Report No.: NTC1706113FV00 FCC ID: ATI9R3HRD60701



RADIO TEST REPORT

The device described below is tested by Dongguan Nore Testing Center Co., Ltd. to determine the maximum emission levels emanating from the device, the severe levels which the device can endure and E.U.T.'s performance criterion. The test results, data evaluation, test procedures, and equipment of configurations shown in this report were made in accordance with the procedures in ANSI C63.10(2013).

Applicant / Manufacturer: Action Electronics Co., Ltd.

Address : 2480, TINGKAT PERUSAHAAN ENAM, PRAI FREE TRADE ZONE,

13600, PERAI, PENANG, MALAYSIA

Factory : Shenzhen SSP INDUSTRIES CO., LTD

Address : 4 Floor, Block 1, NO.25 Jinxiang Industrial Park, Jian'an Road, Fuyong

Town, Bao'an District, Shenzhen, China

E.U.T. : 7" LCD MONITOR WITH BUILT-IN DVD PLAYER AND HDMI PORT

FOR REAR SEAT ENTERTAINMENT

Brand Name : moviestoGO

Model No. : HRD60701, MTGHRD1 (For model difference refer to section 1.)

FCC ID : ATI9R3HRD60701

Measurement Standard: FCC PART 15.239

Date of Receiver : June 08, 2017

Date of Test : June 08, 2017 to June 30, 2017

Date of Report : June 30, 2017

This Test Report is Issued Under the Authority of :

Prepared by

Rose Hu / Engineer

Approved & Authorized Signer

Iori Fan Authorized Signatory

This test report is for the customer shown above and their specific product only. This report applies to above tested sample only and shall not be reproduced in part without written approval of Dongguan Nore Testing Center Co., Ltd.

Dongguan Nore Testing Center Co., Ltd. Report No.: NTC1706113FV00 FCC ID: ATI9R3HRD60701



Table of Contents

1. GENERAL INFORMATION	4
1.1 PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST	4
1.2 RELATED SUBMITTAL(S) / GRANT (S)	6
1.3 TEST METHODOLOGY	6
1.4 EQUIPMENT MODIFICATIONS	6
1.5 SUPPORT DEVICE	
1.6 TEST FACILITY AND LOCATION	
1.7 SUMMARY OF TEST RESULTS	
2. SYSTEM TEST CONFIGURATION	8
2.1 EUT CONFIGURATION	8
2.2 SPECIAL ACCESSORIES	8
2.3 DESCRIPTION OF TEST MODES	8
3. CONDUCTED EMISSIONS TEST	9
3.1 TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)	9
3.2 TEST CONDITION	
3.3 MEASUREMENT RESULTS	9
4. RADIATED SPURIOUS EMISSIONS AND RESTRICTED BANDS	10
4.1 TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)	10
4.2 MEASUREMENT PROCEDURE	11
4.3 LIMIT	12
4.4 MEASUREMENT RESULTS	13
5. OCCUPIED BANDWIDTH	20
5.1 MEASUREMENT PROCEDURE	20
5.2 TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)	20
5.3 MEASUREMENT RESULTS	20
6. ANTENNA APPLICATION	23
6.1 Antenna requirement	23
6.2 MEASUREMENT RESULTS	
7 TEST FOLIPMENT LIST	24

Dongguan Nore Testing Center Co., Ltd. Report No.: NTC1706113FV00 FCC ID: ATI9R3HRD60701



Revision History of This Test Report

Report Number	Description	Issued Date
NTC1706113FV00	Initial Issue	2017-06-30

Report No.: NTC1706113FV00 FCC ID: ATI9R3HRD60701



1. GENERAL INFORMATION

1.1 Product Description for Equipment under Test

Product name : 7" LCD MONITOR WITH BUILT-IN DVD PLAYER

AND HDMI PORT FOR REAR SEAT

ENTERTAINMENT

Power Supply : DC 12V

Adapter : None

Test voltage : DC 12V

Model name : HRD60701, MTGHRD1

All tests performed on model HRD60701.

