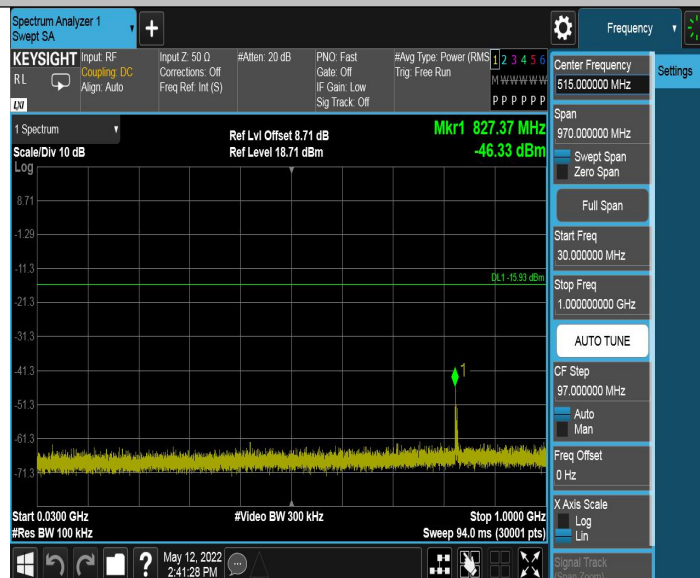


BLE_BT5.0(2Mbps)_Ant1_2402_0~Reference



BLE_BT5.0(2Mbps)_Ant1_2402_30~1000



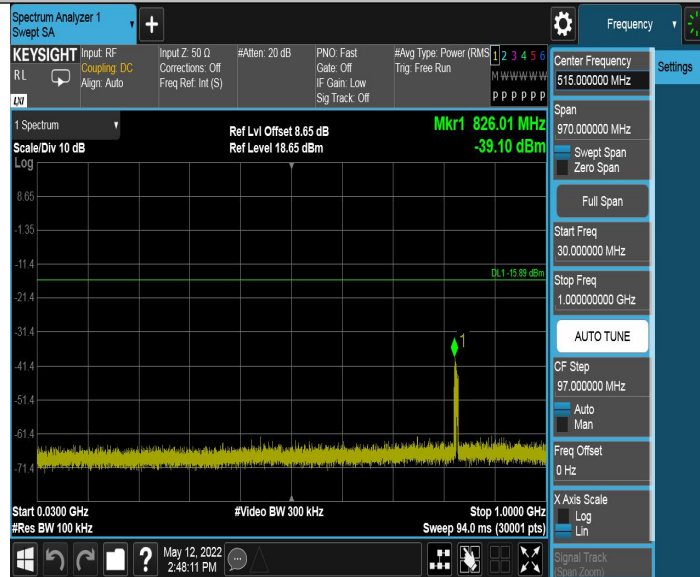
BLE_BT5.0(2Mbps)_Ant1_2402_1000~26500



BLE_BT5.0(2Mbps)_Ant1_2440_0~Reference



BLE_BT5.0(2Mbps)_Ant1_2440_30~1000



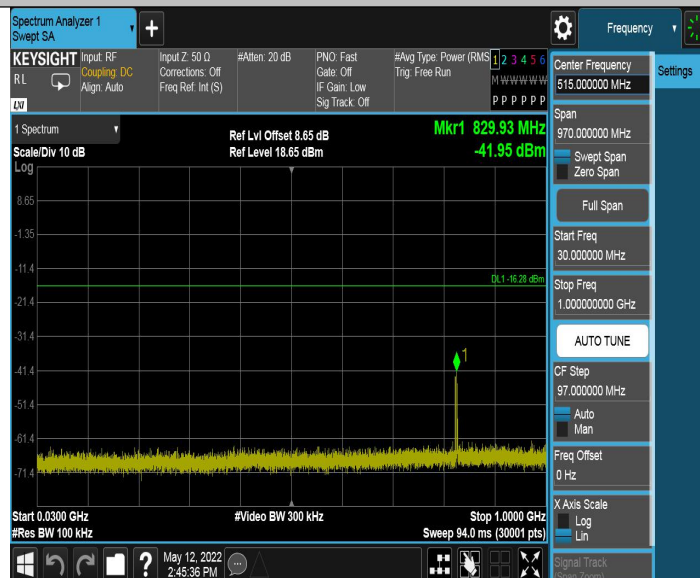
BLE_BT5.0(2Mbps)_Ant1_2440_1000~26500

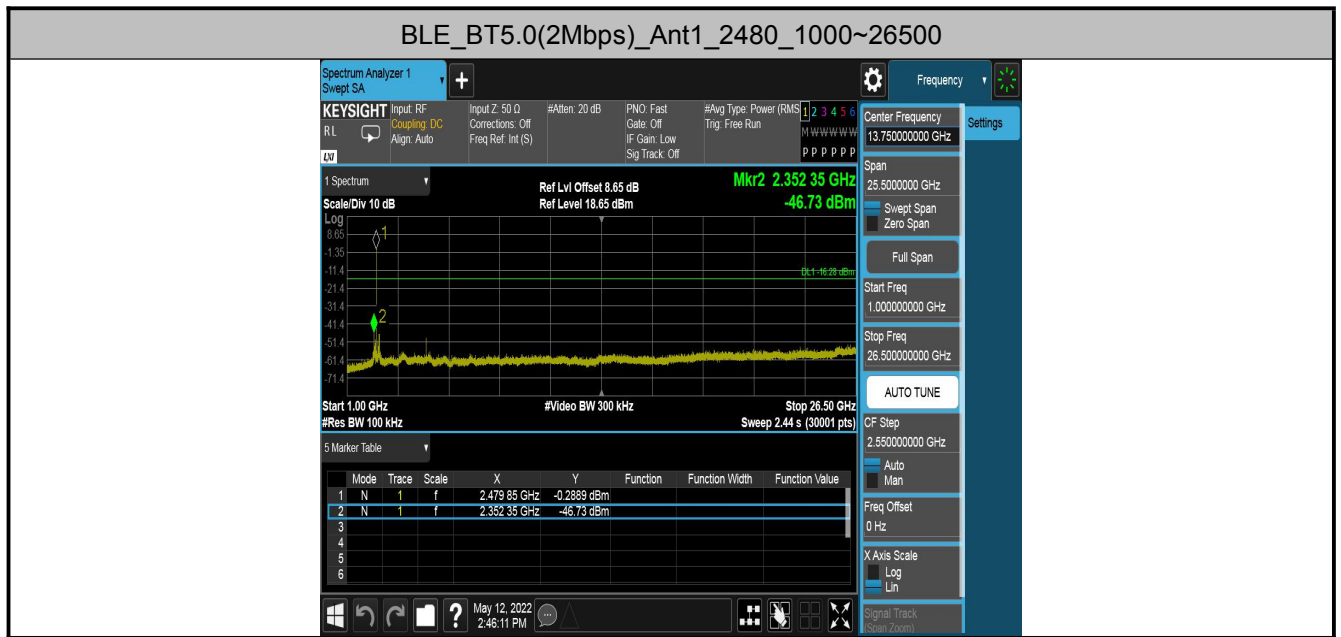


BLE_BT5.0(2Mbps)_Ant1_2480_0~Reference



BLE_BT5.0(2Mbps)_Ant1_2480_30~1000





7.6. Radiated Spurious Emission Measurement

7.6.1. Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [uV/m]	Measured Distance [Meters]
0.009 – 0.490	2400/F (kHz)	300
0.490 – 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

7.6.2. Test Procedure Used

ANSI C63.10-2013 – Section 6.6.4.3

7.6.3. Test Setting

Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = as specified in Table 1
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold

- Trace was allowed to stabilize

Table 1 - RBW as a function of frequency

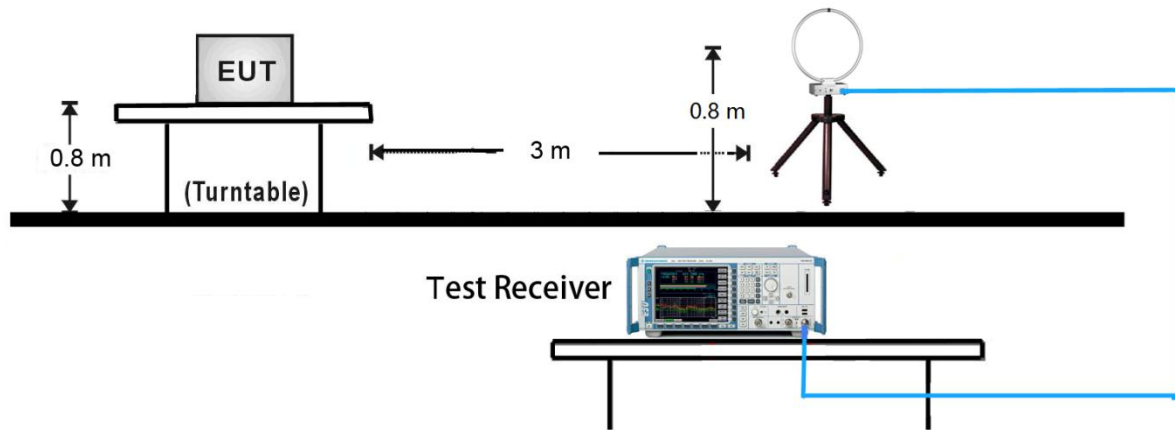
Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000 MHz	1 MHz

Average Field Strength Measurements

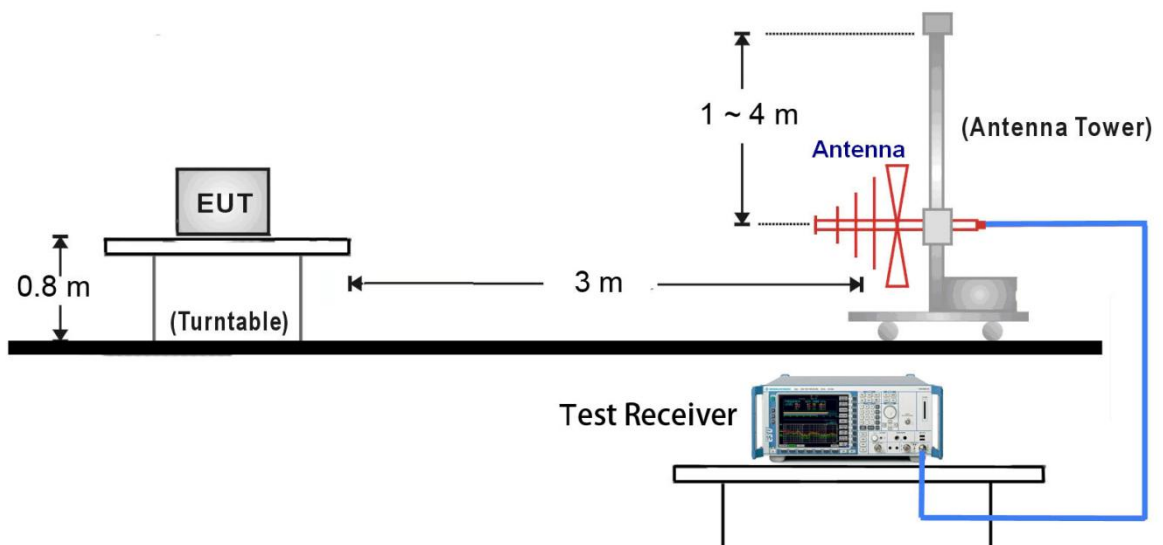
- Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- RBW = 1MHz
- VBW = 3MHz
- Detector = Power Average (RMS)
- Number of sweep point = 2001 (Number of sweep points must be $\geq 2 \times \text{span} / \text{RBW}$)
- Sweep time = auto
- Trace (RMS) averaging was performed over at least 100 traces.

