Test Report of FCC CFR 47 Part 15 Subpart B

On Behalf of

Hena Digital Technology (Shenzhen) Co., Ltd.

Product Description:	MID
Test Model No.:	MID8306CM
	JTAB 8, MID8306HCM, MID8306CE, MID8306HCE, UNO X8,

MW83**P, MW83**G, MW83**E, MW83**S,MY83**P,MY83**G, MY83**E, MY83**S, MID83**CM, MID83**CE, MID83**HCM,

MID83**HCE(** Can be 01-99)

Brand Name: HENA, JadooTV

FCC ID:

Supplementary Model:

Approved by:

Prepared for: Hena Digital Technology (Shenzhen) Co., Ltd.

M7C-MID115

3F, South Tower, Jiuzhou Electric Building, Southern No, 12Rd, High-tech Industrial Park, Nanshan District, Shenzhen, China

Prepared by: Bontek Compliance Testing Laboratory Co., Ltd

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Report No.: BCT13HR280E-2

Issue Date: September 12, 2013

Test Date: August 20-September 10, 2013

Tested by: / Reviewed by:

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1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant:	Hena Digital Technology (Shenzhen) Co., Ltd.
Address of Applicant:	3F, South Tower, Jiuzhou Electric Building, Southern No, 12Rd,
	High-tech Industrial Park, Nanshan District, Shenzhen, China
Manufacturer:	Hena Digital Technology (Shenzhen) Co., Ltd.
Address of Manufacturer:	3F, South Tower, Jiuzhou Electric Building, Southern No, 12Rd,
	High-tech Industrial Park, Nanshan District, Shenzhen, China

General Description of E.U.T

Items	Description
EUT Description:	MID
Trade Name:	HENA, JadooTV
Test Model No.:	MID8306CM
Supplementary Model:	JTAB 8, MID8306HCM, MID8306CE, MID8306HCE, UNO X8, MW83**P, MW83**G, MW83**E, MW83**S,MY83**P,MY83**G, MY83**E, MY83**S, MID83**CE, MID83**HCM, MID83**HCE(** Can be 01-99)
WIFI Module:	
Frequency Band:	2412M~2462M
Type of Modulation:	IEEE 802.11b: DSSS (CCK, DQPSK, DBPSK)
	IEEE 802.11g: OFDM (64QAM, 16QAM, QPSK, BPSK)
	IEEE 802.11n HT20/40: OFDM (64QAM, 16QAM, QPSK, BPSK)
Rated Voltage:	Input: 5VDC 2.0A from AC/DC adapter
Adapter Description:	Model:K15S050200U
	Input: AC 100-240V 50/60Hz 0.5A
	Output: 5VDC 2.0A

Remark: * The test data gathered are from the production sample provided by the manufacturer.

* Supplementary models have the same circuit, but with different appearance

1.2 Test Standards

The report of EUT is prepared in accordance with FCC Rules and Regulations Part 15 Subpart B 2006. The objective of the manufacturer is to demonstrate compliance with the described above standards.

1.3 Test Facility

All measurement required was performed at laboratory of Bontek Compliance Testing Laboratory Ltd at 1/F, Block East H-3, OCT Eastern Ind. Zone, Qiaocheng East Road, Nanshan, Shenzhen, China.

The test facility is recognized, certified, or accredited by the following organizations:

FCC - Registration No.: 338263

BONTEK COMPLIANCE TESTING LABORATORY LTD. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 338263, March 03, 2011.

IC Registration No.: 7631A

The 3m alternate test site of BONTEK COMPLIANCE TESTING LABORATORY LTD. EMC Laboratory has been registered by Certification and Engineer Bureau of Industry Canada for the performance of with Registration NO.: 7631A on January 25, 2011.

CNAS - Registration No.: L3923

BONTEK COMPLIANCE TESTING LABORATORY LTD. to ISO/IEC 17025:25 General Requirements for the Competence of Testing and Calibration Laboratories(CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing. The acceptance letter from the CNAS is maintained in our files: Registration: L3923, March 22, 2012.

TUV - Registration No.: 50242657-0001

Shenzhen Bontek Compliance Testing Laboratory Co., Ltd. An assessment of the laboratory was conducted according to the "Procedures and Conditions for EMC Test Laboratories" with reference to EN ISO/IEC 17025 by a TUV Rheinland auditor. Audit Report NO. 17010783-003

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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 that intends to maximize its emission characteristics in a continuous normal application.

2.2 Support Equipments

The calibrated antennas used to sample the radiated field strength are mounted on a non-conductive, motorized antenna mast 3 or 10 meters from the leading edge of the turntable.

