CLASS B CERTIFICATION APPLICATION
UNDER PART15, SUBPART B

EUT LANTERN
MODEL SU-811R,RU-811R,CU-811R
FCC ID OR3SU-811R

SRT REPORT # T9I31

PREPARED FOR

FAVOUR LIGHT ENTERPRISES LTD.
FLAT 3&4 , 17/F., PERFECT INDUSTRIAL BLDG,
31 TAI YAU STREET, SAN PO KONG,
KOWLOON, HONG KONG.

豐亮企業有限公司
FAVOUR LIGHT ENTERPRISES LTD.
九龍新蒲崗大有街31號基美工業大廈17字樓3-4室 電話：(852) 2321 6294-7, 2321 2097 圖文傳真:(852) 2352 0882
Flat 3 & 4, 17/F., Perfect Industrial Bldg, 31 Tai Yau Street, San Po Kong, Kowloon, Hong Kong Tel : 2321 6294-7, 2321 2097 Fax: (852) 2352 0882

Federal Communications Commission
Authorization and Evaluation Division
7435 Oakland Mills Road
Columbia, MD 21046

To whom it may concern :

This is to serve as proper written authorization that Spectrum Research and Testing Laboratory, Inc., 15200, Shady Grove Rd., Rockville, MD. 20850, will act as our representative in all matters relating to FCC applications for equipment approval. This includes the signing of all related documents, the transmitting of required fees, and receiving correspondence and notifications from the FCC. All acts performed by Spectrum Research and Testing Laboratory, Inc., especially modifications to our equipment under testing will be carried out on our behalf.

Meantime, the applicant certifies that in the case of an individual applicant (e.g., corporation), no party to the applicant is subject to a denial of federal benefits, that includes FCC benial of federal benefits, that includes FCC benefits, pursuant to Section 5301 of the Anti-Drug Abuse Act of 1998, 21 U.S.C. 862. For a definition of a " party " for these purposes see 47 C.F.R. 1.2002(b).

If you have any questions regarding our applications for equipment approval, please contact Spectrum Research and Testing Laboratory, Inc. by calling (301) 670-2818.

Respectfully,

Stephanie Shiu
Administrative Manageress
Date : 23-Sep-99

Effective Dates :
From 23-Sep-99 to 22-Sep-00

EMI TESTING REPORT

EUT □ LANTERN

MODEL □ SU-811R,RU-811R,CU-811R

FCC ID □ OR3SU-811R

PREPARED FOR

FAVOUR LIGHT ENTERPRISES LTD.
FLAT 3&4 , 17/F., PERFECT INDUSTRIAL BLDG,
31 TAI YAU STREET, SAN PO KONG,
KOWLOON, HONG KONG.

PREPARED BY

SPECTRUM RESEARCH & TESTING LABORATORY INC.
NO. 101-10 , LING 8 , SHAN-TONG LI CHUNG – LI CITY ,
TAOYUAN, TAIWAN , R. O. C.
TEL□ (03) 4987684 FAX□ (03) 4986528

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1. TEST REPORT CERTIFICATION

APPLICANT □ FAVOUR LIGHT ENTERPRISES LTD.

ADDRESS □ FLAT 3&4 , 17/F, PERFECT INDUSTRIAL BLDG,
31 TAI YAU STREET, SAN PO KONG,
KOWLOON, HONG KONG.

EUT DESCRIPTION □ LANTERN

(A) POWER SUPPLY □ 3V/6V

(B) MODEL □ SU-811R,RU-811R,CU811R

(C) FCC ID □ OR3SU-811R

FINAL TEST DATE 10/13/1999

MEASUREMENT PROCEDURE USED

* PART 15 SUB PART B OF FCC RULES AND REGULATIONS (47 CFR PART 15)
* ANSI C63.4 - 1992

We hereby certify that

The measurements contained in this report were made in accordance with the procedures indicated, and the energy emitted by the equipment was found to be within the limits applicable.

TESTING ENGINEER : Wei-Ming Hu DATE 10/13/1999
Wei-Ming Hu

SUPERVISOR : DATE 10/13/99
Jesse Ho

APPROVED BY : DATE 10/13/99
Johnson Ho

2 TEST STATEMENT

2 . 1 TEST STATEMENT

1. This letter is to explain the test condition of this project. The EUT be tested as the following status.

2. The data was shown in this report reflects the worst – case data for the condition as listed above. Please disregard any other oricessir (s) speed shown in this user manual.

