

EXHIBIT D
CKC TEST REPORT



CERTIFICATION TEST REPORT

FOR THE

900 MHZ CORDLESS PHONE, MICROSOFT PHONE

FCC PART 15, SUBPART C

CLASS B COMPLIANCE

DATE OF ISSUE: APRIL 14, 1998

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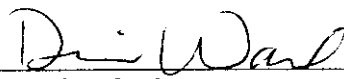
Report No: FC98-012

Date of test: February 13, 1998

APPROVED BY:

DOCUMENTATION CONTROL:


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ADMINISTRATIVE INFORMATION

DATE OF TEST: February 13, 1998

PURPOSE OF TEST: To demonstrate the compliance of the 900 MHz Cordless Phone, Microsoft Phone, with the FCC Part 15, Subpart C requirements.

MANUFACTURER: Microsoft Corporation
One Microsoft Way
Redmond, WA 98052

REPRESENTATIVE: Ann Bovee

TEST LOCATION: CKC Laboratories, Inc.
22105 Wilson River Hwy
Tillamook, OR 97141

TEST PERSONNEL: Mike Wilkinson

TEST METHOD: ANSI C63.4 1992

FREQUENCY RANGE TESTED: 450 kHz - 5000 MHz

EQUIPMENT UNDER TEST:

Base Unit

Manuf: Microsoft
Model: MP-900 BS
Serial: JR020998A
FCC ID: C3KT2

Handset

Manuf: Microsoft
Model: MP-900 HS
Serial: JR020998B
FCC ID: C3KT2

SUMMARY OF RESULTS

The Microsoft Corporation 900 MHz Cordless Phone was tested in accordance with ANSI C63.4 1992 for compliance with the requirements of Part 15, Subpart C of the FCC Rules.

As received, the above equipment was found to be fully compliant with the limits of FCC Part 15, Subpart C for both radiated and conducted emissions.

EQUIPMENT UNDER TEST (EUT) DESCRIPTION

The Borg Pre-Beta.

MEASUREMENT UNCERTAINTY

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

PERIPHERAL DEVICES

The EUT was tested with the following peripheral devices:

Computer

Manuf: Dell
Model: XPSD266
Serial: BPZS5
FCC ID: DOC

Monitor

Manuf: IBM
Model: P70
Serial: 22-03652
FCC ID: AK8GDM17SE2T

Keyboard

Manuf: Dell
Model: QuiteKeys
Serial: 81730
FCC ID: GYUR26SK

Mouse

Manuf: Microsoft
Model: Maui
Serial: JR120197A
FCC ID: C3KKMP5

Printer

Manuf: HP
Model: C3941A
Serial: JPCD1020090
FCC ID: B94C3941A

REPORT OF MEASUREMENTS

The following Tables 1 and 2 report the six highest radiated and conducted emissions levels recorded during the tests performed on the Microsoft 900 MHz Cordless Phone. 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 dB μ V	CORRECTION FACTORS				CORRECTED READING dB μ V/m	SPEC LIMIT dB μ V/m	MARGIN dB	NOTES
		Ant dB	Amp dB	Cable dB	10 dB Pad dB				
122.886	55.7	11.2	-27.0	2.2	0.0	42.1	43.5	-1.4	VQ
941.258	41.1	23.4	-27.4	7.6	0.0	44.7	46.0	-1.3	HQ
2826.483	47.5	29.4	-39.7	4.3	10.0	52.5	54.0	-1.5	VA
3161.024	45.6	30.9	-39.8	5.8	10.0	52.5	54.0	-1.5	VA
3612.402	45.5	31.5	-39.8	6.2	10.0	53.4	54.0	-0.6	VA
4515.483	42.5	32.4	-39.4	7.0	10.0	52.5	54.0	-1.5	VA

Test Method: ANSI C63.4 1992
Spec Limit : FCC Part 15.209/15.249
Test Distance: 3 Meters

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

COMMENTS: The table above was compiled from a combination of test conditions. For exact test conditions refer to the test data sheets contained in Appendix B.

Table 2: Six Highest Conducted Emission Levels

FREQUENCY MHz	METER READING dB μ V	CORRECTION FACTORS				CORRECTED READING dB μ V	SPEC LIMIT dB μ V	MARGIN dB	NOTES
		Lisn dB							
0.842734	34.0	0.0				34.0	48.0	-14.0	W
2.408561	34.0	0.0				34.0	48.0	-14.0	B
3.370048	34.1	0.0				34.1	48.0	-13.9	B
5.460732	34.1	0.0				34.1	48.0	-13.9	W
15.495830	35.2	0.0				35.2	48.0	-12.8	W
24.359250	34.3	0.0				34.3	48.0	-13.7	W

Test Method: ANSI C63.4 1992
 Spec Limit : FCC Part 15.209/15.249
 Test Distance: No Distance

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

COMMENTS: The table above was compiled from a combination of the following test conditions.

- Borg Unit operating in Telephone answering machine mode using Drvtest. The base unit uses 8 MHz clock. The RJ11 (J500) is connected to an active remote CO line. The printer is connected and is powered on. Handset TX freq. is 903 MHz and Base TX freq. is 926.9 MHz. The Handset is in the side position with its left side on the test table. The temperature was 56°F and the humidity was 78%. Base Unit connected to the LISN
- Borg Unit operating in Telephone answering machine mode using Drvtest. The base unit uses 8 MHz clock. The RJ11 (J500) is connected to an active remote CO line. The printer is connected and is powered on. Handset TX freq. is 903 MHz and Base TX freq. is 926.9 MHz. The Handset is in the side position with its left side on the test table. The temperature was 56°F and the humidity was 78%. Handset Charger connected to the LISN

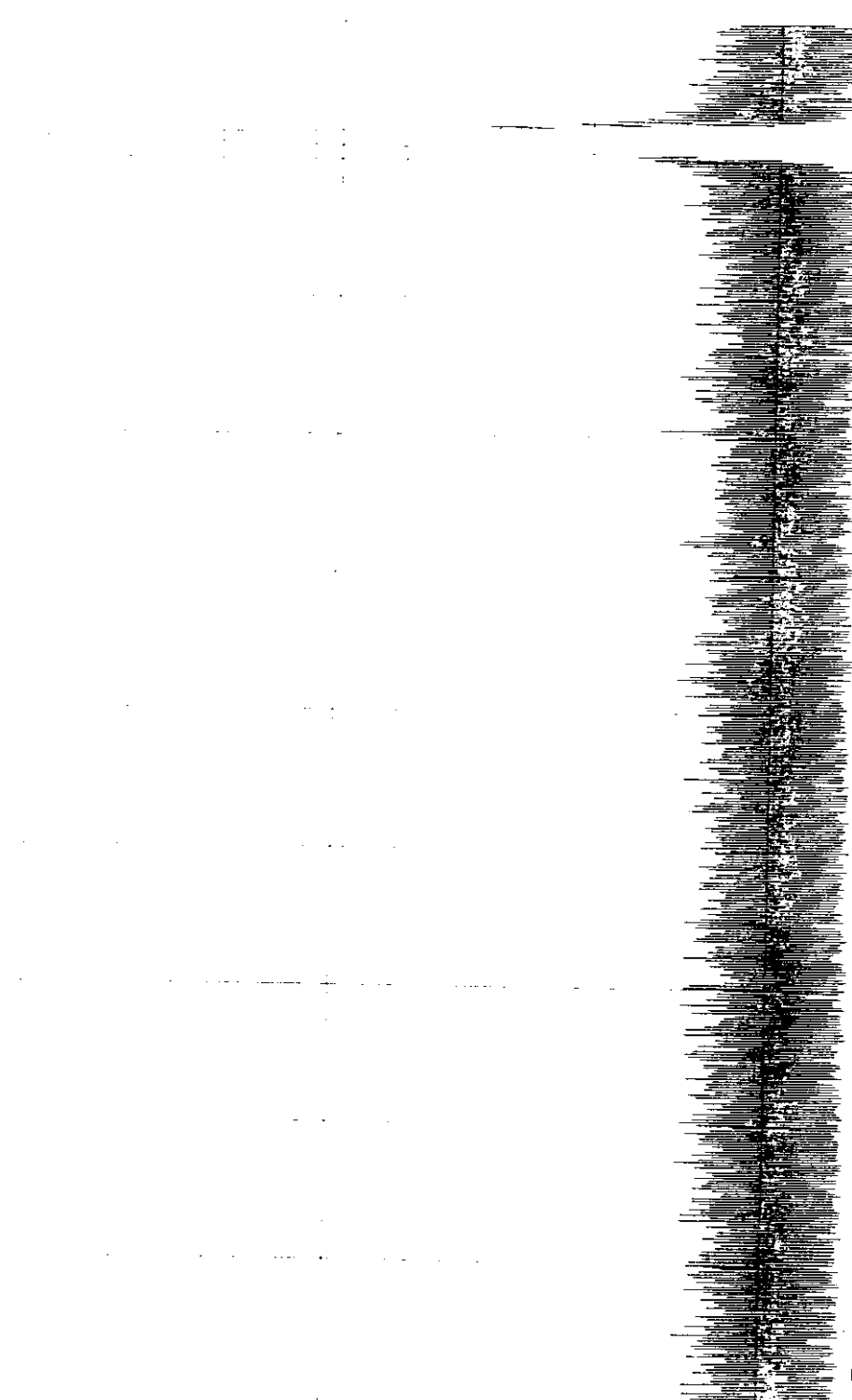


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Occupied Bandwidth Plot Part 15.231(c)

m Dick 2.12.98

Title: Borg Handset. Channel 27
Ref Level 97 dBuV ATTN 0 dB
Marker: 904.075MHz 86.8 dBuV
10 dB/



