



FCC 47 CFR PART 15 Subpart C

TEST REPORT

For

Advanced Scenario Hub/Music Server

Model Number:
HSC-300, HSC-200, HSC-100,
HMP-100, HMS-100, HSC-50

Trade Name: HomeScenario

Issued to

HomeScenario, Inc.
12F No. 17 Sec. 3 Chongcing S. Rd.
Taipei 100, TAIWAN, R.O.C.

Issued by

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1. TEST RESULT CERTIFICATION

Applicant: HomeScenario, Inc.
12F No. 17 Sec. 3 Chongcing S. Rd. Taipei 100, TAIWAN, R.O.C.

Equipment Under Test: Advanced Scenario Hub/Music Server

Trade Name: HomeScenario

Model Number: HSC-300, HSC-200, HSC-100,
HMP-100, HMS-100, HSC-50

Date of Test: October 6 ~ 14, 2009

APPLICABLE STANDARDS	
STANDARD	TEST RESULT
FCC 47 CFR Part 15 Subpart C	No non-compliance noted

We hereby certify that:

The above equipment was tested by Compliance Certification Services Inc. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4: 2003 and the energy emitted by the sample EUT tested as described in this report is in compliance with the requirements emission limits of FCC Rules Part 15.107, 15.109, 15.207, 15.209 and 15.249.

The test results of this report relate only to the tested sample identified in this report.

Approved by:

Rex Lai
Section Manager
Compliance Certification Services Inc.

Reviewed by:

Gina Lo
Section Manager
Compliance Certification Services Inc.



2. EUT DESCRIPTION

Product	Advanced Scenario Hub/Music Server		
Trade Name	HomeScenario		
Model Number	HSC-300, HSC-200, HSC-100, HMP-100, HMS-100, HSC-50		
Model Discrepancy	Model	Difference	
	HSC-300	Advanced Scenario Hub/Music Server	
	HSC-200	Advanced Scenario Hub	
	HSC-100	Scenario Hub	
	HMP-100	Networked Music Player	
	HMS-100	Multi-room Music server	
	HSC-50	Scenario Hub Extender	
EUT Power Rating	VDC from Power Adapter		
Power Adapter Manufacturer	JENTEC TECHNOLOGY CO.,LTD	Model	AH1812-B
		Model	AH3612-Y
Power Adapter Power Rating	For AH1812-B I/P: AC 100-240V, 0.4A, 50-60Hz O/P: DC 12V, 1.25A For AH3612-Y I/P: AC 100-240V, 0.8A, 50-60Hz O/P: DC 12V, 3A		
Frequency Range	908.4MHz		
Modulation Technique	FSK		
Antenna Gain	Gain: 0dBi		
Antenna Designation	Dipole Antenna		

Remark:

1. The sample selected for test was production product and was provided by manufacturer.
2. This submittal(s) (test report) is intended for FCC ID: **XS9HSC000000A1** filing to comply with Section 15.107 & 15.109 (FCC Part 15, Subpart B) and Section 15.207, 15.209, 15.249.



3. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.4 and FCC CFR 47 2.1046, 2.1047, 2.1049, 2.1051, 2.1053, 2.1055, 2.1057, 15.207, 15.209 and 15.249.

3.1 EUT CONFIGURATION

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

3.2 EUT EXERCISE

The EUT was operated in the engineering mode to fix the TX frequency that was for the purpose of the measurements.

According to its specifications, the EUT must comply with the requirements of the Section 15.107 and 15.109 under the FCC Rules Part 15 Subpart B and Section 15.207, 15.209, 15.249 under the FCC Rules Part 15 Subpart C.

3.3 GENERAL TEST PROCEDURES

Conducted Emissions

The EUT is placed on the turntable, which is 0.8 m above ground plane. According to the requirements in Section 13.1.4.1 of ANSI C63.4 Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-peak and average detector modes.

Radiated Emissions

The EUT is placed on a turn table, which is 0.8 m above ground plane. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna, which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the maximum emissions, exploratory radiated emission measurements were made according to the requirements in Section 13.1.4.1 of ANSI C63.4.

