

# **FCC Test Report**

# Report No.: AGC03061190601FE02

FCC ID	9	2A05W-ROCKIT
APPLICATION PURPOSE	•	Original Equipment
PRODUCT DESIGNATION	:	Bluetooth True Wireless Headset
BRAND NAME	:	SACKit
MODEL NAME		ROCKit
APPLACANT	Fr	SACKit ApS
DATE OF ISSUE		Jul. 02, 2019
STANDARD(S)		FCC Part 15.247
REPORT VERSION	:	V1.0

# Attestation of Global Compliance (Shenzhen) Co., Ltd

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# **REPORT REVISE RECORD**

<b>Report Version</b>	Revise Time Issued Date		Valid Version	Notes
V1.0		Jul. 02, 2019	Valid	Initial Release





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# **1. VERIFICATION OF COMPLIANCE**

Applicant	SACKit ApS			
Address	Lyngvej 1, Aalborg, 9000 Denmark			
Manufacturer	Zhongshan K-mate General Electronics Co., Ltd.			
Address	NO.2, 5th Xinsheng Street, Gangkou Town, Zhongshan City, Guangdong, China			
Factory	Zhongshan K-mate General Electronics Co., Ltd			
Address	NO.2, 5th Xinsheng Street, Gangkou Town, Zhongshan City, Guangdong, China			
Product Designation	Bluetooth True Wireless Headset			
Brand Name	SACKit			
Test Model	ROCKit			
Date of test	Jun. 13, 2019 to Jul. 02, 2019			
Deviation	None			
Condition of Test Sample Normal				
Test Result Pass				
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.

Tested By

sky dong

Sky Dong(Dong Huihui)

. C

Max Zhang

Max Zhang(Zhang Yi)

Jul. 02, 2019

Jul. 02, 2019

Approved By

**Reviewed By** 

Forrest in

Forrest Lei(Lei Yonggang) Authorized Officer

Jul. 02, 2019





# 2.GENERAL INFORMATION

# 2.1PRODUCT DESCRIPTION

The EUT is designed as a "Bluetooth True Wireless Headset". 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         2.402 GHz to 2.480GHz			
RF Output Power	1.573dBm(Max)		
Bluetooth Version	V 5.0		
Modulation     BR ⊠GFSK, EDR ⊠π /4-DQPSK, ⊠8DPSK       BLE ⊠GFSK 1Mbps □GFSK 2Mbps			
Number of channels	40 Channel		
Antenna Designation	Ceramic Antenna(Comply with requirements of the FCC part 15.203)		
Antenna Gain	2dBi		
Hardware Version	BTH108RMB-V15		
Software Version BTH177-V11			
Power Supply	DC 3.7V by battery		

Note: The EUT comprises left and right channel headsets, both are the same and have been tested. Only the test data of left headset recorded in this report.

# 2.2. TABLE OF CARRIER FREQUENCYS

Frequency Band	Channel Number	Frequency 2402MHZ	
	0		
		2404MHZ	
2400~2483.5MHZ			
C c L	38	2478 MHZ	
	39	2480 MHZ	





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

This submittal(s) (test report) is intended for FCC ID: 2A05W-ROCKIT filing to comply with the FCC Part 15.247 requirements.

#### 2.4TEST 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 2.2.

#### **2.6 EQUIPMENT MODIFICATIONS**

Not available for this EUT intended for grant.





# **3. MEASUREMENT UNCERTAINTY**

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

- Uncertainty of Conducted Emission, Uc = ±3.2 dB
- Uncertainty of Radiated Emission below 1GHz, Uc = ±3.9 dB
- Uncertainty of Radiated Emission above 1GHz, Uc = ±4.8 dB
- Uncertainty of total RF power, conducted,  $Uc = \pm 0.8$ dB
- Uncertainty of RF power density, conducted, Uc = ±2.6dB
- Uncertainty of spurious emissions, conducted, Uc = ±2.7dB
- Uncertainty of Occupied Channel Bandwidth: Uc = ±2 %





# 4. DESCRIPTION OF TEST MODES

NO.	TEST MODE DESCRIPTION
1	Low channel TX
2	Middle channel TX
3	High channel 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.

