



REPORT NO : RF89061406
PRODUCT : Video Sender
MODEL NO : RW800A-T
BRAND NAME : FUNET
SERIAL NO : N/A
CLIENT : FUNAI Radio & Communications Corporation
ADDRESS : 3F, No.24, Chien Kou Rd., T.E.P.Z., Tantz, Taiwan R.O.C.
ISSUED BY : Advance Data Technology Corporation (Adt Corp.)
OFFICE ADDRESS : 11F, No. 1, Sec. 4, Nan-King East Rd., Taipei, Taiwan, R.O.C.
LABORATORY ADDRESS : No. 13-1, Lane 19, Wen Shan 3rd St., Kweishan, Taoyuan, Taiwan, R.O.C.
TEST STANDARD : 47CFR Part 15, Subpart C (15.249)
TEST DATE : August 22, 2000
TEST RESULT : Pass

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Accredited Laboratory

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1 CERTIFICATION

Issue Date: August 29, 2000

PRODUCT : Video Sender
MODEL NO : RW800A-T
FCC ID : OV4RW800A
SPEC. : 2.4 ~ 2.4835 GHz, 4 Channels,
FSK modulation, Patch antenna
CLIENT : FUNAI Radio & Communications Corporation
TEST STANDARD : FCC 47CFR Part 15, Subpart C (Section 15.249)
ANSI C63.4-1992

We, **ADVANCE DATA TECHNOLOGY CORPORATION**, hereby certify that one sample of the designated sample has been tested in our facility. The test record, data evaluation and Equipment Under Test (EUT) configurations represented herein are true and accurate representation of the measurements of the sample's EMI characteristics and the energy emitted under the conditions herein specified.

TESTED BY: Ellis Wu **DATE:** Aug. 24, 2000
Ellis Wu
PREPARED BY: Delphine Hsu **DATE:** Aug 24, 2000
Delphine Hsu
APPROVED BY: Alan Lane **DATE:** Aug 26, 2000
Dr. Alan Lane, Manager



2 SUMMARY OF TEST RESULTS & GERERAL STATEMENT OF CERTIFICATION

The EUT has been tested according to the following specifications:

47 CFR Part 15, Subpart C			
PARAGRAPH.	TEST REQUIREMENTS	COMPLIANCE (YES/NO)	TEST RESULT
15.107	AC Power Conducted Emissions Spec.: 48 dBuV	Yes	Minimum passing margin is -12.1 dBuV At 0.639 MHz
15.249(c)	Transmitter Radiated Emissions Spec.: Table 15.209	Yes	Minimum passing margin is -5.9 dBuV At 2414.45 MHz
15.249(d)	Band Edge Measurement	Yes	N/A



3 GENERAL INFORMATION

3.1 General Description of EUT

Product	:	Video Sender Transmitter
Model No	:	RW800A-T
Power Supply	:	AC Adapter (DC 7.5V)
Modulation Type	:	FSK
Operating Frequency	:	2.4 - 2.4835 GHz
Number of Channel	:	4
Channel BandWidth	:	18 MHz
Carrier Frequencies	:	2414 MHz, 2432 MHz, 2450 MHz, 2468 MHz
Antenna Type	:	Patch Antenna, No Antenna Connector
Rated RF output power level	:	Max. 0 dBm
Others	:	N/A

Note: The Wireless Baby Guard Broadcasts its high-quality audio and video using direction Antennas which must be oriented in certain configurations for best results. The 2.4 GHz audio/video antennas have been designed to pivot and have limited rotation in either clockwise or counterclockwise directions.

The other detailed information, please refer to user's manual.

3.2 Description of Test mode

Four channels are provided in this EUT.

Channel	Frequency
1	2414 MHz
2	2432 MHz
3	2450 MHz
4	2468 MHz

Three channels, including lowest and highest channels are chosen for testing

Mode	Channel Frequency
Mode 1	Channel 1 (2414 MHz)
Mode 2	Channel 2 (2432 MHz)
Mode 3	Channel 4 (2468 MHz)

3.3 Test Methodology

These tests were conducted on a sample of EUT for the evaluation in compliance with FCC CFR47 Part 15, Subpart C (15.249)

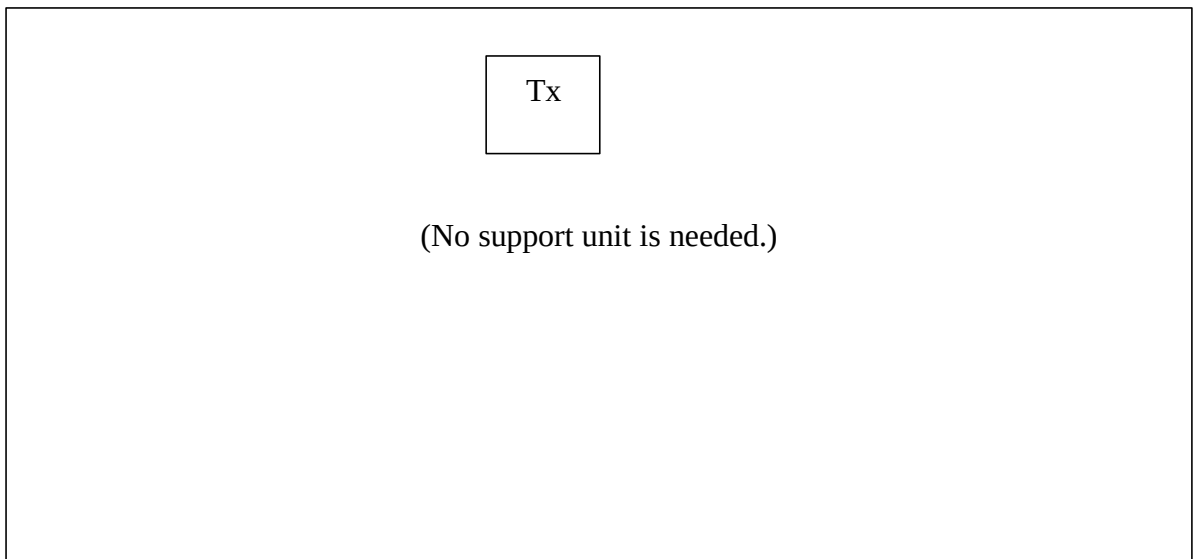
Both conducted and radiated emissions measurements were conducted in accordance with ANSI C63.4:1992.



3.4 Support Units List

N/A

3.5 Configuration of System Under Test



4 GENERAL INFORMATION OF TEST FACILITY

4.1 Test Lab.:

Advance Data Technology Corporation

R & TTE Certification Division

No. 13-1, Lane 19, Wen Shan 3rd St., Kweishan, Taoyuan, Taiwan, R.O.C.

4.2 Calibration Interval :

All calibration interval of the test sites and test instruments is 12 months. The calibrations are traceable to NML/ROC and NIST/USA.

5 TEST PROCEDURES AND TEST RESULTS

5.1 Conducted Emission Measurement

5.1.1 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
ROHDE & SCHWARZ Test Receiver	ESH3	893495/006	July 26, 2001
ROHDE & SCHWARZ Spectrum Monitor	EZM	893787/013	July 14, 2001
ROHDE & SCHWARZ Artificial Mains Network	ESH3-Z5	892107/003	July 9, 2001
EMCO L.I.S.N.	3825/2	9504-2359	July 9, 2001
Shielded Room	Site 2	ADT-C02	NA

The measurement uncertainty is less than +/- 2.6dB, which is calculated as per NAMAS document NIS81.