3. EUT Conditions.

The lampstand can be operated by the remote control. Operating frequancy : 323.52MHz.

4. NVLAP logo is to be approved by management (it is according to

NVLAP requirement if it need) before use.

2.2 DEPARTURE FROM DOCUMENT POLICIES, PROCEDURE OR SPECIFICATIONS , THE STATEMNT

A . Did have
Any departure from document policies & procedures or from specifications.
Yes _____, No ___√___ .
If yes , the description as below.

B . The certificate and report shall not be reproduced except in full , without the written approval of SRT laboratory.

C . The report must not be used by the client to claim product endorsement by NVLAP or any agency the government.

D. This product is a prototype product.

E. The effect that the results relate only to the items tested.

3 EUT MODIFICATIONS

The following accessories were added to the EUT during testing □
No modifications by SRT lab.

豐亮企業有限公司
FAVOUR LIGHT ENTERPRISES LTD.
九龍新蒲崗大有街31號善美工業大廈1/F室樓3-4室 電話：(852) 2321 6294-7, 2321 2007 圖文傳真:(852) 2352 0882
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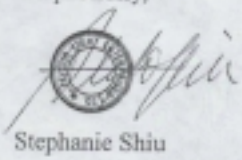
Federal Communications Commission
Authorization and Evaluation Division
7435 Oakland Mills Road
Columbia, MD 21046

To whom it may concern:

This is to serve as proper notice that our company agrees to make all modifications to FCC ID: OR3SU-811R as listed in section 3.0 of modification to submitted by Spectrum Research and Testing Laboratory, Inc.

Respectfully,



Stephanie Shiu
Administrative Manageress
Date: 23-Sep-99

Effective Dates:
From 23-Sep-99 to 22 Sep-00

4. RADIATED EMISSION TEST

4.1 TEST EQUIPMENT

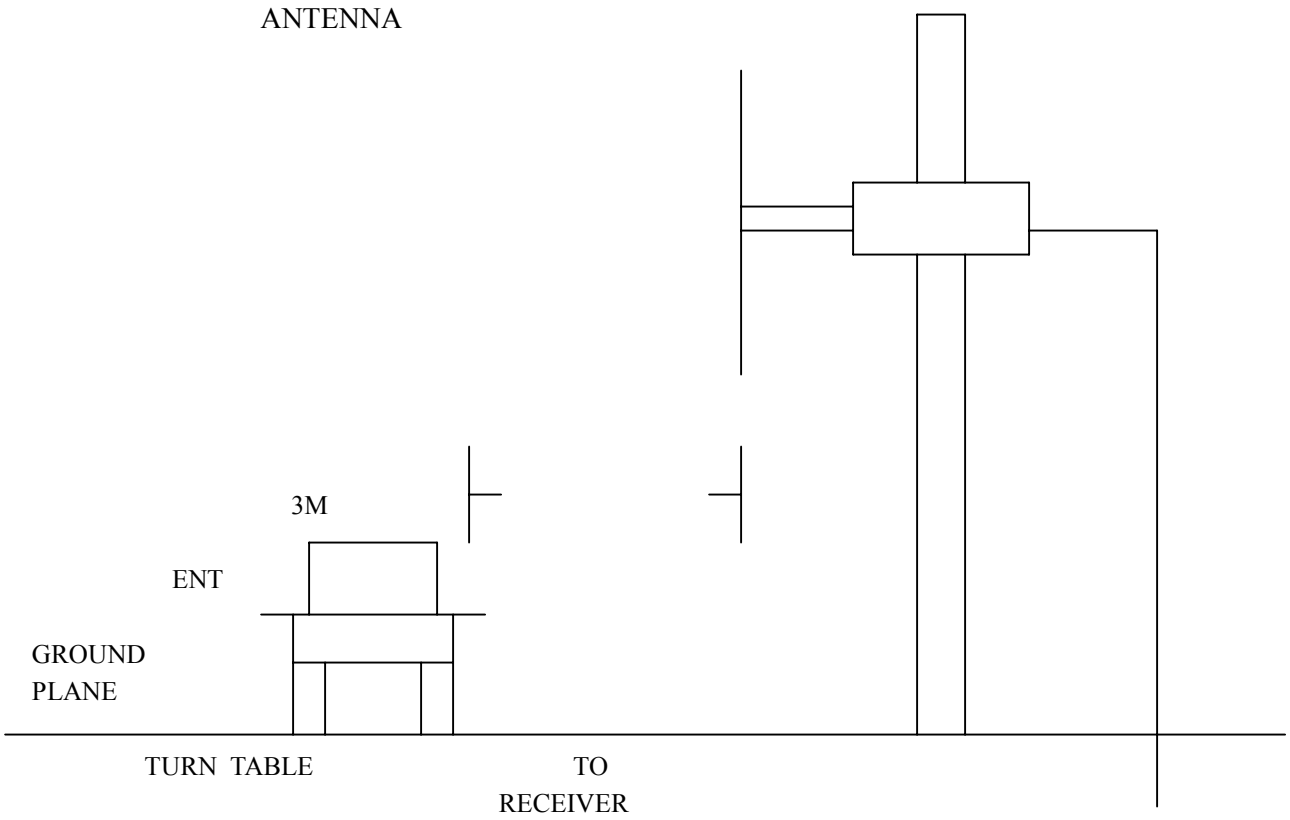
The following test equipments were used during the radiated emission test □