Model difference : Both of models have the same circuit schematic,

construction, PCB Layout and critical components. Their difference in model number due to trading

purpose.

Hardware version : V1.0

Software version : V1.0

Serial number : N/A

Note : N/A

Technical parameters

Frequency Range : 88.1~107.9MHz

Modulation : FM

Channel space : 100KHz

Number of Channel : 199

Antenna Type : Integral Antenna

Antenna Gain : 1.0 dBi

Report No.: NTC1706113FV00 FCC ID: ATI9R3HRD60701



Test Frequency

FM								
Channel	Frequency (MHz)							
Low	88.1							
Mid	97.9							
High	107.9							

- **Note 1**: According to section 15.31(m), regards to the operating frequency range over 10MHz, the Lowest, middle, and the Highest frequency of channel were selected to perform the test. The selected frequency see below:
- **Note 2**: All the requirements have been tested by modulating the transmitter with a 2.5KHz tone at a level 16dB higher than that required to produce a frequency deviation of 75KHz.

Report No.: NTC1706113FV00 FCC ID: ATI9R3HRD60701



1.2 Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for FCC ID: ATI9R3HRD60701 filing to comply with Section 15.239 of the FCC Part 15(2016), Subpart C Rule.

1.3 Test Methodology

Both AC mains line-conducted and radiated emission measurements were performed according to the procedures in ANSI C63.10 (2013). Radiated emission measurement was performed in semi-anechoic chamber and conducted emission measurement was performed in shield room. For radiated emission measurement, preliminary scans were performed in the semi-anechoic chamber only to determine the worst case modes. All radiated tests were performed at an antenna to EUT distance of 3 meters. All other measurements were made in accordance with the procedures in 47 CFR part 2.

1.4 Equipment Modifications

Not available for this EUT intended for grant.

1.5 Support Device

Audio : Manufacturer: LONGWEIINSTRUMENTS (H.K)

Signal Generator CO., LTD.

M/N: TAG-101 S/N: N/A CE

1.6 Test Facility and Location

Listed by FCC, July 03, 2014
The Certificate Registration Number is 665078.
Listed by Industry Canada, June 18, 2014
The Certificate Registration Number is 9743A.

Dongguan NTC Co., Ltd.

(Full Name: Dongguan Nore Testing Center Co., Ltd.)

Building D, Gaosheng Science and Technology Park, Hongtu Road, Nancheng District, Dongguan City, Guangdong, China (Full Name: Building D, Gaosheng Science & Technology Park, Zhouxi Longxi Road, Nancheng District, Dongguan, Guangdong, China.

FCC ID: ATI9R3HRD60701



1.7 Summary of Test Results

FCC Rules	Description Of Test	Uncertainty	Result
§15.207 (a)	AC Power Conducted Emission	±2.07dB	N/A
§15.239(a)/ §2.1049	Occupied Bandwidth	±1.42 x10 ⁻⁴ %	Compliance
§15.239(b)	Field strength of the fundamental signal	±3.70dB	Compliance
§15.239(b)(c)/ §15.209/ §2.1053	Spurious emissions	±3.70dB	Compliance
§ 15.203	Antenna requirements		Compliance

Note: Due to this EUT is powered by DC 12V vehicle battery only, the AC Power Conducted Emission is not applicable.

Report No.: NTC1706113FV00 FCC ID: ATI9R3HRD60701



2. System Test Configuration

2.1 EUT Configuration

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

2.2 Special Accessories

Not available for this EUT intended for grant.

2.3 Description of test modes

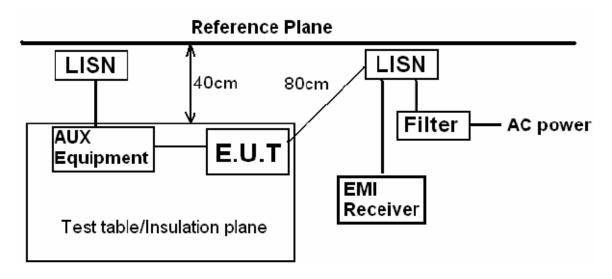
The EUT has been tested under operating condition. The Lowest, middle and highest channel were chosen for testing.

