

# **FCC Test Report**

Report No.: AGC01040210301FE03

FCC ID : 2ACN7BC200

APPLICATION PURPOSE : Original Equipment

**PRODUCT DESIGNATION**: Bike Computer

**BRAND NAME** : N/A

**MODEL NAME** : BC200, BC201

**APPLICANT**: ShenZhen Fitcare Electronics Co., LTD

**DATE OF ISSUE** : Mar. 19, 2021

**STANDARD(S)** : FCC Part 15.247

**REPORT VERSION** : V1.0

Attestation of Globa Compliance (Shenzhen) Co., Ltd





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# **REPORT REVISE RECORD**

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Mar. 19, 2021	Valid	Initial Release



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# 1. VERIFICATION OF COMPLIANCE

Applicant	ShenZhen Fitcare Electronics Co., LTD	
Address	6th floor(south), Building A, Dingxin Science Park Honglang North 2nd Road, Bao'an, Shenzhen, China	
Manufacturer	ShenZhen Fitcare Electronics Co., LTD	
Address	6th floor(south), Building A, Dingxin Science Park Honglang North 2nd Road, Bao'an, Shenzhen, China	
Factory	ShenZhen Fitcare Electronics Co., LTD	
Address	6th floor(south), Building A, Dingxin Science Park Honglang North 2nd Road, Bao'an, Shenzhen, China	
Product Designation	Bike Computer	
Brand Name	N/A	
Test Model	BC200	
Series Model	BC201	
Difference description	All the series models are the same as the test model except for the model names.	
Date of test Mar. 03, 2021 to Mar. 19, 2021		
Deviation	No any deviation from the test method	
Condition of Test Sample	Normal	
Test Result	Pass	
Report Template	AGCRT-US-BLE/RF	
Report Template	AGCRT-US-BLE/RF	

We hereby certify that:

The above equipment was tested by Attestation of Global Compliance (Shenzhen) Co., Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2013) and the energy emitted by the sample EUT tested as described in this report is in compliance with radiated emission limits of FCC part 15.247.

Prepared By	Eddy Lin	NGC
	Eddy Liu (Project Engineer)	Mar. 19, 2021
Reviewed By	Max Zhang	
,0	Max Zhang (Reviewer)	Mar. 19, 2021
Approved By	Formerlies	
CC C	Forrest Lei (Authorized Officer)	Mar. 19, 2021



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# 2. GENERAL INFORMATION

#### 2.1. PRODUCT DESCRIPTION

The EUT is designed as a "Bike Computer". It is designed by way of utilizing the GFSK technology to achieve the system operation.

A major technical description of EUT is described as following

Operation Frequency	2.457GHz	
RF Output Power	-3.218dBm (Max)	
Modulation	GFSK 1Mbps	
Number of channels	1 Channel	
Antenna Designation	Integral Antenna (Comply with requirements of the FCC part 15.203)	
Antenna Gain	0dBi	
Hardware Version	V5.4	
Software Version	V1.4.5	
Power Supply DC 5V by adapter		

#### 2.2. TABLE OF CARRIER FREQUENCYS

Frequency Band Channel Number		Frequency	
2400~2483.5MHz	0	2457 MHz	



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# 2.3. RELATED SUBMITTAL(S)/GRANT(S)

This submittal(s) (test report) is intended for **FCC ID: 2ACN7BC200** filing to comply with the FCC Part 15.247 requirements.

#### 2.4. TEST METHODOLOGY

Both conducted and radiated testing was performed according to the procedures in ANSI C63.10 (2013). Radiated testing was performed at an antenna to EUT distance 3 meters.

#### 2.5. SPECIAL ACCESSORIES

Refer to section 5.2.

#### 2.6. EQUIPMENT MODIFICATIONS

Not available for this EUT intended for grant.

#### 2.7. ANTENNA REQUIREMENT

This intentional radiator is designed with a permanently attached antenna of an antenna to ensure that no antenna other than that furnished by the responsible party shall be used with the device. For more information of the antenna, please refer to the APPENDIX B: PHOTOGRAPHS OF EUT.