4. The test software is the RTLBTAPP Version\_5.2.2.1 which can set the EUT into the individual test modes.





# **5. SYSTEM TEST CONFIGURATION**

# **5.1 CONFIGURATION OF TESTED SYSTEM**

EUT

# **5.2 EQUIPMENT USED IN TESTED SYSTEM**

Item	Equipment	Model No.	ID or Specification	Remark
1	Bluetooth True Wireless Headset	ROCKit	2AO5W-ROCKIT	EUT

# **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)	15.247 (d) Conducted Spurious Emission		
15.247 (e) Maximum Conducted Output Power Density		Compliant	
15.209	Radiated Emission	Compliant	
15.207	Conducted Emission	N/A_	

Note: The EUT can not use the BT function with charging





# 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	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 RADIATED EMISSION TEST

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
TEST RECEIVER	R&S	ESCI	10096	Jun. 12, 2019	Jun. 26, 2020
EXA Signal Analyzer	Aglient	N9010A	MY53470504	Dec. 20, 2018	Dec. 19, 2019
2.4GHz Fliter	EM Electronics	2400-2500MHz	N/A	Feb. 27, 2019	Feb. 26, 2020
Attenuator	ZHINAN	E-002	N/A	Aug. 28, 2018	Aug. 27, 2019
Horn antenna	SCHWARZBECK	BBHA 9170	#768	Sep. 21, 2017	Sep. 20, 2020
Active loop antenna (9K-30MHz)	ZHINAN	ZN30900C	18051	Jun. 14, 2018	Jun. 13, 2020
Double-Ridged Waveguide Horn	ETS LINDGREN	3117	00034609	May. 26, 2018	May. 25, 2020
Broadband Preamplifier	ETS LINDGREN	3117PA	00225134	Oct. 25, 2018	Oct. 24, 2019
ANTENNA	SCHWARZBECK	VULB9168	D69250	Sep. 28, 2017	Sep. 27, 2019



 $\label{eq:attestation} Attestation of Global Compliance (Shenzhen) Co., Ltd.$ 



# 7. PEAK OUTPUT POWER

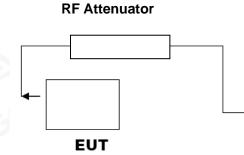
# 7.1. MEASUREMENT PROCEDURE

For peak power test:

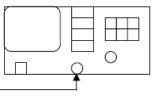
- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- 2. RBW > DTS bandwidth
- 3. VBW≥3\*RBW.
- 4. SPAN≥VBW.
- 5. Sweep: Auto.
- 6. Detector function: Peak.
- 7. Trace: Max hold.

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



# Spectrum Analyzer



RF Cable





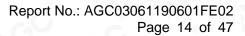
#### 7.3. LIMITS AND MEASUREMENT RESULT

	PEAK OUTPUT POWER MEASUREMENT RESULT							
Frequency (GHz)	Pass or Fail							
2.402	1.490	30	Pass					
2.440	1.573	30	Pass					
2.480	0.985	30	Pass					

CH0









CH19



CH39

Magilent Spectrun	n Analyzer - Swept SA RF 50 Ω AC			ISE:INT	ALIGN AUTO	02,20,20 0	1 Jun 24, 2019	a a <mark>x</mark>
Marker 1 2.	4800350000				: Log-Pwr	TRAC	E 1 2 3 4 5 6	Peak Search
		IFGain:Low	Atten: 30	dB			35 GHz	NextPeak
10 dB/div R	tef 20.00 dBm	1				0.9	85 dBm	
								Next Dr Direkt
10.0				<b>▲</b> 1				Next Pk Right
0.00				<u>•</u>	 			
-10.0								Next Pk Lef
-20.0								Marker Delta
-30.0								
-40.0								
								Mkr→CF
-50.0								
-60.0								Mkr→RefLv
-70.0								
								More
Center 2.480		#\/B\/	V 5 MHz		Buroon 4	Span 5	.000 MHz	1 of 2
#Res BW 1.:		#VBV	V SIVINZ		Sweep 1		1001 pts)	
			_	_				





