ACCREDITED

CERTIFICATION TEST REPORT

FOR THE

KEYBOARD, RT9356TW

FCC/CISPR 22/85
CLASS B COMPLIANCE

DATE OF ISSUE: FEBRUARY 8, 1999

PREPARED FOR:

NMB Technologies
9730 Independence Avenue
Chatsworth, CA 91311

Compaq Computer Corporation
20555 State Highway 249
Houston, TX 77070

P.O. No: Q011815
W.O. No: 70817

Report No: FB99-015

PREPARED BY:

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Date of test: January 30 & 31, 1999 &
February 3, 1999

DOCUMENTATION CONTROL:

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APPROVED BY:

Dennis Ward

Dennis Ward
Director of Laboratories
CKC Laboratories, Inc.

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ADMINISTRATIVE INFORMATION

DATE OF TEST:	January 30 & 31, February 3, 1999
PURPOSE OF TEST:	To demonstrate the compliance of the Keyboard, RT9356TW, with the requirements for FCC/CISPR 22/85 Class B devices.
MANUFACTURER:	NMB Technologies 9730 Independence Avenue Chatsworth, CA 91311
REPRESENTATIVE:	Bob Dickerman
TEST LOCATION:	CKC Laboratories, Inc. 110 Olinda Place Brea, CA 92621
TEST PERSONNEL:	Septimiu Apahidean, Eddie Wong, Stu Yamamoto
TEST METHOD:	ANSI C63.4 1992
FREQUENCY RANGE TESTED:	150kHz - 1000MHz
EQUIPMENT UNDER TEST:	**Keyboard** Manuf: NMB Technologies Model: RT9356TW Serial: N/A FCC ID: N/A

SUMMARY OF RESULTS

The NMB Technologies Keyboard, RT9356TW was tested in accordance with ANSI C63.4 (1992) for compliance with the Class B requirements of the FCC/CISPR 22/85 Rules.

As received, the above equipment was found to be fully compliant with the Class B limits of FCC/CISPR 22/85 for both radiated and conducted emissions.

EQUIPMENT UNDER TEST (EUT) DESCRIPTION

Keyboard.

Note: Keyboard can be sold with a ferrite bead or without a ferrite bead. Testing was performed on the keyboard without the ferrite bead, which is worst case.

MEASUREMENT UNCERTAINTY

Associated with data in this report is a ±4dB measurement uncertainty.

PERIPHERAL DEVICES

The EUT was tested with the following peripheral devices:

Printer
Manuf: HP
Model: C2184A
Serial: CN5B21R1DM
FCC ID: B94C2184X

Computer
Manuf: Intel
Model: S100EDZ8FLC
Serial: A05721230
FCC ID: EJMBATTAHITI

Mouse
Manuf: Logitech
Model: M-CQ38
Serial: LT554205822
FCC ID: DZLM04

Modem
Manuf: Hayes
Model: 6802US
Serial: B10068023649
FCC ID: BFJ9D9-6802US

REPORT OF MEASUREMENTS

The following Tables 1 and 2 report the six highest worst case radiated and conducted emissions levels recorded during the tests performed on the Keyboard, RT9356TW. The data sheets from which these tables were compiled are contained in Appendix B.

Table 1: Six Highest Radiated Emission Levels

FREQUENCY MHz	METER READING dBµV	CORRECTION FACTORS Ant dB	Amp dB	Cable dB	Dist dB	CORRECTED READING dBµV/m	SPEC LIMIT dBµV/m	MARGIN dB	NOTES
43.732	39.3	12.3	-28.0	1.2		24.8	30.0	-5.2	V
58.331	39.6	10.9	-28.0	1.7		24.1	30.0	-5.9	V
58.814	40.2	10.8	-28.1	2.3		24.6	30.0	-5.4	V
61.913	41.7	9.6	-28.1	1.8		25.0	30.0	-5.0	V
124.448	33.7	16.5	-27.7	2.5		25.0	30.0	-5.0	V
128.006	32.9	16.7	-27.8	2.5		24.3	30.0	-5.7	V

Test Method: ANSI C63.4 1992
Spec Limit : CISPR 22 B
Test Distance: 10 Meters

NOTES:
H = Horizontal Polarization
V = Vertical Polarization
N = No Polarization
D = Dipole Reading
Q = Quasi Peak Reading
A = Average Reading

COMMENTS: The EUT is a keyboard and is connected to the host computer. The computer also has a monitor, mouse, printer, and modem connected. The EUT is continually sending H's to the computer and the H's are being displayed on the monitor. Voltage to computer is 115 VAC, 60 Hz. Temperature: 18°C Humidity: 55%.