3.4 FCC PART 15.205 RESTRICTED BANDS OF OPERATIONS

- (a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 -	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.52525	2655 - 2900	22.01 - 23.12
8.41425 - 8.41475	156.7 - 156.9	3260 - 3267	23.6 - 24.0
12.29 - 12.293	162.0125 - 167.17	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	167.72 - 173.2	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	240 - 285	3600 - 4400	(²)
13.36 - 13.41	322 - 335.4		

¹ Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

² Above 38.6

- (b) Except as provided in paragraphs (d) and (e), the field strength of emissions appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

3.5 DESCRIPTION OF TEST MODES

The EUT (model: HSC-300) comes with two types of power adapter (Model No.: AH1812-B & Model No.: AH3612-Y) for sale. After the preliminary test, the EUT with power adapter (Model: AH3612-Y) was found to emit the worst emissions and therefore had been tested under operating condition

After verification, all tests were carried out with the worst case test modes as shown below except radiated spurious emission below 1GHz, which worst case was in normal link mode only, and powerline conducted emission below 30MHz, which worst case was in normal link mode.



4. INSTRUMENT CALIBRATION

4.1 MEASURING INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment, which is traceable to recognized national standards.

4.2 MEASUREMENT EQUIPMENT USED

Equipment Used for Emissions Measurement

Remark: Each piece of equipment is scheduled for calibration once a year.

Conducted Emissions Test Site				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	MY43360131	02/23/2010

3M Semi Anechoic Chamber				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	US42510252	09/09/2010
Test Receiver	Rohde&Schwarz	ESCI	100064	11/29/2009
Switch Controller	TRC	Switch Controller	SC94050010	05/02/2010
4 Port Switch	TRC	4 Port Switch	SC94050020	05/02/2010
Loop Antenna	EMCO	6502	8905/2356	05/28/2010
Horn-Antenna	TRC	HA-0502	06	06/03/2010
Horn-Antenna	TRC	HA-0801	04	06/17/2010
Horn-Antenna	TRC	HA-1201A	01	08/10/2010
Horn-Antenna	TRC	HA-1301A	01	08/10/2010
Bilog- Antenna	Sunol Sciences	JB3	A030205	03/27/2010
Turn Table	Max-Full	MFT-120S	T120S940302	N.C.R.
Antenna Tower	Max-Full	MFA-430	A440940302	N.C.R.
Controller	Max-Full	MF-CM886	CC-C-1F-13	N.C.R.
Site NSA	CCS	N/A	FCC MRA: TW1039 IC: 2324G-1/-2	10/17/2010 11/04/2010
Test S/W	LABVIEW (V 6.1)			

Powerline Conducted Emissions Test Site				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
TEST RECEIVER	R&S	ESHS10	843743/015	03/30/2010
LISN (EUT)	FCC	FCC-LISN-50-32-2	08009	06/07/2010
LISN	EMCO	3825/2	1382	01/05/2010
BNC CABLE	MIYAZAKI	5D-FB	BNC B1	07/10/2010
Pulse Limiter	R&S	ESH3-Z2	100374	08/21/2010
THERMO-HYGRO METER	TOP	HA-202	9303-3	01/28/2010

Remark: The measurement uncertainty is less than +/- 2.81dB, which is evaluated as per the NAMAS NIS 81 and CISPR/A/291/CDV.



4.3 MEASUREMENT UNCERTAINTY

PARAMETER	UNCERTAINTY
Powerline Conducted Emission	+/- 2.81
3M Semi Anechoic Chamber / 30MHz ~ 1GHz	+/-3.7046
3M Semi Anechoic Chamber / Above 1GHz	+/-3.0958

Remark: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.



5. FACILITIES AND ACCREDITATIONS

5.1 FACILITIES

All measurement facilities used to collect the measurement data are located at

☒ No.11, Wugong 6th Rd., Wugu Industrial Park, Taipei Hsien 248, Taiwan

Tel: 886-2-2299-9720 / Fax: 886-2-2298-4045

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 and CISPR Publication 22.

