CERTIFICATE OF COMPLIANCE

Regulation : FCC Part15C(Section 15.231)
RSS-210 issue 6(Section A.1.1)

Applicant	Testing Laboratory
TOPCON CORPORATION 75-1, Husunuma-cho, Itabashi-ku, Tokyo, 174-8580 Japan Tel : +81 3 3558 2576 Fax : +81 3 3966 0038	Akzo Nobel K. K. Kashima site 1, Sunayama, Kamisu-shi Ibaraki-ken 314-0255 Japan Tel.: +81 479 40 1097 Fax.: +81 479 46 1788 E-mail: kashima-site@akzoemc.co.jp URL: http://www.akzoemc.co.jp

Equipment Type	Remote Controller
Trademark	TOPCON
Model (s)	RC-30
Serial No.	3K0001
Equipment Authorization	Certification (FCC ID : H5PRC-30, IC CN and UPN : 6050A-RC30)
Test Result	Complied
Report Number	ANKK-105261
Report Issue Date	November 1, 2005

This equipment has been shown to be capable of compliance with the applicable standard(s) as indicated in the test report.
I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

Approved by

Gokita Kazuo
[Assistant Manager]

Tested by

Naoki Ikeda

Katsuya Uchida

Responsible Party of Test Item (Product)

Responsible Party	:
Add.	:
Tel.	:
Fax.	:
Contact Person	:

This report contains data that are not covered by the NVLAP accreditation.

Lab Code 100290-3

TABLE OF CONTENTS

SECTION 1. GENERAL INFORMATION

TEST PERFORMED

Location	Kashima No.1 Test Site
EUT Received	October 20, 2005
Test Started	October 20, 2005
Test Completed	October 27, 2005
Standard Applied	FCC Part15C(Section 15.231) , RSS-210(Section A1.1) Unintentional Radiators
Test Setup	ANSI C63.4-2003
Deviation from Standard (s)	No deviation

TEST TRACEABILITY

Traceability to national standards of test result is achieved by means of calibration traceability to national or international standards.

LIMITATIONS ON RESULTS

The test result of this report is effective for equipment under test itself and under the test configuration described on the report.
This test report does not assure that whether the test result taken in other testing laboratory is compatible or reproducible to the test result on this report or not.

ABBREVIATIONS

AE = Associated Equipment
AMN = Artificial Mains Network
AMP = Amplifier, ATT = Attenuator
ANT = Antenna, BBA = Broadband Antenna
AVG = Average
Cal = Calibration
CDN = Coupling Decoupling Network
DIP = Dipole Antenna
DoC = Device for Declaration of Conformity
EUT = Equipment Under Test
ISN = Impedance Stabilization Network
LISN = Line Impedance Stabilization Network
PK = Peak
Q-P = Quasi-peak

SECTION 2. SUMMARY OF TEST RESULTS

This test report clearly shows that the EUT is in compliance with the **FCC Part15C(Section15.231)** , **RSS-210(SectionA1.1)** specification.

The minimum margins to the limits are as follows:

Transmitter Requirement	Reference of FCC	Reference of RSS-210	Result
Radiated (Fundamental)	Section 15.231(b)	A1.1.2	Pass *Note c: Horizontal
Transmitter Time	Section 15.231(a)(1)	A1.1.1(2)	Pass
Radiated (Spurious)	Section 15.231(b)	A1.1.2	Pass *Note b *Note c: Vertical
Restricted bands of operation	Section 15.231(b) Section 15.205 Section 15.209	A1.1.2	Pass *Note c: Horizontal
Emission Bandwidth (20dB and 26dB)	Section 15.231(c)	A1.1.3	Pass *Note c: Horizontal

Note a : See Section 9 for details.

Note b : We evaluated spurious levels with the limit value of FCC Section 15.209.
Spurious levels are satisfied with also Section 15.231(b).

Note c : Tested both Horizontal Condition and Vertical Condition.
For the results in the worst condition , see above.

< Sample Calculations >

* Radiated Electric Field
Emission Level [dBuV/m] = Meter Reading [dBuV] + Factor [dB/m]
Margin [dB] = Limit [dBuV/m] - Emission Level [dBuV/m]
* Factor = Antenna Factor + Cable Loss - Amplifier Gain + Pad Loss
(– Distance Conversion Factor)

SECTION 3. INFORMATION ABOUT EUT

The equipment under test (EUT) consisted of the following equipment.

3.1 List of System Configuration

Symbol	Item	Model No.	Serial No.	Manufacture	FCC ID
A	Remote Controller	RC-30	3K0001	TOPCON CORPORATION	H5PRC-30
Power Ratings of EUT : DC 3.0-4.5V, 40mA					
Power Supply : DC 4.5V, 40mA					
Condition of Equipment	Preproduction				
Type	Handheld				
Suppression Devices	No Modifications by the laboratory were made to the device				

3.2 Overview of EUT

Frequency Range	429.2500 – 429.7375 MHz
Number of Channel	9
Channel Spacing	12.5 kHz
Modulation Method	Frequency Modulation

3.3 Highest Frequency Oscillator(s) / Crystal (s) :

Oscillator	Operating Frequency	Board Name	Notes
4.9152 MHz	4.9152 MHz	Remote Controll Board	
21.25 MHz	21.25 MHz *429.2500 - 429.7375 MHz	RF Unit Board	* Operating Frequency channels 1ch:429.2500MHz 2ch:429.2625MHz 3ch:429.3000MHz 4ch:429.3625MHz 5ch:429.4375MHz 6ch:429.5250MHz 7ch:429.6500MHz 8ch:429.6750MHz 9ch:429.7375MHz

3.4 Frequency Range of Measurements

	Required Measurement Range	Measured Frequency Range
Radiated(Fundamental)	429.2500 – 429.7375 MHz	429.2500 – 429.7375 MHz
Transmitter Time	Within not more than 5second	Within not more than 5second
Radiated(Spurious)	0.009 – 5000 MHz	30 – 5000 MHz
Restricted bands of operation	399.9-410MHz, 608-614 MHz	399.9-410 MHz, 608-614 MHz
Emission Bandwidth	429.2500 – 429.7375 MHz	429.2500 – 429.7375 MHz

SECTION 4. SUPPORT EQUIPMENT(S)

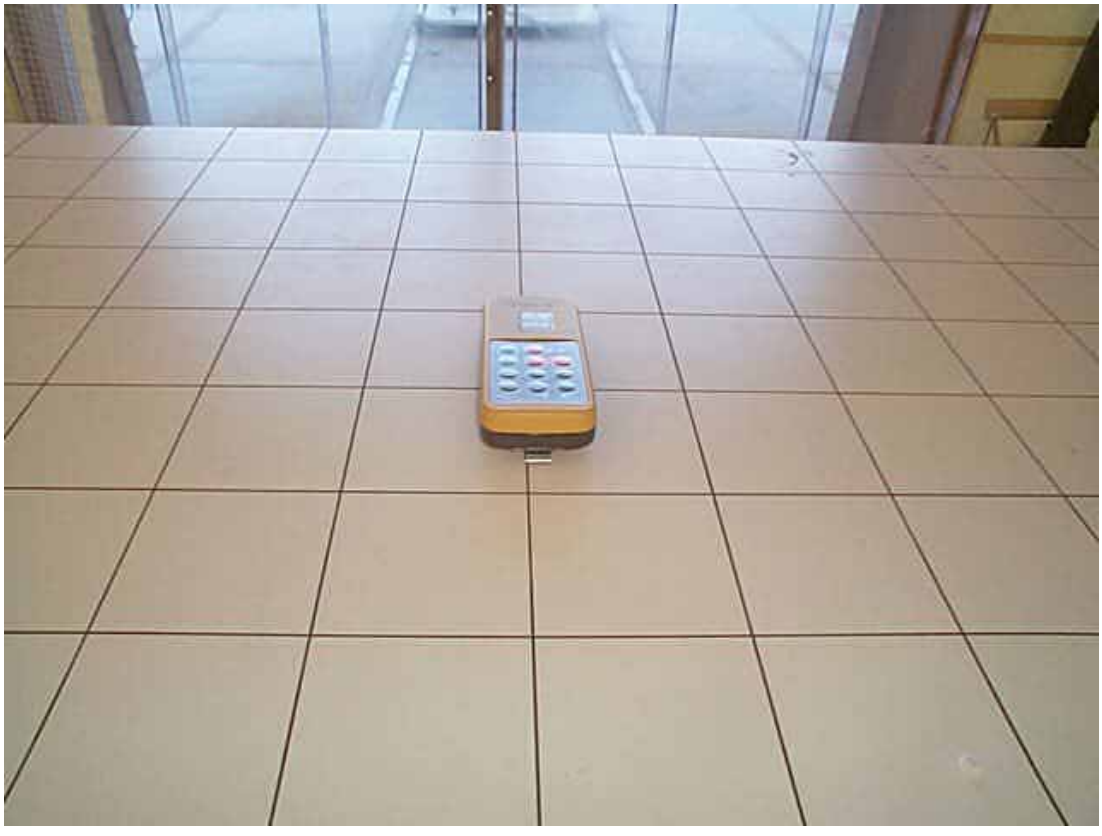
No support equipment was provided for test.

SECTION 5. USED CABLE (S)

No cable was provided for test.

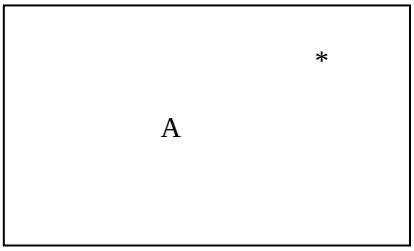
SECTION 6. PHOTOGRAPHS OF MAXIMUM EMISSION SET-UP

6.1.1 Radiated Electric Field (Horizontal Condition)



6.1.2 Radiated Electric Field (Vertical Condition)

6.2 Details of Configuration



SECTION 7. OPERATING CONDITION

The EUT was operated under the following conditions during the test.

7.1 Operating Condition

The test was carried out under Transmitter mode.
EUT was examined in the operating conditions that had maximum emissions.

7.2 Operating Flow [Transimitter mode]

Following operations were performed continuously.

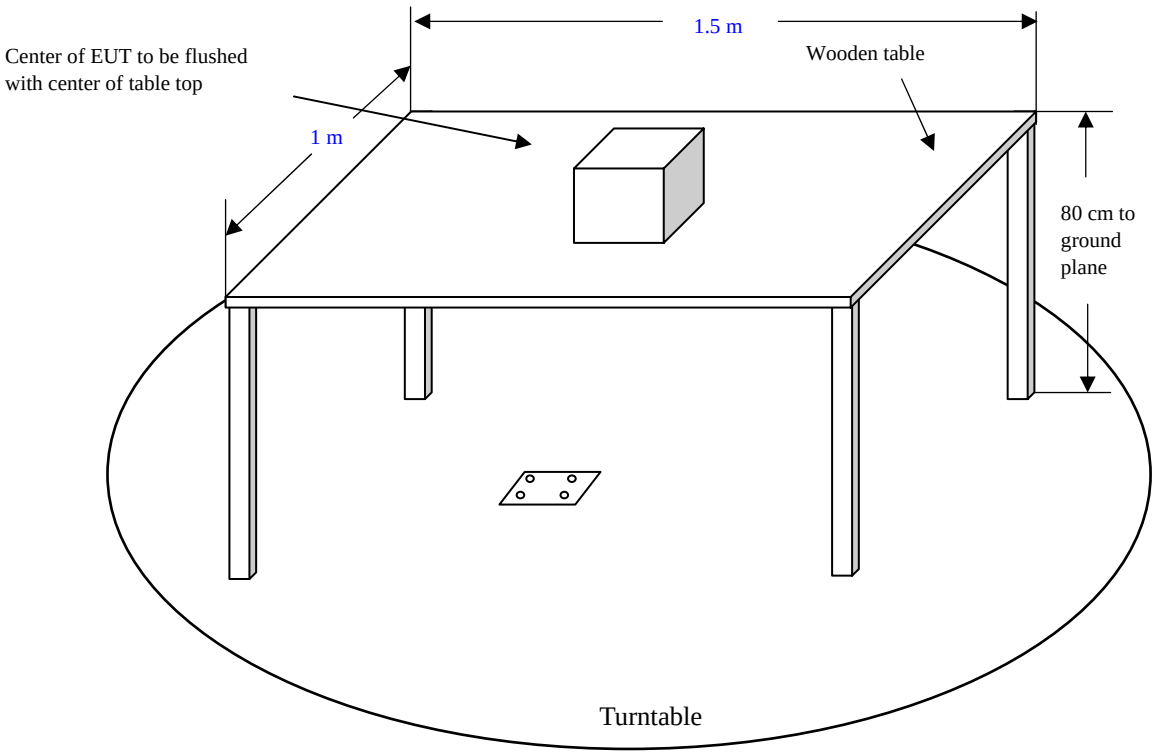
Transmitter Power is continuously. Data format is 2400bps Frequency Modulation.