Report No.: NTC1706113FV00 FCC ID: ATI9R3HRD60701



3. Conducted Emissions Test

3.1 Test SET-UP (Block Diagram of Configuration)



3.2 Test Condition

Test Requirement: FCC Part 15.207

Frequency Range: 150KHz ~ 30MHz

Detector: RBW 9KHz, VBW 30KHz

Operation Mode: FM Mode

3.3 Measurement Results

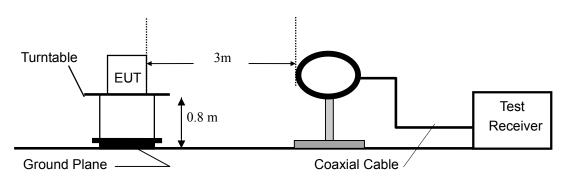
N/A

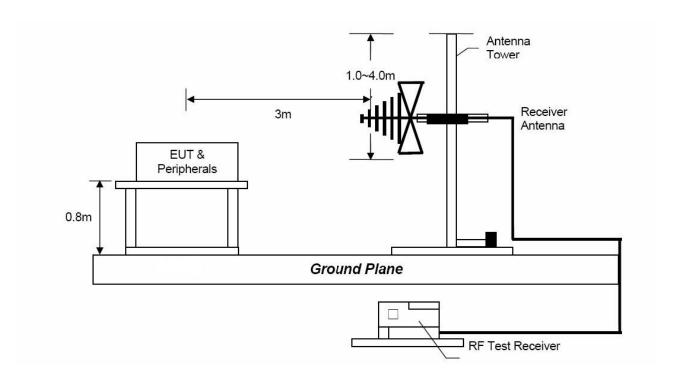


4. Radiated Spurious Emissions and Restricted Bands

4.1 Test SET-UP (Block Diagram of Configuration)

4.1.1 Radiated Emission Test Set-Up, Frequency Below 30MHz

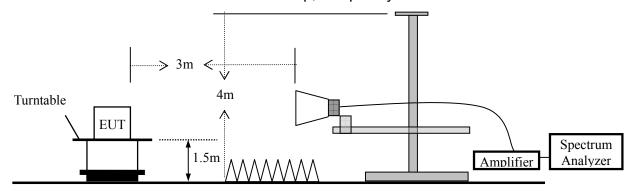




Report No.: NTC1706113FV00 FCC ID: ATI9R3HRD60701



4.1.2 Radiated Emission Test Set-Up, Frequency above 1GHz



4.2 Measurement Procedure

- a. Blow 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi- anechoic chamber room.
- b. For the radiated emission test above 1GHz:
 - The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter full anechoic chamber room. The table was rotated 360 degrees to determine the position of the highest radiation. Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
- c. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. The test-receiver system was set to peak detect function and specified bandwidth with maximum hold mode.
- f. A Quasi-peak measurement was then made for that frequency point for below 1GHz test. PK and AV for above 1GHz emission test.

Report No.: NTC1706113FV00 FCC ID: ATI9R3HRD60701



During the radiated emission test, the spectrum analyzer was set with the following

configurations:

Frequency Band (MHz)	Level	Resolution Bandwidth	Video Bandwidth		
30 to 1000	QP	120 kHz	300 kHz		
Above 1000	Peak	1 MHz	3 MHz		
Above 1000	Average	1 MHz	10 Hz		

4.3 Limit

(1) Limit for Field strength of the fundamental signal

	Lir	mit
Frequency	Average Value	Peak Value (dBuv/m
	(dBuv/m @3m)	@3m)
88-108MHz	47.96	67.96

Note: FCC part 15.239(b) the field strength of any emissions with the permitted 200KHz band shall not exceed 250microvolts/meter at 3 meters. The emission limit in this paragraph is based on measurement instrumentation employing an average detector. The provision in section 15.35 for limiting peak emissions apply.

