

TEST REPORT

of

FCC Part 22 Subpart H and Part 24 Subpart E

FCC ID: TQ8-AT240B1AN

Equipment Under Test : DIGITAL CAR AVNT SYSTEM

Model Name : AT240B1AN

Serial No. : N/A

Applicant : HYUNDAI MOBIS CO., LTD.

Manufacturer : HYUNDAI MOBIS CO., LTD.

Date of Test(s) : 2013.08.26 ~ 2013.08.27

Date of Issue : 2013.09.02

In the configuration tested, the EUT complied with the standards specified above.

Tested By:



Date:

2013.09.02

Harim Lee

Approved By:



Date:

2013.09.02

Feel Jeong

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1. General information

1.1. Testing laboratory

SGS Korea Co., Ltd. (Gunpo Laboratory)

- Wireless Div. 3FL, 18-34, Sanbon-dong, Gunpo-si, Gyeonggi-do, Korea 435-040

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1.2. Details of applicant

Applicant : HYUNDAI MOBIS CO., LTD.
Address : 80-9, Mabook-Dong, Giheung-Gu, Yongin-shi, Gyunggi-Do, 446-912, South Korea
Contact Person : Kim, Jong-Tae
Phone No. : +82 31 260 0092

1.3. Description of EUT

Kind of Product	DIGITAL CAR AVNT SYSTEM
Model Name	AT240B1AN
Serial Number	N/A
Power Supply	DC 14.4 V (Vehicle Battery)
Rated Power	CDMA800: 24 dB m CDMA1 900: 24 dB m
Frequency Range	CDMA800: 824.70 MHz ~ 848.31 MHz CDMA1 900: 1 851.25 MHz ~ 1 908.75 MHz
Antenna Gain	CDMA800: 2.26 dB i CDMA1 900: 3.61 dB i
Support Mode	1xRTT, 1xEV-DO
Emission Designator	CDMA800 (1xRTT): 1M27F9W CDMA1 900 (1xRTT): 1M27F9W CDMA800 (1xEV-DO): 1M27F9W CDMA1 900 (1xEV-DO): 1M27F9W

1.4. Declaration by the manufacturer

- Long cable than original cable and CDMA antenna change

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1.5. Description of test mode

The transmitter has a maximum average output power as follows:

1xRTT

Cellular Band

Frequency (MHz)	Service Option (SO)	Channel	Average Output Power (dB m)
824.70	RC5 9 (Loopback)	1 013	23.55
836.52		384	24.08
848.31		777	23.88

PCS Band

Frequency (MHz)	Service Option (SO)	Channel	Average Output Power (dB m)
1 851.25	RC1 55 (Loopback)	25	23.38
1 880.00		600	23.55
1 908.75		1 175	23.51

1xEV-DO Release 0

Cellular Band - RTAP

Frequency (MHz)	RTAP Rate	Channel	Average Output Power (dB m)
824.70	9.6	1 013	23.64
836.52		384	24.17
848.31		777	23.89

PCS Band - RTAP

Frequency (MHz)	RTAP Rate	Channel	Average Output Power (dB m)
1 851.25	76.8	25	23.33
1 880.00		600	23.94
1 908.75		1 175	23.82

CDMA (800 / 1 900)

We found out the test mode with the highest power level after we investigated average output power of all the modulations and (or) data rates for each mode. So we chose below test mode as a representative of worst case.

- CDMA (800) 1xRTT : RC5 / 9 (Loopback), 1xEV-DO Rel0 : RTAP / 9.6
- CDMA (1 900) 1xRTT : RC1 / 55 (Loopback), 1xEV-DO Rel0 : RTAP / 76.8

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1.6. Sample calculation for offset

Where relevant, the following sample calculation is provided:

1.6.1. Conducted test

Offset value (dB) = Directional Coupler (dB) + Attenuator (dB) + Cable loss (dB)

1.6.2. Radiation test

E.R.P. & E.I.R.P. = [S.G level + Amp.](dB m) - Cable loss(dB) + Ant. gain (dB d/dB i)

