

APPLICATION OF CERTIFICATION

For

BenQ Corporation

LCD Monitor

Brand Name	Model Number
BenQ	RP552; RP552H; RP552H1; RP552H2; RP552H3; RP552H4

FCC ID: JVPRP552

Prepared for : BenQ Corporation
16 Jihu Road, Neihu, Taipei 114, Taiwan

Prepared By: Audix Technology (Shenzhen) Co., Ltd.
No. 6, Ke Feng Rd., 52 Block,
Shenzhen Science & Industrial Park,
Nantou, Shenzhen, Guangdong, China

Tel: (0755) 26639496
Fax: (0755) 26632877

Report Number : ACS- F15167-1
Date of Test : Apr.14~19,2016
Date of Report : May.13,2016

TABLE OF CONTENTS

Description	Page
Test Report Certification	
1. SUMMARY OF STANDARDS AND RESULTS	1-2
1.1. Description of Standards and Results	1-2
2. GENERAL INFORMATION	2-1
2.1. Description of Device (EUT).....	2-1
2.2. Tested Supporting System Details	2-2
2.3. Block diagram of connection between the EUT and simulators.....	2-4
2.4. Test Facility	2-5
2.5. Measurement Uncertainty (95% confidence levels, k=2).....	2-5
3. POWER LINE CONDUCTED EMISSION MEASUREMENT	3-1
3.1. Test Equipment	3-1
3.2. Block Diagram of Test Setup.....	3-1
3.3. Power Line Conducted Emission Test Limits	3-1
3.4. Configuration of EUT on Test.....	3-2
3.5. Operating Condition of EUT	3-2
3.6. Test Procedure	3-2
3.7. Conducted Emission at Mains Terminals Test Results.....	3-3
4. RADIATED EMISSION MEASUREMENT	4-6
4.1. Test Equipment	4-6
4.2. Block Diagram of Test Setup.....	4-7
4.3. Radiated Emission Limit	4-8
4.4. EUT Configuration on Test	4-8
4.5. Operating Condition of EUT	4-8
4.6. Test Procedure	4-8
4.7. Radiated Emission Test Results.....	4-9
5. PHOTOGRAPH	5-1
5.1. Photos of Power Line Conducted Emission Test.....	5-1
5.2. Photos of Radiated Emission Test (In Anechoic Chamber)	5-2
6. PHOTOS OF THE EUT	6-1

FCC ID:JVPRP552

TEST REPORT CERTIFICATION

Applicant : BenQ Corporation
EUT Description : LCD Monitor
FCC ID : JVPRP552

(A) Model No. &
Brand Name

Brand Name	Model Number
BenQ	RP552; RP552H; RP552H1; RP552H2; RP552H3; RP552H4

(B) Power Supply : AC 100-240V; 50/60Hz
(C) Test Voltage : AC 120V/60Hz

Measurement Standard Used:

FCC Rules and Regulations Part 15 Subpart B Class B 2015

The device described above is tested by AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart B Class B limits both conducted and radiated emissions. The test results are contained in this test report and AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. is assumed of full responsibility for the accuracy and completeness of these tests. This report contains data that are not covered by the NVLAP accreditation.

After the test, our opinion is that EUT compliance with the requirement of the above standards.

This Report is made under FCC Part 2.1075. No modifications were required during testing to bring this product into compliance.

This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

Date of Test : Apr.14~19,2016 Report of date: May.13,2016

Prepared by : April Tseng
April Tseng / Assistant

Reviewed by : Bensun Chen
Bensun Chen / Deputy Manager

Approved & Authorized Signer :



Modified History

Edition No.	Date of Rev.	Summary	Report No.
0	Original Report.	Jun.15,2015	ACS-F15167
Rev.01	Change LCD Panel & Power board & Factory	May.13,2016	ACS-F15167-1

Remark:

1. This report is an additional version with original report number ACS-F15167. the different with original report are see the above table of Rev.01.
2. Through evaluation of the above difference, All test items are needed to be re-performed. The EUT was retested and all the test data were recorded in this report.
3. This report is based on report of ACS-F15167.

1. SUMMARY OF STANDARDS AND RESULTS

1.1. Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

EMISSION			
Description of Test Item	Standard	Results	Remark
Power Line Conducted Emission Test	FCC Part 15: 2015 ANSI C63.4: 2014	PASS	Minimum passing margin is 14.07dB at 0.154MHz
Radiated Emission Test (30-1000MHz)	FCC Part 15: 2015 ANSI C63.4: 2014	PASS	Minimum passing margin is 5.00dB at 75.20MHz
Radiated Emission Test (1-6GHz)	FCC Part 15: 2015 ANSI C63.4: 2014	PASS	Minimum passing margin is 14.33dB at 1425.25MHz
N/A is an abbreviation for Not Applicable.			

2. GENERAL INFORMATION

2.1. Description of Device (EUT)

Description : LCD Monitor

Brand Name
& Model No.

Brand Name	Model No.
BenQ	RP552; RP552H; RP552H1; RP552H2; RP552H3; RP552H4

Marketing Difference.

Test Model : RP552

Applicant : BenQ Corporation
16 Jihu Road, Neihu, Taipei 114, Taiwan

Manufacturer : BenQ Corporation
16 Jihu Road, Neihu, Taipei 114, Taiwan

Factory : Coretronic (Guangzhou) Co., Ltd.
Building 1, No. 2 Guoyuan 1st Road, East Zone, Guangzhou
Economic and Technological Development
District, Guangzhou, Guangdong Province, P.R. China

VGA Cable : Shielded, Detachable, 5.0m (Bonded two ferrite cores)

USB Cable : Shielded, Detachable, 5.0m (Bonded two ferrite cores)