5.2 EQUIPMENT




Radiated emissions are measured with one or more of the following types of linearly polarized antennas: tuned dipole, biconical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with pre-selectors and quasi-peak detectors are used to perform radiated measurements.

Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers.

Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

**5.3 TABLE OF ACCREDITATIONS AND LISTINGS**

Country	Agency	Scope of Accreditation	Logo
USA	FCC	3M Semi Anechoic Chamber (FCC MRA: TW1039) to perform FCC Part 15 measurements	 FCC MRA: TW1039
Taiwan	TAF	LP0002, RTTE01, FCC Method-47 CFR Part 15 Subpart C, D, E, RSS-210, RSS-310 IDA TS SRD, AS/NZS 4268, AS/NZS 4771, TS 12.1 & 12.2, ETSI EN 300 440-1, ETSI EN 300 440-2, ETSI EN 300 328, ETSI EN 300 220-1, ETSI EN 300 220-2, ETSI EN 301 893, ETSI EN 301 489-1/3/7/17 FCC OET Bulletin 65 + Supplement C, EN 50360, EN 50361, EN 50371, RSS 102, EN 50383, EN 50385, EN 50392, IEC 62209, CNS 14958-1, CNS 14959 FCC Method -47 CFR Part 15 Subpart B IEC / EN 61000-3-2, IEC / EN 61000-3-3, IEC / EN 61000-4-2/3/4/5/6/8/11	 Testing Laboratory 1309
Canada	Industry Canada	3M Semi Anechoic Chamber (IC 2324G-1 / IC 2324G-2) to perform	 IC 2324G-1 IC 2324G-2

** No part of this report may be used to claim or imply product endorsement by A2LA or any agency of the US Government.*



6. SETUP OF EQUIPMENT UNDER TEST

6.1 SETUP CONFIGURATION OF EUT

See test photographs attached in Appendix I for the actual connections between EUT and support equipment.

6.2 SUPPORT EQUIPMENT

No.	Device Type	Brand	Model	Series No.	FCC ID	Data Cable	Power Cord
1.	SOUND BLASTER MUSIC SX	CREATIVE	SB0560	MASB0560805000004X	FCC DoC	N/A	Shielded, 1.8m
2.	USB 2.0 External HDD	TeraSyS	F12-UF (COMBO)	A0100215-42O014	FCC DoC	Unshielded, 18m	N/A
3.	Channel Surround Speakers System	YAMADA	P3600	N/A	N/A	Unshielded, 1.2m	Unshielded, 1.3m
4.	DVD Player	Pioneer	DV-S633A	ALMP001035TA	FCC DoC	N/A	Unshielded, 1m
5.	IR Extension Cable	HOW WEI / HomeScenario	H5033 / HSK-10	N/A	N/A	N/A	N/A
6.	IR Extension Cable	HOW WEI / HomeScenario	H5033 / HSK-10	N/A	N/A	N/A	N/A
7.	IR Extension Cable	HOW WEI / HomeScenario	H5033 / HSK-10	N/A	N/A	N/A	N/A
8.	IR Extension Cable	HOW WEI / HomeScenario	H5033 / HSK-10	N/A	N/A	N/A	N/A
9.	Notebook PC (Remote)	IBM	2672 (X31)	9985H9M	WLAN: ANO20030400 LEG Bluetooth: ANO20020100 MTN	LAN Cable: Unshielded, 10m	AC I/P: Unshielded, 1.8m DC O/P: Unshielded, 1.8m with a core
10.	Adapter (Remote)	EVERSPRING	AN135	N/A	FU5AV135	N/A	N/A

Remark:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.



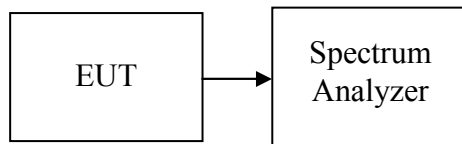
7. FCC PART 15.249 REQUIREMENTS

7.120 DB BANDWIDTH

LIMIT

None; for reporting purposes only.