# 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 $\ge$ 3×RBW.
- 4. Set SPA Trace 1 Max hold, then View.

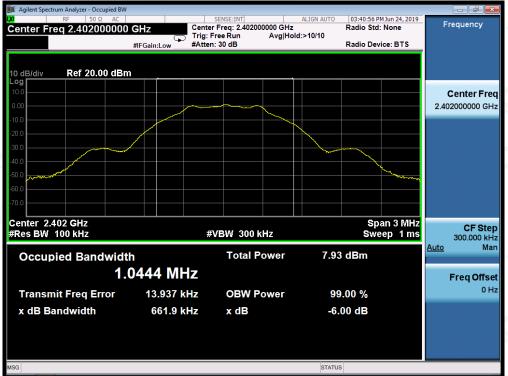
Note: The EUT was tested according to ANSI C63.10 for compliance to FCC PART 15.247 requirements.

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

The same as described in section 7.2.

#### **8.3. LIMITS AND MEASUREMENT RESULTS**

LIMITS AND MEASUREMENT RESULT						
Applicable Limite	Applicable Limits					
Applicable Limits	Test Data (kHz) Criteria					
5	Low Channel	661.9	PASS			
>500KHZ	Middle Channel	662.7	PASS			
	High Channel	662.7	PASS			



# TEST PLOT OF BANDWIDTH FOR LOW CHANNEL

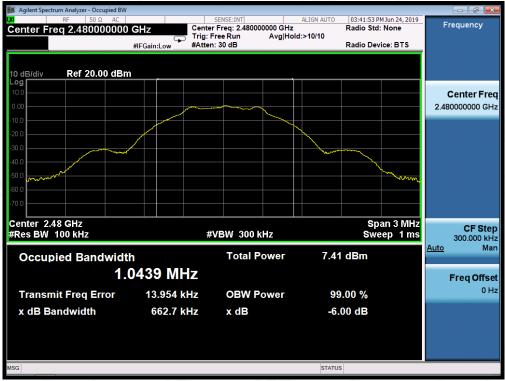






# TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL

#### TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL







# 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						
	Measurement Res	ult				
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 PASS				







