

JianYan Testing Group Shenzhen Co., Ltd.

Report No: JYTSZB-R12-2102123

FCC REPORT

Autel Robotics Co., Ltd.
9th Floor, Bldg. B1, Zhiyuan, 1001 Xueyuan Rd., Xili, Nanshan, Shenzhen 518055, China
UT)
DragonFish Base Station
DFMS-2
OUTEL
ROBOTICS 2AGNTDFMS2TBG
FCC CFR Title 47 Part 15 Subpart C Section 15.247
13 Oct., 2021
14 Oct., to 04 Nov., 2021
04 Nov., 2021
PASS*

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

Authorized Signature:



Bruce Zhang Laboratory Manager

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 and does not permit the use of the JYT product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

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Version 2

Version No.	Date	Description
00	04 Nov., 2021	Original

Tested by:

Reviewed by:

Mike.DU Test Engineer

04 Nov., 2021 Date:

Winner Thang

Project Engineer

Date: 04 Nov., 2021

Project No.: JYTSZE2110039



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Test Summary 4

Test Items	Section in CFR 47	Test Data	Result
Antenna requirement	15.203 & 15.247 (b)	See Section 6.1	Pass
AC Power Line Conducted Emission	15.207	See Section 6.2	Pass
Duty Cycle	ANSI C63.10-2013	Appendix A – 900MHz Appendix B – 2.4GHz	Pass
Conducted Peak Output Power	15.247 (b)(3)	Appendix A – 900MHz Appendix B – 2.4GHz	Pass
6dB Emission Bandwidth 99% Occupied Bandwidth	15.247 (a)(2)	Appendix A – 900MHz Appendix B – 2.4GHz	Pass
Power Spectral Density	15.247 (e)	Appendix A – 900MHz Appendix B – 2.4GHz	Pass
Conducted Band Edge	15.247 (d)	Appendix A – 900MHz Appendix B – 2.4GHz	Pass
Radiated Band Edge		See Section 6.6.2	Pass
Conducted Spurious Emission	ed Spurious Emission 15.205 & 15.209		Pass
Radiated Spurious Emission		See Section 6.7.2	Pass

the customer).

Test Method:

ANSI C63.10-2013 KDB 558074 D01 15.247 Meas Guidance v05r02



5 General Information

5.1 Client Information

Applicant:	Autel Robotics Co., Ltd.
Address:	9th Floor, Bldg. B1, Zhiyuan, 1001 Xueyuan Rd., Xili, Nanshan, Shenzhen 518055, China
Manufacturer/ Factory:	Autel Robotics Co., Ltd.
Address:	9th Floor, Bldg. B1, Zhiyuan, 1001 Xueyuan Rd., Xili, Nanshan, Shenzhen 518055, China

5.2 General Description of E.U.T.

Product Name:	DragonFish Base Station
Model No.:	DFMS-2
Operation Frequency:	904.0MHz~926.0MHz, 2403.5MHz~2475.5MHz
Channel numbers:	904.0MHz~926.0MHz: 23 for 1.4MHz Bandwidth 13 for 10 MHz Bandwidth 3 for 20 MHz Bandwidth 2403.5MHz~2475.5MHz: 71 for 1.4MHz Bandwidth
	65 for 10 MHz Bandwidth 51 for 20 MHz Bandwidth
Channel separation:	1MHz
Modulation technology:	QPSK and 16QAM
Bandwidth:	1.4MHz, 10MHz, 20MHz
ANT TXRX Type:	MIMO
Antenna Type:	External Antenna
Antenna gain:	ANT 1 and ANT 2 906.0MHz~924.0MHz : 4.54dBi(declare by Applicant) 2403.5MHz~2475.5MHz: 5.56dBi(declare by Applicant)
Power supply:	High Performance Li-po Battery DC11.55V, 4950mAh
AC adapter:	Model: GaN-001 us Input: AC100-240V, 50/60Hz, 1.5A Total Output Power: 65.0W Max USB-C1/C2:5V=3.0A, 9V=3.0A, 12V=3.0A, 15V=3.0A, 20V=3.25A,12V=3.0A 65.0W Max USB-A:3.4-5.5V=5.0A, 5V=3.0A 9V=3.0A, 12V=3.0A 20V=3.0A 60.0W Max
Test Sample Condition:	The test samples were provided in good working order with no visible defects.



900MHz:

Operation Frequency each of channel for 1.4MHz Bandwidth									
Channel Frequency Channel Frequency Channel Frequency									
1 904MHz									
2	905MHz	11	915MHz	22	925MHz				
3	3 906MHz 23 926MHz								
Note: 1. Channel 1, 15 & 19 selected as Lowest, Middle and Highest channel.									

Operation Frequency each of channel for 10MHz Bandwidth										
Channel Frequency Channel Frequency Channel Frequency										
1 909MHz										
2	910MHz	7	915MHz	12	920MHz					
3	911MHz			13	921MHz					
Note:										
1. Channel 1, 7 &	1. Channel 1, 7 & 13 selected as Lowest, Middle and Highest channel.									

Operation Frequency each of channel for 20MHz Bandwidth								
Channel Frequency Channel Frequency Channel Frequency								
1 914 2 915 3 916								
Note: 1. Channel 1, 2 & 3 selected as Lowest, Middle and Highest channel.								

2.4GHz:

Operation Frequency each of channel for 1.4MHz Bandwidth									
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency		
1	2403.5MHz	4	2406.5MHz			73	2475.5MHz		
2	2404.5MHz	5	2407.5MHz	35	2439.5MHz				
3	3 2405.5MHz 6 2408.5MHz								
Note:									
1. Channel	1, 35 & 73 selecte	d as Lowest.	Middle and Highe	est channel.					

1. Channel 1, 35 & 73 selected as Lowest, Middle and Highest channel.

Operation Frequency each of channel for 10MHz Bandwidth										
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency			
1	2407.5MHz	4	2410.5MHz			64	2470.5MHz			
2	2408.5MHz	5	2411.5MHz	33	2439.5MHz	65	2471.5MHz			
3	2409.5MHz	6	2412.5MHz							
Note:	Note:									
1. Channel	1, 33 & 65 selecte	d as Lowest,	Middle and Highe	est channel.						

Operation Frequency each of channel for 20MHz Bandwidth									
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency		
1	2412.5MHz	4	2415.5MHz			50	2461.5MHz		
2	2413.5MHz	5	2416.5MHz	26	2437.5MHz	51	2462.5MHz		
3	2414.5MHz	6	2417.5MHz						
Note:	Note:								
1. Channel	1, 26 & 65 selecte	d as Lowest,	Middle and Highe	est channel.					



5.3 Test environment and mode

Operating Environment:	
Temperature:	24.0 °C
Humidity:	54 % RH
Atmospheric Pressure:	1010 mbar
Test mode:	
Transmitting mode	Keep the EUT in continuous transmitting with modulation
of 3m chamber. Measurements i each emission was maximized b rotated about all 3 axis (X, Y & Z interconnecting cables, rotating t Horizontal polarizations. The em	was placed 0.8m (below 1GHz)/1.5m (above 1GHz) above the ground plane n both Vertical and Horizontal polarities were performed. During the test, y: having the EUT continuously working, investigated all operating modes,) and considered typical configuration to obtain worst position, manipulating he turntable, varying antenna height from 1m to 4m in both Vertical and issions worst-case are shown in Test Results of the following pages. n and function in typical operation. All the test modes were carried out with

5.4 Description of Support Units

The EUT has been tested as an independent unit.