Table 2: Six Highest Conducted Emission Levels									
FREQUENCY MHz	METER READING dBµV	CORRECTION FACTORS Lisn dB	dB	dB	dB	CORRECTED READING dBµV	SPEC LIMIT dBµV	MARGIN dB	NOTES
0.206634	45.2	0.0				45.2	53.3	-8.1	B
0.487047	37.4	0.0				37.4	46.2	-8.8	B
0.637084	38.3	0.0				38.3	46.0	-7.7	B
3.372396	37.6	0.0				37.6	46.0	-8.4	W
3.493636	38.2	0.0				38.2	46.0	-7.8	W
3.943960	40.2	0.0				40.2	46.0	-5.8	B

Test Method: ANSI C63.4 1992
Spec Limit : CISPR 22 Class B
Test Distance: No Distance

NOTES: Q = Quasi Peak Reading
A = Average Reading
B = Black Lead
W = White Lead

COMMENTS: The EUT is a keyboard and is connected to the host computer. The computer also has a monitor, mouse, printer, and modem connected. The EUT is continually sending H's to the computer and the H's are being displayed on the monitor. Voltage to the computer is 115 VAC, 60 Hz. Temperature: 18°C Humidity: 55%.

TABLE A

LIST OF TEST EQUIPMENT

VCCI Acceptance No. R-301 & C-314

1. Spectrum Analyzer, Hewlett Packard, Model No. 8568A, S/N 2049A01287. Calibration date: October 14, 1998. Calibration due date: October 14, 1999.
2. Display, Hewlett Packard, Model No. 85680A, S/N 2106A02109. Calibration date: October 14, 1998. Calibration due date: October 14, 1999.
3. Quasi-Peak Adapter, Hewlett Packard, Model No. 8565A, S/N 2430A00532. Calibration date: October 14, 1998. Calibration due date: October 14, 1999.
4. Log Periodic Antenna, A & H Systems, Model No. SAS-200/516, S/N 331. Calibration date: October 8, 1998. Calibration due date: October 8, 1999.
5. Preamp, Hewlett Packard, Model No. 461A, S/N 0946A07380. Calibration date: April 1, 1998. Calibration due date: April 1, 1999.
6. Biconical Antenna, A & H Systems, Model No. SAS-200/540, S/N 220. Calibration date: October 5, 1998. Calibration due date: October 5, 1999.
7. LISN, Solar Electronics, Model No. 50 uH, S/N Brea #2. Calibration date: April 9, 1998. Calibration due date: April 9, 1999.
8. Brea site calibration date: May 8, 1998. Brea site calibration due date: May 8, 1999.
9. Test software, EMI Test 2.91.

EUT SETUP

The equipment under test (EUT) and the peripherals listed were set up in a manner that represented their normal use, as shown in the setup photographs in Appendix A. Any special conditions required for the EUT to operate normally are identified in the comments that accompany Table 1 for radiated emissions, and Table 2 for conducted emissions. Additionally, a complete description of all the ports and I/O cables is included on the information sheets contained in Appendix A.

During radiated emissions testing, the EUT was mounted on a nonconductive, rotating table 80 cm above the conductive grid. The nonconductive table dimensions were 1 meter by 1.5 meters. This configuration is typical for radiated emissions testing of table top devices.

I/O cables were connected to the EUT and peripherals in the manner required for normal operation of the system.

During conducted emissions testing, the EUT was located on a wooden table measuring approximately 80 cm high, 1 meter deep, and 1.5 meters in length. One wall of the room where the EUT is located, has a minimum 2 meter by 2 meter conductive plane. The EUT was mounted on the wooden table 40 cm away from the conductive plane, and 80 cm from any other conductive surface.

The vertical metal plane used for conducted emissions was grounded to the earth. Power to the host PC was provided through a LISN. The LISN was grounded to the ground plane. All other objects were kept a minimum of 80 cm away from the EUT during the conducted test. Conducted emissions tests required the use of the LISN's listed in Table A.

TEST INSTRUMENTATION AND ANALYZER SETTINGS

The test instrumentation and equipment listed in Table A were used to collect both the radiated and conducted emissions data for the Keyboard, RT9356TW. For radiated measurements below 300 MHz, the biconical antenna was used. For frequencies from 300 to 1000 MHz, the log periodic antenna was used. All antennas were located at a distance of 10 meters from the edge of the EUT. Conducted emissions tests required the use of the FCC type LISN's.

The HP spectrum analyzer was used for all measurements. Table B shows the analyzer bandwidth settings that were used in designated frequency bands. For conducted emissions, a reference level of 100 dBµV and a vertical scale size of 10 dB per division were used. A 10 dB external attenuator was also used during conducted tests, with internal offset correction in the analyzer. During radiated testing, the measurements were made with 0 dB of attenuation, a reference level of 97 dBµV, and a vertical scale of 10 dB per division.

TABLE B: ANALYZER 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

SPECTRUM ANALYZER DETECTOR FUNCTIONS

The notes that accompany the measurements contained in Tables 1 and 2 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 six highest readings, this is indicated as a "Q" or an "A" in Table 1 or Table 2. The following paragraphs describe in more detail the detector functions and when they were used to obtain the emissions data for the Keyboard, RT9356TW.

