



APPENDIX D

RESTRICTED BAND EMISSIONS

CONTENTS:
Restricted Band Data

INFORMATION

* CLIENT: **HYUNDAI ELECTRONICS AMERICA**
3103 NORTH FIRST STREET, SAN JOSE, CALIFORNIA, 95134
* CONTACT: **DR SANG KYOON HYUN** 408/894-0437
* PRODUCT: **PICO_BTS, DIGITAL COMMUNICATION SYSTEM**
* REPORT FILE: 2K010401
* FILE NAME: APPENDIX D
* DATE: 01/04/00
* SUBMITTED BY: ELECTRONIC COMPLIANCE LABORATORIES, INC.
1249 BIRCHWOOD DRIVE, SUNNYVALE, CALIFORNIA 94089

* CONTACT: **CHIP MATHENY** 408/747-1490 CHIP@ECLABS.COM





Electronic Compliance Laboratories, Inc.
 1249 Birchwood Drive, Sunnyvale, California 94089
 408/747-1490 – www.eclabs.com

Restricted Band

Agency/Limits: FCC 15.205

Frequency Range: 1000 MHz-20 GHz

EUT/Client Information

Client Name: Hyundai
 E.U.T Name: Pico-BTS (800 MHz)
 Serial Number: Prototype
 FCC ID: CLKPIC800
 Notes:

Test Information

Support Device(s): None Required

Operator: Jook

Date: 2/16/2000

Serial Number(s): N/A

Start Time: N/A

Report File Name: 2K010401A

Exercise Program: Normal Operation

Site: 3/10 M OATS

Modifications: N/A

Site Cal Date: March 1999

NOTES:

FREQ MHZ	READIN G dBuV	PK. or AVG.	A.F dB	CABLE dB	FILTER dB	AMP dB	TOTAL dBuV/m	LIMIT dBuV/m	DELTA dB
FUND 880.68									
1761.36	65.0	Pk	27.4	6.4	35.0	0.0	63.8	74.0	-10.2
1761.36	49.6	Avg	27.4	6.4	35.0	0.0	48.3	54.0	-5.7
2642.04	45.5	Pk	30.6	8.0	35.0	0.0	49.1	74.0	-24.9
2642.04	31.6	Avg	30.6	8.0	35.0	0.0	35.2	54.0	-18.8
3522.72	53.7	Pk	32.5	9.6	35.0	0.0	60.8	74.0	-13.2
3522.72	42.0	Avg	32.5	9.6	35.0	0.0	49.1	54.0	-4.9
4403.40	38.8	Pk	34.0	11.4	35.0	0.0	49.3	74.0	-24.7
4403.40	32.5	Avg	34.0	11.4	35.0	0.0	42.9	54.0	-11.1
5284.08	44.5	Pk	34.8	13.7	35.0	0.0	58.0	74.0	-16.0
5284.08	33.0	Avg	34.8	13.7	35.0	0.0	46.5	54.0	-7.5
6164.76	36.7	Pk	37.3	15.3	35.0	0.0	54.2	74.0	-19.8
6164.76	23.0	Avg	37.3	15.3	35.0	0.0	40.6	54.0	-13.4
7045.44	38.5	Pk	36.8	16.4	35.0	0.0	56.7	74.0	-17.3
7045.44	27.5	Avg	36.8	16.4	35.0	0.0	45.7	54.0	-8.3
7926.12	41.5	Pk	37.8	17.7	35.0	0.0	62.0	74.0	-12.0
7926.12	28.3	Avg	37.8	17.7	35.0	0.0	48.8	54.0	-5.2
8806.80	40.5	Pk	37.3	18.6	35.0	0.0	61.4	74.0	-12.6
8806.80	27.7	Avg	37.3	18.6	35.0	0.0	48.6	54.0	-5.4
1761.36	65.0	Pk	27.4	6.4	35.0	0.0	63.8	74.0	-10.2



