## **TEST REPORT**



DT&C Co., Ltd.

42, Yurim-ro, 154Beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea, 17042 Tel: 031-321-2664, Fax: 031-321-1664

1. Report No: DRTFCC2104-0034

2. Customer

• Name (FCC): GenBody Inc. / Name (IC): GenBody Inc.

Address (FCC): 3-18, Eopseong 2-gil, Seobuk-gu, Cheonan-si, Chungcheongnam-do, South Korea
 Address (IC): 3-18, Eopseong 2-gil, Seobuk-gu Cheonan-si Chungcheongnam-do 31077 Korea
 (Republic Of)

3. Use of Report: FCC & IC Certification

4. Product Name / Model Name : Fluorimetric Immunoassay Analyzer / Confiscope F20

FCC ID: 2AZBMIAAF20

IC: 27104-IAAF20

5. FCC Regulation(s): Part 15.225

IC Standard(s): RSS-210 Issue 10

Test Method used: ANSI C63.10-2013

6. Date of Test: 2021.02.24 ~ 2020.03.25

7. Location of Test: Permanent Testing Lab On Site Testing

8. Testing Environment: Refer to the attached Test Result

9. Test Result: Refer to the attached Test Result

The results shown in this test report refer only to the sample(s) tested unless otherwise stated.

Affirmation Name : SeungJu Woo (Signature) Reviewed by Name : JaeJin Lee (Signature)

2021.04.20.

DT&C Co., Ltd.

This test report is a general report that does not use the KOLAS accreditation mark and is not related to KS Q ISO/IEC 17025 and KOLAS accreditation.

If this report is required to confirmation of authenticity, please contact to report@dtnc.net



IC: 27104-IAAF20

## **Test Report Version**

Test Report No.	Date	Description	Revised by	Reviewed by
DRTFCC2104-0034	Apr. 20, 2021	Initial issue	SeungJu Woo	JaeJin Lee



## **CONTENTS**

1. General Information	. 4
1.1. Testing Laboratory	. 4
1.2. Testing Environment	. 4
1.3. Measurement Uncertainty	. 4
1.4. Details of Applicant	. 5
1.5. Description of EUT	. 5
1.6. Declaration by the applicant / manufacturer	. 5
2. Test Methodology	. 6
2.1. EUT Configuration	. 6
2.2. EUT Exercise	. 6
2.3. General Test Procedures	. 6
2.4. Description of Test Mode	. 6
2.5. Tested frequency	. 6
3. Antenna requirements	. 6
4. Test report	7
4.1. Summary of tests	. 7
4.2. Transmitter requirements	. 8
4.2.1. 20dB bandwidth & Occupied Bandwidth	. 8
4.2.2. In-band emissions	. 9
4.2.3. Out-of-band emissions	.11
4.2.4. Frequency Stability	13
4.2.5. AC Power-Line Conducted Emissions	14
APPENDIX	19



FCC ID: **2AZBMIAAF20**IC: **27104-IAAF20** 

### 1. General Information

### 1.1. Testing Laboratory

### DT&C Co., Ltd.

The 3 m test site and conducted measurement facility used to collect the radiated data are located at the 42, Yurim-ro, 154beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea 17042.

The test site complies with the requirements of § 2.948 according to ANSI C63.4-2014.

- FCC & IC MRA Designation No.: KR0034

- ISED#: 5740A

www.dtnc.net	
Telephone	+ 82-31-321-2664
FAX	+ 82-31-321-1664

### 1.2. Testing Environment

Ambient Condition		
Temperature	+22 °C ~ +24 °C	
<ul> <li>Relative Humidity</li> </ul>	39 % ~ 44 %	

### 1.3. Measurement Uncertainty

The measurement uncertainties shown below were calculated in accordance with requirements of ANSI C63.4-2014 and ANSI C63.10-2013. All measurement uncertainty values are shown with a coverage factor of k = 2 to indicate a 95 % level of confidence.