EQIPMENT / FACILITIES	SPECIFICA-TIONS	MANUFACTUR - ER	MODEL # / SERIAL #	DATE OF CAL. & CAL. CENTER	DUE DATE	FINAL TEST
RECEIVER	20 MHz TO 1000 MHz	R & S	ESVS30/ 841977/003	APRIL 1999 ETC	1Y	√
SPECTRUM ANALYZER	100 Hz TO 1500 MHz	HP	8568B/ 3019A05294	OCT. 1999 ETC	1Y	
SPECTRUM ANALYZER	9 KHz TO 22 GHz	HP	8593E/ 3322A00670	MAY 1999 ETC	1Y	
SPECTRUM ANALYZER	100 Hz TO 1000 MHz	IFR	A-7550/ 2684/1248	JULY 1999 ETC	1Y	
SIGNAL GENERATOR	9 KHz TO 1080 MHz	ROHDE & SCHWARZ	SMY01/ 841104/019	APRIL 1999 ETC	1Y	√
DIPOLE ANTENNA	28 MHz TO 1000 MHz	EMCO	3121C/ 9003-534	MAR. 1999 SRT	1Y	
DIPOLE ANTENNA	28 MHz TO 1000 MHz	EMCO	3121C/ 9611-1239	SEP. 1999 SRT	1Y	
BI-LOG ANTENNA	26 MHz TO 2000 MHz	EMCO	3142/ 9608-1073	SEP. 1999 SRT	1Y	√
BI-LOG ANTENNA	26 MHz TO 1100 MHz	EMCO	3143/ 9509-1152	SEP. 1999 SRT	1Y	
PRE-AMPLIFIER	0.1 MHz TO 1300 MHz	HP	8447D/ 2944A08402	APRIL 1999 ETC	1Y	
PRE-AMPLIFIER	0.1 MHz TO 1300 MHz	HP	8447D/ 2944A06412	AUGUST 1999 ETC	1Y	
HORN ANTENNA	1 GHz TO 18 GHz	EMCO	3115/ 9012-3619	JAN. 1999 EMCO	1Y	

