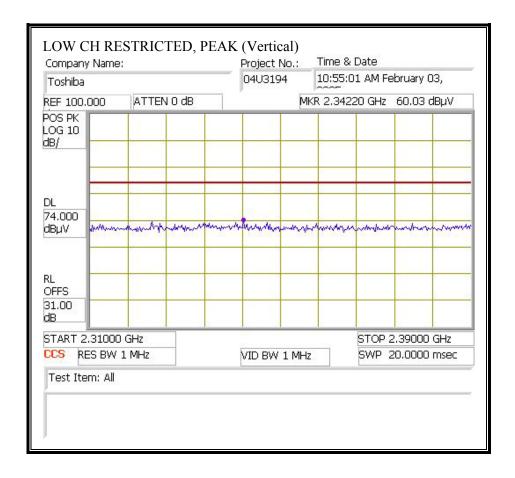
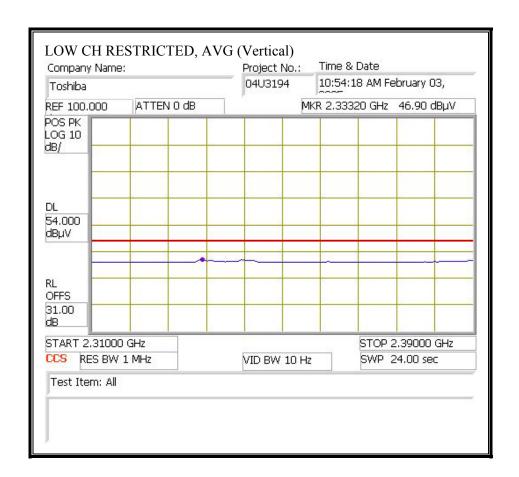
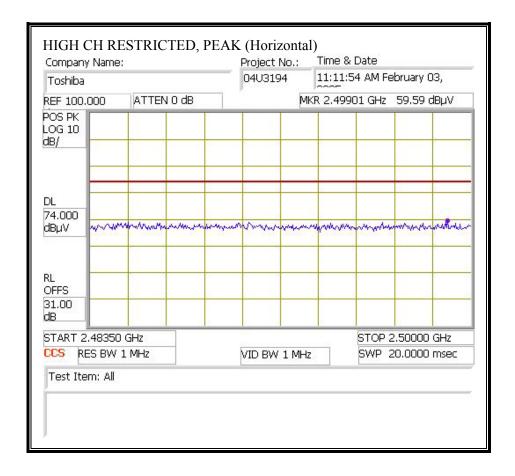
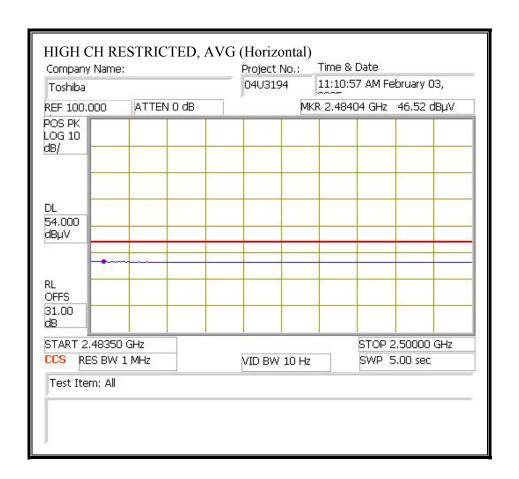
WORST-CASE RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



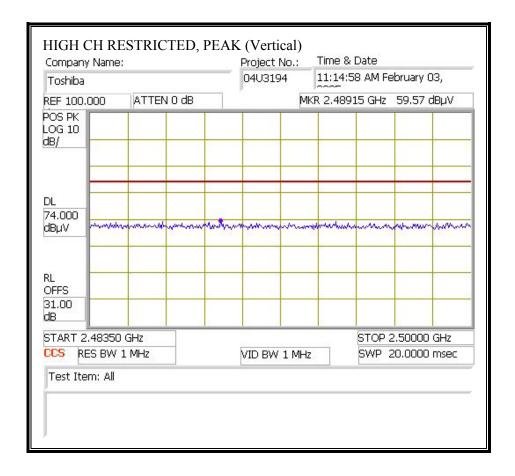


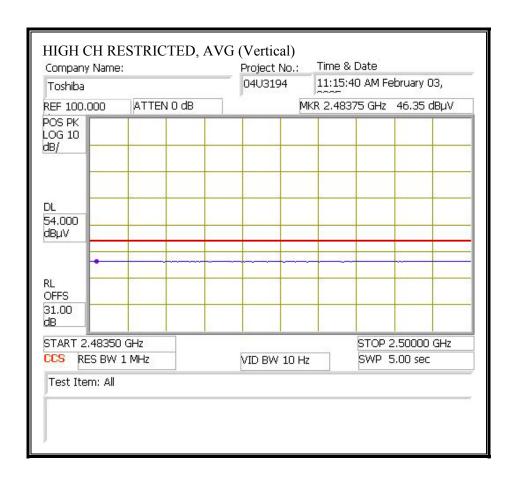
WORST-CASE RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)



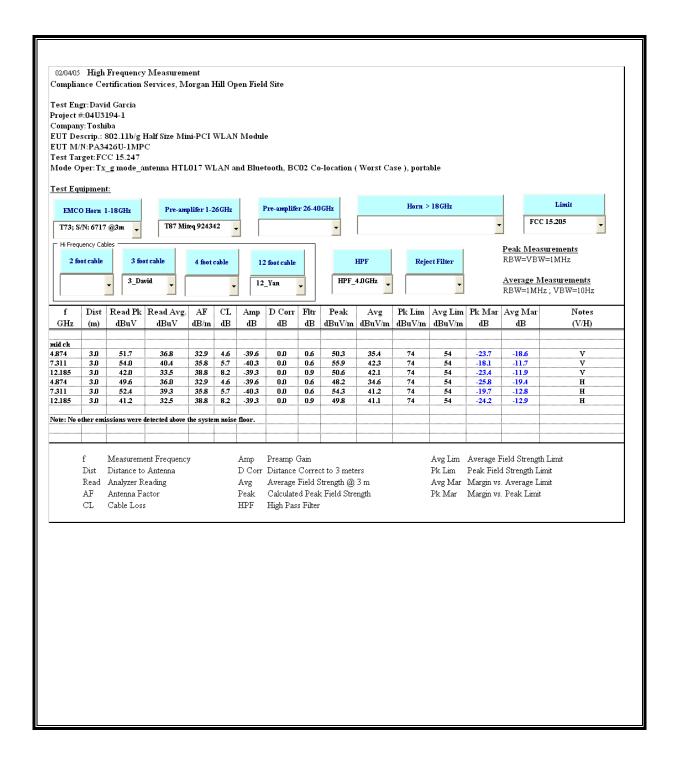


WORST-CASE RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)





WORST-CASE HARMONICS AND SPURIOUS EMISSIONS



DATE: FEBRUARY 25, 2005 FCC ID: CJ6UPA3426WL

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

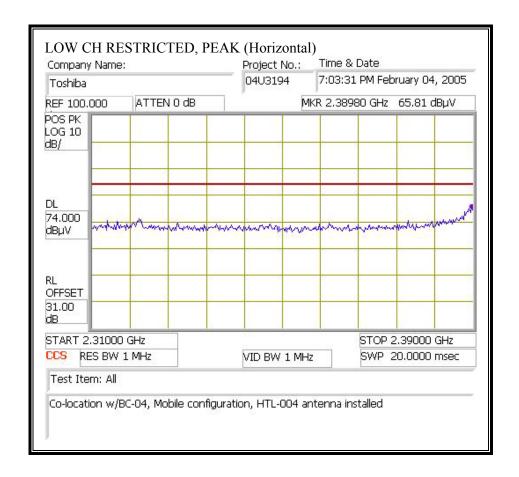
Not applicable. The BT has no extended card to use to be tested for this configuration. Please see 7.2.5.2 for reference.