Audio Cable : Unshielded, Detachable, 5.0m

Remote : Manufacturer: BenQ, M/N: N/A

Max. Resolution : 1920*1080@60Hz

Date of Test : Apr. 14~19, 2016

Date of Receipt : Apr. 12, 2016

Sample Type : Prototype production

2.2. Tested Supporting System Details

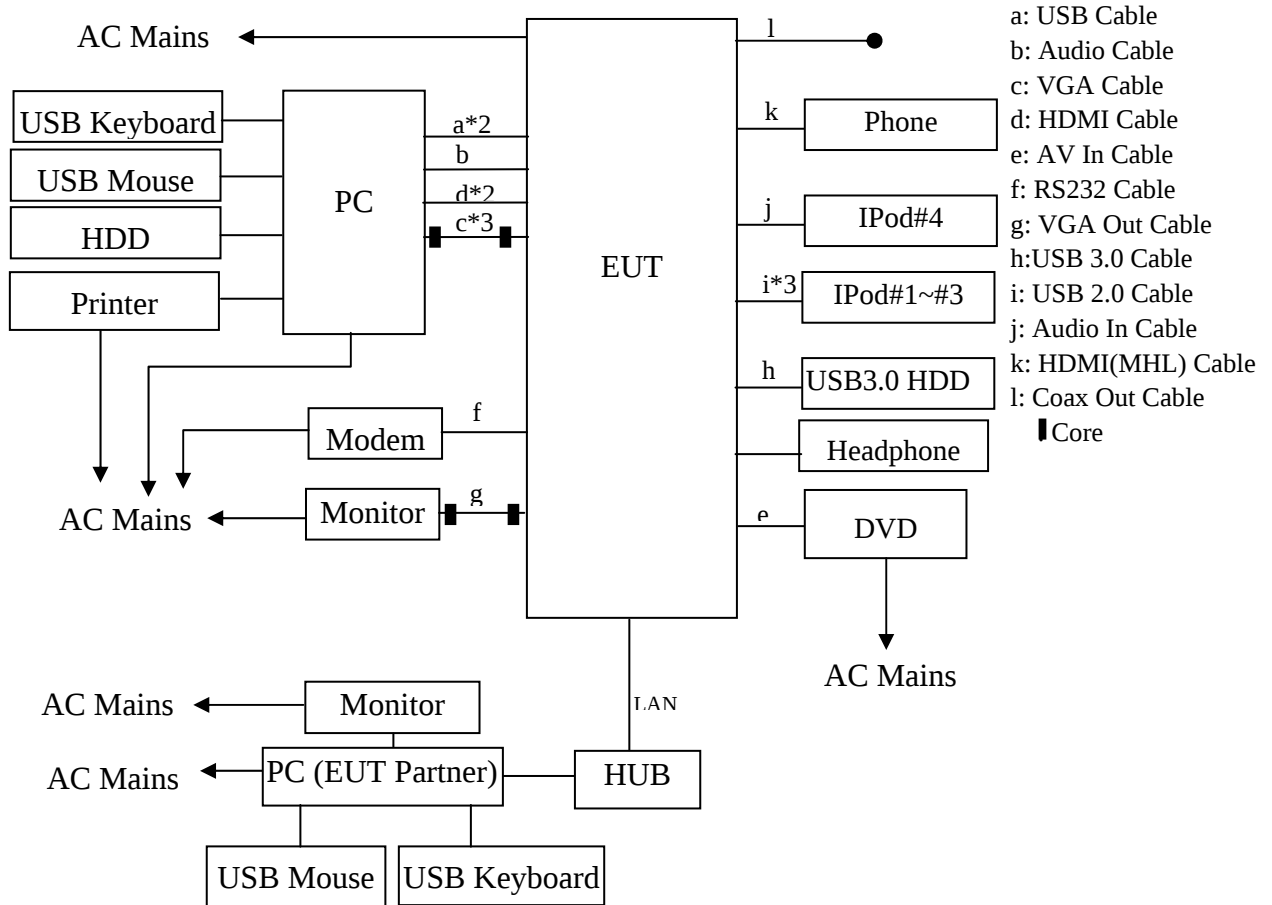
No.	Description	ACS No.	Manufacturer	Model	Serial Number
1	Personal Computer	Test PC GQ2	DELL	Dptiplex 9020MT	8MW91 A00DC2;Z248770
		Power Cord: Unshielded, Detachable, 1.8m Display Card: HD3450(Display +DVI+HDMI)			
2	USB Mouse	ACS-EMC-M03R	DELL	M0C5UO	512023253
		Data Cable: Shielded, Undetachable, 1.8m			
3	USB Keyboard	ACS-EMC-KGQ1	DELL	RG4021	CN-N91F-71581-387- 069A-A01-71616-88F -0VXW
		Data Cable: Shielded, Undetachable, 2.0m			
4	Printer	ACS-EMC-PT04	HP	C9079A	-
		USB Cable: Shielded, Detachable, 1.5m Power Cord: Unshielded, Detachable, 1.8m			
5	HDD	ACS-EMC-HDD01	Terasys	F12-UF	A0100215-5390018
		USB Cable: Shielded, Detachable, 1.0m			
6	Monitor	ACS-EMC-LM04R	DELL	1907FPt	CN-009759-71618-6 AP-ACPP
		Power Cord: Unshielded, Detachable, 1.8m VGA Cable: Shielded, Detachable, 2.0m (with two cores) DVI Cable: Shielded, Detachable, 2.0m (with two cores)			
7	Modem	ACS-EMC-MD01	ACEEX	1414	980013578
		Data Cable: Shielded, Detachable, 1.5m Power Adapter: TGL, MDE130100TH DC Cable: Unshielded, Detachable, 1.6m (with one core)			
8	iPod #1	ACS-EMC-IP11	APPLE	A1204	N/A
		Data Cable: Shielded, Detachable, 1.0m			
9	iPod #2	ACS-EMC-IP12	APPLE	A1204	N/A
		Data Cable: Shielded, Detachable, 1.0m			
10	iPod #3	ACS-EMC-IP13	APPLE	A1204	N/A
		Data Cable: Shielded, Detachable, 1.0m			
11	iPod #4	ACS-EMC-IP07	APPLE	A1199	YM706MD0VQ5
		Data Cable: Shielded, Detachable, 1.0m			
12	USB3.0 HDD	ACS-EMC-HDD42	WD	WD Elements	WXA1A7396898
		USB Cable: Unshielded, Detachable, 1.0m			
13	DVD Player	ACS-EMC-DVD01	DENON	DVD-3910	4098400342E
		Data Cable: Shielded, Detachable, 1.8m Power Cord: Unshielded, Detachable, 1.8m			

14	Headphone	ACS-EMC-EP01	OVANN	OV-T880V	N/A
		Cable: Shielded, Undetachable, 2.0m			
15	Mobile phone	--	HTC	S720e	--
		MHL Cable: Shielded, Detachable, 1.0m			

【PC system which transmitting 】

No.	Description	ACS No.	Manufacturer	Model	Serial Number
1.	Personal Computer	Test PC N	DELL	Studio 540	J14XK2X
		Power Cord: Unshielded, Detachable, 1.8m LAN Cable: Unshielded, Detachable, 10m Display Card: HD3650 (DVI+Display+HDMI)			
2.	USB Keyboard	ACS-EMC- K02R	DELL	SK-8115	CN-ORH656-658 90-686-007J
		Data Cable: Shielded, Undetachable, 2.0m			
3.	USB Mouse	ACS-EMC-M02R	DELL	M056UO	512024264
		Data Cable: Shielded, Undetachable, 1.8m			
4.	Monitor	ACS-EMC-LM04R	DELL	1907FPt	CN-009759-71618 -6AP-ACPP
		Power Cord: Unshielded, Detachable, 1.8m VGA Cable: Shielded, Detachable, 2.0m			
5.	HUB	ACS-EMC-DL01	D-Link	DGS-1008D	B2C6468500621
		Data Cable: Shielded, Detachable, 1.8m Adapter: M/N: RL48-07V51000, DC Cable: Unshielded, Detachable, 1.0m			

