



Appendix B

Coordination with fixed microwave service

Appendix C

Reference to Subpart B

Appendix D

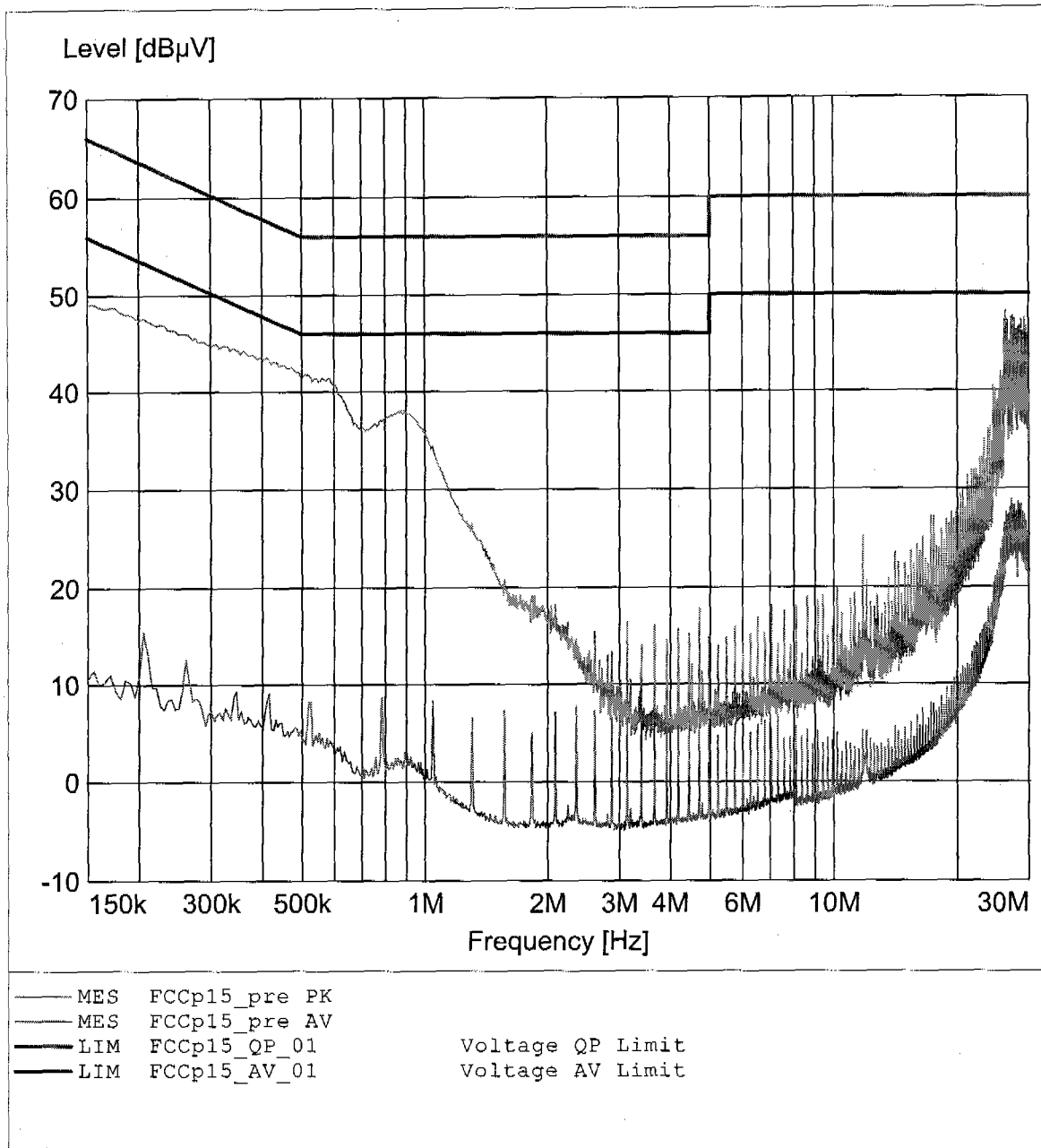
Labeling requirements

Appendix E

Conducted limits AC Power line

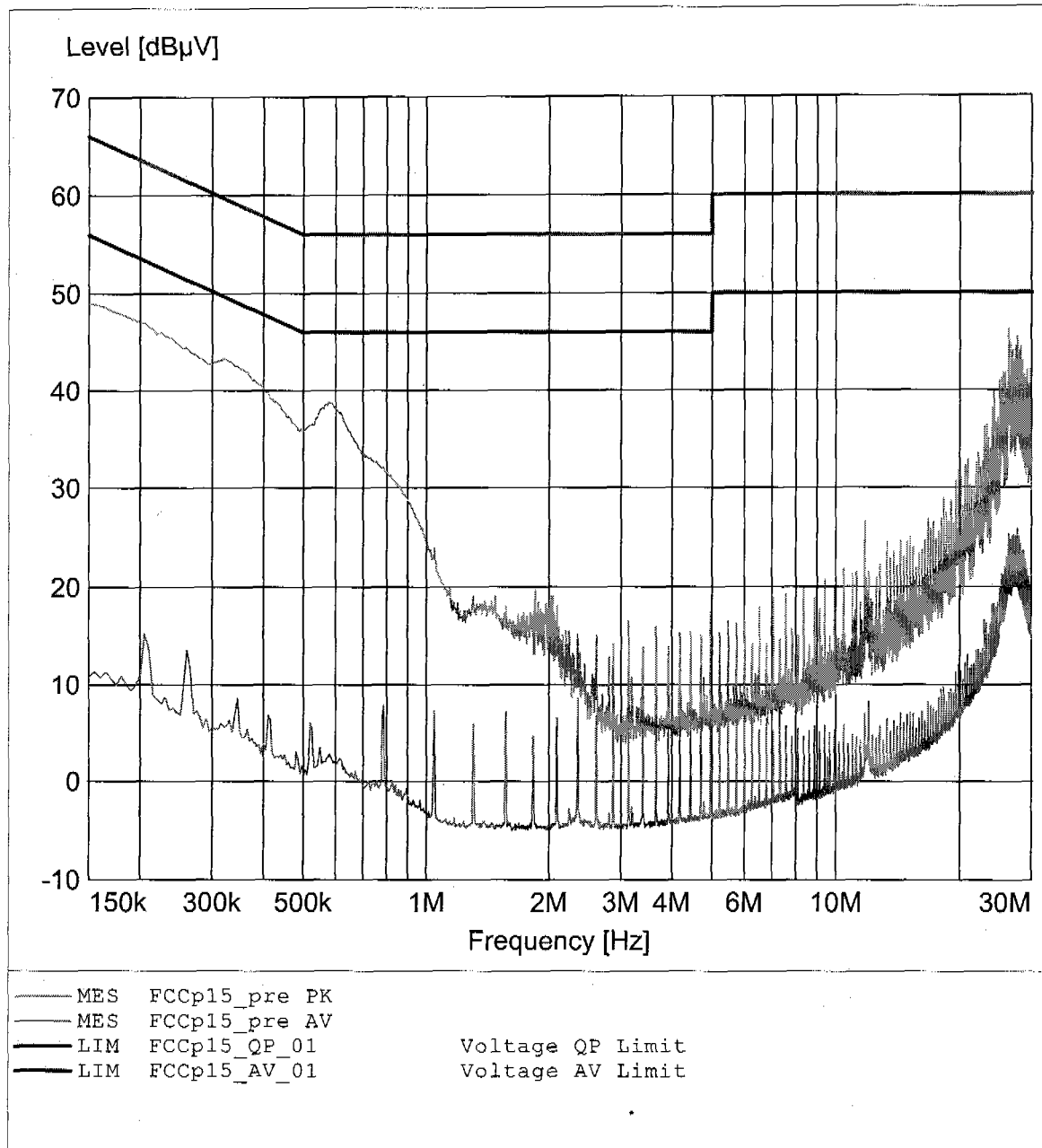
EMI voltage test in the ac-mains according to FCC part 15

EUT: RTX 3055
Manufacturer: RTX Products A/S
Operating Condition: Unom: 120 VAC (AC/DC-adapter), Tnom: 23°C
Test Site: ETS
Operator: Mr. Marguradt
Test Specification: V-Network: ESH2-Z5 (L1)
Comment: model: 3055.1 mode: link + charging



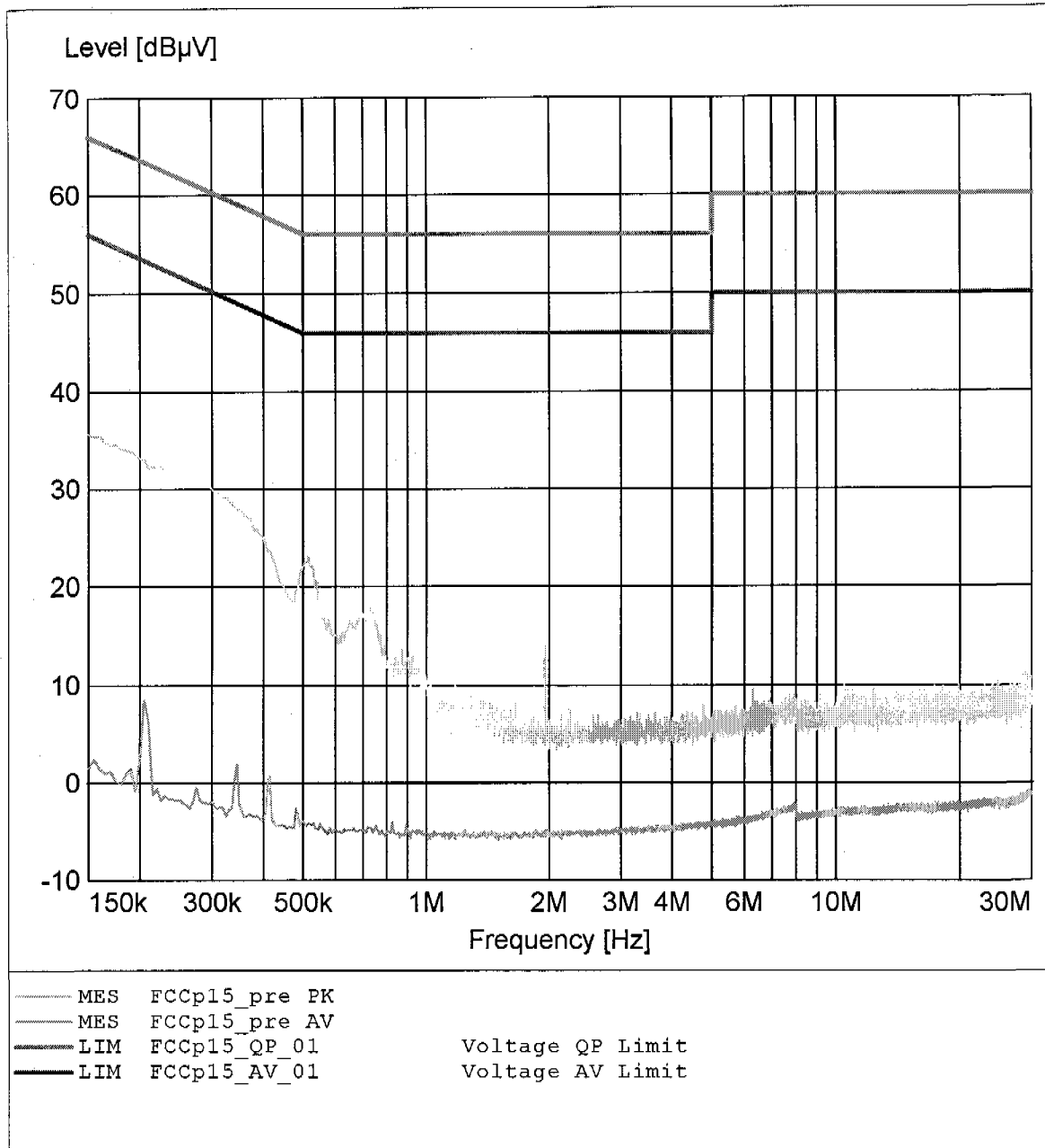
EMI voltage test in the ac-mains according to FCC part 15

EUT: RTX 3055
Manufacturer: RTX Products A/S
Operating Condition: Unom: 120 VAC (AC/DC-adapter), Tnom: 23°C
Test Site: ETS
Operator: Mr. Marquardt
Test Specification: V-Network: ESH2-Z5 (N)
Comment: model: 3055.1 mode: link + charging



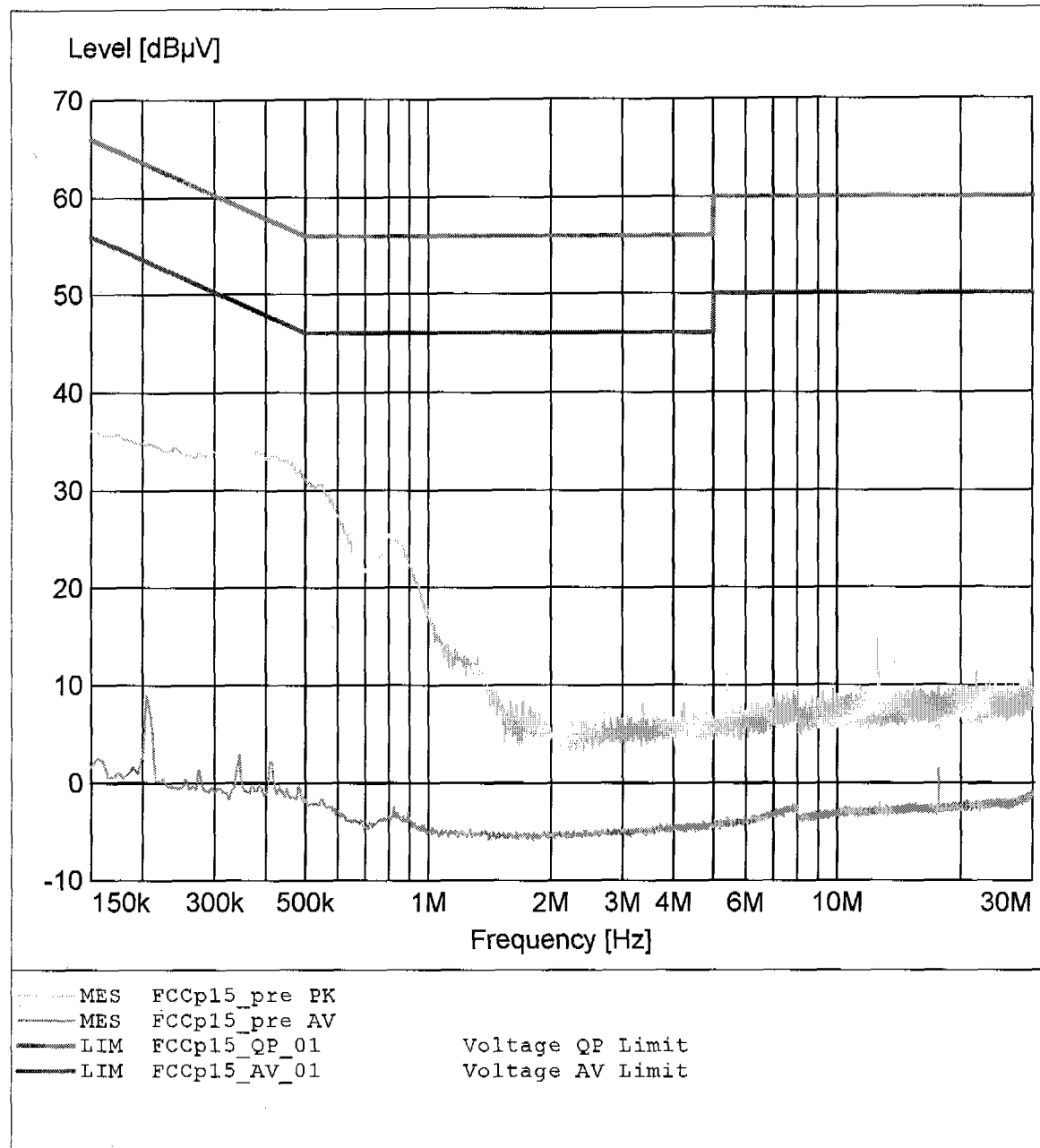
EMI voltage test in the ac-mains according to FCC part 15

EUT: RTX 3055
Manufacturer: RTX Products A/S
Operating Condition: Unom: 120 VAC (AC/DC-adapter), Tnom: 23°C
Test Site: ETS
Operator: Mr. Marquardt
Test Specification: V-Network: ESH2-Z5 (L1)
Comment: model: 3055.3 mode: link + charging



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

EUT: RTX 3055
Manufacturer: RTX Products A/S
Operating Condition: Unom: 120 VAC (AC/DC-adapter), Tnom: 23°C
Test Site: ETS
Operator: Mr. Marquardt
Test Specification: V-Network: ESH2-Z5 (N)
Comment: model: 3055.3 mode: link + charging