Test Configuration



TEST PROCEDURE

1. Place the EUT on the table and set it in the transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
3. Set the spectrum analyzer as RBW=10kHz, VBW = 30kHz, Sweep = auto.
4. Mark the peak frequency and 20dB (upper and lower) frequency.
5. Repeat until all the rest channels are investigated.

TEST RESULTS

No non-compliance noted

Test Data

Frequency (MHz)	20dB Bandwidth (kHz)
908.4	155

802.11a Mode

1. Operating Frequency: 908.4MHz
2. CH: 908.4MHz
3. 20dB bandwidth: CH: 155kHz

Because the mentioned conditions, the test is not applicable.



Test Plot

Agilent 15:14:56 Oct 6, 2009

R T

Δ Mkr2 155 kHz

-0.35 dB

Ref 10 dBm

#Atten 20 dB

#Peak

Log
10
dB/

DI
-33.8
dBm

LgAv

V1 S2

Start 907.900 MHz

Stop 908.900 MHz

#Res BW 10 kHz

#VBW 30 kHz

Sweep 9.56 ms (601 pts)

Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	908.400 MHz	-13.78 dBm
2R	(1)	Freq	908.359 MHz	-33.65 dBm
2Δ	(1)	Freq	155 kHz	-0.35 dB



7.2 SPURIOUS EMISSION

LIMIT

1. In the section 15.249(a):

Except as provided in paragraph (b) of this section, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental Frequency (MHz)	Field Strength of Fundamental Field Strength (mV/m)	Field Strength of Harmonics (μV/m)
902-928 MHz	50	500
2400 - 2483.5 MHz	50	500
5725 - 5875 MHz	50	500
24.0 - 24.25 GHz	250	2500

2. Except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
30-88	100*	3
88-216	150*	3
216-960	200*	3
Above 960	500	3

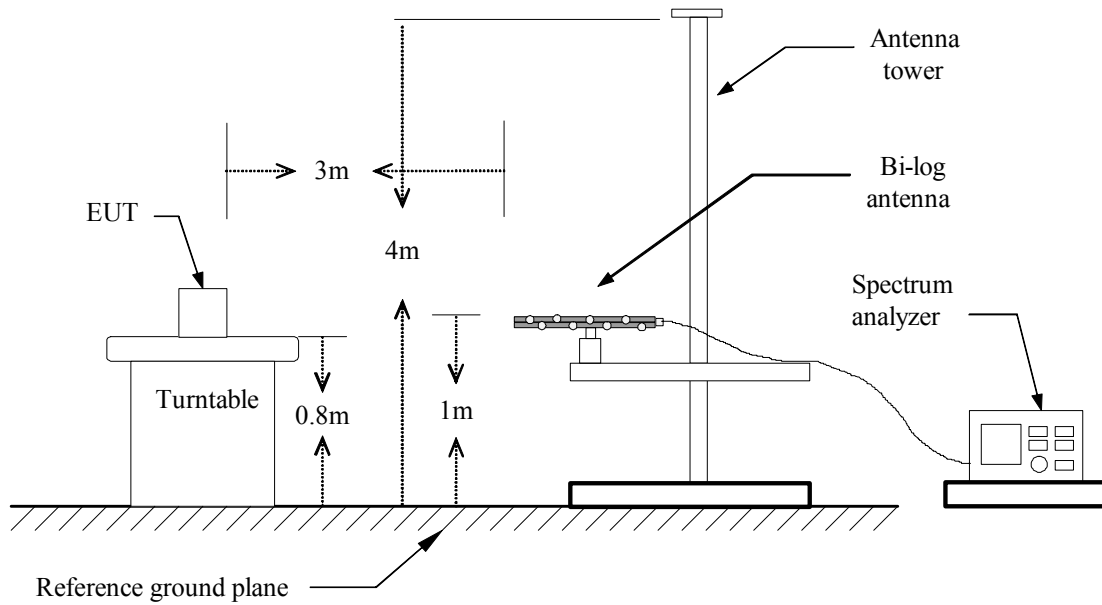
Remark: Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