Support equipments or special accessories in test configuration:

AUX Description:	Manufacturer	Model No.	Certificate	CABLE
Host Computer	Dell	78MD82X	CE, FCC	1.5m Unshielded Power Cord
Monitor	Dell	E178Pc	CE, FCC	1.5m Unshielded Power Cord 1.8m shielded data Cable with core
Keyboard	Dell	L100	CE, FCC	1.8m shielded data Cable with core
Mouse	Dell	OCJ339	CE, FCC	1.8m shielded data Cable with core

2.3 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 7.1 of ANSI C63.4-2003 Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-Peak detector mode.

Radiated Emissions: The EUT is a placed on as turntable, 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 C63.4-2003.

2.4 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Parameter	Uncertainty
Power Line Conducted Emission	+/- 2.3 dB
Radiated Emission	+/- 3.4 dB

Uncertainty figures are valid to a confidence level of 95%.

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2.5 List of Measuring Equipments Used

Test equipments list of Shenzhen Bontek Compliance Testing Laboratory Co., Ltd.

No.	Equipment	Manufacturer	Model No.	S/N	Calibration date	Calibration due date
1	EMI Test Receiver	R&S	ESCI	100687	2013-4-5	2014-4-4
2	EMI Test Receiver	R&S	ESPI	100097	2013-7-24	2014-7-23
3	Amplifier	HP	8447D	1937A02492	2013-4-5	2014-4-4
4	Single Power Conductor Module	FCC	FCC-LISN-5- 50-1-01- CISPR25	07101	2013-4-5	2014-4-4
5	Single Power Conductor Module	FCC	FCC-LISN-5- 50-1-01- CISPR25	07102	2013-4-5	2014-4-4
6	Positioning Controller	C&C	CC-C-1F	MF7802113	N/A	N/A
7	Signal generator	Rhode & Schwarz	SMIQ 03HD + option SM-B1, SMIQB11, SMIQB12, SMIQB14, SMIQB17, SMIQB20	1125.5555.46	2013-4-5	2014-4-4
8	GSM system simulator	Rhode & Schwarz	CMU200 + option K20, K21, K22, K23, K24, K27, K28, K29, K42, K65, B12, B41, B52, B66, B56	1100.0008.34	2013-4-5	2014-4-4
9	GSM system simulator	Agilent	8960 Series 10 E1985A + GSM_AMPS	B.01.76 GB42450443	2013-4-5	2014-4-4
10	Spectrum Analyzer	Agilent	E4404B	US41192833	2013-4-5	2014-4-4
11	6dB Attenuator	Atten	Attenuator	DC-4GHz	2013-4-5	2014-4-4
12	Digital Multimeter	Fluke	15B	91280239	2013-4-5	2014-4-4
13	TRILOG Broadband Test-Antenna	SCHWARZBECK	VULB9163	9163-324	2013-4-9	2014-4-8
14	Horn Antenna	SCHWARZBECK	BBHA9120A	0499	2012-11-27	2013-11-26
15	Active Loop Antenna	DAZE	ZN30900A	1200	2013-4-6	2014-4-5
16	9kHz-2.4GHz signal generator 2024	MARCONI	10S/6625-99- 457-8730	112260/042	2013-4-5	2014-4-4
17	10dB attenuator	ELECTRO- METRICS	EM-7600	836	2013-4-5	2014-4-4
18	Spectrum Analyzer	R&S	FSP	100397	2012-11-1	2013-10-31
19	Broadband preamplifier	SCH WARZBECK	BBV9718	9718-182	2013-4-5	2014-4-4
20	Temperature & Humidity Chamber	TOPSTAT	TOS-831A	3438A05208	2013-4-5	2014-4-4

3. SUMMARY OF TEST RESULTS

Standard	Test Items	Result
FCC Part 15 Subpart B	Conduction Emission, 0.15MHz to 30MHz	Pass
FCC Part 15 Subpart B	Radiation Emission, 30MHz to 1000MHz	Pass

4. TEST OF AC POWER LINE CONDUCTED EMISSION

4.1 Limit of AC Power Line Conducted Emission

Frequency Range (MHz)	Limits (dBuV)				
Frequency Kange (MITZ)	Quasi-Peak Average				
0.150~0.500	66∼56	56∼46			
0.500~5.000	56	46			
5.000~30.00	60	50			

4.2 EUT Setup

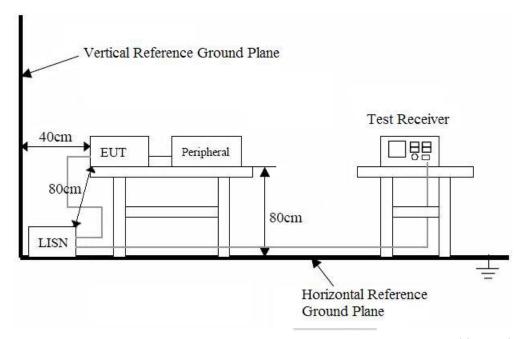
The setup of EUT is according with ANSI C63.4-2003 measurement procedure. The specification used was the FCC Rules and Regulations Part 15 Subpart B limits.