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1.7. Test equipment list

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Interval	Cal. Due.
Signal Generator	R&S	SMBV100A	255834	Jun. 26, 2013	Annual	Jun. 26, 2014
Signal Generator	R&S	SMR40	100272	Aug. 10, 2013	Annual	Aug. 10, 2014
Spectrum Analyzer	R&S	FSV30	100768	Mar. 28, 2013	Annual	Mar. 28, 2014
Mobile Test Unit	Agilent	E5515C	GB43345198	Mar. 29, 2013	Annual	Mar. 29, 2014
Low Pass Filter	Mini-Circuits	NLP-1200+	V8979400903-1	Jun. 12, 2013	Annual	Jun. 12, 2014
High Pass Filter	Wainwright	WHK3.0/18G-10SS	344	Jun. 08, 2013	Annual	Jun. 08, 2014
High Pass Filter	Wainwright	WHKX1.5/15G-6SS	4	Mar. 30, 2013	Annual	Mar. 30, 2014
Preamplifier	H.P.	8447F	2944A03909	Jun. 28, 2013	Annual	Jun. 28, 2014
Preamplifier	R&S	SCU 18	10117	Jan. 14, 2013	Annual	Jan. 14, 2014
Preamplifier	MITEQ Inc.	JS44-18004000-35-8P	1546891	Jul. 13, 2013	Annual	Jul. 13, 2014
Test Receiver	R&S	ESU26	100109	Feb. 28, 2013	Annual	Feb. 28, 2014
Bilog Antenna	SCHWARZBECK MESSELEKTRONIK	VULB9163	396	Jun. 07, 2013	Biennial	Jun. 07, 2015
Horn Antenna	R&S	HF 906	100326	Nov. 23, 2011	Biennial	Nov. 23, 2013
Horn Antenna	SCHWARZBECK MESSELEKTRONIK	BBHA9170	BBHA9170431	May 15, 2012	Biennial	May 15, 2014
Dipole Antenna	SCHWARZBECK MESSELEKTRONIK	VHA/UHA	9103/9105	May 09, 2013	Biennial	May 09, 2015
Antenna Master	INNCO	MM4000	N/A	N.C.R.	N/A	N.C.R.
Turn Table	INNCO	DS 1200S	N/A	N.C.R.	N/A	N.C.R.
Anechoic Chamber	SY Corporation	L × W × H (9.6 m × 6.4 m × 6.4 m)	N/A	N.C.R.	N/A	N.C.R.

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1.8. Summary of test results

The EUT has been tested according to the following specifications:

APPLIED STANDARD : FCC Part 22 Subpart H, Part 24 Subpart E		
Section in FCC part	Test Item	Result
§2.1046 §22.913(a) §24.232(c)	RF Radiated Output Power	Complied
§2.1053 §22.917(a) §24.238(a)	Spurious Radiated Emission	Complied
§2.1046	Conducted Output Power	Complied

1.9. Test report revision

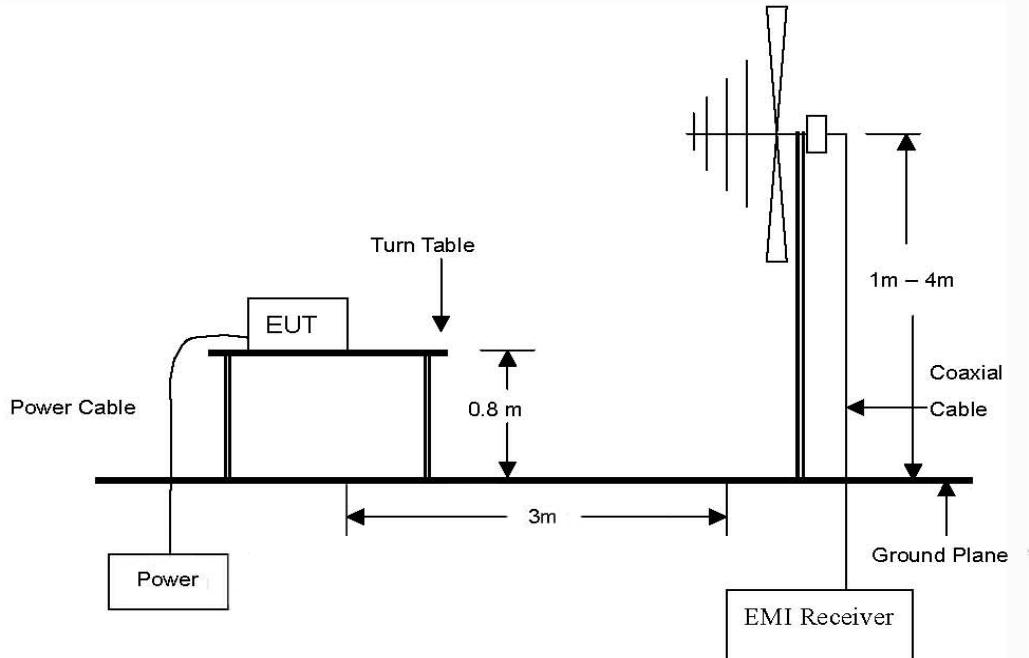
Revision	Report number	Description
0	F690501/RF-RTL006917	Initial