SECTION 8. TEST PROCEDURE(S)

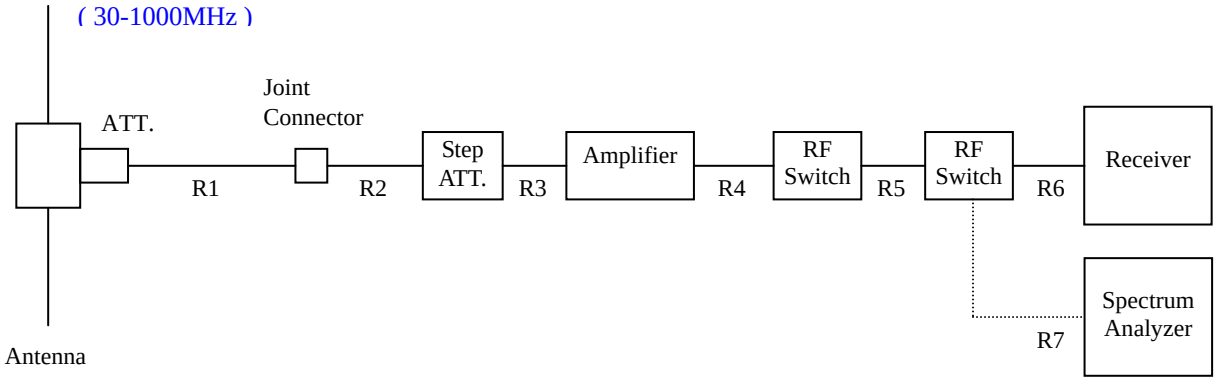
Test was carried out under the following conditions.

Radiated Electric Field

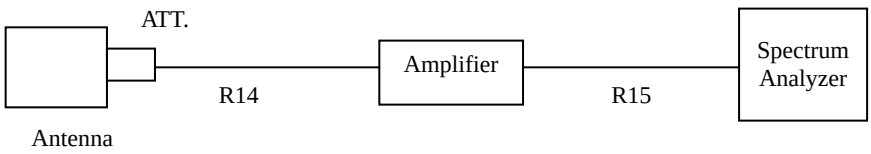
Test procedure : Akzo Nobel Document number : 03-10-003



Schema for the radiated electric field measurement
(30-1000MHz)



Above 1GHz



[Instrument Setup]

Frequency [MHz]	Instrument	Detector Function	Resolution Bandwidth	Video Bandwidth
0.009 to 0.15	Receiver	Quasi Peak	200 Hz	N.A.
0.15 to 30			9 kHz	
30 to 1000			120 kHz	
Above 1000	Spectrum Analyzer	Peak	1 MHz	1 MHz
		Average	1 MHz	10 Hz

[Preliminary Measurement]
EUT is tested on all operating conditions.
The spectrum analyzer is set max-hold mode and swept during turntable was rotated 0 to 360 degree. Then spectrum chart are plotted out to find the worst emission conditions in configuration, operating mode, or ambient noise notation.

[Final Measurement]
The EUT operated in the worst emission condition found by the preliminary test.
The turntable azimuth (EUT direction) and antenna height (1 to 4 meters) are adjusted the position so that maximum field strength is obtained for each frequency spectrum to be measured.
The equipment and cables are arranged or manipulated within the range of the test standard in the above condition.
At least six highest spectrum are measured by the test receiver (quasi-peak) and spectrum analyzer (peak and average).
When the uncertain result was obtained, the measurement is retried by using the half wave dipole antenna instead of the broadband antenna.

SECTION 9. EVALUATION OF TEST RESULTS

9.1 Radiated Electric Field (Fundamental)

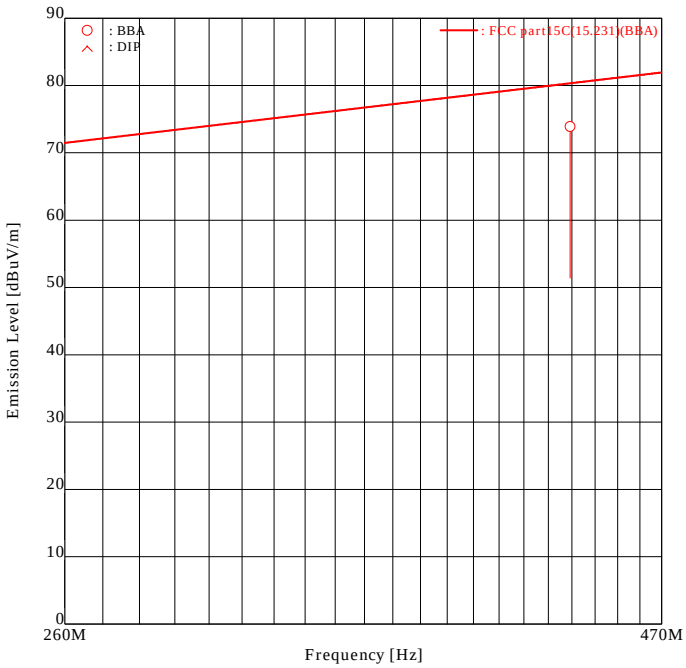
9.1.1 1ch:429.2500 MHz

Akzo Nobel K. K.

Kashima No.1 Test Site

Spurious Emission - Radiated Test

APPLICANT	: TOPCON CORPORATION
EUT NAME	: Remote Controller
MODEL NO.	: RC-30
SERIAL NO.	: 3K0001
TEST MODE	: 1ch : 429.25MHz
POWER SOURCE	: DC4.5V
DATE TESTED	: Oct 20 2005
FILE NO.	: ANKK-105261
REGULATION	: FCC part15(15.231(b))
TEST METHOD	: ANSI C63.4-2003
DISTANCE	: 3.0 [m]
TEMPERATURE	: 23.0 [degC]
HUMIDITY	: 64.0 [%]
NOTE	: Horizontal Condition



ENGINEER : Katsuya Uchida

[No]	FREQUENCY [MHz]	ANT.	READING [dBuV] Hori	Vert	FACTOR [dB/m] Hori	Vert	EMISSION [dBuV/m] Hori	Vert	LIMIT [dBuV/m]	MARGIN [dB] Hori	Vert
1	429.25	BBA	74.9	65.4	-1.0	-1.0	73.9	64.4	80.3	**6.4**	15.9

Higher six points are underlined.

Other frequencies : Below the FCC part15C(15.231(b)) limit

Emission Level = Read + Factor(Antenna,Antenna Pad,Cable,Preamp)

ANT. : Used antenna(BBA = Broadband antenna, DIP = Dipole antenna)

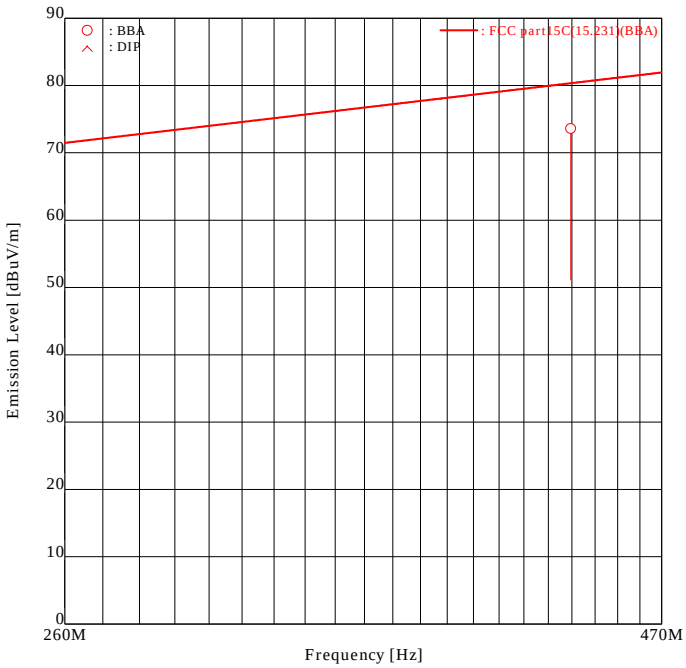
9.1.2 5ch:429.4375 MHz

Akzo Nobel K. K.

Kashima No.1 Test Site

Spurious Emission - Radiated Test

APPLICANT	: TOPCON CORPORATION
EUT NAME	: Remote Controller
MODEL NO.	: RC-30
SERIAL NO.	: 3K0001
TEST MODE	: 5ch : 429.4375MHz
POWER SOURCE	: DC4.5V
DATE TESTED	: Oct 20 2005
FILE NO.	: ANKK-105261
REGULATION	: FCC part15C(15.231(b))
TEST METHOD	: ANSI C63.4-2003
DISTANCE	: 3.0 [m]
TEMPERATURE	: 23.0 [degC]
HUMIDITY	: 64.0 [%]
NOTE	: Horizontal Condition



ENGINEER : Katsuya Uchida

[No]	FREQUENCY [MHz]	ANT.	READING [dBuV] Hori	Vert	FACTOR [dB/m] Hori	Vert	EMISSION [dBuV/m] Hori	Vert	LIMIT [dBuV/m]	MARGIN [dB] Hori	Vert
1	429.44	BBA	74.6	65.0	-1.0	-1.0	73.6	64.0	80.3	**6.7**	16.3

Higher six points are underlined.
Other frequencies : Below the FCC part15C(15.231(b)) limit
Emission Level = Read + Factor(Antenna,Antenna Pad,Cable,Preamp)
ANT. : Used antenna(BBA = Broadband antenna, DIP = Dipole antenna)

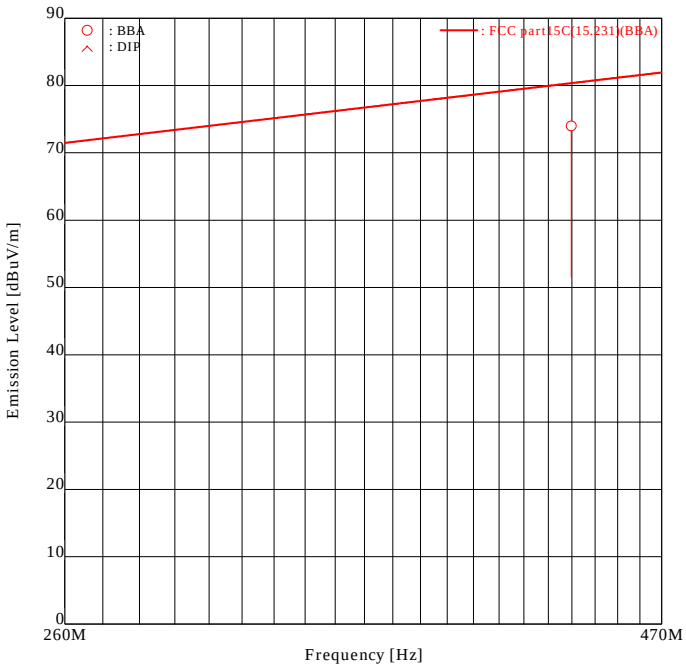
9.1.3 9ch:429.7375 MHz

Akzo Nobel K. K.

Kashima No.1 Test Site

Spurious Emission - Radiated Test

APPLICANT	: TOPCON CORPORATION
EUT NAME	: Remote Controller
MODEL NO.	: RC-30
SERIAL NO.	: 3K0001
TEST MODE	: 9ch : 429.7375MHz
POWER SOURCE	: DC4.5V
DATE TESTED	: Oct 20 2005
FILE NO.	: ANKK-105261
REGULATION	: FCC part15C(15.231(b))
TEST METHOD	: ANSI C63.4-2003
DISTANCE	: 3.0 [m]
TEMPERATURE	: 23.0 [degC]
HUMIDITY	: 64.0 [%]
NOTE	: Horizontal Condition



ENGINEER : Katsuya Uchida

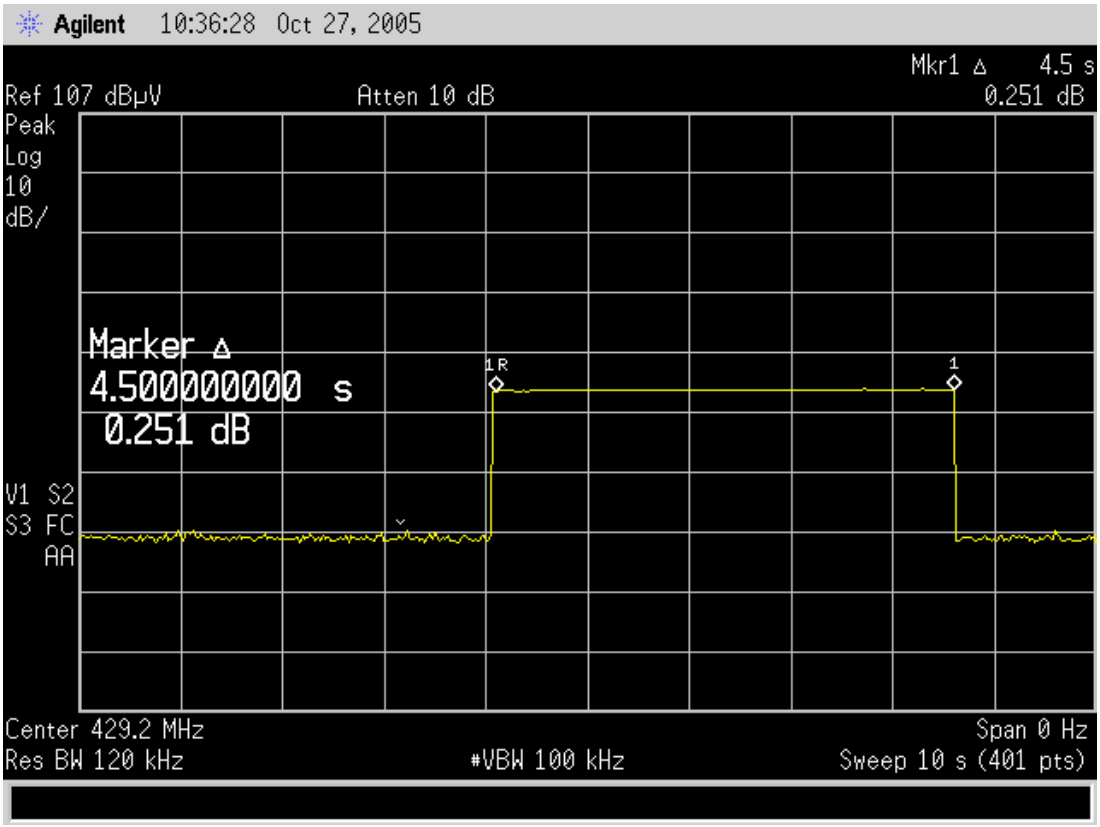
[No]	FREQUENCY [MHz]	ANT.	READING [dBuV] Hori	Vert	FACTOR [dB/m] Hori	Vert	EMISSION [dBuV/m] Hori	Vert	LIMIT [dBuV/m]	MARGIN [dB] Hori	Vert
1	429.74	BBA	75.0	65.9	-1.0	-1.0	74.0	64.9	80.4	**6.4**	15.5