2.3. Block diagram of connection between the EUT and simulators



(EUT: LCD Monitor)

2.4. Test Facility

Site Description

Name of Firm	: Audix Technology (Shenzhen) Co., Ltd. No. 6, Ke Feng Rd., 52 Block, Shenzhen Science & Industrial Park, Nantou, Shenzhen, Guangdong, China
3m Anechoic Chamber	: Certificated by FCC, USA Registration Number: 90454 Valid Date: Dec.30, 2017
3m & 10m Anechoic Chamber	: Certificated by FCC, USA Registration Number: 794232 Valid Date: Jul.12, 2016
EMC Lab.	: Certificated by DAkkS, Germany Registration No: D-PL-12151-01-00 Valid Date: Dec.15, 2016 Accredited by NVLAP, USA NVLAP Code: 200372-0 Valid Date: Mar.31, 2017

2.5. Measurement Uncertainty (95% confidence levels, k=2)

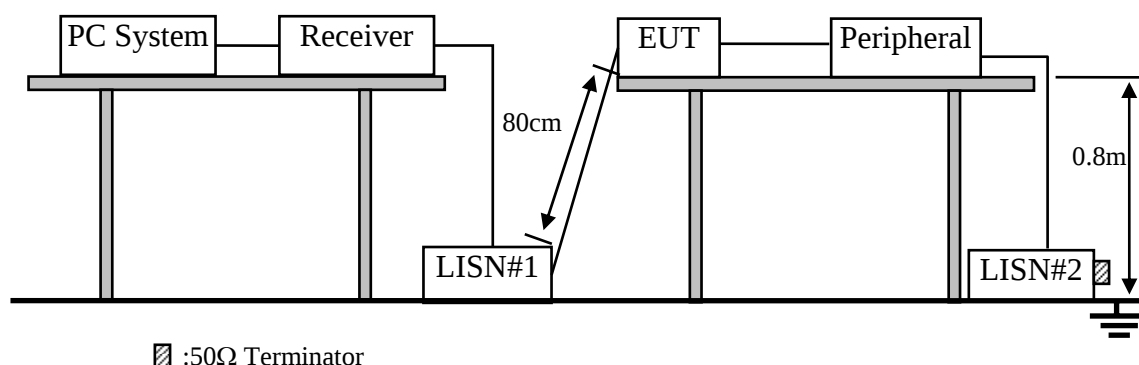
Test Item	Uncertainty
Uncertainty for Conduction emission test in No. 2 Conduction	2.8dB(150kHz to 30MHz)
Uncertainty for Radiation Emission test in 10m chamber (Distance: 10m)	3.0dB (30~200MHz, Polarization: H)
	3.2dB (30~200MHz, Polarization: V)
	3.0dB (200M~1GHz, Polarization: H)
	3.0dB (200M~1GHz, Polarization: V)
Uncertainty for Radiation Emission test in 10m chamber (1GHz-18GHz)	5.2dB (1-6GHz Distance: 3m)
	5.6dB (6-18GHz Distance: 3m)
Uncertainty for S_{VSWR} in 10m Chamber	5.2dB (1~6GHz, Distance: 3m)
	5.4dB (6~18GHz, Distance: 3m)
Uncertainty for test site temperature , humidity, Pressure	0.6°C
	3%
	1kPa

3. POWER LINE CONDUCTED EMISSION MEASUREMENT

3.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	2# Shielding Room	AUDIX	N/A	N/A	Apr.17,15	1 Year
2.	EMI Test Receiver	Rohde & Schwarz	ESR3	101931	Aug.26,15	1 Year
3.	L.I.S.N.#1	Rohde & Schwarz	ENV4200	100041	Apr.28,15	1 Year
4.	L.I.S.N.#2	Kyoritsu	KNW-407	8-1636-1	Apr.28,15	1 Year
5.	Terminator	Hubersuhner	50Ω	No.1	Apr.28,15	1 Year
6.	Terminator	Hubersuhner	50Ω	No.2	Apr.28,15	1 Year
7.	RF Cable	Fujikura	RG-55/U	No.1	Apr.28,15	1 Year
8.	Coaxial Switch	Anritsu	MP59B	6201397223	Apr.28,15	1 Year
9.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100341	Apr.28,15	1 Year
10.	Test Software	AUDIX	e3	6.100913a	N/A	N/A

3.2. Block Diagram of Test Setup



3.3. Power Line Conducted Emission Test Limits

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level dB(μV)	Average Level dB(μV)
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*
500kHz ~ 5MHz	56	46
5MHz ~ 30MHz	60	50

Notes: 1. * Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.

3.4. Configuration of EUT on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

3.4.1. LCD Monitor (EUT)

Model Number : RP552

Serial Number : N/A

3.4.2. Support Equipment : As Tested Supporting System Detail, in Section 2.2.

3.5. Operating Condition of EUT

3.5.1. Setup the EUT and simulator as shown as Section 3.2.

3.5.2. Turned on the power of all equipment.

3.5.3. PC system ran the Self-test program “Burnin Test V7.0” by windows 7 and sent “H” Character to LCD Monitor (EUT) through VGA / HDMI card, the Screen of EUT displayed and filled with “H” pattern.

3.5.4. The PC system was running the program “1kHz signal playing” and sending sound to EUT.

3.5.5. The PC system was reading / writing data from USB into iPod during testing.

3.5.6. DVD & AV Mode: The DVD player played DVD Disk and sent “DVD 1kHz Signal Playing” image to the LCD Monitor (EUT).

3.5.7. MHL Mode: The mobile phone played “color bar video signal” and sent “1kHz signal” to the LCD monitor EUT).

3.5.8. LAN Mode: Connected the EUT and PC with LAN Cable, and transmitted data in the form of “ping” IP address.

3.5.9. The other peripheral devices were driven and operated in turn during all testing.

3.6. Test Procedure

The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#). This provided a 50-ohm coupling impedance for the EUT (Please refer to the block diagram of the test setup and photographs). The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N.# 2). Both sides of power line were checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.4: 2014 on conducted Emission test.

The bandwidth of test receiver (R&S ESR3) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked. The test result are reported on Section 3.7.

3.7. Conducted Emission at Mains Terminals Test Results

PASS. (All emissions not reported below are too low against the prescribed limits.)