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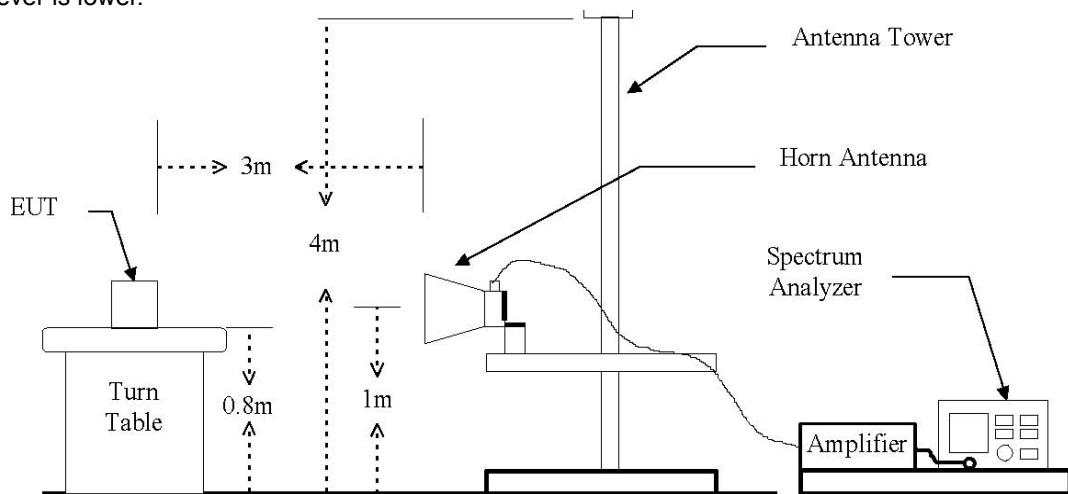
2. RF radiated output power & spurious radiated emission

2.1. Test setup

The diagram below shows the test setup that is utilized to make the measurements for emission from 30 MHz to 1 GHz Emissions.

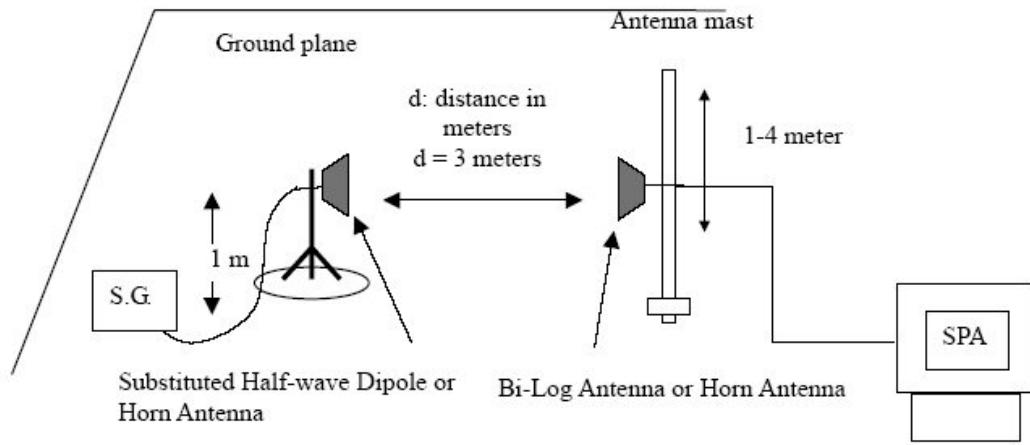


The diagram below shows the test setup that is utilized to make the measurements for emission .The spurious emissions were investigated from 1 GHz to the 10th harmonic of the highest fundamental frequency or 40 GHz, whichever is lower.



