

Shenzhen Toby Technology Co., Ltd.

Report No.: TB-FCC155517

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FCC Radio Test Report FCC ID: 2AEJ6-FF916

Original Grant

Report No. TB-FCC155517

Applicant Zhejiang Lucky Manufacturer Co., Ltd

Equipment Under Test (EUT)

EUT Name Fish Finder

Model No. FF916

Series Model No. **FF916S**

LUCKY, LUCKYLAKER, LUCKYIMAGINE **Brand Name**

Receipt Date 2017-06-20

2017-06-21 to 2017-06-30 **Test Date**

Issue Date 2017-07-02

Standards FCC Part 15, Subpart C (15.247:2016)

Test Method ANSI C63.10: 2013

Conclusions PASS

In the configuration tested, the EUT complied with the standards specified above,

The EUT technically complies with the FCC and IC requirements

Test/Witness Engineer

Approved&

Authorized

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in the report.

TB-RF-074-1.0

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1. General Information about EUT

1.1 Client Information

Applicant: Zhejiang Lucky Manufacturer Co.,Ltd

Address : NO.2098 Cuntong Road, Jindong Industrial Zone, JinHua City,

ZheJiang Province, China

Manufacturer : Zhejiang Lucky Manufacturer Co.,Ltd

Address: NO.2098 Cuntong Road, Jindong Industrial Zone, JinHua City,

ZheJiang Province, China

1.2 General Description of EUT (Equipment Under Test)

EUT Name	:	Fish Finder	COLUMN TO THE PARTY OF THE PART		
Models No.	1	FF916, FF916S			
Model Difference	1	All models are identical in the same PCB layout interior structure and electrical circuits, The only difference is charging position.			
		Operation Frequency:	802.11b/g/n(HT20): 2412MHz~2462MHz		
		Number of Channel:	802.11b/g/n(HT20):11 channels see note(3)		
		RF Output Power:	802.11b: 18.72dBm 802.11g: 17.28dBm 802.11n (HT20):15.46dBm		
Product		Antenna Gain:	3dBi Integral Antenna		
Description		Modulation Type:	802.11b: DSSS(CCK, DQPSK, DBPSK) 802.11g/n: OFDM(BPSK,QPSK,16QAM, 64QAM)		
		Bit Rate of	802.11b:11/5.5/2/1 Mbps		
		Transmitter:	802.11g:54/48/36/24/18/12/9/6 Mbps 802.11n:up to 150Mbps		
Power Supply DC Voltage Supply from USB Port DC Supply by the Li-ion Battery					
Power Rating : DC 5.0 V from the USB Cable DC 3.7V by 850mAh Li-ion Battery					
Connecting I/O Port(S)		Please refer to the User's Manual			

Note:

- (1) This Test Report is FCC Part 15.247 for 802.11b/g/n, the test procedure follows the FCC KDB 558074 D01 DTS Meas Guidance v04.
- (2) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
- (3) Channel List:

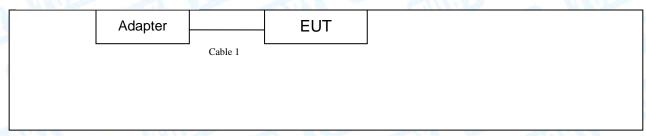


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Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	
01	2412	05	2432	09	2452	
02	2417	06	2437	10	2457	
03	2422	07	2442	11	2462	
04	2427	80	2447			
Note: CH 01~CH 11 for 802.11b/g/n(HT20)						

- (4) The Antenna information about the equipment is provided by the applicant.
- 1.3 Block Diagram Showing the Configuration of System Tested

Normal Mode



TX Mode



1.4 Description of Support Units

	Equipment Information						
Name	Model	FCC ID/VOC	Manufacturer	Used "√"			
33	1000	THURSDAY	1	33			
	Cable Information						
Number	Shielded Type	Ferrite Core	Length	Note			
Cable 1	NO	NO	1.2M				

1.5 Description of Test Mode

To investigate the maximum EMI emission characteristics generates from EUT, the test



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system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned follow was evaluated respectively.

For Conducted Test					
Final Test Mode	Description				
Mode 1	Normal Mode with TX B Mode				

For Radiated Test				
Final Test Mode	Description			
Mode 2	TX Mode B Mode Channel 01/06/11			
Mode 3	TX Mode G Mode Channel 01/06/11			
Mode 4 TX Mode N(HT20) Mode Channel 01/06/11				

Note:

(1) For all test, we have verified the construction and function in typical operation. And all the test modes were carried out with the EUT in transmitting operation in maximum power with all kinds of data rate.

According to ANSI C63.10 standards, the measurements are performed at the highest, Middle, lowest available channels, and the worst case data rate as follows:

802.11b Mode: CCK (1 Mbps) 802.11g Mode: OFDM (6 Mbps)

802.11n (HT20) Mode: MCS 0 (6.5 Mbps)

- (2) During the testing procedure, the continuously transmitting with the maximum power mode was programmed by the customer.
- (3) The EUT is considered a portable unit; in normal use it was positioned on X-plane. The worst case was found positioned on X-plane. Therefore only the test data of this X-plane was used for radiated emission measurement test.



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1.6 Description of Test Software Setting

During testing channel&Power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters of WLAN.

Test Software Version	THE STATE OF THE S	N/A	
Channel	CH 01	CH 06	CH 11
IEEE 802.11b DSSS	DEF	DEF	DEF
IEEE 802.11g OFDM	DEF	DEF	DEF
IEEE 802.11n (HT20)	DEF	DEF	DEF

1.7 Measurement Uncertainty

The reported uncertainty of measurement $y \pm U$, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

Test Item	Parameters	Expanded Uncertainty (U _{Lab})
	Level Accuracy:	
Conducted Emission	9kHz~150kHz	±3.42 dB
	150kHz to 30MHz	±3.42 dB
Dadiated Emission	Level Accuracy:	. 4 CO dD
Radiated Emission	9kHz to 30 MHz	±4.60 dB
Dadiated Emission	Level Accuracy:	. 4 40 dD
Radiated Emission	30MHz to 1000 MHz	±4.40 dB
Radiated Emission	Level Accuracy:	±4.20 dB
Naulateu Emission	Above 1000MHz	±4.20 UD



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1.8 Test Facility

The testing report were performed by the Shenzhen Toby Technology Co., Ltd., in their facilities located at 1A/F., Bldg.6, Yusheng Industrial Zone, The National Road No.107 Xixiang Section 467, Xixiang, Bao'an, Shenzhen, Guangdong, China. At the time of testing, the following bodies accredited the Laboratory:

CNAS (L5813)

The Laboratory has been accredited by CNAS to ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories for the competence in the field of testing. And the Registration No.: CNAS L5813.

FCC List No.: (811562)

The Laboratory is listed in the United States of American Federal Communications Commission (FCC), and the registration number is 811562.

IC Registration No.: (11950A-1)

The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing. The site registration: Site# 11950A-1.



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2. Test Summary

	FCC Part	t 15 Subpart C(15.247)/ RSS 247	Issue 1	
Standa	rd Section	Test Item	l	Remark
FCC	IC	rest item	Judgment	
15.203	1	Antenna Requirement	PASS	N/A
15.207	RSS-GEN 7.2.4	Conducted Emission	PASS	N/A
15.205	RSS-GEN 7.2.2	Restricted Bands	PASS	N/A
15.247(a)(2)	RSS 247 5.2 (1)	6dB Bandwidth	PASS	N/A
15.247(b)	RSS 247 5.4 (4)	Peak Output Power	PASS	N/A
15.247(e)	RSS 247 5.2 (2)	Power Spectral Density	PASS	N/A
15.247(d)	RSS 247 5.5	Band Edge	PASS	N/A
15.247(d)& 15.209	RSS 247 5.5	Transmitter Radiated Spurious Emission	PASS	N/A

Note: "/" for no requirement for this test item.

N/A is an abbreviation for Not Applicable.



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3. Test Equipment

Conducte	d Emission Te	st			
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
EMI Test Receiver	Rohde & Schwarz	ESCI	100321	Jul. 21, 2016	Jul. 20, 2017
RF Switching Unit	Compliance Direction Systems Inc	RSU-A4	34403	Jul. 21, 2016	Jul. 20, 2017
AMN	SCHWARZBECK	NNBL 8226-2	8226-2/164	Jul. 21, 2016	Jul. 20, 2017
LISN	Rohde & Schwarz	ENV216	101131	Jul. 21, 2016	Jul. 20, 2017
Radiation	Emission Tes	t			
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jul. 21, 2016	Jul. 20, 2017
EMI Test Receiver	Rohde & Schwarz	ESPI	100010/007	Jul. 21, 2016	Jul. 20, 2017
Bilog Antenna	ETS-LINDGREN	3142E	00117537	Mar.25, 2017	Mar. 24, 2018
Bilog Antenna	ETS-LINDGREN	3142E	00117542	Mar.25, 2017	Mar. 24, 2018
Horn Antenna	ETS-LINDGREN	3117	00143207	Mar.24, 2017	Mar. 23, 2018
Horn Antenna	ETS-LINDGREN	3117	00143209	Mar.24, 2017	Mar. 23, 2018
Loop Antenna	Laplace instrument	RF300	0701	Mar.24, 2017	Mar. 23, 2018
Pre-amplifier	Sonoma	310N	185903	Mar.25, 2017	Mar. 24, 2018
Pre-amplifier	HP	8449B	3008A00849	Mar.24, 2017	Mar. 23, 2018
Cable	HUBER+SUHNER	100	SUCOFLEX	Mar.25, 2017	Mar. 24, 2018
Positioning Controller	ETS-LINDGREN	2090	N/A	N/A	N/A
Antenna C	Conducted Em	ission			
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jul. 21, 2016	Jul. 20, 2017
Spectrum Analyzer	Rohde & Schwarz	ESCI	100010/007	Jul. 21, 2016	Jul. 20, 2017
Power Meter	Anritsu	ML2495A	25406005	Jul. 21, 2016	Jul. 20, 2017
Power Sensor	Anritsu	ML2411B	25406005	Jul. 21, 2016	Jul. 20, 2017



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4. Conducted Emission Test

4.1 Test Standard and Limit

4.1.1Test Standard FCC Part 15.207

4.1.2 Test Limit

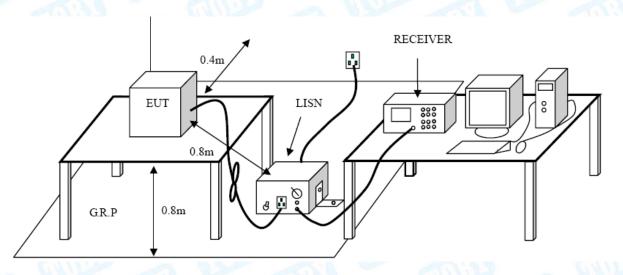
Conducted Emission Test Limit

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

Notes:

- (1) *Decreasing linearly with logarithm of the frequency.
- (2) The lower limit shall apply at the transition frequencies.
- (3) The limit decrease in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

4.2 Test Setup



4.3 Test Procedure

The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/50uH of coupling impedance for the measuring instrument.

Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.



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I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.

LISN at least 80 cm from nearest part of EUT chassis.

The bandwidth of EMI test receiver is set at 9kHz, and the test frequency band is from 0.15MHz to 30MHz.

4.4 EUT Operating Mode

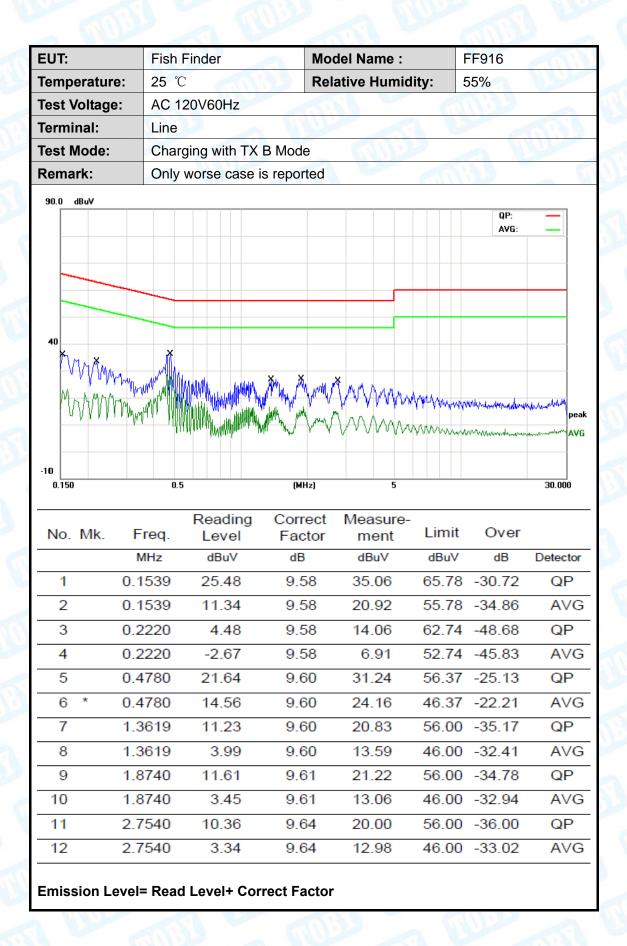
Please refer to the description of test mode.