Appendix F

Emission band width

Emission bandwidth according to FCC Part 15.323 (a)

Verification if the emissions inside the operating frequency range are within the limits of less than 2,5MHz and greater than 50kHz

Test procedure: ANSI C63.17-1998 6.1.3

Analyzer Settings:

EUT Reference RTX 3055 FP

Span 4 MHz

Date 09. 03 2005

RBW 10 kHz

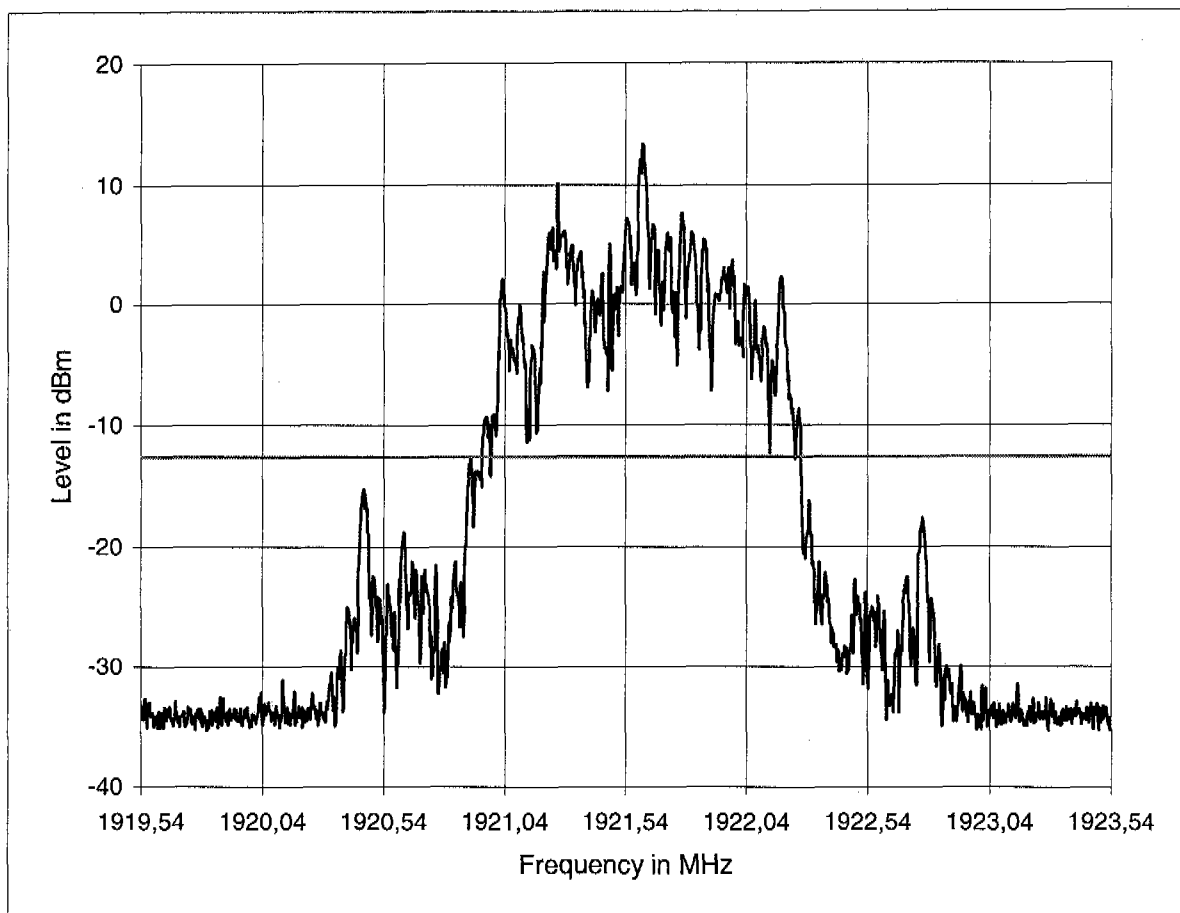
Tester Gräf

Video Bandwidth 30 kHz

Frequency 1921.536MHz

Testresult:

Verdict: **PASS**



	Frequency in MHz	Level in dBm
peak of the Emission=	1921,606	13,4034863
peak-26dB f(low)=	1920,942	
peak-26dB f(high)=	1922,26	
Δf= f(high)-f(low) =	1,318 MHz	

Measurement diagram

Emission bandwidth according to FCC Part 15.323 (a)

further values determinated

		Frequency in MHz	Level in dBm
	peak of the Emission=	1921,606	13,4034863
peak-6dB	f(low)=	1921,254	
peak-6dB	f(high)=	1921,772	
peak-12dB	f(low)=	1921,022	
peak-12dB	f(high)=	1922,186	
peak-24dB	f(low)=	1920,95	
peak-24dB	f(high)=	1922,26	

Measurement diagram

Emission bandwidth according to FCC Part 15.323 (a)

Verification if the emissions inside the operating frequency range are within the limits of less than 2,5MHz and greater than 50kHz

Test procedure: ANSI C63.17-1998 6.1.3

Analyzer Settings:

EUT Reference RTX 3055 FP

Span 4 MHz

Date 08. 03 2005

RBW 10 kHz

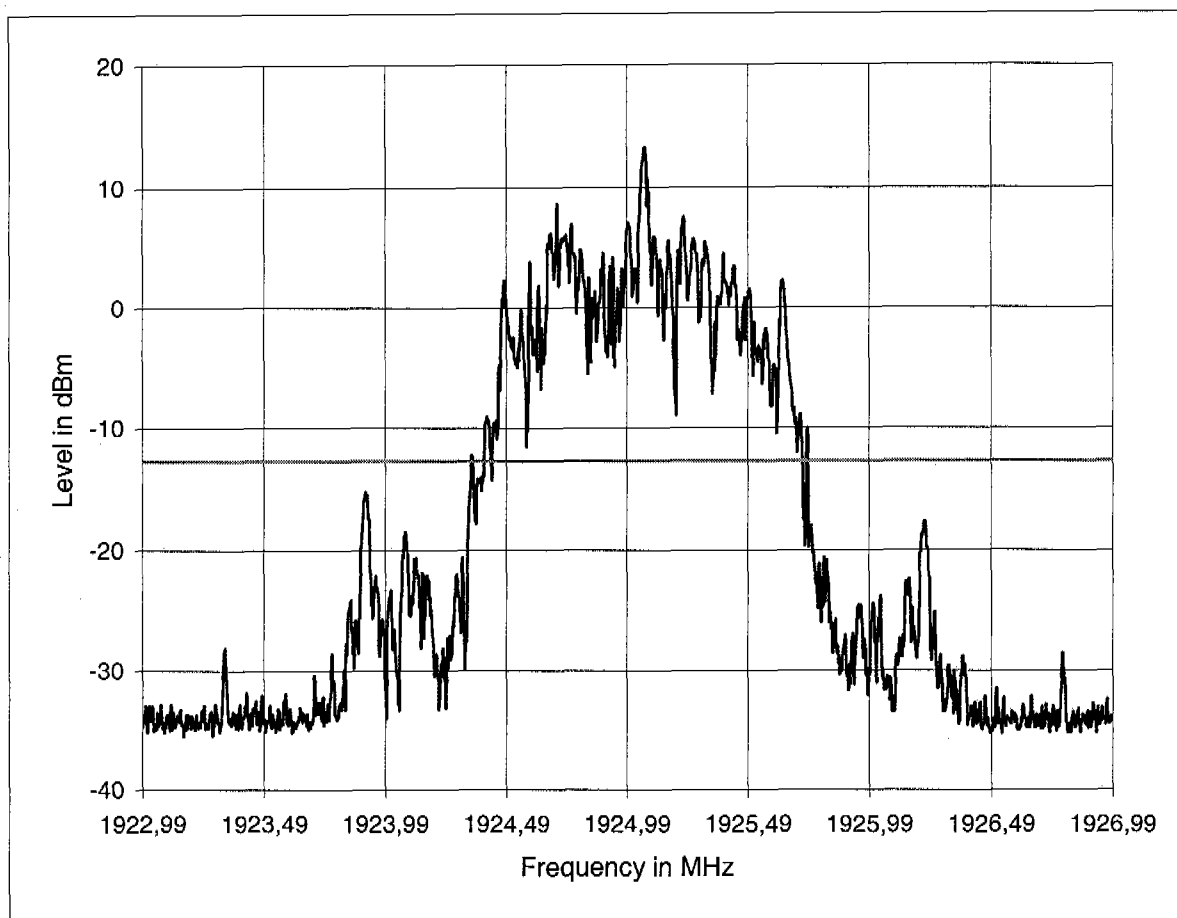
Tester Gräf

Video Bandwidth 30 kHz

Frequency 1924.992MHz

Testresult:

Verdict: **PASS**



	Frequency in MHz	Level in dBm
peak of the Emission=	1925,062	13,2767735
peak-26dB f(low)=	1924,35	
peak-26dB f(high)=	1925,74	
$\Delta f = f(\text{high}) - f(\text{low}) =$	<u>1,39</u> MHz	

Measurement diagram

Emission bandwidth according to FCC Part 15.323 (a)

further values determinated

		Frequency in MHz	Level in dBm
	peak of the Emission=	1925,062	13,2767735
peak-6dB	f(low)=	1924,702	
peak-6dB	f(high)=	1925,228	
peak-12dB	f(low)=	1924,48	
peak-12dB	f(high)=	1925,642	
peak-24dB	f(low)=	1924,404	
peak-24dB	f(high)=	1925,74	

Measurement diagram

Emission bandwidth according to FCC Part 15.323 (a)

Verification if the emissions inside the operating frequency range are within the limits of less than 2,5MHz and greater than 50kHz

Test procedure: ANSI C63.17-1998 6.1.3

Analyzer Settings:

EUT Reference RTX 3055 FP

Span 4 MHz

Date 09. 03 2005

RBW 10 kHz

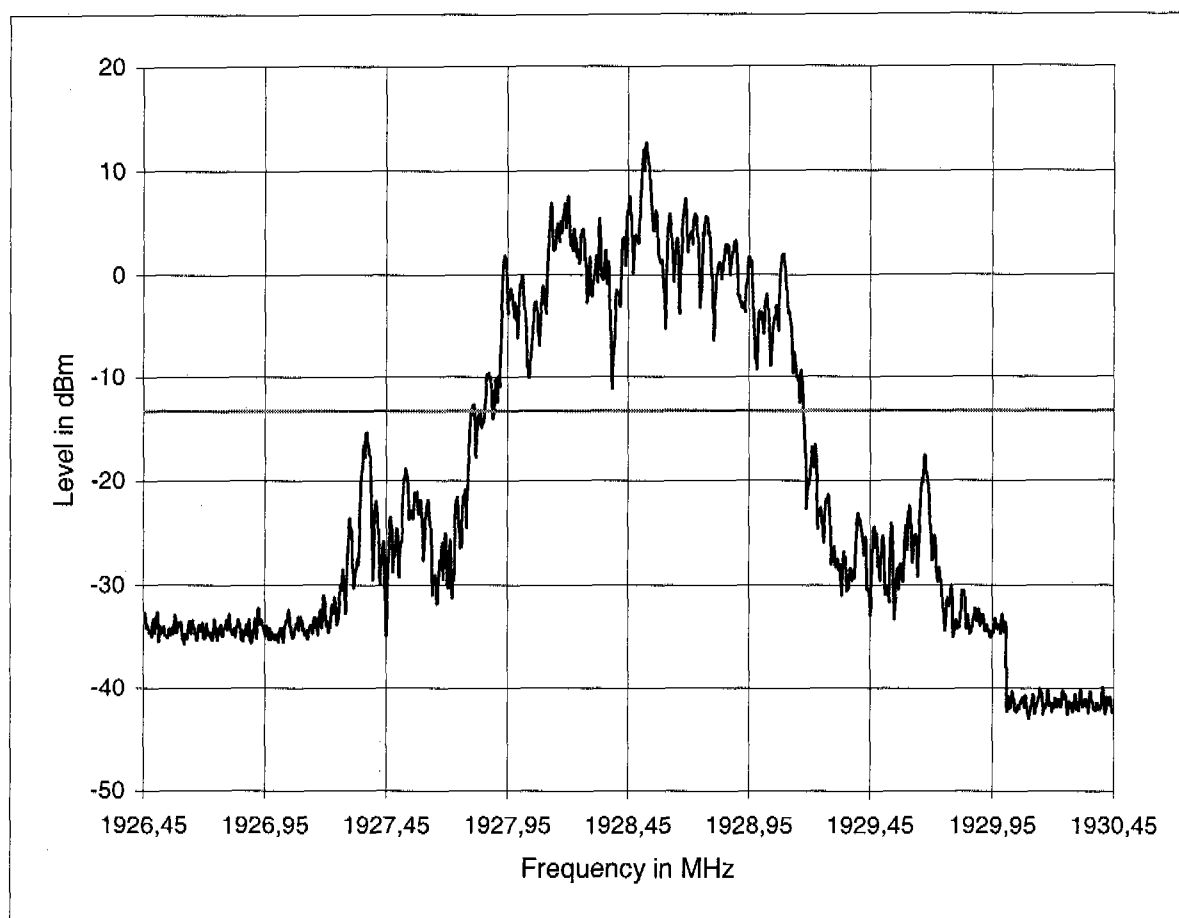
Tester Gräf

Video Bandwidth 30 kHz

Frequency 1928.448MHz

Testresult:

Verdict: **PASS**



	Frequency in MHz	Level in dBm
peak of the Emission=	1928,522	12,673748
peak-26dB f(low)=	1927,802	
peak-26dB f(high)=	1929,17	
$\Delta f = f(\text{high}) - f(\text{low}) =$	<u>1,368</u> MHz	

Measurement diagram

Emission bandwidth according to FCC Part 15.323 (a)

further values determinated

		Frequency in MHz	Level in dBm
	peak of the Emission=	1928,522	12,673748
peak-6dB	f(low)=	1928,13	
peak-6dB	f(high)=	1928,686	
peak-12dB	f(low)=	1927,932	
peak-12dB	f(high)=	1929,096	
peak-24dB	f(low)=	1927,86	
peak-24dB	f(high)=	1929,168	

Measurement diagram

Emission bandwidth according to FCC Part 15.323 (a)

Verification if the emissions inside the operating frequency range are within the limits of less than 2,5MHz and greater than 50kHz

Test procedure: ANSI C63.17-1998 6.1.3

Analyzer Settings:

EUT Reference RTX 3055 FP-doubleslot

Span 4 MHz

Date 10. 03 2005

RBW 10 kHz

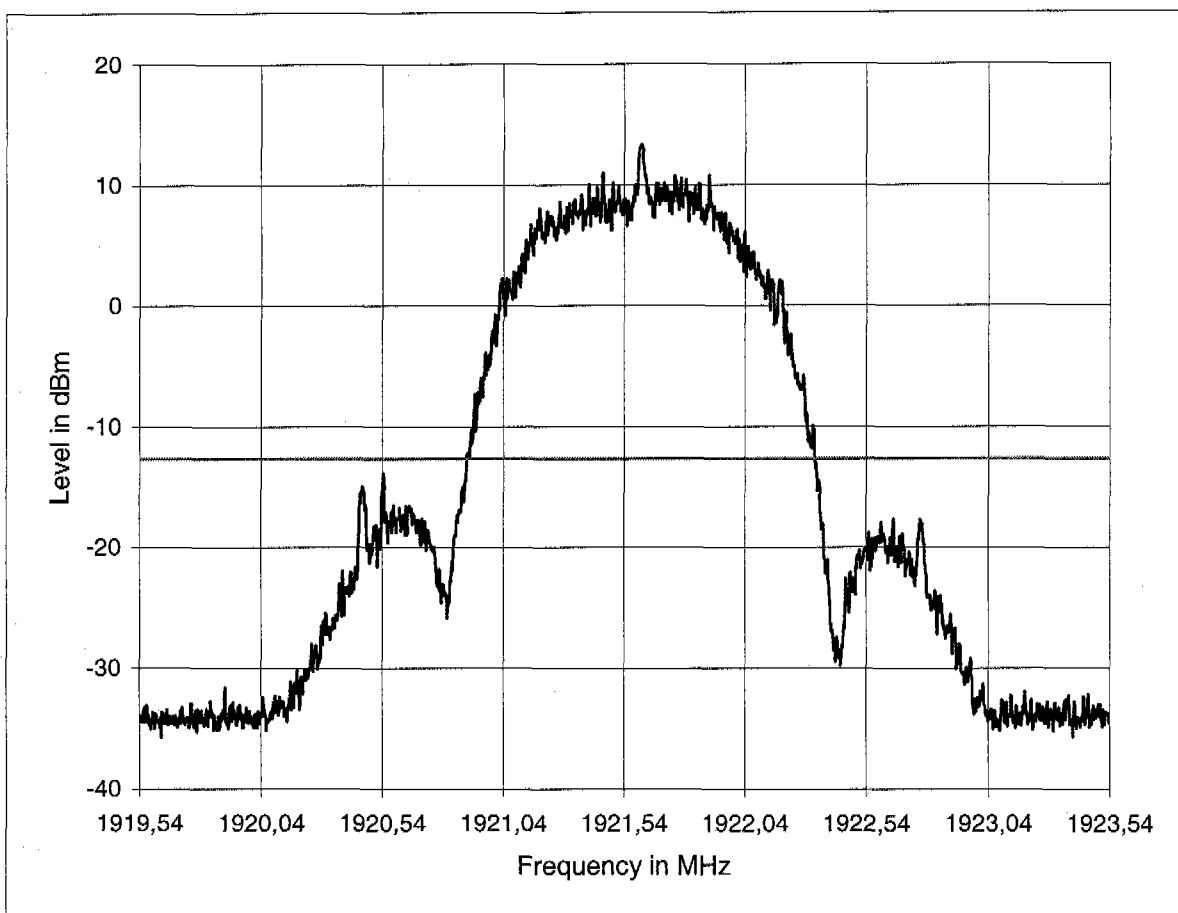
Tester Gräf

Video Bandwidth 30 kHz

Frequency 1921.536MHz

Testresult:

Verdict: **PASS**



	Frequency in MHz	Level in dBm
peak of the Emission=	1921,606	13,3433571
peak-26dB f(low)=	1920,884	
peak-26dB f(high)=	1922,322	
Δf= f(high)-f(low) =	1,438 MHz	

Measurement diagram

Emission bandwidth according to FCC Part 15.323 (a)

further values determinated

		Frequency in MHz	Level in dBm
	peak of the Emission=	1921,606	13,3433571
peak-6dB	f(low)=	1921,184	
peak-6dB	f(high)=	1921,954	
peak-12dB	f(low)=	1921,022	
peak-12dB	f(high)=	1922,188	
peak-24dB	f(low)=	1920,902	
peak-24dB	f(high)=	1922,32	

Measurement diagram

Emission bandwidth according to FCC Part 15.323 (a)

Verification if the emissions inside the operating frequency range are within the limits of less than 2,5MHz and greater than 50kHz

Test procedure: ANSI C63.17-1998 6.1.3

Analyzer Settings:

EUT Reference RTX 3055 FP-doubleslot

Span 4 MHz

Date 10. 03 2005

RBW 10 kHz

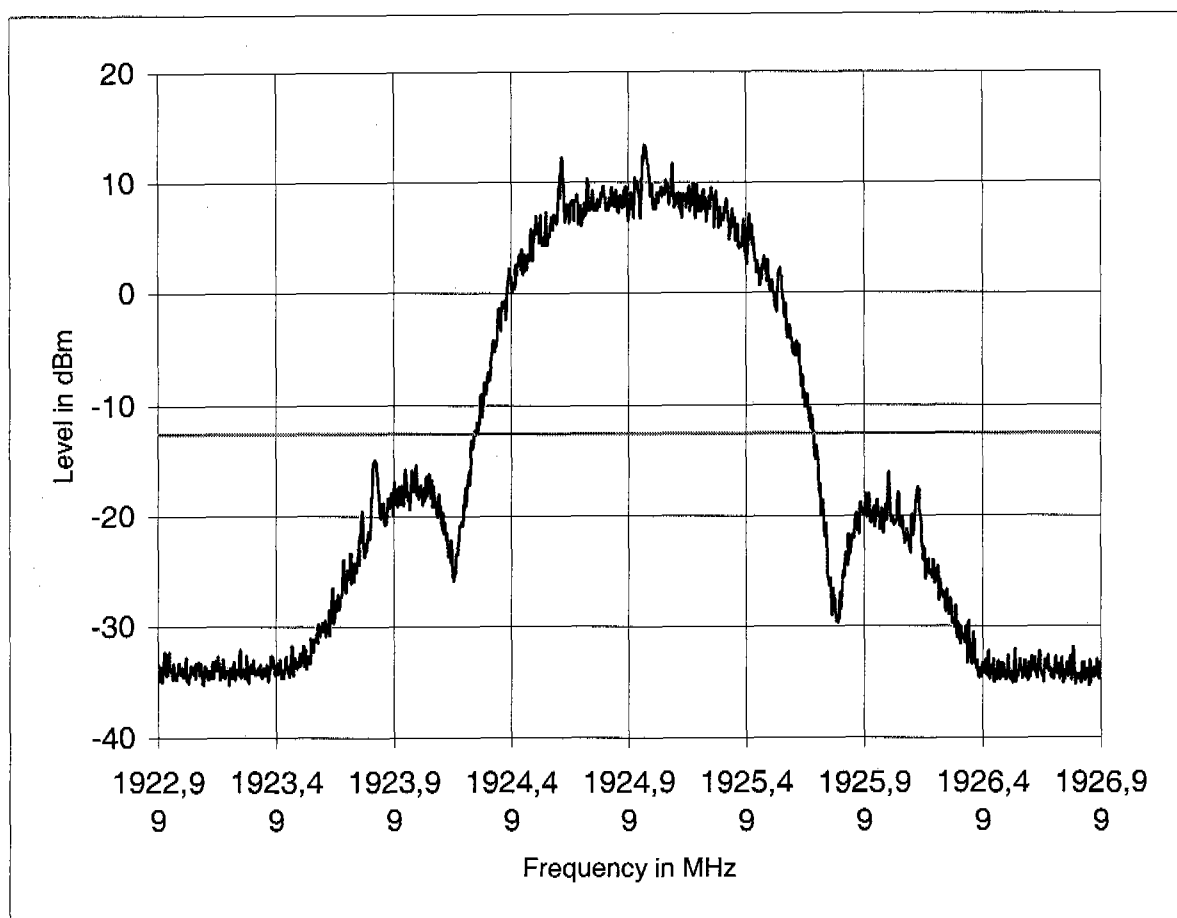
Tester Gräf

Video Bandwidth 30 kHz

Frequency 1924.992MHz

Testresult:

Verdict: **PASS**



	Frequency in MHz	Level in dBm
peak of the Emission=	1925,06	13,4251041
peak-26dB f(low)=	1924,336	
peak-26dB f(high)=	1925,778	
$\Delta f = f(\text{high}) - f(\text{low}) =$	<u>1,442</u> MHz	

Measurement diagram

Emission bandwidth according to FCC Part 15.323 (a)

further values determinated

		Frequency in MHz	Level in dBm
	peak of the Emission=	1925,06	13,4251041
peak-6dB	f(low)=	1924,692	
peak-6dB	f(high)=	1925,434	
peak-12dB	f(low)=	1924,478	
peak-12dB	f(high)=	1925,642	
peak-24dB	f(low)=	1924,358	
peak-24dB	f(high)=	1925,764	

Measurement diagram

Emission bandwidth according to FCC Part 15.323 (a)

Verification if the emissions inside the operating frequency range are within the limits of less than 2,5MHz and greater than 50kHz

Test procedure: ANSI C63.17-1998 6.1.3

Analyzer Settings:

EUT Reference RTX 3055 FP-doubleslot

Span 4 MHz

Date 10. 03 2005

RBW 10 kHz

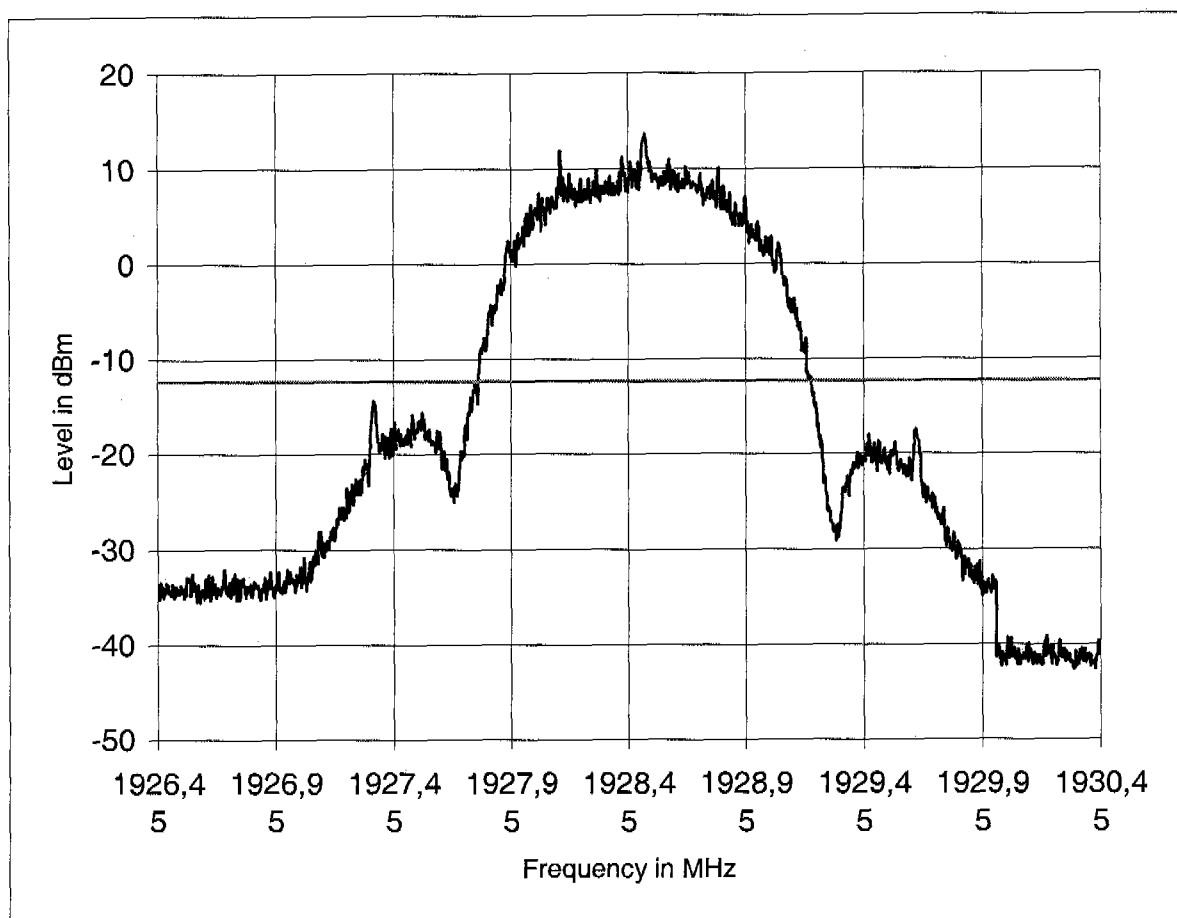
Tester Gräf

Video Bandwidth 30 kHz

Frequency 1928.448MHz

Testresult:

Verdict: **PASS**



	Frequency in MHz	Level in dBm
peak of the Emission=	1928,518	13,6481953
peak-26dB f(low)=	1927,808	
peak-26dB f(high)=	1929,226	
Δf= f(high)-f(low) =	1,418	MHz

Measurement diagram

Emission bandwidth according to FCC Part 15.323 (a)

further values determinated

		Frequency in MHz	Level in dBm
	peak of the Emission=	1928,518	13,6481953
peak-6dB	f(low)=	1928,146	
peak-6dB	f(high)=	1928,856	
peak-12dB	f(low)=	1927,932	
peak-12dB	f(high)=	1929,094	
peak-24dB	f(low)=	1927,816	
peak-24dB	f(high)=	1929,206	

Measurement diagram

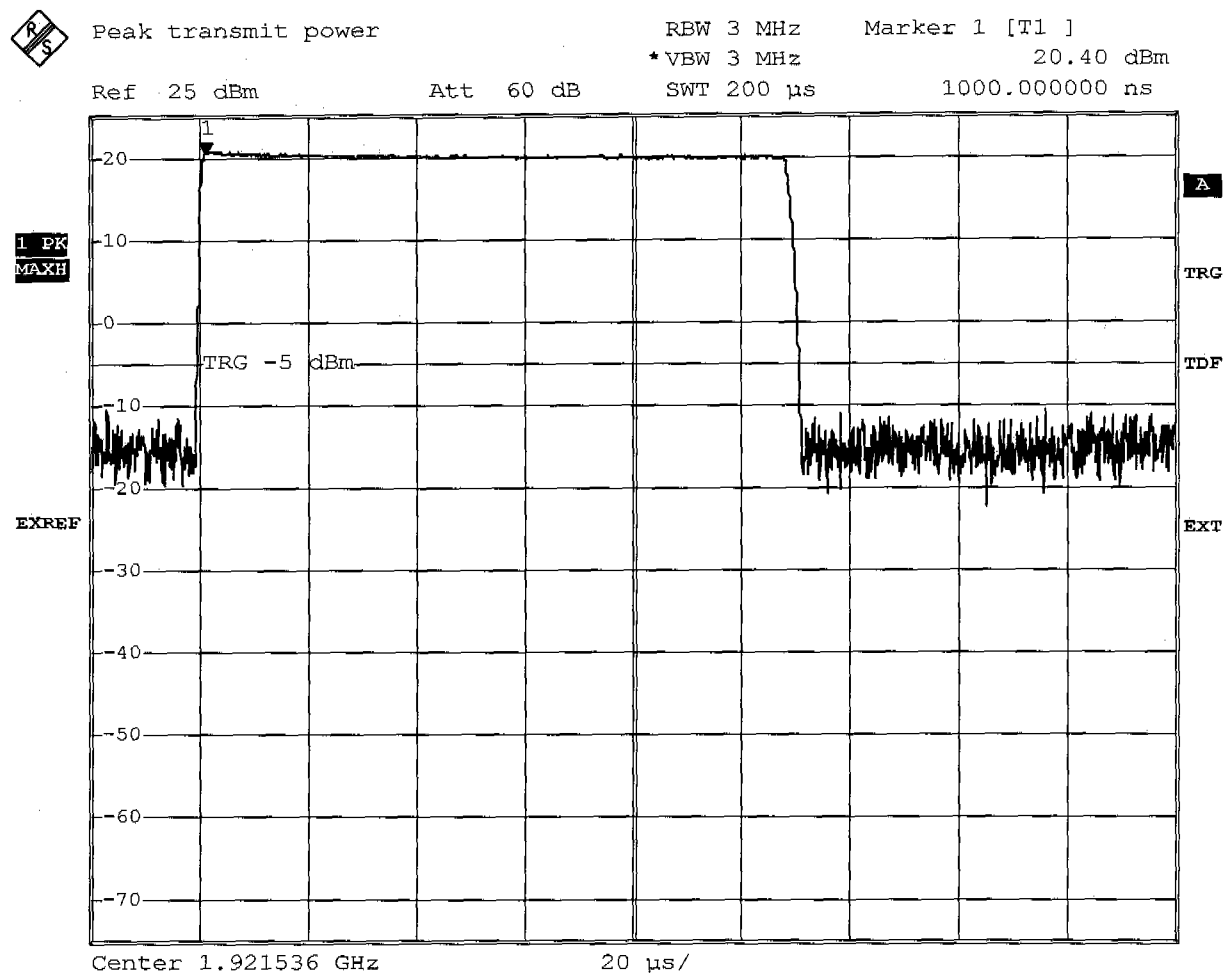
Appendix G

Peak Transmit Power

Peak Transmit Power according to FCC Part 15.319(c)

Test procedure: ANSI 63.17 - 1998 6.1.2
UPCS

EUT	Fixed part
Model	RTX 3055
Applicant	RTX Telecom A/S
Temperature	23°C
Test Site / Operator	ETS
Test Specification	6.1.2 Peak transmit power
Comment 1	Band 1
Comment 2	
Comment 3	