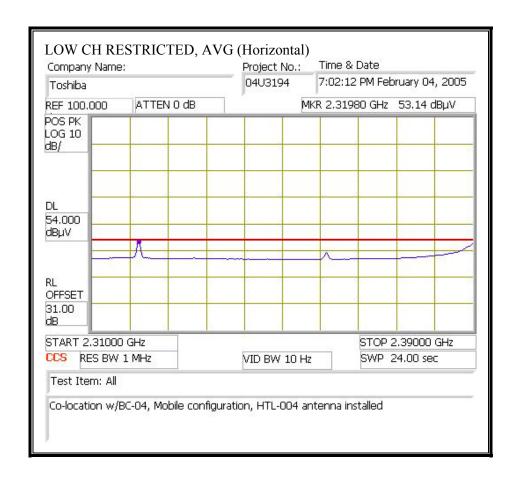
7.2.5.2 **MOBILE CONFIGURATION, WITH BLUETOOTH BC04**

No non-compliance noted:

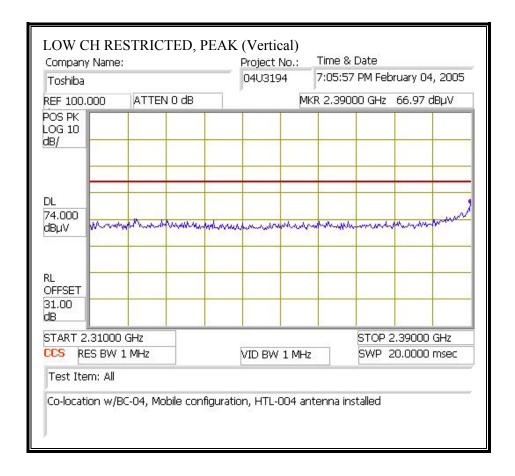
The dominant transmitter is the WLAN and the non-dominant transmitter is the Bluetooth

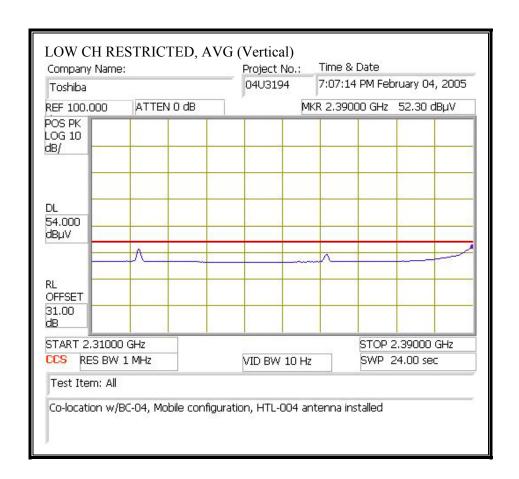
WORST-CASE RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



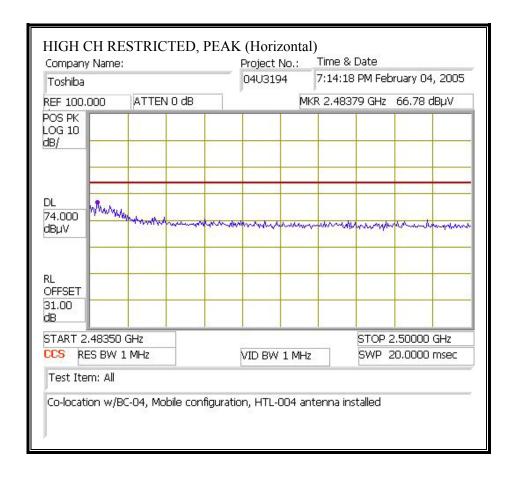


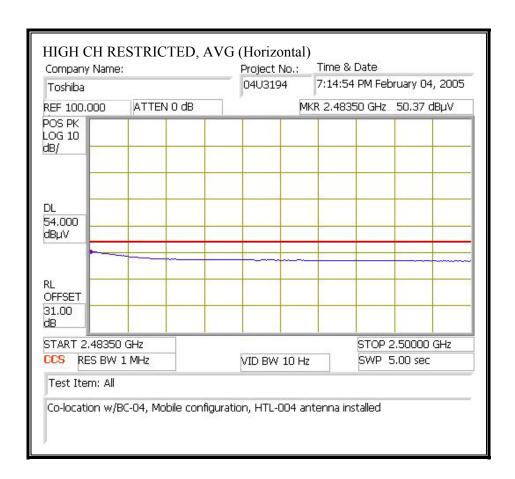
WORST-CASE RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



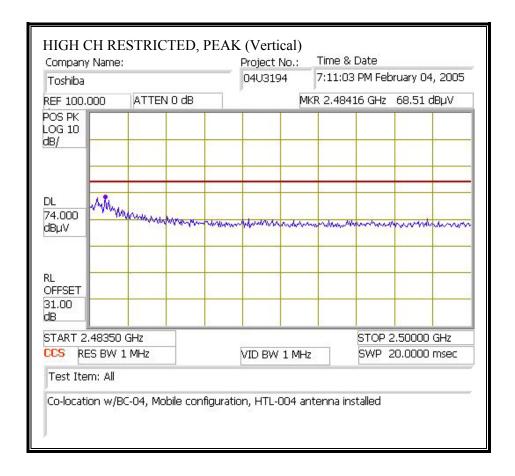


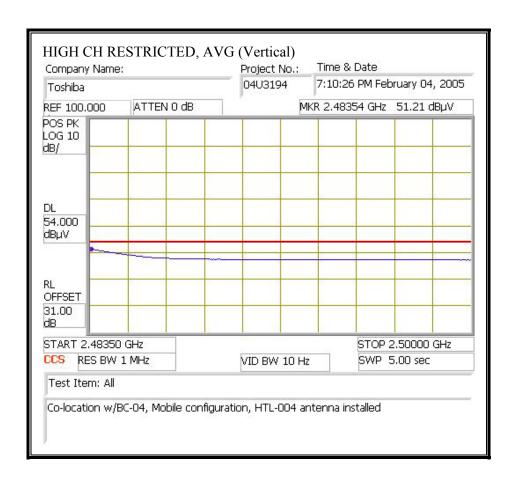
WORST-CASE RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)