4.5 Test Data

Please see the next page.

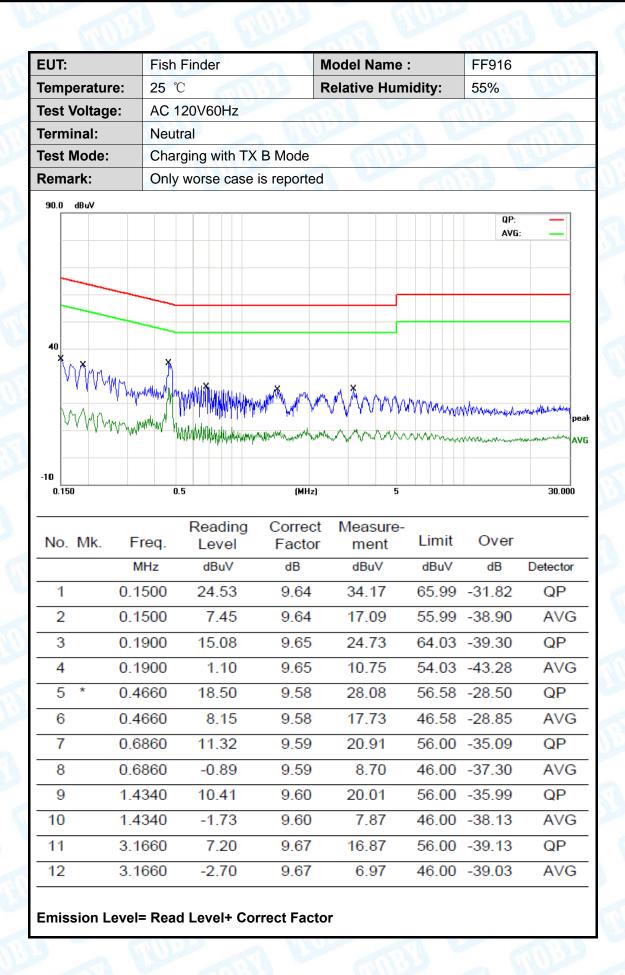


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UT:	Fish F	inder		Model Nan	ne:	FF916	
emperature:	25 ℃		'NO	Relative H	umidity:	55%	Albert
est Voltage:	AC 24	40V/60Hz		118	61	11:30	
erminal:	Line		Alto		J F		
est Mode:	Charg	ging with TX	B Mode	THE		- N	N. C.
Remark:	Only	worse case	is reported	1	CIN'	35	
90.0 dBuV							
						QP: AVG:	_
	J						
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	Freq.				Limit	Over	
0.150		Reading	Correct	Measure-		Over	
0.150 No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit dBuV		30.000
0.150 No. Mk.	Freq. MHz	Reading Level dBuV 11.29	Correct Factor dB 9.58	Measure- ment dBuV	Limit dBuV 65.15	dB -44.28	30.000 Detector QP
0.150 No. Mk. 1 0 2 0	Freq. MHz 0.1660	Reading Level dBuV 11.29 -0.28	Correct Factor dB 9.58 9.58	Measure- ment dBuV 20.87 9.30	dBuV 65.15 55.15	dB -44.28 -45.85	30.000 Detector QP AVG
0.150 No. Mk. 1 0 2 0 3 0	Freq. MHz 0.1660 0.1660 0.3860	Reading Level dBuV 11.29 -0.28 21.21	Correct Factor dB 9.58 9.58 9.60	Measure- ment dBuV 20.87 9.30 30.81	dBuV 65.15 55.15 58.15	dB -44.28 -45.85 -27.34	30.000 Detector QP AVG
0.150 No. Mk. 1 0 2 0 3 0 4 0	Freq. MHz 0.1660 0.1660 0.3860	Reading Level dBuV 11.29 -0.28 21.21 13.75	Correct Factor dB 9.58 9.58 9.60 9.60	Measure- ment dBuV 20.87 9.30 30.81 23.35	dBuV 65.15 55.15 58.15 48.15	dB -44.28 -45.85 -27.34 -24.80	30.000 Detector QP AVG
0.150 No. Mk. 1 0 2 0 3 0 4 0 5 0	Freq. MHz 0.1660 0.1660 0.3860 0.3860 0.4780	Reading Level dBuV 11.29 -0.28 21.21 13.75 28.28	Correct Factor dB 9.58 9.58 9.60 9.60	Measure- ment dBuV 20.87 9.30 30.81 23.35 37.88	dBuV 65.15 55.15 58.15 48.15 56.37	dB -44.28 -45.85 -27.34 -24.80 -18.49	30.000 Detector QP AVG QP AVG
0.150 No. Mk. 1 0 2 0 3 0 4 0 5 0 6 * 0	Freq. MHz 0.1660 0.1660 0.3860 0.3860 0.4780	Reading Level dBuV 11.29 -0.28 21.21 13.75 28.28 21.23	Correct Factor dB 9.58 9.58 9.60 9.60 9.60	Measure- ment dBuV 20.87 9.30 30.81 23.35 37.88 30.83	dBuV 65.15 55.15 58.15 48.15 56.37 46.37	dB -44.28 -45.85 -27.34 -24.80 -18.49 -15.54	30.000 Detector QP AVG QP AVG
0.150 No. Mk. 1 0 2 0 3 0 4 0 5 0 6 * 0 7 1	Freq. MHz 0.1660 0.1660 0.3860 0.3860 0.4780 0.4780 0.1180	Reading Level dBuV 11.29 -0.28 21.21 13.75 28.28 21.23 16.85	Correct Factor dB 9.58 9.58 9.60 9.60 9.60 9.60	Measure- ment dBuV 20.87 9.30 30.81 23.35 37.88 30.83 26.45	dBuV 65.15 55.15 58.15 48.15 56.37 46.37 56.00	dB -44.28 -45.85 -27.34 -24.80 -18.49 -15.54 -29.55	30.000 Detector QP AVG QP AVG QP AVG
0.150 No. Mk. 1 0 2 0 3 0 4 0 5 0 6 * 0 7 1 8 1	Freq. MHz 0.1660 0.3860 0.3860 0.4780 0.4780 0.1180 0.1180	Reading Level dBuV 11.29 -0.28 21.21 13.75 28.28 21.23 16.85 6.28	Correct Factor dB 9.58 9.58 9.60 9.60 9.60 9.60 9.60	Measure- ment dBuV 20.87 9.30 30.81 23.35 37.88 30.83 26.45 15.88	Limit dBuV 65.15 55.15 58.15 48.15 56.37 46.37 56.00 46.00	dB -44.28 -45.85 -27.34 -24.80 -18.49 -15.54 -29.55 -30.12	January Januar
0.150 No. Mk. 1 0 2 0 3 0 4 0 5 0 6 * 0 7 1 8 1 9 1	Freq. MHz 0.1660 0.3860 0.3860 0.4780 0.4780 0.1180 0.1180 0.8900	Reading Level dBuV 11.29 -0.28 21.21 13.75 28.28 21.23 16.85 6.28 17.60	Correct Factor dB 9.58 9.58 9.60 9.60 9.60 9.60 9.60 9.60 9.60 9.60	Measure-ment dBuV 20.87 9.30 30.81 23.35 37.88 30.83 26.45 15.88 27.21	Limit dBuV 65.15 55.15 58.15 48.15 56.37 46.37 56.00 46.00	dB -44.28 -45.85 -27.34 -24.80 -18.49 -15.54 -29.55 -30.12 -28.79	Detector QP AVG QP AVG QP AVG QP AVG
0.150 No. Mk. 1 0 2 0 3 0 4 0 5 0 6 * 0 7 1 8 1 9 1	Freq. MHz 0.1660 0.1660 0.3860 0.4780 0.4780 0.1180 0.1180 0.8900	Reading Level dBuV 11.29 -0.28 21.21 13.75 28.28 21.23 16.85 6.28 17.60 8.20	Correct Factor dB 9.58 9.58 9.60 9.60 9.60 9.60 9.60 9.61 9.61	Measure- ment dBuV 20.87 9.30 30.81 23.35 37.88 30.83 26.45 15.88 27.21 17.81	Limit dBuV 65.15 55.15 58.15 48.15 56.37 46.37 56.00 46.00 56.00	dB -44.28 -45.85 -27.34 -24.80 -18.49 -15.54 -29.55 -30.12 -28.79 -28.19	January Januar
0.150 No. Mk. 1 0 2 0 3 0 4 0 5 0 6 * 0 7 1 8 1 9 1 10 1	Freq. MHz 0.1660 0.3860 0.3860 0.4780 0.4780 0.1180 0.1180 0.8900	Reading Level dBuV 11.29 -0.28 21.21 13.75 28.28 21.23 16.85 6.28 17.60	Correct Factor dB 9.58 9.58 9.60 9.60 9.60 9.60 9.60 9.60 9.60 9.60	Measure-ment dBuV 20.87 9.30 30.81 23.35 37.88 30.83 26.45 15.88 27.21	Limit dBuV 65.15 55.15 58.15 48.15 56.37 46.37 56.00 46.00 56.00 56.00	dB -44.28 -45.85 -27.34 -24.80 -18.49 -15.54 -29.55 -30.12 -28.79	30.000 Detector QP AVG QP AVG QP AVG QP AVG