7.6.4. Test Setup

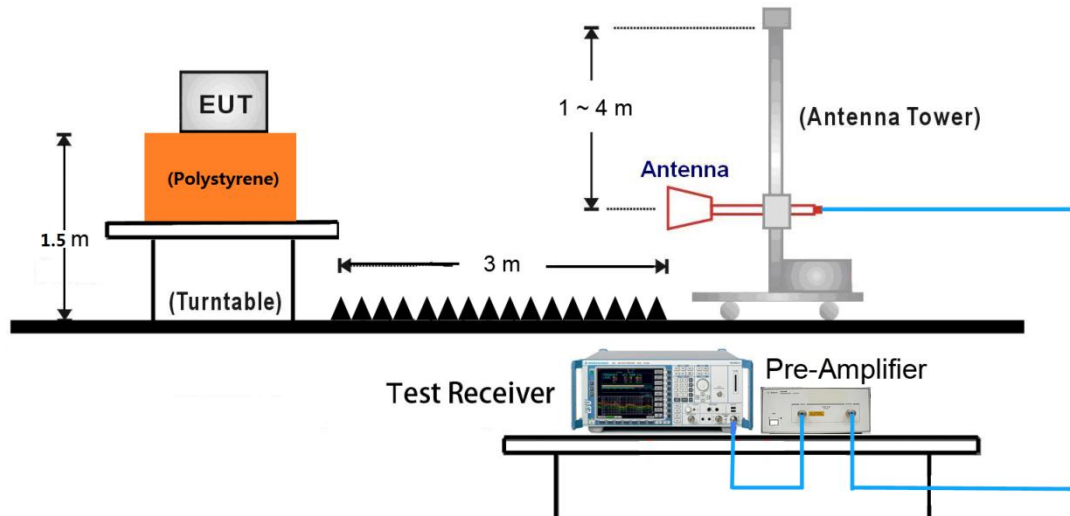
9kHz ~ 30MHz Test Setup:



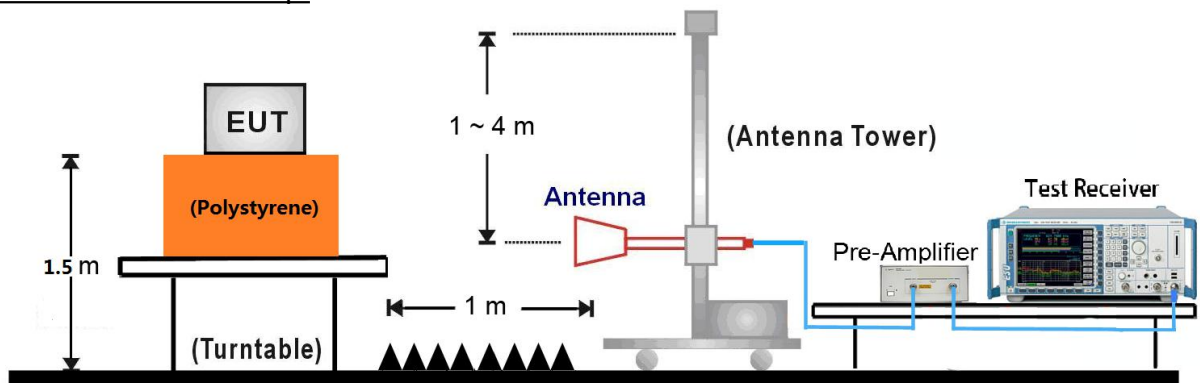
30MHz ~ 1GHz Test Setup:



1GHz ~ 18GHz Test Setup:



18GHz ~ 25GHz Test Setup:



7.6.5. Test Result

Test Mode:	BLE(1Mbps)	Test Date:	2022-05-11
Test Channel:	00	Test Engineer:	Amos Xia
Remark:	Average measurement was not performed if peak level lower than average limit. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Level (dBμV)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4805	57.74	7.39	74	16.26	Peak	Horizontal
	4805	44.12	7.39	54	9.88	AV	Horizontal
*	6360	47.74	12.14	81.98	34.24	Peak	Horizontal
*	7205	56.85	14.84	81.98	25.13	Peak	Horizontal
	7205	48.52	14.84	54	5.48	AV	Horizontal
	7355	50.41	14.88	74	23.59	Peak	Horizontal
	4800	48.55	7.39	74	25.45	Peak	Vertical
*	6780	48.99	13.6	81.98	32.99	Peak	Vertical
*	7205	54.63	14.84	81.98	27.35	Peak	Vertical
	7205	44.3	14.84	54	9.7	AV	Vertical
	7450	50.38	14.69	74	23.62	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (101.98dBμV/m) or 15.209 which is higher.

Test Mode:	BLE(1Mbps)	Test Date:	2022-05-11
Test Channel:	19	Test Engineer:	Amos Xia
Remark:	Average measurement was not performed if peak level lower than average limit. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Level (dBμV)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4880	56.91	7.47	74	17.09	Peak	Horizontal
	4880	47.07	7.47	54	6.93	AV	Horizontal
*	5945	46.21	10.18	80.62	34.41	Peak	Horizontal
*	6625	47.62	13.15	80.62	33	Peak	Horizontal
	7320	55.47	14.74	74	18.53	Peak	Horizontal
	7320	45.87	14.74	54	8.13	AV	Horizontal
	4880	48.65	7.47	74	25.35	Peak	Vertical
*	6035	47.1	10.53	80.62	33.52	Peak	Vertical
*	6595	48.04	12.98	80.62	32.58	Peak	Vertical
	7320	55.14	14.74	74	18.86	Peak	Vertical
	7320	45.65	14.74	54	8.35	AV	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (100.62dBμV/m) or 15.209 which is higher.

Test Mode:	BLE(1Mbps)	Test Date:	2022-05-11
Test Channel:	39	Test Engineer:	Amos Xia
Remark:	Average measurement was not performed if peak level lower than average limit. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Level (dBμV)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4960	55.35	7.58	74	18.65	Peak	Horizontal
	4960	45.92	7.58	54	8.08	AV	Horizontal
*	6380	47.45	12.24	79.2	26.55	Peak	Horizontal
*	6865	48.66	14.36	79.2	25.34	Peak	Horizontal
	7440	54.51	14.66	74	19.49	Peak	Horizontal
	7440	46.7	14.66	54	7.3	AV	Horizontal
	4960	47.67	7.58	74	26.33	Peak	Vertical
*	6310	47.08	11.85	79.2	26.92	Peak	Vertical
*	7005	50.65	14.65	79.2	23.35	Peak	Vertical
	7440	55.05	14.66	74	18.95	Peak	Vertical
	7440	46.41	14.66	54	7.59	AV	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (99.20dBμV/m) or 15.209 which is higher.

Test Mode:	BLE(2Mbps)	Test Date:	2022-05-11
Test Channel:	00	Test Engineer:	Amos Xia
Remark:	Average measurement was not performed if peak level lower than average limit. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Level (dBμV)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4800	57.15	7.39	74	16.85	Peak	Horizontal
	4800	44.35	7.39	54	9.65	AV	Horizontal
*	6690	47.73	13.34	82.35	26.27	Peak	Horizontal
*	7205	56.81	14.84	82.35	17.19	Peak	Horizontal
	7205	47.89	14.84	54	6.11	AV	Horizontal
	7690	50.32	14.86	74	23.68	Peak	Horizontal
	4800	48.26	7.39	74	25.74	Peak	Vertical
*	6675	47.74	13.32	82.35	26.26	Peak	Vertical
*	7205	53.35	14.84	82.35	20.65	Peak	Vertical
	7435	50.26	14.65	74	23.74	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (102.35dBμV/m) or 15.209 which is higher.

Test Mode:	BLE(2Mbps)	Test Date:	2022-05-11
Test Channel:	19	Test Engineer:	Amos Xia
Remark:	Average measurement was not performed if peak level lower than average limit. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Level (dBμV)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4880	56.5	7.47	74	17.5	Peak	Horizontal
	4880	47.18	7.47	54	6.82	AV	Horizontal
*	6005	46.69	10.36	81.61	27.31	Peak	Horizontal
*	6385	48.34	12.27	81.61	25.66	Peak	Horizontal
	7320	57.04	14.74	74	16.96	Peak	Horizontal
	7320	47.09	14.74	54	6.91	AV	Horizontal
	4880	47.92	7.47	74	26.08	Peak	Vertical
	4880	38.9	7.47	54	15.1	AV	Vertical
*	5770	46.43	9.87	81.61	27.57	Peak	Vertical
*	6435	47.62	12.24	81.61	26.38	Peak	Vertical
	7320	55.15	14.74	74	18.85	Peak	Vertical
	7320	44.02	14.74	54	9.98	AV	Vertical

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (101.61dBμV/m) or 15.209 which is higher.

Test Mode:	BLE(2Mbps)	Test Date:	2022-05-11
Test Channel:	39	Test Engineer:	Amos Xia
Remark:	Average measurement was not performed if peak level lower than average limit. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Level (dBμV)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4960	55.24	7.58	74	18.76	Peak	Horizontal
	4960	43.92	7.58	54	10.08	AV	Horizontal
*	5765	46.07	9.87	80.77	27.93	Peak	Horizontal
*	6905	48.96	14.54	80.77	25.04	Peak	Horizontal
	7440	53.75	14.66	74	20.25	Peak	Horizontal
	4960	47.65	7.58	74	26.35	Peak	Vertical
*	5990	46.38	10.31	80.77	27.62	Peak	Vertical
*	6755	48.28	13.46	80.77	25.72	Peak	Vertical
	7440	54.87	14.66	74	19.13	Peak	Vertical
	7440	46.45	14.66	54	7.55	AV	Vertical

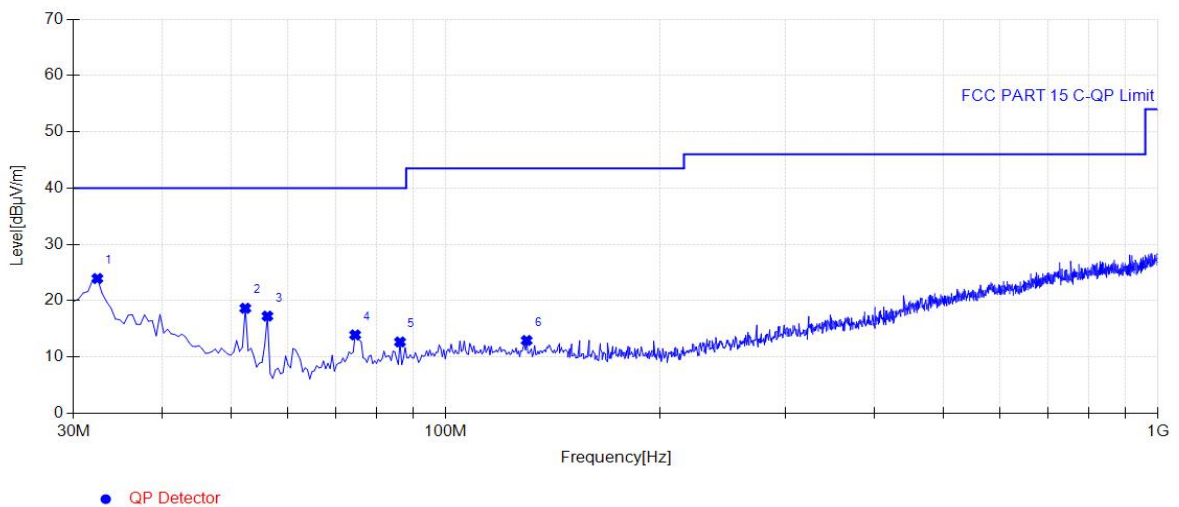
Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (100.77dBμV/m) or 15.209 which is higher.