Parameter	Measurement uncertainty
AC power-line conducted emission	3.6 dB (The confidence level is about 95 %, k = 2)
Radiated emission (Below 1 GHz)	4.9 dB (The confidence level is about 95 %, k = 2)



FCC ID: 2AZBMIAAF20 IC: 27104-IAAF20

## 1.4. Details of Applicant

Applicant Name(FCC)	GenBody Inc.	
Applicant Name(IC)	GenBody Inc.	
Address (FCC)	3-18, Eopseong 2-gil, Seobuk-gu, Cheonan-si, Chungcheongnam-do, South Korea	
Address (IC)	3-18, Eopseong 2-gil, Seobuk-gu Cheonan-si Chungcheongnam-do 31077 Korea (Republic Of)	

## 1.5. Description of EUT

Equipment Class	Low Power Communications Device Transmitter (DXX)	
Product Name	Fluorimetric Immunoassay Analyzer	
Model Name(FCC, IC)	Confiscope F20	
Add Model Name(FCC, IC)	Confiscope F20V	
Firmware Version Identification Number	RFID3021.001	
EUT Serial Number	Undesignated	
Power Supply	DC 3.7 V	
Frequency Range	13.558 MHz	
Modulation Type	ASK	
Antenna Type	PCB Pattern Antenna	

## 1.6. Declaration by the applicant / manufacturer

N/A

FCC ID: 2AZBMIAAF20

IC: 27104-IAAF20

## 2. Test Methodology

The tests were performed according to the ANSI C63.10-2013.

### 2.1. EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

#### 2.2. EUT Exercise

The EUT was operated in the test mode to fix the TX frequency that was for the purpose of the measurements. According to its specifications, the EUT must comply with the requirements of the FCC and IC rules.

#### 2.3. General Test Procedures

#### **Conducted Emissions**

According to the requirements in Section 6.2 of ANSI C63.10, the EUT is placed on the wooden table, which is 0.8 m above ground plane and the conducted emissions from the EUT are measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-peak and Average detector.

#### **Radiated Emissions**

The EUT is placed on a non-conductive table, which is 0.8 m above ground plane. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3 m away from the receiving antenna, which varied from 1 m to 4 m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the highest emission, the relative positions of this hand-held transmitter (EUT) was rotated through three orthogonal axes according to the requirements in Section 6.3 of ANSI C63.10

#### 2.4. Description of Test Mode

Test mode1	Continuous transmitting mode
	• <b>9</b>

The EUT has been tested with the operating condition for maximizing the emission characteristics. And the internal firmware was used for staying in continuous transmitting mode.

#### 2.5. Tested frequency

Channel	TX Frequency(MHz)	
Lowest	13.558	
Middle	-	
Highest	-	

### 3. Antenna requirements

An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

The internal antenna is permanently attached on the PCB. Therefore this E.U.T Complies with the requirement of §15.203



## 4. Test report

## 4.1. Summary of tests

FCC part section(s)	RSS section(s)	Parameter	Limit	Test condition	Status Note 1
2.1049	-	20 dB Bandwidth	-		С
-	RSS-Gen [ 6.7 ]	Occupied Bandwidth	-		С
15.225 (a)	RSS-210 [ B6(a) ]	In-Band Emissions	15,848 µV/m @ 30 m 13.553 MHz – 13.567 MHz		С
15.225 (b)	RSS-210 [ B6(b) ]	In-Band Emissions	334 μV/m @ 30 m 13.410 MHz – 13.553 MHz 13.567 MHz – 13.710 MHz	Radiated	С
15.225 (c)	RSS-210 [ B6(c) ]	In-Band Emissions	106 μV/m @ 30 m 13.110 MHz – 13.410 MHz 13.710 MHz – 14.010 MHz		С
15.225 (d) 15.209	RSS-210 [ B6(d) ] RSS-GEN [8.9]	Out-of Band Emissions	Emissions outside of the specified band (13.110 MHz - 14.010 MHz) must meet the radiated limits detailed in 15.209 (Refer to the section 4.2.3)		С
15.225 (e)	RSS-210 [ B6 ]	Frequency Stability	±0.01 % of operating frequency	Temp & Humid Test Chamber	С
15.207	RSS-Gen [8.8]	AC Conducted Emissions	FCC Part 15.207 (Refer to the section 4.2.6)	AC Line Conducted	С
15.203	-	Antenna Requirements	FCC Part 15.203 (Refer to the section 3)	-	С

Note 1: **C** = Comply **NC** = Not Comply **NT** = Not Tested **NA** = Not Applicable

Note 2: For radiated emission tests below 30 MHz were performed on semi-anechoic chamber which is correlated with OATS.