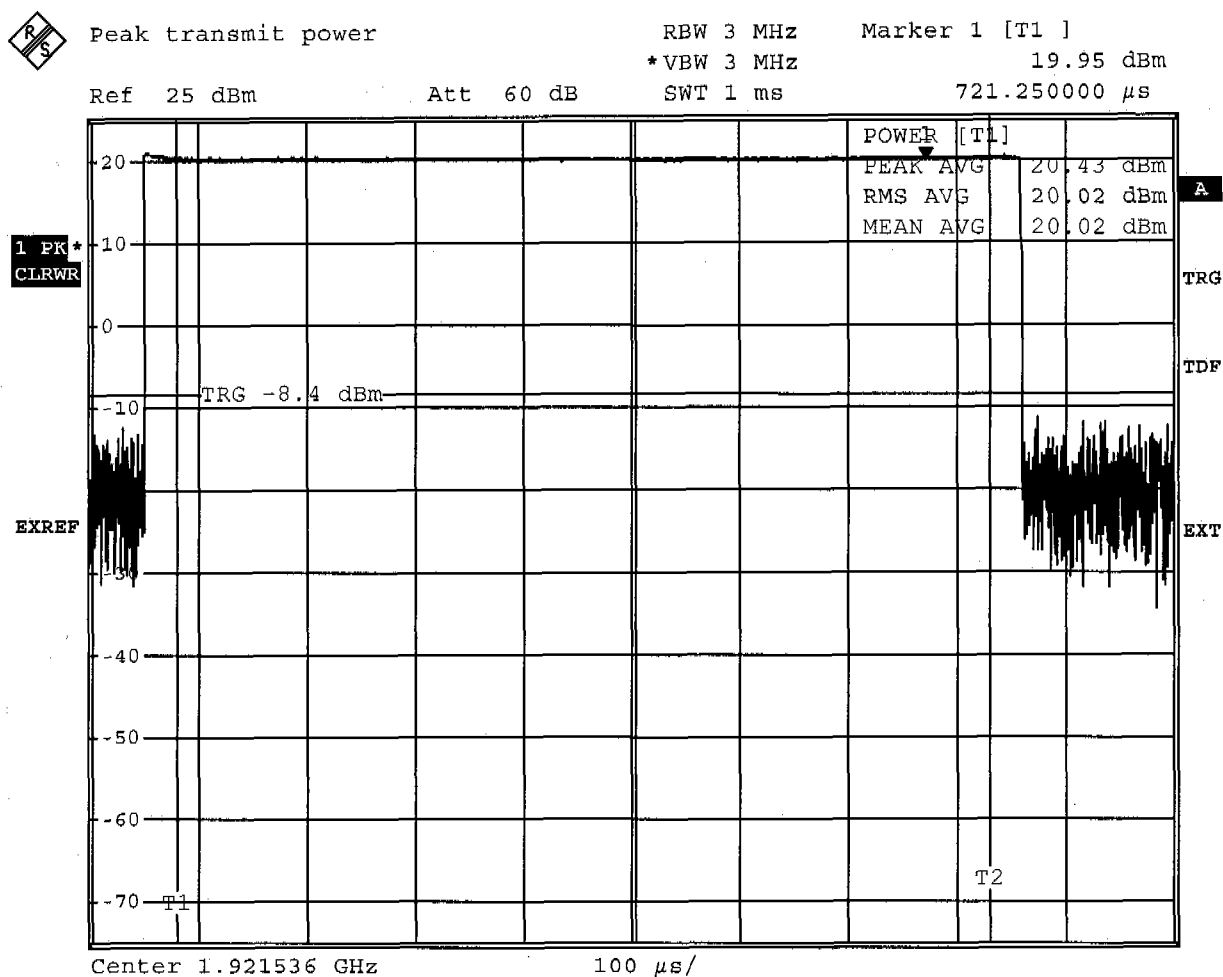
Date: 6.MAR.2005 09:20:49

Measurement diagram

Peak Transmit Power according to FCC Part 15.319(c)

Test procedure: ANSI 63.17 - 1998 6.1.2
UPCS

EUT	Fixed part
Model	RTX 3055
Applicant	RTX Telecom A/S
Temperature	23°C
Test Site / Operator	ETS
Test Specification	6.1.2 Peak transmit power
Comment 1	Band 1
Comment 2	Double Slot Signal
Comment 3	



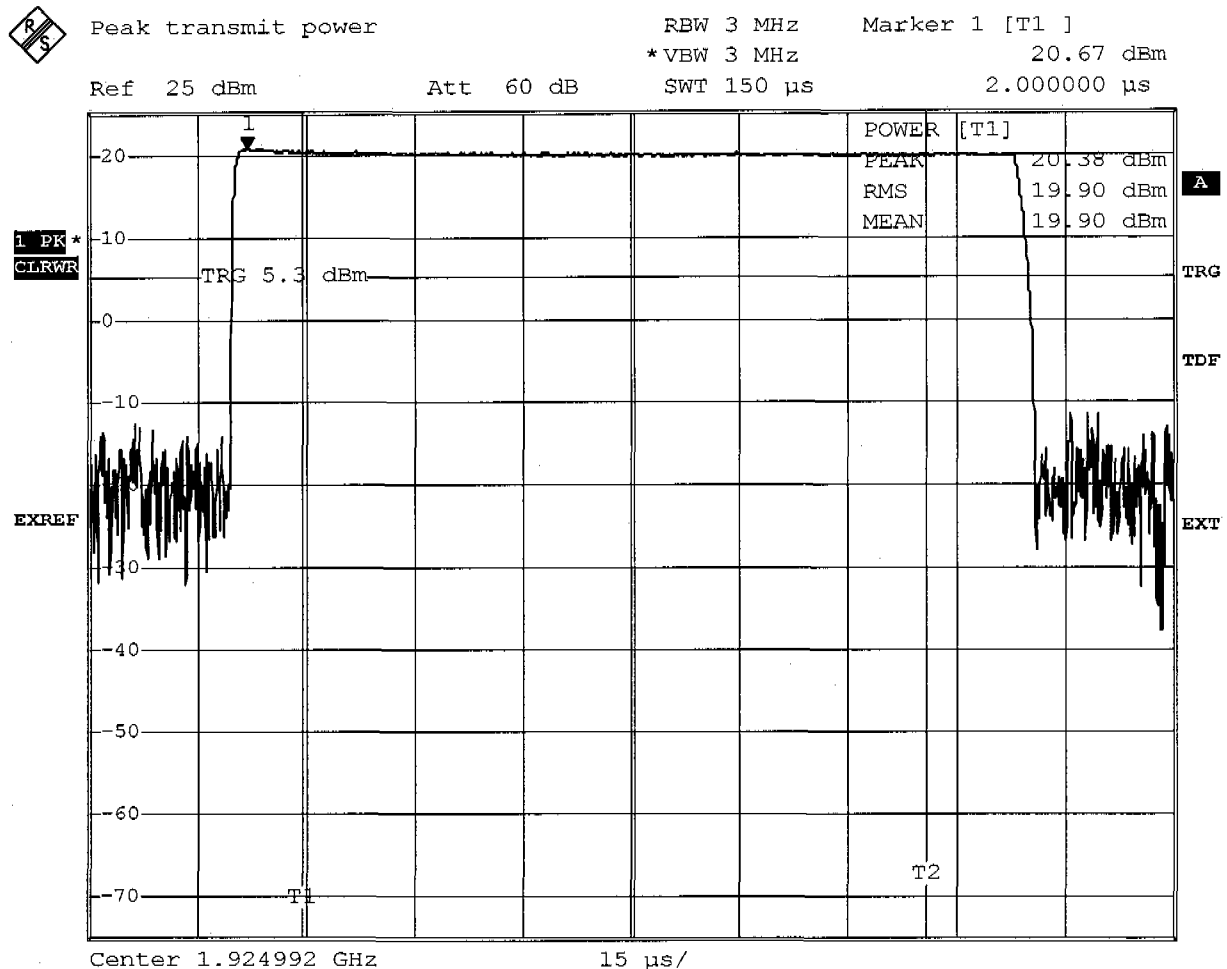
Date: 8.MAR.2005 08:36:39

Measurement diagram

Peak Transmit Power according to FCC Part 15.319(c)

Test procedure: ANSI 63.17 - 1998 6.1.2
UPCS

EUT	Fixed part
Model	RTX 3055
Applicant	RTX Telecom A/S
Temperature	23°C
Test Site / Operator	ETS
Test Specification	6.1.2 Peak transmit power
Comment 1	Band 3
Comment 2	
Comment 3	



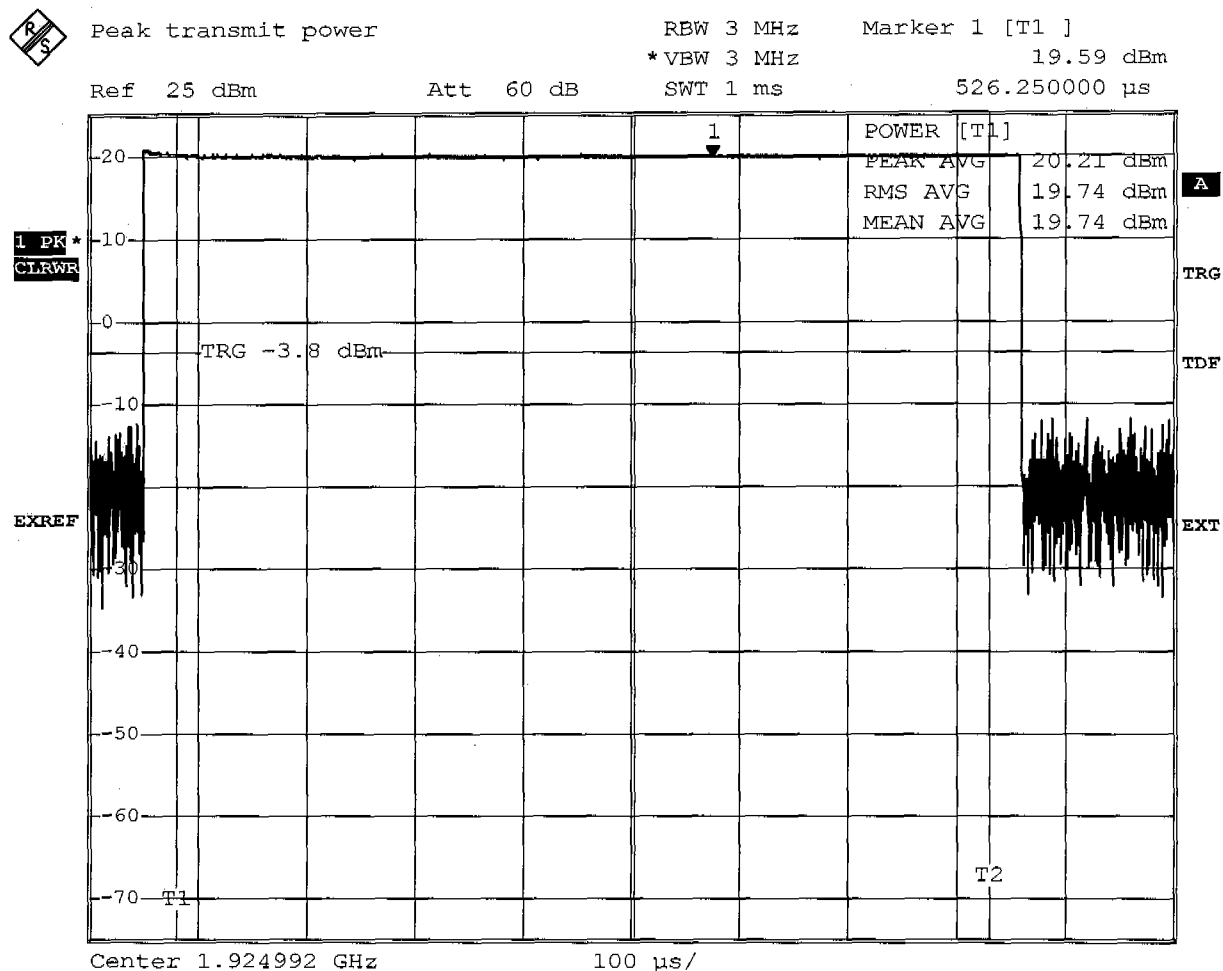
Date: 6.MAR.2005 09:48:07

Measurement diagram

Peak Transmit Power according to FCC Part 15.319(c)

Test procedure: ANSI 63.17 - 1998 6.1.2
UPCS

EUT	Fixed part
Model	RTX 3055
Applicant	RTX Telecom A/S
Temperature	23°C
Test Site / Operator	ETS
Test Specification	6.1.2 Peak transmit power
Comment 1	Band 3
Comment 2	Double Slot Signal
Comment 3	



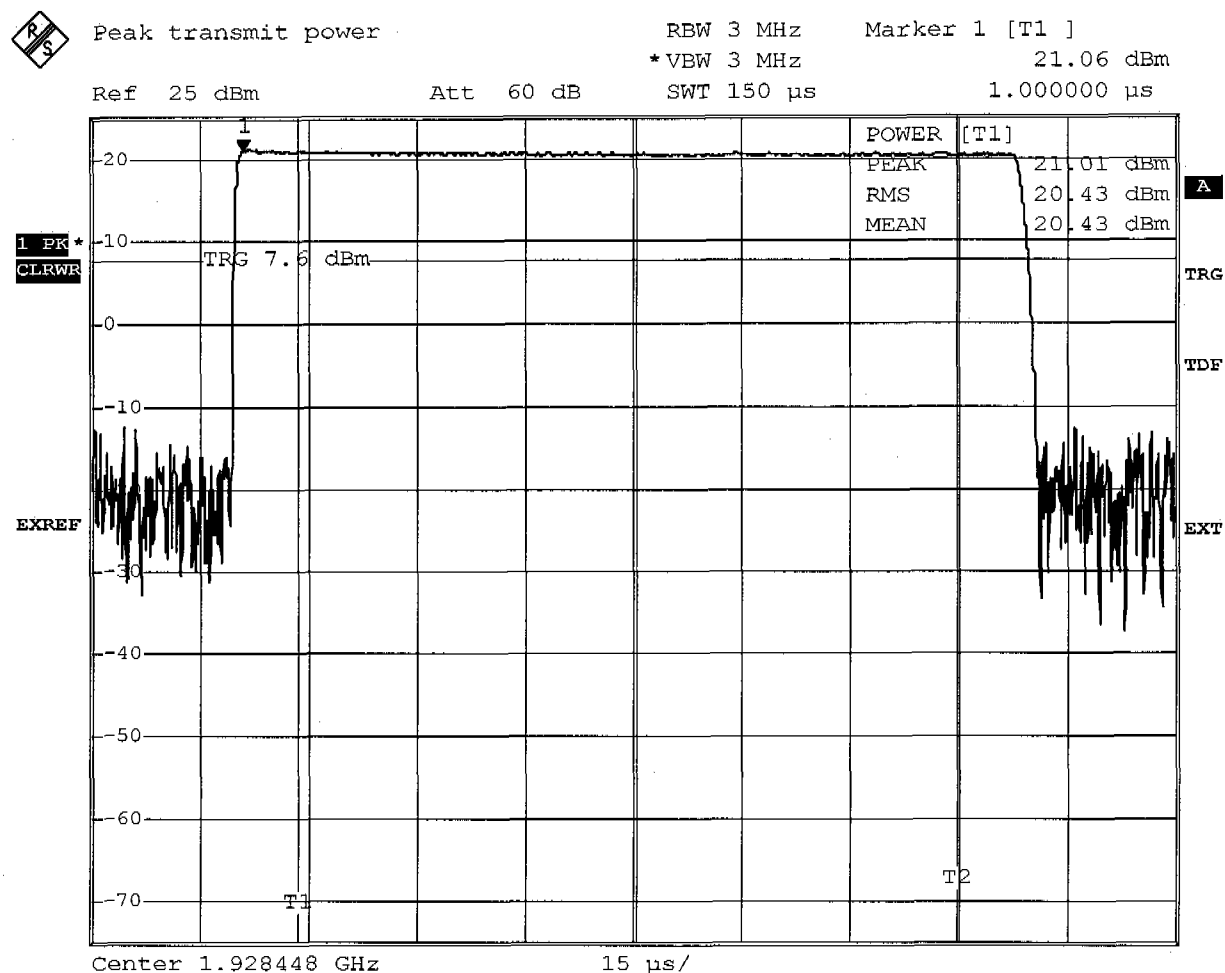
Date: 8.MAR.2005 11:26:35

Measurement diagram

Peak Transmit Power according to FCC Part 15.319(c)

Test procedure: ANSI 63.17 - 1998 6.1.2
UPCS

EUT	Fixed part
Model	RTX 3055
Applicant	RTX Telecom A/S
Temperature	23°C
Test Site / Operator	ETS
Test Specification	6.1.2 Peak transmit power
Comment 1	Band 5
Comment 2	
Comment 3	