5.5 Measurement Uncertainty

Parameter	Expanded Uncertainty (Confidence of 95%)
Conducted Emission (150kHz ~ 30MHz) for V-AMN	2.62 dB
Conducted Emission (150kHz ~ 30MHz) for AAN	3.54 dB
Radiated Emission (9kHz ~ 30MHz electric field) for 3m SAC	3.13 dB
Radiated Emission (30MHz ~ 1GHz) for 3m SAC	4.45 dB
Radiated Emission (1GHz ~ 18GHz) for 3m SAC	5.34 dB
Radiated Emission (18GHz ~ 40GHz) for 3m SAC	5.34 dB
Radiated Emission (30MHz ~ 1GHz) for 10m SAC	4.32 dB

5.6 Laboratory Facility

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

the EUT in transmitting operation, which was shown in this test report and defined as follows:

• FCC - Designation No.: CN1211

JianYan Testing Group Shenzhen Co., Ltd. has been accredited as a testing laboratory by FCC(Federal Communications Commission). The test firm Registration No. is 727551.

• ISED – CAB identifier.: CN0021

The 3m Semi-anechoic chamber and 10m Semi-anechoic chamber of JianYan Testing Group Shenzhen Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

• A2LA - Registration No.: 4346.01

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: <u>https://portal.a2la.org/scopepdf/4346-01.pdf</u>

5.7 Laboratory Location

JianYan Testing Group Shenzhen Co., Ltd. Address: No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China. Tel: +86-755-23118282, Fax: +86-755-23116366 Email: info-JYTee@lets.com, Website: <u>http://www.ccis-cb.com</u>



5.8 Test Instruments list

Radiated Emission:					
Test Equipment	Manufacturer	Model No.	Serial No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
3m SAC	ETS	RFD-100	Q1984	04-14-2021	04-13-2024
BiConiLog Antenna	SCHWARZBECK	VULB9163	9163-1246	03-07-2021	03-06-2022
Biconical Antenna	SCHWARZBECK	VUBA 9117	9117#359	06-17-2021	06-17-2022
Horn Antenna	SCHWARZBECK	BBHA9120D	912D-916	03-07-2021	03-06-2022
Broad-Band Horn Antenna	SCHWARZBECK	BBHA9170	1067	04-02-2021	04-01-2022
Broad-Band Horn Antenna	SCHWARZBECK	BBHA9170	1068	04-02-2021	04-01-2022
EMI Test Receiver	Rohde & Schwarz	ESRP7	101070	03-03-2021	03-02-2022
Spectrum analyzer	Rohde & Schwarz	FSP30	101454	03-03-2021	03-02-2022
Spectrum analyzer	Keysight	N9010B	MY60240202	11-27-2020	11-26-2021
Low Pre-amplifier	SCHWARZBECK	BBV9743B	00305	03-07-2021	03-06-2022
High Pre-amplifier	SKET	LNPA_0118G-50	MF280208233	03-07-2021	03-06-2022
Cable	Qualwave	JYT3M-1G-NN-8M	JYT3M-1	03-07-2021	03-06-2022
Cable	Qualwave	JYT3M-18G-NN-8M	JYT3M-2	03-07-2021	03-06-2022
Cable	Qualwave	JYT3M-1G-BB-5M	JYT3M-3	03-07-2021	03-06-2022
Cable	Bost	JYT3M-40G-SS-8M	JYT3M-4	04-02-2021	04-01-2022
EMI Test Software	Tonscend	TS+		Version:3.0.0.1	
EMI Test Software	AUDIX	E3	V	ersion: 6.110919)b

Conducted Emission:					
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
EMI Test Receiver	Rohde & Schwarz	ESCI 3	101189	03-03-2021	03-02-2022
LISN	Rohde & Schwarz	ENV432	101602	04-06-2021	04-05-2022
LISN	Rohde & Schwarz	ESH3-Z5	843862/010	06-18-2020	06-17-2022
RF Switch	TOP PRECISION	RSU0301	N/A	03-03-2021	03-02-2022
Cable	Bost	JYTCE-1G-NN-2M	JYTCE-1	03-03-2021	03-02-2022
Cable	Bost	JYTCE-1G-BN-3M	JYTCE-2	03-03-2021	03-02-2022
EMI Test Software	AUDIX	E3	V	ersion: 6.110919	b

Conducted method:					
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
Spectrum Analyzer	Keysight	N9010B	MY60240202	11-27-2020	11-26-2021
Vector Signal Generator	Keysight	N5182B	MY59101009	11-27-2020	11-26-2021
Analog Signal Generator	Keysight	N5173B	MY59100765	11-27-2020	11-26-2021
Power Detector Box	MWRF-test	MW100-PSB	MW201020JYT	11-27-2020	11-26-2021
Simulated Station	Rohde & Schwarz	CMW270	102335	11-27-2020	11-26-2021
RF Control Box	MWRF-test	MW100-RFCB	MW200927JYT	N/A	N/A
PDU	MWRF-test	XY-G10	N/A	N/A	N/A
DC Power Supply	Keysight	E3642A	MY60296194	11-27-2020	11-26-2021
Temperature Humidity	Zh e e e Zh i	CZ-C-150D	7140404	11-01-2020	10-31-2021
Chamber	ZhongZhi	CZ-C-150D	ZH16491	11-01-2021	10-31-2022
Test Software	MWRF-tes	MTS 8310	,	Version: 2.0.0.0	



6 Test results and Measurement Data

6.1 Antenna requirement

Standard requirement:	FCC Part 15 C Section 15.203 /247(b)

15.203 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, 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.

15.247(b) (4) requirement:

(4) The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

E.U.T Antenna:

The antenna is an External antenna which cannot replace by end-user, the best case gain of the antenna as bellow:

ANT Gain
4.54dBi
5.56dBi



6.2 Conducted Emission

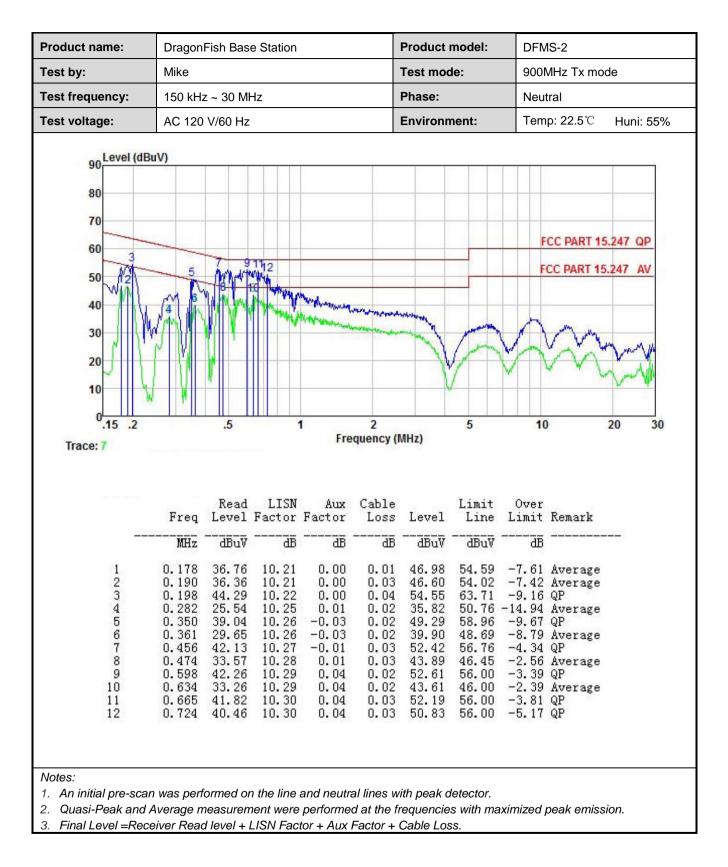
Test Requirement:	FCC Part 15 C Section 15.2	207		
Test Frequency Range:	150 kHz to 30 MHz			
Class / Severity:	Class B			
Receiver setup:	RBW=9 kHz, VBW=30 kHz			
Limit:	Frequency range (MHz)	Limit (dBuV)		
		Quasi-peak	Average	
	0.15-0.5	66 to 56*	56 to 46*	
	0.5-5	56	46	
	5-30	60	50	
	* Decreases with the logarith			
Test procedure	 line impedance stabiliza 50ohm/50uH coupling i The peripheral devices LISN that provides a 50 termination. (Please ref photographs). Both sides of A.C. line a interference. In order to positions of equipment 	brs are connected to the mation network (L.I.S.N.), w mpedance for the measur are also connected to the Dohm/50uH coupling imper fer to the block diagram of are checked for maximum of find the maximum emissi and all of the interface cal .10(latest version) on cond	hich provides a ing equipment. main power through a dance with 500hm the test setup and conducted on, the relative oles must be changed	
Test setup:		st	er — AC power	
Test Instruments:	Refer to section 5.8 for deta	ils		
Test mode:	Refer to section 5.3 for deta	ils		
Test results:	Passed			



