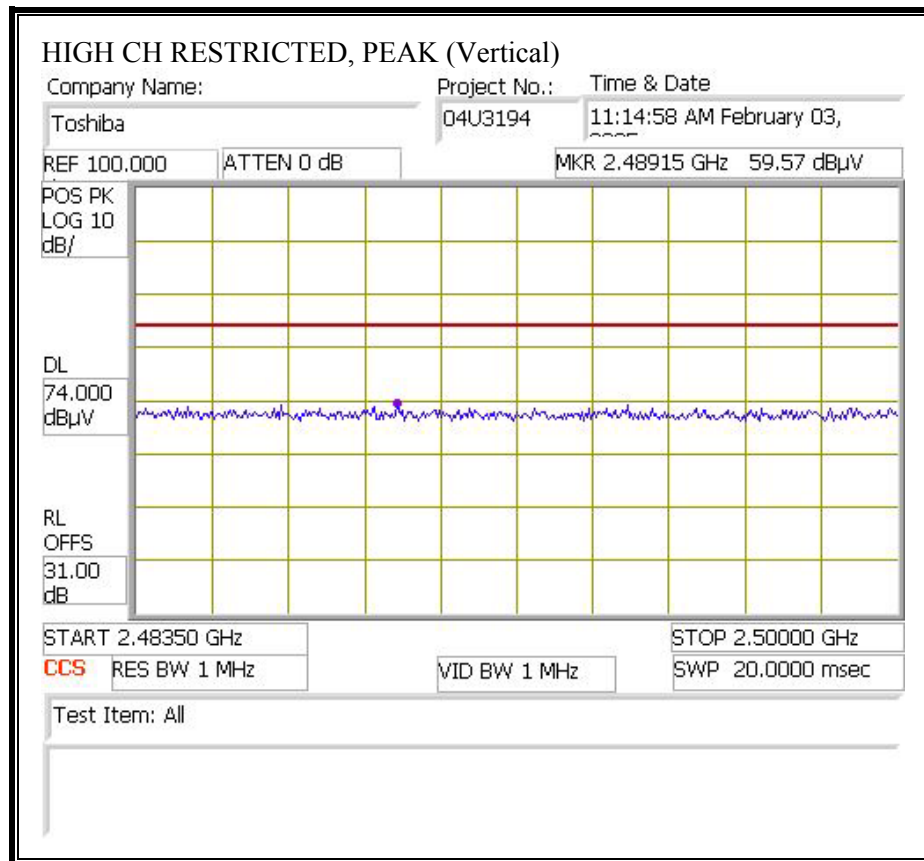


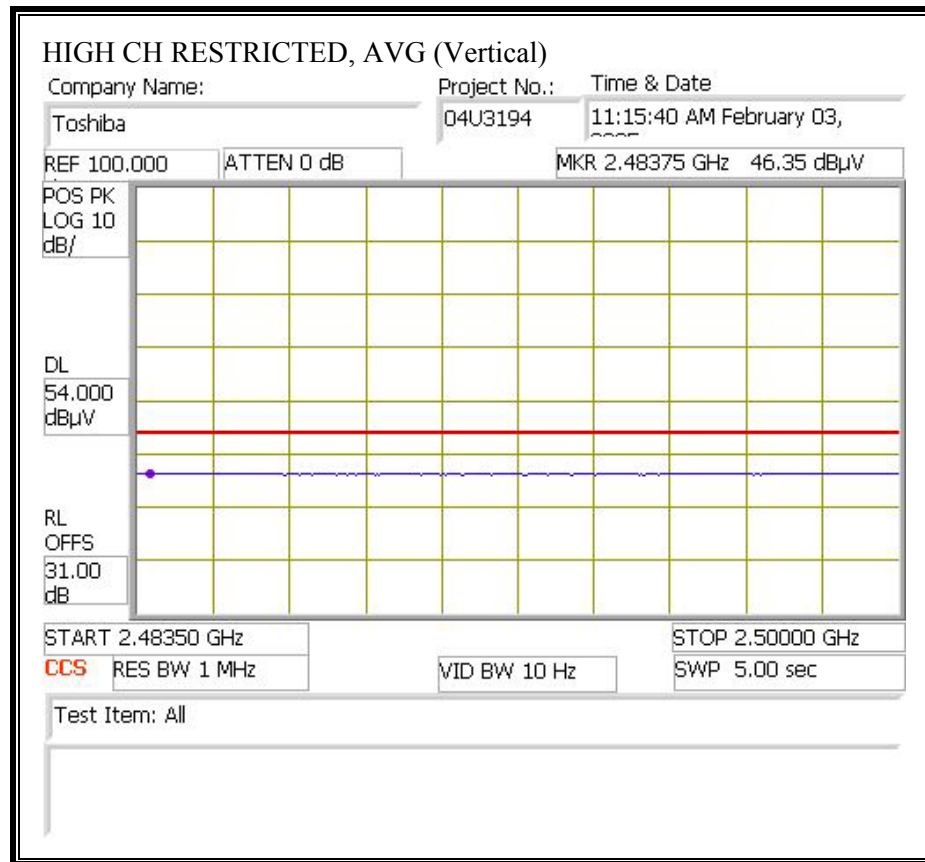
WORST-CASE RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)





WORST-CASE RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)





WORST-CASE HARMONICS AND SPURIOUS EMISSIONS

02/04/05 High Frequency Measurement Compliance Certification Services, Morgan Hill Open Field Site																
Test Engr: David Garcia Project #: 04U3194-1 Company: Toshiba EUT Descrip.: 802.11b/g Half Size Mini-PCI WLAN Module EUT M/N: PA3426U-1MPC Test Target: FCC 15.247 Mode Oper: Tx_g mode_antenna HTL017 WLAN and Bluetooth, BC02 Co-location (Worst Case), portable																
Test Equipment:																
EMCO Horn 1-18GHz T73; S/N: 6717 @3m		Pre-amplifier 1-26GHz T87 Miteq 924342		Pre-amplifier 26-40GHz		Horn > 18GHz		Limit FCC 15.205								
Hi Frequency Cables										Peak Measurements RBW=VBW=1MHz						
2 foot cable 3		3 foot cable 3_David		4 foot cable		12 foot cable 12_Yan		HPF HPF_4.0GHz		Reject Filter		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	Filt dB	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes (V/H)	
mid ch																
4.874	3.0	51.7	36.8	32.9	4.6	-39.6	0.0	0.6	50.3	35.4	74	54	-23.7	-18.6	V	
7.311	3.0	54.0	40.4	35.8	5.7	-40.3	0.0	0.6	55.9	42.3	74	54	-18.1	-11.7	V	
12.185	3.0	42.0	33.5	38.8	8.2	-39.3	0.0	0.9	50.6	42.1	74	54	-23.4	-11.9	V	
4.874	3.0	49.6	36.0	32.9	4.6	-39.6	0.0	0.6	48.2	34.6	74	54	-25.8	-19.4	H	
7.311	3.0	52.4	39.3	35.8	5.7	-40.3	0.0	0.6	54.3	41.2	74	54	-19.7	-12.8	H	
12.185	3.0	41.2	32.5	38.8	8.2	-39.3	0.0	0.9	49.8	41.1	74	54	-24.2	-12.9	H	
Note: No other emissions were detected above the 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									

7.2.5 CO-LOCATED TRANSMITTER RADIATED EMISSIONS ABOVE 1 GHz, WITH ANTENNA HTL004 IN FIREBOLT

Worst-case configurations are determined as:

Lower bandedge: WLAN in g mode at low channel and Bluetooth at low channel;

Upper bandedge: WLAN in g mode at high channel and Bluetooth at high channel;

Harmonics and spurious emissions: WLAN in g mode at mid channel and Bluetooth at mid channel.

7.2.5.1 STAND-ALONE CONFIGURATION, WITH BLUETOOTH BC04

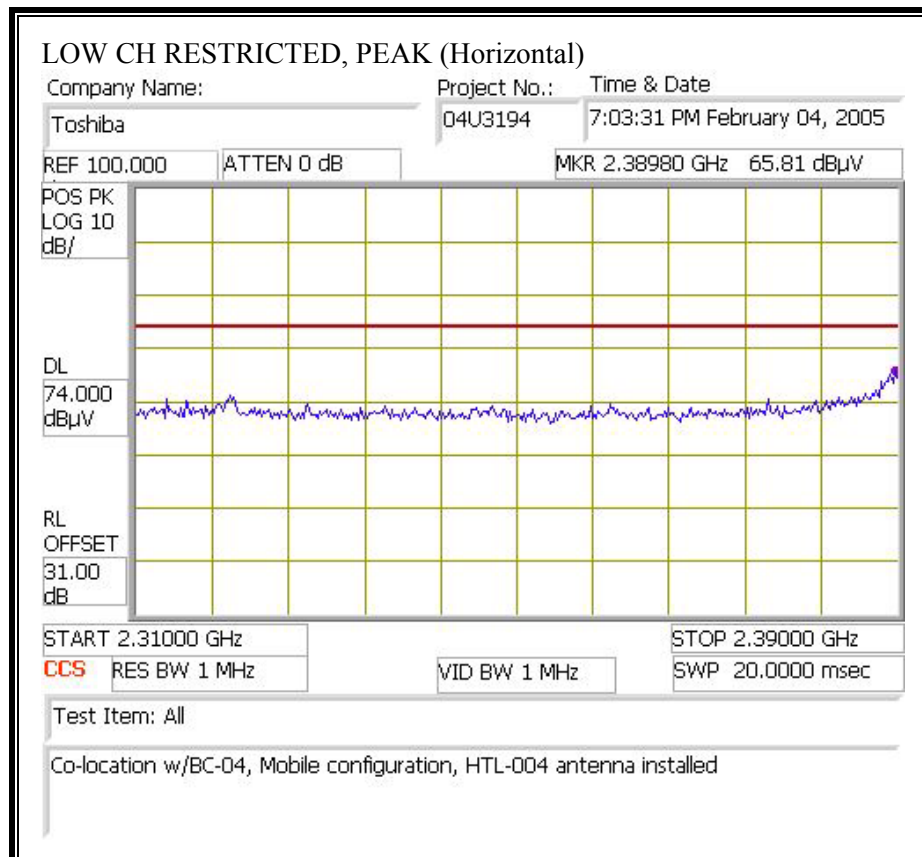
Not applicable. The BT has no extended card to use to be tested for this configuration. Please see 7.2.5.2 for reference.

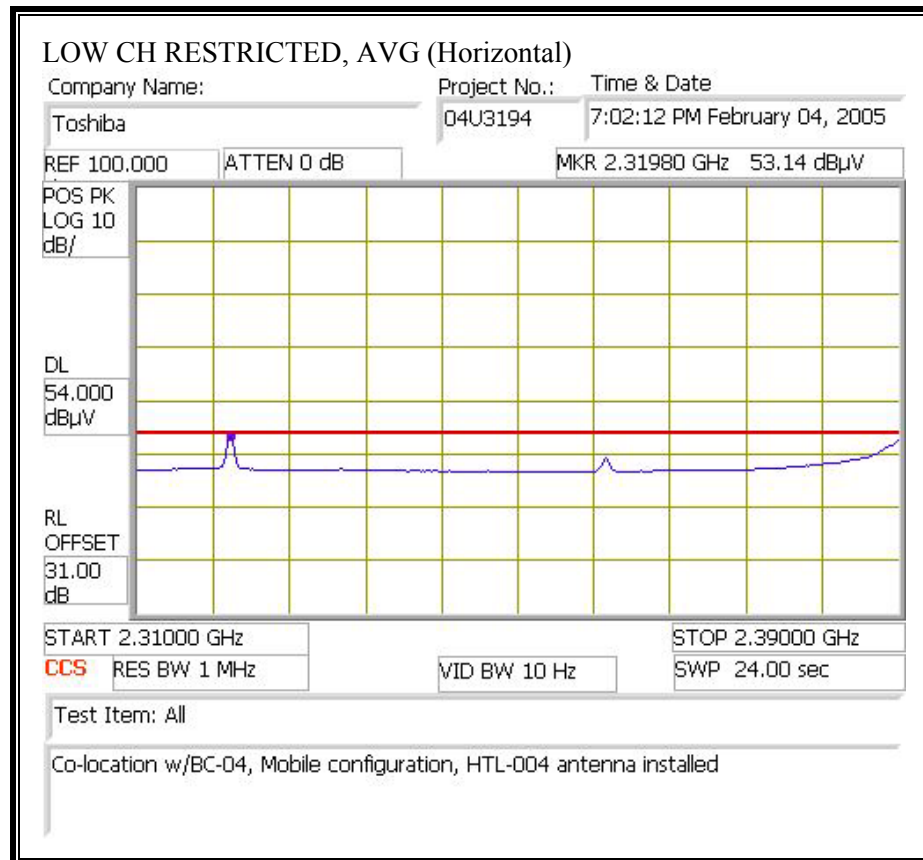
7.2.5.2 MOBILE CONFIGURATION, WITH BLUETOOTH BC04

No non-compliance noted:

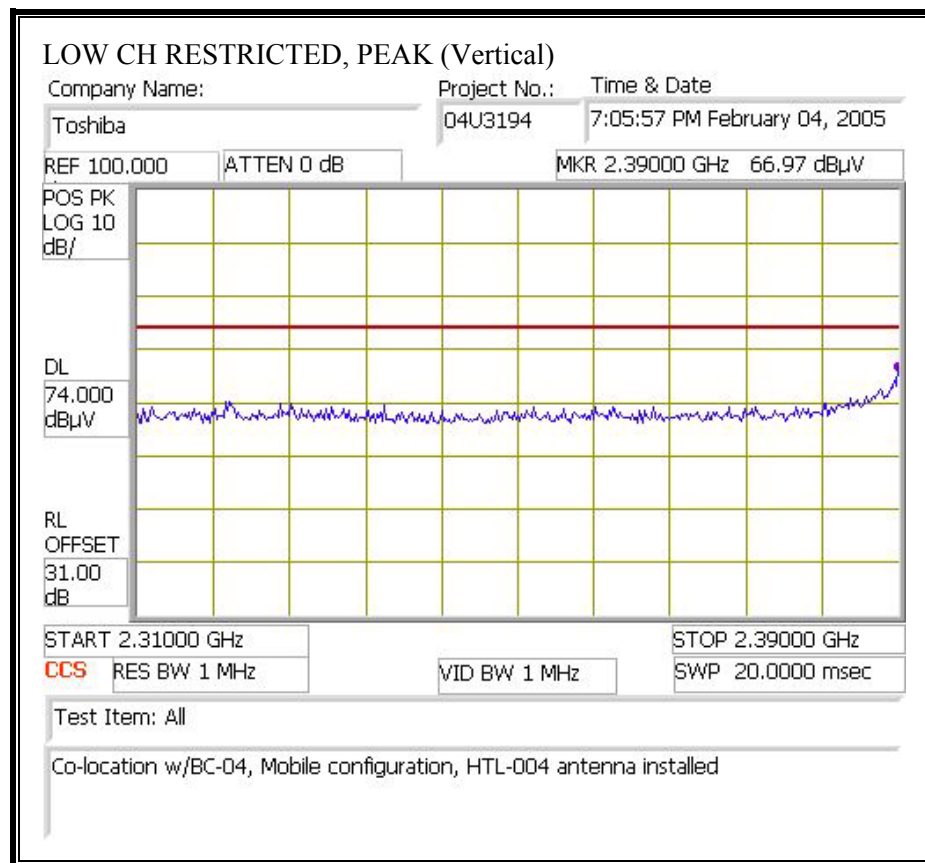
The dominant transmitter is the WLAN and the non-dominant transmitter is the Bluetooth