3. In the above emission table, the tighter limit applies at the band edges.

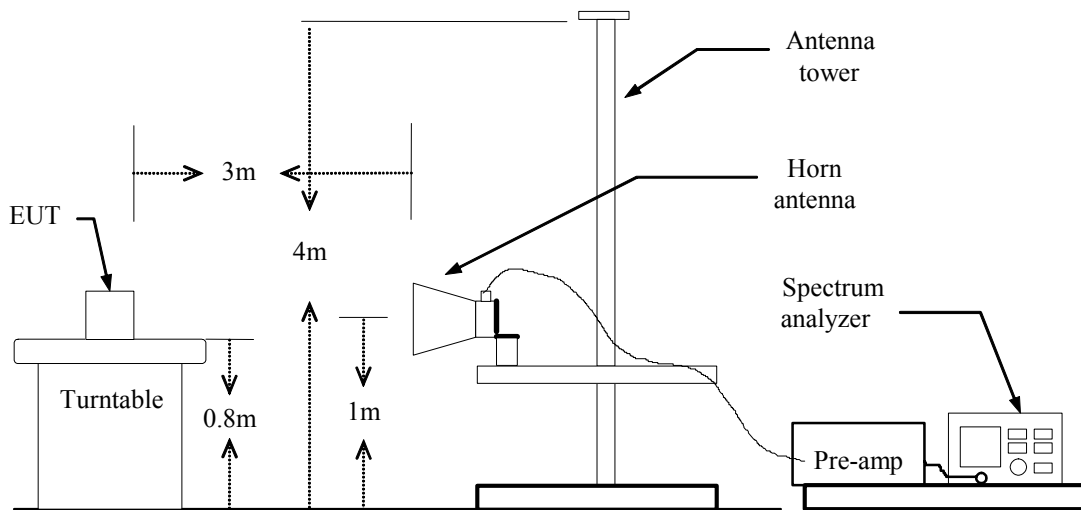
Frequency (MHz)	Field Strength (μV/m at 3-meter)	Field Strength (dBμV/m at 3-meter)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Test Configuration

Below 1 GHz



Above 1 GHz





TEST PROCEDURE

1. The EUT is placed on a turntable, which is 0.8m above ground plane.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Set the spectrum analyzer in the following setting as:
Below 1GHz:
RBW=100kHz / VBW=300kHz / Sweep=AUTO
Above 1GHz:
(a) PEAK: RBW=VBW=1MHz / Sweep=AUTO
(b) AVERAGE: RBW=1MHz / VBW=10Hz / Sweep=AUTO
7. Repeat above procedures until the measurements for all frequencies are complete.

**Below 1 GHz****Operation Mode:** Normal Link**Test Date:** October 6, 2009**Temperature:** 23°C**Tested by:** Mimic Yang**Humidity:** 53% RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Ant.Pol. (H/V)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Peak Limit (dBuV/m)	AVG Limit (dBuV/m)	Margin (dB)	Remark
908.41	V	82.61	1.09	83.70	114.00	94.00	-10.30	AVG
908.41	H	84.50	1.09	85.59	114.00	94.00	-8.41	AVG

Frequency (MHz)	Ant.Pol. (H/V)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
39.70	V	42.26	-8.88	33.39	40.00	-6.61	Peak
169.03	V	37.45	-10.78	26.66	43.50	-16.84	Peak
374.35	V	35.11	-6.92	28.19	46.00	-17.81	Peak
500.45	V	36.25	-4.20	32.06	46.00	-13.94	Peak
647.57	V	31.67	-1.77	29.89	46.00	-16.11	Peak
749.42	V	32.07	-0.50	31.58	46.00	-14.42	Peak
105.98	H	43.79	-11.82	31.97	43.50	-11.53	Peak
366.27	H	41.00	-7.09	33.91	46.00	-12.09	Peak
374.35	H	38.98	-6.92	32.06	46.00	-13.94	Peak
432.55	H	35.38	-5.50	29.88	46.00	-16.12	Peak
500.45	H	40.21	-4.20	36.02	46.00	-9.98	Peak
749.42	H	32.43	-0.50	31.94	46.00	-14.06	Peak