Higher six points are underlined.
Other frequencies : Below the FCC part15C(15.231(b)) limit
Emission Level = Read + Factor(Antenna,Antenna Pad,Cable,Preamp)
ANT. : Used antenna(BBA = Broadband antenna, DIP = Dipole antenna)

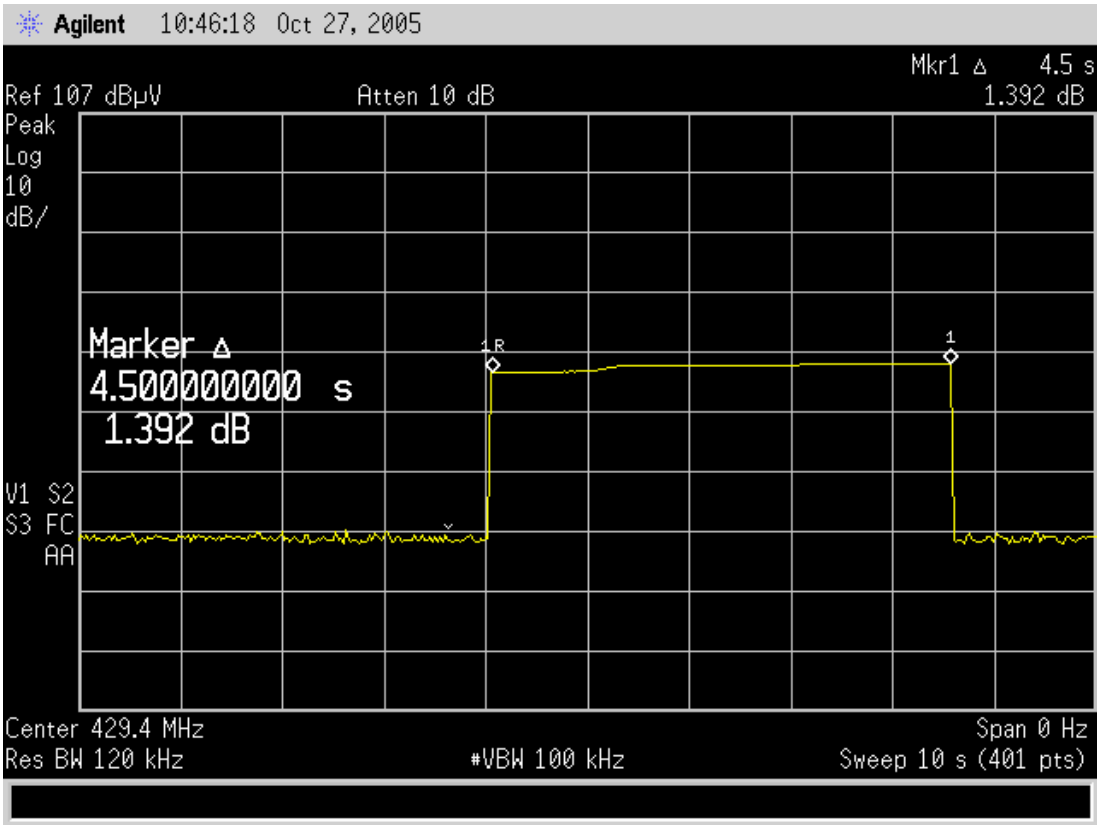
9.2 Transmitter Time

1. The EUT was measured duty cycle of auto wihin not more than 5second of being of released and tested by frequency modulation.
2. Measurement was tested by closely connected small coil .
3. The Receiver was setup using span function of Spectrum Analyzer (span = 0Hz).
4. Following data is the worst case.
   Test date : Oct. 27, 2005
   Temperature : 23 degree C
   Humidity : 61 %

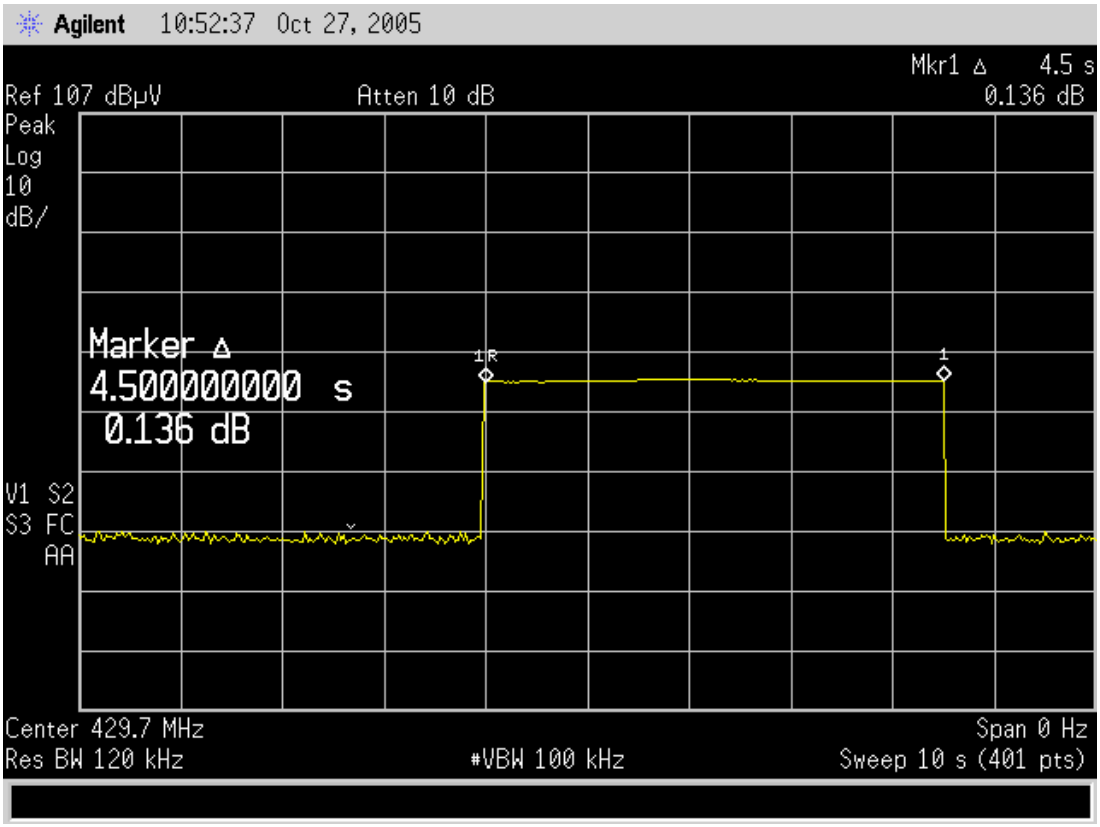
9.2.1 1ch:429.2500 MHz



9.2.2 5ch:429.4375 MHz



9.2.3 9ch:429.7375 MHz



9.3 Radiated Electric Field (Spurious emissions)

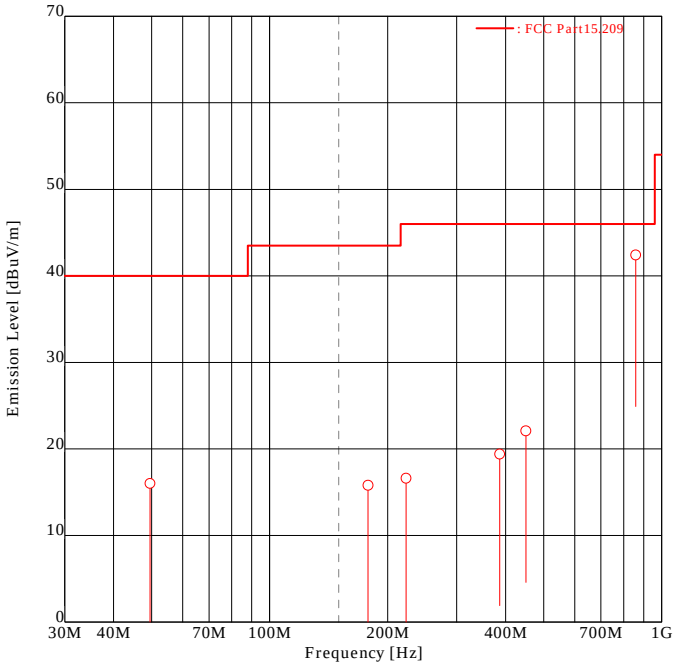
9.3.1 30-1000MHz (1ch:429.2500 MHz)

Akzo Nobel K. K.

Kashima No.1 Test Site

Radiated Electric Field

APPLICANT	: TOPCON CORPORATION
EUT NAME	: Remote Controller
MODEL NO.	: RC-30
SERIAL NO.	: 3K0001
TEST MODE	: 1ch : 429.2500MHz
POWER SOURCE	: DC4.5V
DATE TESTED	: Oct 24 2005
FILE NO.	: ANKK-105261
REGULATION	: FCC Part15C(15.209)
TEST METHOD	: ANSI C63.4-2003
DISTANCE	: 3.0 [m]
TEMPERATURE	: 23.0 [degC]
HUMIDITY	: 64.0 [%]
NOTE	: Vertical Condition



ENGINEER : Katsuya Uchida

[No]	FREQUENCY [MHz]	READING [dBuV] Hori	READING [dBuV] Vert	FACTOR [dB/m] Hori	FACTOR [dB/m] Vert	EMISSION [dBuV/m] Hori	EMISSION [dBuV/m] Vert	LIMIT [dBuV/m]	MARGIN [dB] Hori	MARGIN [dB] Vert
1	49.52	-	23.5	-7.5	-7.5	-	16.0	40.0	-	24.0
2	178.16	-	23.0	-7.2	-7.2	-	15.8	43.5	-	27.7
3	222.77	-	24.0	-7.4	-7.4	-	16.6	46.0	-	29.4
4	386.14	-	21.5	-2.1	-2.1	-	19.4	46.0	-	26.6
5	450.54	-	22.5	-0.4	-0.4	-	22.1	46.0	-	23.9
6	858.52	27.0	33.5	8.9	8.9	35.9	42.4	46.0	10.1	**3.6**

Higher six points are underlined.

Other frequencies : Below the FCC Part15C(15.209) limit

Emission Level = Read + Factor(Antenna,Antenna Pad,Cable,Preamp)

ANT. : Used antenna(BBA = Broadband antenna, DIP = Dipole antenna)

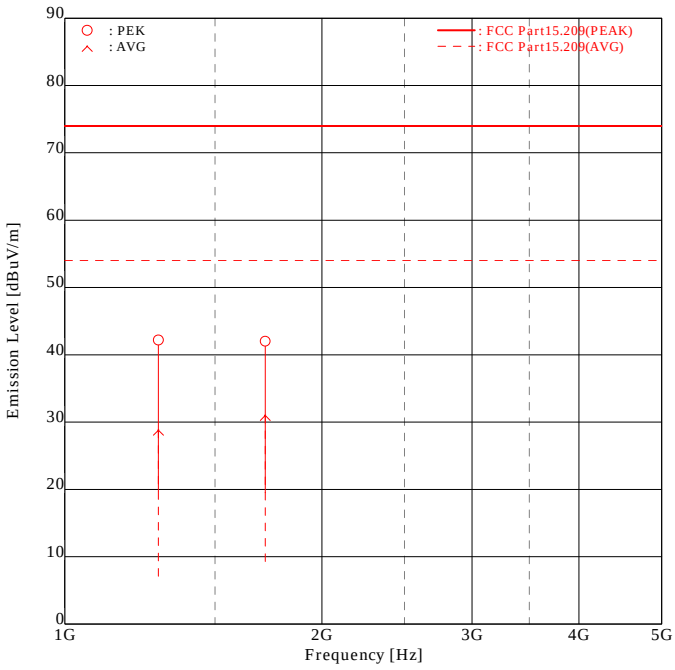
9.3.1 1000MHz-5000MHz (1ch:429.2500 MHz)

Akzo Nobel K. K.