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#### 3. MEASUREMENT UNCERTAINTY

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

- Uncertainty of Conducted Emission, Uc = ±3.1 dB
- Uncertainty of Radiated Emission below 1GHz, Uc = ±4.0 dB
- Uncertainty of Radiated Emission above 1GHz, Uc = ±4.8 dB
- Uncertainty of total RF power, conducted,  $Uc = \pm 0.8 \text{ dB}$
- Uncertainty of RF power density, conducted, Uc = ±2.6 dB
- Uncertainty of spurious emissions, conducted, Uc = ±2.7 dB
- Uncertainty of Occupied Channel Bandwidth: Uc = ±2 %



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# 4. DESCRIPTION OF TEST MODES

NO.	TEST MODE DESCRIPTION	
1	2457MHz TX	

#### Note:

- 1. Only the result of the worst case was recorded in the report, if no other cases.
- 2. For Radiated Emission, 3axis were chosen for testing for each applicable mode.
- 3. For Conducted Test method, a temporary antenna connector is provided by the manufacture.

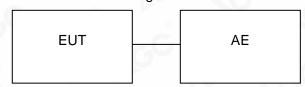


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# 5. SYSTEM TEST CONFIGURATION

# **5.1. CONFIGURATION OF TESTED SYSTEM**

Radiated Emission Configure:



Conducted Emission Configure:

EUT	AE

#### **5.2. EQUIPMENT USED IN TESTED SYSTEM**

Item	Equipment	Model No.	ID or Specification	Remark
1	Bike Computer	BC200	2ACN7BC200	EUT
2	Adapter	TY0500100E1MN	DC 5V	AE
3	Charger line	G258	N/A	AE

# **5.3. SUMMARY OF TEST RESULTS**

FCC RULES	DESCRIPTION OF TEST	RESULT
15.247 (b)(3)	Peak Output Power	Compliant
15.247 (a)(2)	6 dB Bandwidth	Compliant
15.247 (d)	Conducted Spurious Emission	Compliant
15.247 (e)	Maximum Conducted Output Power Density	Compliant
15.209	Radiated Emission	Compliant
15.207	Conducted Emission	Compliant



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# 6. TEST FACILITY

Test Site	Attestation of Global Compliance (Shenzhen) Co., Ltd	
Location	1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China	
Designation Number	r CN1259	
FCC Test Firm Registration Number	975832	
A2LA Cert. No.	5054.02	
Description	Attestation of Global Compliance (Shenzhen) Co., Ltd is accredited by A2LA	

#### TEST EQUIPMENT OF CONDUCTED EMISSION TEST

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
TEST RECEIVER	R&S	ESPI	101206	May 15, 2020	May 14, 2021
LISN	R&S	ESH2-Z5	100086	Jul. 03, 2020	Jul. 02, 2021
Test software	R&S	ES-K1(Ver.V1.71)	N/A	N/A	N/A

#### **TEST EQUIPMENT OF RADIATED EMISSION TEST**

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
TEST RECEIVER	R&S	ESCI	10096	May 15, 2020	May 14, 2021
EXA Signal Analyzer	Aglient	N9010A	MY53470504	Dec. 07, 2020	Dec. 06, 2021
2.4GHz Filter	EM Electronics	2400-2500MHz	N/A	Mar. 23, 2020	Mar. 22, 2022
Attenuator	ZHINAN	E-002	N/A	Sep. 03, 2020	Sep. 02, 2022
Horn antenna	SCHWARZBECK	BBHA 9170	#768	Sep. 21, 2019	Sep. 20, 2021
Active loop antenna (9K-30MHz)	ZHINAN	ZN30900C	18051	May 22, 2020	May 21, 2022
Double-Ridged Waveguide Horn	ETS LINDGREN	3117	00034609	May 17, 2019	May 16, 2021
Broadband Preamplifier	ETS LINDGREN	3117PA	00225134	Sep. 03, 2020	Sep. 02, 2022
ANTENNA	SCHWARZBECK	VULB9168	494	Jan. 08, 2021	Jan. 07, 2023
Test software	FARA	EZ-EMC (Ver RA-03A)	N/A	N/A	N/A



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#### 7. PEAK OUTPUT POWER

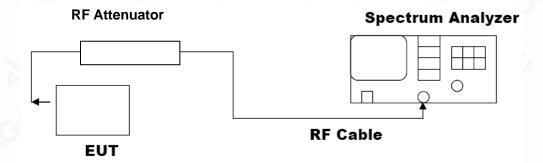
#### 7.1. MEASUREMENT PROCEDURE

For peak power test:

- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- 2. RBW≥DTS bandwidth
- 3. VBW≥3\*RBW.
- 4. SPAN≥VBW.
- 5. Sweep: Auto.
- 6. Detector function: Peak.
- 7. Trace: Max hold.

