

# Appendix K

Monitoring of intended transmit window and maximum reaction time

Registration number: G0M20611-1021-C-3



Rev. Draft ANSI\_7.5\_reaction\_time\_low\_ch.xml

Date 28.11.2006 11:47:36

Reference to the EUT

G0M20611-1021 / AP200 NA / AP200S NA / AP200E NA

Comment:

7.5\_low\_ch\_50 / 35us

3 IP DECT Base station models NEC Philips Unified Solutions

Time stamp	1921.536 MHZ	1923.264 MHz	1924.992 MHz	1926.720 MHz	1928.448 MHz	Comment
	Peak in dBm					
	RMS in dBm					
02:24:30	-86,4	-86,8	-86,3	-87,2	-86,3	Interferer off
	-95,7	-95,7	-95,6	-95,7	-95,7	
02:25:16.3593750	-47,9	-21,8	-50,4	-70,8	-74,6	Dummy on
	72,8	-45.7	-76,2	-93	-94,5	channel 1
02:25:25.6562500	-56	-60,3	-60,3	-60,4	-60,3	50 µs
	-71,8	-60,8	-60,9	-61	-60,9	interference on, dummy release
02:25:33.5000000	-77,6	-74,5	-70,4	-47,7	-21,4	Interference
	-93,7	-92,3	-90	-70	-41,7	off, Dummy on channel 4
02:26:12.7968750	-50,9	-60,3	-60,4	-60,4	-60,3	35 µs
	-67,5	-60,8	-60,9	-61	-60,9	interference on, dummy release



Rev. Draft ANSI\_7.5\_reaction\_time\_high\_ch.xml

Date 28.11.2006 11:40:50

Reference to the EUT

G0M20611-1021 / AP200 NA / AP200S NA / AP200E NA

Comment:

7.5\_high\_ch\_50 / 35us

3 IP DECT Base station models NEC Philips Unified Solutions

Time stamp	1921.536 MHZ	1923.264 MHz	1924.992 MHz	1926.720 MHz	1928.448 MHz	Comment
	Peak in dBm					
	RMS in dBm					
02:17:41.9218750	-86	-86,4	-86,2	-87,1	-85,8	Interference
	-95,7	-95,8	-95,6	-95,8	-95,8	off
02:18:17.9687500	-71,6	-48,3	-21,5	-50,7	-71,2	Dummy on
	-92,6	-73,2	-45,2	-75,4	-93,1	channel2
02:18:27.9843750	-60,3 -60,9	-60,4 -60,9	-60,3 -60,9	-60,2 -60,9	<b>-56,5</b> -71,8	50 µs Interference on, dummy release
02:18:43.9531250	-78,9 -94,8	-75,1 -94,7	-69,5 -93	-48 -73	-22,2 -46,1	Interference off
02:19:22.6250000	-60,4 -60,9	-60,3 -60,9	-60,3 -60,9	-60,3 -60,9	-50,9 -68,4	35 µs Interference on, dummy release



# Appendix L

Monitoring bandwidth



 $Rev.\ Draft\ ANSI\_7.4.1\_monitoring\_bandwidth.xml$ 

Date 28.11.2006 11:27:25

Reference to the EUT

G0M20611-1021 / AP200 NA / AP200S NA / AP200E NA

Comment:

7.4.1 simple compliance test\_low\_+30%

3 IP DECT Base station models NEC Philips Unified Solutions

Time stamp	1921.536 MHZ	1923.264 MHz	1924.992 MHz	1926.720 MHz	1928.448 MHz	Comment
	Peak in dBm RMS in dBm					
02:05:23.1875000	-86,6 -95,7	-85,7 -95,5	-85,7 -95,7	-87,3 -95,7	-86,4 -95,7	Interferer off
02:05:52.7187500	-70,2 -92,5	-47,3 -71,8	-21,6 -45,4	-49,6 -74,4	-70,3 -92,7	Dummy bearer on channel 2
02:06:01.6718750	-85,4 -95,7	-60,2 -60,8	-60,3 -60,9	-60,3 -61	-60,4 -60,9	Interferer on, dummy release



 $Rev.\ Draft\ ANSI\_7.4.1\_monitoring\_bandwidth.xml$ 

Date 28.11.2006 11:23:05

Reference to the EUT

G0M20611-1021 / AP200 NA / AP200S NA / AP200E NA

Comment:

7.4.1 simple compliance test\_low\_-30%

3 IP DECT Base station models NEC Philips Unified Solutions

Time stamp	1921.536 MHZ	1923.264 MHz	1924.992 MHz	1926.720 MHz	1928.448 MHz	Comment
	Peak in dBm RMS in dBm					
01:59:47.4843750	-87 -95,6	-86,8 -95,5	-86,6 -95,6	-86,8 -95,8	-86,8 -95,5	Interferer off
02:00:51.3906250	-70,4 -92,8	-48,4 -73,4	-21,8 -46,5	-50,1 -75,5	-73 -94,2	Dummy bearer on channel 2
02:01:04	-85,7 -95,4	-60,3 -60,8	-60,3 -60,9	-60,4 -61	-60,3 -60,9	Interferer on, Dummy release



 $Rev.\ Draft\ ANSI\_7.4.1\_monitoring\_bandwidth.xml$ 

Date 28.11.2006 11:34:09

Reference to the EUT

G0M20611-1021 / AP200 NA / AP200S NA / AP200E NA

Comment:

7.4.1 simple compliance test\_high\_+30%

3 IP DECT Base station models NEC Philips Unified Solutions

Time stamp	1921.536 MHZ	1923.264 MHz	1924.992 MHz	1926.720 MHz	1928.448 MHz	Comment
	Peak in dBm RMS in dBm					
02:11:42.8906250	-86 -95,7	-85,8 -95,6	-86,7 -95,8	-86,5 -95,8	-86,4 -95,8	Interferer off
02:12:37.0156250	-73,4 -93,8	-48,6 -73,4	-21,5 -45,7	-50,9 -75,4	-70,8 -94	Dummy bearer on channel 2
02:12:45.0937500	-60,4 -60,9	-60,4 -60,9	-60,4 -60,9	-60,4 -60,9	-87 -95,6	Interferer on, dummy release



 $Rev.\ Draft\ ANSI\_7.4.1\_monitoring\_bandwidth.xml$ 

Date 28.11.2006 11:30:40

Reference to the EUT

G0M20611-1021 / AP200 NA / AP200S NA / AP200E NA

Comment:

7.4.1 simple compliance test\_high\_-30%

3 IP DECT Base station models NEC Philips Unified Solutions

Time stamp	1921.536 MHZ	1923.264 MHz	1924.992 MHz	1926.720 MHz	1928.448 MHz	Comment
	Peak in dBm RMS in dBm					
02:08:21.5000000	-85,5 -95,6	-85,7 -95,5	-86 -95,7	-85,6 -95,5	-86,8 -95,8	Interferer off
02:08:59.7187500	-73,5 -94,4	-73,8 -94	-48 -73,4	-21.5 -45.3	-50,8 -75,7	Dummy bearer on channel 3
02:09:14.4218750	-60,3 -60,9	-60,5 -60,9	-60,3 -60,9	-60,3 -60,9	-85,2 -95,4	Interferer on, dummy release



# Appendix M

Random waiting interval



# Appendix N

**Duration of Transmission** 



# Appendix O

Connection acknowledgement



# ANSI C63.17-1998 Rev. Draft ANSI 8.1.1 Access criteria test interval UPCS1900

EUT 3 IP DECT Basestation models

Model AP200 NA / AP200S NA / AP200E NA

Approval Holder NEC Philips Unified Solutions

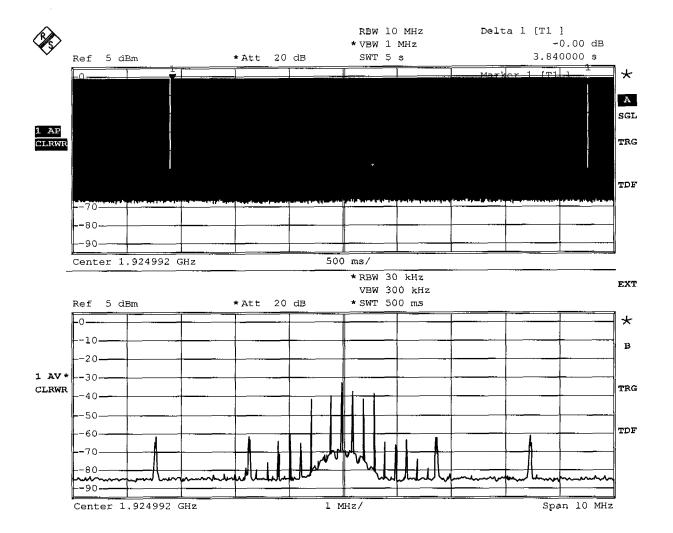
Temperature / Voltage 23°C Test Site / Operator ETS

Test Specification ANSI C63.17-1998 Rev. Draft ANS 8.1.1 Access criteria test interval

Comment 1 The interval between access criteria tests

Comment 2 Measurement result: 3.84 sec

Comment 3 Verdict: PASS



Date:

28.NOV.2006 12:39:03



# ANSI C63.17-1998 Rev. Draft ANSI 8.1.2 Access criteria functional test UPCS1900

EUT 3 IP DECT Basestation models

Model AP200 NA / AP200S NA / AP200E NA

Approval Holder NEC Philips Unified Solutions

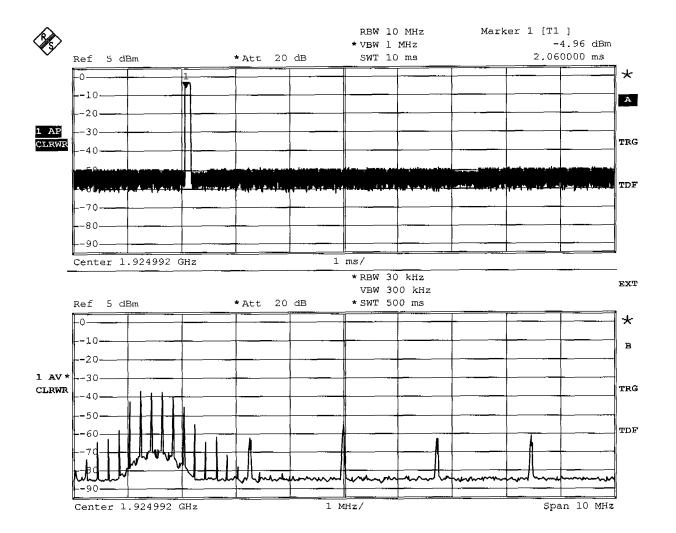
Temperature / Voltage 23°C Test Site / Operator ETS

Test Specification ANSI C63.17-1998 Rev. Draft ANSI 8.1.2 Access criteria functional test

Comment 1 CW interference on ch 2 (initial traffic channel)

Comment 2 after the next pause

Comment 3 New connection at channel 4 (1921,536 MHz)



Date:

