

## **Appendix B**

Coordination with fixed microwave service

UTAM, Inc.

# Affidavit of Participation

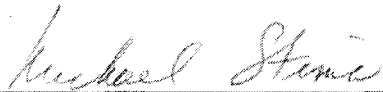
## FCC Section 15.307(b) Affidavit

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

**DeTeWe Systems GmbH**

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 15th day of November, 2006



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

Affidavit #: AAST110806-1

## **Appendix C**

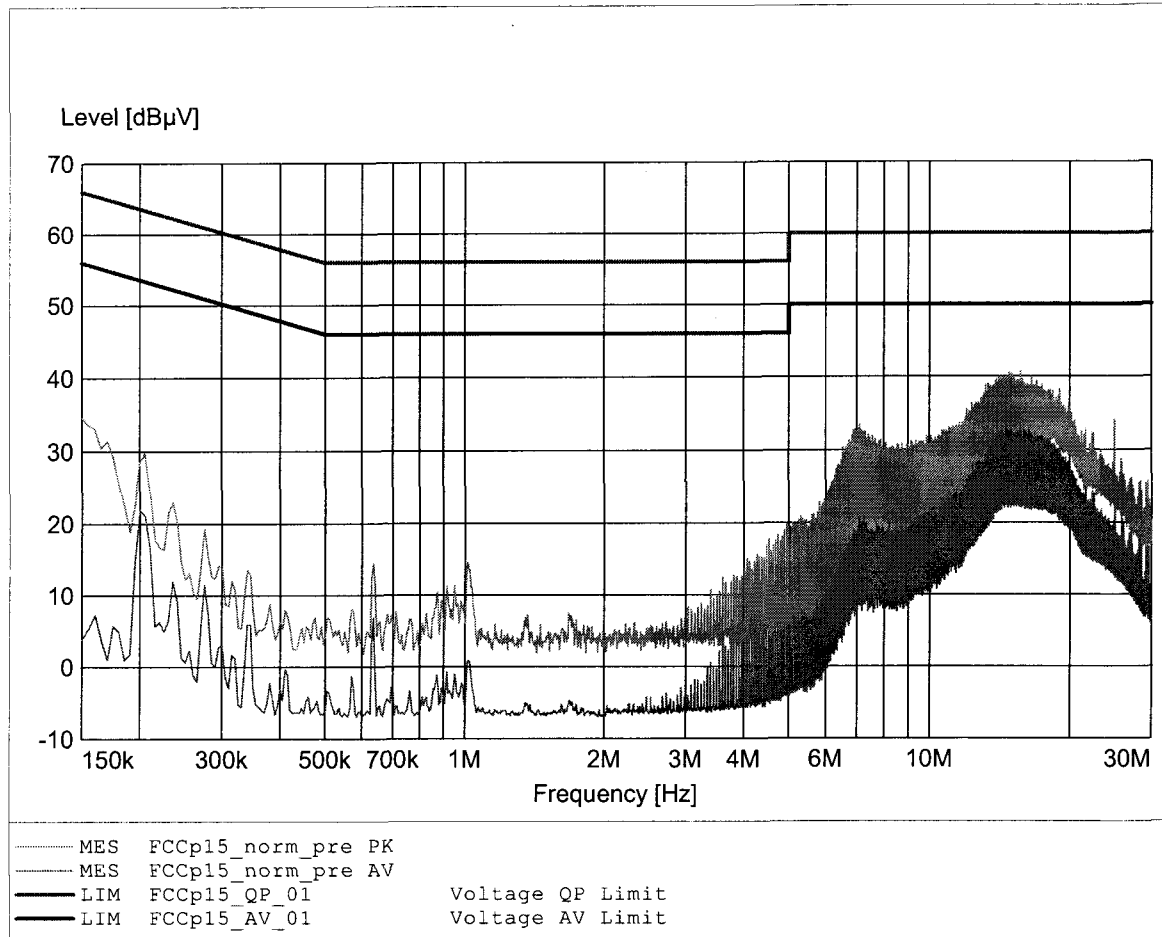
Reference to Subpart B

## **Appendix D**

Conducted limits AC Power line

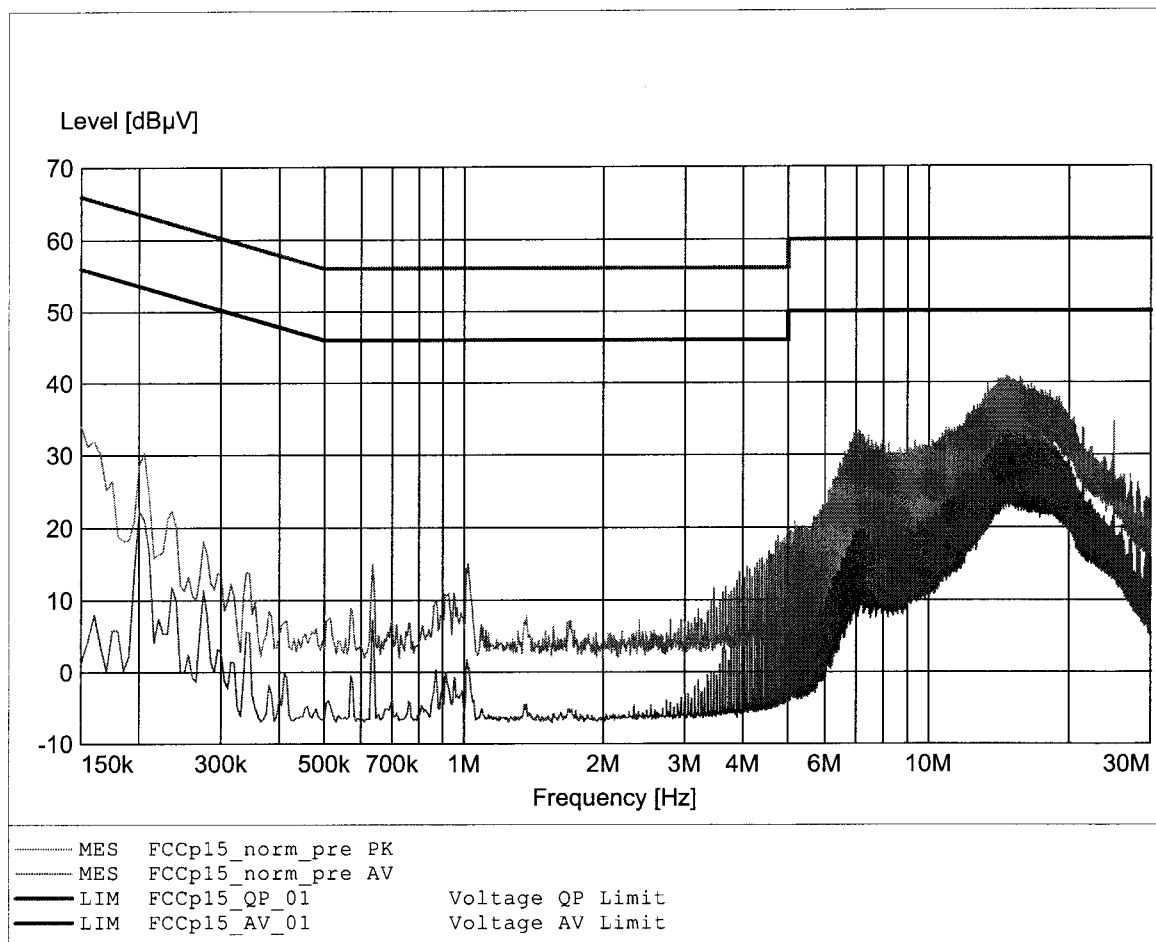
# EMI voltage test in the ac-mains according to FCC part 15

EUT: UPCS IP base  
Manufacturer: DeTeWe Systems GmbH  
Operating Condition: Unom: 120 V AC, Tnom: 23°C  
Test Site: ETS  
Operator: Mr. Pflug  
Test Specification: V-Network: ESH2-Z5 (L1)  
Comment: model: RFP 32



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

EUT: UPCS IP base  
Manufacturer: DeTeWe Systems GmbH  
Operating Condition: Unom: 120 V AC, Tnom: 23°C  
Test Site: ETS  
Operator: Mr. Pflug  
Test Specification: V-Network: ESH2-Z5 (N)  
Comment: model: RFP 32



## **Appendix E**

Emission bandwidth

## FCC Part 15.303(b) Emission bandwidth

### Testprocedure ANSI 63.17-1998 6.1.3

#### UPCS

EUT	UPCS IP base
Model	RFP 32
Applicant	DeTeWe Systems GmbH
Temperature	23°C
Test Site / Operator	ETS Reichenwalde
Test Specification	6.1.3 Emission bandwidth

Measured Bandwidth	Emission Bandwidth = 1.43MHz
Max. Permitted Power	Limit = 2.5 MHz

Test result	Verdict = PASS
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Emission Bandwidth

\*RBW 10 kHz

Delta 2 [T1 ]

\*VBW 30 kHz

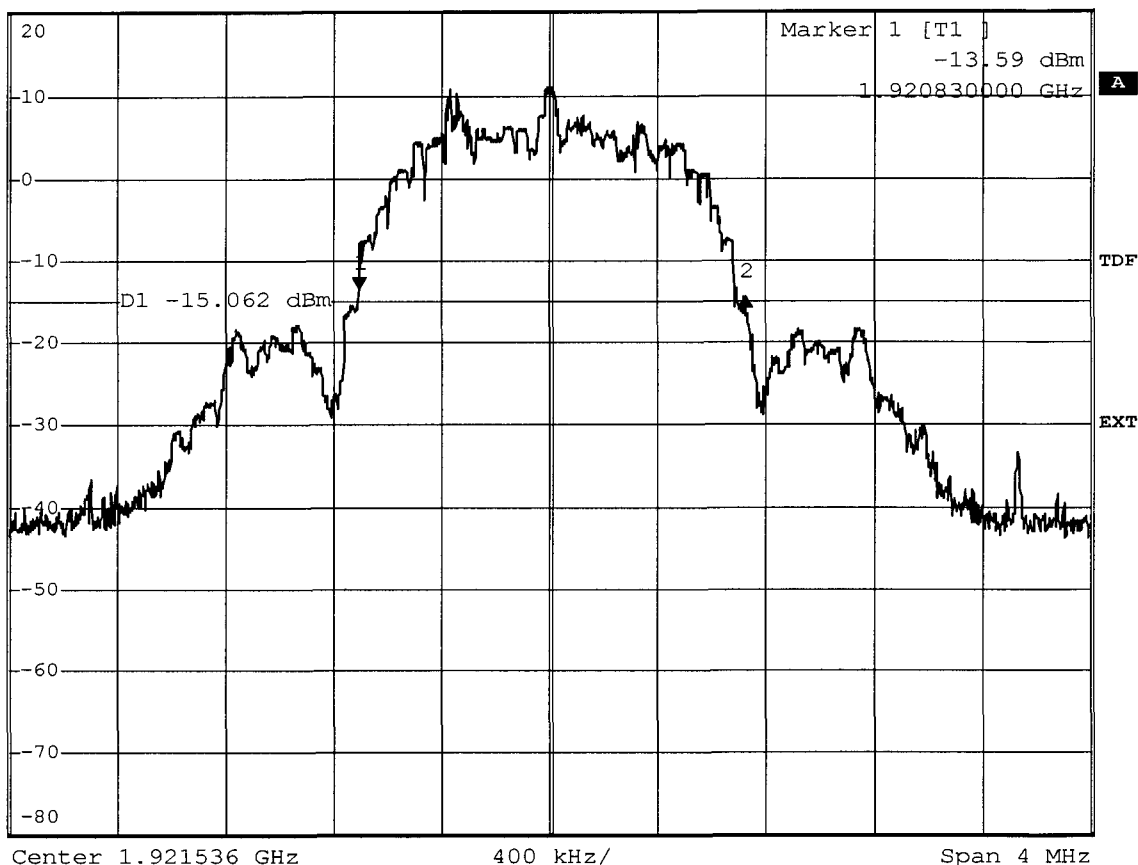
-1.03 dB

Ref 20 dBm

\*Att 40 dB

SWT 40 ms

1.430000000 MHz

Comment: Ansi C63.17-1998 6.1.3

Date: 14.AUG.2006 10:03:31

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 : 1921.11MHz  
Higher frequency : 1921.898MHz

**-12 dB points**

Lower frequency : 1920.946MHz  
Higher frequency : 1922.132MHz

---

Measurement diagram

## FCC Part 15.303(b) Emission bandwidth

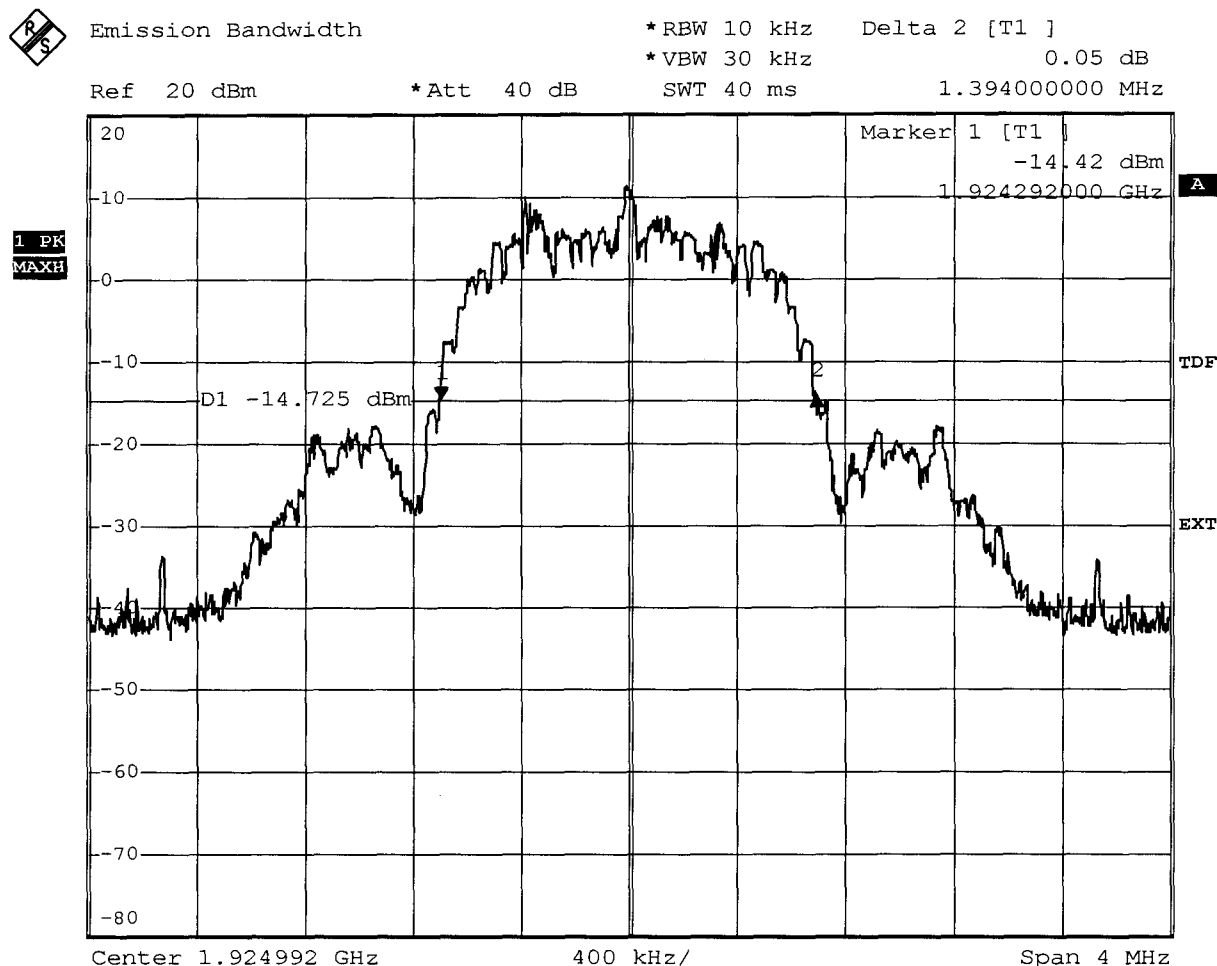
### Testprocedure ANSI 63.17-1998 6.1.3

#### UPCS

EUT	UPCS IP base
Model	RFP 32
Applicant	DeTeWe Systems GmbH
Temperature	23°C
Test Site / Operator	ETS Reichenwalde
Test Specification	6.1.3 Emission bandwidth

Measured Bandwidth	Emission Bandwidth = 1.39MHz
Max. Permitted Power	Limit = 2.5 MHz

Test result	Verdict = PASS
-------------	----------------



Comment: Ansi C63.17-1998 6.1.3  
Date: 14.AUG.2006 10:12:22

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 : 1924.566MHz  
Higher frequency : 1925.342MHz

