

## **Appendix B**

Coordination with fixed microwave service

# UTAM, Inc.

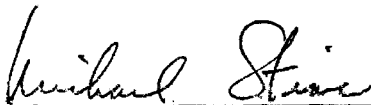
## SECTION 15.307(b) AFFIDAVIT

I, Michael Stima, Managing Director of UTAM, Inc., hereby swear and affirm that:

KIRK Telecom, A/S

is a participating member of UTAM, Inc. in good standing for purposes of Section 15.307(b) of the FCC rules.

Subscribed to and sworn this 12th day of July, 2005



Michael Stima, Managing Director  
UTAM, Inc.  
1170 U.S. Hwy 22  
P.O. Box 8126  
Bridgewater, New Jersey 08807  
Tel: (508) 526-3636

Affidavit #: KIRK071205

## Appendix C

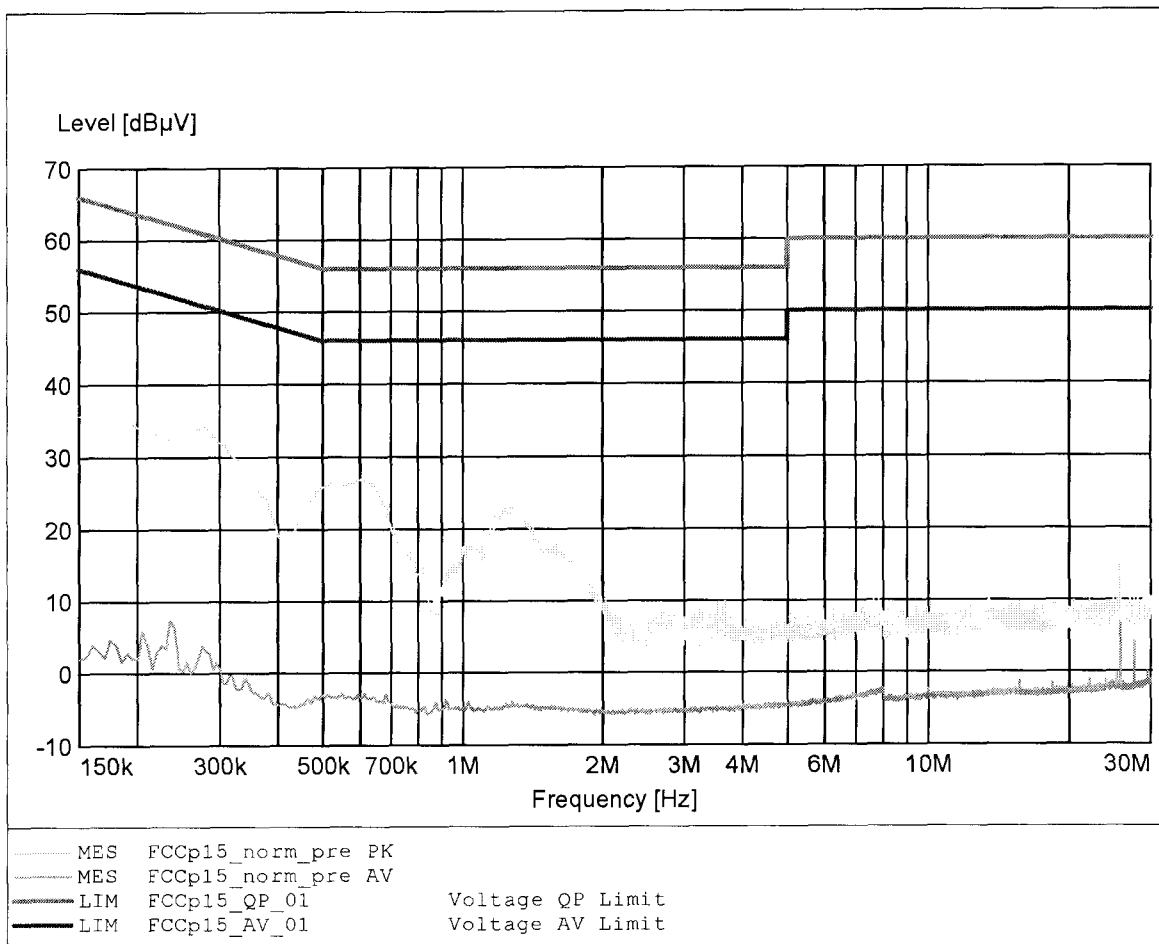
Reference to Subpart B

## Appendix D

Conducted limits AC Power line

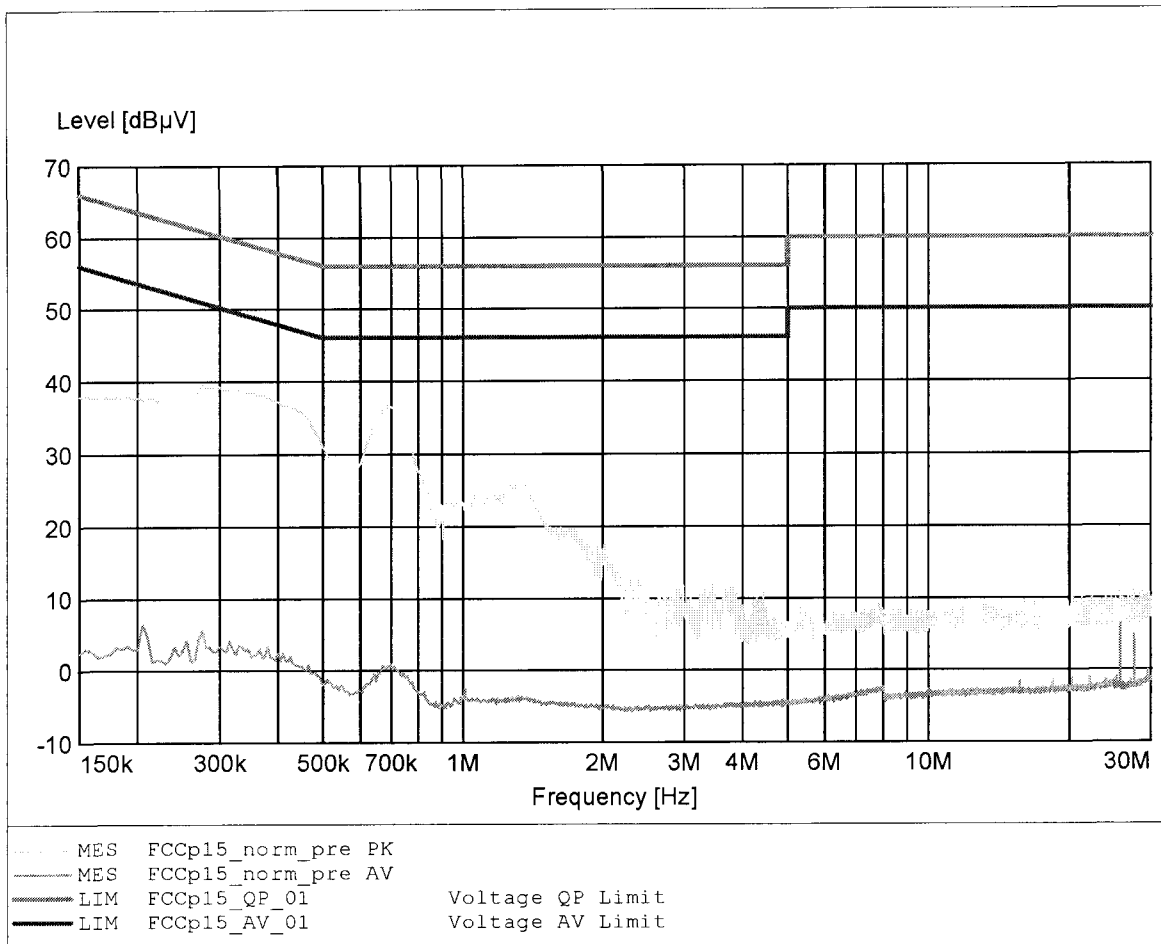
**EMI voltage test in the ac-mains according to FCC part 15**

EUT: KIRK UPCS (DECT based) Handset (PP)  
 Manufacturer: KIRK telecom A/S  
 Operating Condition: Unom: 120 VAC (AC/DC-adaptor), Tnom: 23°C  
 Test Site: ETS  
 Operator: Mr. Marquardt  
 Test Specification: V-Network: ESH2-Z5 (L1)  
 Comment: model: PP5I80 1G9 mode: charging



**EMI voltage test in the ac-mains according to FCC part 15**

EUT: KIRK UPCS (DECT based) Handset (PP)  
 Manufacturer: KIRK telecom A/S  
 Operating Condition: Unom: 120 VAC (AC/DC adaptor), Tnom: 23°C  
 Test Site: ETS  
 Operator: Mr. Marquardt  
 Test Specification: V-Network: ESH2-Z5 (N)  
 Comment: model: PP5I80 1G9 mode: charging



## Appendix E

Emission bandwidth

### FCC Part 15.303(b) Emission bandwidth

#### Testprocedure ANSI 63.17-1998 6.1.3 UPCS

EUT KIRK UPCS (DECT based) Handset (PP)  
 Model PP5180 1G9  
 Applicant KIRK telecom A/S  
 Temperature 23°C  
 Test Site / Operator ETS Reichenwalde  
 Test Specification 6.1.3 Emission bandwidth

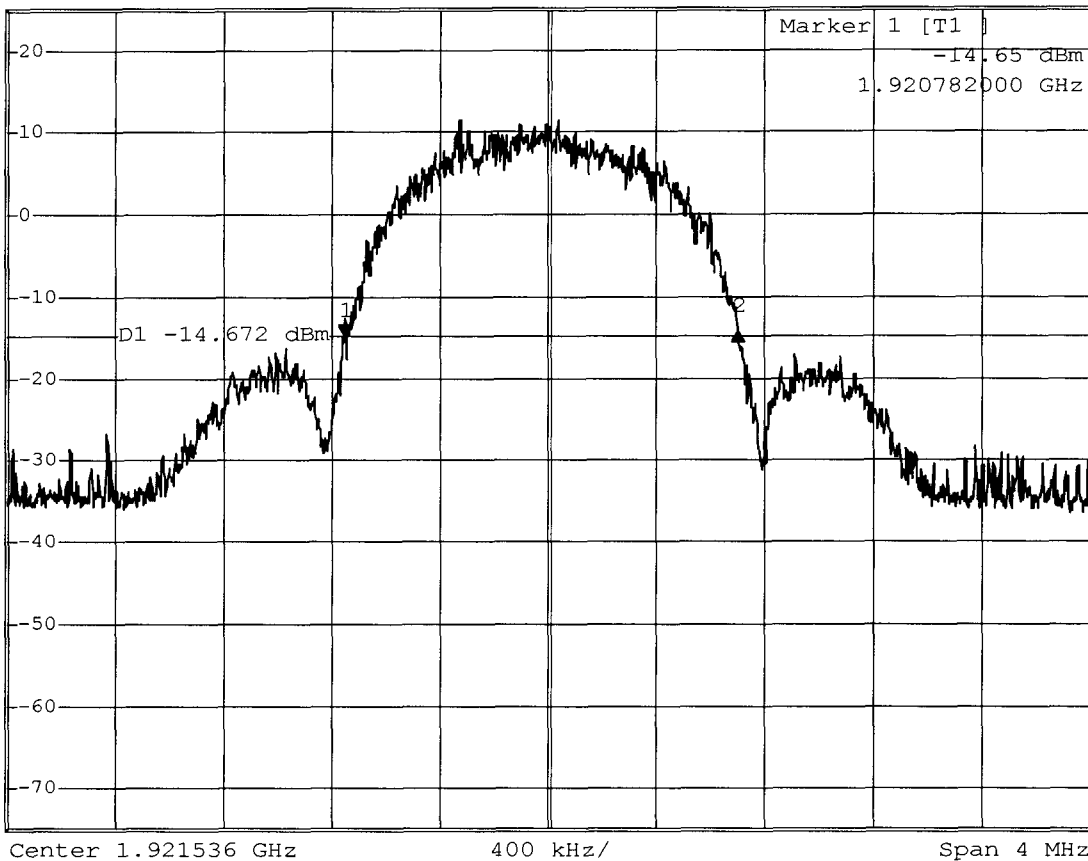
Measured Bandwidth Emission Bandwidth = 1.468MHz  
 Max. Permitted Power Limit = 2.5 MHz

Test result Verdict = PASS



Emission Bandwidth

\*RBW 10 kHz Delta 2 [T1 ]  
 \*VBW 30 kHz 0.36 dB  
 Ref 25 dBm \*Att 50 dB SWT 40 ms 1.458000000 MHz



Comment: Ansi C63.17-1998 6.1.3  
 Date: 8.MAR.2007 15:12:41

Measurement diagram



**Additional values as required for the detailed threshold monitoring bandwidth test  
ANSI C63.17-1988 7.4.2**

-6 dB points

Lower frequency : 1921.07MHz  
Higher frequency : 1921.974MHz

-12 dB points

Lower frequency : 1920.942MHz  
Higher frequency : 1922.14MHz

### FCC Part 15.303(b) Emission bandwidth

#### Testprocedure ANSI 63.17-1998 6.1.3 UPCS

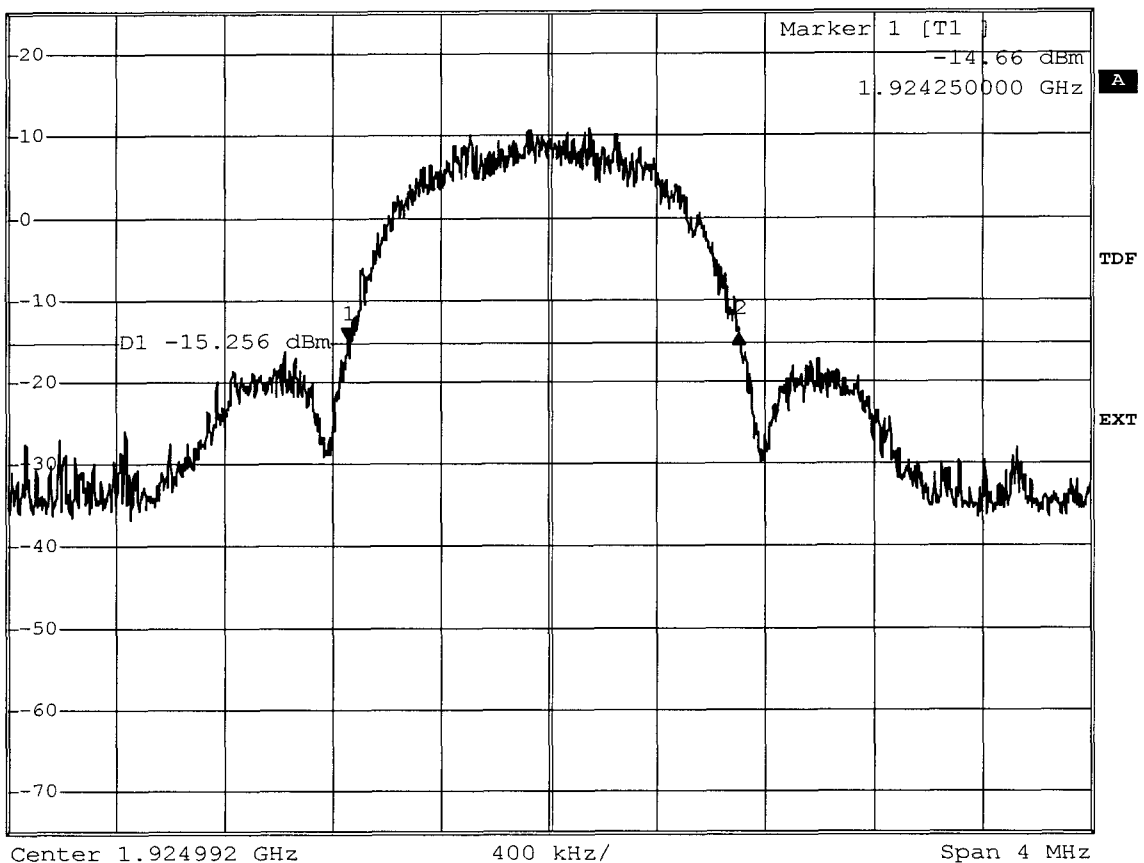
EUT KIRK UPCS (DECT based) Handset (PP)  
 Model PP5180 1G9  
 Applicant KIRK telecom A/S  
 Temperature 23°C  
 Test Site / Operator ETS Reichenwalde  
 Test Specification 6.1.3 Emission bandwidth