Kashima No.1 Test Site

Radiated Electric Field

APPLICANT	: TOPCON CORPORATION
EUT NAME	: Remote Controller
MODEL NO.	: RC-30
SERIAL NO.	: 3K0001
TEST MODE	: 1ch : 429.2500MHz
POWER SOURCE	: DC4.5V
DATE TESTED	: Oct 24 2005
FILE NO.	: ANKK-105261
REGULATION	: FCC Part15C(15.209)
TEST METHOD	: ANSI C63.4-2003
DISTANCE	: 3.0 [m]
TEMPERATURE	: 23.0 [degC]
HUMIDITY	: 64.0 [%]
NOTE	: Vertical Condition



ENGINEER : Katsuya Uchida

[No]	FREQUENCY [MHz]	MODE	READING [dBuV] Hori	READING [dBuV] Vert	FACTOR [dB] Hori	FACTOR [dB] Vert	EMISSION [dBuV/m] Hori	EMISSION [dBuV/m] Vert	LIMIT [dBuV/m]	MARGIN [dB] Hori	MARGIN [dB] Vert
1	1287.75	PEK	40.8	38.9	1.4	1.4	42.2	40.3	74.0	31.8	33.7
2	1287.75	AVG	27.3	27.4	1.4	1.4	28.7	28.8	54.0	25.3	25.2
3	1717.00	PEK	29.8	38.6	3.4	3.4	33.2	42.0	74.0	40.8	32.0
4	1717.00	AVG	27.6	26.7	3.4	3.4	31.0	30.1	54.0	**23.0**	23.9

Higher six points are underlined.
Other frequencies : Below the FCC Part15C(15.209) limit
Emission Level = Read + Factor(Antenna,Antenna Pad,Cable,Preamp)
ANT. : Used antenna(BBA = Broadband antenna, DIP = Dipole antenna)

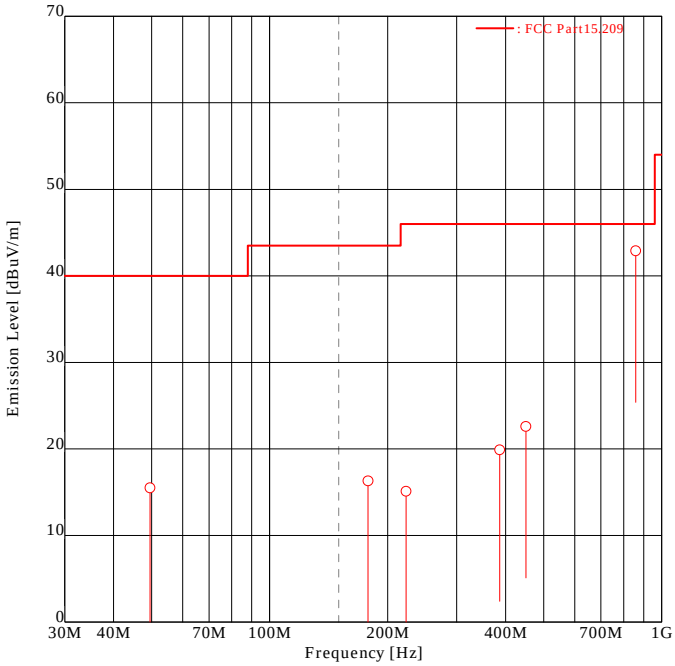
9.3.2 30-1000MHz (5ch:429.4375 MHz)

Akzo Nobel K. K.

Kashima No.1 Test Site

Radiated Electric Field

APPLICANT	: TOPCON CORPORATION
EUT NAME	: Remote Controller
MODEL NO.	: RC-30
SERIAL NO.	: 3K0001
TEST MODE	: 5ch : 429.4375MHz
POWER SOURCE	: DC4.5V
DATE TESTED	: Oct 24 2005
FILE NO.	: ANKK-105261
REGULATION	: FCC Part15C(15.209)
TEST METHOD	: ANSI C63.4-2003
DISTANCE	: 3.0 [m]
TEMPERATURE	: 23.0 [degC]
HUMIDITY	: 64.0 [%]
NOTE	: Vertical Condition



ENGINEER : Katsuya Uchida

[No]	FREQUENCY [MHz]	READING [dBuV] Hori	READING [dBuV] Vert	FACTOR [dB/m] Hori	FACTOR [dB/m] Vert	EMISSION [dBuV/m] Hori	EMISSION [dBuV/m] Vert	LIMIT [dBuV/m]	MARGIN [dB] Hori	MARGIN [dB] Vert
1	49.52	-	23.0	-7.5	-7.5	-	15.5	40.0	-	24.5
2	178.16	-	23.5	-7.2	-7.2	-	16.3	43.5	-	27.2
3	222.77	-	22.5	-7.4	-7.4	-	15.1	46.0	-	30.9
4	386.14	-	22.0	-2.1	-2.1	-	19.9	46.0	-	26.1
5	450.54	-	23.0	-0.4	-0.4	-	22.6	46.0	-	23.4
6	858.90	26.5	34.0	8.9	8.9	35.4	42.9	46.0	10.6	**3.1**

Higher six points are underlined.
Other frequencies : Below the FCC Part15C(15.209) limit
Emission Level = Read + Factor(Antenna,Antenna Pad,Cable,Preamp)
ANT. : Used antenna(BBA = Broadband antenna, DIP = Dipole antenna)

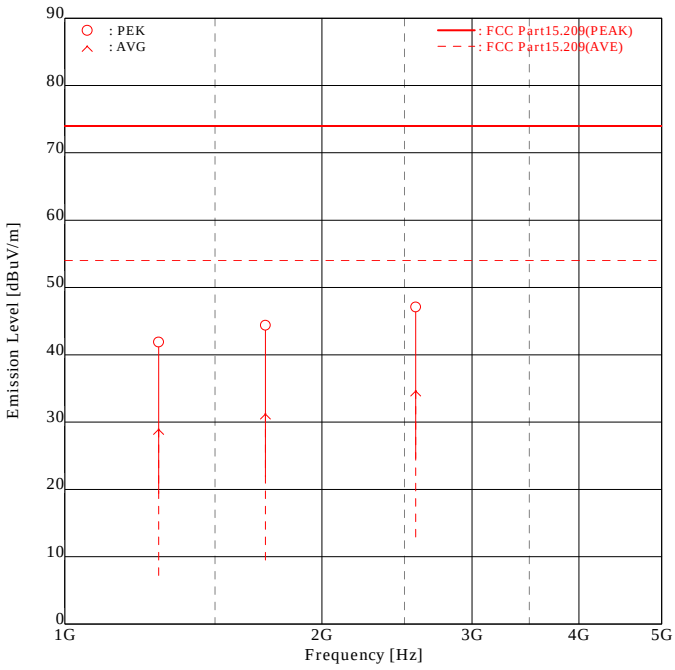
9.3.2 1000MHz-5000MHz (5ch:429.4375 MHz)

Akzo Nobel K. K.

Kashima No.1 Test Site

Radiated Electric Field

APPLICANT	: TOPCON CORPORATION
EUT NAME	: Remote Controller
MODEL NO.	: RC-30
SERIAL NO.	: 3K0001
TEST MODE	: 5ch : 429.4375MHz
POWER SOURCE	: DC4.5V
DATE TESTED	: Oct 24 2005
FILE NO.	: ANKK-105261
REGULATION	: FCC Part15C(15.209)
TEST METHOD	: ANSI C63.4-2003
DISTANCE	: 3.0 [m]
TEMPERATURE	: 23.0 [degC]
HUMIDITY	: 64.0 [%]
NOTE	: Vertical Condition



ENGINEER : Katsuya Uchida

[No]	FREQUENCY [MHz]	MODE	READING [dBuV] Hori	READING [dBuV] Vert	FACTOR [dB] Hori	FACTOR [dB] Vert	EMISSION [dBuV/m] Hori	EMISSION [dBuV/m] Vert	LIMIT [dBuV/m]	MARGIN [dB] Hori	MARGIN [dB] Vert
1	1288.23	PEK	40.5	39.0	1.4	1.4	41.9	40.4	74.0	32.1	33.6
2	1288.23	AVG	27.3	27.5	1.4	1.4	28.7	28.9	54.0	25.3	25.1
3	1717.75	PEK	41.0	39.1	3.4	3.4	44.4	42.5	74.0	29.6	31.5
4	1717.75	AVG	27.6	27.8	3.4	3.4	31.0	31.2	54.0	23.0	22.8
5	2576.63	PEK	40.0	40.3	6.8	6.8	46.8	47.1	74.0	27.2	26.9
6	2576.63	AVG	27.6	27.8	6.8	6.8	34.4	34.6	54.0	19.6	**19.4**

Higher six points are underlined.
Other frequencies : Below the FCC Part15C(15.209) limit
Emission Level = Read + Factor(Antenna,Antenna Pad,Cable,Preamp)
ANT. : Used antenna(BBA = Broadband antenna, DIP = Dipole antenna)

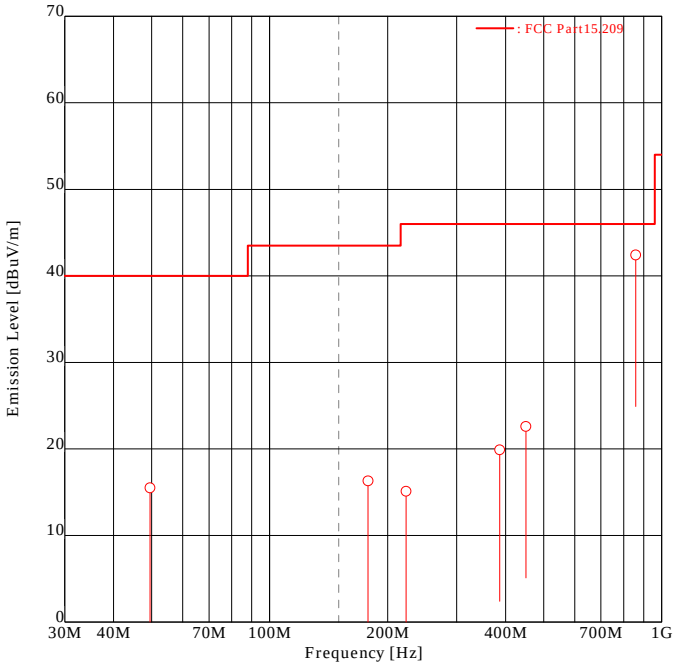
9.3.3 30-1000MHz (9ch:429.7375 MHz)

Akzo Nobel K. K.

Kashima No.1 Test Site

Radiated Electric Field

APPLICANT	: TOPCON CORPORATION
EUT NAME	: Remote Controller
MODEL NO.	: RC-30
SERIAL NO.	: 3K0001
TEST MODE	: 9ch : 429.7375MHz
POWER SOURCE	: DC4.5V
DATE TESTED	: Oct 24 2005
FILE NO.	: ANKK-105261
REGULATION	: FCC Part15C(15.209)
TEST METHOD	: ANSI C63.4-2003
DISTANCE	: 3.0 [m]
TEMPERATURE	: 23.0 [degC]
HUMIDITY	: 64.0 [%]
NOTE	: Vertical Condition



ENGINEER : Katsuya Uchida

[No]	FREQUENCY [MHz]	READING [dBuV] Hori	READING [dBuV] Vert	FACTOR [dB/m] Hori	FACTOR [dB/m] Vert	EMISSION [dBuV/m] Hori	EMISSION [dBuV/m] Vert	LIMIT [dBuV/m]	MARGIN [dB] Hori	MARGIN [dB] Vert
1	49.52	-	23.0	-7.5	-7.5	-	15.5	40.0	-	24.5
2	178.16	-	23.5	-7.2	-7.2	-	16.3	43.5	-	27.2
3	222.77	-	22.5	-7.4	-7.4	-	15.1	46.0	-	30.9
4	386.14	-	22.0	-2.1	-2.1	-	19.9	46.0	-	26.1
5	450.54	-	23.0	-0.4	-0.4	-	22.6	46.0	-	23.4
6	858.90	26.0	33.5	8.9	8.9	34.9	42.4	46.0	11.1	**3.6**

Higher six points are underlined.
Other frequencies : Below the FCC Part15C(15.209) limit
Emission Level = Read + Factor(Antenna,Antenna Pad,Cable,Preamp)
ANT. : Used antenna(BBA = Broadband antenna, DIP = Dipole antenna)

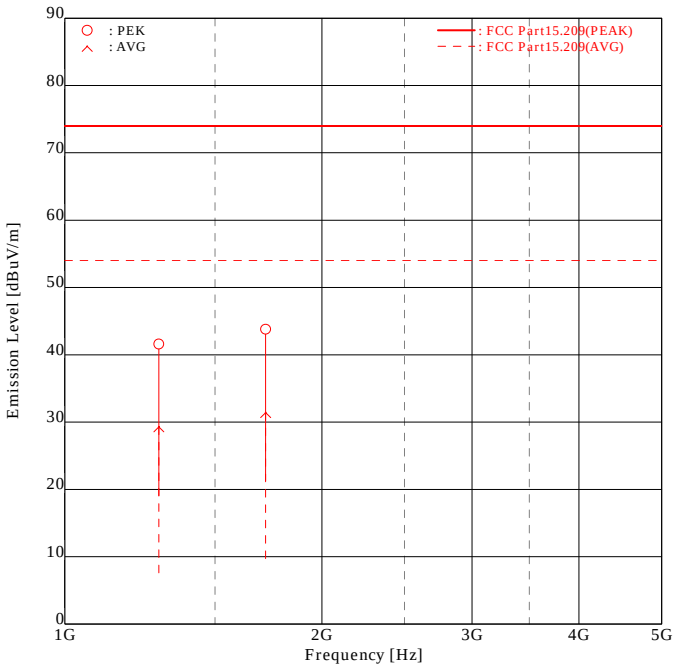
9.3.3 1000MHz-5000MHz (9ch:429.7375 MHz)

Akzo Nobel K. K.