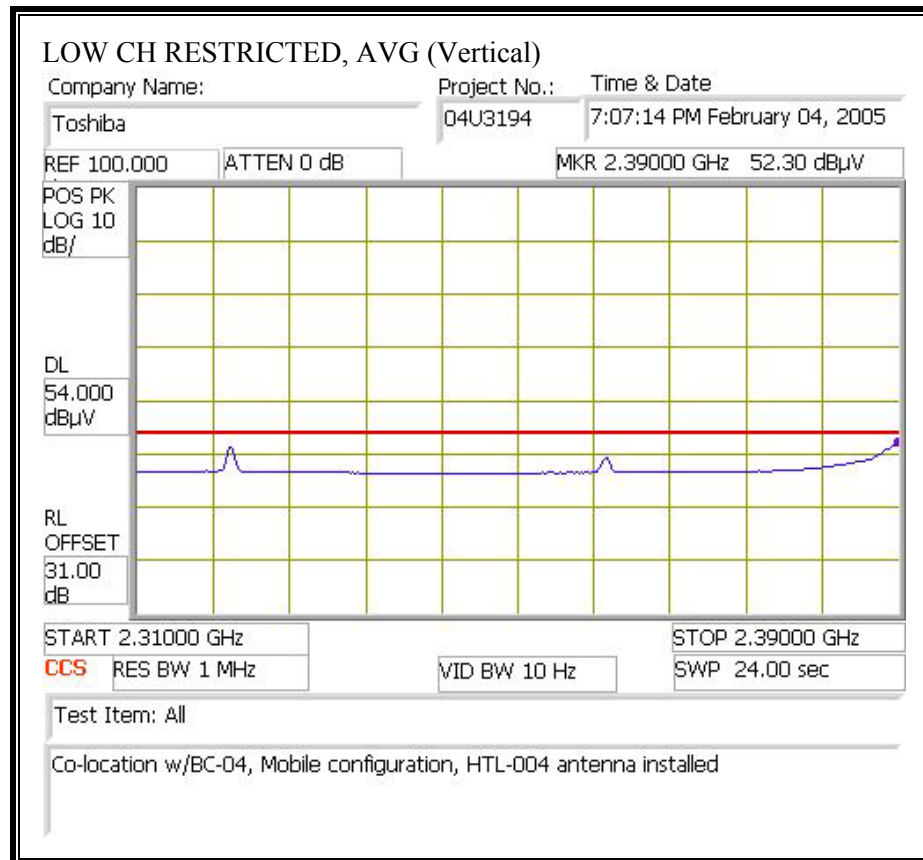
WORST-CASE RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



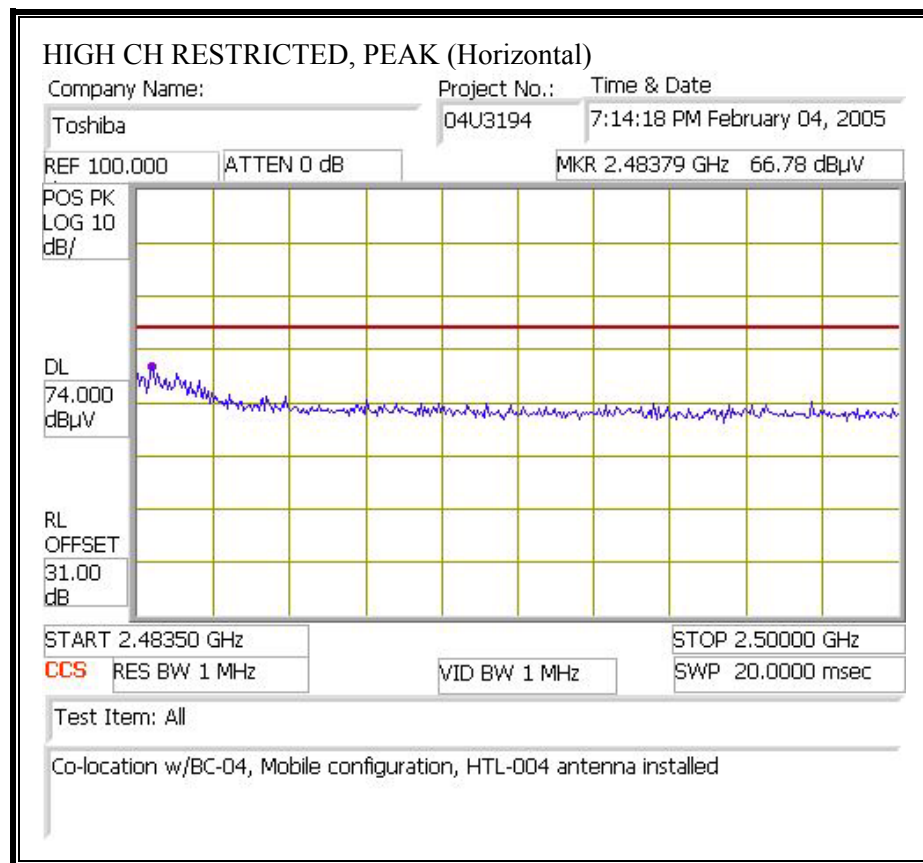


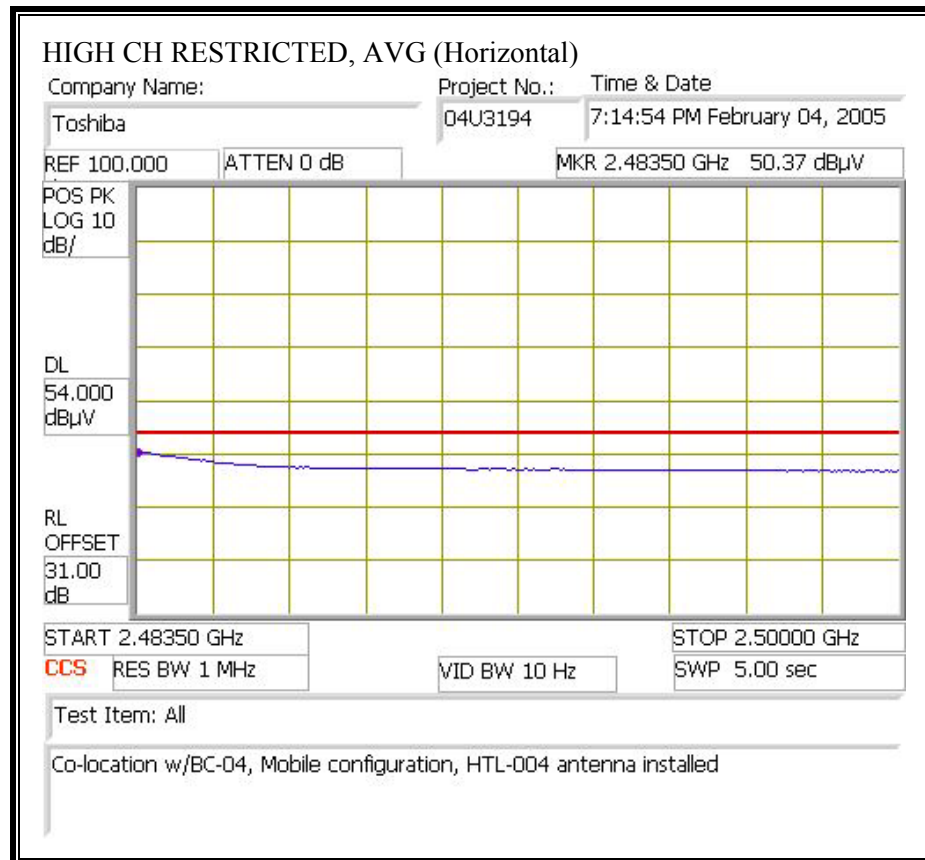
WORST-CASE RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



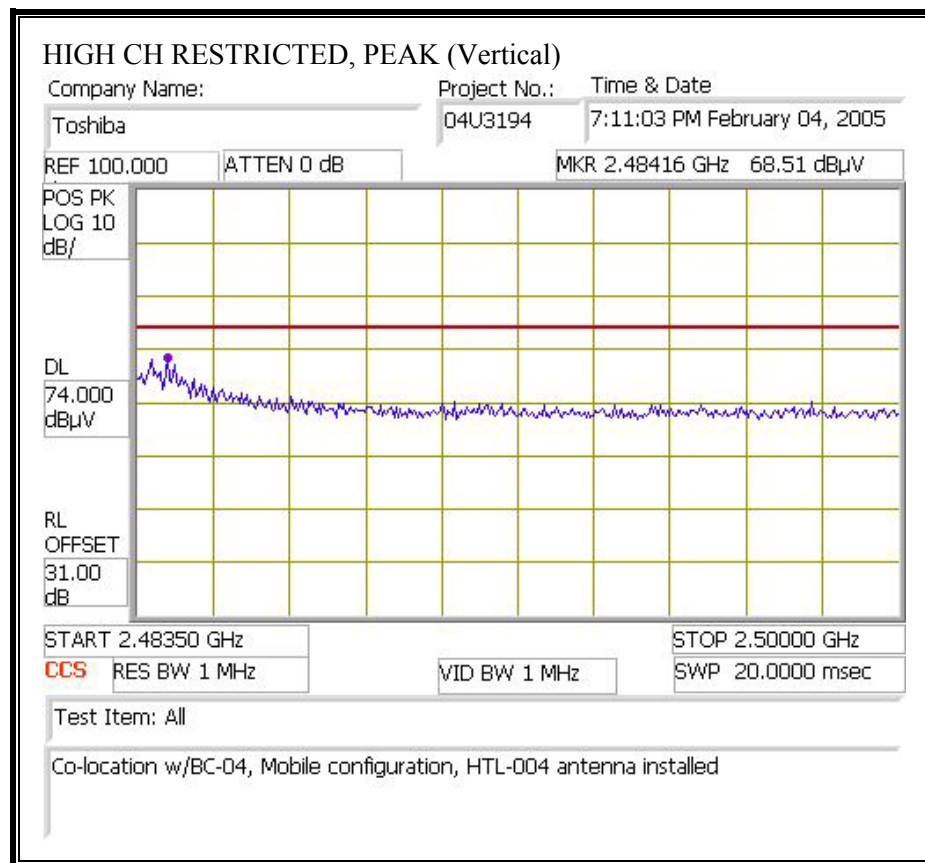


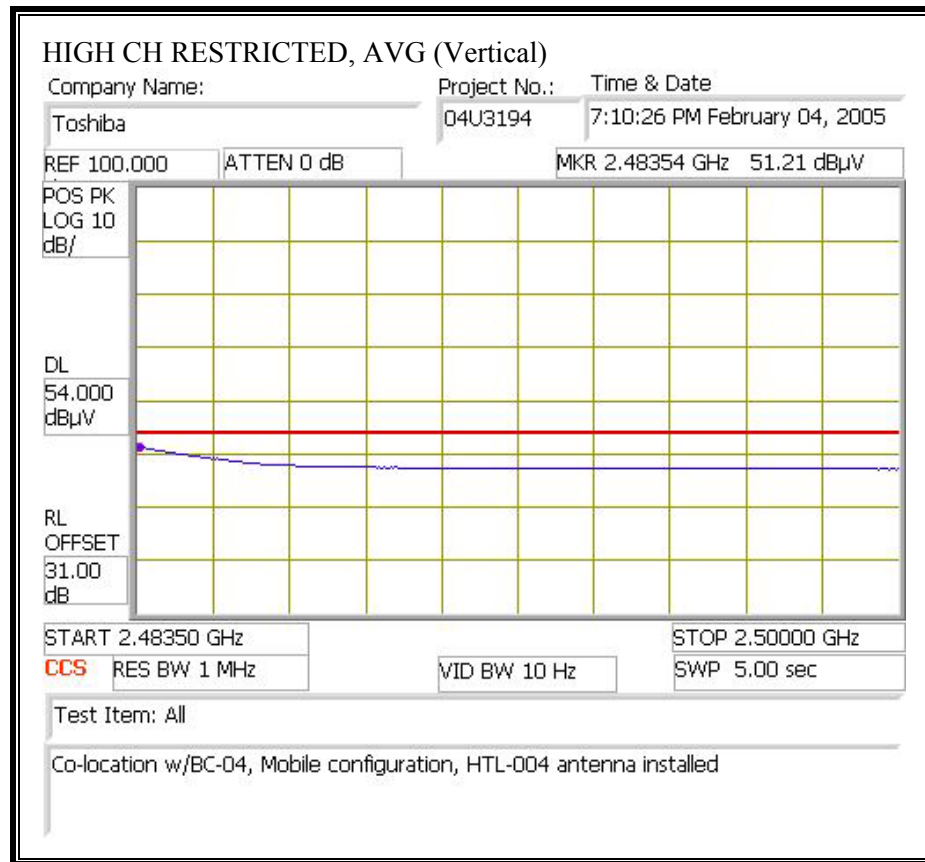
WORST-CASE RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)





WORST-CASE RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)





WORST-CASE HARMONICS AND SPURIOUS EMISSIONS

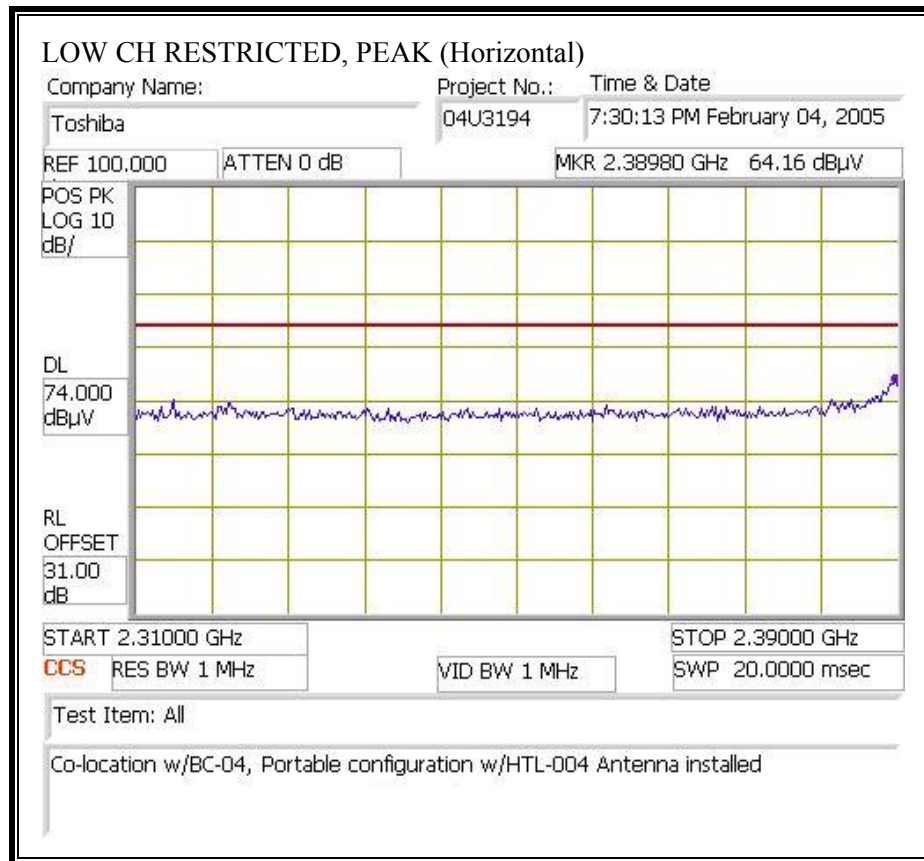
02/04/05 High Frequency Measurement Compliance Certification Services, Morgan Hill Open Field Site																
Test Engr: David Garcia Project #: 04U3194 Company: Toshiba EUT Descrip.: 802.11b/g Half Size Mini-PCI WLAN Module EUT M/N: PA3426U-1MPC Test Target: FCC 15.247 Mode Oper: Tx_g_mode_antenna HTL004_WLAN and BT BC04 Co-location, Mobile																
Test Equipment:																
EMCO Horn 1-18GHz T73; S/N: 6717 @3m				Pre-amplifier 1-26GHz T87 Miteq 924342				Pre-amplifier 26-40GHz				Horn > 18GHz		Limit FCC 15.205		
Hi Frequency Cables																
2 foot cable		3 foot cable		4 foot cable		12 foot cable		HPF		Reject Filter		Peak Measurements RBW=VBW=1MHz				
				4_David		12_Yan		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	Filt dB	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes (V/H)	
2.437 GHz Channel																
4.874	3.0	49.0	36.6	32.9	4.9	-39.6	0.0	0.6	47.8	35.4	74	54	-26.2	-18.6	V	
7.311	3.0	52.0	42.4	35.8	6.0	-40.3	0.0	0.6	54.1	44.5	74	54	-19.9	-9.5	V	
4.874	3.0	47.9	35.5	32.9	4.9	-39.6	0.0	0.6	46.7	34.3	74	54	-27.3	-19.7	H	
7.311	3.0	50.5	43.0	35.8	6.0	-40.3	0.0	0.6	52.6	45.1	74	54	-21.4	-8.9	H	
Note: No other emissions were detected above the 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									

