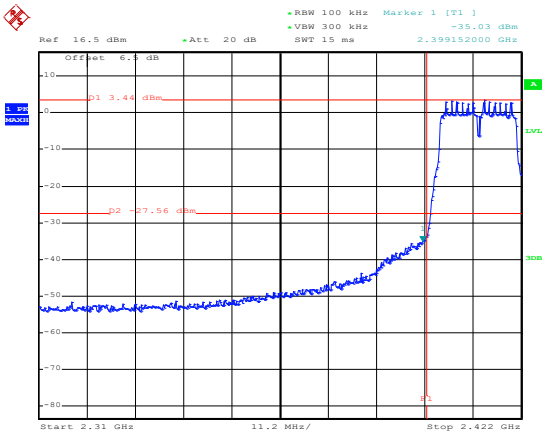
802.11n(HT20)

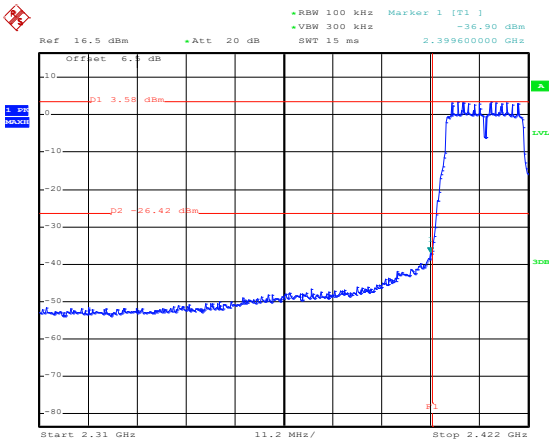
ANT 1



Date: 10.OCT.2020 22:19:28

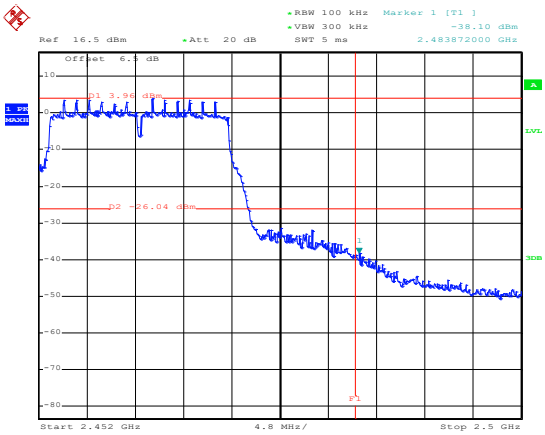
Lowest channel

ANT 2



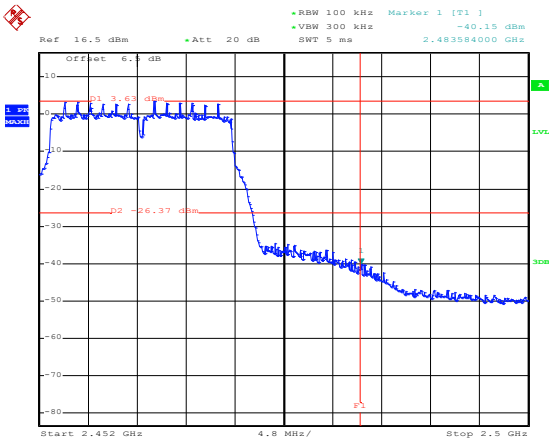
Date: 10.OCT.2020 21:31:03

Lowest channel



Date: 10.OCT.2020 22:15:53

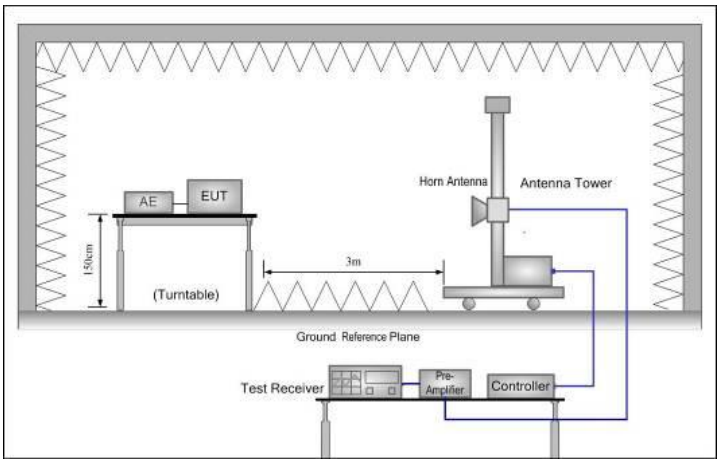
Highest channel



Date: 10.OCT.2020 21:26:58

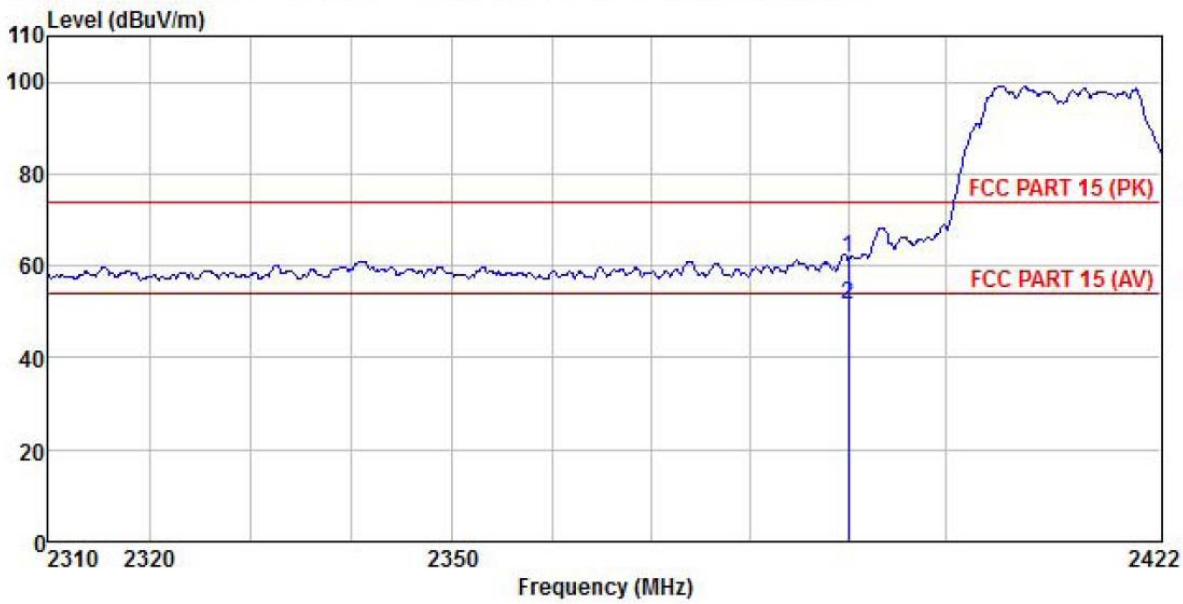
Highest channel

6.6.2 Radiated Emission Method

Test Requirement:	FCC Part 15 C Section 15.209 and 15.205				
Test Frequency Range:	2310 MHz to 2390 MHz and 2483.5 MHz to 2500 MHz				
Test Distance:	3m				
Receiver setup:	Frequency	Detector	RBW	VBW	Remark
	Above 1GHz	Peak	1MHz	3MHz	Peak Value
		RMS	1MHz	3MHz	Average Value
Limit:	Frequency	Limit (dBuV/m @3m)	Remark		
	Above 1GHz	54.00	Average Value		
		74.00	Peak Value		
Test Procedure:	1. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.				
Test setup:					
Test Instruments:	Refer to section 5.9 for details				
Test mode:	Refer to section 5.3 for details				
Test results:	Passed				

802.11g mode (module 1 / ANT 1):

Product Name:	Dragon Fish Remote Control	**Product Model:**	DFRC-1
Test By:	Mike	**Test mode:**	802.11g Tx mode
Test Channel:	Lowest channel	**Polarization:**	Vertical
Test Voltage:	AC 120/60Hz	**Environment:**	Temp: 24℃ Huni: 57%

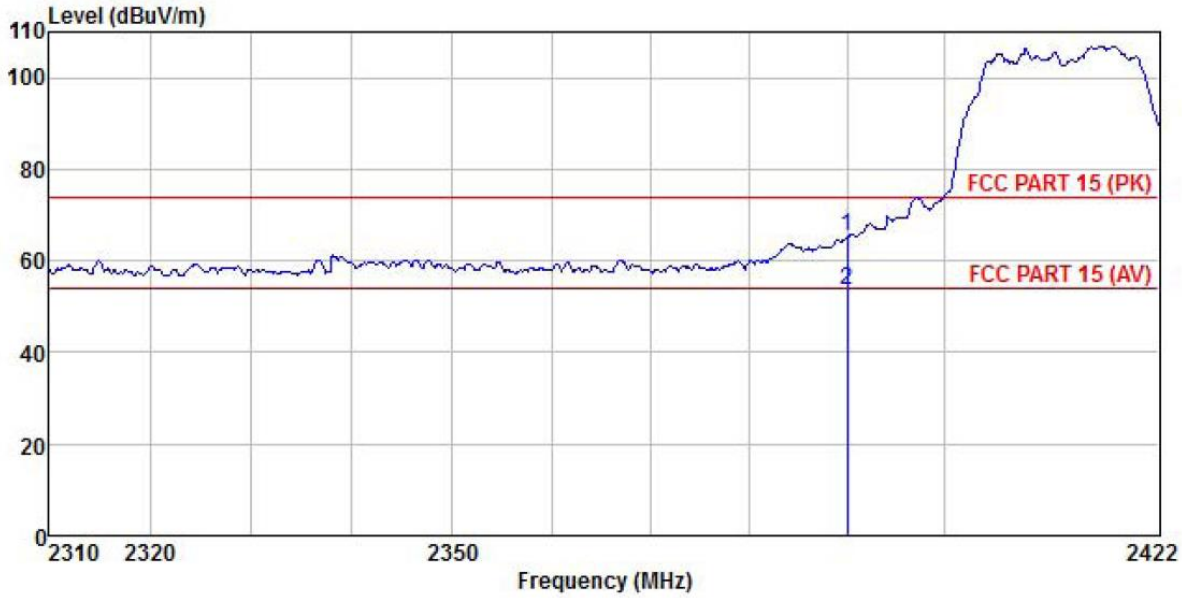


	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	2390.000	28.18	27.03	4.69	1.68	0.00	61.58	74.00	-12.42	Peak
2	2390.000	18.34	27.03	4.69	1.68	0.00	51.74	54.00	-2.26	Average

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

Product Name:	Dragon Fish Remote Control	**Product Model:**	DFRC-1
Test By:	Mike	**Test mode:**	802.11g Tx mode
Test Channel:	Lowest channel	**Polarization:**	Horizontal
Test Voltage:	AC 120/60Hz	**Environment:**	Temp: 24℃ Huni: 57%

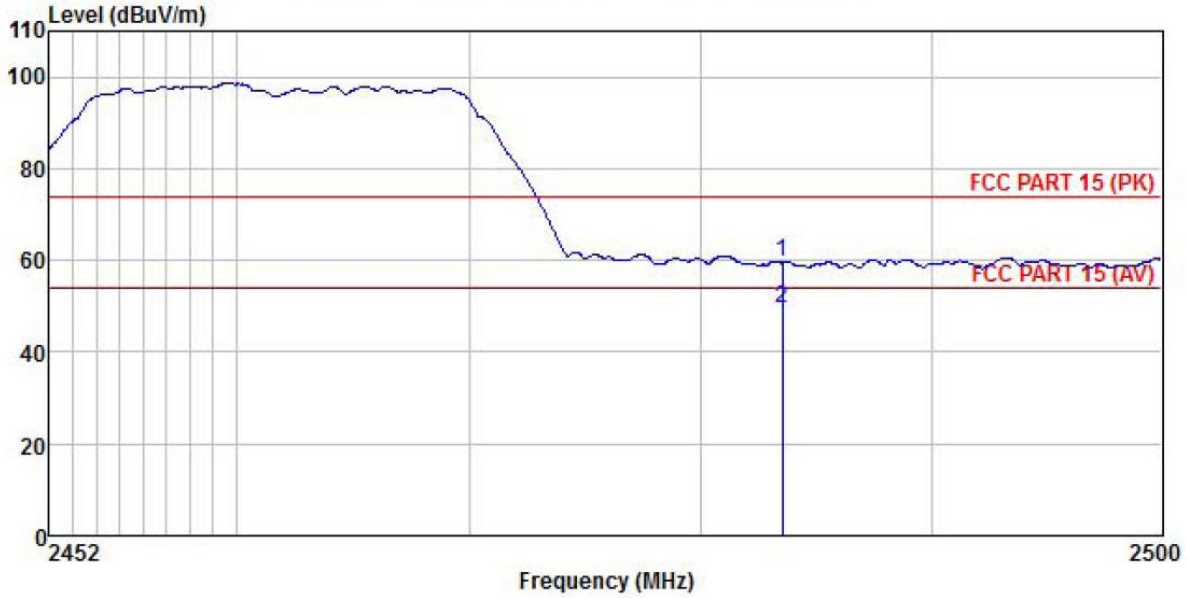


	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	2390.000	31.87	27.03	4.69	1.68	0.00	65.27	74.00	-8.73	Peak
2	2390.000	19.98	27.03	4.69	1.68	0.00	53.38	54.00	-0.62	Average

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

Product Name:	Dragon Fish Remote Control	**Product Model:**	DFRC-1
Test By:	Mike	**Test mode:**	802.11g Tx mode
Test Channel:	Highest channel	**Polarization:**	Vertical
Test Voltage:	AC 120/60Hz	**Environment:**	Temp: 24℃ Huni: 57%

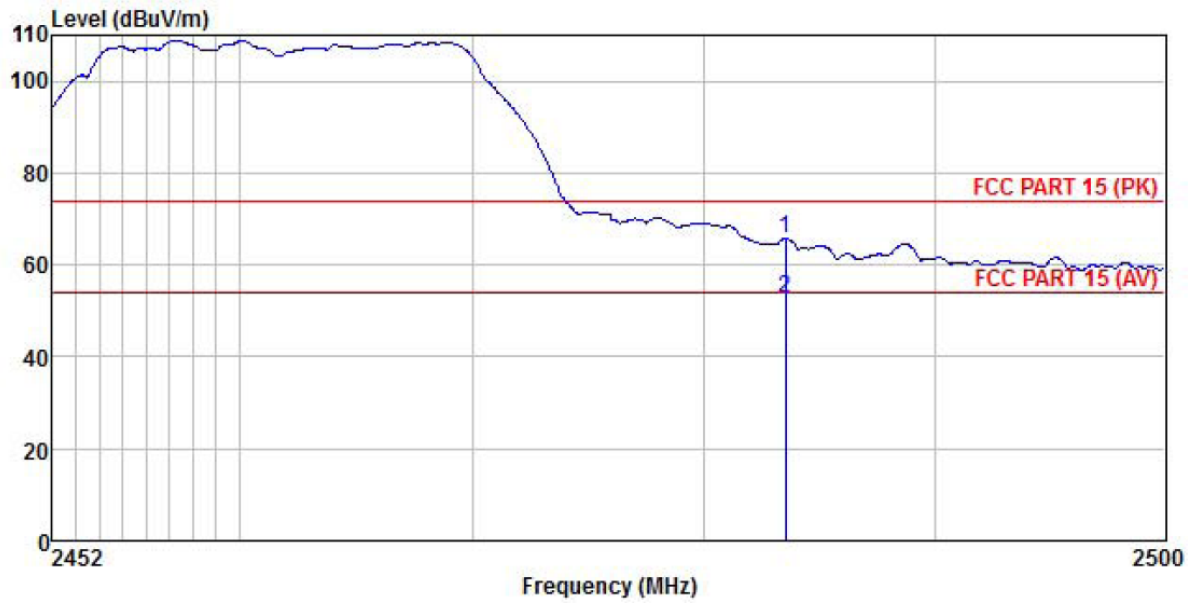


	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	2483.500	25.73	27.27	4.81	1.70	0.00	59.51	74.00	-14.49	Peak
2	2483.500	15.92	27.27	4.81	1.70	0.00	49.70	54.00	-4.30	Average

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

Product Name:	Dragon Fish Remote Control	**Product Model:**	DFRC-1
Test By:	Mike	**Test mode:**	802.11g Tx mode
Test Channel:	Highest channel	**Polarization:**	Horizontal
Test Voltage:	AC 120/60Hz	**Environment:**	Temp: 24℃ Huni: 57%



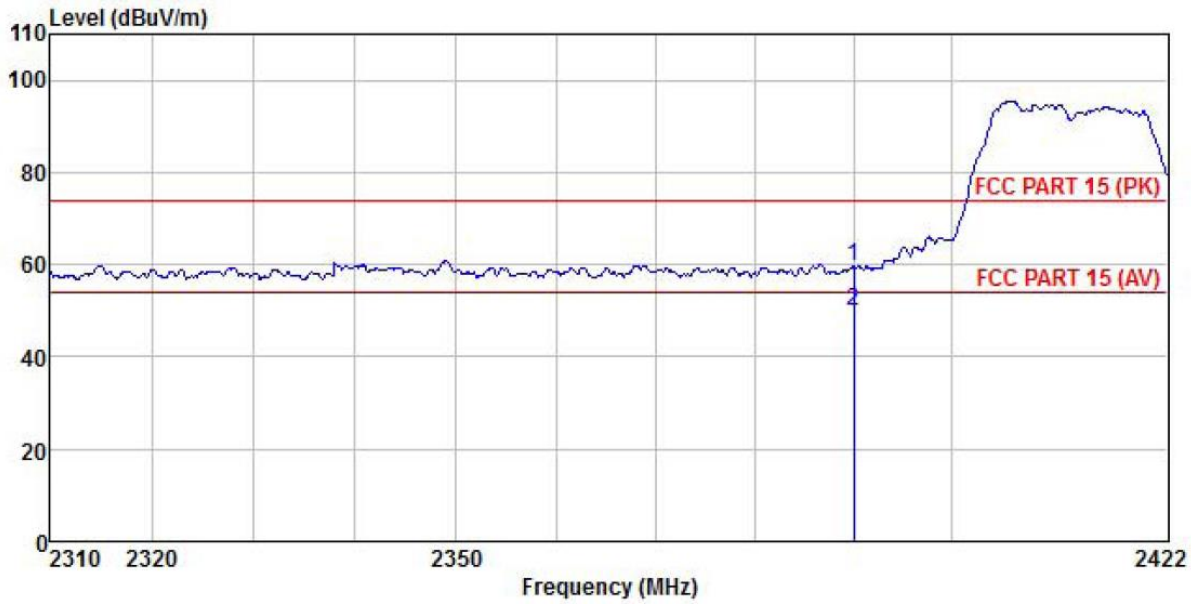
	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	2483.500	31.94	27.27	4.81	1.70	0.00	65.72	74.00	-8.28	Peak
2	2483.500	19.18	27.27	4.81	1.70	0.00	52.96	54.00	-1.04	Average

