



MICROSOFT CORPORATION TEST REPORT

FOR THE

**MICROSOFT® WIRELESS ENTERTAINMENT KEYBOARD 8000,
MICROSOFT® MODEL NO. 1071**

**FCC PART 15 SUBPART B SECTION 15.109 CLASS B
& CISPR 22 (1997) CLASS B**

COMPLIANCE

DATE OF ISSUE: MAY 16, 2007

PREPARED FOR:

Microsoft Corporation
One Microsoft Way
Redmond, WA 98052

P.O. No.: PQ23100
W.O. No.: 86162

PREPARED BY:

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CKC Laboratories, Inc.
5046 Sierra Pines Drive
Mariposa, CA 95338

Date of test: April 11 - May 2, 2007

Report No.: FC07-036

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ADMINISTRATIVE INFORMATION

DATE OF TEST: April 11 - May 2, 2007

DATE OF RECEIPT: April 11, 2007

MANUFACTURER: Microsoft Corporation
One Microsoft Way
Redmond, WA 98052

REPRESENTATIVE: Jamin Pandana – NMB Technologies Corporation
Stephen Stegner – Microsoft Corporation

TEST LOCATION: CKC Laboratories, Inc.
110 Olinda Place
Brea, CA 92823

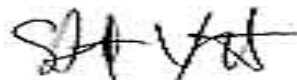
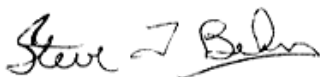
TEST METHOD: ANSI C63.4 (2003)

PURPOSE OF TEST: To demonstrate the compliance of the Microsoft® Wireless Entertainment Keyboard 8000, Microsoft® Model No. 1071 with the requirements for FCC Part 15 Subpart B Section 15.109 Class B and CISPR 22 Class B devices.

APPROVALS

QUALITY ASSURANCE:

TEST PERSONNEL:



Steve Behm, Director of Engineering Services

Stuart Yamamoto, EMC Engineer



Joyce Walker, Quality Assurance Administrative Manager

SUMMARY OF RESULTS

Test	Specification	Results
Conducted Emissions	FCC Part 15 Subpart B Section 15.107	NA
Radiated Emissions	FCC Part 15 Subpart B Section 15.109 Class B CISPR 22 (1997) Class B to ANSI C63.4 (2003)	Pass

NA = Not Applicable

CONDITIONS FOR COMPLIANCE

No modifications to the EUT were necessary to comply. Conducted Emissions is not required because the EUT is battery powered.

COUNTRY COMPLIANCE

The data contained in this report for the Microsoft® Wireless Entertainment Keyboard 8000, Microsoft® Model No. 1071 represents compliance to the specified standards tested. It is the opinion of CKC Laboratories that the following standards are acceptable to the countries listed:

United States

FCC Part 15 Subpart B Class B using:

- FCC Part 15 Subpart B Section 15.109 Class B
- CISPR 22 (1997) Class B
- ANSI C63.4 (2003) method

Canada

ICES-003 Class B using:

- CISPR 22 (1997) Class B
 - ANSI C63.4 (2003) method
- Industry of Canada File No. IC 3172-D

EQUIPMENT UNDER TEST (EUT) DESCRIPTION

The customer declares the EUT tested by CKC Laboratories was representative of a production unit.

EQUIPMENT UNDER TEST

Microsoft® Wireless Entertainment Keyboard 8000

Manuf: Microsoft Corporation
Model: Microsoft® Model No. 1071
Serial: 0017fa5c5311, 0017fa5c262a and 0017fa5cb2ad
FCC ID: C3K1071 (pending)

PERIPHERAL DEVICES

The EUT was tested with the following peripheral device(s):

Desktop Computer

Manuf: Lenovo
Model: 23u
Serial: LKHMR65

USB Mouse

Manuf: Lenovo
Model: MO28UOL
Serial: 23-062823 080

Monitor

Manuf: Dell
Model: P793
Serial: KR-04D025-47602-23Q-D9ZX

Docking Station

Manuf: Microsoft Corporation
Model: 1072
Serial: 1

Wireless Laser Mouse

Manuf: NMB Technologies Corporation
Model: 1062
Serial: 00125a63bd40

Bluetooth Transceiver (3 each)

Manuf: Microsoft Corporation
Model: 1063
Serial: 1, 2 & 3

AC to 5VDC Power Adapter

Manuf: eUrasia Power
Model: HK-HH-A05
Serial: HK-HH-A05

REPORT OF EMISSIONS MEASUREMENTS

TESTING PARAMETERS

The cables were routed consistent with the typical application by varying the configuration of the test sample. Interface cables were connected to the available ports of the test unit. The effect of varying the position of the cables was investigated to find the configuration that produced maximum emissions. Cables were of the type and length specified in the individual requirements. The length of cable that produced maximum emissions was selected.

The equipment under test (EUT) was set up in a manner that represented its normal use, as shown in the setup photographs. Any special conditions required for the EUT to operate normally are identified in the comments that accompany the emissions tables.

The emissions data was taken with a spectrum analyzer or receiver. Incorporating the applicable correction factors for distance, antenna, cable loss and amplifier gain, the data was reduced as shown in the table below. The corrected data was then compared to the applicable emission limits to determine compliance. Preliminary and final measurements were taken in order to ensure that all emissions from the EUT were found and maximized.

CORRECTION FACTORS

The basic spectrum analyzer reading was converted using correction factors as shown in the highest emissions readings in the tables. For radiated emissions in dB μ V/m, the spectrum analyzer reading in dB μ V was corrected by using the following formula. This reading was then compared to the applicable specification limit to determine compliance.

SAMPLE CALCULATIONS		
	Meter reading	(dB μ V)
+	Antenna Factor	(dB)
+	Cable Loss	(dB)
-	Distance Correction	(dB)
-	Preamplifier Gain	(dB)
=	Corrected Reading	(dB μ V/m)

TEST INSTRUMENTATION AND ANALYZER SETTINGS

The test instrumentation and equipment listed were used to collect the emissions data. A spectrum analyzer or receiver was used for all measurements. The following table shows the measuring equipment bandwidth settings that were used in designated frequency bands. For testing emissions, an appropriate reference level and a vertical scale size of 10 dB per division were used. When conducted emissions testing was performed, a 10 dB external attenuator was used with internal offset correction in the analyzer.