TRF-RF-203(09)210316



#### 4.2. Transmitter requirements

#### 4.2.1. 20dB bandwidth & Occupied Bandwidth

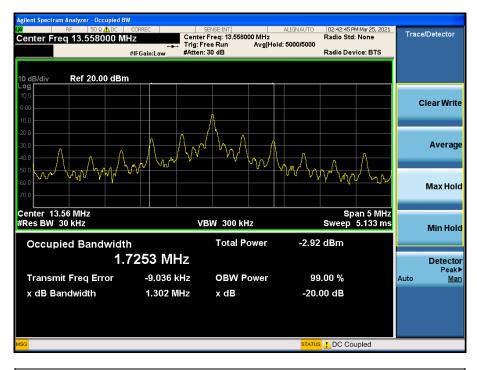
#### - Procedure: ANSI C63.10-2013 Section 6.9.2, RSS-GEN [6.7]

The 20 dB Bandwidth is measured with a spectrum analyzer connected via a receive antenna placed near the EUT while the EUT is operating in transmission mode.

Report No.: DRTFCC2104-0034

- 1. Center frequency = EUT channel center frequency
- 2. Span =  $2 \sim 5$  times the OBW
- 3. RBW = 1 % ~ 5 % OBW
- 4. VBW  $\geq$  3 x RBW
- 5. Detector = Peak
- 6. Trace = Max hold
- 7. The trace was allowed to stabilize
- 8. Determine the reference value = Set the spectrum analyzer marker to the highest level of the displayed trace
- 9. Using the marker-delta function of the instrument, determine the "-xx dB down amplitude" using [(reference value) xx].
- 10. Reset the marker-delta function and move the marker to the other side of the emission until the delta marker amplitude is at the same level as the reference marker amplitude. The marker-delta frequency reading at this point is the specified emission bandwidth.

#### - Measurement Data: Comply



Tested Frequency [MHz]	20 dB BW (MHz)	Occupied BW (MHz)
13.558	1.302	1.725

#### - Minimum Standard: NA

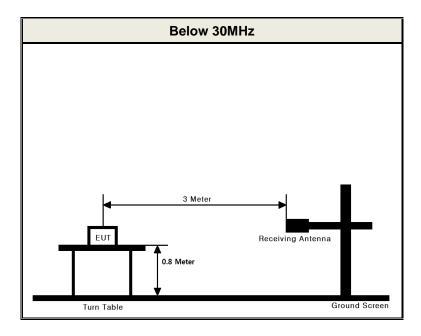


IC: 27104-IAAF20

FCC ID: 2AZBMIAAF20

#### 4.2.2. In-band emissions

#### - Test Configuration



- Procedure: The radiated emission was tested according to the section 6.4 of the ANSI C63.10-2013.

The EUT was placed on a 0.8 m high non-conductive table and it was placed at 3m distance from the antenna. Measurements were performed for each of the three antenna orientations. (ie. parallel, perpendicular, and ground-parallel)

Also, measurements were performed with the EUT oriented in 3 orthogonal axis and rotated 360 degrees to determine worst-case orientation for maximum emissions.

RBW = As specified in below table, VBW  $\geq$  3 x RBW, Sweep = Auto, Detector = Peak Trace mode = Max Hold until the trace stabilizes.

Frequency	RBW
9 - 150 kHz	200 – 300 Hz
0.15 - 30 MHz	9 – 10 kHz
30 - 1 000 MHz	100 – 120 kHz
> 1000 MHz	1 MHz

- Minimum Standard: Part 15.225(a), (b), (c) & RSS-210 [ B6(a), (b), (c) ]

Frequency Band [MHz]	Limit at 30 m measurement distance			
Trequency Band [Minz]	[uV/m]	[dBuV/m]		
13.553 - 13.567	15,848	84.0		
13.410 - 13.553 13.567 - 13.710	334	50.5		
13.110 - 13.410 13.710 - 14.010	106	40.5		