Measured Bandwidth Emission Bandwidth = 1.448MHz  
 Max. Permitted Power Limit = 2.5 MHz

Test result Verdict = PASS



Emission Bandwidth \*RBW 10 kHz Delta 2 [T1 ]  
 \*VBW 30 kHz 0.46 dB  
 Ref 25 dBm \*Att 50 dB SWT 40 ms 1.448000000 MHz



Comment: Ansi C63.17-1998 6.1.3  
 Date: 8.MAR.2007 15:22:08

Measurement diagram

**Additional values as required for the detailed threshold monitoring bandwidth test  
ANSI C63.17-1988 7.4.2**

-6 dB points

Lower frequency : 1924.518MHz  
Higher frequency : 1925.402MHz

-12 dB points

Lower frequency : 1924.388MHz  
Higher frequency : 1925.566MHz

### FCC Part 15.303(b) Emission bandwidth

#### Testprocedure ANSI 63.17-1998 6.1.3 UPCS

EUT KIRK UPCS (DECT based) Handset (PP)  
 Model PP5180 1G9  
 Applicant KIRK telecom A/S  
 Temperature 23°C  
 Test Site / Operator ETS Reichenwalde  
 Test Specification 6.1.3 Emission bandwidth

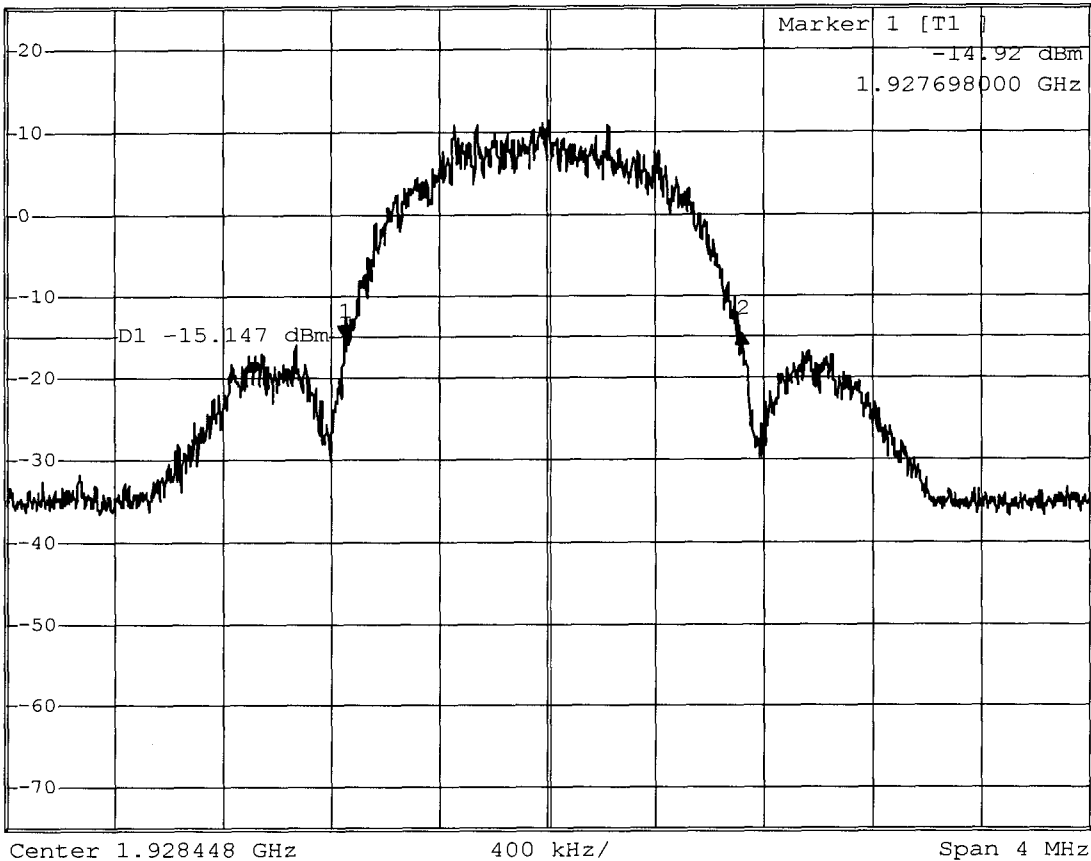
Measured Bandwidth Emission Bandwidth = 1.472MHz  
 Max. Permitted Power Limit = 2.5 MHz

Test result Verdict = PASS



Emission Bandwidth

\*RBW 10 kHz Delta 2 [T1 ]  
 \*VBW 30 kHz 0.03 dB  
 Ref 25 dBm \*Att 50 dB SWT 40 ms 1.472000000 MHz



Comment: Ansi C63.17-1998 6.1.3  
 Date: 8.MAR.2007 15:30:05

Measurement diagram

**Additional values as required for the detailed threshold monitoring bandwidth test  
ANSI C63.17-1988 7.4.2**

**-6 dB points**

Lower frequency : 1928.026MHz  
Higher frequency : 1928.892MHz

**-12 dB points**

Lower frequency : 1927.854MHz  
Higher frequency : 1929.038MHz

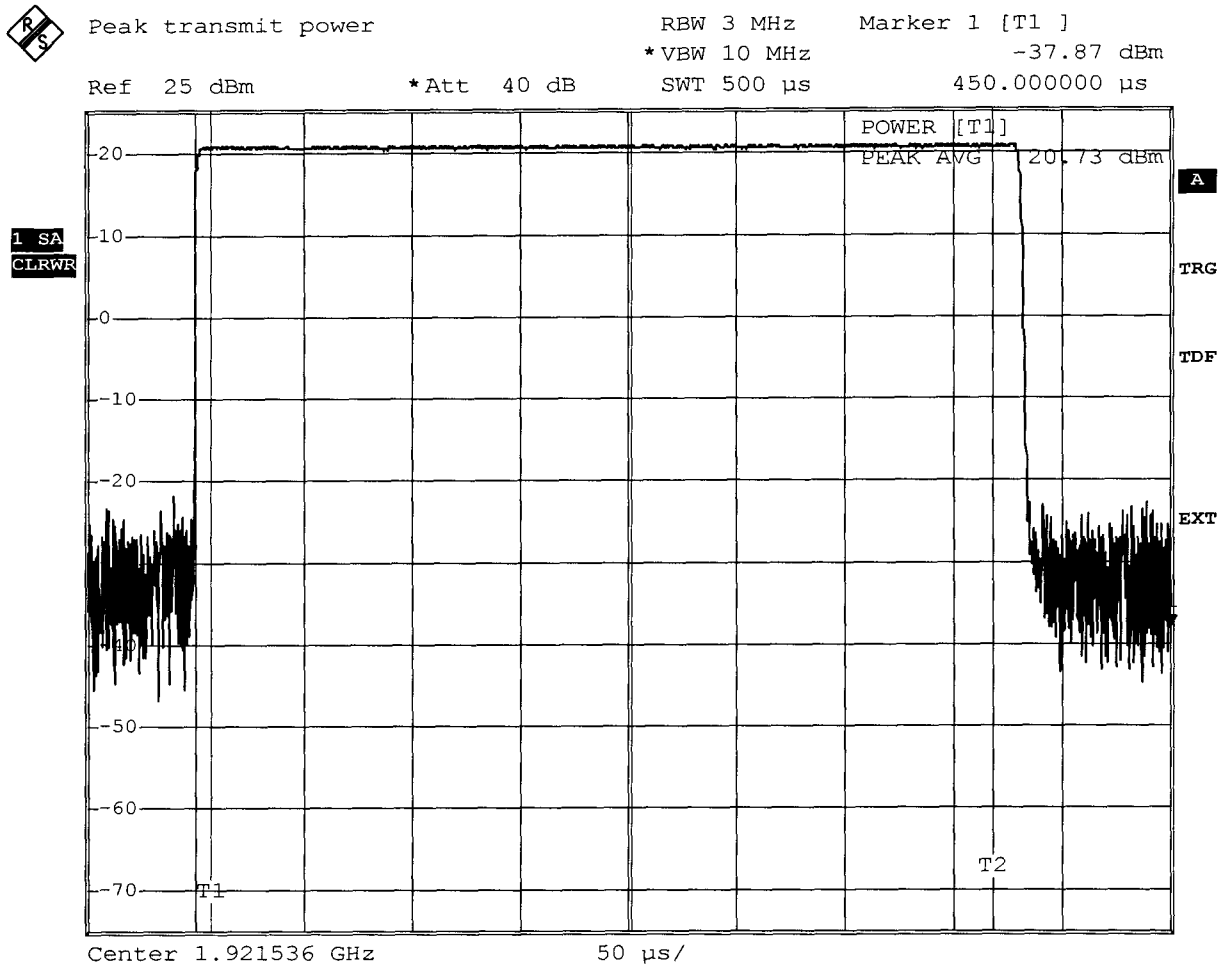
## Appendix F

Peak Transmit Power

# FCC Part 15.319(c) Peak Transmit Power limit

## Testprocedure ANSI 63.17-1998 6.1.2 UPCS

EUT	KIRK UPCS (DECT based) Handset (PP)
Model	PP5180 1G9
Applicant	KIRK telecom A/S
Temperature	23°C
Test Site / Operator	ETS Reichenwalde
Test Specification	6.1.2 Peak transmit power
Supply	
Measured Bandwidth	1.472MHz
Max. Permitted Power	20,83 dBm
Measured Power	20,73 dBm
Test result	Verdict = PASS



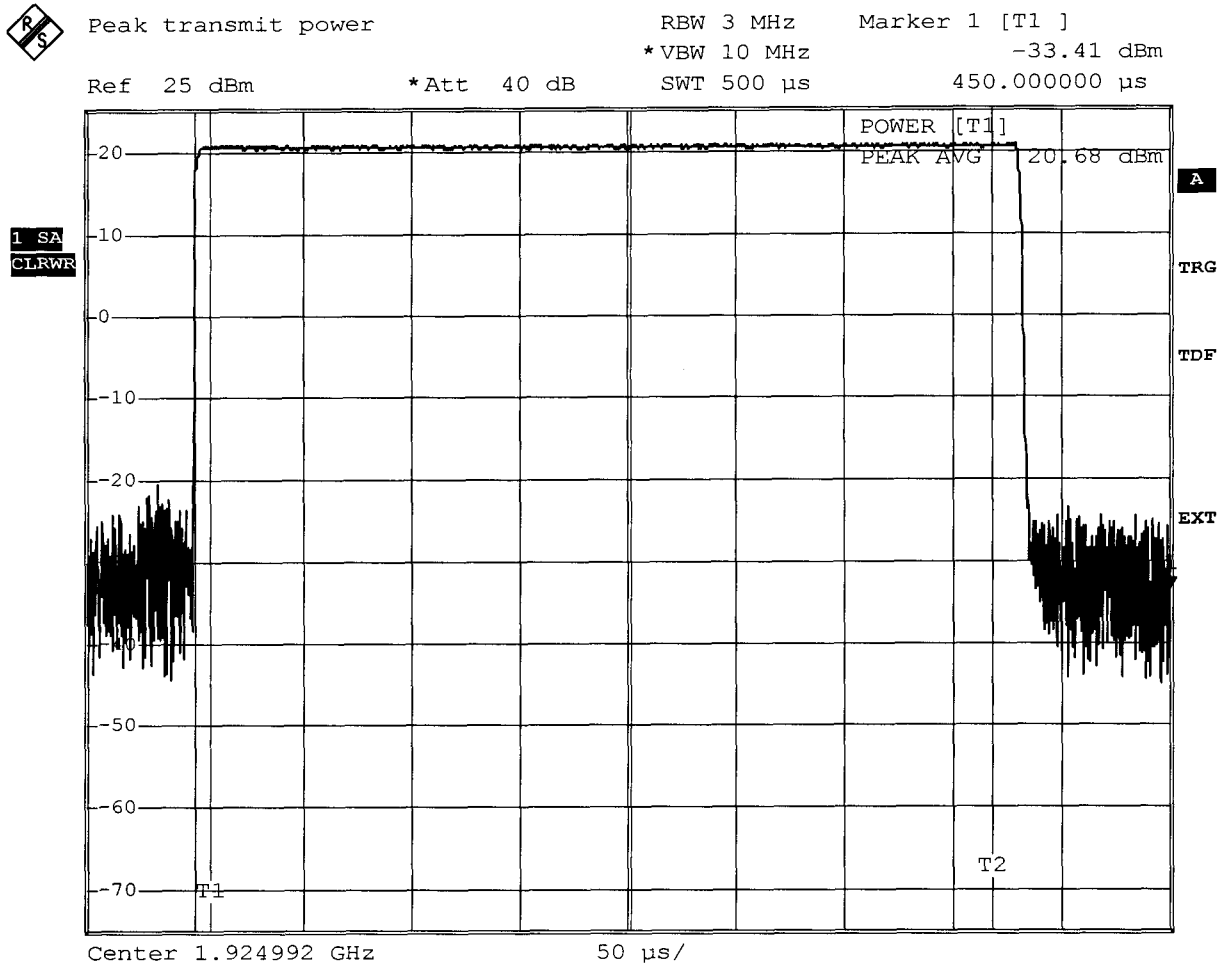
Comment: Ansi C63.17-1998 6.1.2  
Date: 9.MAR.2007 08:16:55