Allow trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission. The indicated level is the peak output power, after any corrections for external attenuators and cables.

# 7.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION) PEAK POWER TEST SETUP





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g/Inspection The test results he test report.

# 7.3. LIMITS AND MEASUREMENT RESULT

	NOTICE MEDICAL		(0)		
PEAK OUTPUT POWER MEASUREMENT RESULT					
FOR GFSK MOUDULATION					
Frequency (GHz)			Pass or Fail		
2.457	-3.218	30	Pass		

CH<sub>0</sub>



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#### 8. 6 DB BANDWIDTH

#### **8.1. MEASUREMENT PROCEDURE**

- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- 2. Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- 3. Set SPA Centre Frequency = Operation Frequency, RBW= 100 kHz, VBW ≥ 3×RBW.
- 4. Set SPA Trace 1 Max hold, then View.

Note: The EUT was tested according to ANSI C63.10 for compliance to FCC PART 15.247 requirements.

# 8.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

The same as described in section 7.2.

#### 8.3. LIMITS AND MEASUREMENT RESULTS

0.01 2 7 1 1 2	0.01				
LIMITS AND MEASUREMENT RESULT					
Applicable Limits					
Applicable Limits	Test Dat	Test Data (kHz)			
>500KHZ	2457MHz	502.7	PASS		

# TEST PLOT OF BANDWIDTH





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# 9. CONDUCTED SPURIOUS EMISSION

#### 9.1. MEASUREMENT PROCEDURE

- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- 2, Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- 3. Set SPA Trace 1 Max hold, then View.

Note: The EUT was tested according to ANSI C63.10 for compliance to FCC PART 15.247 requirements.

# 9.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

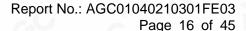
The same as described in section 7.2.

#### 9.3. MEASUREMENT EQUIPMENT USED

The same as described in section 6.

#### 9.4. LIMITS AND MEASUREMENT RESULT

LIMITS AND MEASUREMENT RESULT					
A marilla a la l	Measurement Result				
Applicable Limits	Test Data	Criteria			
In any 100 kHz Bandwidth Outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produce by the intentional radiator shall be at least 20 dB below that in 100KHz bandwidth within the band that contains the highest level of the desired power.	At least -20dBc than the reference level	PASS			

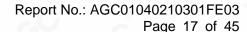




# **TEST RESULT FOR ENTIRE FREQUENCY RANGE**

# **GFSK MODULATION**

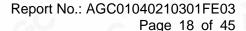








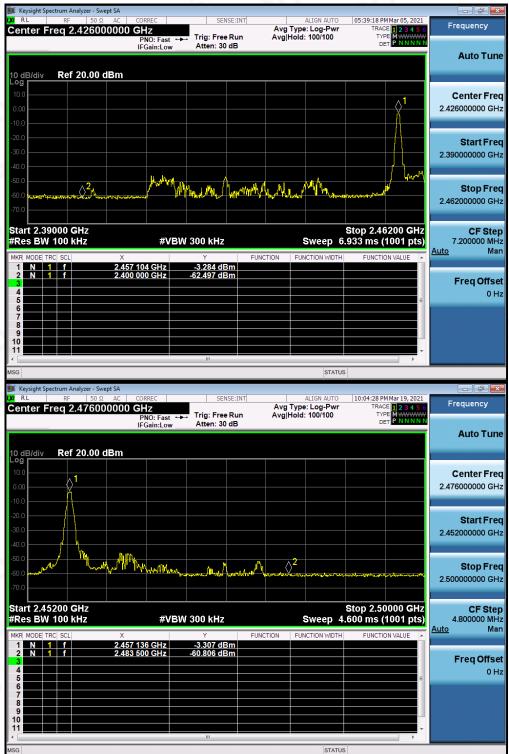
Note: The peak emissions without marker on the above plots are fundamental wave and need not to compare with the limit.