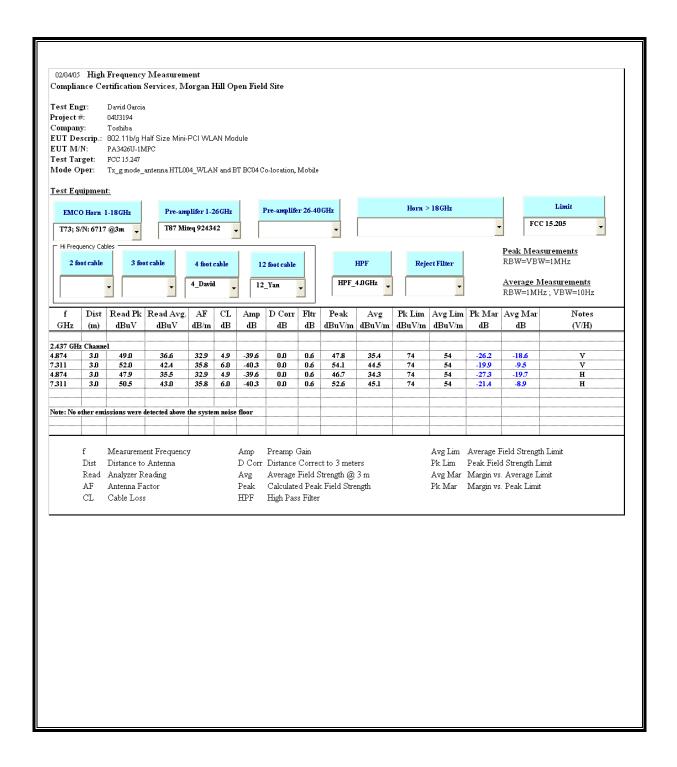


WORST-CASE RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)





WORST-CASE HARMONICS AND SPURIOUS EMISSIONS

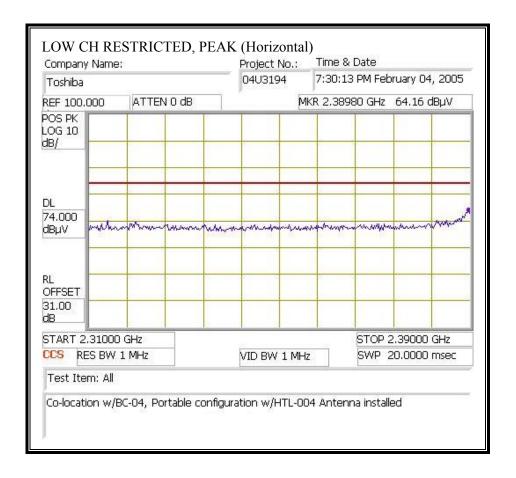


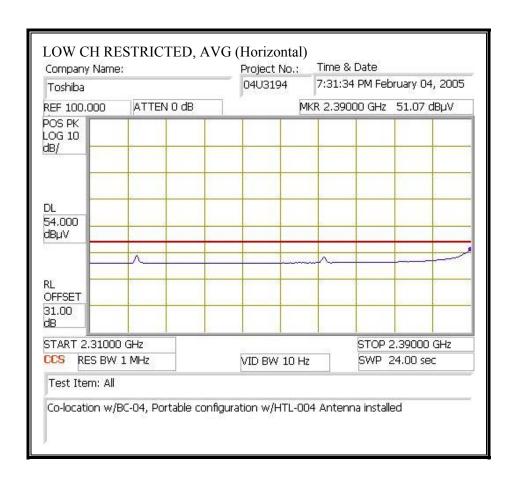
7.2.5.3 PORTABLE CONFIGURATION, WITH BLUETOOTH BC04

No non-compliance noted:

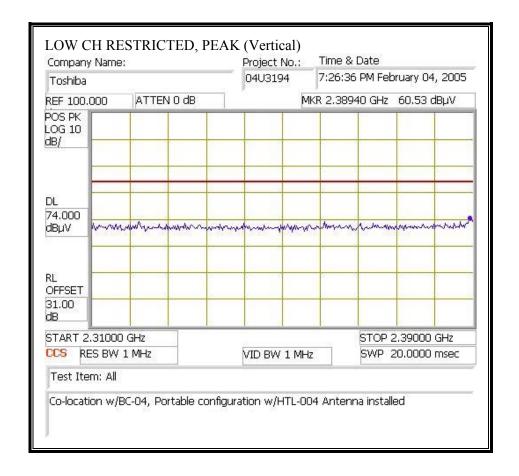
The dominant transmitter is the WLAN and the non-dominant transmitter is the Bluetooth

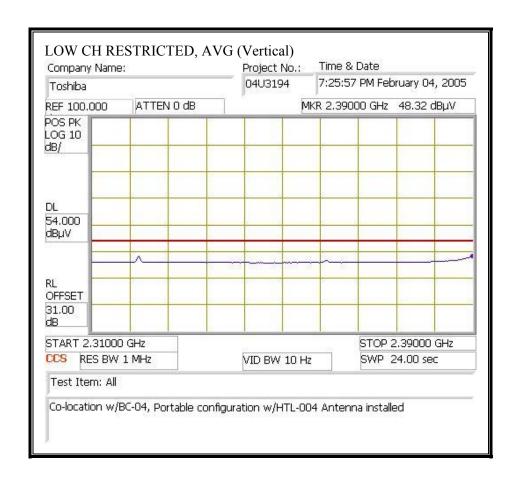
WORST-CASE RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



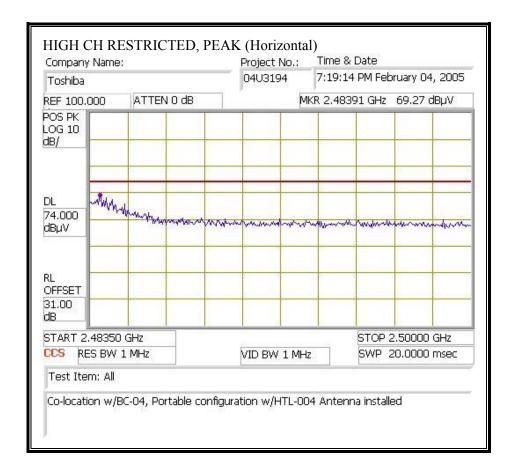


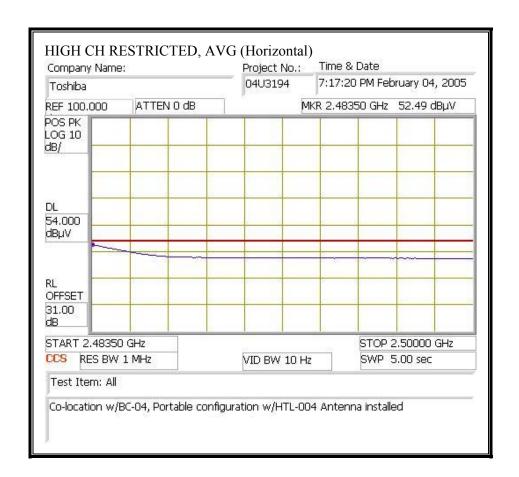
WORST-CASE RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



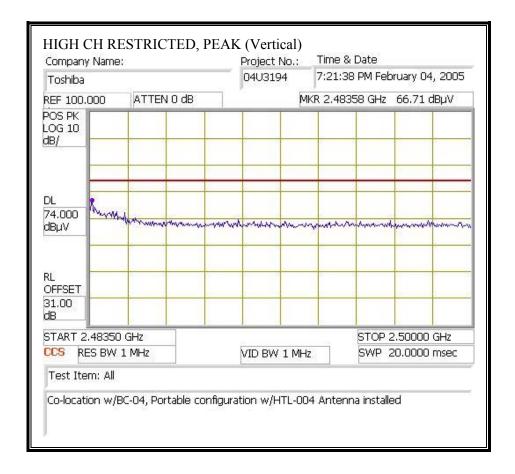


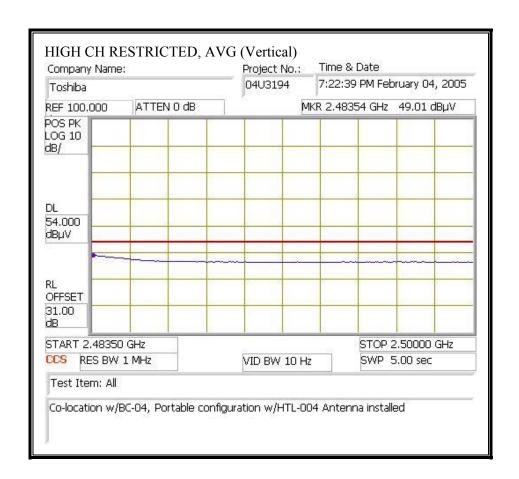
WORST-CASE RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)