4.2 TEST PROCEDURE

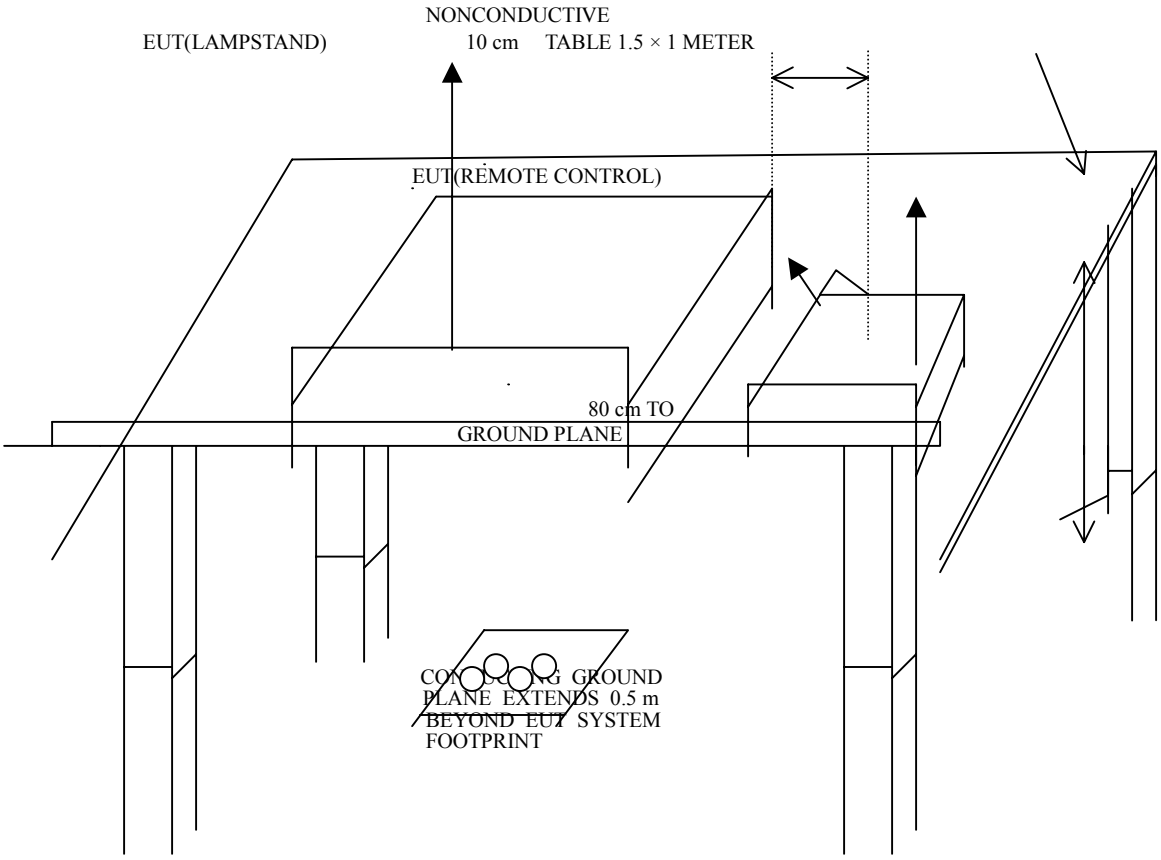
(1).The EUT was tested according to ANSI C63.4 - 1992. The radiated test was performed at SRT lab's open site. this site is on file with the FCC laboratory division, reference 31040 / SIT.
(2).The EUT, peripherals were put on the turntable which table size is 1m x 1.5 m, table high 0.8 m. All set up is according to ANSI C63.4-1992.
(3).The frequency spectrum from 30 MHz to 3 GHz was investigated. All readings from 30 MHz to 1 GHz are quasi-peak values with a resolution bandwidth of 120 KHz. All readings are above 1 GHz, peak values with a resolution bandwidth of 1 MHz. Measurements were made at 3 meters.
(4). The antenna high were varied from 1 m to 4 m high to find the maximum emission for each frequency.
(5). The antenna polarization□Vertical polarization and horizontal polarization.

4.3 RADIATED TEST SET-UP



4 . 3 RADIATED TEST SET-UP

ANSI C63.4-1992
ELECTRICAL AND ELECTRONIC EQUIIPMENT IN THE RANGE IN THE RANGE OF 9 KHz TO 40 GHz



4 . 4 CONFIGURATION OF THE EUT

The EUT was configured according to ANSI C63.4 - 1992. All interface ports were connected to the appropriate peripherals. All peripherals and cables are listed below.