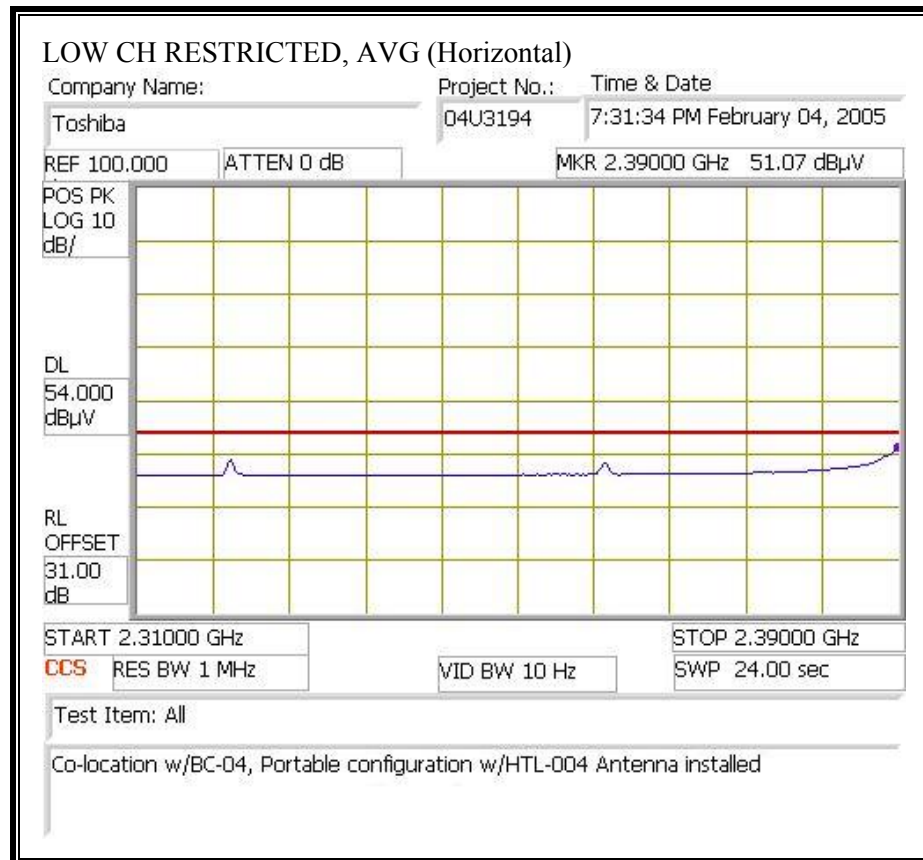
7.2.5.3 PORTABLE CONFIGURATION, WITH BLUETOOTH BC04

No non-compliance noted:

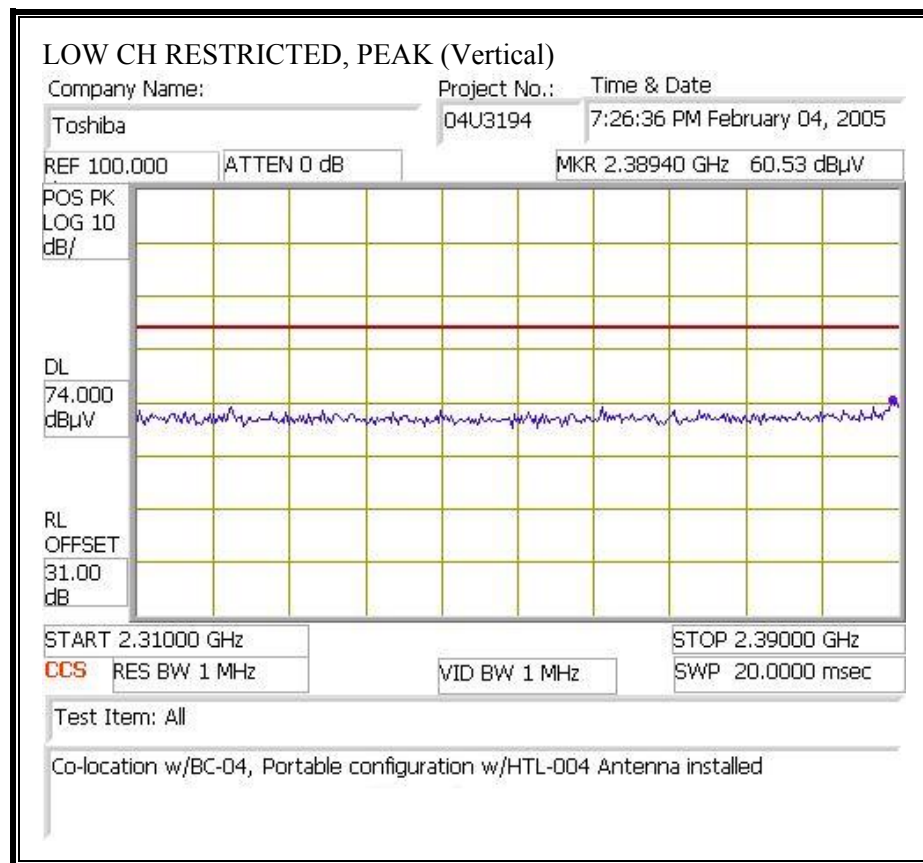
The dominant transmitter is the WLAN and the non-dominant transmitter is the Bluetooth

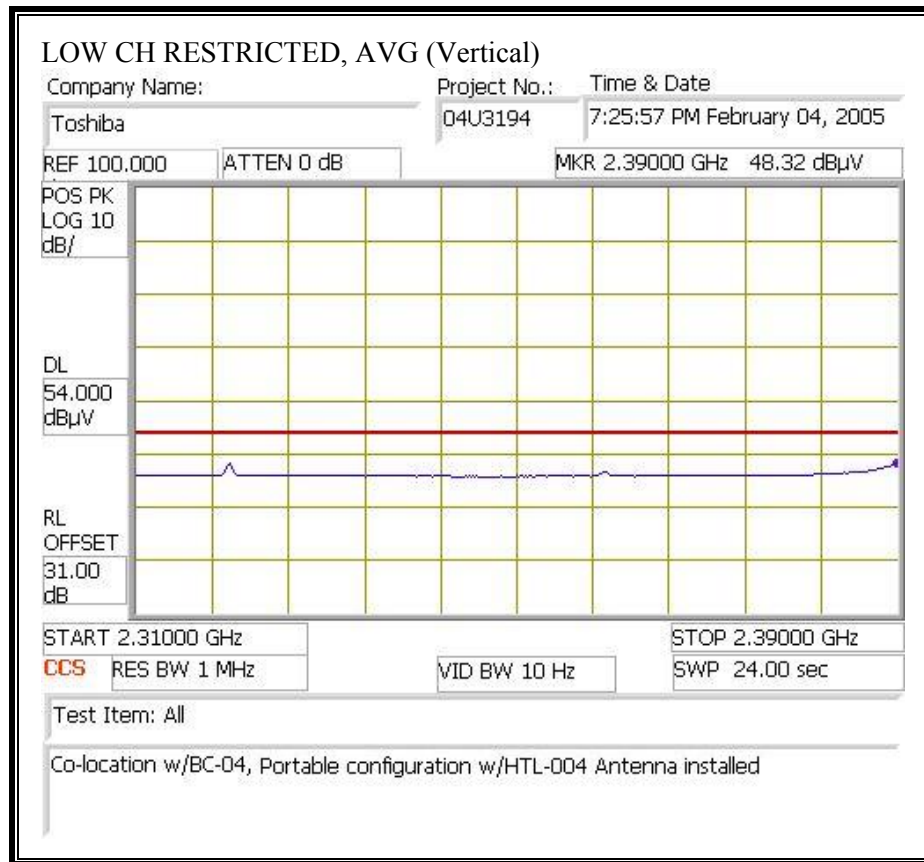
WORST-CASE RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



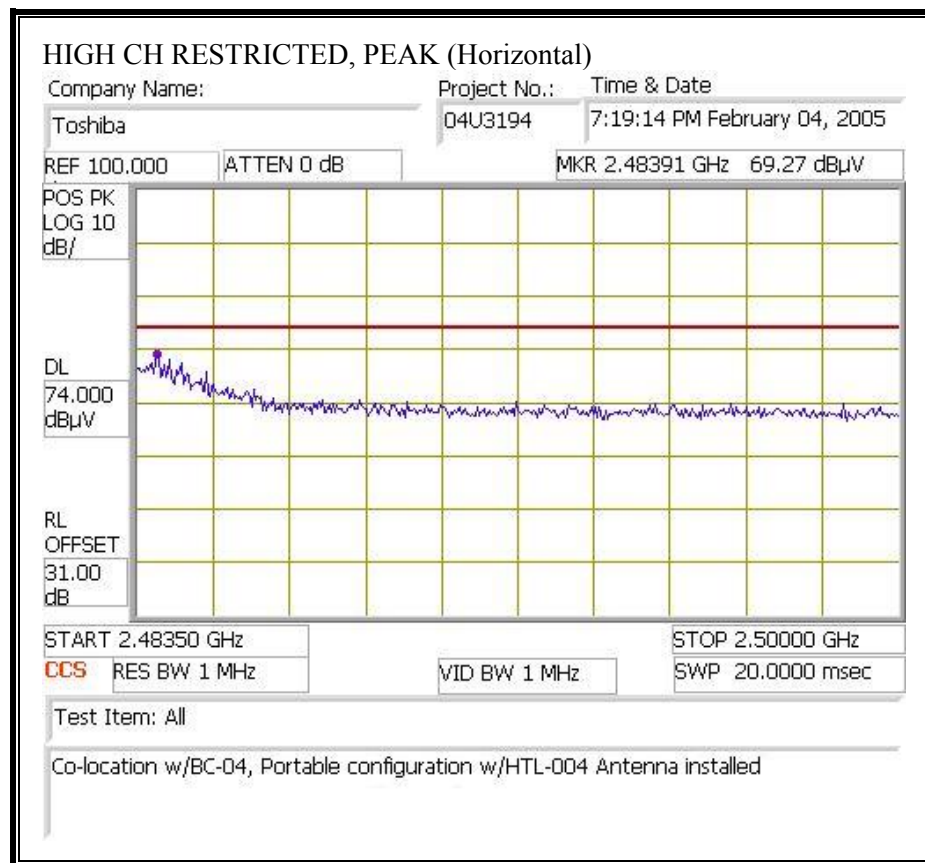


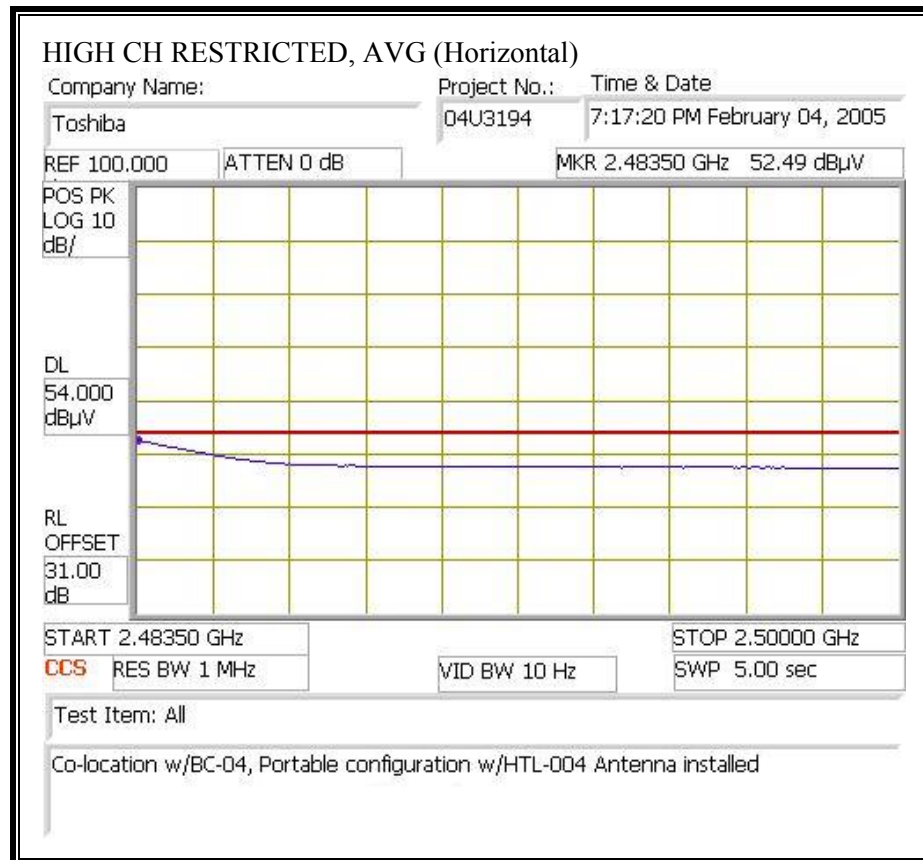
WORST-CASE RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



