

EMISSION TEST REPORT

Test Report No. : 21BE0015YW-1

Applicant: CALSONIC KANSEI CORP.
Type of Equipment: Immobilizer System for Automobile
Model No.: BSVU13
Test standard: FCC Part 15 Subpart C
Test Result: Complies

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The results in this report apply only to the sample tested.

Date of test: September 13, 2000

Tested by: 
Naoki Sakamoto

Approved by:  **Issued date:** September 29, 2000
Kazutoyo Nakanishi
Section Manager of EMC section

Testing Laboratory

A-pex International Co., Ltd.

108 Yokoiwa-cho, Ise-shi Mie-ken 516-1106 JAPAN

Telephone: +81 596 39 1485

Facsimile: +81 596 39 0232

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FCC ID : K0008SVU13

3 RADIATED MEASUREMENT PHOTOS

Figure 3.1 Radiated Measurement Photos



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A-pex International Co., Ltd.

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DATA OF RADIATION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOHA NO.3 OPEN SITE

COMPANY : Calsonic Kansei Corp.
TRADE NAME : Calsonic Kansei
EQUIPMENT : Immobilizer System
MODEL : HSVU13
POWER : DC5V
DESCRIPTION : Transmitting(f=134.2KHz)
REMARKS : No1-No3 Freq. AV Detect
: No4-No6 Freq. QP Detect

REPORT NO : 21BE0015YW-1
REGULATION : FCC Part 15.209(9KHz to 30MHz)
TEST DISTANCE : 10m
ATTENUATOR : 6dB
FCC ID : KBRBSVU13

ENGINEER : Naoki Sakamoto

No.	FREQ [MHz]	ANT TYPE	READING		ANT Factor	CABLE LOSS	AMP GAIN	RESULT		LIMIT	MARGIN	
			HOR [dB μV]	VER [dB μV]				HOR [dB μV/m]	VER [dB μV/m]		HOR [dB]	VER [dB]
1	0.1337	BB	54.6	50.1	20.1	0.2	28.8	52.1	47.6	84.1	32.00	36.50
2	0.2679	BB	42.0	40.4	20.1	0.2	28.4	39.9	38.3	78.1	38.20	39.80
3	0.4018	BB	34.5	33.6	20.1	0.2	28.3	32.5	31.6	74.6	42.10	43.00
4	0.5358	BB	33.4	33.2	20.1	0.3	28.2	31.6	31.4	62.1	20.50	20.70
5	0.6698	BB	30.3	31.1	20.1	0.3	28.2	28.5	29.3	60.1	21.60	20.80
6	0.8037	BB	30.7	30.5	20.1	0.3	28.2	28.9	28.7	48.5	19.60	19.80

SAMPLE CALCULATION :

$$RESULT = READING + ANT.FACTOR + CABLE LOSS - AMP.GAIN + ATT.(6dB)$$

*Expect for the above table : adequate margin data below the limits.

DATA OF RADIATION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOHA NO.3 OPEN SITE

COMPANY	: Calsonic Kansei Corp.	REPORT NO	: 21HE0015YW-1
TRADE NAME	: Calsonic Kansei	REGULATION	: FCC Part 15.209(30MHz to 1GHz)
EQUIPMENT	: Immobilizer System	TEST DISTANCE	: 3m
MODEL	: HSVU13	ATTENUATOR	: 6dB
POWER	: DC5V	FCC ID	: KR85SVU13
DESCRIPTION	: Transmitting(f=134.25KHz)		
REMARKS	: QP Detect		

ENGINEER : Naoki Sakamoto

No.	FREQ [MHz]	ANT TYPE	READING		ANT Factor	CABLE LOSS	AMP GAIN	RESULT		LIMIT	MARGIN	
			HOR [dB μV]	VER [dB μV]				HOR [dB μV/m]	VER [dB μV/m]		HOR [dB]	VER [dB]
1	34.35	BB	28.8	37.5	16.9	1.7	28.3	25.1	33.8	40.0	14.90	6.20
2	51.53	BB	30.9	41.7	10.5	2.1	28.2	21.3	32.1	40.0	18.70	7.90
3	68.70	BB	39.0	41.9	6.9	2.5	27.8	26.6	29.5	40.0	13.40	10.50
4	85.87	BB	32.3	44.0	7.4	2.8	27.6	20.9	32.6	40.0	19.10	7.40
5	103.07	BB	31.1	40.5	10.7	3.1	27.7	23.2	32.6	43.5	20.30	10.90
6	120.26	BB	39.8	38.7	13.4	3.4	27.9	34.7	33.6	43.5	8.80	9.00
7	137.44	BB	36.5	31.7	14.5	3.6	27.7	32.9	28.1	43.5	10.60	15.40
8	206.12	BB	35.3	29.6	16.6	4.5	27.8	34.6	28.9	43.5	8.90	14.60
9	240.50	BB	34.7	27.8	16.9	4.8	27.5	34.9	28.0	46.0	11.10	18.00