28.NOV.2006 13:08:23



# Appendix P

Selected channel, power accuracy, segment occupancy



Test case Rev. Draft ANSI\_7.3.4\_selected channel confirmation.xml

Date 28.11.2006 11:18:13

Reference to the EUT G0M20611-1021 / AP200 NA / AP200S NA / AP200E NA

Comment: initial setup

3 IP DECT Base station models NEC Philips Unified Solutions

Time stamp	1921.536 MHZ	1923.264 MHz	1924.992 MHz	1926.720 MHz	1928.448 MHz	Comment
	Peak in dBm					
	RMS in dBm					
01:56:05.2656250	-87	-87	-85,2	-85,8	-86,2	Interferer off
3112 0102 12 11 2 1	-95,8	-95,6	-95,8	-95,6	-95,8	
01:56:09.3125000	-60,5	-60,6	-60,8	-77	-76,8	Interferer on
021001000000000000000000000000000000000	-60,9	-61	-61,2	-79,6	-79,6	
01:56:30.5468750	-60,3	-59,3	-59,8	-48,7	-21,6	OK 1
	-60,9	-60,9	-61	-72,5	-46	
01:56:44.6718750	-59,5	-59,9	-46,3	-21,8	-51	OK 2
	-60,9	-60,9	-60,6	-45,5	-74,1	



# Appendix Q

Duplex connections



# Appendix R

Emissions inside and outside the sub-band



# FCC Part 15.323(d.2) In-band unwanted emission

## Testprocedure ANSI 63.17-1998 6.1.6.1 **UPCS**

**EUT** 

3 IP DECT Basestation models

Model

AP200 NA / AP200S NA / AP200E NA

Applicant

**NEC Philips Unified Solutions** 

Temperature

23°C

Test Site / Operator

ETS Reichenwalde

Test Specification

6.1.6.1 In-band unwanted emission

1.672MHz



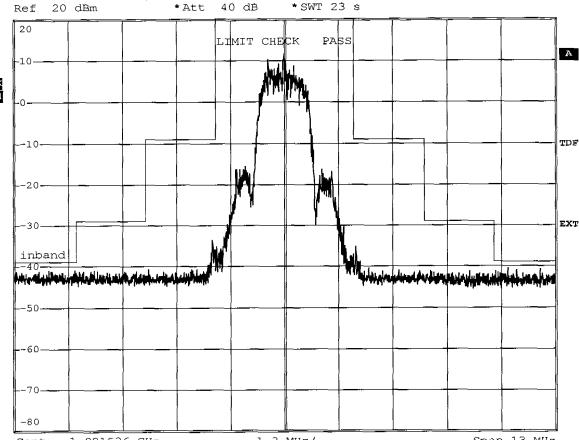
In-band unwanted emis

\*RBW 10 kHz

\* VBW 30 kHz

\* Att 40 dB \*SWT 23 s





Center 1.921536 GHz

1.3 MHz/

Span 13 MHz

Comment: Ansi C63.17-1998 6.1.6.1 27.NOV.2006 11:27:42



A

## FCC Part 15.323(d.2) In-band unwanted emission

# **Testprocedure ANSI 63.17-1998 6.1.6.1 UPCS**

EUT

3 IP DECT Basestation models

Model

AP200 NA / AP200S NA / AP200E NA

Applicant

**NEC Philips Unified Solutions** 

Temperature

23°C

Test Site / Operator

ETS Reichenwalde

Test Specification

6.1.6.1 In-band unwanted emission

LIMIT CHECK

1.672MHz



1 PK MAXH In-band unwanted emis

\*RBW 10 kHz

\*VBW 30 kHz

Ref 20 dBm

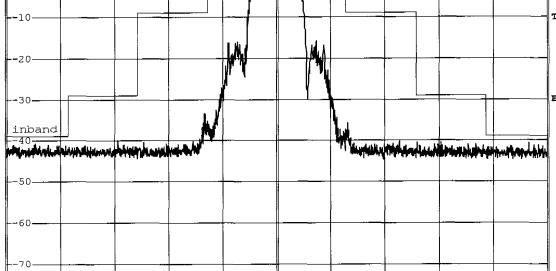
20

\*Att 40 dB

\*SWT 23 s

PASS





Center 1.928448 GHz

1.3 MHz/

Span 13 MHz

Comment: Ansi C63.17-1998 6.1.6.1 Date: 27.NOV.2006 11:30:07



## FCC Part 15.323(d.1) Out-of-band emission

### Testprocedure ANSI 63.17-1998 6.1.6.2 **UPCS**

3 IP DECT Basestation models **EUT** 

AP200 NA / AP200S NA / AP200E NA

Model **NEC Philips Unified Solutions** Applicant

Temperature 23°C

Test Site / Operator ETS Reichenwalde

Test Specification 6.1.6.2 Out-of-band emission

measurement on the lowest carrier

Carrier=1921.536MHz



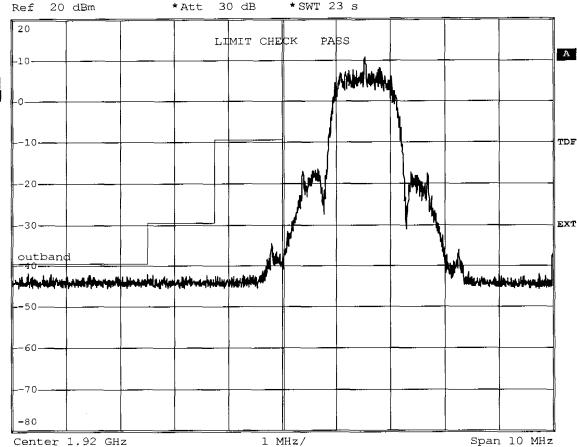
Out-of-band emission

\*RBW 10 kHz

\*VBW 30 kHz

\* Att 30 dB \*SWT 23 s





Comment: Ansi C63.17-1998 6.1.6.2 Date: 27.NOV.2006 11:39:41



# FCC Part 15.323(d.1) Out-of-band emission

## Testprocedure ANSI 63.17-1998 6.1.6.2 **UPCS**

**EUT** Model Applicant 3 IP DECT Basestation models

AP200 NA / AP200S NA / AP200E NA **NEC Philips Unified Solutions** 

23°C

Temperature Test Site / Operator

ETS Reichenwalde

Test Specification

6.1.6.2 Out-of-band emission

measurement on the highest carrier

Carrier=1928.448MHz

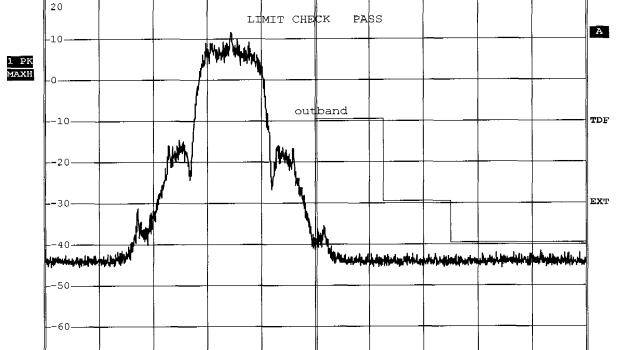


Out-of-band emission

\*RBW 10 kHz

\* VBW 30 kHz

Ref 20 dBm \* Att 30 dB \*SWT 23 s



Center 1.93 GHz

70

1 MHz/

Span 10 MHz

Comment: Ansi C63.17-1998 6.1.6.2 27.NOV.2006 11:34:37 Date:



# FCC Part 15.323(d.2) In-band unwanted emission

### Testprocedure ANSI 63.17-1998 6.1.6.1 **UPCS**

EUT

3 IP DECT Basestation models

Model

AP200 NA / AP200S NA / AP200E NA

Applicant

NEC Philips Unified Solutions

Temperature

23°C

Test Site / Operator

ETS Reichenwalde

Test Specification

6.1.6.1 In-band unwanted emission

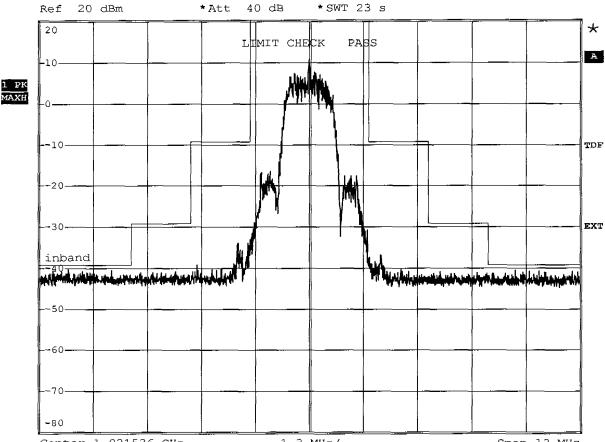
1.424MHz



In-band unwanted emis

\*RBW 10 kHz

\* VBW 30 kHz



Center 1.921536 GHz

1.3 MHz/

Span 13 MHz

Comment: Ansi C63.17-1998 6.1.6,1 29.NOV.2006 08:40:19



## FCC Part 15.323(d.2) In-band unwanted emission

### Testprocedure ANSI 63.17-1998 6.1.6.1 **UPCS**

EUT

3 IP DECT Basestation models

Model

AP200 NA / AP200S NA / AP200E NA

Applicant

**NEC Philips Unified Solutions** 

Temperature

23°C

Test Site / Operator

ETS Reichenwalde

Test Specification

6.1.6.1 In-band unwanted emission

1.408MHz



In-band unwanted emis

\*RBW 10 kHz

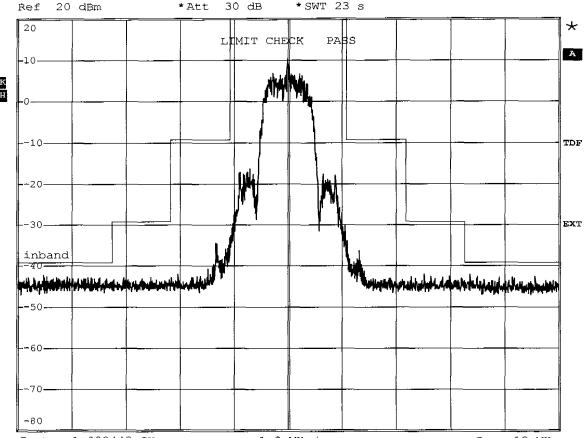
\*VBW 30 kHz

20

\* Att 30 dB

\*SWT 23 s





Center 1.928448 GHz

1.3 MHz/

Span 13 MHz

Comment: Ansi C63.17-1998 6.1.6.1 29.NOV.2006 09:37:17



# FCC Part 15.323(d.1) Out-of-band emission

## Testprocedure ANSI 63.17-1998 6.1.6.2 **UPCS**

**EUT** 

3 IP DECT Basestation models

Model

AP200 NA / AP200S NA / AP200E NA

Applicant

**NEC Philips Unified Solutions** 

Temperature

23°C

Test Site / Operator

ETS Reichenwalde

Test Specification

6.1.6.2 Out-of-band emission

measurement on the lowest carrier

Carrier=1921.536MHz



Ref

Out-of-band emission

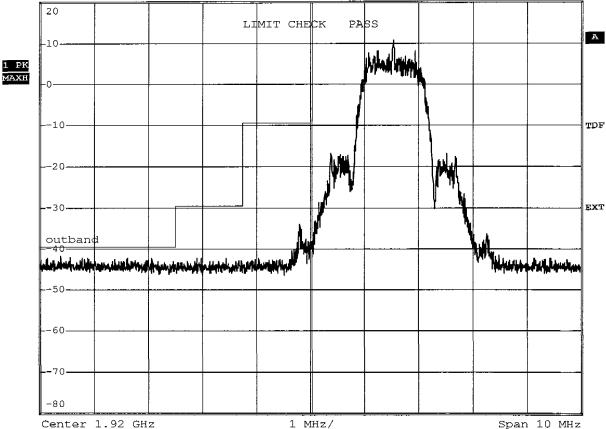
20 dBm

\*RBW 10 kHz

\* VBW 30 kHz

\*Att 30 dB

\* \$WT 23 s



1 MHz/

Span 10 MHz

Comment: Ansi C63.17-1998 6.1.6.2 Date:

29.NOV.2006 08:42:51



## FCC Part 15.323(d.1) Out-of-band emission

### Testprocedure ANSI 63.17-1998 6.1.6.2 **UPCS**

3 IP DECT Basestation models **EUT** 

AP200 NA / AP200S NA / AP200E NA Model

NEC Philips Unified Solutions Applicant

23°C Temperature

ETS Reichenwalde Test Site / Operator

**Test Specification** 6.1.6.2 Out-of-band emission

measurement on the highest carrier

Carrier=1928.448MHz



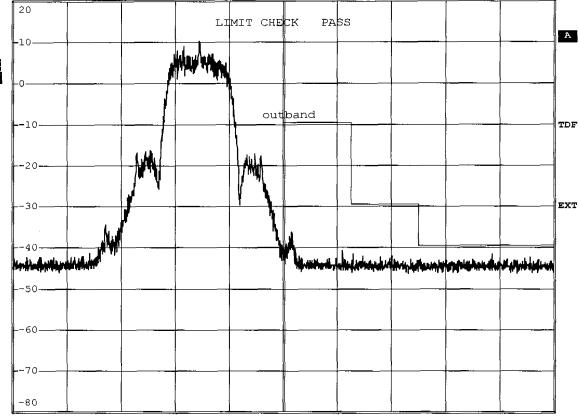
Out-of-band emission

\*RBW 10 kHz

\*VBW 30 kHz







Center 1.93 GHz

1 MHz/

Span 10 MHz

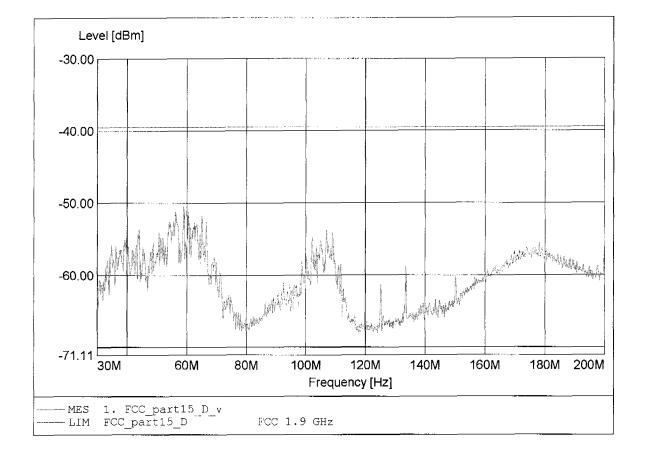
Comment: Ansi C63.17-1998 6.1.6.2 Date: 29.NOV.2006 09:39:42

### FCC RULES PART 15, SUBPART D

NEC Philips Unified Solutions Approval Holder:

EUT / ant. / Ch.: 3 IP DECT Basestation models / Ant. 0 / 1 / Ch.: 4 / 0 Model : AP200 NA/AP200S NA / AP200E NA / external Ant.

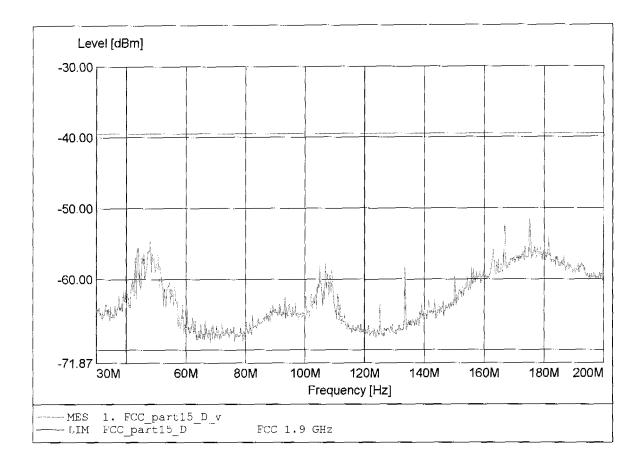
Test Site / Operator: ETS / Mr. Meng
Test Conditions: 25°C / 120 VAC (AC/DC-adaptor)
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: 3m, Ant.: HK 116,
Comment 2: Freq:58.900MHz Pmax:-50.40dBm RBW: 100 kHz



### FCC RULES PART 15, SUBPART D

Approval Holder: NEC Philips Unified Solutions
EUT / ant. / Ch.: 3 IP DECT Basestation models / Ant. 0 / 1 / Ch.: 4 / 0
Model : AP200 NA/AP200S NA / AP200F NA / CULTURE AP200F NA / CULTU

Test Site / Operator: ETS / Mr. Meng
Test Conditions: 25°C / 120 VAC (AC/DC-adaptor)
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: 3m, Ant.: HK 116,
Comment 2: Freq:200.000MHz Pmax:-47.74dBm RBW: 100 kHz

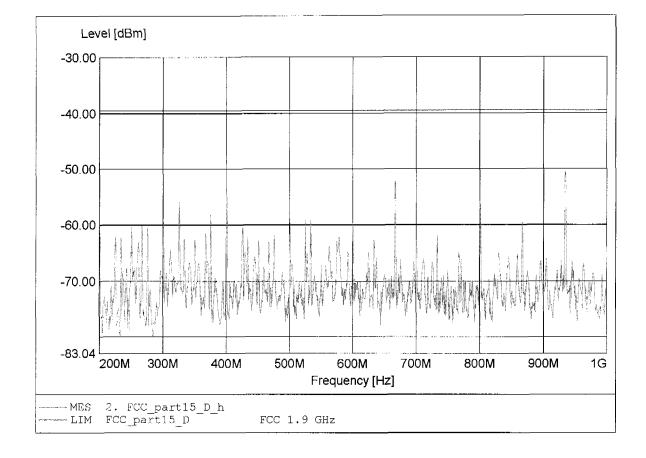


#### FCC RULES PART 15, SUBPART D

Approval Holder: NEC Philips Unified Solutions

EUT / ant. / Ch.: 3 IP DECT Basestation models / Ant. 0 / 1 / Ch.: 4 / 0 Model : AP200 NA/AP200S NA / AP200E NA / external Ant.

Test Site / Operator: ETS / Mr. Meng
Test Conditions: 25°C / 120 VAC (AC/DC-adaptor)
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: 3m, Ant.: HL 223, ampl.
Comment 2: Freq:933.333MHz Pmax:-50.55dBm RBW: 100 kHz

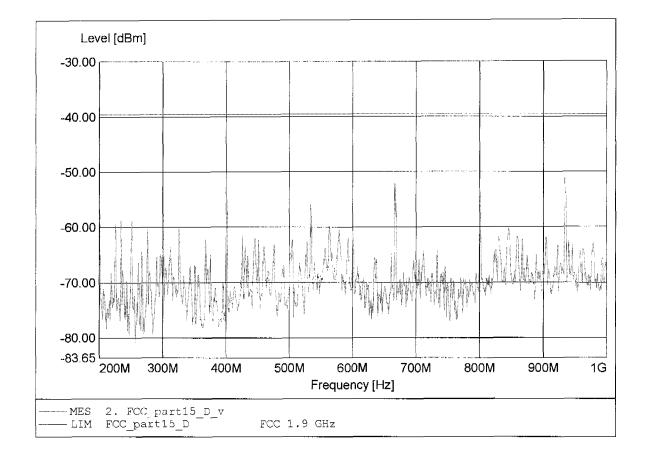


### FCC RULES PART 15, SUBPART D

Approval Holder: NEC Philips Unified Solutions

EUT / ant. / Ch.: 3 IP DECT Basestation models / Ant. 0 / 1 / Ch.: 4 / 0 Model : AP200 NA/AP200S NA / AP200E NA / external Ant.

Test Site / Operator: ETS / Mr. Meng
Test Conditions: 25°C / 120 VAC (AC/DC-adaptor)
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: 3m, Ant.: HL 223, ampl.
Comment 2: Freq:933.333MHz Pmax:-51.29dBm RBW: 100 kHz



### FCC RULES PART 15, SUBPART D

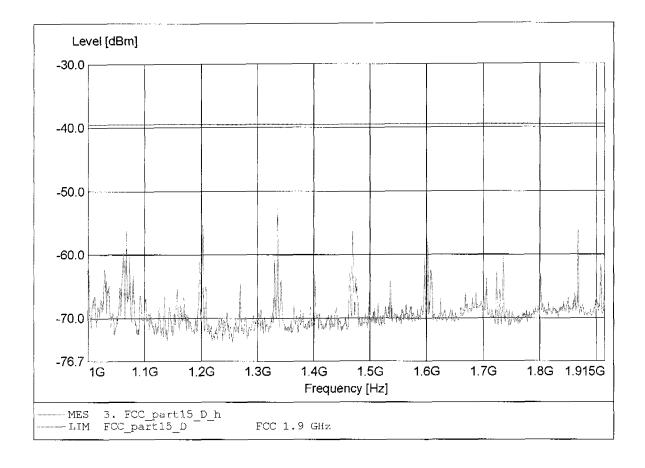
NEC Philips Unified Solutions Approval Holder:

EUT / ant. / Ch.: 3 IP DECT Basestation models / Ant. 0 / 1 / Ch.: 4 / 0 Model : AP200 NA/AP200S NA / AP200E NA / external Ant.

Test Site / Operator: ETS / Mr. Meng
Test Conditions: 25°C / 120 VAC (AC/DC-adaptor) Test Specification: Fully anechoic chamber / mode: Tx

Comment 1: Dist.: 1m, Ant.: HL 025, ampl.

Comment 2: Freq:1.336GHz Pmax:-52.62dBm RBW: 100 kHz



#### FCC RULES PART 15, SUBPART D

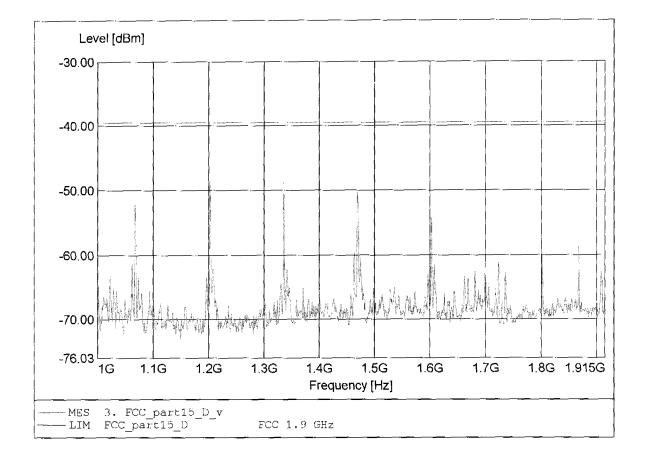
Approval Holder: NEC Philips Unified Solutions

EUT / ant. / Ch.: 3 IP DECT Basestation models / Ant. 0 / 1 / Ch.: 4 / 0 Model : AP200 NA/AP200S NA / AP200E NA / external Ant.