The worst case of Radiated Emission below 1GHz:

30MHz – 1GHz Test Data

EUT:	E-BIKE	Polarity:	Horizontal
Model:	HF01	SN:	N/A
Mode:	Transmit at 2Mbps Channel 00	Voltage:	DC 3.3V
Environment:	Temp: 23°C; Humi:54%	Engineer:	Amos Xia

Test Graph



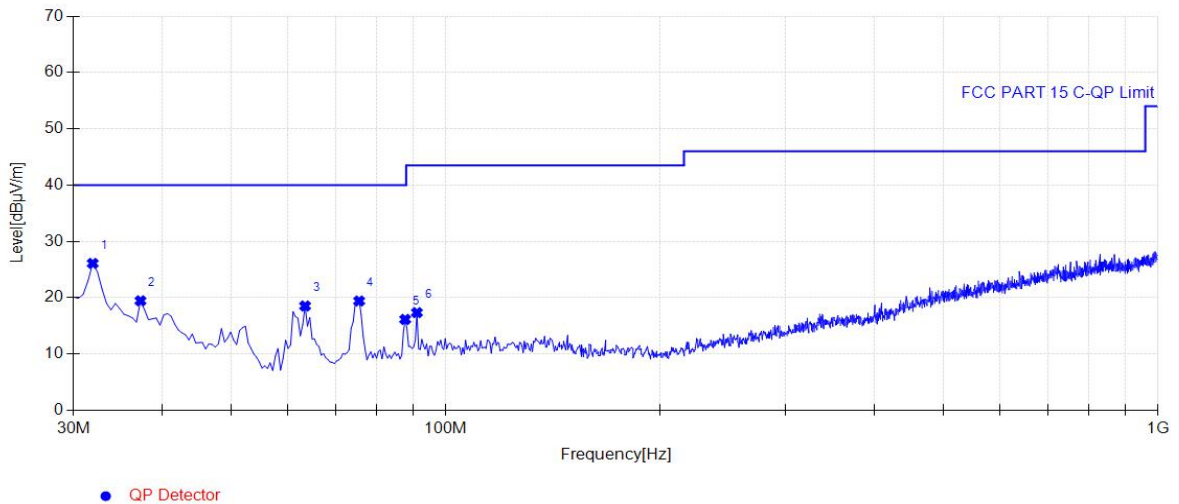
Final Data List

NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	32.4250	23.93	18.48	40.00	16.07	160	221	Horizontal
2	52.3100	18.65	8.89	40.00	21.35	160	288	Horizontal
3	56.1900	17.26	7.84	40.00	22.74	160	177	Horizontal
4	74.6200	13.92	9.09	40.00	26.08	160	360	Horizontal
5	86.2600	12.66	9.89	40.00	27.34	160	126	Horizontal
6	129.910	12.93	11.48	43.50	30.57	160	184	Horizontal

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 25GHz), therefore no data appear in the report.

EUT:	E-BIKE	Polarity:	Vertical
Model:	HF01	SN:	N/A
Mode:	Transmit at 2Mbps Channel 00	Voltage:	DC 3.3V
Environment:	Temp: 23°C; Humi:54%	Engineer:	Amos Xia

Test Graph



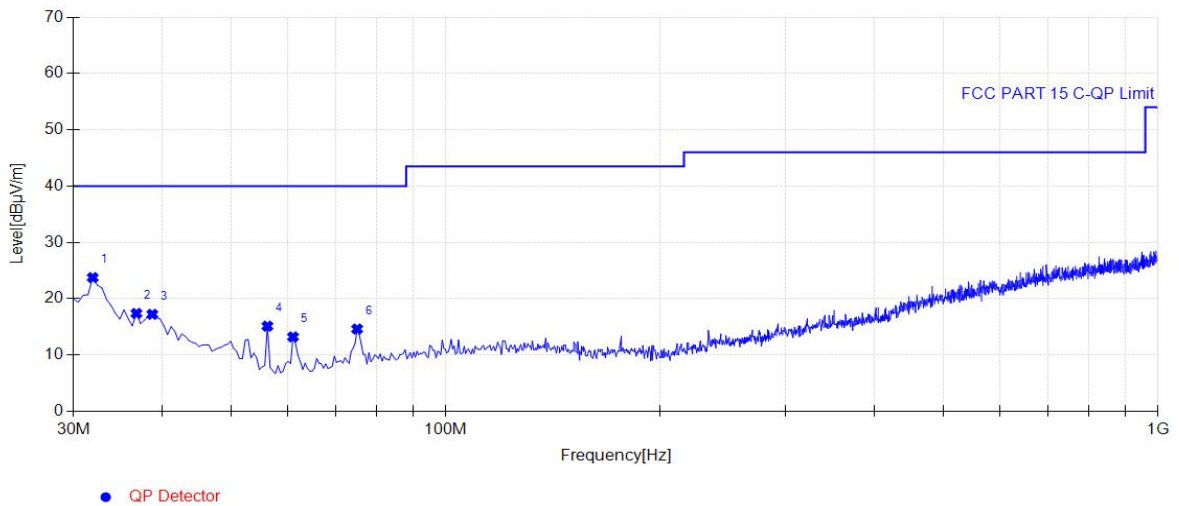
Final Data List

NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	31.9400	26.09	18.73	40.00	13.91	160	294	Vertical
2	37.2750	19.44	16.02	40.00	20.56	160	70	Vertical
3	63.4650	18.52	7.41	40.00	21.48	160	39	Vertical
4	75.5900	19.41	9.20	40.00	20.59	160	329	Vertical
5	87.7150	16.14	9.92	40.00	23.86	160	91	Vertical
6	91.1100	17.35	10.11	43.50	26.15	160	13	Vertical

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 25GHz), therefore no data appear in the report.

EUT:	E-BIKE	Polarity:	Horizontal
Model:	HF01	SN:	N/A
Mode:	Transmit at 2Mbps Channel 39	Voltage:	DC 3.3V
Environment:	Temp: 23°C; Humi:54%	Engineer:	Amos Xia

Test Graph



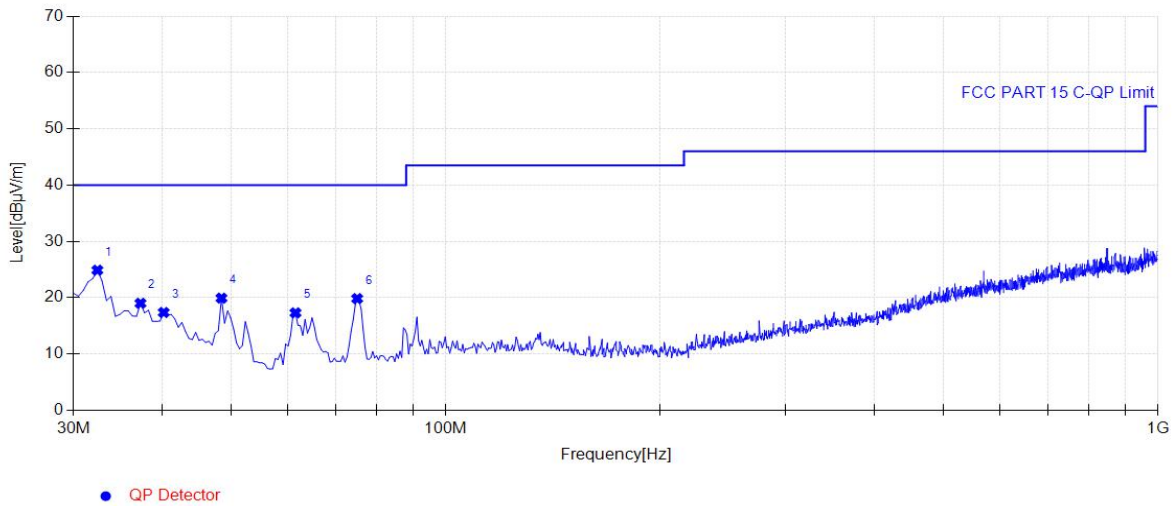
Final Data List

NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	31.9400	23.74	18.73	40.00	16.26	160	119	Horizontal
2	36.7900	17.38	16.27	40.00	22.62	160	119	Horizontal
3	38.7300	17.22	15.28	40.00	22.78	160	258	Horizontal
4	56.1900	15.12	7.84	40.00	24.88	160	236	Horizontal
5	61.0400	13.21	6.99	40.00	26.79	160	199	Horizontal
6	75.1050	14.61	9.14	40.00	25.39	160	10	Horizontal

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 25GHz), therefore no data appear in the report.

EUT:	E-BIKE	Polarity:	Vertical
Model:	HF01	SN:	N/A
Mode:	Transmit at 2Mbps Channel 39	Voltage:	DC 3.3V
Environment:	Temp: 23°C; Humi:54%	Engineer:	Amos Xia

Test Graph



Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	32.4250	24.88	18.48	40.00	15.12	160	52	Vertical
2	37.2750	19.00	16.02	40.00	21.00	160	127	Vertical
3	40.1850	17.37	14.54	40.00	22.63	160	250	Vertical
4	48.4300	19.92	10.32	40.00	20.08	160	18	Vertical
5	61.5250	17.30	7.08	40.00	22.70	160	40	Vertical
6	75.1050	19.83	9.14	40.00	20.17	160	302	Vertical

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 25GHz), therefore no data appear in the report.

7.7. Radiated Restricted Band Edge Measurement

7.7.1. Test Limit

For 15.205 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a).

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.25 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)
13.36 - 13.41	--	--	--

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [uV/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

For RSS-Gen Section 8.10 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 8.10 of RSS-Gen, must also comply with the radiated emission limits specified in Section 8.9.

Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.009 - 0.110	240 - 285	9.0 - 9.2
2.1735 - 2.1905	322 - 335.4	9.3 - 9.5
3.020 - 3.026	399.9 - 410	10.6 - 12.7
4.125 - 4.128	608 - 614	13.25 - 13.4
4.17725 - 4.17775	960 - 1427	14.47 - 14.5
4.20725 - 4.20775	1435 - 1626.5	15.35 - 16.2
5.677 - 5.683	1645.5 - 1646.5	17.7 - 21.4
6.215 - 6.218	1660 - 1710	22.01 - 23.12
6.26775 - 6.26825	1718.8 -1722.2	23.6 - 24.0
6.31175 - 6.31225	2200 - 2300	31.2 - 31.8
8.291 - 8.294	2310 -2390	36.43 - 36.5
8.362 - 8.366	2655 - 2900	Above 38.6
8.37625 - 8.38675	3260 - 3267	--
8.41425 - 8.41475	3332 -3339	
12.29 - 12.293	334.5 - 3358	
12.51975 - 12.52025	3500 - 4400	
12.57675 - 12.57725	4500 - 5150	
13.36 -13.41	5350 - 5460	
16.42 - 16.423	7250 - 7750	
16.69475 - 16.69525	8025 - 8500	
16.80425 - 16.80475	--	
25.5 - 25.67		
37.5 - 38.25		
73 - 74.6		
74.8 - 75.2		
108 - 138		
156.52475 - 156.525225		
156.7 - 156.9		

All out of band emissions appearing in a restricted band as specified in Section 8.10 of the RSS-Gen

must not exceed the limits shown in Table per Section 8.9.