MEASURING EQUIPMENT BANDWIDTH SETTINGS PER FREQUENCY RANGE			
TEST	BEGINNING FREQUENCY	ENDING FREQUENCY	BANDWIDTH SETTING
CONDUCTED EMISSIONS	150 kHz	30 MHz	9 kHz
RADIATED EMISSIONS	30 MHz	1000 MHz	120 kHz
RADIATED EMISSIONS	1000 MHz	>1 GHz	1 MHz

SPECTRUM ANALYZER/RECEIVER DETECTOR FUNCTIONS

The notes that accompany the measurements contained in the emissions tables indicate the type of detector function used to obtain the given readings. Unless otherwise noted, all readings were made in the "Peak" mode. Whenever a "Quasi-Peak" or "Average" reading is listed as one of the highest readings, this is indicated as a "QP" or an "Ave" on the appropriate row of the data sheets. The following paragraphs describe in more detail the detector functions and when they were used to obtain the emissions data.

Peak

In this mode, the spectrum analyzer/receiver readings were recorded all emissions at their peak value as the frequency band selected was scanned. By combining this function with another feature of the measuring device called "peak hold," the measuring device had the ability to measure transients or low duty cycle transient emission peak levels. In this mode the measuring device made a slow scan across the frequency band selected and measured the peak emission value found at each frequency across the band.

Quasi-Peak

When the true peak values exceeded or were within 2 dB of the specification limit, quasi-peak measurements were taken using the quasi-peak detector.

Average

For certain frequencies, average measurements may be made using the spectrum analyzer/receiver. To make these measurements, the test engineer reduces the video bandwidth on the measuring device until the modulation of the signal is filtered out. At this point the measuring device is set into the linear mode and the scan time is reduced.

RADIATED EMISSIONS

Test Setup Photos



Test Data Sheets

Test Location: CKC Laboratories, Inc. • 110 N Olinda Place • Brea, CA 92823 • 714-993-6112

Customer: **NMB Technologies Corporation**
 Specification: **CISPR 22 B RADIATED**
 Work Order #: **86162** Date: 4/11/2007
 Test Type: **Maximized Emissions** Time: 11:29:24
 Equipment: **Wireless Entertainment Keyboard 8000** Sequence#: 13
 Manufacturer: NMB Technologies Corporation Tested By: Stuart Yamamoto
 Model: 1071
 S/N: 0017fa5c5311

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
Antenna Cable	Cable #33	02/02/2007	02/22/2009	P05569
Preamplifier	2727A05392	06/06/2006	06/06/2008	00010
Preamplifier Cable	Cable #22	08/10/2006	08/10/2008	P05555
10m Position Cable	Cable #17	09/19/2006	09/19/2008	P04382
Bilog Antenna	2629	02/02/2006	02/02/2008	00851
Quasi Peak Adapter	3303A01884	09/14/2006	09/14/2008	01437
Spectrum Analyzer	3001A18430	09/14/2006	09/14/2008	02472
Display Section				
Spectrum Analyzer	2928A04874	09/14/2006	09/14/2008	02462
RF Section				

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Wireless Entertainment Keyboard 8000*	NMB Technologies Corporation	1071	0017fa5c5311

Support Devices:

Function	Manufacturer	Model #	S/N
Wireless Laser Mouse	NMB Technologies Corporation	1062	00125a63bd40
Bluetooth Transceiver v3.0	Microsoft Corporation	1063	1
Bluetooth Transceiver v3.0	Microsoft Corporation	1063	2
Bluetooth Transceiver v3.0	Microsoft Corporation	1063	3
USB Mouse	Lenovo	MO28UOL	23-062823 080
Desktop Computer	Lenovo	23u	LKHMR65
Monitor	Dell	P793	KR-04D025-47602-23Q-D9ZX
Docking Station	Microsoft Corporation	1072	1
AC to 5Vdc Power Adapter	eUrasia Power	HK-HH-A05	

Test Conditions / Notes:

The equipment under test (EUT) is a wireless keyboard. The EUT along with all of the support equipment are placed adjacent to each other on the tabletop. The EUT is not docked into the docking station and its H key is pressed continuously. An H pattern is being displayed on the monitor through WordPad. Temperature: 19°C, Humidity: 59%, Pressure: 100kPa.

Transducer Legend:

T1=Bilog AN00851 020208 Chase	T2=84' Heliac Cable P04382
T3=Cable #22 Preamp to SA 081008	T4=Preamp 8447D Asset 00010
T5=Cable P05569, 44' RG214/U	

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dB μ V	T1 T5 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	41.264M	46.2	+13.4 +0.6	+0.7	+0.1	-27.1	-10.0	23.9	30.0	-6.1	Vert
2	143.994M	47.2	+11.2 +1.2	+1.1	+0.2	-27.0	-10.0	23.9	30.0	-6.1	Vert
3	719.986M	40.8	+21.3 +3.0	+2.9	+0.5	-27.8	-10.0	30.7	37.0	-6.3	Vert
4	719.972M QP	40.1	+21.3 +3.0	+2.9	+0.5	-27.8	-10.0	30.0	37.0	-7.0	Horiz
^	719.979M	43.2	+21.3 +3.0	+2.9	+0.5	-27.8	-10.0	33.1	37.0	-3.9	Horiz
6	30.293M	40.0	+18.8 +0.5	+0.7	+0.1	-27.2	-10.0	22.9	30.0	-7.1	Vert
7	30.643M	40.1	+18.7 +0.5	+0.7	+0.1	-27.2	-10.0	22.9	30.0	-7.1	Vert
8	959.973M QP	35.1	+24.6 +3.6	+3.4	+0.5	-27.5	-10.0	29.7	37.0	-7.3	Vert
^	959.978M	37.5	+24.6 +3.6	+3.4	+0.5	-27.5	-10.0	32.1	37.0	-4.9	Vert
10	959.967M QP	34.7	+24.6 +3.6	+3.4	+0.5	-27.5	-10.0	29.3	37.0	-7.7	Horiz
^	959.972M	37.0	+24.6 +3.6	+3.4	+0.5	-27.5	-10.0	31.6	37.0	-5.4	Horiz
12	40.533M	44.0	+13.8 +0.6	+0.7	+0.1	-27.1	-10.0	22.1	30.0	-7.9	Vert
13	600.000M	41.1	+19.9 +2.8	+2.7	+0.5	-27.9	-10.0	29.1	37.0	-7.9	Horiz
14	815.993M	37.0	+22.6 +3.4	+3.1	+0.5	-27.6	-10.0	29.0	37.0	-8.0	Horiz
15	41.754M	43.9	+13.1 +0.6	+0.7	+0.1	-27.1	-10.0	21.3	30.0	-8.7	Vert
16	528.025M	41.5	+19.0 +2.6	+2.5	+0.5	-27.8	-10.0	28.3	37.0	-8.7	Vert
17	66.377M	50.4	+6.1 +0.8	+0.9	+0.1	-27.1	-10.0	21.2	30.0	-8.8	Vert
18	383.218M	44.8	+15.3 +2.2	+2.1	+0.4	-27.0	-10.0	27.8	37.0	-9.2	Horiz
19	942.192M	33.3	+24.4 +3.6	+3.4	+0.5	-27.4	-10.0	27.8	37.0	-9.2	Vert
20	132.024M	43.8	+11.4 +1.2	+1.1	+0.2	-27.0	-10.0	20.7	30.0	-9.3	Vert
21	348.032M	45.6	+14.5 +2.1	+2.0	+0.3	-26.8	-10.0	27.7	37.0	-9.3	Horiz