Measurement Data:

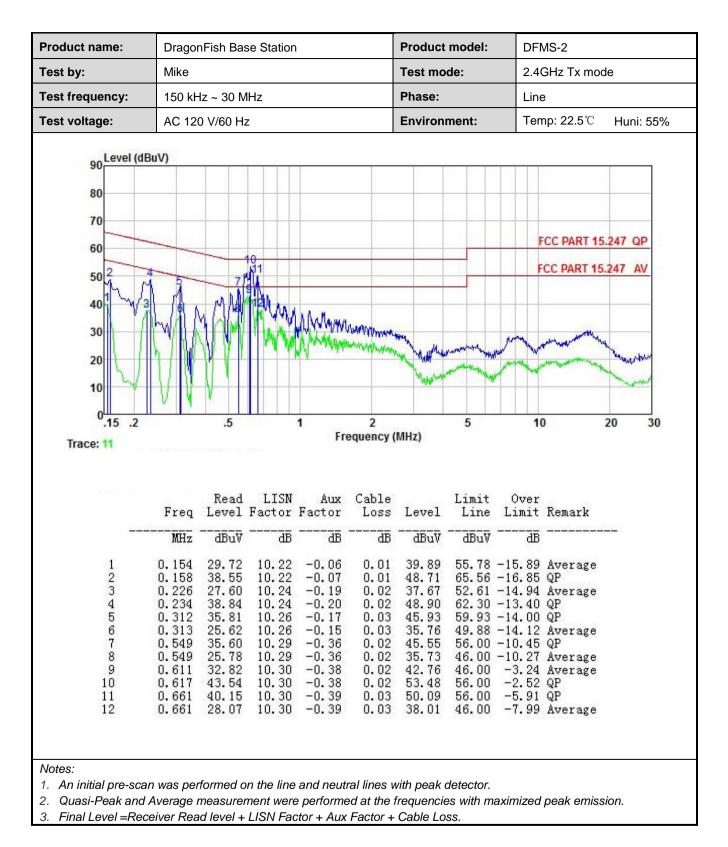
	DragonF	ish Base Sta	tion		Product	model:	DFM	1S-2		
Test by:	Mike				Test mode: Phase:		900	900MHz Tx mode		
Test frequency:	150 kHz	~ 30 MHz					Line			
Test voltage:	AC 120	V/60 Hz			Environment:		Tem	ip: 22.5℃	Huni: 55%	
90 Level (4) 80 70 60 50 40 70 60 50 40 70 10		7 8 1012 7 8 1012 7 9 9 9		MM Langer of a	and a	6		CC PART 15.		
0.15 .2 Trace: 5	U	.5	1 Fre	2 equency (N	1Hz)	5	10		20 30	
	Freq		Fre ISN Aux	_	IHZ) Level	5 Limit Line	Over		20 30	
	Freq MHz	Read L	Fre ISN Aux	equency (N Cable		Limit	Over	Remark	20 30	



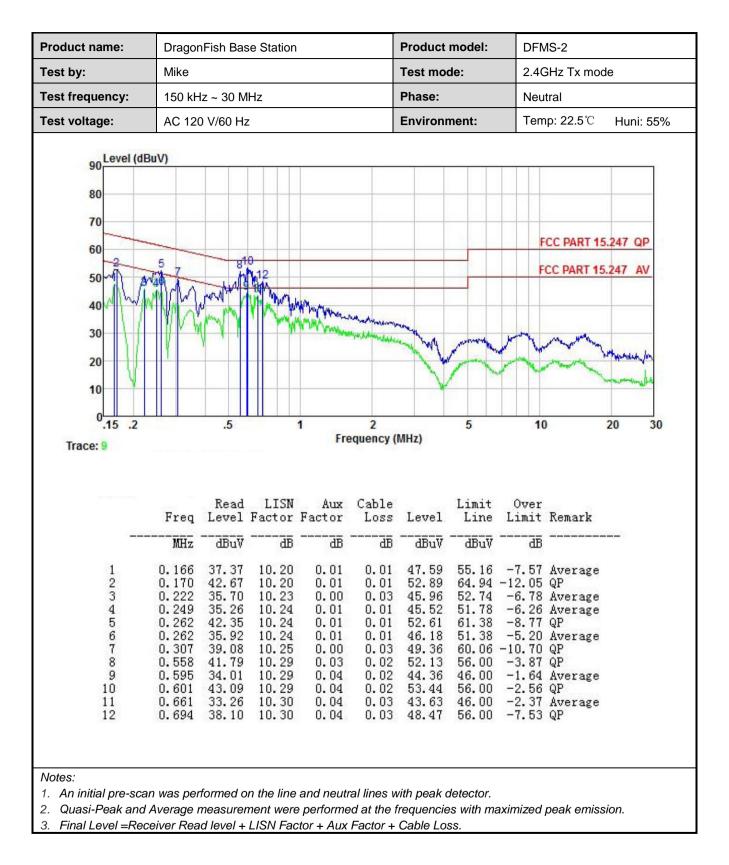


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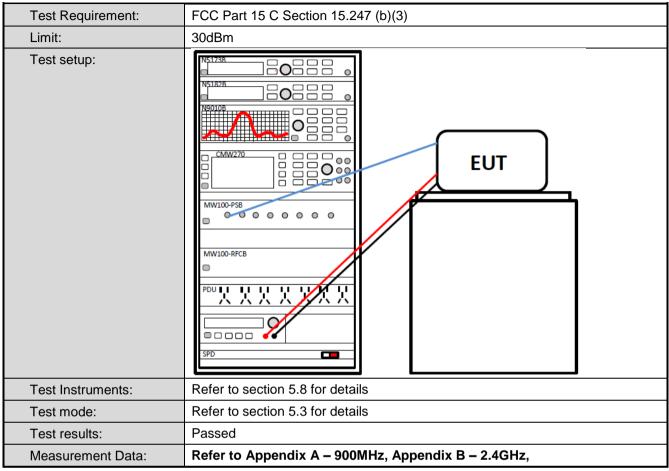