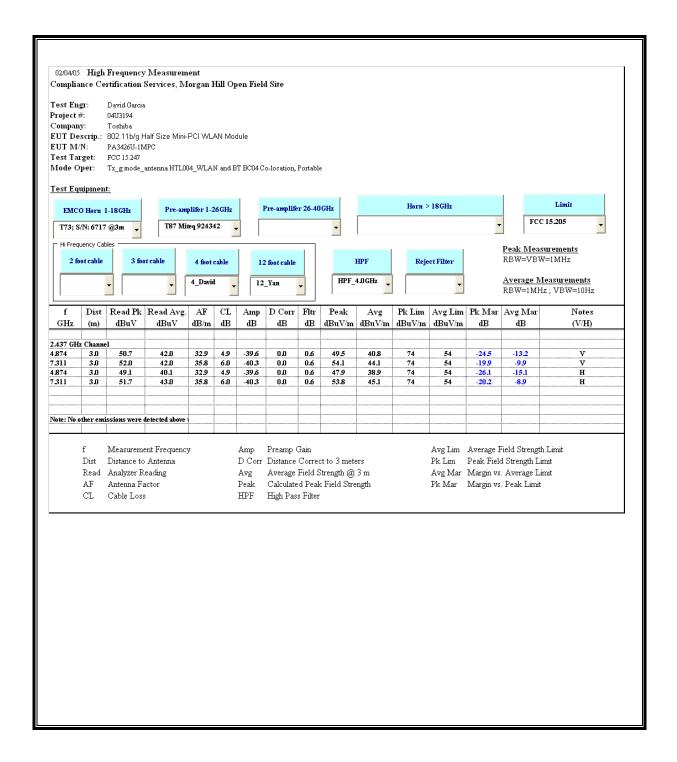


WORST-CASE RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)





WORST-CASE HARMONICS AND SPURIOUS EMISSIONS



7.2.5.4 STAND-ALONE CONFIGURATION, WITH BLUETOOTH BC02

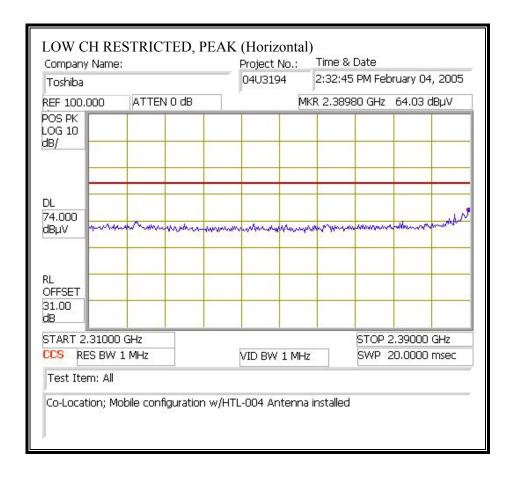
Not applicable. The BT has no extended card to use to be tested for this configuration. Please see 7.2.5.5 for reference.

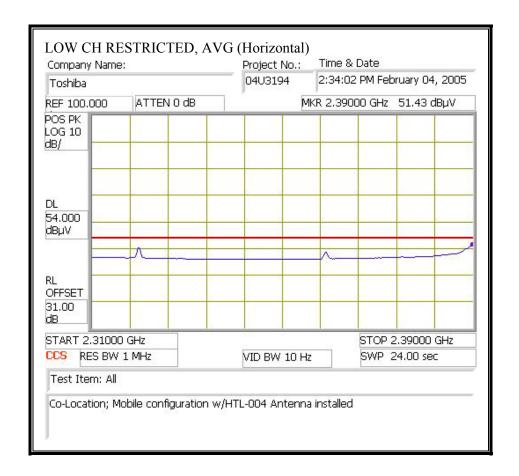
7.2.5.5 **MOBILE CONFIGURATION, WITH BLUETOOTH BC02**

No non-compliance noted:

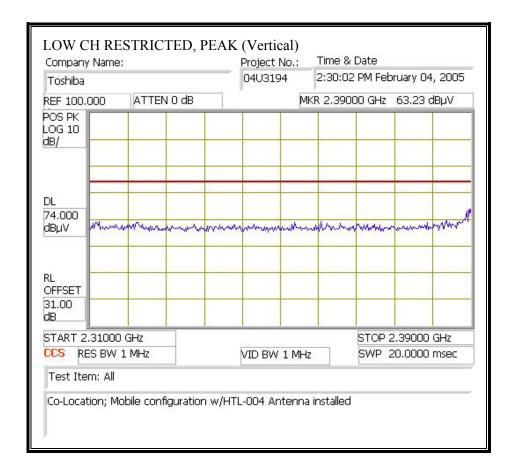
The dominant transmitter is the WLAN and the non-dominant transmitter is the Bluetooth

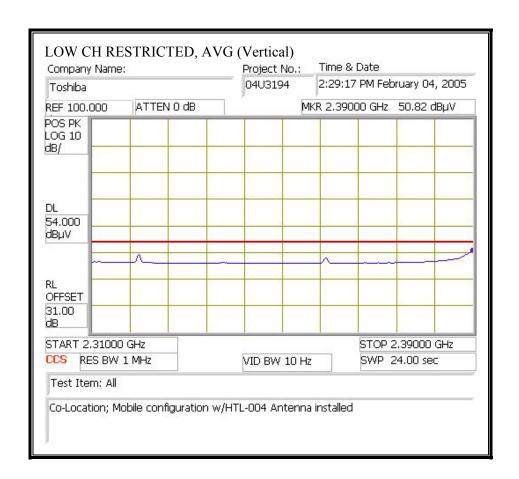
WORST-CASE RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



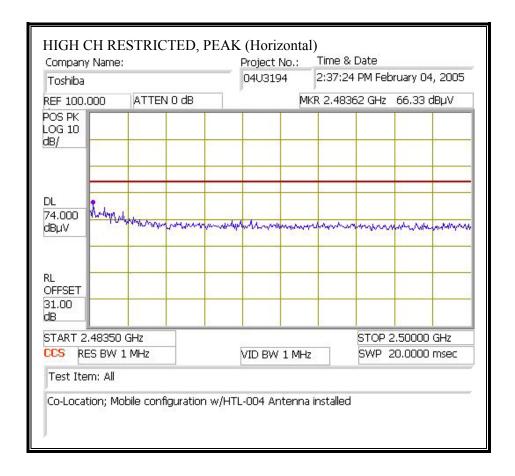


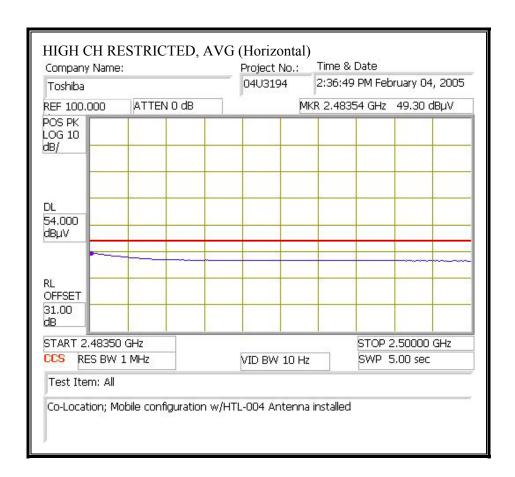
WORST-CASE RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