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The diagram below shows the test setup for substituted method



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2.2. Limit

2.2.1. RF radiated output power

FCC §22.913(a), The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.FCC §24.232(c) Mobile and portable stations are limited to 2 watts EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

2.2.2. Spurious Radiated emission

§ 22.917(a) and §24.238 (a) Out of band emissions. The power of any emission outside of the authorized operating frequency must be attenuated below the transmitting (P) by a factor of at least $43+10\log(P)\text{dB}$.

2.3. Test procedure : Based on ANSI/TIA 603C: 2004

1. On a test site, the EUT shall be placed at 80cm height on a turn table, and in the position close to normal use as declared by the applicant.
2. The test antenna shall be oriented initially for vertical polarization located 3 m from EUT to correspond to the fundamental frequency of the transmitter.
3. The output of the test antenna shall be connected to the measuring receiver and the peak detector is used for the measurement.
4. During the measurement of the EUT, the resolution bandwidth was to 3 MHz and the video bandwidth was set to 3 MHz.
5. The transmitter shall be switched on, the measuring receiver shall be tuned to the frequency of the transmitter under test.
6. The test antenna shall be raised and lowered through the specified range of height until the maximum signal level is detected by the measuring receiver.
7. The transmitter shall be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver.
8. The test antenna shall be raised and lowered again through the specified range of height until the maximum signal level is detected by the measuring receiver.
9. The maximum signal level detected by the measuring receiver shall be noted.
10. The EUT was replaced by half-wave dipole (824 ~ 849 MHz) or horn antenna (1 850 ~ 1 910 MHz) connected to a signal generator.
11. In necessary, the input attenuator setting on the measuring receiver shall be adjusted in order to increase the sensitivity of the measuring receiver.
12. The test antenna shall be raised and lowered through the specified range of height to ensure that the maximum signal is received.
13. The input signal to the substitution antenna shall be adjusted to the level that produces a level detected by the measuring received, which is equal to the level noted while the transmitter radiated power was measured, corrected for the change of input attenuator setting of the measuring receiver.
14. The input level to the substitution antenna shall be recorded as power level in dB m, corrected for any change of input attenuator setting of the measuring receiver.
15. The measurement shall be repeated with the test antenna and the substitution antenna orientated for horizontal polarization.

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2.4. Test result for RF radiated output power

Ambient temperature : (24 ± 2) °C

Relative humidity : 46 % R.H.

CDMA800 1xRTT mode

Frequency (MHz)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB d)	E.R.P.	
					(dB m)	(mW)
824.70	V	27.37	3.42	-3.44	20.51	112.46
824.70	H	28.36	3.42	-3.44	21.50	141.25
836.52	V	27.06	3.38	-3.45	20.23	105.44
836.52	H	26.54	3.38	-3.45	19.71	93.54
848.31	V	26.40	3.34	-3.42	19.64	92.04
848.31	H	29.00	3.34	-3.42	22.24	167.49

CDMA1 900 1xRTT mode

Frequency (MHz)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(mW)
1 851.25	V	24.87	4.87	7.56	27.12	515.23
1 851.25	H	17.11	4.87	7.56	19.80	95.50
1 880.00	V	23.13	4.91	7.63	25.85	384.59
1 880.00	H	16.87	4.91	7.63	19.59	90.99
1 908.75	V	23.05	4.94	7.70	25.81	381.07
1 908.75	H	18.76	4.94	7.70	21.52	141.91

Remark:

1. E.R.P. & E.I.R.P. = S.G level (dB m) - Cable loss (dB) + Ant. gain (dB d/dB i)

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CDMA800 1xEV-DO mode

Frequency (MHz)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB d)	E.R.P.	
					(dB m)	(mW)
824.70	V	28.50	3.42	-3.44	21.64	145.88
824.70	H	29.57	3.42	-3.44	22.71	186.64
836.52	V	28.12	3.38	-3.45	21.29	134.59
836.52	H	27.58	3.38	-3.45	20.75	118.85
848.31	V	27.54	3.34	-3.42	20.78	119.67
848.31	H	29.79	3.34	-3.42	23.03	200.91

CDMA1 900 1xEV-DO mode

Frequency (MHz)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P.	
					(dB m)	(mW)
1 851.25	V	24.57	4.87	7.56	27.06	508.16
1 851.25	H	18.43	4.87	7.56	21.12	129.42
1 880.00	V	22.21	4.91	7.63	24.93	311.17
1 880.00	H	17.88	4.91	7.63	20.60	114.82
1 908.75	V	23.44	4.94	7.70	26.20	416.87
1 908.75	H	20.03	4.94	7.70	22.79	190.11

Remark:

1. E.R.P. & E.I.R.P. = S.G level (dB m) - Cable loss (dB) + Ant. gain (dB d/dB i)

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2.5. Spurious radiated emission

- Measured output Power: 22.24 dB m = 0.200 9 W
- Modulation Signal: CDMA800 1xRTT
- Distance: 3 meters
- Limit: $-(43 + 10\log_{10}(W)) = -36.03$ dB c

Frequency (MHz)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB d)	E.R.P. (dB m)	dB c	Margin (dB)
Low Channel (824.70 MHz)							
1 648.82	V	-39.82	4.54	6.44	-37.92	-60.16	24.92
1 648.53	H	-47.09	4.54	6.44	-45.19	-67.43	32.19
2 474.10	V	-35.02	5.68	7.98	-32.72	-54.96	19.72
2 473.90	H	-38.64	5.68	7.97	-36.35	-58.59	23.35
Middle Channel (836.52 MHz)							
1 673.81	V	-36.81	4.58	6.51	-34.88	-57.12	21.88
1 673.72	H	-47.74	4.58	6.51	-45.81	-68.05	32.81
2 509.72	V	-44.46	5.72	8.02	-42.16	-64.40	29.16
2 509.66	H	-42.75	5.72	8.02	-40.45	-62.69	27.45
High Channel (848.31 MHz)							
1 697.38	V	-28.20	4.62	6.57	-26.25	-48.49	13.25
1 697.21	H	-44.51	4.62	6.57	-42.56	-64.80	29.56
2 545.31	V	-48.16	5.75	8.07	-45.84	-68.08	32.84
2 544.61	H	-49.75	5.75	8.07	-47.43	-69.67	34.43

Remark:

1. E.R.P. & E.I.R.P. = S.G level (dB m) - Cable loss (dB) + Ant. gain (dB d/dB i)
2. No more harmonic above 3rd harmonic for all channel.

- Measured output Power : 27.12 dB m = 0.515 2 W
- Modulation Signal : CDMA1 900 1xRTT
- Distance : 3 meters
- Limit : $-(43 + 10\log_{10}(W)) = -40.12 \text{ dB c}$

Frequency (MHz)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P. (dB m)	dB c	Margin (dB)
Low Channel(1 851.25 MHz)							
3 703.25	V	-21.39	7.14	11.85	-16.68	-43.80	3.68
3 703.40	H	-28.24	7.14	11.85	-23.53	-50.65	10.53
5 554.68	V	-47.40	9.25	12.12	-44.53	-71.65	31.53
5 553.78	H	-40.33	9.24	12.12	-37.45	-64.57	24.45
Middle Channel(1 880.00 MHz)							
3 759.07	V	-23.77	7.23	11.85	-19.15	-46.27	6.15
3 759.19	H	-32.11	7.23	11.85	-27.49	-54.61	14.49
5 639.60	V	-46.28	9.36	12.08	-43.56	-70.68	30.56
5 640.84	H	-36.90	9.36	12.08	-34.18	-61.30	21.18
High Channel(1 908.75 MHz)							
3 816.72	V	-22.57	7.33	11.84	-18.06	-45.18	5.06
3 818.28	H	-29.93	7.33	11.84	-25.42	-52.54	12.42
5 726.02	V	-47.54	9.46	12.04	-44.96	-72.08	31.96
5 726.11	H	-37.91	9.46	12.04	-35.33	-62.45	22.33

Remark:

1. E.R.P. & E.I.R.P. = S.G level (dB m) - Cable loss (dB) + Ant. gain (dB d/dB i)
2. No more harmonic above 3rd harmonic for all channel.