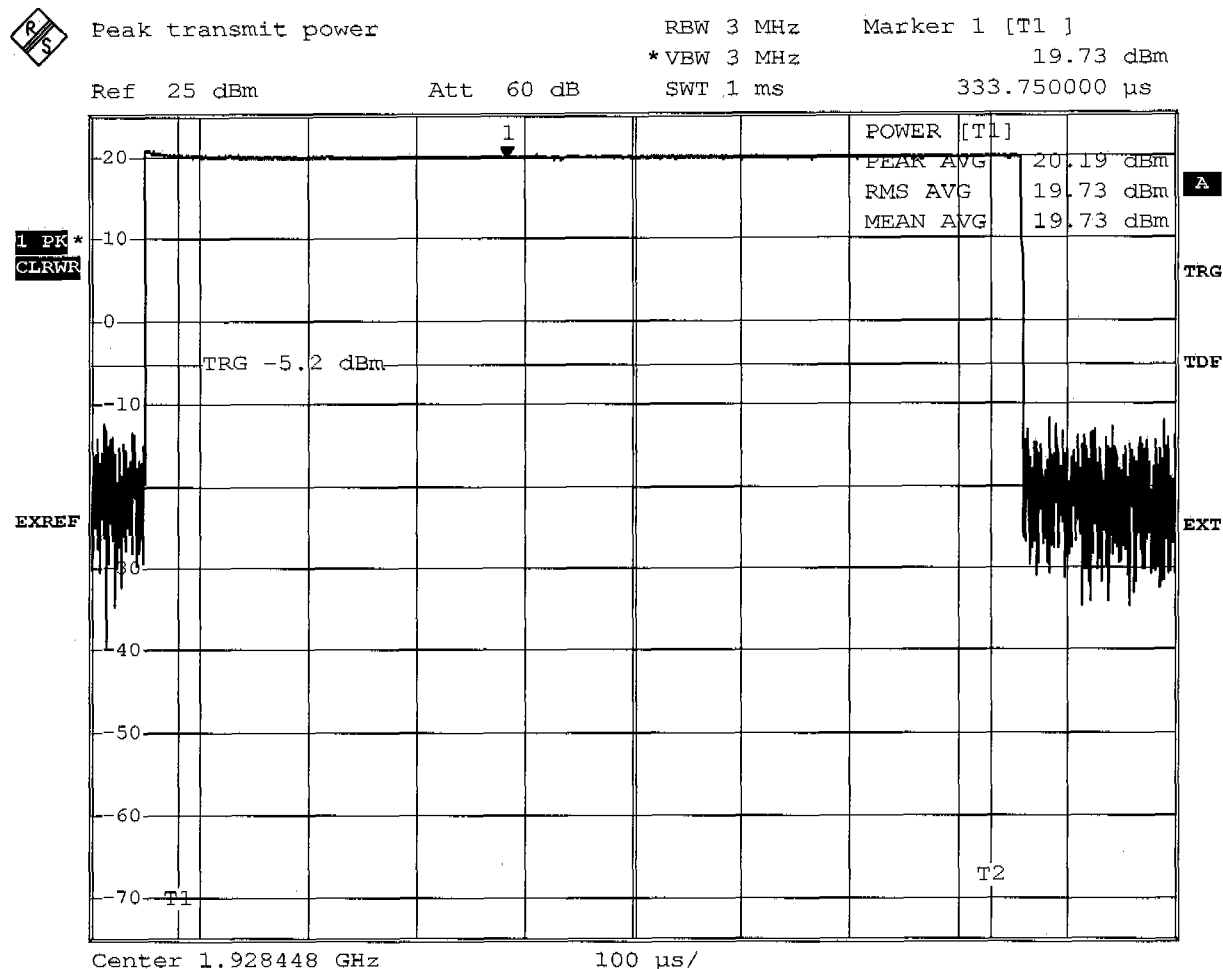
Date: 7.MAR.2005 07:12:45

Measurement diagram

Peak Transmit Power according to FCC Part 15.319(c)

Test procedure: ANSI 63.17 - 1998 6.1.2
UPCS

EUT	Fixed part
Model	RTX 3055
Applicant	RTX Telecom A/S
Temperature	23°C
Test Site / Operator	ETS
Test Specification	6.1.2 Peak transmit power
Comment 1	Band 5
Comment 2	Double Slot Signal
Comment 3	



Date: 8.MAR.2005 11:29:33

Measurement diagram

Appendix H

Power spectral density

Power Spectral density according FCC Part 15.319 (d)

Verification that the power spectral density does not exceed 3mW
in a 3kHz bandwidth

Test procedure: ANSI C63.17 - 1998 6.1.5

Analyzer Settings:

EUT Reference RTX3055 Fixed Part

Span 0 Hz

Date 09. 03 2005

RBW 3 kHz

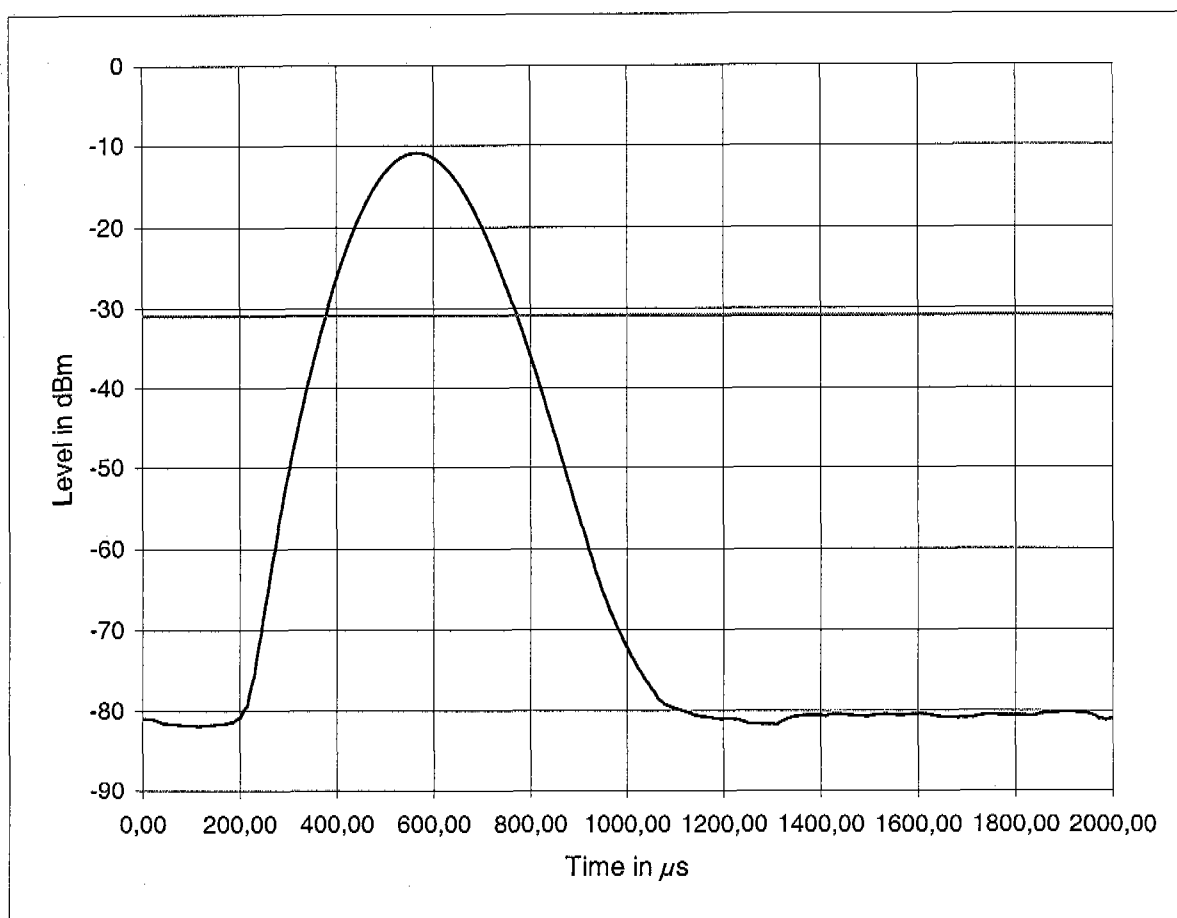
Tester Gräf

Video Bandwidth 30 kHz

Frequency 1921.606MHz

Testresult:

Verdict: **PASS**



maximum level
limit

-10,8976097 dBm
-30,8976097 dBm

y1= summ of the linerized levels above limit line
y2= y1 / (sampling frequency)
y3= y2 / (wide band impulse duration)

13,0222109 mW
1,3022E-05 mWs
0,11731722 mW

Power spectral density (CAT method)
in dBm

0,11731722 mW
-9,31 dBm

Measurement diagram

Power Spectral density according FCC Part 15.319 (d)

Verification that the power spectral density does not exceed 3mW
in a 3kHz bandwidth

Test procedure: ANSI C63.17 - 1998 6.1.5

Analyzer Settings:

EUT Reference RTX3055 Fixed Part

Span 0 Hz

Date 08. 03 2005

RBW 3 kHz

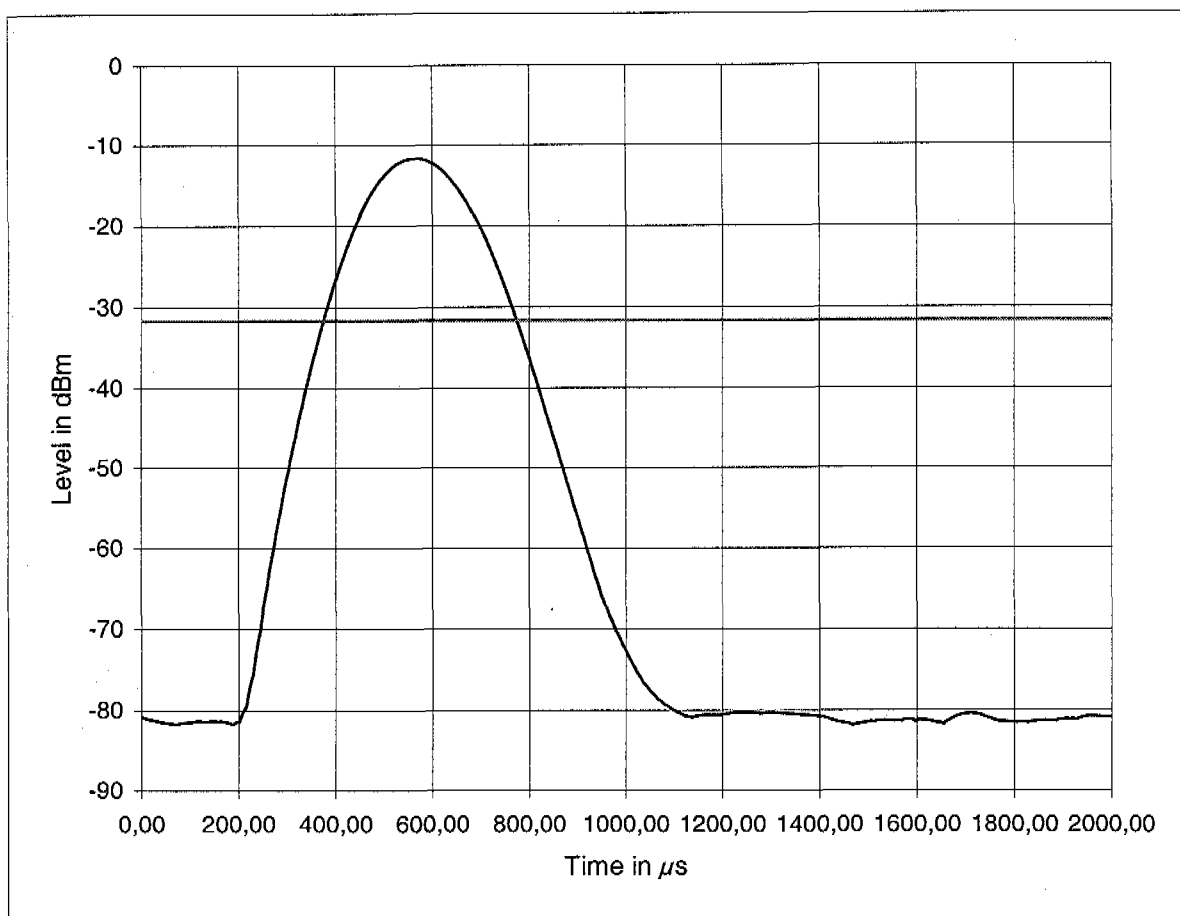
Tester Gräf

Video Bandwidth 30 kHz

Frequency 1925.06MHz

Testresult:

Verdict: **PASS**



maximum level
limit

-11,6817379 dBm
-31,6817379 dBm

y1= summ of the linerized levels above limit line
y2= y1 / (sampling frequency)
y3= y2 / (wide band impulse duration)

11,1553128 mW
1,1155E-05 mWs
0,10049831 mW

Power spectral density (CAT method)
in dBm

0,10049831 mW
-9,98 dBm

Measurement diagram

Power Spectral density according FCC Part 15.319 (d)

Verification that the power spectral density does not exceed 3mW
in a 3kHz bandwidth

Test procedure: ANSI C63.17 - 1998 6.1.5

Analyzer Settings:

EUT Reference RTX3055 Fixed Part

Span 0 Hz

Date 09. 03 2005

RBW 3 kHz

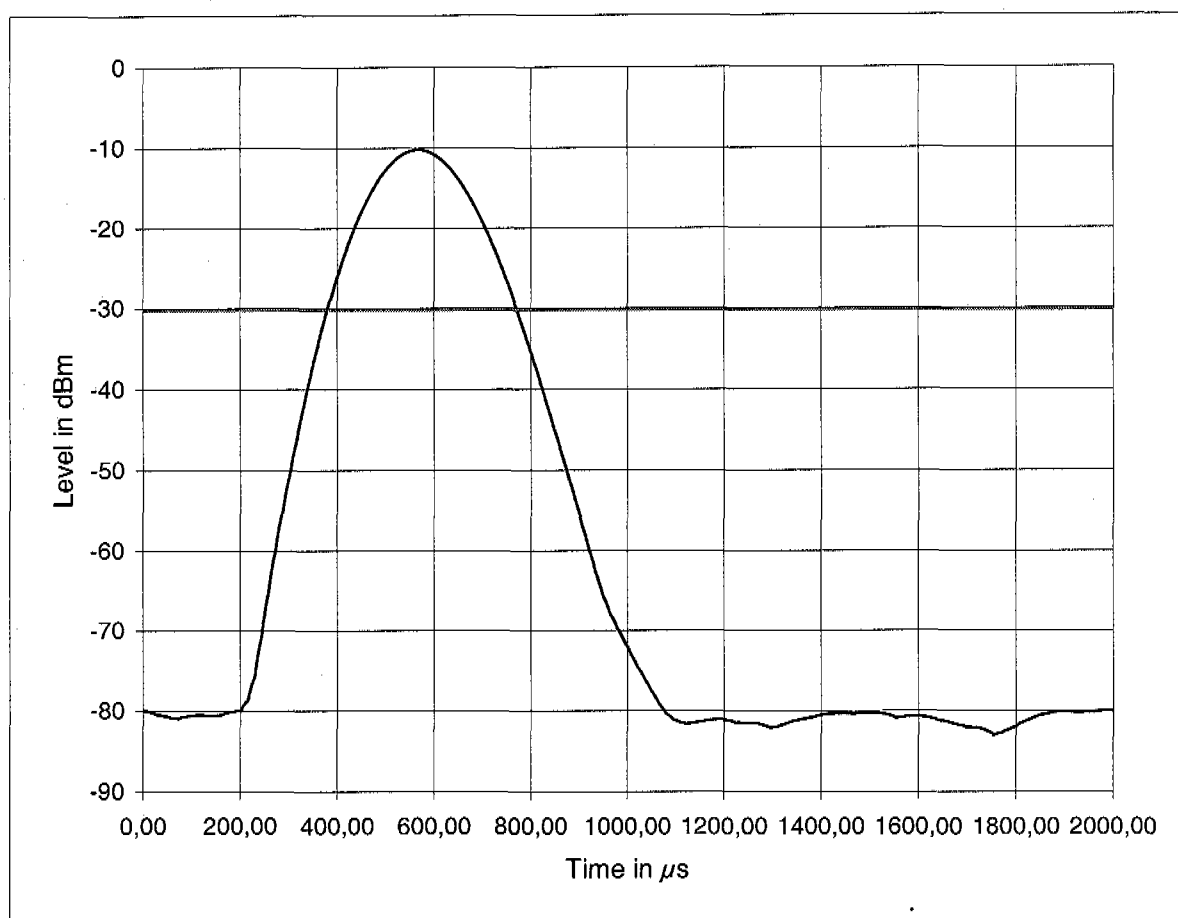
Tester Gräf

Video Bandwidth 30 kHz

Frequency 1928.518MHz

Testresult:

Verdict: **PASS**



maximum level
limit

-10,2134914 dBm
-30,2134914 dBm

y1= summ of the linerized levels above limit line
y2= y1 / (sampling frequency)
y3= y2 / (wide band impulse duration)