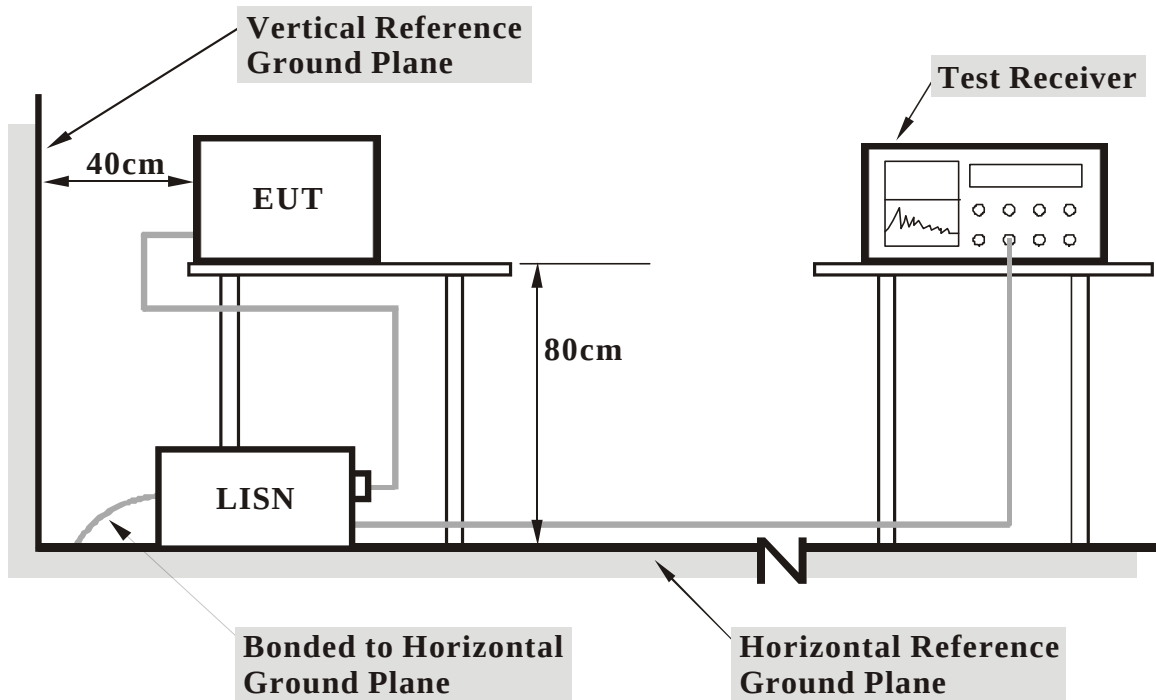
5.1.2 Test Procedure

The EUT was placed 0.4 meter from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 Ω / 50 μ H coupling impedance for the measuring instrument.

Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

The frequency range from 450 kHz to 30 MHz was searched. The emission levels over 10dB under the prescribed limits could not be reported.

5.1.3 Test Setup



- Note:** 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

5.1.4 Photograph of Test Setup





5.1.5 EUT Operating condition

1. Place the EUT on the test table
2. Shift the patch antenna according to the instruction on user's manual
3. Power on
4. Select the channel which is chosen for testing
5. Proceed measurement

5.1.6 Climate Condition

The temperature and related humidity: 26°C and 75%.

5.1.7 Test Results

MODE: CH 1		6 dB Bandwidth: 10 kHz				PHASE: LINE (L)			
Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
		Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
0.540	0.2	30.1	-	30.30	-	48	-	-17.70	-
1.041	0.2	22.3	-	22.50	-	48	-	-25.50	-
1.533	0.2	17.2	-	17.40	-	48	-	-30.60	-
6.146	0.5	12.1	-	12.60	-	48	-	-35.40	-
9.827	1.0	14.3	-	15.30	-	48	-	-32.70	-
25.301	1.3	17.4	-	18.70	-	48	-	-29.30	-

MODE: CH1		6 dB Bandwidth: 10 kHz				PHASE: Neutral(N)			
Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
		Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
0.540	0.2	35.1	-	35.30	-	48	-	-12.70	-
1.041	0.2	26.1	-	26.30	-	48	-	-21.70	-
1.533	0.2	20.1	-	20.30	-	48	-	-27.70	-
6.146	0.5	13.4	-	13.90	-	48	-	-34.10	-
9.827	0.8	15.7	-	16.50	-	48	-	-31.50	-
25.301	1.2	16.8	-	18.00	-	48	-	-30.00	-

- Remarks:
1. "*": Undetectable
 2. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 3. "-": NA
 4. The emission levels of other frequencies were very low against the limit.
 5. Margin value = Emission level - Limit value
 6. Emission Level = Correction Factor + Reading Value.

MODE: CH 2		6 dB Bandwidth: 10 kHz				PHASE: LINE (L)			
Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
		Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
0.639	0.2	32.1	-	32.30	-	48	-	-15.70	-
1.539	0.2	19.0	-	19.20	-	48	-	-28.80	-
6.146	0.5	12.3	-	12.80	-	48	-	-35.20	-
9.542	0.7	16.3	-	17.00	-	48	-	-31.00	-
18.440	1.0	12.0	-	13.00	-	48	-	-35.00	-
25.469	1.3	17.5	-	18.80	-	48	-	-29.20	-

MODE: CH2		6 dB Bandwidth: 10 kHz				PHASE: Neutral(N)			
Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
		Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
0.639	0.2	35.7	-	35.90	-	48	-	-12.10	-
1.539	0.2	19.1	-	19.30	-	48	-	-28.70	-
6.146	0.5	13.1	-	13.60	-	48	-	-34.40	-
9.542	0.6	18.7	-	19.30	-	48	-	-28.70	-
18.440	0.9	13.7	-	14.60	-	48	-	-33.40	-
25.469	1.2	16.7	-	17.90	-	48	-	-30.10	-

- Remarks:
1. "*": Undetectable
 2. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 3. "-": NA
 4. The emission levels of other frequencies were very low against the limit.
 5. Margin value = Emission level - Limit value
 6. Emission Level = Correction Factor + Reading Value.

MODE: CH 4		6 dB Bandwidth: 10 kHz				PHASE: LINE (L)			
Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
		Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
0.537	0.2	33.1	-	33.30	-	48	-	-14.70	-
1.023	0.2	23.9	-	24.10	-	48	-	-23.90	-
1.674	0.2	17.1	-	17.30	-	48	-	-30.70	-
6.146	0.5	13.0	-	13.50	-	48	-	-34.50	-
9.542	0.7	21.7	-	22.40	-	48	-	-25.60	-
25.232	1.3	17.1	-	18.40	-	48	-	-29.60	-

MODE: CH 4		6 dB Bandwidth: 10 kHz				PHASE: Neutral(N)			
Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
		Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
0.537	0.2	35.1	-	35.30	-	48	-	-12.70	-
1.023	0.2	26.1	-	26.30	-	48	-	-21.70	-
1.674	0.2	18.2	-	18.40	-	48	-	-29.60	-
6.146	0.5	13.1	-	13.60	-	48	-	-34.40	-
9.542	0.6	14.7	-	15.30	-	48	-	-32.70	-
25.232	1.2	17.1	-	18.30	-	48	-	-29.70	-

- Remarks:
1. "*": Undetectable
 2. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 3. "-": NA
 4. The emission levels of other frequencies were very low against the limit.
 5. Margin value = Emission level - Limit value
 6. Emission Level = Correction Factor + Reading Value.



CH1

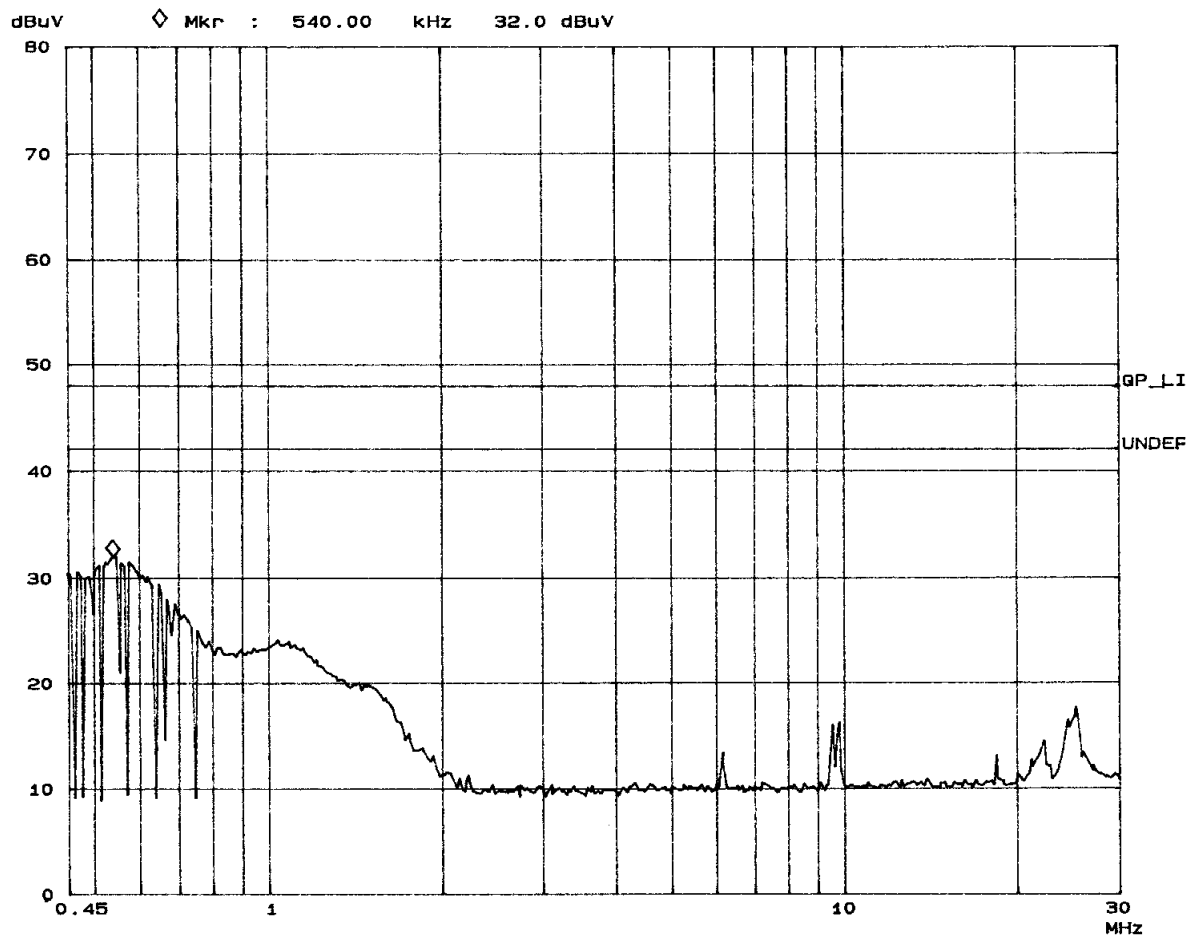
ADT CO. Shielded Room 2
FCC CLASS B

14. Jun 00 20:23

EUT: RW800A-T
Op Cond: CH 1
Operator: ELLIS
Test Spec: LISN : L
Comment: 120V AC / 60Hz