EUT: LCD Monitor

Model No. : RP552

Test Date: Apr.14,2016

Temperature: 20.5℃

Humidity: 53%

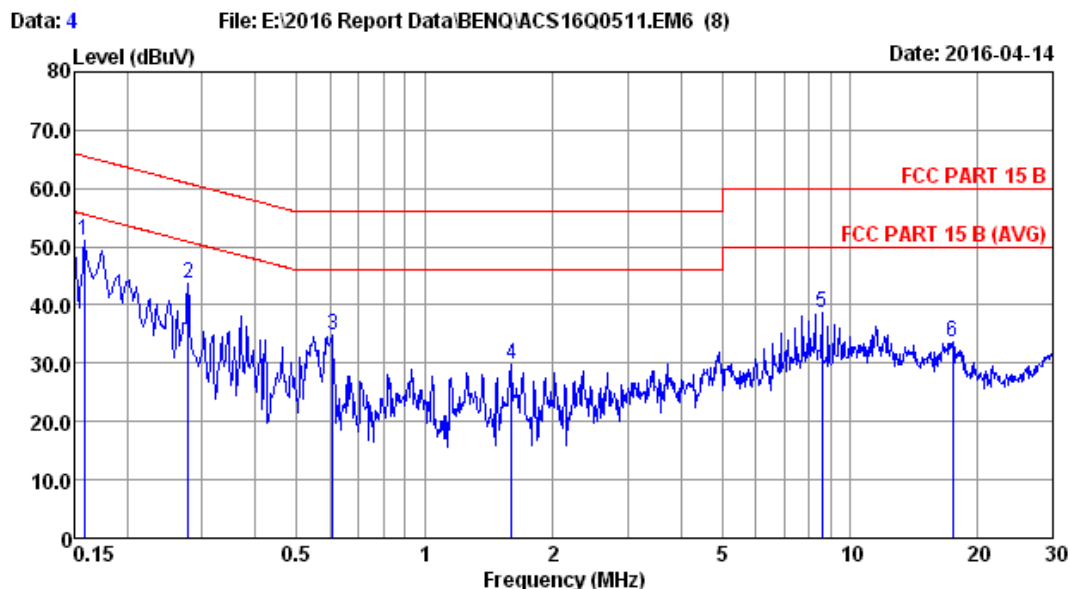
The EUT was pre-tested under following test modes, and selected test mode 6 was the worst cases to issue report.

o.	Test Voltage	Test Mode	Input Port	Resolution & Frequency
1.	AC 120V/60Hz	PC Mode	VGA 1	1920*1080/60Hz
2.			VGA 2	1920*1080/60Hz
3.			VGA 3	1920*1080/60Hz
4.			HDMI 1	800*600/60Hz
5.				1280*1024/75Hz
6. ※				1920*1080/60Hz
7.			HDMI 2	1920*1080/60Hz
8.			HDMI 3	1920*1080/60Hz
9.		DVD Mode	HDMI 1/2/3	Color Bar
10.		USB Mode	USB 2.0 Reading	
11.			USB3.0 Reading	
12.		AV Mode	AV In	

(※ Worst test mode)

Test result is presented in the report as below:

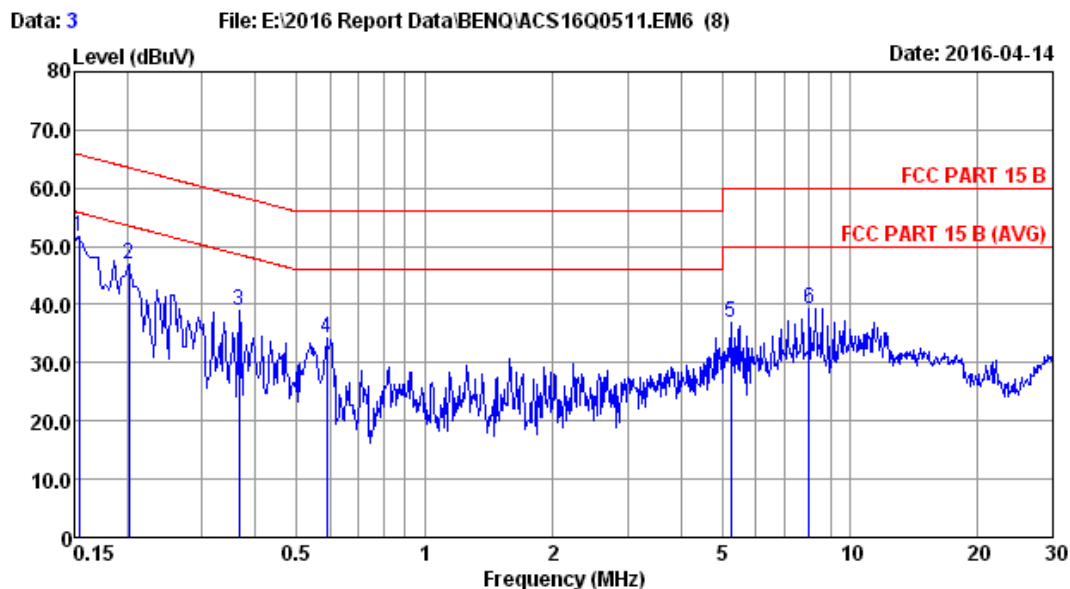
No.	Test Mode	Input Port	Resolution & Frequency	Reference Test Data No.	
				Line	Neutral
1.	PC Mode	HDMI 1	1920*1080/60Hz	#4	#3



Site no :2# Conduction Data No :4
 Dis./Lisn :15 ENV4200 L1 LISN phase:LINE
 Limit :FCC PART 15 B
 Env./Ins. :20.5°C/53% Engineer :Evan
 EUT :M/N:RP552
 Power Rating :AC 120V/60Hz
 Test Mode :Running Burnin Test V7.0
 HDMI 1:1920*1080@60Hz

No	Freq (MHz)	ISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.158	9.91	0.04	41.07	51.02	65.56	14.54	QP
2	0.277	9.80	0.06	33.70	43.56	60.90	17.34	QP
3	0.608	9.66	0.07	25.03	34.76	56.00	21.24	QP
4	1.602	9.62	0.13	19.95	29.70	56.00	26.30	QP
5	8.592	9.77	0.36	28.64	38.77	60.00	21.23	QP
6	17.475	9.94	0.44	23.31	33.69	60.00	26.31	QP

Remarks: 1.Emission Level=ISN Factor+Cable Loss+Reading.
 2.If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



Site no :2# Conduction Data No :3
Dis./Lisn :15 ENV4200 N LISN phase:NEUTRAL
Limit :FCC PART 15 B
Env./Ins. :20.5°C/53% Engineer :Evan
EUT :M/N:RP552
Power Rating :AC 120V/60Hz
Test Mode :Running Burnin Test V7.0
HDMI 1:1920*1080@60Hz

No	Freq (MHz)	ISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.154	9.81	0.04	41.86	51.71	65.78	14.07	QP
2	0.202	9.75	0.05	36.99	46.79	63.54	16.75	QP
3	0.365	9.61	0.06	29.34	39.01	58.61	19.60	QP
4	0.589	9.52	0.07	24.59	34.18	56.00	21.82	QP
5	5.249	9.47	0.28	27.21	36.96	60.00	23.04	QP
6	8.020	9.50	0.35	29.35	39.20	60.00	20.80	QP

Remarks: 1.Emission Level=ISN Factor+Cable Loss+Reading.
2.If the average limit is met when using a quasi-peak detector.
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.