Start Freq 899.5MHz RES BW 10.0KHz
Center Freq 902.0MHz VID BW 100.0KHz
Stop Freq 904.5MHz SWP .3

DL 54 dBuV



Testing the Future

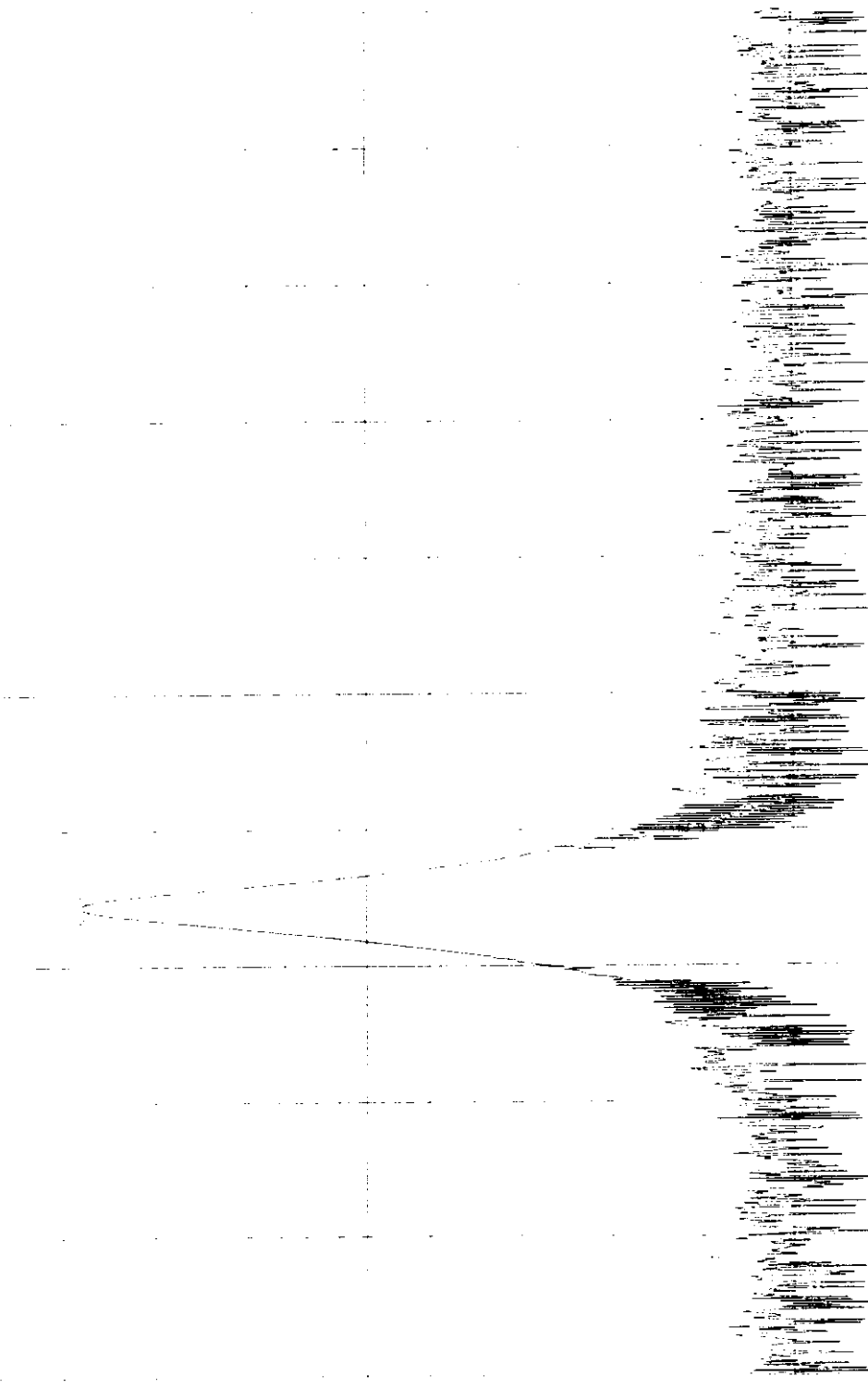
LABORATORIES, INC.

Occupied Bandwidth Plot Part 15.231(c)

MWilk 2-12-58

Title: Borg Base Unit. Channel 27
Ref Level 97 dBuV ATTN 0 dB Marker: 927.842MHz 85.2 dBuV

10 dB/



DL
54
dBuV

Start Freq 927.5MHz RES BW 10.0KHz
 Center Freq 928.0MHz VID BW 100.0KHz
 Stop Freq 928.5MHz SWP .05

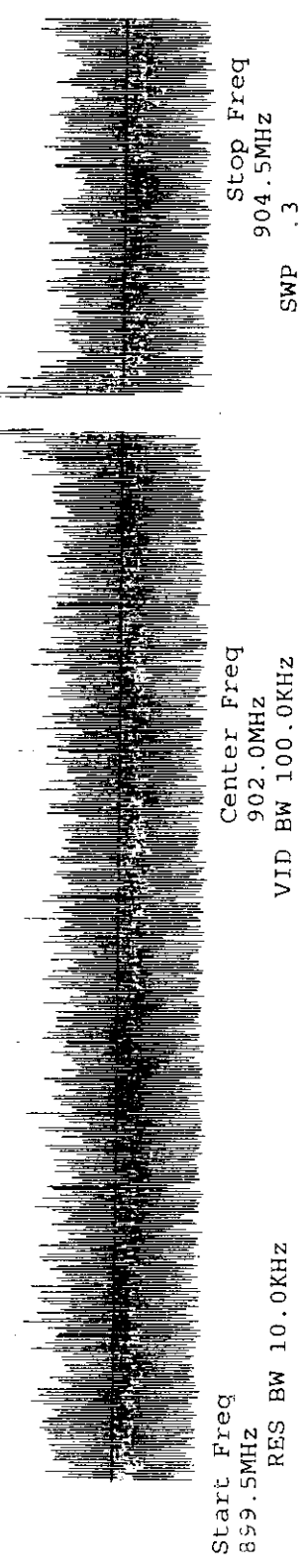
Occupied Bandwidth Plot Part 15.231(c)

advised 2.12.88

Title: Borg Handset. Channel 15
 Ref Level 97 dBuV ATTN 0 dB
 Marker: 903.155MHz 83.7 dBuV

10 dB/

DL 54 dBuV



Start Freq
 859.5MHz
 RES BW 10.0KHz

Center Freq
 902.0MHz
 VID BW 100.0KHz

Stop Freq
 904.5MHz
 SWP .3



Testing the Future
LABORATORIES, INC.

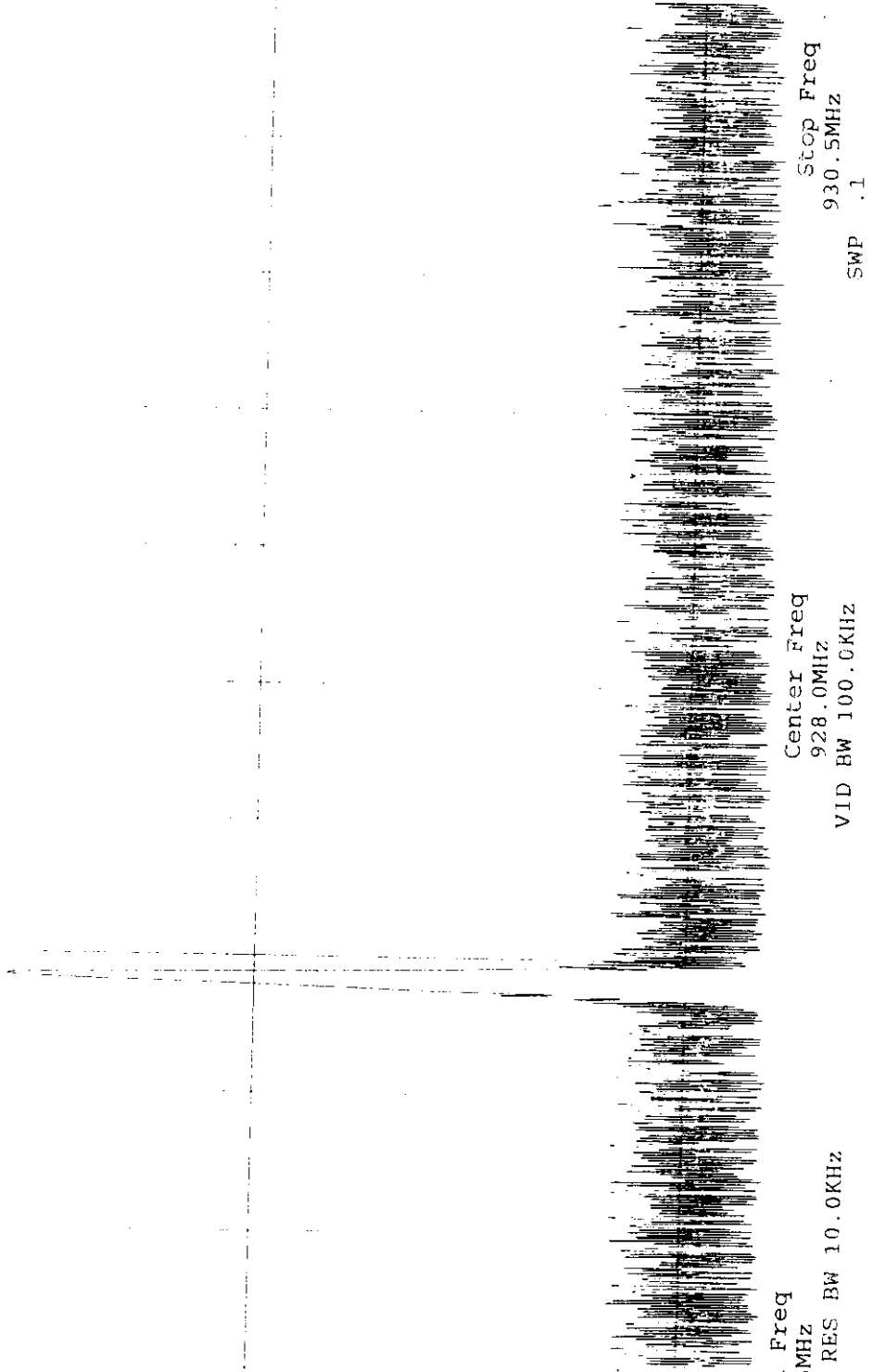
Occupied Bandwidth Plot Part 15.231(c)