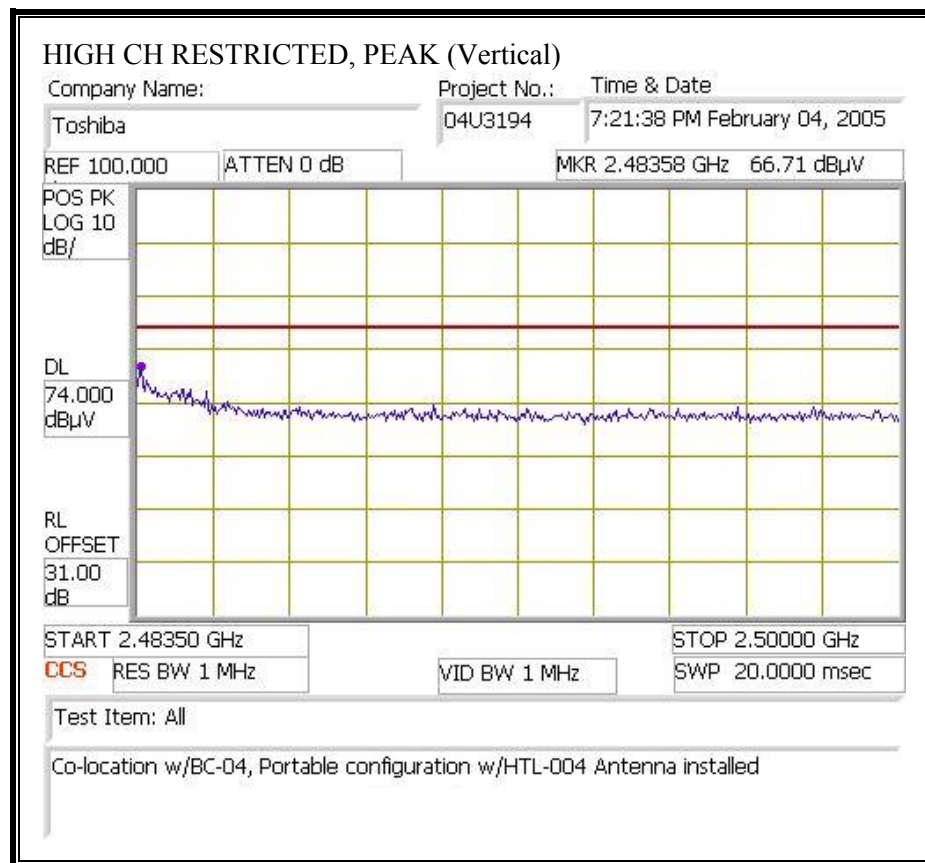


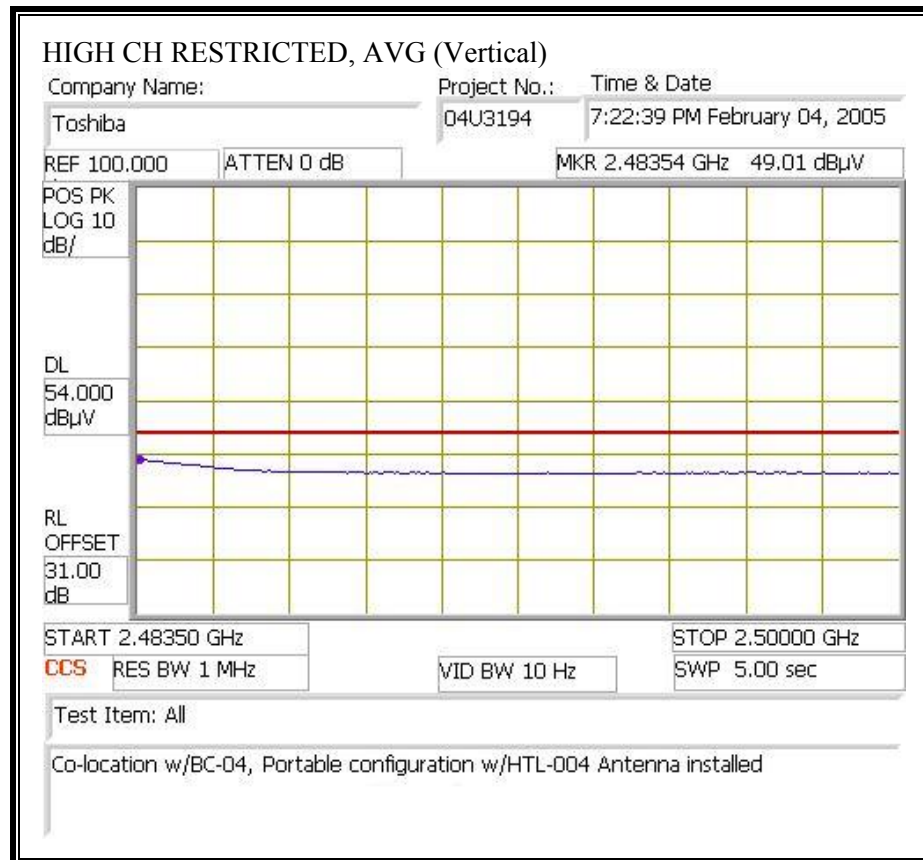
WORST-CASE RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)





WORST-CASE RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)





WORST-CASE HARMONICS AND SPURIOUS EMISSIONS

02/04/05 High Frequency Measurement Compliance Certification Services, Morgan Hill Open Field Site																
Test Engr: David Garcia Project #: 04U3194 Company: Toshiba EUT Descrip.: 802.11b/g Half Size Mini-PCI WLAN Module EUT M/N: PA3426U-1MPC Test Target: FCC 15.247 Mode Oper: Tx_mode_antenna HTL004_WLAN and BT BC04 Co-location, Portable																
Test Equipment:																
EMCO Horn 1-18GHz T73; S/N: 6717 @3m		Pre-amplifier 1-26GHz T87 Miteq 924342		Pre-amplifier 26-40GHz		Horn > 18GHz		Limit FCC 15.205								
Hi Frequency Cables										HPF		Reject Filter		Peak Measurements RBW=VBW=1MHz		
2 foot cable		3 foot cable		4 foot cable		12 foot cable		HPF_4.0GHz		Reject Filter		Average Measurements RBW=1MHz, VBW=10Hz				
4_David		12_Yan														
f GHz	Dist (m)	Read Pk dBuV	Read Avg dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Filt dB	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes (V/H)	
2.437 GHz Channel																
4.874	3.0	50.7	42.0	32.9	4.9	-39.6	0.0	0.6	49.5	40.8	74	54	-24.5	-13.2	V	
7.311	3.0	52.0	42.0	35.8	6.0	-40.3	0.0	0.6	54.1	44.1	74	54	-19.9	-9.9	V	
4.874	3.0	49.1	40.1	32.9	4.9	-39.6	0.0	0.6	47.9	38.9	74	54	-26.1	-15.1	H	
7.311	3.0	51.7	43.0	35.8	6.0	-40.3	0.0	0.6	53.8	45.1	74	54	-20.2	-8.9	H	
Note: No other emissions were detected above																
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									

7.2.5.4 STAND-ALONE CONFIGURATION, WITH BLUETOOTH BC02

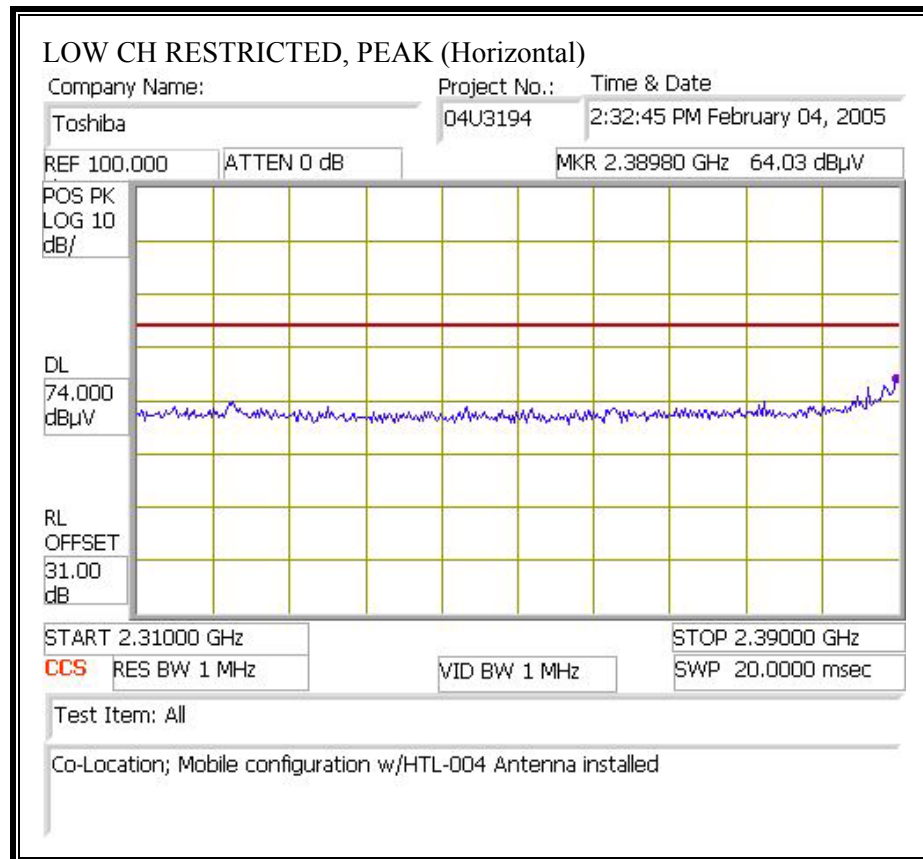
Not applicable. The BT has no extended card to use to be tested for this configuration. Please see 7.2.5.5 for reference.

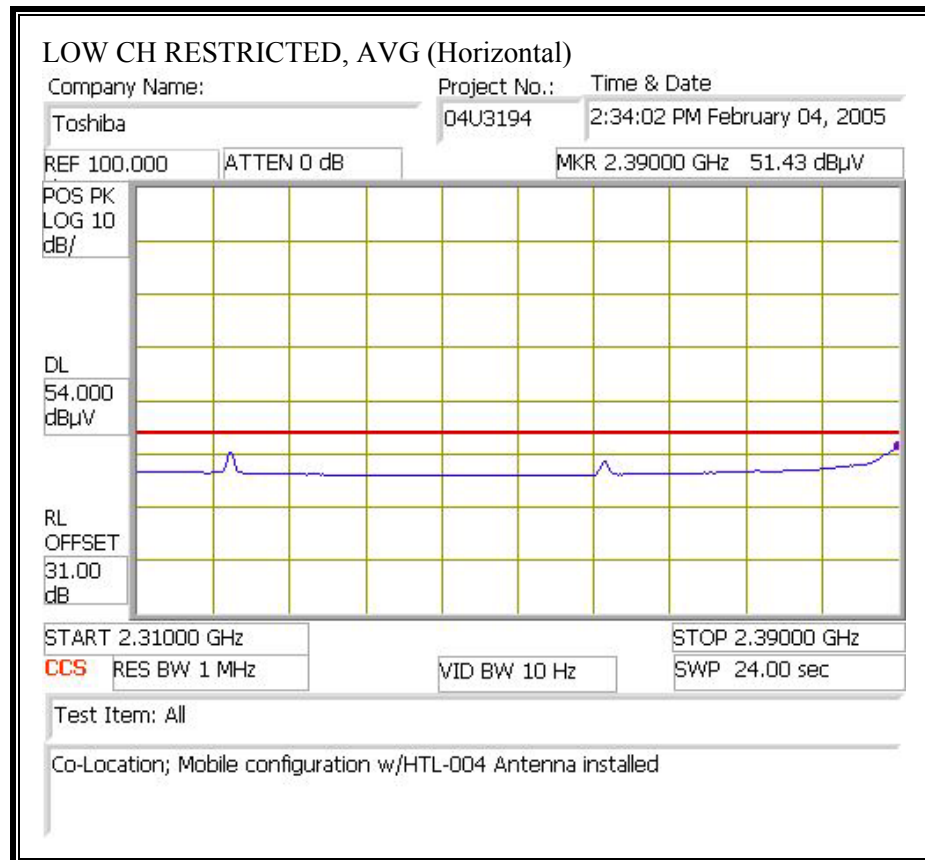
7.2.5.5 MOBILE CONFIGURATION, WITH BLUETOOTH BC02

No non-compliance noted:

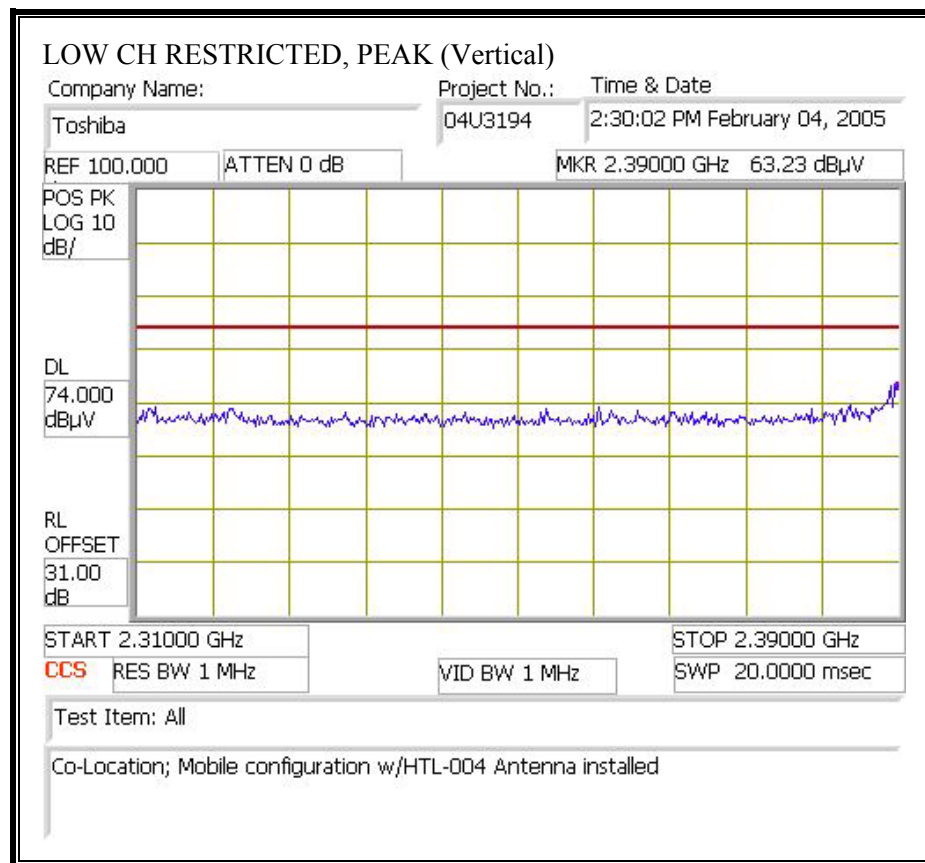
The dominant transmitter is the WLAN and the non-dominant transmitter is the Bluetooth

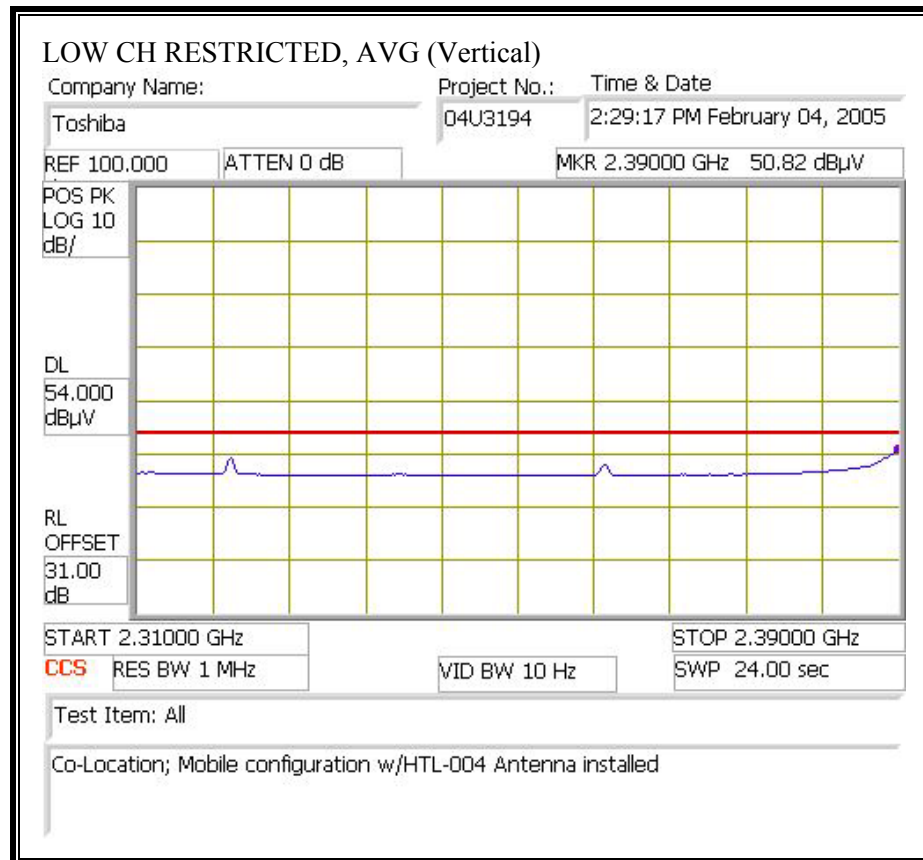
WORST-CASE RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