Remark:

1. No emission found between lowest internal used/generated frequency to 30MHz (9kHz~30MHz).
2. Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using peak/quasi-peak detector mode.
3. Quasi-peak test would be performed if the peak result were greater than the quasi-peak limit or as required by the applicant.
4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
5. $\text{Margin (dB)} = \text{Remark result (dBuV/m)} - \text{Quasi-peak limit (dBuV/m)}$.

**Above 1 GHz****Operation Mode:** Tx / CH Low**Test Date:** October 6, 2009**Temperature:** 23°C**Tested by:** Mimic Young**Humidity:** 53% RH**Polarity:** Ver. / Hor.

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Result		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1816.67	V	58.44	51.37	-4.00	54.44	47.37	74.00	54.00	-6.63	AVG
N/A										
1816.67	H	66.37	58.63	-4.00	62.37	52.63	74.00	54.00	-1.37	AVG
2726.67	H	55.90	44.76	-0.97	54.93	43.79	74.00	54.00	-10.21	AVG
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m). Peak detector mode and average detector mode of the emission shown in Result column.



7.3 POWERLINE CONDUCTED EMISSIONS

LIMIT

According to §15.207(a), except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency Range (MHz)	Limits (dB μ V)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56*	56 to 46*
0.50 to 5	56	46
5 to 30	60	50

* Decreases with the logarithm of the frequency.

Test Configuration

See test photographs attached in Appendix I for the actual connections between EUT and support equipment.

TEST PROCEDURE

1. The EUT was placed on a table, which is 0.8m above ground plane.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. Repeat above procedures until all frequency measured were complete.



TEST RESULTS

The initial step in collecting conducted data is a spectrum analyzer peak scan of the measurement range. Significant peaks are then marked as shown on the following data page, and these signals are then quasi-peaked.

Test Data

Operation Mode: Normal Link **Test Date:** October 14, 2009
Temperature: 22°C **Tested by:** Mark Yang
Humidity: 45% RH

Freq. (MHz)	QP Reading (dBuV)	AV Reading (dBuV)	Corr. factor (dB)	QP Result (dBuV)	AV Result (dBuV)	QP Limit (dBuV)	AV Limit (dBuV)	QP Margin (dB)	AV Margin (dB)	Note
0.1800	48.90	38.40	0.10	49.00	38.50	64.49	54.49	-15.49	-15.99	L1
0.2200	38.21	29.01	0.09	38.30	29.10	62.82	52.82	-24.52	-23.72	L1
0.2900	33.32	25.42	0.08	33.40	25.50	60.52	50.52	-27.12	-25.02	L1
0.3500	32.23	25.43	0.07	32.30	25.50	58.96	48.96	-26.66	-23.46	L1
0.4200	31.53	23.83	0.07	31.60	23.90	57.45	47.45	-25.85	-23.55	L1
24.4600	40.56	31.66	0.54	41.10	32.20	60.00	50.00	-18.90	-17.80	L1
0.1800	49.78	38.38	0.12	49.90	38.50	64.49	54.49	-14.59	-15.99	L2
0.2400	40.20	32.90	0.10	40.30	33.00	62.10	52.10	-21.80	-19.10	L2
0.3700	30.51	17.81	0.09	30.60	17.90	58.50	48.50	-27.90	-30.60	L2
0.4400	35.82	27.92	0.08	35.90	28.00	57.06	47.06	-21.16	-19.06	L2
21.6600	35.99	32.49	0.21	36.20	32.70	60.00	50.00	-23.80	-17.30	L2
24.4400	40.41	31.61	0.29	40.70	31.90	60.00	50.00	-19.30	-18.10	L2