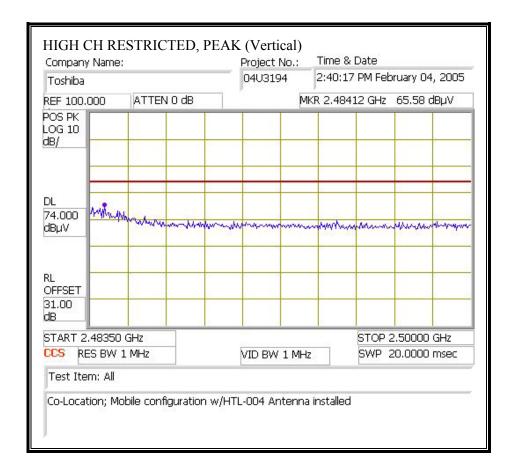


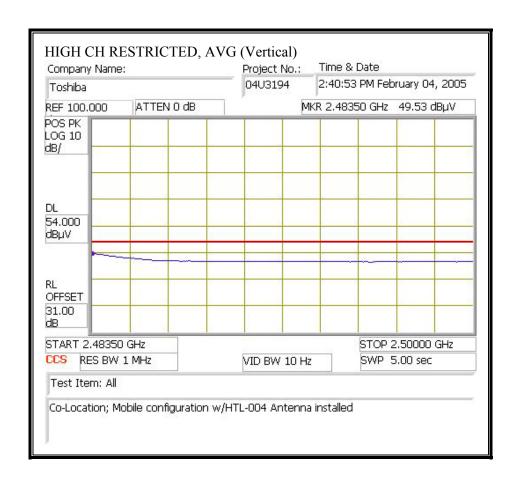
WORST-CASE RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)



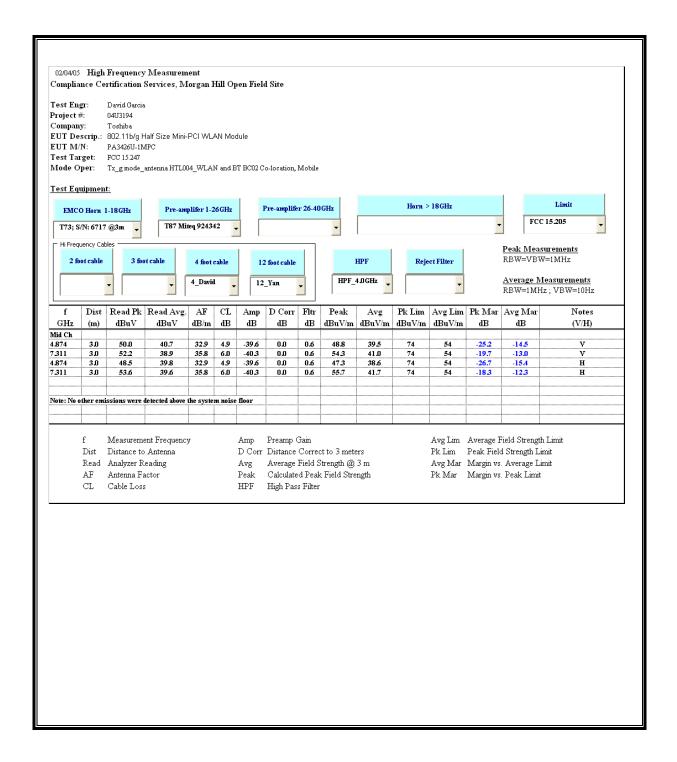


WORST-CASE RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)





WORST-CASE HARMONICS AND SPURIOUS EMISSIONS

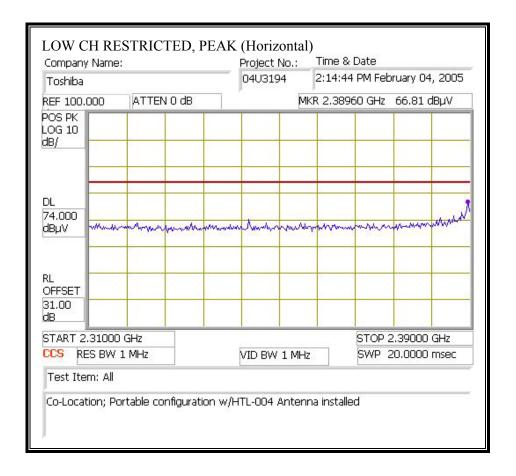


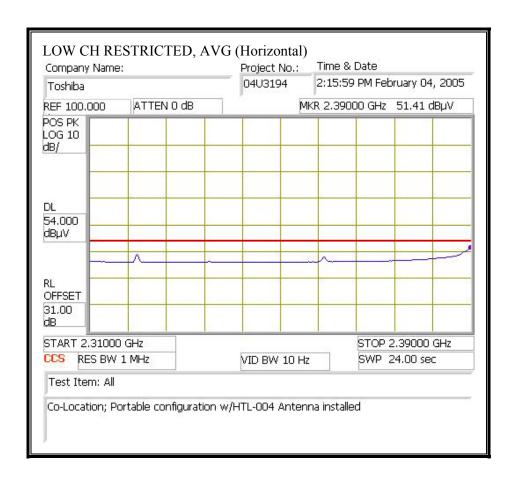
7.2.5.6 PORTABLE CONFIGURATION, WITH BLUETOOTH BC02

No non-compliance noted:

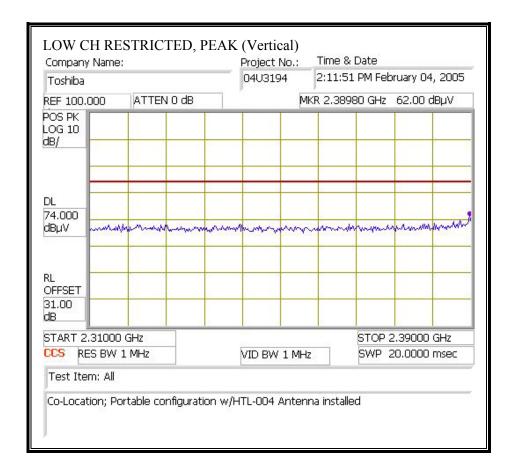
The dominant transmitter is the WLAN and the non-dominant transmitter is the Bluetooth

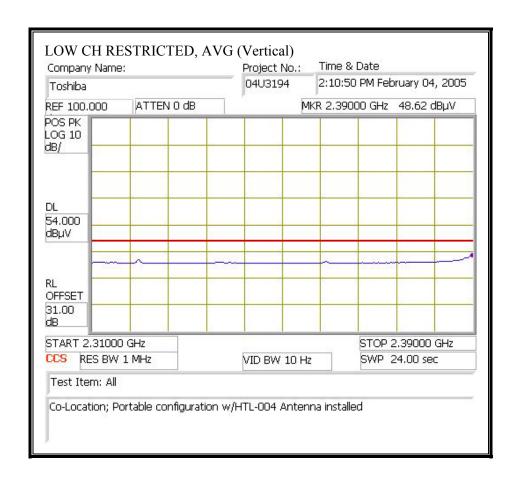
WORST-CASE RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