# **TEST RESULT FOR BAND EDGE**

# **GFSK MODULATION**





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#### 10. MAXIMUM CONDUCTED OUTPUT POWER SPECTRAL DENSITY

#### 10.1. MEASUREMENT PROCEDURE

- (1). Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- (2). Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- (3). Set the SPA Trace 1 Max hold, then View.

Note: The method of PKPSD in the KDB 558074 item 10.2 was used in this testing.

# 10.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

Refer to Section 7.2.

#### 10.3. MEASUREMENT EQUIPMENT USED

Refer to Section 6.

#### 10.4. LIMITS AND MEASUREMENT RESULT

Channel No.	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
2457MHz	-13.532	8	Pass

#### TEST PLOT OF SPECTRAL DENSITY



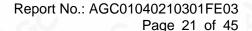


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#### 11. RADIATED EMISSION

#### 11.1. MEASUREMENT PROCEDURE

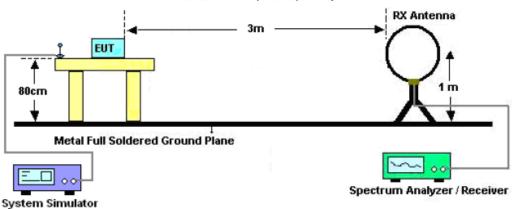
- 1. The EUT was placed on the top of the turntable 0.8 or 1.5 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
- 2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
- 3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
- 4. For each suspected emission, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
- Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
- 6. For emissions above 1GHz, use 1MHz RBW and 3MHz VBW for peak reading. Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
- 7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum values.
- 8.If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
- 9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
- 10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High Low scan is not required in this case.



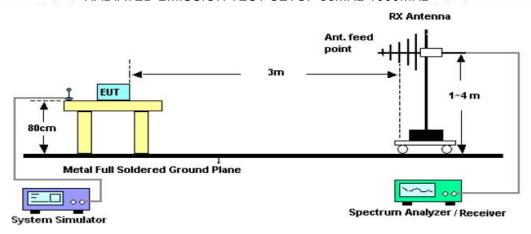


# 11.2. TEST SETUP

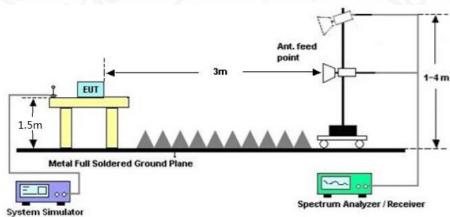
# Radiated Emission Test-Setup Frequency Below 30MHz



#### RADIATED EMISSION TEST SETUP 30MHz-1000MHz



# RADIATED EMISSION TEST SETUP ABOVE 1000MHz



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# 11.3. LIMITS AND MEASUREMENT RESULT

15.209 Limit in the below table has to be followed

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

Note: All modes were tested for restricted band radiated emission, the test records reported below are the worst result compared to other modes.

#### 11.4. TEST RESULT

#### **RADIATED EMISSION BELOW 30MHz**

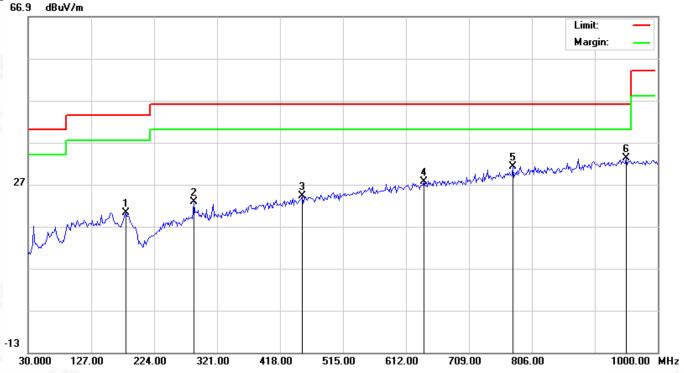
The amplitude of spurious emissions from 9kHz to 30MHz which are attenuated more than 20 dB below the permissible value need not be reported.