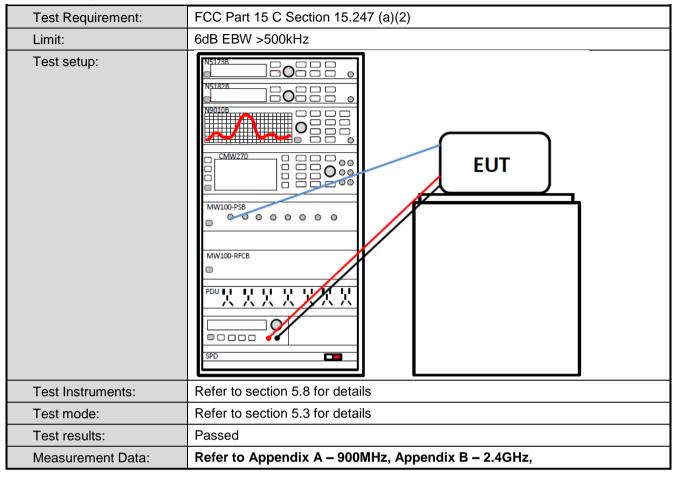


6.3 Conducted Output Power



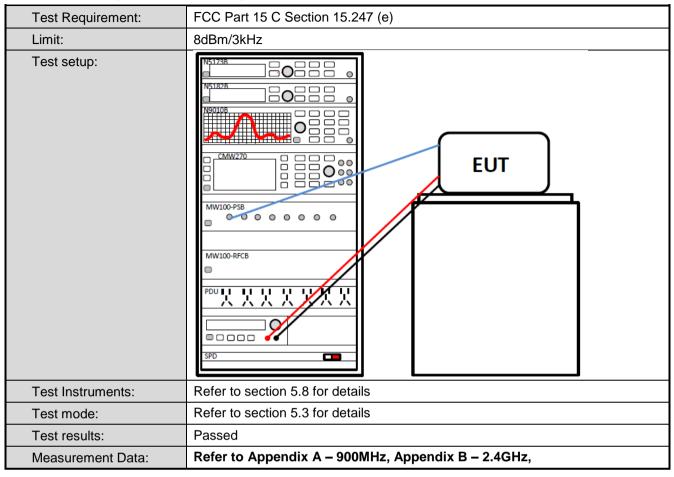


6.4 Occupy Bandwidth





6.5 Power Spectral Density





6.6 Band Edge

6.6.1 Conducted Emission Method

Test Requirement:	FCC Part 15 C Section 15.247 (d)
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph(b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.
Test setup:	
Test Instruments:	Refer to section 5.8 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed
Measurement Data:	Refer to Appendix A – 900MHz, Appendix B – 2.4GHz,



6.6.2 Radiated Emission Method

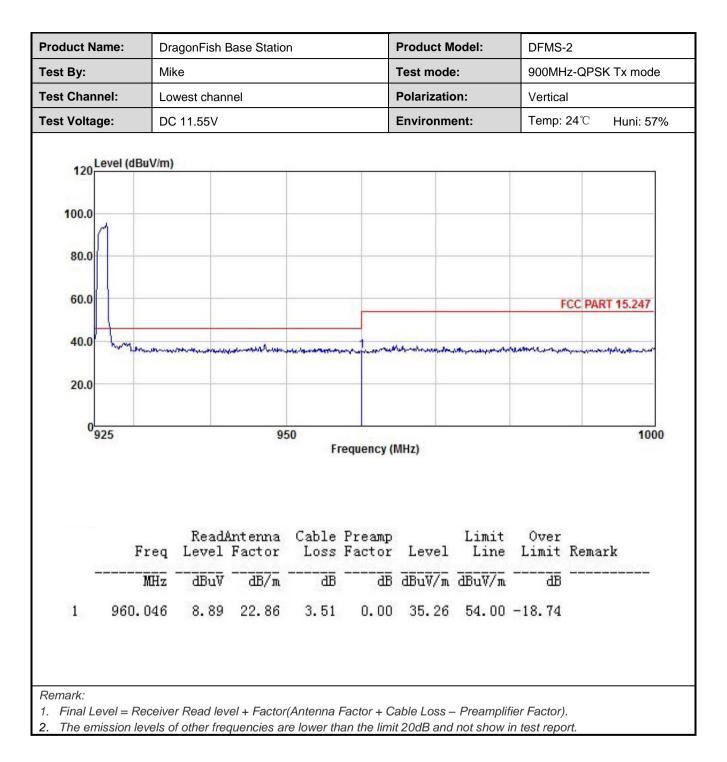
Test Requirement:	FCC Part 15 C Se	ection 15.2	209 a	and 15.205			
Test Frequency Range:	2.4GHz: 2310 MHz to 2390 MHz and 2483.5 MHz to 2500 MHz						
Test Distance:	3m						
Receiver setup:	Frequency Dete		or RBW		VBW		Remark
	Above 1GHz	Peak		1MHz	3MHz		Peak Value
		RMS		1MHz		MHz	Average Value
Limit:	Frequency		Lim	nit (dBuV/m @:	3m)		Remark
	Above 1GH	z –		54.00 74.00			verage Value Peak Value
Test Procedure:	 the ground at determine the ground at determine the 2. The EUT was antenna, whit tower. 3. The antenna ground to det Vertical and the vertical and the measurement 4. For each sus and then the and the rota to maximum reations. 5. The test-rece Specified Bar 6. If the emission limit specified the EUT wou 10dB margin 	a 3 meter e position of s set 3 me ch was mo height is w termine the Horizontal t. pected em antenna w table was ading. tiver system dwidth wi on level of d, then test ld be repo would be	r cai of th ters ount varie e ma pola nissi turn m w the ting orted re-to	e top of a rotat mber. The tab ne highest radi away from the ed on the top of aximum value arizations of th ion, the EUT w tuned to heigh ed from 0 deg vas set to Peak Aaximum Hold EUT in peak n could be stop I. Otherwise th	eter to of the eter to of the eant vas and ts from rees t Mode bode to bode and e emi-	ble 1.5 s rotated ference ariable-h o four mo field str enna are ranged t n 1 met o 360 de ct Func was 10d nd the p ssions t sing pea	meters above d 360 degrees to -receiving height antenna eters above the rength. Both e set to make the o its worst case er to 4 meters egrees to find the tion and B lower than the eak values of hat did not have k, quasi-peak or
Test setup:		AE EUT (Turntable)		~~~~~	Antenna	Antenna Towe	
Test Instruments:	Refer to section 5	.8 for deta	ils				
Test mode:	Refer to section 5	.3 for deta	ils				
Test results:	Passed						