Fast Scan Settings (2 Ranges)

Frequencies			Receiver Settings					
Start	Stop	Step	IF BW	Detector	M-Time	Atten	Preamp	OpRge
450k	5M	3k	10k	PK	1ms	10dB	LN OFF	60dB
5M	30M	3k	10k	PK	1ms	10dB	LN OFF	60dB





CH1

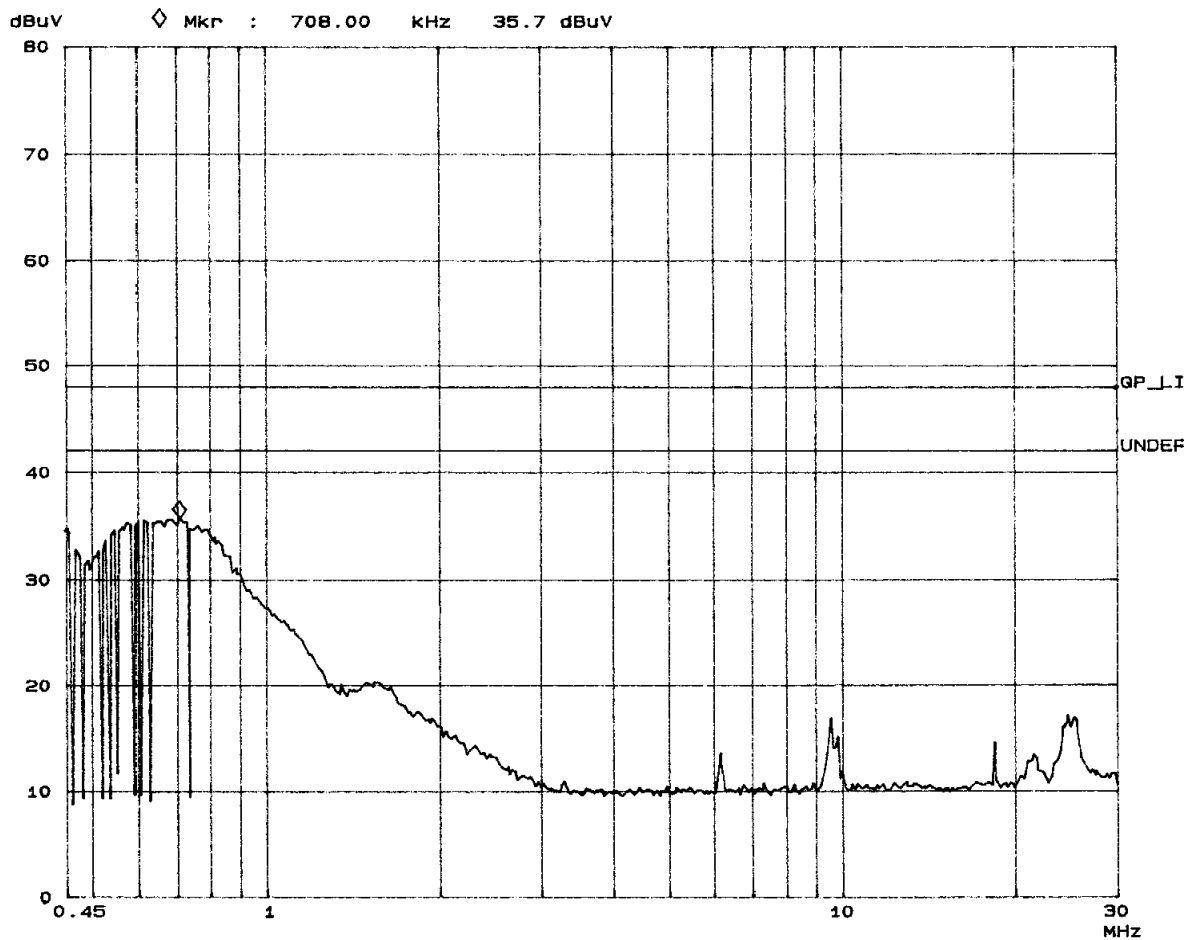
ADT CO. Shielded Room 2
FCC CLASS B

14. Jun 00 20:27

EUT: RW800A-T
Op Cond: CH 1
Operator: ELLIS
Test Spec: LISN : N
Comment: 120V AC / 60Hz

Fast Scan Settings (2 Ranges)

Frequencies			Receiver Settings					
Start	Stop	Step	IF BW	Detector	M-Time	Atten	Preamp	OpAmp
450k	5M	3k	10k	PK	1ms	10dB	LN OFF	60dB
5M	30M	3K	10K	PK	1ms	10dB	LN OFF	60dB





CH2

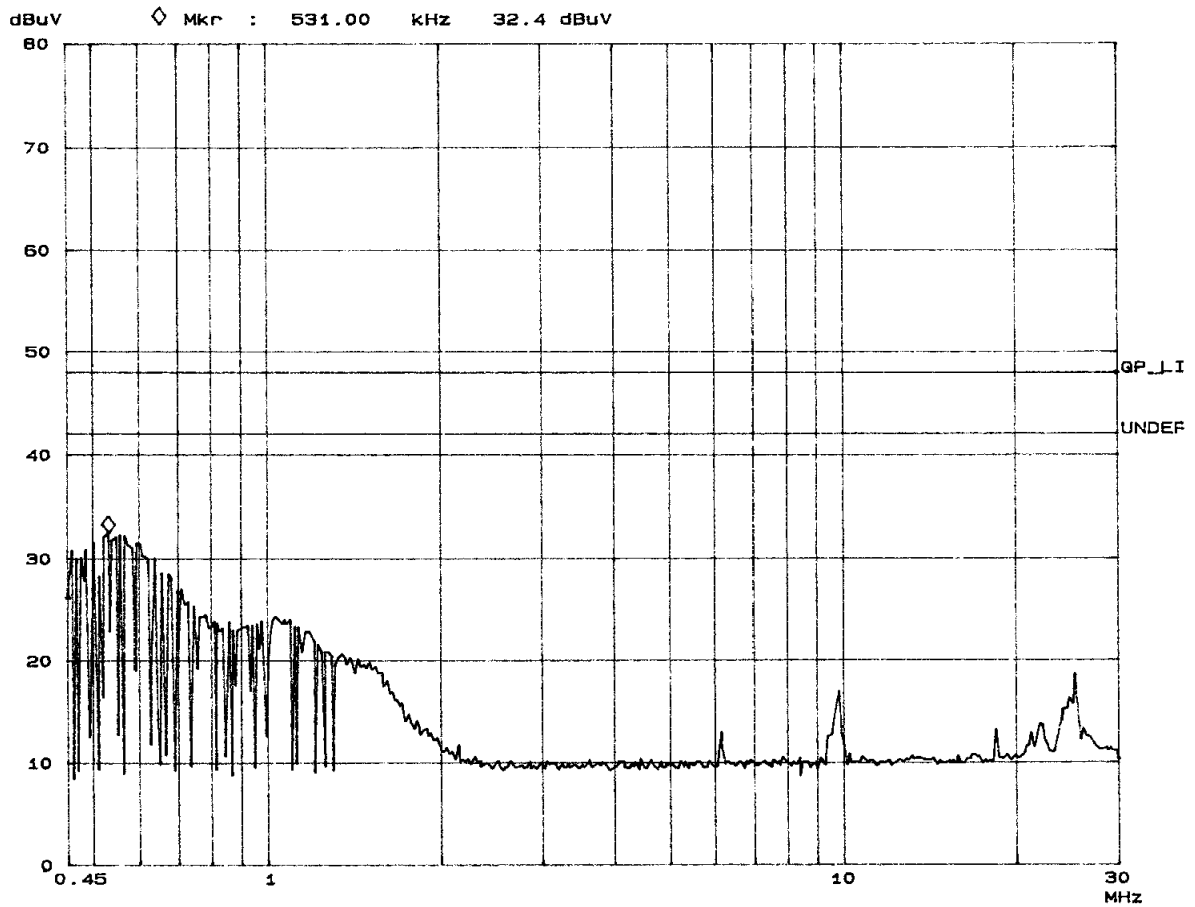
ADT CO. Shielded Room 2
FCC CLASS B

14. Jun 00 20:34

EUT: RW800A-T
Op Cond: CH 2
Operator: ELLIS
Test Spec: LISN : L
Comment: 120V AC / 60Hz