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UT:	Fish	n Finder		Model Name) :	FF916		
emperatui	re: 25	$^{\circ}$ C	33	Relative Humidity: 55%		55%	55%	
est Voltag	e: AC	240V/60Hz						
erminal:	Neu	utral	C CHO		1 6	450		
est Mode:	Cha	arging with TX	B Mode	(MILLION)		1 W		
Remark:	Onl	y worse case	is reported			33		
90.0 dBuV								
						QP: AVG:		
-								
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40	¥							
1 1000 AM	^^{y	LAMANALALLA UMUHAMAN MAYA	PHINAMETER PARTY NAMED OF	$^{\wedge}$ $^{\wedge}$ $^{\wedge}$ $^{\wedge}$	MAKE			
DOWNW.	Walley Wall		Trial III	M A W.A	1 1 A A A A A	Y V/M/M/M	hana/AMMAAA	
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0.150		0.5	(MHz)	5			30.000	
0.150		Reading	Correct	5 Measure-		0	30.000	
0.150	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	30.000	
0.150	Freq.	Reading Level dBuV	Correct	Measure- ment dBuV	Limit dBuV	dB		
0.150	Freq.	Reading Level	Correct Factor	Measure- ment	Limit		Detect	
0.150 No. Mk.	Freq.	Reading Level dBuV	Correct Factor	Measure- ment dBuV	Limit dBuV	dB -32.23	Detect QF	
0.150 No. Mk.	Freq. MHz 0.1500	Reading Level dBuV 24.12	Correct Factor dB 9.64	Measure- ment dBuV 33.76	Limit dBuV 65.99 55.99	dB -32.23	Detect QF AV	
0.150 No. Mk.	Freq. MHz 0.1500 0.1500	Reading Level dBuV 24.12 6.60	Correct Factor dB 9.64 9.64	Measure- ment dBuV 33.76 16.24	Limit dBuV 65.99 55.99 63.86	dB -32.23 -39.75	QF AV	
0.150 No. Mk.	Freq. MHz 0.1500 0.1500 0.1940	Reading Level dBuV 24.12 6.60 7.83	Correct Factor dB 9.64 9.64 9.65	Measure- ment dBuV 33.76 16.24 17.48	Limit dBuV 65.99 55.99 63.86	dB -32.23 -39.75 -46.38	QF AV	
0.150 No. Mk. 1 2 3 4	Freq. MHz 0.1500 0.1500 0.1940 0.1940	Reading Level dBuV 24.12 6.60 7.83 -2.44	Correct Factor dB 9.64 9.64 9.65 9.65	Measure- ment dBuV 33.76 16.24 17.48 7.21	Limit dBuV 65.99 55.99 63.86 53.86	dB -32.23 -39.75 -46.38 -46.65	QF AV QF	
0.150 No. Mk. 1 2 3 4 5 *	Freq. MHz 0.1500 0.1500 0.1940 0.1940 0.4700 0.4700	Reading Level dBuV 24.12 6.60 7.83 -2.44 20.41 9.32	Correct Factor dB 9.64 9.64 9.65 9.65 9.58	Measure- ment dBuV 33.76 16.24 17.48 7.21 29.99 18.90	Limit dBuV 65.99 55.99 63.86 53.86 56.51 46.51	dB -32.23 -39.75 -46.38 -46.65 -26.52 -27.61	Detect QF AV QF AV	
0.150 No. Mk. 1 2 3 4 5 * 6 7	Freq. MHz 0.1500 0.1500 0.1940 0.1940 0.4700 0.4700 1.1620	Reading Level dBuV 24.12 6.60 7.83 -2.44 20.41 9.32 10.17	Correct Factor dB 9.64 9.64 9.65 9.65 9.58 9.58	Measure- ment dBuV 33.76 16.24 17.48 7.21 29.99 18.90 19.76	Limit dBuV 65.99 55.99 63.86 53.86 56.51 46.51 56.00	dB -32.23 -39.75 -46.38 -46.65 -26.52 -27.61 -36.24	Detect QF AV QF AV QF	
0.150 No. Mk. 1 2 3 4 5 * 6 7 8	Freq. MHz 0.1500 0.1500 0.1940 0.1940 0.4700 0.4700 1.1620 1.1620	Reading Level dBuV 24.12 6.60 7.83 -2.44 20.41 9.32 10.17 -1.03	Correct Factor dB 9.64 9.64 9.65 9.65 9.58 9.58 9.59	Measure- ment dBuV 33.76 16.24 17.48 7.21 29.99 18.90 19.76 8.56	Limit dBuV 65.99 55.99 63.86 53.86 56.51 46.51 56.00 46.00	dB -32.23 -39.75 -46.38 -46.65 -26.52 -27.61 -36.24 -37.44	QF AV QF AV QF AV	
No. Mk. 1 2 3 4 5 * 6 7 8 9	Freq. MHz 0.1500 0.1500 0.1940 0.1940 0.4700 0.4700 1.1620 1.1620 2.5940	Reading Level dBuV 24.12 6.60 7.83 -2.44 20.41 9.32 10.17 -1.03 11.71	Correct Factor dB 9.64 9.65 9.65 9.58 9.58 9.59 9.59	Measure- ment dBuV 33.76 16.24 17.48 7.21 29.99 18.90 19.76 8.56 21.35	Limit dBuV 65.99 55.99 63.86 53.86 56.51 46.51 56.00 46.00	dB -32.23 -39.75 -46.38 -46.65 -26.52 -27.61 -36.24 -37.44 -34.65	QF AV QF AV QF AV	
0.150 No. Mk. 1 2 3 4 5 7 8 9 10	Freq. MHz 0.1500 0.1500 0.1940 0.1940 0.4700 0.4700 1.1620 1.1620 2.5940	Reading Level dBuV 24.12 6.60 7.83 -2.44 20.41 9.32 10.17 -1.03 11.71 1.77	Correct Factor dB 9.64 9.64 9.65 9.65 9.58 9.59 9.59 9.64 9.64	Measure- ment dBuV 33.76 16.24 17.48 7.21 29.99 18.90 19.76 8.56 21.35 11.41	Limit dBuV 65.99 55.99 63.86 53.86 56.51 46.51 56.00 46.00 46.00	dB -32.23 -39.75 -46.38 -46.65 -26.52 -27.61 -36.24 -37.44 -34.65 -34.59	QF AV QF AV QF AV	
0.150 No. Mk. 1 2 3 4 5 * 6 7 8 9	Freq. MHz 0.1500 0.1500 0.1940 0.1940 0.4700 0.4700 1.1620 1.1620 2.5940	Reading Level dBuV 24.12 6.60 7.83 -2.44 20.41 9.32 10.17 -1.03 11.71	Correct Factor dB 9.64 9.65 9.65 9.58 9.58 9.59 9.59	Measure- ment dBuV 33.76 16.24 17.48 7.21 29.99 18.90 19.76 8.56 21.35	Limit dBuV 65.99 55.99 63.86 53.86 56.51 46.51 56.00 46.00 56.00	dB -32.23 -39.75 -46.38 -46.65 -26.52 -27.61 -36.24 -37.44 -34.65	Detect QF AV QF AV QF AV QF AV	



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5. Radiated Emission Test

5.1 Test Standard and Limit

5.1.1 Test Standard FCC Part 15.209

5.1.2 Test Limit

Radiated Emission Limits (9 kHz~1000 MHz)

Frequency (MHz	Field Strength (microvolt/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

Radiated Emission Limit (Above 1000MHz)

Frequency	Distance of 3	m (dBuV/m)
(MHz)	Peak	Average
Above 1000	74	54

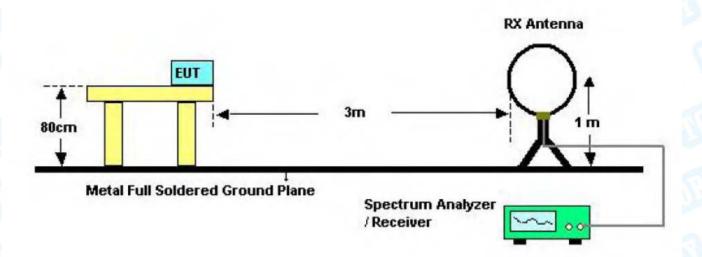
Note:

- (1) The tighter limit applies at the band edges.
- (2) Emission Level(dBuV/m)=20log Emission Level(uV/m)

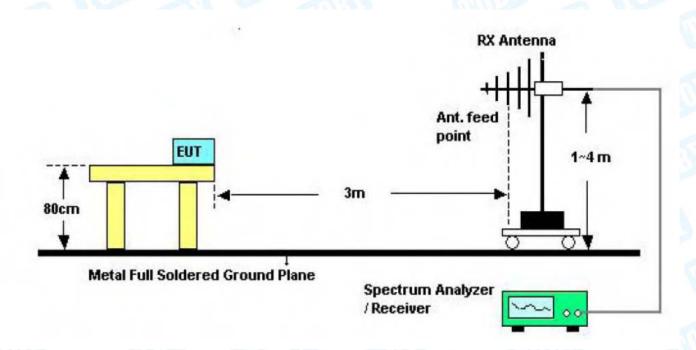


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5.2 Test Setup



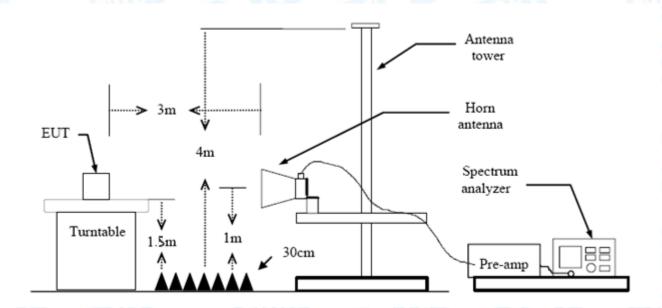
Below 30MHz Test Setup



Below 1000MHz Test Setup



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Above 1GHz Test Setup

5.3 Test Procedure

- (1) Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.
- (2) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.
- (3) The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- (4) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Bellow 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.
- (5) Testing frequency range below 1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection.
- (6) Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.
- (7) For the actual test configuration, please see the test setup photo.

5.4 EUT Operating Condition

The Equipment Under Test was set to Continual Transmitting in maximum power.



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5.5 Test Data

Remark: During testing above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.

Test data please refer the following pages.



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9KHz~30MHz

From 9KHz to 30MHz: Conclusion: PASS

Note: The amplitude of spurious emissions which are attenuated by more than 20dB

below the permissible value has no need to be reported.

30MHz~1GHz

EUT:	Fish Finder		Model:		FF916		
Temperature:	25 ℃		Relative Hu	Relative Humidity: 55%			
Test Voltage:	DC 3.7V	THE STATE OF THE S	3	DATE			
Ant. Pol.	Horizontal	1 W					
Test Mode:	TX B Mode 2	412MHz	Maria	1	1		
Remark:	Only worse c	ase is reported		HILLY		167	
90.0 dBuV/m							
				FCC	15B 3M Radiatio	n e	
					Margin -6	dB [
30		2 3	4	5	6	14.	
	1	Ž Ž	X	warm the March	phapping the strange of the stage of the sta	Androtal money	
and of the same of	Mary Mary Mary Mary Mary Mary Mary Mary	Market & commence	Mayer	Whate .			
- The state of the	Winds.						
30.000 40 5	60 60 70 80	(MHz)	300	400 5	00 600 700	1000.00	
	Read	ing Correct	Measure-				
No. Mk. F	req. Leve	_	ment	Limit	Over		
1	MHz dBu\	/ dB/m	dBuV/m	dBuV/m	dB	Detecto	
1 60.	2801 36.5		12.41	40.00	-27.59	QP	
2 * 125	.4457 44.3	2 -21.89	22.43	43.50	-21.07	QP	
	.8295 43.5		22.33	43.50	-21.17	QP	
				43.50			
			20.99		-22.51	QP	
5 390	.7226 33.8	6 -12.62	21.24	46.00	-24.76	QP	
6 651	.9417 32.0	2 -7.66	24.36	46.00	-21.64	QP	
*:Maximum data	x:Over limit !:ov	er margin					



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EUT:			Finder		Model:		FF916	3		
peratu	re:	25 °C	C	UBI I	Relative Hu	midity:	idity: 55%			
Voltag	je:	DC 3	3.7V		73 V	6	TO STATE OF THE PARTY OF THE PA			
Pol.		Verti	cal	~ W						
Mode:	:	TX B	Mode :	2412MHz		William William				
ark:		Only	worse	case is reporte	ed	6.11	(19)			
dBuV/m										
hall a contract of the contrac	Aman	1	Manufacture of the state of the	2 3	wanter the the state of the sta	A A A A A A A A A A A A A A A A A A A		Margin -6	dB 6	
000 4	0 50	60 7					500 6	500 700	1000.00	
. Mk.	Fre	∋q.		•			t C	ver		
	MF	łz	dBu\	dB/m	dBuV/m	dBuV	//m	dB	Detecto	
*	61.56	618	44.7	2 -24.04	20.68	40.0	00 -1	9.32	QP	
	126.7	723	41.0	2 -21.85	19.17	43.5	50 -2	24.33	QP	
	143.8	295	40.8	7 -21.23	19.64	43.5	50 -2	23.86	QP	
	434.0	651	33.3	3 -11.95	21.38	46.0	00 -2	24.62	QP	
	633.9	073	32.3	5 -7.64	24.71	46.0	00 -2	21.29	QP	
	869 1	302	31.0	7 -4 93	26 14	46 (QP	
	Pol. Mode: ark: dBuV/m	Mode: ark: dBuV/m MK. Fre MH * 61.56 126.7 143.8 434.0 633.9	Pol. Verti Mode: TX E ark: Only dBuV/m 1 1 MK. Freq. MHz	Pol. Vertical TX B Mode 2 Only worse of the state of th	Pol. Vertical TX B Mode 2412MHz Only worse case is reported and the second sec	Mode: TX B Mode 2412MHz Only worse case is reported Buv/m Reading Correct Measure Evel Factor ment MHz dBuV dB/m * 61.5618 44.72 -24.04 20.68 126.7723 41.02 -21.85 19.17 143.8295 40.87 -21.23 19.64 434.0651 33.33 -11.95 21.38 633.9073 32.35 -7.64 24.71	Mode: TX B Mode 2412MHz Only worse case is reported TX B Mode 2412MHz	Pol. Vertical Mode: TX B Mode 2412MHz Only worse case is reported dBuV/m Reading Correct Measure- Level Factor ment Limit Co MHz dBuV dB/m dBuV/m dBuV/m * 61.5618 44.72 -24.04 20.68 40.00 -1 126.7723 41.02 -21.85 19.17 43.50 -2 143.8295 40.87 -21.23 19.64 43.50 -2 434.0651 33.33 -11.95 21.38 46.00 -2 633.9073 32.35 -7.64 24.71 46.00 -2	Pol. Vertical Mode: TX B Mode 2412MHz Only worse case is reported BBW/m FCC 158 3M Radiation Margin 6 Reading Correct Measure- Level Factor ment Limit Over MHz dBuV dB/m dBuV/m dBuV/m dB * 61.5618 44.72 -24.04 20.68 40.00 -19.32 126.7723 41.02 -21.85 19.17 43.50 -24.33 143.8295 40.87 -21.23 19.64 43.50 -23.86 434.0651 33.33 -11.95 21.38 46.00 -24.62 633.9073 32.35 -7.64 24.71 46.00 -21.29	



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Above 1GHz

EUT:	Fish Finder	Model:	FF916
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2412MHz	THE PERSON NAMED IN	A VIVE
Remark:	No report for the emission	which more than 10 de	B below the prescribed
	limit.	2 m	

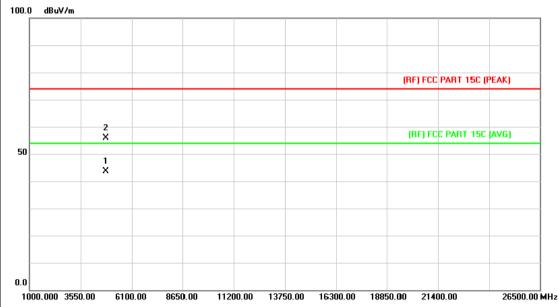


No.	Mk.	Freq.	_	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4823.654	30.09	13.56	43.65	54.00	-10.35	AVG
2		4824.021	42.86	13.56	56.42	74.00	-17.58	peak