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

802.11g mode (module 1 /ANT 2):

Product Name:	Dragon Fish Remote Control	**Product Model:**	DFRC-1
Test By:	Mike	**Test mode:**	802.11g Tx mode
Test Channel:	Lowest channel	**Polarization:**	Vertical
Test Voltage:	AC 120/60Hz	**Environment:**	Temp: 24℃ Huni: 57%

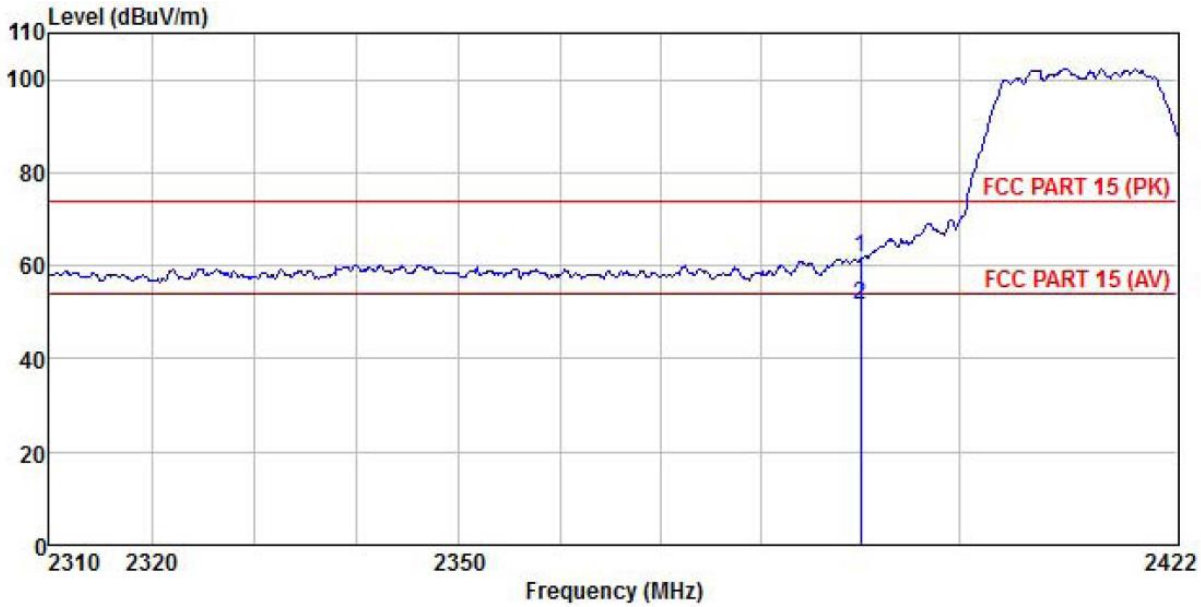


	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	2390.000	26.07	27.03	4.69	1.68	0.00	59.47	74.00	-14.53	Peak
2	2390.000	16.34	27.03	4.69	1.68	0.00	49.74	54.00	-4.26	Average

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

Product Name:	Dragon Fish Remote Control	**Product Model:**	DFRC-1
Test By:	Mike	**Test mode:**	802.11g Tx mode
Test Channel:	Lowest channel	**Polarization:**	Horizontal
Test Voltage:	AC 120/60Hz	**Environment:**	Temp: 24℃ Huni: 57%

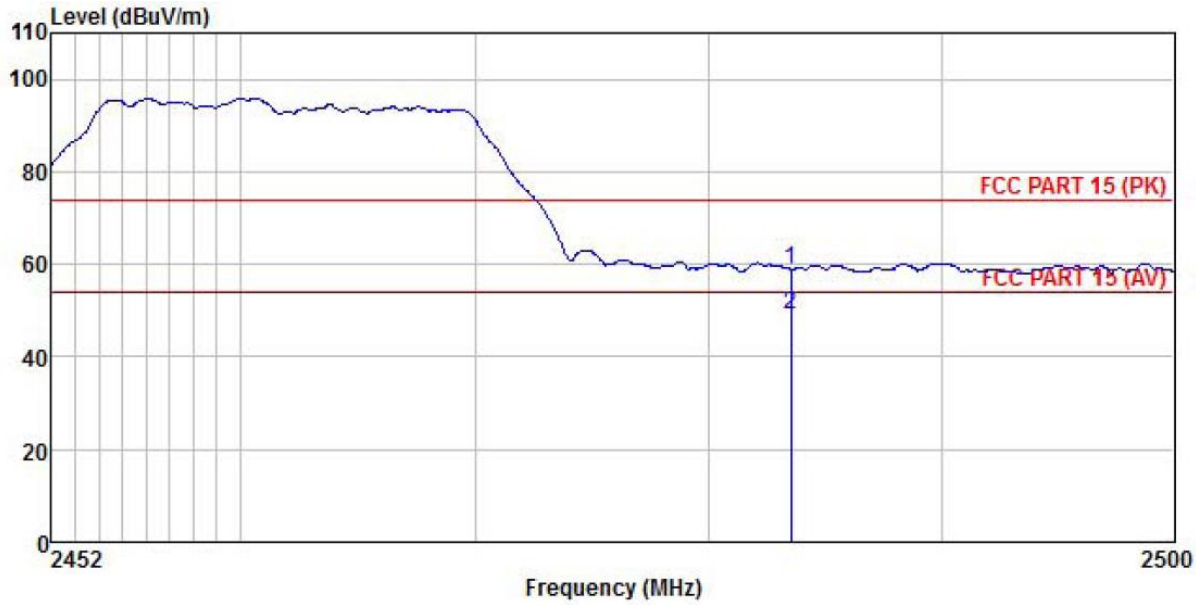


	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	2390.000	28.20	27.03	4.69	1.68	0.00	61.60	74.00	-12.40	Peak
2	2390.000	18.34	27.03	4.69	1.68	0.00	51.74	54.00	-2.26	Average

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

Product Name:	Dragon Fish Remote Control	**Product Model:**	DFRC-1
Test By:	Mike	**Test mode:**	802.11g Tx mode
Test Channel:	Highest channel	**Polarization:**	Vertical
Test Voltage:	AC 120/60Hz	**Environment:**	Temp: 24℃ Huni: 57%

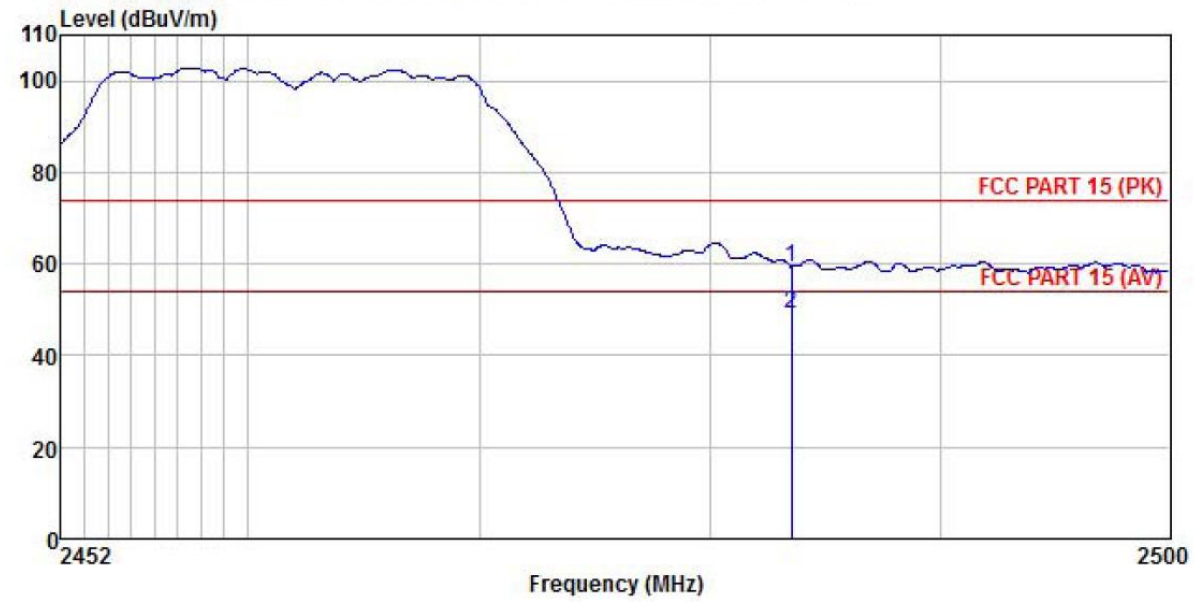


	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	2483.500	25.17	27.27	4.81	1.70	0.00	58.95	74.00	-15.05	Peak
2	2483.500	15.38	27.27	4.81	1.70	0.00	49.16	54.00	-4.84	Average

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

Product Name:	Dragon Fish Remote Control	**Product Model:**	DFRC-1
Test By:	Mike	**Test mode:**	802.11g Tx mode
Test Channel:	Highest channel	**Polarization:**	Horizontal
Test Voltage:	AC 120/60Hz	**Environment:**	Temp: 24℃ Huni: 57%



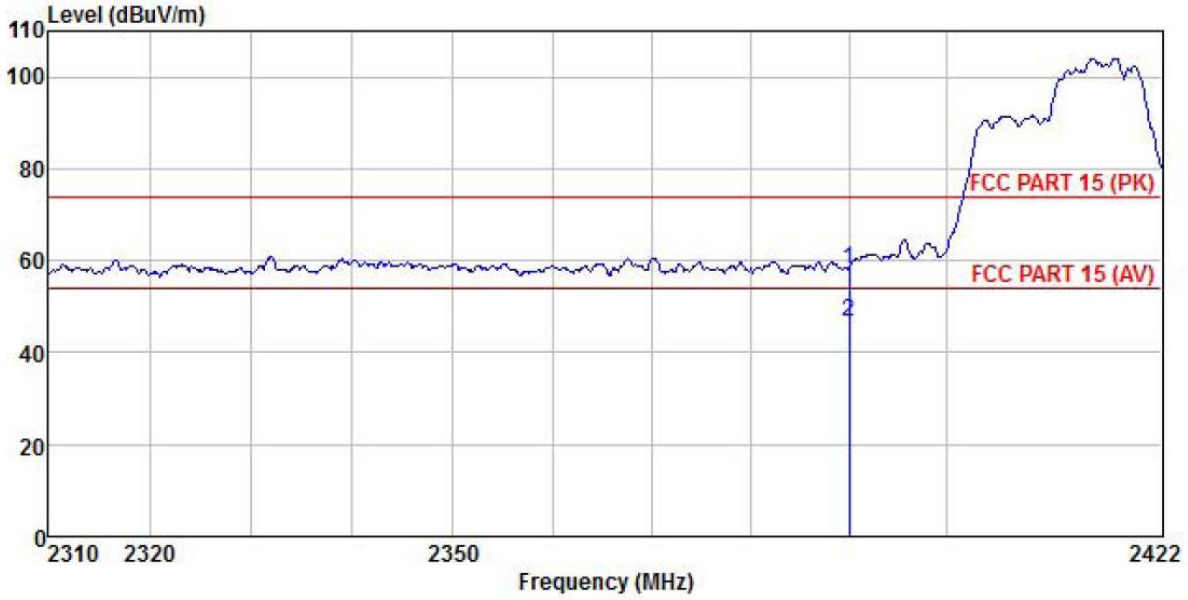
	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	2483.500	25.63	27.27	4.81	1.70	0.00	59.41	74.00	-14.59	Peak
2	2483.500	15.34	27.27	4.81	1.70	0.00	49.12	54.00	-4.88	Average

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

802.11n(HT20) (module 1 / MIMO):

Product Name:	Dragon Fish Remote Control	**Product Model:**	DFRC-1
Test By:	Mike	**Test mode:**	802.11n(HT20) Tx mode
Test Channel:	Lowest channel	**Polarization:**	Vertical
Test Voltage:	AC 120/60Hz	**Environment:**	Temp: 24℃ Huni: 57%

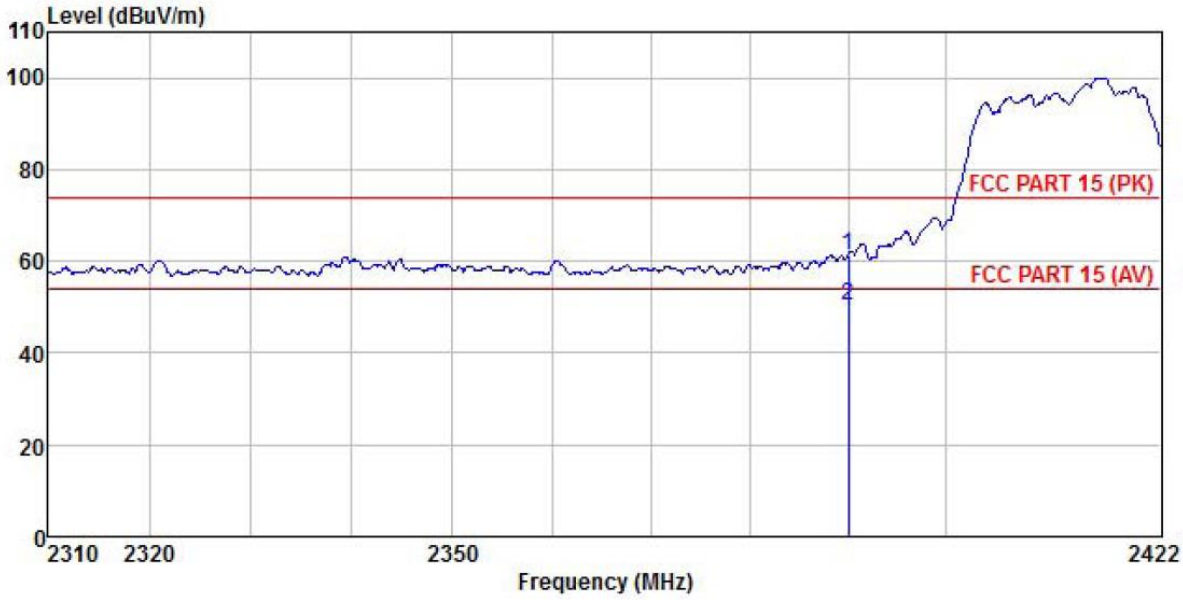


	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	2390.000	24.67	27.03	4.69	1.68	0.00	58.07	74.00	-15.93	Peak
2	2390.000	13.13	27.03	4.69	1.68	0.00	46.53	54.00	-7.47	Average

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

Product Name:	Dragon Fish Remote Control	**Product Model:**	DFRC-1
Test By:	Mike	**Test mode:**	802.11n(HT20) Tx mode
Test Channel:	Lowest channel	**Polarization:**	Horizontal
Test Voltage:	AC 120/60Hz	**Environment:**	Temp: 24℃ Huni: 57%

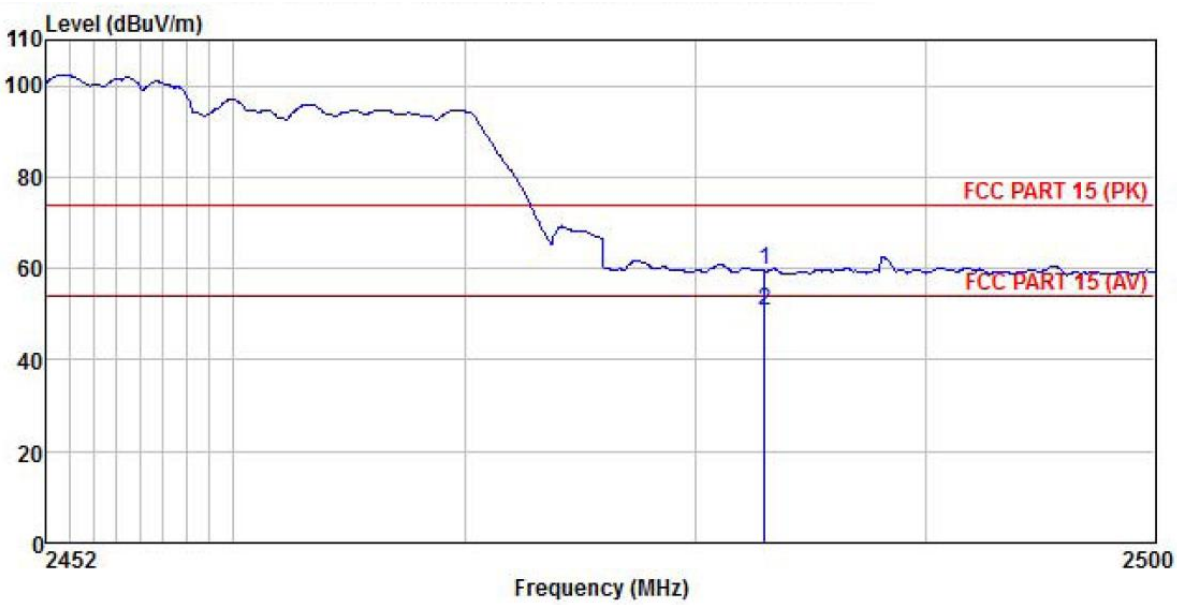


	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	2390.000	27.93	27.03	4.69	1.68	0.00	61.33	74.00	-12.67	Peak
2	2390.000	16.80	27.03	4.69	1.68	0.00	50.20	54.00	-3.80	Average

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

Product Name:	Dragon Fish Remote Control	Product Model:	DFRC-1
Test By:	Mike	Test mode:	802.11n(HT20) Tx mode
Test Channel:	Highest channel	Polarization:	Vertical
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24℃ Huni: 57%

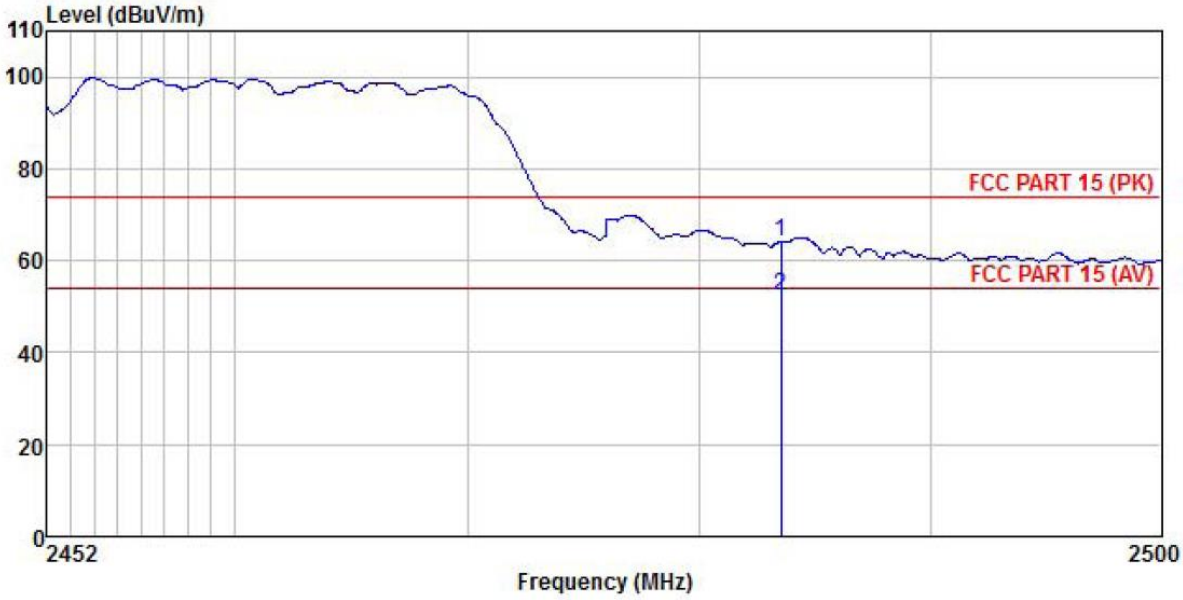


	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	2483.000	26.05	27.27	4.81	1.70	0.00	59.83	74.00	-14.17	Peak
2	2483.000	16.84	27.27	4.81	1.70	0.00	50.62	54.00	-3.38	Average