SAMPLE CALCATION :

$$\text{RESULT} = \text{READING} + \text{ANT.FACTOR} + \text{CABLE LOSS} - \text{AMP.GAIN} + \text{ATT.(6dB)}$$

*Expect for the above table : adequate margin data below the limits.

PCCID.K LBSVU13

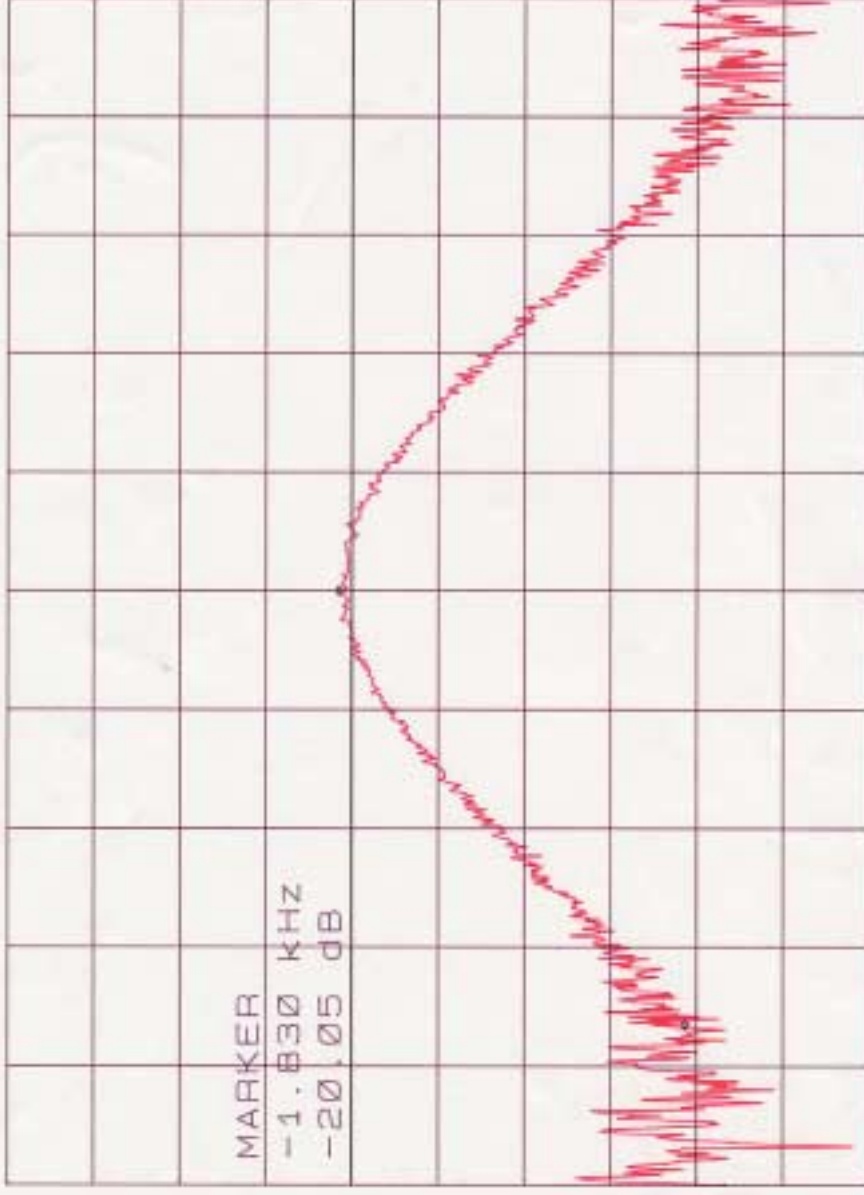
MKR -1.830 KHZ
-20.05 dB

REF 75.0 dB V ATTEN 10 dB

5 dB/

MARKER

DL
55.0
dB V
-1.830 KHZ