Fast Scan Settings (2 Ranges)

Frequencies			Receiver Settings					
Start	Stop	Step	IF BW	Detector	M-Time	Atten	Preamp	OpRge
450k	5M	3k	10k	PK	1ms	10dBLN	OFF	60dB
5M	30M	3k	10k	PK	1ms	10dBLN	OFF	60dB





CH2

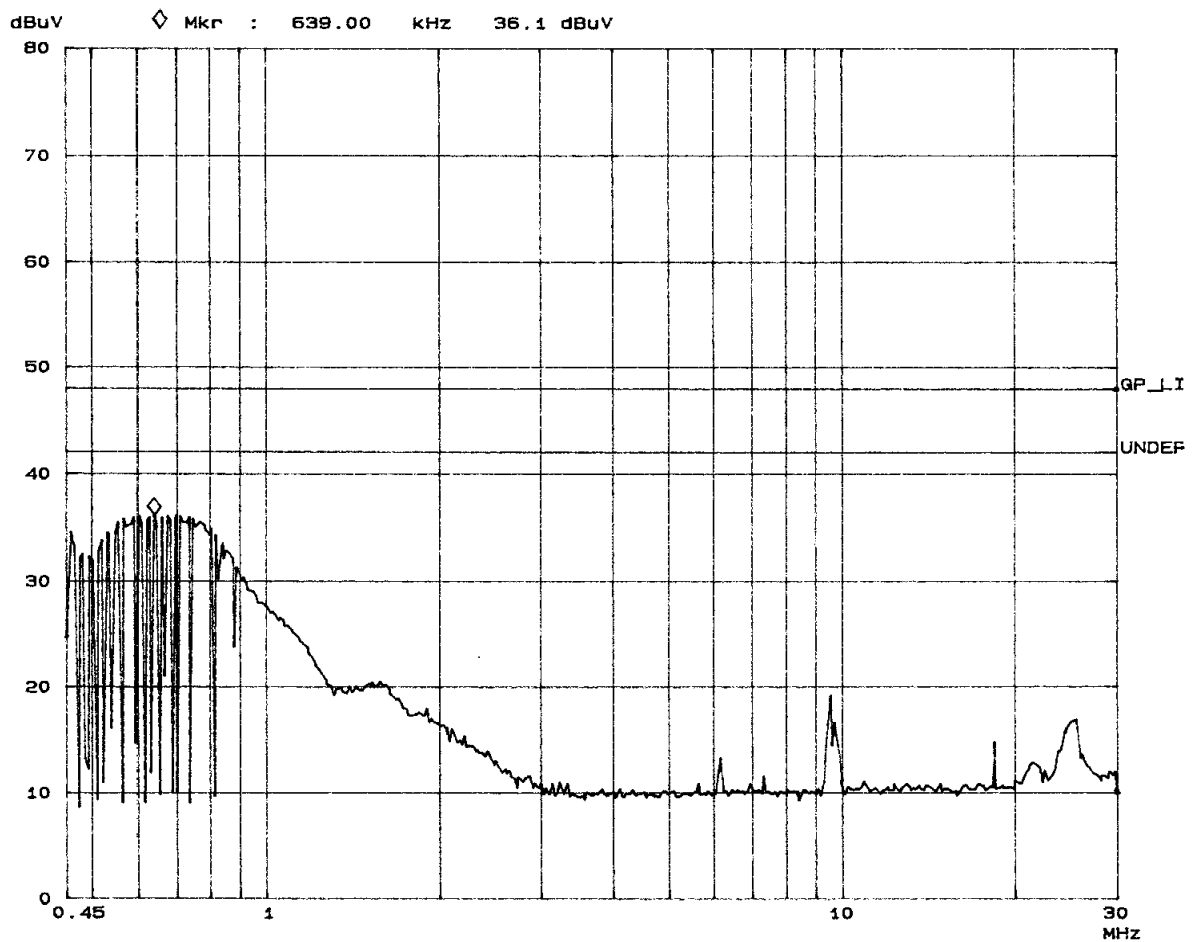
ADT CO. Shielded Room 2
FCC CLASS B

14. Jun 00 20:31

EUT: RW800A-T
Op Cond: CH 2
Operator: ELLIS
Test Spec: LISN : N
Comment: 120V AC / 60Hz

Fast Scan Settings (2 Ranges)

Frequencies			Receiver Settings					
Start	Stop	Step	IF BW	Detector	M-Time	Atten	Preamp	OpRge
450k	5M	3k	10k	PK	1ms	10dBLN	OFF	60dB
5M	30M	3k	10k	PK	1ms	10dBLN	OFF	60dB





CH4

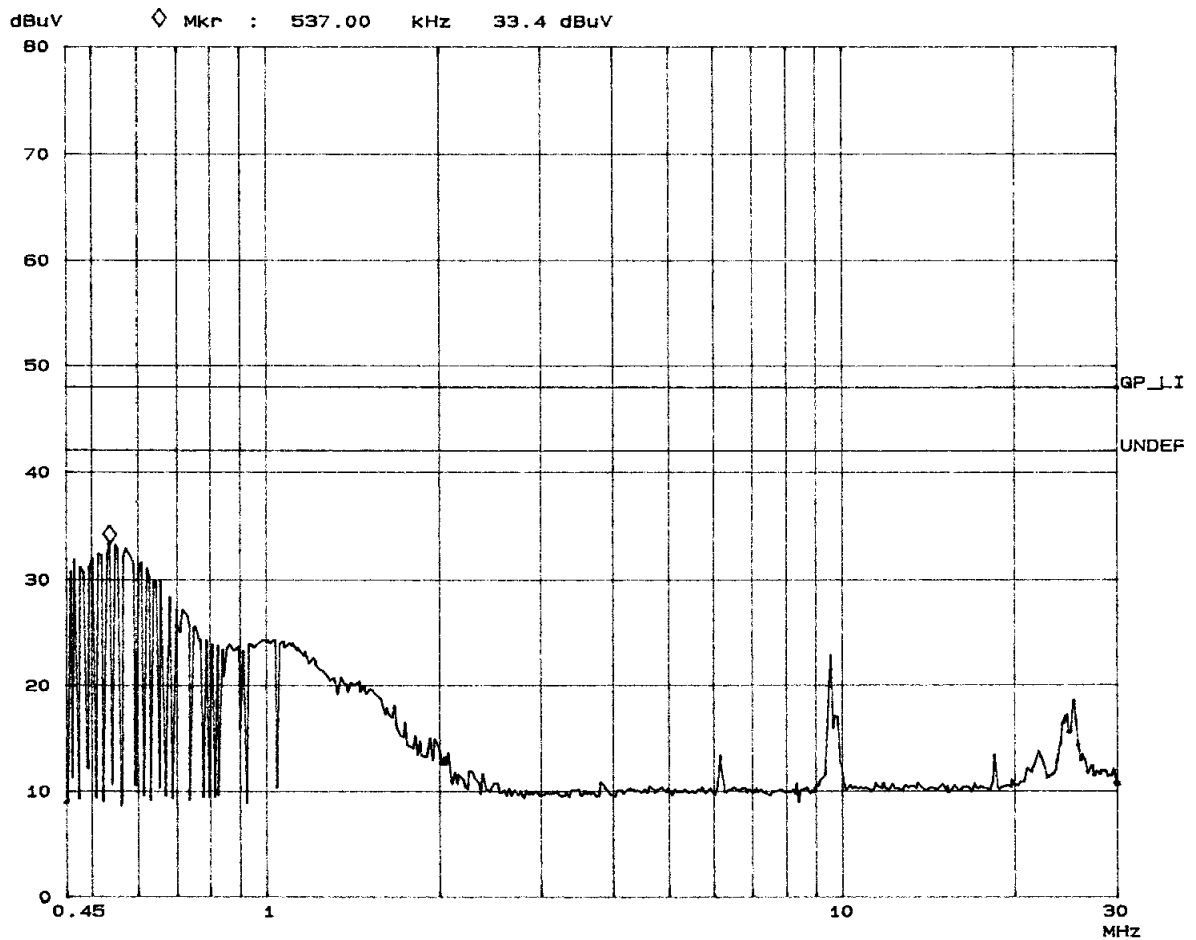
ADT CO. Shielded Room 2
FCC CLASS B

14. Jun 00 20:36

EUT: RW800A-T
Op Cond: CH 4
Operator: ELLIS
Test Spec: LISN : L
Comment: 120V AC / 60Hz