Test Site / Operator: ETS / Mr. Meng
Test Conditions: 25°C / 120 VAC (AC/DC-adaptor) Test Specification: Fully anechoic chamber / mode: Tx

Comment 1: Dist.: 1m, Ant.: HL 025, ampl.

Comment 2: Freq:1.336GHz Pmax:-48.51dBm RBW: 100 kHz

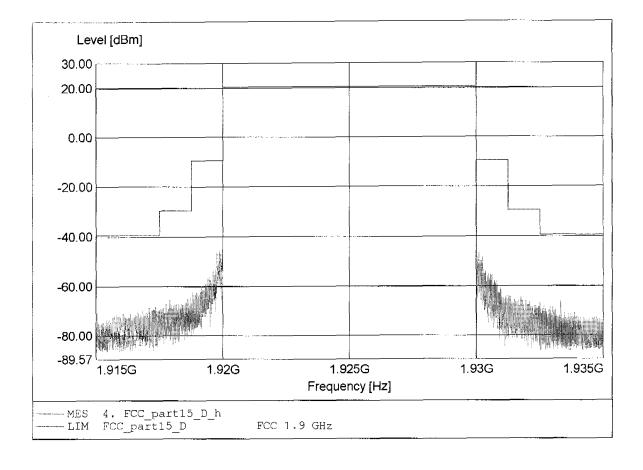


## FCC PART 15, SUBPART D (ANSI C63.17-1998, Subclause 6.1.6.3)

NEC Philips Unified Solutions Approval Holder:

EUT / ant. / Ch.: 3 IP DECT Basestation models / Ant. 0 / 1 / Ch.: 4 / 0 Model : AP200 NA/AP200S NA / AP200E NA / external Ant. / Module 0

Test Site / Operator: ETS / Mr. Meng
Test Conditions: 25°C / 120 VAC (AC/DC-adaptor)
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: 1m, Ant.: HL 025, ampl.
Comment 2: Freq:1.920GHz Pmax:-45.61dBm RBW: 10 kHz

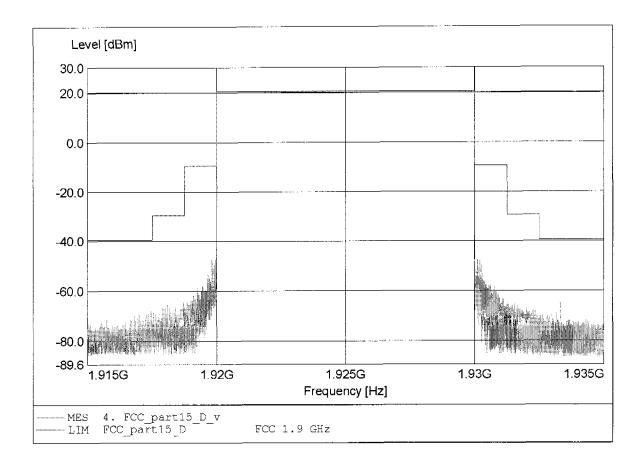


## FCC PART 15, SUBPART D (ANSI C63.17-1998, Subclause 6.1.6.3)

NEC Philips Unified Solutions Approval Holder:

EUT / ant. / Ch.: 3 IP DECT Basestation models / Ant. 0 / 1 / Ch.: 4 / 0 Model : AP200 NA/AP200S NA / AP200E NA / external Ant. / Module 0

Test Site / Operator: ETS / Mr. Meng
Test Conditions: 25°C / 120 VAC (AC/DC-adaptor)
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: 1m, Ant.: HL 025, ampl.
Comment 2: Freq:1.920GHz Pmax:-47.27dBm RBW: 10 kHz



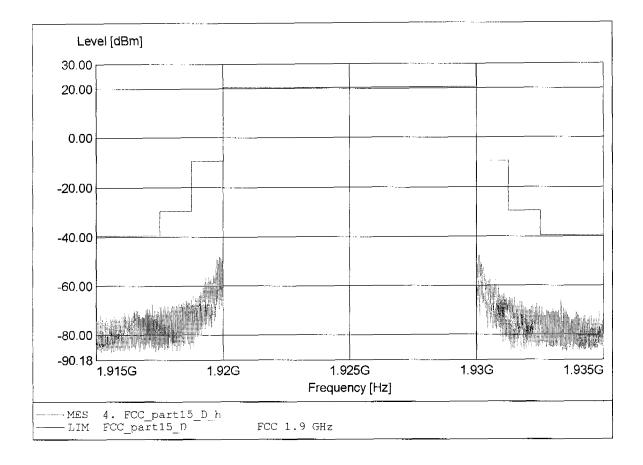
## FCC PART 15, SUBPART D (ANSI C63.17-1998, Subclause 6.1.6.3)

NEC Philips Unified Solutions Approval Holder:

EUT / ant. / Ch.: 3 IP DECT Basestation models / Ant. 0 / 1 / Ch.: 4 / 0 Model : AP200 NA/AP200S NA / AP200E NA / external Ant. / Module 1

Test Site / Operator: ETS / Mr. Meng
Test Conditions: 25°C / 120 VAC (AC/DC-adaptor) Test Specification: Fully anechoic chamber / mode: Tx Dist.: 1m, Ant.: HL 025, ampl. Comment 1:

Dist.: Im, Ant.: nh 023, campr.
Freq:1.930GHz Pmax:-47.68dBm RBW: 10 kHz Comment 2:



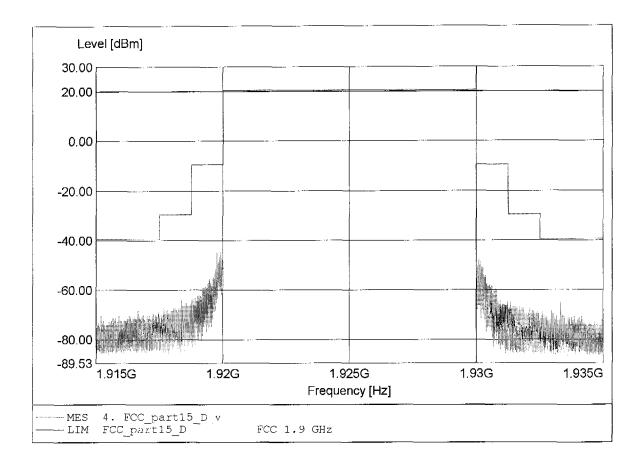
## FCC PART 15, SUBPART D (ANSI C63.17-1998, Subclause 6.1.6.3)

NEC Philips Unified Solutions Approval Holder:

EUT / ant. / Ch.: 3 IP DECT Basestation models / Ant. 0 / 1 / Ch.: 4 / 0 Model : AP200 NA/AP200S NA / AP200E NA / external Ant. / Module 1

Test Site / Operator: ETS / Mr. Meng
Test Conditions: 25°C / 120 VAC (AC/DC-adaptor)
Test Specification: Fully anechoic chamber / mode: Tx Fully anechoic chamber / mode: Tx Dist.: 1m, Ant.: HL 025, ampl. Comment 1:

Dist.: Im, Ant.: nb 023, ampr. Freq:1.920GHz Pmax:-44.67dBm RBW: 10 kHz Comment 2:



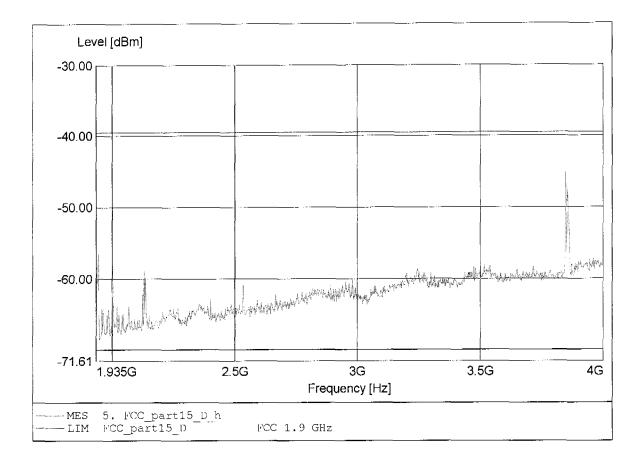
#### FCC RULES PART 15, SUBPART D

NEC Philips Unified Solutions Approval Holder:

EUT / ant. / Ch.: 3 IP DECT Basestation models / Ant. 0 / 1 / Ch.: 4 / 0 Model : AP200 NA/AP200S NA / AP200E NA / external Ant. / Module 0

Test Site / Operator: ETS / Mr. Meng
Test Conditions: 25°C / 120 VAC (AC/DC-adaptor) Test Specification: Fully anechoic chamber / mode: Tx Comment 1: Dist.: 1m, Ant.: HL 025, ampl.

Dist.: Im, Ant.: nb 023, ampl.
Freq:3.846GHz Pmax:-45.21dBm RBW: 100 kHz Comment 2:



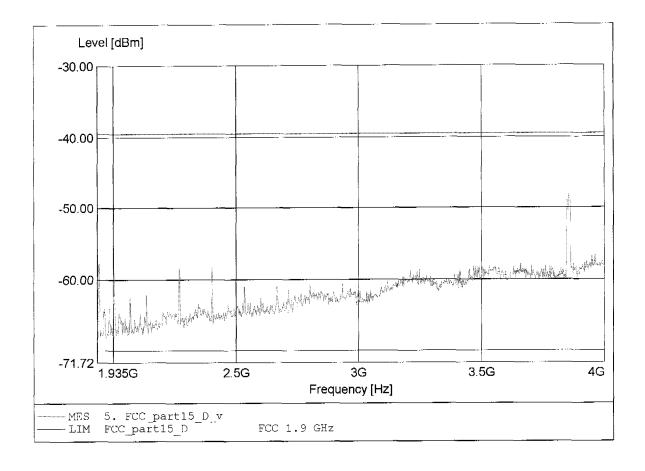
# FCC RULES PART 15, SUBPART D

NEC Philips Unified Solutions Approval Holder:

EUT / ant. / Ch.: 3 IP DECT Basestation models / Ant. 0 / 1 / Ch.: 4 / 0 Model : AP200 NA/AP200S NA / AP200E NA / external Ant. / Module 0

Test Site / Operator: ETS / Mr. Meng
Test Conditions: 25°C / 120 VAC (AC/DC-adaptor) Fully anechoic chamber / mode: Tx Test Specification: Dist.: 1m, Ant.: HL 025, ampl. Comment 1:

Freq:3.853GHz Pmax:-48.01dBm RBW: 100 kHz Comment 2:



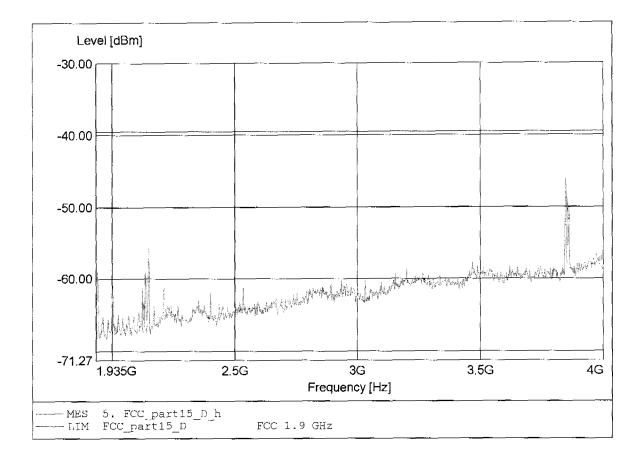
#### FCC RULES PART 15, SUBPART D

NEC Philips Unified Solutions Approval Holder:

EUT / ant. / Ch.: 3 IP DECT Basestation models / Ant. 0 / 1 / Ch.: 4 / 0 Model : AP200 NA/AP200S NA / AP200E NA / external Ant. / Module 1

Test Site / Operator: ETS / Mr. Meng
Test Conditions: 25°C / 120 VAC (AC/DC-adaptor)
Test Specification: Fully anechoic chamber / mode: Tx Fully anechoic chamber / mode: Tx Test Specification: Dist.: 1m, Ant.: HL 025, ampl. Comment 1:

Freq:3.846GHz Pmax:-46.07dBm RBW: 100 kHz Comment 2:

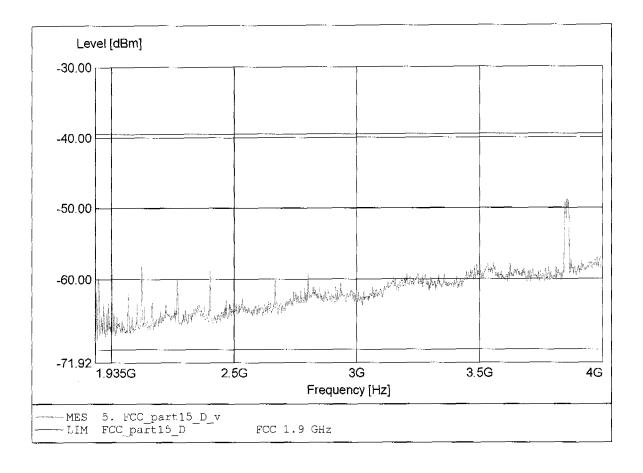


#### FCC RULES PART 15, SUBPART D

NEC Philips Unified Solutions Approval Holder:

EUT / ant. / Ch.: 3 IP DECT Basestation models / Ant. 0 / 1 / Ch.: 4 / 0 Model : AP200 NA/AP200S NA / AP200E NA / external Ant. / Module 1

Test Site / Operator: ETS / Mr. Meng
Test Conditions: 25°C / 120 VAC (AC/DC-adaptor)
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: 1m, Ant.: HL 025, ampl.
Comment 2: Freq:3.853GHz Pmax:-48.77dBm RBW: 100 kHz

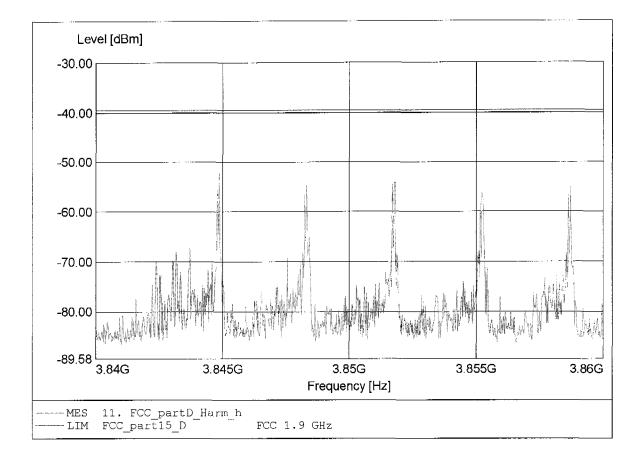


# FCC PART 15, SUBPART D (ANSI C63.17-1998, Subclause 6.1.6.3)

Approval Holder: NEC Philips Unified Solutions

EUT / ant. / Ch.: 3 IP DECT Basestation models / Ant. 0 / 1 / Ch.: 4 / 0 Model : AP200 NA/AP200S NA / AP200E NA / external Ant.

Test Site / Operator: ETS / Mr. Meng
Test Conditions: 25°C / 120 VAC (AC/DC-adaptor)
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: lm, Ant.: HL 025, ampl.
Comment 2: Freq:3.845GHz Pmax:-52.15dBm RBW:10 kHz

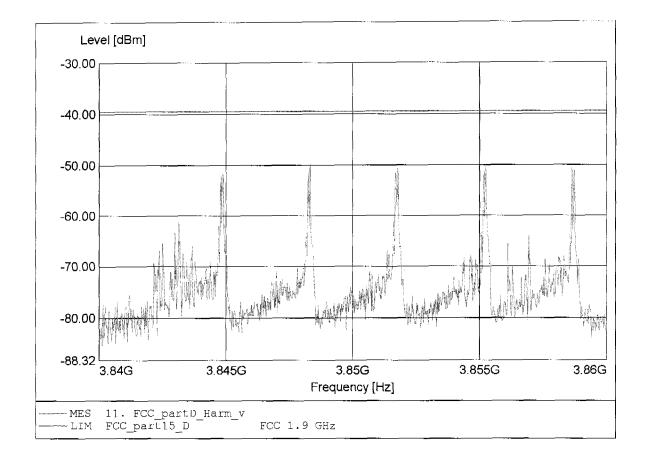


# FCC PART 15, SUBPART D (ANSI C63.17-1998, Subclause 6.1.6.3)

NEC Philips Unified Solutions Approval Holder:

EUT / ant. / Ch.: 3 IP DECT Basestation models / Ant. 0 / 1 / Ch.: 4 / 0 Model : AP200 NA/AP200S NA / AP200E NA / external Ant.

Test Site / Operator: ETS / Mr. Meng
Test Conditions: 25°C / 120 VAC (AC/DC-adaptor)
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: 1m, Ant.: HL 025, ampl.
Comment 2: Freq:3.848GHz Pmax:-49.60dBm RBW:10 kHz



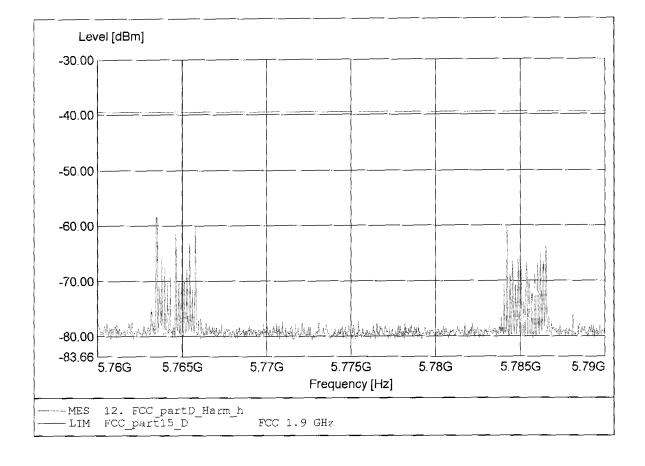
# FCC PART 15, SUBPART D (ANSI C63.17-1998, Subclause 6.1.6.3)

NEC Philips Unified Solutions Approval Holder:

EUT / ant. / Ch.: 3 IP DECT Basestation models / Ant. 0 / 1 / Ch.: 4 / 0 Model : AP200 NA/AP200S NA / AP200E NA / external Ant.

Test Site / Operator: ETS / Mr. Meng
Test Conditions: 25°C / 120 VAC (AC/DC-adaptor)
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: 1m, Ant.: HL 025, ampl.

Dist.: Im, Ant.: nh 523, ampr.
Freq:5.764GHz Pmax:-58.31dBm RBW:10 kHz Comment 2:



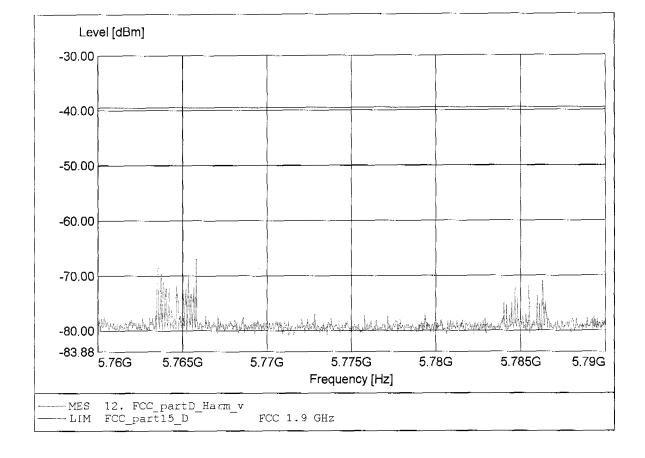
# FCC PART 15, SUBPART D (ANSI C63.17-1998, Subclause 6.1.6.3)

NEC Philips Unified Solutions Approval Holder:

EUT / ant. / Ch.: 3 IP DECT Basestation models / Ant. 0 / 1 / Ch.: 4 / 0 Model : AP200 NA/AP200S NA / AP200E NA / external Ant.

Test Site / Operator: ETS / Mr. Meng
Test Conditions: 25°C / 120 VAC (AC/DC-adaptor)
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: 1m, Ant.: HL 025, ampl.

Freq:5.766GHz Pmax:-66.99dBm RBW:10 kHz Comment 2:

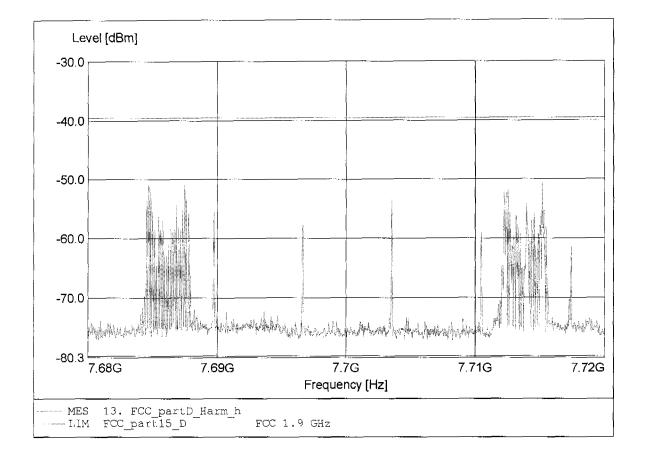


# FCC PART 15, SUBPART D (ANSI C63.17-1998, Subclause 6.1.6.3)

NEC Philips Unified Solutions Approval Holder:

EUT / ant. / Ch.: 3 IP DECT Basestation models / Ant. 0 / 1 / Ch.: 4 / 0 Model : AP200 NA/AP200S NA / AP200E NA / external Ant.