22	239.980M	49.0	+11.7 +1.7	+1.6	+0.3	-26.7	-10.0	27.6	37.0	-9.4	Horiz
23	32.382M	38.4	+17.8 +0.5	+0.7	+0.1	-27.2	-10.0	20.3	30.0	-9.7	Vert
24	599.988M	39.1	+19.9 +2.8	+2.7	+0.5	-27.9	-10.0	27.1	37.0	-9.9	Vert
25	36.017M	39.5	+16.0 +0.6	+0.7	+0.1	-27.1	-10.0	19.8	30.0	-10.2	Vert
26	68.367M	49.0	+6.1 +0.8	+0.9	+0.1	-27.1	-10.0	19.8	30.0	-10.2	Horiz
27	72.018M	48.5	+6.4 +0.8	+0.9	+0.1	-27.1	-10.0	19.6	30.0	-10.4	Vert
28	528.017M	39.6	+19.0 +2.6	+2.5	+0.5	-27.8	-10.0	26.4	37.0	-10.6	Horiz
29	57.055M	48.0	+6.9 +0.7	+0.8	+0.1	-27.2	-10.0	19.3	30.0	-10.7	Vert
30	840.008M	33.4	+23.1 +3.5	+3.2	+0.5	-27.5	-10.0	26.2	37.0	-10.8	Vert
31	144.016M	42.3	+11.2 +1.2	+1.1	+0.2	-27.0	-10.0	19.0	30.0	-11.0	Horiz
^	144.018M	47.5	+11.2 +1.2	+1.1	+0.2	-27.0	-10.0	24.2	30.0	-5.8	Horiz
33	64.143M	48.2	+6.2 +0.8	+0.8	+0.1	-27.2	-10.0	18.9	30.0	-11.1	Vert
34	815.981M	33.9	+22.6 +3.4	+3.1	+0.5	-27.6	-10.0	25.9	37.0	-11.1	Vert
35	48.040M	44.7	+9.7 +0.7	+0.8	+0.1	-27.2	-10.0	18.8	30.0	-11.2	Vert
36	79.321M	46.6	+7.4 +0.8	+1.0	+0.1	-27.1	-10.0	18.8	30.0	-11.2	Vert
37	82.201M	46.2	+7.7 +0.9	+1.0	+0.1	-27.1	-10.0	18.8	30.0	-11.2	Vert
38	105.634M	43.4	+10.3 +1.0	+1.0	+0.2	-27.1	-10.0	18.8	30.0	-11.2	Vert
39	81.011M	46.2	+7.6 +0.9	+1.0	+0.1	-27.1	-10.0	18.7	30.0	-11.3	Vert
40	479.974M	40.2	+17.7 +2.5	+2.4	+0.4	-27.5	-10.0	25.7	37.0	-11.3	Horiz
41	65.180M	47.5	+6.1 +0.8	+0.9	+0.1	-27.1	-10.0	18.3	30.0	-11.7	Vert
42	34.234M	36.9	+16.9 +0.6	+0.7	+0.1	-27.2	-10.0	18.0	30.0	-12.0	Vert
43	73.041M	46.8	+6.5 +0.8	+0.9	+0.1	-27.1	-10.0	18.0	30.0	-12.0	Vert
44	47.540M	43.4	+9.9 +0.7	+0.8	+0.1	-27.2	-10.0	17.7	30.0	-12.3	Vert
45	114.565M	41.4	+10.9 +1.1	+1.1	+0.2	-27.0	-10.0	17.7	30.0	-12.3	Vert
46	912.008M	31.1	+23.5 +3.5	+3.3	+0.5	-27.6	-10.0	24.3	37.0	-12.7	Horiz

47	119.996M	40.5	+11.2 +1.1	+1.1	+0.2	-27.0	-10.0	17.1	30.0	-12.9	Vert
48	839.966M	31.1	+23.1 +3.5	+3.2	+0.5	-27.5	-10.0	23.9	37.0	-13.1	Horiz
49	48.368M	42.9	+9.5 +0.7	+0.8	+0.1	-27.2	-10.0	16.8	30.0	-13.2	Vert
50	611.994M	35.2	+20.0 +2.8	+2.7	+0.5	-27.9	-10.0	23.3	37.0	-13.7	Horiz
51	381.813M	40.2	+15.3 +2.2	+2.1	+0.4	-27.0	-10.0	23.2	37.0	-13.8	Horiz
52	120.002M	39.3	+11.2 +1.1	+1.1	+0.2	-27.0	-10.0	15.9	30.0	-14.1	Horiz
53	62.664M	44.4	+6.2 +0.8	+0.8	+0.1	-27.2	-10.0	15.1	30.0	-14.9	Horiz

Test Location: CKC Laboratories, Inc. • 110 N Olinda Place • Brea, CA 92823 • 714-993-6112