Fast Scan Settings (2 Ranges)

Frequencies			Receiver Settings					
Start	Stop	Step	IF BW	Detector	M-Time	Atten	Preamp	OpRge
450k	5M	3k	10k	PK	1ms	10dB	LN OFF	60dB
5M	30M	3k	10k	PK	1ms	10dB	LN OFF	60dB





CH4

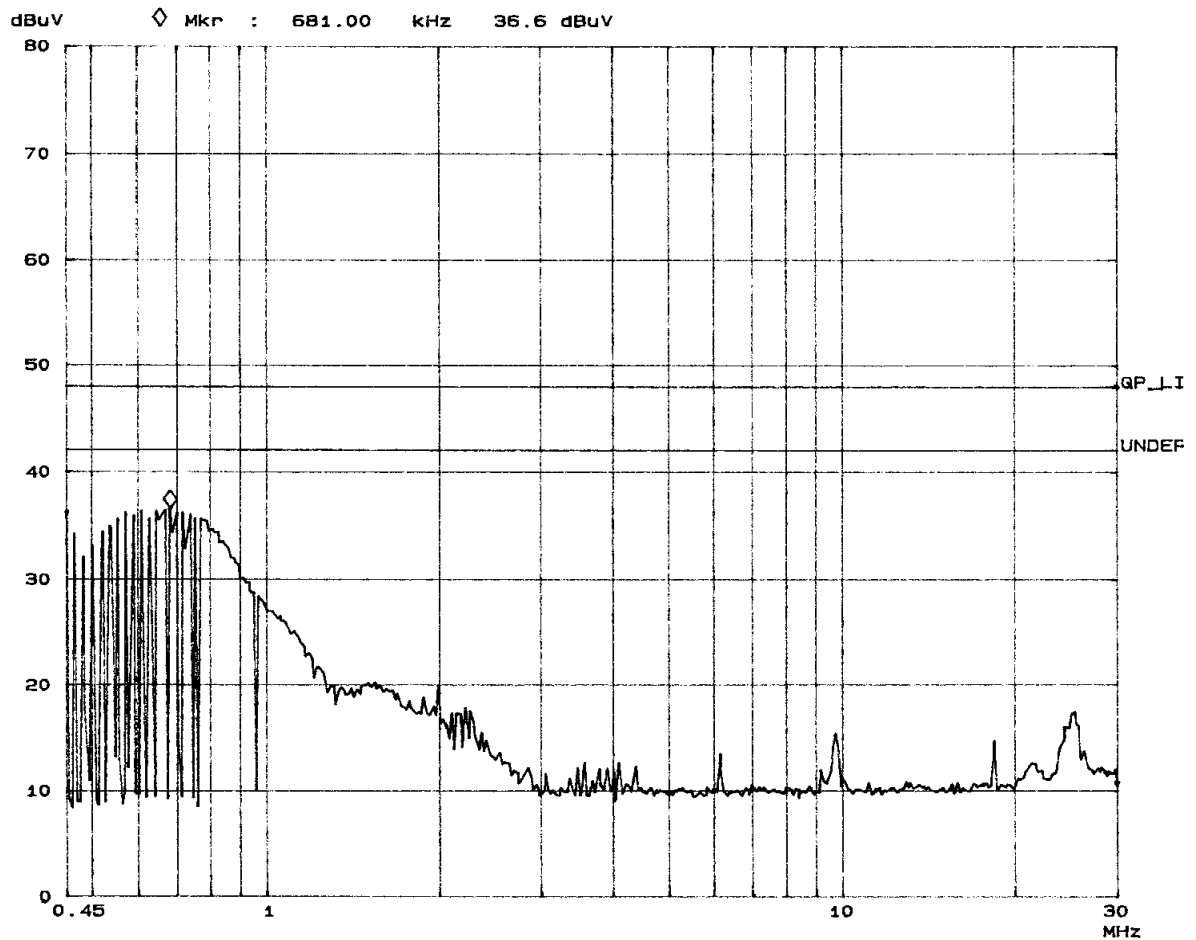
ADT CO. Shielded Room 2
FCC CLASS B

14. Jun 00 20:39

EUT: RW800A-T
Op Cond: CH 4
Operator: ELLIS
Test Spec: LISN : N
Comment: 120V AC / 60Hz

Fast Scan Settings (2 Ranges)

Frequencies			Receiver Settings					
Start	Stop	Step	IF BW	Detector	M-Time	Atten	Preamp	OpRge
450k	5M	3k	10k	PK	1ms	10dBLN	OFF	60dB
5M	30M	3k	10k	PK	1ms	10dBLN	OFF	60dB





5.2 Radiated Emission Measurement

5.2.1 Test instruments

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
HP Spectrum Analyzer	8590L	3544A01176	Apr 18, 2001
HP Preamplifier	8447D	2944A08485	Oct. 23, 2000
HP Preamplifier	8347A	3307A01088	Sep. 09, 2000
ROHDE & SCHWARZ TEST RECEIVER	ESMI	839013/007 839379/002	Aug. 3, 2001
SCHWARZBECK Tunable Dipole Antenna	VHA 9103 UHA 9105	E101051 E101055	Nov. 25, 2000
CHASE BILOG Antenna	CBL6112A	2221	Aug. 4, 2001
SCHWARZBECK Horn Antenna	BBHA9120-D	D130	Jul. 09, 2001
SCHWARZBECK Horn Antenna	BBHA9170	123	Jan. 31, 2001
EMCO Turn Table	1060	1115	N/A
SHOSHIN Tower	AP-4701	A6Y005	N/A
Open Field Test Site	Site 5	ADT-R05	Aug. 09, 2000

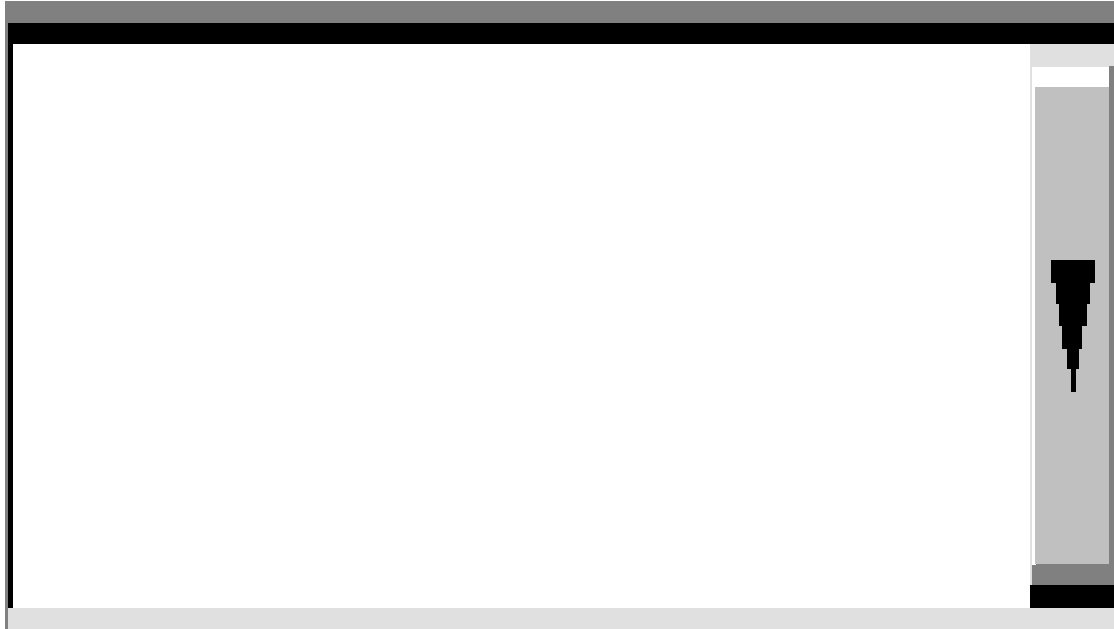
The measurement uncertainty is less than +/- 3dB, which is calculated as per NAMAS document NIS81.