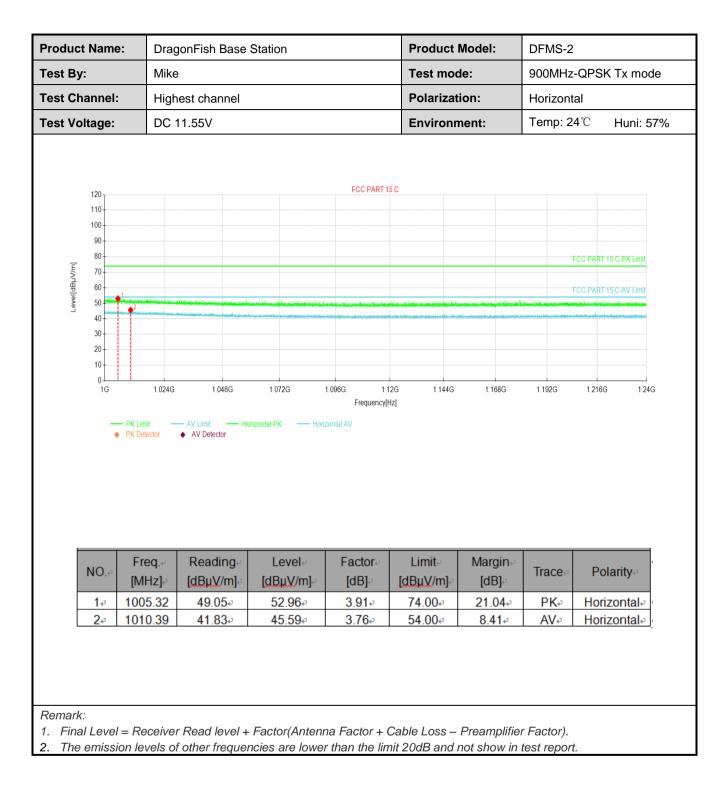
BW: 1.4MHz

	DragonFish Base Station					Product Model:		DFMS-2		
st By:	Mike)				Test mo	de:	900MHz	z-QPSK Tx	mode
st Channel:	Low	est channe	el			Polarization:		Horizontal		
st Voltage:	DC 11.55V					Environr	nent:	Temp: 24℃ Huni: 57		uni: 57%
120 Level (dB 100.0 80.0 60.0 40.0	uV/m)	within	ret ve Brown ferregen		4			FC	C PART 15	. <u>247</u>
0925	Grea	Read	950 Intenna Factor	Fn Cable	Preamp		Limit		Remark	1000
925		Level	untenna Factor	Fro Cable Loss	Preamp Factor	Level	Line	Limit	Remark	
925 I	Treq MHz 046	Level dBuV	untenna Factor 	Fro Cable Loss dB	Preamp Factor	Level dBuV/m	Line dBuV/m	Limit <u>a</u> B		