Customer: **Microsoft Corporation**

Specification: **CISPR 22 B RADIATED**

Work Order #: **86162**

Date: 4/12/2007

Test Type: **Maximized Emissions**

Time: 11:03:24

Equipment: **Wireless Entertainment Keyboard
8000**

Sequence#: 14

Manufacturer: Microsoft Corporation

Tested By: Stuart Yamamoto

Model: 1071

S/N: 0017fa5cb2ad

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
Antenna Cable	Cable #33	02/02/2007	02/22/2009	P05569
Preamplifier	2727A05392	06/06/2006	06/06/2008	00010
Preamplifier Cable	Cable #22	08/10/2006	08/10/2008	P05555
10m Position Cable	Cable #17	09/19/2006	09/19/2008	P04382
Bilog Antenna	2629	02/02/2006	02/02/2008	00851
Quasi Peak Adapter	3303A01884	09/14/2006	09/14/2008	01437
Spectrum Analyzer	3001A18430	09/14/2006	09/14/2008	02472
Display Section				
Spectrum Analyzer	2928A04874	09/14/2006	09/14/2008	02462
RF Section				

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Wireless Entertainment Keyboard 8000*	Microsoft Corporation	1071	0017fa5cb2ad

Support Devices:

Function	Manufacturer	Model #	S/N
Wireless Laser Mouse	NMB Technologies Corporation	1062	00125a63953e
Bluetooth Transceiver v3.0	Microsoft Corporation	1063	2
Bluetooth Transceiver v3.0	Microsoft Corporation	1063	3
USB Mouse	Lenovo	MO28UOL	23-062823 080
Desktop Computer	Lenovo	23u	LKHMR65
Monitor	Dell	P793	KR-04D025-47602-23Q- D9ZX
Bluetooth Transceiver v3.0	Microsoft Corporation	1063	1
Docking Station	Microsoft Corporation	1072	2
AC to 5Vdc Power Adapter	eUrasia Power	HK-HH-A05	

Test Conditions / Notes:

The equipment under test (EUT) is a wireless keyboard. The EUT along with all of the support equipment are placed adjacent to each other on the tabletop. The EUT is not docked into the docking station and its H key is pressed continuously. An H pattern is being displayed on the monitor through WordPad. Temperature: 19°C, Humidity: 50%, Pressure: 100kPa.

Transducer Legend:

T1=Bilog AN00851 020208 Chase	T2=84' Heliac Cable P04382
T3=Cable #22 Preamp to SA 081008	T4=Preamp 8447D Asset 00010
T5=Cable P05569, 44' RG214/U	

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dB μ V	T1 T5 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	959.997M	36.3	+24.6 +3.6	+3.4	+0.5	-27.5	-10.0	30.9	37.0	-6.1	Vert
2	960.010M QP	35.9	+24.6 +3.6	+3.4	+0.5	-27.5	-10.0	30.5	37.0	-6.5	Horiz
^	959.973M	37.7	+24.6 +3.6	+3.4	+0.5	-27.5	-10.0	32.3	37.0	-4.7	Horiz
4	144.032M	46.8	+11.2 +1.2	+1.1	+0.2	-27.0	-10.0	23.5	30.0	-6.5	Vert
5	719.988M QP	40.2	+21.3 +3.0	+2.9	+0.5	-27.8	-10.0	30.1	37.0	-6.9	Horiz
^	719.990M	42.7	+21.3 +3.0	+2.9	+0.5	-27.8	-10.0	32.6	37.0	-4.4	Horiz
7	144.002M	46.2	+11.2 +1.2	+1.1	+0.2	-27.0	-10.0	22.9	30.0	-7.1	Horiz
8	600.004M	41.5	+19.9 +2.8	+2.7	+0.5	-27.9	-10.0	29.5	37.0	-7.5	Horiz
9	30.820M	39.8	+18.6 +0.5	+0.7	+0.1	-27.2	-10.0	22.5	30.0	-7.5	Vert
10	49.440M	49.1	+8.9 +0.7	+0.8	+0.1	-27.2	-10.0	22.4	30.0	-7.6	Vert
11	719.976M	39.3	+21.3 +3.0	+2.9	+0.5	-27.8	-10.0	29.2	37.0	-7.8	Vert
12	41.053M	44.3	+13.5 +0.6	+0.7	+0.1	-27.1	-10.0	22.1	30.0	-7.9	Vert
13	815.954M	36.9	+22.6 +3.4	+3.1	+0.5	-27.6	-10.0	28.9	37.0	-8.1	Horiz
14	50.080M	48.7	+8.6 +0.7	+0.8	+0.1	-27.2	-10.0	21.7	30.0	-8.3	Vert
15	66.376M	50.8	+6.1 +0.8	+0.9	+0.1	-27.1	-10.0	21.6	30.0	-8.4	Vert
16	32.478M	39.1	+17.7 +0.5	+0.7	+0.1	-27.2	-10.0	20.9	30.0	-9.1	Vert
17	41.789M	43.5	+13.1 +0.6	+0.7	+0.1	-27.1	-10.0	20.9	30.0	-9.1	Vert
18	67.966M	50.0	+6.1 +0.8	+0.9	+0.1	-27.1	-10.0	20.8	30.0	-9.2	Vert
19	600.002M	39.8	+19.9 +2.8	+2.7	+0.5	-27.9	-10.0	27.8	37.0	-9.2	Vert
20	57.030M	49.3	+6.9 +0.7	+0.8	+0.1	-27.2	-10.0	20.6	30.0	-9.4	Vert
21	64.779M	49.8	+6.2 +0.8	+0.8	+0.1	-27.2	-10.0	20.5	30.0	-9.5	Vert