**-12 dB points**

Lower frequency : 1924.392MHz  
Higher frequency : 1925.578MHz

## FCC Part 15.303(b) Emission bandwidth

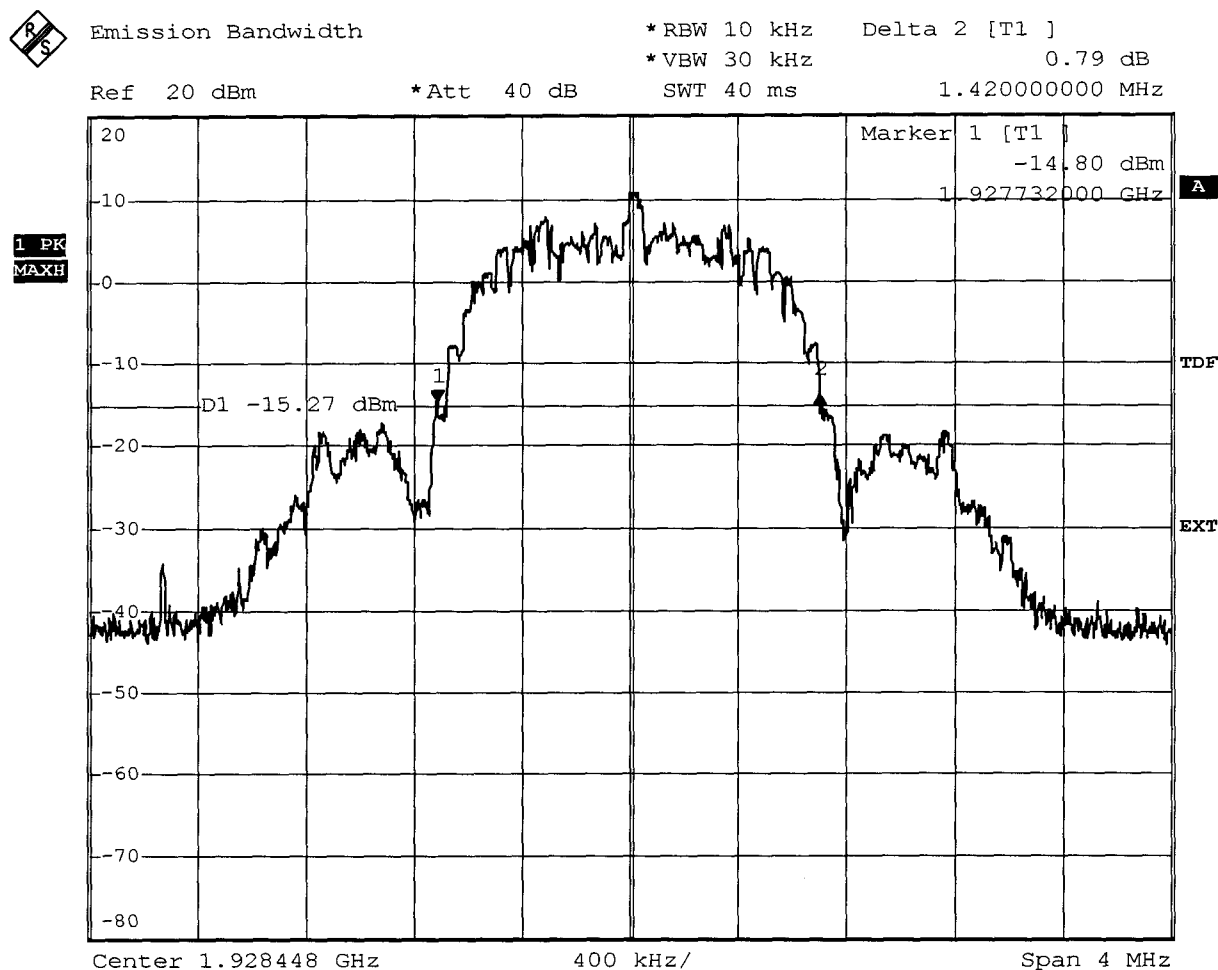
### Testprocedure ANSI 63.17-1998 6.1.3

#### UPCS

EUT	UPCS IP base
Model	RFP 32
Applicant	DeTeWe Systems GmbH
Temperature	23°C
Test Site / Operator	ETS Reichenwalde
Test Specification	6.1.3 Emission bandwidth

Measured Bandwidth	Emission Bandwidth = 1.42MHz
Max. Permitted Power	Limit = 2.5 MHz

Test result	Verdict = PASS
-------------	----------------



Comment: Ansi C63.17-1998 6.1.3  
 Date: 14.AUG.2006 10:07:25

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 : 1928.056MHz  
Higher frequency : 1928.894MHz

**-12 dB points**

Lower frequency : 1927.864MHz  
Higher frequency : 1929.052MHz

## **Appendix F**

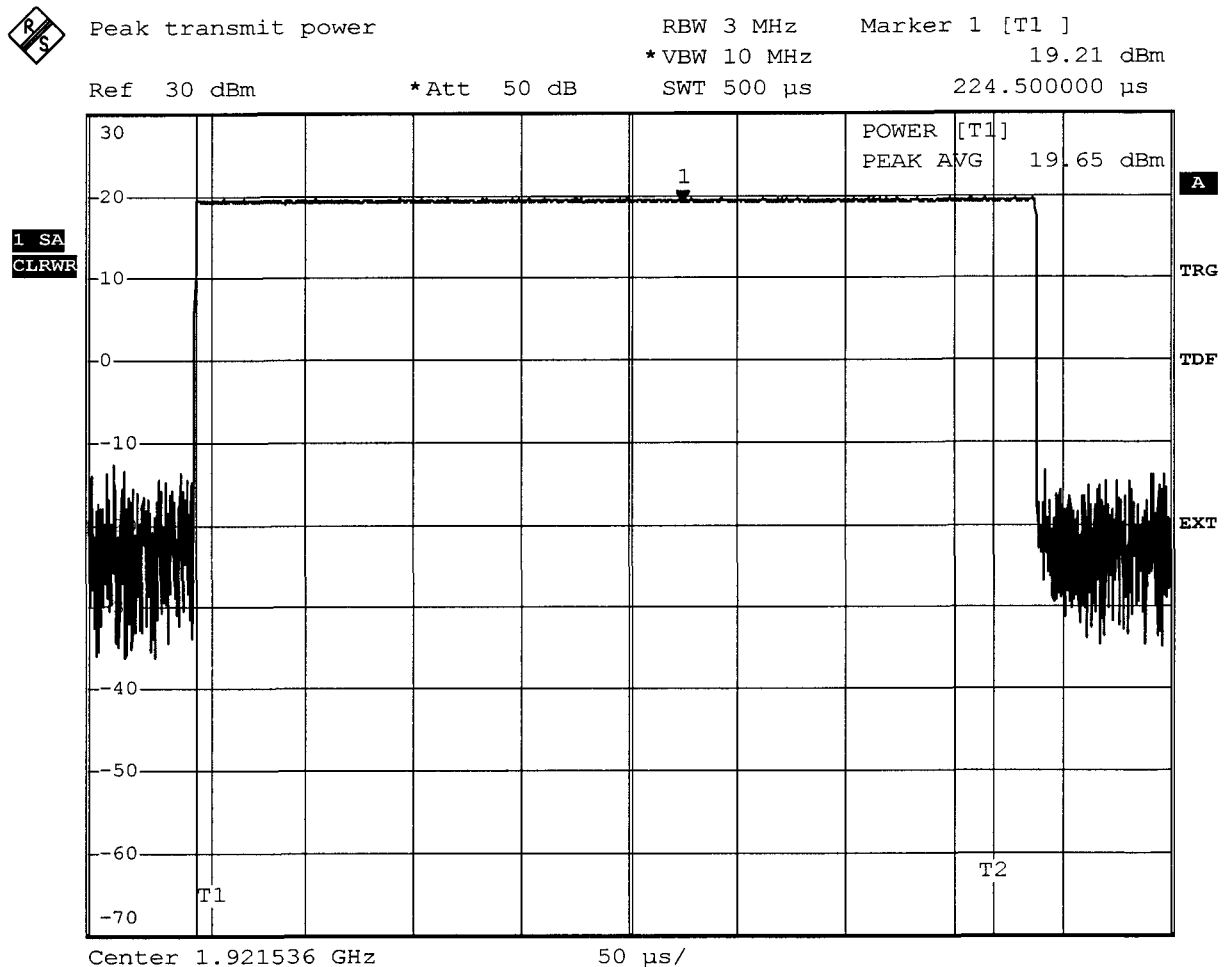
Peak Transmit Power

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

### Testprocedure ANSI 63.17-1998 6.1.2

#### UPCS

EUT	UPCS IP base
Model	RFP 32
Applicant	DeTeWe Systems GmbH
Temperature	23°C
Test Site / Operator	ETS Reichenwalde
Test Specification	6.1.2 Peak transmit power
Supply	Vnom (48V)
Measured Bandwidth	1.43MHz
Max. Permitted Power	20,77 dBm
Measured Power	19,65 dBm
Test result	Verdict = PASS



Comment: Ansi C63.17-1998 6.1.2

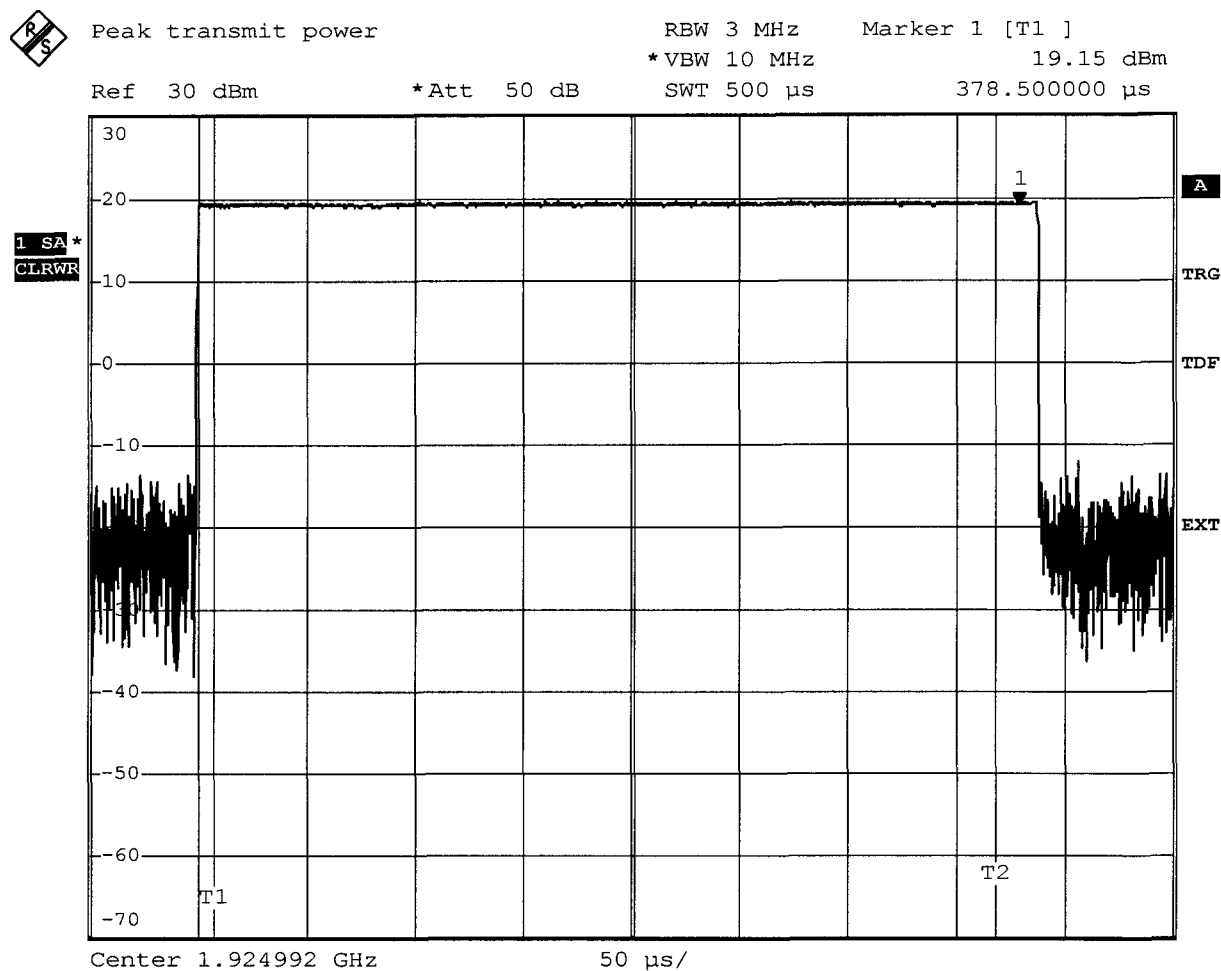
Date: 16.AUG.2006 11:57:35

Measurement diagram

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

### Testprocedure ANSI 63.17-1998 6.1.2 UPCS

EUT	UPCS IP base
Model	RFP 32
Applicant	DeTeWe Systems GmbH
Temperature	23°C
Test Site / Operator	ETS Reichenwalde
Test Specification	6.1.2 Peak transmit power
Supply	Vnom (48V)
Measured Bandwidth	1.43MHz
Max. Permitted Power	20,77 dBm
Measured Power	19,63 dBm
Test result	Verdict = PASS



Comment: Ansi C63.17-1998 6.1.2  
Date: 16.AUG.2006 11:46:35

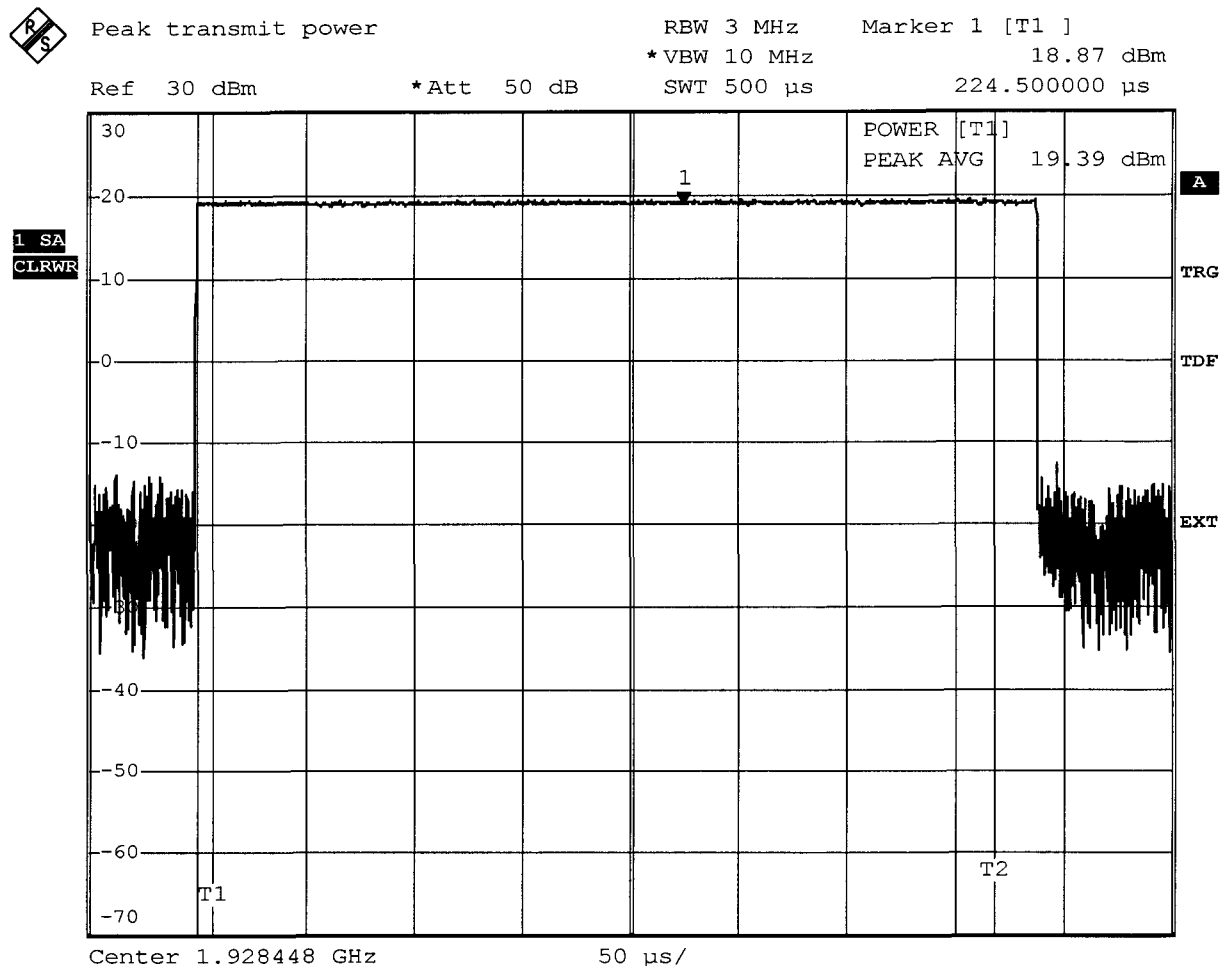
Measurement diagram



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

### Testprocedure ANSI 63.17-1998 6.1.2 UPCS

EUT	UPCS IP base
Model	RFP 32
Applicant	DeTeWe Systems GmbH
Temperature	23°C
Test Site / Operator	ETS Reichenwalde
Test Specification	6.1.2 Peak transmit power
Supply	Vnom (48V)
Measured Bandwidth	1.43MHz
Max. Permitted Power	20,77 dBm
Measured Power	19,39 dBm
Test result	Verdict = PASS



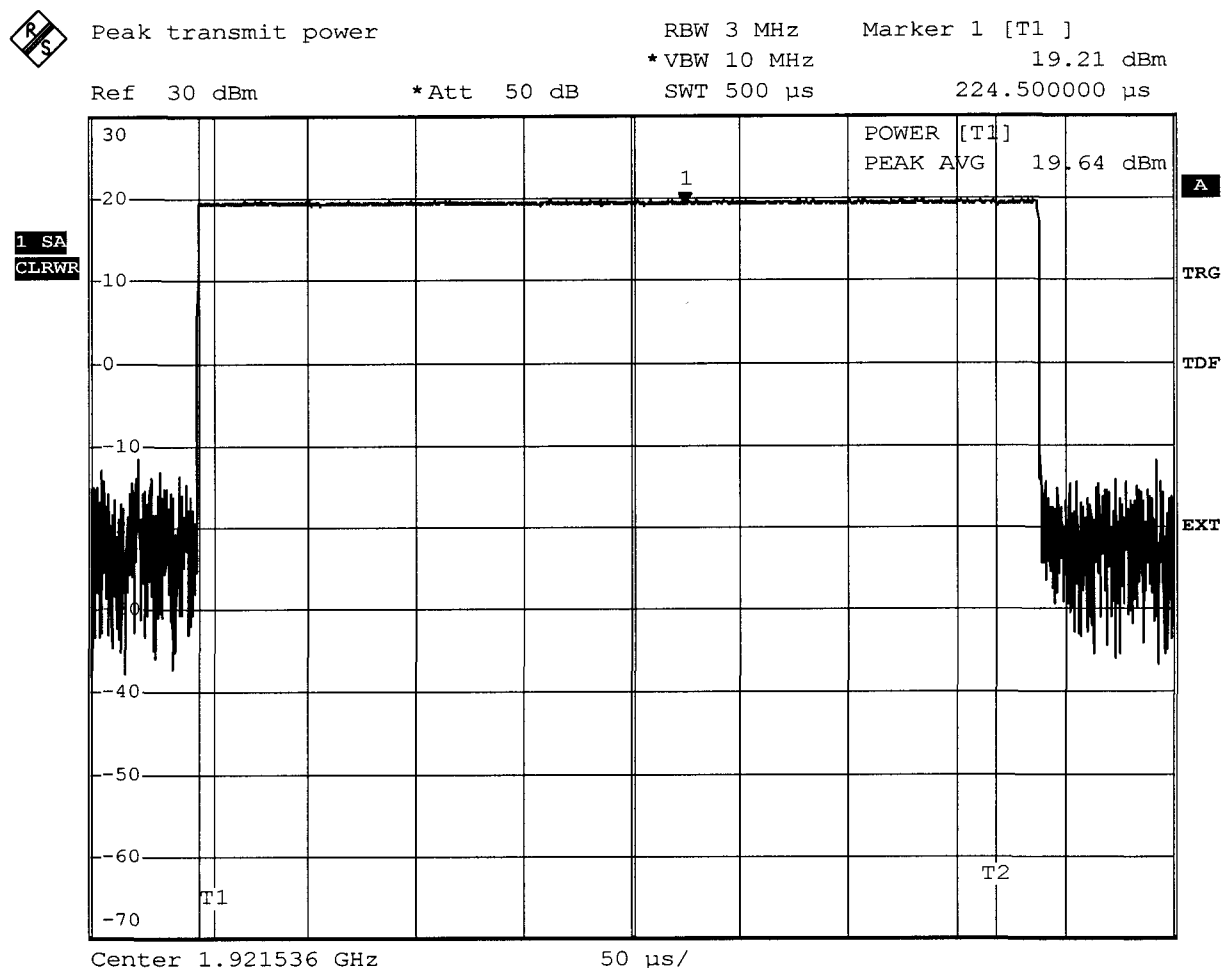
Comment: Ansi C63.17-1998 6.1.2  
Date: 16.AUG.2006 12:37:05