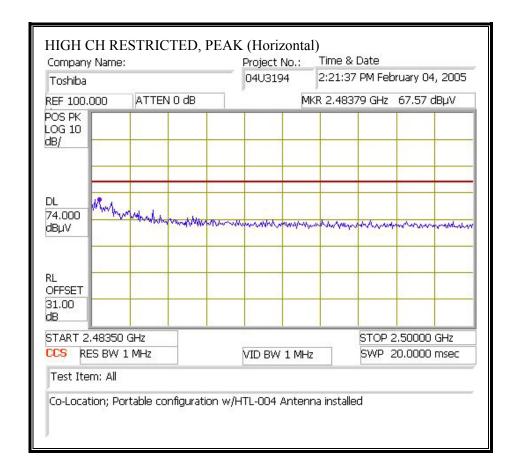


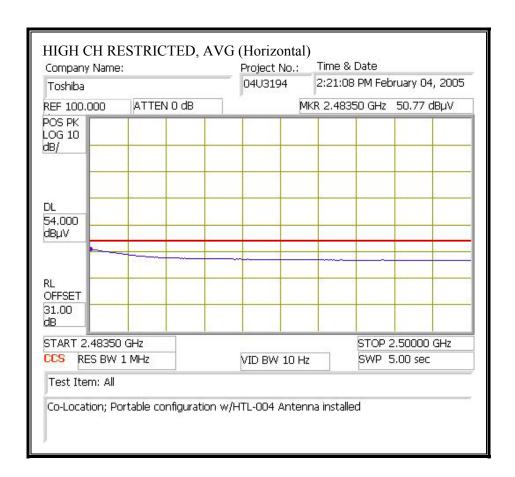
WORST-CASE RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



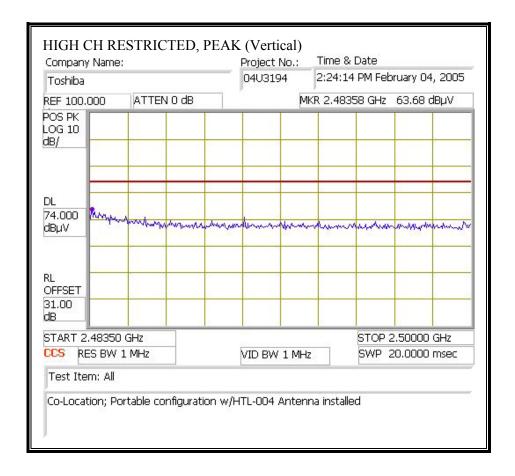


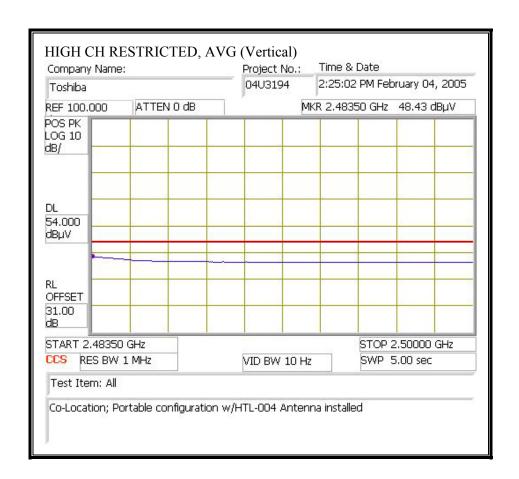
WORST-CASE RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)



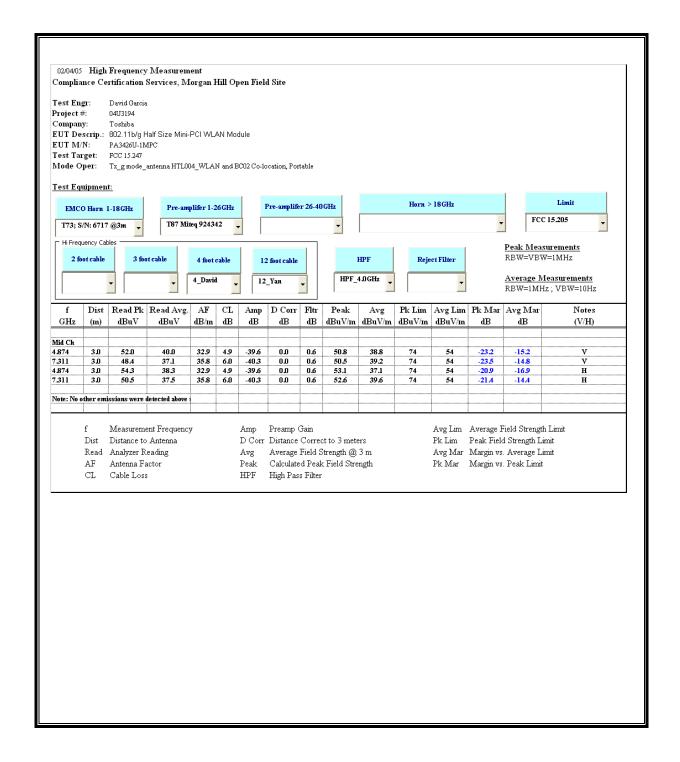


WORST-CASE RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)





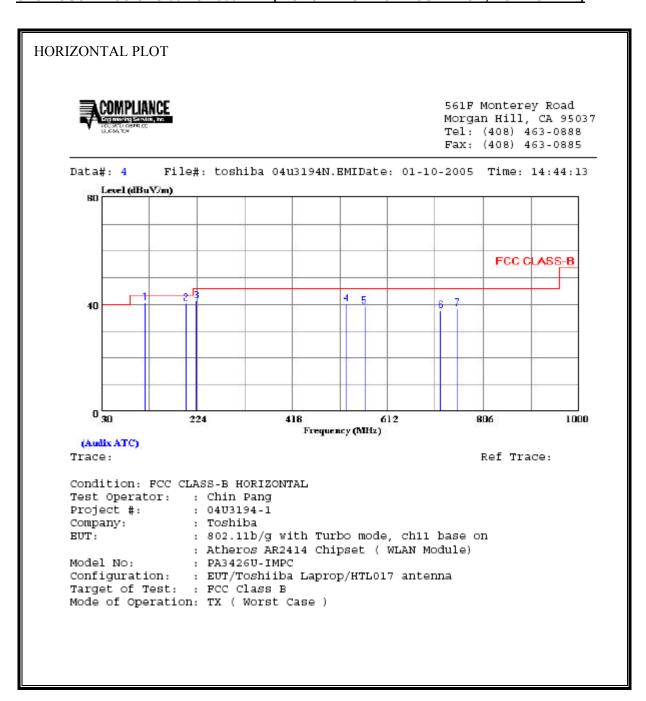
WORST-CASE HARMONICS AND SPURIOUS EMISSIONS