22	815.983M	35.5	+22.6 +3.4	+3.1	+0.5	-27.6	-10.0	27.5	37.0	-9.5	Vert
23	942.162M	32.6	+24.4 +3.6	+3.4	+0.5	-27.4	-10.0	27.1	37.0	-9.9	Vert
24	527.996M	40.3	+19.0 +2.6	+2.5	+0.5	-27.8	-10.0	27.1	37.0	-9.9	Vert
25	240.005M	48.3	+11.7 +1.7	+1.6	+0.3	-26.7	-10.0	26.9	37.0	-10.1	Horiz
26	840.010M	34.1	+23.1 +3.5	+3.2	+0.5	-27.5	-10.0	26.9	37.0	-10.1	Vert
27	131.999M	42.5	+11.4 +1.2	+1.1	+0.2	-27.0	-10.0	19.4	30.0	-10.6	Vert
28	479.977M	40.7	+17.7 +2.5	+2.4	+0.4	-27.5	-10.0	26.2	37.0	-10.8	Horiz
29	119.998M	42.5	+11.2 +1.1	+1.1	+0.2	-27.0	-10.0	19.1	30.0	-10.9	Horiz
30	527.989M	38.9	+19.0 +2.6	+2.5	+0.5	-27.8	-10.0	25.7	37.0	-11.3	Horiz
31	82.792M	46.1	+7.7 +0.9	+1.0	+0.1	-27.1	-10.0	18.7	30.0	-11.3	Vert
32	105.631M	43.3	+10.3 +1.0	+1.0	+0.2	-27.1	-10.0	18.7	30.0	-11.3	Vert
33	69.110M	47.7	+6.1 +0.8	+0.9	+0.1	-27.1	-10.0	18.5	30.0	-11.5	Horiz
34	383.197M	42.5	+15.3 +2.2	+2.1	+0.4	-27.0	-10.0	25.5	37.0	-11.5	Horiz
35	34.047M	37.2	+16.9 +0.5	+0.7	+0.1	-27.2	-10.0	18.2	30.0	-11.8	Vert
36	36.213M	37.8	+15.9 +0.6	+0.7	+0.1	-27.1	-10.0	18.0	30.0	-12.0	Vert
37	72.004M	46.9	+6.4 +0.8	+0.9	+0.1	-27.1	-10.0	18.0	30.0	-12.0	Vert
38	73.231M	46.6	+6.6 +0.8	+0.9	+0.1	-27.1	-10.0	17.9	30.0	-12.1	Vert
39	912.023M	31.7	+23.5 +3.5	+3.3	+0.5	-27.6	-10.0	24.9	37.0	-12.1	Vert
40	840.007M	31.8	+23.1 +3.5	+3.2	+0.5	-27.5	-10.0	24.6	37.0	-12.4	Horiz
41	348.014M	42.5	+14.5 +2.1	+2.0	+0.3	-26.8	-10.0	24.6	37.0	-12.4	Horiz
42	114.567M	41.0	+10.9 +1.1	+1.1	+0.2	-27.0	-10.0	17.3	30.0	-12.7	Vert
43	612.015M	36.1	+20.0 +2.8	+2.7	+0.5	-27.9	-10.0	24.2	37.0	-12.8	Horiz
44	911.957M	30.9	+23.5 +3.5	+3.3	+0.5	-27.6	-10.0	24.1	37.0	-12.9	Horiz
45	168.005M	40.6	+9.7 +1.4	+1.2	+0.2	-26.9	-10.0	16.2	30.0	-13.8	Vert

46	78.719M	43.7	+7.3 +0.8	+1.0	+0.1	-27.1	-10.0	15.8	30.0	-14.2	Vert
47	381.818M	39.4	+15.3 +2.2	+2.1	+0.4	-27.0	-10.0	22.4	37.0	-14.6	Horiz
48	119.989M	38.2	+11.2 +1.1	+1.1	+0.2	-27.0	-10.0	14.8	30.0	-15.2	Vert
49	240.006M	40.5	+11.7 +1.7	+1.6	+0.3	-26.7	-10.0	19.1	37.0	-17.9	Vert

Test Location: CKC Laboratories, Inc. • 110 N Olinda Place • Brea, CA 92823 • 714-993-6112

Customer: **Microsoft Corporation**

Specification: **CISPR 22 B RADIATED**

Work Order #: **86162**

Date: 4/18/2007

Test Type: **Maximized Emissions**

Time: 14:36:42

Equipment: **Wireless Entertainment Keyboard
8000**

Sequence#: 16

Manufacturer: Microsoft Corporation

Tested By: Stuart Yamamoto

Model: 1071

S/N: 0017fa5c262a

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
Antenna Cable	Cable #33	02/02/2007	02/22/2009	P05569
Preamplifier	2727A05392	06/06/2006	06/06/2008	00010
Preamplifier Cable	Cable #22	08/10/2006	08/10/2008	P05555
10m Position Cable	Cable #17	09/19/2006	09/19/2008	P04382
Bilog Antenna	2629	02/02/2006	02/02/2008	00851
Quasi Peak Adapter	3303A01884	09/14/2006	09/14/2008	01437
Spectrum Analyzer	3001A18430	09/14/2006	09/14/2008	02472
Display Section				
Spectrum Analyzer	2928A04874	09/14/2006	09/14/2008	02462
RF Section				

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Wireless Entertainment Keyboard 8000*	Microsoft Corporation	1071	0017fa5c262a

Support Devices:

Function	Manufacturer	Model #	S/N
Wireless Laser Mouse	NMB Technologies Corporation	1062	00125a63cf5a
Bluetooth Transceiver v3.0	Microsoft Corporation	1063	1
Bluetooth Transceiver v3.0	Microsoft Corporation	1063	2
Bluetooth Transceiver v3.0	Microsoft Corporation	1063	3
USB Mouse	Lenovo	MO28UOL	23-062823 080
Desktop Computer	Lenovo	23u	LKHMR65
Monitor	Dell	P793	KR-04D025-47602-23Q- D9ZX
AC to 5Vdc Power Adapter	eUrasia Power	HK-HH-A05	
Docking Station	Microsoft Corporation	1072	3

Test Conditions / Notes:

The equipment under test (EUT) is a wireless keyboard. The EUT along with all of the support equipment are placed adjacent to each other on the tabletop. The EUT is not docked into the docking station and its H key is pressed continuously. An H pattern is being displayed on the monitor through WordPad. Temperature: 20°C, Humidity: 52%, Pressure: 100kPa.