Mich 2-12-98

Title: Borg Base Unit, Channel 15
Ref Level 97 dBuV
ATTEN 0 dB
Marker: 926.915MHz 81.1 dBuV

10 dB/

DL 54 dBuV



Start Freq
925.5MHz
RES BW 10.0KHz

Center Freq
928.0MHz
VID BW 100.0KHz

Stop Freq
930.5MHz
SWP .1

TABLE A

LIST OF TEST EQUIPMENT

Tillamook site A VCCI Registration Numbers R-577 & C-312

1. EMI Receiver System, Hewlett Packard, Model No. 8574A, S/N 3010A01076. Calibration date: November 25, 1997. Calibration due date: November 25, 1998.
2. Preamp, Hewlett Packard, Model No. 8447D, S/N 2727A05392. Calibration date: June 11, 1997. Calibration due date: June 11, 1998.
3. High Frequency Preamp, Hewlett Packard, Model No. 83017A, S/N 3123A00283. Calibration date: April 30, 1997. Calibration due date: April 30, 1998.
4. Biconical Antenna, A & H Systems, Model No. SAS-200/540, S/N 359. Calibration date: May 12, 1997. Calibration due date: May 12, 1998.
5. Log Periodic Antenna, A & H Systems, Model No. SAS200/510, S/N 464. Calibration date: August 26, 1997. Calibration due date: August 26, 1998.
6. LISN, Chase, Model No. SW147LY, S/N 1516. Calibration date: January 14, 1998. Calibration due date: January 14, 1999.
7. LISN (3 phase), Solar, Model No. 50uH, S/N T-MOOK1-2. Calibration date: January 15, 1998. Calibration due date: January 15, 1999.
8. Tillamook A site calibration date: November 18, 1997. Tillamook A site calibration due date: November 18, 1998.
9. Test software, EMI Test 2.86.

EUT SETUP

The equipment under test (EUT) and the peripherals listed were setup in a manner that represented their normal use. 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 1 meter 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. Excess cabling was bundled in the center in a serpentine fashion using 30-40 centimeter lengths.

During conducted emissions testing, the EUT was located 80 centimeters above the conducting ground plane on the same nonconducting table as was used for radiated testing. The metal plane was grounded to the earth through the green wire safety ground. Power to the Power Adapter was provided via 3 meters of shielded power cable from a filter grounded to the metal plane to a LISN. The LISN was also grounded to the plane and attached to the LISN was a 4 ganged grounded outlet whose source was also shielded and 60 cm in length. All other objects were kept a minimum of 1 meter away from the EUT during the conducted test.

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 900 MHz Cordless Phone, Microsoft Phone. For radiated measurements below 300 MHz, the biconical antenna was used. For frequencies from 300 to 1000 MHz, the log periodic antenna was used. For frequencies above 1000 MHz, the horn antenna was used. All antennas were located at a distance of 3 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 dB μ V 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 dB μ V, 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	450 kHz	30 MHz	9 kHz
RADIATED EMISSIONS	30 MHz	1000 MHz	120 kHz
RADIATED EMISSIONS	1000 MHz	5000 MHz	1 MHz

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 Microsoft 900 MHz Cordless Phone.

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 85650A Quasi-Peak Adapter for the HP 8568B Spectrum Analyzer. The detailed procedure for making quasi peak measurements contained in the HP Quasi-Peak Adapter manual were followed.

Average

When the frequencies exceed 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 900 MHz Cordless Phone, Microsoft Phone, 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 Part 15, Subpart C 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 EUT 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 with the biconical antenna in the same manner, 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. For frequencies above 1000 MHz, the horn antenna was used. 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 450 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.

Tables 1 and 2 show the corrected values of the six highest readings obtained for the Microsoft Corporation 900 MHz Cordless Phone.

Occupied Bandwidth Measurements

In accordance with Part 15.215(c), the fundamental frequency was kept within the central 80% of the permitted band in order to minimize the possibility of out-of-band operation.

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 dB μ V/m, the spectrum analyzer reading in dB μ V was corrected by using the following formula:

$$\begin{aligned}
 & \text{Meter reading (dB}\mu\text{V)} \\
 & + \text{Antenna Factor (dB)} \\
 & + \text{Cable Loss (dB)} \\
 & - \text{Distance Correction (dB)} \\
 & - \text{Pre-amplifier Gain (dB)} \\
 & = \text{Corrected Reading(dB}\mu\text{V/m)}
 \end{aligned}$$

This reading was then compared to the applicable specification limit to determine compliance. For conducted emissions, no correction factors were needed when 50 μ H LISN's were used.

A typical data sheet will display the following in column format:

#	Freq MHz	Rdng dBuV	Cable	Amp.	Bicon	Horn	Log	Dist	Corr dBuV/m	Spec	Margin	Polar
---	-------------	--------------	-------	------	-------	------	-----	------	----------------	------	--------	-------

means reading number

Freq MHz is the frequency in MHz of the obtained reading.

Rdng dBuV is the reading obtained on the spectrum analyzer in dB μ V.

Amp. is short for the preamplifier factor or gain in dB.

Bicon is the biconical antenna factor in dB.

Log is the log periodic antenna factor in dB.

Horn is the horn antenna factor in dB.

Cable is the cable loss in dB of the coaxial cable on the OATS.

Dist is the distance factor (in dB). It is used when testing at a different test distance than the one stated in the spec.

Corr dB μ V/m is the corrected reading which is now in dB μ V/m (field strength).

Spec is the specification limit (dB) stated in the agency's regulations.

Margin is the closeness to the specified limit in dB; + is over and - is under the limit.

Polar is the Polarity of the antenna with respect to earth.

APPENDIX A
INFORMATION ABOUT THE EQUIPMENT UNDER TEST

INFORMATION ABOUT THE EQUIPMENT UNDER TEST

Test Software/Firmware: CRT was displaying: Power Supply Manufacturer: Power Supply Part Number: AC Adapter Type: 120V, 12V, 300mA AC Adapter Part Number/Revision: 35B21300012	
The AC power cord is removable and is NOT shielded	
Line voltage used during testing: 120V 60Hz	

I/O PORTS

Type	#
Serial	1

CRYSTAL OSCILLATORS

Type	Freq. In MHz
Z89169 (Base)	20.48
HC05 (Base)	8
Crystal (Base)	1.8432
Crystal (Base RF)	13.865
Hco5 (Handset)	4
Crystal (Handset)	13.865

PRINTED CIRCUIT BOARDS

Function	Model & Rev	Clocks, MHz	Layers	Location
Base	20801520011 Revision 14	20.48, 8, 1.8432		Base Unit
Base RF	20F01520015 Revision 15	13.865		
Handset	20A01520016 Revision 16	4, 13.865		
Charger	20C01520013 Revision 13	None		

REQUIRED EUT CHANGES TO COMPLY:

None.