# TEST RESULT FOR ENTIRE FREQUENCY RANGE GFSK MODULATION IN LOW CHANNEL







#### GFSK MODULATION IN MIDDLE CHANNEL





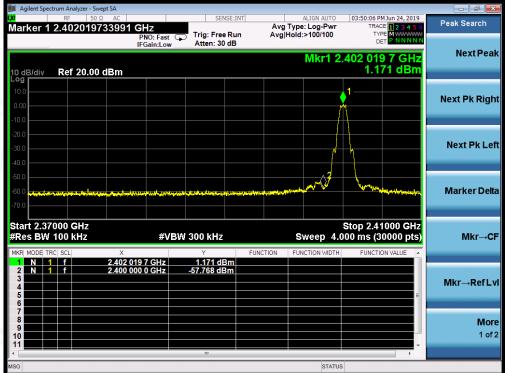


# GFSK MODULATION IN HIGH CHANNEL

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



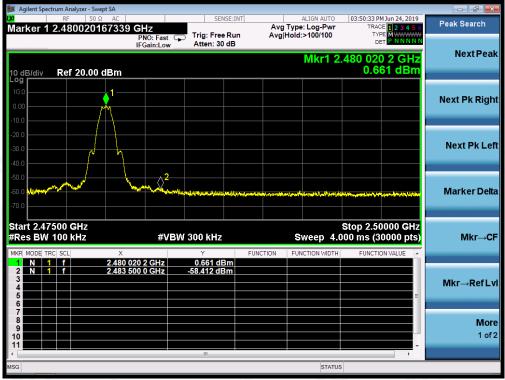




# TEST RESULT FOR BAND EDGE

# GFSK MODULATION IN LOW CHANNEL

#### GFSK MODULATION IN HIGH CHANNEL







# **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 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.

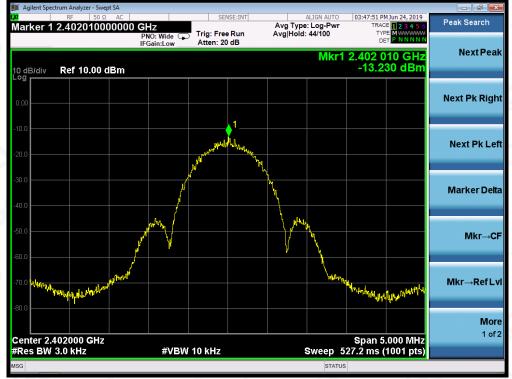
#### **10.3 MEASUREMENT EQUIPMENT USED**

Refer To Section 6.

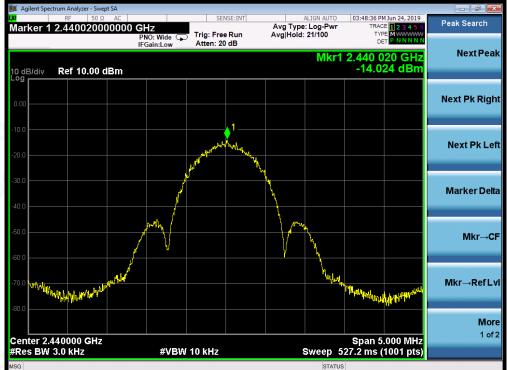
#### **10.4 LIMITS AND MEASUREMENT RESULT**

Channel No.	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
Low Channel	-13.230	8	Pass
Middle Channel	-14.024	8	Pass
High Channel	-14.472	8	Pass

# TEST PLOT OF SPECTRAL DENSITY FOR LOW CHANNEL







# TEST PLOT OF SPECTRAL DENSITY FOR MIDDLE CHANNEL

Agilent Spectrum Analyzer - Swept SA			i eitii	IGH CHANN	
₩ RF 50 Ω AC Marker 1 2.480025000000 G	Hz	Avg Type	e: Log-Pwr	03:48:55 PM Jun 24, 2019 TRACE 1 2 3 4 5 6 TYPE M WWWW	Peak Search
	NO: Wide Trig: Free Gain:Low Atten: 20			DET PNNNN	NextPea
10 dB/div Ref 10.00 dBm			Mkr1 2.	480 025 GHz -14.472 dBm	NextFed
0.00					Next Pk Rigl
20.0		1			Next Pk Le
40.0	//**	- Voy			Marker De
50.0			h.		Mkr→C
60.0 70.0 White Market and a strain a strain and a strain a st			hat water	<sup>4</sup> ะปัชน์สอน กลา เปปลงในไหน่ง	Mkr→RefL
Center 2.480000 GHz				Span 5.000 MHz	<b>Mo</b> 1 of
Res BW 3.0 kHz	#VBW 10 kHz		Sweep 527	.2 ms (1001 pts)	





# **11. RADIATED EMISSION**

#### **11.1. MEASUREMENT PROCEDURE**

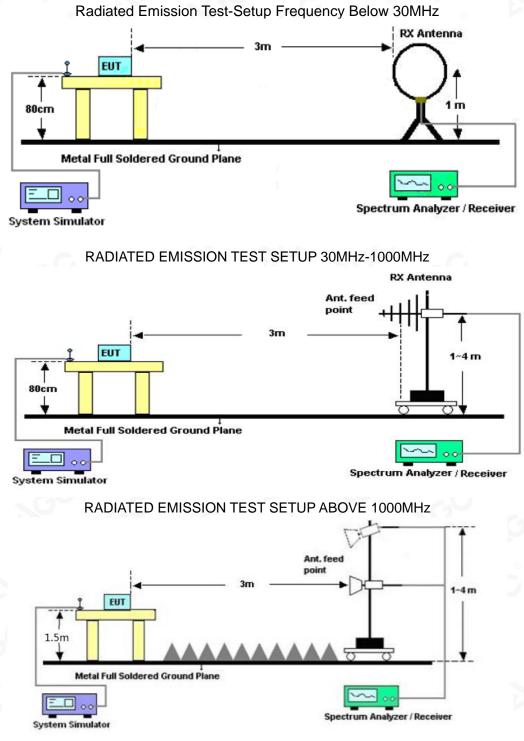
- 1. The EUT was placed on the top of the turntable 0.8 or 1.5 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
- 2. Power on the EUT and all the supporting units. The turntable was rotated 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 emissions, 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.
- 5. 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.