4. RADIATED EMISSION MEASUREMENT

4.1. Test Equipment

4.1.1. For frequency range 30MHz~1000MHz (In 10m Anechoic Chamber)

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	10m Chamber	AUDIX	N/A	N/A	Mar.01,16	1 Year
2.	EMC Analyzer	Agilent	E7403A	MY42000106	Apr.28,15	1 Year
3.	EMC Analyzer	Agilent	E7405A	MY45116588	Oct.18,15	1 Year
4.	Test Receiver	Rohde & Schwarz	ESCI	100843	Oct.17,15	1 Year
5.	Amplifier	Agilent	8447D	2944A10684	Apr.28,15	1 Year
6.	Amplifier	Agilent	8447D	2944A11140	Apr.28,15	1 Year
7.	Tri-log-Broadband Antenna	SCHWARZBECK	VULB 9168	9168-493	May.06,15	1 Year
8.	Tri-log-Broadband Antenna	SCHWARZBECK	VULB 9168	9168-429	Jan.08,16	1 Year
9.	RF Cable	MIYAZAKI	CFD400-LW(3.5M)	10m Chamber No.1	Apr.28,15	1 Year
10.	RF Cable	MIYAZAKI	CFD400-LW(3.5M)	10m Chamber No.2	Apr.28,15	1 Year
11.	RF Cable	MIYAZAKI	CFD400-LW(22M)	10m Chamber No.5	Apr.28,15	1 Year
12.	RF Cable	MIYAZAKI	CFD400-LW(22M)	10m Chamber No.6	Apr.28,15	1 Year
13.	Coaxial Switch	Anritsu	MP59B	6201397220	Apr.28,15	1 Year
14.	Coaxial Switch	Anritsu	MP59B	6201397221	Apr.28,15	1 Year
15.	Coaxial Switch	Anritsu	MP59B	620313662	Apr.28,15	1 Year
16.	Test Software	AUDIX	e3	6.100913a	N/A	N/A

Note: N/A means Not applicable.

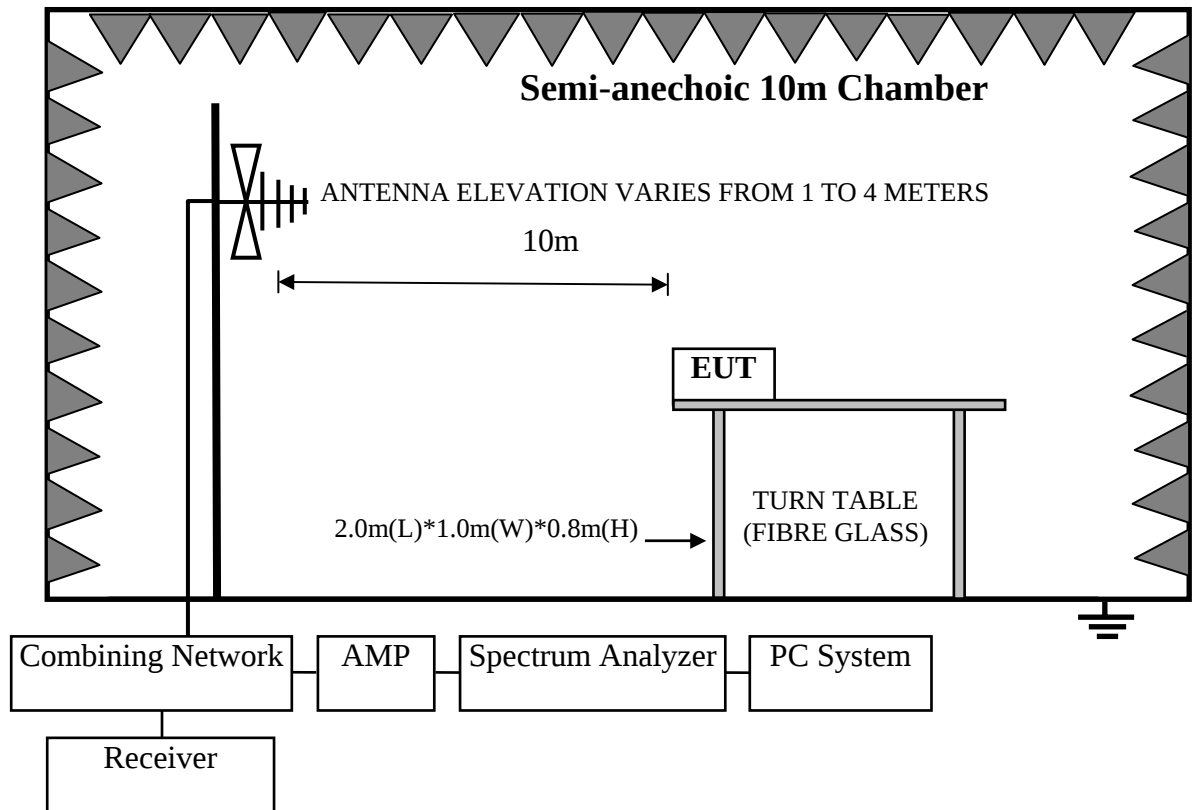
4.1.2. For frequency range 1GHz~6GHz (In 10m Anechoic Chamber)

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	10m Chamber	AUDIX	N/A	N/A	Mar.21,16	1 Year
2.	EMC Analyzer	Agilent	N9030A	MY51380221	Oct.18,15	1 Year
3.	Horn Antenna	ETS	3115	9510-4580	Oct.15,15	1 Year
4.	Amplifier	Agilent	83017A	MY53270085	May.25,15	1 Year
5.	RF Cable	Hubersuhner	SUCOFLEX106	505239/6+28610/2	Apr.28,15	1 Year
6.	Test Software	AUDIX	e3	6.100913a	N/A	N/A