(2) Limit for Spurious emission

Frequency	Limit
MHz	Quasi-peak Value (dBuv/m @3m)
30-88	40.0
88-216	43.5
216-960	46.0
960-1000	54.0

(3) Limit for band edge

FCC 15.205(3)

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50dB below the level of the fundamental or to the general radiated emission limits in section 15.209, whichever is the lesser attenuation.

FCC ID: ATI9R3HRD60701



4.4 Measurement Results

Pass.

Please refer to following plots for items Spurious Emissions and Field Strength of Fundamental.

Report No.: NTC1706113FV00 FCC ID: ATI9R3HRD60701



Site: Radiation



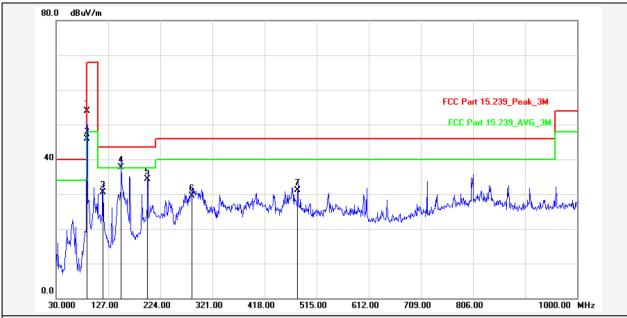
Dongguan NTC Co., Ltd. Tel:+86-769-22022444 Fax:+86-769-22022799

g Center Web: Http://www.ntc-c.com

Test Time: 2017-6-30 10:20:36

Test Distance:

3m



Report No.: HRD60701

Test Standard: FCC Part 15.239_Peak_3M

Test item: Ant. Polarization: **Radiation Emission** Horizontal Applicant: **ACTION** 22(C) / 54 % Temp.(C)/Hum.(%):

Product: Power Rating: **DC 12V**

Model No.: HRD60701 Test Engineer: Knight

Test Mode:

Remark: 88.1M EUT: 7" LCD MONITOR WITH BUILT-IN DVD PLAYER AND HDMI PORT FOR REAR SEAT ENTERTAINMENT

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)		Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	88.1000	-14.40	68.35	53.95	67.96	-14.01	peak			Р	
2	88.1000	-14.40	60.22	45.82	47.96	-2.14	AVG			Ρ	
3	117.2999	-13.46	43.94	30.48	43.50	-13.02	QP			Ρ	
4	151.2500	-15.47	53.16	37.69	43.50	-5.81	QP			Р	
5	200.7199	-13.42	47.64	34.22	43.50	-9.28	QP			Ρ	
6	283.1700	-10.91	40.34	29.43	46.00	-16.57	QP			Ρ	
7	480.0799	-7.21	38.41	31.20	46.00	-14.80	QP			Ρ	

Report No.: NTC1706113FV00 FCC ID: ATI9R3HRD60701



Site: Radiation



Dongguan NTC Co., Ltd. Tel:+86-769-22022444 Fax:+86-769-22022799

Nore Testing Center Web: <u>Http://www.ntc-c.com</u>

Test Time: 2017-6-30

Test Distance:

Power Rating:

Test Engineer:

Ant. Polarization:

Temp.(C)/Hum.(%):

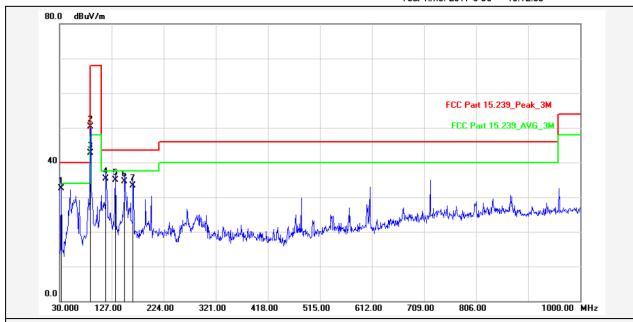
3m

DC 12V

Knight

Vertical

22(C) / 54 %



Report No.: HRD60701

Test Standard: FCC Part 15.239_Peak_3M

Radiation Emission

Applicant: **ACTION**

Product: Model No.: HRD60701

Test Mode:

Test item:

Remark:

88.1M EUT: 7" LCD MONITOR WITH BUILT-IN DVD PLAYER AND HDMI PORT FOR REAR SEAT ENTERTAINMENT

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	32.9099	-15.67	48.21	32.54	40.00	-7.46	QP			Р	
2	88.1000	-17.40	67.77	50.37	67.96	-17.59	peak			Р	
3	88.1000	-17.40	60.08	42.68	47.96	-5.28	AVG			Р	
4	116.3299	-16.25	51.47	35.22	43.50	-8.28	QP			Р	
5	133.7899	-18.32	53.13	34.81	43.50	-8.69	QP			Р	
6	151.2500	-18.47	53.07	34.60	43.50	-8.90	QP			Р	
7	166.7700	-17.92	51.27	33.35	43.50	-10.15	QP			Р	

Report No.: NTC1706113FV00 FCC ID: ATI9R3HRD60701

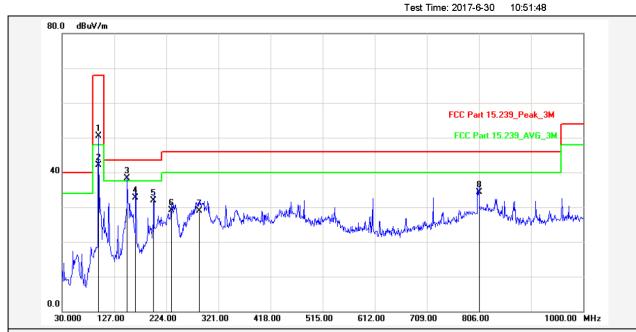




Dongguan NTC Co., Ltd. Tel:+86-769-22022444 Fax:+86-769-22022799

Web: <u>Http://www.ntc-c.com</u>

Site: Radiation



Report No.: HRD60701

Test Standard: FCC Part 15.239_Peak_3M

Test item: **Radiation Emission** Ant. Polarization: Horizontal Applicant: **ACTION** Temp.(C)/Hum.(%): 22(C) / 54 %

Product: Power Rating: DC 12V Model No.: HRD60701 Test Engineer: Knight

Test Mode:

97.9M EUT: 7" LCD MONITOR WITH BUILT-IN DVD PLAYER AND HDMI PORT FOR REAR SEAT ENTERTAINMENT Remark:

Test Distance:

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	97.9000	-12.40	62.84	50.44	67.96	-17.52	peak			Р	
2	97.9000	-12.40	54.46	42.06	47.96	-5.90	AVG			Р	
3	151.2500	-15.47	53.70	38.23	43.50	-5.27	QP			Р	
4	166.7700	-14.92	47.56	32.64	43.50	-10.86	QP			Р	
5	200.7199	-13.42	45.37	31.95	43.50	-11.55	QP			Р	
6	233.6999	-12.30	41.48	29.18	46.00	-16.82	QP			Р	
7	286.0799	-10.85	39.84	28.99	46.00	-17.01	QP			Р	
8	806.0000	-1.85	36.07	34.22	46.00	-11.78	QP			Р	

Report No.: NTC1706113FV00 FCC ID: ATI9R3HRD60701



Site: Radiation



Dongguan NTC Co., Ltd. Tel:+86-769-22022444 Fax:+86-769-22022799

Note Testing Center Web: <u>Http://www.ntc-c.com</u>

Test Time: 2017-6-30 11:04:07

Test Distance:

Power Rating:

Test Engineer:

Ant. Polarization:

Temp.(C)/Hum.(%):