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# 11.2. TEST SETUP





# **11.3. LIMITS AND MEASUREMENT RESULT**

15.209 Limit in the below table has to be followed

Frequencies (MHz)	Field Strength (micorvolts/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**

No emission found between lowest internal used/generated frequencies to 30MHz.

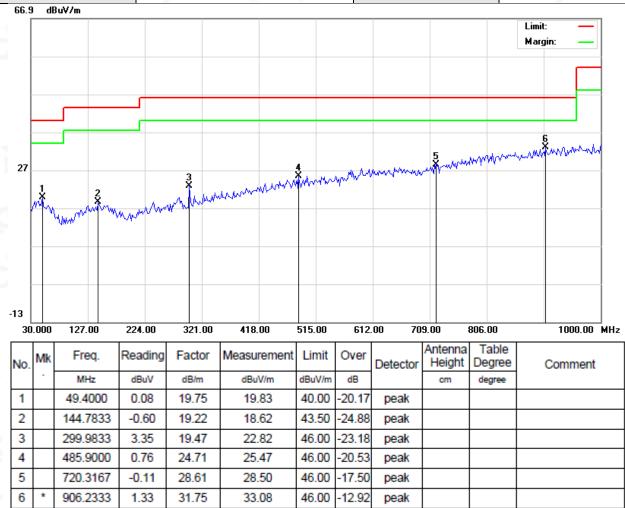




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# **RADIATED EMISSION BELOW 1GHZ**

EUT	Bluetooth True Wireless Headset	Model Name	ROCKit
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Horizontal