Measurement diagram

### FCC Part 15.319(c) Peak Transmit Power limit

#### Testprocedure ANSI 63.17-1998 6.1.2 UPCS

EUT	KIRK UPCS (DECT based) Handset (PP)
Model	PP5I80 1G9
Applicant	KIRK telecom A/S
Temperature	23°C
Test Site / Operator	ETS Reichenwalde
Test Specification	6.1.2 Peak transmit power
Supply	
Measured Bandwidth	1.472MHz
Max. Permitted Power	20,83 dBm
Measured Power	20,68 dBm
Test result	Verdict = PASS



Comment: Ansi C63.17-1998 6.1.2  
Date: 9.MAR.2007 08:18:46

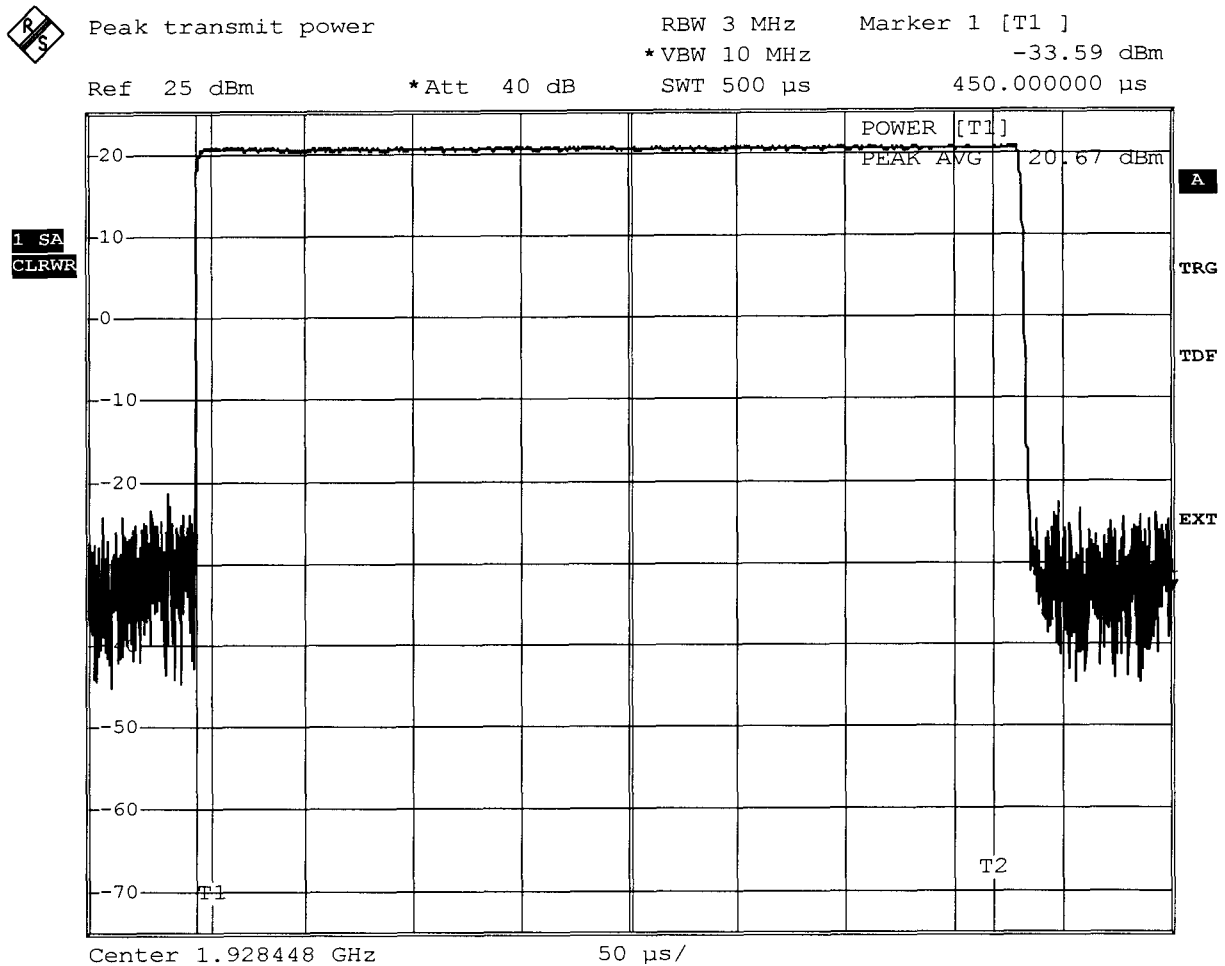
Measurement diagram



## FCC Part 15.319(c) Peak Transmit Power limit

### Testprocedure ANSI 63.17-1998 6.1.2 UPCS

EUT	KIRK UPCS (DECT based) Handset (PP)
Model	PP5180 1G9
Applicant	KIRK telecom A/S
Temperature	23°C
Test Site / Operator	ETS Reichenwalde
Test Specification	6.1.2 Peak transmit power
Supply	
Measured Bandwidth	1.472MHz
Max. Permitted Power	20,83 dBm
Measured Power	20,67 dBm
Test result	Verdict = PASS



Comment: Ansi C63.17-1998 6.1.2  
Date: 9.MAR.2007 08:19:49

Measurement diagram

## Appendix G

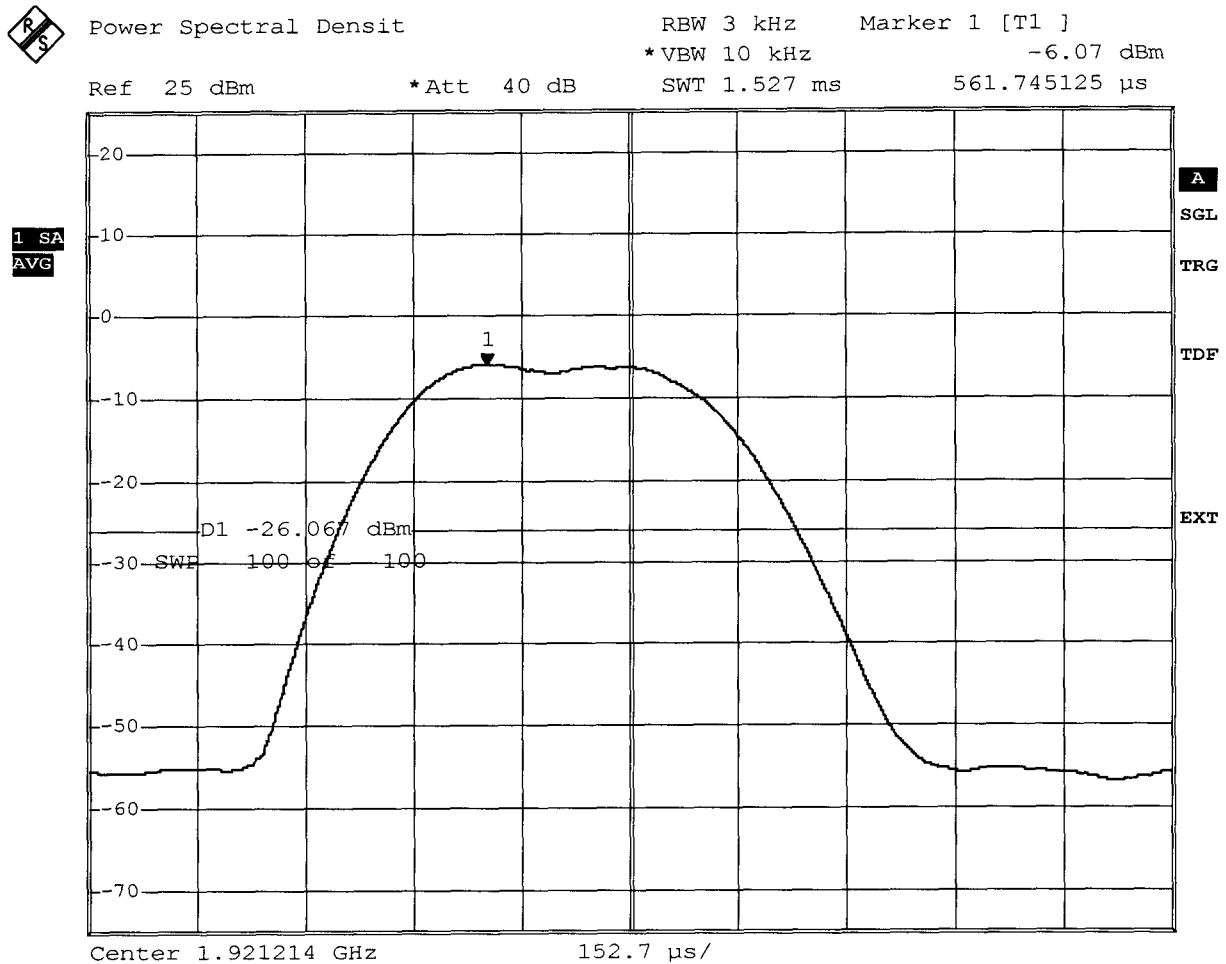
Power spectral density

### FCC Part 15.319(d) Power spectral density

#### Testprocedure ANSI 63.17-2006 6.1.5 UPCS

EUT	KIRK UPCS (DECT based) Handset (PP)
Model	PP5180 1G9
Applicant	KIRK telecom A/S
Temperature	23°C
Test Site / Operator	ETS Reichenwalde
Test Specification	6.1.5 Power spectral density
Peak Frequency in MHz	1921,214000 MHz
Total pulse energy in mW	0,000089 mW
Wideband pulse duration in ms	0,381750 ms
PSD in mW	0,2320 mW
PSD in dBm	-6,3456 dBm

Pass criteria: PSD is less than 3mW Verdict = PASS



Comment: Ansi C63.17-2006 6.1.5  
Date: 8.MAR.2007 15:14:53

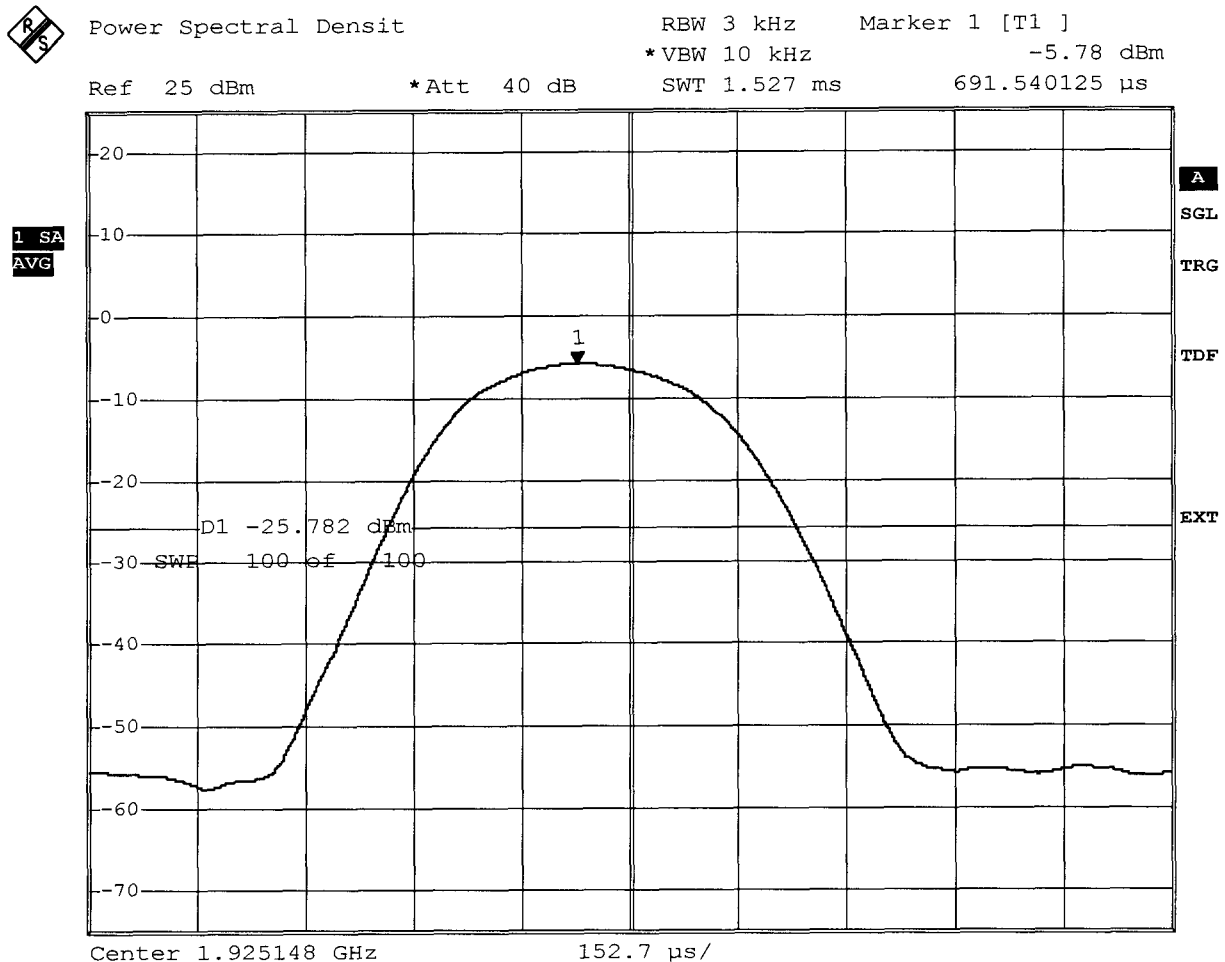
Measurement diagram

### FCC Part 15.319(d) Power spectral density

#### Testprocedure ANSI 63.17-2006 6.1.5 UPCS

EUT	KIRK UPCS (DECT based) Handset (PP)
Model	PP5I80 1G9
Applicant	KIRK telecom A/S
Temperature	23°C
Test Site / Operator	ETS Reichenwalde
Test Specification	6.1.5 Power spectral density
Peak Frequency in MHz	1925,148000 MHz
Total pulse energy in mW	0,000072 mW
Wideband pulse duration in ms	0,381750 ms
PSD in mW	0,1892 mW
PSD in dBm	-7,2306 dBm