Transducer Legend:

T1=Bilog AN00851 020208 Chase	T2=84' Heliac Cable P04382
T3=Cable #22 Preamp to SA 081008	T4=Preamp 8447D Asset 00010
T5=Cable P05569, 44' RG214/U	

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dB μ V	T1 T5 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	959.973M QP	36.3	+24.6 +3.6	+3.4	+0.5	-27.5	-10.0	30.9	37.0	-6.1	Horiz
^	959.967M	38.0	+24.6 +3.6	+3.4	+0.5	-27.5	-10.0	32.6	37.0	-4.4	Horiz
3	144.006M	47.1	+11.2 +1.2	+1.1	+0.2	-27.0	-10.0	23.8	30.0	-6.2	Horiz
4	959.994M	35.8	+24.6 +3.6	+3.4	+0.5	-27.5	-10.0	30.4	37.0	-6.6	Vert
5	30.695M	40.3	+18.6 +0.5	+0.7	+0.1	-27.2	-10.0	23.0	30.0	-7.0	Vert
6	719.964M	40.0	+21.3 +3.0	+2.9	+0.5	-27.8	-10.0	29.9	37.0	-7.1	Horiz
7	41.170M	44.7	+13.4 +0.6	+0.7	+0.1	-27.1	-10.0	22.4	30.0	-7.6	Vert
8	30.226M	39.2	+18.9 +0.5	+0.7	+0.1	-27.2	-10.0	22.2	30.0	-7.8	Vert
9	815.959M	37.2	+22.6 +3.4	+3.1	+0.5	-27.6	-10.0	29.2	37.0	-7.8	Horiz
10	527.973M	42.1	+19.0 +2.6	+2.5	+0.5	-27.8	-10.0	28.9	37.0	-8.1	Horiz
11	600.017M	40.8	+19.9 +2.8	+2.7	+0.5	-27.9	-10.0	28.8	37.0	-8.2	Horiz
12	239.978M	49.7	+11.7 +1.7	+1.6	+0.3	-26.7	-10.0	28.3	37.0	-8.7	Horiz
13	32.259M	39.1	+17.8 +0.5	+0.7	+0.1	-27.2	-10.0	21.0	30.0	-9.0	Vert
14	119.998M	44.4	+11.2 +1.1	+1.1	+0.2	-27.0	-10.0	21.0	30.0	-9.0	Vert
15	82.136M	48.3	+7.7 +0.9	+1.0	+0.1	-27.1	-10.0	20.9	30.0	-9.1	Vert
16	942.187M	33.3	+24.4 +3.6	+3.4	+0.5	-27.4	-10.0	27.8	37.0	-9.2	Vert
17	119.998M	44.2	+11.2 +1.1	+1.1	+0.2	-27.0	-10.0	20.8	30.0	-9.2	Horiz
18	48.048M	46.6	+9.7 +0.7	+0.8	+0.1	-27.2	-10.0	20.7	30.0	-9.3	Vert
19	57.002M	49.3	+6.9 +0.7	+0.8	+0.1	-27.2	-10.0	20.6	30.0	-9.4	Vert
20	719.968M	37.5	+21.3 +3.0	+2.9	+0.5	-27.8	-10.0	27.4	37.0	-9.6	Vert
21	599.989M	39.4	+19.9 +2.8	+2.7	+0.5	-27.9	-10.0	27.4	37.0	-9.6	Vert

22	62.518M	49.6	+6.2 +0.8	+0.8	+0.1	-27.2	-10.0	20.3	30.0	-9.7	Vert
23	839.976M	34.0	+23.1 +3.5	+3.2	+0.5	-27.5	-10.0	26.8	37.0	-10.2	Horiz
24	383.182M	43.5	+15.3 +2.2	+2.1	+0.4	-27.0	-10.0	26.5	37.0	-10.5	Horiz
25	528.011M	39.5	+19.0 +2.6	+2.5	+0.5	-27.8	-10.0	26.3	37.0	-10.7	Vert
26	36.004M	38.9	+16.0 +0.6	+0.7	+0.1	-27.1	-10.0	19.2	30.0	-10.8	Vert
27	143.996M	42.1	+11.2 +1.2	+1.1	+0.2	-27.0	-10.0	18.8	30.0	-11.2	Vert
28	64.037M	48.0	+6.2 +0.8	+0.8	+0.1	-27.2	-10.0	18.7	30.0	-11.3	Vert
29	72.384M	47.5	+6.5 +0.8	+0.9	+0.1	-27.1	-10.0	18.7	30.0	-11.3	Vert
30	815.977M	33.6	+22.6 +3.4	+3.1	+0.5	-27.6	-10.0	25.6	37.0	-11.4	Vert
31	840.005M	32.5	+23.1 +3.5	+3.2	+0.5	-27.5	-10.0	25.3	37.0	-11.7	Vert
32	72.001M	47.0	+6.4 +0.8	+0.9	+0.1	-27.1	-10.0	18.1	30.0	-11.9	Vert
33	48.330M	43.9	+9.5 +0.7	+0.8	+0.1	-27.2	-10.0	17.8	30.0	-12.2	Vert
34	33.840M	36.5	+17.0 +0.5	+0.7	+0.1	-27.2	-10.0	17.6	30.0	-12.4	Vert
35	479.980M	38.5	+17.7 +2.5	+2.4	+0.4	-27.5	-10.0	24.0	37.0	-13.0	Horiz
36	41.190M	36.4	+13.4 +0.6	+0.7	+0.1	-27.1	-10.0	14.1	30.0	-15.9	Vert

Test Location: CKC Laboratories, Inc. • 110 N Olinda Place • Brea, CA 92823 • 714-993-6112

Customer: **Microsoft Corporation**

Specification: **FCC 15.109 Class B**

Work Order #: **86162**

Date: 5/2/2007

Test Type: **Maximized Emissions**

Time: 15:39:13

Equipment: **Wireless Entertainment Keyboard
8000**

Sequence#: 23

Manufacturer: Microsoft Corporation

Tested By: Stuart Yamamoto

Model: 1071

S/N: 0017fa5c5311

Test Equipment:

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
Antenna Cable	Cable #33	02/02/2007	02/22/2009	P05569
Loop Antenna	2014	06/14/2006	06/14/2008	00314
Preamplifier	2727A05392	06/06/2006	06/06/2008	00010
Preamplifier Cable	Cable #22	08/10/2006	08/10/2008	P05555
10m Position Cable	Cable #17	09/19/2006	09/19/2008	P04382
Bilog Antenna	2629	02/02/2006	02/02/2008	00851
Quasi Peak Adapter	3303A01884	09/14/2006	09/14/2008	01437
Spectrum Analyzer Display Section	3001A18430	09/14/2006	09/14/2008	02472
Spectrum Analyzer RF Section	2928A04874	09/14/2006	09/14/2008	02462
Spectrum Analyzer	MY46186290	02/12/2007	02/12/2009	02869
Horn Antenna	9603-4683	06/29/2006	06/29/2008	01646
Microwave Preamplifier	3123A00282	05/27/2005	05/27/2007	00787
Preamplifier Cable	35591-48	01/17/2006	01/17/2008	P05455
18 to 26.5 GHz Horn Antenna	(none)	11/27/2006	11/27/2008	01413