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EUT:	Fish Finder	Model:	FF916			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 3.7V		1133			
Ant. Pol.	Vertical	O				
Test Mode:	TX B Mode 2412MHz	WILLIAM STATE	3 1111			
Remark:	No report for the emission which more than 10 dB below the					
	prescribed limit.	- 13V				

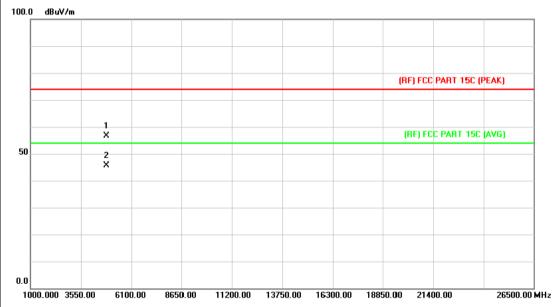


No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4823.897	30.19	13.56	43.75	54.00	-10.25	AVG
2		4824.652	42.33	13.56	55.89	74.00	-18.11	peak



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EUT:	Fish Finder	Model:	FF916			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 3.7V		TIES TO THE TOTAL PROPERTY OF THE TOTAL PROP			
Ant. Pol.	Horizontal					
Test Mode:	TX B Mode 2437MHz					
Remark:	No report for the emission which more than 10 dB below the					
	prescribed limit.					
<i>i</i>						

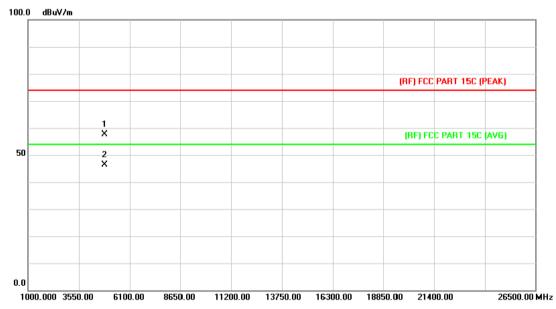


No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4873.899	42.73	13.86	56.59	74.00	-17.41	peak
2	*	4874.065	31.76	13.86	45.62	54.00	-8.38	AVG



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EUT:	Fish Finder	Model:	FF916					
Temperature:	25 ℃ Relative Humidity: 55%							
Test Voltage:	DC 3.7V	DC 3.7V						
Ant. Pol.	Vertical							
Test Mode:	TX B Mode 2437MHz	MILLER	The same of the sa					
Remark:	No report for the emission	No report for the emission which more than 10 dB below the						
	prescribed limit.							
İ								

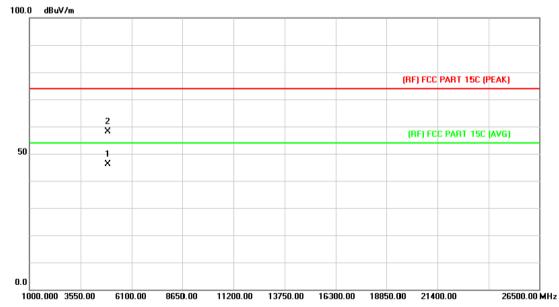


No.	Mk.	Freq.		Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4873.584	43.83	13.86	57.69	74.00	-16.31	peak
2	*	4874.254	32.46	13.86	46.32	54.00	-7.68	AVG



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EUT:	Fish Finder	Model:	FF916					
Temperature:	25 ℃	Relative Humidity:	55%					
Test Voltage:	DC 3.7V	DC 3.7V						
Ant. Pol.	Horizontal							
Test Mode:	TX B Mode 2462MHz		THE PARTY OF THE P					
Remark:	No report for the emission which more than 10 dB below the prescribed limit.							
400.0 10.111	prosonoca mint.							



No.	Mk.	Freq.		Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4923.514	31.97	14.15	46.12	54.00	-7.88	AVG
2		4924.021	44.08	14.15	58.23	74.00	-15.77	peak



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	Model:	FF916				
25 ℃	Relative Humidity:	55%				
DC 3.7V						
Vertical						
TX B Mode 2462MHz	WILDS	THE PARTY OF THE P				
No report for the emission volvescribed limit.	which more than 10 dE	s below the				
1	OC 3.7V Vertical TX B Mode 2462MHz No report for the emission	OC 3.7V Vertical TX B Mode 2462MHz No report for the emission which more than 10 dB				

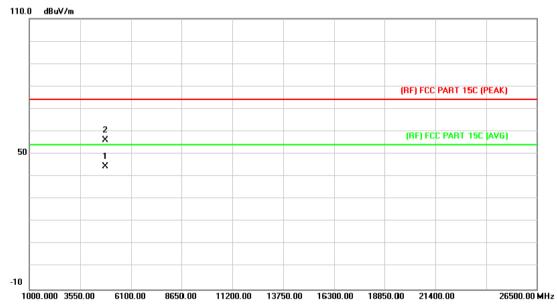


No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4923.987	43.97	14.15	58.12	74.00	-15.88	peak
2	*	4924.354	32.06	14.15	46.21	54.00	-7.79	AVG



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EUT:	Fish Finder	Model:	FF916			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 3.7V					
Ant. Pol.	Horizontal					
Test Mode:	TX G Mode 2412MHz	MILES	A VIII			
Remark:	No report for the emission prescribed limit.	which more than 10 dE	3 below the			

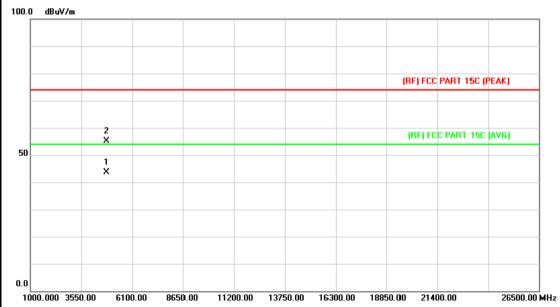


No.	. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4824.387	30.78	13.56	44.34	54.00	-9.66	AVG
2		4825.194	42.57	13.57	56.14	74.00	-17.86	peak



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EUT:	Fish Finder	Model:	FF916					
Temperature:	25 ℃ Relative Humidity: 55%							
Test Voltage:	DC 3.7V	DC 3.7V						
Ant. Pol.	Vertical							
Test Mode:	TX G Mode 2412MHz	MILES	The same of the sa					
Remark:	No report for the emission	No report for the emission which more than 10 dB below the						
	prescribed limit.							

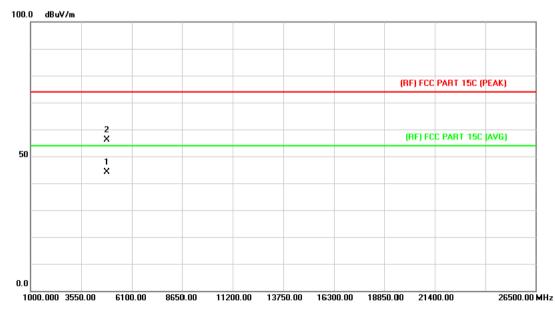


No.	Mł	k. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4823.687	30.12	13.56	43.68	54.00	-10.32	AVG
2		4824.556	41.52	13.56	55.08	74.00	-18.92	peak



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EUT:	Fish Finder	Model:	FF916				
Temperature:	25 °C	Relative Humidity:	55%				
Test Voltage:	DC 3.7V	DC 3.7V					
Ant. Pol.	Horizontal						
Test Mode:	TX G Mode 2437MH	z					
Remark:	No report for the emission which more than 10 dB below the						
	prescribed limit.						

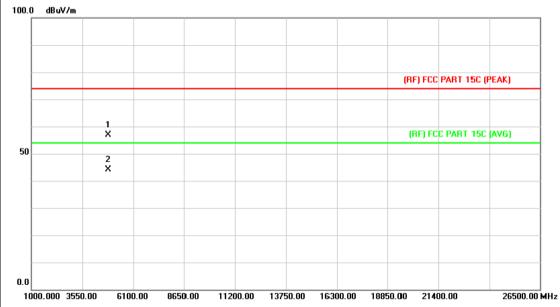


No.	Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4873.854	30.37	13.86	44.23	54.00	-9.77	AVG
2		4874.685	42.35	13.86	56.21	74.00	-17.79	peak



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EUT:	Fish Finder	Model:	FF916			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 3.7V	DC 3.7V				
Ant. Pol.	Vertical					
Test Mode:	TX G Mode 2437MHz	WIID S	THE PARTY OF THE P			
Remark:	No report for the emission which more than 10 dB below the prescribed limit.					
proceniced minu						



No.	Mk.	Freq.		Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4873.735	43.01	13.86	56.87	74.00	-17.13	peak
2	*	4874.035	30.39	13.86	44.25	54.00	-9.75	AVG



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EUT:	Fish Finder	Model:	FF916		
Temperature:	25 ℃	Relative Humidity:	55%		
Test Voltage:	DC 3.7V				
Ant. Pol.	Horizontal				
Test Mode:	TX G Mode 2462MHz	MILES	A VIII		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.				

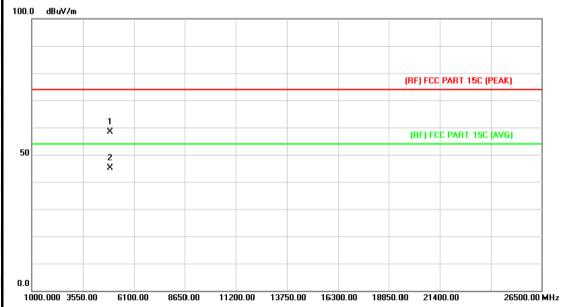


No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4923.608	42.39	14.15	56.54	74.00	-17.46	peak
2	*	4923.987	30.74	14.15	44.89	54.00	-9.11	AVG



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EUT:	Fish Finder	Model:	FF916		
Temperature:	25 ℃	Relative Humidity:	55%		
Test Voltage:	DC 3.7V				
Ant. Pol.	Vertical				
Test Mode:	TX G Mode 2462MHz	WIII DE	A VIII		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.				



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4923.574	44.18	14.15	58.33	74.00	-15.67	peak
2	*	4923.621	30.89	14.15	45.04	54.00	-8.96	AVG



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EUT:	Fish Finder	Model:	FF916			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 3.7V					
Ant. Pol.	Horizontal					
Test Mode:	TX N(HT20) Mode 2412M	TX N(HT20) Mode 2412MHz				
Remark:	No report for the emission which more than 10 dB below the					
	prescribed limit.					



No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4824.342	29.65	13.56	43.21	54.00	-10.79	AVG
2		4824.588	40.75	13.56	54.31	74.00	-19.69	peak



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EUT.	Fiel Fieles	No alala	FF046			
EUT:	Fish Finder	Model:	FF916			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 3.7V	DC 3.7V				
Ant. Pol.	Vertical					
Test Mode:	TX N(HT20) Mode 2412N	1Hz				
Remark:	No report for the emission which more than 10 dB below the					
	prescribed limit.					