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

Product Name:	Dragon Fish Remote Control	**Product Model:**	DFRC-1
Test By:	Mike	**Test mode:**	802.11n(HT20) Tx mode
Test Channel:	Highest channel	**Polarization:**	Horizontal
Test Voltage:	AC 120/60Hz	**Environment:**	Temp: 24℃ Huni: 57%



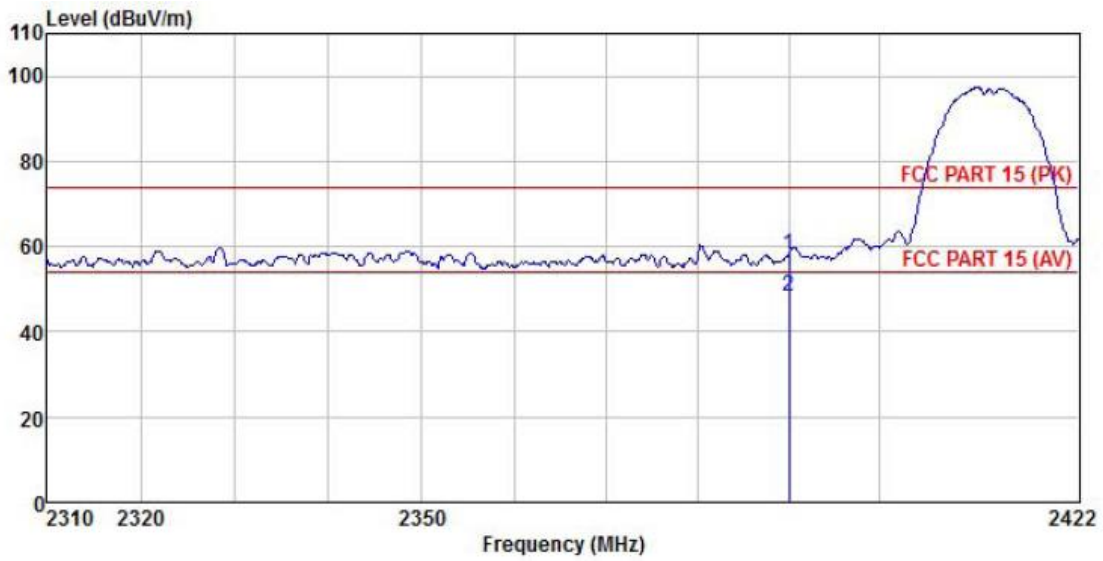
	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	2483.500	30.43	27.27	4.81	1.70	0.00	64.21	74.00	-9.79	Peak
2	2483.500	18.63	27.27	4.81	1.70	0.00	52.41	54.00	-1.59	Average

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

(module 2 /ANT 3):

Product Name:	Dragon Fish Remote Control	**Product Model:**	DFRC-1
Test By:	Mike	**Test mode:**	802.11b Tx mode
Test Channel:	Lowest channel	**Polarization:**	Vertical
Test Voltage:	AC 120/60Hz	**Environment:**	Temp: 24℃ Huni: 57%

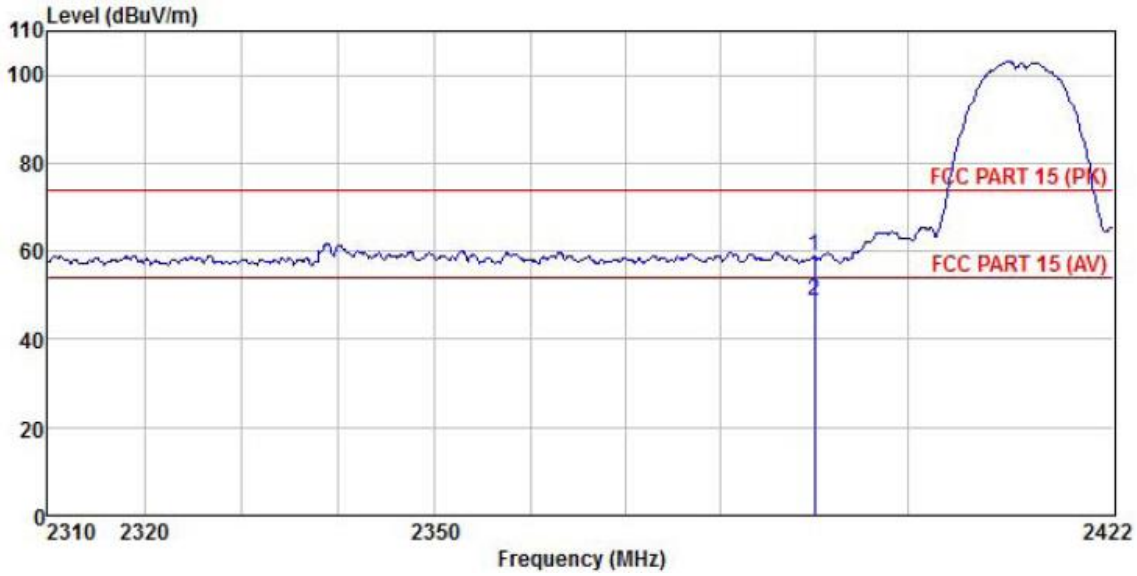


	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	2390.000	24.73	27.03	4.69	1.68	0.00	58.13	74.00	-15.87	Peak
2	2390.000	14.87	27.03	4.69	1.68	0.00	48.27	54.00	-5.73	Average

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

Product Name:	Dragon Fish Remote Control	**Product Model:**	DFRC-1
Test By:	Mike	**Test mode:**	802.11b Tx mode
Test Channel:	Lowest channel	**Polarization:**	Horizontal
Test Voltage:	AC 120/60Hz	**Environment:**	Temp: 24℃ Huni: 57%

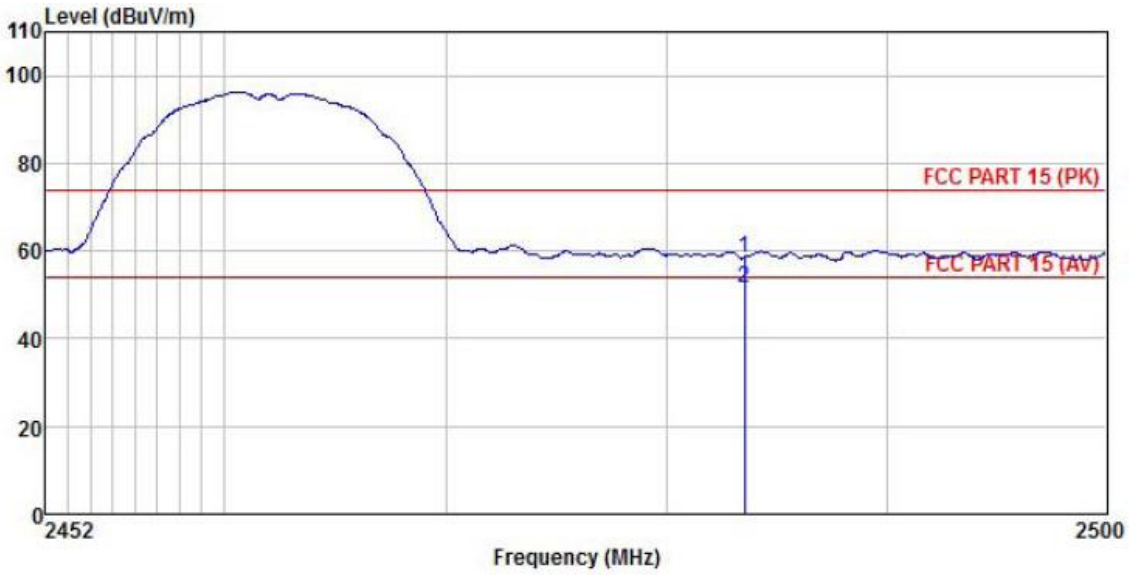


	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	2390.000	25.29	27.03	4.69	1.68	0.00	58.69	74.00	-15.31	Peak
2	2390.000	15.34	27.03	4.69	1.68	0.00	48.74	54.00	-5.26	Average

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

Product Name:	Dragon Fish Remote Control	Product Model:	DFRC-1
Test By:	Mike	Test mode:	802.11b Tx mode
Test Channel:	Highest channel	Polarization:	Vertical
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24℃ Huni: 57%

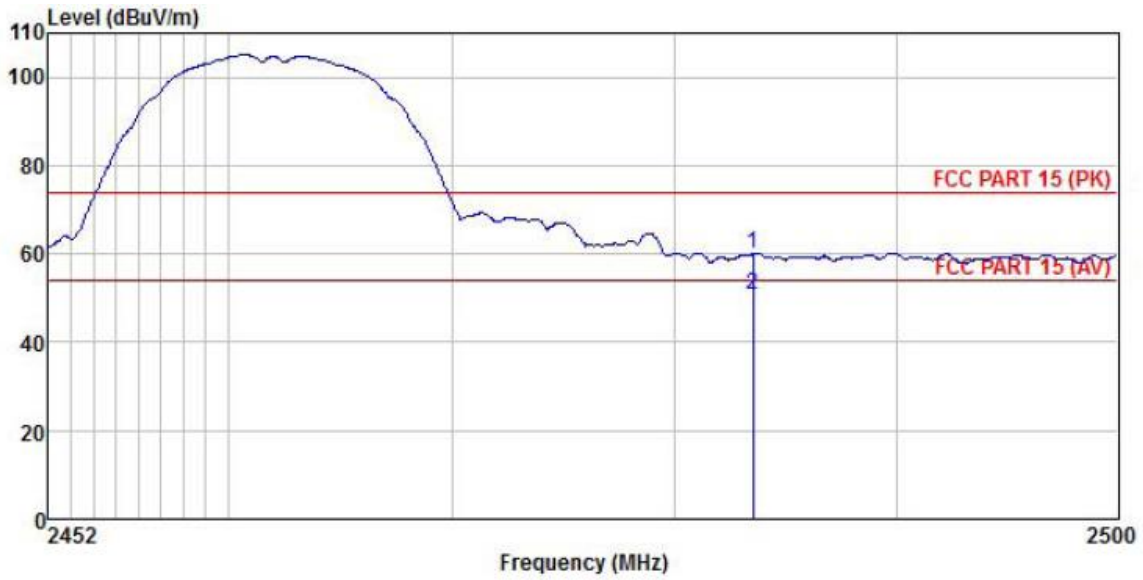


	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	2483.500	24.77	27.27	4.81	1.70	0.00	58.55	74.00	-15.45	Peak
2	2483.500	17.97	27.27	4.81	1.70	0.00	51.75	54.00	-2.25	Average

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

Product Name:	Dragon Fish Remote Control	**Product Model:**	DFRC-1
Test By:	Mike	**Test mode:**	802.11b Tx mode
Test Channel:	Highest channel	**Polarization:**	Horizontal
Test Voltage:	AC 120/60Hz	**Environment:**	Temp: 24℃ Huni: 57%

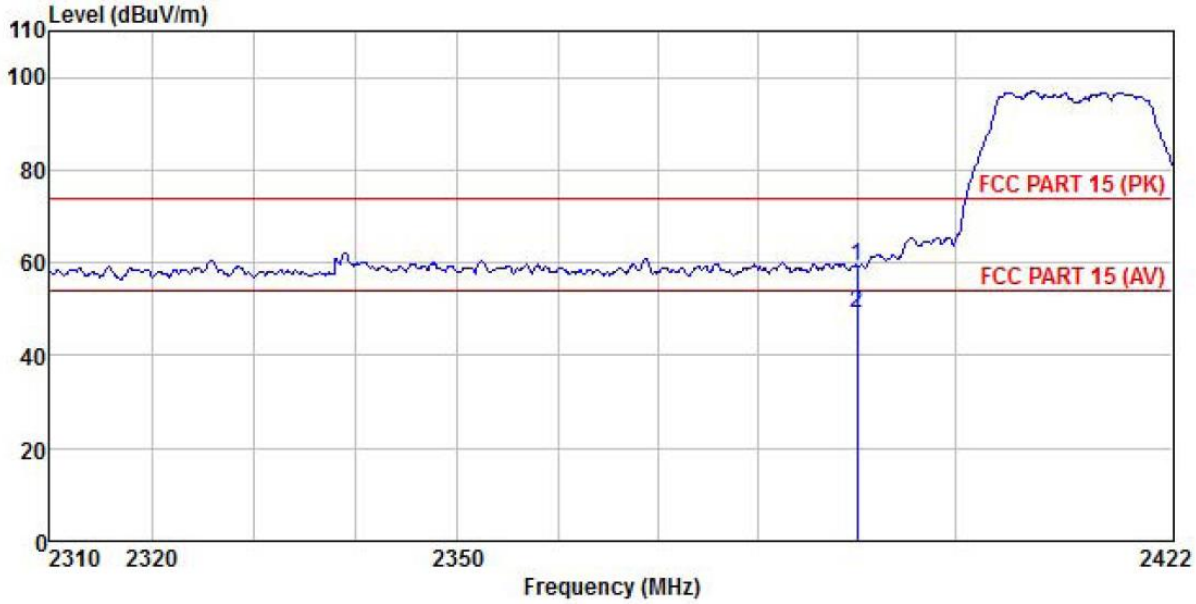


	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	2483.500	26.19	27.27	4.81	1.70	0.00	59.97	74.00	-14.03	Peak
2	2483.500	16.78	27.27	4.81	1.70	0.00	50.56	54.00	-3.44	Average

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

Product Name:	Dragon Fish Remote Control	Product Model:	DFRC-1
Test By:	Mike	Test mode:	802.11g Tx mode
Test Channel:	Lowest channel	Polarization:	Vertical
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24℃ Huni: 57%

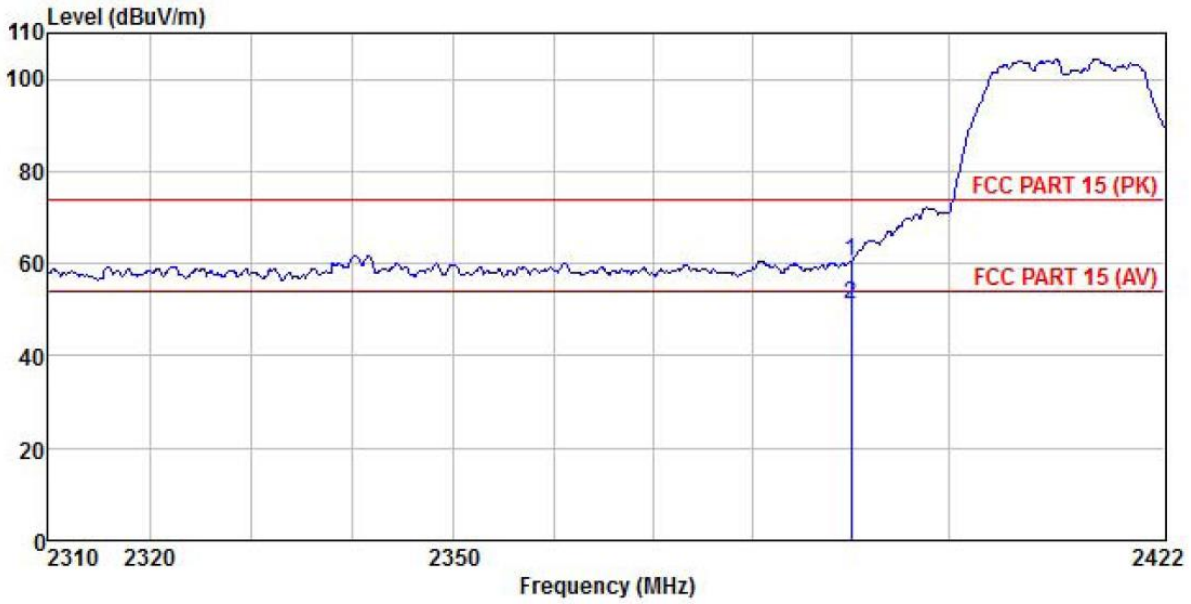


	Freq	ReadLevel	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	2390.000	25.84	27.03	4.69	1.68	0.00	59.24	74.00	-14.76	Peak
2	2390.000	15.78	27.03	4.69	1.68	0.00	49.18	54.00	-4.82	Average

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

Product Name:	Dragon Fish Remote Control	**Product Model:**	DFRC-1
Test By:	Mike	**Test mode:**	802.11g Tx mode
Test Channel:	Lowest channel	**Polarization:**	Horizontal
Test Voltage:	AC 120/60Hz	**Environment:**	Temp: 24℃ Huni: 57%

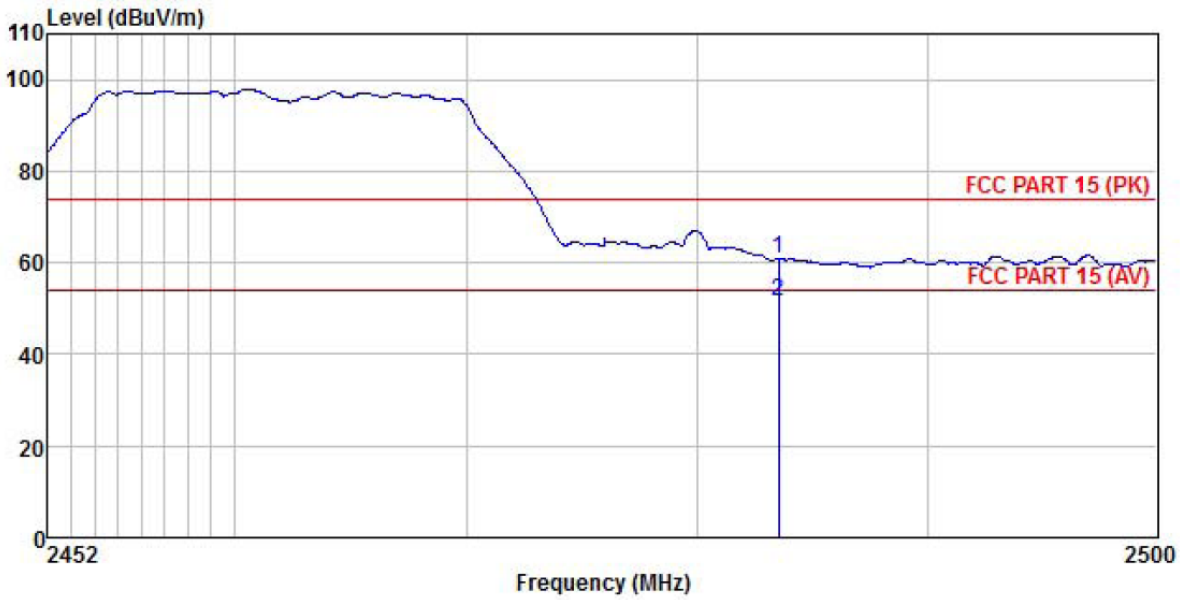


	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	2390.000	27.07	27.03	4.69	1.68	0.00	60.47	74.00	-13.53	Peak
2	2390.000	17.64	27.03	4.69	1.68	0.00	51.04	54.00	-2.96	Average