Testing the Future

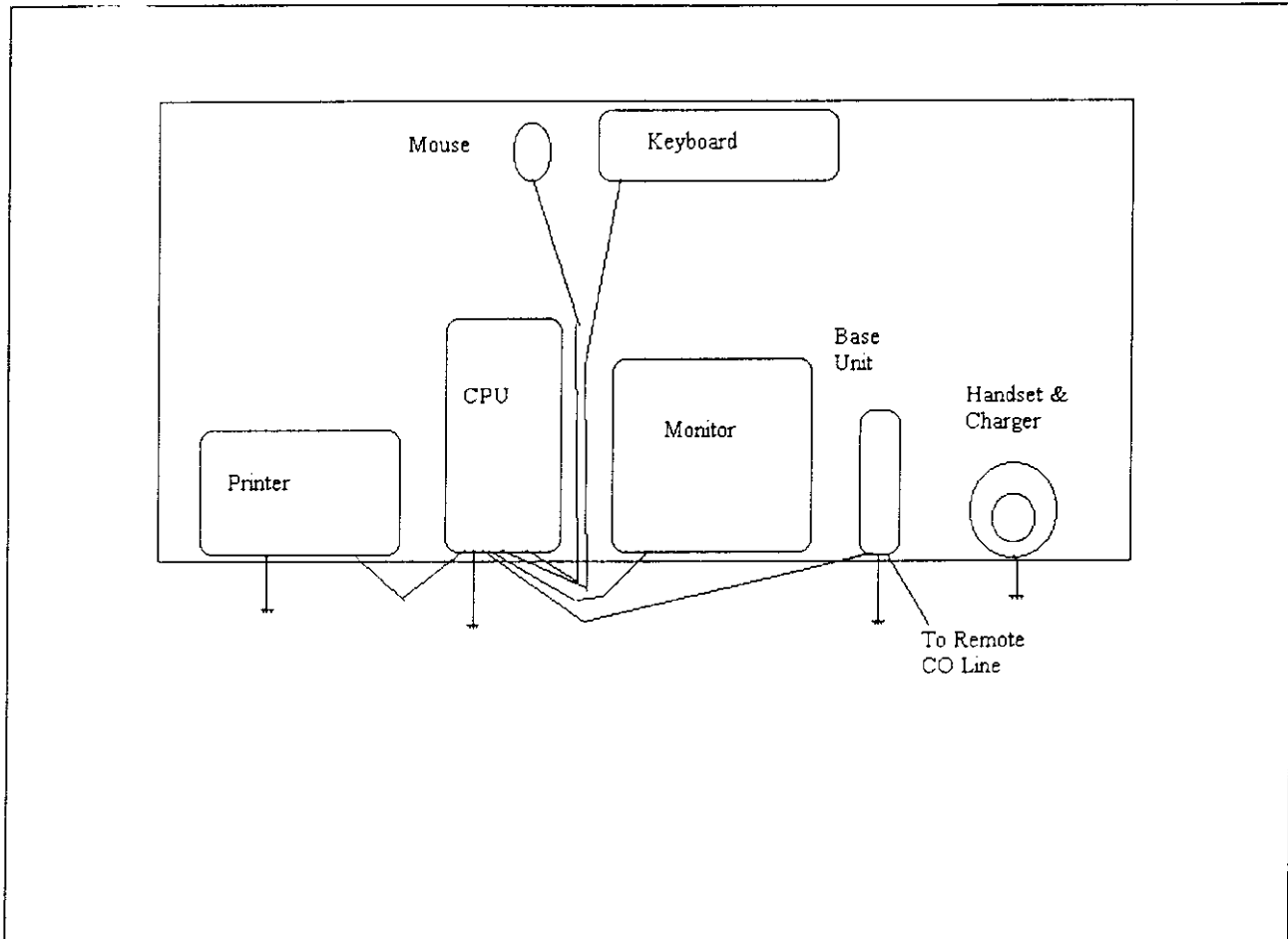
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CABLE INFORMATION

Cable #: 1	Cable(s) of this type: 1
Cable Type: Serial Construction: Round Connected To End (1): Base Station Connector At End (1): Computer Shield Grounded At (1): Data Ground, Shield Ground Part Number:	Shield Type: Foil Length In Meters: Connected To End (2): Hard Wired Connector At End (2): Serial/RS232 Shield Grounded At (2): Data Ground, Shield Ground Number of Conductors:
Notes: Cable Part Number, Revision: 53D11092000, Cable Manufacturer: Foxlink	

Cable Routing For Worst Case Emissions:
Cable length only allows routing as shown in photograph.

EQUIPMENT CONFIGURATION BLOCK DIAGRAM



NOTES:

APPENDIX B
MEASUREMENT DATA SHEETS

Test Location: CKC LABORATORIES INC. • 22105 Wilson River Hwy, Site A • Tillamook, Oregon 97141
 • (800) 500-4EMC

Customer: **Microsoft Corporation** Date: Feb-12-98
 Specification: **FCC15209 & 249** Time: 14:22
 Test Type: **Maximized Emissions** Sequence#: 2
 Equipment: **900 MHz Cordless Phone**
 Manufacturer: **Microsoft** Tested By: **Mike Wilkinson**
 Model: **MP-900 (Borg)**
 S/N: **JR020998A**

Equipment Under Test

Function	Manufacturer	Model #	S/N
Base Unit*	Microsoft	MP-900 BS	JR020998A
Handset	Microsoft	MP-900 HS	JR020998B

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Dell	XPSD266	BPZS5
Monitor	IBM	P70	22-03652
Keyboard	Dell	QuiteKeys	81730
Mouse	Microsoft	Maui	JR120197A
Printer	HP	C3941A	JPCD1020090

Test Conditions / Notes:

Borg Unit operating in Telephone answering machine mode using Drvtest. The base unit uses 8 MHz clock. The RJ11 (J500) is connected to an active remote CO line. The printer is connected and is powered on. The handset is placed in a vertical position and is in its charging stand. Handset TX freq. is 903.MHz and Base TX freq. is 926.9MHz. The temperature was 56°F and the humidity was 78%. Frequency range tested was 30 to 5000 MHz

Measurement Data:

Sorted by Margin

Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	10dB Pad Log dB	Amp dB	Cable dB	Bicon/ Horn dB	Dist dB	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar
1	3612.402	45.5	+10.0	-39.8	+6.2	+0.0	+0.0	53.4	54.0	-0.6	Vert
	Average					+31.5					
2	4515.483	42.5	+10.0	-39.4	+7.0	+0.0	+0.0	52.5	54.0	-1.5	Vert
	Average					+32.4					
3	4515.474	42.0	+10.0	-39.4	+7.0	+0.0	+0.0	52.0	54.0	-2.0	Horiz
	Average					+32.4					
4	941.258	40.2	+0.0	-27.4	+7.6	+23.4	+0.0	43.8	46.0	-2.2	Vert
	Quasi Peak		+0.0								
5	926.938	87.6	+0.0	-27.5	+7.5	+23.3	+0.0	90.9	94.0	-3.1	Vert
	Quasi Peak		+0.0								
6	451.582	49.0	+0.0	-27.6	+4.9	+16.5	+0.0	42.8	46.0	-3.2	Vert
	Quasi Peak		+0.0								
7	2257.744	47.6	+10.0	-39.4	+4.7	+0.0	+0.0	50.4	54.0	-3.6	Vert
	Average		+0.0			+27.5					
8	470.632	48.3	+0.0	-27.7	+4.8	+16.8	+0.0	42.2	46.0	-3.8	Vert
	Quasi Peak		+0.0								



9	122.887	53.1	+11.2	-27.0	+2.2	+0.0	+0.0	39.5	43.5	-4.0	Vert
	Quasi Peak		+0.0								
10	4063.936	40.7	+10.0	-39.5	+6.3	+0.0	+0.0	49.7	54.0	-4.3	Vert
	Average		+0.0			+32.2					
11	903.154	86.3	+0.0	-27.6	+7.4	+23.1	+0.0	89.2	94.0	-4.8	Vert
	Quasi Peak		+0.0								
12	3160.851	42.0	+10.0	-39.8	+5.8	+0.0	+0.0	48.9	54.0	-5.1	Vert
	Average		+0.0			+30.9					
13	884.104	37.9	+0.0	-27.6	+7.3	+22.8	+0.0	40.4	46.0	-5.6	Vert
	Quasi Peak		+0.0								
14	3612.392	40.3	+10.0	-39.8	+6.2	+0.0	+0.0	48.3	54.0	-5.7	Horiz
	Average					+31.5					
15	3110.724	41.8	+10.0	-39.8	+4.6	+30.7		48.3	54.0	-5.7	Vert
	Average										
16	77.387	50.2	+9.2	-27.1	+1.6	+0.0	+0.0	33.9	40.0	-6.1	Vert
			+0.0								
17	941.252	36.2	+0.0	-27.4	+7.6	+23.4	+0.0	39.8	46.0	-6.2	Horiz
			+0.0								
18	582.907	43.8	+0.0	-27.9	+5.7	+18.1	+0.0	39.7	46.0	-6.3	Vert
	Quasi Peak		+0.0								
19	588.910	43.3	+0.0	-27.9	+5.9	+18.2	+0.0	39.5	46.0	-6.5	Vert
	Quasi Peak		+0.0								
20	577.201	43.3	+0.0	-27.9	+5.5	+18.1	+0.0	39.0	46.0	-7.0	Vert
			+0.0								
21	2257.733	44.0	+10.0	-39.4	+4.7	+27.5	+0.0	46.8	54.0	-7.2	Horiz
	Average		+0.0								
22	922.211	35.2	+0.0	-27.5	+7.4	+23.3	+0.0	38.4	46.0	-7.6	Vert
			+0.0								
23	122.935	49.4	+11.2	-27.0	+2.2	+0.0	+0.0	35.8	43.5	-7.7	Horiz
			+0.0								
24	126.298	49.0	+11.3	-27.0	+2.3	+0.0	+0.0	35.6	43.5	-7.9	Vert
			+0.0								
25	903.150	83.2	+0.0	-27.6	+7.4	+23.1	+0.0	86.1	94.0	-7.9	Horiz
			+0.0								
26	200.066	43.9	+14.7	-26.6	+3.1	+0.0	+0.0	35.1	43.5	-8.4	Vert
			+0.0								
27	1806.208	44.1	+10.0	-39.4	+4.1	+26.5	+0.0	45.3	54.0	-8.7	Vert
28	173.253	45.5	+13.1	-26.8	+2.8	+0.0	+0.0	34.6	43.5	-8.9	Vert
			+0.0								
+2.5	149.509	46.5	+12.4	-27.0	+2.5	+0.0	+0.0	34.4	43.5	-9.1	Vert
			+0.0								
30	599.943	40.7	+0.0	-27.9	+5.8	+18.3	+0.0	36.9	46.0	-9.1	Horiz
			+0.0								
31	799.831	36.6	+0.0	-27.8	+6.9	+21.0	+0.0	36.7	46.0	-9.3	Vert
			+0.0								
32	884.138	33.9	+0.0	-27.6	+7.3	+22.8	+0.0	36.4	46.0	-9.6	Horiz
			+0.0								
33	926.933	79.4	+0.0	-27.5	+7.5	+23.3	+0.0	82.7	94.0	-11.3	Horiz
			+0.0								