Kashima No.1 Test Site

Radiated Electric Field

APPLICANT	: TOPCON CORPORATION
EUT NAME	: Remote Controller
MODEL NO.	: RC-30
SERIAL NO.	: 3K0001
TEST MODE	: 9ch : 429.7375MHz
POWER SOURCE	: DC4.5V
DATE TESTED	: Oct 24 2005
FILE NO.	: ANKK-105261
REGULATION	: FCC Part15C(15.209)
)TEST METHOD	: ANSI C63.4-2003
DISTANCE	: 3.0 [m]
TEMPERATURE	: 23.0 [degC]
HUMIDITY	: 64.0 [%]
NOTE	: Vertical Condition



ENGINEER : Katsuya Uchida

[No]	FREQUENCY [MHz]	MODE	READING [dBuV] Hori	READING [dBuV] Vert	FACTOR [dB] Hori	FACTOR [dB] Vert	EMISSION [dBuV/m] Hori	EMISSION [dBuV/m] Vert	LIMIT [dBuV/m]	MARGIN [dB] Hori	MARGIN [dB] Vert
1	1289.21	PEK	40.2	39.3	1.4	1.4	41.6	40.7	74.0	32.4	33.3
2	1289.21	AVG	27.9	27.5	1.4	1.4	29.3	28.9	54.0	24.7	25.1
3	1718.95	PEK	39.8	40.4	3.4	3.4	43.2	43.8	74.0	30.8	30.2
4	1718.95	AVG	28.0	27.8	3.4	3.4	31.4	31.2	54.0	**22.6**	22.8

Higher six points are underlined.

Other frequencies : Below the FCC Part15C(15..209) limit

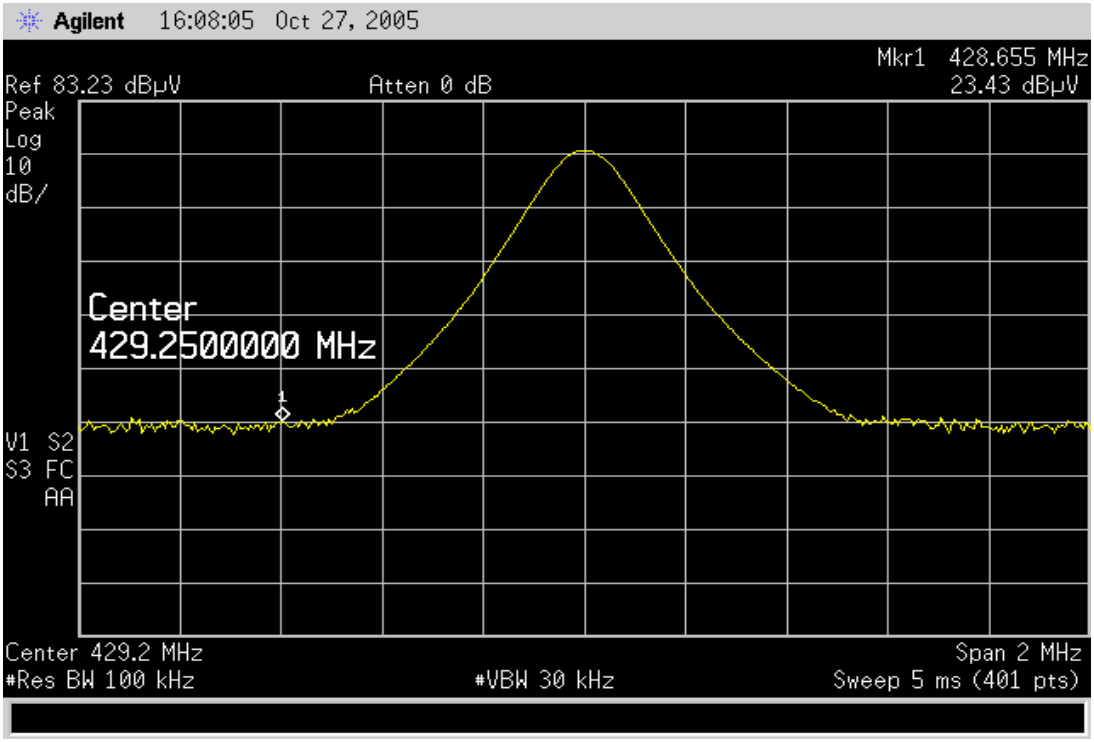
Emission Level = Read + Factor(Antenna,Antenna Pad,Cable,Preamp)

ANT. : Used antenna(BBA = Broadband antenna, DIP = Dipole antenna)

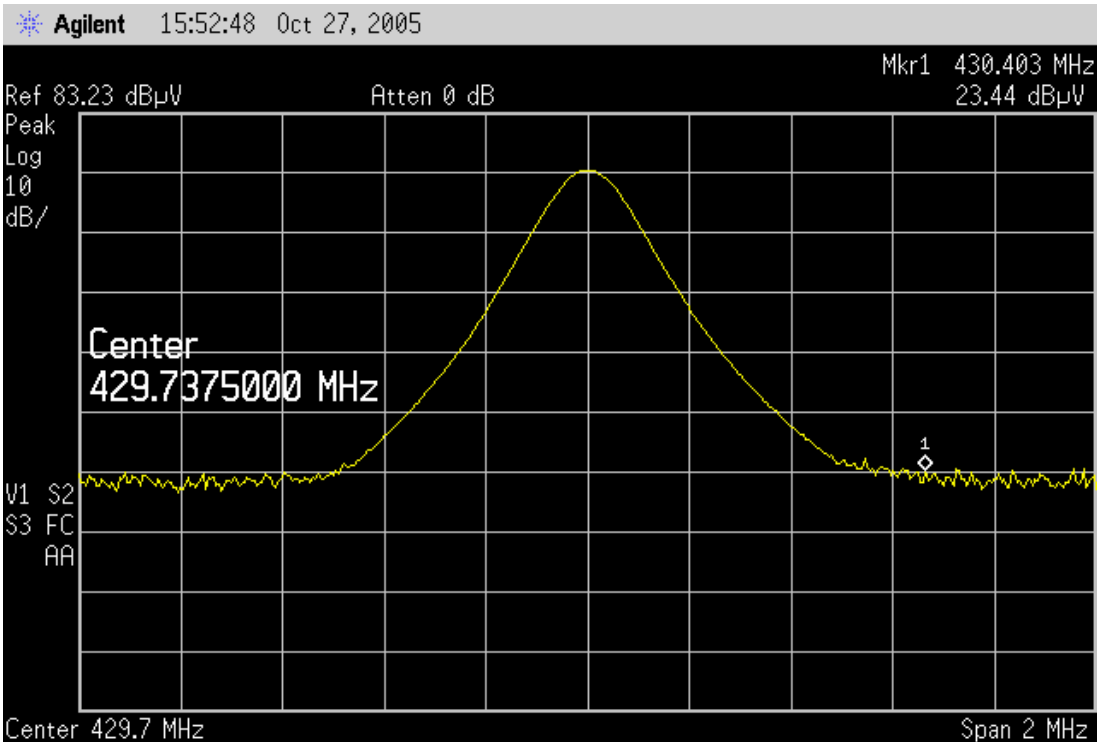
9.4 Restricted band of operation

1. The EUT was measured by transmitting continuously with frequency modulation.
2. Measurement distance was 3 meter.
3. The Receiver was setup using spectrum analyzer (RBW = 100kHz, VBW=30kHz, Span=2 MHz).
4. Following data is the worst case.
   Test date : Oct. 27, 2005
   Temperature : 23 degree C
   Humidity : 61 %

9.4.1 1ch:429.2500 MHz



9.4.2 9ch:429.7375 MHz



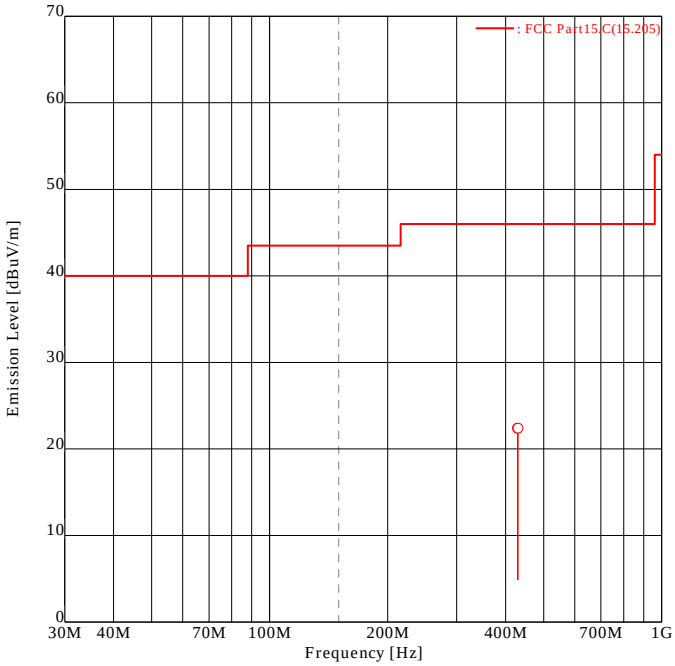
9.4.3 1ch:429.2500 MHz / 9ch 429.7375 MHz

Akzo Nobel K. K.

Kashima No.1 Test Site

Restricted bands of operation

APPLICANT	: TOPCON CORPORATION
EUT NAME	: Remote Controller
MODEL NO.	: RC-30
SERIAL NO.	: 3K0001
TEST MODE	: 1ch : 429.2500MHz, 9ch : 429.7375MHz
POWER SOURCE	: DC4.5V
DATE TESTED	: Oct 27 2005
FILE NO.	: ANKK-105261
REGULATION	: FCC Part15C(15.205)
TEST METHOD	: ANSI C63.4-2003
DISTANCE	: 3.0 [m]
TEMPERATURE	: 23.0 [degC]
HUMIDITY	: 61.0 [%]
NOTE	: Horizontal Condition



ENGINEER : Naoki Ikeda

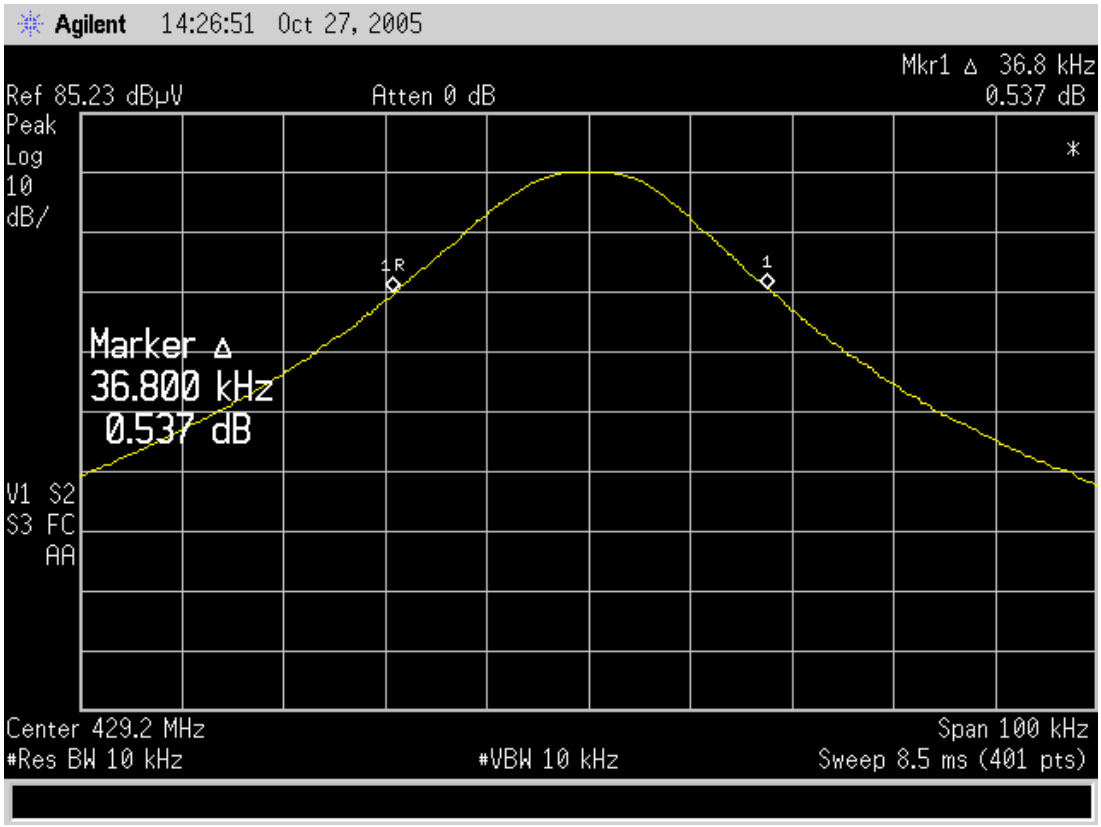
[No]	FREQUENCY [MHz]	READING [dBuV] Hori	READING [dBuV] Vert	FACTOR [dB/m] Hori	FACTOR [dB/m] Vert	EMISSION [dBuV/m] Hori	EMISSION [dBuV/m] Vert	LIMIT [dBuV/m]	MARGIN [dB] Hori	MARGIN [dB] Vert
1	428.65	23.4	-	-1.0	-1.0	22.4	-	46.0	**23.6**	-
2	430.40	23.4	-	-1.0	-1.0	22.4	-	46.0	23.6	-

Higher six points are underlined.
Other frequencies : Below the FCC Part15C(15.205) limit
Emission Level = Read + Factor(Antenna,Antenna Pad,Cable,Preamp)
ANT. : Used antenna(BBA = Broadband antenna, DIP = Dipole antenna)