Peak

In this mode, the Spectrum Analyzer or test engineer recorded all emissions at their peak value as the frequency band selected was scanned. By combining this function with another feature of the analyzer called "peak hold," the analyzer had the ability to measure transients or low duty cycle transient emission peak levels. In this mode the analyzer 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 HP Quasi-Peak Adapter for the HP Spectrum Analyzer. The detailed procedure for making quasi peak measurements contained in the HP Quasi-Peak Adapter manual were followed.

Average

For frequencies below 30 MHz and exceeding 1 GHz, average measurements may be made using the spectrum analyzer. To make these measurements, the test engineer reduces the video bandwidth on the analyzer until the modulation of the signal is filtered out. At this point the analyzer is set into the linear mode and the scan time is reduced.

TEST METHODS

The radiated and conducted emissions data of the Keyboard, RT9356TW, was taken with the HP Spectrum Analyzer. Incorporating the applicable correction factors for distance, antenna, cable loss and amplifier gain, the data was reduced as shown in the "Sample Calculations". The corrected data was then compared to the FCC/CISPR 22/85 Class B emissions limits to determine compliance.

Preliminary and final measurements were taken in order to better ensure that all emissions from the EUT were found and maximized.

Radiated Emissions Testing

During the preliminary radiated scan, the host PC was powered up and operating in its defined FCC test mode, with the I/O cables and line cords facing the antenna. The frequency range of 30 MHz - 88 MHz was then scanned with the biconical antenna located about 1.5 meter above the ground plane in the vertical configuration. During this scan, the turntable was rotated and all peaks which were at or near the limit were recorded. The frequency range of 100 - 300 MHz was scanned in the same manner, using the biconical antenna, and the peaks recorded. Lastly, a scan of the FM band from 88 - 110 MHz was made, using a reduced resolution bandwidth and a reduced frequency span. The biconical antenna was changed to the horizontal polarity and the above steps were repeated. After changing to the log periodic antenna in the horizontal configuration, the frequency range of 300 - 1000 MHz was scanned. The log periodic antenna was changed to the vertical polarity and the frequency range of 300 - 1000 MHz was again scanned. Care was taken to ensure that no frequencies were missed within the FM and TV bands. An analysis was performed to determine if the signals that were at or near the limit were caused by an ambient transmission. If unable to determine by analysis, the equipment was powered down to make the final determination if the EUT was the source of the emission.

For the final radiated scan, the equipment was again positioned with its I/O and power cables facing the antenna. A thorough scan of all frequencies was manually made using a small frequency span, rotating the turntable as needed. Comparison with the previously recorded measurements was then made.

Using the peak readings from both scans as a guide, the test engineer then maximized the readings with respect to the table rotation, antenna height and configuration of the peripherals and cables. Maximizing of the cables was achieved by monitoring the spectrum analyzer on a closed circuit television monitor while the EUT cables were being moved and rearranged on the EUT table for maximum emissions. Photographs showing the final worst case configuration of the EUT are contained in Appendix A.

Conducted Emissions Testing

For conducted emissions testing, a 30 to 50 second sweep time was used for automated measurements in the frequency bands of 150 kHz to 1.705 MHz, 1.705 MHz to 3 MHz, and 3 MHz to 30 MHz. All readings within 20 dB of the limit were recorded. At frequencies where the recorded emissions were close to the limit, further investigation was performed manually at a slower sweep rate.

SAMPLE CALCULATIONS

The basic spectrum analyzer reading was converted using correction factors as shown in the six highest emissions readings in Tables 1 and 2. For radiated emissions in dBµV/m, the spectrum analyzer reading in dBµV was corrected by using the following formula:

Meter reading (dBµV)
+ Antenna Factor (dB)
+ Cable Loss (dB)
- Distance Correction (dB)
- Pre-amplifier Gain (dB)

= Corrected Reading(dBµV/m)

This reading was then compared to the applicable specification limit to determine compliance.

APPENDIX A

INFORMATION ABOUT THE EQUIPMENT UNDER TEST

INFORMATION ABOUT THE EQUIPMENT UNDER TEST	
Test Software/Firmware:	
CRT was displaying:	**Scrolling "H's"**
Power Supply Manufacturer:	
Power Supply Part Number:	
AC Line Filter Manufacturer:	
AC Line Filter Part Number:	
Line voltage used during testing:	**115 VAC, 60 Hz**