15,092938 mW
1,5093E-05 mWs
0,13597241 mW

Power spectral density (CAT method)
in dBm

0,13597241 mW
-8,67 dBm

Measurement diagram

Appendix I

Directional gain of the antenna

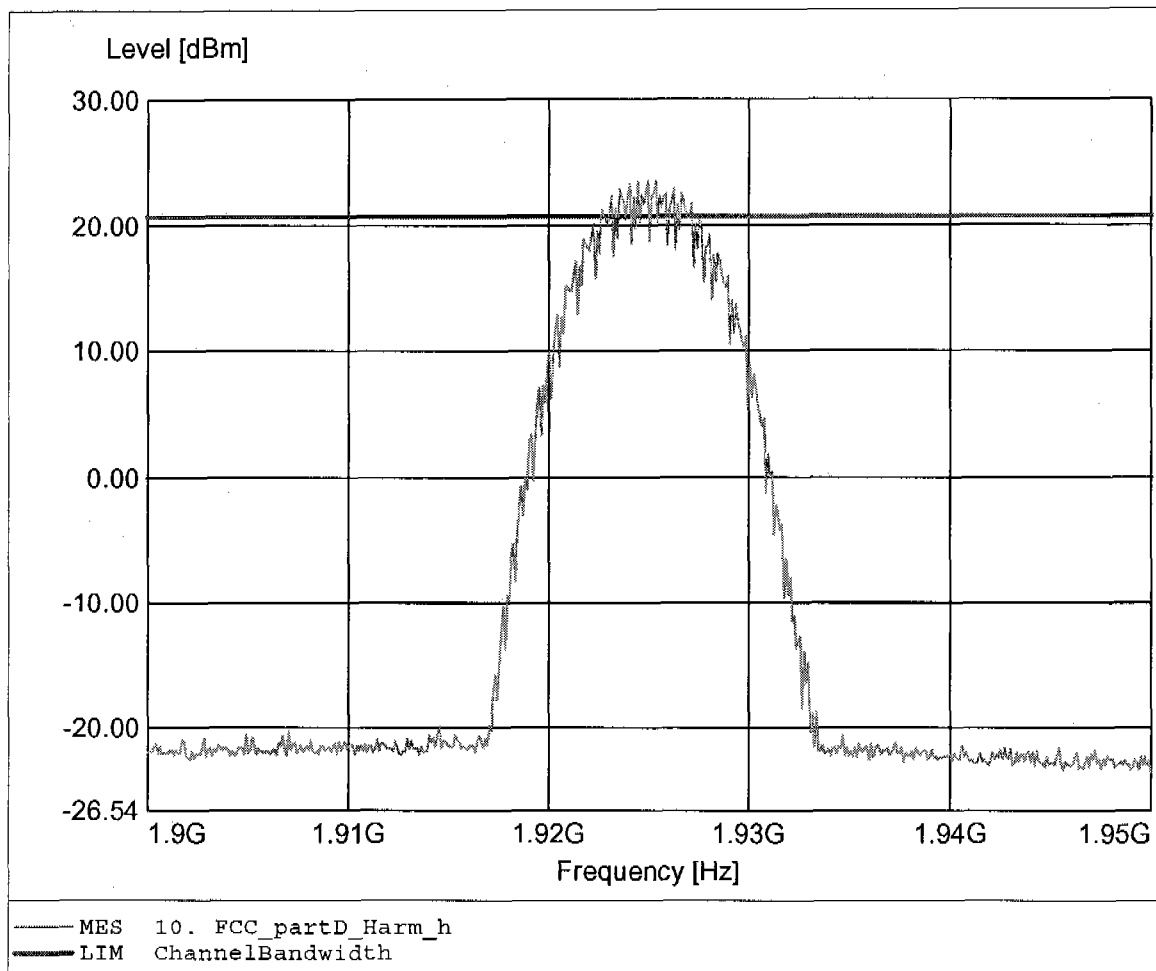
Appendix J

Radio frequency radiation exposure

Peak Transmit Power, Radiated

FCC RULES PART 15, SUBPART D

Approval Holder: RTX Products A/S
EUT: RTX 3055
Model: 3055.1 (Base) / Antenna 1 / 1924.992 MHz
Test Site / Operator: ETS / Mr. Hoppe
Temperature/ Voltage: 25°C / Unom: 10.0 V DC (120 V AC/DC adaptor)
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: 3m, Ant.: BBHA 9120D,
Comment 2: Freq:1.925GHz Pmax:23.57dBm RBW: 5 MHz



Appendix K

Monitoring threshold

Appendix L

Monitoring of intended transmit window and maximum reaction time

Monitoring threshold according to FCC 15.323 (c) (2)

Test case FCC 15.323 (C) 2
 Date 01.04.2005 13:40:58
 Reference to the EUT RTX3055
 Comment: ANSI reference C 63.17-1998 7.3.2.1.1

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	
00:08:32.9687500	-85,4 -94,8	-85,9 -94,3	-85,7 -94,6	-86,1 -94,8	-86,3 -95	Initial condition
00:09:12.2031250	-85 -93,1	-85,2 -94	-85 -94,4	-61,6 -86,7	-26,1 -46,2	Last band selected
00:10:34.0781250	-85,4 -94,8	-86,3 -95,6	-87 -95,9	-71,2 -95,6	-84,7 -93,2	Power on last band stepwise increased
00:10:34.9375000	-24,7 -44,5	-55,1 -86,4	-62,2 -92,8	-83,8 -95,9	-84,6 -93,2	Channel change at - 93 dBm

Log file

Maximum reaction time according FCC 15.321 (c) (1)

Reference to the EUT Date 05.04.2005 12:48:30
RTX3055

Comment: ANSI reference C63.17-1998
7.5
test c)

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	
00:00:55.4218750	-89,4 -99,4	-91,2 -100,1	-92,1 -100,5	-92,3 -100,9	-91,5 -100,7	All interferers off
00:01:05.6718750	-78,1 -79,9	-79,2 -81,1	-79,6 -81,6	-92,2 -100,8	-79,3 -81,3	CW interferers on
00:02:06.4218750	-77,8 -79,9	-79 -81,2	-79,5 -81,6	-83,9 -97,8	-79,1 -81,3	50µs pulse interferer at 1926.720M Hz
00:03:09.8906250	-78 -80	-78,7 -81,1	-79,5 -81,7	-82,9 -97,2	-79,4 -81,4	No connection

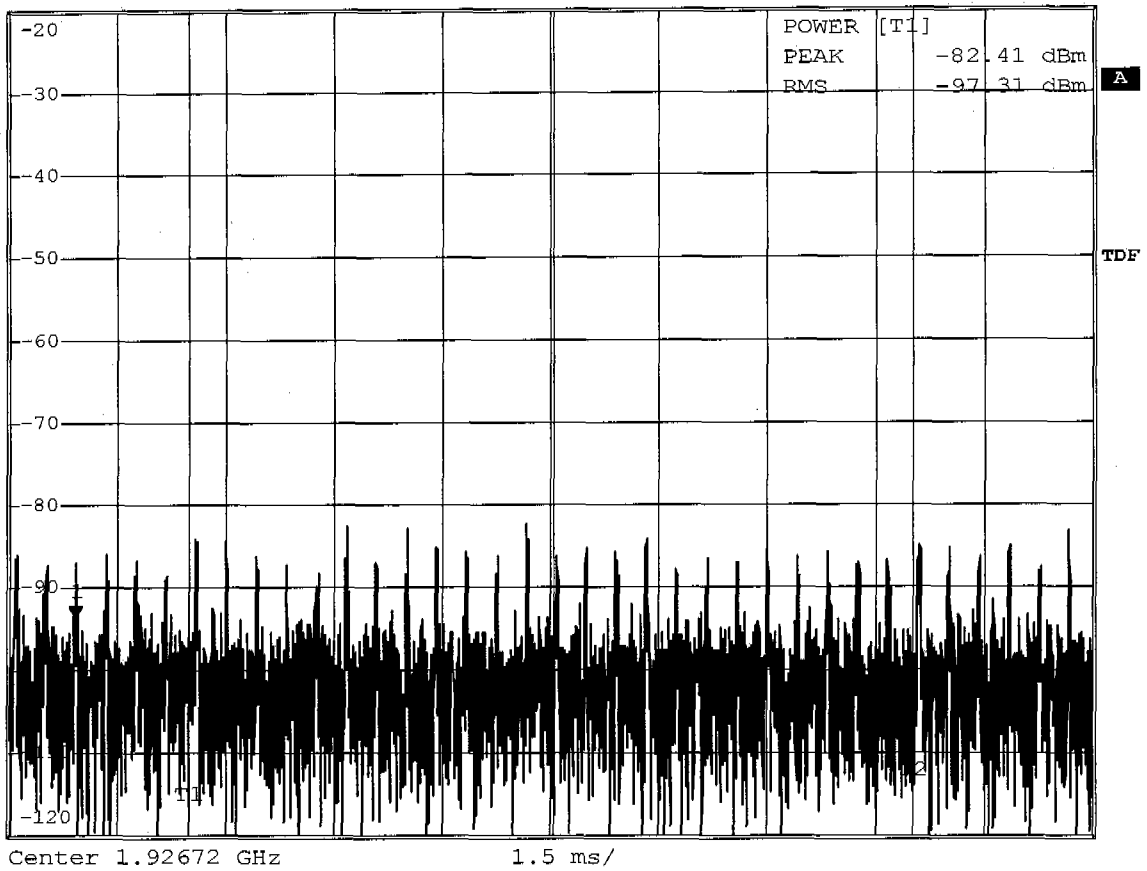
Log file



Power indication

RBW 100 kHz Marker 1 [T1]
*VBW 1 MHz -93.63 dBm
Ref -20 dBm Att 10 dB SWT 15 ms 939.375000 μ s

1 RM*
CLRWR



Comment: ANSI C63.17-1998

Date: 3.APR.2005 12:30:56

Log file

ELECTRONIC TECHNOLOGY SYSTEMS DR. GENZ GMBH
Storkower Str. 38C, D-15526 REICHENWALDE B. BERLIN

Maximum reaction time according FCC 15.321 (c) (1)

Reference to the EUT Date 05.04.2005 12:48:41
RTX3055

Comment: ANSI reference C63.17-1998
7.5
test d)

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	
00:04:19.1093750	-90,9 -99,5	-90,6 -100,1	-91,9 -100,6	-92,4 -100,7	-99,5 -101,3	All interferers off
00:04:19.9687500	-77,9 -79,9	-79,3 -81,1	-79,7 -81,7	-91,2 -100,6	-79,2 -81,3	CW interferers on
00:05:24.7812500	-77,9 -80	-79,1 -81,2	-79,3 -81,6	-77,5 -94,7	-79,4 -81,3	35µs impulse interferer at 1926.720M Hz
00:06:08.2656250	-77,9 -80	-79,3 -81,2	-79,7 -81,7	-77,5 -94,5	-79,5 -81,4	No connection

Log file



Power indication

RBW 100 kHz Marker 1 [T1]

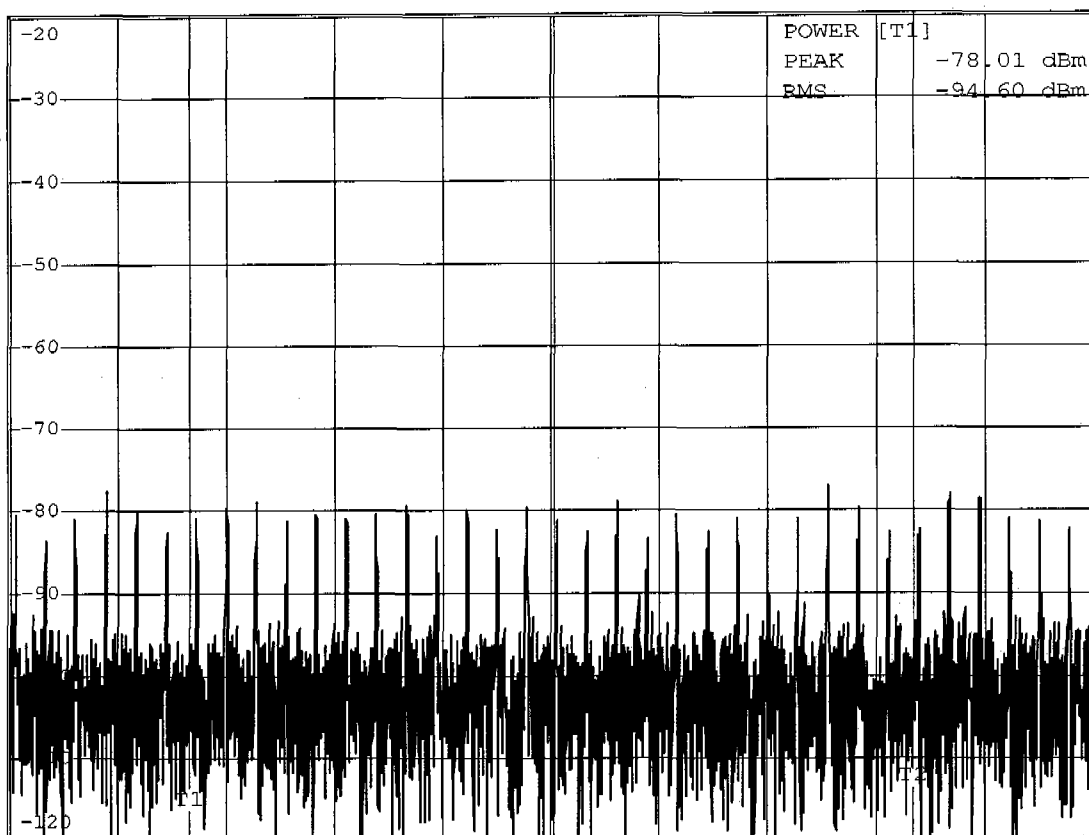
*VBW 1 MHz

-102.69 dBm

Ref -20 dBm

Att 10 dB

SWT 15 ms

939.375000 μ s1 RM*
CLRWR

A

TDF

Center 1.92672 GHz

1.5 ms/

Comment: ANSI C63.17-1998

Date: 3.APR.2005 12:34:11

Log file

Maximum reaction time according FCC 15.321 (c) (1)

Date 05.04.2005 12:48:52

Reference to the EUT

RTX3055

Comment:

ANSI reference C63.17-1998

7.5

test e)

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	
00:07:07.2031250	-90,3 -99,2	-91,6 -100,3	-92,3 -100,7	-91 -100,8	-91,8 -100,8	All interferers off
00:07:18.2968750	-77,8 -80	-79,3 -81,1	-79,5 -81,6	-91 -101	-79,1 -81,3	CW interferers on
00:07:55.0625000	-77,9 -80	-79 -81,1	-79,4 -81,6	-75 -88,3	-79,5 -81,3	75µs impulse interferer on
00:07:56.7968750	-77,9 -80	-78,8 -81,2	-79,6 -81,6	-74,1 -88,2	-79,5 -81,3	Vary synchronisa tion
00:07:57.6406250	-78 -79,9	-78,9 -81,1	-79,4 -81,7	-74,2 -88,3	-79,2 -81,3	Vary synchronisa tion
00:09:01.8593750	-74,2 -88,3	-79 -81,2	-79,6 -81,7	-74,3 -88,2	-79,5 -81,4	Vary synchronisa tion
00:09:03.3125000	-78 -80	-78,9 -81,2	-79,4 -81,7	-74 -88,2	-79,3 -81,4	No connection

Log file



Power indication

RBW 100 kHz Marker 1 [T1]

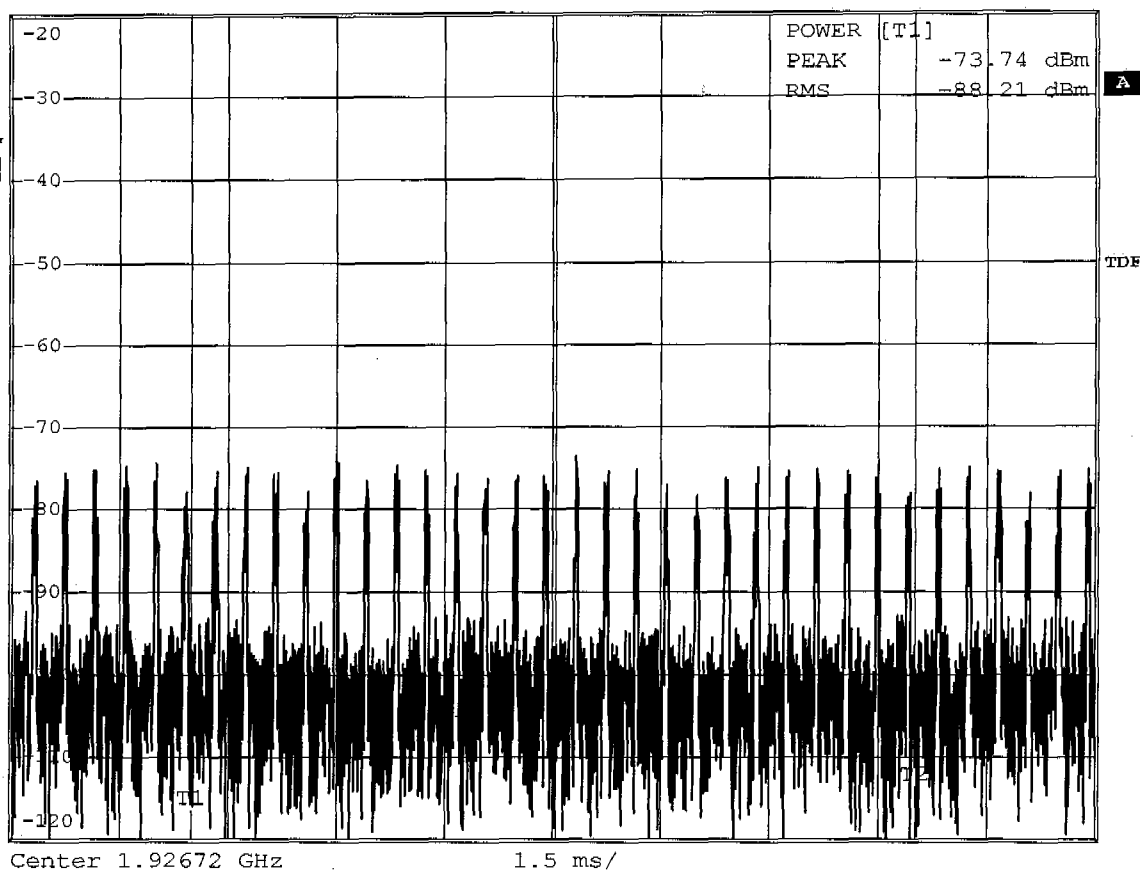
*VBW 1 MHz

-103.42 dBm

Ref -20 dBm

Att 10 dB

SWT 15 ms

939.375000 μ s1 RM *
CLRWR

Comment: ANSI C63.17-1998

Date: 3.APR.2005 12:37:11

Log file

ELECTRONIC TECHNOLOGY SYSTEMS DR. GENZ GMBH
Storkower Str. 38C, D-15526 REICHENWALDE B. BERLIN

Appendix M

Monitoring band width

Monitoring bandwidth according FCC Part 15.323 (c) (7)