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

Product Name:	Dragon Fish Remote Control	**Product Model:**	DFRC-1
Test By:	Mike	**Test mode:**	802.11g Tx mode
Test Channel:	Highest channel	**Polarization:**	Vertical
Test Voltage:	AC 120/60Hz	**Environment:**	Temp: 24℃ Huni: 57%

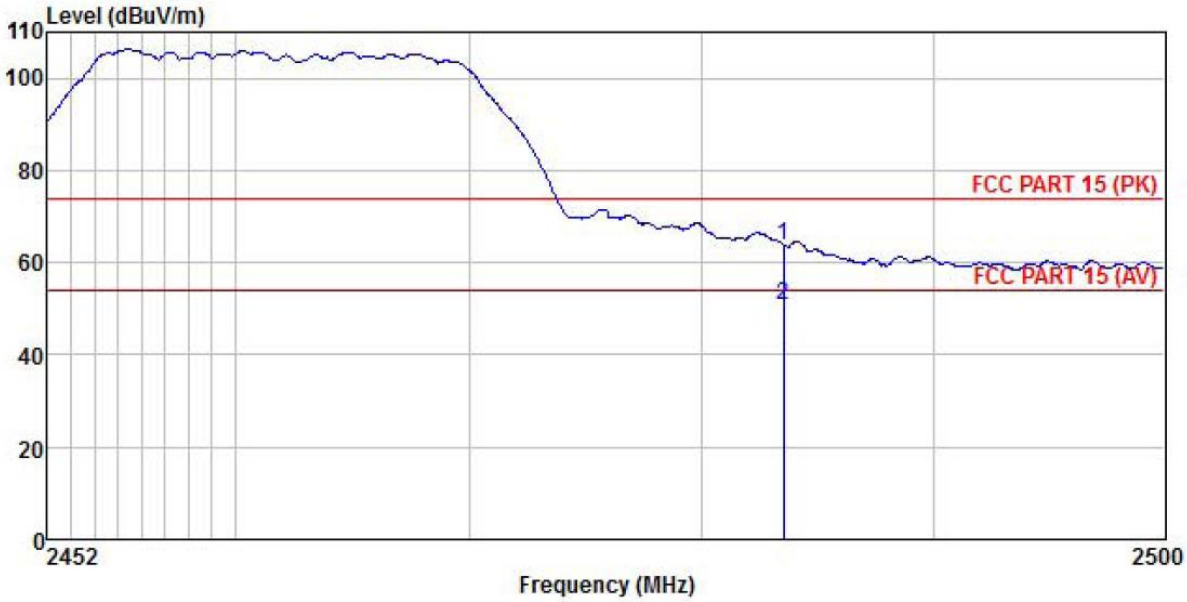


	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	2483.500	27.16	27.27	4.81	1.70	0.00	60.94	74.00	-13.06	Peak
2	2483.500	17.65	27.27	4.81	1.70	0.00	51.43	54.00	-2.57	Average

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

Product Name:	Dragon Fish Remote Control	**Product Model:**	DFRC-1
Test By:	Mike	**Test mode:**	802.11g Tx mode
Test Channel:	Highest channel	**Polarization:**	Horizontal
Test Voltage:	AC 120/60Hz	**Environment:**	Temp: 24℃ Huni: 57%



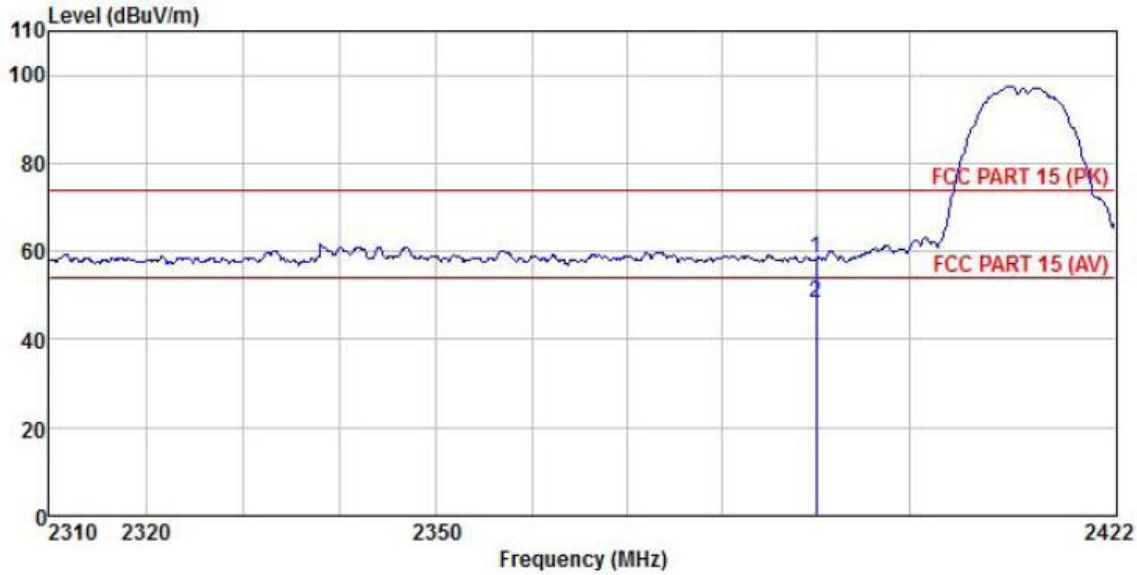
	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	2483.500	30.09	27.27	4.81	1.70	0.00	63.87	74.00	-10.13	Peak
2	2483.500	16.85	27.27	4.81	1.70	0.00	50.63	54.00	-3.37	Average

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

(module 2 /ANT 4):

Product Name:	Dragon Fish Remote Control	**Product Model:**	DFRC-1
Test By:	Mike	**Test mode:**	802.11b Tx mode
Test Channel:	Lowest channel	**Polarization:**	Vertical
Test Voltage:	AC 120/60Hz	**Environment:**	Temp: 24℃ Huni: 57%

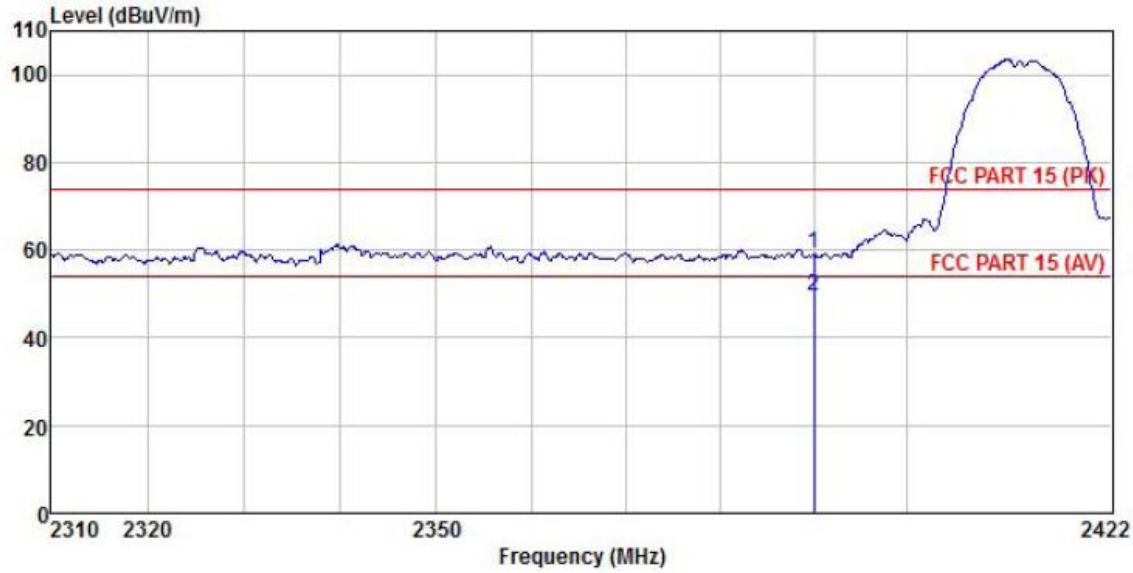


	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	2390.000	24.86	27.03	4.69	1.68	0.00	58.26	74.00	-15.74	Peak
2	2390.000	14.97	27.03	4.69	1.68	0.00	48.37	54.00	-5.63	Average

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

Product Name:	Dragon Fish Remote Control	**Product Model:**	DFRC-1
Test By:	Mike	**Test mode:**	802.11b Tx mode
Test Channel:	Lowest channel	**Polarization:**	Horizontal
Test Voltage:	AC 120/60Hz	**Environment:**	Temp: 24℃ Huni: 57%

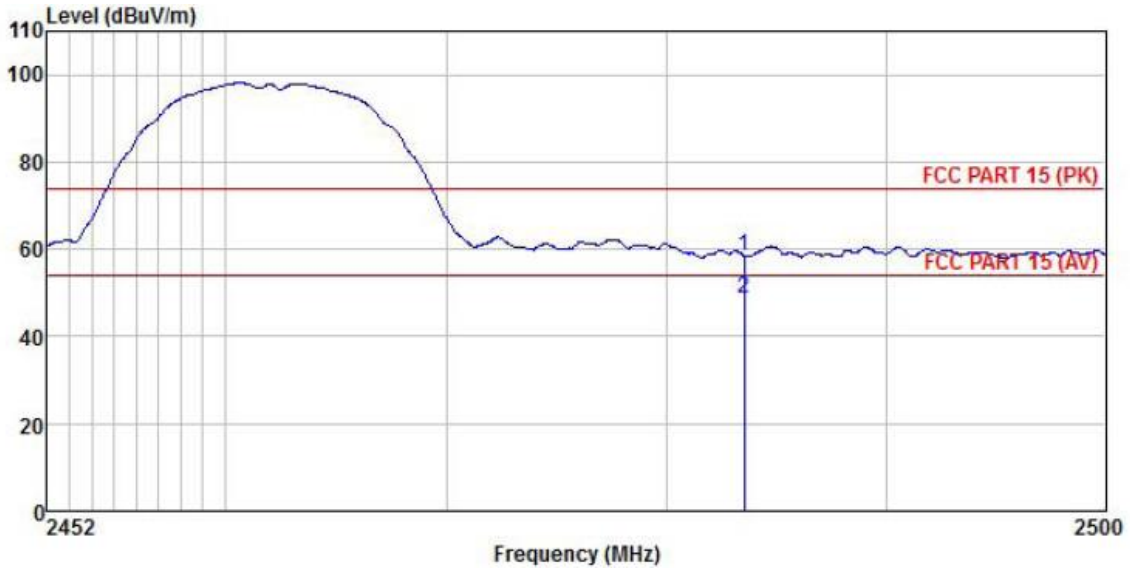


	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	2390.000	25.73	27.03	4.69	1.68	0.00	59.13	74.00	-14.87	Peak
2	2390.000	15.97	27.03	4.69	1.68	0.00	49.37	54.00	-4.63	Average

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

Product Name:	Dragon Fish Remote Control	**Product Model:**	DFRC-1
Test By:	Mike	**Test mode:**	802.11b Tx mode
Test Channel:	Highest channel	**Polarization:**	Vertical
Test Voltage:	AC 120/60Hz	**Environment:**	Temp: 24℃ Huni: 57%

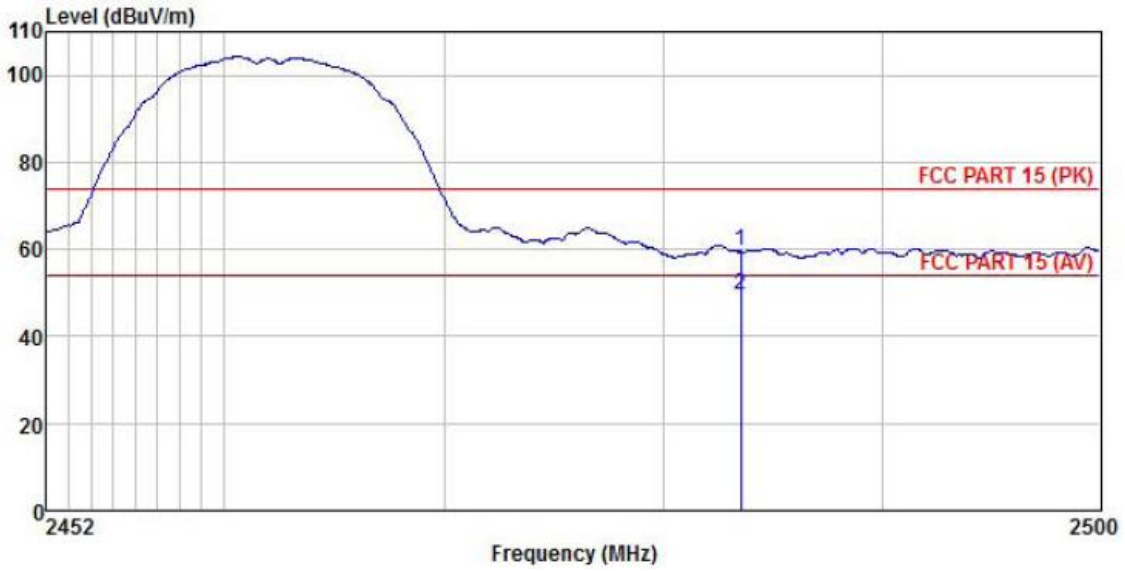


	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	2483.500	24.86	27.27	4.81	1.70	0.00	58.64	74.00	-15.36	Peak
2	2483.500	14.92	27.27	4.81	1.70	0.00	48.70	54.00	-5.30	Average

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

Product Name:	Dragon Fish Remote Control	**Product Model:**	DFRC-1
Test By:	Mike	**Test mode:**	802.11g Tx mode
Test Channel:	Highest channel	**Polarization:**	Horizontal
Test Voltage:	AC 120/60Hz	**Environment:**	Temp: 24℃ Huni: 57%

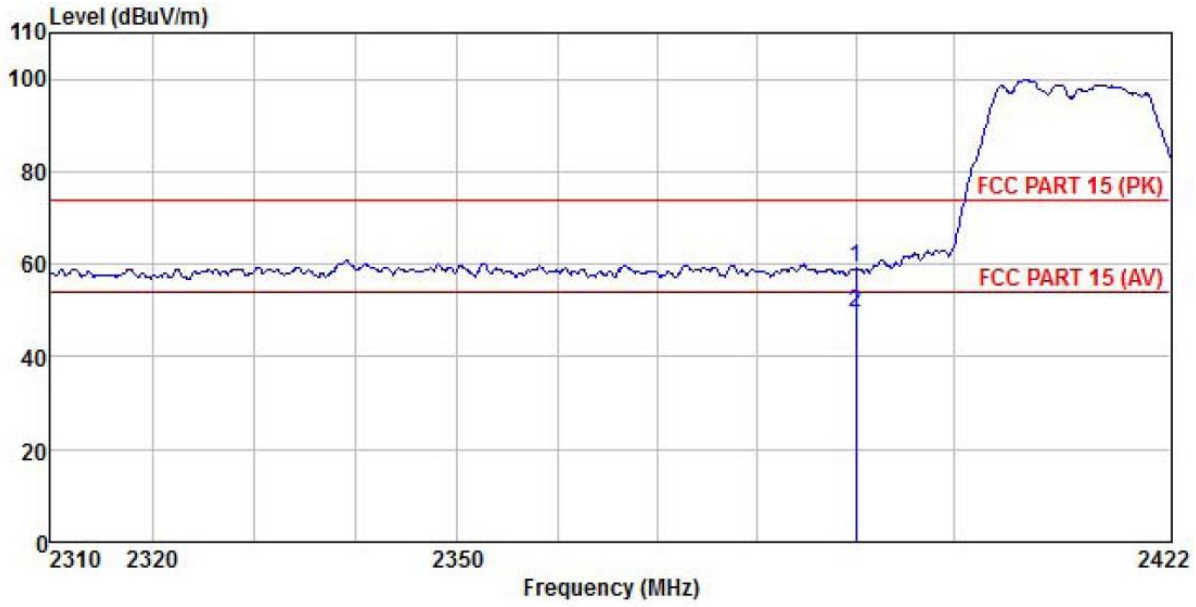


	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	2483.500	25.72	27.27	4.81	1.70	0.00	59.50	74.00	-14.50	Peak
2	2483.500	15.64	27.27	4.81	1.70	0.00	49.42	54.00	-4.58	Average

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

Product Name:	Dragon Fish Remote Control	Product Model:	DFRC-1
Test By:	Mike	Test mode:	802.11g Tx mode
Test Channel:	Lowest channel	Polarization:	Vertical
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24℃ Huni: 57%