TRF-RF-203(09)210316 Pages: 9 / 20



IC: **27104-IAAF20** 

FCC ID: 2AZBMIAAF20

#### - Measurement Data:

Test Frequency Band [MHz]	Freq. [MHz]	EUT Axis.	ANT (Note 1)	Reading Level [dBuV]	T.F [dB/m]	Field Strength @3 m [dBuV/m]	Field Strength @30 m [dBuV/m]	Limit [dBuV/m]	Margin [dB]
13.110 ~ 13.410	13.384	Z	Р	33.8	10.4	44.2	4.2	40.5	36.3
13.410 ~ 13.553	13.553	Z	Р	46.9	10.4	57.3	17.3	50.5	33.2
13.553 ~ 13.567	13.560	Z	Р	51.8	10.4	62.2	22.2	84.0	61.8
13.567 ~ 13.710	13.567	Z	Р	45.1	10.4	55.5	15.5	50.5	35.0
13.710 ~ 14.010	13.728	Z	Р	34.1	10.4	44.5	4.5	40.5	36.0

Note 1. Loop antenna orientation

**Note 2.** This test item was performed at 3 m and the data were extrapolated to the specified measurement distance of 30 m using the square of an inverse linear distance extrapolation factor (40 dB/decade) as specified in §15.31(f)2.

Extrapolation Factor = 40 log( 3m / 30m ) = -40

**Note 3.** All data were recorded using a spectrum analyzer employing a peak detector.

If PK results were meet Quasi-peak limit, Quasi-peak measurements were omitted.

Note 4. Sample Calculation.

Margin = Limit - Field Strength @ 30 m / Field Strength @ 30 m = Field Strength @ 3 m - 40 dB

Field Strength @ 3 m = Reading + T.F / T.F = AF + CL

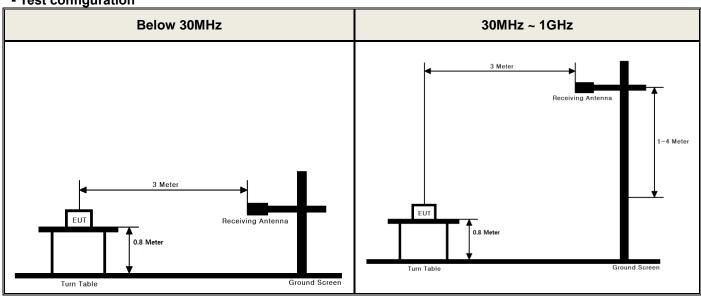
Where, T.F = Total Factor, AF = Antenna Factor, CL = Cable Loss

<sup>&</sup>quot;P": Parallel, "V": perpendicular, "G": ground-parallel

Report No.: DRTFCC2104-0034 IC: 27104-IAAF20

#### 4.2.3. Out-of-band emissions

- Test configuration



- Procedure: The radiated emission was tested according to the section 6.4, 6.5 of the ANSI C63.10-2013.

For below 30 MHz, measurements were performed as descripted in section 4.2.3. For above 30 MHz;

The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3 m away from the receiving antenna, which varied from 1 m to 4 m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the highest emission, the relative positions of the EUT were rotated through three orthogonal axes.

RBW = As specified in below table, VBW ≥ 3 x RBW, Sweep = Auto, Detector = Peak

Trace mode = Max Hold until the trace stabilizes.

Frequency	RBW
9 - 150 kHz	200 – 300 Hz
0.15 - 30 MHz	9 – 10 kHz
31 - 1 000 MHz	101 – 120 kHz
> 1000 MHz	1 MHz

#### - Minimum Standard: Part 15.209, 225(d) & RSS-210[B6(d)], RSS-GEN[8.9]

The field strength of any emissions appearing outside of the 13.110 - 14.010 MHz band shall not exceed the general radiated emission limits as below.