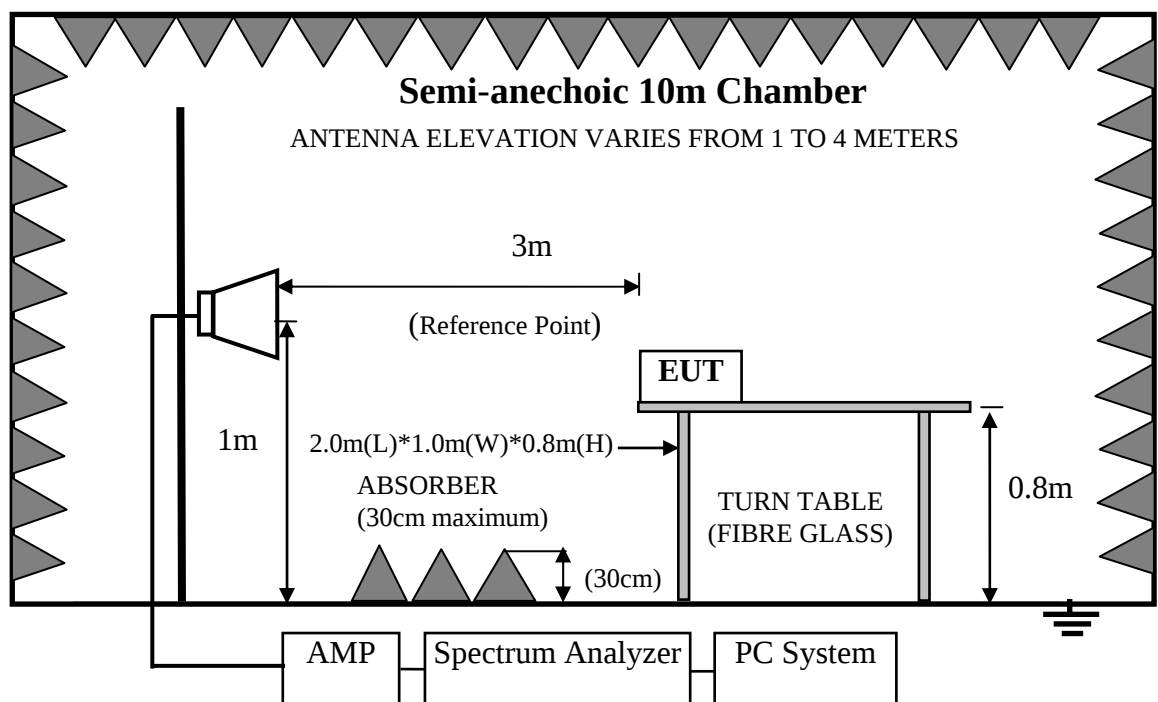
Note: N/A means Not applicable.

4.2. Block Diagram of Test Setup

4.2.1. For frequency range 30MHz-1000MHz



4.2.2. For frequency range 1GHz-6GHz



4.3. Radiated Emission Limit

FREQUENCY (MHz)	DISTANCE (Meters)	FIELD STRENGTHS LIMITS (dB μ V/m)
30 ~ 230	10	30
230 ~ 1000	10	37
1000~3000	3	70(Peak) 50(Average)
3000~6000	3	74(Peak) 54(Average)

- Remark: (1) Emission level = Antenna Factor + Cable Loss + Reading
Emission level = Antenna Factor - Amp Factor + Cable Loss + Reading
(above 1000MHz)
- (2) The smaller limit shall apply at the cross point between two frequency bands.
- (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

4.4. EUT Configuration on Test

The configurations of EUT are listed in Section 3.4

4.5. Operating Condition of EUT

Same as Conducted Emission test that is listed in Section 3.5. except the test set up replaced by Section 4.2.

4.6. Test Procedure

The EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber. An antenna was located 10m from the EUT on an adjustable mast. A pre-scan was first performed in order to find prominent radiated emissions. For final emissions measurements at each frequency of interest, the EUT were rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.4: 2014 on Radiated Emission test.

The bandwidth setting on the test receiver (R&S ESCI) is 120 kHz.

The resolution bandwidth of the Agilent Spectrum Analyzer N9030A was set at 1MHz. (For above 1GHz)

The frequency range from 30MHz to 1000MHz was pre-scanned with a peak detector and all final readings of measurement from Test Receiver are Quasi-Peak values.

The frequency range from 1GHz to 18GHz was checked and all final readings of measurement were with Peak and Average detector, measurement distance was 3m at semi-anechoic chamber. The portion of the test volume that was obstructed by absorber placed on the floor (30cm maximum).

4.7. Radiated Emission Test Results

PASS. (All emissions not reported below are too low against the prescribed limits.)

EUT: LCD Monitor

Model No. : RP552

For frequency range 30MHz~1000MHz

Test Date: Apr.19,2016 Temperature: 21.5℃ Humidity: 50%

The EUT was pre-tested under following test modes, and selected test mode 6 was the worst cases to issue report.

No.	Test Voltage	Test Mode	Input Port	Resolution & Frequency
1.	AC 120V/60Hz	PC Mode	VGA 1	1920*1080/60Hz
2.			VGA 2	1920*1080/60Hz
3.			VGA 3	1920*1080/60Hz
4.			HDMI 1	800*600/60Hz
5.				1280*1024/75Hz
6. ※				1920*1080/60Hz
7.			HDMI 2	1920*1080/60Hz
8.			HDMI 3	1920*1080/60Hz
9.		DVD Mode	HDMI 1/2/3	Color Bar
10.		USB Mode	USB 2.0 Reading	
11.			USB3.0 Reading	
12.		AV Mode	AV In	

(※ Worst test mode)

Test result is presented in the report as below

No.	Test Mode	Input Port	Resolution & Frequency	Reference Test Data No.	
				Horizontal	Vertical
1.	PC Mode	HDMI 1	1920*1080/60Hz	#4	#3

For frequency range 1GHz~6GHz

Test Date: Apr.15,2016 Temperature: 22.6℃ Humidity: 49.3%

The EUT was pre-tested under following test modes, and selected test mode 5 was the worst cases to issue report.

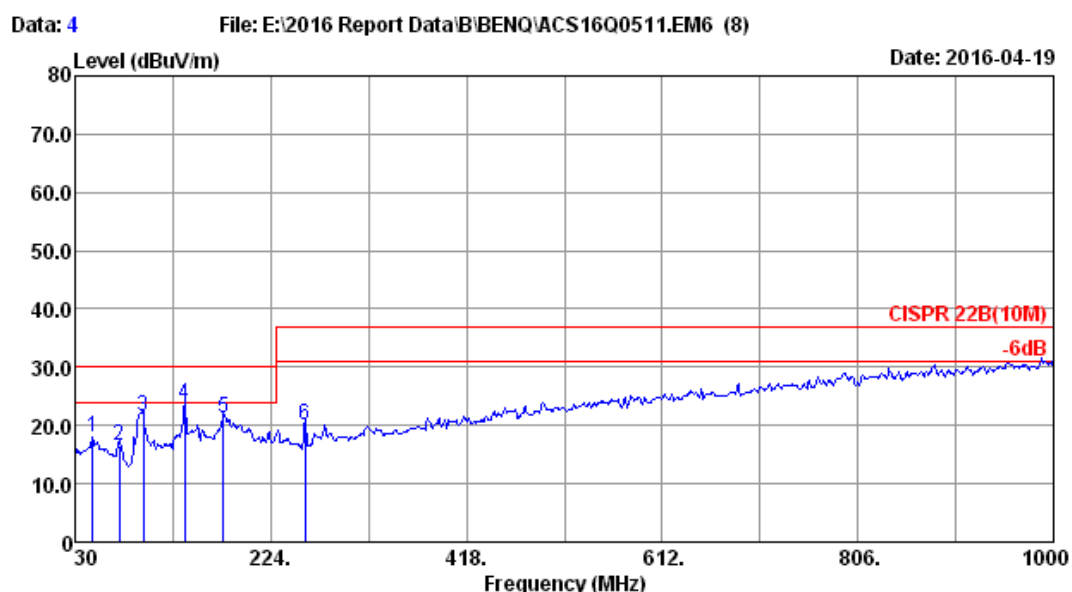
No.	Test Voltage	Test Mode	Input Port	Resolution & Frequency
1.	AC 120V/60Hz	PC Mode	VGA 1	1920*1080/60Hz
2.			VGA 2	1920*1080/60Hz
3.			VGA 3	1920*1080/60Hz
4.			HDMI 1	1280*1024/75Hz
5. ※				1920*1080/60Hz
6.			HDMI 2	1920*1080/60Hz
7.			HDMI 3	1920*1080/60Hz
8.		DVD Mode	HDMI 1/2/3	Color Bar
9.		USB Mode	USB 2.0 Reading	
10.			USB3.0 Reading	
11.		AV Mode	AV In	