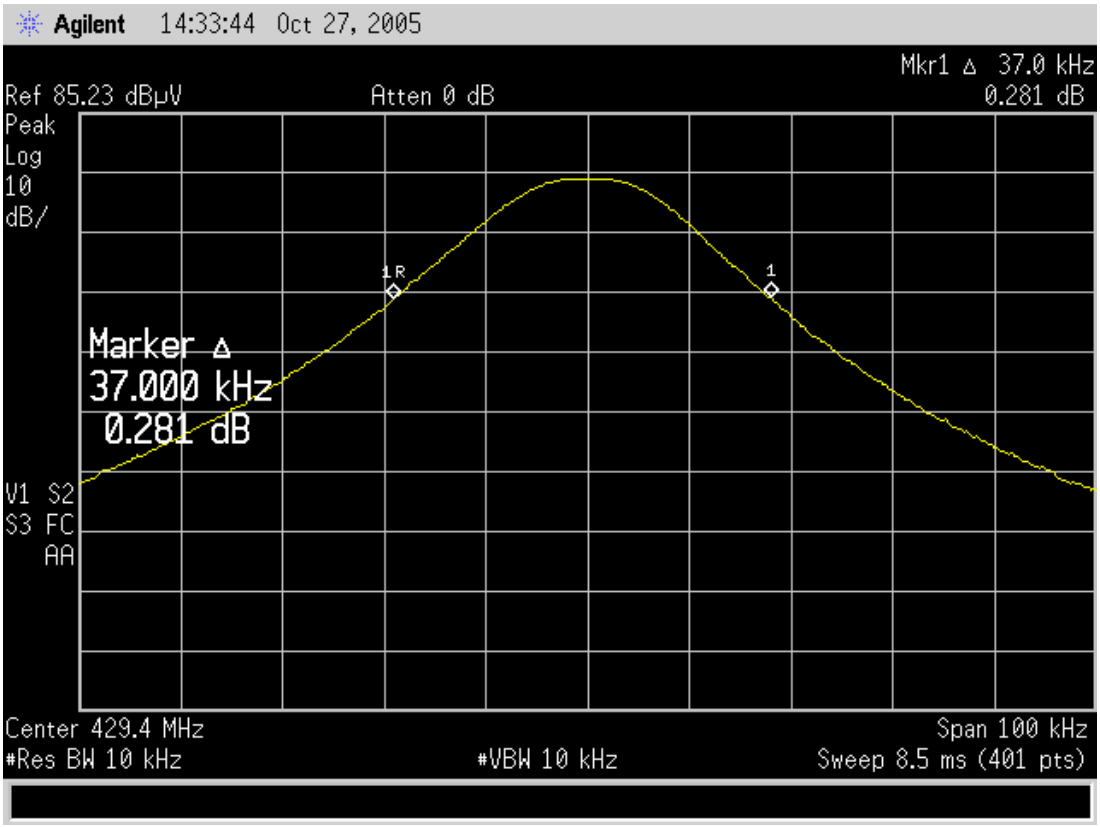
9.5 Emission Bandwidth

1. The EUT was measured by transmitting continuously with frequency modulation.
2. Measurement distance was 3 meter.
3. The Receiver was setup using spectrum analyzer (RBW = 10kHz, VBW=10kHz, Span=100kHz).
4. Maximum permitted is 0.5% of the center frequency .
5. Following data is the worst case.
   Test date : Oct. 27, 2005
   Temperature : 23 degree C
   Humidity : 61 %

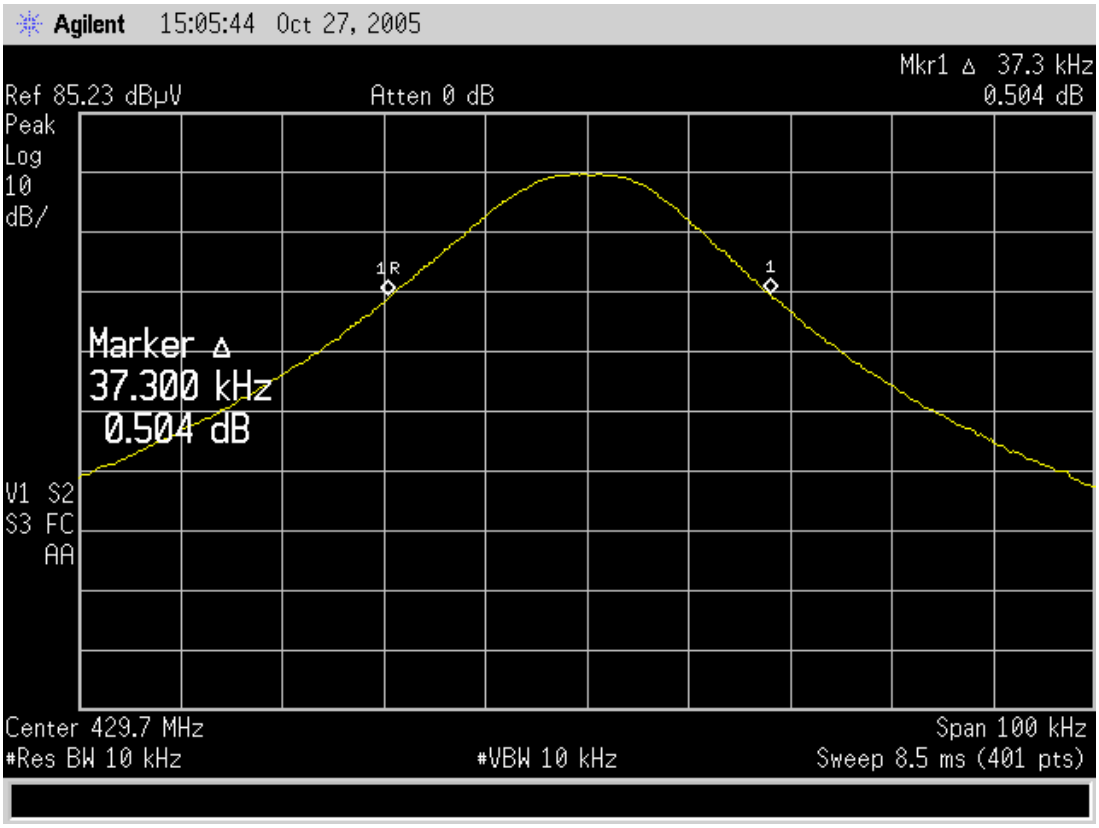
9.5.1 1ch:429.2500 MHz / Hor Pol. / 20dB Bandwidth



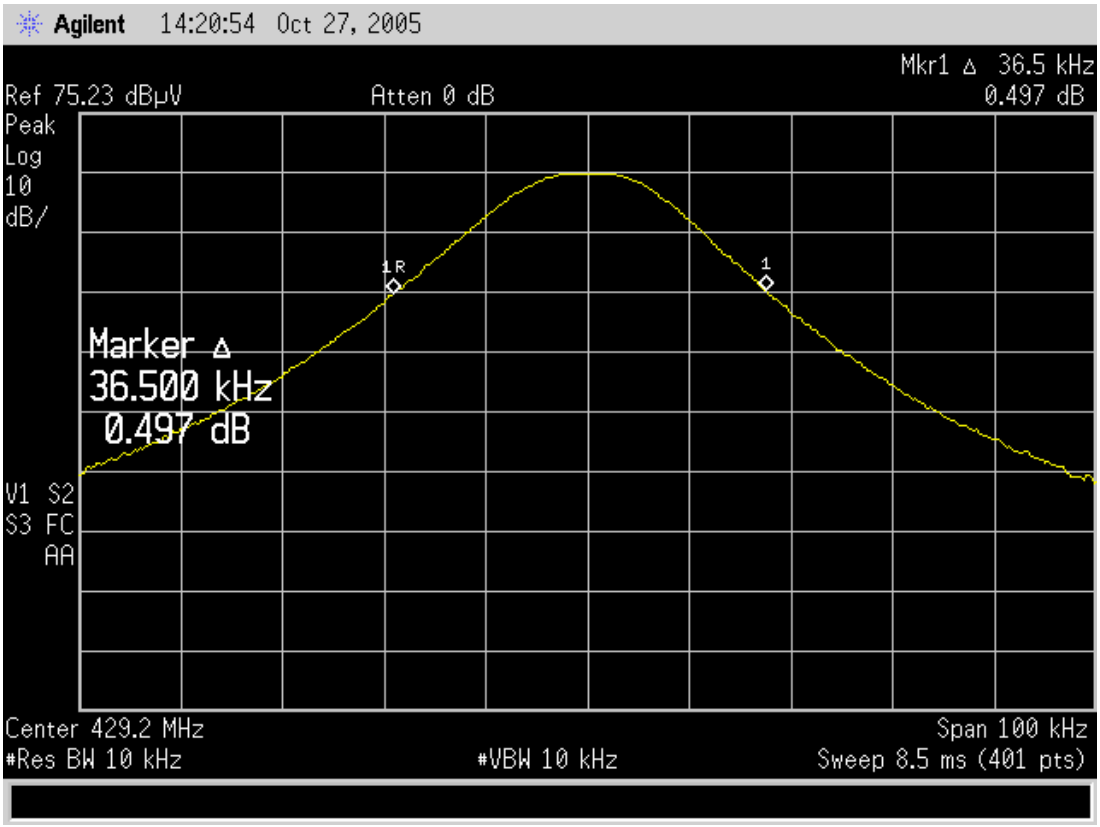
9.5.2 5ch:429.4375 MHz / Hor Pol. / 20dB Bandwidth



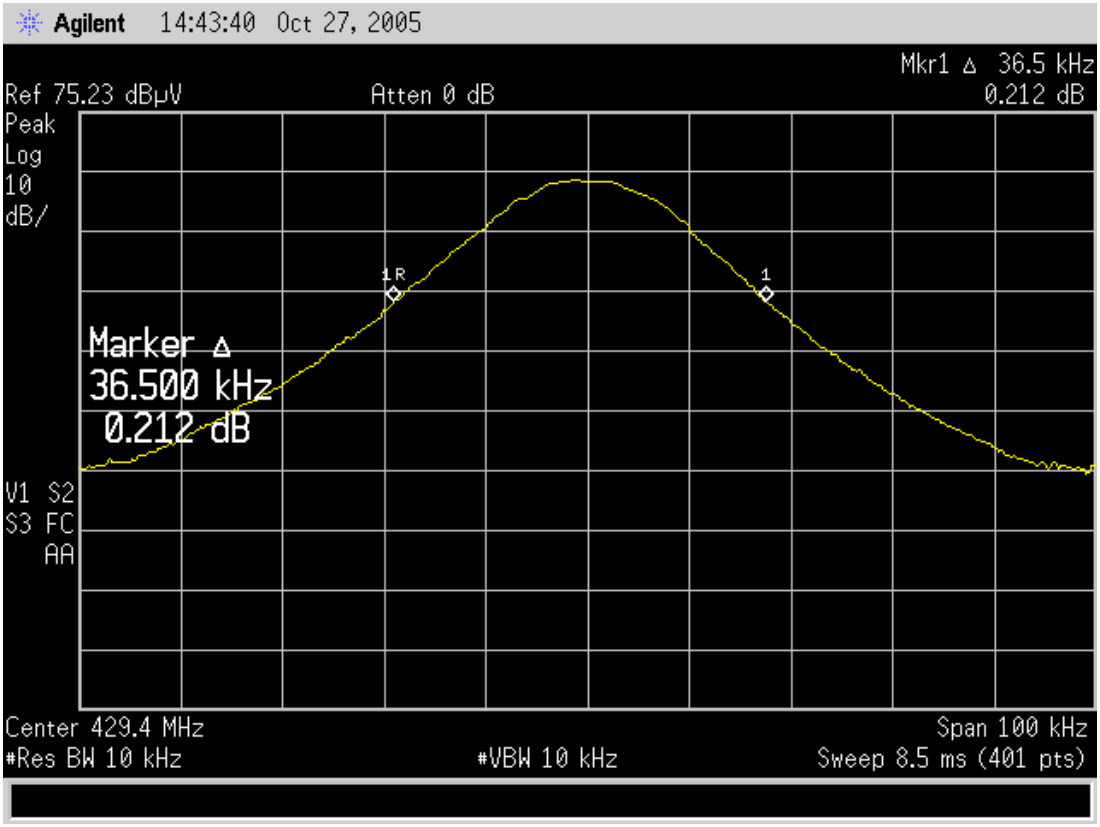
9.5.3 9ch:429.7375 MHz / Hor Pol. / 20dB Bandwidth