RSS-Gen Section 8.9		
Frequency [MHz]	Field Strength [uV/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

7.7.2. Test Procedure Used

ANSI C63.10 Section 6.3 (General Requirements)

ANSI C63.10 Section 6.6 (Standard test method above 1GHz)

7.7.3. Test Setting

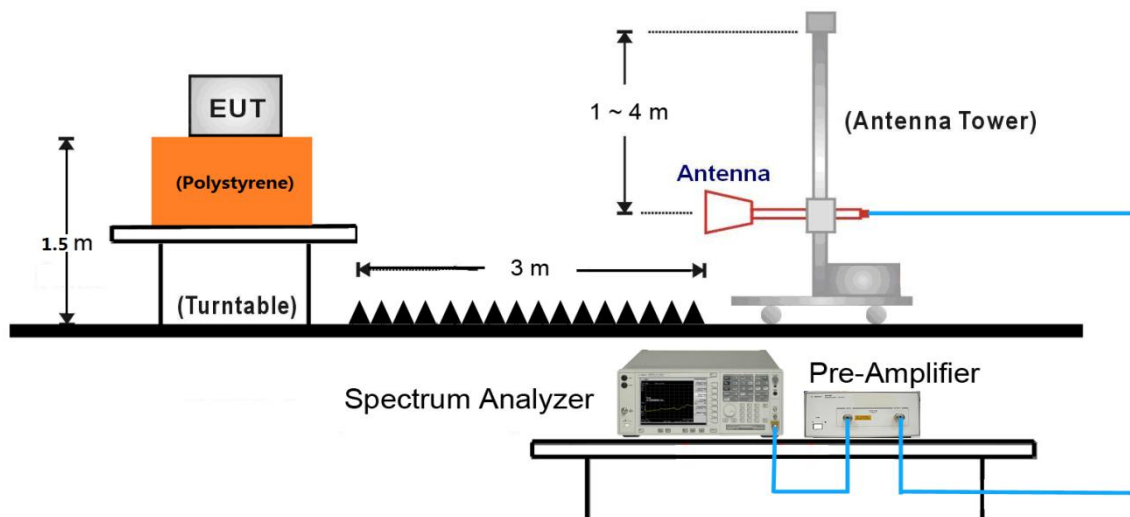
Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Average Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = Power Average (RMS)
5. Number of sweep point = 2001 (Number of sweep points must be $\geq 2 \times \text{span} / \text{RBW}$)
6. Sweep time = auto
7. Trace (RMS) averaging was performed over at least 100 traces.

7.7.4. Test Setup



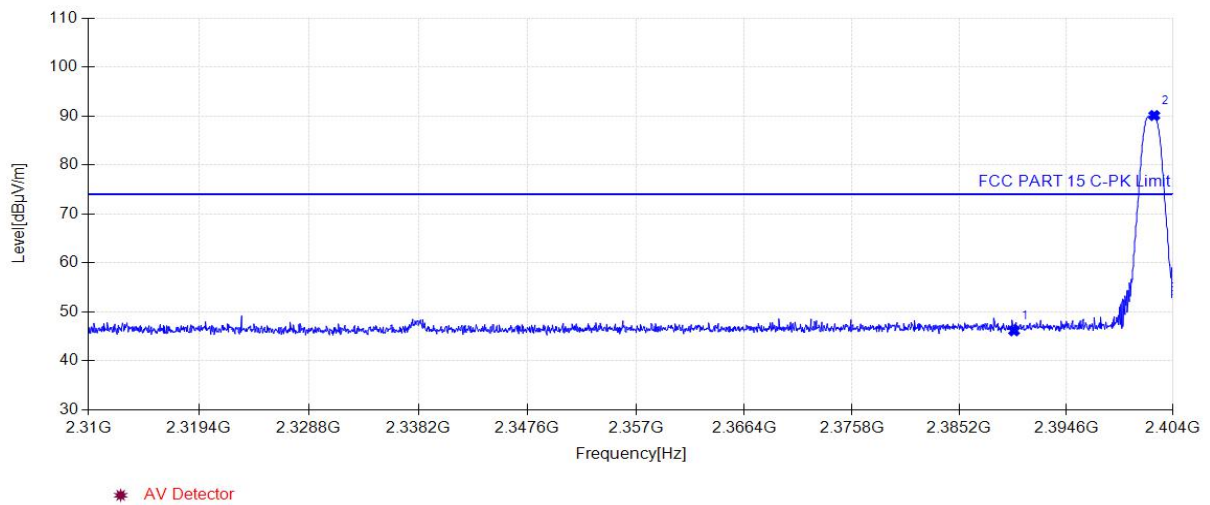
Note: This item was performed with the WIFI antenna connected.

7.7.5. Test Result

Project Information			
EUT:	E-BIKE	Model:	HF01
SN:	N/A	Voltage:	DC 3.3V
Environment:	Temp: 23°C; Humi:54%	Engineer:	Amos Xia
Remark:	Transmit at 1Mbps Channel 00		

Start of Test:2022-05-11 14:14:58

Test Graph

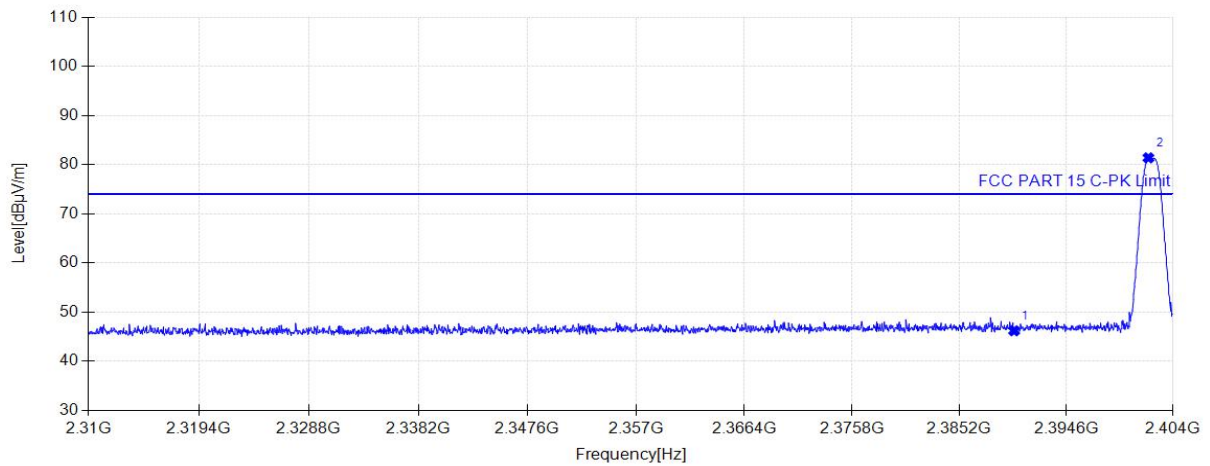


Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	46.14	34.25	74.00	27.86	160	313	Horizontal
2	2402.35	90.09	34.32	74.00	-16.09	160	261	Horizontal

Project Information			
EUT:	E-BIKE	Model:	HF01
SN:	N/A	Voltage:	DC 3.3V
Environment:	Temp: 23°C; Humi:54%	Engineer:	Amos Xia
Remark:	Transmit at 1Mbps Channel 00		

Start of Test:2022-05-11 14:15:56

Test Graph



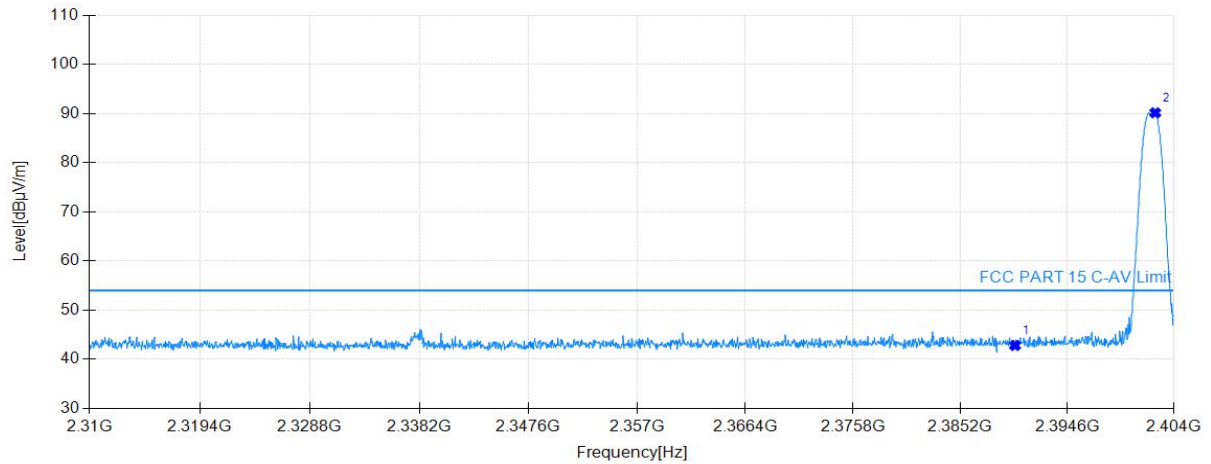
* AV Detector

Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	46.20	34.25	74.00	27.80	160	109	Vertical
2	2401.83	81.38	34.31	74.00	-7.38	160	300	Vertical

Project Information			
EUT:	E-BIKE	Model:	HF01
SN:	N/A	Voltage:	DC 3.3V
Environment:	Temp: 23°C; Humi:54%	Engineer:	Amos Xia
Remark:	Transmit at 1Mbps Channel 00		

Start of Test:2022-05-11 14:18:26

Test Graph



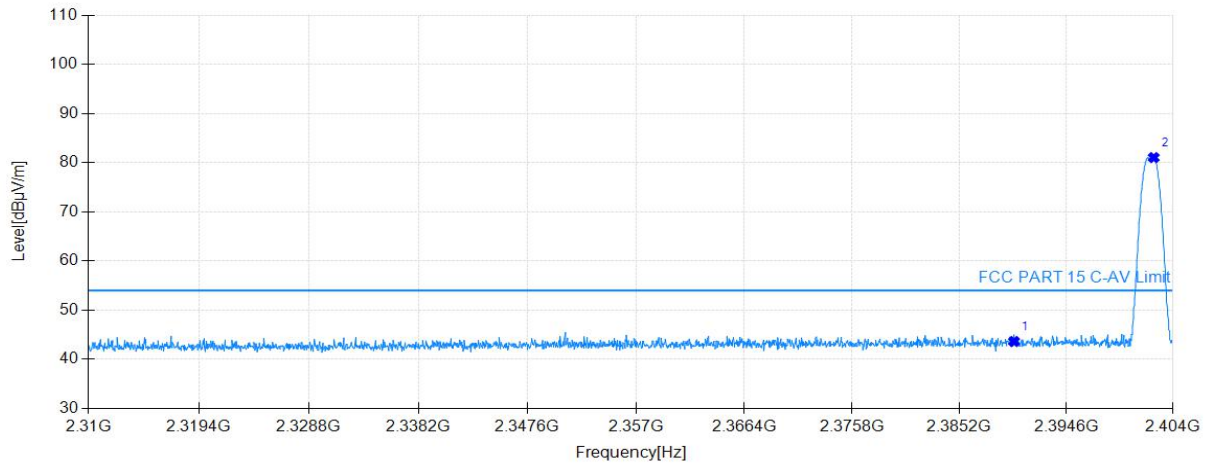
* AV Detector

Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	42.81	34.25	54.00	11.19	160	280	Horizontal
2	2402.35	90.13	34.32	54.00	-36.13	160	258	Horizontal

Project Information			
EUT:	E-BIKE	Model:	HF01
SN:	N/A	Voltage:	DC 3.3V
Environment:	Temp: 23°C; Humi:54%	Engineer:	Amos Xia
Remark:	Transmit at 1Mbps Channel 00		

Start of Test:2022-05-11 14:19:18

Test Graph



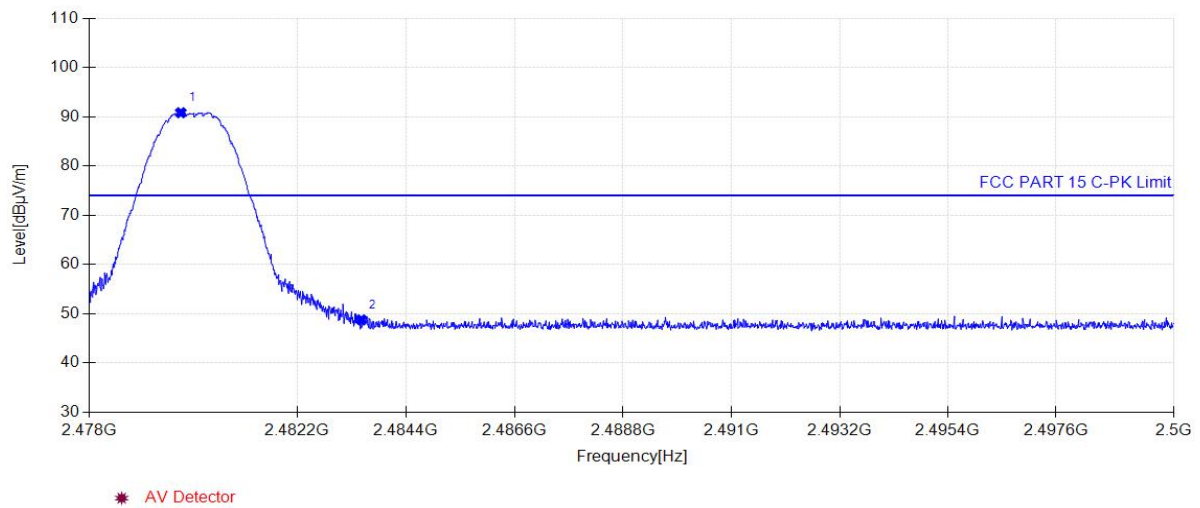
* AV Detector

Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	43.62	34.25	54.00	10.38	160	206	Vertical
2	2402.30	81.02	34.31	54.00	-27.02	160	299	Vertical