-20.05 dB



CENTER 133.780 KHZ
RES BW 1 KHZ

VBW 1 KHZ

BANDWIDTH HOK

SPAN 5.000 KHZ
SWP 300 msec

A3

FCC ID: KBRBSVU13

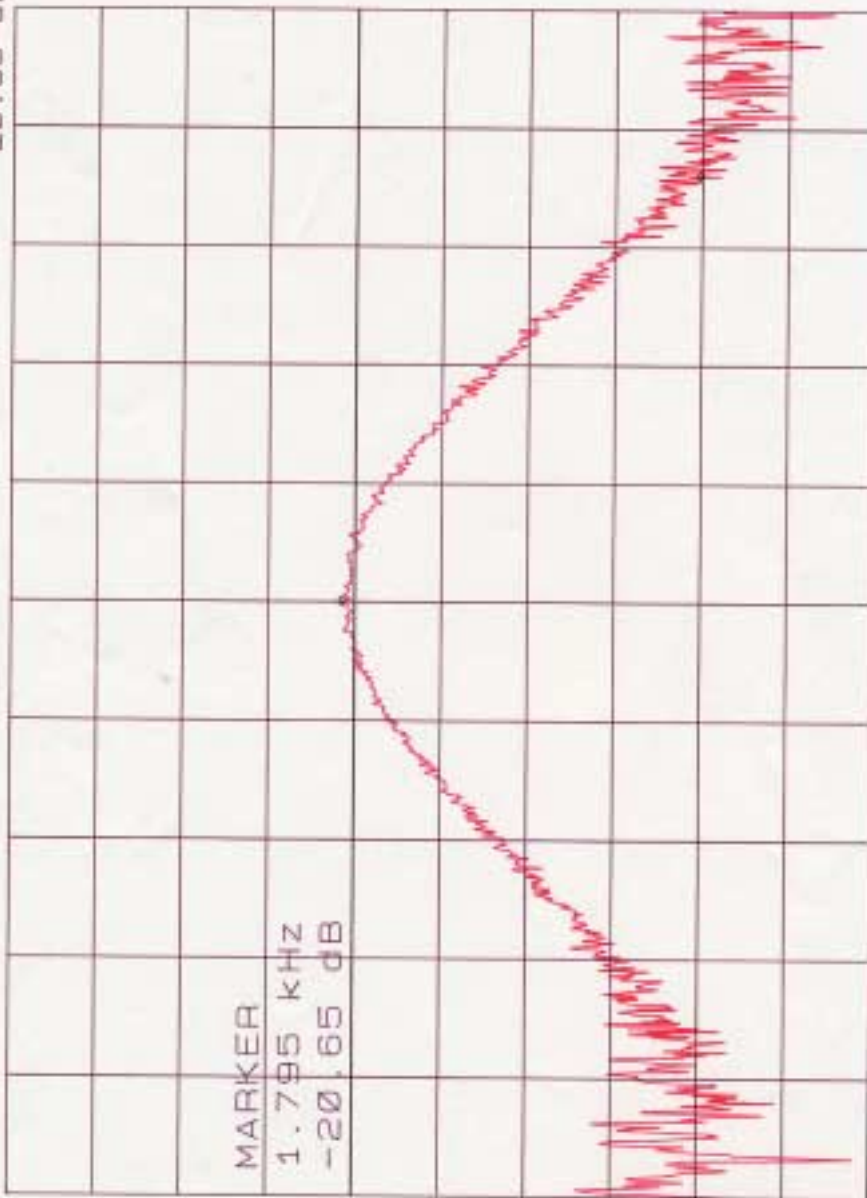
MKR 1.795 KHZ
-20.65 dB

REF 75.0 dB V ATTEN 10 dB

5 dB/

MARKER

DL 1.795 KHZ
55.0 dB V
-20.65 dB



CENTER 133.780 KHZ
RES BW 1 KHZ

VBW 1 KHZ
BANDWIDTH HOR

SPAN 5.000 KHZ
SWP 300 msec A4