Fund =		885.00							
1770.00	62.7	Pk	27.4	6.4	35.0	0.0	61.4	74.0	-12.6
1770.00	48.2	Avg	27.4	6.4	35.0	0.0	46.9	54.0	-7.1
2655.00	58.1	Pk	30.6	8.0	35.0	0.0	61.7	74.0	-12.3
2655.00	36.4	Avg	30.6	8.0	35.0	0.0	40.0	54.0	-14.0
3540.00	47.4	Pk	32.5	9.6	35.0	0.0	54.5	74.0	-19.5
3540.00	27.6	Avg	32.5	9.6	35.0	0.0	34.7	54.0	-19.3
4425.00	46.1	Pk	34.0	11.4	35.0	0.0	56.5	74.0	-17.5
4425.00	31.0	Avg	34.0	11.4	35.0	0.0	41.4	54.0	-12.6
5310.00	44.8	Pk	34.8	13.8	35.0	0.0	58.5	74.0	-15.5
5310.00	28.6	Avg	34.8	13.8	35.0	0.0	42.3	54.0	-11.7
6195.00	34.5	Pk	37.3	15.3	35.0	0.0	52.1	74.0	-21.9
6195.00	21.7	Avg	37.3	15.3	35.0	0.0	39.2	54.0	-14.8
7080.00	40.7	Pk	36.8	16.6	35.0	0.0	59.0	74.0	-15.0
7080.00	27.7	Avg	36.8	16.6	35.0	0.0	46.0	54.0	-8.0
7965.00	40.5	Pk	37.8	18.2	35.0	0.0	61.5	74.0	-12.5
7965.00	28.8	Avg	37.8	18.2	35.0	0.0	49.8	54.0	-4.2
8850.00	35.8	Pk	37.3	18.7	35.0	0.0	56.9	74.0	-17.1
8850.00	28.5	Avg	37.3	18.7	35.0	0.0	49.5	54.0	-4.5

Fund =		889.32							
1778.64	63.0	Pk	27.4	6.4	35.0	0.0	61.8	74.0	-12.2
1778.64	45.5	Avg	27.4	6.4	35.0	0.0	44.3	54.0	-9.7
2667.96	45.7	Pk	30.6	8.0	35.0	0.0	49.3	74.0	-24.7
2667.96	34.0	Avg	30.6	8.0	35.0	0.0	37.6	54.0	-16.4
3557.28	44.7	Pk	32.5	9.7	35.0	0.0	51.9	74.0	-22.1
3557.28	34.0	Avg	32.5	9.7	35.0	0.0	41.2	54.0	-12.8
4446.60	48.2	Pk	34.0	11.4	35.0	0.0	58.6	74.0	-15.4
4446.60	35.7	Avg	34.0	11.4	35.0	0.0	46.1	54.0	-7.9
5335.92	48.3	Pk	34.8	13.8	35.0	0.0	61.9	74.0	-12.1
5335.92	30.5	Avg	34.8	13.8	35.0	0.0	44.2	54.0	-9.8
6225.24	44.3	Pk	37.3	15.3	35.0	0.0	61.9	74.0	-12.1
6225.24	31.5	Avg	37.3	15.3	35.0	0.0	49.1	54.0	-4.9
7114.56	40	Pk	36.8	16.7	35.0	0.0	58.5	74.0	-15.5
7114.56	27.67	Avg	36.8	16.7	35.0	0.0	46.2	54.0	-7.8
8003.88	41.2	Pk	38.4	17.7	35.0	0.0	62.3	74.0	-11.7
8003.88	28.3	Avg	38.4	17.7	35.0	0.0	49.5	54.0	-4.6
8893.20	40.3	Pk	37.3	18.7	35.0	0.0	61.4	74.0	-12.6
8893.20	27.8	Avg	37.3	18.7	35.0	0.0	48.9	54.0	-5.1

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Restricted Band

Agency/Limits: FCC 15.205

Frequency Range: 1000MHz-20GHz

EUT/Client Information

Client Name: Hyundai Electronics America
E.U.T Name: Pico-BTS
Serial Number: Prototype
FCC ID: CLKPIC1900
Notes: Block E

Test Information

Support Device(s): None Required

Operator: Jook

Date: 08/08/99

Serial Number(s): N/A

Start Time: N/A

Report File Name: 90722501

Exercise Program: Normal Operation

Site: 3/10 M OATS

Modifications: N/A

Site Cal Date: March 1999

NOTES:

FREQ MHZ	READIN G dBuV	PK. or AVG.	A.F dB	CABLE dB	FILTER dB	AMP dB	TOTAL dBuV/m	LIMIT dBuV/m	DELTA dB
3932.5	48.2	Pk	32.5	11.0	35.0	0.0	56.7	74.0	-17.3
3932.5	36.7	Avg	32.5	11.0	35.0	0.0	45.2	54.0	-8.8
5898.75	33.5	Pk	35.6	14.5	35.0	0.0	48.6	74.0	-25.4
5898.75	31.5	Avg	35.6	14.5	35.0	0.0	46.6	54.0	-7.4
7865	39.7	Pk	37.8	17.7	35.0	0.0	60.1	74.0	-13.9
7865	21.3	Avg	37.8	17.7	35.0	0.0	41.8	54.0	-12.2
9831.25	42.5	Pk	38.0	20.5	35.0	0.0	66.0	74.0	-8.0
9831.25	16.3	Avg	38.0	20.5	35.0	0.0	39.8	54.0	-14.2
11797.5	42.5	Pk	40.9	24.6	35.0	0.0	73.0	74.0	-1.0