The EUT was placed center and the back edge of the test table.

The AV cables were draped along the test table and bundled to 30-40cm in the middle.

The spacing between the peripherals was 10 cm.

Maximum emission emitted from EUT was determined by manipulating the EUT, support equipment, interconnecting cables and varying the mode of operation and the levels in the final result of the test were recorded with the EUT running in the operating mode that maximum emission was emitted.



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Remark: The EUT was connected to a 120VAC/60Hz power source.

4.3 Instrument Setup

The test receiver was set with the following configurations:

Test Receiver Setting:

Frequency Range......150 KHz to 30 MHz

Detector......Peak & Quasi-Peak & Average

Sweep Speed......Auto
IF Band Width......9 KHz

4.4 Test Procedure

During the conducted emission test, the EUT power cord was connected to the auxiliary outlet of the first Artificial Mains.

Maximizing procedure was performed on the six (6) highest emissions to ensure EUT compliance using all installation combination.

All data was recorded in the peak detection mode. Quasi-peak and Average readings were only performed when an emission was found to be marginal (within -10 dB μ V of specification limits). Quasi-peak readings are distinguished with a "QP". Average readings are distinguished with a "AV".

4.5 Test Result

Temperature ($^{\circ}$ C) : 22~23	EUT: MID
Humidity (%RH): 50~54	M/N: MID8306CM
Barometric Pressure (mbar): 950~1000	Operation Condition:
	Connect to PC & SD /Charging & Camera/ SD Playing/HDMI Playing

Note: In all test modes, Connect to PC & SD, HDMI Playing ,Charging & Camera is the worst-case.

EUT: MID

M/N: MID8306CM

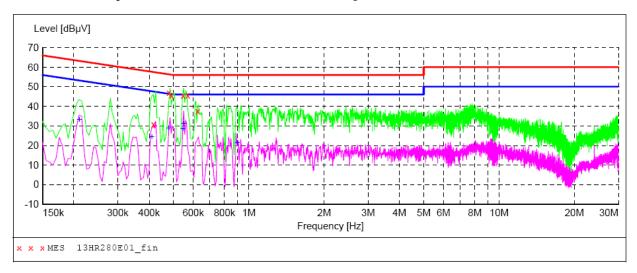
Operating Condition: Charging & Camera Test Site: Shielded Room

Operator: Yang

Test Specification: AC 120V/60Hz for adapter

Comment: L Line

SCAN TABLE: "Voltage(150K-30M)FIN"
Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "13HR280E01 fin"

8/22/2013	14:57						
Frequenc MH	•	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.41500	0 30.90	10.7	58	26.6	QP	L1	GND
0.48000	0 47.10	10.5	56	9.2	QP	L1	GND
0.49000	0 45.70	10.5	56	10.5	QP	L1	GND
0.54500	0 45.70	10.5	56	10.3	QP	L1	GND
0.57000	0 45.60	10.4	56	10.4	QP	L1	GND
0.62500	0 37.50	10.4	56	18.5	QP	L1	GND

MEASUREMENT RESULT: "13HR280E01 fin2"

8/22/2013 14: Frequency MHz		Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.210000 0.410000 0.480000 0.545000 0.550000 0.900000	33.30 24.40 28.90 28.50 31.40 21.30	11.3 10.7 10.5 10.5 10.5	53 48 46 46 46 46	19.9 23.2 17.4 17.5 14.6 24.7	AV AV	L1 L1 L1 L1 L1	GND GND GND GND GND GND

EUT: MID

M/N: MID8306CM

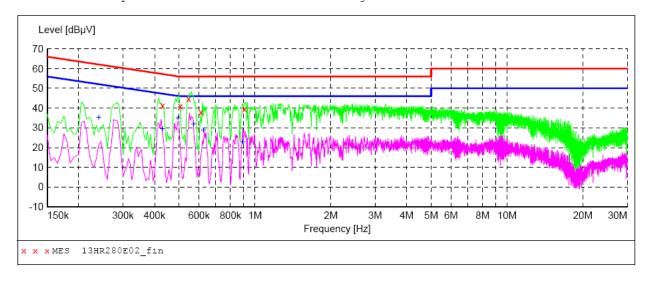
Operating Condition: Charging & Camera Test Site: Shielded Room

Yang Operator:

Test Specification: AC 120V/60Hz for adapter

Comment: N Line

SCAN TABLE: "Voltage (150K-30M) FIN"
Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "13HR280E02_fin"