Test Site / Operator: ETS / Mr. Meng
Test Conditions: 25°C / 120 VAC (AC/DC-adaptor)
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: 1m, Ant.: HL 025, ampl.
Comment 2: Freq:7.715GHz Pmax:-50.72dBm RBW:10 kHz

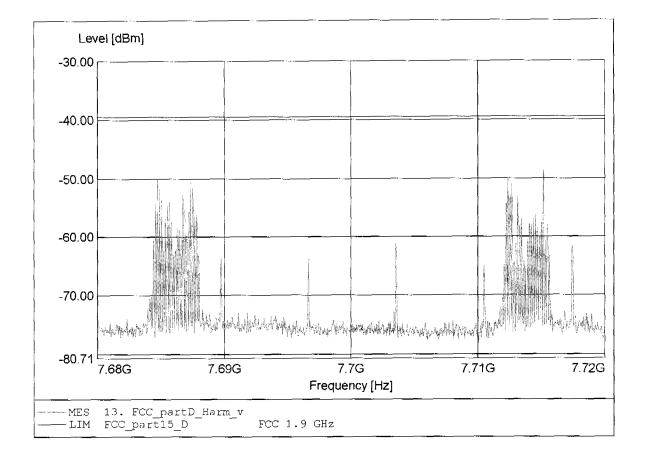


# FCC PART 15, SUBPART D (ANSI C63.17-1998, Subclause 6.1.6.3)

NEC Philips Unified Solutions Approval Holder:

EUT / ant. / Ch.: 3 IP DECT Basestation models / Ant. 0 / 1 / Ch.: 4 / 0 Model : AP200 NA/AP200S NA / AP200E NA / external Ant.

Test Site / Operator: ETS / Mr. Meng
Test Conditions: 25°C / 120 VAC (AC/DC-adaptor)
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: 1m, Ant.: HL 025, ampl.
Comment 2: Freq:7.715GHz Pmax:-48.55dBm RBW:10 kHz

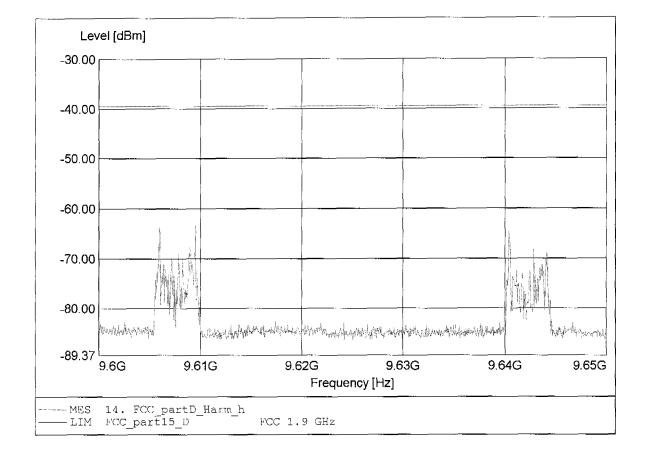


# FCC PART 15, SUBPART D (ANSI C63.17-1998, Subclause 6.1.6.3)

NEC Philips Unified Solutions Approval Holder:

EUT / ant. / Ch.: 3 IP DECT Basestation models / Ant. 0 / 1 / Ch.: 4 / 0 Model : AP200 NA/AP200S NA / AP200E NA / external Ant.

Test Site / Operator: ETS / Mr. Meng
Test Conditions: 25°C / 120 VAC (AC/DC-adaptor)
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: 1m, Ant.: HL 025, ampl.
Comment 2: Freq:9.610GHz Pmax:-63.28dBm RBW:10 kHz



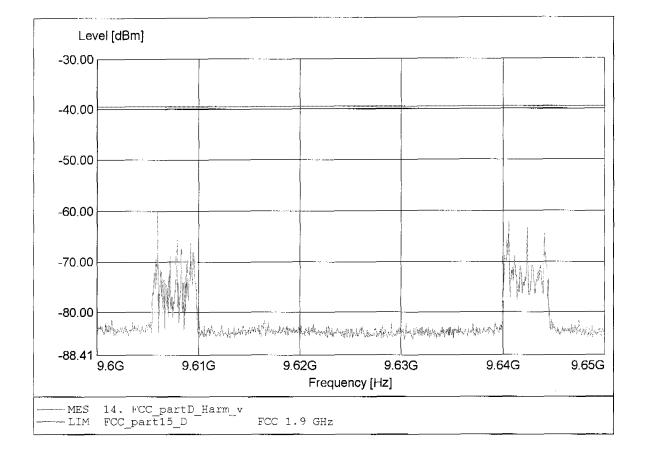
# FCC PART 15, SUBPART D (ANSI C63.17-1998, Subclause 6.1.6.3)

NEC Philips Unified Solutions Approval Holder:

EUT / ant. / Ch.: 3 IP DECT Basestation models / Ant. 0 / 1 / Ch.: 4 / 0 Model : AP200 NA/AP200S NA / AP200E NA / external Ant.

Test Site / Operator: ETS / Mr. Meng
Test Conditions: 25°C / 120 VAC (AC/DC-adaptor)
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: 1m, Ant.: HL 025, ampl.

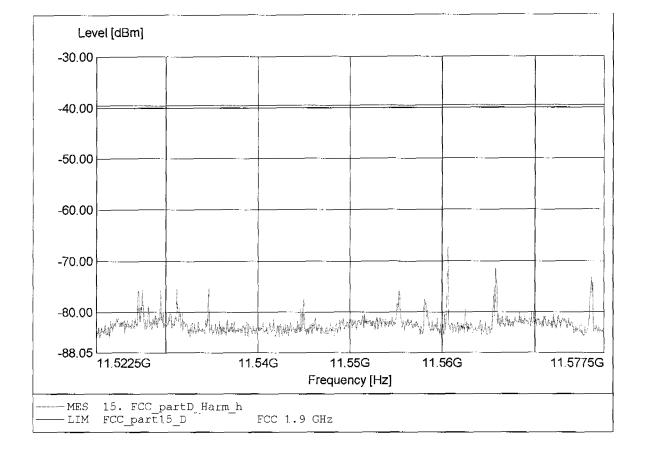
Dist.: lm, Ant.: nL 023, ampl.
Freq:9.606GHz Pmax:-60.08dBm RBW:10 kHz Comment 2:



# FCC PART 15, SUBPART D (ANSI C63.17-1998, Subclause 6.1.6.3)

Approval Holder: NEC Philips Unified Solutions
EUT / ant. / Ch.: 3 IP DECT Basestation models / Ant. 0 / 1 / Ch.: 4 / 0
Model : AP200 NA/AP200S NA / AP200F NA / OUT.

Test Site / Operator: ETS / Mr. Meng
Test Conditions: 25°C / 120 VAC (AC/DC-adaptor)
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: 1m, Ant.: HL 025, ampl.
Comment 2: Freq:11.561GHz Pmax:-67.32dBm RBW:10 kHz

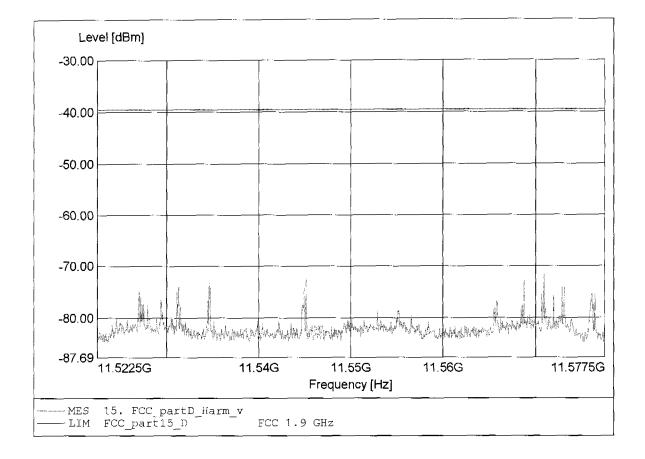


# FCC PART 15, SUBPART D (ANSI C63.17-1998, Subclause 6.1.6.3)

NEC Philips Unified Solutions Approval Holder:

EUT / ant. / Ch.: 3 IP DECT Basestation models / Ant. 0 / 1 / Ch.: 4 / 0 Model : AP200 NA/AP200S NA / AP200E NA / external Ant.

Test Site / Operator: ETS / Mr. Meng
Test Conditions: 25°C / 120 VAC (AC/DC-adaptor)
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: lm, Ant.: HL 025, ampl.
Comment 2: Freq:11.571GHz Pmax:-70.76dBm RBW:10 kHz



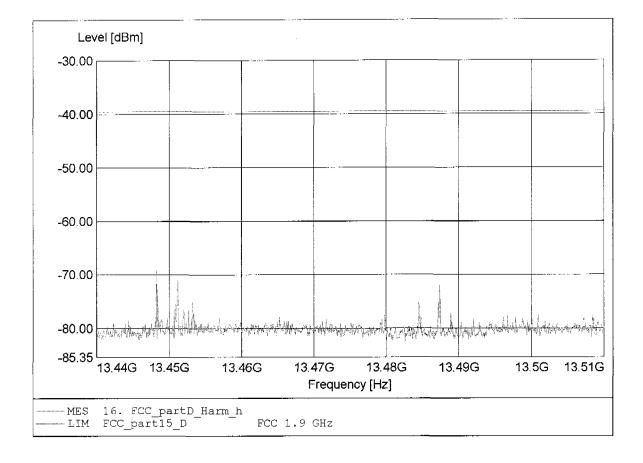
# FCC PART 15, SUBPART D (ANSI C63.17-1998, Subclause 6.1.6.3)

NEC Philips Unified Solutions Approval Holder:

EUT / ant. / Ch.: 3 IP DECT Basestation models / Ant. 0 / 1 / Ch.: 4 / 0 Model : AP200 NA/AP200S NA / AP200E NA / external Ant.

Test Site / Operator: ETS / Mr. Meng
Test Conditions: 25°C / 120 VAC (AC/DC-adaptor)
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: 1m, Ant.: HL 025, ampl.

Freq:13.448GHz Pmax:-69.22dBm RBW:10 kHz Comment 2:



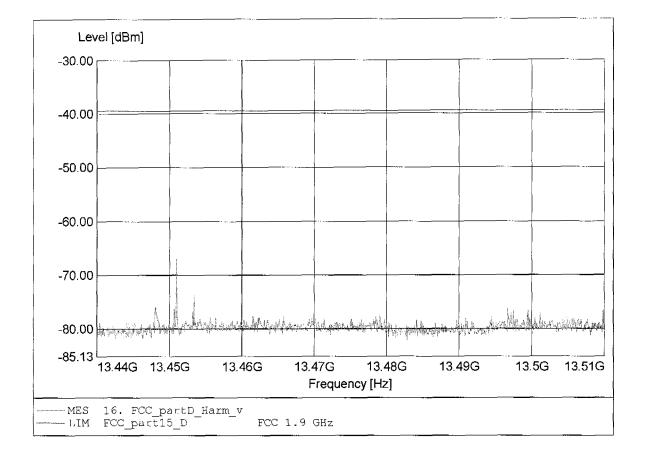
# FCC PART 15, SUBPART D (ANSI C63.17-1998, Subclause 6.1.6.3)

NEC Philips Unified Solutions Approval Holder:

EUT / ant. / Ch.: 3 IP DECT Basestation models / Ant. 0 / 1 / Ch.: 4 / 0 Model : AP200 NA/AP200S NA / AP200E NA / external Ant.