I/O PORTS	
Type	#
Serial, Keyboard	1

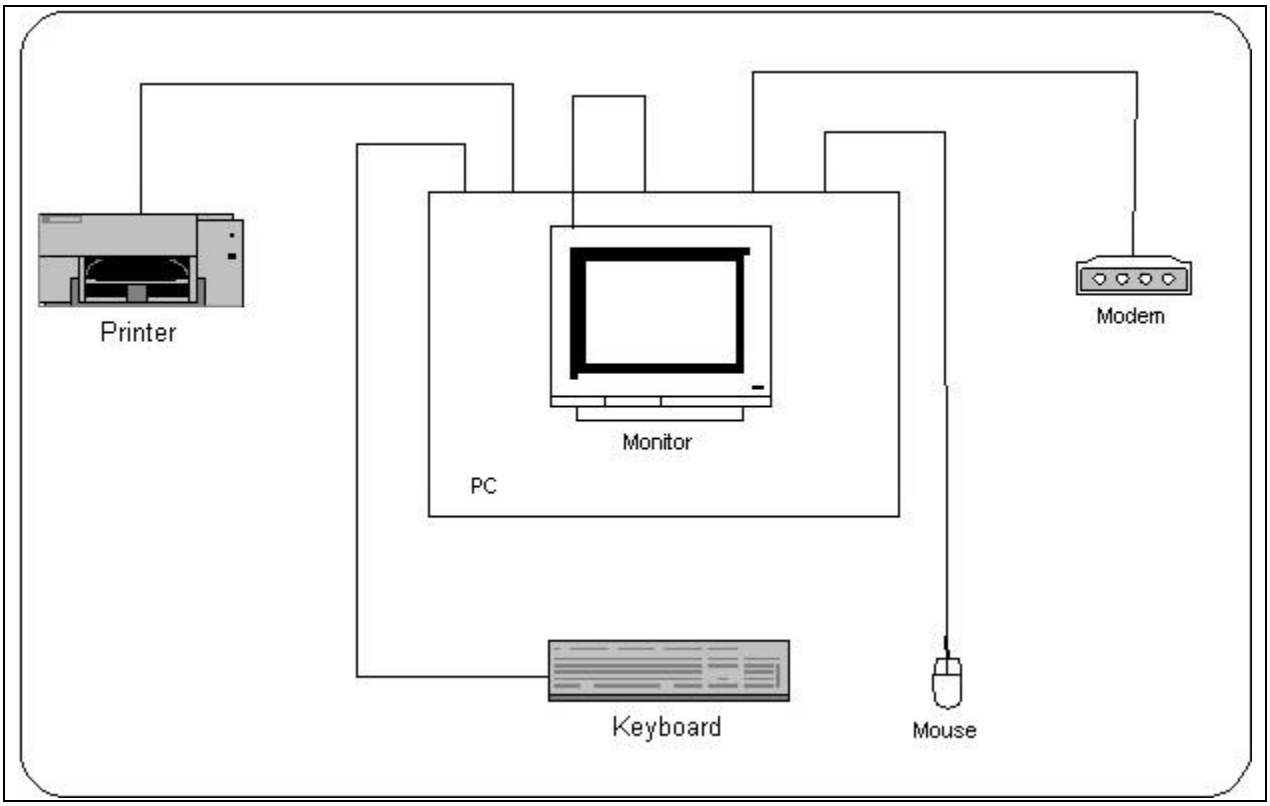
CRYSTAL OSCILLATORS	
Type	Freq In MHz
RC Resonator (Clock)	4

PRINTED CIRCUIT BOARDS				
Function	Model & Rev	Clocks, MHz	Layers	Location
Logic KS88C0604 MPU	3058 3076 Rev. A	5	1	Inside K/B

CABLE INFORMATION			
Cable #:	1	Cable(s) of this type:	1
Cable Type:	Serial	Shield Type:	Foil
Construction:	Round	Length In Meters:	2.4
Connected To End (1):	Mini Din	Connected To End (2):	PCB
Connector At End (1):		Connector At End (2):	
Shield Grounded At (1):	Chassis Ground	Shield Grounded At (2):	Chassis Ground
Part Number:		Number of Conductors:	4
Notes:			

REQUIRED EUT CHANGES TO COMPLY:
None.