Measurement diagram

# FCC Part 15.319(c) Peak Transmit Power limit

## Testprocedure ANSI 63.17-1998 6.1.2 UPCS

EUT	UPCS IP base
Model	RFP 32
Applicant	DeTeWe Systems GmbH
Temperature	23°C
Test Site / Operator	ETS Reichenwalde
Test Specification	6.1.2 Peak transmit power
Supply	Vmax (52V)
Measured Bandwidth	1.43MHz
Max. Permitted Power	20,77 dBm
Measured Power	19,64 dBm
Test result	Verdict = PASS



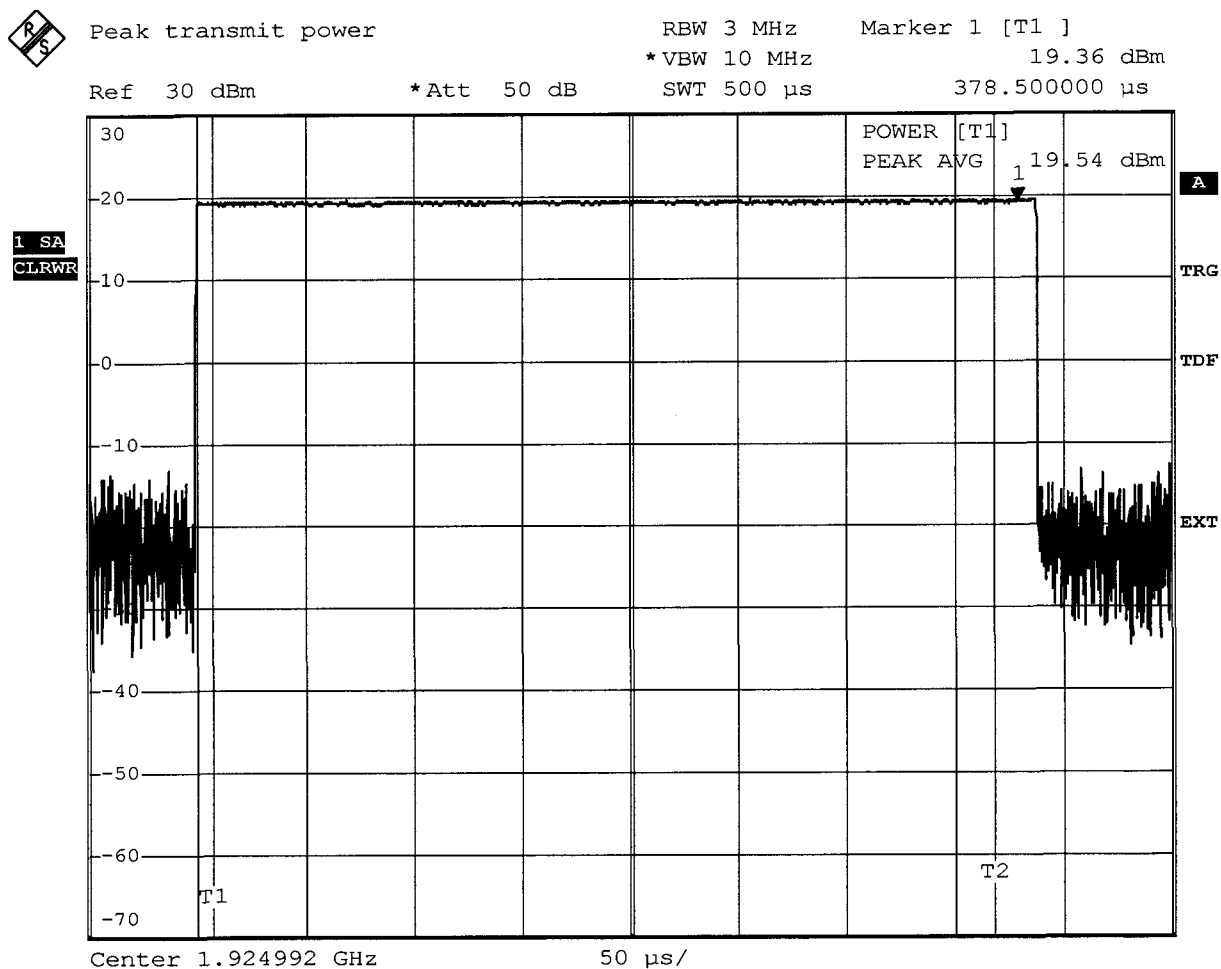
Comment: Ansi C63.17-1998 6.1.2  
Date: 16.AUG.2006 11:55:48

Measurement diagram

# FCC Part 15.319(c) Peak Transmit Power limit

## Testprocedure ANSI 63.17-1998 6.1.2 UPCS

EUT	UPCS IP base
Model	RFP 32
Applicant	DeTeWe Systems GmbH
Temperature	23°C
Test Site / Operator	ETS Reichenwalde
Test Specification	6.1.2 Peak transmit power
Supply	Vmax (52V)
Measured Bandwidth	1.43MHz
Max. Permitted Power	20,77 dBm
Measured Power	19,54 dBm
Test result	Verdict = PASS



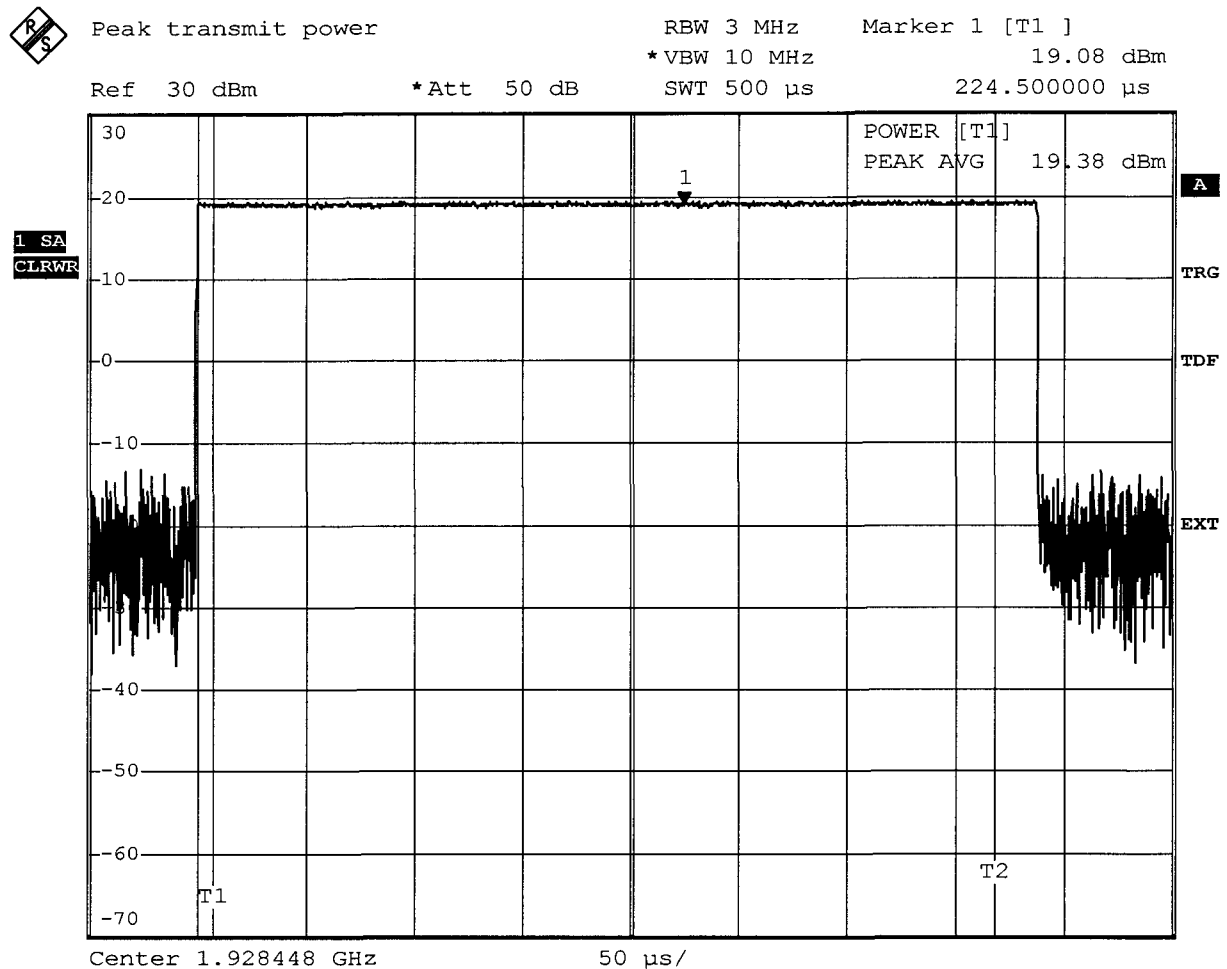
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Date: 16.AUG.2006 11:53:01

Measurement diagram

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

### Testprocedure ANSI 63.17-1998 6.1.2 UPCS

EUT	UPCS IP base
Model	RFP 32
Applicant	DeTeWe Systems GmbH
Temperature	23°C
Test Site / Operator	ETS Reichenwalde
Test Specification	6.1.2 Peak transmit power
Supply	Vmax (52V)
Measured Bandwidth	1.43MHz
Max. Permitted Power	20,77 dBm
Measured Power	19,42 dBm
Test result	Verdict = PASS



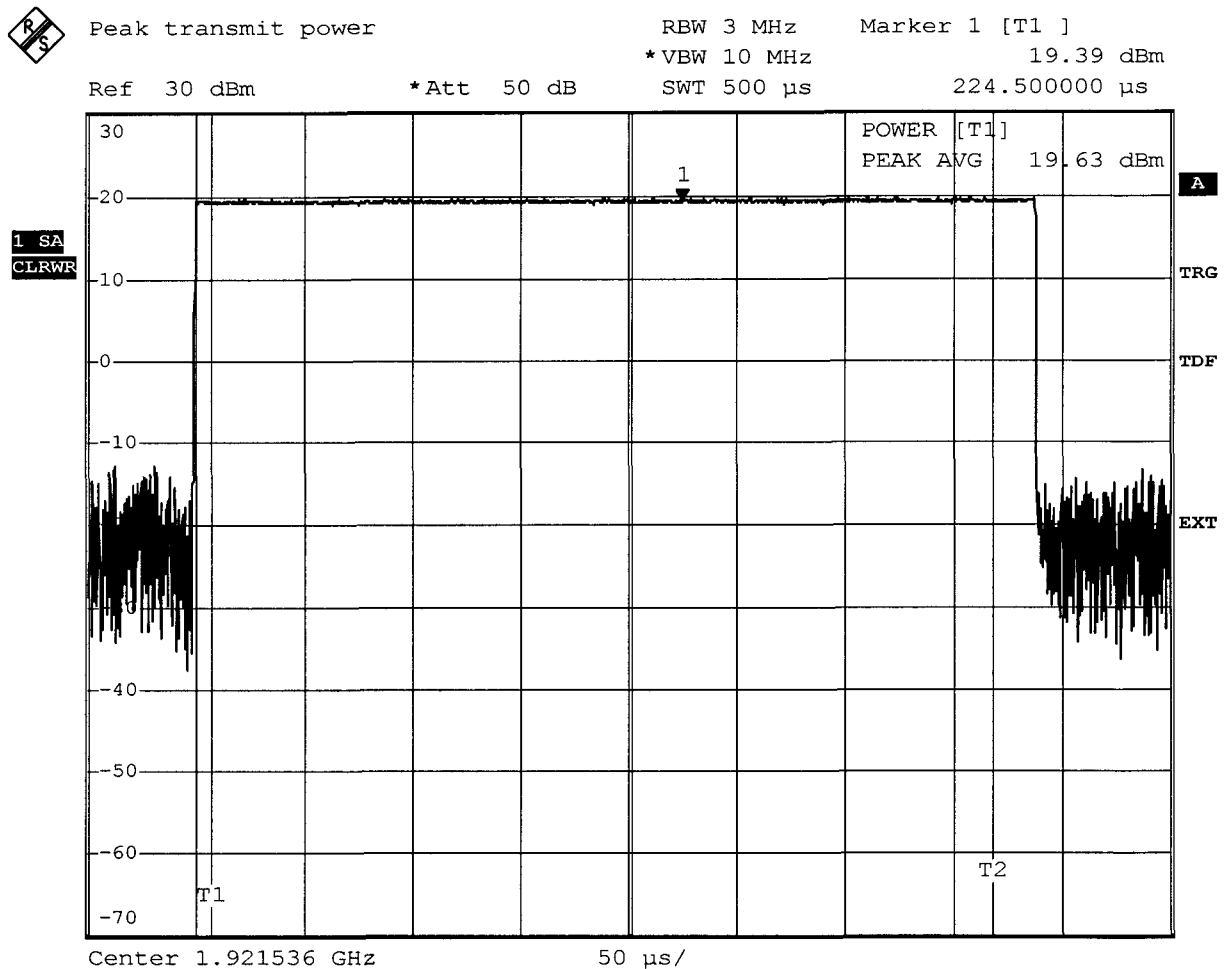
Comment: Ansi C63.17-1998 6.1.2  
Date: 16.AUG.2006 12:38:44

Measurement diagram

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

### Testprocedure ANSI 63.17-1998 6.1.2 UPCS

EUT	UPCS IP base
Model	RFP 32
Applicant	DeTeWe Systems GmbH
Temperature	23°C
Test Site / Operator	ETS Reichenwalde
Test Specification	6.1.2 Peak transmit power
Supply	Vmin (35V)
Measured Bandwidth	1.43MHz
Max. Permitted Power	20,77 dBm
Measured Power	19,63 dBm
Test result	Verdict = PASS



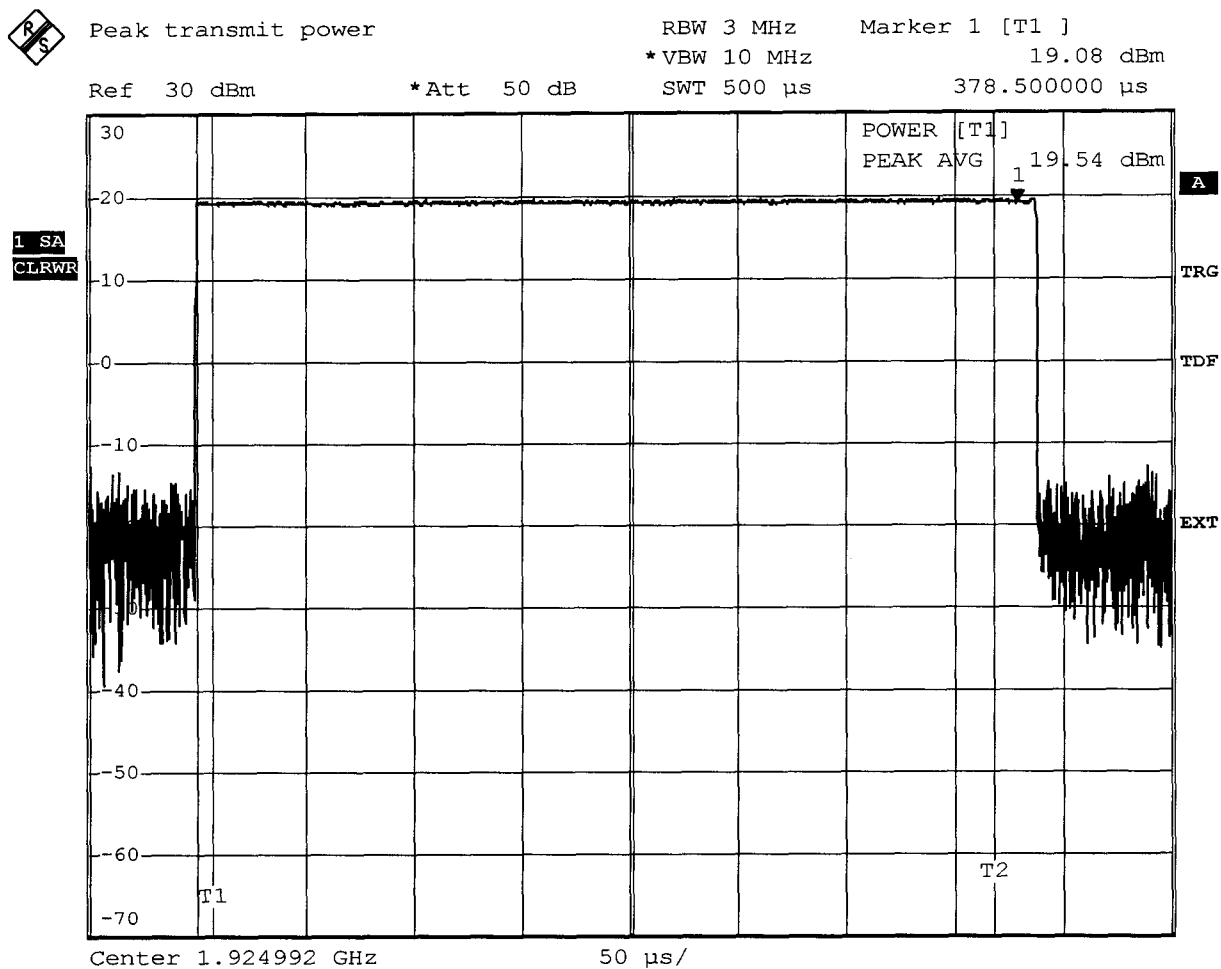
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Date: 16.AUG.2006 11:59:21