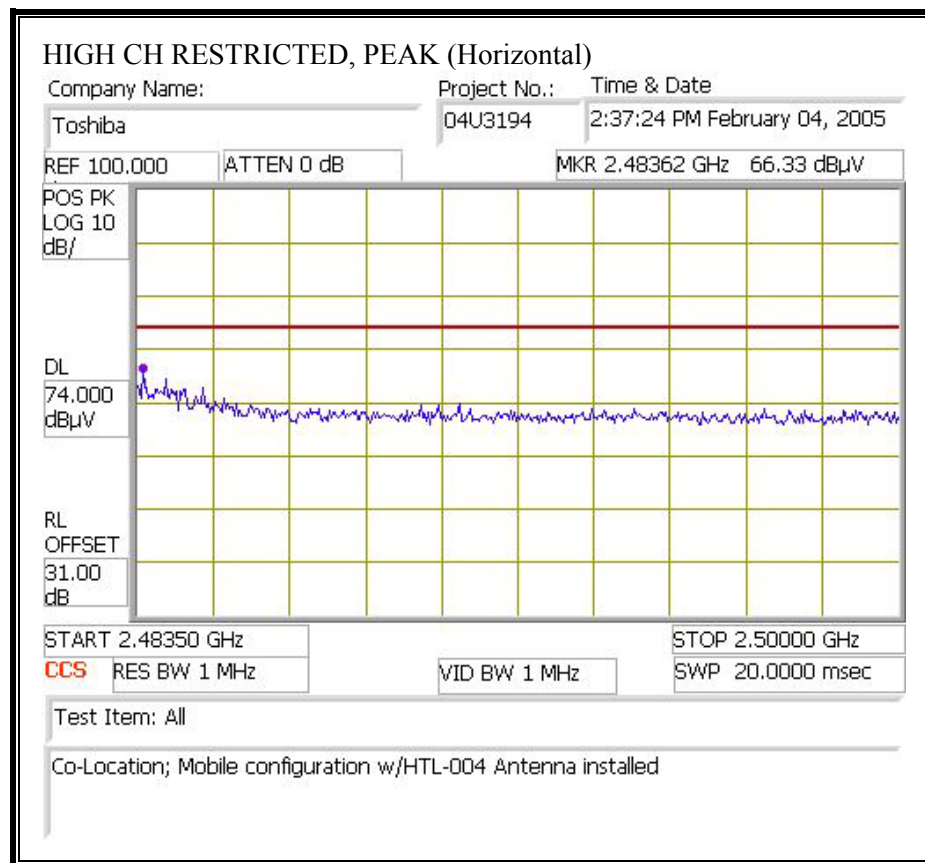


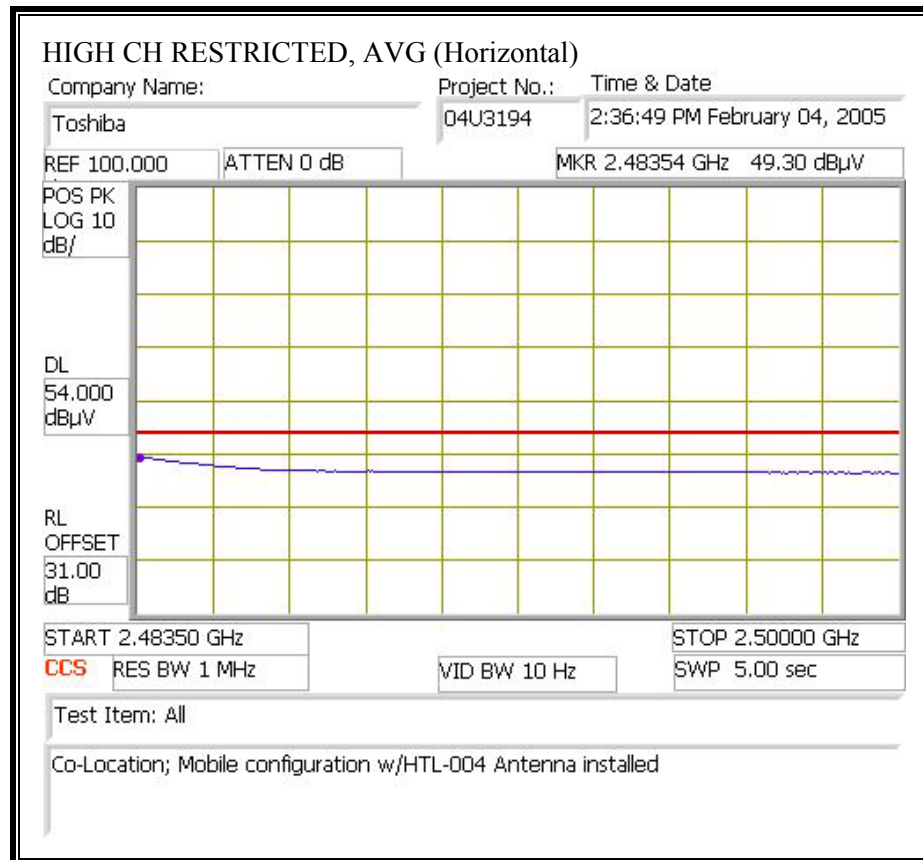
WORST-CASE RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



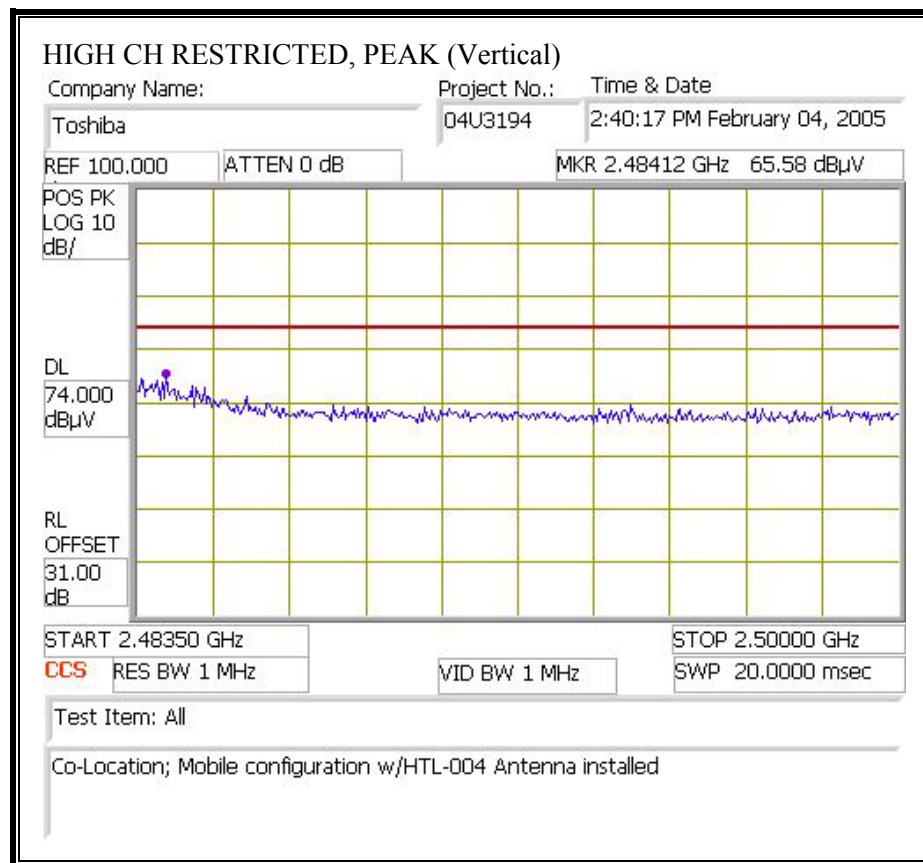


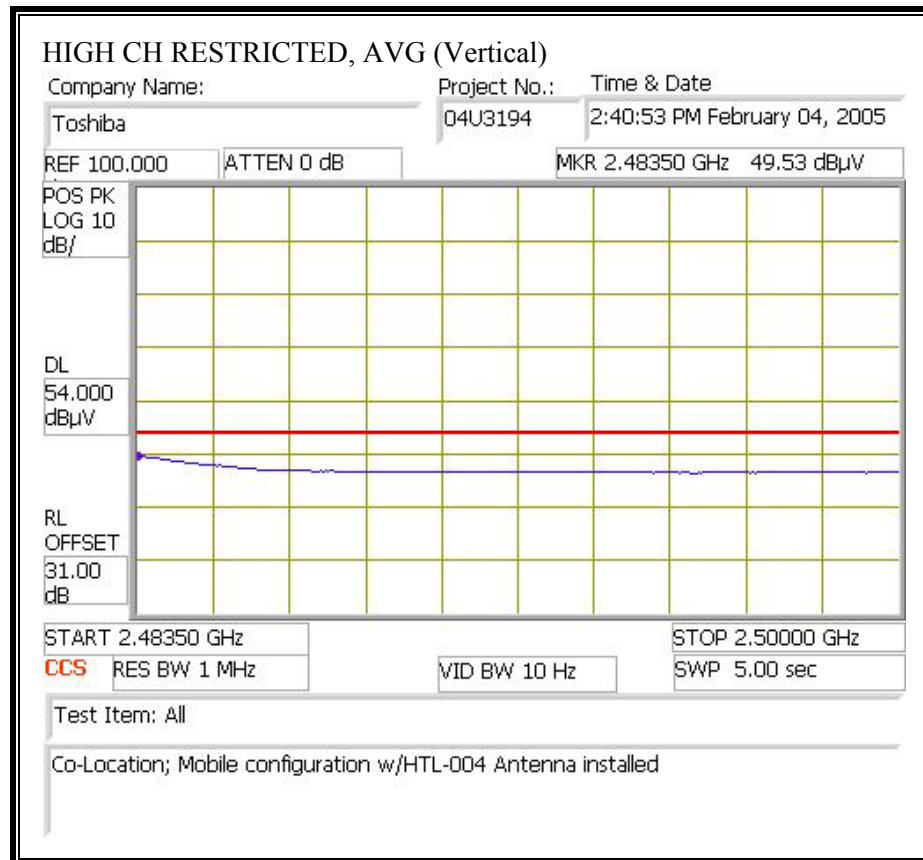
WORST-CASE RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)





WORST-CASE RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)





WORST-CASE HARMONICS AND SPURIOUS EMISSIONS

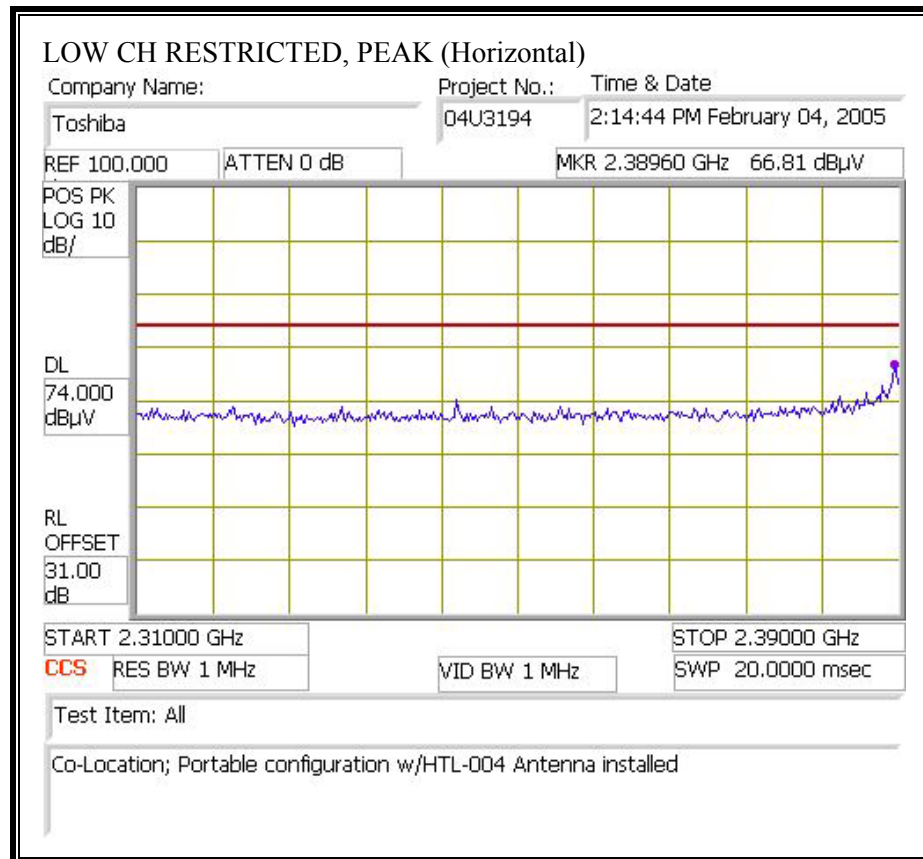
02/04/05 High Frequency Measurement Compliance Certification Services, Morgan Hill Open Field Site																
Test Engr: David Garcia Project #: 04U3194 Company: Toshiba EUT Descrip.: 802.11b/g Half Size Mini-PCI WLAN Module EUT M/N: PA3426U-1MPC Test Target: FCC 15.247 Mode Oper: Tx_g_mode_antenna HTL004_WLAN and BT BC02 Co-location, Mobile																
Test Equipment:																
EMCO Horn 1-18GHz T73; S/N: 6717 @3m				Pre-amplifier 1-26GHz T87 Miteq 924342				Pre-amplifier 26-40GHz				Horn > 18GHz				Limit FCC 15.205
Hi Frequency Cables																
2 foot cable		3 foot cable		4 foot cable		12 foot cable		HPF		Reject Filter		Peak Measurements RBW=VBW=1MHz				
				4_David		12_Yan		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	Filt dB	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes (V/H)	
Mid Ch																
4.874	3.0	50.0	40.7	32.9	4.9	-39.6	0.0	0.6	48.8	39.5	74	54	-25.2	-14.5	V	
7.311	3.0	52.2	38.9	35.8	6.0	-40.3	0.0	0.6	54.3	41.0	74	54	-19.7	-13.0	V	
4.874	3.0	48.5	39.8	32.9	4.9	-39.6	0.0	0.6	47.3	38.6	74	54	-26.7	-15.4	H	
7.311	3.0	53.6	39.6	35.8	6.0	-40.3	0.0	0.6	55.7	41.7	74	54	-18.3	-12.3	H	
Note: No other emissions were detected above the 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											