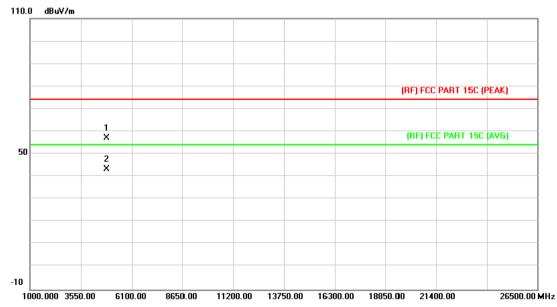


No.	Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4823.016	28.45	13.56	42.01	54.00	-11.99	AVG
2		4824.027	42.42	13.56	55.98	74.00	-18.02	peak



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EUT:	Fish Finder	Model:	FF916
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V		US S
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT20) Mode 2437M	Hz	Jan Milliam
Remark:	No report for the emission	which more than 10 de	B below the
	prescribed limit.	- A 134	



No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4874.726	43.12	13.86	56.98	74.00	-17.02	peak
2	*	4874.882	29.33	13.86	43.19	54.00	-10.81	AVG



Page: 38 of 76

EUT:	Fish Finder	Model:	FF916
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT20) Mode 2437M	Hz	
Remark:	No report for the emission	which more than 10 de	B below the
	prescribed limit.	- N	

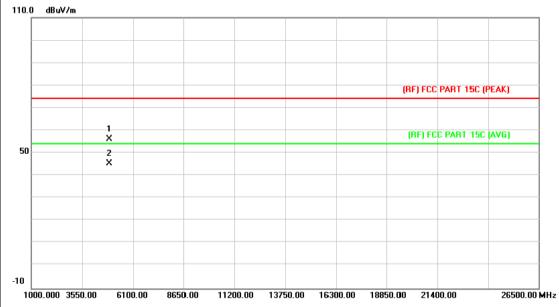


No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4872.503	43.06	13.85	56.91	74.00	-17.09	peak
2	*	4872.503	29.34	13.85	43.19	54.00	-10.81	AVG



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EUT:	Fish Finder	Model:	FF916
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V		133
Ant. Pol.	Horizontal	0	
Test Mode:	TX N(HT20) Mode 2462MH	z (MINDE	J. Hilliam
Remark:	No report for the emission w	hich more than 10 dB	below the
	prescribed limit.		
1100 40.44			

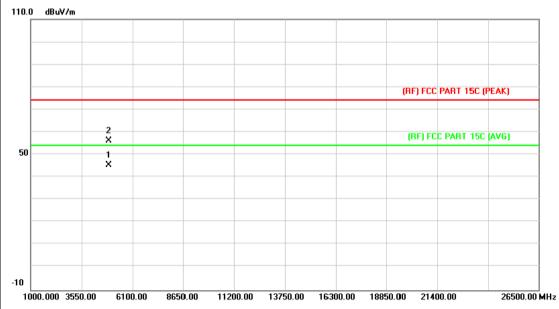


No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4922.905	42.15	14.14	56.29	74.00	-17.71	peak
2	*	4924.201	31.21	14.15	45.36	54.00	-8.64	AVG



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EUT:	Fish Finder	Model:	FF916
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V	11	1133
Ant. Pol.	Vertical	TO U	
Test Mode:	TX N(HT20) Mode 2462MH	z milipe	2
Remark:	No report for the emission w	hich more than 10 dB	below the
	prescribed limit.		
			!



No.	Mł	k. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4922.746	31.23	14.14	45.37	54.00	-8.63	AVG
2		4923.274	42.04	14.15	56.19	74.00	-17.81	peak



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6. Restricted Bands Requirement

6.1 Test Standard and Limit

6.1.1 Test Standard

FCC Part 15.247(d)

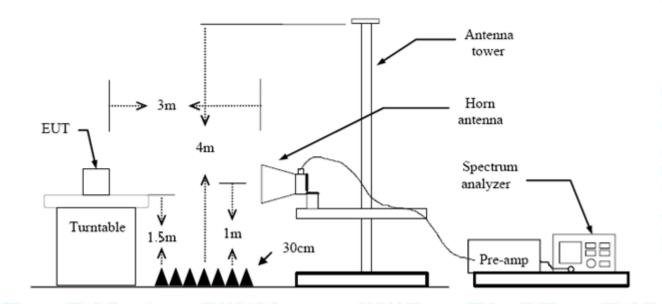
FCC Part 15.209

FCC Part 15.205

6.1.2 Test Limit

Restricted Frequency	Distance of	3m (dBuV/m)
Band (MHz)	Peak	Average
2310 ~2390	74	54
2483.5 ~2500	74	54

6.2 Test Setup



6.3 Test Procedure

- (1) The measuring distance of 3m shall be used for measurements at frequency up to 1GHz and above 1 GHz. The EUT was placed on a rotating 0.8m high above ground, the table was rotated 360 degrees to determine the position of the highest radiation.
- (2) Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.



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(3) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.

- (4) The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- (5) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Bellow 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.
- (6) Testing frequency range below 1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection.
- (7) Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.
- (8) For the actual test configuration, please see the test setup photo.

6.4 EUT Operating Condition

The Equipment Under Test was set to Continual Transmitting in maximum power.

6.5 Test Data

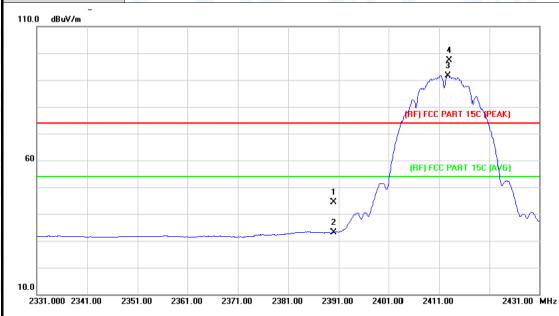
Please see the next page.



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(1) Radiation Test

EUT:	Fish Finder	Model:	FF916
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V	1	
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2412MHz		
Remark:	N/A	- 13º	



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	43.61	0.77	44.38	74.00	-29.62	peak
2		2390.000	32.36	0.77	33.13	54.00	-20.87	AVG
3	*	2412.800	90.88	0.86	91.74	Fundamental F	Frequency	AVG
4	X	2413.000	96.49	0.86	97.35	Fundamental F	Frequency	peak



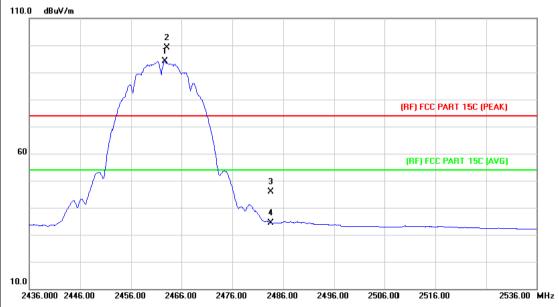
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EUT	:		Fish	Finder		2 Y	Mode	el:		FF916	
Tem	perat	ure:	25 °	C	The state of	33	Relat	ive Hur	nidity:	55%	
Test	t Volta	age:	DC 3	3.7V	3		Biggs		CU	1132	
Ant.	Pol.		Verti	cal		P. H.	Single Control		10		
Test	t Mod	e:	TX E	3 Mode	2412	MHz	- 6	11/10		2 11	J. Land
Ren	nark:		N/A	1/3			A V			13	
110.0	dBu∀∕	'm									
									4 ¥		
								,	~~~~		
								Л	(BE) ECC I	ART 15C (PEA)	71
									(III) T CC I	ATT TOC (I CAI	4
60											
									(RF) FCC	PART 15C (AVI	6)
							1 ×	\wedge			
							2 ~~			- Um	wh.
							×				
10.0											
23	38.000 2	348.00 2	2358.00	2368.00	2378	3.00 2388	3.00 2398	3.00 240	08.00 24 18.	00 2	2438.00 MF
No	n Mk	Fre	.u	Read		Correc		sure-	Limit	Over	
No	o. Mł			Leve	el	Facto	r me	ent	Limit	Over	Detecto
	o. Mł	МН	lz	dBu\	el V	Factor dB/m	r me	ent uV/m	dBuV/m	dB	Detecto
1	o. Mł		lz	dBu\	el v 25	dB/m 0.77	r me dBu 45	ent uV/m 5.02			peak
1	o. Mk	МН	lz 000	dBu\	el v 25	Factor dB/m	r me dBu 45	ent uV/m	dBuV/m	dB	
No 1 2	b. Mk	мн 2390.	000 000	dBu\	el V 25 36	dB/m 0.77	r me dBu 45	ent uV/m 5.02	dBuV/m 74.00 54.00	dB -28.98	peak



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EUT:	Fish Finder	Model:	FF916
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2462MHz	MILLER	
Remark:	N/A		
		·	



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	2462.700	92.97	1.08	94.05	Fundamenta	I Frequency	AVG
2	X	2463.100	98.17	1.08	99.25	Fundamenta	I Frequency	peak
3		2483.500	44.76	1.17	45.93	74.00	-28.07	peak
4		2483.500	33.18	1.17	34.35	54.00	-19.65	AVG



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EUT:	Fish Finder	Model:	FF916
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2462MHz	WILD TO	
Remark:	N/A		130
-			



No.	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	2461.200	92.87	1.07	93.94	Fundamental	Frequency	AVG
2	X	2463.100	98.02	1.08	99.10	Fundamental	Frequency	peak
3		2483.500	45.00	1.17	46.17	74.00	-27.83	peak
4		2483.500	34.64	1.17	35.81	54.00	-18.19	AVG



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EUT:			Fish	Finder		2 N	Мо	del:			FF916	
Temp	peratu	re:	25 °	С	m		Re	lative	tive Humidity: 55%			
Test	Voltaç	je:	DC 3	3.7V						Cu)		
Ant.	Pol.		Hori	zontal		11/1				1 63		
Test	Mode		TX	3 Mode	2412	MHz		6111	W	9	2 11	Meson
Rem	ark:		N/A	AR		1		60			131	
110.0	dBuV/m											
										3 X 4 X (RF) FCC	PART 15C (PEA	K)
60							1 X			(RF) FCC	PART 15C (AV	6)
							 2 X					
10.0												
	8.000 23		358.00 Q.	Readi		Correc	t M	easu ment	re-	18.00 2418. Limit	oo Over	2438.00 M
		MH	Z	dBu\		dB/m		dBuV/ı		dBuV/m	dB	Detecto
1		2390.0	000	45.3	3	0.77		46.10)	74.00	-27.90	peak
 2		2390.0		33.9		0.77		34.70		54.00	-19.30	AVG
3	X	2413.5		94.9		0.86		95.8			al Frequency	peak
4	*	2416.2	200	84.9	1	0.88		85.79	9	_	al Frequency	AVG



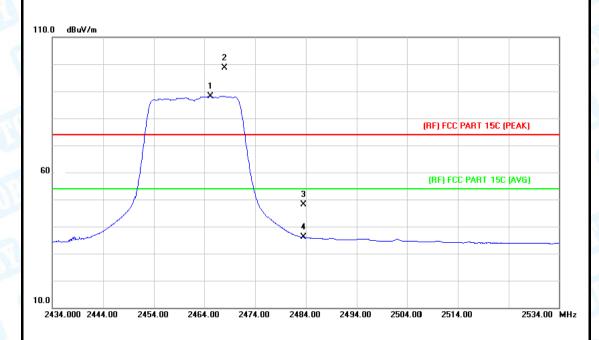
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EUT	:		Fish	Finder		1//	Mod	lel:			FF916		10
Гет	perat	ure:	25 °	С	MAL		Rela	tive H	łumidit	:y:	55%	ABI	
Гest	Volta	ge:	DC 3	3.7V		1	198		6	AV.	1133		
Ant.	Pol.		Verti	cal	- N	MA					120		
Гest	Mode) :	TX	3 Mode 2	2412MH	Z	1	11/12	1.00		N N		
Rem	ark:		N/A	AR		1			6.00	117			I
110.0	dBuV/	m											_
										×			
								,.,		3 ×			1
									(RF)) FCC PAI	T 15C (PE	AK)	1
													1
60													
						1 X			ĮН	FJ FCC PA	AR)† 15C (A	waj	-
)					
						2 X						- Marie	1
													1
													1
10.0	38.000 2	3.48 00 3	2358.00	2368.00	2378.00	2388.00	2398	R NN 3	2408.00	2418.00		2438.00	_
250	30.000 2	340.00	2330.00	2300.00	2370.00	2500.00	, 2330	3.00	2400.00	2410.00		2430.00	
				Readi	na Co	rrect	Mea	sure-					
No	o. Mk	. Fre	eq.	Leve		actor		ent	Lim	it	Over		
		MH	Ηz	dBuV	dl	B/m	dB	uV/m	dBu\	V/m	dB	Dete	cto
1		2390.	.000	49.49	9 0	.77	50	0.26	74.	00	-23.7	4 pe	al
2		2390.	.000	34.20	0 0	.77	34	1.97	54.	00	-19.03		
3	*	2417.	400	85.2	5 0.	.89	86	6.14	Funda	mental F	requency		
	X	2419.		95.1				6.00			requency		
4						.89	-						



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EUT:	Fish Finder	Model:	FF916
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V	0.0	
Ant. Pol.	Horizontal		
Test Mode:	TX G Mode 2462MHz		
Remark:	N/A		133



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	2465.100	87.14	1.09	88.23	Fundamental I	Frequency	AVG
2	X	2467.900	97.48	1.10	98.58	Fundamental I	Frequency	peak
3		2483.500	46.97	1.17	48.14	74.00	-25.86	peak
4		2483.500	34.89	1.17	36.06	54.00	-17.94	AVG



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EUT	:		Fish	Finde	er		Mod	lel:		FF916		
Tem	perat	ure:	25 °	C		177	Rela	ative H	lumidity:	55%	The same	
Test	Volta	ige:	DC:	3.7V			110		(ili)	Dist.		
Ant.	Pol.		Vert	ical		I WIND			a w			
Test	Mod	e:	TX	3 Mod	de 2462	2MHz	- 6	11/10		3 W	Market	
Ren	nark:		N/A	167			N A			13		
110.0	0 dBu∨	/m										
			1									
			×									
				2 X	~							
		+			\rightarrow				(BE) ECC	PART 15C (PEA	n	
									().55		.,,	
60												
-						2			(RF) FC	PART 15C (AV	G)	
					-	X 3						
		4			`	4						
										_		
10.0												
2	138.000	2448.00	2458.00	2468	.00 24	78.00 2488.0	00 249	8.00	2508.00 2518	.00	2538.00 M	
		_			ding	Correct		sure-	1 : 14	0		
No). Mk	. Fre	eq.	Le	vel	Factor	me	ent	Limit	Over		
		MH	lz	dB	u∨	dB/m	dBı	uV/m	dBuV/m	dB	Detecto	
	X	2459.	000	97	.74	1.06	98	3.80	Fundamenta	I Frequency	peak	
				86	.99	1.09	88	3.08	Fundamenta	al Frequency	AVG	
	*	2465.	200	00								
2	*	2465. 2483.			.47	1.17	47	7.64	74.00	-26.36	peak	
1 2 3 4	*		500	46	.47	1.17 1.17		7.64 6.03	74.00 54.00	-26.36 -17.97	peal AV0	