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Wireless Entertainment Keyboard 8000*	Microsoft Corporation	1071	0017fa5c5311

Support Devices:

Function	Manufacturer	Model #	S/N
Wireless Laser Mouse	NMB Technologies Corporation	1062	00125a63bd40
Bluetooth Transceiver v3.0	Microsoft Corporation	1063	1
Bluetooth Transceiver v3.0	Microsoft Corporation	1063	2
Bluetooth Transceiver v3.0	Microsoft Corporation	1063	3
USB Mouse	Lenovo	MO28UOL	23-062823 080
Desktop Computer	Lenovo	23u	LKHMR65
Monitor	Dell	P793	KR-04D025-47602-23Q- D9ZX

Test Conditions / Notes:

The equipment under test (EUT) is a wireless keyboard. Voltage to the AC to 5Vdc adapter is 230Vac 50Hz. Temperature: 20°C, Humidity: 53%, Pressure: 100kPa. Frequency range scanned and maximized, 1MHz to 25GHz.

Transducer Legend:

T1=84' Heliac Cable P04382	T2=48' Heliac Cable 091808 P05563
T3=Horn 01646_062908	T4=HF Preamp Cal. HP-83017A,S/N- 3123A00282
T5=1-40 GHz Cable_AN5455_011708	

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dB μ V	Reading listed by margin.				Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
			T1 T5 dB	T2 dB	T3 dB	T4 dB					
1	1652.847M	48.2	+4.5 +0.5	+2.7	+25.4	-39.5	+0.0	41.8	54.0	-12.2	Horiz
2	2443.943M	42.3	+5.8 +0.7	+3.2	+28.6	-39.4	+0.0	41.2	54.0	-12.8	Horiz
3	2413.080M	42.5	+5.7 +0.7	+3.2	+28.4	-39.4	+0.0	41.1	54.0	-12.9	Horiz
4	1629.273M	47.3	+4.5 +0.5	+2.7	+25.3	-39.5	+0.0	40.8	54.0	-13.2	Horiz
5	2479.210M	41.6	+5.9 +0.7	+3.2	+28.7	-39.4	+0.0	40.7	54.0	-13.3	Horiz
6	1653.083M	46.9	+4.5 +0.5	+2.7	+25.4	-39.5	+0.0	40.5	54.0	-13.5	Vert
7	2479.527M	40.5	+5.9 +0.7	+3.2	+28.7	-39.4	+0.0	39.6	54.0	-14.4	Vert
8	1629.273M	45.9	+4.5 +0.5	+2.7	+25.3	-39.5	+0.0	39.4	54.0	-14.6	Vert
9	2413.113M	40.5	+5.7 +0.7	+3.2	+28.4	-39.4	+0.0	39.1	54.0	-14.9	Vert
10	1608.730M	45.4	+4.4 +0.5	+2.6	+25.3	-39.5	+0.0	38.7	54.0	-15.3	Vert
11	2443.963M	39.2	+5.8 +0.7	+3.2	+28.6	-39.4	+0.0	38.1	54.0	-15.9	Vert
12	1608.732M	44.5	+4.4 +0.5	+2.6	+25.3	-39.5	+0.0	37.8	54.0	-16.2	Horiz

Test Location: CKC Laboratories, Inc. • 110 N Olinda Place • Brea, CA 92823 • 714-993-6112

Customer: **Microsoft Corporation**
 Specification: **FCC 15.109 Class B**
 Work Order #: **86162** Date: 5/2/2007
 Test Type: **Maximized Emissions** Time: 16:13:56
 Equipment: **Wireless Entertainment Keyboard 8000** Sequence#: 24
 Manufacturer: Microsoft Corporation Tested By: Stuart Yamamoto
 Model: 1071
 S/N: 0017fa5cb2ad

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
18 to 26.5 GHz Horn Antenna	(none)	11/27/2006	11/27/2008	01413
Spectrum Analyzer	US44300438	01/03/2007	01/03/2009	02672
Spectrum Analyzer	MY46186290	02/12/2007	02/12/2009	02869
10m Position Cable	Cable #17	09/19/2006	09/19/2008	P04382
Antenna Cable	L1-PNMM-48	09/18/2006	09/18/2008	P05563
Microwave Preamplifier	3123A00282	05/27/2005	05/27/2007	00787
Preamplifier Cable	35591-48	01/17/2006	01/17/2008	P05455
Horn Antenna	9603-4683	06/29/2006	06/29/2008	01646

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Wireless Entertainment Keyboard 8000*	Microsoft Corporation	1071	0017fa5cb2ad

Support Devices:

Function	Manufacturer	Model #	S/N
Wireless Laser Mouse	NMB Technologies Corporation	1062	00125a63bd40
Bluetooth Transceiver v3.0	Microsoft Corporation	1063	1
Bluetooth Transceiver v3.0	Microsoft Corporation	1063	2
Bluetooth Transceiver v3.0	Microsoft Corporation	1063	3
USB Mouse	Lenovo	MO28UOL	23-062823 080
Desktop Computer	Lenovo	23u	LKHMR65
Monitor	Dell	P793	KR-04D025-47602-23Q-D9ZX

Test Conditions / Notes:

The equipment under test (EUT) is a wireless keyboard. Voltage to the AC to 5Vdc adapter is 230Vac 50Hz. Temperature: 20°C, Humidity: 53%, Pressure: 100kPa.