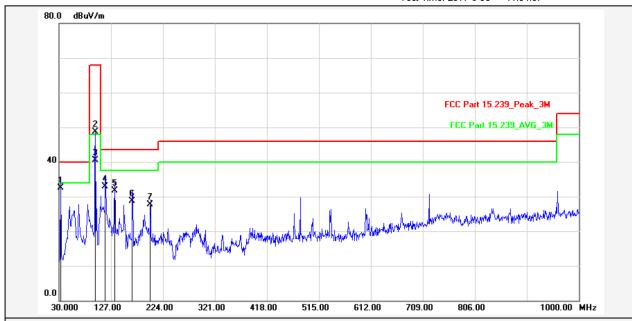
3m

DC 12V

Knight

Vertical

22(C) / 54 %



Report No.: HRD60701

Test Standard: FCC Part 15.239_Peak_3M

Radiation Emission

Applicant: **ACTION**

Product: Model No.: HRD60701

Test Mode:

Test item:

Remark:

97.9M EUT: 7" LCD MONITOR WITH BUILT-IN DVD PLAYER AND HDMI PORT FOR REAR SEAT ENTERTAINMENT

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	32.9099	-15.67	48.23	32.56	40.00	-7.44	QP			Р	
2	97.9000	-15.98	64.60	48.62	67.96	-19.34	peak			Р	
3	97.9000	-15.98	56.56	40.58	47.96	-7.38	AVG			Р	
4	116.3299	-16.25	49.18	32.93	43.50	-10.57	QP			Р	
5	133.7899	-18.32	49.97	31.65	43.50	-11.85	QP			Р	
6	166.7700	-17.92	46.69	28.77	43.50	-14.73	QP			Р	
7	200.7198	-16.42	44.04	27.62	43.50	-15.88	QP			Р	

Report No.: NTC1706113FV00 FCC ID: ATI9R3HRD60701



Site: Radiation



Dongguan NTC Co., Ltd. Tel:+86-769-22022444 Fax:+86-769-22022799

Note Testing Center Web: <u>Http://www.ntc-c.com</u>

11:27:51

Test Distance:

Power Rating:

Test Engineer:

Ant. Polarization:

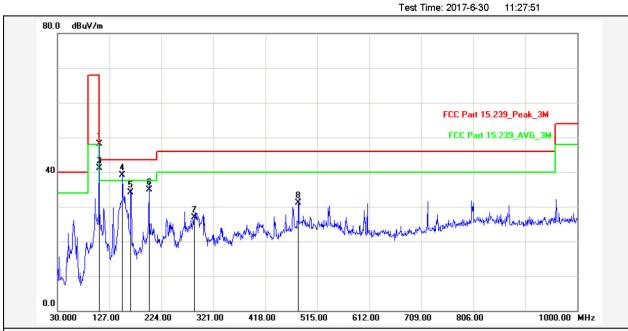
Temp.(C)/Hum.(%):

Horizontal

DC 12V

Knight

22(C) / 54 %



Report No.: HRD60701

Test Standard: FCC Part 15.239_Peak_3M

Radiation Emission

Applicant: **ACTION**

Product: Model No.: HRD60701

Test Mode: TΧ

Test item:

Remark: 107.9M EUT: 7" LCD MONITOR WITH BUILT-IN DVD PLAYER AND HDMI PORT FOR REAR SEAT ENTERTAINMENT

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	107.9000	-12.08	60.10	48.02	67.96	-19.94	peak			Р	
2	107.9000	-12.08	53.18	41.10	47.96	-6.86	AVG			Р	
3	108.0000	-12.08	53.15	41.07	43.50	-2.43	QP			Р	
4	151.2500	-15.47	54.53	39.06	43.50	-4.44	QP			Р	
5	166.7700	-14.92	49.09	34.17	43.50	-9.33	QP			Р	
6	200.7200	-13.42	48.38	34.96	43.50	-8.54	QP			Р	
7	286.0799	-10.85	37.82	26.97	46.00	-19.03	QP			Р	
8	480.0799	-7.21	38.34	31.13	46.00	-14.87	QP			Р	