A. EUT

DEVICE	MANUFACTURER	MODEL #	FCC ID / DoC
LANTERN	FAVOUR LIGHT ENTERPRISES LTD.	SU-811R,RU-811R CU-811R	OR3SU-811R

B. INTERNAL DEVICES

DEVICE	MANUFACTURER	MODEL #	FCCID / DoC
– NONE –			

C. PERIPHERALS

DEVICE	MANUFACTURER	MODEL #	FCC ID / DoC	CABLE
-NONE-				

- **REMARK**

(1). Cable - S1 □ Single point shielding.
S2 □ 360° shielding.
S3 □ Double point shielding

(2). Cables - All 1m or greater in length - bundled according to regulations.

4.5 EUT OPERATING CONDITION

Operating condition is according to ANSI C63.4 - 1992.

1. EUT power on.
2. Continue emission.
3. Operating frequency : 323.52MHz.

4.6 RADIATED EMISSION LIMITS

All emission from a digital device, including any network of

conductors and apparatus connected thereto, shall not exceed the level of field strength specified below □

CLASS B

FREQUENCY (MHz)	DISTANCE (m)	FIELS STRENGTH (uV/m)
30 - 88	3	40.0
88 - 216	3	43.5
216 - 960	3	46.0
ABOVE 960	3	54.0

NOTE □ 1. In the emission tables above, the tighter limit applies at the band edges.

2. Distance refers to the distance between measuring instrument, antenna, and the closest point of any part of the device or system.

4.7 RADIATED EMISSION TEST RESULTS

The frequency spectrum from 30 MHz to 1 GHz was investigated. All readings from 30 MHz to 1 GHz are quasi-peak values with a resolution bandwidth of 120 KHz. All readings are above 1 GHz, peak values with a resolution bandwidth of 1 MHz. Measurements were made at 3 meters.

Temperature : 30 □ Humidity : 40 %RH

FREQ. (MHz)	FACTOR (dB)	ANT. FACTOR (dB/m)	READING (dBuV)		EMISSION (dBuV/m)		LIMITS (dBuV/m)
			HORIZ	VERT	HORIZ	VERT	
323.52	1.6	15.4	32.6	37.9	49.6	54.9	75.0

55.78	0.6	9.5	*	16.8	*	26.9	40.0
94.04	0.8	8.7	17.0	*	26.5	*	43.5
179.64	1.1	10.6	17.6	*	29.3	*	43.5
716.76	2.3	21.7	14.6	*	38.6	*	46.0
853.96	2.9	22.8	11.6	*	37.3	*	46.0

REMARKS (1). *= Measurement does not apply for this frequency.
(2). Uncertainty in radiated emission measured is <+/-4dB
(3). Any departure from specification N/A
(4). Factor will include cable loss and correction factor.
(5). Sample calculation
20 log (emission) uV/m = Factor (dB)+Ant. Factor(dB/m)+reading(dBuV)
(6). Lampstand
(7). Operating frequency : 323.52MHz

SIGNED BY TESTING ENGINEER

Wei-Ming Hu

4.7 RADIATED EMISSION TEST RESULTS

The frequency spectrum from 30 MHz to 1 GHz was investigated. All readings from 30 MHz to 1 GHz are quasi-peak values with a resolution bandwidth of 120 KHz. All readings are above 1 GHz, peak values with a resolution bandwidth of 1 MHz. Measurements were made at 3 meters.

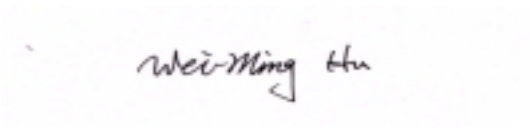
Temperature : 30 Humidity : 40 %RH

FREQ. (MHz)	FACTOR (dB)	ANT. FACTOR (dB/m)	READING (dBuV)		EMISSION (dBuV/m)		LIMITS (dBuV/m)
			HORIZ	VERT	HORIZ	VERT	
323.52	1.6	15.4	42.6	41.7	59.6	58.7	75.0
647.19	2.1	22.5	25.6	23.6	50.2	48.2	55.0

971.49	3.0	24.7	16.8	17.6	44.5	45.3	55.0
35.85	0.5	13.7	20.7	*	34.9	*	40.0
55.89	0.6	9.5	*	17.0	*	27.1	40.0
207.16	1.2	12.5	*	17.6	*	31.3	43.5