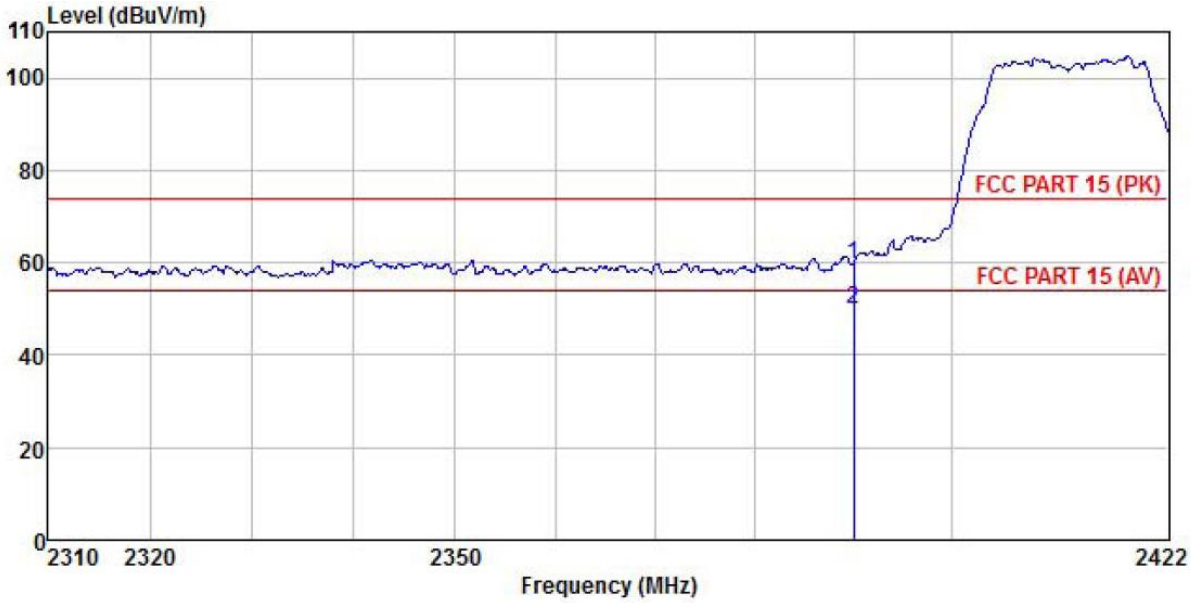


	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	2390.000	25.70	27.03	4.69	1.68	0.00	59.10	74.00	-14.90	Peak
2	2390.000	15.98	27.03	4.69	1.68	0.00	49.38	54.00	-4.62	Average

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

Product Name:	Dragon Fish Remote Control	**Product Model:**	DFRC-1
Test By:	Mike	**Test mode:**	802.11g Tx mode
Test Channel:	Lowest channel	**Polarization:**	Horizontal
Test Voltage:	AC 120/60Hz	**Environment:**	Temp: 24℃ Huni: 57%

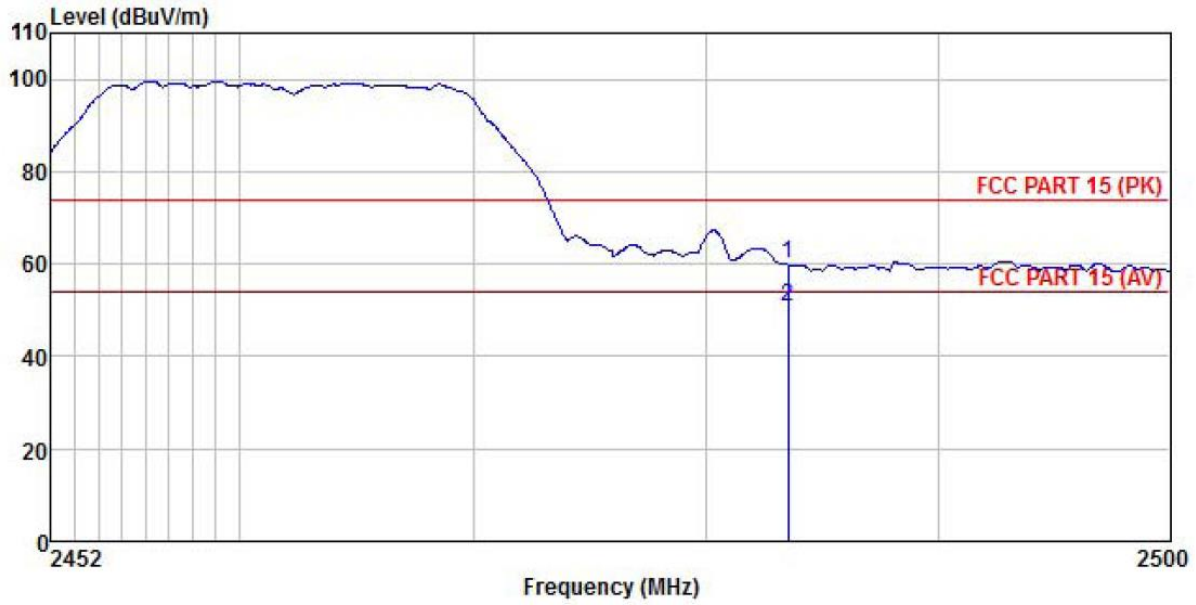


	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	2390.000	26.35	27.03	4.69	1.68	0.00	59.75	74.00	-14.25	Peak
2	2390.000	16.65	27.03	4.69	1.68	0.00	50.05	54.00	-3.95	Average

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

Product Name:	Dragon Fish Remote Control	**Product Model:**	DFRC-1
Test By:	Mike	**Test mode:**	802.11g Tx mode
Test Channel:	Highest channel	**Polarization:**	Vertical
Test Voltage:	AC 120/60Hz	**Environment:**	Temp: 24℃ Huni: 57%

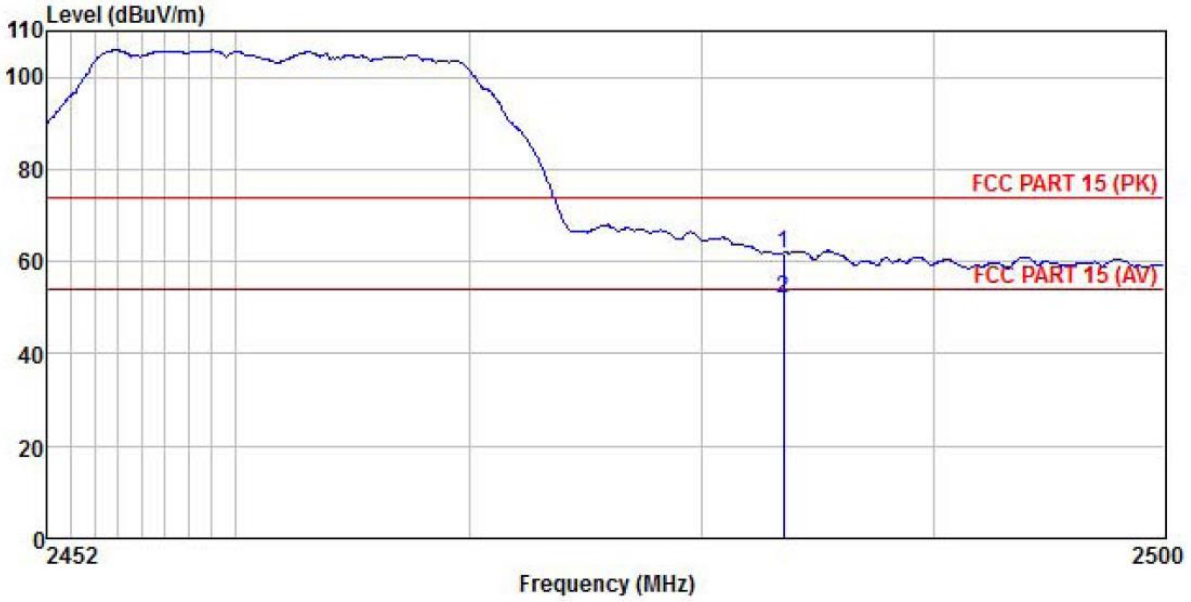


	Freq	ReadLevel	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	2483.500	26.10	27.27	4.81	1.70	0.00	59.88	74.00	-14.12	Peak
2	2483.500	16.77	27.27	4.81	1.70	0.00	50.55	54.00	-3.45	Average

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

Product Name:	Dragon Fish Remote Control	**Product Model:**	DFRC-1
Test By:	Mike	**Test mode:**	802.11g Tx mode
Test Channel:	Highest channel	**Polarization:**	Horizontal
Test Voltage:	AC 120/60Hz	**Environment:**	Temp: 24℃ Huni: 57%



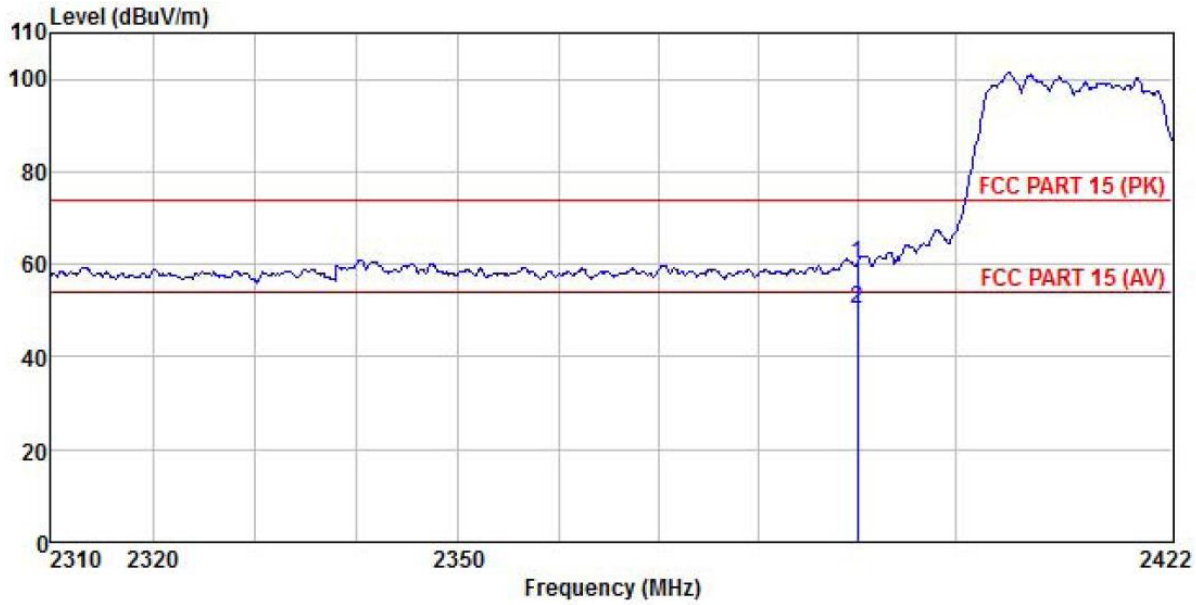
	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	2483.500	28.07	27.27	4.81	1.70	0.00	61.85	74.00	-12.15	Peak
2	2483.500	18.34	27.27	4.81	1.70	0.00	52.12	54.00	-1.88	Average

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

802.11n(HT20) (module 2 /MIMO):

Product Name:	Dragon Fish Remote Control	**Product Model:**	DFRC-1
Test By:	Mike	**Test mode:**	802.11n(HT20) Tx mode
Test Channel:	Lowest channel	**Polarization:**	Vertical
Test Voltage:	AC 120/60Hz	**Environment:**	Temp: 24℃ Huni: 57%

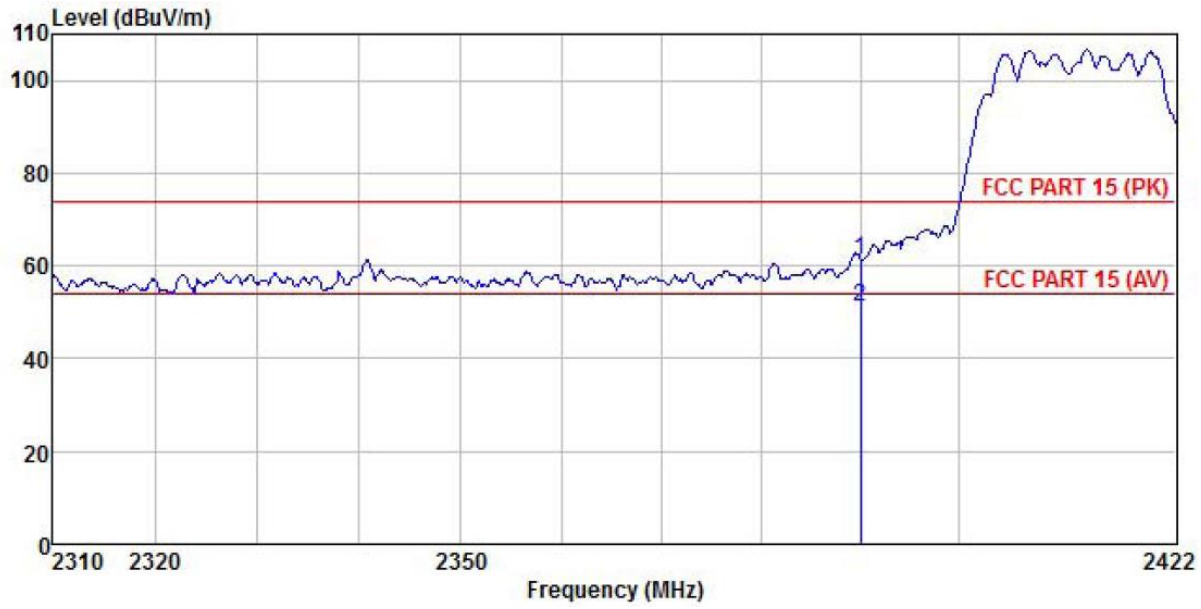


	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	2390.000	26.76	27.03	4.69	1.68	0.00	60.16	74.00	-13.84	Peak
2	2390.000	16.78	27.03	4.69	1.68	0.00	50.18	54.00	-3.82	Average

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

Product Name:	Dragon Fish Remote Control	**Product Model:**	DFRC-1
Test By:	Mike	**Test mode:**	802.11n(HT20) Tx mode
Test Channel:	Lowest channel	**Polarization:**	Horizontal
Test Voltage:	AC 120/60Hz	**Environment:**	Temp: 24℃ Huni: 57%

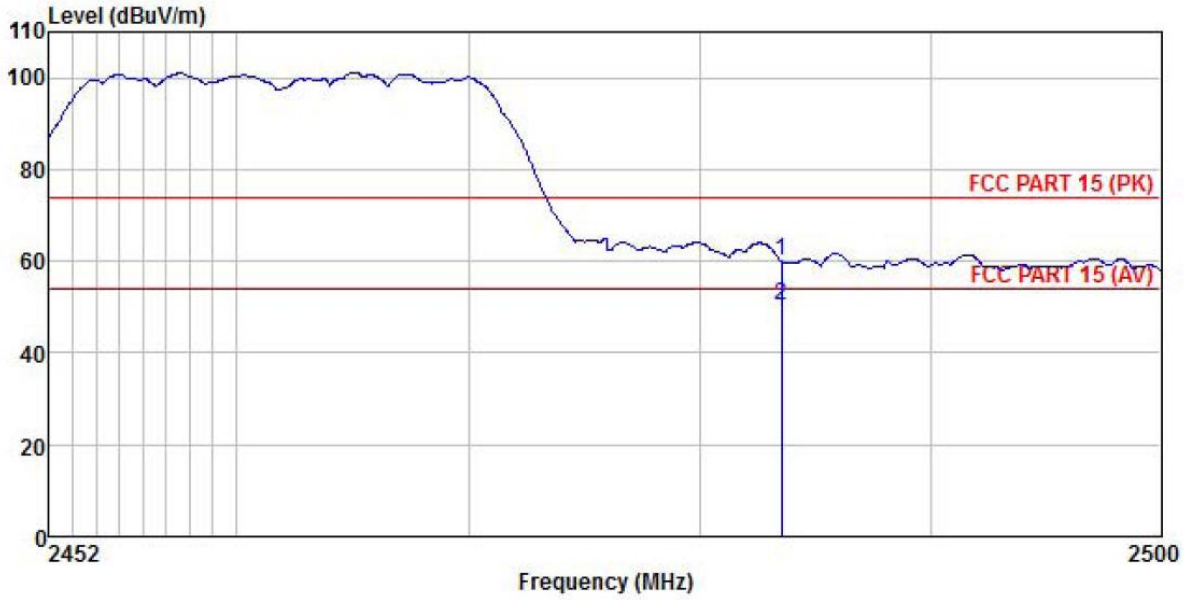


	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	2390.000	27.93	27.03	4.69	1.68	0.00	61.33	74.00	-12.67	Peak
2	2390.000	17.68	27.03	4.69	1.68	0.00	51.08	54.00	-2.92	Average

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

Product Name:	Dragon Fish Remote Control	**Product Model:**	DFRC-1
Test By:	Mike	**Test mode:**	802.11n(HT20) Tx mode
Test Channel:	Highest channel	**Polarization:**	Vertical
Test Voltage:	AC 120/60Hz	**Environment:**	Temp: 24℃ Huni: 57%

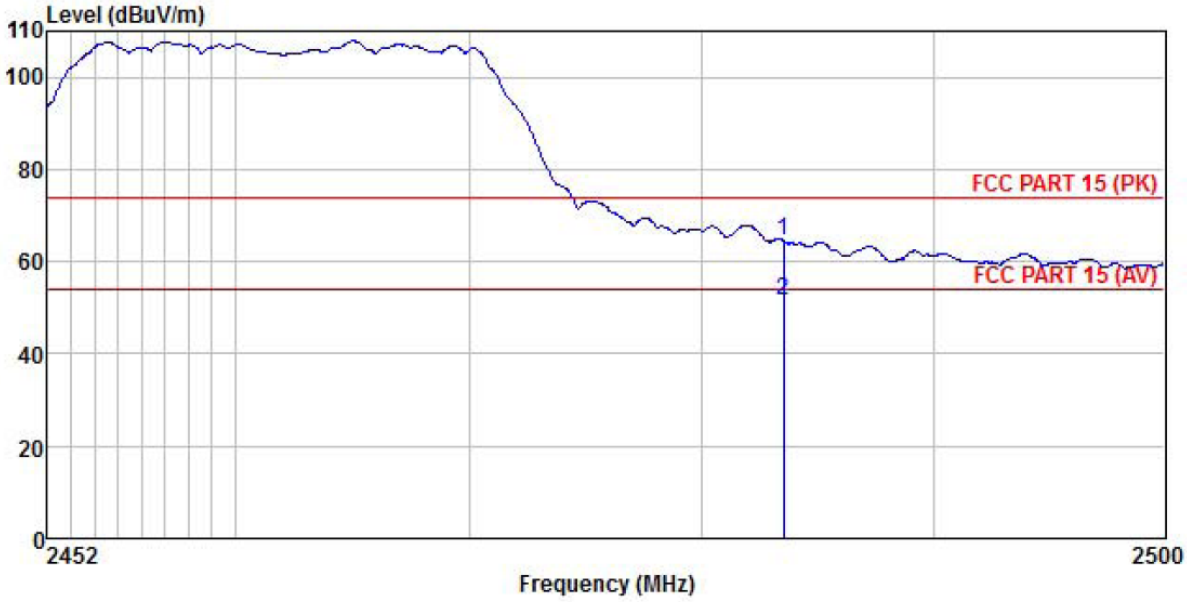


	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	2483.500	26.22	27.27	4.81	1.70	0.00	60.00	74.00	-14.00	Peak
2	2483.500	16.64	27.27	4.81	1.70	0.00	50.42	54.00	-3.58	Average

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

Product Name:	Dragon Fish Remote Control	**Product Model:**	DFRC-1
Test By:	Mike	**Test mode:**	802.11n(HT20) Tx mode
Test Channel:	Highest channel	**Polarization:**	Horizontal
Test Voltage:	AC 120/60Hz	**Environment:**	Temp: 24℃ Huni: 57%