Project Information			
EUT:	E-BIKE	Model:	HF01
SN:	N/A	Voltage:	DC 3.3V
Environment:	Temp: 23°C; Humi:54%	Engineer:	Amos Xia
Remark:	Transmit at 1Mbps Channel 39		

Start of Test:2022-05-11 14:31:24

Test Graph

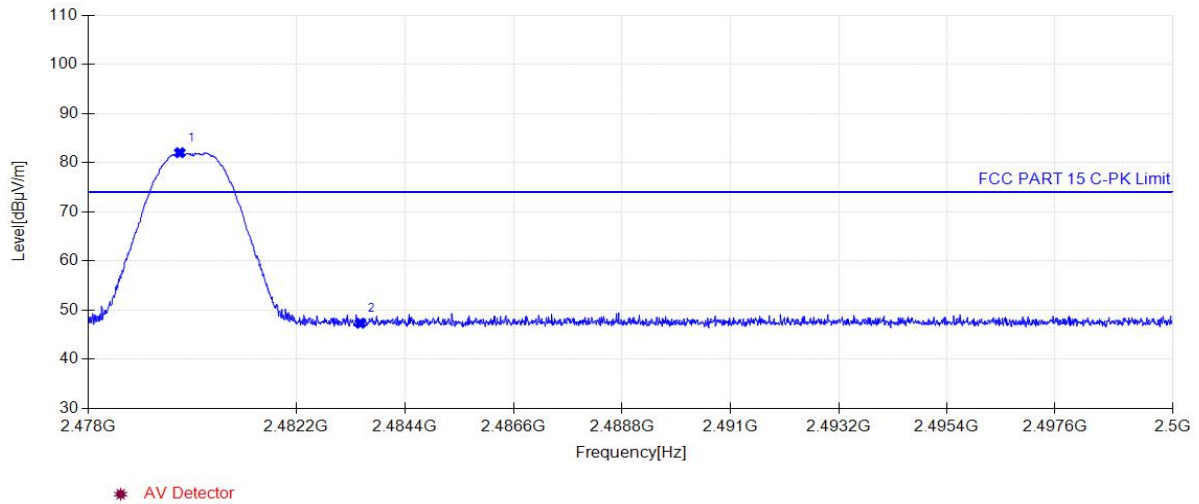


Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2479.84	90.81	34.64	74.00	-16.81	160	146	Horizontal
2	2483.50	48.76	34.65	74.00	25.24	160	25	Horizontal

Project Information			
EUT:	E-BIKE	Model:	HF01
SN:	N/A	Voltage:	DC 3.3V
Environment:	Temp: 23℃; Humi:54%	Engineer:	Amos Xia
Remark:	Transmit at 1Mbps Channel 39		

Start of Test:2022-05-11 14:32:16

Test Graph

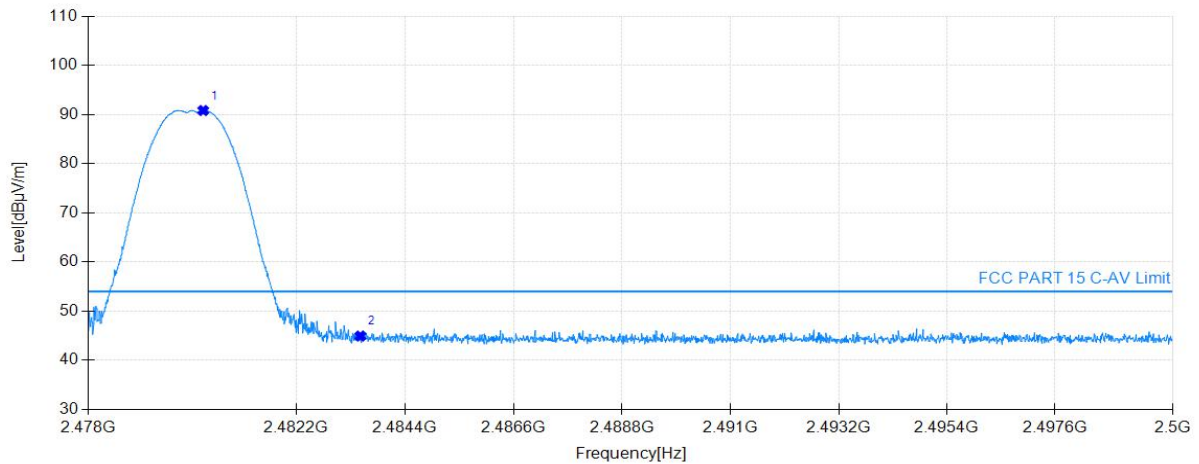


Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2479.84	82.01	34.64	74.00	-8.01	160	320	Vertical
2	2483.50	47.33	34.65	74.00	26.67	160	226	Vertical

Project Information			
EUT:	E-BIKE	Model:	HF01
SN:	N/A	Voltage:	DC 3.3V
Environment:	Temp: 23°C; Humi:54%	Engineer:	Amos Xia
Remark:	Transmit at 1Mbps Channel 39		

Start of Test:2022-05-11 14:33:42

Test Graph



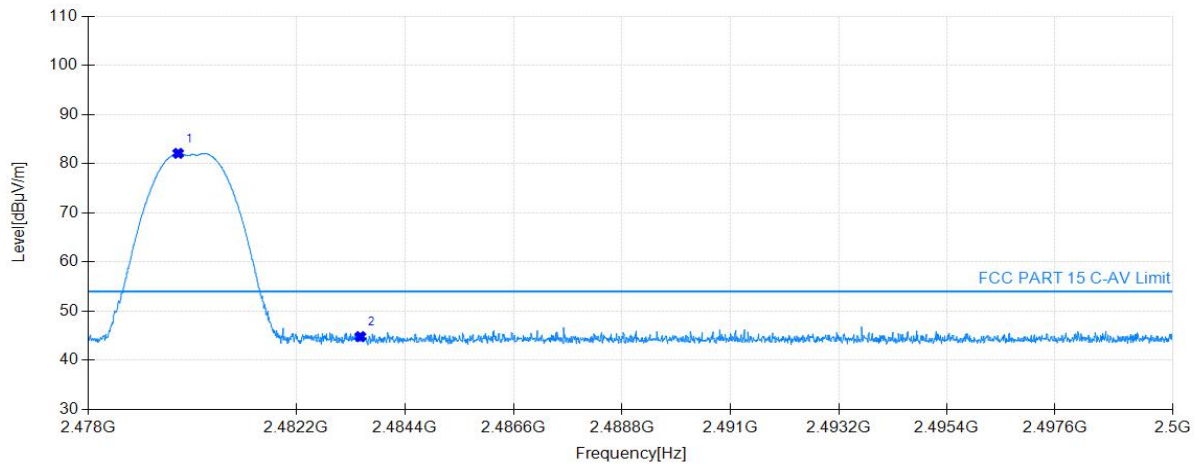
* AV Detector

Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2480.32	90.80	34.64	54.00	-36.80	160	147	Horizontal
2	2483.50	44.93	34.65	54.00	9.07	160	308	Horizontal

Project Information			
EUT:	E-BIKE	Model:	HF01
SN:	N/A	Voltage:	DC 3.3V
Environment:	Temp: 23°C; Humi:54%	Engineer:	Amos Xia
Remark:	Transmit at 1Mbps Channel 39		

Start of Test:2022-05-11 14:34:34

Test Graph



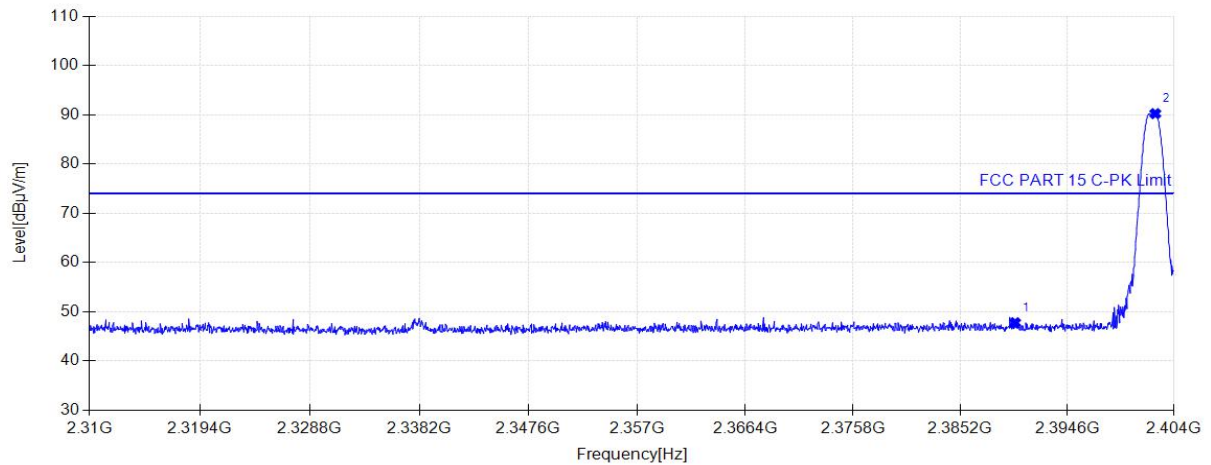
* AV Detector

Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2479.81	82.09	34.64	54.00	-28.09	160	314	Vertical
2	2483.50	44.81	34.65	54.00	9.19	160	237	Vertical

Project Information			
EUT:	E-BIKE	Model:	HF01
SN:	N/A	Voltage:	DC 3.3V
Environment:	Temp: 23°C; Humi:54%	Engineer:	Amos Xia
Remark:	Transmit at 2Mbps Channel 00		

Start of Test:2022-05-11 14:42:24

Test Graph



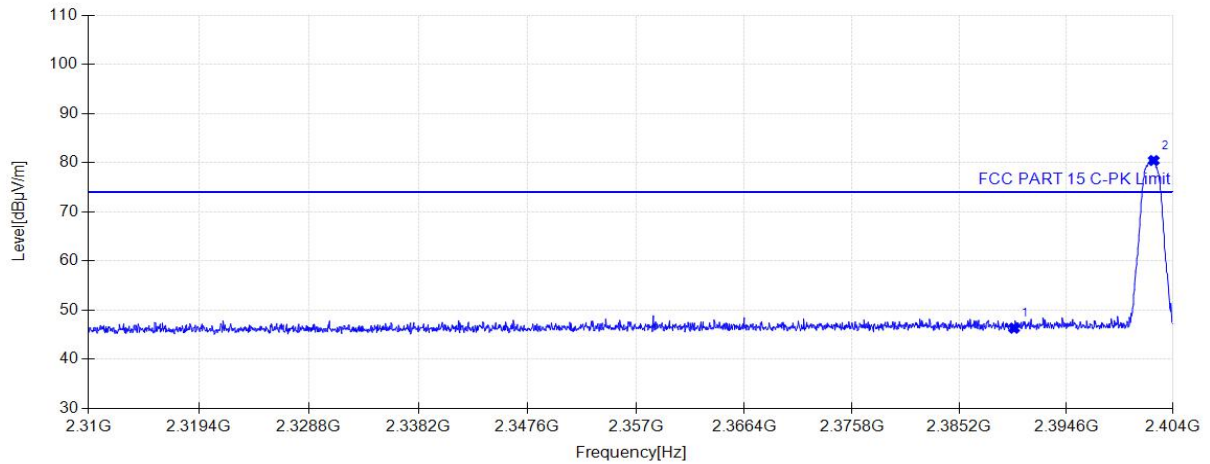
* AV Detector

Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	47.77	34.25	74.00	26.23	160	307	Horizontal
2	2402.35	90.22	34.32	74.00	-16.22	160	262	Horizontal