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

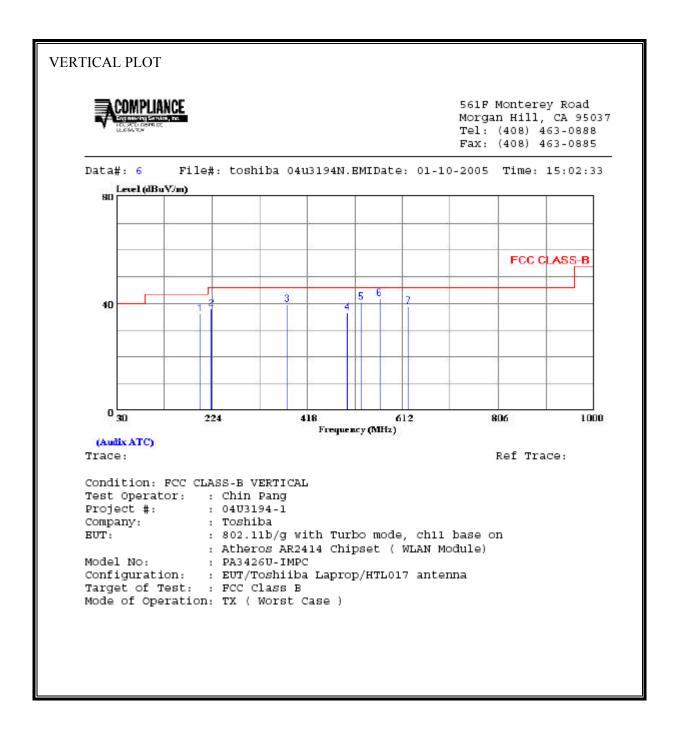
7.2.6.1 STAND-ALONE CONFIGURATION

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



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

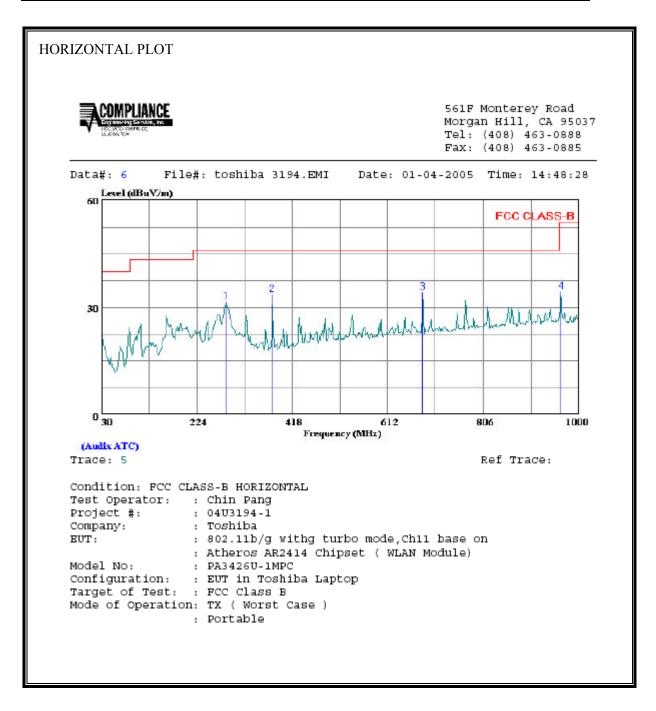
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, VERTICAL)



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

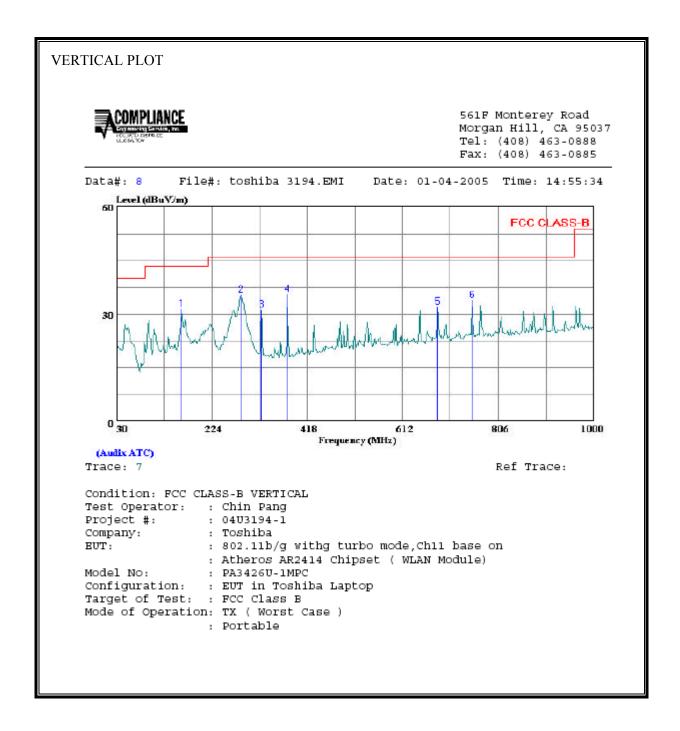
7.2.6.2 PORTABLE CONFIGURATION

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



HORIZONTAL DATA Page: 1 Limit Over Read Freq Level Factor Level Line Limit Remark MHz dBuV dB dBuV/m dBuV/m 284.140 45.84 -14.35 31.49 46.00 -14.51 Peak 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 963.140 38.19 -3.82 34.37 54.00 -19.63 Peak

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

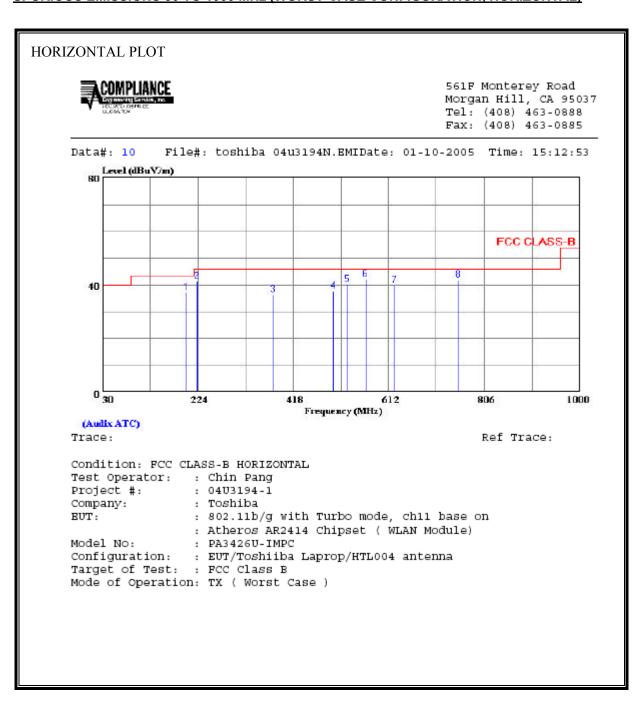


VERTICAL DATA									
		Freq MHz			Limit vel Line V/m dBuV/m		Remark ————	Page: 1	
	1 2 3 4 5 6	284.140 324.880 378.230 683.780	49.72 -1 44.42 -1 47.50 -1 38.70 -	4.35 35 3.26 31 2.03 35 6.62 32	.44 43.50 .37 46.00 .16 46.00 .47 46.00 .08 46.00 .83 46.00	-10.63 -14.84 -10.53 -13.92	Peak Peak Peak Peak		

