

FCC Test Report

FCC ID : XVG50-0102-QT-44

Equipment : HD IPTV receiver

Model No. : Kamai751Q, Amulet 756Q

(Refer to item 1.1.1 for more details)

Multiple Listing : Kamai 7XYQzzzzzz

(where "X" can be 0-9, "Y" can be 0-9; "zzzzzz" can be any combination of "0-9", "a-z","-", "/" or blank for marketing purpose)

Amulet 7XYQzzzzzz

(where "X" can be 0-9, "Y" can be 0-9; "zzzzzz" can be any combination of "0-9", "a-z","-", "/" or blank for marketing purpose)

Brand Name : Amino

Applicant : Amino Communications Ltd

Address : Buckingway Business Park, Anderson Road,

Swavesey, Cambridge CB24 4UQ, United

Testing Laboratory

Kingdom

Standard : 47 CFR FCC Part 15.407

Received Date : Jun. 13, 2017

Tested Date : Jul. 07 ~ Sep. 26, 2017

We, International Certification Corp., would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It may be duplicated completely for legal use with the approval of the applicant. It shall not be reproduced except in full without the written approval of our laboratory.

Reviewed by: Approved by:

Along Chen // Assistant Manager Gary Chang / Manager

Report No.: FR761304AN Page: 1 of 12



Table of Contents

1	GENERAL DESCRIPTION	4
	Information	
2	REFERENCING TEST DATA	9
2.1	Introduction	g
2.2	Difference	<u> </u>
2.3	Spot Check Verification Data	
2.4	Reference	11
3	TEST LABORATORY INFORMATION	12



Release Record

Report No.	Version	Description	Issued Date
FR761304AN	Rev. 01	Initial issue	Oct. 05, 2017

Report No.: FR761304AN Page: 3 of 12



1 General Description

1.1 Information

1.1.1 Product Details

The following models are provided to this EUT.

Model Name	Multiple Listing	Product Name	Description
Kamai751Q	nai 7XYQzzzzzz ere "X" can be 0-9, "Y" can be 0-9; "zzzzzz" can any combination of "0-9", "a-z","-", "/" or blank for rketing purpose) HD IPTV receiver		Without HDD
Amulet 756Q	Amulet 7XYQzzzzzz (where "X" can be 0-9, "Y" can be 0-9; "zzzzzz" can be any combination of "0-9", "a-z","-", "/" or blank for marketing purpose)	ורו v leceivei	With HDD

1.1.2 Specification of the Equipment under Test (EUT)

RF General Information						
Frequency Range (MHz)	IEEE Std. 802.11	Ch. Freq. (MHz)	Channel Number	Transmit Chains (N _{TX})	Data Rate / MCS	
5150-5250 5250-5350 5470-5725 5725-5850	а	5180-5240 5260-5320 5500-5700 5745-5825	36-48 [4] 52-64 [4] 100-140 [11] 149-165 [5]	4	6-54 Mbps	
5150-5250 5250-5350 5470-5725 5725-5850	n (HT20)	5180-5240 5260-5320 5500-5700 5745-5825	36-48 [4] 52-64 [4] 100-140 [11] 149-165 [5]	4	MCS 0-31	
5150-5250 5250-5350 5470-5725 5725-5850	n (HT40)	5190-5230 5270-5310 5510-5670 5755-5795	38-46 [2] 54-62 [2] 102-134 [5] 151-159 [2]	4	MCS 0-31	
5150-5250 5250-5350 5470-5725 5725-5850	ac (VHT20)	5180-5240 5260-5320 5500-5700 5745-5825	36-48 [4] 52-64 [4] 100-140 [11] 149-165 [5]	4	NSSI 2-4, MCS 0-8	
5150-5250 5250-5350 5470-5725 5725-5850	ac (VHT40)	5190-5230 5270-5310 5510-5670 5755-5795	38-46 [2] 54-62 [2] 102-134 [5] 151-159 [2]	4	NSSI 2-4, MCS 0-9	
5150-5250 5250-5350 5470-5725 5725-5850	ac (VHT80)	5210 5290 5530~5610 5775	42 [1] 58 [1] 106-122 [2] 155 [1]	4	NSSI 2-4, MCS 0-9	

Note 1: RF output power specifies that Maximum Conducted Output Power.

Note 2: 802.11a/n/ac uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.

Note 3: 802.11ac supports beamforming mode.