REMARKS (1). *= Measurement does not apply for this frequency.
(2). Uncertainty in radiated emission measured is <+/-4dB
(3). Any departure from specification N/A
(4). Factor will include cable loss and correction factor.
(5). Sample calculation
20 log (emission) uV/m = Factor (dB)+Ant. Factor(dB/m)+reading(dBuV)
(6). Remote control
(7). Operating frequency : 323.52MHz

SIGNED BY TESTING ENGINEER



4 . 7 RADIATED EMISSION TEST RESULTS

The frequency spectrum from 1 GHz to 3 GHz was investigated. All readings from 30 MHz to 1 GHz are quasi-peak values with a resolution bandwidth of 120 KHz . All readings are above 1 GHz , peak values with a resolution bandwidth of 1 MHz. Measurements were made at 3 meters.

Temperature : 30 Humidity : 40 %RH

FREQ. (GHz)	FACTOR (dB)	ANT. FACTOR (dB/m)	PRE-AMP (dB)	READING (dBuV)		EMISSION (dBuV/m)		LMTS (dBuV/m)
				HORIZ	VERT	HORIZ	VERT	
1.1140	3.2	24.9	36.6	*	49.1	*	40.58	54.0

1.3680	3.5	24.9	36.6	49.1	*	41.19	*	54.0
1.5080	3.7	25.7	36.2	50.0	*	43.2	*	54.0
1.7780	3.9	27.1	35.9	49.4	*	44.43	*	54.0
1.9640	4.0	28.4	35.8	*	49.5	*	46.01	54.0
2.0940	4.3	28.4	35.8	49.5	*	46.29	*	54.0

REMARKS (1). *= Measurement does not apply for this frequency.
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(4). Factor will include cable loss and correction factor.
(5). Sample calculation
20 log (emission) uV/m = Factor (dB)+Ant. Factor(dB/m)+reading(dBuV)
(6). Lampstand
(7). Operating frequency : 323.52MHz

Wei-Ming Hu

SIGNED BY TESTING ENGINEER

4.7 RADIATED EMISSION TEST RESULTS

The frequency spectrum from 1 GHz to 3 GHz was investigated. All readings from 30 MHz to 1 GHz are quasi-peak values with a resolution bandwidth of 120 KHz. All readings are above 1 GHz, peak values with a resolution bandwidth of 1 MHz. Measurements were made at 3 meters.

Temperature : 30 Humidity : 40 %RH

FREQ. (GHz)	FACTOR (dB)	ANT. FACTOR (dB/m)	PRE-AMP (dB)	READING (dBuV)		EMISSION (dBuV/m)		LMTS (dBuV/m)
				HORIZ	VERT	HORIZ	VERT	

1.2926	3.4	24.9	36.6	60.3	53.7	52.00	45.44	54.0
1.6213	3.8	25.7	36.2	57.8	*	51.10	*	54.0
1.9443	4.0	27.1	35.8	43.1	*	38.25	*	54.0
2.2673	4.6	28.4	35.8	40.2	40.2	37.36	37.35	54.0
2.5523	5.2	29.4	35.8	37.8	*	36.55	*	54.0
3.7651	5.3	30.2	35.9	37.5	*	37.12	*	54.0

REMARKS (1). *= Measurement does not apply for this frequency.
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20 log (emission) uV/m = Factor (dB)+Ant. Factor(dB/m)+reading(dBuV)
(6). Remote control
(7). Operating frequency : 323.52MHz