Test Location: CKC LABORATORIES INC. • 22105 Wilson River Hwy, Site A • Tillamook, Oregon 97141
• (800) 500-4EMC

Customer: **Microsoft Corporation** Date: Feb-10-98
 Specification: **FCC15209 & 249** Time: 08:00
 Test Type: **Maximized Emissions** Sequence#: 4
 Equipment: **900 MHz Cordless Phone**
 Manufacturer: **Microsoft** Tested By: **Mike Wilkinson**
 Model: **MP-900 (Borg)**
 S/N: **JR020998A**

Equipment Under Test

Function	Manufacturer	Model #	S/N
Base Unit	Microsoft	MP-900 BS	JR020998A
Handset	Microsoft	MP-900 HS	JR020998B

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Dell	XPSD266	BPZS5
Monitor	IBM	P70	22-03652
Keyboard	Dell	QuiteKeys	81730
Mouse	Microsoft	Maui	JR120197A
Printer	HP	C3941A	JPCD1020090

Test Conditions / Notes:

Borg Unit operating in Telephone answering machine mode using Drvtest. The base unit uses 8 MHz clock. The RJ11 (J500) is connected to an active remote CO line. The printer is connected and is powered on. The handset is placed in a vertical position and is in its charging stand. Handset TX freq. is 904 MHz and Base TX freq. is 927.8 MHz. The temperature was 56°F and the humidity was 78%. Frequency range tested was 30 to 5000 MHz

Measurement Data:

Sorted by Margin

Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	10 dB Pad Bicon or Horn dB	Hi Fr dB	Cable dB	Cable dB	Dist dB	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar
1	2826.483	47.5	+10.0	-39.7	+2.7	+2.6	+0.0	52.5	54.0	-1.5	Vert
	Average		+29.4								
2	2712.162	47.0	+10.0	-39.6	+2.6	+2.6	+0.0	51.8	54.0	-2.2	Vert
	Average		+29.1								
3	3164.211	44.5	+10.0	-39.8	+2.9	+2.9	+0.0	51.4	54.0	-2.6	Vert
	Average		+30.9								
4	904.115	87.6	+23.1	-27.6	+7.4	+0.0	+0.0	90.5	94.0	-3.5	Vert
			+0.0								
5	3616.242	42.5	+10.0	-39.8	+3.1	+3.1	+0.0	50.4	54.0	-3.6	Vert
	Average		+31.5								
6	927.850	86.8	+23.3	-27.5	+7.5	+0.0	+0.0	90.1	94.0	-3.9	Vert
	Quasi Peak		+0.0								
7	2826.485	44.5	+10.0	-39.7	+2.7	+2.6	+0.0	49.5	54.0	-4.5	Horiz
	Average		+29.4								

Handset
Borg



Testing the Future

LABORATORIES, INC.

8	4520.290	37.9	+10.0	-39.4	+3.5	+3.5	+0.0	47.9	54.0	-6.1	Vert
	Average		+32.4								
9	1333.052	48.9	+10.0	-39.9	+1.8	+1.7	+0.0	47.3	54.0	-6.7	Vert
			+24.8								
10	927.848	82.7	+23.3	-27.5	+7.5	+0.0	+0.0	86.0	94.0	-8.0	Horiz
			+0.0								
11	904.064	81.9	+23.1	-27.6	+7.4	+0.0	+0.0	84.8	94.0	-9.2	Horiz
	Quasi Peak		+0.0								
12	3164.211	36.3	+10.0	-39.8	+2.9	+2.9	+0.0	43.2	54.0	-10.8	Horiz
	Average		+30.9								

Test Location: CKC LABORATORIES INC. • 22105 Wilson River Hwy, Site A • Tillamook, Oregon 97141
• (800) 500-4EMC

Customer: Microsoft Corporation Date: Feb-11-98
Specification: FCC15209 & 249 Time: 06:08
Test Type: Maximized Emissions Sequence#: 5
Equipment: 900 MHz Cordless Phone
Manufacturer: Microsoft Tested By: Mike Wilkinson
Model: MP-900 (Borg)
S/N: JR020998A

Equipment Under Test

Function	Manufacturer	Model #	S/N
Base Unit	Microsoft	MP-900 BS	JR020998A
Handset	Microsoft	MP-900 HS	JR020998B

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Dell	XPSD266	BPZS5
Monitor	IBM	P70	22-03652
Keyboard	Dell	QuiteKeys	81730
Mouse	Microsoft	Maui	JR120197A
Printer	HP	C3941A	JPCD1020090

Test Conditions / Notes:

Borg Unit operating in Telephone answering machine mode using Drvtest. The base unit uses 8 MHz clock. The RJ11 (J500) is connected to an active remote CO line. The printer is connected and is powered on. Handset TX freq. is 903 MHz and Base TX freq. is 926.9 MHz. The Handset is in the horizontal position with its back on the test table. The temperature was 56°F and the humidity was 78%. Frequency range tested was 30 to 5000 MHz

Measurement Data:

Sorted by Margin

Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	10 dB Log Bicon or Horn dB	Hi Fr dB	Cable dB	Cable dB	Dist dB	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar
1	3161.024	45.6	+10.0	-39.8	+2.9	+2.9	+0.0	52.5	54.0	-1.5	Vert
	Average		+30.9								
2	122.887	55.6	+11.2	-27.0	+2.2	+0.0	+0.0	42.0	43.5	-1.5	Vert
	Quasi Peak		+0.0								
3	2709.447	47.2	+10.0	-39.6	+2.6	+2.6	+0.0	51.9	54.0	-2.1	Vert
			+29.1								
4	926.992	88.6	+23.3	-27.5	+7.5	+0.0	+0.0	91.9	94.0	-2.1	Vert
	Quasi Peak		+0.0								
5	3612.599	42.5	+10.0	-39.8	+3.1	+3.1	+0.0	50.4	54.0	-3.6	Vert
	Average		+31.5								
6	903.154	86.9	+23.1	-27.6	+7.4	+0.0	+0.0	89.8	94.0	-4.2	Horiz
	Quasi Peak		+0.0								
7	4515.754	39.5	+10.0	-39.4	+3.5	+3.5	+0.0	49.5	54.0	-4.5	Vert
	Average		+32.4								



8	174.086	49.5	+13.2	-26.8	+2.8	+0.0	+0.0	38.7	43.5	-4.8	Vert
	Quasi Peak		+0.0								
9	3294.382	41.5	+10.0	-39.8	+2.9	+2.9	+0.0	48.6	54.0	-5.4	Vert
			+31.1								
10	126.315	50.9	+11.3	-27.0	+2.3	+0.0	+0.0	37.5	43.5	-6.0	Vert
	Quasi Peak		+0.0								
11	884.148	37.4	+22.8	-27.6	+7.3	+0.0	+0.0	39.9	46.0	-6.1	Horiz
			+0.0								
12	149.512	49.4	+12.4	-27.0	+2.5	+0.0	+0.0	37.3	43.5	-6.2	Vert
			+0.0								
13	449.279	45.7	+16.5	-27.6	+4.9	+0.0	+0.0	39.5	46.0	-6.5	Vert
			+0.0								
14	96.262	52.4	+9.7	-27.1	+1.9	+0.0	+0.0	36.9	43.5	-6.6	Vert
	Quasi Peak		+0.0								
15	200.018	45.4	+14.7	-26.6	+3.1	+0.0	+0.0	36.6	43.5	-6.9	Vert
	Quasi Peak		+0.0								
16	3161.023	40.0	+10.0	-39.8	+2.9	+2.9	+0.0	46.9	54.0	-7.1	Horiz
	Average		+30.9								
17	599.891	42.6	+18.3	-27.9	+5.8	+0.0	+0.0	38.8	46.0	-7.2	Horiz
			+0.0								
18	903.154	83.6	+23.1	-27.6	+7.4	+0.0	+0.0	86.5	94.0	-7.5	Vert
	Quasi Peak		+0.0								
19	2257.882	43.2	+10.0	-39.4	+2.4	+2.3	+0.0	46.0	54.0	-8.0	Vert
	Average		+27.5								
20	104.503	50.0	+10.2	-27.1	+2.0	+0.0	+0.0	35.1	43.5	-8.4	Vert
			+0.0								
21	4515.748	35.1	+10.0	-39.4	+3.5	+3.5	+0.0	45.1	54.0	-8.9	Horiz
	Average		+32.4								
22	77.395	47.3	+9.2	-27.1	+1.6	+0.0	+0.0	31.0	40.0	-9.0	Vert
	Quasi Peak		+0.0								
23	943.567	33.0	+23.5	-27.4	+7.6	+0.0	+0.0	36.7	46.0	-9.3	Vert
			+0.0								
24	921.626	32.9	+23.3	-27.5	+7.4	+0.0	+0.0	36.1	46.0	-9.9	Vert
			+0.0								
25	926.939	79.1	+23.3	-27.5	+7.5	+0.0	+0.0	82.4	94.0	-11.6	Horiz
	Quasi Peak		+0.0								
26	471.815	39.2	+16.8	-27.7	+4.8	+0.0	+0.0	33.1	46.0	-12.9	Vert
			+0.0								