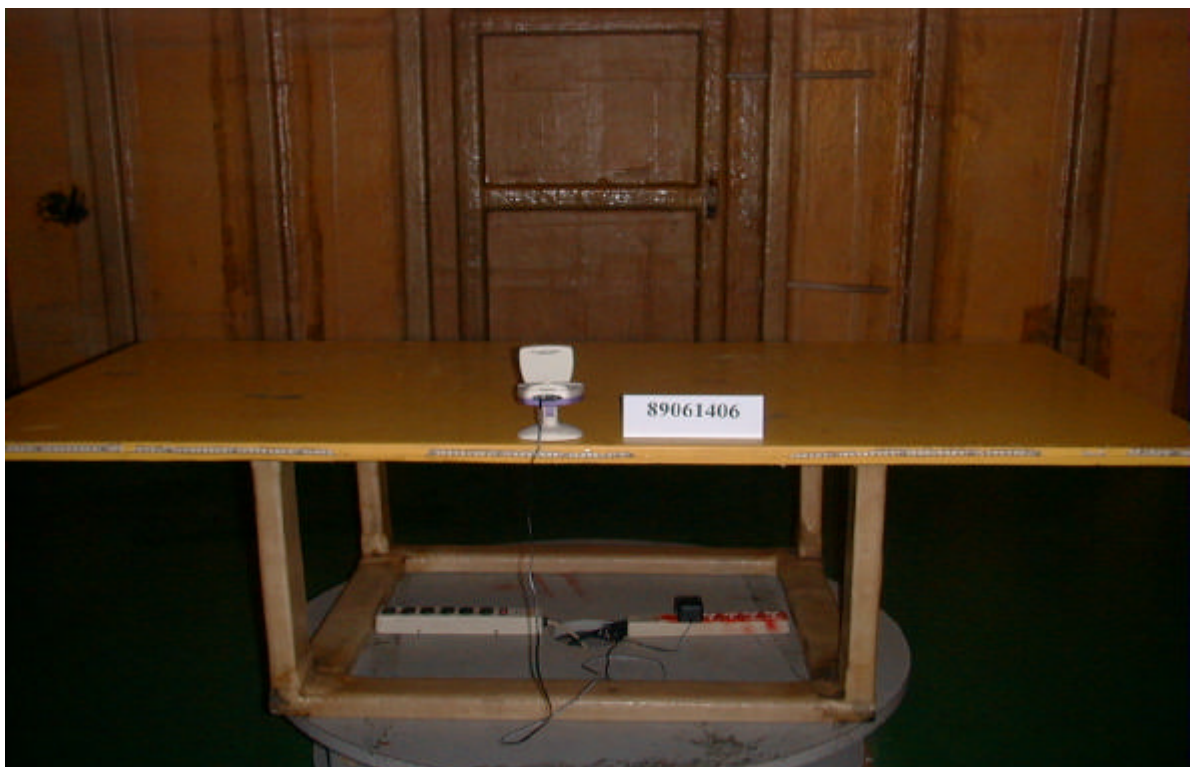
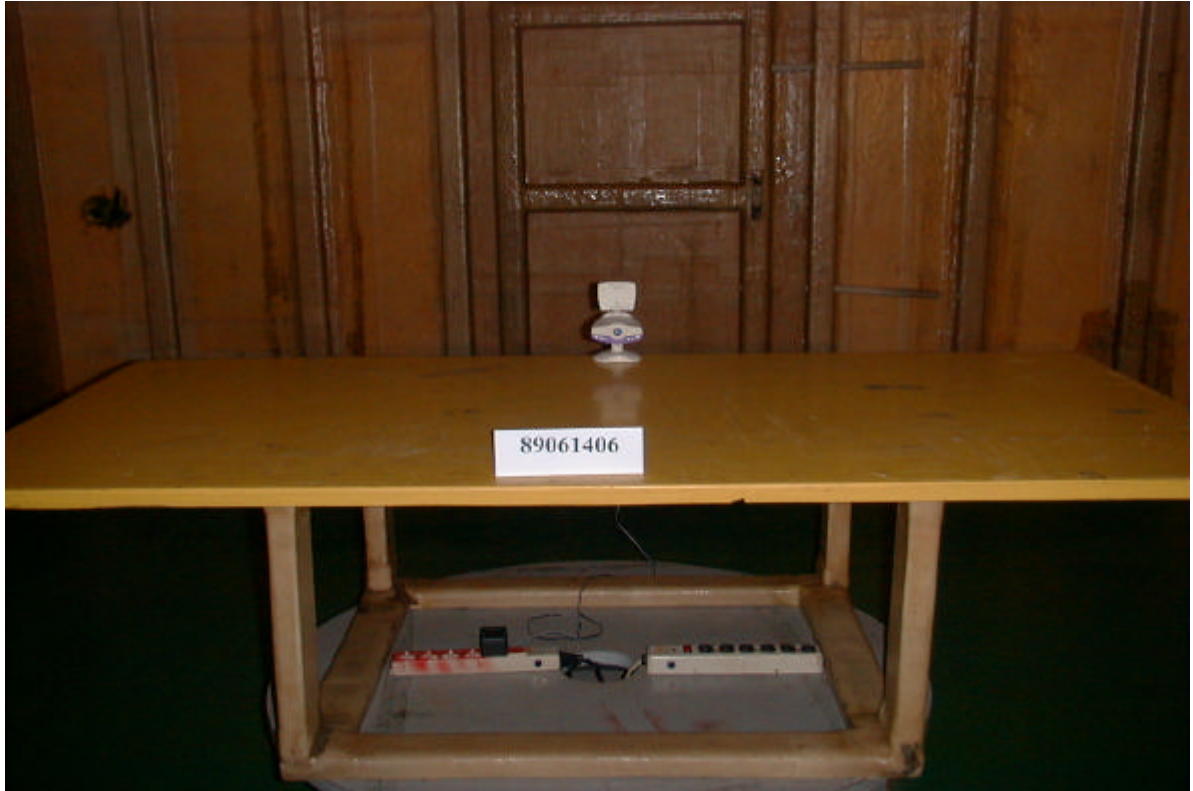
5.2.2 Test Procedures

- a. The EUT was placed on the turn table 0.8 meter above ground in 3 meter open area test site.
- b. Set the resolution bandwidth to 120KHz in the test receiver and select Peak function to scan the frequency below 1 GHz.
- c. Shift the interference-receiving antenna located in antenna tower upwards and downwards between 1 and 4 meters above ground and find out the local peak emission on frequency domain.
- d. Locate the interference-receiving antenna at the position where the local peak reach the maximum emission.
- e. Rotate the turn table and stop at the angle where the measurement device has maximum reading
- f. Shift the interference-receiving antenna again to detect the maximum emission of the local peak
- g. If the reading of the local peak under Peak function is lower than limit by 6dB, then Quasi Peak detection is not needed and this reading should be recorded. And if it is higher than Peak limit, then the test is fail. Others, switch the receiver to Quasi Peak function, set the resolution bandwidth to 100kHz and repeat the procedures C ~ F. If the reading is lower than limit, this reading should be recorded, otherwise, the test is fail.
- h. Set the resolution and video bandwidth of the spectrum analyzer to 1MHz and repeat procedures C ~ F for frequency band from 1 GHz to 10 times carrier frequency.
- i. If the reading for the local peak is lower than the Average limit, no further testing is needed in this local peak and this reading should be recorded. If it is higher than Average limit but lower than Peak limit, then set the resolution bandwidth to 1MHz and video bandwidth to 300Hz. Repeat procedures C ~ F. If the maximum reading is lower than Average limit, then this reading should be recorded. If it is higher, then the test is fail.

5.2.3 Test Setup



5.2.4 Photograph of Test Setup





5.2.5 EUT Operating Condition

1. Place the EUT on the test table
2. Shift the patch antenna according to the instruction on user's manual
3. Power on
4. Select the channel which is chosen for testing
5. Proceed measurement

5.2.6 Climate Condition

The temperature and related humidity: 26°C and 75%

5.2.7 Test Results

CHANNEL:1 ANTENNA POLARITY: Vertical		Detector Function : Quasi-Peak		6dB Bandwidth : 120 kHz.		Distance : 3 M Frequency Range : 30 – 1000 MHz.	
Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
49.19	8.4	20.4	28.8	40.0	-11.2	100	297
73.73	7.4	22.3	29.7	40.0	-10.3	137	153
86.02	9.4	17.1	26.5	40.0	-13.5	136	122
98.48	11.4	21.2	32.6	43.5	-10.9	136	313
147.99	12.2	13.0	25.2	43.5	-18.3	122	366
269.83	14.6	5.2	19.8	46.0	-26.2	148	59

CHANNEL:1 ANTENNA POLARITY: Horizontal		Detector Function : Quasi-Peak		6dB Bandwidth : 120 kHz.		Distance : 3 M Frequency Range : 30 – 1000 MHz.	
Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
49.21	8.4	13.5	21.9	40.0	-18.1	109	-2
98.10	11.3	15.0	26.3	43.5	-17.2	115	45
110.55	12.3	4.0	16.3	43.5	-27.2	129	233
270.46	14.6	7.8	22.4	46.0	-23.6	135	59
282.76	14.7	10.3	25.0	46.0	-21.0	102	64
479.38	19.3	4.8	24.1	46.0	-21.9	100	278

- Remarks:**
1. Emission level (dBuV/m) = Correction Factor (dB) + Reading value (dBuV).
 2. Correction Factor (dB) = Ant. Factor (dB)+Cable loss (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level - Limit value
 5. The limit value is defined as per 15.249