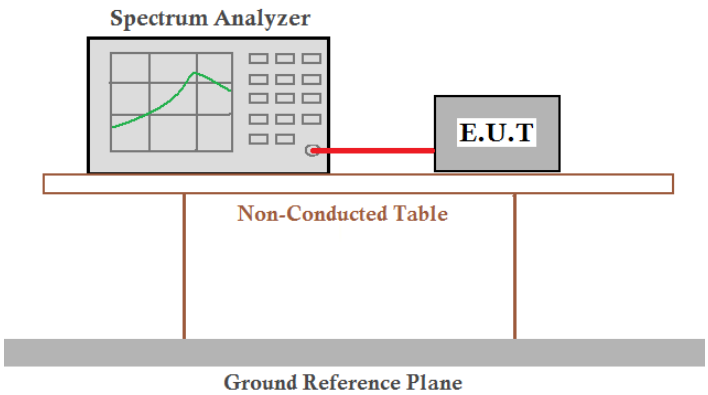
	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	2483.500	30.83	27.27	4.81	1.70	0.00	64.61	74.00	-9.39	Peak
2	2483.500	17.62	27.27	4.81	1.70	0.00	51.40	54.00	-2.60	Average

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

6.7 Spurious Emission

6.7.1 Conducted Emission Method

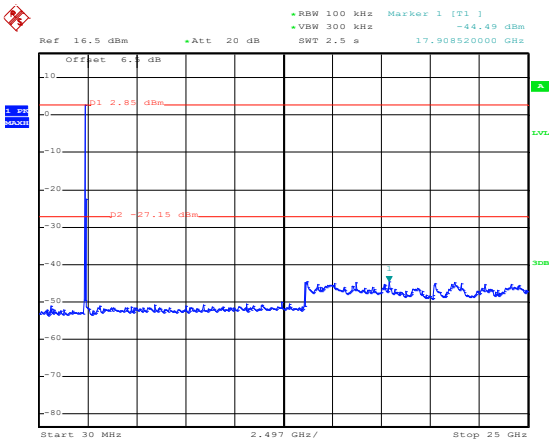
Test Requirement:	FCC Part 15 C Section 15.247 (d)
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth 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 5.9 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

Test plot as follows (module 1):

Test mode: 802.11g

ANT 1

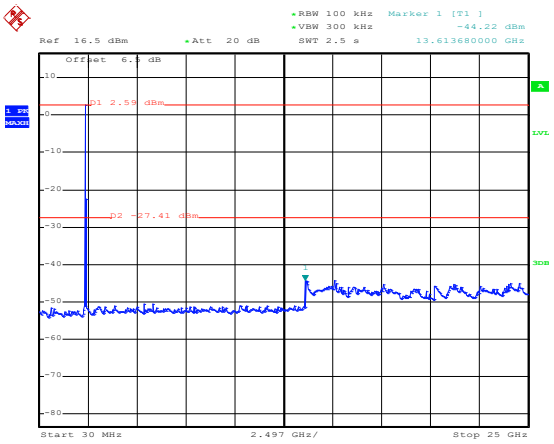
Lowest channel



Date: 10.OCT.2020 18:19:14

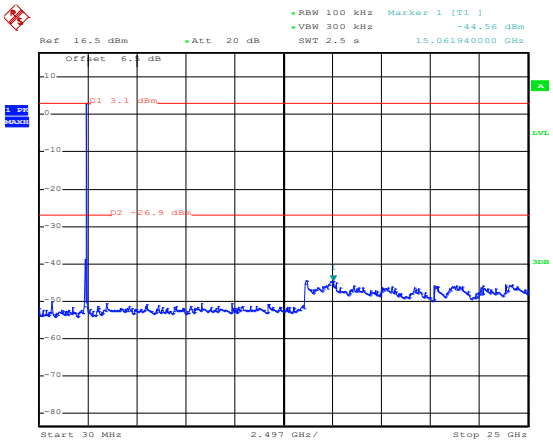
ANT 2

Lowest channel



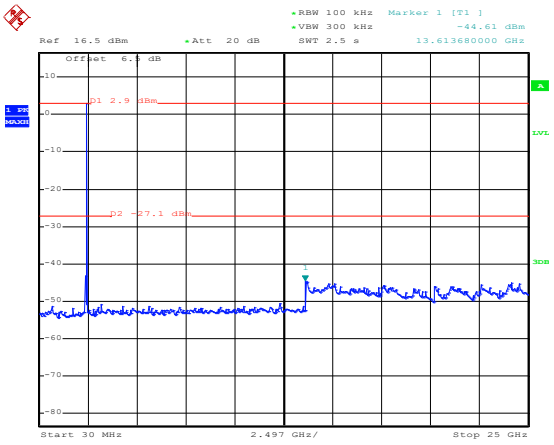
Date: 10.OCT.2020 17:27:31

Middle channel



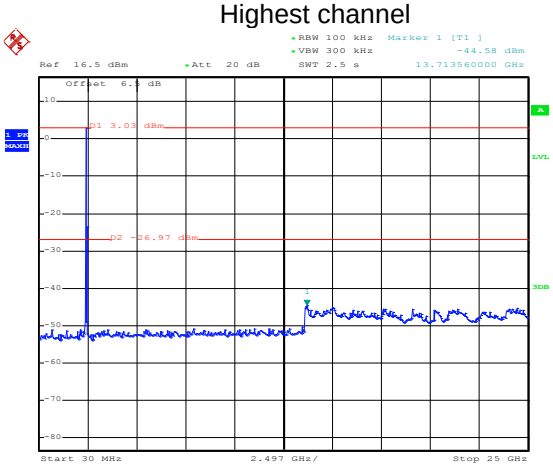
Date: 10.OCT.2020 18:16:39

Middle channel



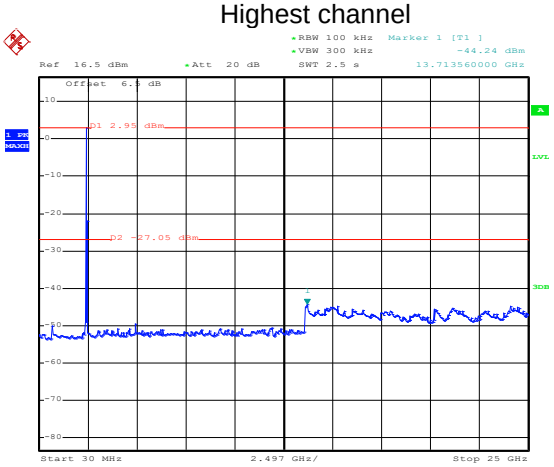
Date: 10.OCT.2020 17:28:21

Highest channel



Date: 10.OCT.2020 18:15:38

Highest channel

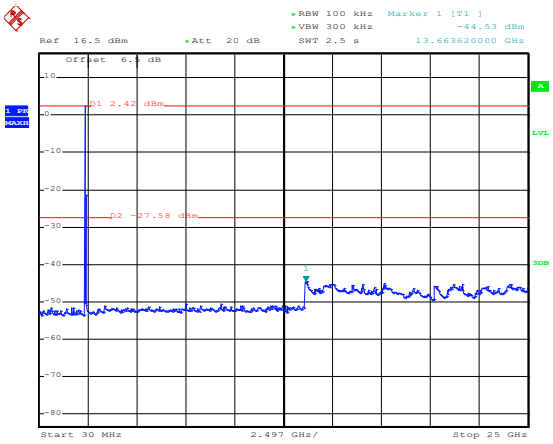


Date: 10.OCT.2020 17:30:54

Test mode: 802.11n(HT20)

ANT 1

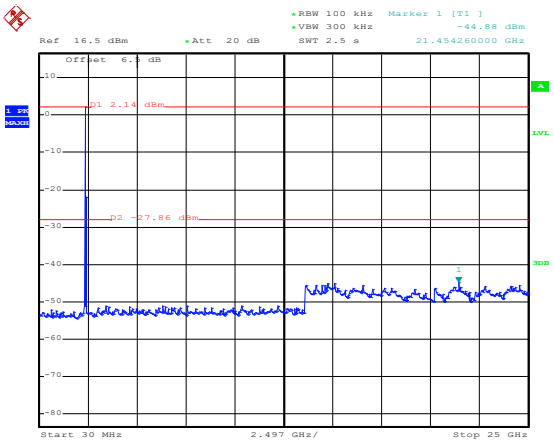
Lowest channel



Date: 10.OCT.2020 18:38:28

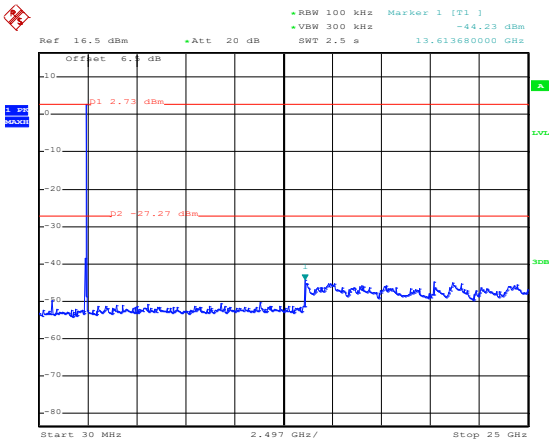
ANT 2

Lowest channel



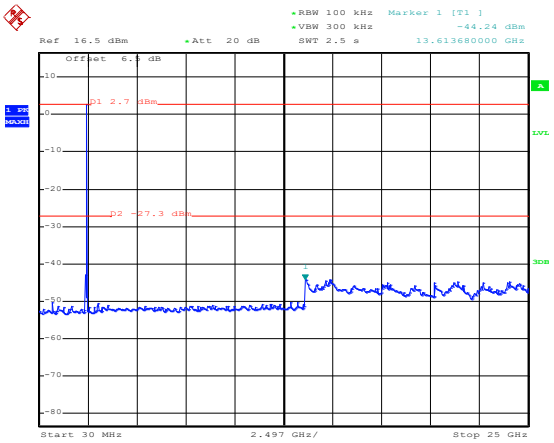
Date: 10.OCT.2020 17:39:54

Middle channel



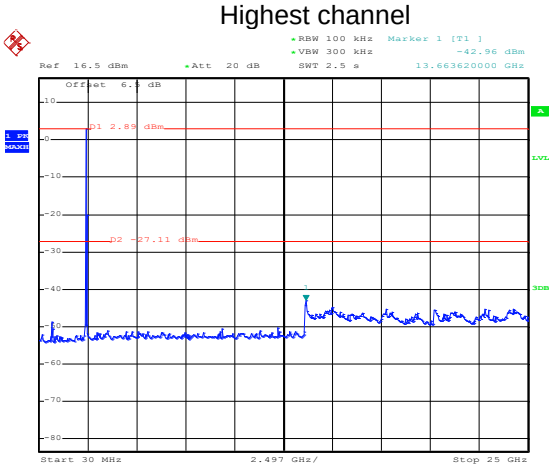
Date: 10.OCT.2020 18:12:41

Middle channel



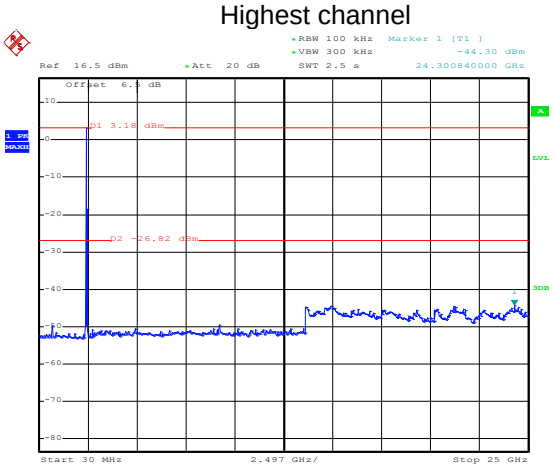
Date: 10.OCT.2020 17:39:15

Highest channel



Date: 10.OCT.2020 18:13:37

Highest channel



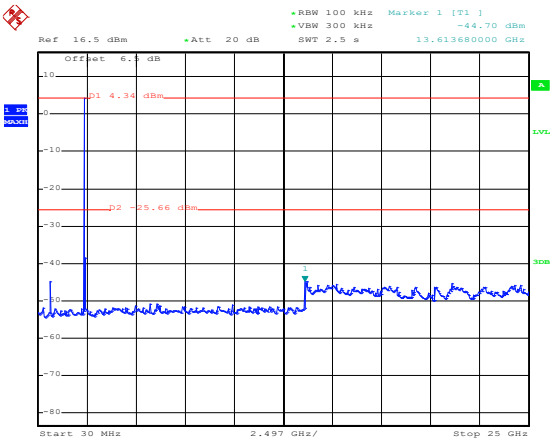
Date: 10.OCT.2020 17:35:58

Test plot as follows (module 2):