Pass criteria: PSD is less than 3mW Verdict = PASS



Comment: Ansi C63.17-2006 6.1.5  
Date: 8.MAR.2007 15:24:10

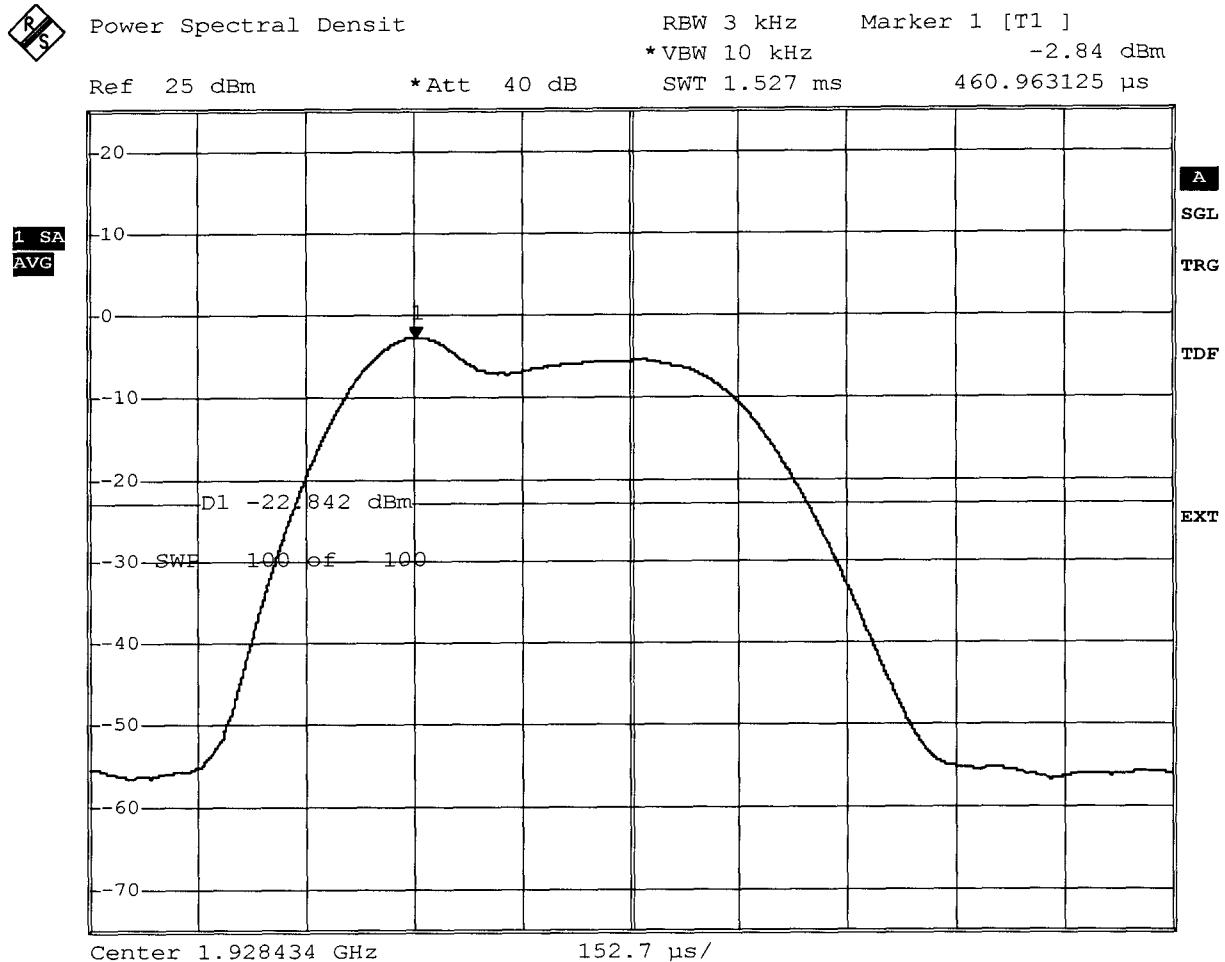
Measurement diagram

### FCC Part 15.319(d) Power spectral density

#### Testprocedure ANSI 63.17-2006 6.1.5 UPCS

EUT	KIRK UPCS (DECT based) Handset (PP)
Model	PP5I80 1G9
Applicant	KIRK telecom A/S
Temperature	23°C
Test Site / Operator	ETS Reichenwalde
Test Specification	6.1.5 Power spectral density
Peak Frequency in MHz	1928,434000 MHz
Total pulse energy in mW	0,000152 mW
Wideband pulse duration in ms	0,381750 ms
PSD in mW	0,3974 mW
PSD in dBm	-4,0081 dBm

Pass criteria: PSD is less than 3mW Verdict = PASS



Comment: Ansi C63.17-2006 6.1.5  
Date: 8.MAR.2007 15:32:39

Measurement diagram

## Appendix H

Directional gain of the antenna

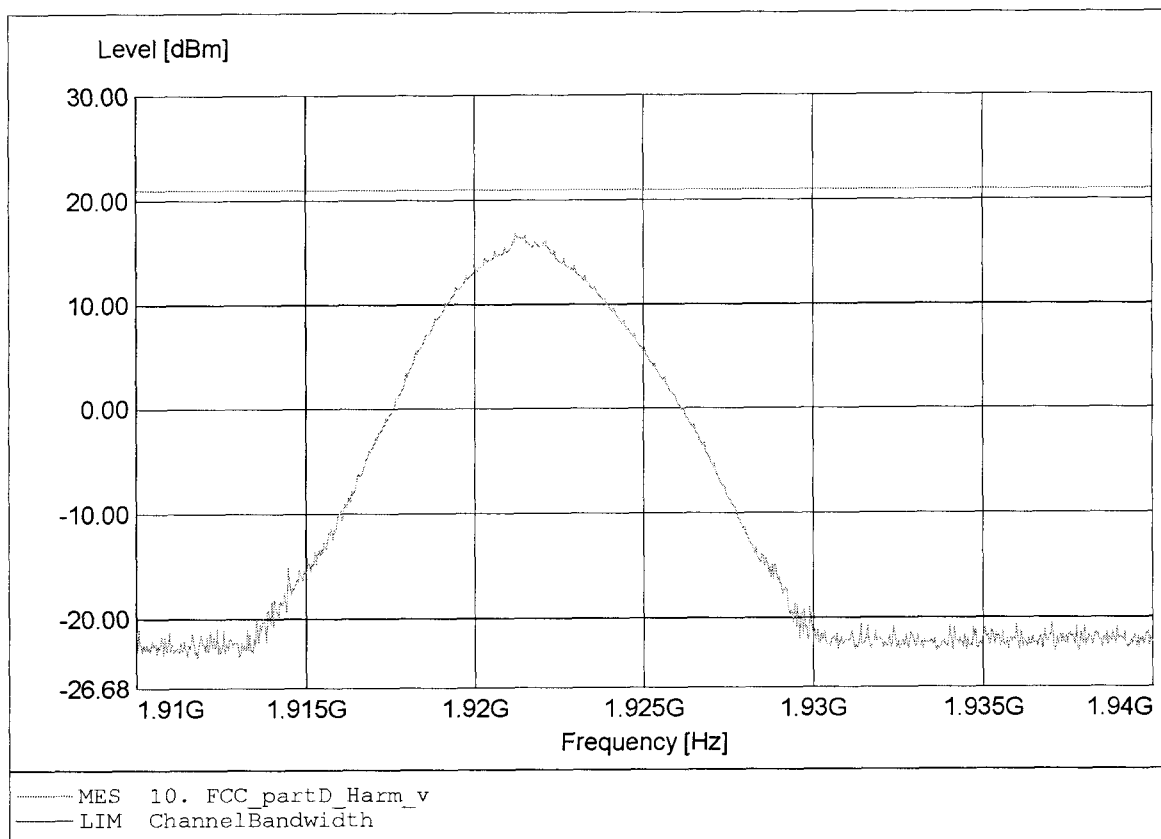
# Appendix I

Radio frequency radiation exposure

**Peak Transmit Power, Radiated**

**FCC RULES PART 15, SUBPART D**

Approval Holder: KIRK telecom A/S  
EUT: KIRK UPCS (DECT BASED) HANDSET (PP)  
Model : PP5I80 1G9 / PP / Ch.: 4  
Operator : ETS / Mr. Cerovsky  
Test Conditions: 25°C / Unom.: 3,6 V  
Test Specification: Fully anechoic chamber / mode: Tx  
Comment 1: Dist.: 3m, Ant.: HL 025,  
Comment 2: Freq:1.921GHz Pmax:16.84dBm RBW: 5 MHz

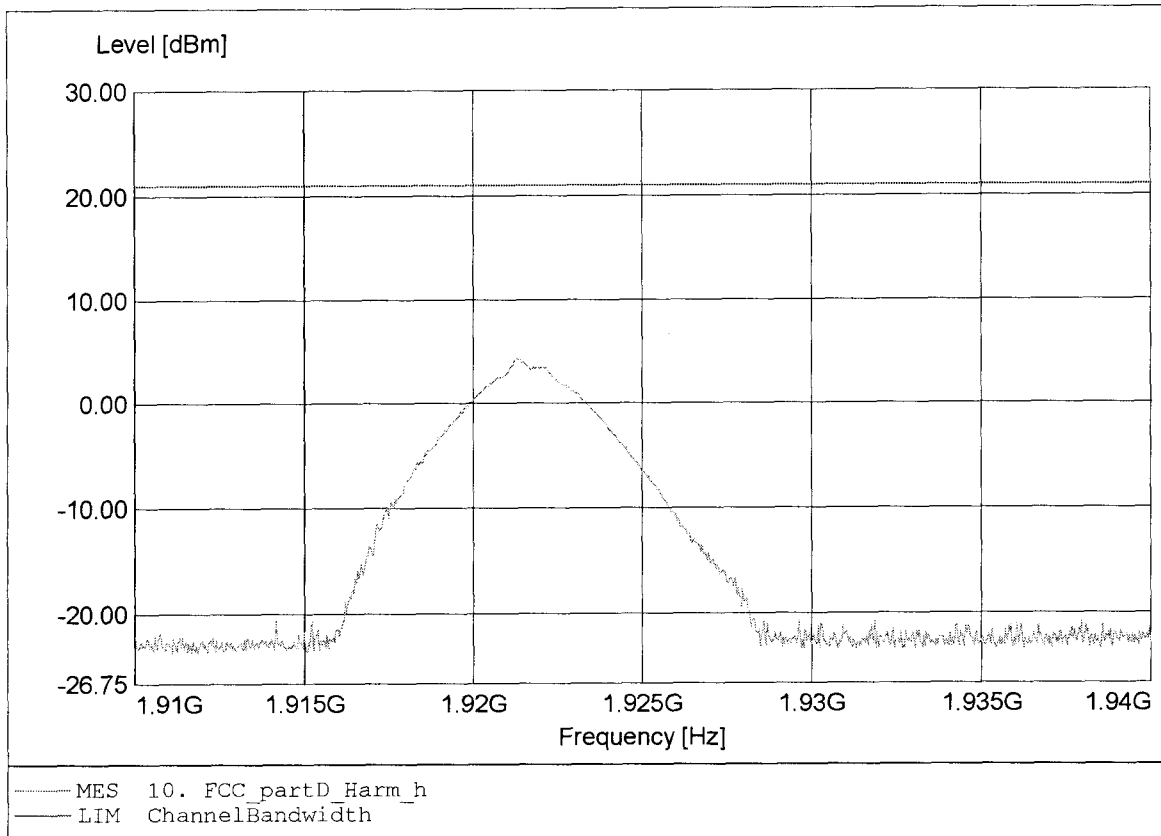




**Peak Transmit Power, Radiated**

**FCC RULES PART 15, SUBPART D**

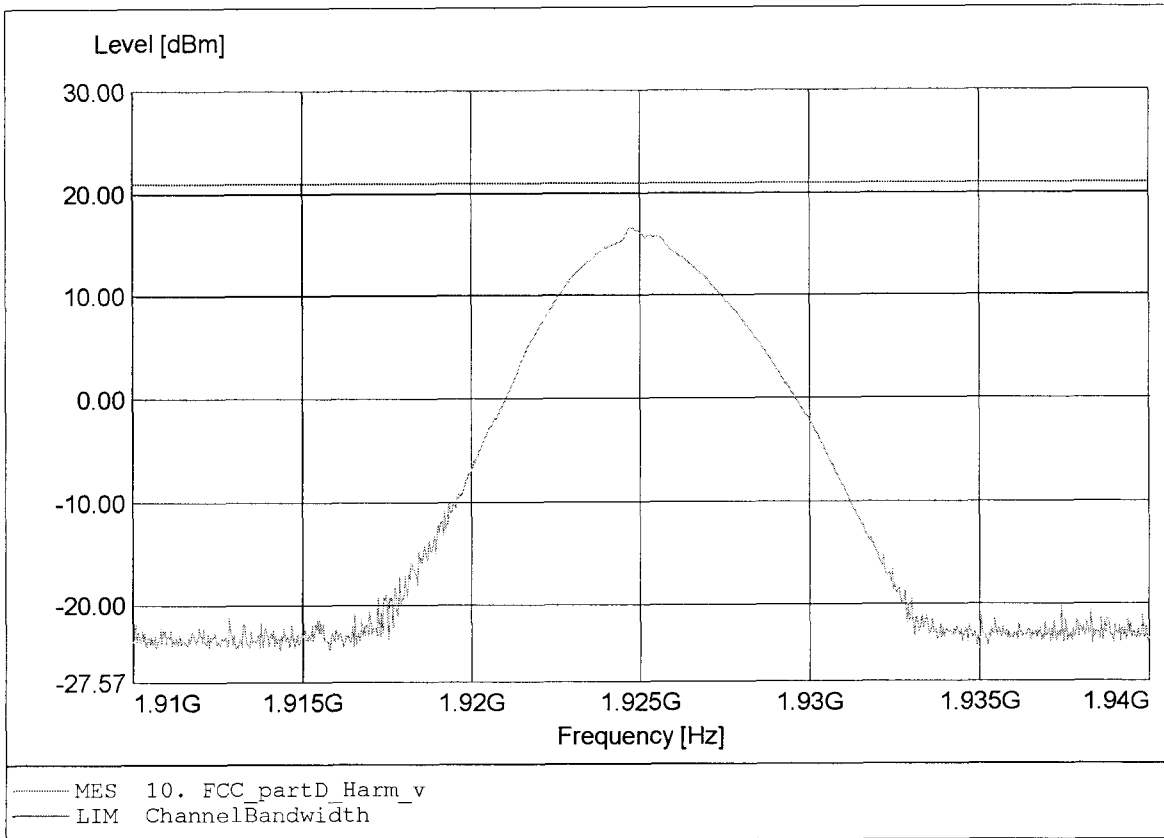
Approval Holder: KIRK telecom A/S  
EUT: KIRK UPCS (DECT BASED) HANDSET (PP)  
Model : PP5I80 1G9 / PP / Ch.: 4  
Operator : ETS / Mr. Cerovsky  
Test Conditions: 25°C / Unom.: 3,6 V  
Test Specification: Fully anechoic chamber / mode: Tx  
Comment 1: Dist.: 3m, Ant.: HL 025,  
Comment 2: Freq:1.921GHz Pmax:4.36dBm RBW: 5 MHz