11797.5	11.0	Avg	40.9	24.6	35.0	0.0	41.5	54.0	-12.5
13763.75	35.7	Pk	40.8	31.7	35.0	0.0	73.2	74.0	-0.8
13763.75	16.0	Avg	40.8	31.7	35.0	0.0	53.5	54.0	-0.5
15730	30.2	Pk	41.7	32.2	35.0	0.0	69.1	74.0	-4.9
15730	11.8	Avg	41.7	32.2	35.0	0.0	50.7	54.0	-3.3
Fund= 1967.5									
3935	42.2	Pk	32.5	11.0	35.0	0.0	50.7	74.0	-23.3
3935	34.7	Avg	32.5	11.0	35.0	0.0	43.2	54.0	-10.8
5902.5	41.2	Pk	35.6	14.7	35.0	0.0	56.5	74.0	-17.5
5902.5	32.8	Avg	35.6	14.7	35.0	0.0	48.1	54.0	-5.9
7870	47.3	Pk	37.8	17.7	35.0	0.0	67.8	74.0	-6.2
7870	30.8	Avg	37.8	17.7	35.0	0.0	51.3	54.0	-2.7
9837.5	36.8	Pk	38.0	20.5	35.0	0.0	60.3	74.0	-13.7
9837.5	25.3	Avg	38.0	20.5	35.0	0.0	48.8	54.0	-5.2
11805	36.8	Pk	40.9	25.0	35.0	0.0	67.7	74.0	-6.3
11805	21.8	Avg	40.9	25.0	35.0	0.0	52.7	54.0	-1.3
13772.5	36.0	Pk	40.8	31.7	35.0	0.0	73.5	74.0	-0.5
13772.5	10.8	Avg	40.8	31.7	35.0	0.0	48.3	54.0	-5.7
15740	31.0	Pk	41.7	32.2	35.0	0.0	69.9	74.0	-4.1
15740	10.3	Avg	41.7	32.2	35.0	0.0	49.2	54.0	-4.8
Fund = 1968.8					26.0				
3937.5	47.3	Pk	32.5	11.0	35.0	0.0	55.9	74.0	-18.1
3937.5	38.7	Avg	32.5	11.0	35.0	0.0	47.2	54.0	-6.8
5906.25	33.5	Pk	35.6	14.7	35.0	0.0	48.8	74.0	-25.2
5906.25	27.3	Avg	35.6	14.7	35.0	0.0	42.6	54.0	-11.4
7875	37.7	Pk	37.8	17.7	35.0	0.0	58.1	74.0	-15.9
7875	31.7	Avg	37.8	17.7	35.0	0.0	52.1	54.0	-1.9
9843.75	39.2	Pk	38.0	20.5	35.0	0.0	62.6	74.0	-11.4
9843.75	28.3	Avg	38.0	20.5	35.0	0.0	51.8	54.0	-2.2
11812.5	36.7	Pk	40.9	25.0	35.0	0.0	67.6	74.0	-6.4
11812.5	17.5	Avg	40.9	25.0	35.0	0.0	48.4	54.0	-5.6
13781.25	31.33	Pk	40.8	31.7	35.0	0.0	68.8	74.0	-5.2
13781.25	11	Avg	40.8	31.7	35.0	0.0	48.5	54.0	-5.5
15750	33.67	Pk	41.7	32.3	35.0	0.0	72.7	74.0	-1.3
15750	11.83	Avg	41.7	32.3	35.0	0.0	50.8	54.0	-3.2

*QP= Quasi-Peak P= Peak

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Restricted Band

Agency/Limits: FCC 15.205

Frequency Range: 1000 MHZ-20 GHz

EUT/Client Information

Client Name: Hyundai
E.U.T Name: Pico-BTS
Serial Number: Prototype
FCC ID: CLKPIC1900
Notes: Block F

Test Information

Support Device(s): None Required

Operator: Jook

Date: 08/09/99

Serial Number(s): N/A

Start Time: N/A

Report File Name: 9080401

Exercise Program: Normal Operation

Site: 3/10 M OATS

Modifications: N/A

Site Cal Date: March 1999

NOTES:

FREQ MHZ	READING dBuV	PK. or AVG.	A.F dB	CABLE dB	FILTER dB	AMP dB	TOTAL dBuV/m	LIMIT dBuV/m	DELTA dB
3942.5	43.8	Pk	32.5	11.0	35.0	0.0	52.4	74.0	-21.6
3942.5	32.2	Avg	32.5	11.0	35.0	0.0	40.7	54.0	-13.3
5913.75	40.3	Pk	35.6	14.7	35.0	0.0	55.6	74.0	-18.4
5913.75	29.3	Avg	35.6	14.7	35.0	0.0	44.6	54.0	-9.4
7885	47.7	Pk	37.8	17.7	35.0	0.0	68.1	74.0	-5.9
7885	27.0	Avg	37.8	17.7	35.0	0.0	47.5	54.0	-6.5
9856.25	37.3	Pk	38.0	20.4	35.0	0.0	60.7	74.0	-13.3
9856.25	26.5	Avg	38.0	20.4	35.0	0.0	49.9	54.0	-4.1
11827.5	37.3	Pk	40.9	25.0	35.0	0.0	68.2	74.0	-5.8



11827.5	16.8	Avg	40.9	25.0	35.0	0.0	47.7	54.0	-6.3
13798.75	25.3	Pk	40.8	31.7	35.0	0.0	62.8	74.0	-11.2
13798.75	11.5	Avg	40.8	31.7	35.0	0.0	49.0	54.0	-5.0
15770	34.0	Pk	41.7	32.3	35.0	0.0	73.0	74.0	-1.0
15770	12.0	Avg	41.7	32.3	35.0	0.0	51.0	54.0	-3.0
Fund = 1972.5									
3945	43.7	Pk	32.5	11.0	35.0	0.0	52.2	74.0	-21.8
3945	31.7	Avg	32.5	11.0	35.0	0.0	40.2	54.0	-13.8
5917.5	41.5	Pk	35.6	14.7	35.0	0.0	56.8	74.0	-17.2
5917.5	28.8	Avg	35.6	14.7	35.0	0.0	44.1	54.0	-9.9
7890	49.0	Pk	37.8	17.7	35.0	0.0	69.5	74.0	-4.5
7890	26.8	Avg	37.8	17.7	35.0	0.0	47.3	54.0	-6.7
9862.5	37.3	Pk	38.0	20.4	35.0	0.0	60.7	74.0	-13.3
9862.5	26.2	Avg	38.0	20.4	35.0	0.0	49.6	54.0	-4.4
11835	38.5	Pk	40.9	25.0	35.0	0.0	69.4	74.0	-4.6
11835	16.8	Avg	40.9	25.0	35.0	0.0	47.7	54.0	-6.3
13807.5	32.0	Pk	40.8	31.6	35.0	0.0	69.4	74.0	-4.6
13807.5	12.5	Avg	40.8	31.6	35.0	0.0	49.9	54.0	-4.1
15780	20.3	Pk	41.7	32.3	35.0	0.0	59.3	74.0	-14.7
15780	12.7	Avg	41.7	32.3	35.0	0.0	51.7	54.0	-2.3
Fund = 1973.8									
3947.5	47.3	Pk	32.5	11.0	35.0	0.0	55.9	74.0	-18.1
3947.5	33.2	Avg	32.5	11.0	35.0	0.0	41.7	54.0	-12.3
5921.25	35.0	Pk	35.6	14.7	35.0	0.0	50.3	74.0	-23.7
5921.25	28.8	Avg	35.6	14.7	35.0	0.0	44.1	54.0	-9.9
7895	43.8	Pk	37.8	17.7	35.0	0.0	64.3	74.0	-9.7
7895	26.8	Avg	37.8	17.7	35.0	0.0	47.3	54.0	-6.7
9868.75	38.3	Pk	38.0	20.4	35.0	0.0	61.7	74.0	-12.3
9868.75	26.5	Avg	38.0	20.4	35.0	0.0	49.9	54.0	-4.1
11842.5	37.8	Pk	40.9	25.0	35.0	0.0	68.7	74.0	-5.3
11842.5	11.2	Avg	40.9	25.0	35.0	0.0	42.1	54.0	-11.9
13816.25	24.5	Pk	40.8	31.6	35.0	0.0	61.9	74.0	-12.1
13816.25	16	Avg	40.8	31.6	35.0	0.0	53.4	54.0	-0.6
15790	25.33	Pk	41.7	32.3	35.0	0.0	64.3	74.0	-9.7
15790	11.5	Avg	41.7	32.3	35.0	0.0	50.5	54.0	-3.5

*QP= Quasi-Peak

P= Peak