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- Measured output Power: 22.03 dB m = 0.159 6 W
- Modulation Signal: CDMA800 1xEV-DO
- Distance: 3 meters
- Limit: $-(43 + 10\log_{10}(W)) = -35.03 \text{ dB c}$

Frequency (MHz)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB d)	E.R.P. (dB m)	dB c	Margin (dB)
Low Channel (824.70 MHz)							
1 648.88	V	-40.39	4.54	6.44	-38.49	-60.52	25.49
1 648.66	H	-46.84	4.54	6.44	-44.94	-66.97	31.94
2 474.27	V	-34.26	5.68	7.98	-31.96	-53.99	18.96
2 473.83	H	-34.73	5.68	7.97	-32.44	-54.47	19.44
Middle Channel (836.52 MHz)							
1 673.04	V	-36.85	4.58	6.50	-34.93	-56.96	21.93
1 673.88	H	-46.78	4.58	6.51	-44.85	-66.88	31.85
2 509.48	V	-42.71	5.72	8.02	-40.41	-62.44	27.41
2 509.40	H	-40.70	5.72	8.02	-38.40	-60.43	25.40
High Channel (848.31 MHz)							
1 697.01	V	-28.03	4.62	6.57	-26.08	-48.11	13.08
1 697.25	H	-43.18	4.62	6.57	-41.23	-63.26	28.23
2 544.50	V	-46.14	5.75	8.07	-43.82	-65.85	30.82
2 544.65	H	-47.92	5.75	8.07	-45.60	-67.63	32.60

Remark:

1. E.R.P. & E.I.R.P. = S.G level (dB m) - Cable loss (dB) + Ant. gain (dB d/dB i)
2. No more harmonic above 3rd harmonic for all channel.

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- Measured output Power : 27.06 dB m = 0.508 2 W
- Modulation Signal : CDMA1 900 1xEV-DO
- Distance : 3 meters
- Limit : $-(43 + 10\log_{10}(W)) = -40.06$ dB c

Frequency (MHz)	Ant. Pol. (H/V)	S.G level + Amp. (dB m)	Cable loss (dB)	Ant. gain (dB i)	E.I.R.P. (dB m)	dB c	Margin (dB)
Low Channel(1 851.25 MHz)							
3 702.45	V	-21.45	7.13	11.85	-16.73	-43.79	3.73
3 703.02	H	-30.40	7.14	11.85	-25.69	-52.75	12.69
5 553.24	V	-44.39	9.24	12.12	-41.51	-68.57	28.51
5 554.69	H	-41.11	9.25	12.12	-38.24	-65.30	25.24
Middle Channel(1 880.00 MHz)							
3 759.42	V	-25.06	7.23	11.85	-20.44	-47.50	7.44
3 759.55	H	-34.25	7.23	11.85	-29.63	-56.69	16.63
5 639.12	V	-44.50	9.36	12.08	-41.78	-68.84	28.78
5 640.77	H	-41.43	9.36	12.08	-38.71	-65.77	25.71
High Channel(1 908.75 MHz)							
3 816.65	V	-21.03	7.33	11.84	-16.52	-43.58	3.52
3 816.76	H	-31.18	7.33	11.84	-26.67	-53.73	13.67
5 725.82	V	-46.47	9.46	12.04	-43.89	-70.95	30.89
5 725.56	H	-43.60	9.46	12.04	-41.02	-68.08	28.02

Remark:

1. E.R.P. & E.I.R.P. = S.G level (dB m) - Cable loss (dB) + Ant. gain (dB d/dB i)
2. No more harmonic above 3rd harmonic for all channel.