**Peak Transmit Power, Radiated**

**FCC RULES PART 15, SUBPART D**

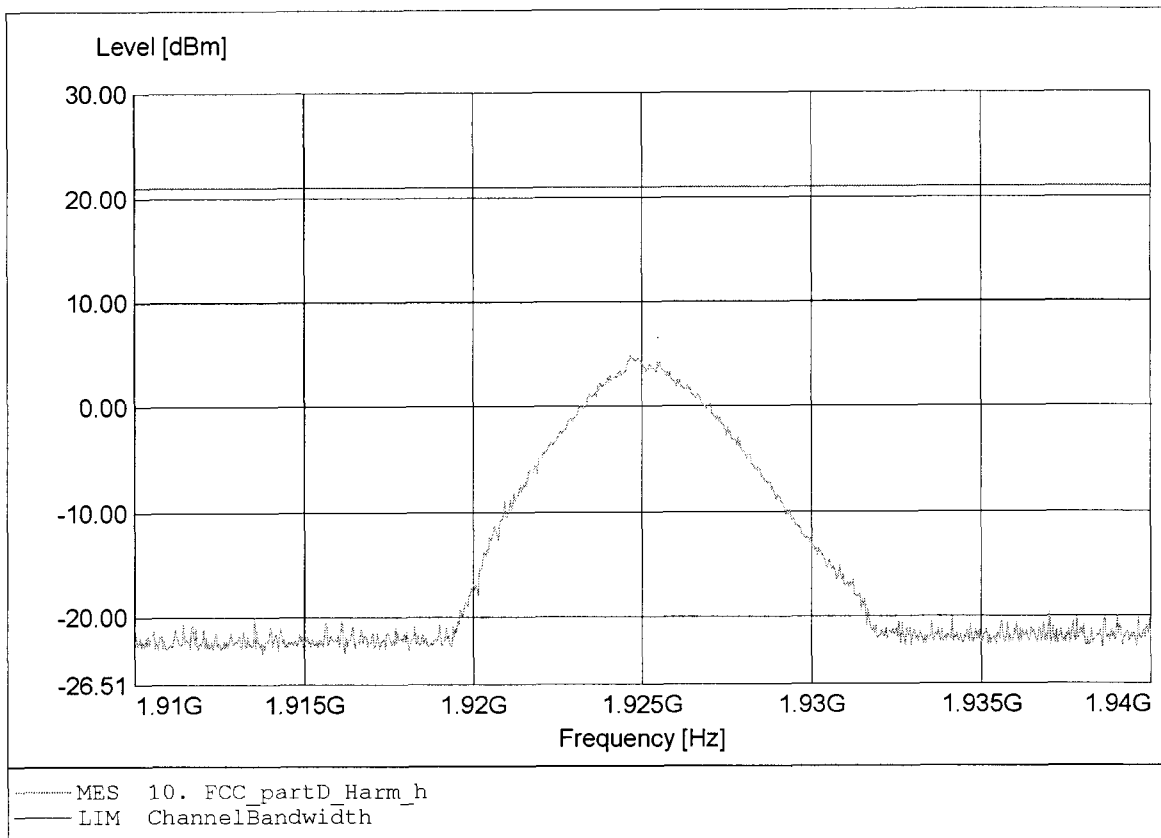
Approval Holder: KIRK telecom A/S  
EUT: KIRK UPCS (DECT BASED) HANDSET (PP)  
Model : PP5I80 1G9 / PP / Ch.: 2  
Operator : ETS / Mr. Cerovsky  
Test Conditions: 25°C / Unom.: 3,6 V  
Test Specification: Fully anechoic chamber / mode: Tx  
Comment 1: Dist.: 3m, Ant.: HL 025,  
Comment 2: Freq:1.925GHz Pmax:16.68dBm RBW: 5 MHz



**Peak Transmit Power, Radiated**

**FCC RULES PART 15, SUBPART D**

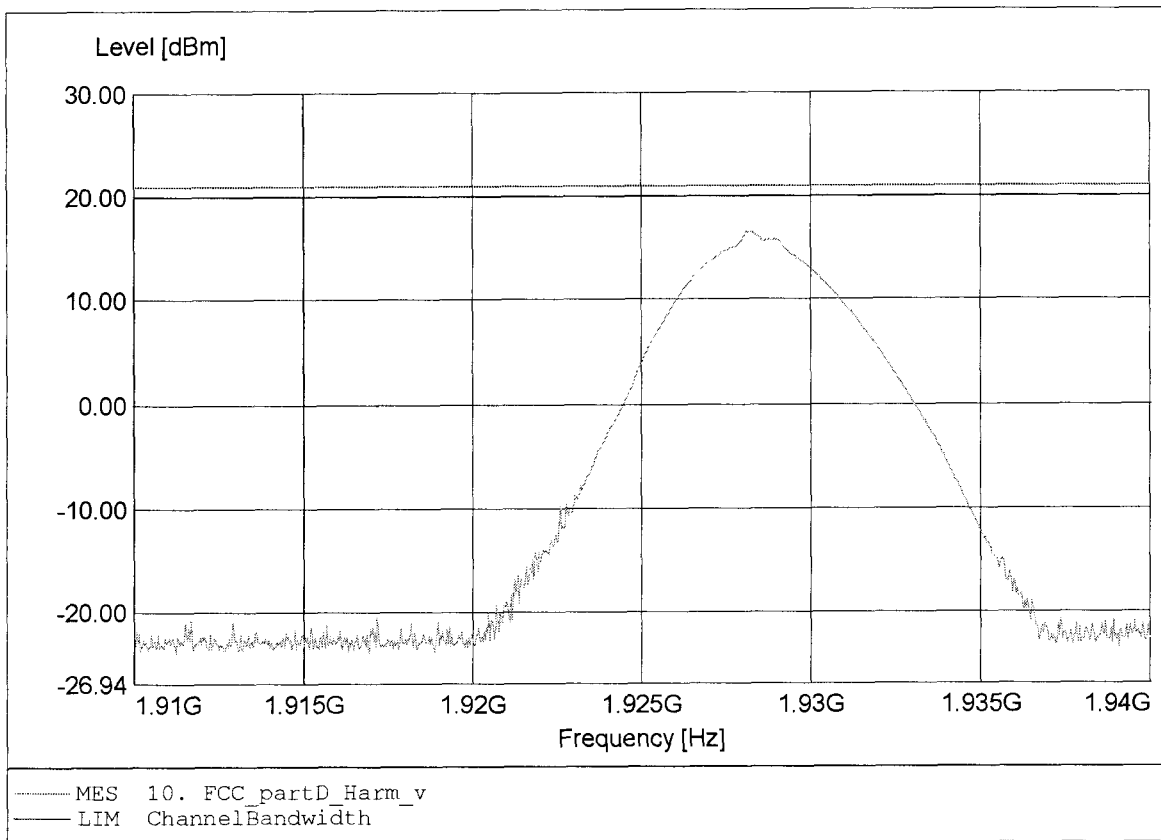
Approval Holder: KIRK telecom A/S  
EUT: KIRK UPCS (DECT BASED) HANDSET (PP)  
Model : PP5I80 1G9 / PP / Ch.: 2  
Operator : ETS / Mr. Cerovsky  
Test Conditions: 25°C / Unom.: 3,6 V  
Test Specification: Fully anechoic chamber / mode: Tx  
Comment 1: Dist.: 3m, Ant.: HL 025,  
Comment 2: Freq:1.925GHz Pmax:4.82dBm RBW: 5 MHz



**Peak Transmit Power, Radiated**

**FCC RULES PART 15, SUBPART D**

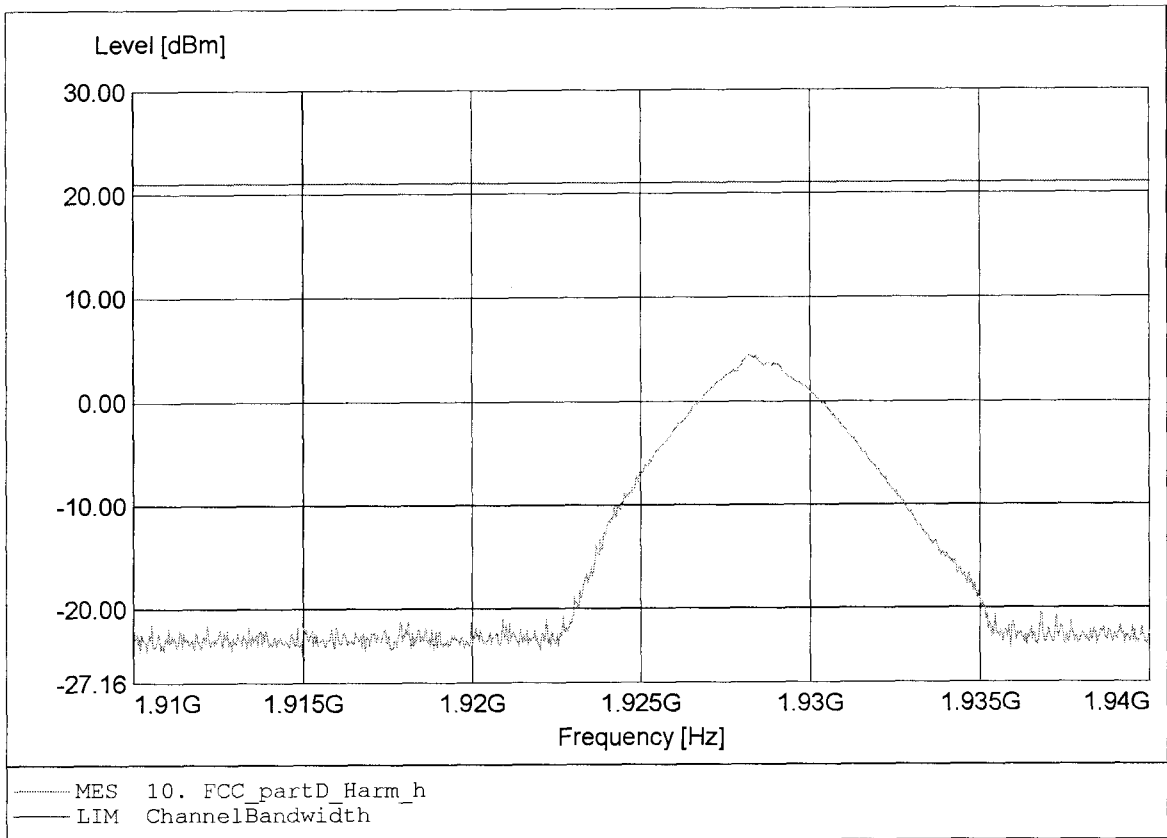
Approval Holder: KIRK telecom A/S  
EUT: KIRK UPCS (DECT BASED) HANDSET (PP)  
Model : PP5I80 1G9 / PP / Ch.: 0  
Operator : ETS / Mr. Cerovsky  
Test Conditions: 25°C / Unom.: 3,6 V  
Test Specification: Fully anechoic chamber / mode: Tx  
Comment 1: Dist.: 3m, Ant.: HL 025,  
Comment 2: Freq:1.928GHz Pmax:16.63dBm RBW: 5 MHz



**Peak Transmit Power, Radiated**

**FCC RULES PART 15, SUBPART D**

Approval Holder: KIRK telecom A/S  
EUT: KIRK UPCS (DECT BASED) HANDSET (PP)  
Model : PP5I80 1G9 / PP / Ch.: 0  
Operator : ETS / Mr. Cerovsky  
Test Conditions: 25°C / Unom.: 3,6 V  
Test Specification: Fully anechoic chamber / mode: Tx  
Comment 1: Dist.: 3m, Ant.: HL 025,  
Comment 2: Freq:1.928GHz Pmax:4.46dBm RBW: 5 MHz



## Appendix J

Monitoring threshold

Test case Rev. Draft ANSI\_7.3.3\_least\_interfered\_channel.xml  
 Date 09.03.2007 10:05:33  
 Reference to the EUT G0M20703-1223 / PP5180 1G9  
 Comment: 7.3.3\_b  
 KIRK UPCS (DECT based) Handset (PP)  
 KIRK telecom A/S

The LOG table shows the level changes on each Channel of the transmission system

Time stamp	1921.536 MHZ	1923.264 MHZ	1924.992 MHz	1926.720 MHz	1928.448 MHz	Comment
	Peak in dBm	Peak in dBm	Peak in dBm	Peak in dBm	Peak in dBm	
	RMS in dBm	RMS in dBm	RMS in dBm	RMS in dBm	RMS in dBm	
00:28:36.2187500	-86,6 -95,3	-85,7 -95,5	-85,7 -95,4	-86 -95,4	-85,7 -95,3	Interferer off
00:28:42.7343750	-61,7 -62,1	-61,9 -62,3	-61,9 -62,4	-73,8 -75,6	-78 -82,3	Interferer on
00:28:51.9843750	-61,2 -62,2	-61,3 -62,3	-51,9 -62,4	-42,9 -71,6	-21,7 -41,4	OK 1
00:28:57.7500000	-61,7 -62,2	-61,9 -62,4	-61,9 -62,4	-73,3 -75,5	-78,3 -82,2	
00:29:02.5156250	-61,5 -62,2	-56,3 -62,3	-54,3 -62,4	-43 -71,5	-21,9 -41,6	OK 2
00:29:07.5468750	-61,7 -62,2	-61,8 -62,3	-61,9 -62,4	-73,5 -75,5	-78,2 -82,2	
00:29:11.7656250	-60,1 -62,1	-60,7 -62,3	-52 -62,4	-42,7 -71,2	-22 -41,2	OK 3
00:29:14.6093750	-61,7 -62,1	-61,9 -62,3	-61,8 -62,4	-73,6 -75,5	-78,7 -82,3	
00:29:17.2812500	-61,3 -62,2	-60,8 -62,3	-52,9 -62,4	-43,2 -71,9	-21,8 -42,2	OK 4
00:29:20.9375000	-61,7 -62,1	-61,8 -62,3	-61,7 -62,4	-73,3 -75,5	-78,6 -82,3	
00:29:23.4218750	-61 -62,1	-58,6 -62,3	-58,7 -62,4	-43 -71,9	-22,2 -41,7	OK 5

---

Log file

---

ETS Product Service AG  
 Storkower Str. 38C, D-15526 Reichenwalde

Test case Rev. Draft ANSI\_7.3.3\_least\_interfered\_channel.xml  
 Date 09.03.2007 10:09:22  
 Reference to the EUT G0M20703-1223 / PP5180 1G9  
 Comment: 7.3.3\_c  
 KIRK UPCS (DECT based) Handset (PP)  
 KIRK telecom A/S