8/22/2013 15:	:01						
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.430000	41.20	10.6	57	16.1	OP	N	GND
0.505000	40.90	10.5		15.1	~	N	GND
0.545000	44.80	10.5	56	11.2	QΡ	N	GND
0.610000	37.90	10.4	56	18.1	QP	N	GND
0.910000	39.50	10.4	56	16.5	OP	N	GND

MEASUREMENT RESULT: "13HR280E02 fin2"

8/	22/2013 15:	:01						
	Frequency	Level	Transd	Limit	Margin	Detector	Line	PΕ
	MHz	dΒμV	dB	dΒμV	dB			
	0.240000	35.30	11.2	52	16.8	AV	N	GND
	0.430000	29.60	10.6	47	17.7	AV	N	GND
	0.495000	34.90	10.5	46	11.2	AV	N	GND
	0.570000	32.00	10.4	46	14.0	AV	N	GND
	0.625000	28.90	10.4	46	17.1	AV	N	GND
	0.895000	22.60	10.4	46	23.4	AV	N	GND

EUT: MID

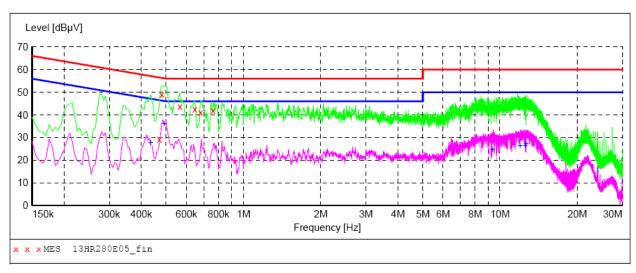
M/N: MID8306CM Operating Condition: **HDMI Playing** Test Site: Shielded Room

Yang Operator:

Test Specification: AC 120V/60Hz for adapter

Comment: L Line

SCAN TABLE: "Voltage(150K-30M)FIN"
Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "13HR280E05 fin"

8/22/2013 1	6:03						
Frequency MHz		Transd dB	Limit dBµV	Margin dB	Detector	Line	PΕ
0 470000	00.00	10.5		07.0		- 4	
0.470000	29.30	10.5	57	27.2	QP	L1	GND
0.480000	49.00	10.5	56	7.3	QP	L1	GND
0.565000	43.60	10.5	56	12.4	QP	L1	GND
0.645000	42.40	10.4	56	13.6	QP	L1	GND
0.680000	41.20	10.4	56	14.8	QP	L1	GND
0.760000	41.80	10.4	56	14.2	QP	L1	GND

MEASUREMENT RESULT: "13HR280E05 fin2"

8/22/2013 16: Frequency MHz	03 Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.435000 0.490000 9.360000 11.975000 12.545000 12.640000	27.70 36.20 24.60 26.20 26.40 27.20	10.6 10.5 10.6 10.6 10.6	47 46 50 50 50	19.5 10.0 25.4 23.8 23.6 22.8	AV AV AV AV AV	L1 L1 L1 L1 L1	GND GND GND GND GND GND

EUT: MID

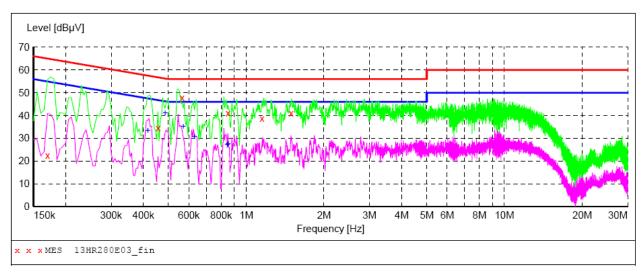
M/N: MID8306CM Operating Condition: **HDMI Playing** Test Site: Shielded Room

Yang Operator:

Test Specification: AC 120V/60Hz for adapter

Comment: N Line

SCAN TABLE: "Voltage(150K-30M)FIN"
Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "13HR280E03 fin"

8/22/2013 19 Frequency MHz	5:14 Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.170000	22.60	12.5	65	42.4	QP	N	GND
0.455000	34.60	10.6	57	22.2	QP	N	GND
0.565000	47.90	10.5	56	8.1	QP	N	GND
0.850000	41.10	10.4	56	14.9	QP	N	GND
1.150000	38.80	10.4	56	17.2	QP	N	GND
1.490000	41.00	10.4	56	15.0	QP	N	GND

MEASUREMENT RESULT: "13HR280E03 fin2"

8/22/2013 15: Frequency MHz		Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.415000	33.30	10.7	48	14.2	AV	N	GND
0.485000	41.00	10.5	46	5.3	AV	N	GND
0.570000	35.10	10.4	46	10.9	AV	N	GND
0.630000	30.80	10.4	46	15.2	AV	N	GND
0.845000	27.30	10.4	46	18.7	AV	N	GND
0.850000	27.50	10.4	46	18.5	AV	N	GND