Report No.: NTC1706113FV00 FCC ID: ATI9R3HRD60701





Dongguan NTC Co., Ltd. Tel:+86-769-22022444 Fax:+86-769-22022799

Web: Http://www.ntc-c.com

Test Time: 2017-6-30 11:15:22

Test Distance:

Power Rating:

Test Engineer:

Ant. Polarization:

Temp.(C)/Hum.(%):

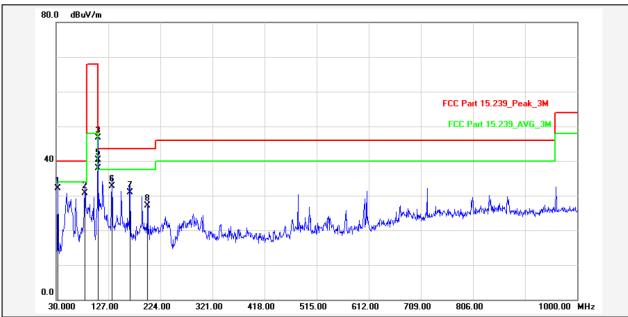
3m

DC 12V

Knight

Vertical

22(C) / 54 %



Report No.: HRD60701

Test Standard: FCC Part 15.239_Peak_3M

Test item: **Radiation Emission**

Applicant: **ACTION**

Product: Model No.: HRD60701

Test Mode:

Remark: 107.9M EUT: 7" LCD MONITOR WITH BUILT-IN DVD PLAYER AND HDMI PORT FOR REAR SEAT ENTERTAINMENT

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	32.9099	-15.67	47.76	32.09	40.00	-7.91	QP			Р	
2	83.3499	-18.50	49.27	30.77	40.00	-9.23	QP			Р	
3	107.9000	-16.08	62.85	46.77	67.96	-21.19	peak			Р	
4	107.9000	-16.08	53.99	37.91	47.96	-10.05	AVG			Р	
5	108.0000	-16.08	56.29	40.21	43.50	-3.29	QP			Р	
6	133.7899	-18.32	50.96	32.64	43.50	-10.86	QP			Р	
7	167.7400	-17.89	48.88	30.99	43.50	-12.51	QP			Р	
8	200.7199	-16.42	43.57	27.15	43.50	-16.35	QP			Р	

Report No.: NTC1706113FV00 FCC ID: ATI9R3HRD60701



5. Occupied Bandwidth

5.1 Measurement Procedure

FCC Part 15C section 15.239(a) & §2.1049

1. Set the parameters of SPA as below:

Centre frequency = Operation frequency

RBW=3KHz VBW=10KHz Span: 300KHz Sweep time: Auto

- 2. Set the EUT to continue transmitting mode. Allow the trace to stabilize. Use the "N dB down" function of SPA to define the bandwidth.
- 3. Record the plots and reported.

5.2 Test SET-UP (Block Diagram of Configuration)



5.3 Measurement Results

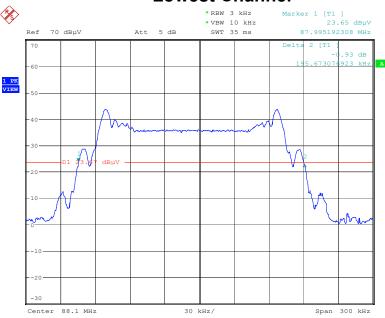
Refer to attached data chart.

Channel	20dB	Limit	Result
Frequency(MHz)	Bandwidth(kHz)	(kHz)	
88.1	195.7	200	PASS
97.9	196.2	200	PASS
107.9	197.6	200	PASS