Transducer Legend:

T1=84' Heliac Cable P04382	T2=48' Heliac Cable 091808 P05563
T3=Horn 01646_062908	T4=HF Preamp Cal. HP-83017A,S/N- 3123A00282
T5=1-40 GHz Cable_AN5455_011708	

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dB μ V	T1 T5 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	2443.007M	42.6	+5.8 +0.7	+3.2	+28.6	-39.4	+0.0	41.5	54.0	-12.5	Horiz
2	2441.044M	42.1	+5.8 +0.7	+3.2	+28.5	-39.4	+0.0	40.9	54.0	-13.1	Horiz
3	2440.966M	42.1	+5.8 +0.7	+3.2	+28.5	-39.4	+0.0	40.9	54.0	-13.1	Vert
4	2438.652M	41.3	+5.8 +0.7	+3.2	+28.5	-39.4	+0.0	40.1	54.0	-13.9	Horiz
5	1627.341M	46.1	+4.5 +0.5	+2.7	+25.3	-39.5	+0.0	39.6	54.0	-14.4	Horiz
6	1628.672M	46.1	+4.5 +0.5	+2.7	+25.3	-39.5	+0.0	39.6	54.0	-14.4	Horiz
7	2438.650M	40.0	+5.8 +0.7	+3.2	+28.5	-39.4	+0.0	38.8	54.0	-15.2	Vert
8	2443.007M	39.6	+5.8 +0.7	+3.2	+28.6	-39.4	+0.0	38.5	54.0	-15.5	Vert
9	1625.777M	44.8	+4.5 +0.5	+2.7	+25.3	-39.5	+0.0	38.3	54.0	-15.7	Horiz
10	1628.667M	44.3	+4.5 +0.5	+2.7	+25.3	-39.5	+0.0	37.8	54.0	-16.2	Vert
11	1625.788M	43.7	+4.5 +0.5	+2.7	+25.3	-39.5	+0.0	37.2	54.0	-16.8	Vert
12	1627.324M	43.7	+4.5 +0.5	+2.7	+25.3	-39.5	+0.0	37.2	54.0	-16.8	Vert

Test Location: CKC Laboratories, Inc. • 110 N Olinda Place • Brea, CA 92823 • 714-993-6112

Customer: **Microsoft Corporation**

Specification: **FCC 15.109 Class B**

Work Order #: **86162**

Date: 5/2/2007

Test Type: **Maximized Emissions**

Time: 16:52:09

Equipment: **Wireless Entertainment Keyboard
8000**

Sequence#: 25

Manufacturer: Microsoft Corporation

Tested By: Stuart Yamamoto

Model: 1071

S/N: 0017fa5c262a

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
18 to 26.5 GHz Horn Antenna	(none)	11/27/2006	11/27/2008	01413
Spectrum Analyzer	US44300438	01/03/2007	01/03/2009	02672
Spectrum Analyzer	MY46186290	02/12/2007	02/12/2009	02869
10m Position Cable	Cable #17	09/19/2006	09/19/2008	P04382
Antenna Cable	L1-PNMM-48	09/18/2006	09/18/2008	P05563
Microwave Preamplifier	3123A00282	05/27/2005	05/27/2007	00787
Preamplifier Cable	35591-48	01/17/2006	01/17/2008	P05455
Horn Antenna	9603-4683	06/29/2006	06/29/2008	01646

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Wireless Entertainment Keyboard 8000*	Microsoft Corporation	1071	0017fa5c262a

Support Devices:

Function	Manufacturer	Model #	S/N
Wireless Laser Mouse	NMB Technologies Corporation	1062	00125a63bd40
Bluetooth Transceiver v3.0	Microsoft Corporation	1063	1
Bluetooth Transceiver v3.0	Microsoft Corporation	1063	2
Bluetooth Transceiver v3.0	Microsoft Corporation	1063	3
USB Mouse	Lenovo	MO28UOL	23-062823 080
Desktop Computer	Lenovo	23u	LKHMR65
Monitor	Dell	P793	KR-04D025-47602-23Q-D9ZX

Test Conditions / Notes:

The equipment under test (EUT) is a wireless keyboard. Voltage to the AC to 5Vdc adapter is 230Vac 50Hz. Temperature: 20°C, Humidity: 53%, Pressure: 100kPa.

Transducer Legend:

T1=84' Heliac Cable P04382	T2=48' Heliac Cable 091808 P05563
T3=Horn 01646_062908	T4=HF Preamp Cal. HP-83017A,S/N- 3123A00282
T5=1-40 GHz Cable_AN5455_011708	

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dB μ V	T1 T5 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	2440.234M	42.3	+5.8 +0.7	+3.2	+28.5	-39.4	+0.0	41.1	54.0	-12.9	Horiz
2	1648.154M	46.9	+4.5 +0.5	+2.7	+25.4	-39.5	+0.0	40.5	54.0	-13.5	Horiz
3	2403.999M	41.7	+5.7 +0.7	+3.2	+28.4	-39.4	+0.0	40.3	54.0	-13.7	Vert
4	1626.821M	46.7	+4.5 +0.5	+2.7	+25.3	-39.5	+0.0	40.2	54.0	-13.8	Horiz
5	2404.000M	41.1	+5.7 +0.7	+3.2	+28.4	-39.4	+0.0	39.7	54.0	-14.3	Horiz
6	1626.838M	46.0	+4.5 +0.5	+2.7	+25.3	-39.5	+0.0	39.5	54.0	-14.5	Vert
7	1648.120M	45.7	+4.5 +0.5	+2.7	+25.4	-39.5	+0.0	39.3	54.0	-14.7	Vert
8	1602.665M	45.3	+4.4 +0.5	+2.6	+25.2	-39.5	+0.0	38.5	54.0	-15.5	Vert
9	2440.252M	39.5	+5.8 +0.7	+3.2	+28.5	-39.4	+0.0	38.3	54.0	-15.7	Vert
10	1602.665M	44.7	+4.4 +0.5	+2.6	+25.2	-39.5	+0.0	37.9	54.0	-16.1	Horiz
11	2472.233M	38.5	+5.8 +0.7	+3.2	+28.7	-39.4	+0.0	37.5	54.0	-16.5	Horiz
12	2471.800M	37.9	+5.8 +0.7	+3.2	+28.7	-39.4	+0.0	36.9	54.0	-17.1	Vert

APPENDIX A

CUSTOMER PROVIDED INFORMATION

INFORMATION ABOUT THE EQUIPMENT UNDER TEST	
Test Software/Firmware:	
CRT was displaying:	
Power Supply Manufacturer:	
Power Supply Part Number:	
AC Line Filter Manufacturer:	
AC Line Filter Part Number:	

I/O PORTS	
Type	#

CRYSTAL OSCILLATORS	
Type	Freq In MHz
Crystal Oscillator, Broadcom BT module	24MHz
Cypress PSoC internal Silicon Oscillator	12MHz