EUT: MID

MID8306CM M/N:

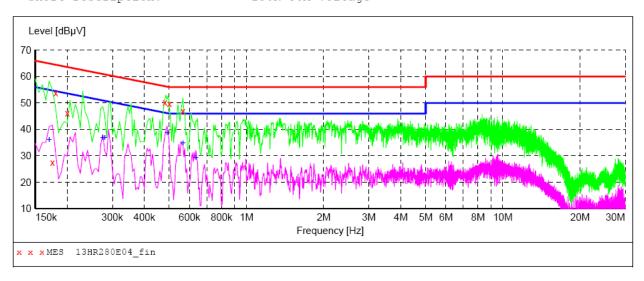
Operating Condition: Connect to PC & SD Test Site: Shielded Room

Yang Operator:

Test Specification: AC 120V/60Hz for adapter

Comment: L Line

SCAN TABLE: "Voltage(150K-30M)FIN"
Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "13HR280E04_fin"

8/22/2013	15:16						
Frequer	cy Leve	el Transd	l Limit	Margin	Detector	Line	PΕ
- N	iHz dbj	ıV dE	dBµV	dB			
	·		·				
0.1750	000 27.5	50 12.3	65	37.2	QP	L1	GND
0.1800	000 53.8	30 12.1	65	10.7	QP	L1	GND
0.2000	000 46.3	30 11.3	64	17.3	QP	L1	GND
0.4800	000 50.3	30 10.5	56	6.0	QP	L1	GND
0.5000	000 49.8	30 10.5	56	6.2	QP	L1	GND
0.5650	000 46.9	90 10.5	56	9.1	QP	L1	GND

MEASUREMENT RESULT: "13HR280E04_fin2"

8/22/2013	15:16						
Freque	4		Limit	_	Detector	Line	PΕ
1	MHz dBp	.V dB	dBµV	dB			
0.170	000 36.1	0 12.5	55	18.9	AV	L1	GND
0.275	000 36.7	0 11.0	51	14.3	AV	L1	GND
0.280	000 36.9	0 11.0	51	13.9	AV	L1	GND
0.490	000 38.6	0 10.5	46	7.6	AV	L1	GND
0.565	000 34.8	0 10.5	46	11.2	AV	L1	GND
0.635	000 29.3	0 10.4	46	16.7	AV	L1	GND

EUT: MID

MID8306CM M/N:

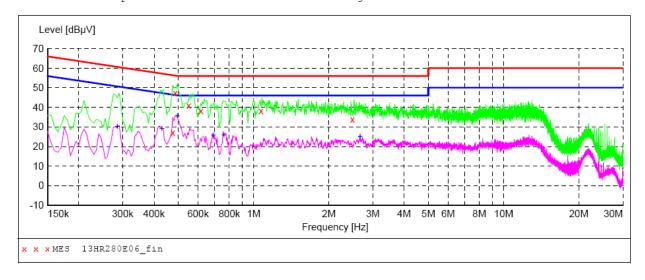
Operating Condition: Connect to PC & SD Test Site: Shielded Room

Operator: Yang

Test Specification: AC 120V/60Hz for adapter

Comment: N Line

SCAN TABLE: "Voltage (150K-30M) FIN"
Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "13HR280E06 fin"

8/	22/2013 16:	05						
	Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PΕ
	0.475000	27.20	10.5	56	29.2	QP	N	GND
	0.485000	47.30	10.5	56	9.0	QΡ	N	GND
	0.550000	40.90	10.5	56	15.1	QP	N	GND
	0.615000	38.40	10.4	56	17.6	QP	N	GND
	1.070000	38.40	10.5	56	17.6	QP	N	GND
	2.485000	33.90	10.4	56	22.1	QP	N	GND

MEASUREMENT RESULT: "13HR280E06 fin2"

8,	/22/2013 16: Frequency	05 Level	Transd	Limit	Margin	Detector	Line	PE
	MHZ	dΒμV	dB	dΒμV	dB	20000002		
	0.285000	30.10	11.0	51	20.6	AV	N	GND
	0.430000	29.20	10.6	47	18.1	AV	N	GND
	0.495000	35.60	10.5	46	10.5	AV	N	GND
	0.690000	25.60	10.4	46	20.4	AV	N	GND
	0.760000	25.80	10.4	46	20.2	AV	N	GND
	2.665000	25.10	10.4	46	20.9	AV	N	GND

5 - RADIATED DISTURBANCES

5.1 Limit of Radiated Disturbances

Frequency (MHz)	Distance (Meters)	Field Strengths Limits (dB _µ V/m)
30 ~ 88	3	40
88~216	3	43.5
216 ~ 960	3	46
960 ~ 1000	3	54

Note:

- (1) The tighter limit shall apply at the edge between two frequency bands.(2) Distance refers to the distance in meters between the test instrument antenna and the closest point of any part of the E.U.T.