(※ Worst test mode)

Test result is presented in the report as below

No.	Test Mode	Input Port	Resolution & Frequency	Reference Test Data No.	
				Horizontal	Vertical
1.	PC Mode	HDMI 1	1920*1080/60Hz	#1	#2

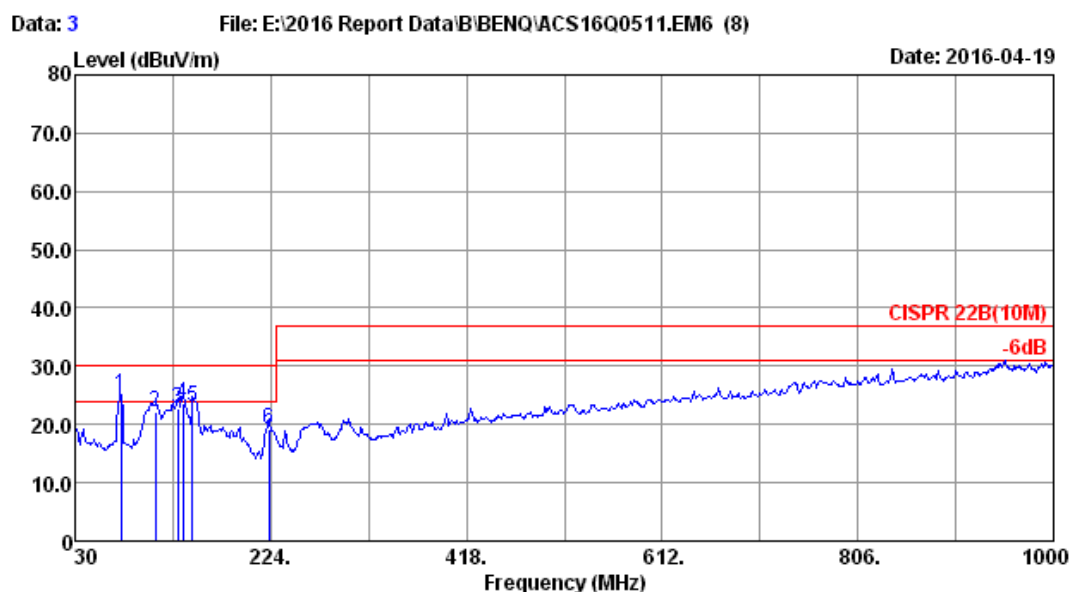
30MHz~1000MHz



Site no. : 10m Chamber Data no. : 4
 Dis. / Ant. : 10m 2016 9168-429 Ant. pol. : HORIZONTAL
 Limit : CISPR 22B(10M)
 Env. / Ins. : 21.5°C/50% Engineer : Saxon
 EUT : M/N:PR552
 Power rating : AC 120V/60Hz
 Test Mode : Running Burnin Test V7.0
 HDMI 1:1920*1080@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	47.46	13.75	3.84	0.43	18.02	30.00	11.98	QP
2	73.65	10.55	4.07	2.01	16.63	30.00	13.37	QP
3	97.90	8.75	4.19	8.63	21.57	30.00	8.43	QP
4	138.64	12.85	4.22	6.42	23.49	30.00	6.51	QP
5	177.44	11.87	4.29	5.17	21.33	30.00	8.67	QP
6	257.95	12.05	4.67	3.43	20.15	37.00	16.85	QP

- Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.
 3. The worst emission was detected at 138.64MHz with corrected signal level of 23.49dB μ V/m. (Antenna height 2.0m; Turntable degree 218°)
 4. 0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