Reference to the EUT Date 05.04.2005 11:57:53
RTX3055

Comment: ANSI reference C63.17-1998
7.4.1 monitoring bandwidth

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	
00:01:47.4218750	-91,4 -100,7	-90,9 -100,2	-91 -100,6	-91,9 -100,8	-91,3 -100,7	All interferers off
00:02:02.4531250	-75,5 -77	-76,4 -78,2	-91,1 -100,6	-76 -78,7	-74,7 -77,8	Interferer at 1924,404M Hz And 1925,58MH Z
00:03:12.5625000	-75,6 -77	-76,8 -78,2	-91,3 -100,6	-76 -78,7	-74,7 -77,8	No connection
00:04:05.8281250	-90,5 -99,6	-76,5 -78,2	-76,7 -78,1	-76 -78,7	-74,8 -77,8	Interferer at 1920,948M Hz And 1922,124M Hz
00:04:59.7343750	-90 -99,4	-76,8 -78,3	-76,6 -78,1	-75,9 -78,8	-74,7 -77,8	No connection
00:05:21.6406250	-74 -75,8	-72,3 -76,1	-76,5 -78,2	-77,2 -78,8	-91,8 -100,8	Interferer at 1927,86MH Z And 1929,036M Hz
00:07:13.7187500	-75,8 -78,1	-74,2 -78,3	-76,7 -78,2	-77,1 -78,8	-90,5 -100,8	No connection

Log file

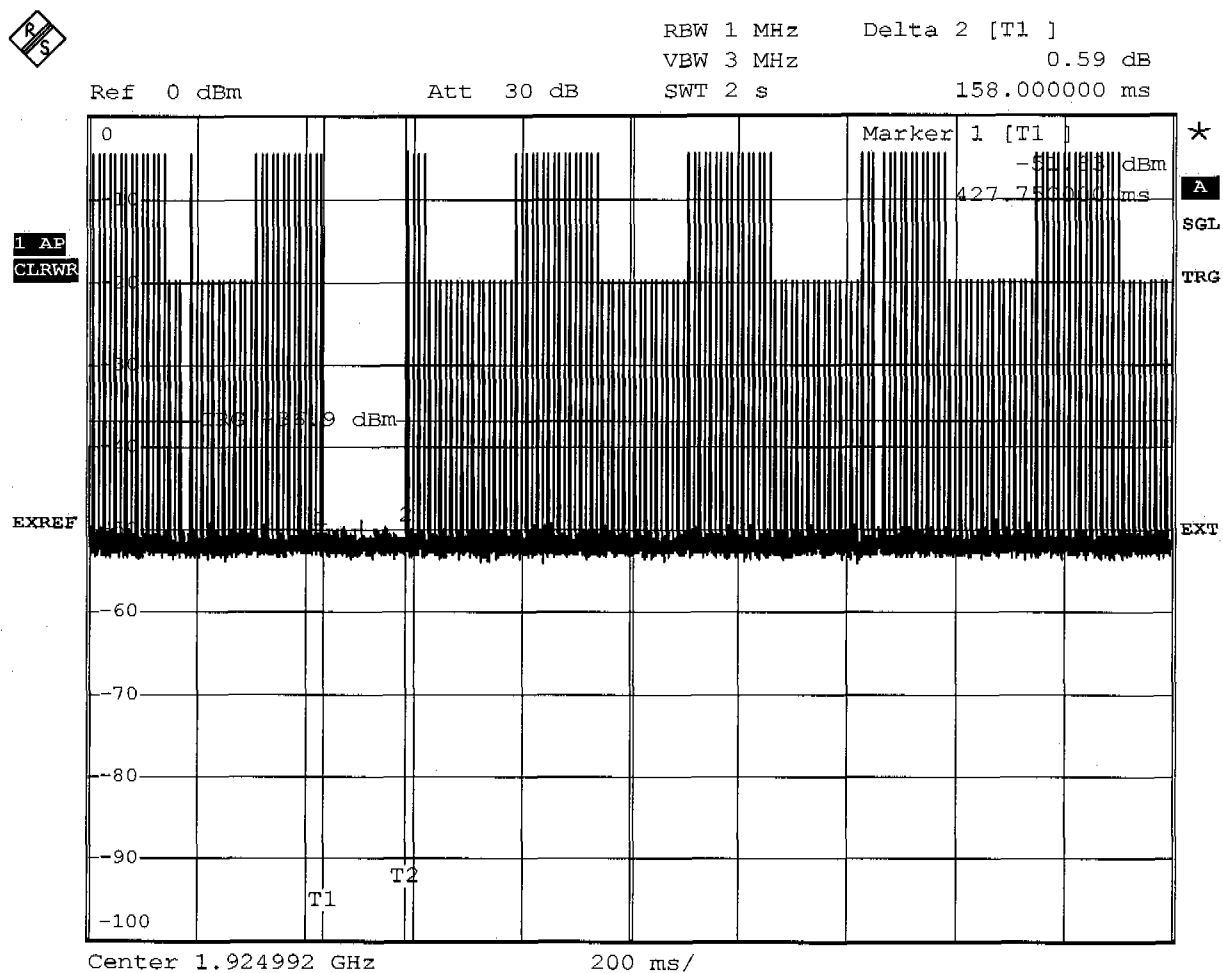
Appendix N

Random waiting interval

Random waiting interval according FCC Part 15.323 (c) (6)

Test procedure: ANSI 63.17-1998
UPCS

EUT	Fixed part
Model	RTX 3055
Applicant	RTX Telecom A/S
Temperature	23°C
Test Site / Operator	ETS
Test Specification	FCC 15.323 C 6
Comment 1	8.1.3 unacknowledged transmission
Comment 2	150ms requirement
Comment 3	



Date: 9.MAR.2005 13:58:05

Measurement diagram

Appendix O

Duration of Transmission

Duration of Transmission according FCC 15.323 (c) (3)

Reference to the EUT Date 25.04.2005 09:02:39
RTX3055

Comment: Maximum transmit period

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
1	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	
	Ch 1	Ch 2	Ch 3	Ch 4	Ch 5	
00:00:50.4843750	-55,4 -80	-25,4 -51,4	-49,9 -81,9	-81,2 -100,7	-89,9 -100,5	Start logging
00:00:51.4843750	-56 -79,7	-25,3 -50	-65,3 -95,6	-64,9 -100,7	-91,1 -99,8	Control signal at Ch 2
00:01:03.4687500	-71,8 -94,4	-26,4 -49,9	-65,4 -93,4	-27 -50,7	-65,1 -95,7	Control signal at Ch 4 (connection establish- ment)
00:01:16.3125000	-57 -75,2	-25,4 -41,3	-49,8 -79,7	-65,3 -93,7	-78,4 -97,3	Traffic on Ch 2 (connection established)
00:31:13.3750000	-24,7 -40,5	-64,9 -80,1	-81,6 -97	-82,5 -97,7	-81,2 -98,4	Traffic on Ch 1
00:41:12.3593750	-25,1 -49,1	-82 -96,8	-79,5 -98,6	-59,4 -80,6	-25,7 -41,6	Control on Ch 1 / Traffic on Ch 5
00:51:11.0781250	-58,8 -80,3	-26,3 -42,5	-49,6 -78,7	-66,2 -98,4	-78,4 -99,8	Traffic on Ch 2
01:01:10.7187500	-24,6 -40,9	-49,4 -78,2	-76,1 -97,2	-81,8 -97,7	-89,7 -97,8	Traffic on Ch 1
01:11:09.8750000	-76,5 -97,3	-59,1 -80,4	-25,8 -42	-65,2 -87,4	-79,8 -98,7	Traffic on Ch 3
01:51:06.4843750	-24,7 -40,7	-49,3 -81,1	-66,4 -92	-80 -97,4	-89,1 -100	Traffic on Ch 1
02:21:03.8125000	-86 -98,9	-86,8 -99,1	-77,9 -94,9	-56,5 -75,7	-26 -42,2	Traffic on Ch 5
02:31:02.1562500	-87,6 -96	-73,3 -98,2	-57,2 -75,5	-25,8 -41,5	-63,3 -78,4	Traffic on Ch 4

Log file

Time stamp	1921.536 MHz	1923.264 MHz	1924.992 MHz	1926.720 MHz	1928.448 MHz	Comment
2	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	
	Ch 1	Ch 2	Ch 3	Ch 4	Ch 5	
03:00:59.7500000	-69,9 -97,8	-60,6 -80,6	-26,8 -41,7	-63,8 -86,1	-81,1 -98,9	Traffic on Ch 3
03:10:59.0625000	-59,2 -74,7	-25,4 -41,8	-49,9 -78,5	-77 -98,9	-80,2 -97,2	Traffic on Ch 2
03:40:56.3125000	-25,3 -40,1	-49,8 -78,4	-65,6 -91,8	-78,6 -99,9	-83,5 -98,1	Traffic on Ch 1
03:50:56.5625000	-83,3 -98,8	-79,4 -96,8	-75,4 -94,7	-56,1 -81,7	-26,1 -42,6	Traffic on Ch 5
04:00:53.9375000	-85,3 -98,7	-61,1 -81,1	-25,8 -41,2	-50 -78,2	-64 -92,8	Traffic on Ch 3
04:10:53.7187500	-25,1 -40,4	-64,4 -78,2	-80,4 -98,1	-79 -97,1	-83,8 -98	Traffic on Ch 1
04:20:53.2031250	-86,3 -98,6	-73,2 -94,6	-56,7 -76	-26,1 -41,7	-64,6 -87,4	Traffic on Ch 4
04:30:52.1250000	-24,5 -40,3	-49,4 -78,9	-75,2 -97,7	-90,4 -100,2	-90,3 -100,3	Traffic on Ch 1
04:31:12.8437500	-24,9 -50,1	-65,2 -95,5	-65,5 -95,1	-91,6 -100,8	-81,5 -99,9	Control on Ch 1 (Connection closed)

Log file

Appendix P

Connection acknowledgement

Connection Acknowledgement according FCC Part 15.323 (c) (4)

Reference to the EUT

Date 06.04.2005 07:42:00

RTX3055

Comment:

ANSI reference C63.17-1998

8.2.1 Acknowledgments

test a) and test b)

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	
	Ch 0	Ch 1	Ch 2	Ch 3	Ch 4	
00:00:33.0468750	-91,3 -99,5	-91,2 -100,1	-90,5 -100,8	-88,6 -100,6	-91,2 -100,7	All interferers off
00:00:44.2968750 T(1)	-87,6 -97,4	-74,2 -96,6	-26,8 -51,7	-68,7 -84,7	-83,1 -100,7	Control signal on ch 2
00:01:06.4062500 T(2)	-74 -96,1	-26,5 -49,8	-68,3 -97,4	-68,6 -97,7	-92,1 -100,4	Control signal on Ch 1
Time difference T(2) – T(1)	22 sec					
00:01:32.1250000 T(3)	-82,2 -99,1	-87,3 -97,9	-74,2 -97	-26,9 -51,6	-68,1 -84,7	Control signal on ch 3
Time difference T(3) – T(2)	26 sec					
00:01:56.0781250 T(4)	-91 -96,8	-58,9 -96,3	-26,8 -50,6	-68,3 -84,4	-84,4 -100,7	Control signal on ch 2
Time difference T(4) – T(3)	24 sec					
00:02:22.0937500 T(5)	-25,6 -51,5	-52,5 -84	-84,1 -96,8	-91,6 -100,6	-85,4 -100,8	Control signal on ch 1
Time difference T(5) – T(4)	26 sec					
00:02:48.1250000 T(6)	-89,3 -99,3	-82,8 -100,2	-74,6 -98,7	-75,4 -83,7	-26,3 -50,3	Control signal on ch 4
Time difference T(6) – T(5)	26 sec					

Log file

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	
	Ch 0	Ch 1	Ch 2	Ch 3	Ch 4	
00:03:10.750000 T(7)	-90,3 -99,2	-81,6 -99,9	-26,1 -50,1	-53,8 -97,6	-67,3 -97,8	Control signal on ch 2
Time difference T(7) – T(6)	22 sec					
00:03:13.0156250 T(8)	-24,8 -43,1	-67,5 -95,7	-83,4 -100,3	-81,3 -100,8	-90,5 -100,5	Control signal on ch 1
Time difference T(8) – T(7)	3 sec					
00:03:30.6875000 T(9)	-25,2 -51,4	-52,6 -84,5	-68,1 -96,5	-26,3 -44,2	-68 -95,9	Control signal on ch 1 Traffic signal on ch 3
Time difference T(9) – T(8)	17 sec					
00:03:31.6718750 T(10)	-89,9 -99,6	-89,3 -99,9	-75,1 -94,8	-26,5 -44,5	-68 -95,6	Traffic signal on ch 3
Time difference T(10) – T(9)	1 sec					
00:04:00.6875000 T(11)	-84,3 -99,2	-84,3 -99,9	-75,3 -95,2	-26,4 -44,3	-68,4 -95,9	Hang up
Time difference T(11) – T(10)	29 sec					
00:04:01.3437500 T(12)	-90,4 -99,2	-74,1 -98,7	-59,5 -83,7	-26,4 -51	-52,1 -84,2	Control signal on ch 3
Time difference T(12) – T(11)	0,65 sec					

Log file

Connection Acknowledgement according FCC Part 15.323 (c) (4)

Reference to the EUT Date 05.04.2005 15:43:50
RTX3055

Comment: ANSI reference C63.17-1998
8.1.3 Unacknowledged transmission (isochronous
test e)

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	
00:03:42.0156250	-89,9 -99,5	-90,9 -100,3	-92,6 -100,6	-92,2 -100,8	-91,4 -100,8	All interferers off
00:03:55.7031250	-90,5 -99,5	-91,8 -100,4	-92,2 -100,7	-85,7 -90,1	-85,7 -90	CW interferer on last two channels
00:04:09.4843750	-90,7 -99,3	-91 -100,3	-26,6 -51,8	-53,1 -84,1	-85,3 -90,1	Transmission on 1924.992MHz
00:04:32.3437500	-74 -96	-25,8 -50,5	-52,8 -84,9	-80,6 -90,1	-85,1 -90,1	Transmission on 1923.264MHz
00:04:57.7968750	-25,6 -49	-68 -97,2	-68,6 -96,9	-85,7 -90	-83,2 -90,1	Transmission on 1921.536MHz

Log file

Reference to the EUT Date 06.04.2005 07:16:58
RTX3055

Comment: ANSI reference C63.17-1998
8.1.3 Unacknowledged transmission (isochronous
test f)