Frequency (MHz)	FCC Limit (uV/m)	IC Limit (μA/m)	Measurement Distance (m)
0.009 - 0.490	2 400 / F (kHz)	6.37/F (F in kHz)	300
0.490 - 1.705	2 4000 / F (kHz)	63.7/F (F in kHz)	30
1.705 – 30.0	30	0.08	30

Frequency (MHz)	FCC Limit (uV/m)	IC Limit (uV/m)	Measurement Distance (m)
30 ~ 88	100 **	100	3
88 ~ 216	150 **	150	3
216 ~ 960	200 **	200	3
Above 960	500	500	3

<sup>\*\*</sup>Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§15.231 and 15.241

This test report is prohibited to copy or reissue in whole or in part without the approval of DT&C Co., Ltd. TRF-RF-203(09)210316 Pages: 11 / 20 Report No.: **DRTFCC2104-0034** IC: **27104-IAAF20** 

FCC ID: 2AZBMIAAF20

Pages: 12 / 20

#### - Measurement Data:

Frequency [MHz]	EUT Axis.	ANT (Note 1)	Reading [dBuV]	T.F [dB/m]	DCF [dB]	Electric Field Strength [dBuV/m]	Magnetic Field Strength [dBuA/m]	Limit [dBuV/m]	Limit [dBuA/m]	Margin [dB]
9.39	Z	Р	33.6	10.8	-40	4.4	-47.1	29.5	-21.9	25.1
18.92	Z	Р	27.1	10.1	-40	-2.8	-54.3	29.5	-21.9	32.3
40.67	Z	V	42.5	-9.6	N/A	32.9	-	40.0	-	7.1
202.66	Z	Н	51.5	-11.0	N/A	40.5	-	43.5	-	3.0
335.55	Z	Н	48.7	-5.8	N/A	42.9	-	46.0	-	3.1
419.94	Z	Н	48.8	-4.0	N/A	44.8	-	46.0	-	1.2
504.33	Z	Н	45.7	-2.7	N/A	43.0	1	46.0	-	3.0
-	-	-	ı		ı	-	1	-	-	-
-	-	-	-	-	-	-	-	-	-	-

Note 1. No other spurious and harmonic emissions were reported greater than listed emissions above table.

Note 2. All data were recorded using a spectrum analyzer employing a peak detector.

If PK results were meet Quasi-peak limit, Quasi-peak measurements were omitted.

Note 3. Loop antenna orientation (30 MHz Below)

"P"= Parallel, "V"= perpendicular, "G"= ground-parallel

Bilog antenna polarization (30 MHz above)

"H"= Horizontal, "V"= Vertical

Note 4. Information of Distance Correction Factor

For finding emissions, measurements may be performed at a distance closer than that specified in the regulations.

In this case, the distance factor is applied to the result.

- Calculation of distance correction factor

At frequencies below 30 MHz = 40 log( tested distance / specified distance )

At frequencies at or above 30 MHz = 20 log( tested distance / specified distance )

When distance factor is "N/A", the measurements were performed at the specified distance and distance factor is not applied.

Note 5. Sample calculation

Margin = Limit[dBuV/m] – Electric Field Strength

Electric Field Strength (dBuV/m) = Reading + T.F - DCF

Magnetic Field Strength (dBuA/m) = Electric Field Strength - 51.5 dB

T.F = AF + CL - AG

Where, T.F = Total Factor, AF = Antenna Factor, CL = Cable Loss, AG = Amplifier Gain, DCF = Distance Factor

IC: **27104-IAAF20** 

FCC ID: 2AZBMIAAF20

### 4.2.4. Frequency Stability

#### - Procedure:

Part 15.225 requires that devices operating in the 13.553 – 13.567 MHz shall maintain the carrier frequency within 0.01 % of the operating frequency over the temperature variation of -20 degrees to + 50 degrees C at normal supply voltage.

- Measurement Data: Comply

Operating Frequency : 13,558,000 Hz

VOLTAGE (%)	POWER (V <sub>DC</sub> )	TEMP (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100%		+20(ref)	13,558,601	601	0.004433
100%		-20	13,558,713	713	0.005259
100%		-10	13,558,696	696	0.005133
100%		0	13,558,775	775	0.005716
100%	3.70	+10	13,558,598	598	0.004410
100%		+20	13,558,602	602	0.004440
100%		+30	13,558,623	623	0.004595
100%		+40	13,558,576	576	0.004248
100%		+50	13,558,584	584	0.004307
85%	3.15	20	13,558,599	599	0.004418
115%	4.26	20	13,558,611	611	0.004506

#### - Minimum Standard: Part 15. 225(e) & RSS-210 [B6]

The frequency tolerance of the carrier signal shall be maintained within ±0.01 % of the operating frequency.