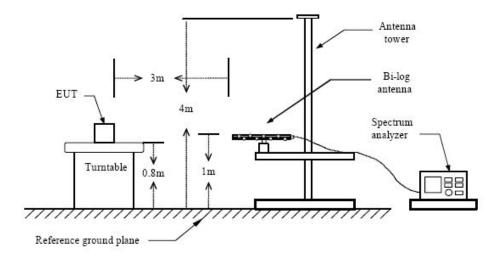
5.2 EUT Setup

The radiated emission tests were performed in the in the 3-meter anechoic chamber, using the setup accordance with the ANSI C63.4-2003. The specification used was the FCC Part 15 Subpart B limits.

The EUT was placed on the center of the test table.

Maximum emission emitted from EUT was determined by manipulating the EUT, support equipment, interconnecting cables and varying the mode of operation and the levels in the final result of the test were recorded with the EUT running in the operating mode that maximum emission was emitted.

Below 1 GHz



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5.3 Test Receiver Setup

According to FCC Part 15 rule, the frequency was investigated from 30 to 1000 MHz. During the radiated emission test, the test receiver was set with the following configurations:

Test Receiver Setting:

Detector.....Peak & Quasi-Peak

IF Band Width......120KHz

Frequency Range......30MHz to 1000MHz Turntable Rotated........0 to 360 degrees

Antenna Position:

Height......1m to 4m

Polarity......Horizontal and Vertical

5.4 Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

All data was recorded in the peak detection mode. Quasi-peak readings performed only when an emission was found to be marginal (within -10 dB $_{\mu}$ V of specification limits), and are distinguished with a "QP" in the data table.

5.5 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

Corr. Ampl. = Indicated Reading + Antenna Factor + Cable Factor - Amplifier Gain

The "Margin" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -7dB μ V means the emission is 7dB μ V below the maximum limit for Subpart B. The equation for margin calculation is as follows:

Margin = Limit - Corr. Ampl.

5.6 Radiated Emissions Test Result

Temperature (°C) : 22~23	EUT: MID
Humidity (%RH): 50~54	M/N: MID8306CM
Barometric Pressure (mbar): 950~1000	Operation Condition:
	Connect to PC & SD /Charging & Camera/ SD Playing/HDMI Playing

Note: In all test modes, Connect to PC & SD, HDMI Playing Charging & Camera is the worst-case.

EUT: MID

M/N: MID8306CM

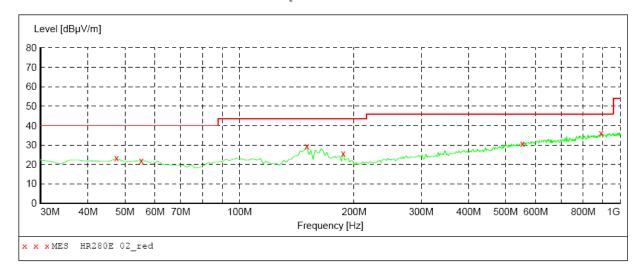
Operating Condition: Charging & Camera Test Site: 3m CHAMBER

Operator: Chen

Test Specification: AC 120V/60Hz for adapter Comment: Polarization: Horizontal

SWEEP TABLE: "test (30M-1G)"
Short Description: Field Strength Detector Meas. IF Start Stop

Transducer Frequency Frequency 30.0 MHz 1.0 GHz Time Bandw. MaxPeak Coupled 100 kHz VULB9163 NEW



MEASUREMENT RESULT: "HR280E 02 red"

8/25/2013	17:19								
Frequenc M	_	evel µV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
47.46000	00 2	3.20	15.8	40.0	16.8	QP	100.0	0.00	HORIZONTAL
55.22000	0 2	2.00	15.6	40.0	18.0	QP	100.0	0.00	HORIZONTAL
150.28000	00 2	9.30	12.3	43.5	14.2	QP	100.0	0.00	HORIZONTAL
187.14000	0 2	5.80	14.5	43.5	17.7	QP	100.0	0.00	HORIZONTAL
553.80000	0 3	0.80	25.1	46.0	15.2	QP	300.0	0.00	HORIZONTAL
891.36000	0 3	6.00	29.1	46.0	10.0	QP	100.0	0.00	HORIZONTAL