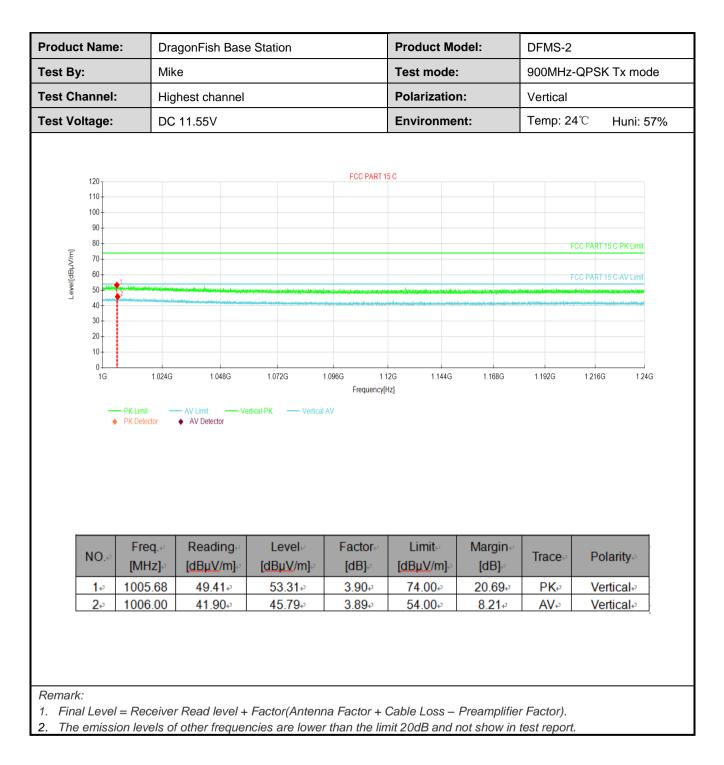




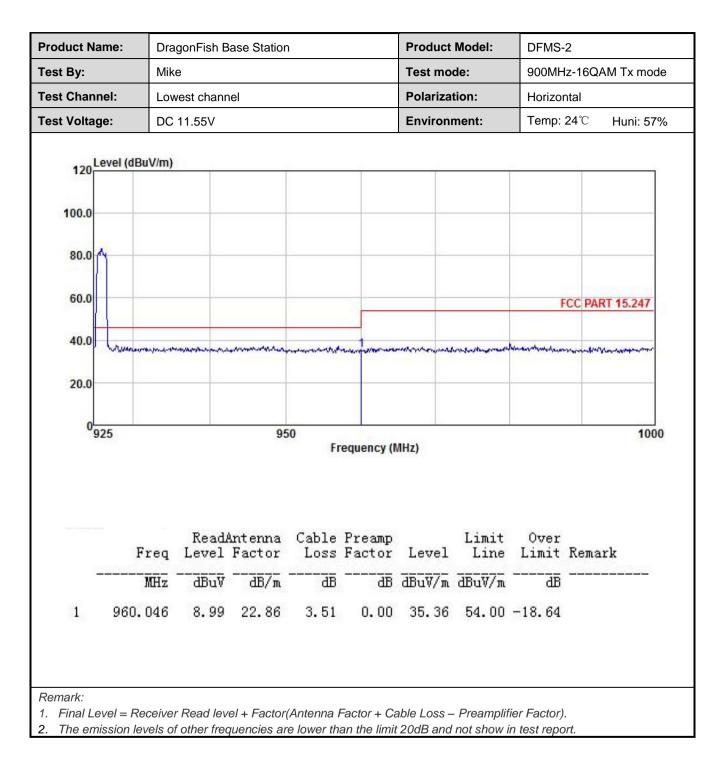




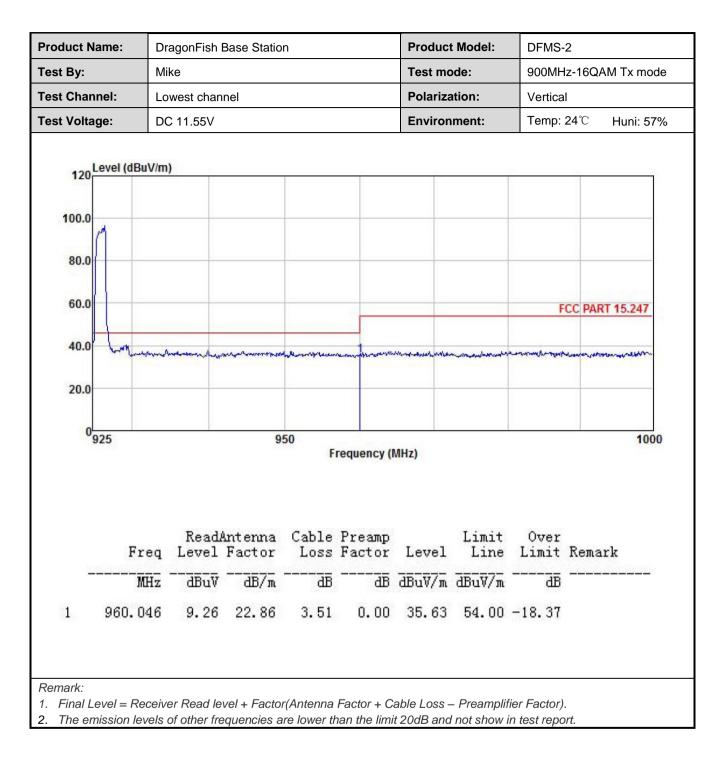




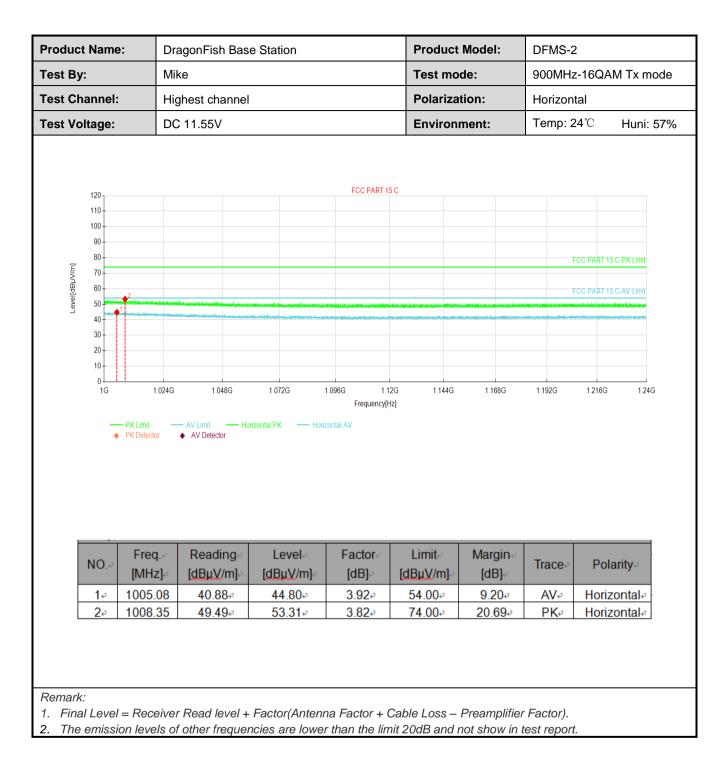




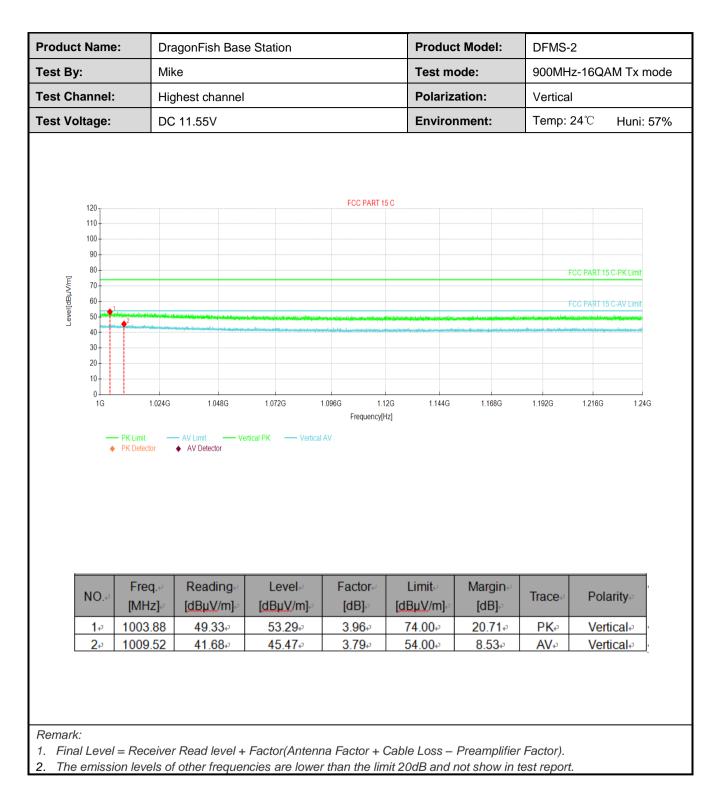




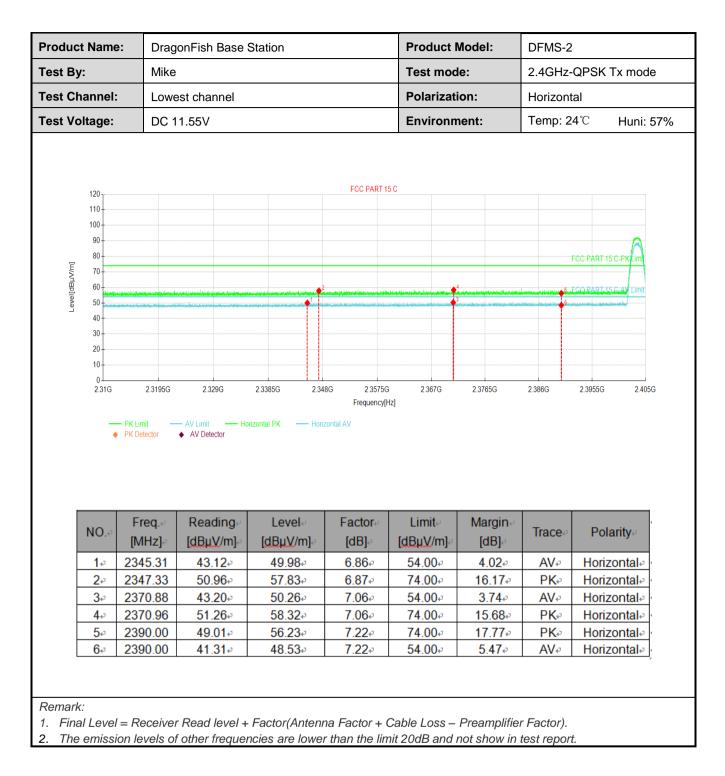




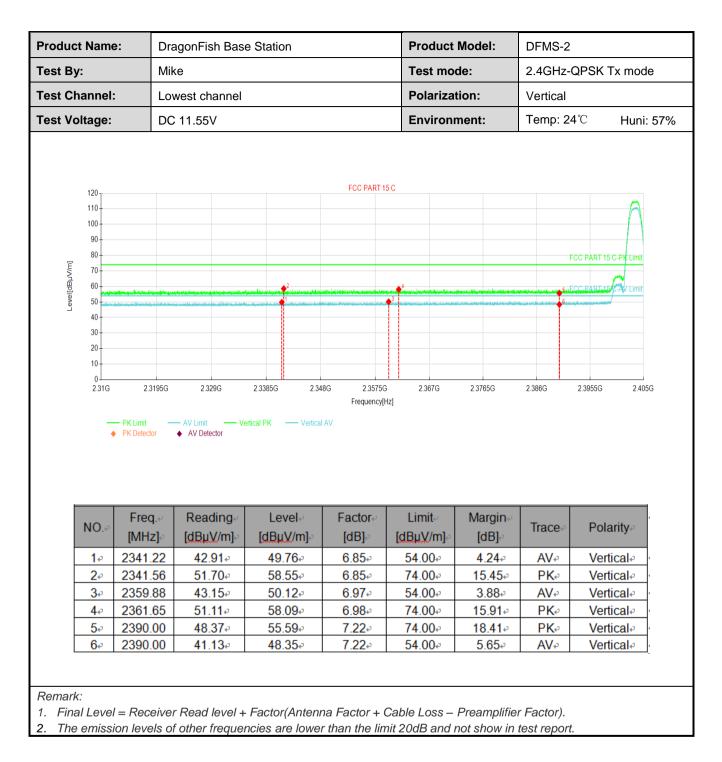








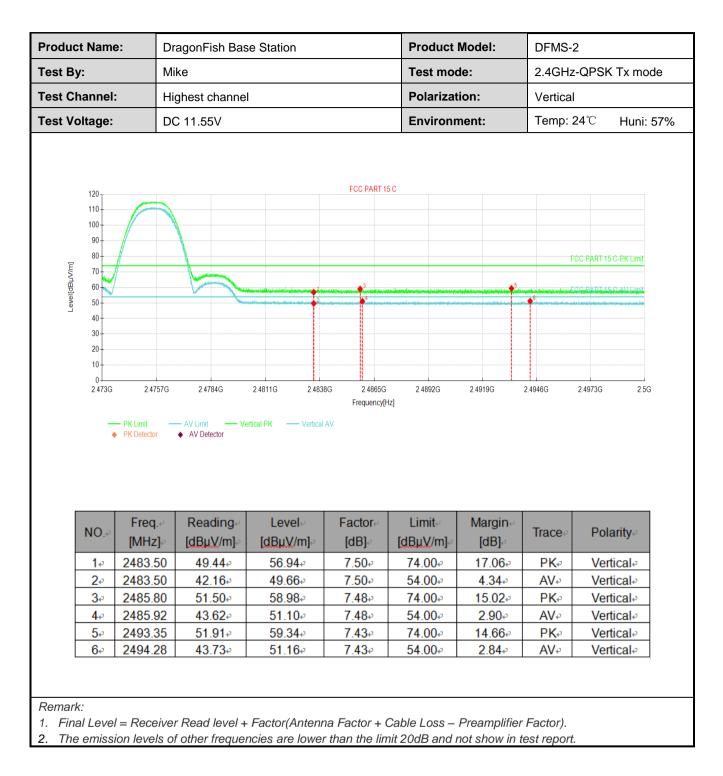






est By:			se Station		Product	woder:	DFMS-	2	
	Mi	ке			Test mo	de:	2.4GHz	z-QPSK T	x mode
est Channel	: Hię	ghest channel			Polariza	tion:	Horizor	ntal	
est Voltage:	DC	C 11.55V			Environ	ment:	Temp:	24°C ⊢	luni: 57º
120 110 90 80 70	\bigcap			FCC PART 15	C		F	CC PART 15 C-Pi	CLimit
	2.4757G – PK Limit • PK Detector	2.4784G AV Limit Ho AV Detector	2.4811G 2.4836 prizontal PK — Horiz	Frequency[H	2.4892(G	2.4919G	2.4946G	2.4973G	256
40 30 20 10 0 2.473G	— PK Limit —	— AV Limit —— Ho		Frequency[H		2.4919G	2.4946G Trace	2.4973G Polarit	
40 30 20 10 0 2.473G	PK Limit PK Detector	AV Limit Ho ◆ AV Detector Ho	orizontal PK — Horiz	Frequency[H ontal AV	2] Limite	Margin⊭		_	y _s ∍