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# **RADIATED EMISSION BELOW 1GHZ**

EUT	Bike Computer	Model Name	BC200
Temperature	25° C	Relative Humidity	58%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Horizontal



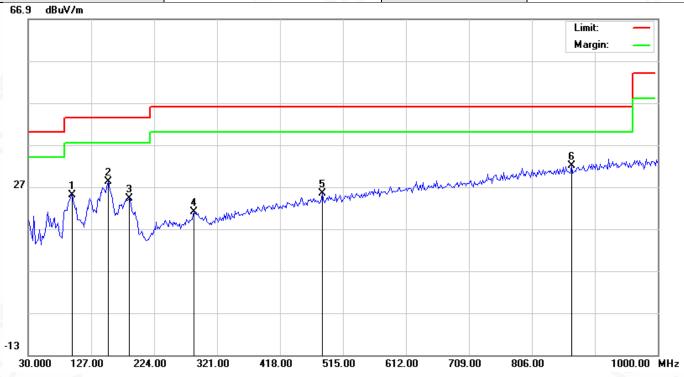
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		180.3500	3.15	17.06	20.21	43.50	-23.29	peak
2	-	285.4333	2.94	19.81	22.75	46.00	-23.25	peak
3	4	451.9500	0.27	24.02	24.29	46.00	-21.71	peak
4	(	639.4833	0.14	27.42	27.56	46.00	-18.44	peak
5		776.9000	1.35	29.89	31.24	46.00	-14.76	peak
6	* (	951.5000	1.05	32.14	33.19	46.00	-12.81	peak

**RESULT: PASS** 



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EUT	Bike Computer	Model Name	BC200
Temperature	25° C	Relative Humidity	58%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Vertical



No.	Mk	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		97.9000	9.28	15.79	25.07	43.50	-18.43	peak
2		152.8667	8.94	19.20	28.14	43.50	-15.36	peak
3		185.2000	8.07	16.07	24.14	43.50	-19.36	peak
4		285.4333	1.14	19.81	20.95	46.00	-25.05	peak
5		482.6667	0.78	24.64	25.42	46.00	-20.58	peak
6	*	867.4333	0.68	31.28	31.96	46.00	-14.04	peak

# RESULT: PASS

- 1. Factor=Antenna Factor + Cable loss, Margin=Measurement-Limit.
- 2. All test modes had been tested. The mode 1 is the worst case and recorded in the report.



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# **RADIATED EMISSION ABOVE 1GHZ**

EUT	Bike Computer	Model Name	BC200
Temperature	25° C	Relative Humidity	58%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Horizontal

Frequency	Meter Reading	Factor Emission Level		Limits	Margin	Value Type	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type	
4914.000	46.38	0.08	46.46	74	-27.54	peak	
4914.000	35.18	0.08	35.26 54		-18.74	AVG	
7371.000	42.19	2.21	44.4	74	-29.6	peak	
7371.000	31.28	2.21	33.49	54	-20.51	AVG	
C	8	(8)		0	8	(8)	
emark:	6 - (		8		10°	0	
ctor = Anter	nna Factor + Cabl	e Loss – Pre-	amplifier.				

EUT	Bike Computer	Model Name	BC200
Temperature	25° C	Relative Humidity	58%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Vertical

Frequency	Meter Reading	Factor Emission Level		Limits	Margin	Value Type	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type	
4914.000	46.19	0.08	46.27	74	-27.73	peak	
4914.000	35.27	0.08	35.35	54	-18.65	AVG	
7371.000	39.58	2.21	41.79	74	-32.21	peak	
7371.000	30.42	2.21	32.63	54	-21.37	AVG	
		1000		@			
emark:							
actor = Anter	nna Factor + Cab	le Loss – Pre-	amplifier.			8	

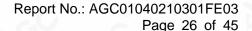
#### **RESULT: PASS**

#### Note:

The amplitude of other spurious emissions from 1G to 25 GHz which are attenuated more than 20 dB below the permissible value need not be reported.