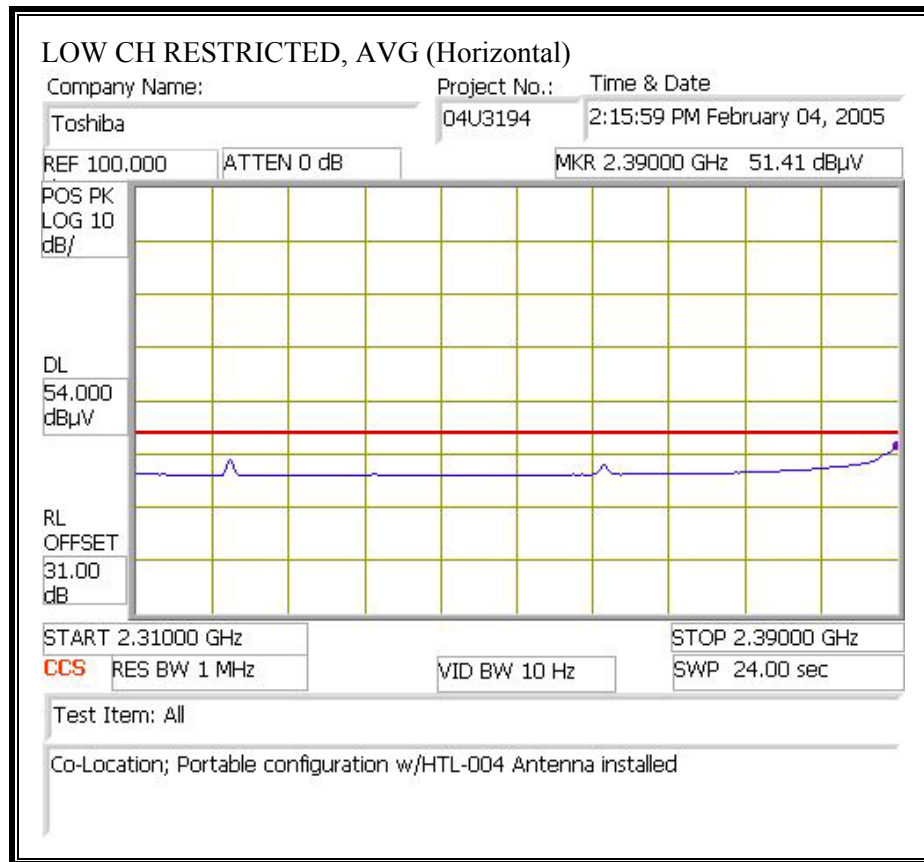
7.2.5.6 PORTABLE CONFIGURATION, WITH BLUETOOTH BC02

No non-compliance noted:

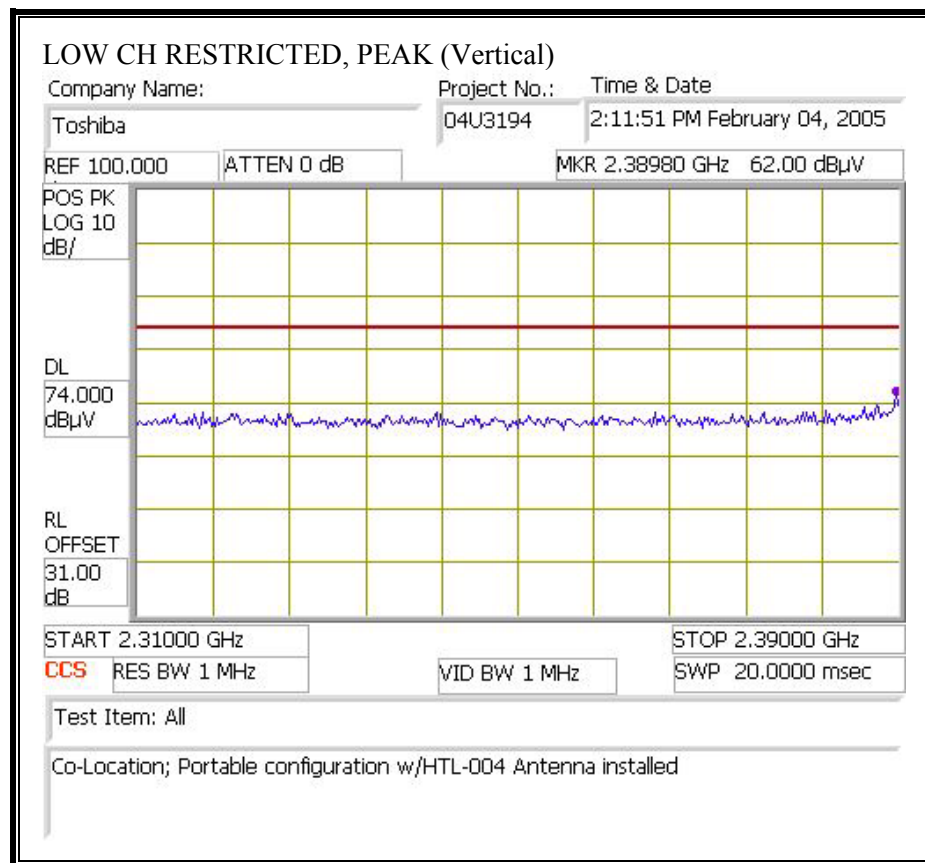
The dominant transmitter is the WLAN and the non-dominant transmitter is the Bluetooth

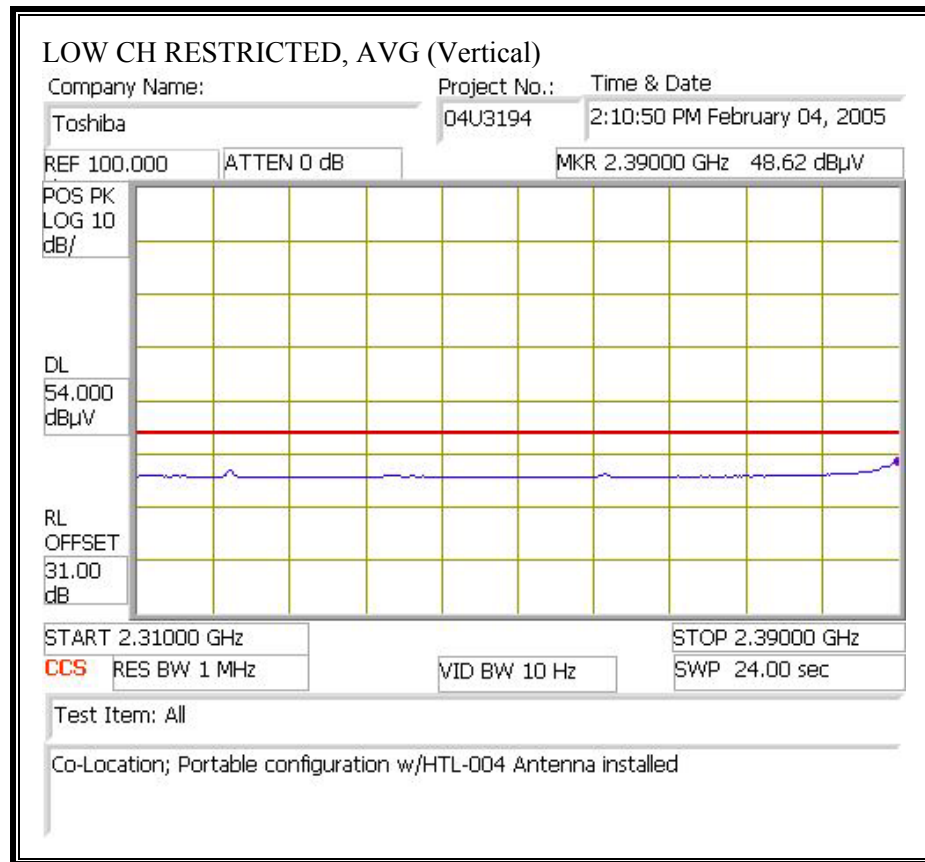
WORST-CASE RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



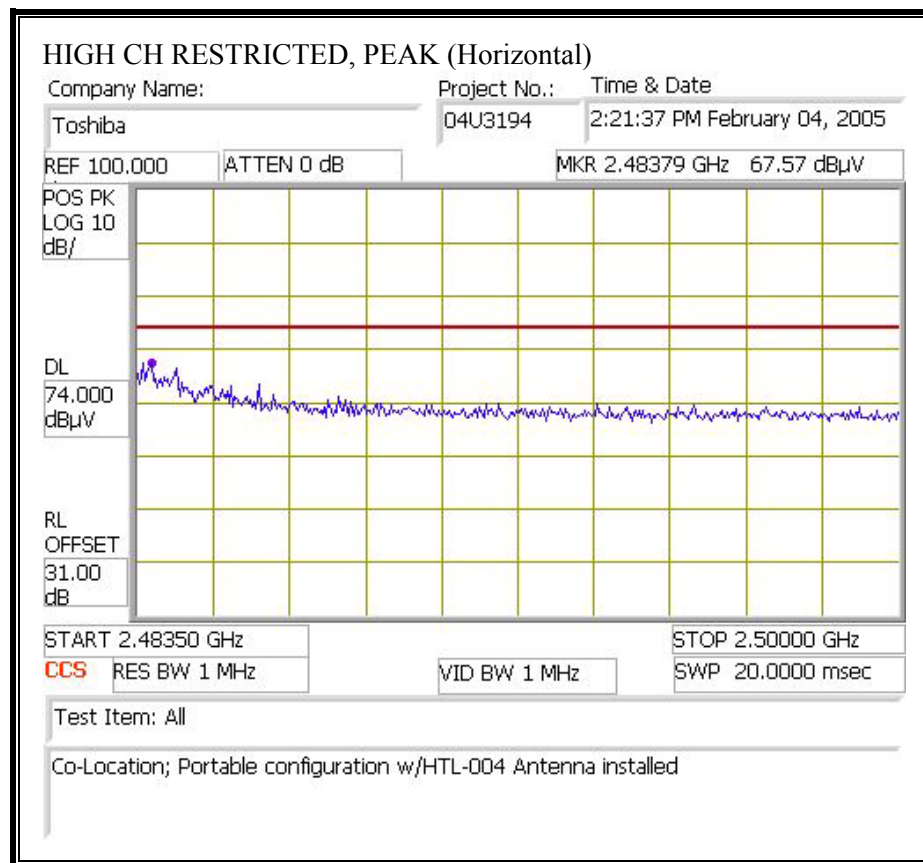


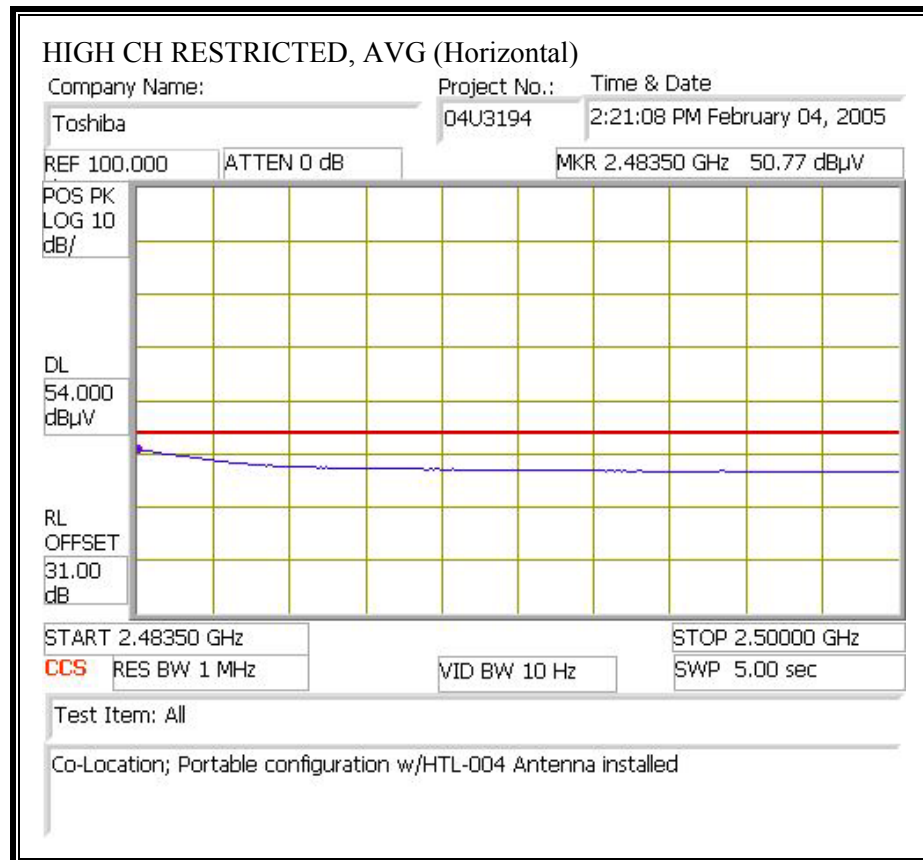
WORST-CASE RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



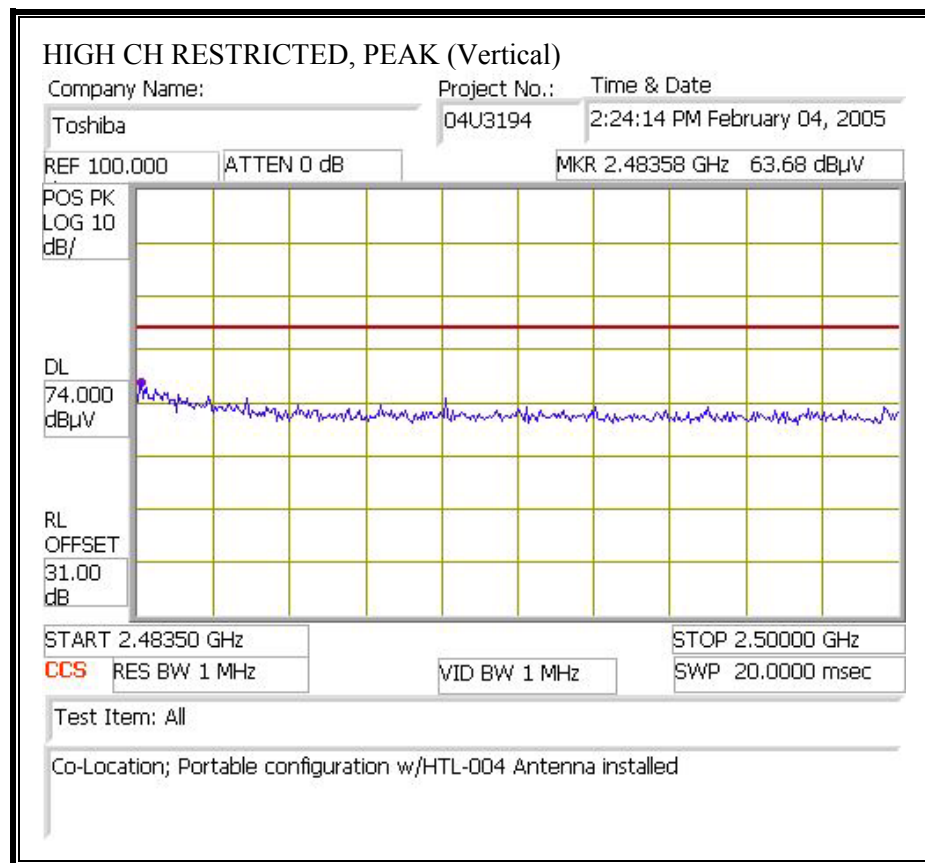


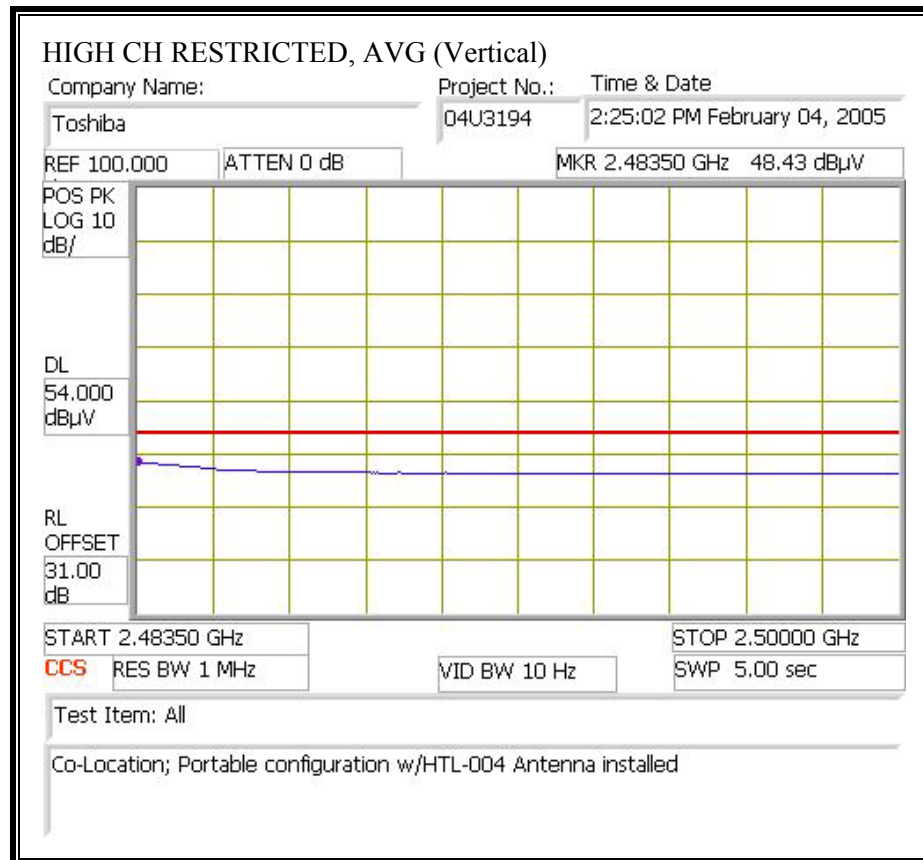
WORST-CASE RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)