Project Information			
EUT:	E-BIKE	Model:	HF01
SN:	N/A	Voltage:	DC 3.3V
Environment:	Temp: 23°C; Humi:54%	Engineer:	Amos Xia
Remark:	Transmit at 2Mbps Channel 00		

Start of Test:2022-05-11 14:43:17

Test Graph



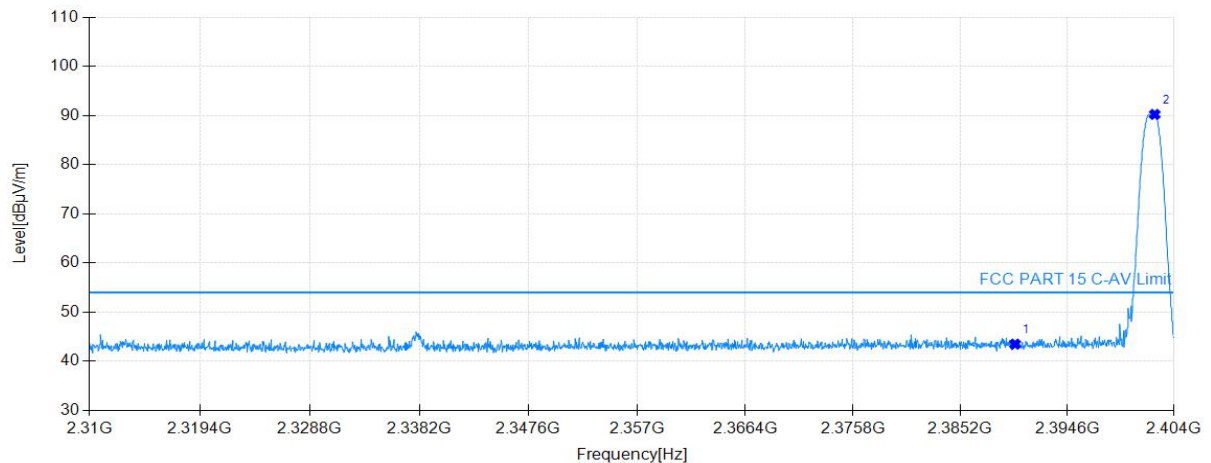
* AV Detector

Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	46.33	34.25	74.00	27.67	160	181	Vertical
2	2402.30	80.43	34.31	74.00	-6.43	160	336	Vertical

Project Information			
EUT:	E-BIKE	Model:	HF01
SN:	N/A	Voltage:	DC 3.3V
Environment:	Temp: 23°C; Humi:54%	Engineer:	Amos Xia
Remark:	Transmit at 2Mbps Channel 00		

Start of Test:2022-05-11 14:47:28

Test Graph



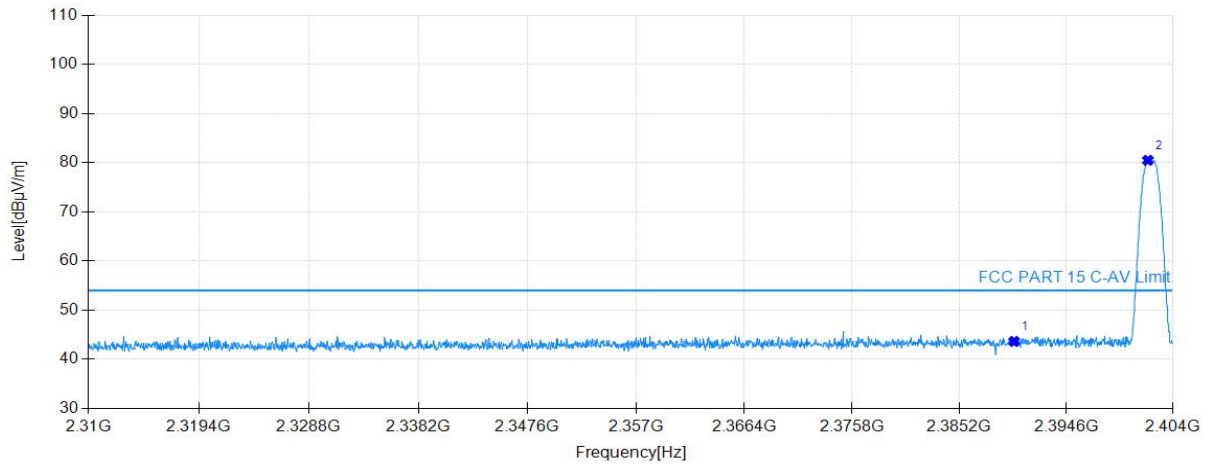
* AV Detector

Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	43.49	34.25	54.00	10.51	160	76	Horizontal
2	2402.30	90.21	34.31	54.00	-36.21	160	267	Horizontal

Project Information			
EUT:	E-BIKE	Model:	HF01
SN:	N/A	Voltage:	DC 3.3V
Environment:	Temp: 23°C; Humi:54%	Engineer:	Amos Xia
Remark:	Transmit at 2Mbps Channel 00		

Start of Test:2022-05-11 14:48:21

Test Graph



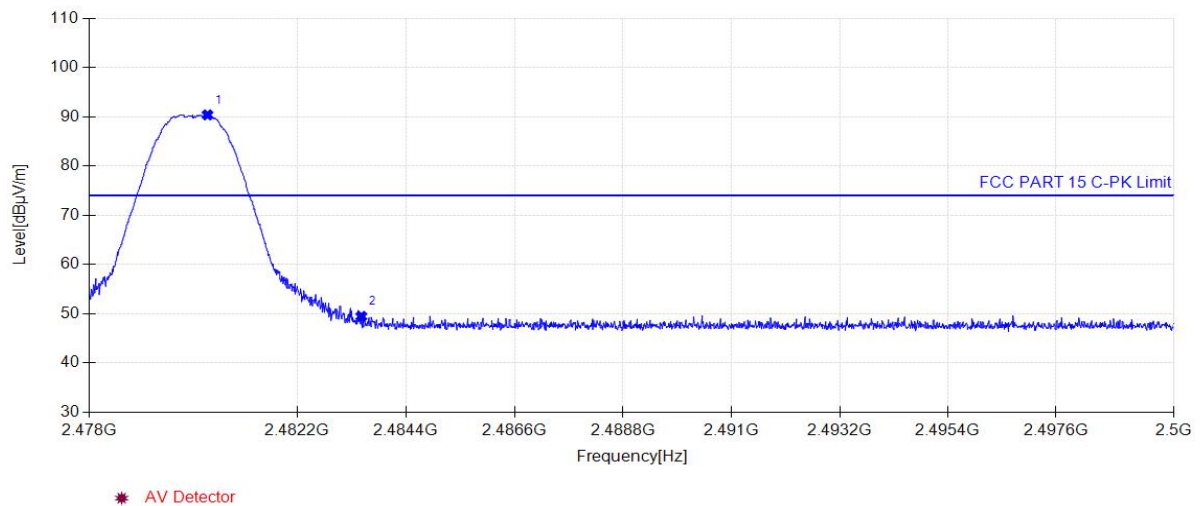
* AV Detector

Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2390.00	43.63	34.25	54.00	10.37	160	169	Vertical
2	2401.79	80.47	34.31	54.00	-26.47	160	328	Vertical

Project Information			
EUT:	E-BIKE	Model:	HF01
SN:	N/A	Voltage:	DC 3.3V
Environment:	Temp: 23°C; Humi:54%	Engineer:	Amos Xia
Remark:	Transmit at 2Mbps Channel 39		

Start of Test:2022-05-11 15:08:18

Test Graph

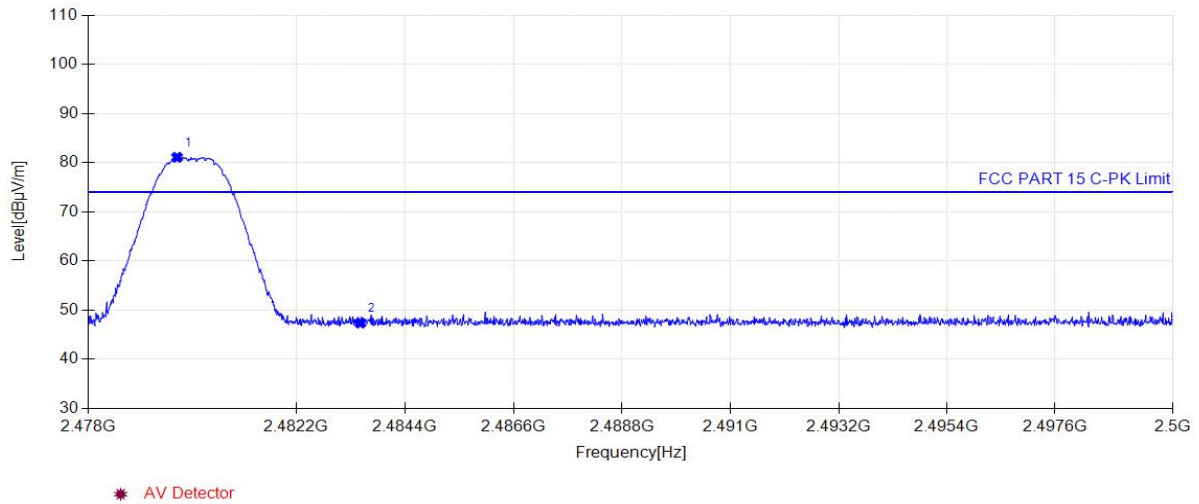


Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2480.38	90.37	34.64	74.00	-16.37	160	138	Horizontal
2	2483.50	49.46	34.65	74.00	24.54	160	218	Horizontal

Project Information			
EUT:	E-BIKE	Model:	HF01
SN:	N/A	Voltage:	DC 3.3V
Environment:	Temp: 23°C; Humi:54%	Engineer:	Amos Xia
Remark:	Transmit at 2Mbps Channel 39		

Start of Test:2022-05-11 15:09:10

Test Graph

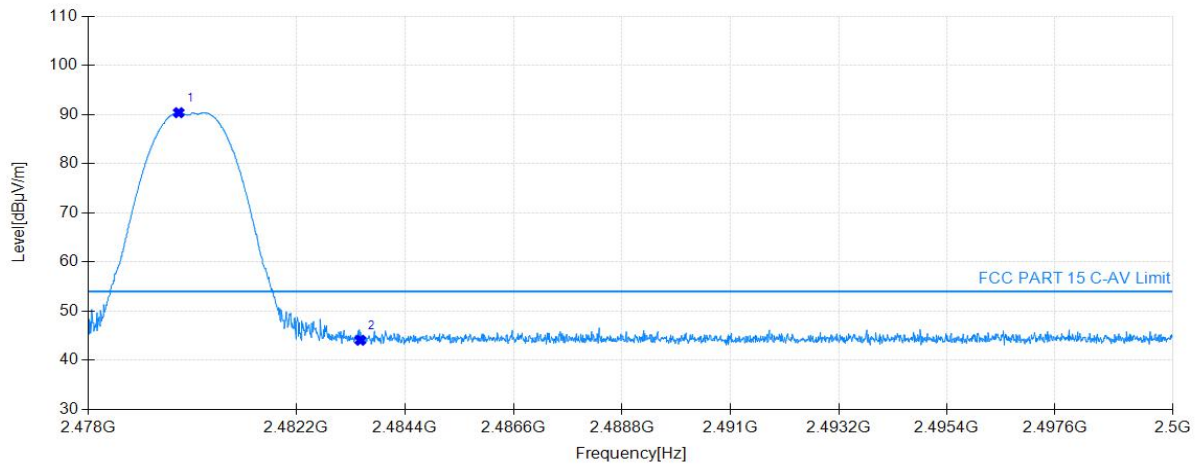


Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2479.79	81.07	34.64	74.00	-7.07	160	135	Vertical
2	2483.50	47.37	34.65	74.00	26.63	160	193	Vertical