TRF-RF-203(09)210316

Pages: 13 / 20

FCC ID: **2AZBMIAAF20**IC: **27104-IAAF20** 

#### 4.2.5. AC Power-Line Conducted Emissions

### - Test Requirements and limit, Part 15.207 & RSS-Gen [8.8]

An intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 uH/50 ohm line impedance stabilization network (LISN).

Compliance with the provision of this paragraph shall on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower applies at the boundary between the frequency ranges.

Frequency Range (MHz)	Conducted Limit (dBuV)				
	Quasi-Peak	Average			
0.15 ~ 0.5	66 to 56 *	56 to 46 *			
0.5 ~ 5.0	56	46			
5 ~ 30	60	50			

<sup>\*</sup> Decreases with the logarithm of the frequency

Compliance with this provision shall be based on the measurement of the radio frequency voltage between each power line (LINE and NEUTRAL) and ground at the power terminals.

#### - Test Configuration

See test photographs for the actual connections between EUT and support equipment.

#### - Test Procedure

Conducted emissions from the EUT were measured according to the ANSI C63.10-2013.

- 1. The test procedure is performed in a 6.5 m  $\times$  3.5 m  $\times$  3.5 m (L  $\times$  W  $\times$  H) shielded room. The EUT along with its peripherals were placed on a 1.0 m (W)  $\times$  1.5 m (L) and 0.8 m in height wooden table and the EUT was adjusted to maintain a 0.4 meter space from a vertical reference plane.
- 2. The EUT was connected to power mains through a line impedance stabilization network (LISN) which provides 50 ohm coupling impedance for measuring instrument and the chassis ground was bounded to the horizontal ground plane of shielded room.
- 3. All peripherals were connected to the second LISN and the chassis ground also bounded to the horizontal ground plane of shielded room.
- 4. The excess power cable between the EUT and the LISN was bundled. The power cables of peripherals were unbundled. All connecting cables of EUT and peripherals were moved to find the maximum emission.
- Measurement Data: Comply (refer to the next page)

TRF-RF-203(09)210316



IC: 27104-IAAF20

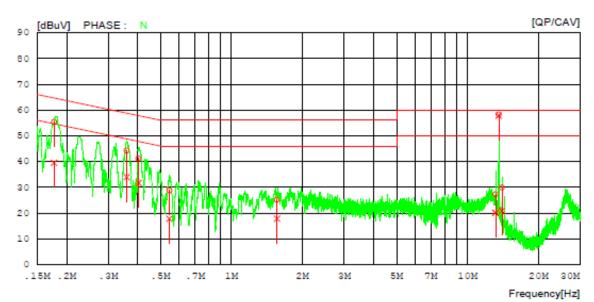


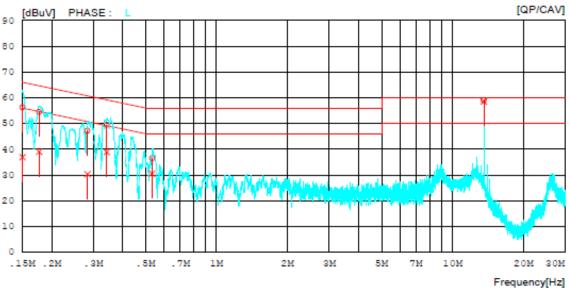
#### **Measurement Data**

## Results of Conducted Emission

Date 2021-03-05 DTNC Order No. Referrence No. Power Supply Model No. Confiscope F20 120 V, 60 Hz Serial No. Temp/Humi. 22 'C / 39 % Test Condition NFC Operator S.J.Woo Memo

LIMIT : FCC P15.207 QP FCC P15.207 AV





TRF-RF-203(09)210316

Pages: 15 / 20



FCC ID: **2AZBMIAAF20**IC: **27104-IAAF20** 

#### **Measurement Data**

## Results of Conducted Emission

DTNC Date 2021-03-05

Order No. Model No.

Confiscope F20

Referrence No. Power Supply Temp/Humi.