Test Site / Operator: ETS / Mr. Meng
Test Conditions: 25°C / 120 VAC (AC/DC-adaptor) Test Specification: Fully anechoic chamber / mode: Tx Comment 1:

Dist.: 1m, Ant.: HL 025, ampl. Freq:13.451GHz Pmax:-67.04dBm RBW:10 kHz Comment 2:

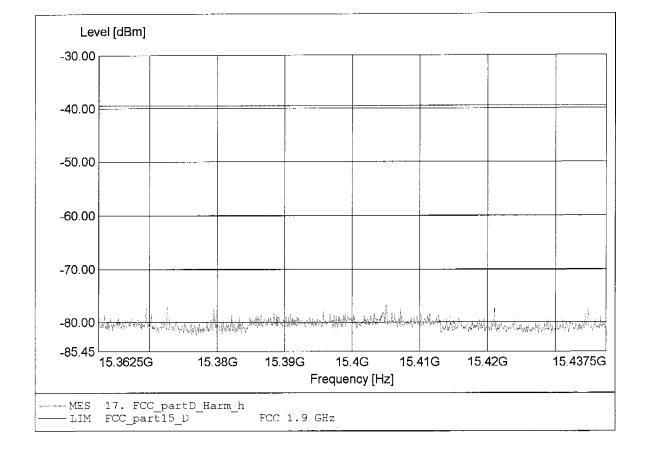


# FCC PART 15, SUBPART D (ANSI C63.17-1998, Subclause 6.1.6.3)

NEC Philips Unified Solutions Approval Holder:

EUT / ant. / Ch.: 3 IP DECT Basestation models / Ant. 0 / 1 / Ch.: 4 / 0 Model : AP200 NA/AP200S NA / AP200E NA / external Ant.

Test Site / Operator: ETS / Mr. Meng
Test Conditions: 25°C / 120 VAC (AC/DC-adaptor) Test Conditions.
Test Specification: Fully anechoic chamber / mode. In
Comment 1: Dist.: 1m, Ant.: HL 025, ampl.
Freq:15.421GHz Pmax:-76.56dBm RBW:10 kHz



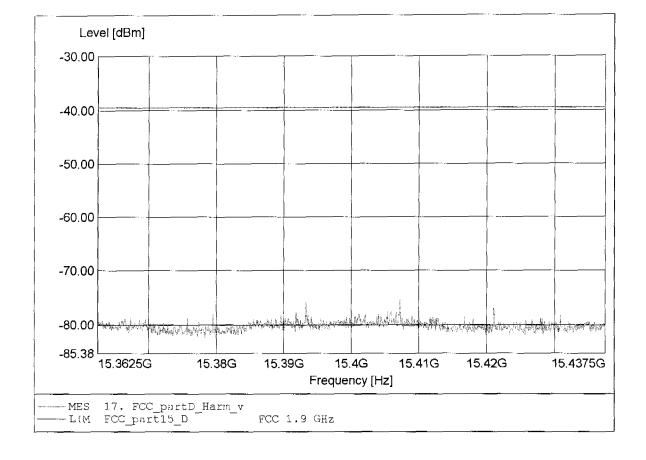
# FCC PART 15, SUBPART D (ANSI C63.17-1998, Subclause 6.1.6.3)

NEC Philips Unified Solutions Approval Holder:

EUT / ant. / Ch.: 3 IP DECT Basestation models / Ant. 0 / 1 / Ch.: 4 / 0 Model : AP200 NA/AP200S NA / AP200E NA / external Ant.

Test Site / Operator: ETS / Mr. Meng
Test Conditions: 25°C / 120 VAC (AC/DC-adaptor) Fully anechoic chamber / mode: Tx Test Specification: Dist.: lm, Ant.: HL 025, ampl. Comment 1:

Freq:15.407GHz Pmax:-75.29dBm RBW:10 kHz Comment 2:

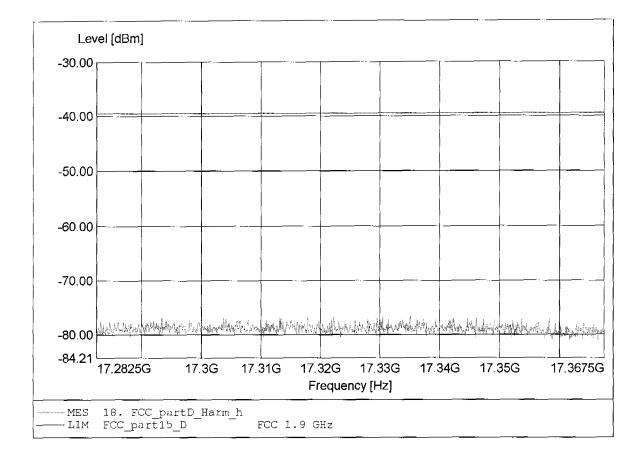


# FCC PART 15, SUBPART D (ANSI C63.17-1998, Subclause 6.1.6.3)

NEC Philips Unified Solutions Approval Holder:

EUT / ant. / Ch.: 3 IP DECT Basestation models / Ant. 0 / 1 / Ch.: 4 / 0 Model : AP200 NA/AP200S NA / AP200E NA / external Ant.

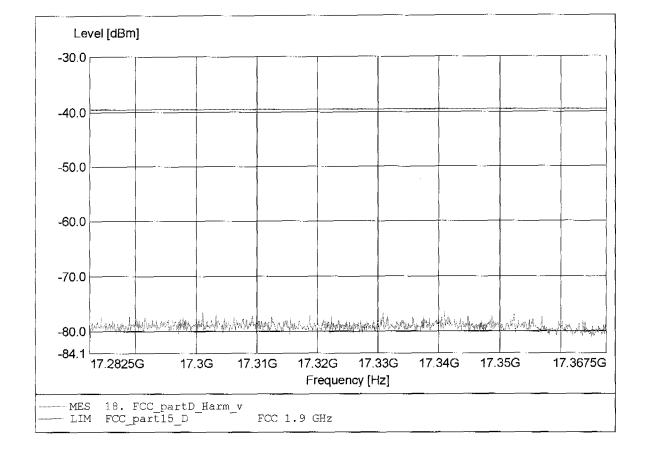
Test Site / Operator: ETS / Mr. Meng
Test Conditions: 25°C / 120 VAC (AC/DC-adaptor)
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: lm, Ant.: HL 025, ampl.
Comment 2: Freq:17.335GHz Pmax:-76.32dBm RBW:10 kHz



# FCC PART 15, SUBPART D (ANSI C63.17-1998, Subclause 6.1.6.3)

Approval Holder: NEC Philips Unified Solutions
EUT / ant. / Ch.: 3 IP DECT Basestation models / Ant. 0 / 1 / Ch.: 4 / 0
Model : AP200 NA/AP200S NA / AP200E NA / CULTURE AP200E NA / CULTU

Test Site / Operator: ETS / Mr. Meng
Test Conditions: 25°C / 120 VAC (AC/DC-adaptor)
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: 1m, Ant.: HL 025, ampl.
Comment 2: Freq:17.341GHz Pmax:-76.50dBm RBW:10 kHz

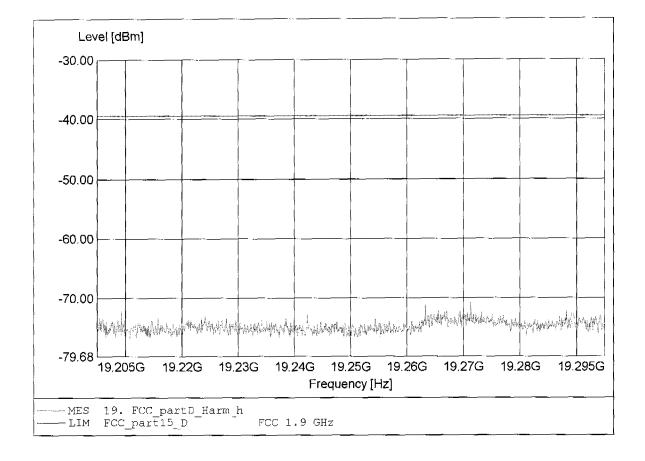


# FCC PART 15, SUBPART D (ANSI C63.17-1998, Subclause 6.1.6.3)

NEC Philips Unified Solutions Approval Holder:

EUT / ant. / Ch.: 3 IP DECT Basestation models / Ant. 0 / 1 / Ch.: 4 / 0 Model : AP200 NA/AP200S NA / AP200E NA / external Ant.

Test Site / Operator: ETS / Mr. Meng
Test Conditions: 25°C / 120 VAC (AC/DC-adaptor)
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: lm, Ant.: HL 025, ampl.
Comment 2: Freq:19.271GHz Pmax:-70.81dBm RBW:10 kHz

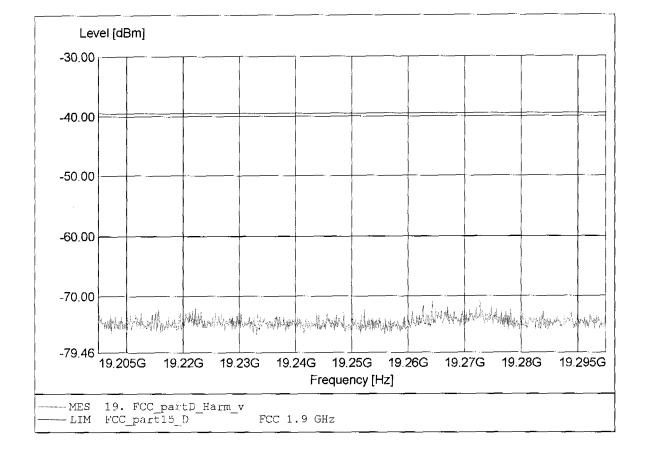


# FCC PART 15, SUBPART D (ANSI C63.17-1998, Subclause 6.1.6.3)

NEC Philips Unified Solutions Approval Holder:

EUT / ant. / Ch.: 3 IP DECT Basestation models / Ant. 0 / 1 / Ch.: 4 / 0 Model : AP200 NA/AP200S NA / AP200E NA / external Ant.