Test Location: CKC LABORATORIES INC. • 22105 Wilson River Hwy. Site A • Tillamook, Oregon 97141
 • (800) 500-4EMC

Customer:	Microsoft Corporation	Date:	Feb-13-98
Specification:	FCC15209 & 249	Time:	11:23
Test Type:	Maximized Emissions	Sequence#:	6
Equipment:	900 MHz Cordless Phone	Tested By:	Mike Wilkinson
Manufacturer:	Microsoft		
Model:	MP-900 (Borg)		
S/N:	JR020998A		

Equipment Under Test

Function	Manufacturer	Model #	S/N
Base Unit	Microsoft	MP-900 BS	JR020998A
Handset	Microsoft	MP-900 HS	JR020998B

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Dell	XPSD266	BPZS5
Monitor	IBM	P70	22-03652
Keyboard	Dell	QuiteKeys	81730
Mouse	Microsoft	Maui	JR120197A
Printer	HP	C3941A	JPCD1020090

Test Conditions / Notes:

Borg Unit operating in Telephone answering machine mode using Drvtest. The base unit uses 8 MHz clock. The RJ11 (J500) is connected to an active remote CO line. The printer is connected and is powered on. Handset TX freq. is 903 MHz and Base TX freq. is 926.9 MHz. The Handset is in the side position with its left side on the test table. The temperature was 56°F and the humidity was 78%. Frequency range tested was 30 to 5000 MHz

Measurement Data: Sorted by Margin Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV	10 dB	Hi Fr	Cable	Cable	Dist dB	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar
			Log Bicon or Horn dB	dB	dB	dB					
1	941.258	41.1	+23.4	-27.4	+7.6	+0.0	+0.0	44.7	46.0	-1.3	Horiz
	Quasi Peak		+0.0								
2	122.886	55.7	+11.2	-27.0	+2.2	+0.0	+0.0	42.1	43.5	-1.4	Vert
	Quasi Peak		+0.0								
3	122.886	55.6	+11.2	-27.0	+2.2	+0.0	+0.0	42.0	43.5	-1.5	Vert
	Quasi Peak		+0.0								
4	926.939	86.8	+23.3	-27.5	+7.5	+0.0	+0.0	90.1	94.0	-3.9	Vert
	Quasi Peak		+0.0								
5	2709.443	44.9	+10.0	-39.6	+2.6	+2.6	+0.0	49.6	54.0	-4.4	Vert
	Average		+29.1								
6	884.103	38.6	+22.8	-27.6	+7.3	+0.0	+0.0	41.1	46.0	-4.9	Horiz
	Quasi Peak		+0.0								
7	174.086	49.2	+13.2	-26.8	+2.8	+0.0	+0.0	38.4	43.5	-5.1	Vert
	Quasi Peak		+0.0								

8	126.312	51.6	+11.3	-27.0	+2.3	+0.0	+0.0	38.2	43.5	-5.3	Vert
	Quasi Peak		+0.0								
9	2257.866	45.0	+10.0	+27.5	+2.4	+2.3	+0.0	47.8	54.0	-6.2	Vert
	Average		-39.4								
10	3161.021	40.4	+10.0	-39.8	+2.9	+2.9	+0.0	47.3	54.0	-6.7	Horiz
	Average		+30.9								
11	903.154	84.3	+23.1	-27.6	+7.4	+0.0	+0.0	87.2	94.0	-6.8	Vert
	Quasi Peak		+0.0								
12	941.307	35.4	+23.4	-27.4	+7.6	+0.0	+0.0	39.0	46.0	-7.0	Vert
			+0.0								
13	200.017	45.0	+14.7	-26.6	+3.1	+0.0	+0.0	36.2	43.5	-7.3	Vert
	Quasi Peak		+0.0								
14	4515.740	36.6	+10.0	-39.4	+3.5	+3.5	+0.0	46.6	54.0	-7.4	Vert
	Average		+32.4								
15	4515.742	36.5	+10.0	-39.4	+3.5	+3.5	+0.0	46.5	54.0	-7.5	Horiz
	Average		+32.4								
16	77.397	48.5	+9.2	-27.1	+1.6	+0.0	+0.0	32.3	40.0	-7.7	Vert
	Quasi Peak		+0.0								
17	470.627	42.4	+16.8	-27.7	+4.8	+0.0	+0.0	36.3	46.0	-9.7	Vert
			+0.0								
18	451.600	39.4	+16.5	-27.6	+4.9	+0.0	+0.0	33.2	46.0	-12.8	Vert
			+0.0								
19	3161.021	34.0	+10.0	-39.8	+2.9	+2.9	+0.0	40.8	54.0	-13.2	Vert
	Average		+30.9								

Test Location: CKC LABORATORIES INC. • 22105 Wilson River Hwy, Site A • Tillamook, Oregon 97141
• (800) 500-4EMC

Customer: **Microsoft Corporation** Date: Feb-13-98
 Specification: **FCC B QP** Time: 13:31
 Test Type: **Conducted Emissions** Sequence#: 7
 Equipment: **900 MHz Cordless Phone**
 Manufacturer: **Microsoft** Tested By: **Mike Wilkinson**
 Model: **MP-900 (Borg)**
 S/N: **JR020998A**

Equipment Under Test

Function	Manufacturer	Model #	S/N
Base Unit	Microsoft	MP-900 BS	JR020998A
Handset	Microsoft	MP-900 HS	JR020998B

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Dell	XPSD266	BPZS5
Monitor	IBM	P70	22-03652
Keyboard	Dell	QuiteKeys	81730
Mouse	Microsoft	Maui	JR120197A
Printer	HP	C3941A	JPCD1020090

Test Conditions / Notes:

Borg Unit operating in Telephone answering machine mode using Drvtest. The base unit uses 8 MHz clock. The RJ11 (J500) is connected to an active remote CO line. The printer is connected and is powered on. Handset TX freq. is 903 MHz and Base TX freq. is 926.9 MHz. The Handset is in the side position with its left side on the test table. The temperature was 56°F and the humidity was 78%. Base Unit connected to the LISN

Measurement Data:

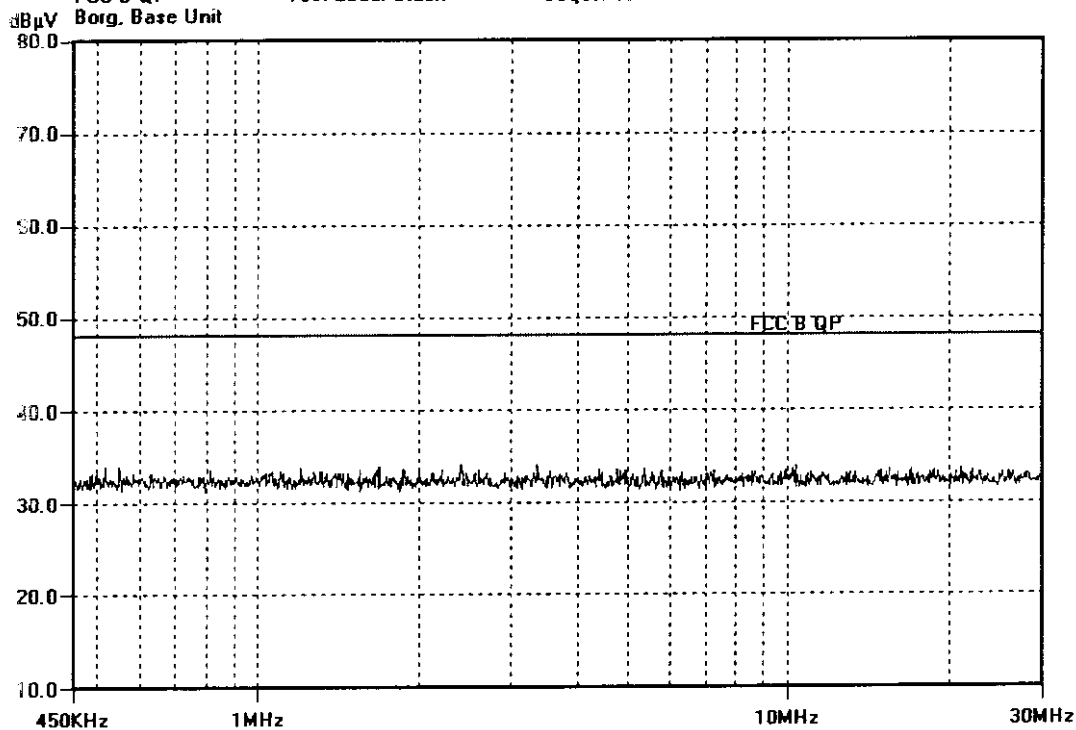
Sorted by Margin

Test Lead: Black

#	Freq	Rdng dB μ V	dB	dB	dB	dB	Dist dB	Corr dB μ V	Spec dB μ V	Margin dB	Polar
1	3.370M	34.1					+0.0	34.1	48.0	-13.9	Black
2	2.409M	34.0					+0.0	34.0	48.0	-14.0	Black
3	10.403M	33.9					+0.0	33.9	48.0	-14.1	Black
4	1.686M	33.9					+0.0	33.9	48.0	-14.1	Black
5	550.853k	33.8					+0.0	33.8	48.0	-14.2	Black
6	517.488k	33.8					+0.0	33.8	48.0	-14.2	Black
7	1.670M	33.7					+0.0	33.7	48.0	-14.3	Black