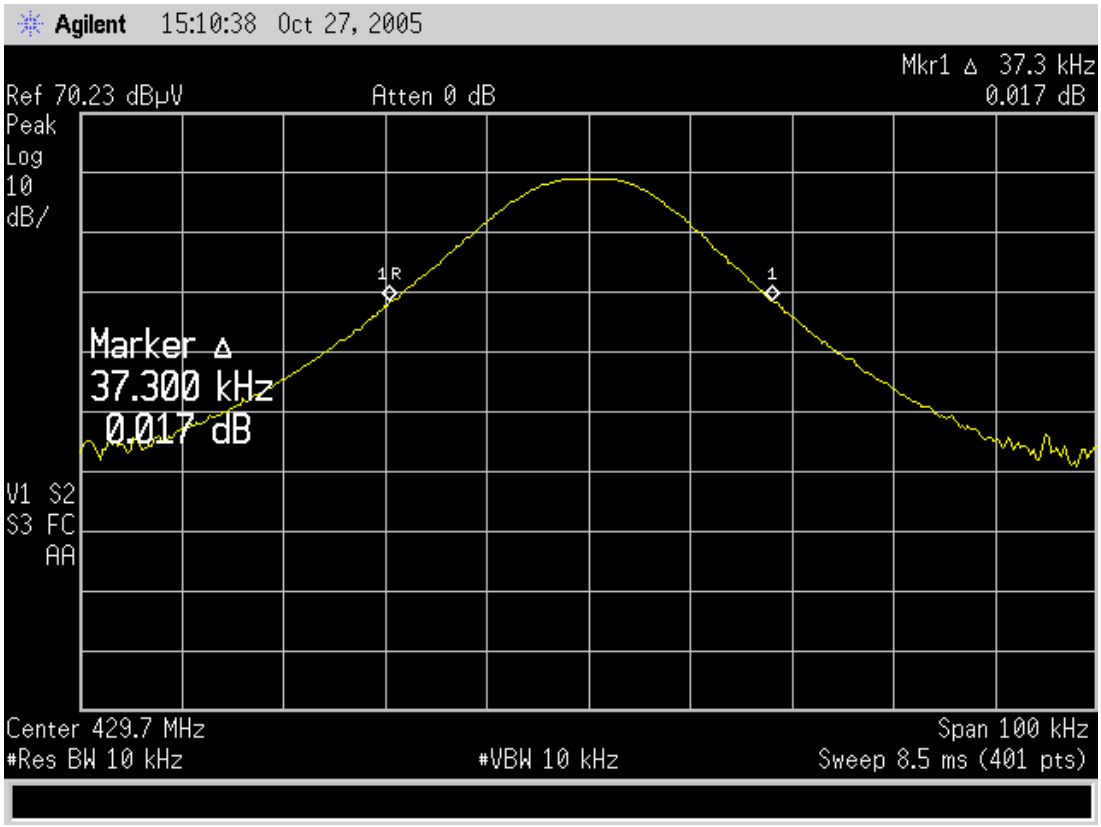
9.5.4 1ch:429.2500 MHz / Ver Pol. / 20dB Bandwidth



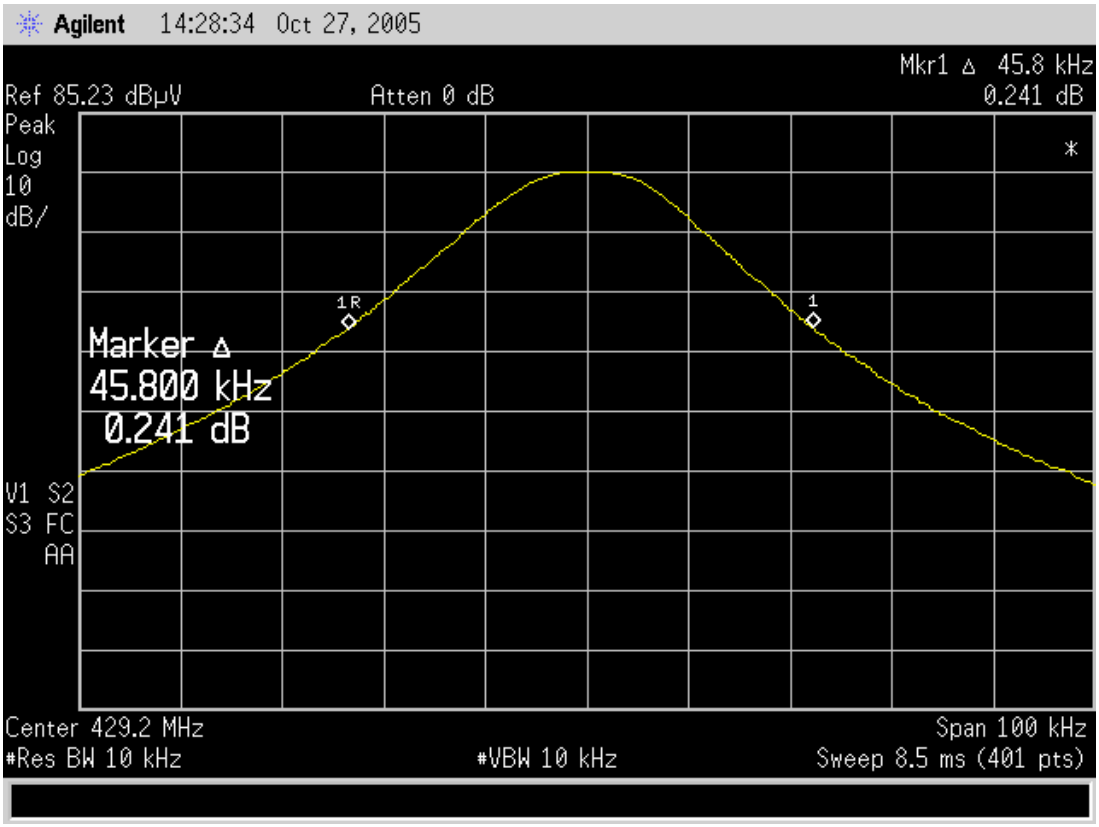
9.5.5 5ch:429.4375 MHz / Ver Pol. / 20dB Bandwidth



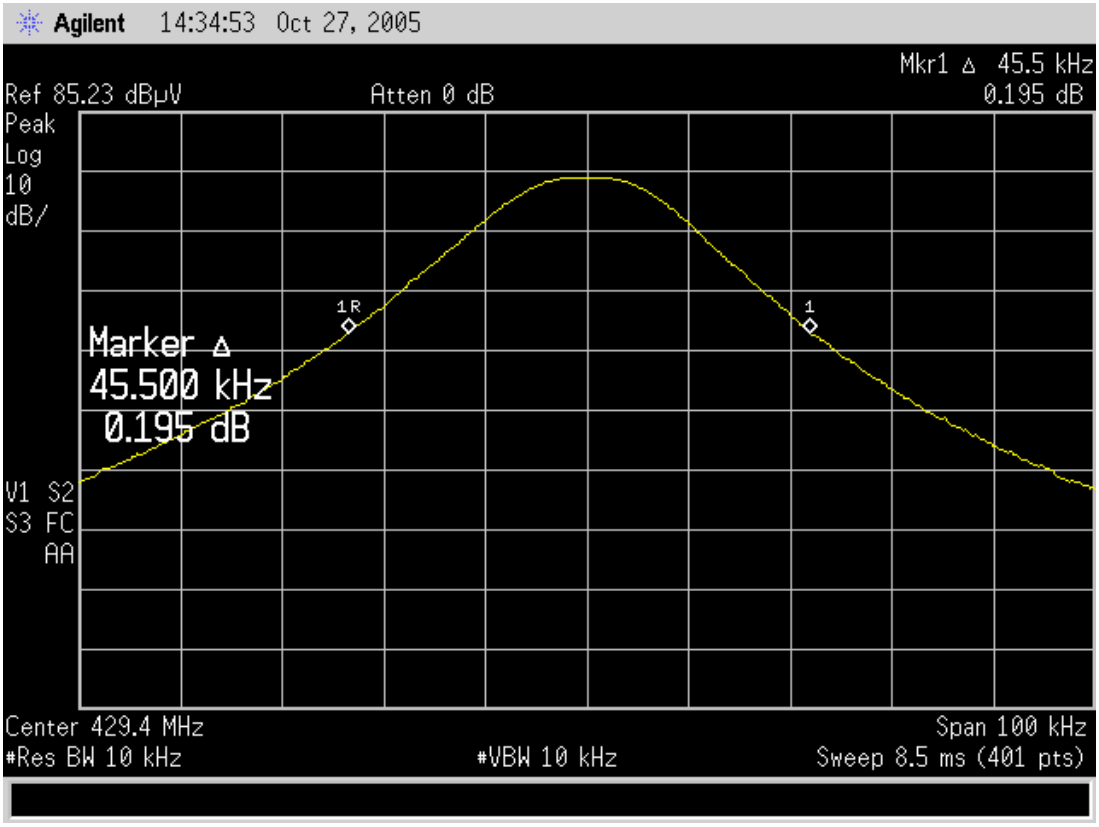
9.5.6 9ch:429.7375 MHz / Ver Pol. / 20dB Bandwidth



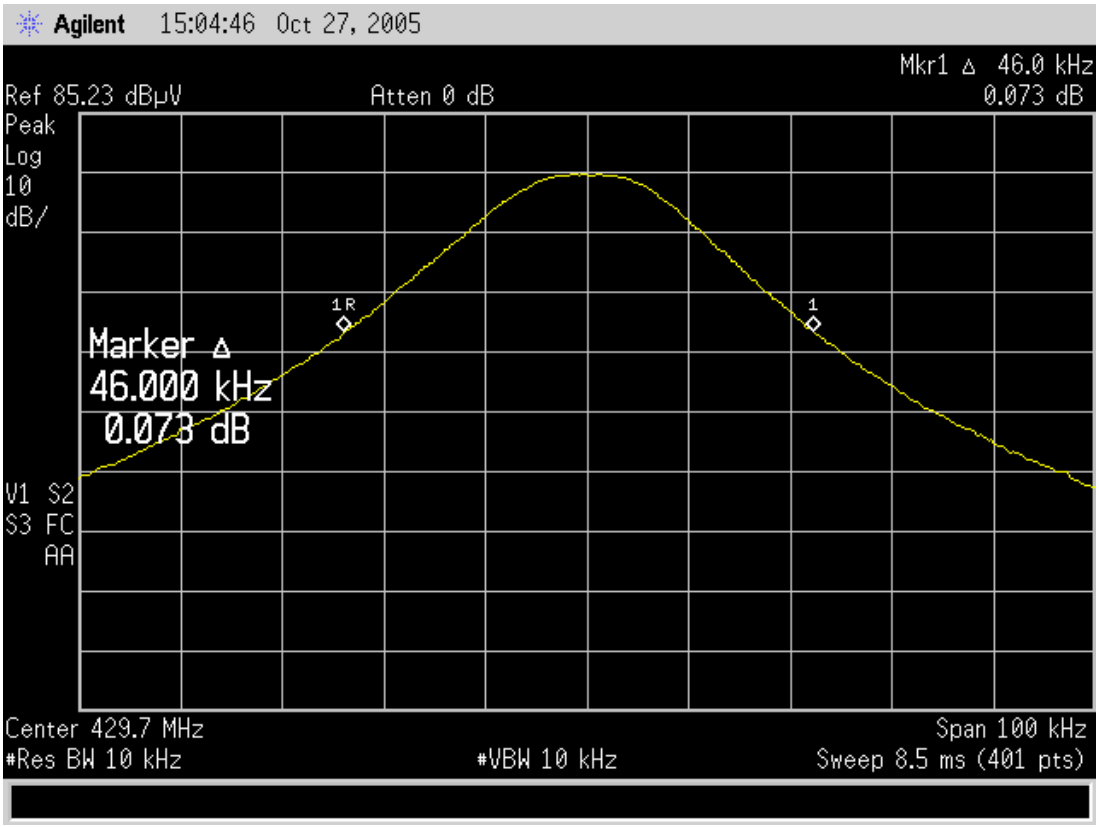
9.5.7 1ch:429.2500 MHz / Hor Pol. / 26dB Bandwidth



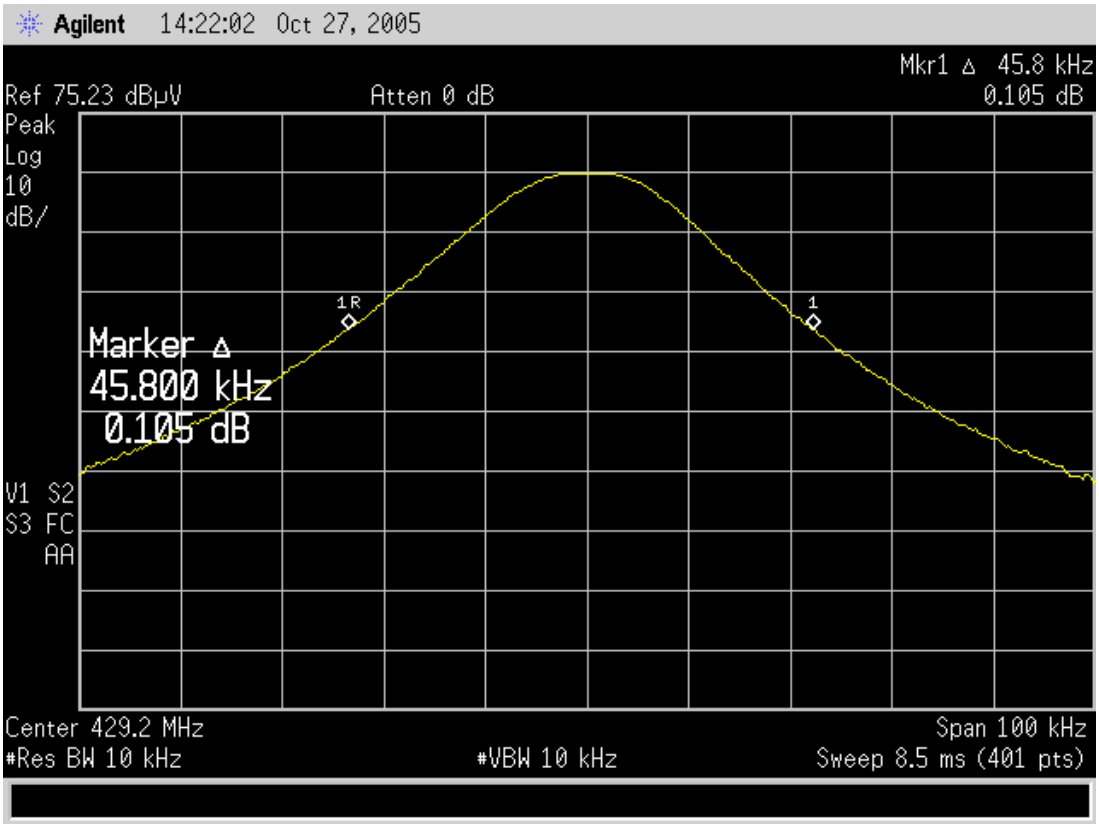
9.5.8 5ch:429.4375 MHz / Hor Pol. / 26dB Bandwidth