FCC ID: ATI9R3HRD60701

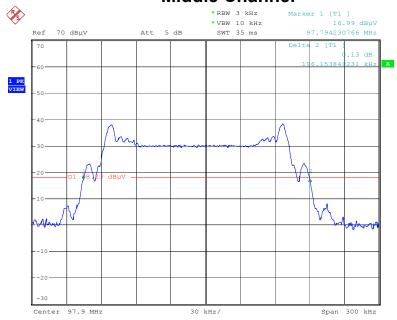


Lowest Channel



Date: 30.JUN.2017 18:03:06

Middle Channel

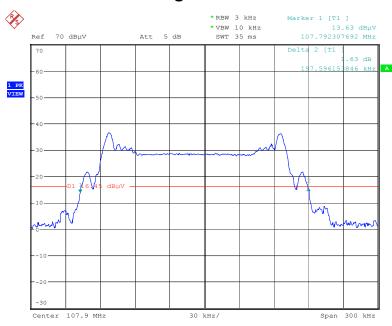


Date: 30.JUN.2017 18:05:37

FCC ID: ATI9R3HRD60701



Highest Channel



Date: 30.JUN.2017 18:09:59

Report No.: NTC1706113FV00 FCC ID: ATI9R3HRD60701



6. Antenna Application

6.1 Antenna requirement

According to of FCC part 15C section 15.203 and 15.240:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

6.2 Measurement Results

The antenna is integral antenna that no antenna other than that furnished by the responsible party shall be used with the device, and the best case gain of the antenna is 1.0dBi. So, the antenna is consider meet the requirement.

Report No.: NTC1706113FV FCC ID: ATI9R3HRD60701



7. Test Equipment List

Description	Manufacturer	Model Number	Serial Number	Characteristics	Calibration Date	Calibration Due Date
Test Receiver	Rohde & Schwarz	ESCI7	100837	9KHz~7GHz	Nov. 22, 2016	Nov. 21, 2017
Antenna	Schwarzbeck	VULB9162	9162-010	30MHz~7GHz	Nov. 25, 2016	Nov. 24, 2017
Cable	Huber+Suhner	CBL2-NN-1M	22390001	9KHz~7GHz	Nov. 06, 2016	Nov. 05, 2017
Cable	Huber+Suhner	CIL02	N/A 9KHz~7GHz N		Nov. 06, 2016	Nov. 05, 2017
RF Cable	Huber+Suhner	SF-104	MY16559/4	9KHz~25GHz	Mar. 05, 2017	Mar. 04, 2018
Power Amplifier	HP	HP 8447D	1145A00203	100KHz~1.3GHz	Nov. 06, 2016	Nov. 05, 2017
Horn Antenna	Schwarzbeck	BBHA9170	9170-242	15GHz~40GHz	Feb.23, 2017	Feb.22, 2018
Horn Antenna	Com-Power	AH-118	071078	1GHz~18GHz Nov. 04, 2016		Nov. 03, 2017
RF Cable	Huber+Suhner	SF-106	N/A	9KHz~40GHz	April. 06, 2017	April. 04, 2018
Loop antenna	Daze	ZA30900A	0708	9KHz~30MHz Oct.09, 2016		Oct.08, 2017
Spectrum Analyzer	Rohde & Schwarz	FSU26	200409/026	20Hz~26.5GHz Aug. 31, 2016		Aug. 30, 2017
Spectrum Analyzer	Rohde & Schwarz	FSV40	101003 10Hz~400		April. 06, 2017	April. 05, 2018
Pre-Amplifier	EMCI	EMC 184045	980102	980102 18GHz~40GHz Nov. 04		Nov. 03, 2017
Pre-Amplifier	Agilent	8449B	3008A02964	1GHz~26.5GHz	Nov. 02, 2016	Nov. 01, 2017
L.I.S.N.	Rohde & Schwarz	ENV 216	101317	9KHz~30MHz Nov. 06, 2016		Nov. 07, 2017
Temporary antenna connector	TESCOM	SS402	N/A	9KHz-25GHz	N/A	N/A
Power Meter	Anritsu	ML2495A	1139001	100k-65GHz	Nov. 04, 2016	Nov. 03, 2017
Power Sensor	Anritsu	MA2411B	100345	300M-40GHz	Nov. 04, 2016	Nov. 03, 2017

Note: The temporary antenna connector is soldered on the PCB board in order to perform conducted tests and this temporary antenna connector is listed in the equipment list.