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

STAND-ALONE CONFIGURATION 7.2.7.1

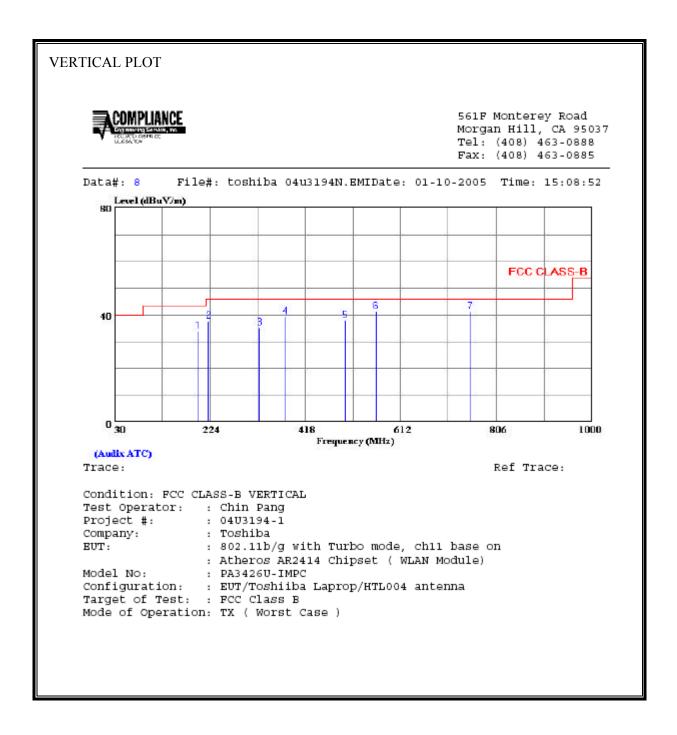
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)



Page 224 of 248

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

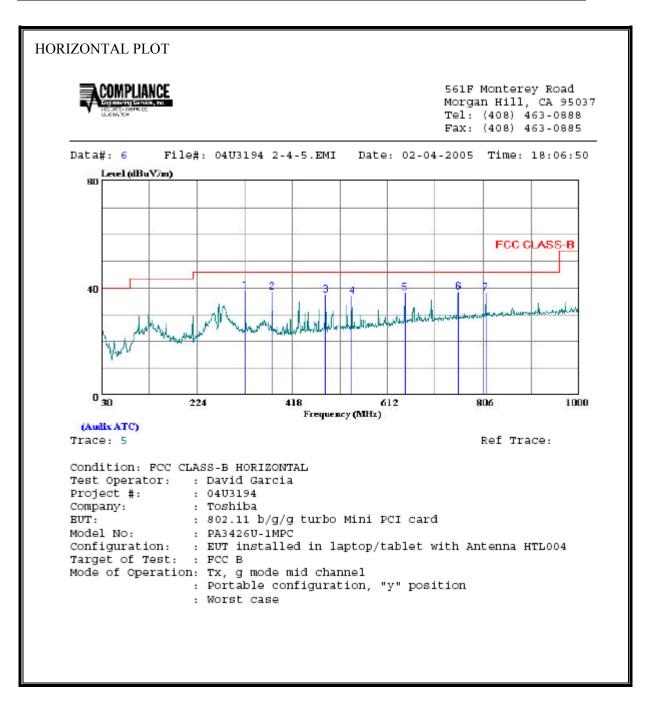
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, VERTICAL)



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

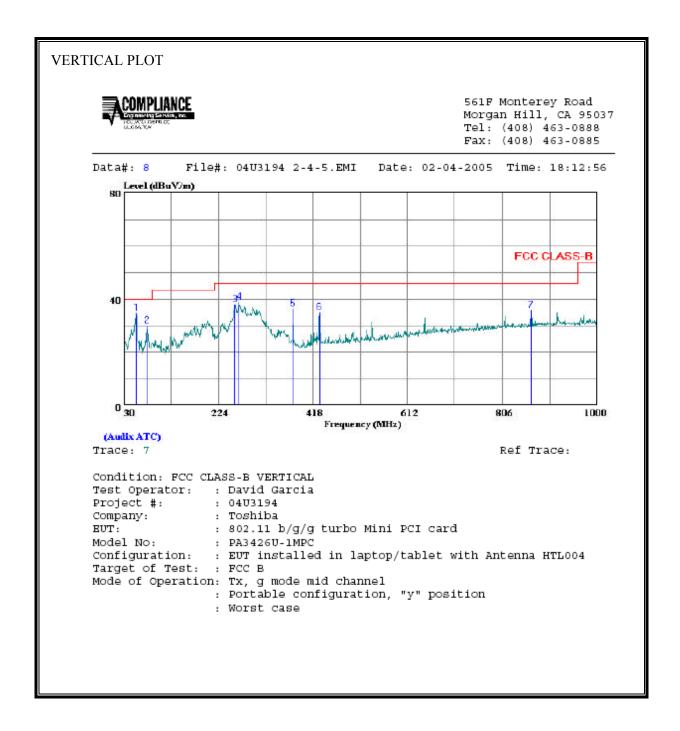
7.2.7.2 PORTABLE CONFIGURATION

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



								Page: 1
	Prog	Read		Lovel	Limit Line	Over		
	ried	пелет	Factor	rever	Tille	ышт	Kelliatk	
	MHz	dBuV	dB	dBuV/m	dBu√/m	dв		
1	322.940	50.00	-11.21	38.79	46.00	-7.21	Peak	
2	377.260							
3	485.900							
4	539.250							
5	647.890							
6	756.530							
7	809.880	39.90	-1.66	38.24	46.00	-/./6	reak	

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



VERTICA	L DATA							
	Freq MHz	Read Level E						Page: 1
1 2 3 4 5 6 7	55.220 77.530 257.950 266.680 377.260 431.580 864.200	51.30 - 51.87 - 46.40 - 43.60	-18.82 -13.37 -13.12 -10.01 -8.74	29.98 37.93 38.75 36.39 34.86	40.00 46.00 46.00 46.00 46.00	-10.02 -8.07 -7.25 -9.61 -11.14	Peak Peak Peak Peak Peak	

7.3 POWERLINE CONDUCTED EMISSIONS

LIMIT

 $\S15.207$ (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.

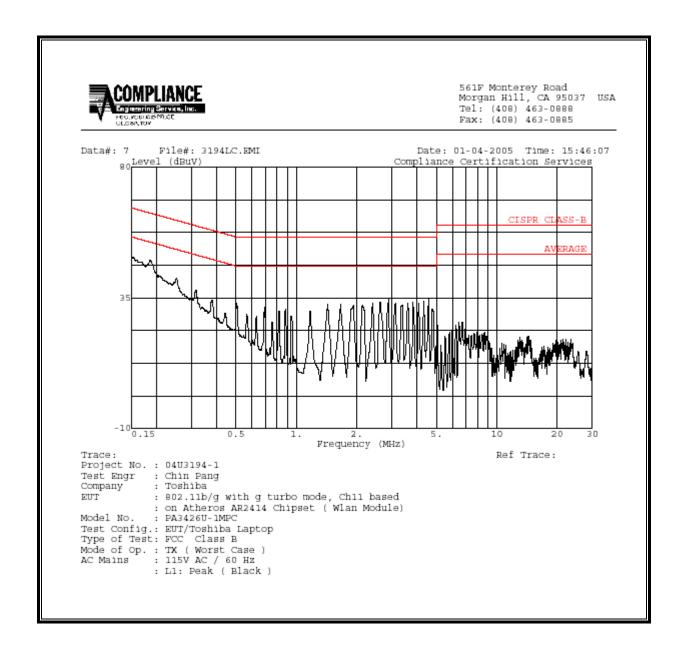
RESULTS

No non-compliance noted:

6 WORST EMISSIONS

CONDUCTED EMISSIONS DATA (115VAC 60Hz)											
Freq.		Reading		Closs Limit EN_B		EN_B	Mar	Remark			
(MHz)	PK (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 I	Data 										

LINE 1 RESULTS



LINE 2 RESULTS