Factor = Antenna Factor + Cable loss - Amplifier gain, Over=Measure-Limit.

The "Factor" value can be calculated automatically by software of measurement system.

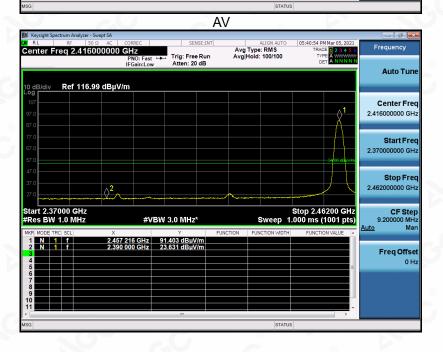




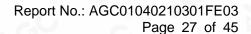
TEST RESULT FOR RESTRICTED BANDS REQUIREMENTS

EUT	Bike Computer	Model Name	BC200
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Horizontal





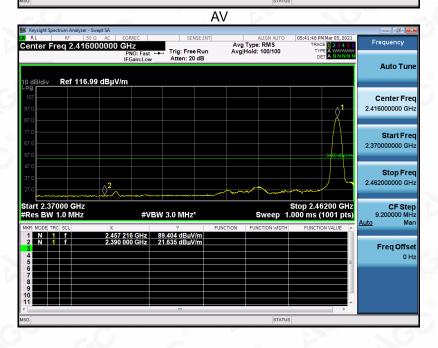
**RESULT: PASS** 



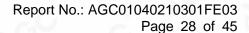


EUT	Bike Computer	Model Name	BC200
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Vertical



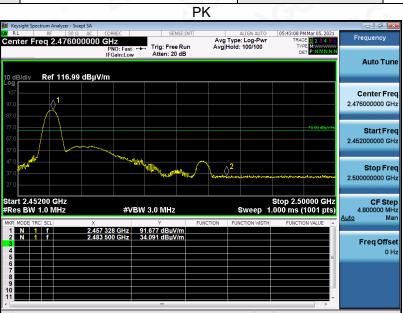


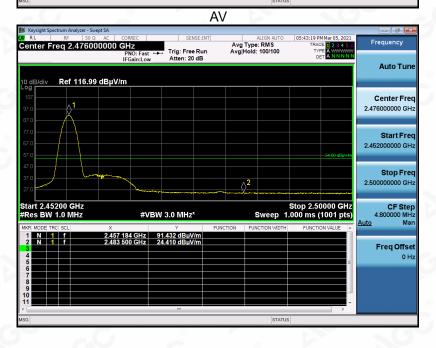
**RESULT: PASS** 



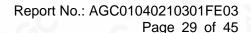


EUT	Bike Computer	Model Name	BC200
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Horizontal



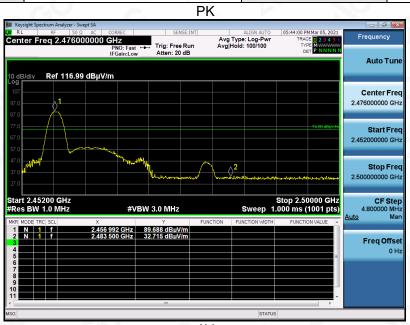


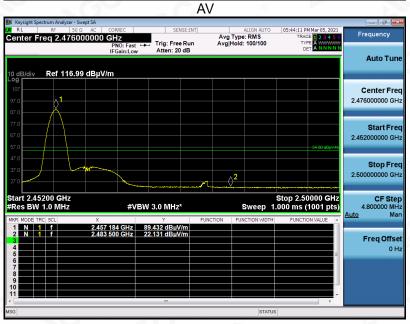
**RESULT: PASS** 





EUT	Bike Computer	Model Name	BC200
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Vertical





**RESULT: PASS** 

Note: The factor had been edited in the "Input Correction" of the Spectrum Analyzer.