The LOG table shows the level changes on each Channel of the transmission system

Time stamp	1921.536	1923.264	1924.992	1926.720	1928.448	Comment
	MHZ	MHZ	MHz	MHz	MHz	
	Peak in dBm	Peak in dBm	Peak in dBm	Peak in dBm	Peak in dBm	
	RMS in dBm	RMS in dBm	RMS in dBm	RMS in dBm	RMS in dBm	
00:32:22.8437500	-86,5 -95,3	-86,2 -95,4	-86,9 -95,3	-86,3 -95,4	-85,1 -95,3	Interferer off
00:32:33.4375000	-61,7 -62,2	-61,9 -62,3	-61,9 -62,4	-78,8 -82,3	-64,4 -75,3	Interferer on
00:32:52.6250000	-56,4 -62,1	-52 -62,3	-43,8 -62,2	-21,7 -42	-46,9 -73	OK 1
00:32:55.0156250	-61,7 -62,2	-61,8 -62,3	-61,8 -62,4	-63,5 -81	-73,6 -75,4	
00:32:57.7656250	-59,3 -62,2	-52,4 -62,3	-42,8 -62,1	-22,3 -41,1	-46,8 -72,9	OK 2
00:33:00.0781250	-61,7 -62,1	-61,7 -62,3	-61,8 -62,4	-62,1 -80,1	-73,4 -75,5	
00:33:02.3750000	-61,1 -62,2	-58,9 -62,3	-43,8 -62,1	-22,1 -41,2	-47 -72,6	OK 3
00:33:04.8593750	-61,6 -62,1	-61,8 -62,3	-61,7 -62,4	-63 -81	-73,1 -75,4	
00:33:07.5156250	-56,5 -62,1	-54,1 -62,3	-42,7 -62,1	-22,2 -42,3	-46,9 -72,9	OK 4
00:33:10	-61,6 -62,1	-61,9 -62,3	-61,7 -62,4	-61,7 -81	-73,6 -75,4	
00:33:12.9375000	-61,1 -62,2	-58,6 -62,3	-43,2 -62,1	-22,1 -41,2	-46,8 -72,9	OK 5

Log file

ETS Product Service AG  
 Storkower Str. 38C, D-15526 Reichenwalde



Test case Rev. Draft ANSI\_7.3.3\_least\_interfered\_channel.xml  
 Date 09.03.2007 10:20:25  
 Reference to the EUT G0M20703-1223 / PP5180 1G9  
 Comment: 7.3.3\_d  
 KIRK UPCS (DECT based) Handset (PP)  
 KIRK telecom A/S

The LOG table shows the level changes on each Channel of the transmission system

Time stamp	1921.536 MHZ	1923.264 MHZ	1924.992 MHZ	1926.720 MHZ	1928.448 MHZ	Comment
	Peak in dBm	Peak in dBm	Peak in dBm	Peak in dBm	Peak in dBm	
	RMS in dBm	RMS in dBm	RMS in dBm	RMS in dBm	RMS in dBm	
00:43:38.6250000	-62,7 -86,6	-85,5 -95,4	-86,1 -95,3	-83,6 -95,4	-85,7 -95,4	Interferer off
00:43:44.3437500	-57,1 -62,1	-61,8 -62,3	-61,7 -62,4	-78,2 -81,4	-82,3 -87,8	Interferer on
00:43:51.7656250	-58,1 -62,2	-57,1 -62,3	-51,8 -62,3	-42,9 -72,8	-22,1 -42,3	OK 1
00:43:54.4218750	-61,7 -62,1	-61,9 -62,3	-61,7 -62,4	-77,8 -81,4	-63,1 -84,6	
00:43:56.8125000	-60,8 -62,2	-56,2 -62,3	-54,2 -62,4	-43 -72,9	-21,6 -41,3	OK 2
00:43:59.4843750	-61,6 -62,2	-61,8 -62,3	-61,8 -62,4	-78 -81,3	-62,9 -84,6	
00:44:01.8750000	-60,5 -62,2	-58,9 -62,3	-59,6 -62,4	-43 -73,2	-21,6 -41,1	OK 3
00:44:04.4375000	-61,7 -62,1	-61,9 -62,3	-61,8 -62,4	-77,8 -81,4	-62,6 -84,2	
00:44:07.2968750	-61,3 -62,2	-56,3 -62,3	-57,4 -62,4	-42,9 -73,3	-22 -41,2	OK 4
00:44:09.9687500	-61,7 -62,1	-61,8 -62,3	-61,8 -62,4	-78 -81,4	-62,2 -84,3	
00:44:12.5468750	-61,5 -62,2	-58,2 -62,3	-53,1 -62,4	-42,9 -73,2	-21,8 -41,4	OK 5

Log file

Test case Rev. Draft ANSI\_7.3.3\_least\_interfered\_channel.xml  
 Date 09.03.2007 10:24:02  
 Reference to the EUT G0M20703-1223 / PP5180 1G9  
 Comment: 7.3.3\_e  
 KIRK UPCS (DECT based) Handset (PP)  
 KIRK telecom A/S

The LOG table shows the level changes on each Channel of the transmission system

Time stamp	1921.536	1923.264	1924.992	1926.720	1928.448	Comment
	MHZ	MHZ	MHz	MHz	MHz	
	Peak in dBm	Peak in dBm	Peak in dBm	Peak in dBm	Peak in dBm	
	RMS in dBm	RMS in dBm	RMS in dBm	RMS in dBm	RMS in dBm	
00:47:19.6562500	-85,6 -95,4	-63,7 -87,2	-86,3 -95,3	-86 -95,4	-86,6 -95,4	Interferer off
00:47:24.3437500	-61,7 -62,2	-59 -62,3	-61,9 -62,4	-80,7 -87,8	-76,8 -81,4	Interferer on
00:47:29.5468750	-59,5 -62,2	-58,1 -62,3	-42,6 -62	-22,4 -41,6	-47,5 -75,7	OK 1
00:47:32.1093750	-61,7 -62,2	-61,8 -62,3	-61,7 -62,4	-62,4 -84,3	-77,8 -81,3	
00:47:34.8750000	-56,4 -62,1	-54 -62,3	-42,6 -62	-21,5 -41	-47,2 -75,7	OK 2
00:47:37.5468750	-61,7 -62,1	-61,8 -62,3	-61,8 -62,4	-63,7 -84,8	-77,8 -81,3	
00:47:40.5000000	-58,9 -62,2	-52,9 -62,3	-42,6 -62,1	-21,7 -40,7	-46,8 -75,4	OK 3
00:47:42.9687500	-61,7 -62,1	-61,9 -62,3	-61,7 -62,4	-62,8 -84,8	-77,8 -81,3	
00:47:45.6406250	-56,6 -62,1	-53,9 -62,3	-42,4 -62	-21,9 -41,1	-46,9 -75,1	OK 4
00:47:48.2031250	-61,7 -62,2	-61,8 -62,3	-61,7 -62,4	-62,9 -84,3	-77,5 -81,3	
00:47:50.8750000	-61,1 -62,2	-56,4 -62,3	-43,5 -62,1	-22,3 -41,3	-47,3 -75,4	OK 5

Log file

ETS Product Service AG  
 Storkower Str. 38C, D-15526 Reichenwalde

Test case Rev. Draft ANSI\_7.3.2\_upper\_threshold.xml  
 Date 09.03.2007 09:41:40  
 Reference to the EUT G0M20703-1223 / PP5180 1G9  
 Comment: initial setup  
 KIRK UPCS (DECT based) Handset (PP)  
 KIRK telecom A/S

The LOG table shows the level changes on each Channel of the transmission system

Time stamp	1921.536	1923.264	1924.992	1926.720	1928.448	Comment
	MHZ	MHZ	MHz	MHz	MHz	
	Peak in dBm	Peak in dBm	Peak in dBm	Peak in dBm	Peak in dBm	
	RMS in dBm	RMS in dBm	RMS in dBm	RMS in dBm	RMS in dBm	
00:01:53.7656250	-50,2 -50,3	-46,7 -50,4	-50,1 -50,2	-50,4 -50,5	-50 -50,1	-50 dBm
00:02:06.5781250	-51,2 -51,4	-51,3 -51,5	-51,1 -51,3	-46,3 -51,5	-51 -51,2	-51 dBm
00:02:19.0781250	-47,1 -52,4	-52,4 -52,5	-52,4 -52,6	-48 -52,9	-52,4 -52,6	-52 dBm
00:02:30.5625000	-47,8 -53,4	-53,3 -53,5	-53,4 -53,5	-53,7 -53,9	-53,4 -53,6	-53 dBm
00:02:41.3281250	-54,1 -54,4	-54,3 -54,5	-48,6 -54,5	-54,7 -54,9	-54,4 -54,6	-54 dBm
00:02:56.3281250	-49,3 -55,2	-55,2 -55,4	-55,3 -55,5	-55,7 -55,9	-55,3 -55,5	-55 dBm
00:03:08.3125000	-50,1 -56,2	-56,1 -56,4	-56,3 -56,5	-56,3 -56,5	-56,3 -56,5	-56 dBm
00:03:28.7968750	-57 -57,2	-57,1 -57,4	-49,3 -57,4	-57,3 -57,5	-50,3 -57,5	-57 dBm
00:03:40.8593750	-57,9 -58,2	-58,1 -58,4	-58 -58,4	-58,3 -58,5	-49,8 -58,4	-58 dBm
00:03:59.4375000	-58,9 -59,2	-49,8 -59,3	-58,9 -59,4	-59,2 -59,5	-59,1 -59,5	-59 dBm
00:04:24.7656250	-59,6 -60,3	-59,1 -60,5	-52,2 -60,4	-42,9 -60,3	-22,4 -41,6	Upper threshold level: -60 dBm

Log file

## **Appendix K**

Monitoring of intended transmit window and maximum reaction time

Test case Rev. Draft ANSI\_7.5\_reaction\_time\_low\_ch.xml  
 Date 09.03.2007 11:34:06  
 Reference to the EUT G0M20703-1223 / PP5180 1G9  
 Comment: 7.5\_low\_ch\_50  $\mu$ s / 35  $\mu$ s  
 KIRK UPCS (DECT based) Handset (PP)  
 KIRK telecom A/S

The LOG table shows the level changes on each Channel of the transmission system

Time stamp	1921.536	1923.264	1924.992	1926.720	1928.448	Comment
	MHZ	MHz	MHz	MHz	MHz	
	Peak in dBm	Peak in dBm	Peak in dBm	Peak in dBm	Peak in dBm	
	RMS in dBm	RMS in dBm	RMS in dBm	RMS in dBm	RMS in dBm	
01:56:43.9062500	-86,4 -95,5	-84,8 -95,4	-85,6 -95,3	-63,3 -87,1	-86,4 -95,4	Interferer off
01:56:48.8125000	-22,3 -41,3	-46,9 -76,8	-57,3 -87,6	-62,6 -85,9	-70,1 -93,6	Test connection
01:57:03.0468750	-56,4 -72,2	-60,7 -61,1	-60,7 -61,1	-60,7 -61,1	-58,1 -61	50 $\mu$ s interference on, no connection
01:57:16.8437500	-68,9 -93,7	-61,9 -91,3	-55 -86,5	-43 -73,5	-22 -41,6	Test connection
01:58:00.0156250	-51,3 -68	-60,7 -61,1	-60,7 -61,1	-60,7 -61,1	-56,9 -61	35 $\mu$ s interference on, no connection

---

Log file

---

ETS Product Service AG  
 Storkower Str. 38C, D-15526 Reichenwalde

Test case Rev. Draft ANSI\_7.5\_reaction\_time\_high\_ch.xml  
 Date 09.03.2007 11:27:27  
 Reference to the EUT G0M20703-1223 / PP5180 1G9  
 Comment: 7.5\_high\_ch\_50  $\mu$ s /35  $\mu$ s  
 KIRK UPCS (DECT based) Handset (PP)  
 KIRK telecom A/S

The LOG table shows the level changes on each Channel of the transmission system

Time stamp	1921.536 MHz	1923.264 MHz	1924.992 MHz	1926.720 MHz	1928.448 MHz	Comment
	Peak in dBm	Peak in dBm	Peak in dBm	Peak in dBm	Peak in dBm	
	RMS in dBm	RMS in dBm	RMS in dBm	RMS in dBm	RMS in dBm	
01:48:40.0156250	-86,2 -95,5	-85,9 -95,5	-64 -87,3	-85 -95,4	-85,6 -95,4	Interferer off
01:48:49.6562500	-21,7 -41,1	-47 -76,6	-57,7 -88,2	-66 -92,5	-71,8 -94,1	Test connection
01:49:59.1562500	-56,6 -61,2	-60,9 -61,4	-60,9 -61,4	-60,8 -61,4	-57,1 -72,4	50 $\mu$ s inter- ference on, no connection
01:50:15.3281250	-21,8 -41,5	-47,1 -76,6	-57,4 -88,1	-64,6 -92,3	-71,5 -94,1	Test connection
01:51:00.3437500	-57,3 -61,2	-60,9 -61,4	-60,7 -61,4	-56,5 -61,4	-51,7 -69	35 $\mu$ s inter- ference on, no connection

---

Log file

ETS Product Service AG  
 Storkower Str. 38C, D-15526 Reichenwalde

## Appendix L

Monitoring bandwidth

Test case Rev. Draft ANSI\_7.4.1\_monitoring\_bandwidth.xml  
 Date 09.03.2007 10:44:33  
 Reference to the EUT G0M20703-1223 / PP5180 1G9  
 Comment: 7.4.1 simple compliance test\_low\_+30%  
 KIRK UPCS (DECT based) Handset (PP)  
 KIRK telecom A/S

The LOG table shows the level changes on each Channel of the transmission system

Time stamp	1921.536 MHz	1923.264 MHz	1924.992 MHz	1926.720 MHz	1928.448 MHz	Comment
	Peak in dBm	Peak in dBm	Peak in dBm	Peak in dBm	Peak in dBm	
	RMS in dBm	RMS in dBm	RMS in dBm	RMS in dBm	RMS in dBm	
01:07:57.9062500	-85,9 -95,5	-63,4 -87	-86,1 -95,5	-63,6 -87,1	-86,1 -95,6	Interferer off
01:08:08.6250000	-22,2 -40,9	-47,4 -76,8	-57,5 -88,1	-64,7 -92,3	-71,4 -94,3	Test connection
01:08:26.7343750	-85,2 -95,3	-61,7 -62,2	-61,9 -62,4	-61,9 -62,5	-56,9 -62,4	interferer on, no establish connection

---

Log file

---

ETS Product Service AG  
 Storkower Str. 38C, D-15526 Reichenwalde



Test case Rev. Draft ANSI\_7.4.1\_monitoring\_bandwidth.xml  
 Date 09.03.2007 10:39:01  
 Reference to the EUT G0M20703-1223 / PP5180 1G9  
 Comment: 7.4.1 simple compliance test\_low\_-30%  
 KIRK UPCS (DECT based) Handset (PP)  
 KIRK telecom A/S