Test mode: 802.11b

ANT 3

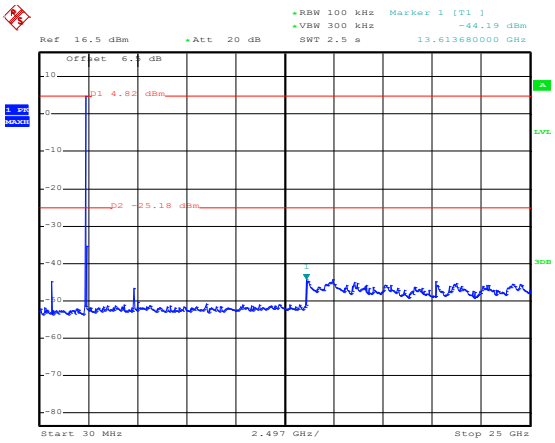
Lowest channel



Date: 10.OCT.2020 22:31:05

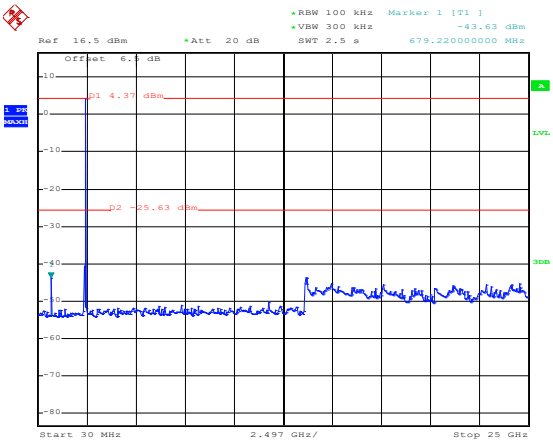
ANT 4

Lowest channel



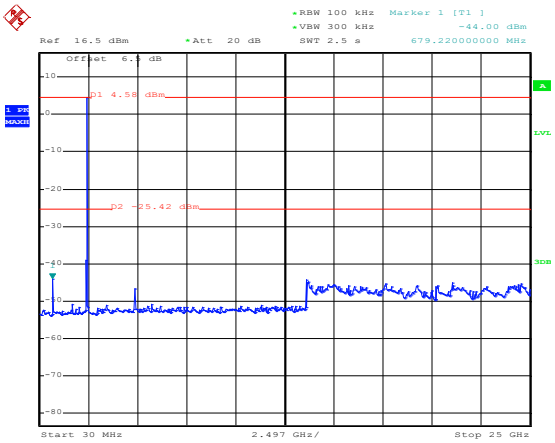
Date: 10.OCT.2020 21:49:14

Middle channel



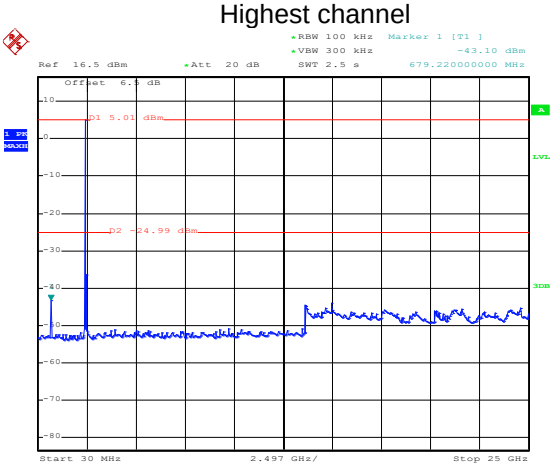
Date: 10.OCT.2020 22:31:39

Middle channel



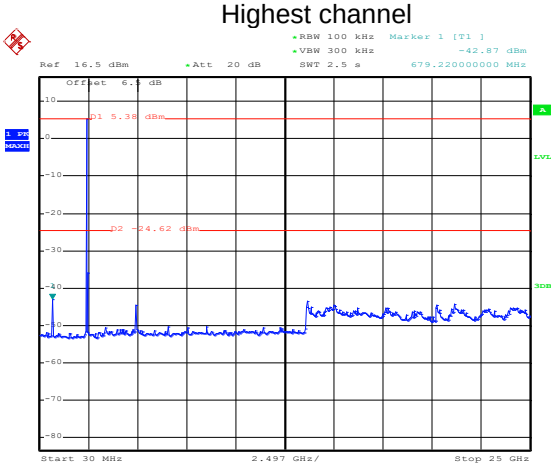
Date: 10.OCT.2020 21:50:32

Highest channel



Date: 10.OCT.2020 22:32:48

Highest channel

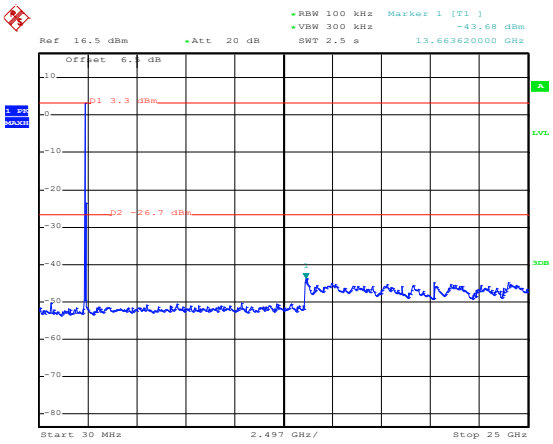


Date: 10.OCT.2020 21:53:21

Test mode: 802.11g

ANT 3

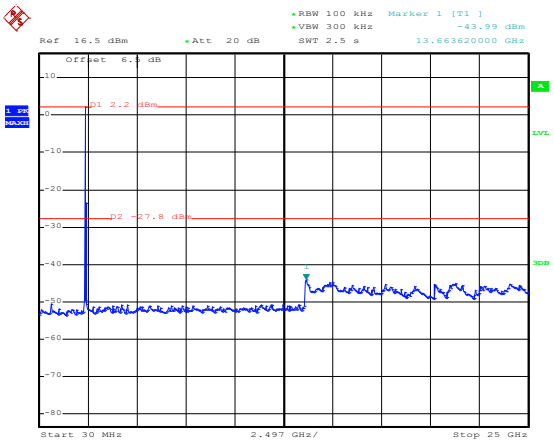
Lowest channel



Date: 10.OCT.2020 22:26:01

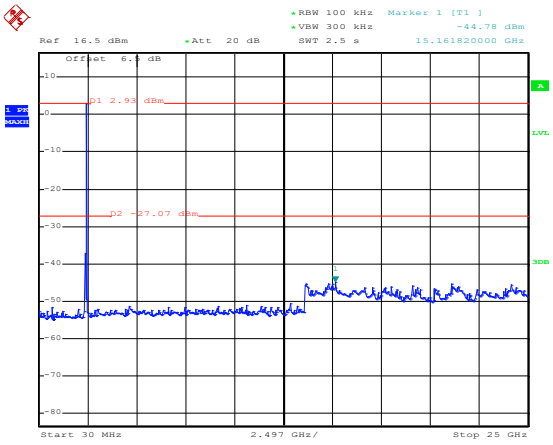
ANT 4

Lowest channel



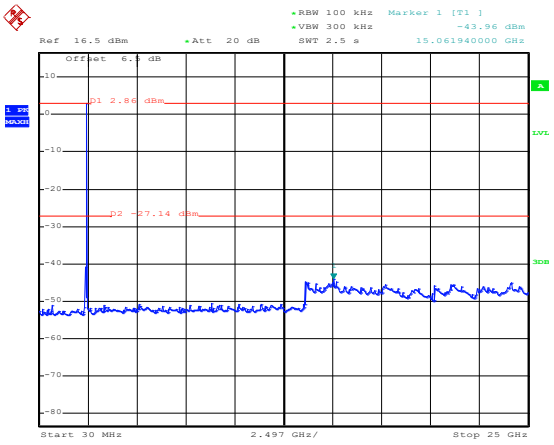
Date: 10.OCT.2020 21:47:15

Middle channel



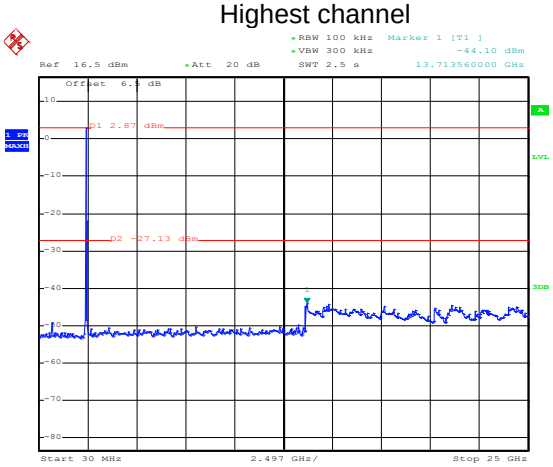
Date: 10.OCT.2020 22:26:26

Middle channel



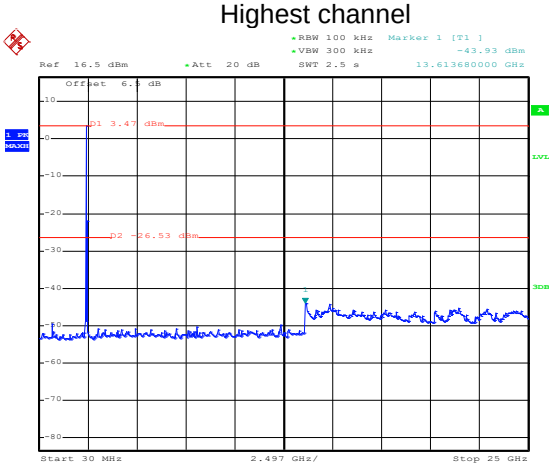
Date: 10.OCT.2020 21:44:23

Highest channel



Date: 10.OCT.2020 22:30:16

Highest channel

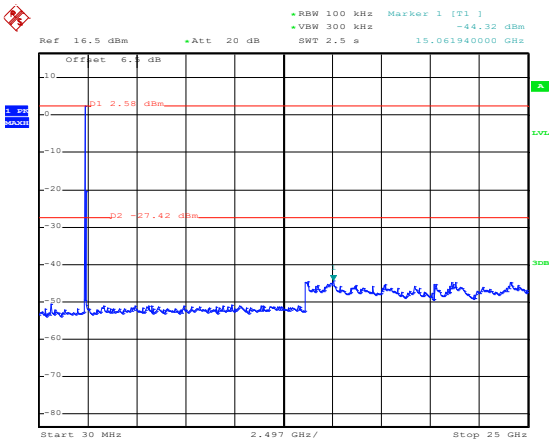


Date: 10.OCT.2020 21:42:38

Test mode: 802.11n(HT20)

ANT 3

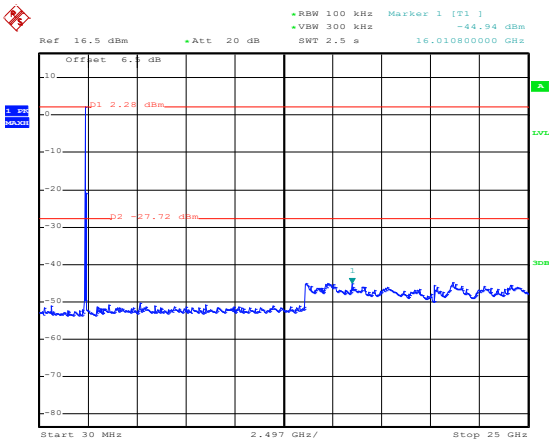
Lowest channel



Date: 10.OCT.2020 22:21:28

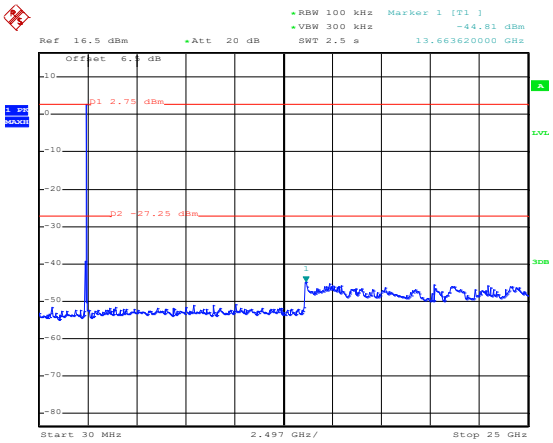
ANT 4

Lowest channel



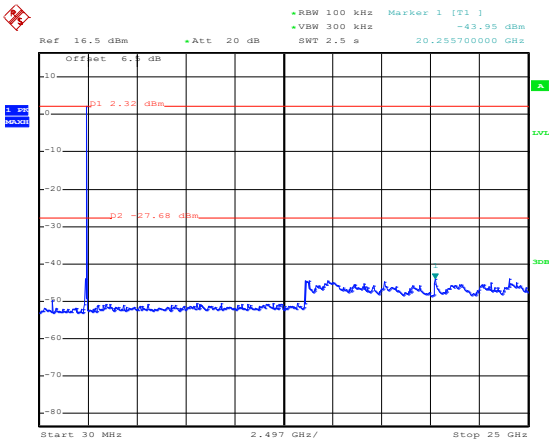
Date: 10.OCT.2020 21:32:29

Middle channel



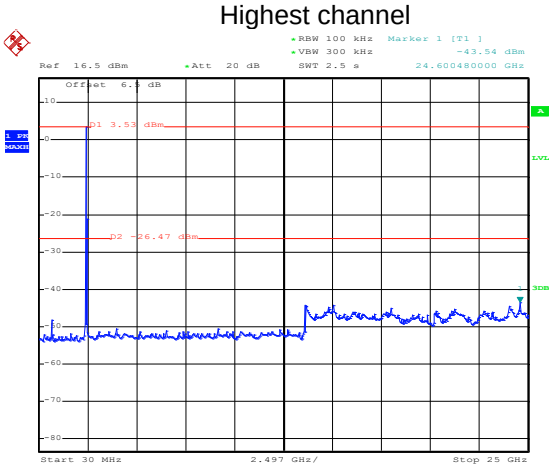
Date: 10.OCT.2020 22:21:58

Middle channel



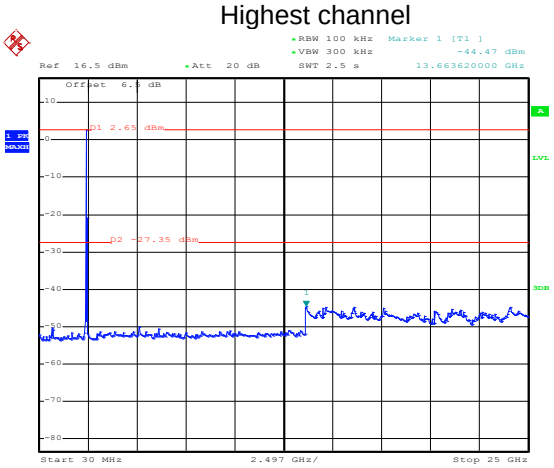
Date: 10.OCT.2020 21:37:21

Highest channel



Date: 10.OCT.2020 22:23:07

Highest channel



Date: 10.OCT.2020 21:56:37

6.7.2 Radiated Emission Method

Test Requirement:	FCC Part 15 C Section 15.209 and 15.205
Test Frequency Range:	9kHz to 25GHz
Test Distance:	3m

Receiver setup:

Frequency	Detector	RBW	VBW	Remark
30MHz-1GHz	Quasi-peak	120KHz	300KHz	Quasi-peak Value
Above 1GHz	Peak	1MHz	3MHz	Peak Value
	RMS	1MHz	3MHz	Average Value

Limit:

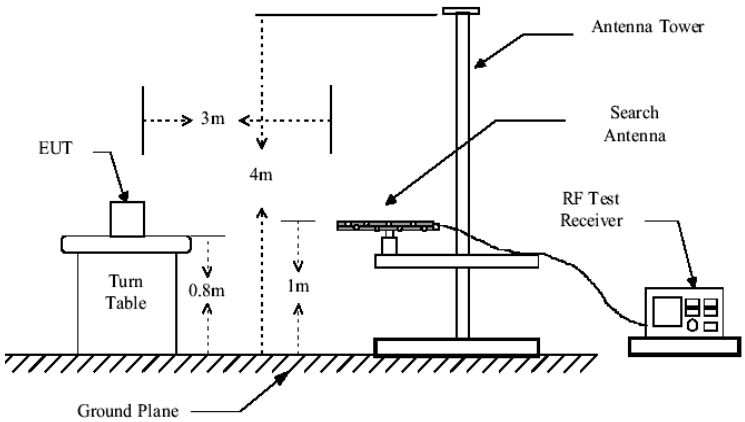
Frequency	Limit (dBuV/m @3m)	Remark
30MHz-88MHz	40.0	Quasi-peak Value
88MHz-216MHz	43.5	Quasi-peak Value
216MHz-960MHz	46.0	Quasi-peak Value
960MHz-1GHz	54.0	Quasi-peak Value
Above 1GHz	54.0	Average Value
	74.0	Peak Value

Test Procedure:

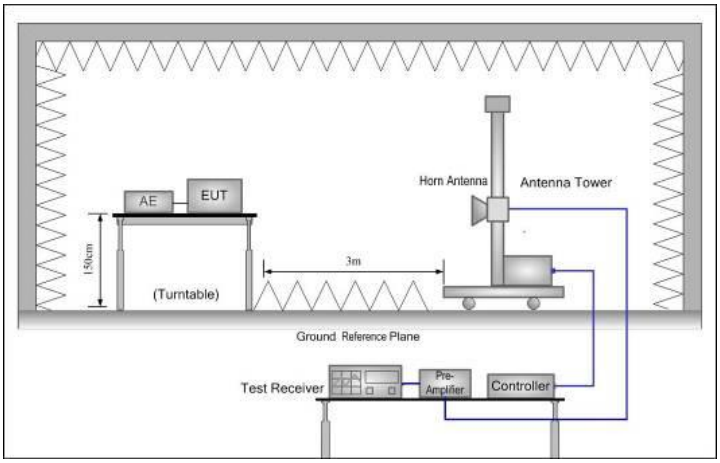
1. The EUT was placed on the top of a rotating table 0.8m(below 1GHz)/1.5m(above 1GHz) above the ground at a 3 meter chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.
5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

Test setup:

Below 1GHz



Above 1GHz

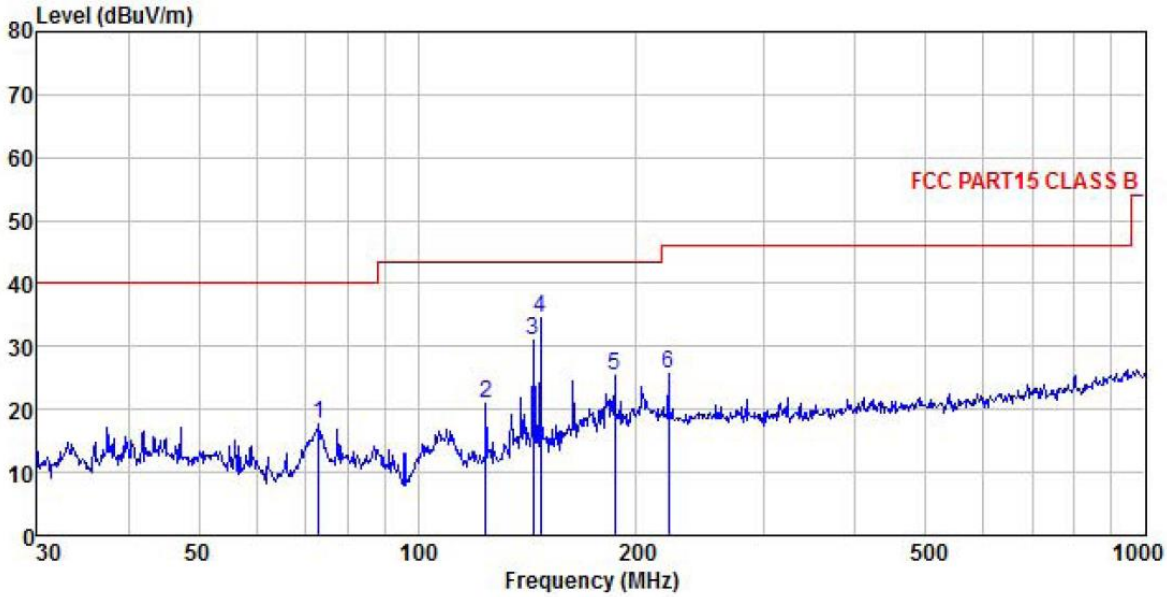
	
Test Instruments:	Refer to section 5.9 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed
Remark:	1. Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis is the worst case. 2. 9 kHz to 30MHz is lower than the limit 20dB, so only shows the data of above 30MHz in this report.

Measurement Data (worst case):

Below 1GHz:

Module 1:

Product Name:	Dragon Fish Remote Control	**Product Model:**	DFRC-1
Test By:	Mike	**Test mode:**	Wi-Fi Tx mode
Test Frequency:	30 MHz ~ 1 GHz	**Polarization:**	Vertical
Test Voltage:	AC 120/60Hz	**Environment:**	Temp: 24℃ Huni: 57%

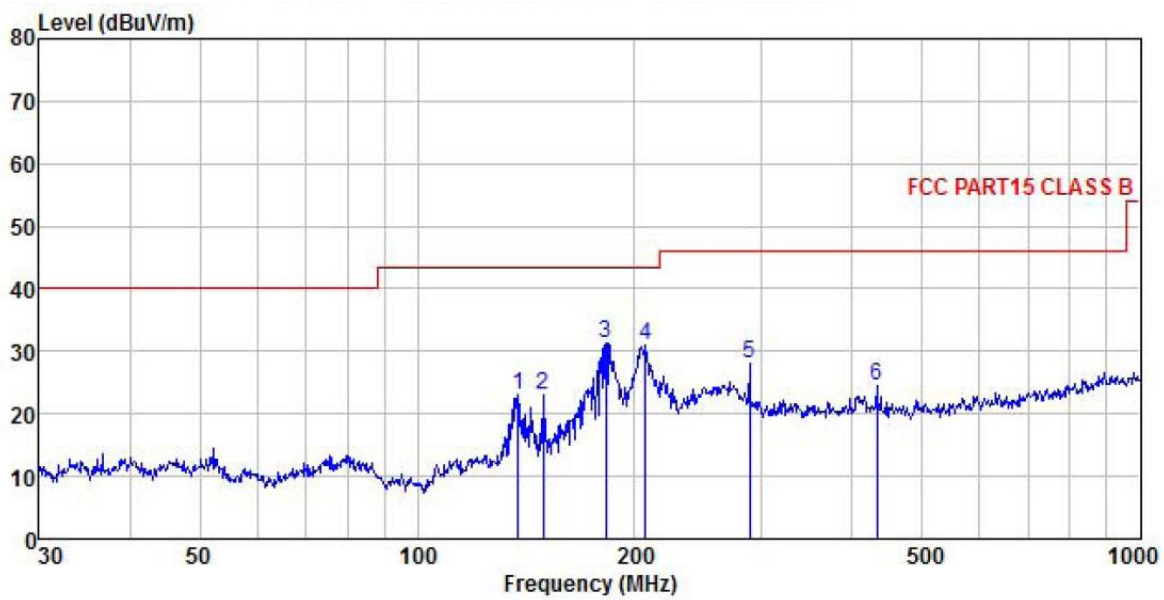


	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	73.103	35.97	10.98	0.45	0.00	29.69	17.71	40.00	-22.29	QP
2	124.133	38.58	11.28	0.58	0.00	29.36	21.08	43.50	-22.42	QP
3	144.335	45.62	13.89	0.61	0.00	29.25	30.87	43.50	-12.63	QP
4	147.404	49.13	14.10	0.61	0.00	29.23	34.61	43.50	-8.89	QP
5	186.441	36.32	17.26	0.69	0.00	28.93	25.34	43.50	-18.16	QP
6	221.392	35.31	18.39	0.74	0.00	28.70	25.74	46.00	-20.26	QP

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*
3. *The Aux Factor is a notch filter switch box loss, this item is not used.*

Product Name:	Dragon Fish Remote Control	**Product Model:**	DFRC-1
Test By:	Mike	**Test mode:**	Wi-Fi Tx mode
Test Frequency:	30 MHz ~ 1 GHz	**Polarization:**	Horizontal
Test Voltage:	AC 120/60Hz	**Environment:**	Temp: 24℃ Huni: 57%