CHANNEL:2 ANTENNA POLARITY: Vertical		Detector Function : Quasi-Peak		6dB Bandwidth : 120 kHz.		Distance : 3 M Frequency Range : 30 – 1000 MHz.	
Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
61.46	6.8	19.8	26.6	40.0	-13.4	124	303
86.06	9.4	13.5	22.9	40.0	-17.1	124	48
196.69	10.3	8.7	19.0	43.5	-24.5	100	5
258.15	14.5	4.9	19.4	46.0	-26.6	158	116
270.47	14.6	4.5	19.1	46.0	-26.9	100	218
307.35	15.1	5.1	20.2	46.0	-25.8	100	340

CHANNEL:2 ANTENNA POLARITY: Horizontal		Detector Function : Quasi-Peak		6dB Bandwidth : 120 kHz.		Distance : 3 M Frequency Range : 30 – 1000 MHz.	
Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
61.26	6.8	9.1	15.9	40.0	-24.1	143	7
258.17	14.5	8.2	22.7	46.0	-23.3	135	263
258.17	14.5	9.1	23.6	46.0	-22.4	124	259
270.46	14.6	9.6	24.2	46.0	-21.8	140	93
282.75	14.7	7.3	22.0	46.0	-24.0	140	312
479.11	19.3	4.0	23.3	46.0	-22.7	160	363

- Remarks:** 1. Emission level (dBuV/m) = Correction Factor (dB) + Reading value (dBuV).
2. Correction Factor (dB) = Ant. Factor (dB)+Cable loss (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level - Limit value
5. The limit value is defined as per 15.249

CHANNEL:4 ANTENNA POLARITY: Vertical		Detector Function : Quasi-Peak		6dB Bandwidth : 120 kHz.		Distance : 3 M Frequency Range : 30 – 1000 MHz.	
Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
49.18	8.4	15.2	23.6	40.0	-16.4	154	135
98.48	11.4	18.8	30.2	43.5	-13.3	136	97
282.75	14.7	6.0	20.7	46.0	-25.3	145	263
295.05	14.9	7.1	22.0	46.0	-24.0	106	264
307.34	15.1	5.2	20.3	46.0	-25.7	157	286
479.02	19.3	7.8	27.1	46.0	-18.9	100	180

CHANNEL:4 ANTENNA POLARITY: Horizontal		Detector Function : Quasi-Peak		6dB Bandwidth : 120 kHz.		Distance : 3 M Frequency Range : 30 – 1000 MHz.	
Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
49.19	8.4	9.0	17.4	40.0	-22.6	128	241
98.48	11.4	12.0	23.4	43.5	-20.1	239	338
282.76	14.7	10.6	25.3	46.0	-20.7	110	69
295.05	14.9	9.4	24.3	46.0	-21.7	110	72
307.37	15.1	7.1	22.2	46.0	-23.8	126	85
479.38	19.3	1.7	21.0	46.0	-25.0	112	69

- Remarks:** 1. Emission level (dBuV/m) = Correction Factor (dB) + Reading value (dBuV).
2. Correction Factor (dB) = Ant. Factor (dB)+Cable loss (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level - Limit value
5. The limit value is defined as per 15.249

Channel 1 ANTENNA POLARITY: Vertical		Detector Function : Peak Average				6dB Bandwidth : 1 MHz.				Distance : 3 M Frequency Range : Above 1000 MHz.	
Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)		Antenna Height (cm)	Table Angle (Degree)
		P.K.	A.V.	P.K.	A.V.	P.K.	A.V.	P.K.	A.V.		
*2414.16	34.3	57.2	53.6	91.5	87.9	114	94	-22.5	-6.1	110	189
4828.56	41.3	17.4	3.5	58.7	44.8	74.0	54.0	-15.3	-9.2	108	217
7244.48	39.5	17.5	5.1	57.0	44.6	74.0	54.0	-17.0	-9.4	137	57
9656.00	42.1	-	-	-	-	74.0	54.0	-	-	-	-

Channel 1 ANTENNA POLARITY: Horizontal		Detector Function : Peak Average				6dB Bandwidth : 1 MHz.				Distance : 3 M Frequency Range : Above 1000 MHz.	
Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)		Antenna Height (cm)	Table Angle (Degree)
		P.K.	A.V.	P.K.	A.V.	P.K.	A.V.	P.K.	A.V.		
*2414.45	34.3	58.0	53.8	92.3	88.1	114	94	-21.7	-5.9	102	213
4828.50	41.3	17.5	3.7	58.8	45.0	74.0	54.0	-15.2	-9.0	103	165
7245.06	39.5	17.4	4.5	56.9	44.0	74.0	54.0	-17.1	-10.0	138	62
9656.00	42.1	-	-	-	-	74.0	54.0	-	-	-	-

- Remarks:**
1. Emission level (dBuV/m) = Correction Factor (dB) + Reading value (dBuV).
 2. Correction Factor (dB) = Ant. Factor (dB)+Cable loss (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level - Limit value
 5. The limit value is defined as per 15.249
 6. " * " : Fundamental Frequency

Channel 2 ANTENNA POLARITY: Vertical		Detector Function : Peak Average				6dB Bandwidth : 1 MHz.				Distance : 3 M Frequency Range : Above 1000 MHz.	
Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)		Antenna Height (cm)	Table Angle (Degree)
		P.K.	A.V.	P.K.	A.V.	P.K.	A.V.	P.K.	A.V.		
*2432.40	34.4	57.0	52.4	91.4	86.8	114	94	-22.6	-7.2	104	192
4864.27	41.2	18.0	3.1	59.2	44.3	74.0	54.0	-14.8	-9.7	131	39
7296.81	39.5	16.9	2.7	56.4	42.2	74.0	54.0	-17.6	-11.8	109	213
9728.00	42.3	-	-	-	-	74.0	54.0	-	-	-	-

Channel 2 ANTENNA POLARITY: Horizontal		Detector Function : Peak Average				6dB Bandwidth : 1 MHz.				Distance : 3 M Frequency Range : Above 1000 MHz.	
Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)		Antenna Height (cm)	Table Angle (Degree)
		P.K.	A.V.	P.K.	A.V.	P.K.	A.V.	P.K.	A.V.		
*2432.53	34.4	57.3	52.6	91.7	87.0	114	94	-22.3	-7.0	103	213
4864.43	41.2	17.4	2.1	58.6	43.3	74.0	54.0	-15.4	-10.7	102	170
7297.13	39.5	18.2	4.1	57.7	43.6	74.0	54.0	-16.3	-10.4	148	60
9728.00	42.3	-	-	-	-	74.0	54.0	-	-	-	-

- Remarks:**
1. Emission level (dBuV/m) = Correction Factor (dB) + Reading value (dBuV).
 2. Correction Factor (dB) = Ant. Factor (dB)+Cable loss (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level - Limit value
 5. The limit value is defined as per 15.249
 6. " * " : Fundamental Frequency

Channel 4 ANTENNA POLARITY: Vertical		Detector Function : Peak Average				6dB Bandwidth : 1 MHz.				Distance : 3 M Frequency Range : Above 1000 MHz.	
Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)		Antenna Height (cm)	Table Angle (Degree)
		P.K.	A.V.	P.K.	A.V.	P.K.	A.V.	P.K.	A.V.		
*2468.74	34.5	57.3	52.6	91.8	87.1	114	94	-22.2	-6.9	104	194
4936.98	41.4	16.8	2.1	58.2	43.5	74.0	54.0	-15.8	-10.5	104	218
7404.01	39.8	18.8	5.48	58.6	45.3	74.0	54.0	-15.4	-8.7	131	2
9872.00	42.5	-	-	-	-	74.0	54.0	-	-	-	-

Channel 4 ANTENNA POLARITY: Horizontal		Detector Function : Peak Average				6dB Bandwidth : 1 MHz.				Distance : 3 M Frequency Range : Above 1000 MHz.	
Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)		Antenna Height (cm)	Table Angle (Degree)
		P.K.	A.V.	P.K.	A.V.	P.K.	A.V.	P.K.	A.V.		
*2466.87	34.5	55.5	51.3	90.0	85.8	114	94	-24.0	-8.2	104	213
4936.54	41.4	16.3	1.2	57.7	42.6	74.0	54.0	-16.3	-11.4	104	183
7404.27	39.8	18.1	3.9	57.9	43.7	74.0	54.0	-16.1	-10.3	134	365
9872.00	42.5	-	-	-	-	74.0	54.0	-	-	-	-

- Remarks:**
1. Emission level (dBuV/m) = Correction Factor (dB) + Reading value (dBuV).
 2. Correction Factor (dB) = Ant. Factor (dB)+Cable loss (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level - Limit value
 5. The limit value is defined as per 15.249
 6. " * " : Fundamental Frequency

5.3 BAND EDGES MEASUREMENT

5.3.1 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
ROHDE & SCHWARZ TEST RECEIVER	ESMI	848926/005 846839/018	Dec 03, 2000
HP PLOTTER	7475A	2641V27755	N/A

The measurement uncertainty is less than +/- 2.6dB, which is calculated as per NAMAS document NIS81.