The LOG table shows the level changes on each Channel of the transmission system

Time stamp	1921.536	1923.264	1924.992	1926.720	1928.448	Comment
	MHZ	MHz	MHz	MHz	MHz	
	Peak in dBm	Peak in dBm	Peak in dBm	Peak in dBm	Peak in dBm	
	RMS in dBm	RMS in dBm	RMS in dBm	RMS in dBm	RMS in dBm	
01:01:31.0468750	-85,8 -95,3	-86,5 -95,4	-85,3 -95,2	-63,1 -87,4	-86,6 -95,4	Interferer off
01:01:44.3125000	-68,7 -93,4	-62,7 -91,4	-55,1 -86,3	-43,3 -73,7	-22,2 -41,2	Test connection
01:02:53.9531250	-85,9 -95,5	-61,8 -62,2	-61,9 -62,4	-57,6 -62,5	-61,9 -62,4	interferer on, no establish connection

---

Log file

---

ETS Product Service AG  
 Storkower Str. 38C, D-15526 Reichenwalde

Test case Rev. Draft ANSI\_7.4.1\_monitoring\_bandwidth.xml  
 Date 09.03.2007 10:55:43  
 Reference to the EUT G0M20703-1223 / PP5180 1G9  
 Comment: 7.4.1 simple compliance test\_high\_+30%  
 KIRK UPCS (DECT based) Handset (PP)  
 KIRK telecom A/S

The LOG table shows the level changes on each Channel of the transmission system

Time stamp	1921.536	1923.264	1924.992	1926.720	1928.448	Comment
	MHZ	MHz	MHz	MHz	MHz	
	Peak in dBm	Peak in dBm	Peak in dBm	Peak in dBm	Peak in dBm	
	RMS in dBm	RMS in dBm	RMS in dBm	RMS in dBm	RMS in dBm	
01:19:09.2968750	-84,9 -95,5	-86,4 -95,6	-85,9 -95,4	-62,9 -88	-86,4 -95,6	Interferer off
01:19:17.1406250	-43,4 -74,4	-21,5 -41,9	-46,8 -76	-57,2 -87,7	-65 -92,4	Test connection
01:19:33.5937500	-60,7 -61,1	-60,7 -61,2	-60,7 -61,1	-56,5 -61	-85,6 -95,3	interferer off, no establish connection

---

Log file

Test case Rev. Draft ANSI\_7.4.1\_monitoring\_bandwidth.xml  
 Date 09.03.2007 10:50:53  
 Reference to the EUT G0M20703-1223 / PP5180 1G9  
 Comment: 7.4.1 simple compliance test\_high\_-30%  
 KIRK UPCS (DECT based) Handset (PP)  
 KIRK telecom A/S

The LOG table shows the level changes on each Channel of the transmission system

Time stamp	1921.536	1923.264	1924.992	1926.720	1928.448	Comment
	MHZ	MHz	MHz	MHz	MHz	
	Peak in dBm	Peak in dBm	Peak in dBm	Peak in dBm	Peak in dBm	
	RMS in dBm	RMS in dBm	RMS in dBm	RMS in dBm	RMS in dBm	
01:12:36.2812500	-85,7 -95,4	-85,6 -95,5	-85,9 -95,4	-63,7 -87,3	-85,4 -95,4	Interferer off
01:12:45.0312500	-55 -86,3	-43,3 -74,1	-22,2 -41,3	-47,3 -76,5	-57,2 -87,9	Test connection
01:14:40.2656250	-60,7 -61,1	-60,8 -61,2	-60,7 -61,1	-56 -61	-85,7 -95,2	interferer on, no establish connection

---

Log file

---

ETS Product Service AG  
 Storkower Str. 38C, D-15526 Reichenwalde

## Appendix M

Random waiting interval

## Appendix N

Duration of Transmission

**FCC Part 15.323 Transmission duration PP only**

**Testprocedure ANSI 63.17-1998  
UPCS**

EUT	KIRK UPCS (DECT based) Handset (PP)
Model	PP5I80 1G9
Applicant	KIRK telecom A/S
Temperature	23°C
Test Site / Operator	ETS Reichenwalde
Test Specification	Transmission duration
Test result	Pass

The diagram shows the channel / slot assignment. The channels are marked with the following colours .

 Ch 1    
  Ch 2    
  Ch 3    
  Ch 4    
  Ch 5

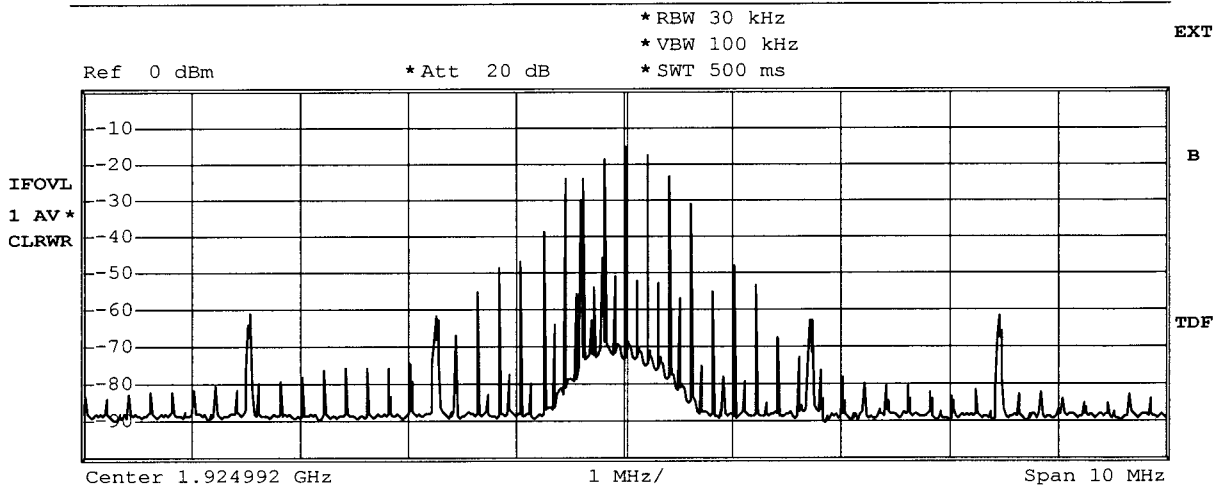
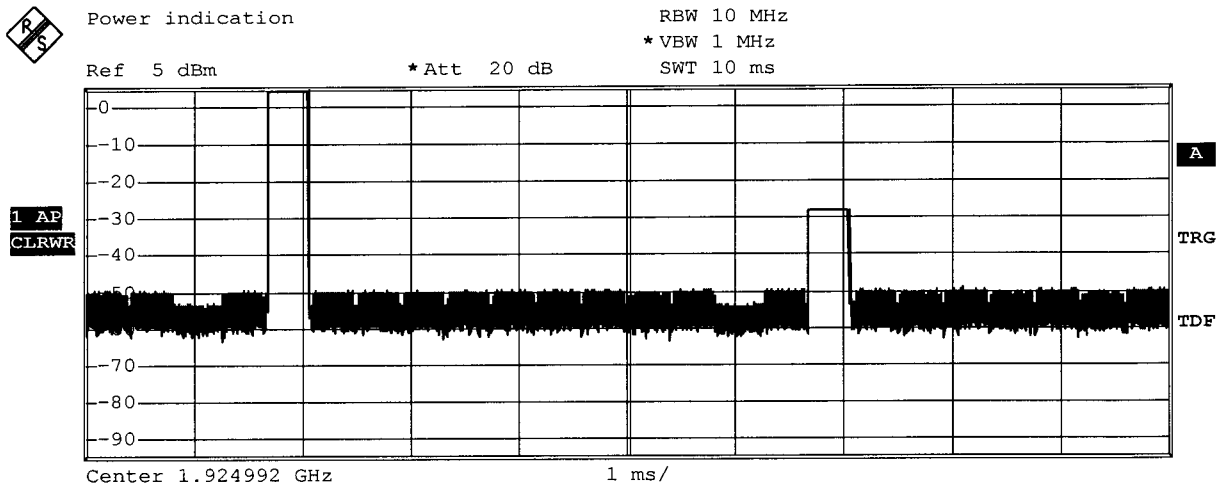
Time	Slot																							
[15:49:47.171]	T 1	T 2	T 3	T 4	T 5	T 6	T 7	T 8	T 9	T 10	T 11	T 12	R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8	R 9	R 10	R 11	R 12
[15:49:48.750]	T 1	T 2	T 3	T 4	T 5	T 6	T 7	T 8	T 9	T 10	T 11	T 12	R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8	R 9	R 10	R 11	R 12
[21:23:09.953]	T 1	T 2	T 3	T 4	T 5	T 6	T 7	T 8	T 9	T 10	T 11	T 12	R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8	R 9	R 10	R 11	R 12
[21:23:10.31]	T 1	T 2	T 3	T 4	T 5	T 6	T 7	T 8	T 9	T 10	T 11	T 12	R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8	R 9	R 10	R 11	R 12
[02:56:32.125]	T 1	T 2	T 3	T 4	T 5	T 6	T 7	T 8	T 9	T 10	T 11	T 12	R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8	R 9	R 10	R 11	R 12
[02:57:42.546]	T 1	T 2	T 3	T 4	T 5	T 6	T 7	T 8	T 9	T 10	T 11	T 12	R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8	R 9	R 10	R 11	R 12

## Appendix O

Connection acknowledgement

ANSI C63.17-1998 Rev. Draft ANSI 8.2.1 Acknowledgements  
 UPCS1900

EUT	KIRK UPCS (DECT based) Handset (PP)
Model	PP5180 1G9
Approval Holder	KIRK telecom A/S
Temperature / Voltage	25°C
Test Site / Operator	ETS
Test Specification	ANSI C63.17-1998 Rev. Draft ANSI 8.2.1 acknowledgements
Comment 1	Test connection with unblocked acknowledgements
Comment 2	TDMA, two time slot are interference free
Comment 3	connection is establish



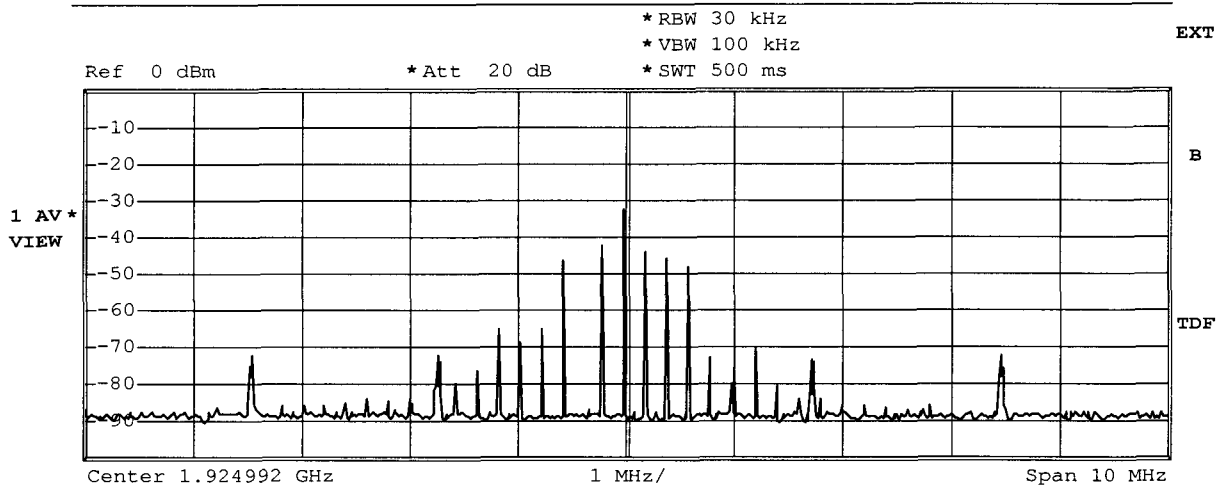
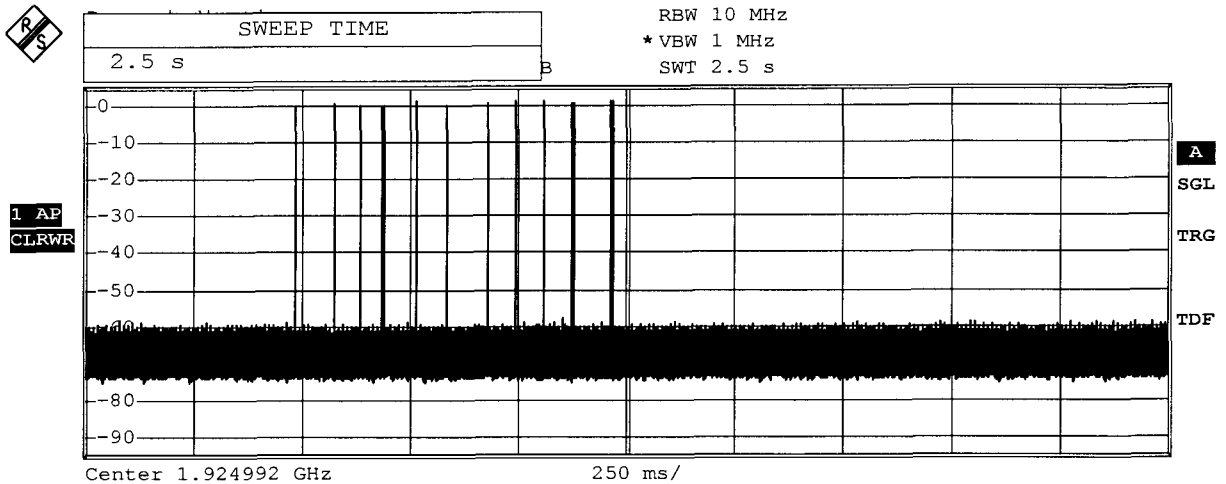
Date: 9.MAR.2007 11:49:12

Measurement diagram



**ANSI C63.17-1998 Rev. Draft ANSI 8.2.1 acknowledgements  
UPCS1900**

EUT	KIRK UPCS (DECT based) Handset (PP)
Model	PP5180 1G9
Approval Holder	KIRK telecom A/S
Temperature / Voltage	25°C
Test Site / Operator	ETS
Test Specification	ANSI C63.17-1998 Rev. Draft ANSI 8.2.1 acknowledgements
Comment 1	paragraph a) blocked acknowledgements from the companion device
Comment 2	by blocking the Rx time slots from the companion device
Comment 3	The EUT cease transmission on the communications channel after 535 ms Limit: < 1second



Date: 9.MAR.2007 12:50:29

Measurement diagram

Test case Rev. Draft ANSI\_8.2.1\_Acknowledgments\_30s.xml  
 Date 09.03.2007 13:31:11  
 Reference to the EUT G0M20703-1223 / PP5180 1G9  
 Comment: 8.2.1 Acknowledgments for c)  
 KIRK UPCS (DECT based) Handset (PP)  
 KIRK telecom A/S

The LOG table shows the level changes on each Channel of the transmission system

Time stamp	1921.536	1923.264	1924.992	1926.720	1928.448	Comment
	MHZ	MHz	MHz	MHz	MHz	
	Peak in dBm	Peak in dBm	Peak in dBm	Peak in dBm	Peak in dBm	
	RMS in dBm	RMS in dBm	RMS in dBm	RMS in dBm	RMS in dBm	
00:17:54.500000	-48,9 -55,2	-45,2 -55,4	-20,8 -38	-47,3 -55,8	-54,5 -55,4	Connection
00:18:00.2187500	-49,7 -55,2	-41,8 -55,4	-22 -41,4	-46,3 -55,8	-54 -55,4	Block acknowledge- ments from the companion device
00:18:03.6093750	-54,9 -55,2	-55 -55,4	-85 -95,5	-55,2 -55,8	-54,8 -55,4	No transmissions

The EUT terminates the transmissions on the communications channel after 3.4 seconds.