Measurement diagram

# FCC Part 15.319(c) Peak Transmit Power limit

## Testprocedure ANSI 63.17-1998 6.1.2 UPCS

EUT	UPCS IP base
Model	RFP 32
Applicant	DeTeWe Systems GmbH
Temperature	23°C
Test Site / Operator	ETS Reichenwalde
Test Specification	6.1.2 Peak transmit power
Supply	V min (35V)
Measured Bandwidth	1.43MHz
Max. Permitted Power	20,77 dBm
Measured Power	19,54 dBm
Test result	Verdict = PASS



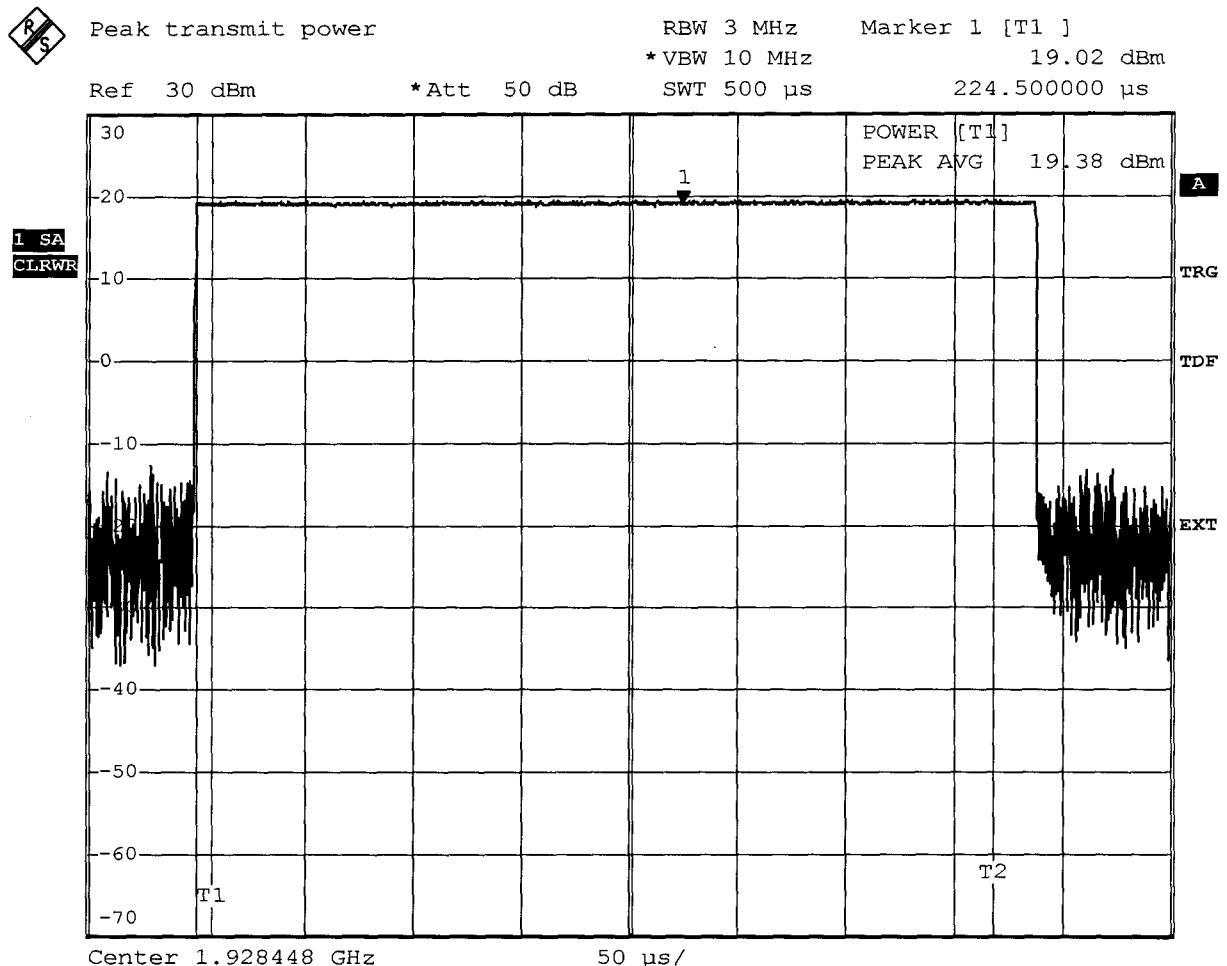
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Date: 16.AUG.2006 11:51:04

Measurement diagram

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

Testprocedure ANSI 63.17-1998 6.1.2  
UPCS

EUT	UPCS IP base
Model	RFP 32
Applicant	DeTeWe Systems GmbH
Temperature	23°C
Test Site / Operator	ETS Reichenwalde
Test Specification	6.1.2 Peak transmit power
Supply	Vmin (35V)
Measured Bandwidth	1.43MHz
Max. Permitted Power	20,77 dBm
Measured Power	19,38 dBm
Test result	Verdict = PASS



Comment: Ansi C63.17-1998 6.1.2  
Date: 16.AUG.2006 12:35:50

Measurement diagram

## **Appendix G**

Power spectral density



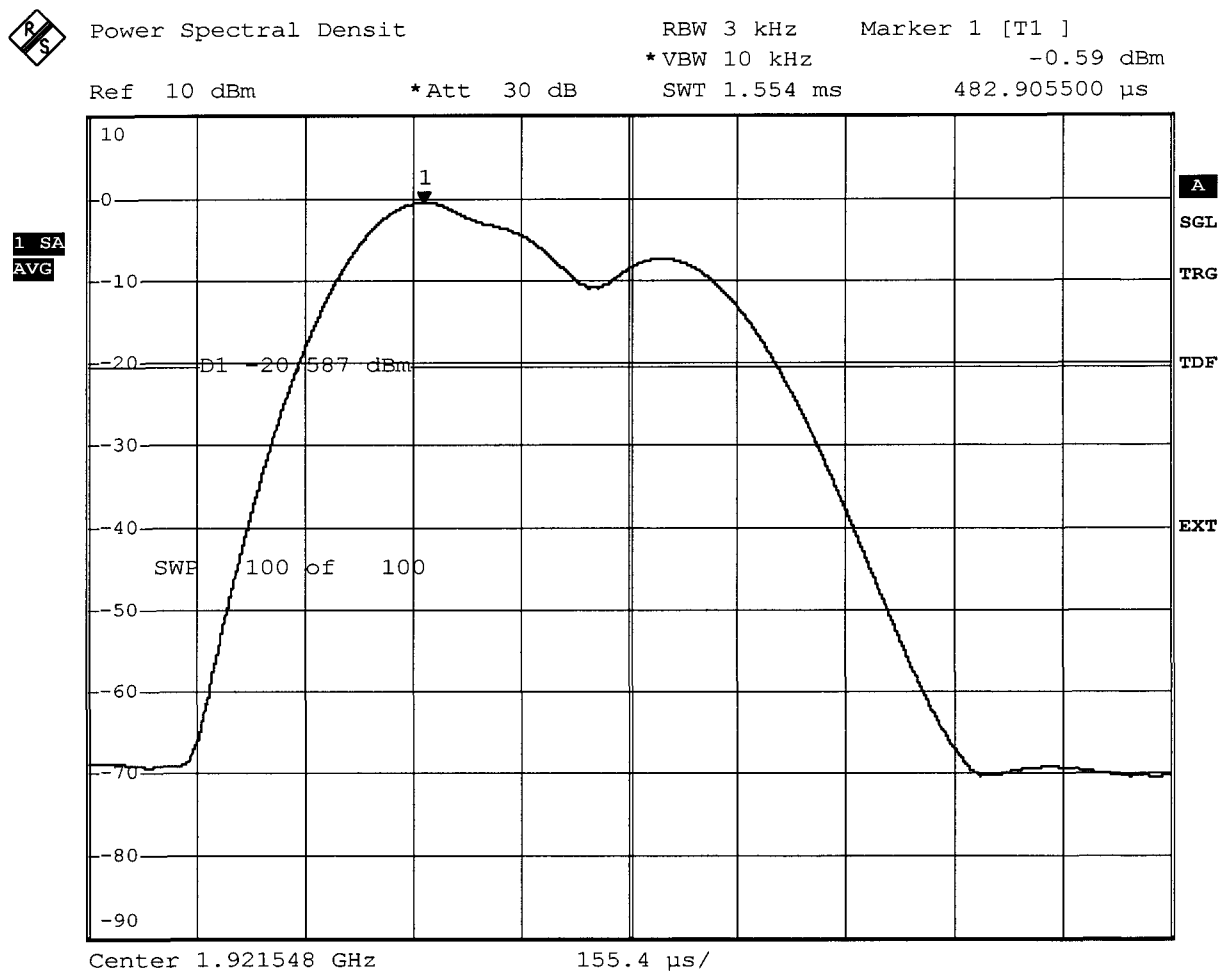
## FCC Part 15.319(d) Power spectral density

### Testprocedure ANSI 63.17-2006 6.1.5

#### UPCS

EUT	UPCS IP base
Model	RFP 32
Applicant	DeTeWe Systems GmbH
Temperature	23°C
Test Site / Operator	ETS Reichenwalde
Test Specification	6.1.5 Power spectral density
Peak Frequency in MHz	1921,548000 MHz
Total pulse energy in mW	0,000194 mW
Wideband pulse duration in ms	0,388500 ms
PSD in mW	0,4984 mW
PSD in dBm	-3,0239 dBm

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



Comment: Ansi C63.17-2006 6.1.5  
 Date: 14.AUG.2006 10:41:43

Measurement diagram

## FCC Part 15.319(d) Power spectral density

## Testprocedure ANSI 63.17-2006 6.1.5

## UPCS

EUT	UPCS IP base
Model	RFP 32
Applicant	DeTeWe Systems GmbH
Temperature	23°C
Test Site / Operator	ETS Reichenwalde
Test Specification	6.1.5 Power spectral density
Peak Frequency in MHz	1924,984000 MHz
Total pulse energy in mW	0,000145 mW
Wideband pulse duration in ms	0,388500 ms
PSD in mW	0,3745 mW
PSD in dBm	-4,2656 dBm

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



Power Spectral Densit

RBW 3 kHz

Marker 1 [T1 ]

\*VBW 10 kHz

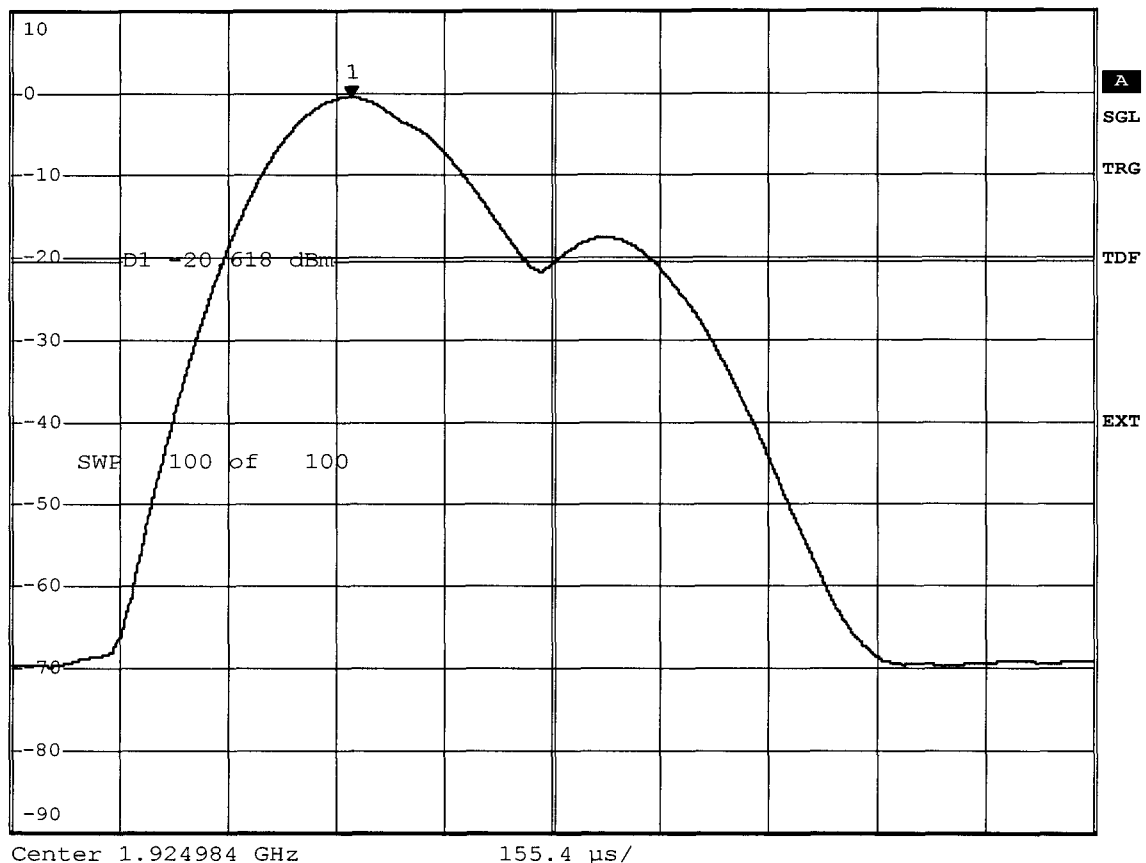
-0.62 dBm

Ref 10 dBm

\*Att 30 dB

SWT 1.554 ms

489.121500 µs

1 SA  
AVG

Comment: Ansi C63.17-2006 6.1.5

Date: 14.AUG.2006 10:35:13

Measurement diagram

# FCC Part 15.319(d) Power spectral density

## Testprocedure ANSI 63.17-2006 6.1.5

### UPCS

EUT	UPCS IP base
Model	RFP 32
Applicant	DeTeWe Systems GmbH
Temperature	23°C
Test Site / Operator	ETS Reichenwalde
Test Specification	6.1.5 Power spectral density
Peak Frequency in MHz	1928,474000 MHz
Total pulse energy in mW	0,000180 mW
Wideband pulse duration in ms	0,389750 ms
PSD in mW	0,4618 mW
PSD in dBm	-3,3550 dBm

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



Power Spectral Densit

RBW 3 kHz

Marker 1 [T1]