EUT: MID

M/N: MID8306CM

Operating Condition: Charging & Camera Test Site: 3m CHAMBER

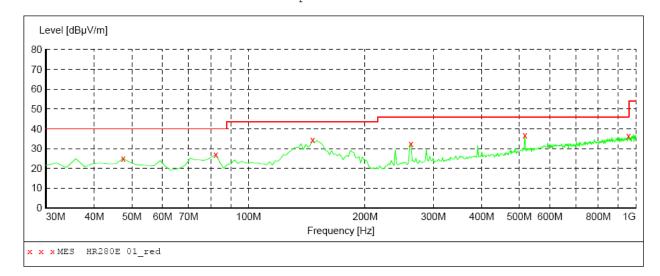
Operator: Chen

Test Specification: AC 120V/60Hz for adapter Comment: Polarization: Vertical

SWEEP TABLE: "test (30M-1G)"
Short Description: Field Strength

Detector Meas. IF Start Stop Transducer

Frequency Frequency Time Bandw. 30.0 MHz 1.0 GHz Coupled 100 kHz VULB9163 NEW MaxPeak



MEASUREMENT RESULT: "HR280E 01 red"

8/25/2013 17: Frequency MHz		Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
47.460000	25.00	15.8	40.0	15.0	QP	100.0	0.00	VERTICAL
82.380000	27.10	13.4	40.0	12.9	QP	100.0	0.00	VERTICAL
146.400000	34.40	12.3	43.5	9.1	QP	100.0	0.00	VERTICAL
262.800000	32.50	17.5	46.0	13.5	QP	100.0	0.00	VERTICAL
516.940000	37.00	24.2	46.0	9.0	ÕР	100.0	0.00	VERTICAL
957.320000	36.40	29.6	46.0	9.6	OP	100.0	0.00	VERTICAL

EUT: MID

M/N: MID8306CM **HDMI** Playing Operating Condition: Test Site: 3m CHAMBER

Operator: Chen

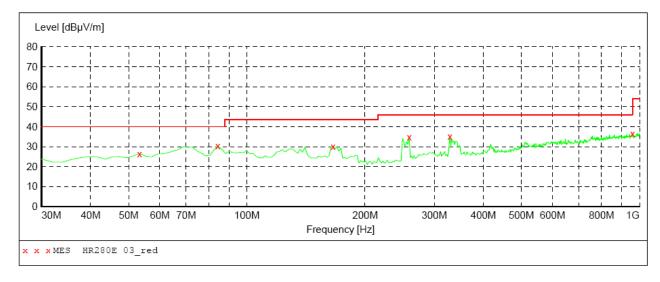
Test Specification: AC 120V/60Hz for adapter Comment: Polarization: Horizontal

SWEEP TABLE: "test (30M-1G)"
Short Description: Fi Field Strength

Start Stop Detector Meas. IF Transducer

Frequency Frequency Bandw. Time

30.0 MHz 1.0 GHz MaxPeak Coupled 100 kHz VULB9163 NEW



MEASUREMENT RESULT: "HR280E 03 red"

8/25/2013	18:	21							
Frequen	СУ	Level	Transd	Limit	Margin	Det.	Height	Azimuth	Polarization
M	ΗZ	dBuV/m	dB	dBuV/m	dB		cm	dea	
		, ,						2	
53.2800	00	26.60	15.7	40.0	13.4	QP	300.0	0.00	HORIZONTAL
84.3200	00	30.30	14.1	40.0	9.7	QP	300.0	0.00	HORIZONTAL
165.8000	00	30.00	13.0	43.5	13.5	QP	100.0	0.00	HORIZONTAL
258.9200	00	34.90	17.3	46.0	11.1	QP	100.0	0.00	HORIZONTAL
328.7600	00	35.30	19.6	46.0	10.7	QP	100.0	0.00	HORIZONTAL
959.2600	00	36.40	29.6	46.0	9.6	QP	300.0	0.00	HORIZONTAL

EUT: MID

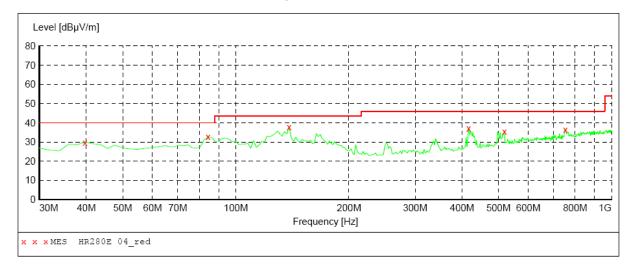
M/N: MID8306CM Operating Condition: **HDMI** Playing Test Site: 3m CHAMBER

Operator: Chen

Test Specification: AC 120V/60Hz for adapter Comment: Polarization: Vertical

SWEEP TABLE: "test (30M-1G)"
Short Description: Field Strength Start Stop Detector Meas. IF Transducer Frequency Frequency Time Bandw.