**RESULT: PASS** 





ure         960hPa         Test Voltage         Normal Voltage           Aode         Mode 1         Antenna         Vertical           66.9         dBuV/m         Imit: Margin:	Bluetooth True Wireless Headset ROCKit	ROCKit	Model Name		Bluetooth True Wireless Headset				-		
Aode         Mode 1         Antenna         Vertical           66.9         dBuV/m         Imit:         Margin:         Imit:         Margin:           27         3         3         3         24.00         321.00         418.00         515.00         612.00         709.00         806.00         1000.00           13         0.000         127.00         224.00         321.00         418.00         515.00         612.00         709.00         806.00         1000.00           No.         MR         Freq.         Reading         Factor         Measurement         Limit         Over         Detector         Height Degree         Comment           1         39.7000         0.35         19.98         20.33         40.00         -19.67         peak          Comment           2         149.6333         0.42         19.21         19.63         43.50         -23.87         peak           Comment	Relative Humidity 55.4%	Relative Humidity 55.4%			25° C			25° C Relative Humidity		e	peratur
66.9       dBuV/m         27       Image: Constraint of the second	960hPa Test Voltage Normal Volt	Normal Voltage	est Voltage	CO T	NO.	hPa	960		sure		
Z7         Limit: Margin:           27         3           3         3           30.000         127.00           224.00         321.00           418.00         515.00           612.00         709.00           806.00         1000.00           No.         K           Freq.         Reading           Factor         Measurement           Limit         Over           Detector         Height           MHz         dBuV           4BW         dBuV/m           4BW         dBuV/m           4BW         dBuV/m           4BW         4B.00           1         39.7000           3         299.9833         2.62           19.47         22.09         46.00         -23.91           1         299.9833         2.62         19.47         22.09         46.00         -23.91         peak         -	Ande 1 Antenna Vertical	Vertical	Intenna	A	0	le 1	Mod		Mode		
Arterna         Reading         Factor         Measurement         Limit         Over         Detector         Anterna         Degree         Comment           1         39.7000         0.35         19.98         20.33         40.00         -19.67         peak         - <t< th=""><th></th><th></th><th>1</th><th></th><th></th><th></th><th>1</th><th>3uV/m</th><th>66.9 dl</th></t<>			1				1	3uV/m	66.9 dl		
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30.000         127.00         224.00         321.00         418.00         515.00         612.00         709.00         806.00         1000.00           No.         Mk         Freq.         Reading         Factor         Measurement         Limit         Over         Detector         Antenna         Table         Degree         Comment         Comment         I         39.7000         0.35         19.98         20.33         40.00         -19.67         peak         Image: Comment         Image: Comment <td< th=""><th>man have a second second</th><th></th><th></th><th>Mynami</th><th>whohimput</th><th>www.</th><th>WWWWW</th><th>humm</th><th></th></td<>	man have a second			Mynami	whohimput	www.	WWWWW	humm			
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1       39.7000       0.35       19.98       20.33       40.00       -19.67       peak         2       149.6333       0.42       19.21       19.63       43.50       -23.87       peak         3       299.9833       2.62       19.47       22.09       46.00       -23.91       peak									-13		
2       149.6333       0.42       19.21       19.63       43.50       -23.87       peak         3       299.9833       2.62       19.47       22.09       46.00       -23.91       peak	00 321.00 418.00 515.00 612.00 709.00 806.00 1000	806.00 1000.00 nna Table	2.00 709.00 Antenn	5.00 612	418.00	321.00	224.00	127.00	-13 30.000		
3 299.9833 2.62 19.47 22.09 46.00 -23.91 peak	00         321.00         418.00         515.00         612.00         709.00         806.00         1000           ing         Factor         Measurement         Limit         Over         Antenna         Table         Degree         Comm           V         dB/m         dBuV/m         dBuV/m         dB         Comm         degree         Comm	806.00 1000.00 nna Table ght Degree Comment	2.00 709.00 Detector Antenn Heigh cm	5.00 612 imit Over uV/m dB	418.00 Measurement dBuV/m	321.00 Factor dB/m	224.00 Reading dBuV	127.00 Freq. MHz	-13 30.000		
	00       321.00       418.00       515.00       612.00       709.00       806.00       1000         1ing       Factor       Measurement       Limit       Over Detector       Antenna Height       Table Degree       Comm         V       dB/m       dBuV/m       dB       79.07       peak       Comm	806.00 1000.00 nna Table ght Degree Comment	2.00 709.00 Detector Heigh cm	5.00 612 imit Over uV/m dB 0.00 -19.67	418.00 Measurement dBuV/m 20.33	321.00 Factor dB/m 19.98	224.00 Reading dBuV 0.35	127.00 Freq. MHz 39.7000	-13 30.000		
	00       321.00       418.00       515.00       612.00       709.00       806.00       1000         1ing       Factor       Measurement       Limit       Over Detector       Antenna Height       Table Degree       Comm         V       dB/m       dBuV/m       dB       79.07       peak       Comm	806.00 1000.00 nna Table ght Degree Comment	2.00 709.00 Detector Heigh cm	5.00 612 imit Over uV/m dB 0.00 -19.67	418.00 Measurement dBuV/m 20.33	321.00 Factor dB/m 19.98	224.00 Reading dBuV 0.35	127.00 Freq. MHz 39.7000 149.6333	-13 30.000		
4 580.1333 1.19 20.08 27.87 46.00 -18.13 peak	00       321.00       418.00       515.00       612.00       709.00       806.00       1000         ing       Factor       Measurement       Limit       Over Detector       Antenna Height       Table Degree       Comm         v       dB/m       dBuV/m       dB       V       or       cm       degree       Comm         2       19.21       19.63       43.50       -23.87       peak	806.00 1000.00 nna Table ght Degree Comment	2.00 709.00 Detector peak peak peak	5.00 612 imit Over uV/m dB 0.00 -19.67 3.50 -23.87 5.00 -23.91	418.00 Measurement dBuV/m 20.33 19.63 22.09	321.00 Factor dB/m 19.98 19.21 19.47	224.00 Reading dBuV 0.35 0.42	127.00 Freq. 39.7000 149.6333 299.9833	-13 30.000 No. Mk - 1 2		
5 810.8500 1.89 30.55 32.44 46.00 -13.56 peak	00       321.00       418.00       515.00       612.00       709.00       806.00       1000         100       321.00       418.00       515.00       612.00       709.00       806.00       1000         101       Factor       Measurement       Limit       Over Detector       Antenna Height       Table Degree Comm       Comm         V       dB/m       dBuV/m       dB       0       1000       1000         5       19.98       20.33       40.00       -19.67       peak       1       1         2       19.21       19.63       43.50       -23.87       peak       1       1       1	806.00 1000.00 nna Table ght Degree Comment	2.00 709.00 Detector peak peak peak	5.00 612 imit Over uV/m dB 0.00 -19.67 3.50 -23.87 5.00 -23.91	418.00 Measurement dBuV/m 20.33 19.63 22.09	321.00 Factor dB/m 19.98 19.21 19.47	224.00 Reading dBuV 0.35 0.42	127.00 Freq. MHz 39.7000 149.6333	-13 30.000 No. Mk -1 2		