\*VBW 10 kHz

0.08 dBm

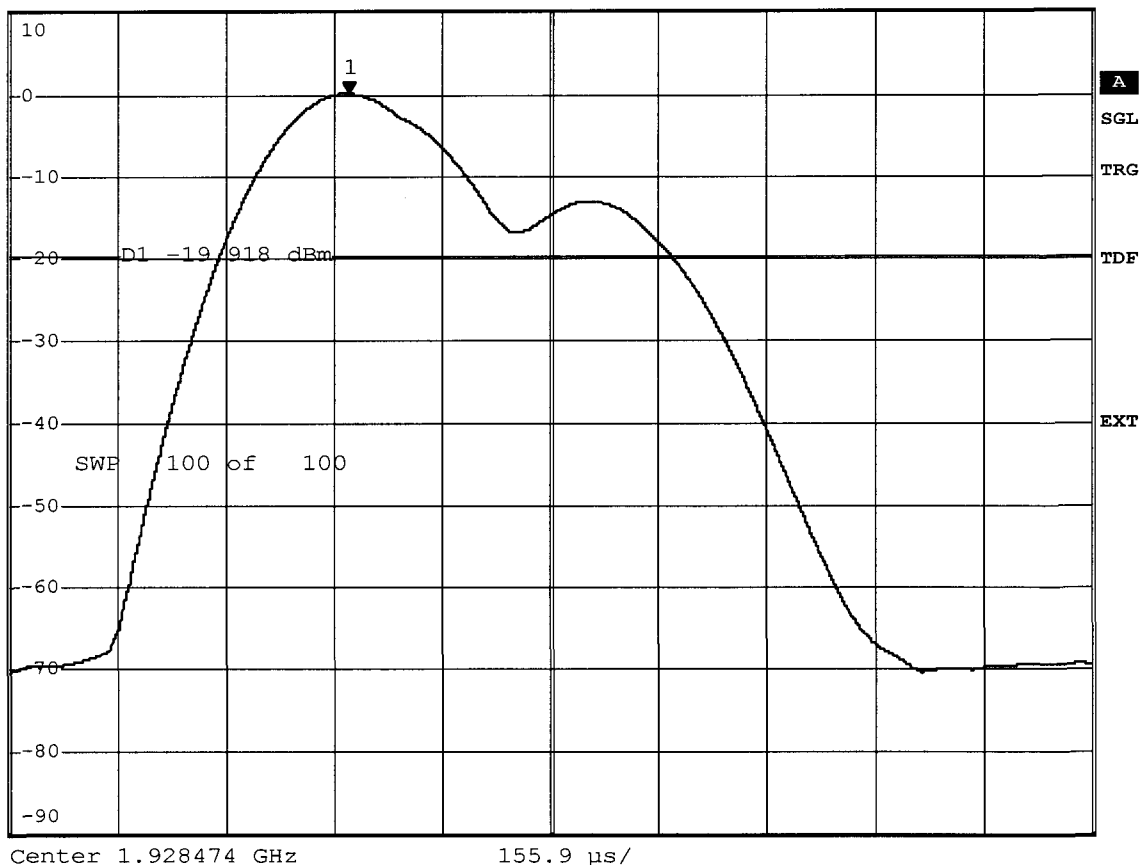
Ref 10 dBm

\*Att 30 dB

SWT 1.559 ms

490.695250 µs

1 SA  
AVG



Comment: Ansi C63.17-2006 6.1.5

Date: 14.AUG.2006 10:44:58

Measurement diagram

## **Appendix H**

Directional gain of the antenna

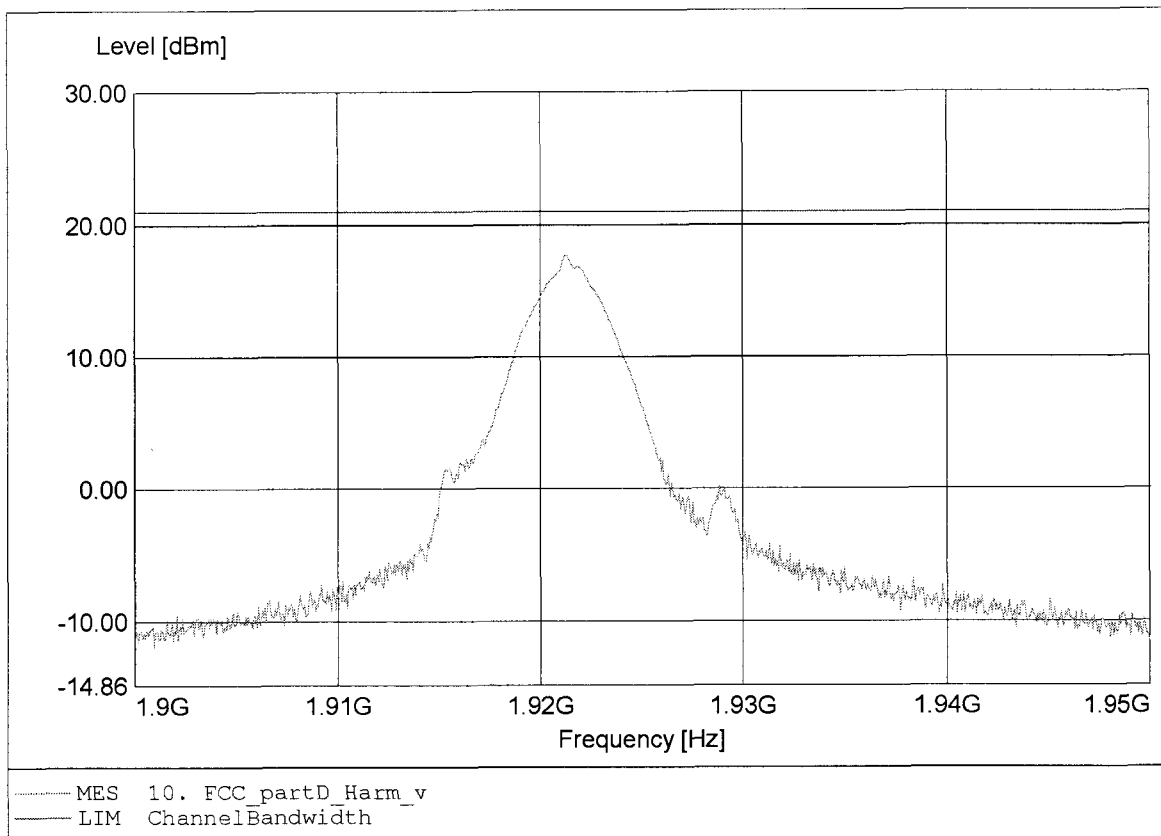
## **Appendix I**

Radio frequency radiation exposure

## Peak Transmit Power, Radiated

### FCC RULES PART 15, SUBPART D

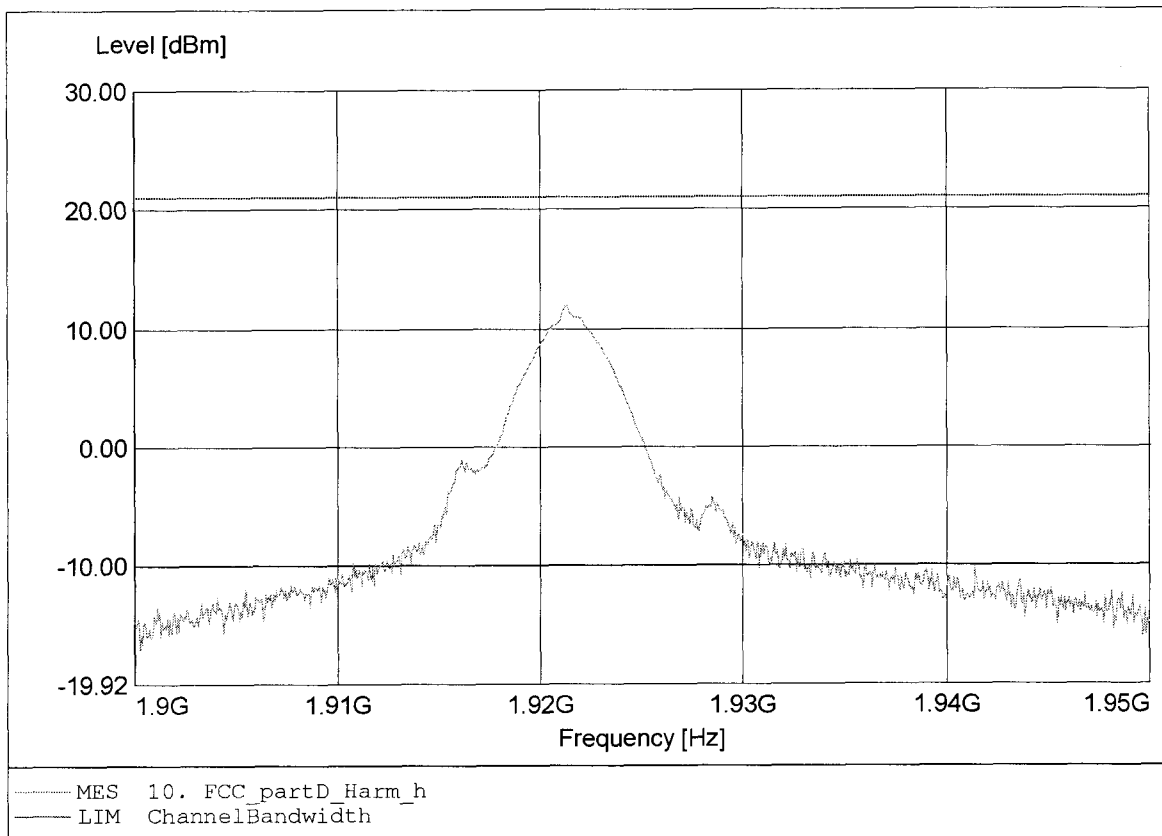
Approval Holder: DeTeWe  
EUT : IP - USA (UPCS)  
Model / Ch.: RFP 32 / Ch.: 4 / slot 0 / antenna 0  
Test Site / Operator: ETS / Mr. Cersovsky  
Test Conditions: 23°C / Unom.: POL  
Test Specification: Fully anechoic chamber / mode: Tx  
Comment 1: Dist.: 3m, Ant.: HL 025,  
Comment 2: Freq:1.921GHz Pmax:17.73dBm RBW: 5 MHz



# Peak Transmit Power, Radiated

## FCC RULES PART 15, SUBPART D

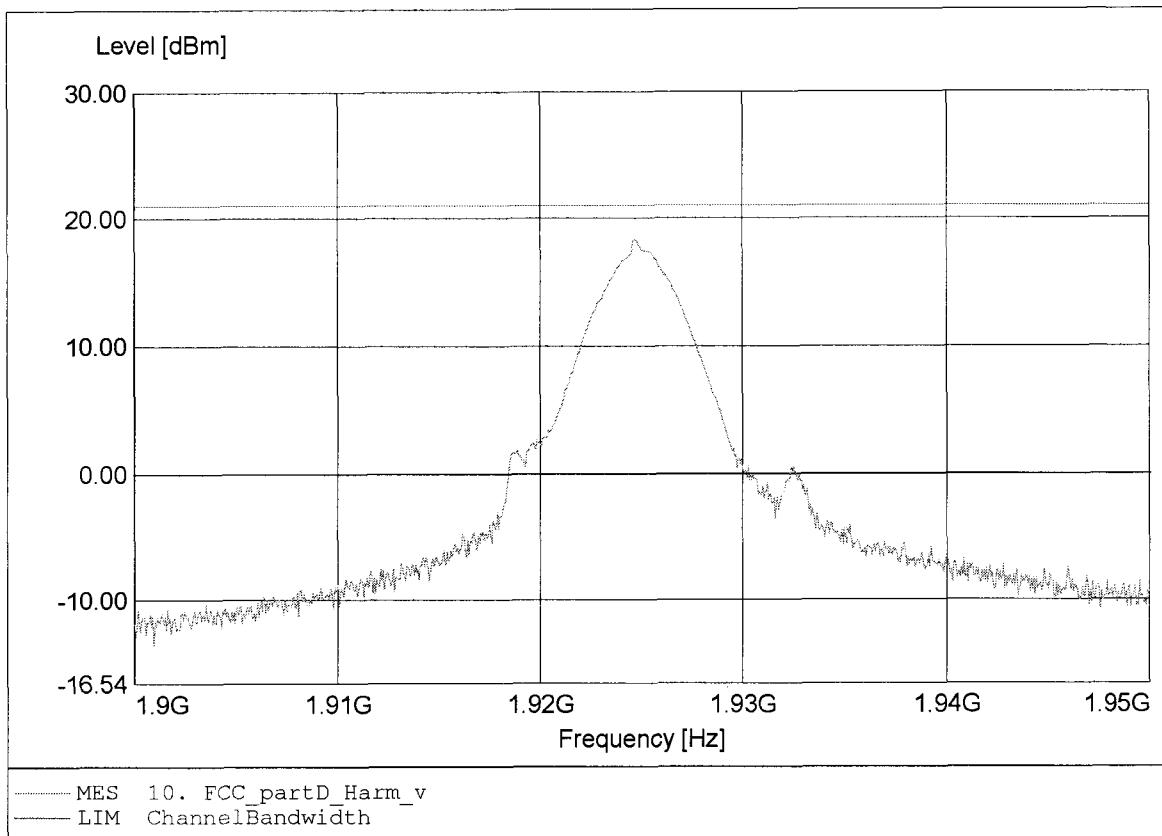
Approval Holder: DeTeWe  
EUT : IP - USA (UPCS)  
Model / Ch.: RFP 32 / Ch.: 4 / slot 0 / antenna 0  
Test Site / Operator: ETS / Mr. Cerovsky  
Test Conditions: 23°C / Unom.: POL  
Test Specification: Fully anechoic chamber / mode: Tx  
Comment 1: Dist.: 3m, Ant.: HL 025,  
Comment 2: Freq:1.921GHz Pmax:11.95dBm RBW: 5 MHz



# Peak Transmit Power, Radiated

## FCC RULES PART 15, SUBPART D

Approval Holder: DeTeWe  
EUT : IP - USA (UPCS)  
Model / Ch.: RFP 32 / Ch.: 2 / slot 0 / antenna 0  
Test Site / Operator: ETS / Mr. Cersovsky  
Test Conditions: 23°C / Unom.: POL  
Test Specification: Fully anechoic chamber / mode: Tx  
Comment 1: Dist.: 3m, Ant.: HL 025,  
Comment 2: Freq:1.925GHz Pmax:18.30dBm RBW: 5 MHz

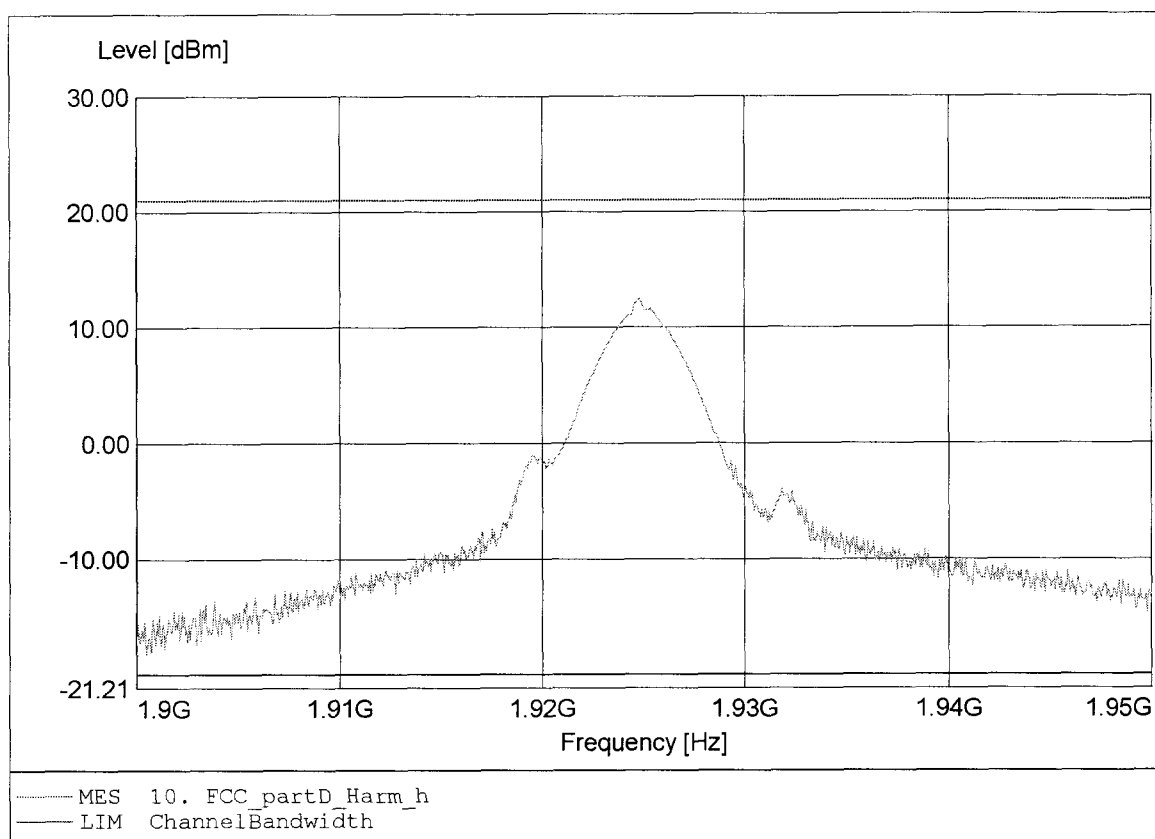




# Peak Transmit Power, Radiated

## FCC RULES PART 15, SUBPART D

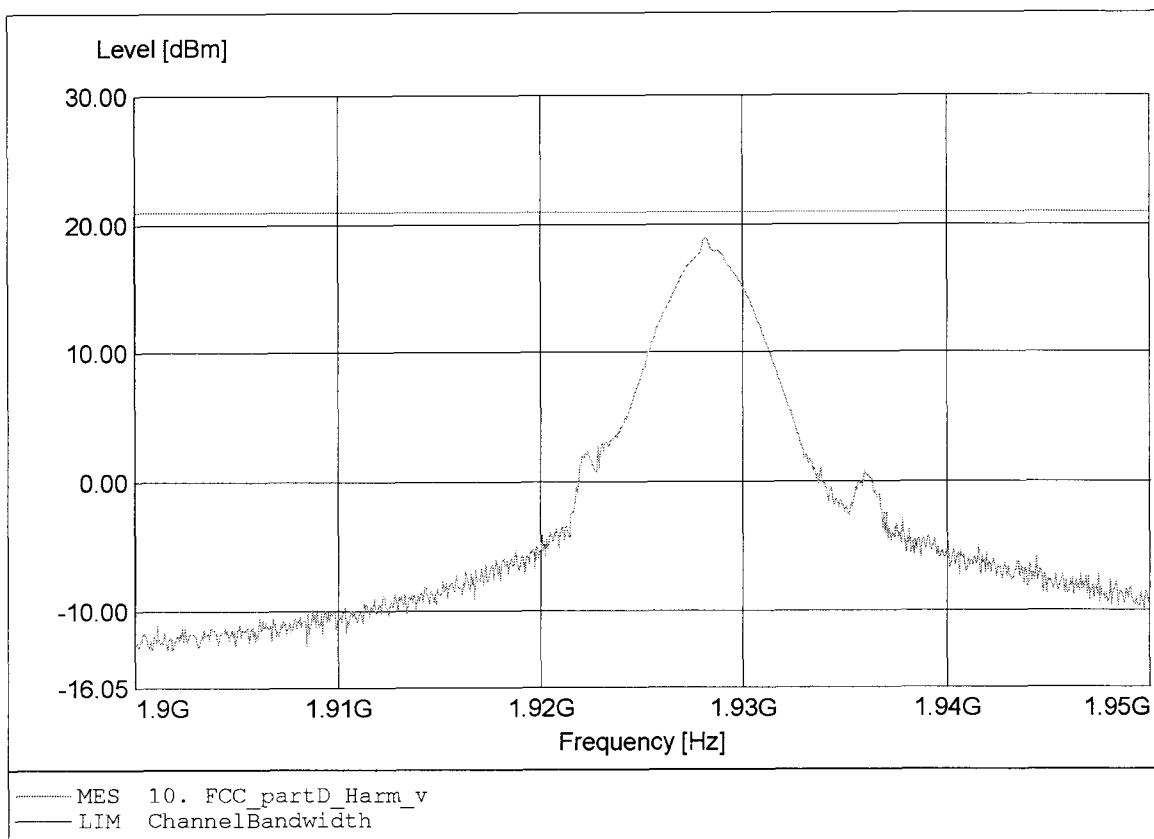
Approval Holder: DeTeWe  
EUT : IP - USA (UPCS)  
Model / Ch.: RFP 32 / Ch.: 2 / slot 0 / antenna 0  
Test Site / Operator: ETS / Mr. Cersovsky  
Test Conditions: 23°C / Unom.: POL  
Test Specification: Fully anechoic chamber / mode: Tx  
Comment 1: Dist.: 3m, Ant.: HL 025,  
Comment 2: Freq:1.925GHz Pmax:12.47dBm RBW: 5 MHz