Operator

120 V, 60 Hz 22 'C / 39 % S.J.Woo

Serial No. Test Condition

NFC

Memo

LIMIT : FCC P15.207 QP FCC P15.207 AV

NO	FREQ [MHs]	READING QP CAV [dBuV][dBuV	C.FACTOR	QP CAV	LIMIT QP CAV ] [dBuV][dBuV	MARGIN QP CAV ] [dBuV][dBuV	PHASE 7]
1	0.17684	45.38 29.50	9.95	55.33 39.45	64.63 54.63	9.3015.18	N
2	0.35942	34.23 23.92	9.96	44.19 33.88	58.74 48.74	14.5514.86	N
3	0.40317	31.21 21.72	9.98	41.19 31.70	57.79 47.79	16.60 16.09	N
4	0.54492	18.76 7.83	9.98	28.74 17.81	56.00 46.00	27.2628.19	N
5	1.55772	15.14 7.81	10.00	25.14 17.81	56.00 46.00	30.8628.19	N
6	13.13564	16.83 9.67	10.40	27.23 20.07	60.00 50.00	32.77 29.93	N
7	13.55840	47.76 47.36	10.42	58.18 57.78	60.00 50.00	1.82 -7.78	N
8	13.98051	19.46 10.41	10.44	29.90 20.85	60.00 50.00	30.1029.15	N
9	0.15065	46.31 26.89	9.95	56.2636.84	65.96 55.96	9.7019.12	L
10	0.17702	44.47 29.03	9.94	54.41 38.97	64.62 54.62	10.2115.65	L
11	0.28372	37.24 20.24	9.95	47.19 30.19	60.71 50.71	13.52 20.52	L
12	0.34235	39.41 28.85	9.96	49.37 38.81	59.15 49.15	9.7810.34	L
13	0.53267	26.49 20.44	9.98	36.47 30.42	56.00 46.00	19.5315.58	L
14	13.55872	48.58 48.10	10.41	58.99 58.51	60.00 50.00	1.01-8.51	L



Date 2021-03-05

IC: 27104-IAAF20

Report No.: DRTFCC2104-0034



## **Measurement Data (With antenna terminated)**

## Results of Conducted Emission

 Order No.
 Reference No.

 Model No.
 Confiscope F20
 Power Supply Temp/Humi.
 120 V, 60 Hz Temp/Humi.