Model:
Test Site / Operator: ETS / Mr. Meng
Test Conditions: 25°C / 120 VAC (AC/DC-adaptor)
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: 1m, Ant.: HL 025, ampl.
Comment 2: Freq:19.273GHz Pmax:-70.77dBm RBW:10 kHz





# Appendix S

Frame period



# FCC Part 15.323(e.1) Frame repetition

# Testprocedure ANSI 63.17-1998 6.2.2 UCPS

EUT

3 IP DECT Basestation models

Model

AP200 NA / AP200S NA / AP200E NA

Applicant

**NEC Philips Unified Solutions** 

Temperature

23°C

Test Site / Operator Test Specification ETS Reichenwalde 6.2.2 Frame repetition

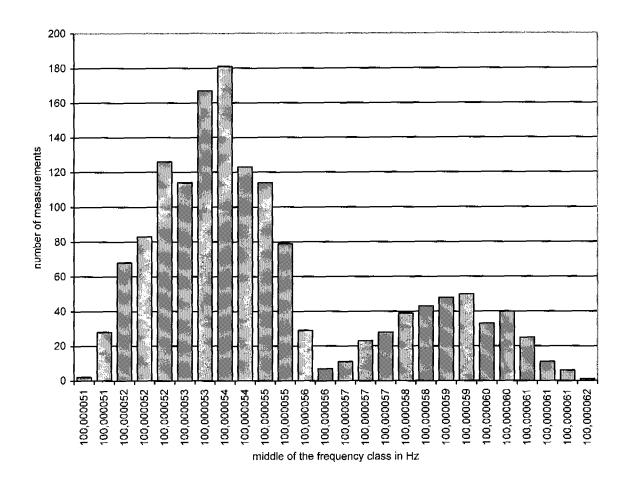
Width of the

frequency class Mean 0,000000 Hz 100,000055 Hz

0,000003

Deviation
Stability in ppm
Test result

0,077391 ppm Verdict = PASS





# FCC Part 15.323(e.4) Frame Period and jitter

# Testprocedure ANSI 63.17-1998 6.2.3 UCPS

EUT

3 IP DECT Basestation models

Model

AP200 NA / AP200S NA / AP200E NA

Applicant

NEC Philips Unified Solutions

Temperature

23°C

Test Site / Operator

ETS Reichenwalde

Test Specification

6.2.3 Frame Period and jitter

Width of the

time class

0,004433 μs

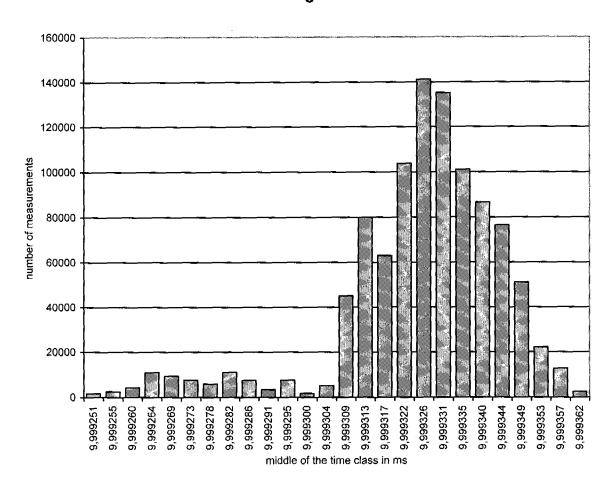
Mean

9,999326 ms

Deviation

0,000018

Max-Min Test result 0,110827 μs Verdict = PASS





# Appendix T

Frequency stability



# **Testprocedure ANSI 63.17-1998 6.2.1**

EUT 3 IP DECT Basestation models

Model AP200 NA / AP200S NA / AP200E NA

Applicant NEC Philips Unified Solutions

Temperature 20 °C

Test Site / Operator ETS Reichenwalde
Test Specification ETS Reichenwalde
6.2.1 Frequency stability

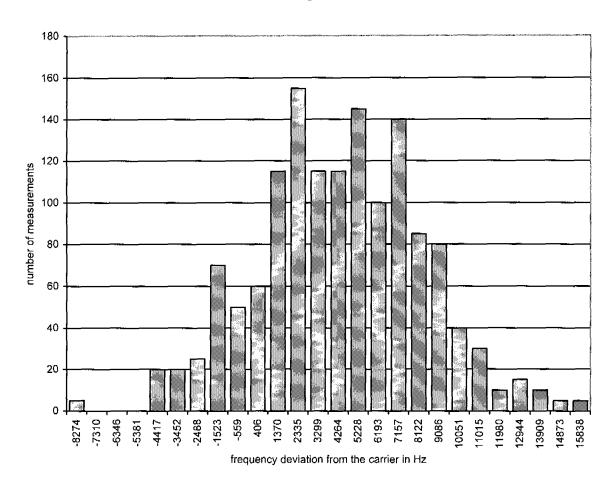
Power supply Vnom

Frequency of carrier 1924,996345 MHz Measured mean 1924,996345 MHz

Stability (supply temp) reference Result Verdict = PASS

Stability over time fmax: 5,97 ppm fmin: 6,56 ppm

Result Verdict = PASS





#### **Testprocedure ANSI 63.17-1998 6.2.1**

EUT

3 IP DECT Basestation models

Model

AP200 NA / AP200S NA / AP200E NA

Applicant

**NEC Philips Unified Solutions** 

Temperature

20 °C

Test Site / Operator Test Specification ETS Reichenwalde 6.2.1 Frequency stability

Power supply

Vmin

Frequency of carrier Measured mean

1924,996345 MHz 1924,996190 MHz

Stability (supply temp)
Result

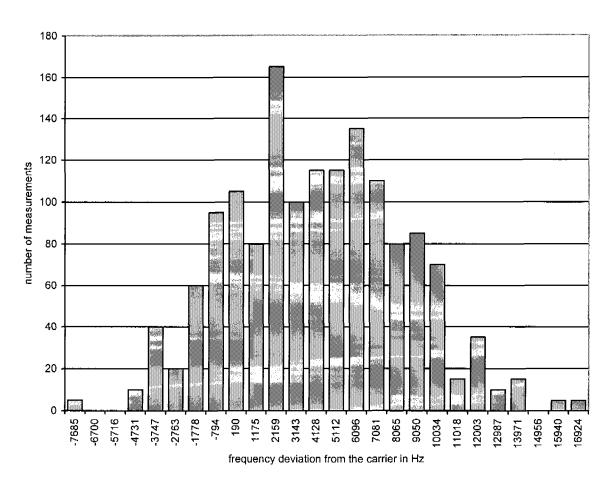
-2,18 ppm Verdict = PASS

Stability over time

fmax: 6,62 ppm fmin: 6,17 ppm

Result

Verdict = PASS





# **Testprocedure ANSI 63.17-1998 6.2.1**

EUT

3 IP DECT Basestation models

Model

AP200 NA / AP200S NA / AP200E NA

Applicant

NEC Philips Unified Solutions

Temperature

20 °C

Test Site / Operator

ETS Reichenwalde

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Test Specification

6.2.1 Frequency stability

Power supply

Vmax

Frequency of carrier Measured mean 1924,996345 MHz 1924,996422 MHz

Stability (supply temp)
Result

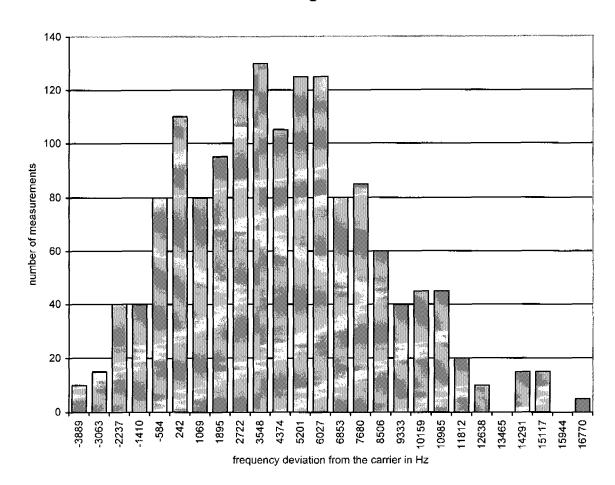
-2,30 ppm Verdict = PASS

Stability over time

fmax: 6,41 ppm fmin: 4,32 ppm

Result

Verdict = PASS





#### **Testprocedure ANSI 63.17-1998 6.2.1**

EUT

3 IP DECT Basestation models

Model

AP200 NA / AP200S NA / AP200E NA

Applicant

**NEC Philips Unified Solutions** 

Temperature

0°C

Test Site / Operator

ETS Reichenwalde

Test Specification

6.2.1 Frequency stability

Power supply

Vnom

Frequency of carrier Measured mean

1924,996345 MHz 1925,005375 MHz

Stability (supply temp)
Result

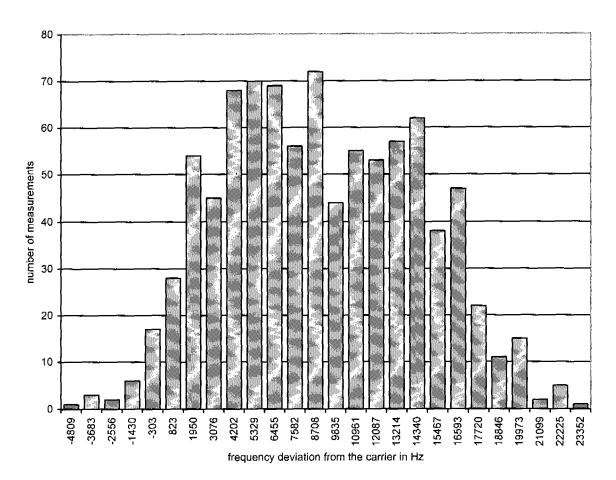
-4,69 ppm Verdict = PASS

Stability over time

fmax: 7,44 ppm fmin: 7,19 ppm

Result

Verdict = PASS





# Testprocedure ANSI 63.17-1998 6.2.1

EUT

3 IP DECT Basestation models

Model

AP200 NA / AP200S NA / AP200E NA

Applicant

**NEC Philips Unified Solutions** 

Temperature

45 °C

Test Site / Operator

ETS Reichenwalde

Test Specification

6.2.1 Frequency stability

Power supply

Vnom

Frequency of carrier Measured mean

1924,996345 MHz 1924,983553 MHz

Stability (supply temp)
Result

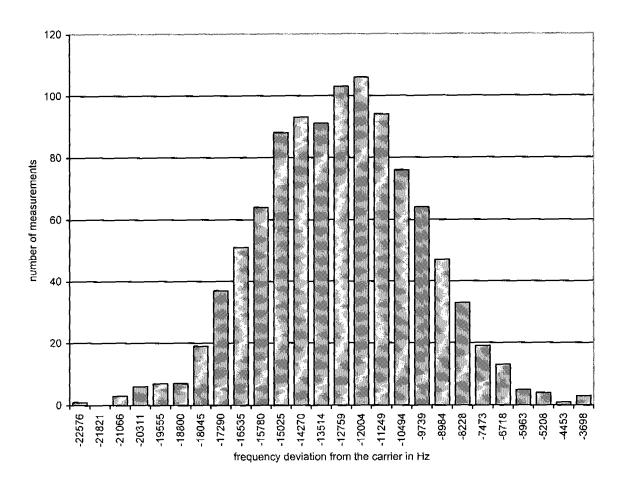
6,65 ppm Verdict = PASS

Stability over time

fmax: 4,72 ppm fmin: 5,08 ppm

Result

Verdict = PASS





# Appendix U

Receiver spurious emissions

Registration number: G0M20611-1021-C-3

Appendix U