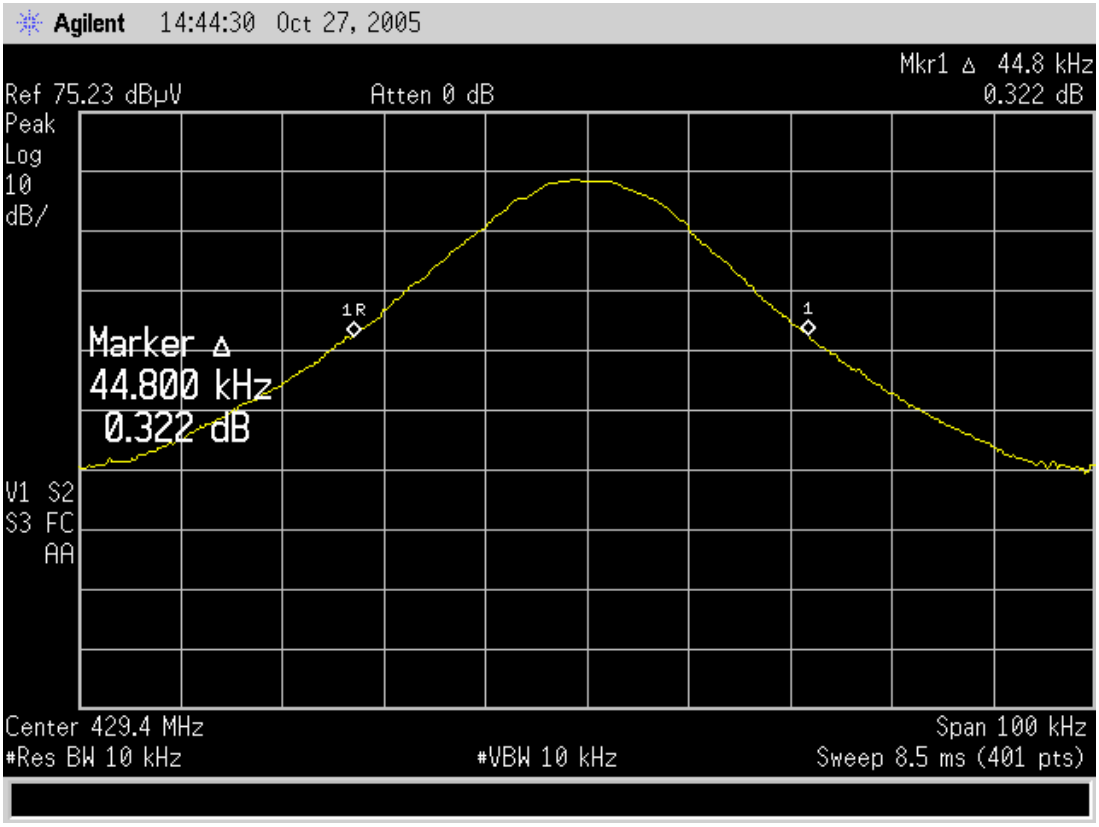
9.5.9 9ch:429.7375 MHz / Hor Pol. / 26dB Bandwidth



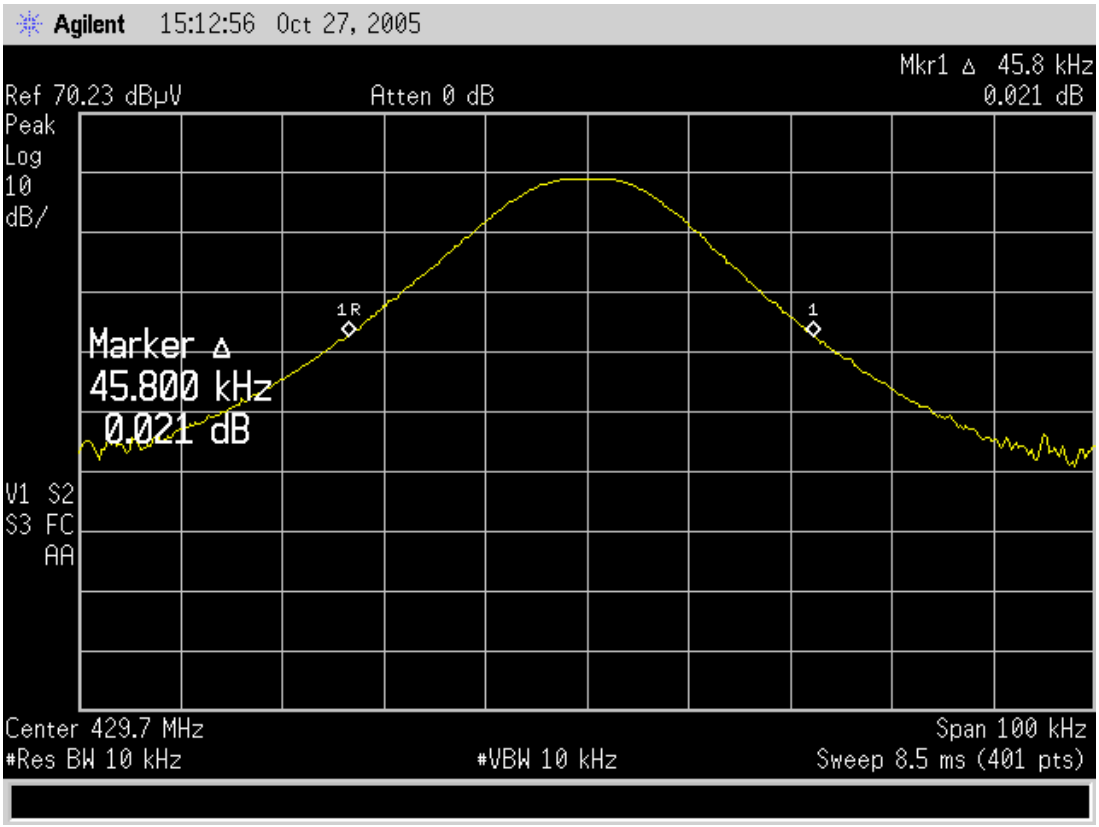
9.5.10 1ch:429.2500 MHz / Ver Pol. / 26dB Bandwidth



9.5.11 5ch:429.4375 MHz / Ver Pol. / 26dB Bandwidth



9.5.12 9ch:429.7375 MHz / Ver Pol. / 26dB Bandwidth



SECTION 10. LIST OF MEASURING INSTRUMENTS

Instrument	Model No.	Serial No.	Manufacturer	Cal. Date	Calibration Expired
Radiated Electric Field					
Broad Band antenna	VULB9168	106	Schwarzbeck	May. 01, 05	May. 31, 06
6dB Attenuator	MP721B	M57593	ANRITSU	Oct. 27, 04	Oct. 31, 05
Step Attenuator	8494B	2726A14513	HEWLETT PACKARD	Oct. 27, 04	Oct. 31, 05
Amplifier	8447D	1937A03130	HEWLETT PACKARD	Oct. 27, 04	Oct. 31, 05
Coaxial cable	5D-2W(9.0 m)	R1	AKZO	Oct. 27, 04	Oct. 31, 05
Coaxial cable	5D-2W(5.5 m)	R2	AKZO	Oct. 27, 04	Oct. 31, 05
Coaxial cable	5D-2W(2.0 m)	R3	AKZO	Oct. 27, 04	Oct. 31, 05
Coaxial cable	5D-2W(0.2 m)	R4	AKZO	Oct. 27, 04	Oct. 31, 05
Coaxial cable	5D-2W(1.0 m)	R5	AKZO	Oct. 27, 04	Oct. 31, 05
Coaxial cable	5D-2W(1.0 m)	R6	AKZO	Oct. 27, 04	Oct. 31, 05
Coaxial cable	5D-2W(1.0 m)	R7	AKZO	Oct. 27, 04	Oct. 31, 05
Spectrum Analyzer	8564E	3643A00665	HEWLETT PACKARD	Aug. 18, 05	Aug. 31, 06
Amplifier	83051A	3332A00329	HEWLETT PACKARD	Sep. 28, 05	Sep. 31, 06
Double Ridged Antenna	3115	9612-5044	EMCO	Jun. 13, 05	Jun. 30, 06
3dB Attenuator	4768-3	79	narda	Sep. 28, 05	Sep. 30, 06
Coaxial cable	SUCOFLEX102(1.0m)	R14	SUHNER	Sep. 28, 05	Sep. 30, 06
Coaxial cable	SUCOFLEX102(5.0m)	R15	SUHNER	Sep. 28, 05	Sep. 30, 06
Spectrum Analyzer	E7401A	US399440256	HEWLETT PACKARD	Aug. 18, 05	Aug. 31, 06
Site Attenuation				Jun. 03, 05	Jun. 30, 06
Common					
Test receiver	ESV	893271/018	ROHDE & SCHWARZ	Jun. 03, 05	Jun. 30, 06
RF Switch	ACX-150	None	AKZO	Oct. 27, 04	Oct. 31, 05
Testing Software : emiT (Version 1.6.2.3)					

Note : Test instruments are calibrated according to Quality Manual and Calibration Rules of EMC division.

SECTION 11. MEASUREMENT UNCERTAINTY

The uncertainty of the measurements performed for this report lies:

Radiated Electric Field at 3m		
30 MHz – 1000 MHz Above 1 GHz	±4.74 dB ±4.13 dB	
Radiated Electric Field at 10m		
30 MHz – 1000 MHz Above 1 GHz	± 4.74 dB ± 4.13 dB	
Radiated Electric Field at 30m		
Under consideration		
Radiated Effective Power		
11.7 GHz – 12.7 GHz	± 3.8 dB	
Conducted Voltages on Mains Port		
9 kHz – 30 MHz	± 3.06 dB	
Conducted Voltages on Telecommunication Port		
9 kHz – 30 MHz	± 3.40 dB	
Conducted Current on Telecommunication Port		
9 kHz – 30 MHz	± 3..40 dB	
Conducted Voltages on Terminals		
150 kHz – 30 MHz	± 1.0 dB	
Radiated Power		
Under consideration		

Note on Radiated Electric Field measurement uncertainty

The following items are not included in the calculations in spite of their own uncertainty components because it is impracticable to find the value.

It is our problem awaiting solution in future.

(1) Repeatability of measurement
It is not possible to calculate repeatability since the measurement was carried out only one time.

(2) Antenna factor variation
The definition of measured (radiated electric field strength) is not completed on the referred standard(s).

(3) Loss of EUT radiation propagation
It is certainly one of the uncertainty components, however is not able to calculate.

Please note that these uncertainties are not reflected to the compliance judgment of the test results in this report.

SECTION 12. DESCRIPTION OF TEST LABORATORY

Akzo Nobel K. K., the country organization in Japan for Akzo Nobel NV, was established in 1968. The shares are owned by Akzo Nobel NV (100%). Akzo Nobel NV, headquartered in the Netherlands, is one of the world's leading companies in selected areas of chemicals, coatings, healthcare products and fibers with work force of approximately 70,000 people in over 50 countries.

In 1984, in order to respond to the growing testing demand, in particular, for FCC filing, Akzo Nobel K. K. started EMI testing business, installing the first open air test site in Kashima, Ibaraki prefecture. Further the business has been expanded by installing additional testing facilities not only in Ibaraki but also in other areas such as Nagano, Kanagawa and Tochigi.

As results, Akzo Nobel K. K. has now 16 open air test sites and 4 anechoic chambers for EMI/EMC testing. As the largest EMC testing laboratory in number of testing facilities and staffs, EMC Division has been organized separately in the company and independently operated in conformity with the requirements of ISO/IEC17025 for its competency as a testing laboratory.

Akzo Nobel K. K. EMC Division is the first foreign private laboratory accredited by NVLAP, National Voluntary Laboratory Accreditation Program-NIST, USA. The division has been certified, authorized and/or filed as a competent testing laboratory by various testing organizations/authorities as described below.

ACCREDITATION	SCOPE	LAB. CODE
NVLAP USA	EMC Testing	100290-3
VLAC JAPAN	EMC Testing	VLAC-008
BSMI TAIWAN	EMC Testing	SL2-IN-E-6007

AUTHORIZATION	SCOPE	LAB. CODE
NEMKO NORWAY	EMC Testing	ELA107
ETL SEMKO SWEDEN	EMC Testing	J0406557, J0406558

FILING	SCOPE	LAB. CODE
VCCI JAPAN	EMC Testing	-
FCC USA	EMC Testing	Registration Number 783559
IC CANADA	EMC Testing Telecom Testing	IC 5290
SASO SAUDI ARABIA	EMC Testing	-