---

Log file

ETS Product Service AG  
 Storkower Str. 38C, D-15526 Reichenwalde

## Appendix P

Selected channel, power accuracy, segment occupancy

Test case confirmation.xml Rev. Draft ANSI\_7.3.4\_selected channel  
 Date 09.03.2007 10:28:21  
 Reference to the EUT G0M20703-1223 / PP5180 1G9  
 Comment: initial setup  
 KIRK UPCS (DECT based) Handset (PP)  
 KIRK telecom A/S

The LOG table shows the level changes on each Channel of the transmission system

Time stamp	1921.536 MHz	1923.264 MHz	1924.992 MHz	1926.720 MHz	1928.448 MHz	Comment
	Peak in dBm	Peak in dBm	Peak in dBm	Peak in dBm	Peak in dBm	
	RMS in dBm	RMS in dBm	RMS in dBm	RMS in dBm	RMS in dBm	
00:51:22.4062500	-87 -95,6	-85,7 -95,5	-63,5 -88,6	-85,9 -95,3	-85,8 -95,4	Interferer off
00:51:44.5156250	-61,7 -62,1	-61,7 -62,2	-57 -62,1	-78,5 -82	-85,6 -95,6	Interferer on
00:52:01.3437500	-61,2 -62,2	-56,6 -62,3	-55,7 -62,4	-43 -73	-21,9 -41,8	OK 1
00:52:15.7031250	-58,7 -62,2	-57,9 -62,3	-42,7 -62,1	-22,4 -41,4	-47,3 -75,9	OK 2

---

Log file

---

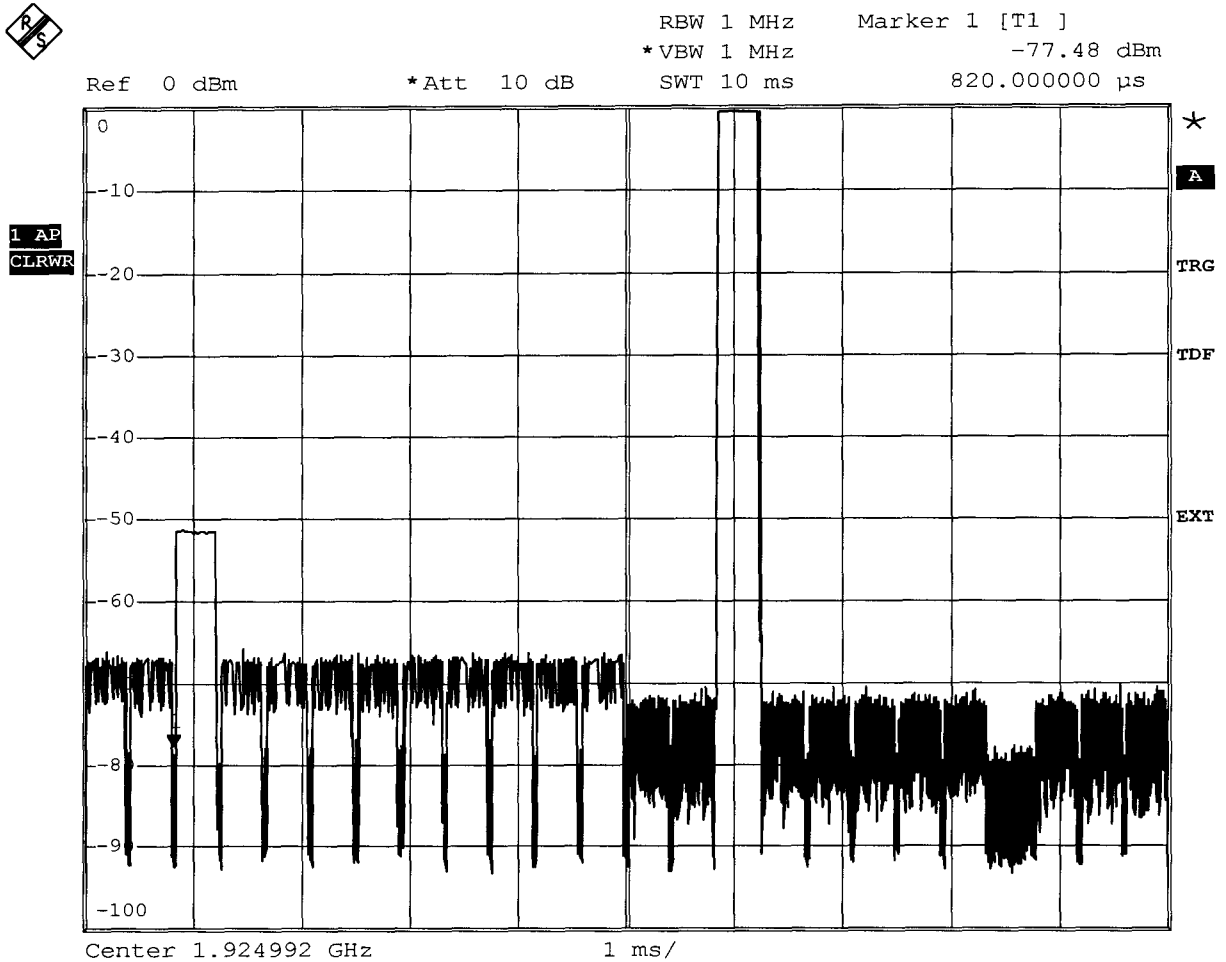
ETS Product Service AG  
 Storkower Str. 38C, D-15526 Reichenwalde

## Appendix Q

Duplex connections

**ANSI 8.3.2 Duplex connections**  
**Subclause 8.3.2 (d)**

EUT	KIRK UPCS (DECT based) Handset (PP)
Model	PP5180 1G9
Approval Holder	KIRK telecom A/S
Temperature / Voltage	25°C
Test Site / Operator	ETS
Test Specification	ANSI C63.17-1998 Revision Draft
Comment 1	Rx time slot 2 is interference free
Comment 2	Connection in Rx time slot 2
Comment 3	Verdict : PASS

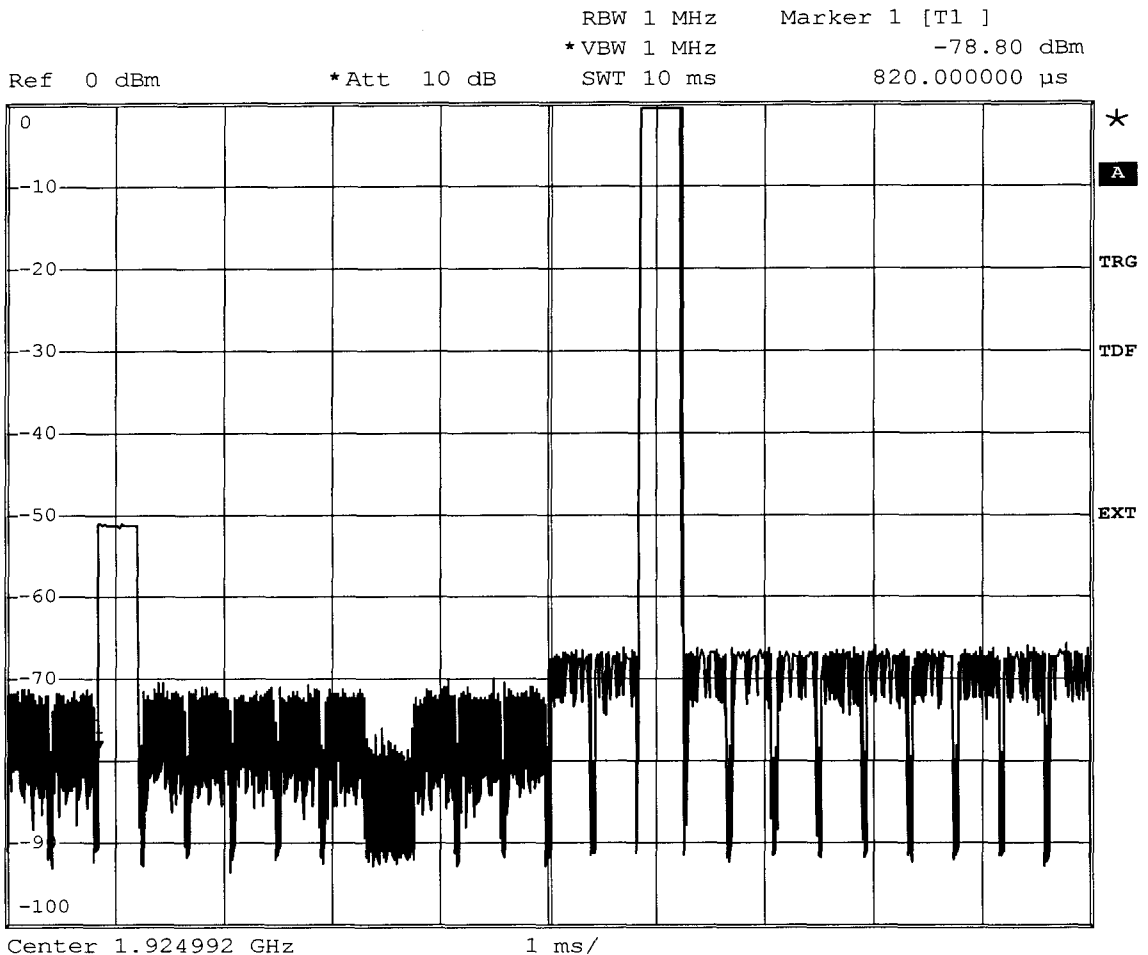


Date: 9.MAR.2007 13:35:02

Measurement diagram

**ANSI 8.2.3 Duplex connections**  
**Subclause 8.3.2 (f)**

EUT	KIRK UPCS (DECT based) Handset (PP)
Model	PP5180 1G9
Approval Holder	KIRK telecom A/S
Temperature / Voltage	25°C
Test Site / Operator	ETS
Test Specification	ANSI C63.17-1998 Revision Draft 1.1
Comment 1	Tx time slot 2 is interference free
Comment 2	Connection in Tx time slot 2
Comment 3	Verdict : PASS

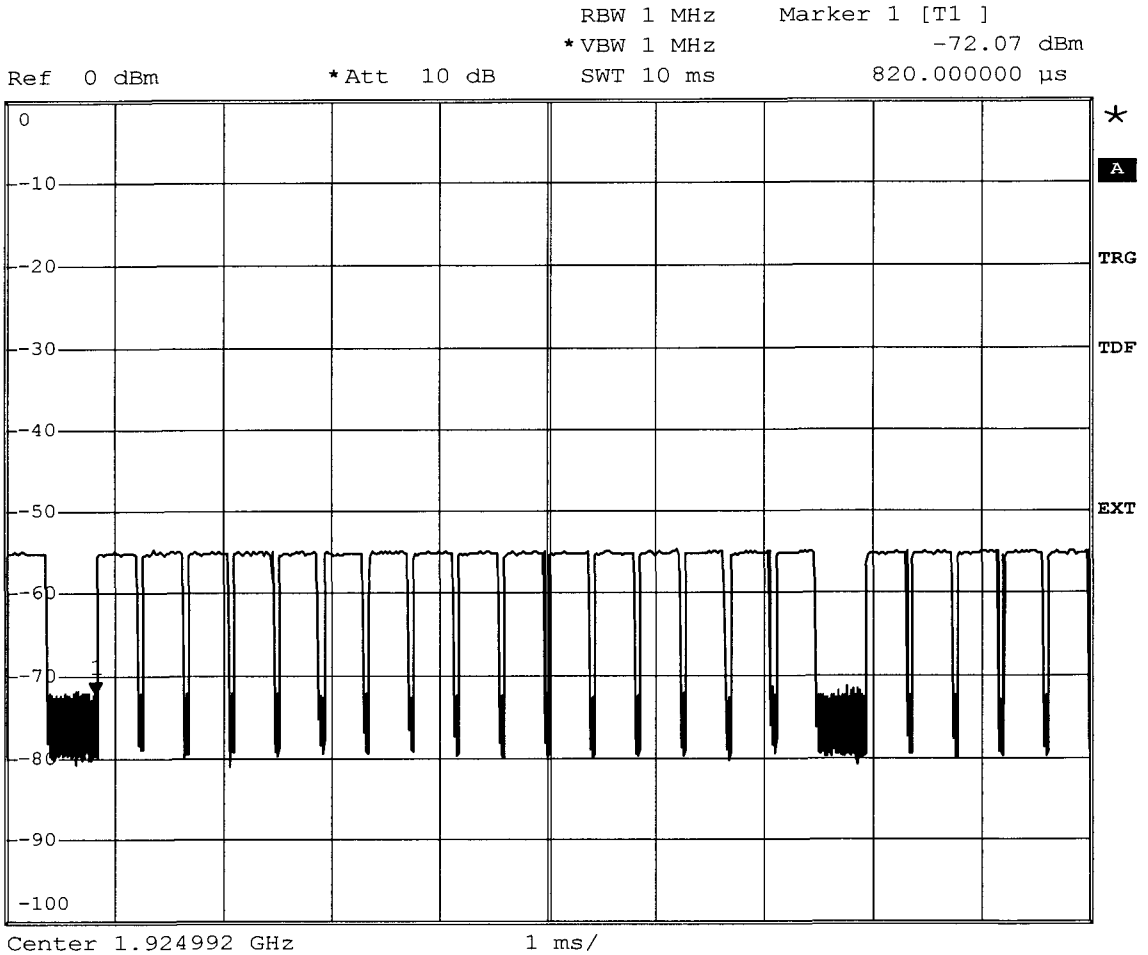


Date: 9.MAR.2007 13:40:40

Measurement diagram

**ANSI 8.2.3 Duplex connections**  
**Subclause 8.3.2 (g)**

EUT	KIRK UPCS (DECT based) Handset (PP)
Model	PP5180 1G9
Approval Holder	KIRK telecom A/S
Temperature / Voltage	25°C
Test Site / Operator	ETS
Test Specification	ANSI C63.17-1998 Revision Draft
Comment 1	No connection establisht in the interference free time slot.
Comment 2	The slot pair are not a duplex slot pair.
Comment 3	Verdict pass



Date: 9.MAR.2007 13:49:31

Measurement diagram