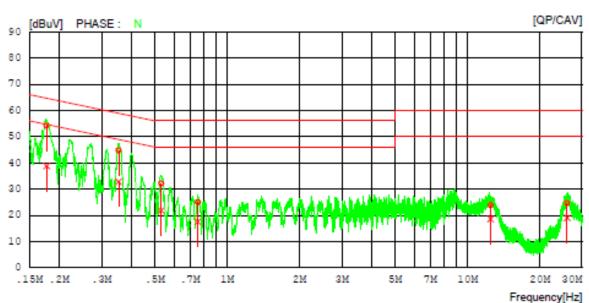
 Serial No.
 Temp/Humi.
 22 °C / 39 %

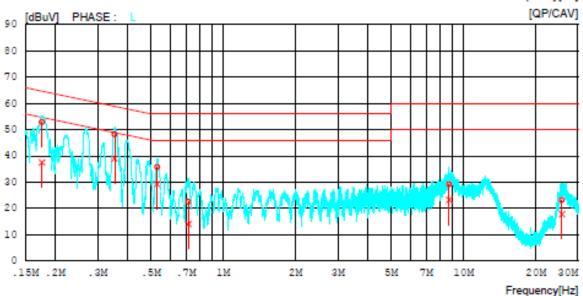
 Test Condition
 NFC
 Operator
 S.J.Woo

Memo

DTNC

LIMIT : FCC P15.207 QP FCC P15.207 AV





TRF-RF-203(09)210316



FCC ID: 2AZBMIAAF20

IC: 27104-IAAF20

## Measurement Data (With antenna terminated)

## Results of Conducted Emission

DTNC Date 2021-03-05

Order No. Model No. Serial No. Test Condition

Confiscope F20

NFC

Referrence No. Power Supply Temp/Humi. Operator

120 V, 60 Hz 22 'C / 39 % S.J.Woo

Memo

LIMIT : FCC P15.207 QP FCC P15.207 AV

NO	FREQ	READING OP CAV	C.FACTOR	RESULT QP CAV	LIMIT QP C		PHASE
	[MHs]	[dBuV][dBuV]	[dB]	•	_	iBuV] [dBuV][dBu	
1	0.17715	44.28 28.83	9.95	54.23 38.78	64.62 54	.62 10.3915.84	N
2	0.35311	34.78 22.86	9.96	44.74 32.82	58.89 48.	.89 14.1516.07	N
3	0.53111	22.1311.84	9.98	32.1121.82	56.00 46.	.00 23.8924.18	N
4	0.75469	15.07 7.60	9.98	25.0517.58	56.00 46.	.00 30.9528.42	N
5	12.47308	13.50 8.19	10.38	23.8818.57	60.00 50.	.00 36.1231.43	N
6	25.93991	14.00 8.42	10.61	24.6119.03	60.00 50.	.00 35.3930.97	N
7	0.17613	42.84 27.53	9.94	52.78 37.47	64.67 54	.67 11.8917.20	L
8	0.35296	38.18 28.98	9.96	48.1438.94	58.89 48.	.89 10.75 9.95	L
9	0.53092	25.8419.26	9.98	35.82 29.24	56.00 46.	.00 20.1816.76	L
10	0.71604	12.52 3.96	9.96	22.4813.92	56.00 46.	.00 33.5232.08	L
11	8.71719	18.9212.93	10.26	29.18 23.19	60.00 50.	.00 30.8226.81	L
12	25.66487	12.52 7.15	10.57	23.0917.72	60.00 50.	.00 36.9132.28	L



IC: 27104-IAAF20

# **APPENDIX**

## **TEST EQUIPMENT FOR TESTS**



FCC ID: 2AZBMIAAF20

IC: 27104-IAAF20

Pages: 20 / 20

Туре	Manufacturer	Model	Cal.Date (yy/mm/dd)	Next.Cal.Date (yy/mm/dd)	S/N
Spectrum Analyzer	Agilent Technologies	N9020A	20/06/24	21/06/24	MY46471622
Spectrum Analyzer	Agilent Technologies	N9020A	20/06/24	21/06/24	US47360812
DC Power Supply	Agilent Technologies	66332A	20/06/24	21/06/24	MY43000211
Multimeter	FLUKE	17B+	20/12/16	21/12/16	3630701WS
Signal Generator	Rohde Schwarz	SMBV100A	20/12/16	21/12/16	255571
Thermohygrometer	BODYCOM	BJ5478	20/12/16	21/12/16	120612-1
Thermohygrometer	BODYCOM	BJ5478	20/12/16	21/12/16	120612-2
Loop Antenna	ETS-Lindgren	6502	21/01/28	23/01/28	00226186
BILOG ANTENNA	Schwarzbeck	VULB 9160	20/12/16	21/12/16	3362
PreAmplifier	H.P	8447D	20/12/16	21/12/16	2944A07774
Temp & Humi Test Chamber	SJ Science	SJ-TH-S50	20/06/24	21/06/24	SJ-TH-S50- 130930
Cable	DT&C	Cable	21/01/08	22/01/08	M-01
Cable	DT&C	Cable	21/01/08	22/01/08	M-02
Cable	DT&C	Cable	21/01/08	22/01/08	M-03
Cable	DT&C	Cable	21/01/08	22/01/08	M-07
Cable	DT&C	Cable	21/01/08	22/01/08	M-09
EMI Receiver	ROHDE&SCHWAR Z	ESU	20/11/16	21/11/16	100469
PULSE LIMITER	Rohde Schwarz	ESH3-Z2	20/08/25	21/08/25	101333
LISN	SCHWARZBECK	NSLK 8128 RC	20/10/23	21/10/23	8128 RC-387
HYGROMETER	TESTO	608-H1	21/01/19	22/01/19	34862883
Cable	Radiall	TESTPRO3	21/01/08	22/01/08	RF-82
Test Software	tsj	Radiated Emission Measurement	N/A	N/A	Version 2.00.0177
Test Software	tsj	Noise Terminal Voltage Measurement	N/A	N/A	Version 2.00.0170

Note1: The measurement antennas were calibrated in accordance to the requirements of ANSI C63.5-2017.

Note2: The cable is not a regular calibration item, so it has been calibrated by DT&C itself.