# Peak Transmit Power, Radiated

## FCC RULES PART 15, SUBPART D

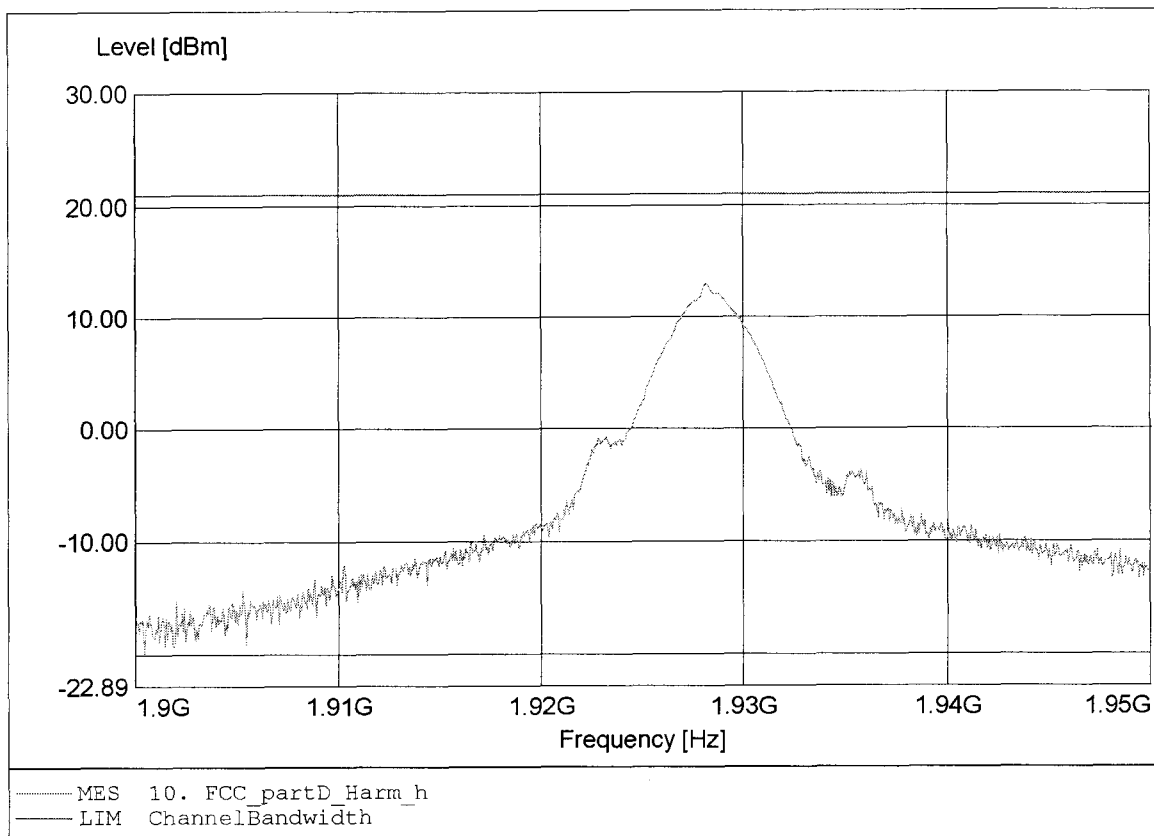
Approval Holder: DeTeWe  
EUT : IP - USA (UPCS)  
Model / Ch.: RFP 32 / Ch.: 0 / slot 0 / antenna 0  
Test Site / Operator: ETS / Mr. Cerovsky  
Test Conditions: 23°C / Unom.: POL  
Test Specification: Fully anechoic chamber / mode: Tx  
Comment 1: Dist.: 3m, Ant.: HL 025,  
Comment 2: Freq:1.928GHz Pmax:18.94dBm RBW: 5 MHz



# Peak Transmit Power, Radiated

## FCC RULES PART 15, SUBPART D

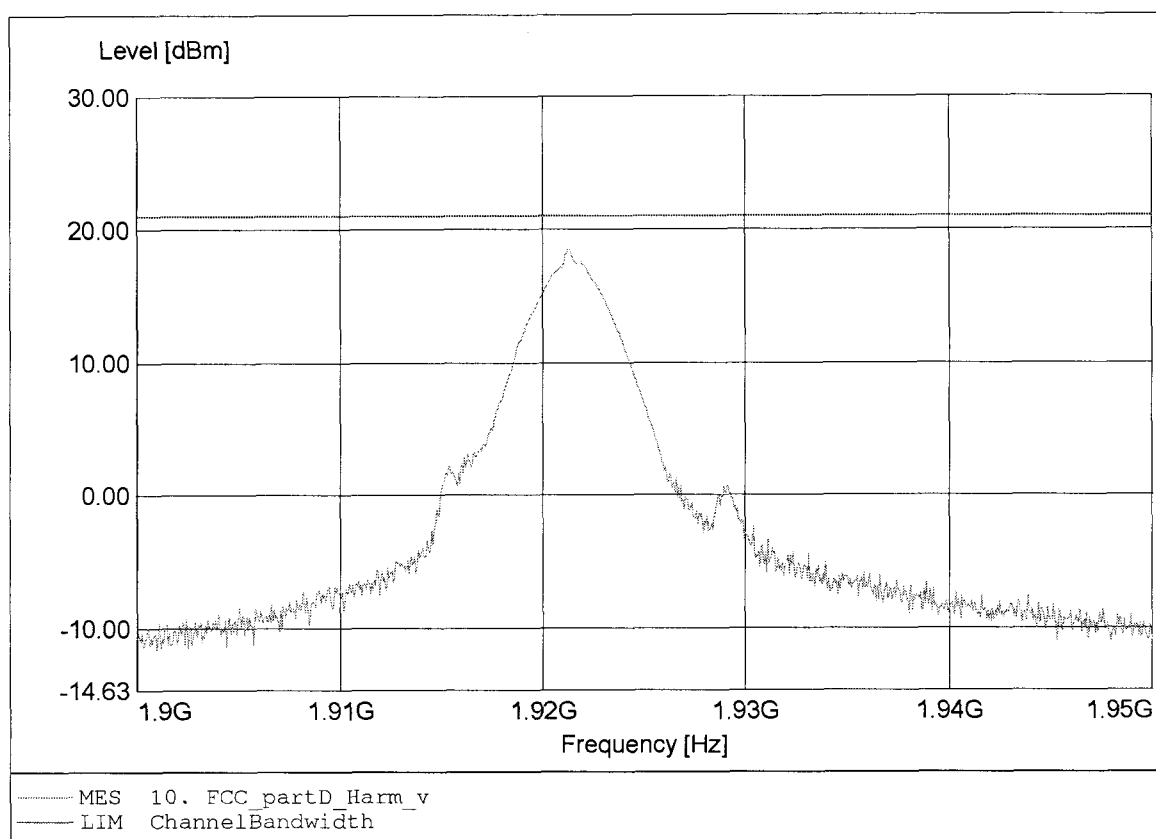
Approval Holder: DeTeWe  
EUT : IP - USA (UPCS)  
Model / Ch.: RFP 32 / Ch.: 0 / slot 0 / antenna 0  
Test Site / Operator: ETS / Mr. Cerovsky  
Test Conditions: 23°C / Unom.: POL  
Test Specification: Fully anechoic chamber / mode: Tx  
Comment 1: Dist.: 3m, Ant.: HL 025,  
Comment 2: Freq:1.928GHz Pmax:12.99dBm RBW: 5 MHz



# Peak Transmit Power, Radiated

## FCC RULES PART 15, SUBPART D

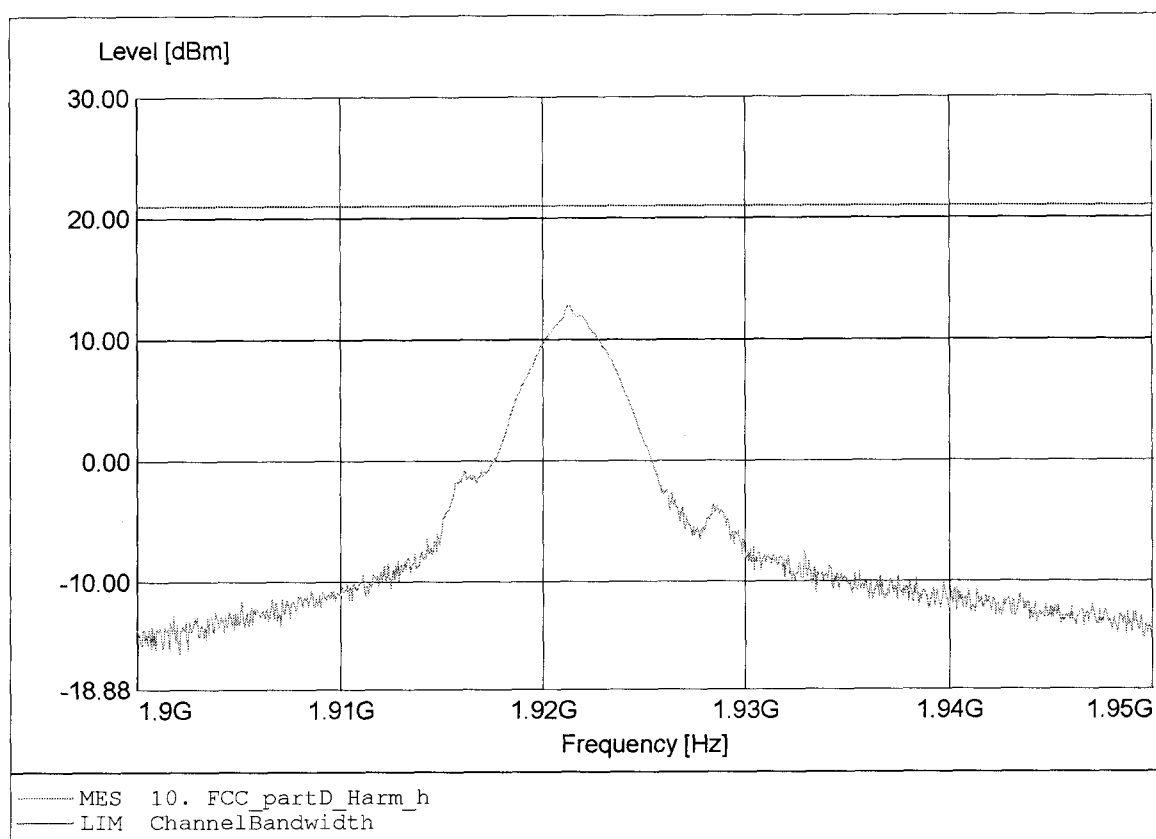
Approval Holder: DeTeWe  
EUT : IP - USA (UPCS)  
Model / Ch.: RFP 32 / Ch.: 4 / slot 0 / antenna 1  
Test Site / Operator: ETS / Mr. Cersovsky  
Test Conditions: 23°C / Unom.: POL  
Test Specification: Fully anechoic chamber / mode: Tx  
Comment 1: Dist.: 3m, Ant.: HL 025,  
Comment 2: Freq:1.921GHz Pmax:18.52dBm RBW: 5 MHz



# Peak Transmit Power, Radiated

## FCC RULES PART 15, SUBPART D

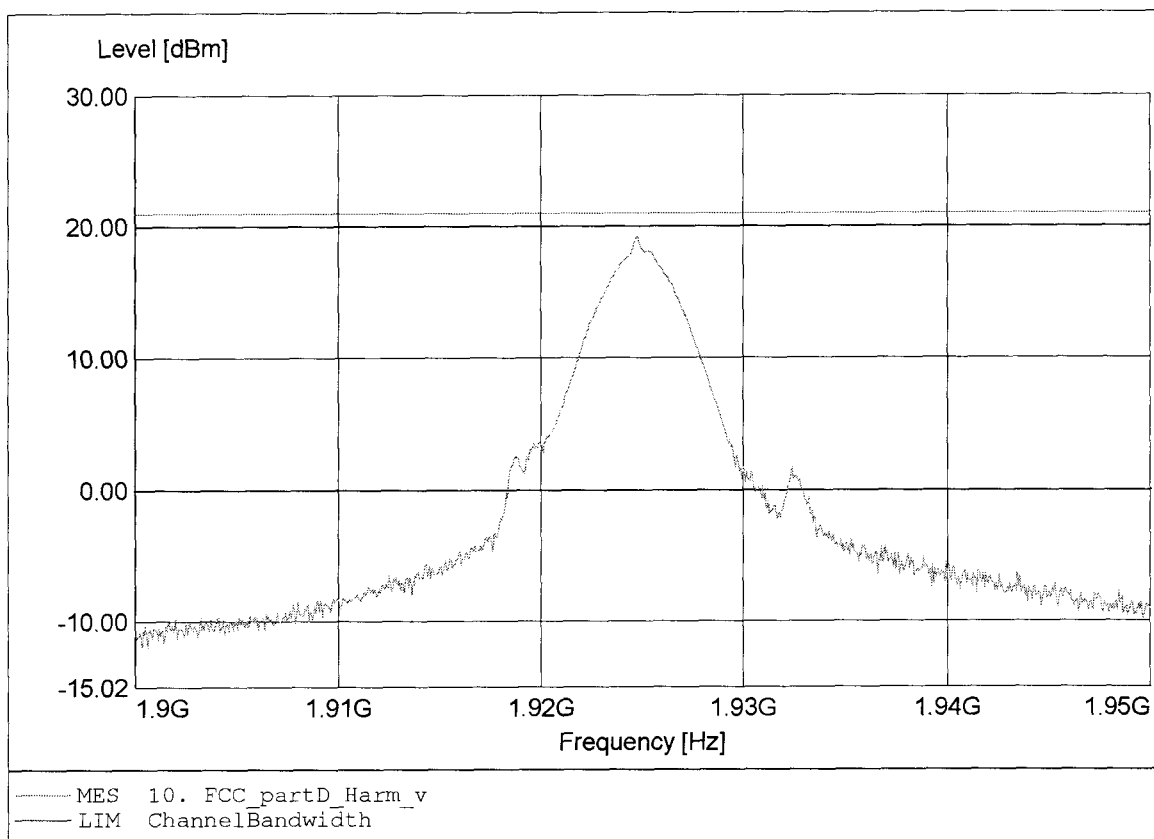
Approval Holder: DeTeWe  
EUT : IP - USA (UPCS)  
Model / Ch.: RFP 32 / Ch.: 4 / slot 0 / antenna 1  
Test Site / Operator: ETS / Mr. Cersovsky  
Test Conditions: 23°C / Unom.: POL  
Test Specification: Fully anechoic chamber / mode: Tx  
Comment 1: Dist.: 3m, Ant.: HL 025,  
Comment 2: Freq:1.921GHz Pmax:12.79dBm RBW: 5 MHz



# Peak Transmit Power, Radiated

## FCC RULES PART 15, SUBPART D

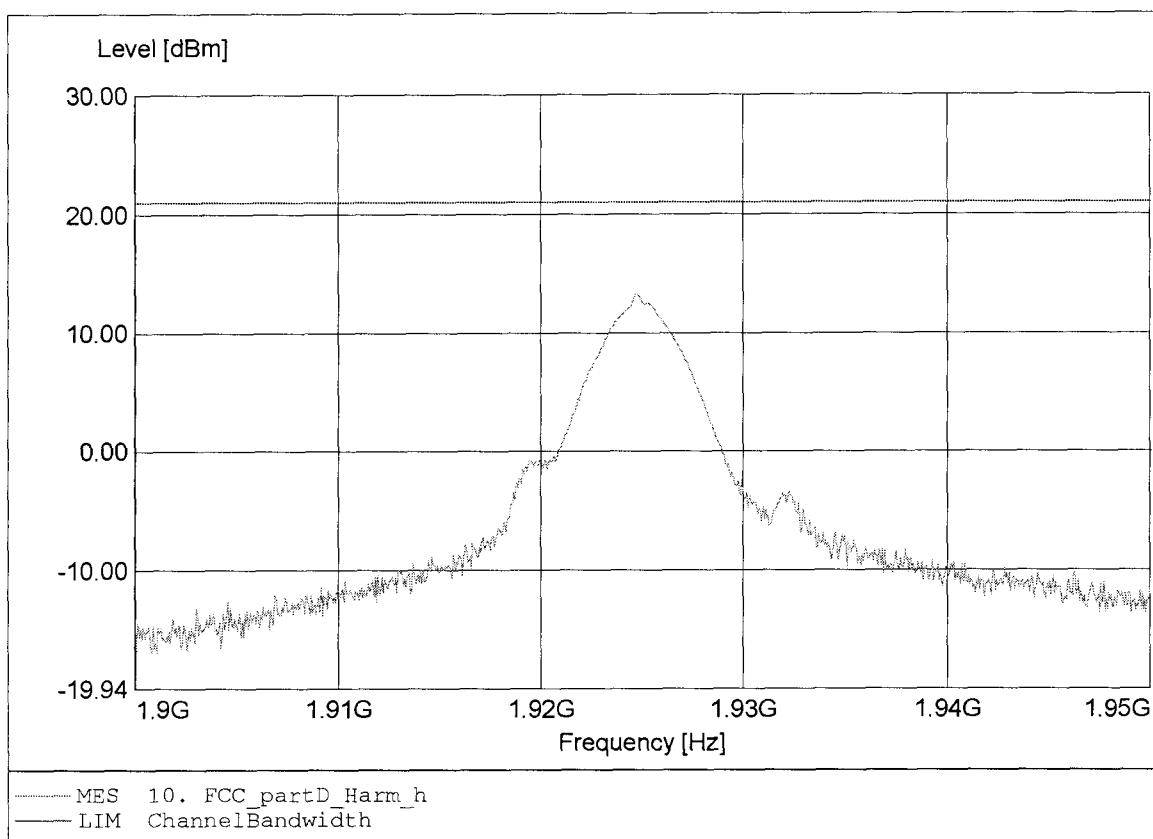
Approval Holder: DeTeWe  
EUT : IP - USA (UPCS)  
Model / Ch.: RFP 32 / Ch.: 2 / slot 0 / antenna 1  
Test Site / Operator: ETS / Mr. Cerovsky  
Test Conditions: 23°C / Unom.: POL  
Test Specification: Fully anechoic chamber / mode: Tx  
Comment 1: Dist.: 3m, Ant.: HL 025,  
Comment 2: Freq:1.925GHz Pmax:19.19dBm RBW: 5 MHz