#### RESULT: PASS Note:

- 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	Bluetooth True Wireless Headset	Model Name	ROCKit
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Tree
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	- Value Type
4804.000	52.72	0.08	52.8	74	-21.2	peak
4804.000	49.34	0.08	49.42	54	-4.58	AVG
7206.000	43.1	2.21	45.31	74	-28.69	peak
7206.000	38.52	2.21	40.73	54	-13.27	AVG
	20			0	0	
emark:		Ο,				20
actor = Anter	na Factor + Cable	e Loss – Pre-	amplifier	(Q)		

EUT	Bluetooth True Wireless Headset	Model Name	ROCKit
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Vertical

				Margin	
(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	- Value Type
51.64	0.08	51.72	74	-22.28	peak
47.65	0.08	47.73	54	-6.27	AVG
40.47	2.21	42.68	74	-31.32	peak
36.53	2.21	38.74	54	-15.26	AVG
	<u>so</u>	- 6			
	51.64 47.65 40.47	51.64         0.08           47.65         0.08           40.47         2.21	51.64         0.08         51.72           47.65         0.08         47.73           40.47         2.21         42.68	51.64         0.08         51.72         74           47.65         0.08         47.73         54           40.47         2.21         42.68         74	51.64         0.08         51.72         74         -22.28           47.65         0.08         47.73         54         -6.27           40.47         2.21         42.68         74         -31.32





# Report No.: AGC03061190601FE02 Page 30 of 47

EUT	Bluetooth True Wireless Headset	Model Name	ROCKit
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 2	Antenna	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Trees
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	- Value Type
4880.000	51.91	0.14	52.05	74	-21.95	peak
4880.000	47.76	0.14	47.9	54	-6.1	AVG
7320.000	42.16	2.36	44.52	74	-29.48	peak
7320.000	38.19	2.36	40.55	54	-13.45	AVG
S	-0			200	<i></i> C	0

Factor = Antenna Factor + Cable Loss – Pre-amplifier.

EUT	Bluetooth True Wireless Headset	Model Name	ROCKit
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 2	Antenna	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Malua Tima
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	- Value Type
4880.000	51.05	0.14	51.19	74	-22.81	peak
4880.000	46.31	0.14	46.45	54	-7.55	AVG
7320.000	40.99	2.36	43.35	74	-30.65	peak
7320.000	36.58	2.36	38.94	54	-15.06	AVG
		00	C.			

Factor = Antenna Factor + Cable Loss – Pre-amplifier.