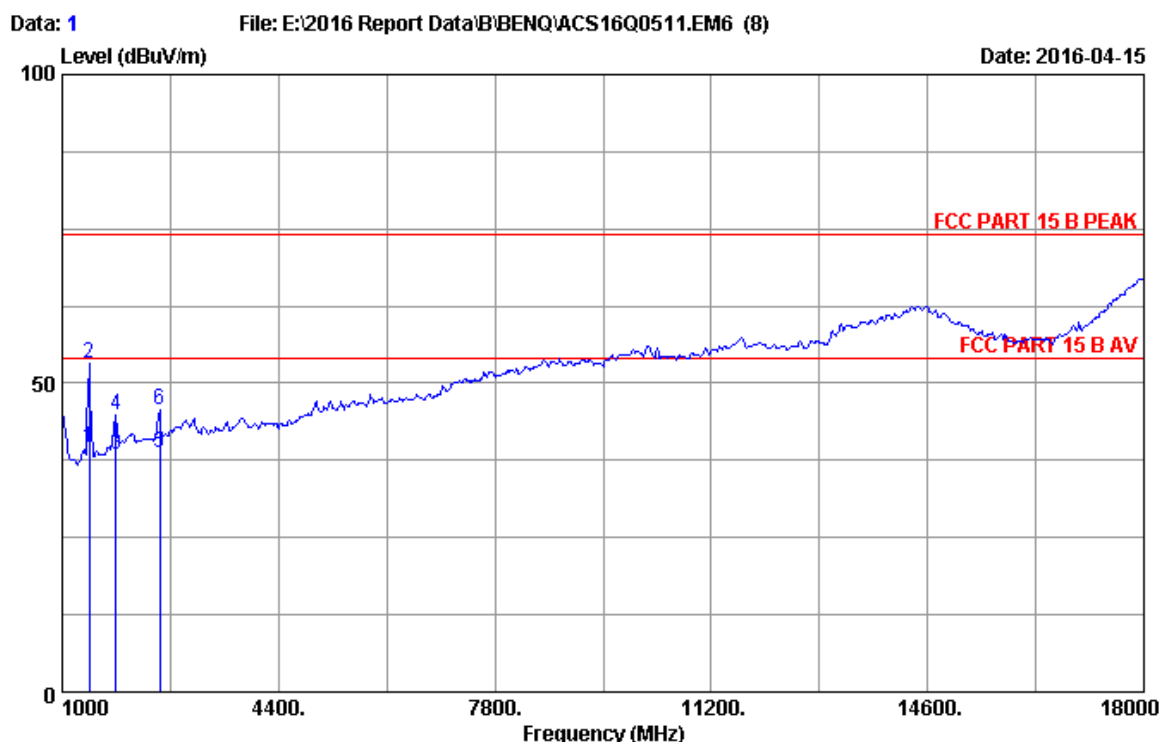


Site no. : 10m Chamber Data no. : 3
 Dis. / Ant. : 10m 2015 9168-493 Ant. pol. : VERTICAL
 Limit : CISPR 22B(10M)
 Env. / Ins. : 21.5°C/50% Engineer : Saxon
 EUT : M/N:PR552
 Power rating : AC 120V/60Hz
 Test Mode : Running Burnin Test V7.0
 HDMI 1:1920*1080@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	75.20	11.11	3.99	9.90	25.00	30.00	5.00	QP
2	109.54	10.82	4.14	7.20	22.16	30.00	7.84	QP
3	131.85	13.07	4.22	5.30	22.59	30.00	7.41	QP
4	136.70	13.27	4.24	6.07	23.58	30.00	6.42	QP
5	146.40	13.40	4.27	5.26	22.93	30.00	7.07	QP
6	222.06	9.95	4.53	4.61	19.09	30.00	10.91	QP

- Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.
 3. The worst emission was detected at 75.20MHz with corrected signal level of 25.00dB μ V/m. (Antenna height 2.0m; Turntable degree 56°)
 4. 0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

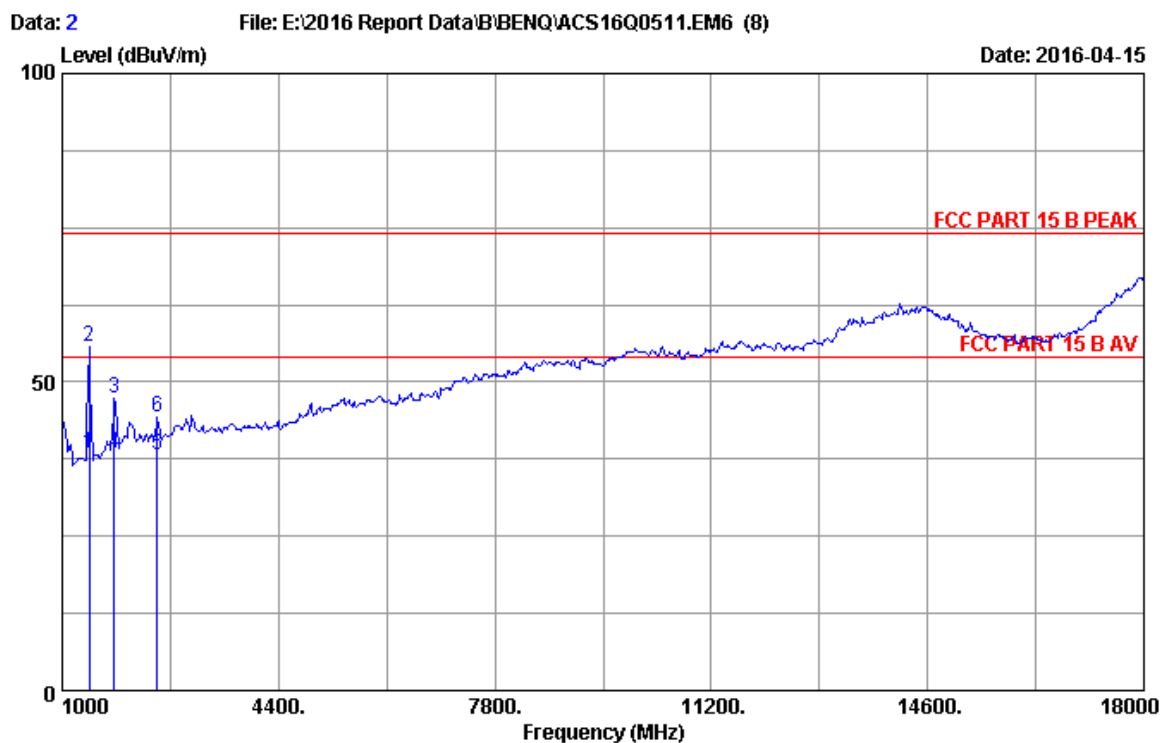
1GHz-18GHz



Site no. : 10m Chamber Data no. : 1
 Dis. / Ant. : 3m 2015 3115-4580 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15 B PEAK
 Env. / Ins. : 22.6°C/49.3% Engineer : Brown
 EUT : M/N:RP552
 Power rating : AC 120V/60Hz
 Test Mode : Runjing Burnin Test V7.0
 HDMI1:1920*1080@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1425.25	25.80	2.31	35.34	46.90	39.67	54.00	14.33	Average
2	1425.25	25.80	2.31	35.34	60.55	53.32	74.00	20.68	Peak
3	1850.25	27.37	2.64	34.87	43.21	38.35	54.00	15.65	Average
4	1850.25	27.37	2.64	34.87	49.69	44.83	74.00	29.17	Peak
5	2530.36	28.40	2.78	34.48	41.90	38.60	54.00	15.40	Average
6	2530.36	28.40	2.78	34.48	49.09	45.79	74.00	28.21	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official
 limit are not reported.



Site no. : 10m Chamber Data no. : 2
 Dis. / Ant. : 3m 2015 3115-4580 Ant. pol. : VERTICAL
 Limit : FCC PART 15 B PEAK
 Env. / Ins. : 22.6°C/49.3% Engineer : Brown
 EUT : M/N:RP552
 Power rating : AC 120V/60Hz
 Test Mode : Runjing Burnin Test V7.0
 HDMI1:1920*1080@60Hz

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1425.00	25.80	2.31	35.34	45.60	38.37	54.00	15.63	Average
2	1425.00	25.80	2.31	35.34	62.92	55.69	74.00	18.31	Peak
3	1816.00	27.23	2.62	34.89	52.33	47.29	74.00	26.71	Peak
4	1816.25	27.23	2.62	34.89	43.60	38.56	54.00	15.44	Average
5	2496.00	28.30	2.75	34.49	41.50	38.06	54.00	15.94	Average
6	2496.00	28.30	2.75	34.49	47.70	44.26	74.00	29.74	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official
 limit are not reported.