Report No.: FR761304AN Page: 4 of 12



1.1.3 Antenna Details

Model Name: Kamai751Q

Ant. No.	Model	Туре	Connector		ating Frequencies (M Antenna Gain (dBi)	
				5150~5350 5470~5725		5725~5850
1	ANT 1	Dipole	IPEX	3.25		
2	ANT 2	Dipole	IPEX	3.17		
3	ANT 3	Dipole	IPEX	2.84		
4	ANT 4	Dipole	IPEX	3.03		

Model Name: Amulet 756Q

Ant. No.	Model	Туре	Connector	Oper	ating Frequencies (N Antenna Gain (dBi)	
				5150~5350 5470~5725 572		5470~5725 5725~5850
1	ANT 1	Dipole	IPEX	2.99		
2	ANT 2	Dipole	IPEX	3.05		
3	ANT 3	Dipole	IPEX	3.19		
4	ANT 4	Dipole	IPEX		3.29	

1.1.4 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	12Vdc from AC adapter
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Report No.: FR761304AN Page: 5 of 12



1.1.5 Accessories

Model Name: Kamai751Q

	Accessories					
No.	Equipment	Description				
1	Adapter 1	Brand Name: MOSO Model Name: MSA-C2000IS12.0-24Y-US I/P: 100-120Vac, 50/60Hz, 0.7A Max O/P: 12Vdc, 2A Power line: 1.8m non-shielded without core				
2	Adapter 2	Brand Name: APD Model Name: WA-24Q12R-EBAB I/P: 100-120Vac, 50-60Hz, 0.7A Max O/P: 12Vdc, 2A Power line: 1.8m non-shielded without core				
3	3.5mm to 3RCA cable	Brand : Interconnect Model : KFA1141105074-5, Power line: 1.75m, non-shielded, without core				
4	HDMI cable	Brand : Interconnect Model : 18-94H1CS-372G-H Power line: 2m, shielded, without ferrite core				
5	Ethernet cable	Brand :WENET Model : P355-3-1 Power line: 2m, non-shielded cable, w/o ferrite core				
6.	Remote control					

Report No.: FR761304AN Page: 6 of 12



Model Name: Amulet 756Q

	Accessories					
No.	Equipment	Description				
1	Adapter 1	Brand Name: MOSO Model Name: MSA-C2000IS12.0-24Y-US I/P: 100-120Vac, 50/60Hz, 0.7A Max O/P: 12Vdc, 2A Power line: 1.8m non-shielded without core				
2	Adapter 2	Brand Name: APD Model Name: WA-24Q12R-EBAB I/P: 100-120Vac, 50-60Hz, 0.7A Max O/P: 12Vdc, 2A Power line: 1.8m non-shielded without core				
3	3.5mm to 3RCA cable	Brand Name: Interconnect Model Name: KFA1141105074-5, Power line: 1.75m, non-shielded, without core				
4	HDMI cable	Brand Name: Interconnect Model Name: 18-94H1CS-372G-H Power line: 2m, shielded, without ferrite core				
5	Ethernet cable	Brand Name: WENET Model Name: P355-3-1 Power line: 2m, non-shielded cable, w/o ferrite core				
6.	Remote control					
7	HDD	Brand Name: WD Model Name: WD10JUCT				

Report No.: FR761304AN Page: 7 of 12



1.1.6 Channel List

802.11 a / F	HT20 / VHT20	HT40) / VHT40
Channel	Frequency(MHz)	Channel	Frequency(MHz)
36	5180	38	5190
40	5200	46	5230
44	5220	54	5270
48	5240	62	5310
52	5260	102	5510
56	5280	110	5550
60	5300	118	5590
64	5320	126	5630
100	5500	134	5670
104	5520	151	5755
108	5540	159	5795
112	5560	V	HT80
116	5580	42	5210
120	5600	58	5290
124	5620	106	5530
128	5640	122	5610
132	5660	155	5775
136	5680		
140	5700		
149	5745		
153	5765		
157	5785		
161	5805		
165	5825		

Report No.: FR761304AN Page: 8 of 12



2 Referencing Test Data

2.1 Introduction

Test data of FCC ID: XVG50-0102-QT-BL is referred to the device(FCC ID: XVG50-0102-QT-44).

Reference FCC	D ID	Equipment Class	Frequency bands	Reference Report Title
XVG50-0102-Q1	Γ-BL	NII	5180-5240 MHz 5260-5320 MHz 5500-5700 MHz 5745-5825 MHz	FR761304-01AN

FCC ID: XVG50-0102-QT-44 / XVG50-0102-QT-BL use the same internal printed circuit board, antenna, software version for 5GHz Wi-Fi .