WORST-CASE RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)





WORST-CASE HARMONICS AND SPURIOUS EMISSIONS

02/04/05 High Frequency Measurement Compliance Certification Services, Morgan Hill Open Field Site																
Test Engr: David Garcia Project #: 04U3194 Company: Toshiba EUT Descrip.: 802.11b/g Half Size Mini-PCI WLAN Module EUT M/N: PA3426U-IMPC Test Target: FCC 15.247 Mode Oper: Tx_g_mode_antenna HTL004_WLAN and BC02 Co-location, Portable																
Test Equipment:																
EMCO Horn 1-18GHz T73; S/N: 6717 @3m		Pre-amplifier 1-26GHz T87 Miteq 924342		Pre-amplifier 26-40GHz		Horn > 18GHz		Limit FCC 15.205								
Hi Frequency Cables										Peak Measurements RBW=VBW=1MHz						
2 foot cable		3 foot cable		4 foot cable		12 foot cable		HPF		Reject Filter		Average Measurements RBW=1MHz, VBW=10Hz				
				4_David		12_Yan		HPF_4.0GHz								
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)	
Mid Ch																
4.874	3.0	52.0	40.0	32.9	4.9	-39.6	0.0	0.6	50.8	38.8	74	54	-23.2	-15.2	V	
7.311	3.0	48.4	37.1	35.8	6.0	-40.3	0.0	0.6	50.5	39.2	74	54	-23.5	-14.8	V	
4.874	3.0	54.3	38.3	32.9	4.9	-39.6	0.0	0.6	53.1	37.1	74	54	-20.9	-16.9	H	
7.311	3.0	50.5	37.5	35.8	6.0	-40.3	0.0	0.6	52.6	39.6	74	54	-21.4	-14.4	H	
Note: No other emissions were detected above :																
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									

7.2.6 WORST-CASE RADIATED EMISSIONS BELOW 1 GHz, WITH ANTENNA HTL017 IN FIREBOLT

7.2.6.1 STAND-ALONE CONFIGURATION

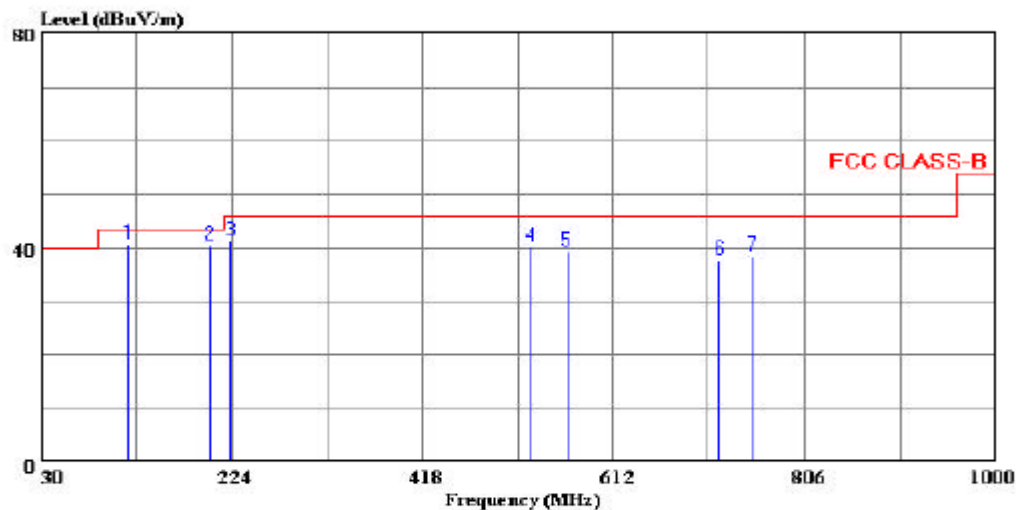
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)

HORIZONTAL PLOT



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

Data#: 4 File#: toshiba 04u3194N.EMIDate: 01-10-2005 Time: 14:44:13



(Auxiliary ATC)

Trace:

Ref Trace:

Condition: FCC CLASS-B HORIZONTAL
Test Operator: : Chin Pang
Project #: : 04U3194-1
Company: : Toshiba
EUT: : 802.11b/g with Turbo mode, chl1 base on
: Atheros AR2414 Chipset (WLAN Module)
Model No: : PA3426U-IMPC
Configuration: : EUT/Toshiba Laprop/HTL017 antenna
Target of Test: : FCC Class B
Mode of Operation: TX (Worst Case)

HORIZONTAL DATA

Page: 1

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	119.240	53.45	-12.77	40.68	43.50	-2.82	Peak
2	201.690	53.62	-13.32	40.30	43.50	-3.20	Peak
3	223.030	56.06	-14.90	41.16	46.00	-4.84	Peak
4	528.580	46.88	-6.76	40.12	46.00	-5.88	Peak
5	565.440	45.27	-6.06	39.21	46.00	-6.79	Peak
6	720.640	40.54	-2.84	37.70	46.00	-8.30	Peak
7	754.590	41.05	-2.45	38.60	46.00	-7.40	Peak

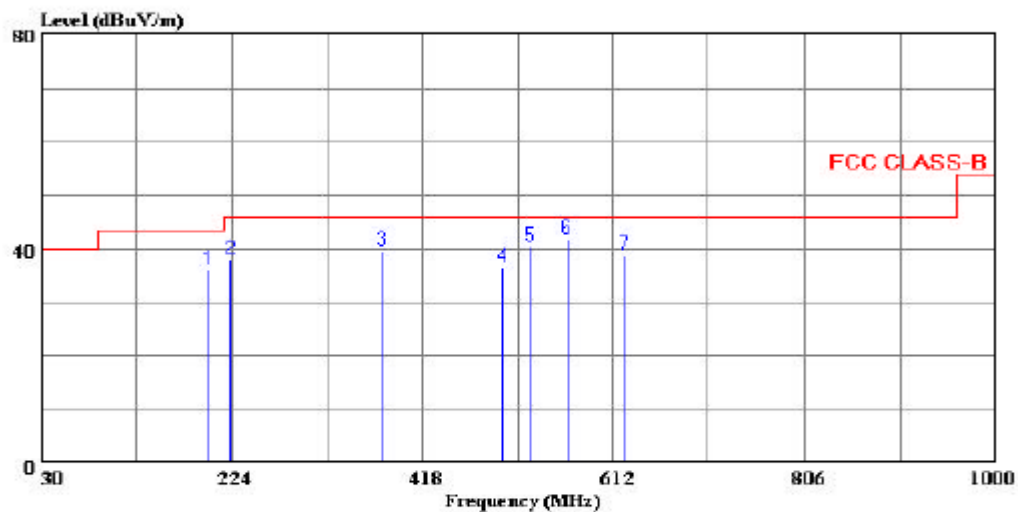
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, VERTICAL)

VERTICAL PLOT



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

Data#: 6 File#: toshiba 04u3194N.EMIDate: 01-10-2005 Time: 15:02:33



(Auxiliary ATC)

Trace:

Ref Trace:

Condition: FCC CLASS-B VERTICAL

Test Operator: : Chin Pang

Project #: : 04U3194-1

Company: : Toshiba

EUT: : 802.11b/g with Turbo mode, chl1 base on

: Atheros AR2414 Chipset (WLAN Module)

Model No: : PA3426U-IMPC

Configuration: : EUT/Toshiba Laprop/HTL017 antenna

Target of Test: : FCC Class B

Mode of Operation: TX (Worst Case)

VERTICAL DATA

Page: 1

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	200.720	49.32	-13.23	36.09	43.50	-7.41	Peak
2	223.030	52.84	-14.90	37.94	46.00	-8.06	Peak
3	378.230	49.71	-10.00	39.71	46.00	-6.29	Peak
4	499.480	43.76	-7.24	36.52	46.00	-9.48	Peak
5	528.580	47.11	-6.76	40.35	46.00	-5.65	Peak
6	565.440	47.86	-6.06	41.80	46.00	-4.20	Peak
7	623.640	43.72	-4.89	38.83	46.00	-7.17	Peak

7.2.6.2 PORTABLE CONFIGURATION

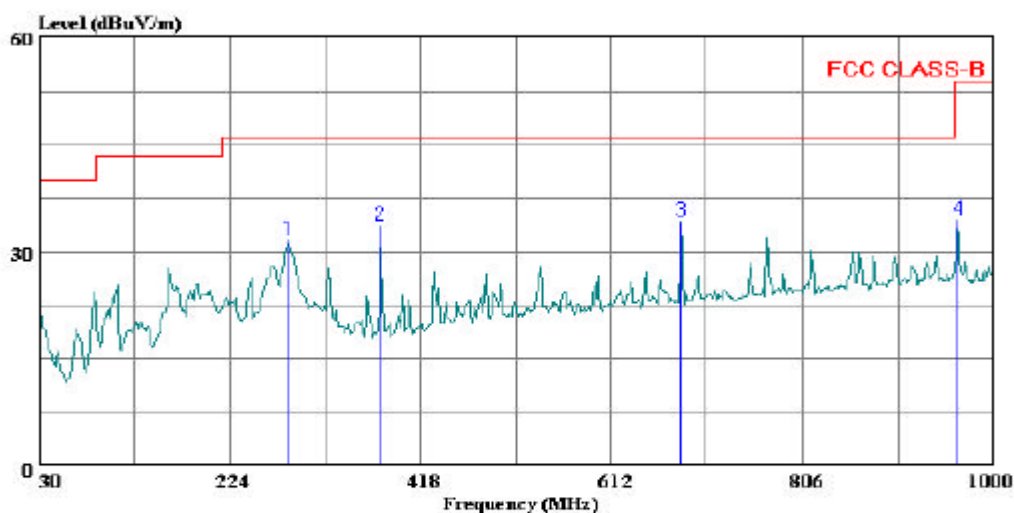
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)

HORIZONTAL PLOT



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

Data#: 6 File#: toshiba 3194.EMI Date: 01-04-2005 Time: 14:48:28



(Auxiliary ATC)

Trace: 5

Ref Trace:

Condition: FCC CLASS-B HORIZONTAL
Test Operator: : Chin Pang
Project #: : 04U3194-1
Company: : Toshiba
EUT: : 802.11b/g withg turbo mode, Ch11 base on
: Atheros AR2414 Chipset (WLAN Module)
Model No: : PA3426U-1MPC
Configuration: : EUT in Toshiba Laptop
Target of Test: : FCC Class B
Mode of Operation: TX (Worst Case)
: Portable

HORIZONTAL DATA

Page: 1

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	284.140	45.84	-14.35	31.49	46.00	-14.51	Peak
2	378.230	45.73	-12.03	33.70	46.00	-12.30	Peak
3	683.780	40.89	-6.62	34.27	46.00	-11.73	Peak
4	963.140	38.19	-3.82	34.37	54.00	-19.63	Peak

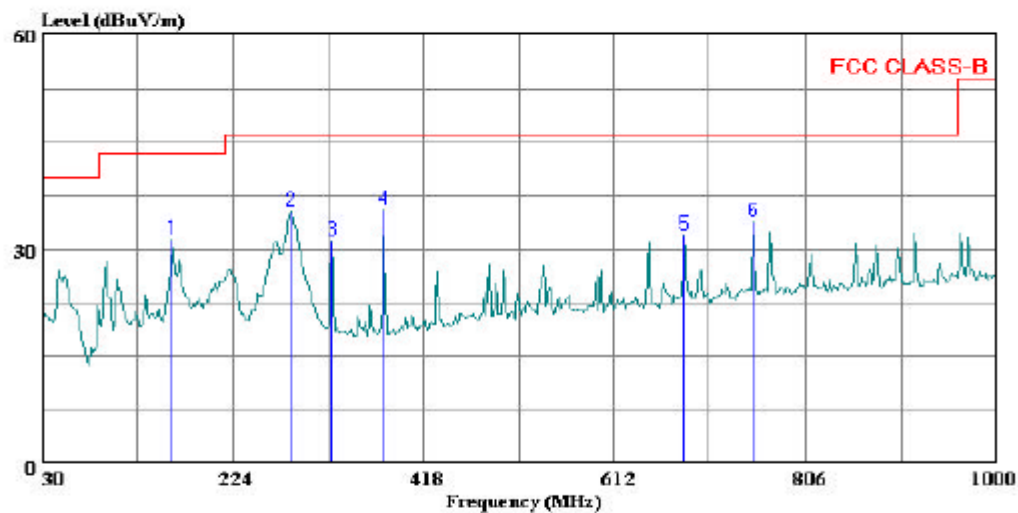
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, VERTICAL)

VERTICAL PLOT



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

Data#: 8 File#: toshiba 3194.EMI Date: 01-04-2005 Time: 14:55:34



(Auxiliary ATC)

Trace: 7

Ref Trace:

Condition: FCC CLASS-B VERTICAL
Test Operator: : Chin Pang
Project #: : 04U3194-1
Company: : Toshiba
EUT: : 802.11b/g withg turbo mode, Ch11 base on
: Atheros AR2414 Chipset (WLAN Module)
Model No: : PA3426U-1MPC
Configuration: : EUT in Toshiba Laptop
Target of Test: : FCC Class B
Mode of Operation: TX (Worst Case)
: Portable

VERTICAL DATA

Page: 1

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	162.890	46.97	-15.53	31.44	43.50	-12.06	Peak
2	284.140	49.72	-14.35	35.37	46.00	-10.63	Peak
3	324.880	44.42	-13.26	31.16	46.00	-14.84	Peak
4	378.230	47.50	-12.03	35.47	46.00	-10.53	Peak
5	683.780	38.70	-6.62	32.08	46.00	-13.92	Peak
6	754.590	39.57	-5.74	33.83	46.00	-12.17	Peak

7.2.7 WORST-CASE RADIATED EMISSIONS BELOW 1 GHz, WITH ANTENNA HTL004 IN FIREBOLT

7.2.7.1 STAND-ALONE CONFIGURATION

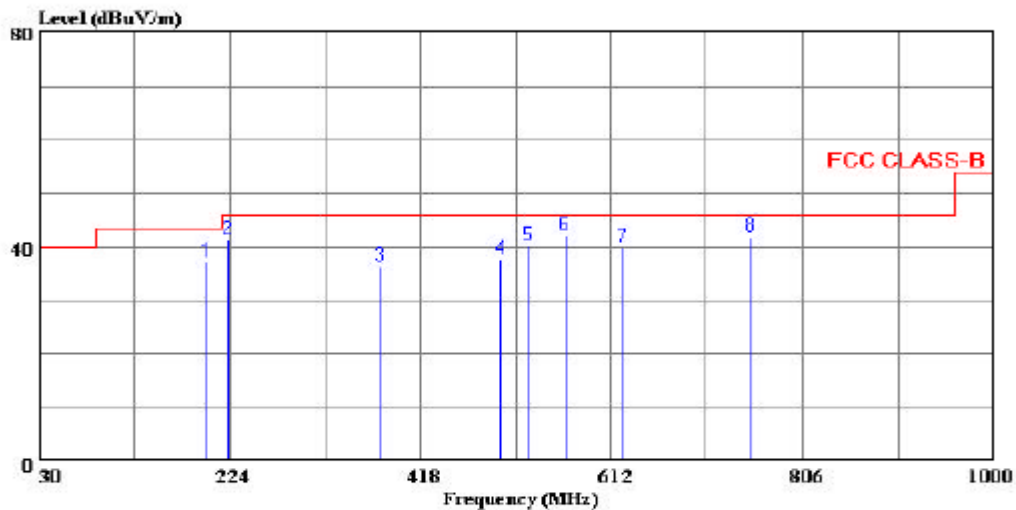
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)