Wei-Ming Hu

SIGNED BY TESTING ENGINEER

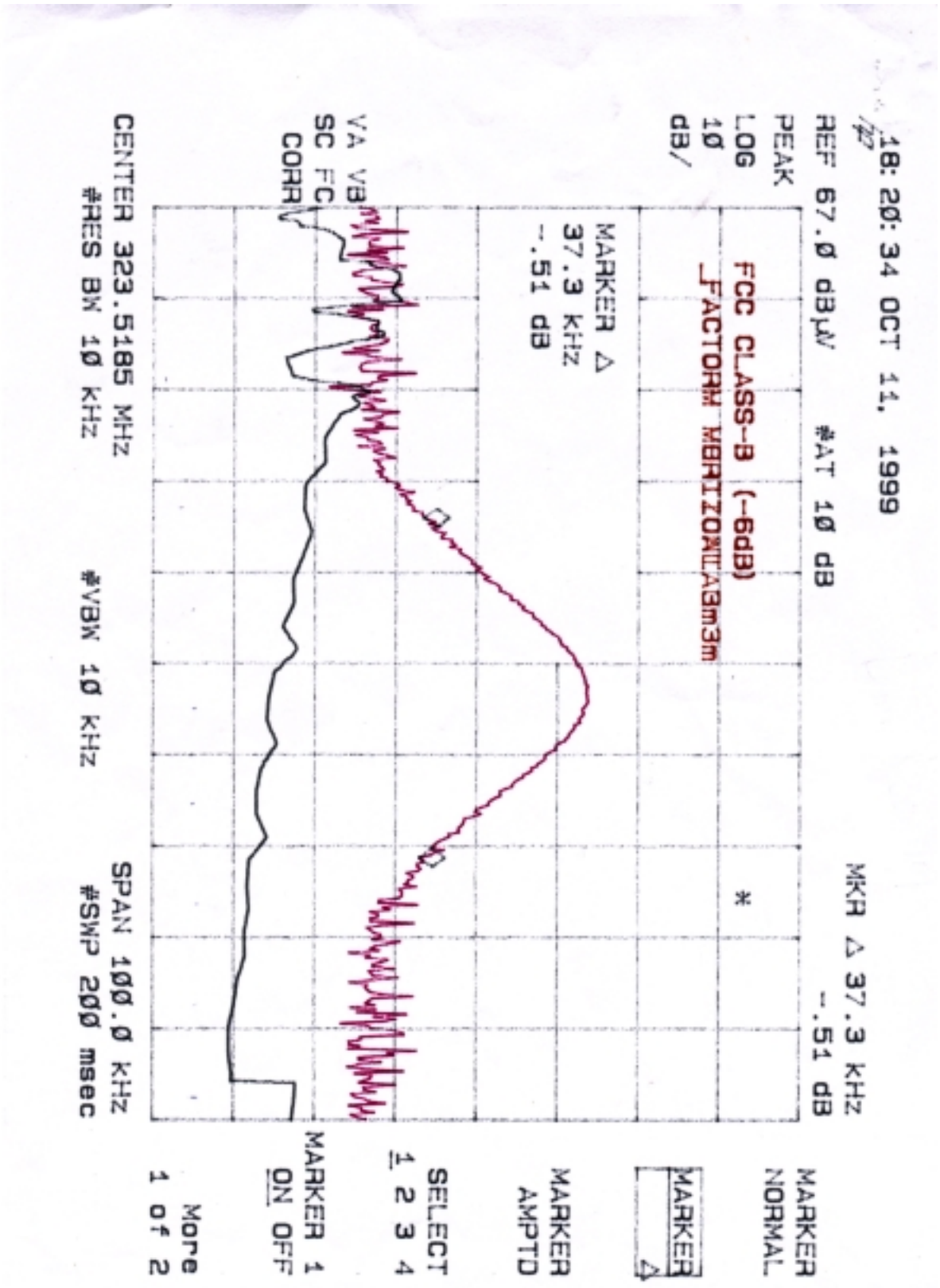
5. BANDWITH

5.1 Limit

Base channel Lampstand : Minimun 20dB bandwith= 43.8KHz
Base channel Remote : Minimun 20dB bandwith= 37.3KHz

5.2 Test Result

Please see attached plootter.


18: 20: 34 OCT 11, 1999
REF 67.0 dBµV
#AT 10 dB
MKR Δ 37.3 kHz
-.51 dB
PEAK
LOG
10
dB/
FCC CLASS-B (-6dB)
FACTOR# MBRIZON#LA3m3m
MARKER Δ
37.3 kHz
-.51 dB
VA VB
SC FC
CORR
MARKER
NORMAL
MARKER
AMPTD
MARKER
SELECT
1 2 3 4
MARKER 1
ON OFF
More
1 of 2
CENTER 323.5185 MHz
#RES BW 10 kHz
#VBW 10 kHz
SPAN 100.0 kHz
#SWP 200 msec