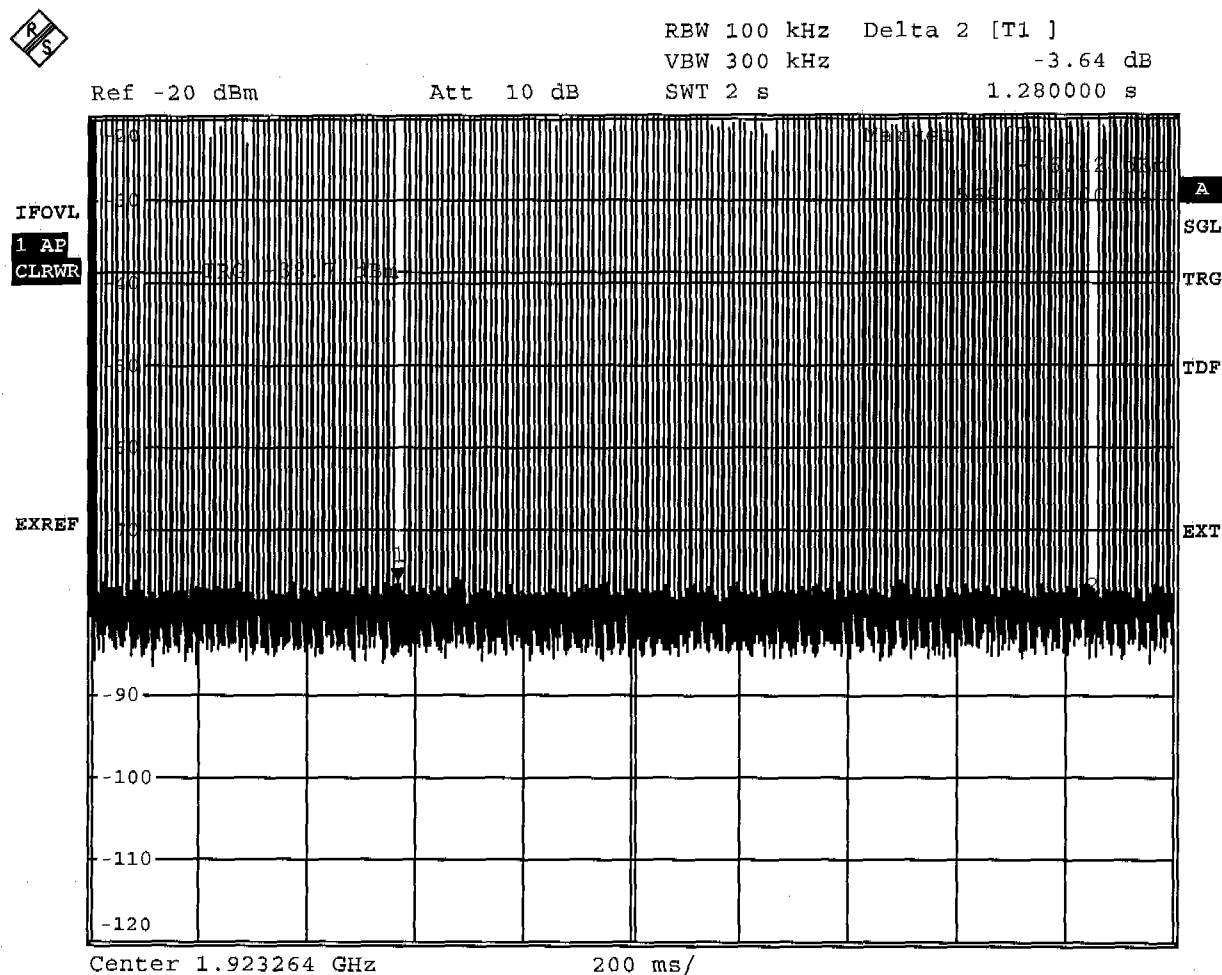
Time stamp	1921.536 MHz	1923.264 MHz	1924.992 MHz	1926.720 MHz	1928.448 MHz	Comment
	Peak in dBm	Peak in dBm	Peak in dBm	Peak in dBm	Peak in dBm	
	RMS in dBm	RMS in dBm	RMS in dBm	RMS in dBm	RMS in dBm	
00:02:46.4218750	-89,6 -99,5	-90,2 -100,4	-91,8 -100,7	-90,5 -100,8	-92,9 -101,2	All interferers off
00:02:47.2812500	-88,3 -95,5	-82 -96,3	-85,9 -96,9	-74,7 -94,8	-26,2 -50,6	EUT transmits at 1928,448M Hz

ELECTRONIC TECHNOLOGY SYSTEMS DR. GENZ GMBH
Storkower Str. 38C, D-15526 REICHENWALDE B. BERLIN

Connection Acknowledgement according FCC Part 15.323 (c) (4)

Test procedure: ANSI 63.17-1998
UPCS

EUT	Fixed part
Model	RTX 3055
Applicant	RTX Telecom A/S
Temperature	23°C
Test Site / Operator	ETS
Test Specification	8.2.1 Acknowledgments
Comment 1	FCC 15.323 (c) 4
Comment 2	
Comment 3	



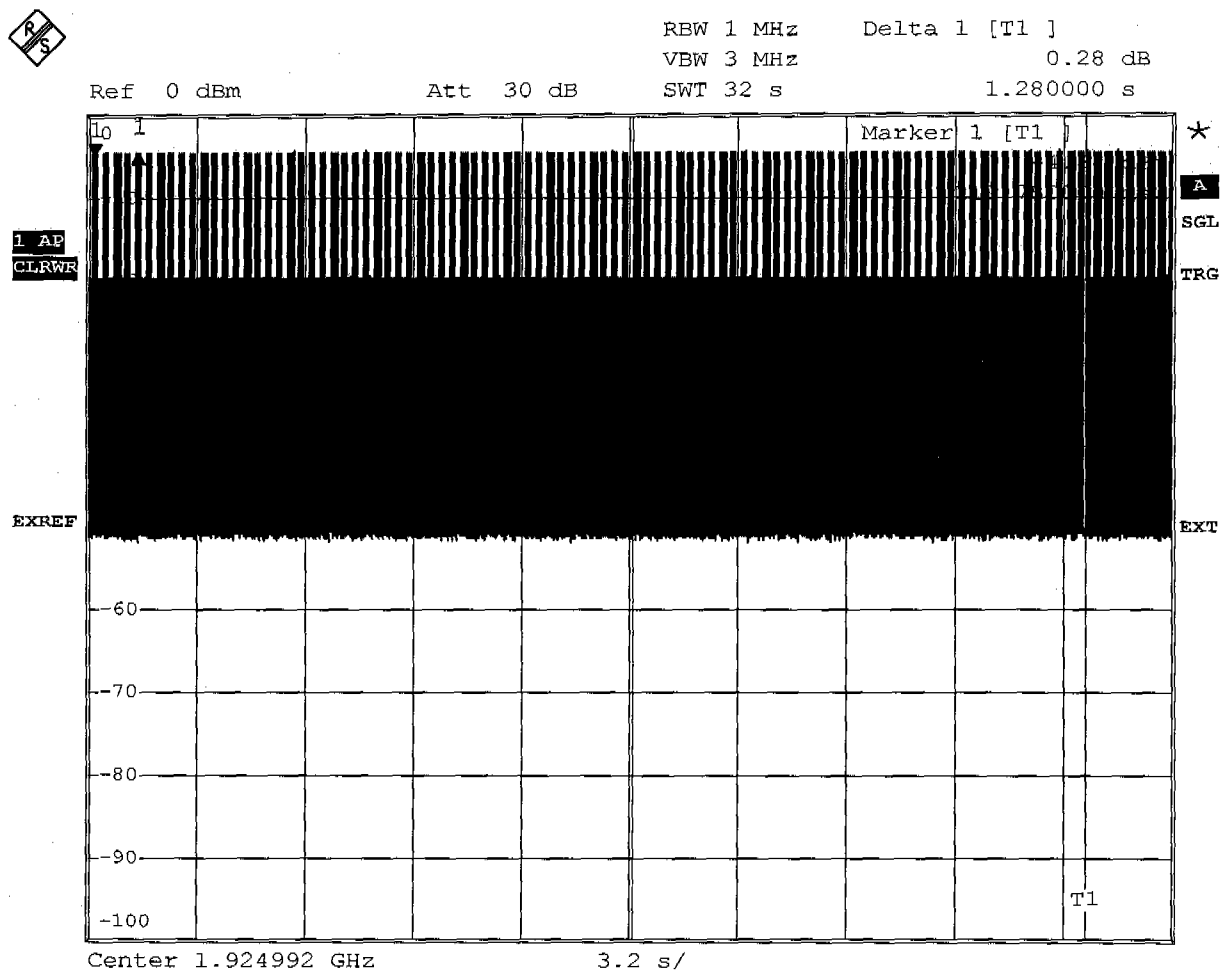
Date: 7.MAR.2005 12:55:54

Measurement diagram

Connection Acknowledgement according FCC Part 15.323 (c) (4)

Test procedure: ANSI 63.17-1998
UPCS

EUT	Fixed part
Model	RTX 3055
Applicant	RTX Telecom A/S
Temperature	23°C
Test Site / Operator	ETS
Test Specification	FCC 15.323 C 4
Comment 1	8.1.3 unacknowledged transmission
Comment 2	30 sec requirement
Comment 3	



Date: 9.MAR.2005 13:54:21

Measurement diagram

Appendix Q

Upper threshold selected channel, power accuracy, segment occupancy

Upper Threshold selected Channel, power accuracy, segment occupancy
according FCC Part 15.323 (c) (5)

Reference to the EUT

Date 05.04.2005 09:29:55
RTX3055

Comment:

ANSI reference C63.17-1998
Subclause 7.3.2.1.2 Least - interfered channel
test a)

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	
00:00:53.5000000	-90,9 -99,5	-91,1 -100,3	-91,7 -100,3	-92,3 -100,8	-91,9 -100,8	Interferer off
00:01:01.2187500	-75,5 -76,9	-76,7 -78,1	-77 -78,6	-76,9 -78,3	-76,7 -78,2	Blocking of all channels
00:01:26.0312500	-75,4 -76,9	-80,2 -82,9	-77,2 -78,6	-76,5 -78,3	-76,7 -78,2	f ₁ =-83dBm
00:01:36.2968750	-75,4 -76,9	-80,3 -83	-77,1 -78,6	-85 -90,1	-76,8 -78,2	f ₂ =-90dBm
00:04:33.6718750	-75,5 -76,9	-80 -83	-76,5 -78,6	-85,8 -90	-76,8 -78,2	No connection Since the number of channels is less than 40

Log file

Upper Threshold selected Channel, power accuracy, segment occupancy
according FCC Part 15.323 (c) (5)

Reference to the EUT Date 05.04.2005 09:44:49
RTX3055

Comment: ANSI reference 7.3.2.1.2
Least interfered channel
test b)

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	
00:39:45.4687500	-89,7 -99,4	-91,6 -100,1	-89,7 -100,4	-91,4 -100,8	-91,1 -100,8	All interferers off
00:40:00.0312500	-75,5 -76,9	-76,2 -77,7	-77,1 -78,6	-77,2 -78,8	-76,7 -78,2	All channels blocked
00:43:07.5625000	-75,6 -76,9	-90,8 -100,2	-76,8 -78,6	-85,8 -90,3	-76,8 -78,2	f2=-90dBm
00:43:08.4375000	-75,4 -77	-82,8 -91,6	-76,9 -78,6	-85,6 -90,2	-76,7 -78,2	F1=-83dBm TDMA signal with one slot pair free
00:43:23.8281250	-75,5 -76,9	-26,2 -50	-63,7 -78,6	-69,6 -90,1	-76,7 -78,3	Connection in the free slot established

Log file



Power indication

RBW 100 kHz Marker 1 [T1]

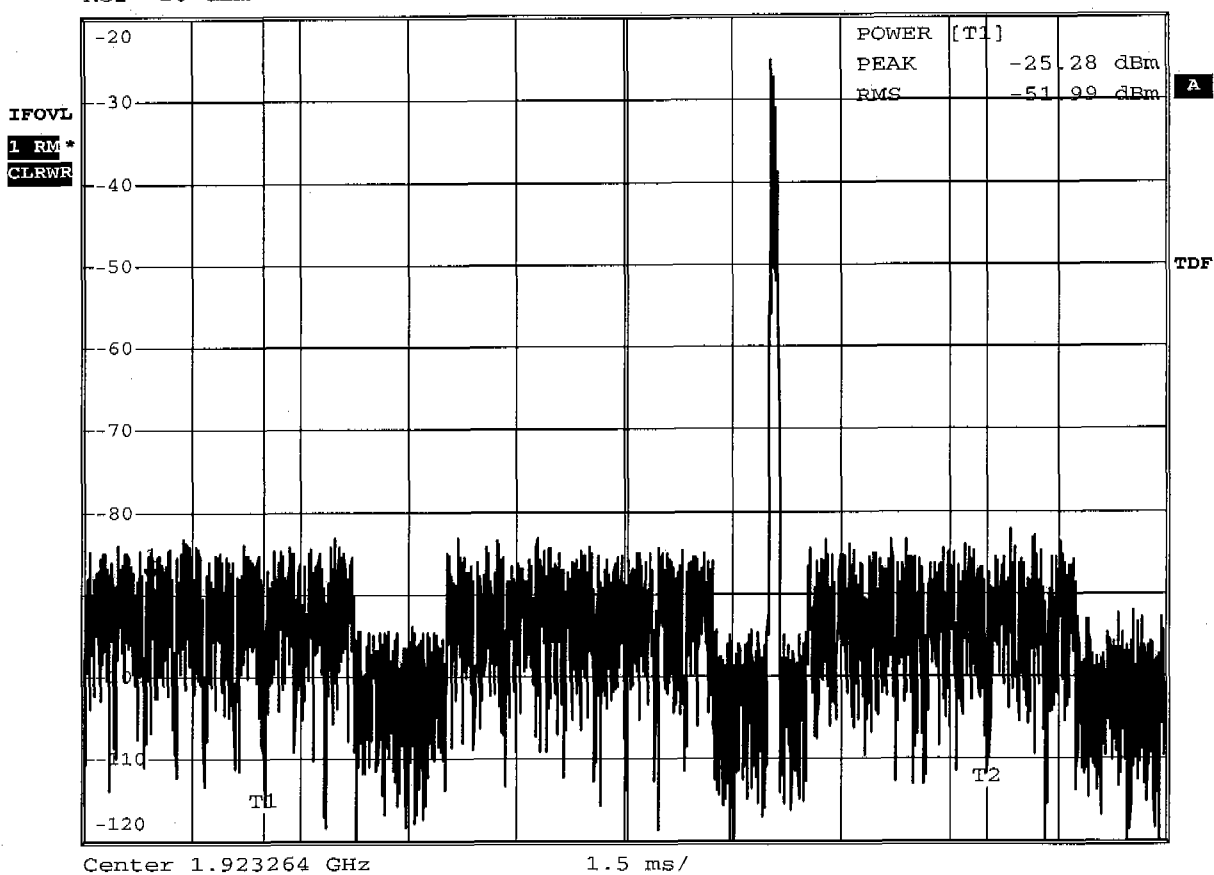
*VBW 1 MHz

-88.14 dBm

Ref -20 dBm

Att 10 dB

SWT 15 ms

939.375000 μ s

Comment: ANSI C63.17-1998

Date: 3.APR.2005 09:32:31

Log file

Upper Threshold selected Channel, power accuracy, segment occupancy
according FCC Part 15.323 (c) (5)

Reference to the EUT

Date 05.04.2005 10:01:10
RTX3055

Comment:

ANSI reference C63.17-1998
7.3.2.1.2 Least-interfered channel
test c)

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	
00:00:13.6250000	-88,9 -99,4	-90 -100,3	-90,6 -100,6	-91,4 -100,8	-90,8 -100,8	All interferers off
00:00:28.1718750	-75,4 -76,9	-76,3 -77,7	-77 -78,6	-77,3 -78,8	-76,8 -78,2	All channels blocked
00:00:55.5625000	-75,5 -76,9	-85,1 -89,5	-77,1 -78,6	-77,3 -78,8	-76,6 -78,2	f1=-90dbm
00:01:12.6718750	-75,5 -76,9	-84,6 -89,4	-77,2 -78,6	-81 -83,6	-76,7 -78,2	f2=-83dBm
00:02:49.1718750	-75,5 -76,9	-85,1 -89,4	-77,1 -78,6	-81 -83,6	-76,5 -78,2	No connection

Log file

Upper Threshold selected Channel, power accuracy, segment occupancy
according FCC Part 15.323 (c) (5)

Date 05.04.2005 11:06:30

Reference to the EUT

RTX3055

Comment:

ANSI reference C63.17-1998

7.3.2.2 selected channel confirmation

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	
00:12:49.8750000	-90,8 -99,5	-90,4 -100,3	-90,4 -100,5	-91,1 -100,9	-91,8 -100,7	All interferers off
00:13:12.1093750	-75,6 -76,9	-76,3 -77,7	-77,1 -78,6	-77,2 -78,8	-76,8 -78,2	All channels blocked
00:13:24.0625000	-75,4 -76,9	-84,6 -89,4	-76,8 -78,6	-77,2 -78,8	-76,5 -78,2	f1=-90dBm
00:13:36.0468750	-75,6 -76,9	-84,7 -89,3	-77,1 -78,6	-81 -83,6	-76,7 -78,2	f2=-83dBm
00:13:49.7343750	-75,5 -76,9	-85,2 -89,5	-76,9 -78,6	-90,8 -100,7	-76,8 -78,2	f2 interferer is off
00:14:00	-75,3 -76,9	-85,2 -89,4	-77,1 -78,6	-25,9 -51,2	-53,9 -77,6	Connection on f2
00:14:21.2187500	-75,6 -77	-79,7 -89,4	-68,7 -78,5	-81 -83,6	-76,8 -78,2	Connection closed F2 interferer is on
00:15:01.4218750	-75,5 -76,9	-84,3 -89,4	-77,2 -78,6	-81,2 -83,6	-76,8 -78,3	No connection since the number of channels is less than 40

Log file