Project Information			
EUT:	E-BIKE	Model:	HF01
SN:	N/A	Voltage:	DC 3.3V
Environment:	Temp: 23°C; Humi:54%	Engineer:	Amos Xia
Remark:	Transmit at 2Mbps Channel 39		

Start of Test:2022-05-11 15:12:43

Test Graph



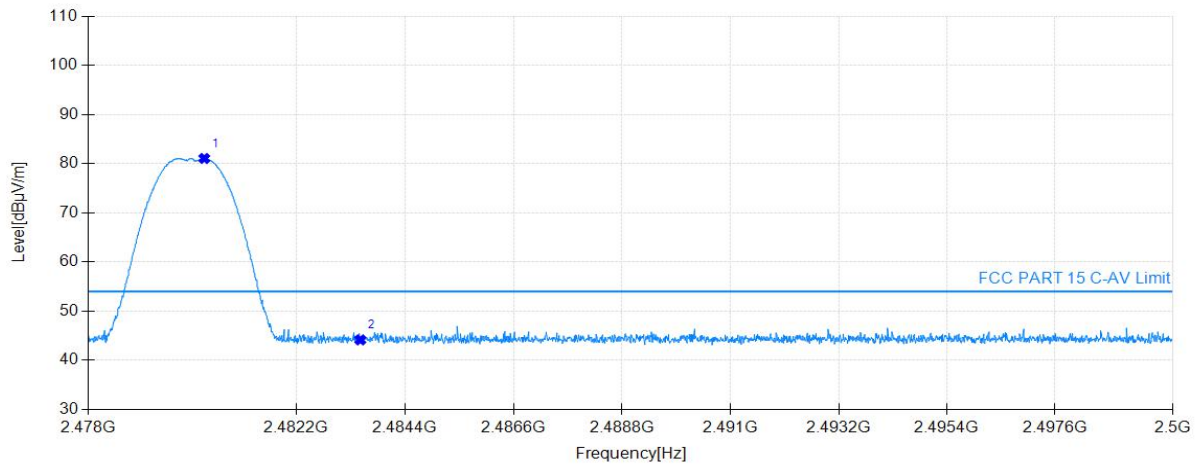
* AV Detector

Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2479.82	90.36	34.64	54.00	-36.36	160	133	Horizontal
2	2483.50	44.08	34.65	54.00	9.92	160	81	Horizontal

Project Information			
EUT:	E-BIKE	Model:	HF01
SN:	N/A	Voltage:	DC 3.3V
Environment:	Temp: 23°C; Humi:54%	Engineer:	Amos Xia
Remark:	Transmit at 2Mbps Channel 39		

Start of Test:2022-05-11 15:13:36

Test Graph



Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2480.34	81.05	34.64	54.00	-27.05	160	135	Vertical
2	2483.50	44.15	34.65	54.00	9.85	160	0	Vertical

7.8. AC Conducted Emissions Measurement

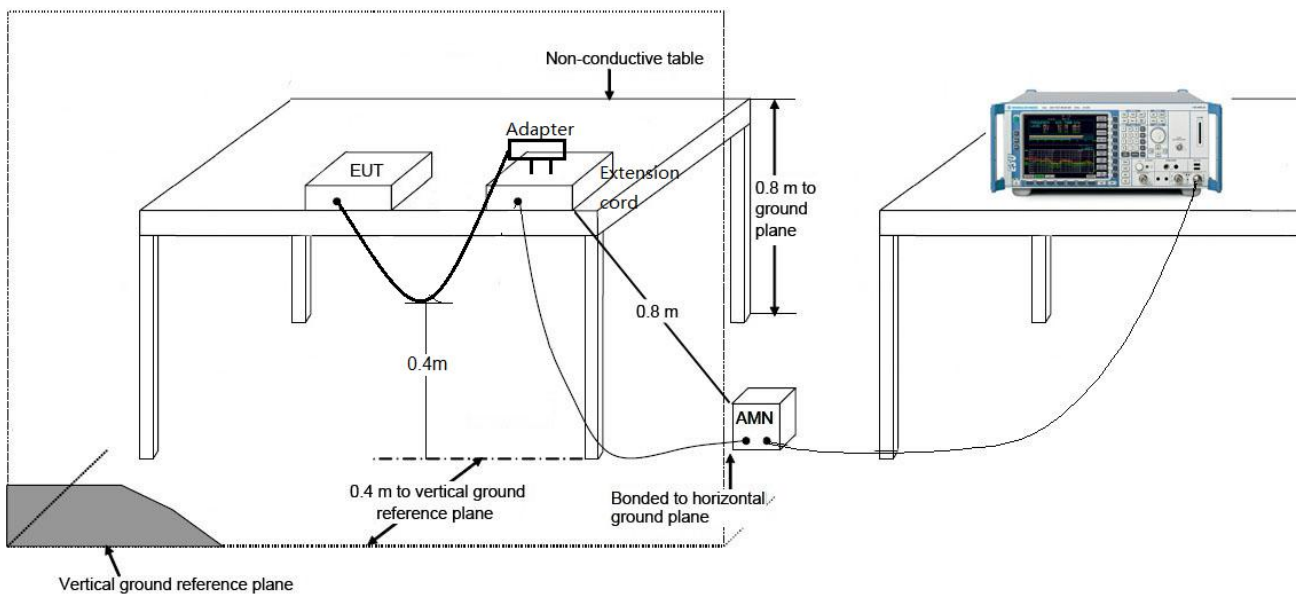
7.8.1. Test Limit

FCC Part 15 Subpart C Paragraph 15.207 Limits		
Frequency (MHz)	QP (dBuV)	AV (dBuV)
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Note 1: The lower limit shall apply at the transition frequencies.

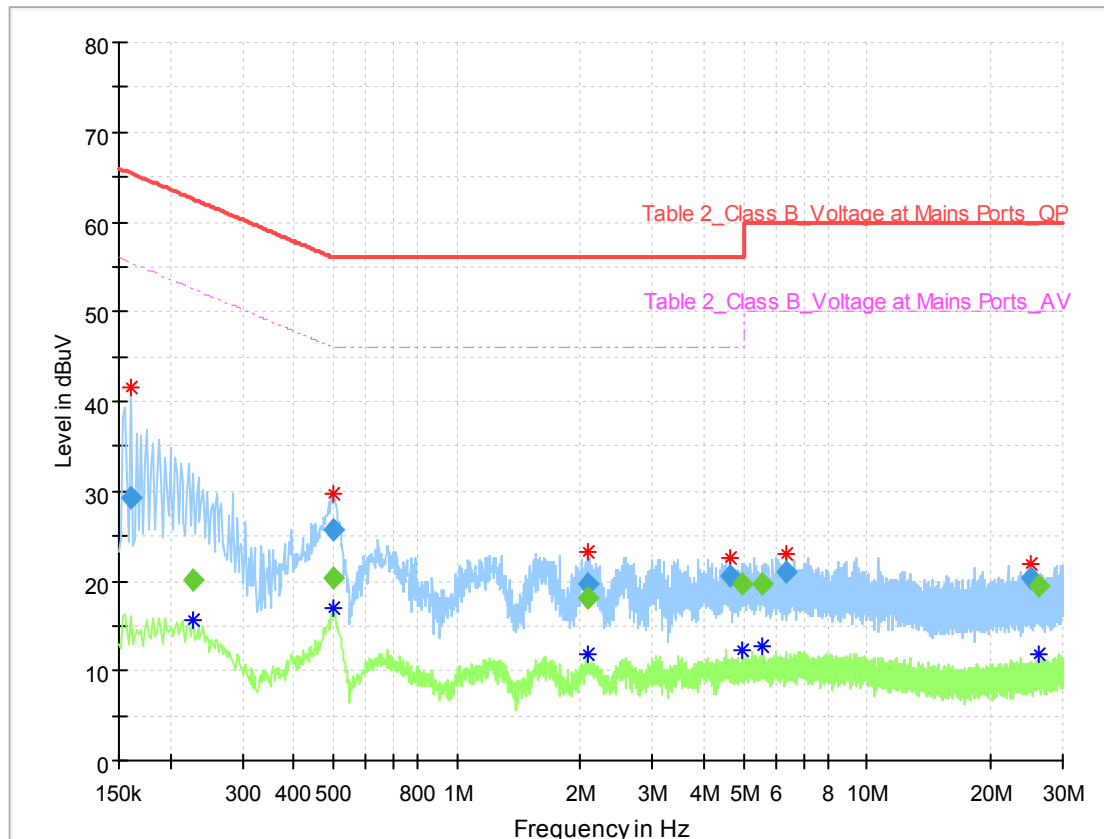
Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

7.8.2. Test Setup



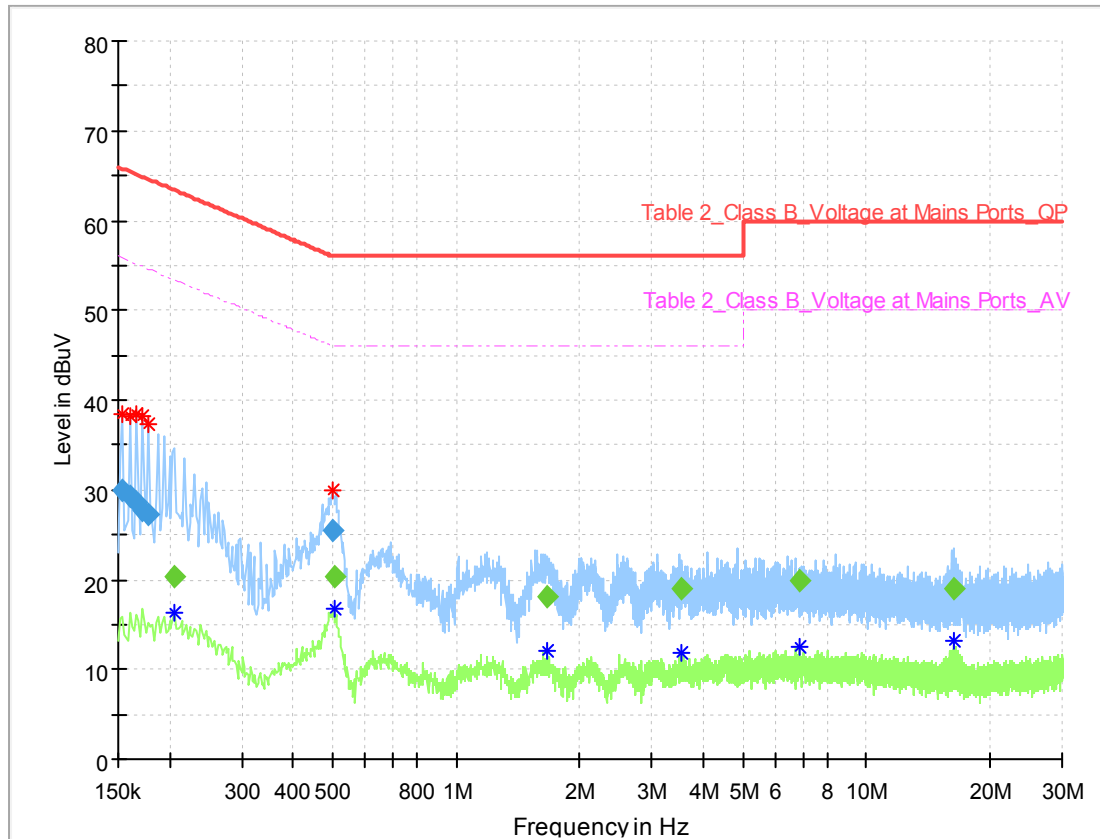
7.8.3. Test Result

EUT:	E-BIKE	Polarity:	LINE
Model:	HF01	Voltage:	120V/60Hz
Environment:	Temp: 22°C; Humi:52%	Engineer:	Amos Xia
Remark:	Transmit at 2Mbps Channel 00		