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# 12. FCC LINE CONDUCTED EMISSION TEST

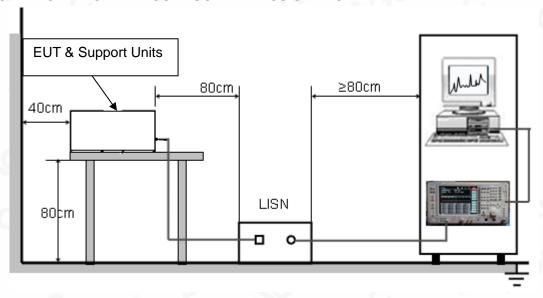
# 12.1. LIMITS OF LINE CONDUCTED EMISSION TEST

F	Maximum RF Line Voltage						
Frequency	Q.P.( dBuV)	Average( dBuV)					
150kHz~500kHz	66-56	56-46					
500kHz~5MHz	56	46					
5MHz~30MHz	60	50					

#### Note:

- 1. The lower limit shall apply at the transition frequency.
- 2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.

# 12.2. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST





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#### 12.3. PRELIMINARY PROCEDURE OF LINE CONDUCTED EMISSION TEST

- 1. The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.10 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- 2. Support equipment, if needed, was placed as per ANSI C63.10.
- 3. All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.
- 4. All support equipment received AC120V/60Hz power from a LISN, if any.
- 5. The EUT received DC 12V power from adapter which received AC120V/60Hz power from a LISN.
- 6. The test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
- 7. Analyzer / Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.
- 8. During the above scans, the emissions were maximized by cable manipulation.
- 9. The test mode(s) were scanned during the preliminary test.

Then, the EUT configuration and cable configuration of the above highest emission level were recorded for reference of final testing.

#### 12.4. FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST

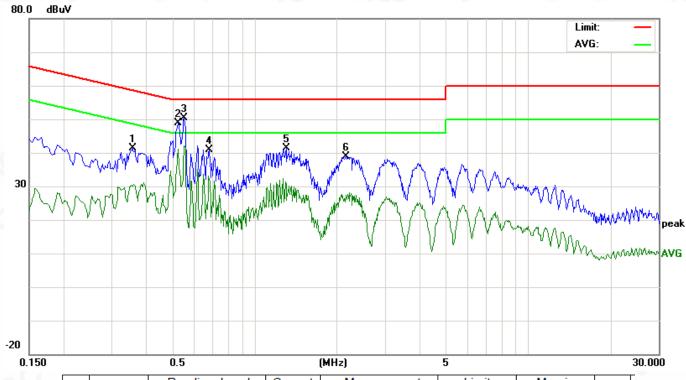
- 1. EUT and support equipment was set up on the test bench as per step 2 of the preliminary test.
- 2. A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. If EUT emission level was less 2dB to the A.V. limit in Peak mode, then the emission signal was re-checked using Q.P and Average detector.
- 3. The test data of the worst case condition(s) was reported on the Summary Data page.



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# 12.5. TEST RESULT OF LINE CONDUCTED EMISSION TEST

Line Conducted Emission Test Line 1-L



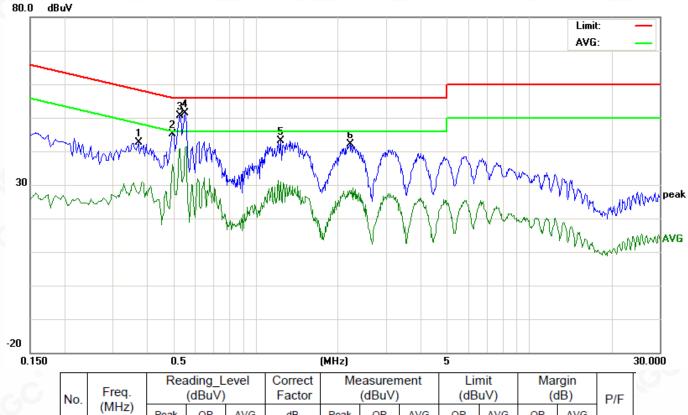
No.	No.	Freq. (MHz)	· (abav)		Correct Factor				Limit (dBuV)		Margin (dB)		P/F	
			Peak	QP	AVG	dB	Peak	QP	AVG	QP	AVG	QP	AVG	
	1	0.3580	28.07	24.14	16.48	13.30	41.37	37.44	29.78	58.77	48.77	-21.33	-18.99	Р
	2	0.5260	35.07	32.90	26.91	13.76	48.83	46.66	40.67	56.00	46.00	-9.34	-5.33	Р
	3	0.5540	36.55	33.98	27.98	13.78	50.33	47.76	41.76	56.00	46.00	-8.24	-4.24	Р
	4	0.6860	26.96	23.01	15.81	13.81	40.77	36.82	29.62	56.00	46.00	-19.18	-16.38	Р
	5	1.3060	27.71	22.41	14.32	13.77	41.48	36.18	28.09	56.00	46.00	-19.82	-17.91	Р
	6	2.1660	25.33	20.27	12.02	13.62	38.95	33.89	25.64	56.00	46.00	-22.11	-20.36	Р