40 30 20 10 0 2.4736	PK Limit PK Detector Freq.↔ [MHz].₂	AV Limit Ho ♦ AV Detector Reading ₹ [dBµV/m] ₹	orizontal PK — Horiz Level⊷ [dBµV/m].∘	Frequency[H ontal AV Factor⊷ [dB]-⊃	z] Limit⊮ [dBµV/m]⊬	Margin⊮ [dB]∞	Trace∞	Polarit	y⊭ tal₽
40 30 20 10 0 2.473G	PK Limit PK Detector Freq.₄ [MHz]₄ 2483.50	AV Limit Ho AV Detector Reading [dBµV/m] 49.23↔	Level⊷ [dBµV/m]₽ 56.73₽	Frequency[H ontal AV Factor [dB] 7.50+	Limit-/ [dBµV/m]↔ 74.00↔	Margin⊮ [dB]₽ 17.27₽	Trace.₀ PK.₀	Polarit Horizon	y⊭ tal₽ tal₽
40 30 20 10 0 2.473G	PK Limit PK Detector Freq.↔ [MHZ].→ 2483.50 2483.50	AV Limit Ho ♦ AV Detector Reading 4 [dBµV/m]= 49.23+ 41.83+	Level. [dBµV/m]. 56.73. 49.33.	Frequency[H ontal AV Factor/ [dB]- ³ 7.50 ³ 7.50 ³	Limit [dBµV/m] 74.00 54.00	Margin⊮ [dB]₀ 17.27¢ 4.67¢	Trace.₀ PK↔ AV↔	Polarit Horizon Horizon	y⊭ tal₽ tal₽ tal₽
40 30 20 10 0 2.4736 NO.~ 1~ 2.4736	PK Limit PK Detector Freq [MHZ]- 2483.50 2487.70	AV Limit Ho ♦ AV Detector Reading [dBµV/m] 49.23+ 41.83+ 51.68+ 2	Level [dBµV/m] 56.73 49.33 59.15 2	Frequency[H ontal AV Factor [dB] 7.50+ 7.50+ 7.47+	Limit- [dBµV/m]↔ 74.00↔ 54.00↔ 74.00↔	Margin₊ [dB]₀ 17.27₊ 4.67₊ 14.85₊	Trace↔ PK↔ AV↔ PK↔	Polarit Horizon Horizon Horizon	y⊭ tal₽ tal₽ tal₽ tal₽