EQUIPMENT CONFIGURATION BLOCK DIAGRAM



Block Diagram

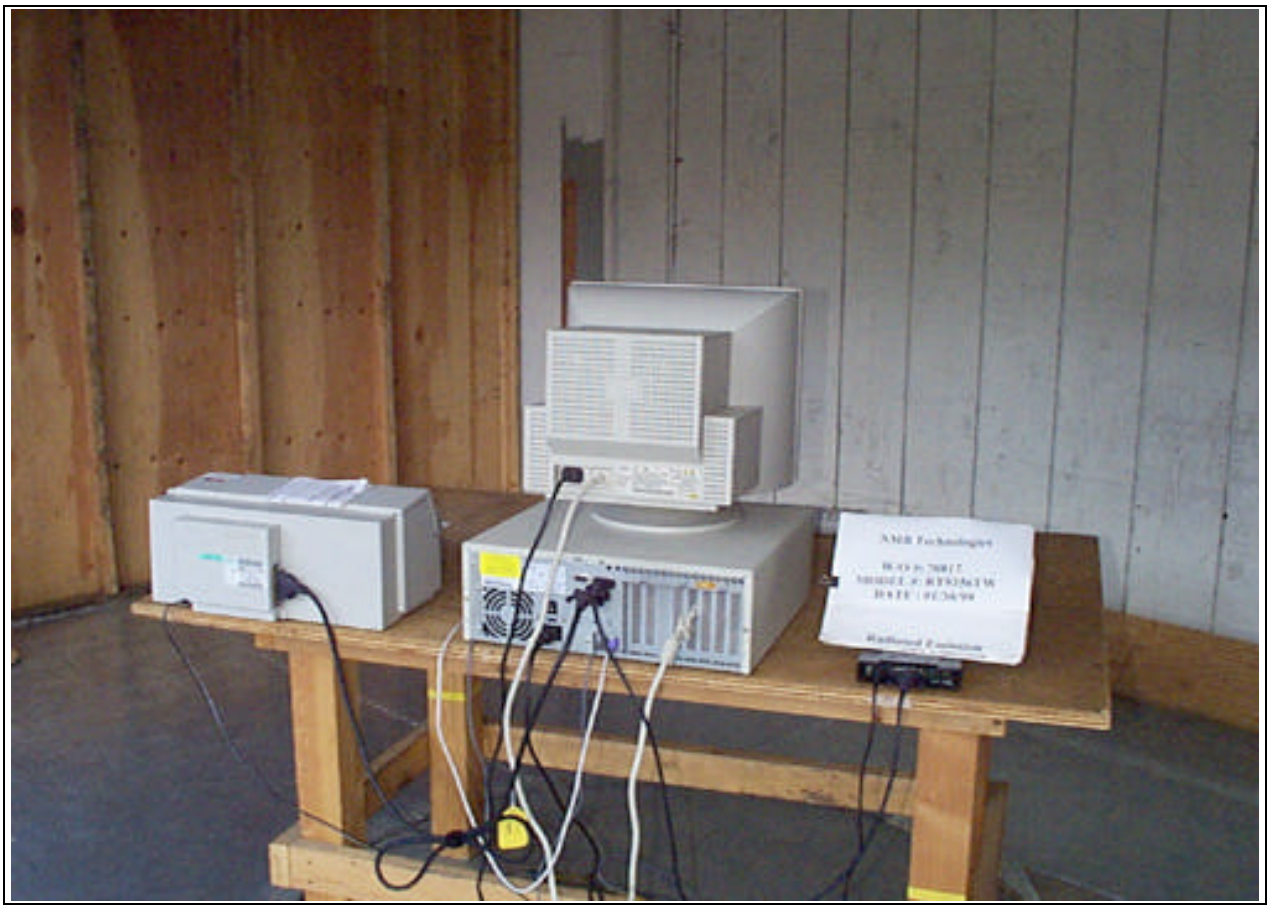
NOTES:

PHOTOGRAPH SHOWING RADIATED EMISSIONS

Radiated Emissions - Front View

NOTES:

PHOTOGRAPH SHOWING RADIATED EMISSIONS



Radiated Emissions - Back View

NOTES:

PHOTOGRAPH SHOWING CONDUCTED EMISSIONS

Conducted Emissions - Front View

NOTES:

PHOTOGRAPH SHOWING CONDUCTED EMISSIONS

Conducted Emissions - Side View

NOTES:

APPENDIX B

MEASUREMENT DATA SHEETS

Test Location: CKC LABORATORIES INC • 110 N. OLINDA PL. • BREA, CA 92823 • 714-993-6112

Customer:	**NMB Technologies Inc.**	Date:	Jan-31-99
Specification:	**CISPR 22 B RADIATED**	Time:	14:51
Test Type:	**Maximized Emissions**	Sequence#:	1
Equipment:	**Keyboard**		
Manufacturer:	NMB Technologies, Inc	Tested By:	Septimiu Apahidean
Model:	RT9356TW		
S/N:	N/A		

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Keyboard*	NMB Technologies, Inc	RT9356TW	N/A

Support Devices:

Function	Manufacturer	Model #	S/N
Printer	HP	C2184A	CN5B21R1DM
Computer	Intel	S100EDZ8FLC	A05721230
Mouse	Logitech	M-CQ38	LT554205822
Modem	Hayes	6802US	B10068023649

Test Conditions / Notes:

The EUT is a keyboard and is connected to the host computer. The computer also has a monitor, mouse, printer, and modem connected. The EUT is continually sending H's to the computer and the H's are being displayed on the monitor. Voltage to computer is 115 VAC, 60 Hz. Temperature: 18°C Humidity: 55%.