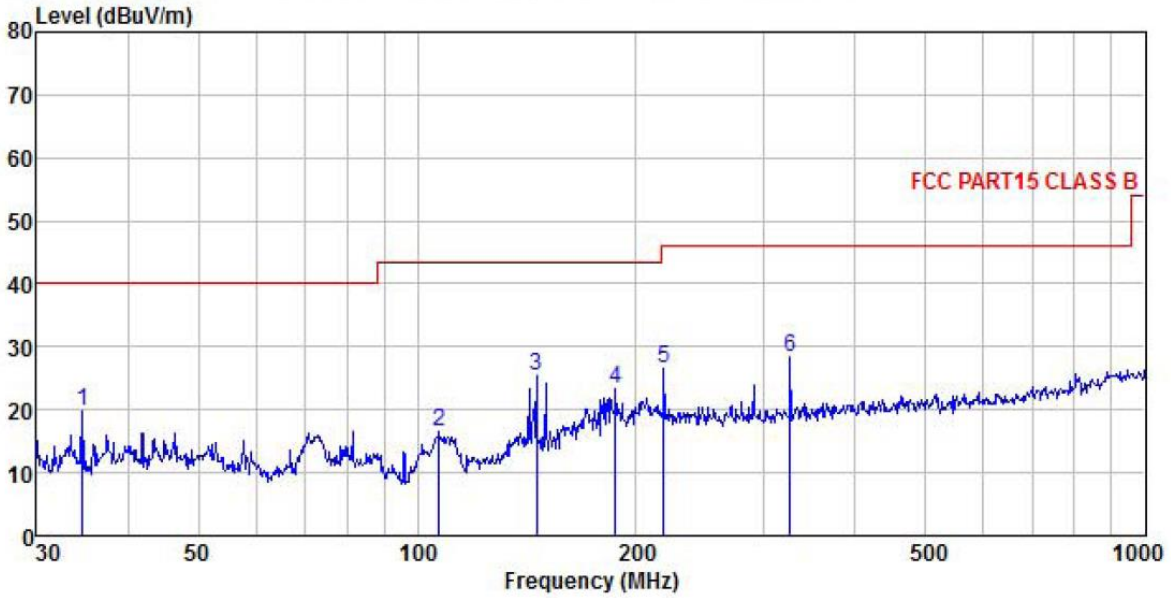
	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	137.903	37.96	13.68	0.60	0.00	29.28	22.96	43.50	-20.54	QP
2	149.486	37.39	14.26	0.62	0.00	29.22	23.05	43.50	-20.45	QP
3	182.559	42.60	17.05	0.69	0.00	28.95	31.39	43.50	-12.11	QP
4	207.123	40.72	18.33	0.73	0.00	28.78	31.00	43.50	-12.50	QP
5	287.990	37.09	18.65	0.85	0.00	28.47	28.12	46.00	-17.88	QP
6	432.546	33.13	19.17	1.03	0.00	28.84	24.49	46.00	-21.51	QP

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*
3. *The Aux Factor is a notch filter switch box loss, this item is not used.*

Module 2:

Product Name:	Dragon Fish Remote Control	**Product Model:**	DFRC-1
Test By:	Mike	**Test mode:**	Wi-Fi Tx mode
Test Frequency:	30 MHz ~ 1 GHz	**Polarization:**	Vertical
Test Voltage:	AC 120/60Hz	**Environment:**	Temp: 24℃ Huni: 57%

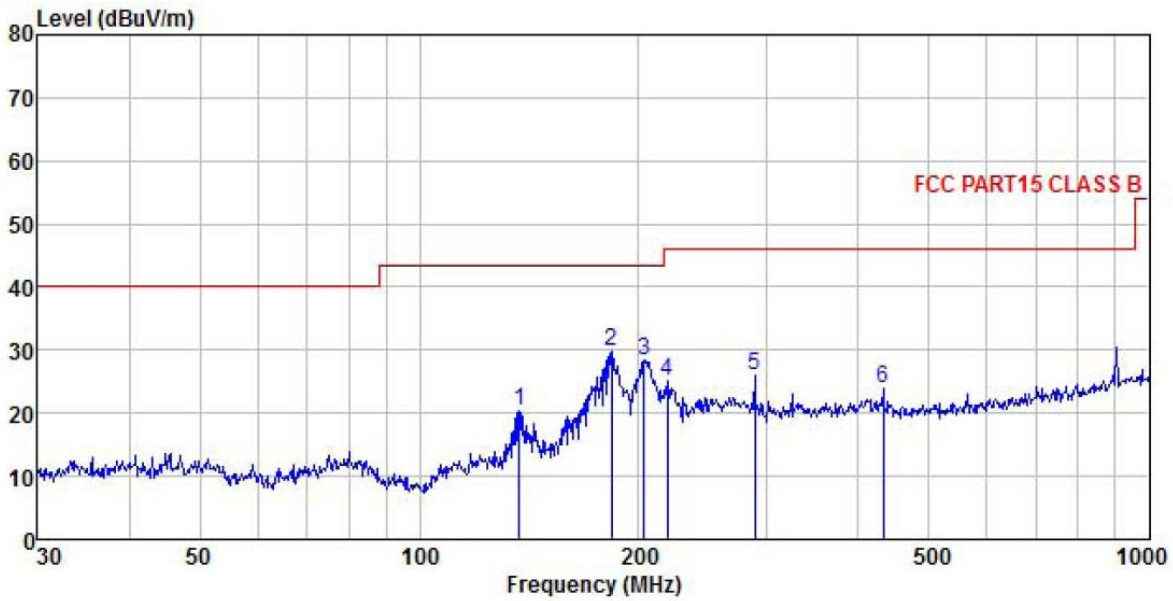


	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	34.639	36.79	12.55	0.34	0.00	29.95	19.73	40.00	-20.27	QP
2	107.134	35.68	9.73	0.54	0.00	29.48	16.47	43.50	-27.03	QP
3	145.861	40.18	13.98	0.61	0.00	29.24	25.53	43.50	-17.97	QP
4	187.096	34.22	17.29	0.69	0.00	28.92	23.28	43.50	-20.22	QP
5	218.309	36.06	18.38	0.74	0.00	28.72	26.46	46.00	-19.54	QP
6	325.596	37.06	18.75	0.90	0.00	28.51	28.20	46.00	-17.80	QP

Remark:

4. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
5. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*
6. *The Aux Factor is a notch filter switch box loss, this item is not used.*

Product Name:	Dragon Fish Remote Control	**Product Model:**	DFRC-1
Test By:	Mike	**Test mode:**	Wi-Fi Tx mode
Test Frequency:	30 MHz ~ 1 GHz	**Polarization:**	Horizontal
Test Voltage:	AC 120/60Hz	**Environment:**	Temp: 24℃ Huni: 57%



	Freq	Read Level	Antenna Factor	Cable Loss	Aux Factor	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dB	dBuV/m	dBuV/m	dB	
1	136.939	35.47	13.62	0.60	0.00	29.29	20.40	43.50	-23.10	QP
2	183.201	40.84	17.09	0.69	0.00	28.95	29.67	43.50	-13.83	QP
3	203.523	38.07	18.32	0.72	0.00	28.81	28.30	43.50	-15.20	QP
4	219.075	34.68	18.38	0.74	0.00	28.71	25.09	46.00	-20.91	QP
5	287.990	35.00	18.65	0.85	0.00	28.47	26.03	46.00	-19.97	QP
6	432.546	32.62	19.17	1.03	0.00	28.84	23.98	46.00	-22.02	QP

Remark:

4. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
5. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*
6. *The Aux Factor is a notch filter switch box loss, this item is not used.*

Above 1GHz (Module 1 /ANT1):

802.11g									
Test channel: Lowest channel									
Detector: Peak Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4824.00	49.26	30.81	6.81	2.46	41.82	47.52	74.00	-26.48	Vertical
4824.00	48.35	30.81	6.81	2.46	41.82	46.61	74.00	-27.39	Horizontal
Detector: Average Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4824.00	39.69	30.81	6.81	2.46	41.82	37.95	54.00	-16.05	Vertical
4824.00	38.12	30.81	6.81	2.46	41.82	36.38	54.00	-17.62	Horizontal
Test channel: Middle channel									
Detector: Peak Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4874.00	49.65	30.93	6.85	2.47	41.84	48.06	74.00	-25.94	Vertical
4874.00	47.04	30.93	6.85	2.47	41.84	45.45	74.00	-28.55	Horizontal
Detector: Average Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4874.00	39.08	30.93	6.85	2.47	41.84	37.49	54.00	-16.51	Vertical
4874.00	37.78	30.93	6.85	2.47	41.84	36.19	54.00	-17.81	Horizontal
Test channel: Highest channel									
Detector: Peak Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4924.00	49.75	31.05	6.89	2.48	41.86	48.31	74.00	-25.69	Vertical
4924.00	50.00	31.05	6.89	2.48	41.86	48.56	74.00	-25.44	Horizontal
Detector: Average Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4924.00	39.57	31.05	6.89	2.48	41.86	38.13	54.00	-15.87	Vertical
4924.00	38.23	31.05	6.89	2.48	41.86	36.79	54.00	-17.21	Horizontal

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

Above 1GHz (Module 1 /ANT2):

802.11g									
Test channel: Lowest channel									
Detector: Peak Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4824.00	48.12	30.81	6.81	2.46	41.82	46.38	74.00	-27.62	Vertical
4824.00	47.72	30.81	6.81	2.46	41.82	45.98	74.00	-28.02	Horizontal
Detector: Average Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4824.00	38.70	30.81	6.81	2.46	41.82	36.96	54.00	-17.04	Vertical
4824.00	38.17	30.81	6.81	2.46	41.82	36.43	54.00	-17.57	Horizontal
Test channel: Middle channel									
Detector: Peak Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4874.00	48.33	30.93	6.85	2.47	41.84	46.74	74.00	-27.26	Vertical
4874.00	47.81	30.93	6.85	2.47	41.84	46.22	74.00	-27.78	Horizontal
Detector: Average Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4874.00	39.05	30.93	6.85	2.47	41.84	37.46	54.00	-16.54	Vertical
4874.00	37.79	30.93	6.85	2.47	41.84	36.20	54.00	-17.80	Horizontal
Test channel: Highest channel									
Detector: Peak Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4924.00	47.93	31.05	6.89	2.48	41.86	46.49	74.00	-27.51	Vertical
4924.00	47.87	31.05	6.89	2.48	41.86	46.43	74.00	-27.57	Horizontal
Detector: Average Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4924.00	39.27	31.05	6.89	2.48	41.86	37.83	54.00	-16.17	Vertical
4924.00	38.09	31.05	6.89	2.48	41.86	36.65	54.00	-17.35	Horizontal

Remark:

3. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.

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

802.11n(HT20) (MIMO)									
Test channel: Lowest channel									
Detector: Peak Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4824.00	48.32	30.81	6.81	2.46	41.82	46.58	74.00	-27.42	Vertical
4824.00	49.05	30.81	6.81	2.46	41.82	47.31	74.00	-26.69	Horizontal
Detector: Average Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4824.00	38.65	30.81	6.81	2.46	41.82	36.91	54.00	-17.09	Vertical
4824.00	39.16	30.81	6.81	2.46	41.82	37.42	54.00	-16.58	Horizontal
Test channel: Middle channel									
Detector: Peak Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4874.00	48.30	30.93	6.85	2.47	41.84	46.71	74.00	-27.29	Vertical
4874.00	48.94	30.93	6.85	2.47	41.84	47.35	74.00	-26.65	Horizontal
Detector: Average Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4874.00	39.07	30.93	6.85	2.47	41.84	37.48	54.00	-16.52	Vertical
4874.00	38.98	30.93	6.85	2.47	41.84	37.39	54.00	-16.61	Horizontal
Test channel: Highest channel									
Detector: Peak Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4924.00	47.88	31.05	6.89	2.48	41.86	46.44	74.00	-27.56	Vertical
4924.00	48.87	31.05	6.89	2.48	41.86	47.43	74.00	-26.57	Horizontal
Detector: Average Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4924.00	39.08	31.05	6.89	2.48	41.86	37.64	54.00	-16.36	Vertical
4924.00	39.18	31.05	6.89	2.48	41.86	37.74	54.00	-16.26	Horizontal

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

Above 1GHz (Module 2 /ANT3):

802.11b									
Test channel: Lowest channel									
Detector: Peak Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4824.00	48.90	30.81	6.81	2.46	41.82	47.16	74.00	-26.84	Vertical
4824.00	48.74	30.81	6.81	2.46	41.82	47.00	74.00	-27.00	Horizontal
Detector: Average Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4824.00	38.64	30.81	6.81	2.46	41.82	36.90	54.00	-17.10	Vertical
4824.00	37.98	30.81	6.81	2.46	41.82	36.24	54.00	-17.76	Horizontal
Test channel: Middle channel									
Detector: Peak Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4874.00	48.91	30.93	6.85	2.47	41.84	47.32	74.00	-26.68	Vertical
4874.00	48.40	30.93	6.85	2.47	41.84	46.81	74.00	-27.19	Horizontal
Detector: Average Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4874.00	38.88	30.93	6.85	2.47	41.84	37.29	54.00	-16.71	Vertical
4874.00	37.56	30.93	6.85	2.47	41.84	35.97	54.00	-18.03	Horizontal
Test channel: Highest channel									
Detector: Peak Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4924.00	48.48	31.05	6.89	2.48	41.86	47.04	74.00	-26.96	Vertical
4924.00	48.33	31.05	6.89	2.48	41.86	46.89	74.00	-27.11	Horizontal
Detector: Average Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4924.00	39.02	31.05	6.89	2.48	41.86	37.58	54.00	-16.42	Vertical
4924.00	37.32	31.05	6.89	2.48	41.86	35.88	54.00	-18.12	Horizontal

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

802.11g									
Test channel: Lowest channel									
Detector: Peak Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4824.00	48.96	30.81	6.81	2.46	41.82	47.22	74.00	-26.78	Vertical
4824.00	48.79	30.81	6.81	2.46	41.82	47.05	74.00	-26.95	Horizontal
Detector: Average Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4824.00	38.93	30.81	6.81	2.46	41.82	37.19	54.00	-16.81	Vertical
4824.00	38.21	30.81	6.81	2.46	41.82	36.47	54.00	-17.53	Horizontal
Test channel: Middle channel									
Detector: Peak Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4874.00	48.95	30.93	6.85	2.47	41.84	47.36	74.00	-26.64	Vertical
4874.00	48.31	30.93	6.85	2.47	41.84	46.72	74.00	-27.28	Horizontal
Detector: Average Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4874.00	39.09	30.93	6.85	2.47	41.84	37.50	54.00	-16.50	Vertical
4874.00	38.44	30.93	6.85	2.47	41.84	36.85	54.00	-17.15	Horizontal
Test channel: Highest channel									
Detector: Peak Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4924.00	48.65	31.05	6.89	2.48	41.86	47.21	74.00	-26.79	Vertical
4924.00	48.34	31.05	6.89	2.48	41.86	46.90	74.00	-27.10	Horizontal
Detector: Average Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4924.00	39.53	31.05	6.89	2.48	41.86	38.09	54.00	-15.91	Vertical
4924.00	38.51	31.05	6.89	2.48	41.86	37.07	54.00	-16.93	Horizontal

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

Above 1GHz (Module 2 /ANT4):

802.11b									
Test channel: Lowest channel									
Detector: Peak Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4824.00	51.67	30.81	6.81	2.46	41.82	49.93	74.00	-24.07	Vertical
4824.00	51.88	30.81	6.81	2.46	41.82	50.14	74.00	-23.86	Horizontal
Detector: Average Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4824.00	41.86	30.81	6.81	2.46	41.82	40.12	54.00	-13.88	Vertical
4824.00	41.73	30.81	6.81	2.46	41.82	39.99	54.00	-14.01	Horizontal
Test channel: Middle channel									
Detector: Peak Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4874.00	51.26	30.93	6.85	2.47	41.84	49.67	74.00	-24.33	Vertical
4874.00	51.58	30.93	6.85	2.47	41.84	49.99	74.00	-24.01	Horizontal
Detector: Average Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4874.00	42.22	30.93	6.85	2.47	41.84	40.63	54.00	-13.37	Vertical
4874.00	41.25	30.93	6.85	2.47	41.84	39.66	54.00	-14.34	Horizontal
Test channel: Highest channel									
Detector: Peak Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4924.00	51.14	31.05	6.89	2.48	41.86	49.70	74.00	-24.30	Vertical
4924.00	51.74	31.05	6.89	2.48	41.86	50.30	74.00	-23.70	Horizontal
Detector: Average Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4924.00	42.09	31.05	6.89	2.48	41.86	40.65	54.00	-13.35	Vertical
4924.00	41.14	31.05	6.89	2.48	41.86	39.70	54.00	-14.30	Horizontal

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

802.11g									
Test channel: Lowest channel									
Detector: Peak Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4824.00	51.17	30.81	6.81	2.46	41.82	49.43	74.00	-24.57	Vertical
4824.00	51.65	30.81	6.81	2.46	41.82	49.91	74.00	-24.09	Horizontal
Detector: Average Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4824.00	42.09	30.81	6.81	2.46	41.82	40.35	54.00	-13.65	Vertical
4824.00	41.52	30.81	6.81	2.46	41.82	39.78	54.00	-14.22	Horizontal
Test channel: Middle channel									
Detector: Peak Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4874.00	51.39	30.93	6.85	2.47	41.84	49.80	74.00	-24.20	Vertical
4874.00	51.69	30.93	6.85	2.47	41.84	50.10	74.00	-23.90	Horizontal
Detector: Average Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4874.00	42.56	30.93	6.85	2.47	41.84	40.97	54.00	-13.03	Vertical
4874.00	41.45	30.93	6.85	2.47	41.84	39.86	54.00	-14.14	Horizontal
Test channel: Highest channel									
Detector: Peak Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4924.00	50.91	31.05	6.89	2.48	41.86	49.47	74.00	-24.53	Vertical
4924.00	52.17	31.05	6.89	2.48	41.86	50.73	74.00	-23.27	Horizontal
Detector: Average Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4924.00	42.37	31.05	6.89	2.48	41.86	40.93	54.00	-13.07	Vertical
4924.00	41.75	31.05	6.89	2.48	41.86	40.31	54.00	-13.69	Horizontal

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*

802.11n(HT20) (MIMO)									
Test channel: Lowest channel									
Detector: Peak Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4824.00	52.35	30.81	6.81	2.46	41.82	50.61	74.00	-23.39	Vertical
4824.00	50.96	30.81	6.81	2.46	41.82	49.22	74.00	-24.78	Horizontal
Detector: Average Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4824.00	41.87	30.81	6.81	2.46	41.82	40.13	54.00	-13.87	Vertical
4824.00	40.57	30.81	6.81	2.46	41.82	38.83	54.00	-15.17	Horizontal
Test channel: Middle channel									
Detector: Peak Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4874.00	52.51	30.93	6.85	2.47	41.84	50.92	74.00	-23.08	Vertical
4874.00	51.26	30.93	6.85	2.47	41.84	49.67	74.00	-24.33	Horizontal
Detector: Average Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4874.00	41.99	30.93	6.85	2.47	41.84	40.40	54.00	-13.60	Vertical
4874.00	40.93	30.93	6.85	2.47	41.84	39.34	54.00	-14.66	Horizontal
Test channel: Highest channel									
Detector: Peak Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4924.00	52.58	31.05	6.89	2.48	41.86	51.14	74.00	-22.86	Vertical
4924.00	50.87	31.05	6.89	2.48	41.86	49.43	74.00	-24.57	Horizontal
Detector: Average Value									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Aux Factor (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4924.00	41.66	31.05	6.89	2.48	41.86	40.22	54.00	-13.78	Vertical
4924.00	41.39	31.05	6.89	2.48	41.86	39.95	54.00	-14.05	Horizontal

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are lower than the limit 20dB and not show in test report.*