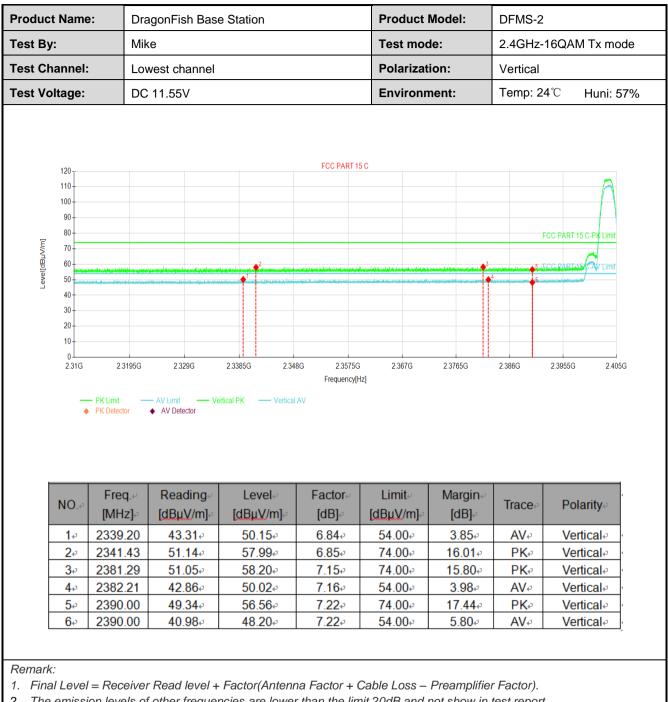






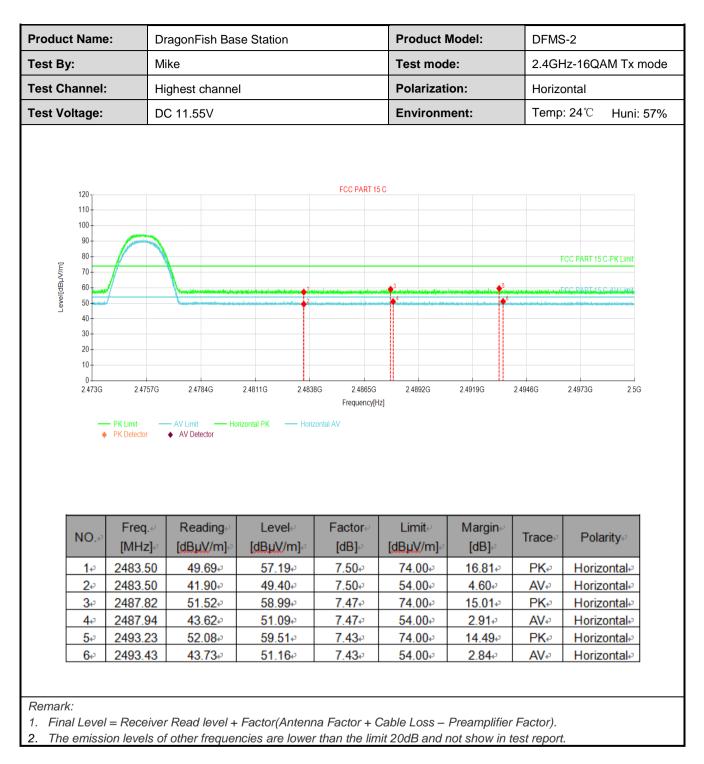
est By:											
	1	Nike				Test mo	de:	2.4GH	z-16QAN	I Tx mode	
Test Channel: Test Voltage:		Lowest channel				Polariza	Polarization:		Horizontal		
		DC 11.55V					Environment:		Temp: 24℃ Huni: 57		
120 110 100 90 80 70 60 50 40 30					FCC PART 15		الار الم الم العالم الم الم الم الم الم الم الم الم الم		FCC PART 15 C		
20 10 0 231G	 PK Limit ♦ PK Detector 		2.329G AV Limit — Ho AV Detector	2.3385G 2.34 prizontal PK — Horiz	Frequency[H		2.3765G	2.386G	2.3955G	2.405G	
20- 10- 0	PK Limit PK Detecto	•	AV Limit Ho		Frequency[H		23765G Margin⊮ [dB]∞	2.386G	2.3955G Polar		
20 10 2.316	PK Limit PK Detector	.+/]0	AV Limit — Ho AV Detector Readinge/	orizontal PK — Horiz	Frequency(H: zontal AV	z] Limit~	Margine			rity⇔	
20- 10 2.316 NO.• 1.• 2.•	PK Limit PK Detector Freq [MHz		AV Limit — Ho AV Detector Reading⊮ [dBµV/m]₽	Drizontal PK — Horiz Level.∉ [dBµV/m].₂	Frequency(H zontal AV Factor₊ [dB]₊	z] Limit⊸ [dBµV/m]↩	Margin⊮ [dB]∘	Trace₽	Polar	rity.₂ •ntal.₂_•	
20- 10- 2.316 NO.4	 PK Limit PK Detecto Frequencies [MHz] 2353. 2354. 2367. 		AV Limit → Ho AV Detector Reading [dBµV/m] 51.19+ ³	Level [dBµV/m] 58.10₽	Frequency(H: zontal AV Factor⊷ [dB]⊷ 6.91⊷	z] Limit-/ [dBµV/m]₽ 74.004	Margin.∉ [dB]⊴ 15.90₽ 3.51₽ 15.55₽	Trace.∘ PK⊷	Polar Horizo Horizo Horizo	rity∍ vntal₽ vntal₽ vntal₽	
20- 10- 231G 231G 10- 231G 231G 231G 20- 231G 231G 20- 231G 231G 231G 20- 231G 231G 231G 231G 231G 231G 231G 231G	 PK Limit PK Detecto Freq [MHz 2353. 2354. 2367. 2369.)] 76 38 41 12	AV Limit → Ho AV Detector [dBµV/m] 51.19+ 43.57+ 51.42+ 43.12+ 43.12+	Level ← [dBµV/m] ← 58.10 ↔ 58.45 ↔ 50.16 ↔	Frequency(H: zontal AV Factor [dB] 6.91 6.92	z] Limit⊸ [dBµV/m]⊶ 74.00₊ 54.00₊	Margin.∉ [dB]₂ 15.90₽ 3.51₽	Trace.₀ PK.₀ AV.₀	Polar Horizo Horizo Horizo Horizo	rity₂ ontal₂ ontal₂ ontal₂ ontal₂	
20- 10- 2316 NO.* 1.* 2.* 3.*	 PK Limit PK Detecto Frequencies [MHz] 2353. 2354. 2367. 	 	AV Limit — Hα AV Detector [dBμV/m] 51.1943 43.5743 51.4243	Level⊷ [dBµV/m]↔ 58.10↔ 50.49↔ 58.45↔	Frequency(H contal AV Factor [dB] 6.91+ 6.92+ 7.03+	z] Limit- [dBµV/m]↔ 74.00↔ 54.00↔ 74.00↔	Margin.∉ [dB]⊴ 15.90₽ 3.51₽ 15.55₽	Trace≓ PK↔ AV↔ PK↔	Polar Horizo Horizo Horizo	rity= ontal= ontal= ontal= ontal= ontal=	





2. The emission levels of other frequencies are lower than the limit 20dB and not show in test report.







Product Name	e: Dr	agonFish Bas	e Station		Product	Model:	DFMS-	-2		
Test By:	Mi	ke			Test mo	de:	2.4GHz	z-16QAM	Tx mode	
Test Channel	: Hi	ghest channel	l		Polariza	Polarization: Environment:		Vertical		
Test Voltage:	D	C 11.55V			Environ			Temp: 24°C Huni: 579		
120 110 100 90 80 70 70 60 50	\bigcap			FCC PART 15	C		F	CC PART 15 C-P	K Limit	
50 50 40 30 20 10 0 2.473G	2.4757G — PK Limit — PK Detector	2.4784G — AV Limit — Ve AV Detector	24811G 2483 rtical PK — Vertical	Frequency[H	2.4892G 2]	2.4919G	2.4946G	2 4973G	2.5G	
40 30 20 10	PK Limit PK Detector Freq. ₽	AV Limit Ve ♦ AV Detector	rtical PK Vertical Level∉	Frequency(H AV	z] Limit-	Margine	2.4946G	2.4973G Polarit	4	
40 30 20 10 0 2.473G	PK Limit PK Detector	AV Limit Ve ♦ AV Detector Reading () [dBµV/m] ()	ertical PK — Vertical Level∉ [dBµV/m],∂	Frequency(H AV Factore [dB]	z] Limit⊬ [dBµV/m]⊷	Margin⊮ [dB]₽	Trace	Polarit	y <i>⇔</i>	
40 30 20 10 2.473G	PK Limit PK Detector Freq. ₽	AV Limit Ve ♦ AV Detector	rtical PK Vertical Level∉	Frequency(H AV	z] Limit-	Margine		_	y <i>⇔</i> al⊷	
40 30 20 10 0 2.473G	PK Limit PK Detector Freq. ₽ [MHz]₽ 2483.50	AV Limit Ve ♦ AV Detector Reading ℓ [dBµV/m] ℓ ² 50.20 ℓ ³	rtical PK — Vertical Level∉ [dBµV/m]∉ 57.70₊3	Frequency(H AV Factor [dB] 7.5042	Limit/ [dBµV/m]-/ 74.003	Margin⊮ [dB]₽ 16.3043	Trace. ² PK.2	Polarit	y⇔ al⊷ al⊷	
40 30 20 10 2473G	PK Limit PK Detector [MHz] 2483.50 2483.50	AV Limit Ve AV Detector Ve Reading.↓ [dBµV/m].↓ 50.20.↓ 42.92.↓	tical PK — Vertical Level↔ [dBµV/m]↔ 57.70↔ 50.42↔	Frequency(H AV Factor [dB]. ² 7.50. ² 7.50. ²	Limit₊ [dBµV/m]-3 74.00₊3 54.00₊3	Margin [dB]₀ 16.30.₀ 3.58.₀	Trace@ PK@ AV@	Polarit Vertica Vertica	y₽ al₽ al₽ 4	
40 30 20 10 0 2.473G	PK Limit PK Detector [MHz] 2483.50 2483.50 2488.67	AV Limit Ve ♦ AV Detector Reading [dBµV/m] 50.20+ ³ 42.92+ ³ 44.12+ ³	Level [dBµV/m] 57.70+ 50.42+ 51.58+	Frequency(H AV Factor+/ [dB]+ ² 7.50+ ³ 7.50+ ³ 7.46+ ³	د] Limit [dBµV/m] 74.00 54.00	Margin-J [dB]↓ 16.30,J 3.58+J 2.42,J	Trace. PK. AV. AV.	Polarit Vertica Vertica Vertica	y <i>₽</i> al₽ al₽ al₽ al₽	



BW: 10MHz

	e: Drag	jonFish Ba	se Station			Product	Model:	DFMS-2	2		
ſest By:	Mike	/ike				Test mode:		900MHz-QPSK Tx mode			
Fest Channe	I: Low	Lowest channel DC 11.55V					Polarization: Environment:		Horizontal		
Fest Voltage	DC [·]								Temp: 24°C Huni: 57%		
100.0	el (dBuV/m)				-***************	*****		FC	C PART 15.247		
20.0											
0				950					1000		
~916				Fr	equency (M	Hz)					
0 <mark>916</mark>					Preamp Factor				Remark		
					Factor	Level		Limit	Remark		