5.3.2 Test Procedure

The transmitter output was connected to the spectrum analyzer via a low lose cable. Set both RBW and VBW of spectrum analyzer to 100 kHz with suitable frequency span including 100 kHz bandwidth from band edge. The band edges was measured and recorded.

5.3.3 Test Setup





5.3.4 EUT Operating condition

1. Place the EUT on the test table
2. Shift the patch antenna according to the instruction on user's manual
3. Power on
4. Select the channel which is chosen for testing
5. Proceed measurement

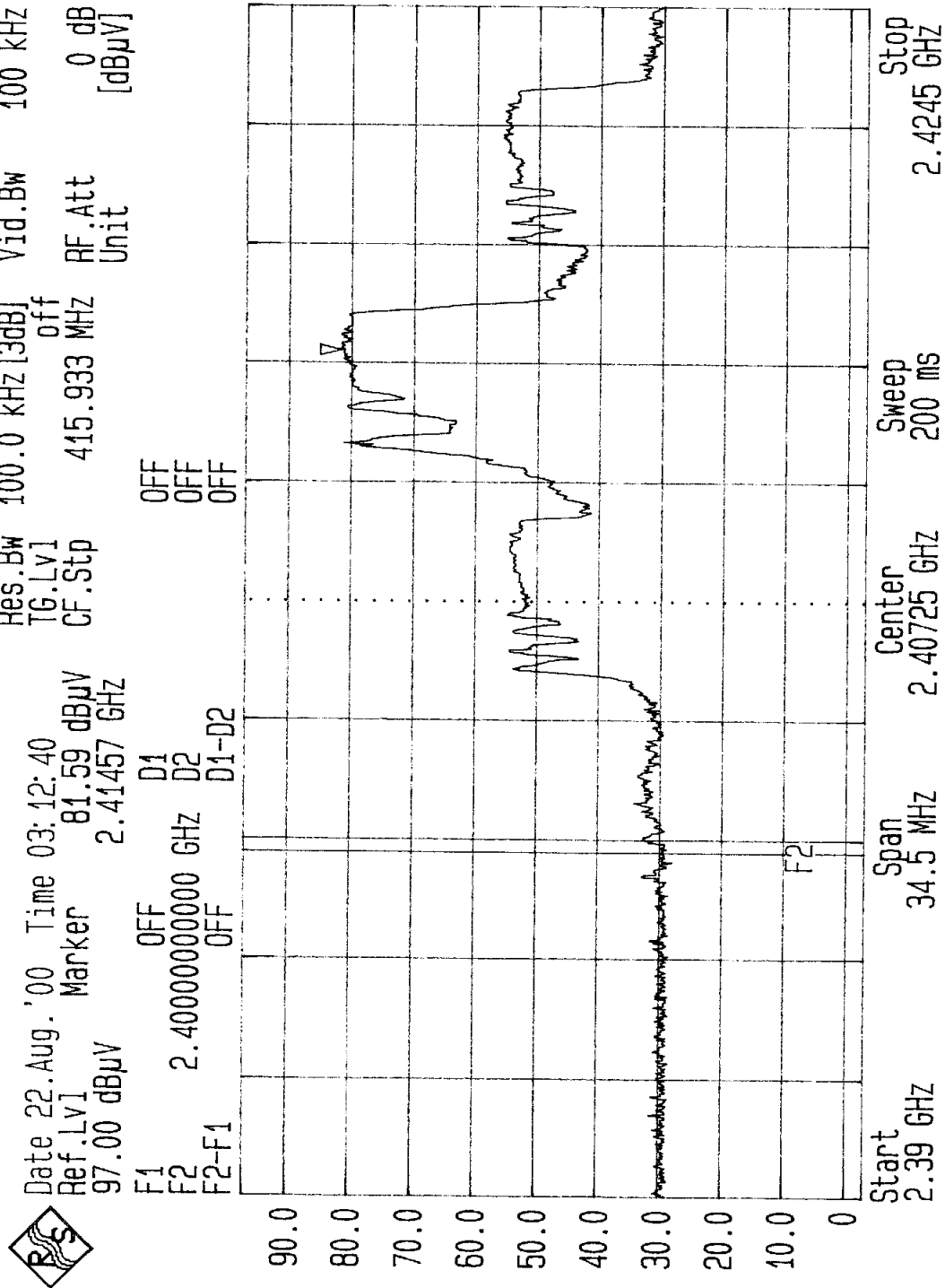
Note: This measurement is only needed for channel 1 and 4.

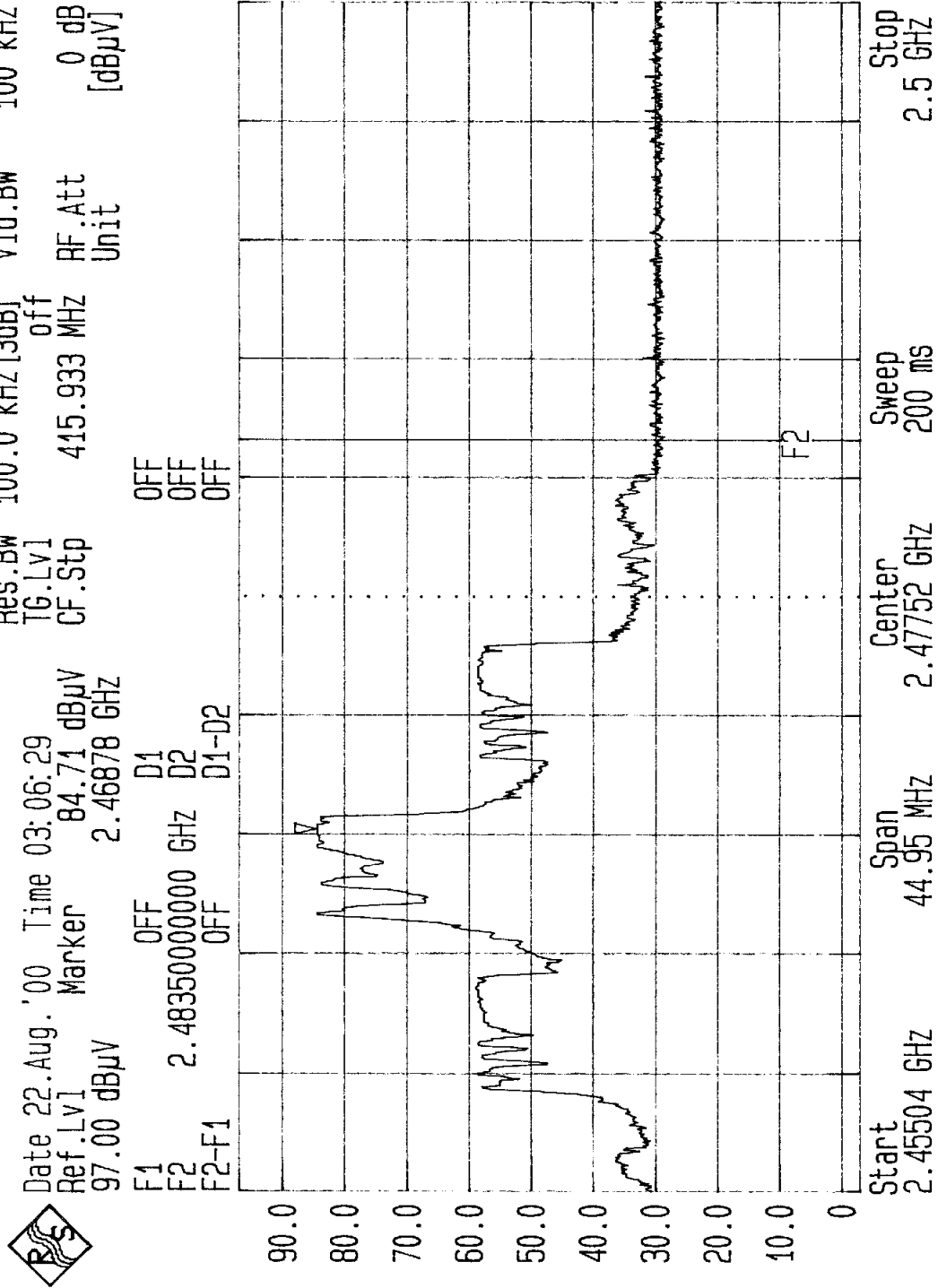
5.3.5 Climate Condition

The temperature and related humidity: 26 Degree C and 75%RH

5.3.6 Test Results

The spectrum plots are attached below.





6 EUT PHOTOS