HORIZONTAL PLOT



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

Data#: 10 File#: toshiba 04u3194N.EMIDate: 01-10-2005 Time: 15:12:53



(Auxiliary ATC)

Trace:

Ref Trace:

Condition: FCC CLASS-B HORIZONTAL
Test Operator: : Chin Pang
Project #: : 04U3194-1
Company: : Toshiba
EUT: : 802.11b/g with Turbo mode, chl1 base on
: Atheros AR2414 Chipset (WLAN Module)
Model No: : PA3426U-IMPC
Configuration: : EUT/Toshiba Laprop/HTL004 antenna
Target of Test: : FCC Class B
Mode of Operation: TX (Worst Case)

HORIZONTAL DATA

Page: 1

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	199.750	50.33	-13.14	37.19	43.50	-6.31	Peak
2	222.060	56.28	-14.93	41.35	46.00	-4.65	Peak
3	378.230	46.40	-10.00	36.40	46.00	-9.60	Peak
4	499.480	45.02	-7.24	37.78	46.00	-8.22	Peak
5	528.580	46.90	-6.76	40.14	46.00	-5.86	Peak
6	565.440	48.28	-6.06	42.22	46.00	-3.78	Peak
7	623.640	44.81	-4.89	39.92	46.00	-6.08	Peak
8	754.590	44.15	-2.45	41.70	46.00	-4.30	Peak

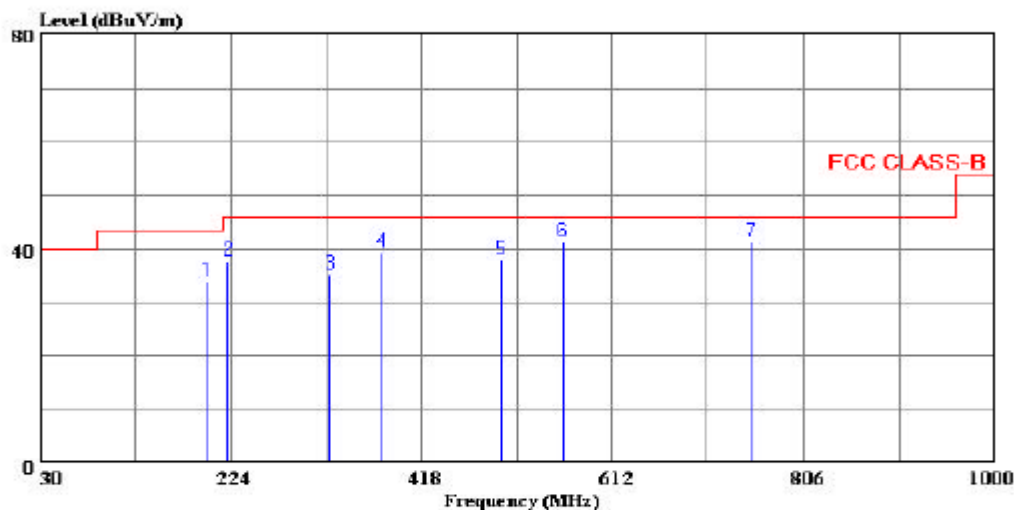
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, VERTICAL)

VERTICAL PLOT



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

Data#: 8 File#: toshiba 04u3194N.EMIDate: 01-10-2005 Time: 15:08:52



(Auxiliary ATC)

Trace:

Ref Trace:

Condition: FCC CLASS-B VERTICAL

Test Operator: : Chin Pang

Project #: : 04U3194-1

Company: : Toshiba

EUT: : 802.11b/g with Turbo mode, ch11 base on
: Atheros AR2414 Chipset (WLAN Module)

Model No: : PA3426U-IMPC

Configuration: : EUT/Toshiba Laprop/HTL004 antenna

Target of Test: : FCC Class B

Mode of Operation: TX (Worst Case)

VERTICAL DATA

Page: 1

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	200.720	47.12	-13.23	33.89	43.50	-9.61	Peak
2	221.090	52.68	-14.95	37.73	46.00	-8.27	Peak
3	324.880	46.44	-11.18	35.26	46.00	-10.74	Peak
4	378.230	49.41	-10.00	39.41	46.00	-6.59	Peak
5	499.480	45.14	-7.24	37.90	46.00	-8.10	Peak
6	562.530	47.30	-6.11	41.19	46.00	-4.81	Peak
7	754.590	43.76	-2.45	41.31	46.00	-4.69	Peak

7.2.7.2 PORTABLE CONFIGURATION

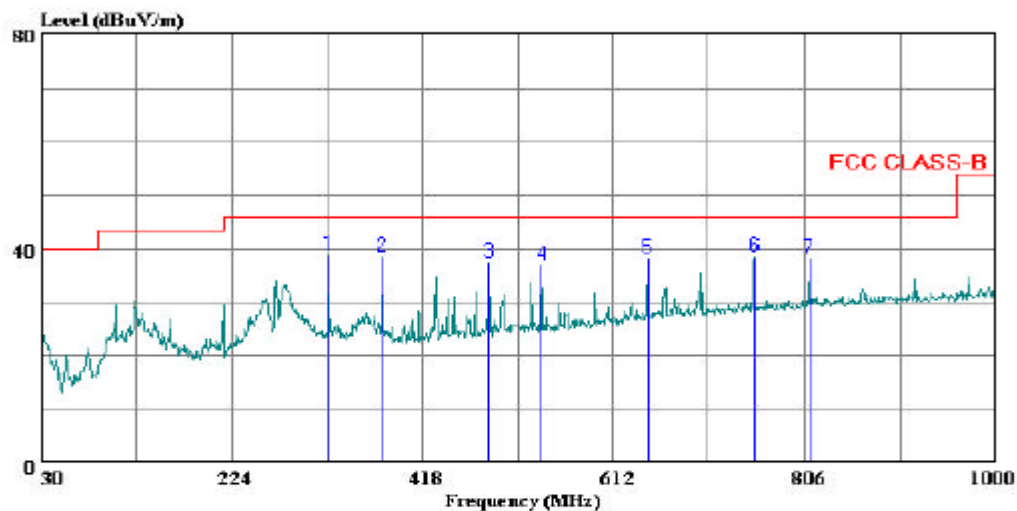
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)

HORIZONTAL PLOT



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

Data#: 6 File#: 04U3194 2-4-5.EMI Date: 02-04-2005 Time: 18:06:50



(Auxiliary ATC)

Trace: 5

Ref Trace:

Condition: FCC CLASS-B HORIZONTAL

Test Operator: : David Garcia

Project #: : 04U3194

Company: : Toshiba

EUT: : 802.11 b/g/g turbo Mini PCI card

Model No: : PA3426U-1MPC

Configuration: : EUT installed in laptop/tablet with Antenna HTL004

Target of Test: : FCC B

Mode of Operation: Tx, g mode mid channel

: Portable configuration, "y" position

: Worst case

HORIZONTAL DATA

Page: 1

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	322.940	50.00	-11.21	38.79	46.00	-7.21	Peak
2	377.260	48.50	-10.01	38.49	46.00	-7.51	Peak
3	485.900	44.90	-7.52	37.38	46.00	-8.62	Peak
4	539.250	43.30	-6.61	36.69	46.00	-9.31	Peak
5	647.890	42.70	-4.41	38.29	46.00	-7.71	Peak
6	756.530	41.10	-2.47	38.63	46.00	-7.37	Peak
7	809.880	39.90	-1.66	38.24	46.00	-7.76	Peak

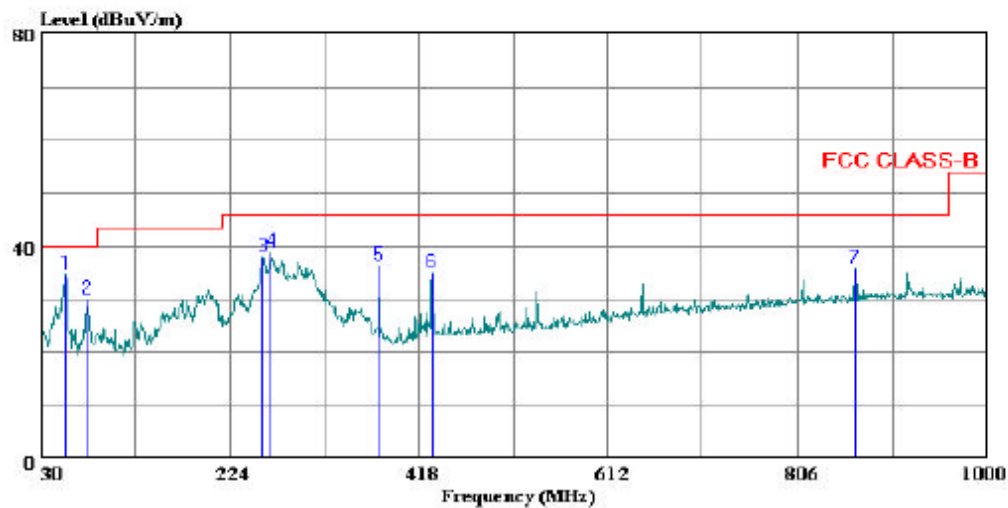
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, VERTICAL)

VERTICAL PLOT



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

Data#: 8 File#: 04U3194 2-4-5.EMI Date: 02-04-2005 Time: 18:12:56



(Auxiliary ATC)

Trace: 7

Ref Trace:

Condition: FCC CLASS-B VERTICAL

Test Operator: : David Garcia

Project #: : 04U3194

Company: : Toshiba

EUT: : 802.11 b/g/g turbo Mini PCI card

Model No: : PA3426U-1MPC

Configuration: : EUT installed in laptop/tablet with Antenna HTL004

Target of Test: : FCC B

Mode of Operation: Tx, g mode mid channel

: Portable configuration, "y" position

: Worst case

VERTICAL DATA

Page: 1

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	55.220	54.00	-19.37	34.63	40.00	-5.37	Peak
2	77.530	48.80	-18.82	29.98	40.00	-10.02	Peak
3	257.950	51.30	-13.37	37.93	46.00	-8.07	Peak
4	266.680	51.87	-13.12	38.75	46.00	-7.25	Peak
5	377.260	46.40	-10.01	36.39	46.00	-9.61	Peak
6	431.580	43.60	-8.74	34.86	46.00	-11.14	Peak
7	864.200	37.00	-1.26	35.74	46.00	-10.26	Peak

7.3 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.

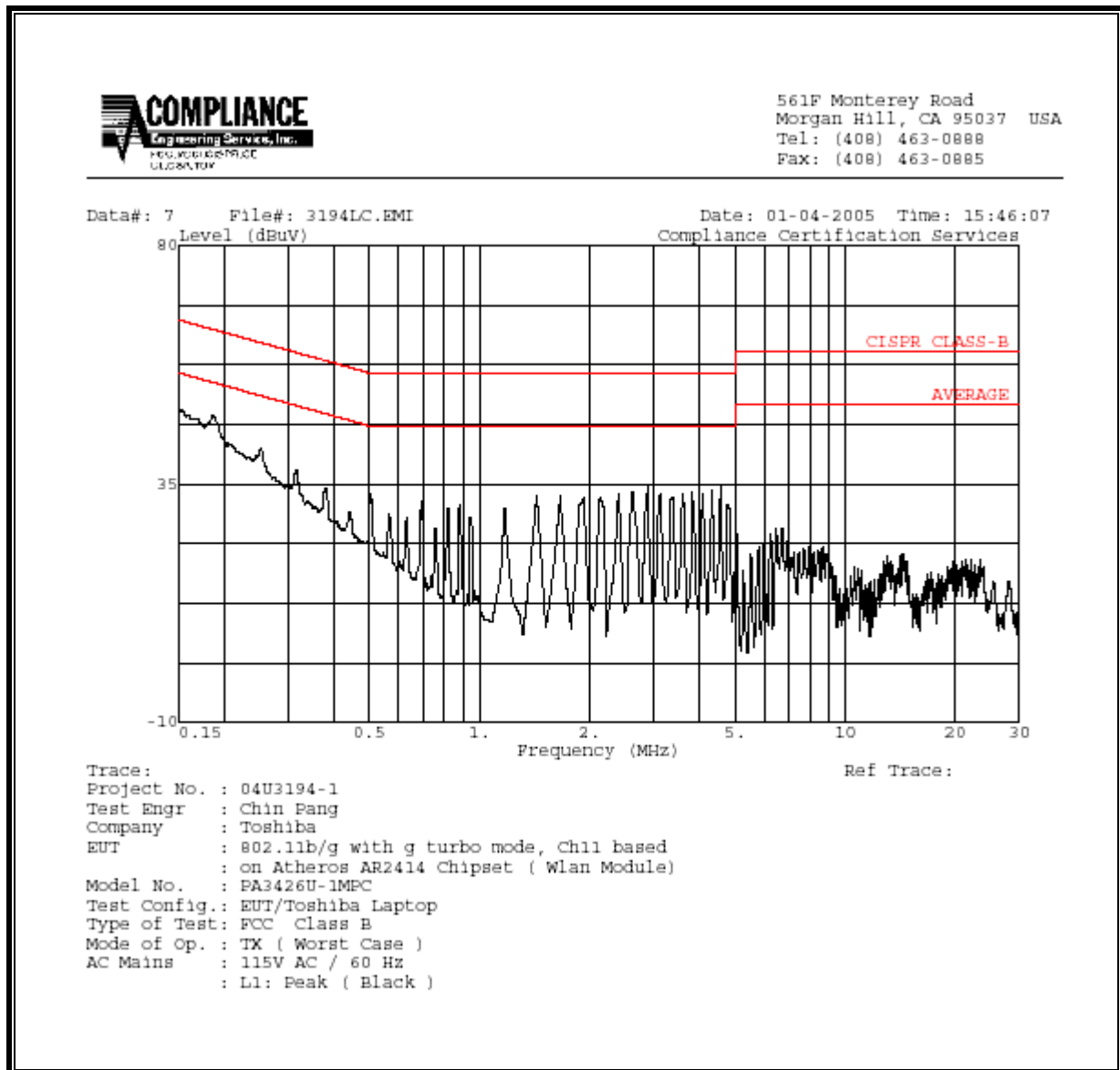
RESULTS

No non-compliance noted:

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	49.82	--	--	0.00	66.00	56.00	-16.18	-6.18	L1
2.88	34.46	--	--	0.00	56.00	46.00	-21.54	-11.54	L1
4.57	34.54	--	--	0.00	56.00	46.00	-21.46	-11.46	L1
0.15	49.28	--	--	0.00	65.89	55.89	-16.61	-6.61	L2
0.51	31.38	--	--	0.00	56.00	46.00	-24.62	-14.62	L2
4.55	29.52	--	--	0.00	56.00	46.00	-26.48	-16.48	L2
6 Worst Data									

LINE 1 RESULTS



LINE 2 RESULTS