Measurement Data: Sorted by Margin Test Distance: 10 Meters

#	Freq MHz	Rdng dBµV	BICON dB	dB	Cable dB	Cable dB	Dist dB	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar
1	124.448	33.7	+16.5 -27.7		+2.1	+0.4	+0.0	25.0	30.0	-5.0	Vert
2	61.913	41.7	+9.6 -28.1		+1.5	+0.3	+0.0	25.0	30.0	-5.0	Vert
3	43.732	39.3	+12.3 -28.0		+1.1	+0.1	+0.0	24.8	30.0	-5.2	Vert
4	58.814	40.2	+10.8 -28.1		+1.4	+0.3	+0.0	24.6	30.0	-5.4	Vert
5	128.006	32.9	+16.7 -27.8		+2.1	+0.4	+0.0	24.3	30.0	-5.7	Vert
6	58.331	39.6	+10.9 -28.1		+1.4	+0.3	+0.0	24.1	30.0	-5.9	Vert
7	87.785	40.1	+10.1 -28.1		+1.7	+0.1	+0.0	23.9	30.0	-6.1	Vert

8	161.925	31.4	+17.3 -28.0	+2.4	+0.5	+0.0	23.6	30.0	-6.4	Vert
9	72.915	42.6	+6.9 -28.0	+1.7	+0.3	+0.0	23.5	30.0	-6.5	Vert
10	196.605	31.7	+16.0 -28.1	+2.8	+0.7	+0.0	23.1	30.0	-6.9	Vert
11	80.133	39.0	+10.2 -28.2	+1.6	+0.3	+0.0	22.9	30.0	-7.1	Vert
12	195.107	31.5	+16.1 -28.1	+2.7	+0.6	+0.0	22.8	30.0	-7.2	Vert
13	65.551	41.0	+7.7 -28.0	+1.6	+0.3	+0.0	22.6	30.0	-7.4	Vert
14	192.133	30.8	+16.4 -28.0	+2.7	+0.6	+0.0	22.5	30.0	-7.5	Vert
15	87.584	38.6	+10.1 -28.1	+1.7	+0.1	+0.0	22.4	30.0	-7.6	Vert
16	189.208	30.2	+16.8 -28.0	+2.7	+0.6	+0.0	22.3	30.0	-7.7	Vert
17	51.018	36.2	+12.6 -27.9	+1.2	+0.2	+0.0	22.3	30.0	-7.7	Vert
18	112.652	33.7	+13.9 -27.8	+1.9	+0.3	+0.0	22.0	30.0	-8.0	Vert
19 Quasi Peak	131.806	30.2	+16.8 -27.8	+2.2	+0.5	+0.0	21.9	30.0	-8.1	Vert
^	131.816	35.1	+16.8 -27.8	+2.2	+0.5	+0.0	26.8	30.0	-3.2	Vert
21	195.985	29.8	+16.0 -28.1	+2.8	+0.7	+0.0	21.2	30.0	-8.8	Vert
22	142.553	29.1	+17.0 -28.0	+2.2	+0.5	+0.0	20.8	30.0	-9.2	Vert
23	91.129	36.7	+10.3 -28.1	+1.7	+0.1	+0.0	20.7	30.0	-9.3	Vert
24	63.497	38.2	+8.7 -28.0	+1.5	+0.3	+0.0	20.7	30.0	-9.3	Vert
25	138.918	28.9	+16.9 -27.9	+2.2	+0.5	+0.0	20.6	30.0	-9.4	Vert
26	65.775	38.8	+7.6 -28.0	+1.6	+0.3	+0.0	20.3	30.0	-9.7	Vert
27	65.549	38.5	+7.7 -28.0	+1.6	+0.3	+0.0	20.1	30.0	-9.9	Horiz
28	72.925	38.5	+6.9 -28.0	+1.7	+0.3	+0.0	19.4	30.0	-10.6	Horiz

Test Location: CKC LABORATORIES INC • 110 N. OLINDA PL. • BREA, CA 92823 • 714-993-6112

Customer:	**NMB Technologies Inc.**	Date:	Feb-03-99
Specification:	**CISPR22 B COND [AVE]**	Time:	16:48
Test Type:	**Conducted Emissions**	Sequence#:	2
Equipment:	**Keyboard**		
Manufacturer:	NMB Technologies, Inc	Tested By:	Septimiu Apahidean
Model:	RT9356TW		
S/N:	N/A		

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Keyboard*	NMB Technologies, Inc	RT9356TW	N/A

Support Devices:

Function	Manufacturer	Model #	S/N
Printer	HP	C2184A	CN5B21R1DM
Computer	Intel	S100EDZ8FLC	A05721230
Mouse	Logitech	M-CQ38	LT554205822
Modem	Hayes	6802US	B10068023649