30.0 MHz 1.0 GHz Coupled 100 kHz VULB9163 NEW MaxPeak



MEASUREMENT RESULT: "HR280E 04 red"

8/25/2013	18:1	8							
Frequenc	СУ	Level	Transd	Limit	Margin	Det.	Height	Azimuth	Polarization
MH	Ηz	dBµV/m	dB	dBµV/m	-dB		cm	deg	
39.70000	0.0	29.90	15.8	40.0	10.1	QP	100.0	0.00	VERTICAL
84.32000	0.0	32.70	14.1	40.0	7.3	QР	100.0	0.00	VERTICAL
138.64000	0.0	37.80	12.4	43.5	5.7	QP	100.0	0.00	VERTICAL
416.06000	0.0	37.10	21.9	46.0	8.9	QP	100.0	0.00	VERTICAL
518.88000	0.0	35.50	24.3	46.0	10.5	QP	100.0	0.00	VERTICAL
753.62000	0.0	36.60	27.3	46.0	9.4	QP	100.0	0.00	VERTICAL

EUT: MID

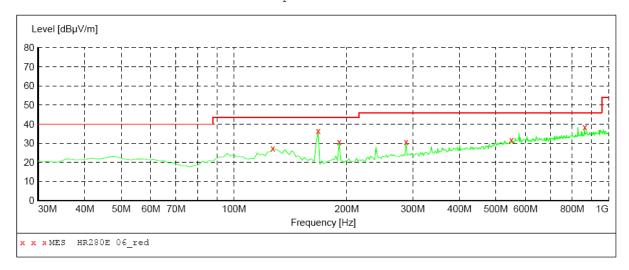
M/N: MID8306CM

Operating Condition: Connect to PC & SD Test Site: 3m CHAMBER

Operator: Chen

Test Specification: AC 120V/60Hz for adapter Comment: Polarization: Horizontal

SWEEP TABLE: "test (30M-1G)"
Short Description: Field Strength
Start Stop Detector Meas. IF Transducer Frequency Frequency Bandw. Time 30.0 MHz 1.0 GHz MaxPeak Coupled 100 kHz VULB9163 NEW



MEASUREMENT RESULT: "HR280E 06 red"

8/	25/2013 18:	:08							
	Frequency	Level	Transd	Limit	Margin	Det.	Height	Azimuth	Polarization
	MHz	dBµV/m	dB	dBµV/m	dB		cm	deg	
	127.000000	27.30	13.5	43.5	16.2	QP	300.0	0.00	HORIZONTAL
	167.740000	36.50	13.0	43.5	7.0	QP	100.0	0.00	HORIZONTAL
	191.020000	30.80	14.8	43.5	12.7	QP	100.0	0.00	HORIZONTAL
	288.020000	30.60	18.4	46.0	15.4	QP	100.0	0.00	HORIZONTAL
	549.920000	31.80	25.0	46.0	14.2	QP	100.0	0.00	HORIZONTAL
	864.200000	38.60	28.8	46.0	7.4	OP	100.0	0.00	HORIZONTAL

EUT: MID

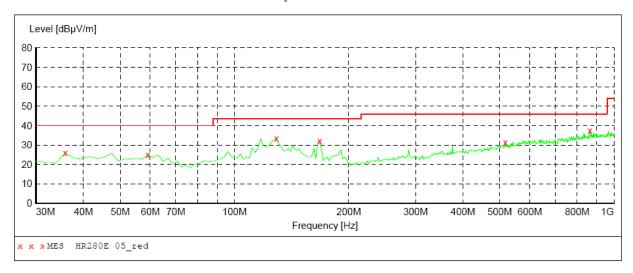
M/N: MID8306CM

Operating Condition: Connect to PC & SD Test Site: 3m CHAMBER

Operator: Chen

Test Specification: AC 120V/60Hz for adapter Comment: Polarization: Vertical

SWEEP TABLE: "test (30M-1G)"
Short Description: Field Strength Start Stop Detector Meas. Transducer Frequency Frequency 30.0 MHz 1.0 GHz Time Bandw. Coupled 100 kHz VULB9163 NEW MaxPeak



MEASUREMENT RESULT: "HR280E 05 red"

8/25/2013 18: Frequency MHz	02 Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
35.820000	25.90	14.7	40.0	14.1	QP	100.0	0.00	VERTICAL
59.100000	25.00	14.6	40.0	15.0	QP	100.0	0.00	VERTICAL
128.940000	33.60	13.2	43.5	9.9	QP	100.0	0.00	VERTICAL
167.740000	32.10	13.0	43.5	11.4	QP	100.0	0.00	VERTICAL
516.940000	31.60	24.2	46.0	14.4	ÕР	100.0	0.00	VERTICAL
864.200000	37.70	28.8	46.0	8.3	OP	100.0	0.00	VERTICAL