8	1.204M	33.7	+0.0	33.7	48.0	-14.3	Black
9	21.097M	33.6	+0.0	33.6	48.0	-14.4	Black
10	15.512M	33.6	+0.0	33.6	48.0	-14.4	Black
11	10.258M	33.6	+0.0	33.6	48.0	-14.4	Black
12	2.211M	33.6	+0.0	33.6	48.0	-14.4	Black
13	1.872M	33.6	+0.0	33.6	48.0	-14.4	Black
14	16.990M	33.5	+0.0	33.5	48.0	-14.5	Black
15	5.369M	33.5	+0.0	33.5	48.0	-14.5	Black
16	4.777M	33.5	+0.0	33.5	48.0	-14.5	Black
17	4.407M	33.5	+0.0	33.5	48.0	-14.5	Black
18	2.604M	33.5	+0.0	33.5	48.0	-14.5	Black
19	1.547M	33.5	+0.0	33.5	48.0	-14.5	Black
20	813.223k	33.5	+0.0	33.5	48.0	-14.5	Black
21	22.168M	33.4	+0.0	33.4	48.0	-14.6	Black
22	18.806M	33.4	+0.0	33.4	48.0	-14.6	Black
23	15.094M	33.4	+0.0	33.4	48.0	-14.6	Black
24	4.820M	33.4	+0.0	33.4	48.0	-14.6	Black
25	1.059M	33.4	+0.0	33.4	48.0	-14.6	Black
26	3.560M	33.3	+0.0	33.3	48.0	-14.7	Black
27	1.994M	33.3	+0.0	33.3	48.0	-14.7	Black
28	1.310M	33.3	+0.0	33.3	48.0	-14.7	Black
29	1.269M	33.3	+0.0	33.3	48.0	-14.7	Black
30	1.101M	33.3	+0.0	33.3	48.0	-14.7	Black

CKC LABORATORIES INC. Date: Fri Feb-13-1998 Time: 13:25:59 WO#: 68181
FCC B QP Test Lead: Black Sequence#: 7
Borg. Base Unit



Test Location: CKC LABORATORIES INC. • 22105 Wilson River Hwy, Site A • Tillamook, Oregon 97141
• (800) 500-4EMC

Customer:	Microsoft Corporation	Date:	Feb-13-98
Specification:	FCC B QP	Time:	13:39
Test Type:	Conducted Emissions	Sequence#:	8
Equipment:	900 MHz Cordless Phone		
Manufacturer:	Microsoft	Tested By:	Mike Wilkinson
Model:	MP-900 (Borg)		
S/N:	JR020998A		

Equipment Under Test

Function	Manufacturer	Model #	S/N
Base Unit	Microsoft	MP-900 BS	JR020998A
Handset	Microsoft	MP-900 HS	JR020998B

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Dell	XPSD266	BPZS5
Monitor	IBM	P70	22-03652
Keyboard	Dell	QuiteKeys	81730
Mouse	Microsoft	Maui	JR120197A
Printer	HP	C3941A	JPCD1020090

Test Conditions / Notes:

Borg Unit operating in Telephone answering machine mode using Drvtest. The base unit uses 8MHz clock. The RJ11 (J500) is connected to an active remote CO line. The printer is connected and power on. Handset TX freq. is 903 MHz and Base TX freq. is 926.9 MHz. The Handset is in the side position with it's left on the test table. The temperature was 56°F and the humidity was 78%. Base Unit connected to the LISN

Measurement Data:

Sorted by Margin

Test Lead: White

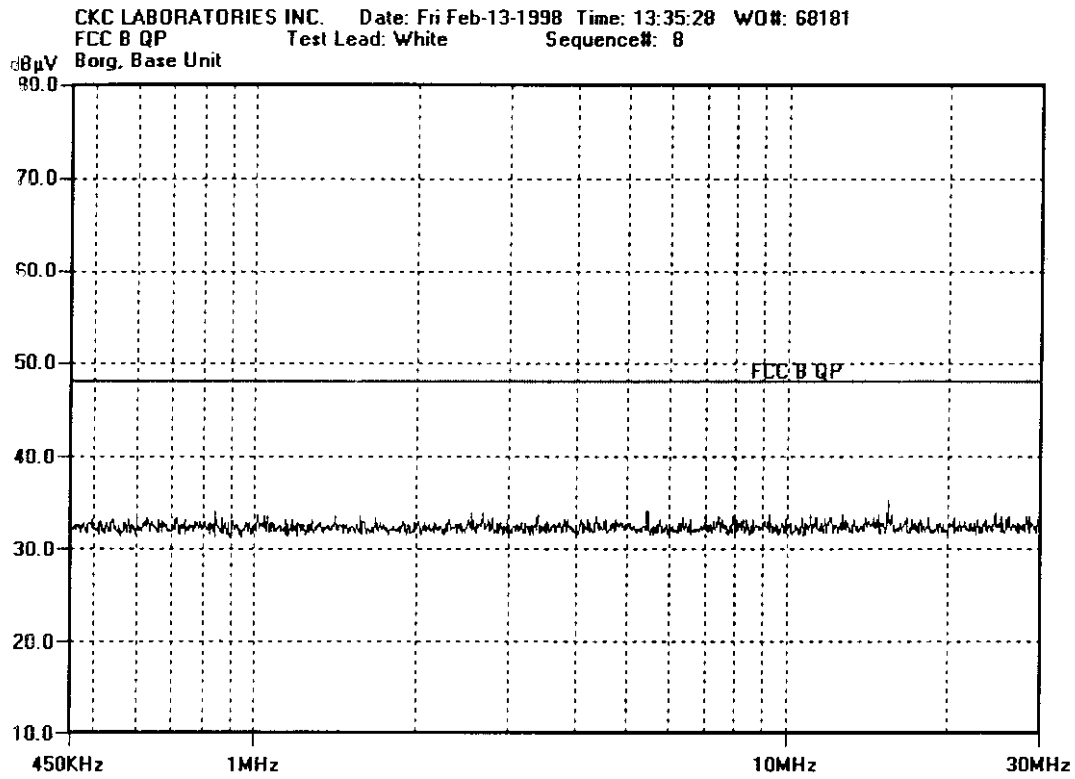
#	Freq	Rdng dB μ V	dB				Dist dB	Corr dB μ V	Spec dB μ V	Margin dB	Polar
1	15.496M	35.2					+0.0	35.2	48.0	-12.8	White
2	5.461M	34.1					+0.0	34.1	48.0	-13.9	White
3	842.734k	34.0					+0.0	34.0	48.0	-14.0	White
4	2.675M	33.9					+0.0	33.9	48.0	-14.1	White
5	2.547M	33.9					+0.0	33.9	48.0	-14.1	White
6	24.608M	33.8					+0.0	33.8	48.0	-14.2	White
7	15.809M	33.7					+0.0	33.7	48.0	-14.3	White



Testing the Future

LABORATORIES, INC.

8	14.950M	33.7	+0.0	33.7	48.0	-14.3	White
9	12.764M	33.7	+0.0	33.7	48.0	-14.3	White
10	11.077M	33.7	+0.0	33.7	48.0	-14.3	White
11	9.260M	33.7	+0.0	33.7	48.0	-14.3	White
12	3.403M	33.7	+0.0	33.7	48.0	-14.3	White
13	1.010M	33.7	+0.0	33.7	48.0	-14.3	White
14	28.045M	33.6	+0.0	33.6	48.0	-14.4	White
15	26.103M	33.6	+0.0	33.6	48.0	-14.4	White
16	25.231M	33.6	+0.0	33.6	48.0	-14.4	White
17	7.925M	33.6	+0.0	33.6	48.0	-14.4	White
18	7.454M	33.6	+0.0	33.6	48.0	-14.4	White
19	4.365M	33.6	+0.0	33.6	48.0	-14.4	White
20	28.493M	33.5	+0.0	33.5	48.0	-14.5	White
21	1.575M	33.5	+0.0	33.5	48.0	-14.5	White
22	1.418M	33.5	+0.0	33.5	48.0	-14.5	White
23	1.056M	33.5	+0.0	33.5	48.0	-14.5	White
24	1.044M	33.5	+0.0	33.5	48.0	-14.5	White
25	12.082M	33.4	+0.0	33.4	48.0	-14.6	White
26	11.776M	33.4	+0.0	33.4	48.0	-14.6	White
27	6.355M	33.4	+0.0	33.4	48.0	-14.6	White
28	2.779M	33.4	+0.0	33.4	48.0	-14.6	White
29	866.475k	33.4	+0.0	33.4	48.0	-14.6	White
30	713.887k	33.4	+0.0	33.4	48.0	-14.6	White



Test Location: CKC LABORATORIES INC. • 22105 Wilson River Hwy, Site A • Tillamook, Oregon 97141
• (800) 500-4EMC

Customer: **Microsoft Corporation** Date: Feb-13-98
 Specification: **FCC B QP** Time: 14:15
 Test Type: **Conducted Emissions** Sequence#: 10
 Equipment: **900 MHz Cordless Phone**
 Manufacturer: **Microsoft** Tested By: **Mike Wilkinson**
 Model: **MP-900 (Borg)**
 S/N: **JR020998A**

Equipment Under Test

Function	Manufacturer	Model #	S/N
Base Unit	Microsoft	MP-900 BS	JR020998A
Handset	Microsoft	MP-900 HS	JR020998B

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Dell	XPSP266	BPZS5
Monitor	IBM	P70	22-03652
Keyboard	Dell	QuiteKeys	81730
Mouse	Microsoft	Maui	JR120197A
Printer	HP	C3941A	JPCD1020090

Test Conditions / Notes:

Borg Unit operating in Telephone answering machine mode using Drvtest. The base unit uses 8 MHz clock. The RJ11 (J500) is connected to an active remote CO line. The printer is connected and is powered on. Handset TX freq. is 903 MHz and Base TX freq. is 926.9 MHz. The Handset is in the side position with its left side on the test table. The temperature was 56°F and the humidity was 78%. Handset Charger connected to the LISN

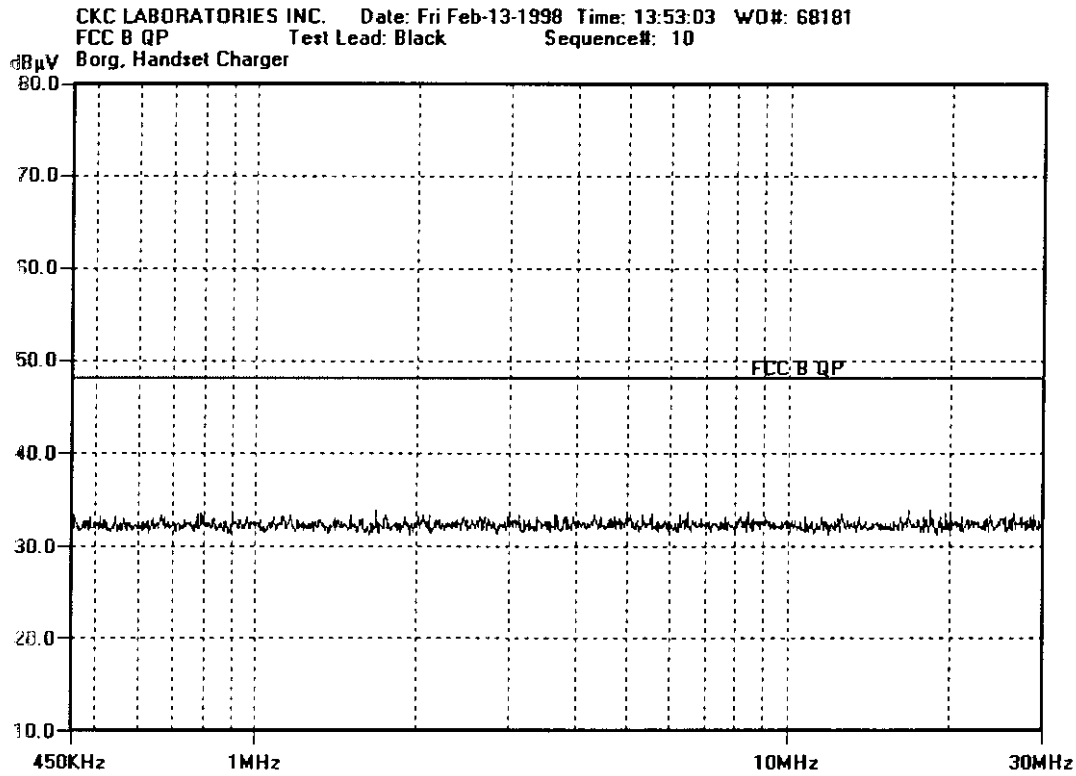
Measurement Data:

Sorted by Margin

Test Lead: Black

#	Freq	Rdng dBμV	dB	dB	dB	dB	Dist dB	Corr dBμV	Spec dBμV	Margin dB	Polar
1	16.829M	33.9					+0.0	33.9	48.0	-14.1	Black
2	18.507M	33.8					+0.0	33.8	48.0	-14.2	Black
3	1.676M	33.8					+0.0	33.8	48.0	-14.2	Black
4	8.440M	33.7					+0.0	33.7	48.0	-14.3	Black
5	6.468M	33.7					+0.0	33.7	48.0	-14.3	Black
6	5.544M	33.6					+0.0	33.6	48.0	-14.4	Black
7	26.302M	33.5					+0.0	33.5	48.0	-14.5	Black

8	19.752M	33.5	+0.0	33.5	48.0	-14.5	Black
9	12.572M	33.5	+0.0	33.5	48.0	-14.5	Black
10	789.716k	33.5	+0.0	33.5	48.0	-14.5	Black
11	28.767M	33.4	+0.0	33.4	48.0	-14.6	Black
12	20.126M	33.4	+0.0	33.4	48.0	-14.6	Black
13	5.343M	33.4	+0.0	33.4	48.0	-14.6	Black
14	4.327M	33.4	+0.0	33.4	48.0	-14.6	Black
15	2.061M	33.4	+0.0	33.4	48.0	-14.6	Black
16	1.745M	33.4	+0.0	33.4	48.0	-14.6	Black
17	778.342k	33.4	+0.0	33.4	48.0	-14.6	Black
18	457.583k	33.4	+0.0	33.4	48.0	-14.6	Black
19	23.961M	33.3	+0.0	33.3	48.0	-14.7	Black
20	6.268M	33.3	+0.0	33.3	48.0	-14.7	Black
21	5.066M	33.3	+0.0	33.3	48.0	-14.7	Black
22	5.000M	33.3	+0.0	33.3	48.0	-14.7	Black
23	3.666M	33.3	+0.0	33.3	48.0	-14.7	Black
24	3.133M	33.3	+0.0	33.3	48.0	-14.7	Black
25	2.113M	33.3	+0.0	33.3	48.0	-14.7	Black
26	1.505M	33.3	+0.0	33.3	48.0	-14.7	Black
27	1.156M	33.3	+0.0	33.3	48.0	-14.7	Black
28	666.114k	33.3	+0.0	33.3	48.0	-14.7	Black
29	674.455k	33.2	+0.0	33.2	48.0	-14.8	Black
30	511.422k	33.2	+0.0	33.2	48.0	-14.8	Black



Test Location: CKC LABORATORIES INC. • 22105 Wilson River Hwy, Site A • Tillamook, Oregon 97141
• (800) 500-4EMC

Customer:	Microsoft Corporation	Date:	Feb-13-98
Specification:	FCC B QP	Time:	14:16
Test Type:	Conducted Emissions	Sequence#:	9
Equipment:	900 MHz Cordless Phone		
Manufacturer:	Microsoft	Tested By:	Mike Wilkinson
Model:	MP-900 (Borg)		
S/N:	JR020998A		

Equipment Under Test

Function	Manufacturer	Model #	S/N
Base Unit	Microsoft	MP-900 BS	JR020998A
Handset	Microsoft	MP-900 HS	JR020998B

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Dell	XPSD266	BPZS5
Monitor	IBM	P70	22-03652
Keyboard	Dell	QuiteKeys	81730
Mouse	Microsoft	Maui	JR120197A
Printer	HP	C3941A	JPCD1020090

Test Conditions / Notes:

Borg Unit operating in Telephone answering machine mode using Drvtest. The base unit uses 8 MHz clock. The RJ11 (J500) is connected to an active remote CO line. The printer is connected and is powered on. Handset TX freq. is 903 MHz and Base TX freq. is 926.9 MHz. The Handset is in the side position with its left side on the test table. The temperature was 56°F and the humidity was 78%. Handset Charger connected to the LISN

Measurement Data:

Sorted by Margin

Test Lead: White

#	Freq	Rdng dB μ V	dB	dB	dB	dB	Dist dB	Corr dB μ V	Spec dB μ V	Margin dB	Polar
1	24.359M	34.3					+0.0	34.3	48.0	-13.7	White
2	2.460M	34.0					+0.0	34.0	48.0	-14.0	White
3	595.593k	34.0					+0.0	34.0	48.0	-14.0	White
4	9.631M	33.8					+0.0	33.8	48.0	-14.2	White
5	8.789M	33.8					+0.0	33.8	48.0	-14.2	White
6	818.531k	33.8					+0.0	33.8	48.0	-14.2	White
7	534.171k	33.8					+0.0	33.8	48.0	-14.2	White

8	8.706M	33.7	+0.0	33.7	48.0	-14.3	White
9	1.724M	33.7	+0.0	33.7	48.0	-14.3	White
10	4.924M	33.6	+0.0	33.6	48.0	-14.4	White
11	2.185M	33.6	+0.0	33.6	48.0	-14.4	White
12	456.445k	33.6	+0.0	33.6	48.0	-14.4	White
13	12.989M	33.5	+0.0	33.5	48.0	-14.5	White
14	8.911M	33.5	+0.0	33.5	48.0	-14.5	White
15	6.425M	33.5	+0.0	33.5	48.0	-14.5	White
16	2.038M	33.5	+0.0	33.5	48.0	-14.5	White
17	1.714M	33.5	+0.0	33.5	48.0	-14.5	White
18	1.285M	33.5	+0.0	33.5	48.0	-14.5	White
19	874.855k	33.5	+0.0	33.5	48.0	-14.5	White
20	714.645k	33.5	+0.0	33.5	48.0	-14.5	White
21	26.302M	33.4	+0.0	33.4	48.0	-14.6	White
22	12.282M	33.4	+0.0	33.4	48.0	-14.6	White
23	3.825M	33.4	+0.0	33.4	48.0	-14.6	White
24	3.304M	33.4	+0.0	33.4	48.0	-14.6	White
25	1.161M	33.4	+0.0	33.4	48.0	-14.6	White
26	1.001M	33.4	+0.0	33.4	48.0	-14.6	White
27	800.332k	33.4	+0.0	33.4	48.0	-14.6	White
28	687.346k	33.4	+0.0	33.4	48.0	-14.6	White
29	674.834k	33.3	+0.0	33.3	48.0	-14.7	White
30	516.730k	33.3	+0.0	33.3	48.0	-14.7	White