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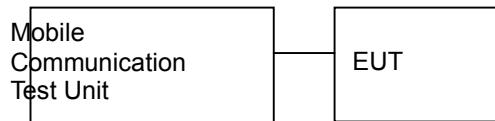
3. Conducted Output Power

3.1. Limit

Requirements: CFR 47, Section §2.1046

3.2. Test Procedure

1. The RF output of the transmitter was connected to the input of the Mobile Communication Test Unit through sufficient attenuation.
2. The EUT was set up for the max. output power with pseudo random data modulation.
3. The power was measured with Mobile Communication Test unit.



3.3. Test Settings

- CDMA2000 1xRTT

- Protocol Rev > 6 (IS-2000-0)
- System ID: 14655; NID:1; Reg. Ch. #: 384(Cell) & 600(PCS)
- Radio Config (RC) > Please see following table for details
- FCH Service Option (SO) Setup > Please see following table for details
- Traffic Data Rate > Full
- TDSO SCH info > F-SCH parameters > F-SCH Data Rate > 153.6kbps
 > R-SCH Parameters > R-SCH Data Rate > 153.6kbps
- RVS Power Ctrl > All Up bits (Maximum TxPout)

- CDMA2000 1xEV-DO

FTAP

- Protocol Rev > 0 (1xEVDO)
- Application Config > Enhanced Test Application Protocol > FTAP
- FTAP Rate > 307.2 kbps (2 slot, QPSK)
- Access Network Info > Termination Parameters > Sector ID > 00000000 > Subnet Mask > 0
- Generator Info > Termination Parameters > Max Forward Packet Duration > 16 slots
- RVS Power Ctrl > All Up bits (Maximum TxPout)

RTAP

- Protocol Rev > 0 (1xEVDO)
- Application Config > Enhanced Test Application Protocol > RTAP
- RTAP Rate > 153.6 kbps
- Access Network Info > Termination Parameters > Sector ID > 00000000 > Subnet Mask > 0
- Generator Info > Termination Parameters > Max Forward Packet Duration > 16 slots
- RVS Power Ctrl > All Up bits (Maximum TxPout)

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3.4. Test Result

Ambient temperature : (24 ± 2) °C
 Relative humidity : 47 % R.H.

CDMA2000 1xRTT**- Cellular Band (Preliminary Measurement Results @ Middle channel)**

Radio Configuration (RC)	Service Option (SO)	Average Output Power (dB m)		
		Ch. 1 013 / 824.70 MHz	Ch. 384 / 836.52 MHz	Ch. 777 / 848.31 MHz
RC1 (Fwd1, Rvs1)	1 (Voice)	-	-	-
	2 (Loopback)	-	24.01	-
	3 (Voice)	-	-	-
	6 (SMS)	-	-	-
	55 (Loopback)	-	24.03	-
	68 (Voice)	-	-	-
	70 (Voice)	-	-	-
RC2 (Fwd2, Rvs2)	9 (Loopback)	-	23.83	-
	14 (SMS)	-	-	-
	17 (Voice)	-	-	-
	55 (Loopback)	-	23.95	-
	32768 (Voice)	-	-	-
RC3 (Fwd3, Rvs3)	1 (Voice)	-	-	-
	2 (Loopback)	-	24.05	-
	3 (Voice)	-	-	-
	6 (SMS)	-	-	-
	55 (Loopback)	-	24.01	-
	32 (+F-SCH)	-	24.06	-
	32 (+SCH)	-	24.02	-
RC4 (Fwd4, Rvs3)	68 (Voice)	-	-	-
	70 (Voice)	-	-	-
	1 (Voice)	-	-	-
	2 (Loopback)	-	24.05	-
	3 (Voice)	-	-	-
	6 (SMS)	-	-	-
	55 (Loopback)	-	24.01	-
RC5 (Fwd5, Rvs4)	32 (+F-SCH)	-	23.95	-
	32 (+SCH)	-	23.97	-
	68 (Voice)	-	-	-
	70 (Voice)	-	-	-
	9 (Loopback)	23.55	24.08	23.88
	14 (SMS)	-	-	-
	17 (Voice)	-	-	-
	55 (Loopback)	-	24.01	-
	32768 (Voice)	-	-	-

- The measurement is average output power for Low, Middle and High channel in worst case.
- The service option 9 of RC5 of worst case is bigger than other power compared with each service option.