Applicant takes full responsibility that the test data as referenced below represents compliance for the FCC ID:XVG50-0102-QT-44.

2.2 Difference

Difference between FCC ID: XVG50-0102-QT-44 / XVG50-0102-QT-BL is only Bluetooth function by embedding Bluetooth module or not.

Characteristic		FCC ID: XVG50-0102-QT-44	FCC ID: XVG50-0102-QT-BL	
	Frequency band	5180-5240 MHz 5260-5320 MHz 5500-5700 MHz 5745-5825 MHz	5180-5240 MHz 5260-5320 MHz 5500-5700 MHz 5745-5825 MHz	
Wi-Fi function	Antenna	Dipole	Dipole	
	Operation modes	11a 11n: HT20 / HT40 11ac / VHT20 / VHT40 / VHT 80	11a 11n: HT20 / HT40 11ac / VHT20 / VHT40 / VHT 80	
	Frequency band	-	2402-2480 MHz	
BT function	Antenna	-	PIFA	
	Operation mode	-	Bluetooth Low Energy	

Report No.: FR761304AN Page: 9 of 12



2.3 Spot Check Verification Data

Model Name: Kamai751Q

Test Item	Mode	FCC ID: XVG50-0102-QT-BL Worst value	FCC ID: XVG50-0102-QT-44 Worst value	Difference (dB)
	802.11a	24.25	24.11	0.14
	802.11n HT20	24.23	24.04	0.19
Average Conducted	802.11n HT40	25.40	25.27	0.13
Power (dBm)	802.11ac VHT20	24.34	24.46	-0.12
	802.11ac VHT40	25.55	25.24	0.31
	802.11ac VHT80	25.10	25.28	-0.18
	802.11ac VHT80 5.2G BF mode	73.59	73.62	-0.03
RSE (Bond Edge	802.11ac VHT80 5.3G BF mode	73.76	73.64	0.12
(Band Edge. Harmonic dBuV/m)	802.11ac VHT80 5.5G BF mode	73.75	73.69	0.06
	802.11ac VHT20 5.8G BF mode	73.69	73.52	0.17

Model Name: Amulet 756Q

Test Item	Mode	FCC ID: XVG50-0102-QT-BL Worst value	FCC ID: XVG50-0102-QT-44 Worst value	Difference (dB)
	802.11a	24.25	24.13	0.12
	802.11n HT20	24.23	24.09	0.14
Average Conducted	802.11n HT40	25.40	25.31	0.09
Power (dBm)	802.11ac VHT20	24.34	24.39	-0.05
	802.11ac VHT40	25.55	25.42	0.13
	802.11ac VHT80	25.1	25.18	-0.08
	802.11ac VHT80 5.2G BF mode	53.16	53.08	0.08
RSE	802.11ac VHT80 5.3G BF mode	73.62	73.45	0.17
(Band Edge. Harmonic dBuV/m)	802.11ac VHT80 5.5G BF mode	73.56	73.25	0.31
	802.11ac VHT80 5.8G BF mode	67.23	67.44	-0.21

Report No.: FR761304AN Page: 10 of 12



2.4 Reference

Equipment Class	Reference FCC ID	Type Grant	Reference application	Reference Report Title
NII	XVG50-0102-QT-BL	Original	XVG50-0102-QT-44	FR761304-01AN

Report No.: FR761304AN Page: 11 of 12



3 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corp (EMC and Wireless Communication Laboratory), it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan District. Location map can be found on our website http://www.icertifi.com.tw.

Linkou

Tel: 886-2-2601-1640 No. 30-2, Ding Fwu Tsuen, Lin Kou District, New Taipei City,

Taiwan, R.O.C.

Kwei Shan

Tel: 886-3-271-8666 No. 3-1, Lane 6, Wen San 3rd St., Kwei Shan District, Tao Yuan City 333, Taiwan, R.O.C.

Kwei Shan Site II

Tel: 886-3-271-8640

No. 14-1, Lane 19, Wen San 3rd St., Kwei Shan District, Tao Yuan City 333, Taiwan, R.O.C.

If you have any suggestion, please feel free to contact us as below information.

Tel: 886-3-271-8666 Fax: 886-3-318-0155

Email: ICC_Service@icertifi.com.tw

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Report No.: FR761304AN Page: 12 of 12