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the condition of the test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



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# Line Conducted Emission Test Line 2-N



No.	Freq. (MHz)			Correct Factor				Limit (dBuV)		Margin (dB)		P/F	
		Peak	QP	AVG	dB	Peak	QP	AVG	QP	AVG	QP	AVG	
1	0.3740	29.22	21.05	11.78	13.38	42.60	34.43	25.16	58.41	48.41	-23.98	-23.25	Р
2	0.4980	31.29	27.62	17.49	13.74	45.03	41.36	31.23	56.03	46.03	-14.67	-14.80	Р
3	0.5299	36.95	33.06	22.78	13.76	50.71	46.82	36.54	56.00	46.00	-9.18	-9.46	Р
4	0.5580	36.09	34.58	27.68	13.79	49.88	48.37	41.47	56.00	46.00	-7.63	-4.53	Р
5	1.2380	29.32	26.87	18.41	13.78	43.10	40.65	32.19	56.00	46.00	-15.35	-13.81	Р
6	2.2139	28.45	22.89	12.70	13.60	42.05	36.49	26.30	56.00	46.00	-19.51	-19.70	Р

**RESULT: PASS** 



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# APPENDIX A: PHOTOGRAPHS OF TEST SETUP

RADIATED EMISSION TEST SETUP BELOW 1GHZ







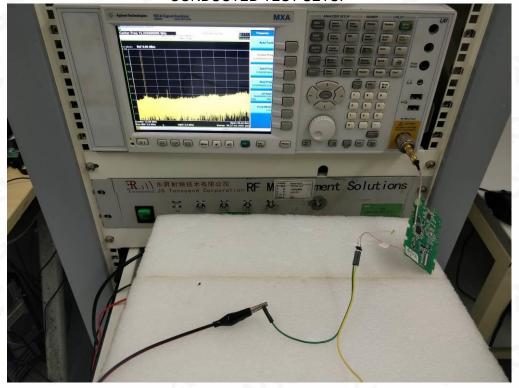


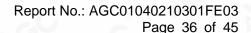
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CONDUCTED TEST SETUP







**APPENDIX B: PHOTOGRAPHS OF EUT** 

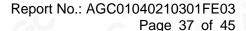
ALL VIEW OF EUT



**EXTERNAL VIEW-1 OF EUT** 

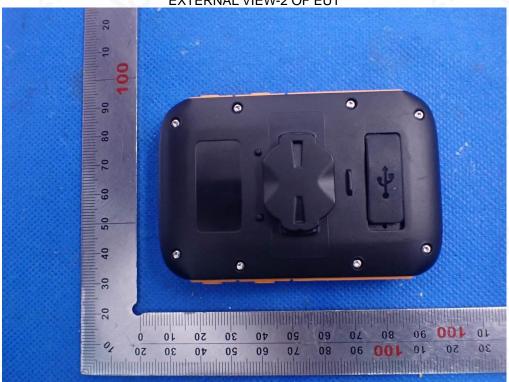


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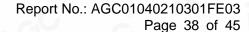
**EXTERNAL VIEW-2 OF EUT** 



**EXTERNAL VIEW-3 OF EUT** 



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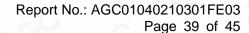


EXTERNAL VIEW-4 OF EUT











**EXTERNAL VIEW-6 OF EUT** 

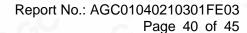






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INTERNAL VIEW-1 OF EUT







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