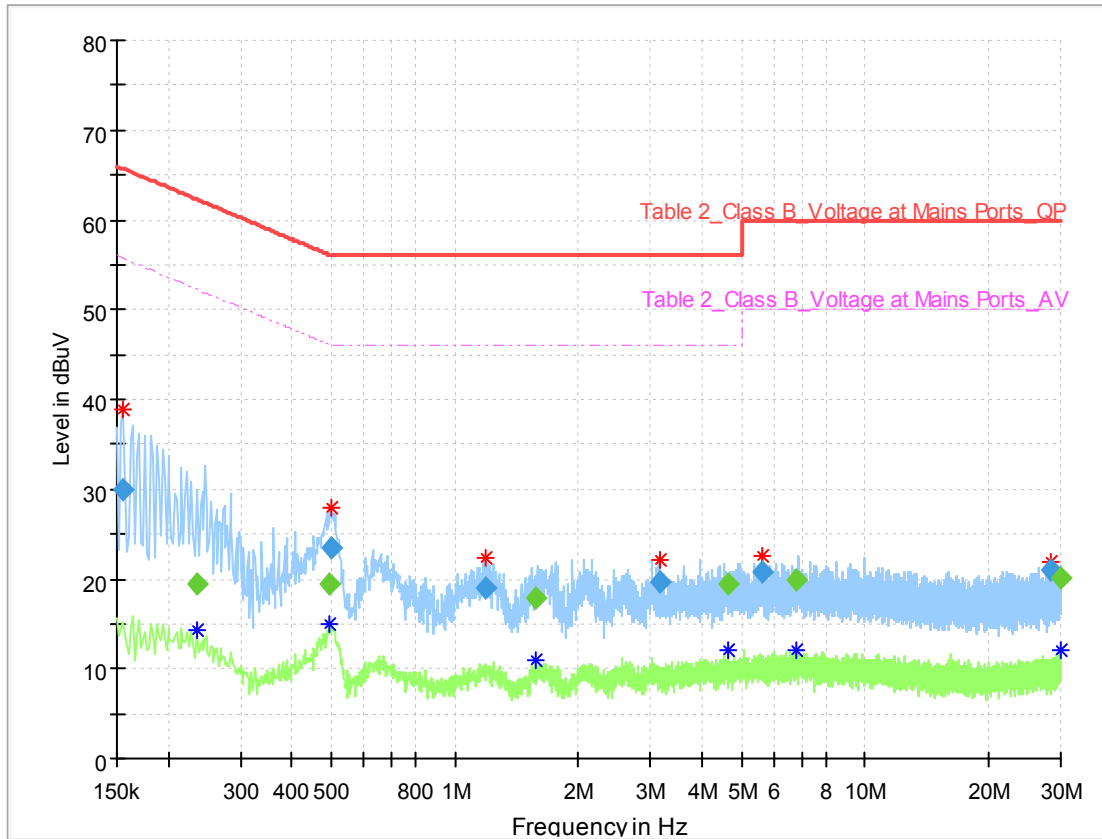
Frequency (MHz)	QuasiPeak (dBuV)	Average (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.160000	29.25	---	65.46	36.21	1000.0	9.000	L1	ON	9.5
0.228000	---	20.08	52.52	32.45	1000.0	9.000	L1	ON	9.5
0.500000	---	20.24	46.00	25.76	1000.0	9.000	L1	ON	9.5
0.500000	25.65	---	56.00	30.35	1000.0	9.000	L1	ON	9.5
2.080000	19.61	---	56.00	36.39	1000.0	9.000	L1	ON	9.6
2.088000	---	18.17	46.00	27.83	1000.0	9.000	L1	ON	9.6
4.640000	20.50	---	56.00	35.50	1000.0	9.000	L1	ON	9.6
4.978000	---	19.66	46.00	26.34	1000.0	9.000	L1	ON	9.6
5.542000	---	19.67	50.00	30.33	1000.0	9.000	L1	ON	9.6
6.358000	21.03	---	60.00	38.97	1000.0	9.000	L1	ON	9.7
25.014000	20.22	---	60.00	39.78	1000.0	9.000	L1	ON	9.8
26.314000	---	19.41	50.00	30.59	1000.0	9.000	L1	ON	9.7

EUT:	E-BIKE	Polarity:	NEUTRAL
Model:	HF01	Voltage:	120V/60Hz
Environment:	Temp: 22°C; Humi:52%	Engineer:	Amos Xia
Remark:	Transmit at 2Mbps Channel 00		



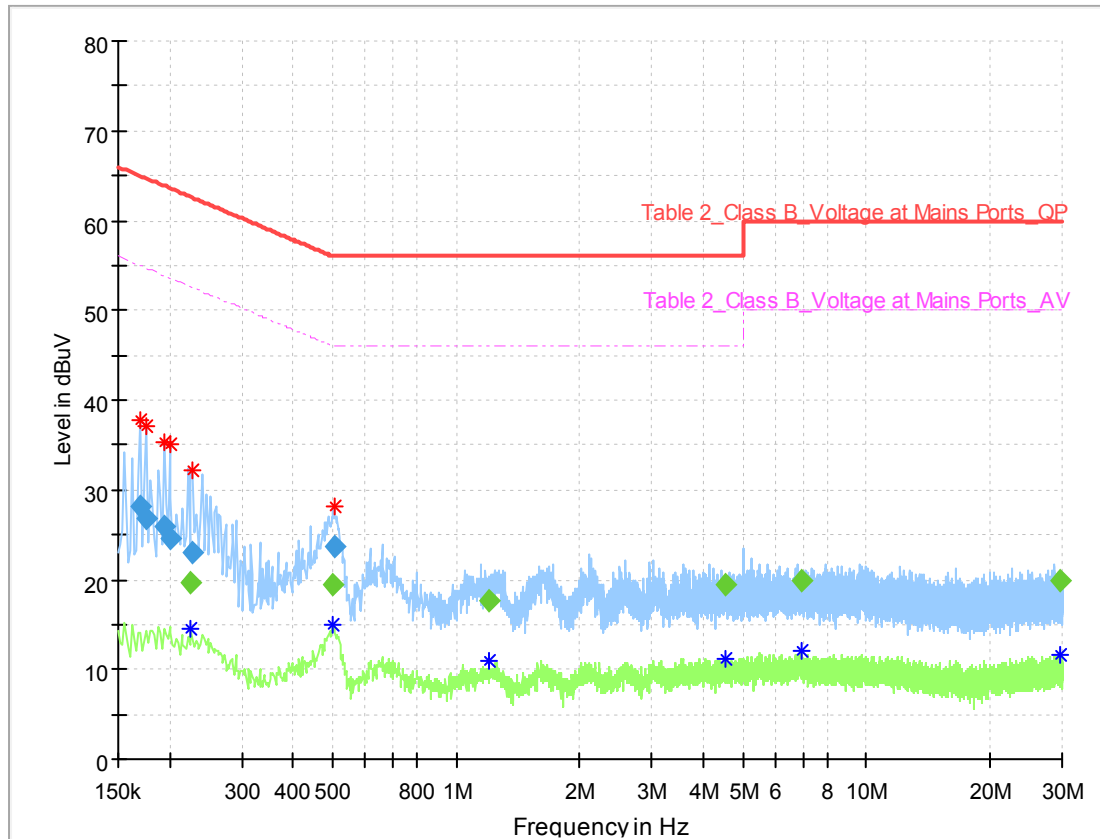
Frequency (MHz)	QuasiPeak (dBuV)	Average (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.154000	29.93	---	65.78	35.86	1000.0	9.000	N	ON	9.5
0.160000	29.18	---	65.46	36.29	1000.0	9.000	N	ON	9.5
0.166000	28.55	---	65.16	36.61	1000.0	9.000	N	ON	9.5
0.172000	27.69	---	64.86	37.17	1000.0	9.000	N	ON	9.5
0.178000	27.15	---	64.58	37.42	1000.0	9.000	N	ON	9.5
0.206000	---	20.40	53.37	32.97	1000.0	9.000	N	ON	9.5
0.498000	25.46	---	56.03	30.57	1000.0	9.000	N	ON	9.5
0.504000	---	20.26	46.00	25.74	1000.0	9.000	N	ON	9.5
1.668000	---	18.09	46.00	27.91	1000.0	9.000	N	ON	9.5
3.526000	---	19.04	46.00	26.96	1000.0	9.000	N	ON	9.6
6.890000	---	19.89	50.00	30.11	1000.0	9.000	N	ON	9.7
16.310000	---	18.99	50.00	31.01	1000.0	9.000	N	ON	9.8

EUT:	E-BIKE	Polarity:	LINE
Model:	HF01	Voltage:	120V/60Hz
Environment:	Temp: 22°C; Humi:52%	Engineer:	Amos Xia
Remark:	Transmit at 2Mbps Channel 39		



Frequency (MHz)	QuasiPeak (dBuV)	Average (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.156000	29.93	---	65.67	35.74	1000.0	9.000	L1	ON	9.5
0.234000	---	19.47	52.31	32.84	1000.0	9.000	L1	ON	9.5
0.494000	---	19.35	46.10	26.75	1000.0	9.000	L1	ON	9.5
0.498000	23.54	---	56.03	32.49	1000.0	9.000	L1	ON	9.5
1.188000	18.92	---	56.00	37.08	1000.0	9.000	L1	ON	9.5
1.568000	---	17.81	46.00	28.19	1000.0	9.000	L1	ON	9.5
3.166000	19.67	---	56.00	36.33	1000.0	9.000	L1	ON	9.6
4.650000	---	19.45	46.00	26.55	1000.0	9.000	L1	ON	9.6
5.616000	20.72	---	60.00	39.28	1000.0	9.000	L1	ON	9.6
6.764000	---	19.89	50.00	30.11	1000.0	9.000	L1	ON	9.7
28.354000	20.93	---	60.00	39.07	1000.0	9.000	L1	ON	9.7
29.980000	---	20.09	50.00	29.91	1000.0	9.000	L1	ON	9.7

EUT:	E-BIKE	Polarity:	NEUTRAL
Model:	HF01	Voltage:	120V/60Hz
Environment:	Temp: 22°C; Humi:52%	Engineer:	Amos Xia
Remark:	Transmit at 2Mbps Channel 39		



Frequency (MHz)	QuasiPeak (dBuV)	Average (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.170000	28.08	---	64.96	36.88	1000.0	9.000	N	ON	9.5
0.176000	26.73	---	64.67	37.95	1000.0	9.000	N	ON	9.5
0.194000	25.84	---	63.86	38.02	1000.0	9.000	N	ON	9.5
0.200000	24.64	---	63.61	38.97	1000.0	9.000	N	ON	9.5
0.226000	---	19.62	52.60	32.98	1000.0	9.000	N	ON	9.5
0.228000	23.00	---	62.52	39.53	1000.0	9.000	N	ON	9.5
0.500000	---	19.48	46.00	26.52	1000.0	9.000	N	ON	9.5
0.504000	23.75	---	56.00	32.25	1000.0	9.000	N	ON	9.5
1.204000	---	17.76	46.00	28.24	1000.0	9.000	N	ON	9.5
4.536000	---	19.41	46.00	26.59	1000.0	9.000	N	ON	9.6
6.912000	---	19.87	50.00	30.13	1000.0	9.000	N	ON	9.7
29.678000	---	19.98	50.00	30.02	1000.0	9.000	N	ON	9.7

8. CONCLUSION

The data collected relate only the item(s) tested and show that the **E-BIKE** is in compliance with Part 15C of the FCC Rules.

_____ The End _____