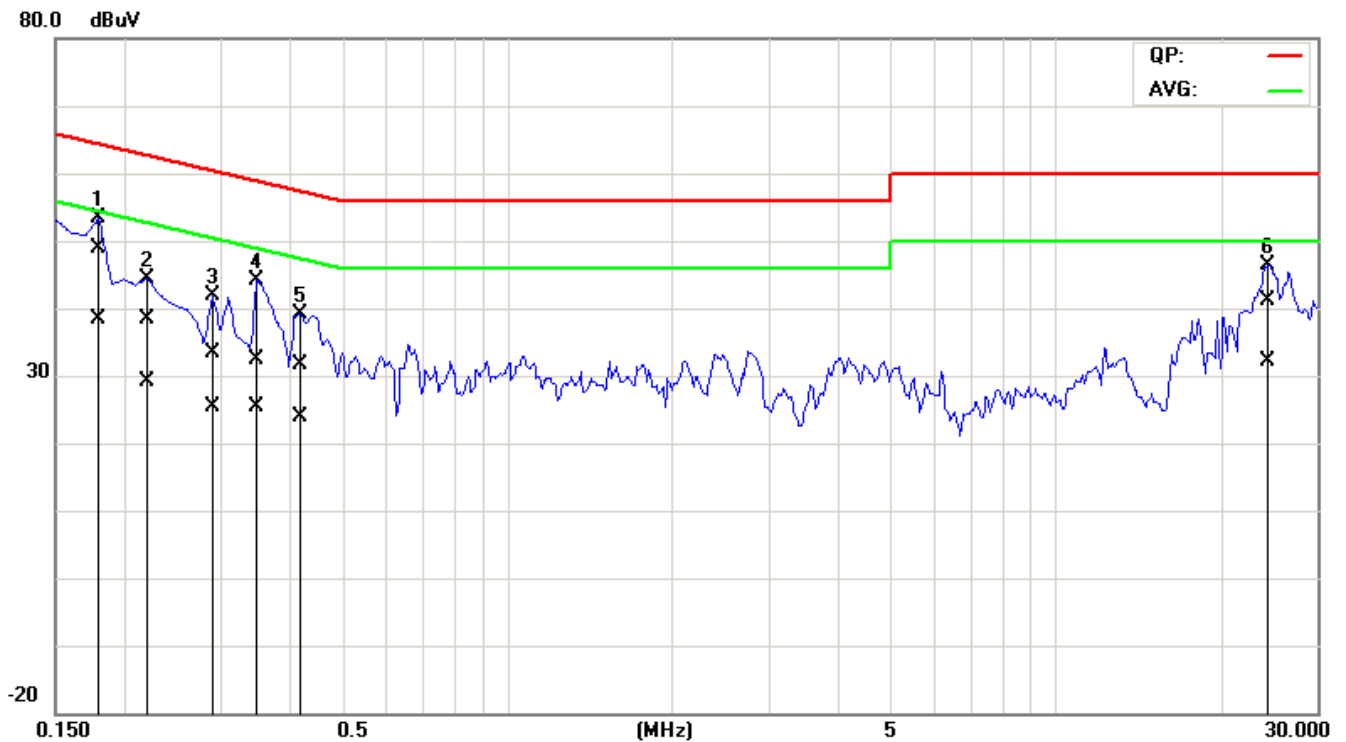
Remark:

1. Measuring frequencies from 0.15 MHz to 30MHz.
2. The emissions measured in frequency range from 0.15 MHz to 30MHz were made with an instrument using Quasi-peak detector and average detector.
3. The IF bandwidth of SPN between 0.15MHz to 30MHz was 10kHz; the IF bandwidth of Test Receiver between 0.15MHz to 30MHz was 9kHz;
4. L1 = Line One (Live Line) / L2 = Line Two (Neutral Line)



Test Plots

Conducted emissions (Line 1)



Conducted emissions (Line 2)