# Peak Transmit Power, Radiated

## FCC RULES PART 15, SUBPART D

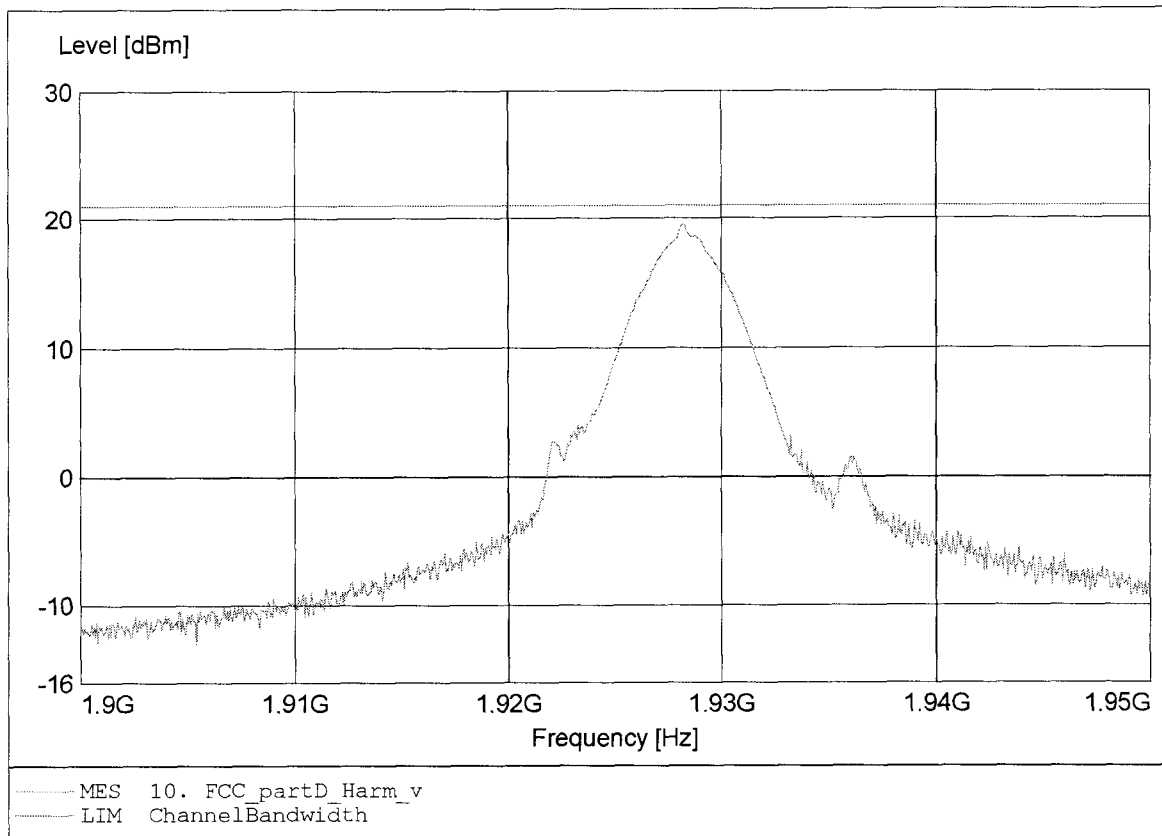
Approval Holder: DeTeWe  
EUT : IP - USA (UPCS)  
Model / Ch.: RFP 32 / Ch.: 2 / slot 0 / antenna 1  
Test Site / Operator: ETS / Mr. Cerovsky  
Test Conditions: 23°C / Unom.: POL  
Test Specification: Fully anechoic chamber / mode: Tx  
Comment 1: Dist.: 3m, Ant.: HL 025,  
Comment 2: Freq:1.925GHz Pmax:13.28dBm RBW: 5 MHz



# Peak Transmit Power, Radiated

## FCC RULES PART 15, SUBPART D

Approval Holder: DeTeWe  
EUT : IP - USA (UPCS)  
Model / Ch.: RFP 32 / Ch.: 0 / slot 0 / antenna 1  
Test Site / Operator: ETS / Mr. Cerovsky  
Test Conditions: 23°C / Unom.: POL  
Test Specification: Fully anechoic chamber / mode: Tx  
Comment 1: Dist.: 3m, Ant.: HL 025,  
Comment 2: Freq:1.928GHz Pmax:19.55dBm RBW: 5 MHz

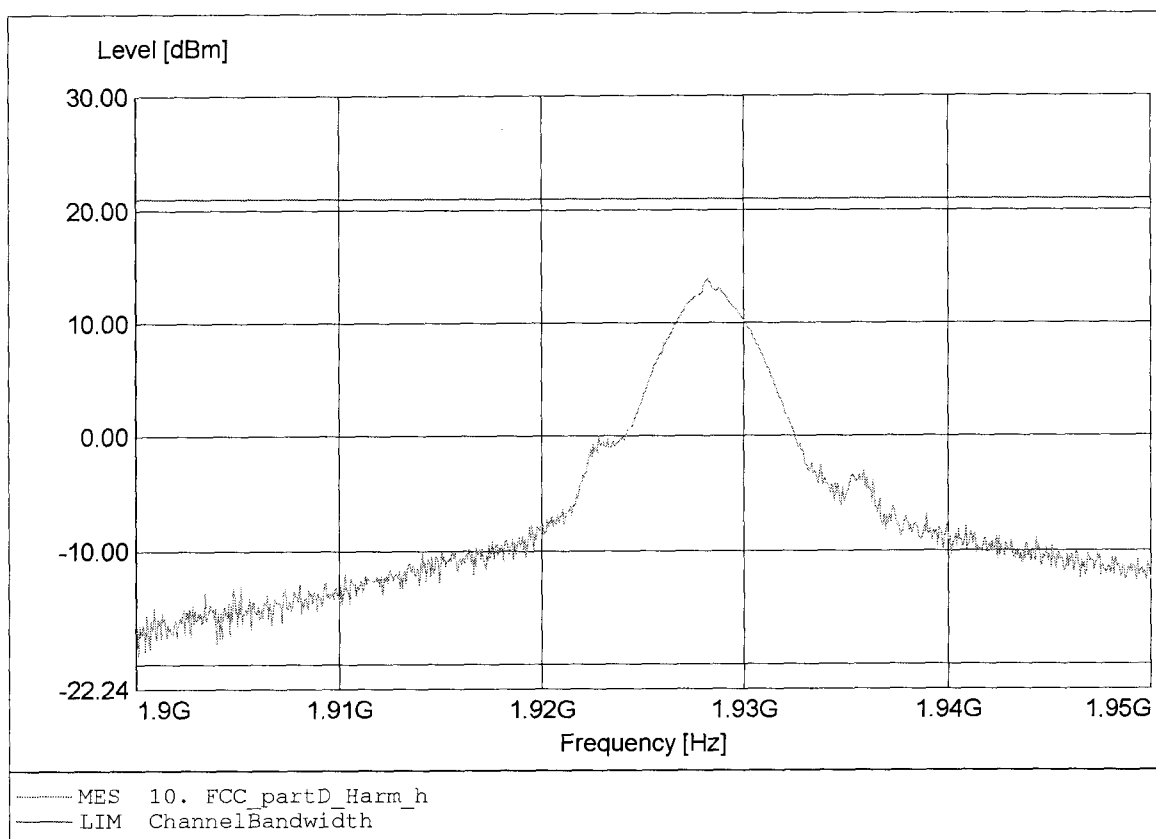




# Peak Transmit Power, Radiated

## FCC RULES PART 15, SUBPART D

Approval Holder: DeTeWe  
EUT : IP - USA (UPCS)  
Model / Ch.: RFP 32 / Ch.: 0 / slot 0 / antenna 1  
Test Site / Operator: ETS / Mr. Cerovsky  
Test Conditions: 23°C / Unom.: POL  
Test Specification: Fully anechoic chamber / mode: Tx  
Comment 1: Dist.: 3m, Ant.: HL 025,  
Comment 2: Freq:1.928GHz Pmax:13.95dBm RBW: 5 MHz



# FCC Part 15.319(d) Power spectral density

## Testprocedure ANSI 63.17-2006 6.1.5 UPCS

EUT	UPCS IP base
Model	RFP 32
Applicant	DeTeWe Systems GmbH
Temperature	23°C
Test Site / Operator	ETS Reichenwalde
Test Specification	6.1.5 Power spectral density
Peak Frequency in MHz	1921,548000 MHz
Total pulse energy in mW	0,000194 mW
Wideband pulse duration in ms	0,388500 ms
PSD in mW	0,4984 mW
PSD in dBm	-3,0239 dBm

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



Power Spectral Densit

RBW 3 kHz

Marker 1 [T1 ]

\*VBW 10 kHz

-0.59 dBm

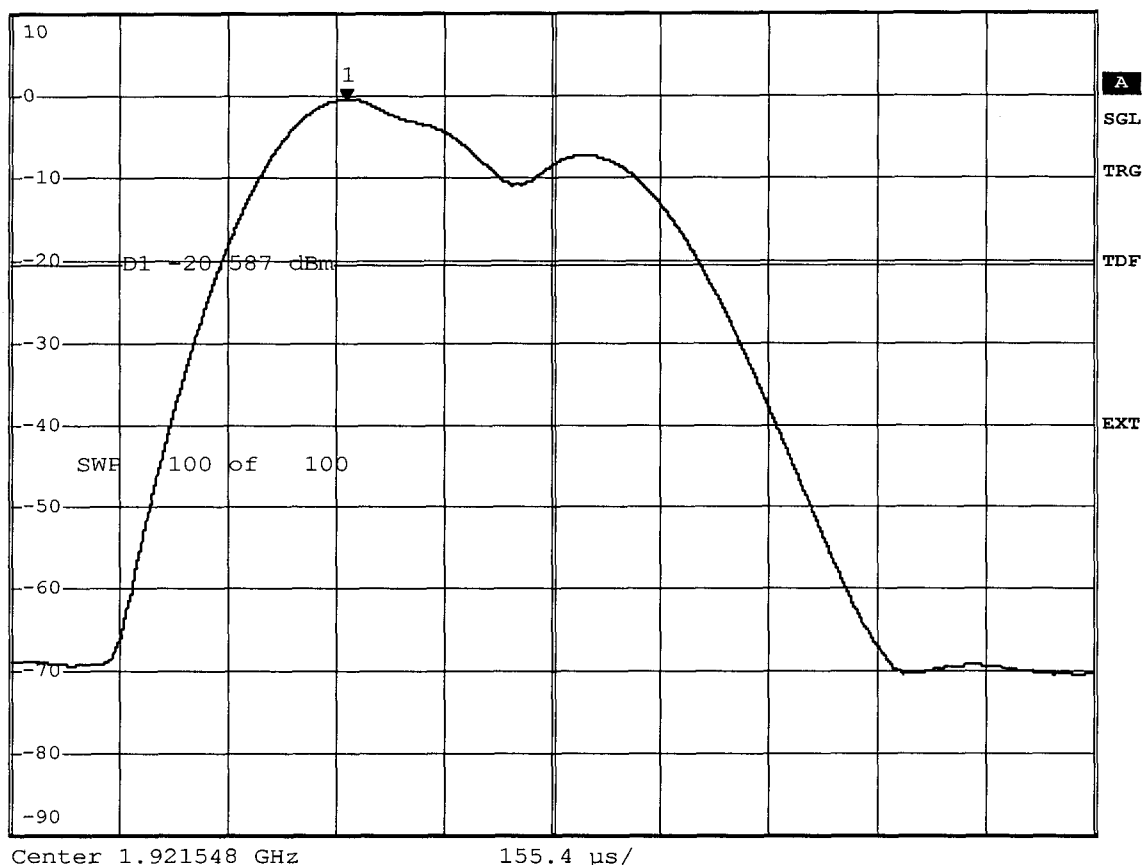
Ref 10 dBm

\*Att 30 dB

SWT 1.554 ms

482.905500 µs

1 SA  
AVG



Comment: Ansi C63.17-2006 6.1.5  
Date: 14.AUG.2006 10:41:43

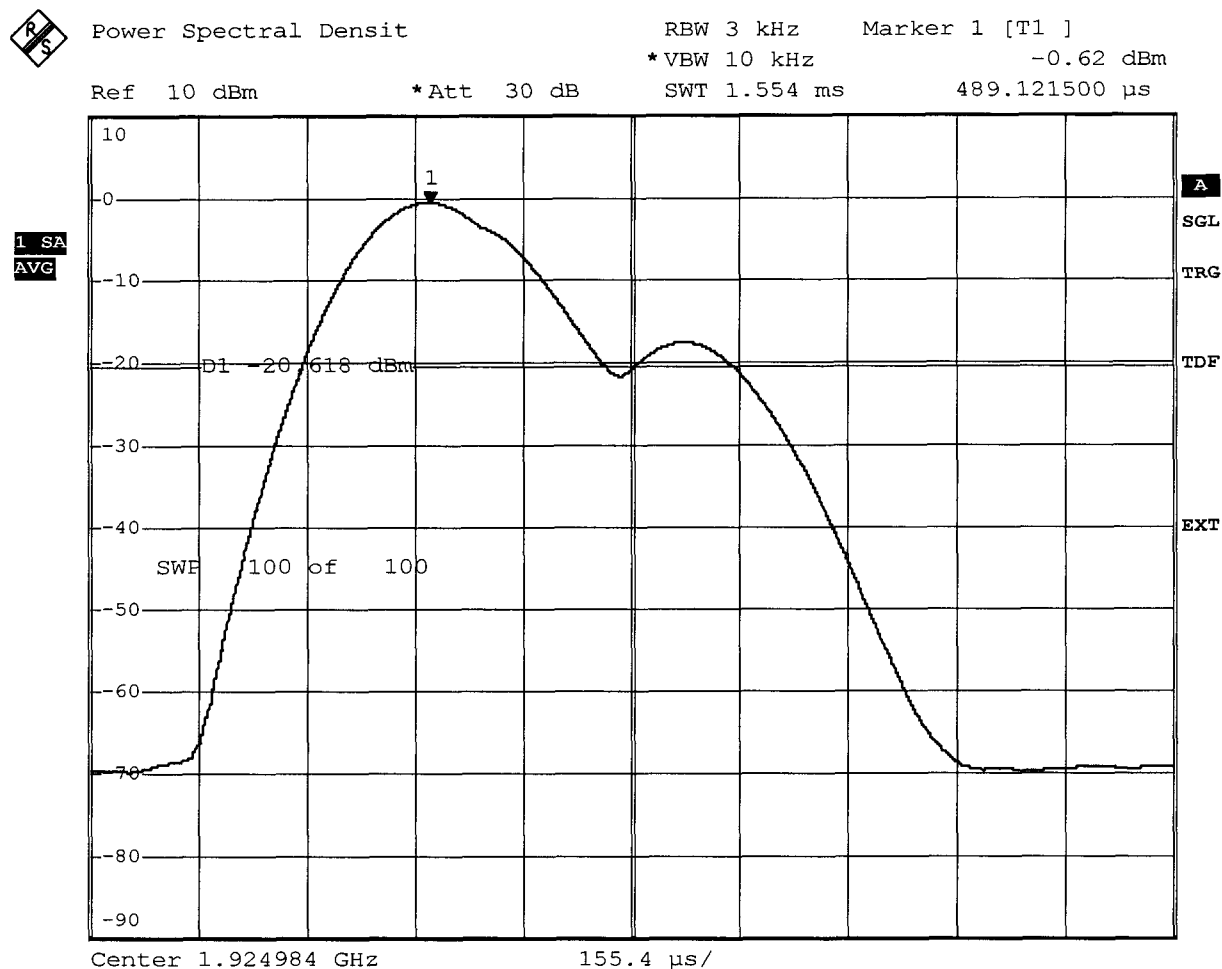
Measurement diagram

# FCC Part 15.319(d) Power spectral density

## Testprocedure ANSI 63.17-2006 6.1.5 UPCS

EUT	UPCS IP base
Model	RFP 32
Applicant	DeTeWe Systems GmbH
Temperature	23°C
Test Site / Operator	ETS Reichenwalde
Test Specification	6.1.5 Power spectral density
Peak Frequency in MHz	1924,984000 MHz
Total pulse energy in mW	0,000145 mW
Wideband pulse duration in ms	0,388500 ms
PSD in mW	0,3745 mW
PSD in dBm	-4,2656 dBm

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



Comment: Ansi C63.17-2006 6.1.5  
Date: 14.AUG.2006 10:35:13

Measurement diagram

# FCC Part 15.319(d) Power spectral density

## Testprocedure ANSI 63.17-2006 6.1.5

### UPCS

EUT	UPCS IP base
Model	RFP 32
Applicant	DeTeWe Systems GmbH
Temperature	23°C
Test Site / Operator	ETS Reichenwalde
Test Specification	6.1.5 Power spectral density
Peak Frequency in MHz	1928,474000 MHz
Total pulse energy in mW	0,000180 mW
Wideband pulse duration in ms	0,389750 ms
PSD in mW	0,4618 mW
PSD in dBm	-3,3550 dBm

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



Power Spectral Densit

RBW 3 kHz

Marker 1 [T1]

\*VBW 10 kHz

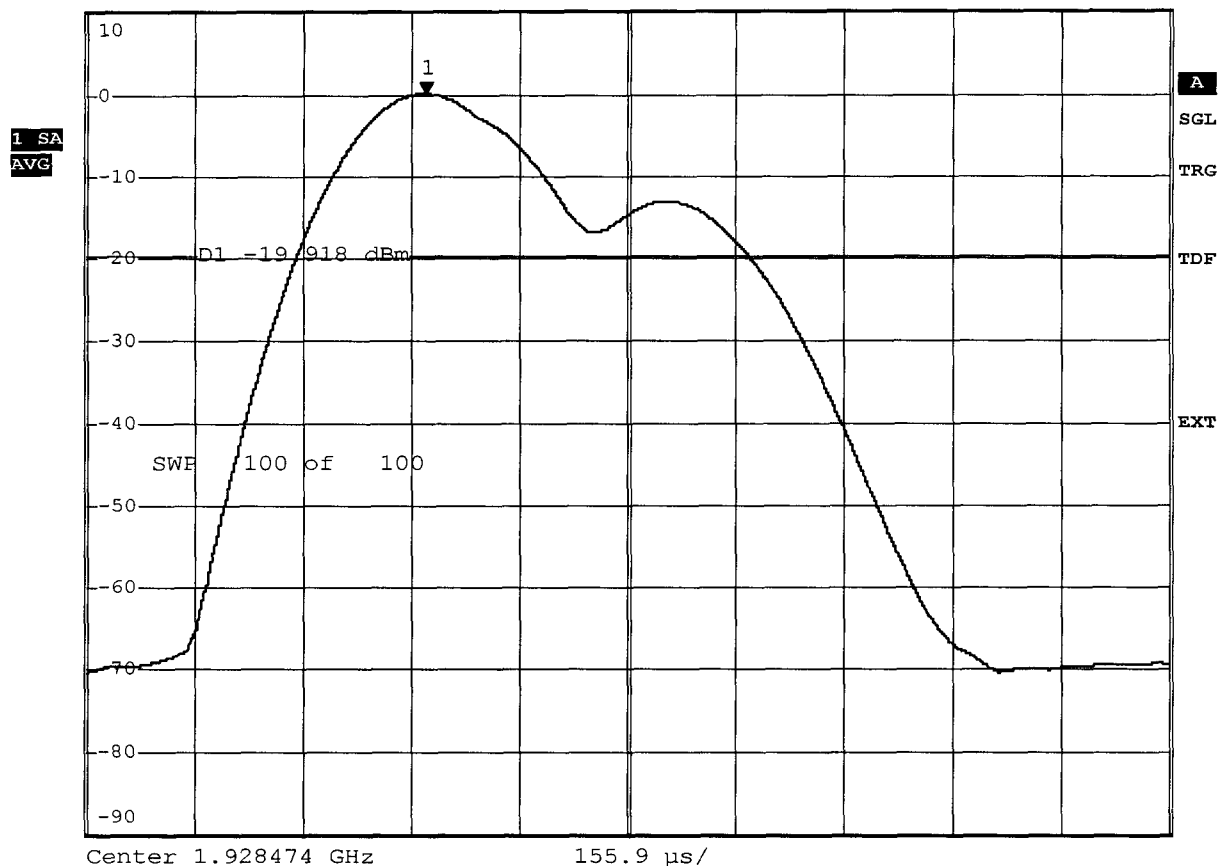
0.08 dBm

Ref 10 dBm

\*Att 30 dB

SWT 1.559 ms

490.695250  $\mu$ s



Comment: Ansi C63.17-2006 6.1.5

Date: 14.AUG.2006 10:44:58

Measurement diagram

## **Appendix J**

Monitoring threshold

Test case Rev. Draft ANSI\_7.3.3\_least\_interfered\_channel.xml  
 Date 14.08.2006 12:31:12  
 Reference to the EUT G0M20608-0762 / RFP 32  
 Comment: 7.3.3\_b  
 UPCS IP base  
 DeTeWe Systems GmbH