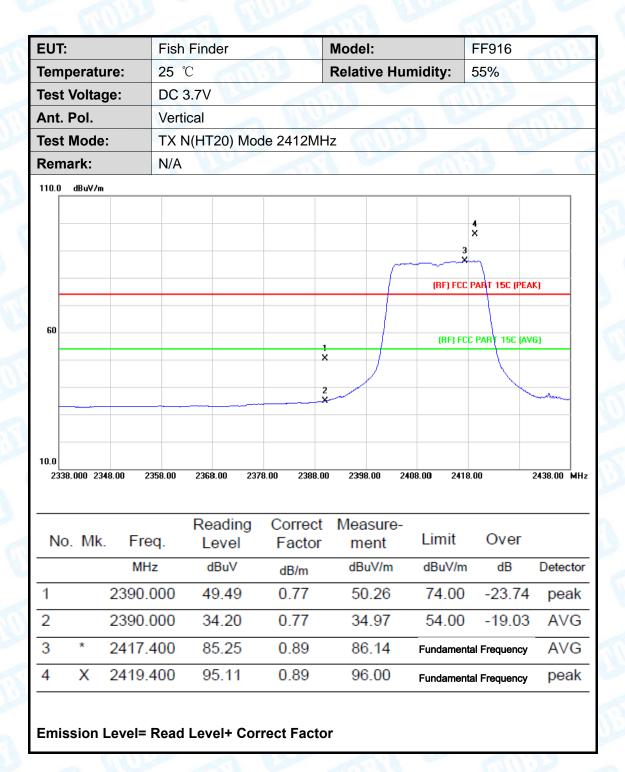


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EUT			Fish	Finder		Model:		FF916	
Tem	perati	ıre:	25 °	C		Relative H	umidity:	55%	The same
Test	t Volta	ge:	DC 3	3.7V	100	118	CIL	1130	
Ant.	Pol.		Hori	zontal	A PHOT		1 67	A	
Test	Mode):	1XT	N(HT20) Mo	ode 2412MH	z MMD		2 11	No.
Ren	nark:		N/A	ABO		1		13	
110.	0 dBuV/	m							
							4 ×		
							3		
							~X		
							(RF) FCC F	PART 15C (PEAK	J
60							(RF) FCC	PART 15C (AVE	i)
					1 X				
					2				
					×				
10.0									
	338.000 2	348.00	2358.00	2368.00 2	378.00 2388.00	2398.00 24	108.00 2418.	00 2	2438.00 MHz
				Reading	Correct	Measure-			
N	o. Mk	. Fr	eq.	Level	Factor	ment	Limit	Over	
		М	Hz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390	.000	45.97	0.77	46.74	74.00	-27.26	peak
2		2390	.000	34.19	0.77	34.96	54.00	-19.04	AVG
3	*	2415	5.000	84.06	0.88	84.94	— Fu <u>ndamen</u> tal	I Frequency	AVG
	X	2417		94.87	0.89	95.76			peak



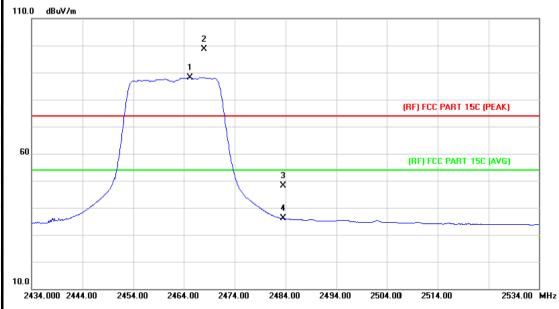
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EUT:	Fish Finder	Model:	FF916						
Temperature:	25 ℃	Relative Humidity:	55%						
Test Voltage:	DC 3.7V								
Ant. Pol.	Horizontal	0							
Test Mode:	TX N(HT20) Mode 2462MH	TX N(HT20) Mode 2462MHz							
Remark:	N/A		72 _ 0						

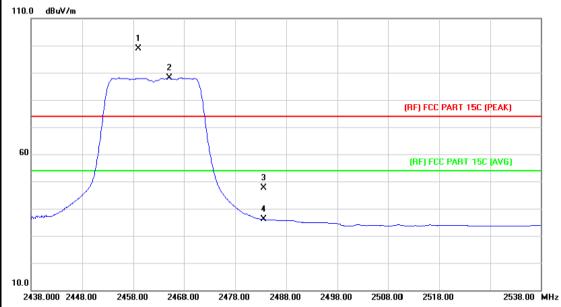


No.	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	2465.100	87.14	1.09	88.23	Fundamental F	requency	AVG
2	Х	2467.900	97.48	1.10	98.58	Fundamental F	requency	peak
3		2483.500	46.97	1.17	48.14	74.00	-25.86	peak
4		2483.500	34.89	1.17	36.06	54.00	-17.94	AVG



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EUT:	Fish Finder	Model:	FF916				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	DC 3.7V						
Ant. Pol.	Vertical	Vertical					
Test Mode:	TX N(HT20) Mode 2462MHz						
Remark:	N/A						

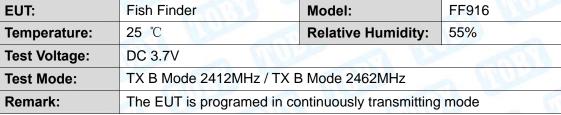


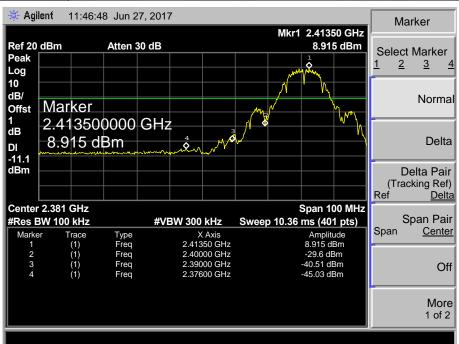
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	X	2459.000	97.74	1.06	98.80	Fundamental	Frequency	peak
2	*	2465.200	86.99	1.09	88.08	Fundamental I	Frequency -	AVG
3		2483.500	46.47	1.17	47.64	74.00	-26.36	peak
4		2483.500	34.86	1.17	36.03	54.00	-17.97	AVG

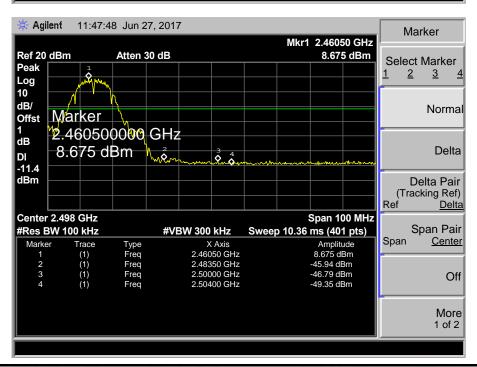


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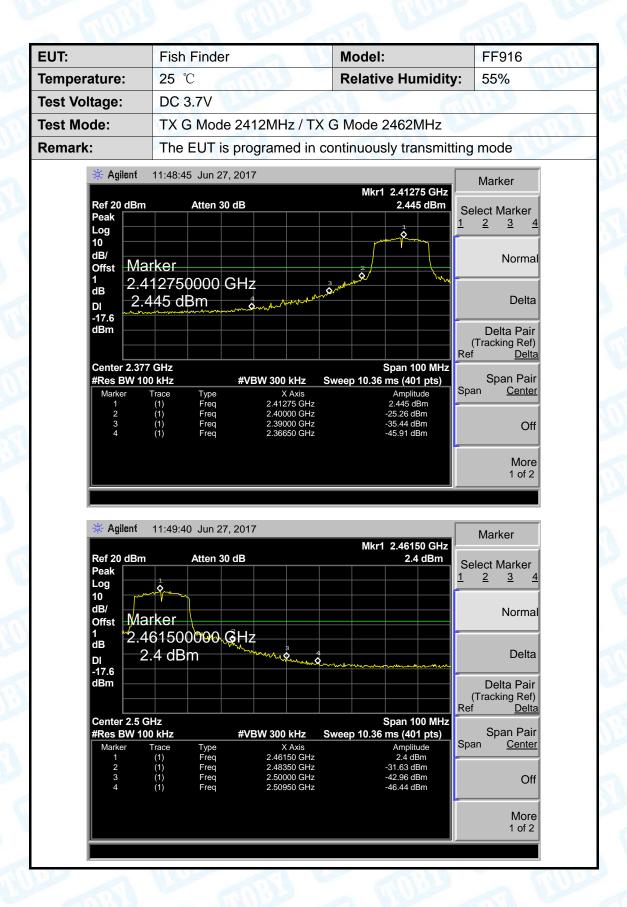








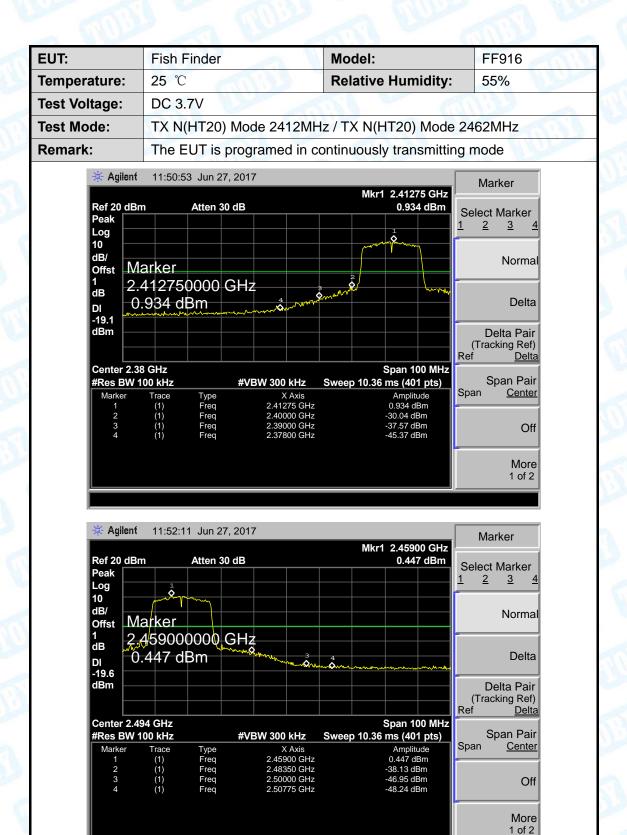
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7. Bandwidth Test

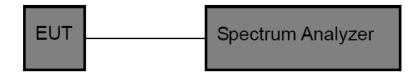
7.1 Test Standard and Limit

7.1.1 Test Standard FCC Part 15.247 (a)(2)

7.1.2 Test Limit

FCC Part 15 Subpart C(15.247)/RSS-210							
Test Item	Test Item Limit Fred						
Bandwidth	>=500 KHz (6dB bandwidth)	2400~2483.5					

7.2 Test Setup



7.3 Test Procedure

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) The bandwidth is measured at an amplitude level reduced 6dB from the reference level. The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency. Once the reference level is established, the equipment is conditioned with typical modulating signal to produce the worst –case (i.e the widest) bandwidth.
- (3)Measure the channel separation the spectrum analyzer was set to Resolution Bandwidth:100 kHz, and Video Bandwidth:300 kHz, Detector: Peak, Sweep Time set auto.

7.4 EUT Operating Condition

The EUT was set to continuously transmitting in each mode and low, Digital photo framesdle and high channel for the test.