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- PCS Band (Preliminary Measurement Results @ Middle channel)

Radio Configuration (RC)	Service Option (SO)	Average Output Power (dB m)		
		Ch. 25 / 1 851.25 MHz	Ch. 600 / 1 880.00 MHz	Ch. 1 175 / 1 908.75 MHz
RC1 (Fwd1, Rvs1)	1 (Voice)	-	-	-
	2 (Loopback)	-	23.38	-
	3 (Voice)	-	-	-
	6 (SMS)	-	-	-
	55 (Loopback)	23.38	23.55	23.51
	68 (Voice)	-	-	-
	70 (Voice)	-	-	-
	9 (Loopback)	-	23.42	-
	14 (SMS)	-	-	-
RC2 (Fwd2, Rvs2)	17 (Voice)	-	-	-
	55 (Loopback)	-	23.44	-
	32768 (Voice)	-	-	-
	1 (Voice)	-	-	-
	2 (Loopback)	-	23.39	-
	3 (Voice)	-	-	-
	6 (SMS)	-	-	-
	55 (Loopback)	-	23.40	-
	32 (+F-SCH)	-	23.32	-
RC3 (Fwd3, Rvs3)	32 (+SCH)	-	23.38	-
	68 (Voice)	-	-	-
	70 (Voice)	-	-	-
	1 (Voice)	-	-	-
	2 (Loopback)	-	23.35	-
	3 (Voice)	-	-	-
	6 (SMS)	-	-	-
	55 (Loopback)	-	23.24	-
	32 (+F-SCH)	-	23.39	-
RC4 (Fwd4, Rvs3)	32 (+SCH)	-	23.35	-
	68 (Voice)	-	-	-
	70 (Voice)	-	-	-
	9 (Loopback)	-	23.31	-
	14 (SMS)	-	-	-
	17 (Voice)	-	-	-
	55 (Loopback)	-	23.39	-
	32768 (Voice)	-	-	-
	9 (Loopback)	-	23.31	-
RC5 (Fwd5, Rvs4)	14 (SMS)	-	-	-
	17 (Voice)	-	-	-
	55 (Loopback)	-	23.39	-
	32768 (Voice)	-	-	-

- The measurement is average output power for Low, Middle and High channel in worst case.
- The service option 55 of RC1 of worst case is bigger than other power compared with each service option.

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CDMA2000 1xEV-DO Release 0 (Rel 0)**- Cellular Band (Preliminary Measurement Results @ Middle channel)**

Application Protocol	Rate	Average Output Power (dB m)		
		Ch. 1 013 / 824.70 MHz	Ch. 384 / 836.52 MHz	Ch. 777 / 848.31 MHz
RTAP	9.6	23.64	24.17	23.89
	19.2	-	24.15	-
	38.4	-	24.06	-
	76.8	-	24.01	-
	153.6	-	23.98	-
FTAP	307.2 kbps (2 slot, QPSK)	23.65	24.09	23.85

- The measurement is average output power for Low, Middle and High channel in worst case.
- The rate 9.6 of RTAP of worst case is bigger than other power compared with each rate.

- PCS Band (Preliminary Measurement Results @ Middle channel)

Application Protocol	Rate	Average Output Power (dB m)		
		Ch. 25 / 1 851.25 MHz	Ch. 600 / 1 880.00 MHz	Ch. 1 175 / 1 908.75 MHz
RTAP	9.6	-	23.82	-
	19.2	-	23.91	-
	38.4	-	23.85	-
	76.8	23.33	23.94	23.82
	153.6	-	23.88	-
FTAP	307.2 kbps (2 slot, QPSK)	23.38	23.91	23.58

- The measurement is average output power for Low, Middle and High channel in worst case.
- The rate 76.8 of RTAP of worst case is bigger than other power compared with each rate.

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