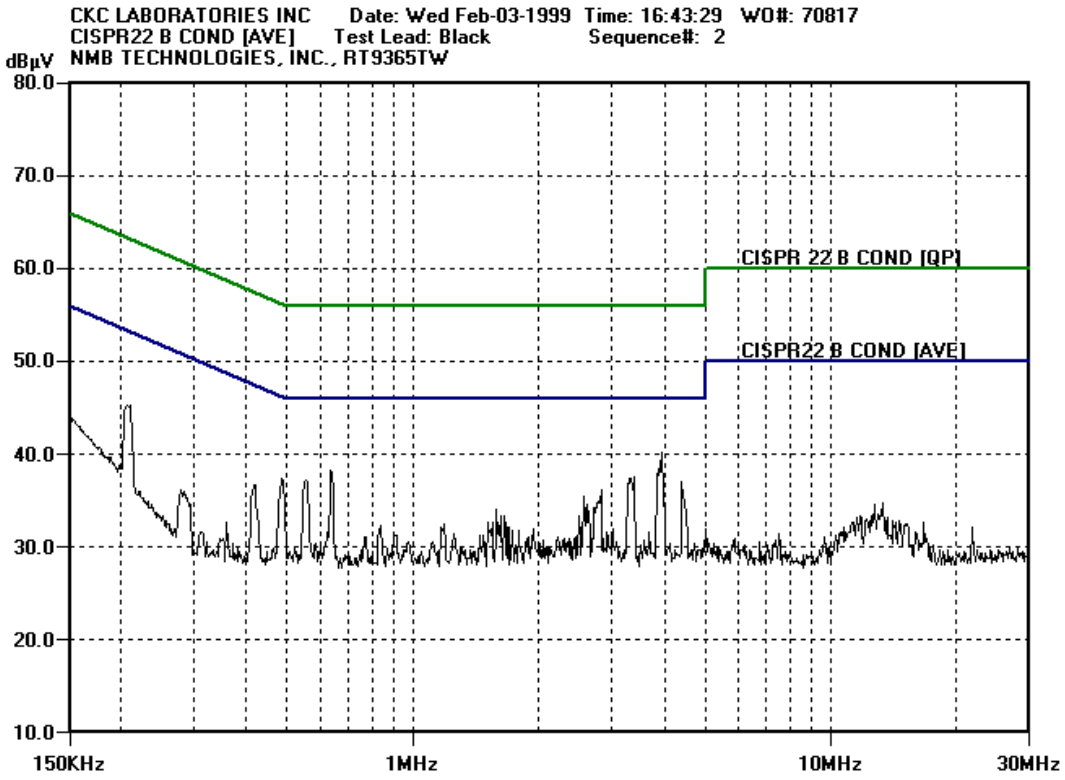
Test Conditions / Notes:

The EUT is a keyboard and is connected to the host computer. The computer also has a monitor, mouse, printer, and modem connected. The EUT is continually sending H's to the computer and the H's are being displayed on the monitor. Voltage to computer is 115 VAC, 60 Hz. Temperature: 18°C Humidity: 55%.

Measurement Data: Sorted by Margin Test Lead: Black

#	Freq	Rdng dBµV	dB	dB	dB	dB	Dist dB	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar
1	3.944M	40.2					+0.0	40.2	46.0	-5.8	Black
2	3.852M	38.5					+0.0	38.5	46.0	-7.5	Black
3	637.084k	38.3					+0.0	38.3	46.0	-7.7	Black
4	206.633k	45.2					+0.0	45.2	53.3	-8.1	Black
5	3.384M	37.5					+0.0	37.5	46.0	-8.5	Black
6	3.332M	37.4					+0.0	37.4	46.0	-8.6	Black
7	554.169k	37.2					+0.0	37.2	46.0	-8.8	Black

8	487.047k	37.4	+0.0	37.4	46.2	-8.8	Black
9	4.417M	37.1	+0.0	37.1	46.0	-8.9	Black
10	2.824M	36.2	+0.0	36.2	46.0	-9.8	Black
11	2.573M	35.5	+0.0	35.5	46.0	-10.5	Black
12	418.609k	36.7	+0.0	36.7	47.5	-10.8	Black
13	2.755M	34.8	+0.0	34.8	46.0	-11.2	Black
14	2.612M	34.5	+0.0	34.5	46.0	-11.5	Black
15	2.714M	34.3	+0.0	34.3	46.0	-11.7	Black


CKC LABORATORIES INC Date: Wed Feb-03-1999 Time: 16:43:29 WO#: 70817
CISPR22 B COND [AVE] Test Lead: Black Sequence#: 2
dBµV NMB TECHNOLOGIES, INC., RT9365TW
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
150KHz
1MHz
10MHz
30MHz
CISPR 22 B COND [QP]
CISPR22 B COND [AVE]

Test Location: CKC LABORATORIES INC • 110 N. OLINDA PL. • BREA, CA 92823 • 714-993-6112

Customer:	**NMB Technologies Inc.**	Date:	Feb-03-99
Specification:	**CISPR22 B COND [AVE]**	Time:	16:54
Test Type:	**Conducted Emissions**	Sequence#:	3
Equipment:	**Keyboard**		
Manufacturer:	NMB Technologies, Inc	Tested By:	Septimiu Apahidean
Model:	RT9356TW		
S/N:	N/A		

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Keyboard*	NMB Technologies, Inc	RT9356TW	N/A

Support Devices:

Function	Manufacturer	Model #	S/N
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Computer	Intel	S100EDZ8FLC	A05721230
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Modem	Hayes	6802US	B10068023649

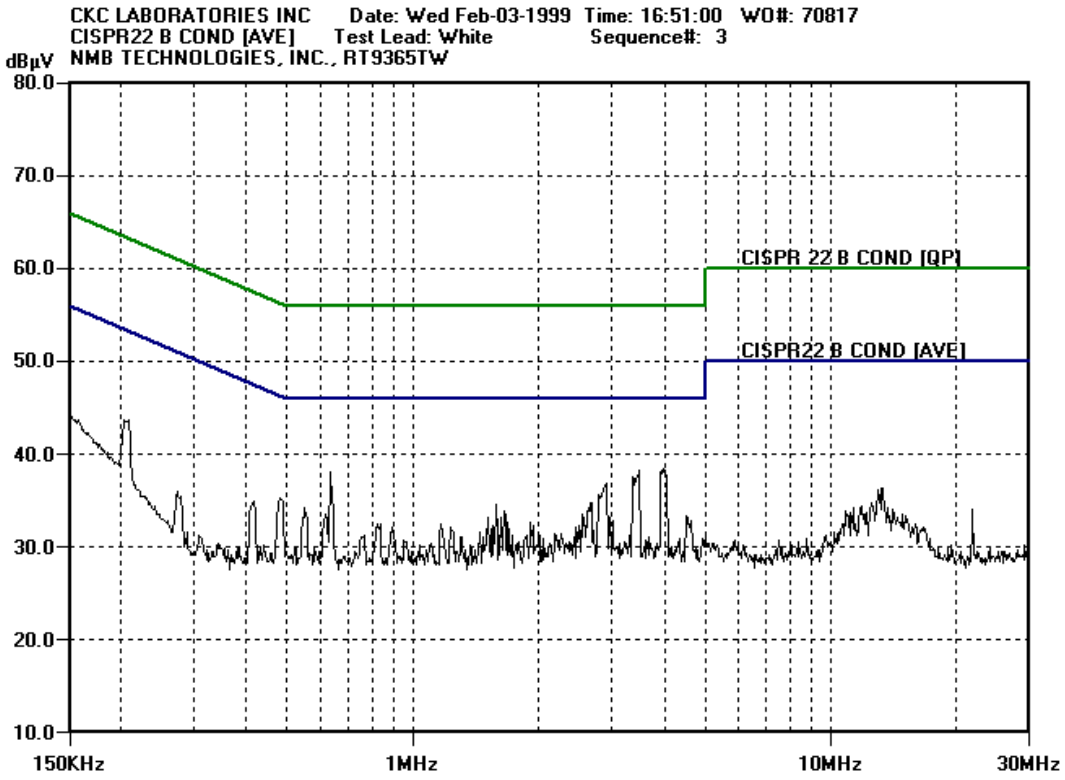
Test Conditions / Notes:

The EUT is a keyboard and is connected to the host computer. The computer also has a monitor, mouse, printer, and modem connected. The EUT is continually sending H's to the computer and the H's are being displayed on the monitor. Voltage to computer is 115 VAC, 60 Hz. Temperature: 18°C Humidity: 55%.

Measurement Data: Sorted by Margin Test Lead: White

#	Freq	Rdng dBµV	dB	dB	dB	dB	Dist dB	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar
1	3.984M	38.5					+0.0	38.5	46.0	-7.5	White
2	4.036M	38.3					+0.0	38.3	46.0	-7.7	White
3	3.494M	38.2					+0.0	38.2	46.0	-7.8	White
4	637.742k	38.1					+0.0	38.1	46.0	-7.9	White
5	3.372M	37.6					+0.0	37.6	46.0	-8.4	White
6	2.916M	36.9					+0.0	36.9	46.0	-9.1	White
7	203.602k	43.6					+0.0	43.6	53.5	-9.9	White

8	2.778M	35.7	+0.0	35.7	46.0	-10.3	White
9	479.150k	35.3	+0.0	35.3	46.4	-11.1	White
10	2.682M	34.8	+0.0	34.8	46.0	-11.2	White
11	2.648M	34.8	+0.0	34.8	46.0	-11.2	White
12	1.588M	34.5	+0.0	34.5	46.0	-11.5	White
13	552.194k	34.2	+0.0	34.2	46.0	-11.8	White
14	150.638k	44.2	+0.0	44.2	56.0	-11.8	White
15	1.655M	33.8	+0.0	33.8	46.0	-12.2	White


CKC LABORATORIES INC Date: Wed Feb-03-1999 Time: 16:51:00 WO#: 70817
CISPR22 B COND [AVE] Test Lead: White Sequence#: 3
dBµV NMB TECHNOLOGIES, INC., RT9365TW
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
150KHz
1MHz
10MHz
30MHz
CISPR 22 B COND [QP]
CISPR22 B COND [AVE]