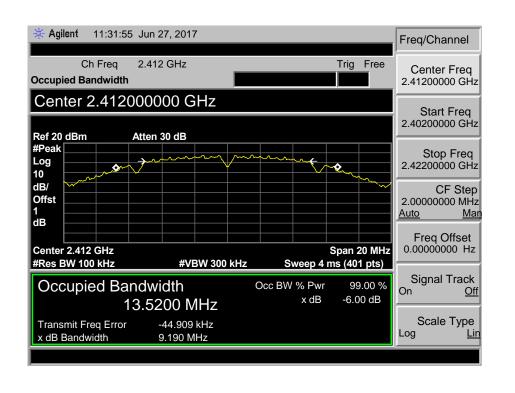


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7.5 Test Data

EUT:	Fish Finder	Model:	FF916
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V		
Test Mode:	TX 802.11B Mode	2 Phillips	0
Channel frequence	cy 6dB Bandwidth	99% Bandwidth	Limit
(MHz)	(MHz)	(MHz)	(MHz)
2412	9.190	13.5200	
2437	9.192	13.2144	>=0.5
2462	2462 9.212		
	802.11B	Mode	•

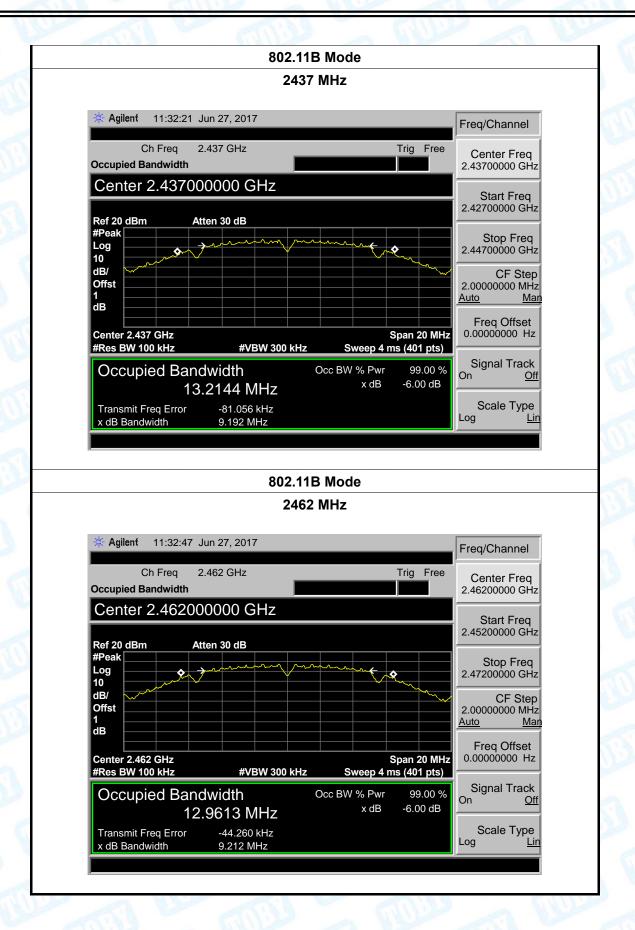
2412 MHz





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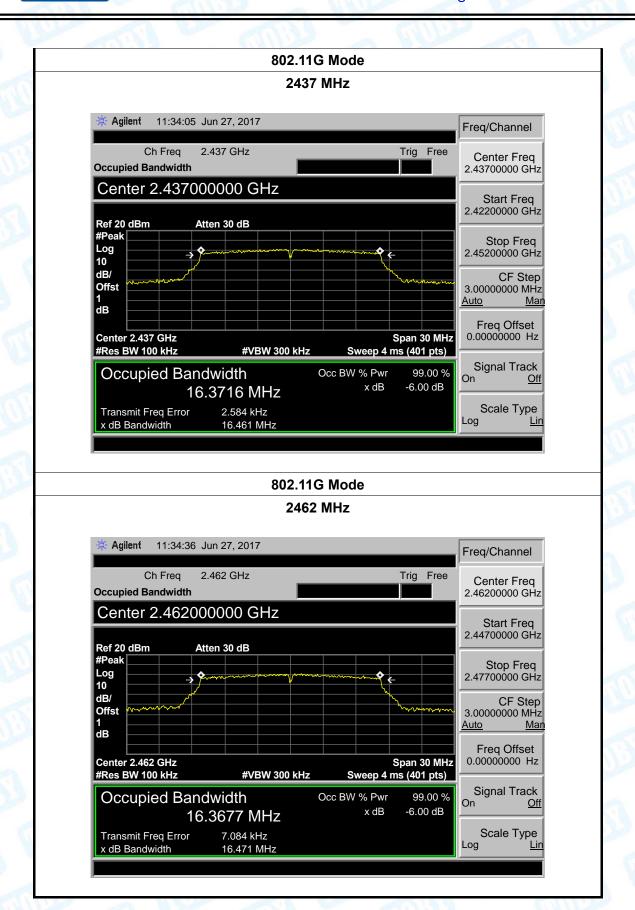


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UT:	Fish Finder	Model:	FF916
emperature:	25 ℃	Relative Humidity:	55%
est Voltage:	DC 3.7V	all a	1133
est Mode:	TX 802.11G Mode	The state of the s	
hannel frequen	cy 6dB Bandwidth	99% Bandwidth	Limit
(MHz)	(MHz)	(MHz)	(MHz)
2412	16.458	16.3711	
2437	16.461	16.3716	>=0.5
2462	16.471	16.3677	
	802.110	Mode	1
	2412	MHz	
* Agilent	11:33:34 Jun 27, 2017	Trig. Fron	eq/Channel
C	n Freq 2.412 GHz	Trig Free	Center Freq
Cocupied Ba	n Freq 2.412 GHz	Trig Free	Center Freq 41200000 GHz
Occupied Ba	n Freq 2.412 GHz ndwidth 2.412000000 GHz	Trig Free 2.	Center Freq
Occupied Ba Center 2 Ref 20 dBm #Peak	n Freq 2.412 GHz	Trig Free 2.4	Center Freq 41200000 GHz Start Freq 39700000 GHz
Center 2 Ref 20 dBm #Peak Log 10	n Freq 2.412 GHz ndwidth 2.412000000 GHz	Trig Free 2.4	Center Freq 41200000 GHz Start Freq 39700000 GHz Stop Freq 42700000 GHz
Center 2 Ref 20 dBm #Peak Log 10 dB/ Offst	n Freq 2.412 GHz ndwidth 2.412000000 GHz	Trig Free 2.4	Center Freq 41200000 GHz Start Freq 39700000 GHz Stop Freq 42700000 GHz CF Step 00000000 MHz
Center 2 Ref 20 dBm #Peak Log 10 dB/	n Freq 2.412 GHz ndwidth 2.412000000 GHz	Trig Free 2.4	Center Freq 41200000 GHz Start Freq 39700000 GHz Stop Freq 42700000 GHz CF Step 000000000 MHz to Man
Conter 2 Ref 20 dBm #Peak Log 10 dB/ Offst 1 dB Center 2.412	2.412 GHz ndwidth 2.412000000 GHz Atten 30 dB	Trig Free 2.4 2.3 Au Span 30 MHz 0.6	Center Freq 41200000 GHz Start Freq 39700000 GHz Stop Freq 42700000 GHz CF Step 00000000 MHz
Center 2 Ref 20 dBm #Peak Log 10 dB/ Offst 1 dB Center 2.412 #Res BW 10	Atten 30 dB Atten 30 dB GHz O kHz #VBW 300 kHz	Trig Free 2.4 2.5 2.6 3.0 Au Span 30 MHz Sweep 4 ms (401 pts) Occ BW % Pwr 99.00 % On	Center Freq 41200000 GHz Start Freq 39700000 GHz Stop Freq 42700000 GHz CF Step 00000000 MHz to Man Freq Offset 00000000 Hz Signal Track
Center 2 Ref 20 dBm #Peak Log 10 dB/ Offst 1 dB Center 2.412 #Res BW 10	Atten 30 dB Atten 30 dB GHz 0 kHz #VBW 300 kHz ed Bandwidth 16.3711 MHz	Trig Free 2.4 2.4 2.4 2.4 3.4 Span 30 MHz Sweep 4 ms (401 pts)	Center Freq 41200000 GHz Start Freq 39700000 GHz Stop Freq 42700000 GHz CF Step 00000000 MHz to Man Freq Offset 00000000 Hz Signal Track



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Center 2.412 GHz #Res BW 100 kHz

Transmit Freq Error x dB Bandwidth

Occupied Bandwidth

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EUT:	Fish Finder	Model:	FF916
Temperature:	25 ℃	Relative Humidity:	55%
Гest Voltage:	DC 3.7V	and the same	1133
Test Mode:			
Channel frequen	cy 6dB Bandwidth	99% Bandwidth	Limit
(MHz)	(MHz)	(MHz)	(MHz)
2412	17.657	17.5273	
2437	17.631	17.5158	>=0.5
2462	17.624	17.5332	
	802.11N(H	Γ20) Mode	•
	2412	MHz	
* Agilent	11:35:23 Jun 27, 2017	Fre	eq/Channel
Occupied Ba			Center Freq 41200000 GHz
	44000000 CII-		
	2.412000000 GHz Atten 30 dB	2.3	Start Freq 39700000 GHz
Ref 20 dBm #Peak Log	Atten 30 dB →		
Ref 20 dBm #Peak Log	Atten 30 dB	2.	Stop Freq 42700000 GHz CF Step 000000000 MHz

#VBW 300 kHz

17.5273 MHz

5.518 kHz 17.657 MHz

99.00 %

-6.00 dB

Signal Track

Scale Type

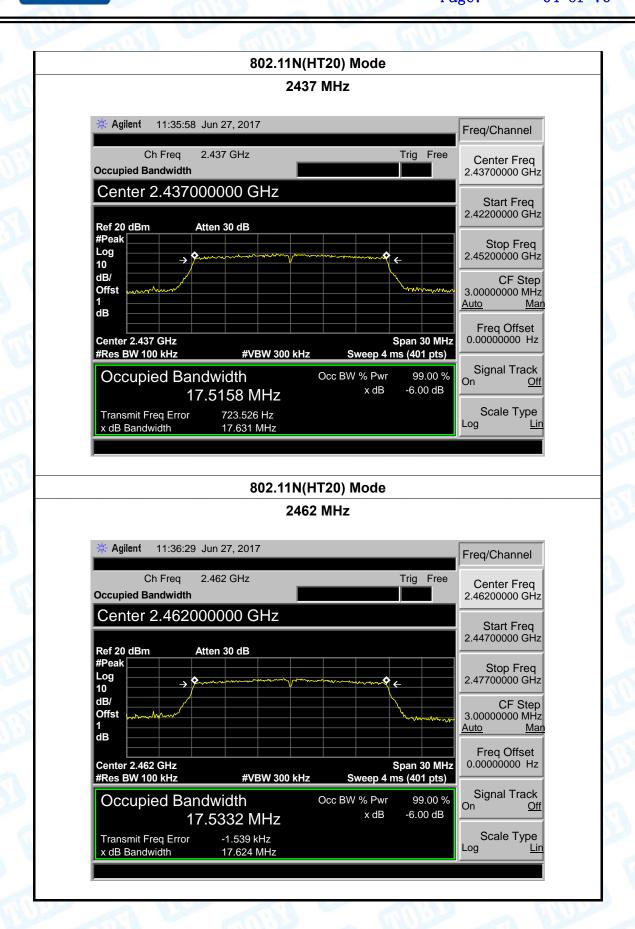
Sweep 4 ms (401 pts)

Occ BW % Pwr

x dB



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8. Peak Output Power Test

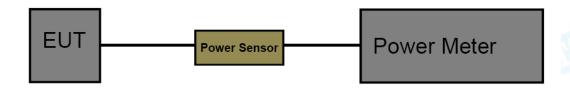
8.1 Test Standard and Limit

8.1.1 Test Standard FCC Part 15.247 (b)

8.1.2 Test Limit

FCC Part 15 Subpart C(15.247)/RSS-210 Test Item Limit Frequency Range(MHz)						

8.2 Test Setup



8.3 Test Procedure

The measurement is according to section 9.1.2 of KDB 558074 D01 DTS Meas Guidance v04. The EUT was connected to RF power meter via a broadband power sensor as show the block above. The power sensor video bandwidth is greater than or equal to the DTS bandwidth of the equipment.

8.4 EUT Operating Condition

The EUT was set to continuously transmitting in the max power during the test.