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 RMS in dBm	Peak in dBm RMS in dBm	Peak in dBm RMS in dBm	Peak in dBm RMS in dBm	Peak in dBm RMS in dBm	
00:25:04.5468750	-86 -95,8	-84,7 -95,6	-85,1 -95,8	-86,9 -95,7	-87,5 -95,8	Interferer off
00:25:27.9843750	-60 -60,3	-59,8 -60,2	-59,7 -60,1	-71,5 -73,1	-77 -79,9	Interferer on
00:32:28.3281250	-58,4 -60,2	-57,6 -60,1	-56,8 -60	-51,2 -71,4	-22,7 -41,5	OK 1
00:33:46.6718750	-59,9 -60,3	-59,8 -60,2	-59,8 -60,1	-71,6 -73,1	-76,9 -79,9	
00:46:11.8437500	-58,4 -60,1	-57,2 -60,1	-57,8 -60	-50 -71,3	-30,4 -48,3	OK 2
00:46:46.0312500	-59,9 -60,3	-59,9 -60,2	-59,7 -60,1	-71,4 -73,1	-77,2 -80	
01:20:02.0312500	-58,6 -60,2	-57,9 -60,1	-57,3 -60	-53,5 -70,2	-21,3 -38,8	OK 3
01:20:15.7343750	-60 -60,4	-59,9 -60,3	-59,8 -60,2	-71,8 -73,1	-76,8 -80	
01:20:27.2343750	-59,8 -60,2	-59,7 -60,1	-59,6 -60	-70,4 -73	-30,2 -48,2	OK 4
01:20:36.5937500	-59,9 -60,3	-59,9 -60,2	-59,8 -60,2	-71,5 -73,1	-77 -79,9	
01:20:45.3593750	-58,6 -60,2	-58,1 -60,1	-56,9 -60	-68,7 -73	-30 -48,3	OK 5

Log file

Test case Rev. Draft ANSI\_7.3.3\_least\_interfered\_channel.xml  
 Date 14.08.2006 12:59:05  
 Reference to the EUT G0M20608-0762 / RFP 32  
 Comment: 7.3.3\_c  
 UPCS IP base  
 DeTeWe Systems GmbH

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 RMS in dBm	Peak in dBm RMS in dBm	Peak in dBm RMS in dBm	Peak in dBm RMS in dBm	Peak in dBm RMS in dBm	
00:18:06.3281250	-86 -95,7	-86,7 -95,5	-86,4 -95,5	-86 -95,6	-85,5 -95,7	Interferer off
00:18:13.3906250	-60 -60,3	-59,9 -60,2	-62,7 -63,2	-77 -79,8	-71,7 -73,1	Interferer on
00:18:35.9531250	-58,2 -60,2	-56 -60,2	-48,8 -62,8	-21,8 -38,6	-51,1 -70,6	OK 1
00:18:42.9687500	-59,9 -60,3	-59,8 -60,2	-62,7 -63,2	-76,9 -79,9	-71,8 -73,1	
00:18:58.6875000	-58 -60,2	-56,7 -60,2	-55,2 -62,9	-22,1 -38,9	-53 -70,8	OK 2
00:19:03.2656250	-59,9 -60,3	-59,8 -60,2	-62,6 -63,2	-76,5 -79,9	-71,7 -73,1	
00:19:15.9843750	-57,8 -60,2	-57,2 -60,2	-53,2 -62,9	-22,6 -39	-53,8 -70,6	OK 3
00:19:21.9375000	-59,9 -60,3	-59,8 -60,2	-62,7 -63,2	-76,9 -79,9	-71,7 -73,1	
00:19:45.6718750	-57,8 -60,2	-57,1 -60,2	-48,5 -62,7	-22,2 -39	-50,5 -70,6	OK 4
00:19:50.3437500	-59,9 -60,3	-59,9 -60,2	-62,6 -63,2	-77,2 -79,9	-71,8 -73,1	
00:20:05.9687500	-57,7 -60,2	-57,1 -60,2	-51,9 -62,8	-21,8 -38,8	-53,1 -70,5	OK 5

Log file

Test case Rev. Draft ANSI\_7.3.3\_least\_interfered\_channel.xml  
 Date 14.08.2006 13:04:23  
 Reference to the EUT G0M20608-0762 / RFP 32  
 Comment: 7.3.3\_d  
 UPCS IP base  
 DeTeWe Systems GmbH

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 RMS in dBm	Peak in dBm RMS in dBm	Peak in dBm RMS in dBm	Peak in dBm RMS in dBm	Peak in dBm RMS in dBm	
00:23:12.8906250	-86,2 -95,7	-86,7 -95,7	-86,9 -95,7	-85,6 -95,7	-86 -95,8	Interferer off
00:23:20.5937500	-59,8 -60,3	-59,9 -60,2	-59,8 -60,1	-76,4 -78,8	-80,9 -85,8	Interferer on
00:23:50.3593750	-58,3 -60,2	-57,8 -60,2	-57,2 -60,1	-50,8 -72,5	-22,3 -39,1	OK 1
00:23:59.2343750	-59,9 -60,3	-59,9 -60,2	-59,8 -60,2	-76 -78,8	-81,1 -85,7	
00:24:13.7656250	-58 -60,2	-58,2 -60,1	-57 -60,1	-49,4 -72,4	-21,7 -39,1	OK 2
00:24:16.9687500	-60 -60,3	-59,7 -60,2	-59,8 -60,2	-76,4 -78,8	-80,5 -85,7	
00:24:38.4375000	-58,3 -60,2	-57,7 -60,2	-56,8 -60,1	-52,5 -72,7	-22,5 -39	OK 3
00:24:41.1093750	-59,9 -60,3	-59,9 -60,2	-59,8 -60,1	-76 -78,8	-80,7 -85,8	
00:24:58.4531250	-58,4 -60,2	-57,5 -60,2	-56,7 -60,1	-54,7 -73,1	-22,2 -39	OK 4
00:25:04.3125000	-59,9 -60,3	-59,9 -60,2	-59,8 -60,1	-76,3 -78,8	-81 -85,8	
00:25:19.0156250	-58,3 -60,2	-57,6 -60,1	-55,1 -60,1	-52,4 -72,5	-21,9 -38,9	OK 5

Log file



Test case Rev. Draft ANSI\_7.3.3\_least\_interfered\_channel.xml  
 Date 14.08.2006 13:12:58  
 Reference to the EUT G0M20608-0762 / RFP 32  
 Comment: 7.3.3\_e  
 UPCS IP base  
 DeTeWe Systems GmbH

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 RMS in dBm	Peak in dBm RMS in dBm	Peak in dBm RMS in dBm	Peak in dBm RMS in dBm	Peak in dBm RMS in dBm	
00:00:28.7656250	-85,8 -95,7	-85,2 -95,6	-85,6 -95,8	-86 -95,6	-85,5 -95,9	Interferer off
00:00:37.7031250	-59,9 -60,3	-59,8 -60,2	-59,8 -60,1	-80,6 -85,6	-76,2 -79	Interferer on
00:00:48.0468750	-57 -60,2	-56,8 -60,2	-52 -59,9	-22,5 -38,7	-50,1 -72,7	OK 1
00:00:54.5468750	-59,9 -60,3	-59,9 -60,2	-59,8 -60,2	-80,1 -85,6	-76,3 -79	
00:01:10.4375000	-56,9 -60,2	-56,4 -60,1	-49,7 -59,9	-21,8 -38,8	-53 -72,9	OK 2
00:01:13.8437500	-59,9 -60,3	-59,8 -60,2	-59,8 -60,1	-80,7 -85,5	-76,3 -79	
00:01:27.7187500	-58,2 -60,2	-57,2 -60,1	-51,3 -59,9	-22,3 -38,9	-51,1 -72,8	OK 3
00:01:34.2187500	-59,9 -60,3	-59,8 -60,2	-59,9 -60,1	-81,2 -85,7	-76,1 -79,1	
00:01:45.7500000	-57,9 -60,2	-56,3 -60,1	-51,9 -60	-22 -39	-53,3 -73,4	OK 4
00:01:48.0625000	-59,9 -60,3	-59,9 -60,2	-59,8 -60,2	-80,6 -85,6	-76 -79	
00:02:11.2500000	-57,2 -60,2	-56,3 -60,1	-52,7 -59,9	-22,3 -38,9	-54,2 -73,3	OK 5

Log file

Test case Rev. Draft ANSI\_7.3.2\_upper\_threshold.xml  
 Date 14.08.2006 11:19:41  
 Reference to the EUT G0M20608-0762 / RFP 32  
 Comment: initial setup  
 UPCS IP base  
 DeTeWe Systems GmbH

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 RMS in dBm	Peak in dBm RMS in dBm	Peak in dBm RMS in dBm	Peak in dBm RMS in dBm	Peak in dBm RMS in dBm	
00:05:46.8437500	-49,8 -49,9	-49,7 -49,9	-49,9 -50,1	-49,6 -49,7	-49,6 -49,7	-50 dBm
00:06:04.9062500	-50,8 -50,9	-50,7 -50,9	-50,9 -51,1	-50,7 -50,8	-50,6 -50,7	-51 dBm
00:06:19.9218750	-51,7 -51,9	-51,7 -51,9	-51,9 -52,1	-51,7 -51,9	-51,6 -51,7	-52 dBm
00:06:41.5625000	-52,7 -52,9	-52,7 -52,9	-52,9 -53,1	-52,7 -52,8	-52,6 -52,7	-53 dBm
00:06:55.3906250	-53,7 -53,9	-53,6 -53,9	-53,9 -54,1	-53,6 -53,8	-53,6 -53,7	-54 dBm
00:07:14.3593750	-54,6 -54,8	-54,5 -54,8	-54,8 -55,1	-54,6 -54,8	-54,5 -54,7	-55 dBm
00:07:26.7187500	-55,5 -55,8	-55,5 -55,8	-55,5 -55,8	-55,6 -55,8	-55,4 -55,6	-56 dBm
00:07:41.4843750	-56,5 -56,8	-56,4 -56,7	-56,5 -56,8	-56,4 -56,7	-56,4 -56,6	-57 dBm
00:07:55.8593750	-57,5 -57,8	-57,5 -57,7	-57,5 -57,8	-57,3 -57,7	-57,3 -57,6	-58 dBm
00:08:40.6250000	-57,2 -59,9	-56,3 -59,8	-56,1 -59,6	-56,3 -59,8	-56,2 -59,7	-59 dBm
00:08:53.3125000	-57,6 -59,9	-56,2 -59,8	-50,6 -59,7	-22,4 -41,8	-22,1 -41,8	Upper threshold level: -60.0 dBm

Log file

## **Appendix K**

Monitoring of intended transmit window and maximum reaction time

Test case Rev. Draft ANSI\_7.5\_reaction\_time\_high\_ch.xml  
 Date 14.08.2006 14:22:02  
 Reference to the EUT G0M20608-0762 / RFP 32  
 Comment: 7.5\_high\_ch\_35us  
 UPCS IP base  
 DeTeWe Systems GmbH

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	
00:02:10.1250000	-86,6 -95,6	-86,3 -95,7	-87,3 -95,7	-86,5 -95,6	-86,5 -95,7	Interferer off
00:02:18.8750000	-70,8 -89,5	-66,5 -86,5	-65,8 -84,5	-54,4 -73,7	-22,1 -38,7	Dummy on channel 0
00:02:53.5000000	-56,8 -57,2	-56,9 -57,2	-56,8 -57,1	-56,7 -57	-52,3 -68,5	50µs interference on, Dummy release
00:03:07.1875000	-21,8 -41,9	-55,6 -76,4	-64,7 -84	-53,7 -76,6	-22,5 -41,9	Interferer off
00:03:13.5937500	-56,9 -57,2	-56,9 -57,2	-56,8 -57,1	-56,7 -57	-47,2 -64	35µs interference on, Dummy release

Log file

Test case Rev. Draft ANSI\_7.5\_reaction\_time\_low\_ch.xml  
 Date 14.08.2006 14:29:10  
 Reference to the EUT G0M20608-0762 / RFP 32  
 Comment: 7.5\_low\_ch\_50 / 35us  
 UPCS IP base  
 DeTeWe Systems GmbH

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	
00:07:00.2656250	-86,3 -95,6	-86,3 -95,6	-85,8 -95,8	-86,3 -95,6	-86,5 -95,8	Interferer off
00:07:09.6250000	-71,6 -89,3	-68,9 -87,2	-63,8 -83,3	-54,6 -73,8	-22,1 -38,8	Dummy on channel 0
00:07:34.0156250	-53,8 -68,2	-56,8 -57,1	-56,8 -57,1	-56,8 -57	-56,7 -57	50µs interference on, Dummy release
00:07:50.7343750	-22,4 -42	-50,8 -77,2	-54,6 -75,7	-22,2 -42,1	-48,1 -75,2	Interferer off, Dummy on channel 1
00:08:49.3593750	-46,5 -64,4	-56,8 -57,1	-56,8 -57,1	-56,8 -57	-56,7 -57	35µs interference on, Dummy release

Log file

## **Appendix L**

Monitoring bandwidth

Test case Rev. Draft ANSI\_7.4.1\_monitoring\_bandwidth.xml  
 Date 14.08.2006 13:57:57  
 Reference to the EUT G0M20608-0762 / RFP 32  
 Comment: 7.4.1 simple compliance test\_high\_-30%  
 UPCS IP base  
 DeTeWe Systems GmbH

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	
00:15:06.7500000	-86,9 -95,8	-85 -95,8	-86,5 -95,6	-86,8 -95,7	-86,6 -95,7	Interferer off
00:15:17.7968750	-71,2 -89,9	-69 -86,6	-63 -83	-53,2 -73,4	-21,7 -38,9	Dummy on channel 0
00:15:46.6718750	-56,9 -57,2	-56,9 -57,2	-56,8 -57,1	-56,7 -57	-86,4 -95,5	Interferer on, Dummy release

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Log file

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Test case Rev. Draft ANSI\_7.4.1\_monitoring\_bandwidth.xml  
 Date 14.08.2006 13:54:38  
 Reference to the EUT G0M20608-0762 / RFP 32  
 Comment: 7.4.1 simple compliance test\_high\_-30%  
 UPCS IP base  
 DeTeWe Systems GmbH

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 RMS in dBm	Peak in dBm RMS in dBm	Peak in dBm RMS in dBm	Peak in dBm RMS in dBm	Peak in dBm RMS in dBm	
00:11:23.0468750	-86,6 -95,8	-85,5 -95,6	-86,1 -95,6	-86,4 -95,8	-86,1 -95,8	Interferer off
00:11:37.9218750	-70,7 -89,4	-67,3 -87	-65,2 -83	-52,8 -73,5	-21,6 -38,7	Dummy on channel 0
00:12:11.4062500	-56,9 -57,2	-56,9 -57,2	-56,8 -57,1	-56,7 -57	-86,1 -95,5	Interferer on, Dummy release

Log file



Test case Rev. Draft ANSI\_7.4.1\_monitoring\_bandwidth.xml  
 Date 14.08.2006 13:51:10  
 Reference to the EUT G0M20608-0762 / RFP 32  
 Comment: 7.4.1 simple compliance test\_low\_+30%  
 UPCS IP base  
 DeTeWe Systems GmbH

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 RMS in dBm	Peak in dBm RMS in dBm	Peak in dBm RMS in dBm	Peak in dBm RMS in dBm	Peak in dBm RMS in dBm	
00:08:21.5625000	-86,1 -96,1	-86,3 -95,7	-86,4 -95,7	-86 -95,8	-86 -95,8	Interferer off
00:08:31.9687500	-71,2 -90	-68,6 -87,4	-60,3 -83,1	-54,7 -73,8	-22,1 -38,8	Dummy on channel 0
00:08:59.0312500	-85 -95,7	-56,8 -57,1	-56,8 -57,1	-56,8 -57	-56,7 -57	Interferer on, Dummy release

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Log file

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Test case Rev. Draft ANSI\_7.4.1\_monitoring\_bandwidth.xml  
 Date 14.08.2006 13:45:36  
 Reference to the EUT G0M20608-0762 / RFP 32  
 Comment: 7.4.1 simple compliance test\_low\_-30%  
 UPCS IP base  
 DeTeWe Systems GmbH

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	
00:01:04.1875000	-85 -95,5	-86,4 -95,7	-86,2 -95,8	-86,8 -95,6	-86,5 -95,7	Interferer off
00:02:23.9531250	-22 -41,8	-50,5 -73,6	-22 -41,8	-49 -76	-67,2 -85,7	Dummy on channel 2
00:02:51.8437500	-86,9 -95,6	-56,8 -57,1	-56,8 -57,1	-56,7 -57,1	-56,7 -57	Interferer on, Dummy release

Log file

## **Appendix M**

Random waiting interval

## **Appendix N**

### Duration of Transmission