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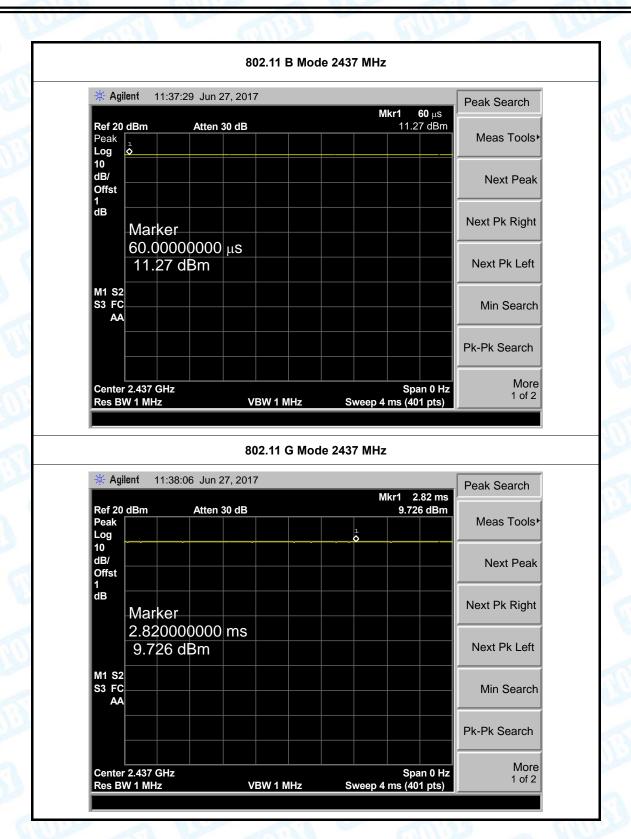
8.5 Test Data

EUT:	Fish Finder	Model:	FF916	
Temperature:	25 ℃	Relative Humidi	ty: 55%	
Test Voltage:	DC 3.7V			
Mode	Channel frequency (MHz)	Test Result (dBm)	Limit (dBm)	
	2412	18.59		
802.11b	2437	18.72		
	2462	18.01		
	2412	16.88		
802.11g	2437	17.28	30	
	2462	16.92		
000 44	2412	15.46		
802.11n (HT20)	2437	15.10		
(11120)	2462	14.61		
	Resi	ılt: PASS		

	Duty Cycle	
Mode	Channel frequency (MHz)	Test Result
	2412	
802.11b	2437	
	2462	
	2412	
802.11g	2437	>98%
	2462	
000 44	2412	
802.11n (HT20)	2437	
(11120)	2462	

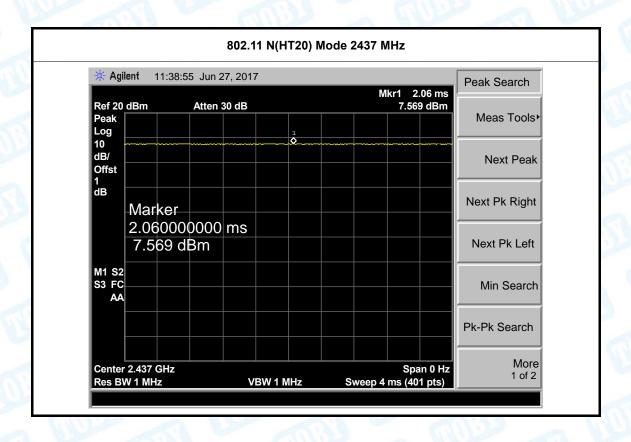


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9. Power Spectral Density Test

9.1 Test Standard and Limit

9.1.1 Test Standard FCC Part 15.247 (e)

9.1.2 Test Limit

FCC Part 15 Subpart C(15.247)							
Test Item Limit Frequency Range(MH							
Power Spectral Density	8dBm(in any 3 kHz)	2400~2483.5					

9.2 Test Setup



9.3 Test Procedure

The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above. The measurement according to section 10.2 of KDB 558074 D01 DTS Meas Guidance v04.

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Set analyser center frequency to DTS channel center frequency.
- (3) Set the span to 1.5 times the DTS bandwidth.
- (4) Set the RBW to: 3 kHz(5) Set the VBW to: 10 kHz
- (6) Detector: peak(7) Sweep time: auto
- (8) Allow trace to fully stabilize. Then use the peak marker function to determine the maximum amplitude level.

9.4 EUT Operating Condition

The EUT was set to continuously transmitting in each mode and low, Digital photo framesdle and high channel for the test.



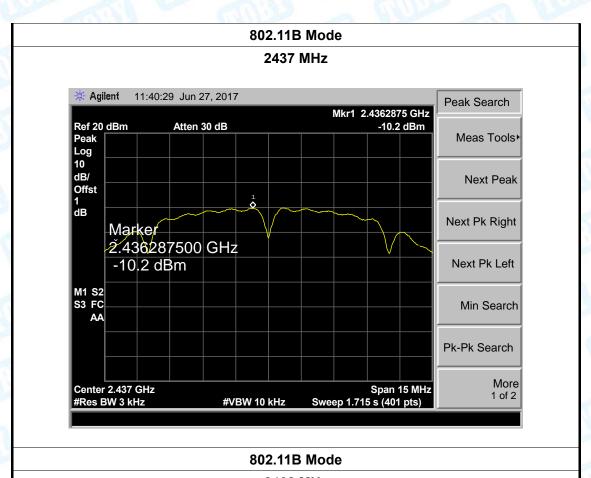
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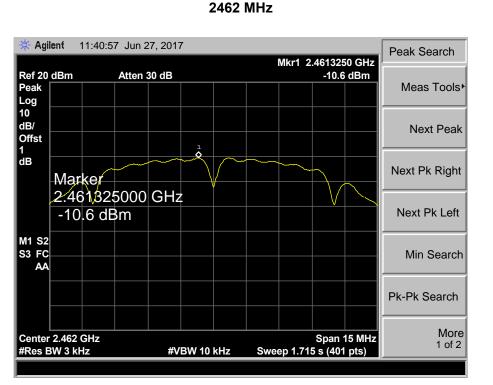
9.5 Test Data

	F	ish Find	er	No.		Mod	lel:			FF916
perature:	2	.5 ℃	A STATE OF	7	1	Rela	ative I	Humid	dity:	55%
Voltage:	D	C 3.7V			135		1	170	100	TIME
Mode:	Т	X 802.1	1B Mod	е			0.11/1			0
hannel Fr	eque	ncy		Pow	er D	ensit	У			Limit
(MH	z)			(dB	3m/3	kHz)				(dBm)
241	2				-10.3	1				
243	37				-10.2	:0				8
246	52				-10.6	0				
				802.	11B	Mode)	·		
				24	112 N	1Hz				
🔆 Agil	lent 1	1:40:03 Ju	n 27, 2017	•						Peak Search
Ref 20	dPm	Atte	n 30 dB				Mkr1 2	.412712 10.31-		T can coaron
Peak	ubiii	Atte	:11 30 UB				$\overline{}$	-10.31	UBIII	Meas Tools
Log 10									-	
dB/ Offst										Next Peak
1 dB		سر		~	•					
	Mark	(er		\longrightarrow	/				~	Next Pk Right
		271250						V		Next Pk Left
		31 dBm								Next Pk Leit
M1 S2 S3 FC										Min Search
AA										Timi Coaron
										Pk-Pk Search
	2.412 G							Span 1	15 MHz	More 1 of 2
#Daa E	3W 3 kH	Z	#V	BW 10	kHz	Swe	ep 1.71	5 s (401	nts)	. 01 2



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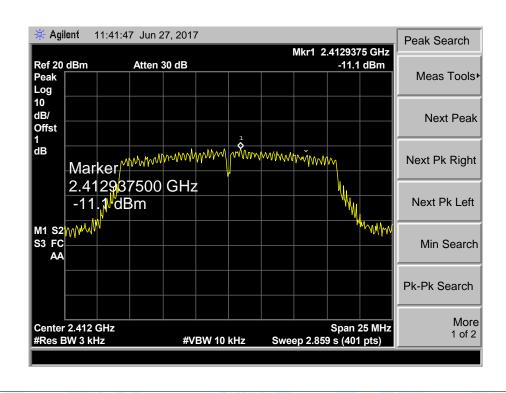
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N	EUT:	Fish Finder	Model:	FF916	
	Temperature:	25 ℃	Temperature:	25 ℃	
	Test Voltage:	DC 3.7V	The state of the s	LIPS .	
	Test Mode:	TX 802.11G Mode			

Channel Frequency	Power Density	Limit
(MHz)	(dBm/3 kHz)	(dBm)
2412	-11.10	
2437	-11.17	8
2462	-11.59	

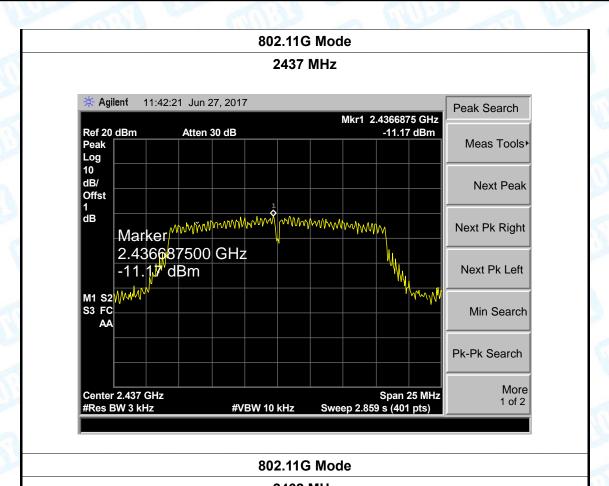
802.11G Mode

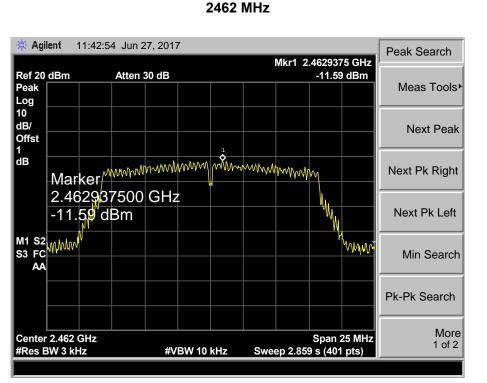
2412 MHz





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Test Mode:	TX 802.1	IN(HT20) Mode		
Test Voltage:	DC 3.7V		31	
Temperature:	25 ℃		Temperature:	25 ℃
EUT:	Fish Find	er	Model:	FF916

 Channel Frequency (MHz)
 Power Density (dBm/3 kHz)
 Limit (dBm)

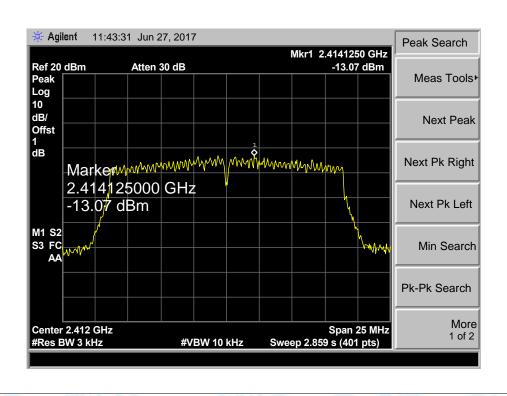
 2412
 -13.07
 8

 2437
 -13.11
 8

 2462
 -13.38
 -13.38

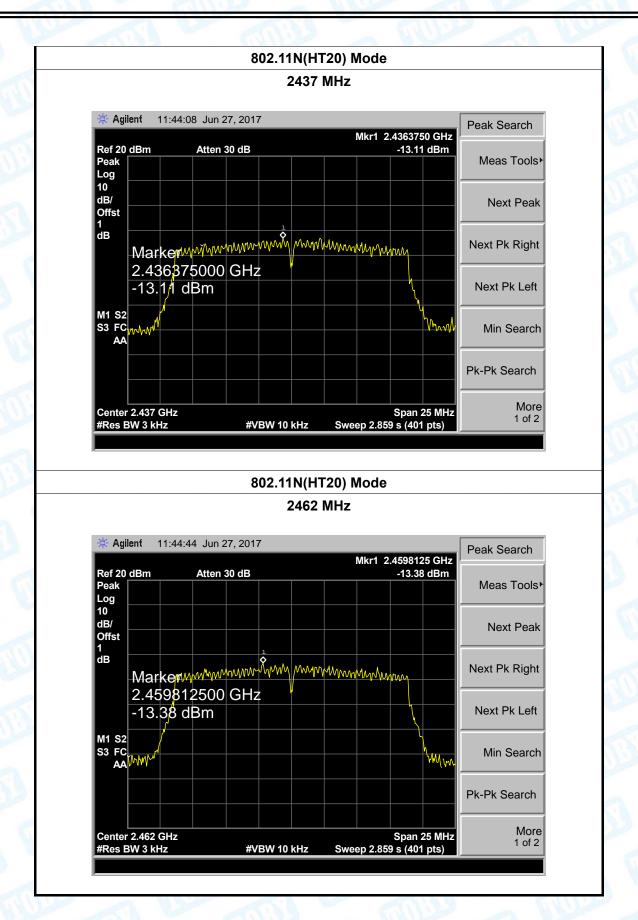
802.11N(HT20) Mode

2412 MHz





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10. Antenna Requirement

10.1 Standard Requirement

10.1.1 Standard FCC Part 15.203

10.1.2 Requirement

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 shall be considered sufficient to comply with the provisions of this Section. 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.

10.2 Antenna Connected Construction

The directional gains of the antenna used for transmitting is 3dBi, and the antenna de-signed with permanent attachment and no consideration of replacement. Please see the EUT photo for details.

Result

The EUT antenna is a Internal Antenna. It complies with the standard requirement.

Antenna Type			
مس	Permanent attached antenna	CAT.	
3 Burn	⊠Unique connector antenna		
	Professional installation antenna	ID.	

----END OF REPORT----